

7850 E Jefferson – 8 Step Floodplain Process

Step One: Determine whether the action is located in a 100-year floodplain or a 500-year floodplain for critical actions) or wetland.

This action is located in a 100-year floodplain. The planned pathway and sea wall is located within AE Zone (special flood hazard area with water surface elevations determined) as indicated on the FEMA Preliminary Flood Insurance Rate Map (FIRM) Panel 301 of 575 no. 26163CO301F revised December 21, 2018. Additionally, a potential third building comprised of market-rate units may be developed in the future. The FIRM is attached to this document.

This project is (a) acquisition of property and (b) new construction of affordable multifamily housing of greater than four units and, for these reasons, E.O. 11988- Floodplain Management applies. This project does not meet any of the exceptions at 24 CFR 55.12 and therefore requires an 8-step analysis of the direct and indirect impacts associated with the construction, occupancy, and modification of the floodplain.

The initial proposed project is located at 7850 E. Jefferson in Detroit, Wayne County, Michigan and includes the new construction of 225-unit rental apartment community to be built in three concurrent identical 75-unit phases on approximately 3.8 acres of vacant land. The purpose is to construct much needed affordable housing for families in the greater downtown Detroit area, especially with access to the Detroit Riverfront. The southern portion of the property near the Detroit River, including a future walk path, playground, curb and small portion of Building Three; Therefore, this analysis will consider impacts to the floodplain along with concerns for loss of property.

Step Two: Notify the public for early review of the proposal and involve the affected and interested public in the decision-making process.

A public notice describing the project was published in the Detroit News, the local and regional paper, on April 28, 2021. The ad targeted local residents, including those in the floodplain. The notice was also sent to interested Federal, State, local agencies, and non-profit groups such as the groups of individuals known by the City of Detroit to be interested in such notices. A list of specific agencies and individuals and a copy of the published notification is kept in the project's environmental review record and attached to this document. A copy was also posted on the City of Detroit's website. The required 15 calendar days were allowed for public comment. As required by regulation, the notice also included the name, proposed location and description of the activity, total number of floodplain acres involved, and the responsible entity contact for information as well as a website and the location and hours of the office at which a full description of the proposed action can be viewed.

The project scope included in the Early Public Notice included construction of three buildings – two on the northern portion of the property outside of the floodplain and one on the southern portion of the property in the floodplain. All three buildings would have included low-income housing units. Additionally, the Early Public Notice utilized data from the 2012 FEMA Firm MAP to evaluate the project for floodplain impacts. According to this map, the proposed sidewalk, sea wall and third building are located in Zone X of the 100-year floodplain.

Comments regarding this project were received from the HUD Detroit Field Environmental Officer (FEO). The HUD Detroit FEO indicated that an updated FEMA Preliminary FIRM map from 2018 was available. This meant a portion of the originally proposed third building was located in the Special Flood Hazard Area (SFHA) –Zone AE. Additionally, the HUD Detroit FEO indicated that the elevation of the originally

proposed third building put the main floor below the Preliminary Map 100-year flood elevation. The City of Detroit Environmental Review Officer (ERO) held two meetings with the HUD Detroit FEO to discuss her comments. The City of Detroit ERO also submitted a written response to the HUD Detroit FEO. The changes to the initial project scope are described in Steps 3-6 of this document.

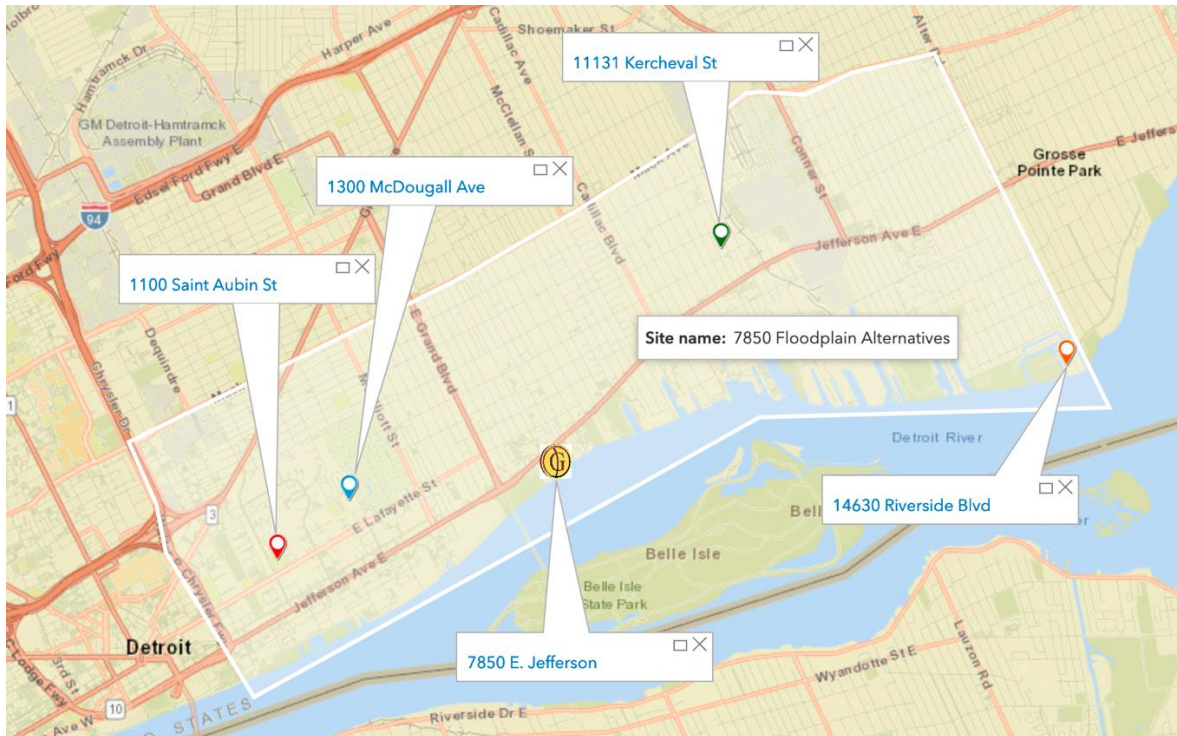
Step Three: Identify and evaluate practicable alternatives:

The project site selection criteria are:

- A. For Sale/For Lease
- B. Scale of property (greater than 2.8 +/- acreage),
- C. Zoning requirements (i.e., requires no re-zoning to accommodate Multi-Family Apartments),
- D. Within approximately 0.25 miles of East Jefferson Avenue, east of the Central Business District within the city limits of Detroit, and
- E. Proximity to similar natural amenities such as the Detroit River.

The City of Detroit considered several alternative sites believed to satisfy these requirements:

1. Moving the project to a different location mostly outside the floodplain
 - There are only four comparable properties within the criterion identified above. The locations are depicted in Figure 1. The properties include:
 - **11131 Kercheval Avenue**
 - NOT FOR SALE
 - Not on the riverfront
 - No direct access to greenways or walking paths to the riverfront
 - Zoned in General Business District
 - Not in the floodplain
 - **1300 McDougall**
 - Zoning is Planned Development, requiring additional public approvals for entitlement of the proposed project
 - Not on the riverfront
 - No direct access to greenways or walking paths to the riverfront
 - Comparable adjacent uses
 - Not in the floodplain
 - **14630 Riverside Drive**
 - NOT FOR SALE
 - On the river, but much further away from downtown Detroit
 - Does not have the potential for riverwalk access
 - Location is partially within a floodplain
 - **1100 St. Aubin**
 - NOT FOR SALE
 - Not on the riverfront
 - Access to riverfront via Dequindre Cut
 - Does not provide the same amenities as 7850 (no Riverwalk access, worse views, etc.)
 - Not in the floodplain



COMPARABLE ALTERNATIVE									
Property Address	City	State	Zip	Property Type	Proposed Use Compliant?	For Sale Price	Land Area (AC)	Zoning	
1) 11131 Kercheval St	Detroit	MI	48214	Land	Yes	Not for sale	4.08	GBD	
2) 1300 McDougall Ave	Detroit	MI	48207	Land	Yes	\$ 2,750,000	4.74	PD	
3) 14630 Riverside Blvd	Detroit	MI	48215	Land	Yes	Not for sale	7.06	R-6	
4) 1100 Saint Aubin St	Detroit	MI	48207	Land	Yes	Not for sale	4.01	R-6	
7850 E. Jefferson	Detroit	MI	48214	Land	Yes	SUBJECT PROPERTY	3.5 (2.80 Usable)	R-6	

Figure 1- Properties Evaluated as Potential Alternatives

- Only one property (1300 McDougall) is actively for sale; therefore, there is only one practicable alternative location. The location is not adjacent to the riverfront, does not have direct access to greenways or riverwalk access and the property is zoned for Planning Development, which requires additional approvals to construct the project. Therefore, there is not an equivalent practicable alternative location for this project.
2. The City of Detroit considered several actions on the property believed to satisfy these requirements:
- **Alternative Method #1: Adjust layout of structures such that all 225 units are accommodated in one smaller building footprint.**
 - This modification to the project would have required modification to unit sizes and orientation to accommodate additional corners in the building, created additional unit types, and expanded common areas to occupy otherwise unusable spaces created by the revised layout.

- **Alternative Method #2: Construct new seawall and modify the Flood Plain through a conditional Letter of Map Revision (LOMR) such that all three buildings are out of the floodplain – Moving Forward.**

The developer evaluated the construction of a new seawall at higher elevation and modification of the Flood Plain such that the proposed third building will not be located in a flood plain. This requires a conditional Letter of Map Revision (LOMR) to modify the FIRM to reflect the as-constructed site improvements after the project is completed. This modification results in the maximum amount of low-income housing available on the site while protecting the safety and security of the low-income residents and their property. Additionally, this eliminates the risk for damage to a HUD-funded property from flooding. Therefore, the scope of the project will be changed to include a new seawall, flood plain modification and conditional Letter of Map Revision.

- **Alternative Method #3: Re-orient buildings on the site to avoid or reduce impact to the floodplain.**
 - The design team evaluated placement of the third building along the east property line to allow more parking to be placed along the west property line, reducing the overall number of parking spaces residing in the floodplain. However, the geotechnical report identified poor soils on southeastern quadrant of the site preventing the location of the third building outside the floodplain. In order to accommodate placement of the third building in this location the structural design would require deep foundations extending more than 100' to bedrock thereby increasing the construction costs of that building by nearly \$4,000 per unit. The additional cost per unit would decrease the affordability and decrease the projects' goal of addressing the City of Detroit's affordable housing crisis.
- **Alternative Method #4: Eliminate parking or achieve zoning variance for reductions to parking.**
 - This modification would have required special approvals from the City of Detroit's Board of Zoning Appeals as well as the Michigan State Housing Development Authority to allow for the reduction of parking spaces below the lender and zoning ordinance minimum standards. An additional 10-15% reduction of parking spaces would be required to eliminate the complete impact to the floodplain. Further, as a largely car-dependent community the reality of reducing parking spaces made available on the premises would have reduced the marketability of the property to potential low-income renters.
- **Alternative Method #5: Re-orient parking on site to avoid or reduce impact of parking on the floodplain.**
 - The design team evaluated alternative layouts for the parking provided. The parking areas were split along the western property line to avoid placement of buildings in the floodplain. As a result of this modification the parking became inefficient and prevented the achievement of parking, counts per zoning ordinance (see also Alternative Method #4).

3. No Action or Alternative Actions:

- A no action alternative was considered and rejected because the City of Detroit suffers from a critical shortage of quality affordable housing for low and very low-income families. Over 10,000 families in Detroit suffer from rent overburden (where families

pay rent greater than 30% of their income) due to the lack of affordable housing (Source: *Michigan Statewide Housing Needs Assessment by the Michigan State Housing Development Authority, April 2019*).

- These families have both limited income and limited housing options. These families are often forced to either live in substandard housing or choose to pay a greater proportion of their household income on rent, reducing income available to purchase other essentials such as groceries or medicine.
- Within the Primary Market Area (PMA) for the proposed project (approximately two miles surrounding the site), there is a need for more than 780 affordable housing units (Source: *Market Study by Shaw Research and Consulting, 2019*).
 - Therefore, the proposed project helps to address rent overburden for a small fraction of families (less than 20%) within the PMA. Up to 150 Low and Very Low-income families would continue suffer the negative effects of rent overburden if this project does not move forward.

Step Four: Identify Potential Direct and Indirect Impacts of Associated with Floodplain Development.

1. Impacts on people and property:

- **Leaving the floodplain as-is creates less attractive connection to the Detroit River**
 - Current access to the Detroit River is essentially non-existent at the site, further blocked by invasive overgrowth and vegetation.
 - Proposed access to the Detroit River provides engineered grade changes (steps) leading to stone walking paths to connect residents to waterfront, surrounded by native plantings.
 - Proposed new seawall with landscaped areas immediately adjacent to the river and associated Resident Park in the floodplain allows enhanced views of the riverfront and beyond.
- **Modifying the floodplain eliminates the potential concern of impacting people and property**
 - Under this modified proposed project scope, low-income residents will reside outside of the modified floodplain
 - This protects the low-income residents and their property from potential flood damage if a catastrophic flooding event occurred.
 - The buildings moving forward to construction are located on the northern portion of the property outside of the current floodplain. The third building will be constructed after site modifications are complete. Therefore, the construction of these buildings will not require FEMA Flood Insurance.
- **The proposed modification of the floodplain is minimal**
 - The overall current regulated floodplain is approximately 2,244 CY yards. The project proposes to reduce the floodplain volume by 2,035 cubic yards. This amount represents 90.69 % of the existing floodplain, as illustrated in Figure 2.

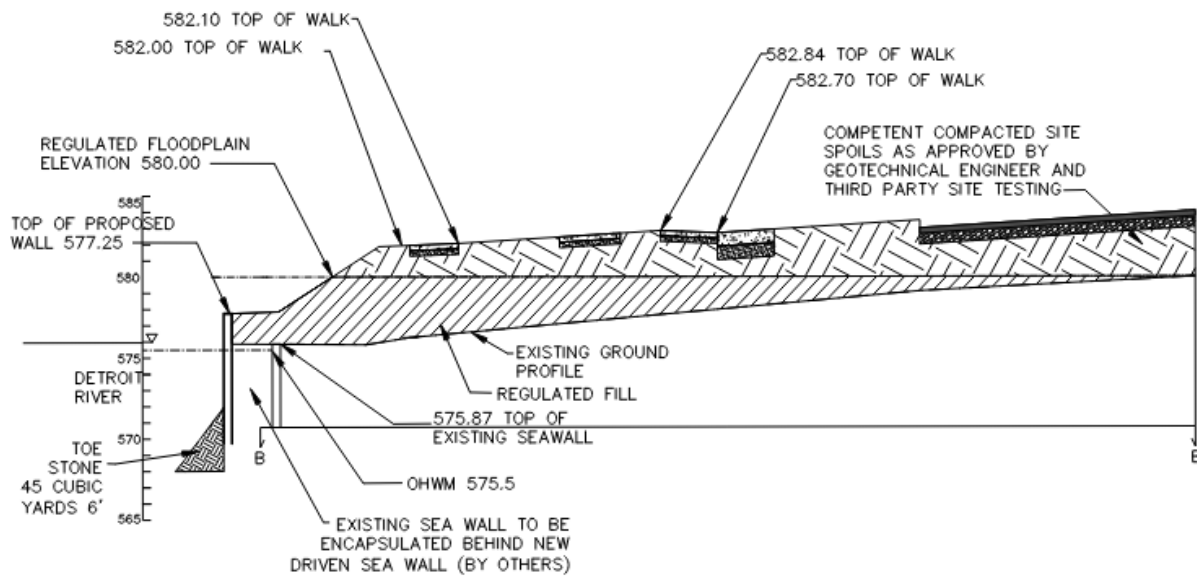


Figure 2- Floodplain Impact Cross Section

- Adjustments in the floodplain to help match neighboring properties. Current elevation differential between the adjacent property on the west is changing by approximately 5' to partially address the existing 8' grade differential between the properties. On the east property, the grade is changing to accommodate overland drainage swales for flood areas while matching the existing grade of the adjacent property.
- Added a new seawall to limit the area of impact to the least number of parking spaces and still accommodate the riverfront park area. If the riverfront park area were eliminated, the volume of impact to the floodplain would be reduced.
- Modification to floodplain allows the resident playground/park to enhance the residential experience. There are no multi-family affordable properties located on the Detroit River. This means low-income families only enjoy riverfront access through public parks. The only affordable properties located on the Detroit River are restricted to senior renters (see Figure 3). The project at 7850 E. Jefferson creates an unprecedented access for families to enjoy the riverfront from within an affordable housing property.
- Converted floodplain areas to park features that can be accessed when flooding does not occur.

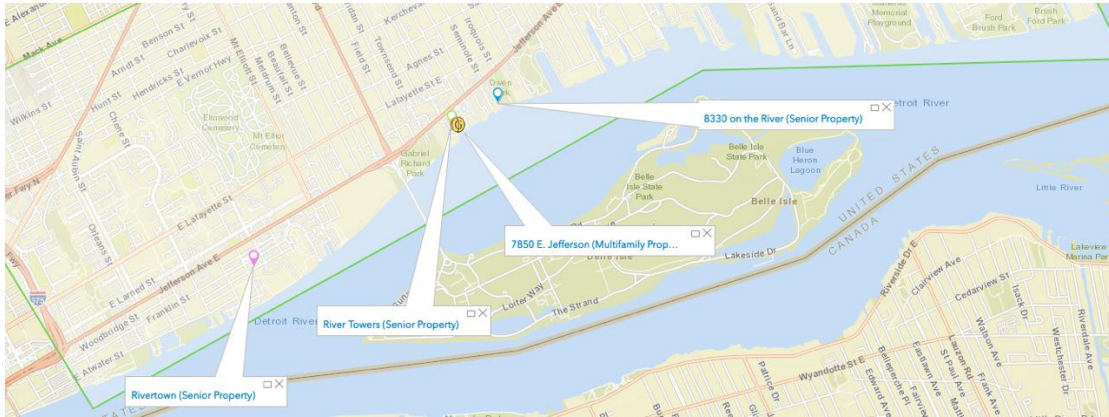


Figure 3- Low Income Housing Options on Jefferson Avenue

2. Impacts to natural and beneficial floodplain values (water resources, vegetation, archaeological/historic impacts, etc.):
 - **Current vegetation along the river is a negative, invasive water-based species (phragmites) which has been promulgated by lack of riverfront maintenance.**
 - The project will eliminate the invasive species and return the riverfront to its natural state with plants that are native to Michigan, including Panther Ninebarks, Karl Forrester Grasses and Blackgums.
 - **Displacing 2,035 cubic yards of flood zone for the project is deemed 'immaterial' when compared to the expanse of the Detroit River and connecting Great Lakes.**
 - This is further confirmed by Department of the Environment, Great Lakes and Energy (EGLE) and the Army Corps of Engineers by the approval of floodplain modifications included in the Part 31 EGLE Permit (in review).
 - **The developer has agreed to follow the Section 106 requirements for a No Adverse Effect determination. The National Register-listed historical properties are located within the Area of Potential Effects; therefore, the project has been given a Conditional No Adverse Effect determination on properties that are listed or eligible for listing in the National Register of historic Places, as long as the following conditions are met:**
 - Prior to the start of any work, building plans, specifications and photos must be submitted to the Preservation Specialist for review and Conditional Approval.
 - Once construction has started the unanticipated discoveries plan shall be executed for the duration of the project, and;
 - If there is a change in the scope of work, those changes will be required to undergo additional Section 106 Review prior to the execution of any work.
 - Additionally, an unanticipated discoveries plan has been created in the event construction reveals concentrations of potentially historic artifacts or features.

Step Five – Where practicable, design or modify the proposed action to minimize the potential adverse impacts to lives, property, and natural values within the floodplain and to restore, and preserve the values of the floodplain.

1. Minimizing harm to People and Property:
 - **Modifying the floodplain protects the lives and property of future low-income residents and property.**

- **The amount of fill has been limited to the least amount necessary to accommodate the project.**
 - **Elevation of protection (flood-proofing) provided through the new seawall proposed to be built on the property.**
 - This further protects potential future development and site improvements by raising the grade above the base flood elevation that floodwaters would need to overcome before damaging property.
2. Preserving Natural Values and Minimizing Impacts to the Environment:
- **Current vegetation along the river is a negative, invasive water-based species (Phragmites) which has been promulgated by lack of riverfront maintenance.**
 - Our project will eliminate this invasive species and return the riverfront to its natural state with plants that are native to MI including Panther Ninebarks, Karl Forrester Grasses and Blackgums.
 - **Utilizing native soils with proper drainage to avoid unnecessary import or export of fill materials.**

Step 6 – Reevaluate Alternatives

1. As documented above, construction at 11131 Kercheval Avenue, 1300 McDougall, 14630 Riverside Drive and 1100 St. Aubin is not viable because the sites do not meet one or more of the selection criteria:
 - A. For Sale/For Lease
 - B. Scale of property (greater than 2.8 +/- acreage),
 - C. Zoning requirements (i.e. requires no re-zoning to accommodate Multi-Family Apartments),
 - D. Within approximately 0.25 miles of East Jefferson Avenue, east of the Central Business District within the city limits of Detroit, and
 - E. Proximity to similar natural amenities such as the Detroit River.

1300 McDougall is the only property actively for sale; therefore. However, the property is not adjacent to the riverfront, does not have direct access to greenways or riverwalk access and the property is zoned for Planning Development. Therefore, the 7850 E. Jefferson property is the only location that satisfies these needs and concerns without displacing residents.

2. Although a portion of the 7850 E. Jefferson is in the floodplain, the project plan has been modified in order to minimize effects on people, property and the environment. Additionally, steps were taken to minimize the impact to the floodplain by removing the smallest amount of fill necessary and constructing a new retaining wall. Finally, a new FEMA Floodplain Map has been created since the original eight step process was completed. The final proposal is:

The proposed project is located at 7850 E. Jefferson in Detroit, Wayne County, Michigan and includes the new construction of a 225-unit rental apartment community to be built in two concurrent identical 75-unit phases and one future 75-unit phase on approximately 3.8 acres of vacant land. The purpose is to construct much needed affordable housing in the greater downtown Detroit area, especially with access to the Detroit Riverfront. The southern portion of the property near the Detroit River, including a new seawall and walkway, are located within the Special Flood Hazard Area (the 100-year floodplain) as indicated on the FEMA Preliminary Flood Insurance Rate Map (FIRM) 26163CO301F dated October 21, 2021. HOME funds and Detroit Housing Commission PBV's will be used in the financing of this project. The project proposes to place 2,035 cubic yards of fill within 0.57 acres of the 100-year floodplain

3. The No Action alternative is also impracticable because it does not satisfy the need to assist the low-income families in the City of Detroit.

Step 7: *Determination of Practicable Alternative*

It is the City of Detroit's determination that eliminating a building in the floodplain to house low-income people is the best practicable alternative. Although the building will not be constructed in the revised floodplain, the floodplain will be impacted by the seawall upgrades, fill.

A final noticed was published and posted that included changes in the scope of the project to reduce impacts to the floodplain. The notices explains reasons why the project was modified and the remaining work must be located in the floodplain, offers a list of alternatives considered at Steps 3 and 6 and describes all mitigation measures at Step 5 taken to minimize adverse impacts and preserve natural and beneficial floodplain values. The Notice is attached to this document.

Step 8: *Implement the Proposed Action*

The City of Detroit will assure that the plan is executed as modified and described above and in the EGLE Part 31 Permit approved in review. Necessary language will be included in all agreements with participating parties. The City will also take an active role in monitoring the construction process to ensure no unnecessary impacts occur nor unnecessary risks are taken.

This Eight-Step Process only covers review for the two buildings outside of the floodplain. Once the project is complete, any future construction projects that occur in the floodplain should strongly consider acquiring flood insurance to protect the safety of future occupants and their property.