

MEMORANDUM



To: City of San Pablo Council Members

From: Ronalyn Nonato, Associate Engineer

Subject: Annual Progress Report of the City Flood Management Plan -
2019 Community Rating System (CRS) Recertification

Date: August 22, 2019

Please receive the Annual Progress Report of the City of San Pablo Flood Management Plan for its 2019 Community Rating System (CRS) recertification.

Background

As a participant in the National Flood Insurance Program's (NFIP) Community Rating System, the City of San Pablo is required to annually evaluate the implementation of the City's Local Hazard Mitigation Plan (LHMP) Flood Management section. Acceptance of this report is a component of the City's participation in the NFIP's Community Rating System (CRS).

The CRS program was implemented as a voluntary program for recognizing and encouraging community floodplain management activities exceeding the minimum NFIP standards. CRS rewards communities that promote flood awareness and actively implement flood-protection measures with reduced flood insurance premiums. Maintaining and implementing the Flood Management Plan of the LHMP is a creditable activity. The CRS provides insurance discounts in 5 percent increments for each of 10 rating classes, with Class 1 being the highest. A community accrues points to improve its CRS class rating and receive increasingly greater insurance rate discounts through engaging in any of creditable activities, organized under the following goals: (1) reduce flood damage to insurable property; (2) strengthen and support the insurance aspects of the NFIP; and (3) encourage a comprehensive approach to floodplain management. The City achieved a CRS Class 8 rating resulting in a 10 percent discount on flood insurance policies for property owners within the Special Flood Hazard Area (1% Annual Chance Flood Hazard) and 5 percent discount for property owners within the 0.2% Annual Chance Flood Hazard areas in the City.

The CRS was implemented in 1990 with 300 communities. Per FEMA's NFIP latest June 2017 update, the number of CRS communities has grown to 1,444. Although CRS communities represent only 5 percent of the over 22,000 communities participating in the NFIP, more than 69 percent of all flood insurance policies are written in CRS communities.

Introduction

On April 16, 2018, the San Pablo City Council passed Resolution 2012-018 adopting the City's Local Hazard Mitigation Plan (LHMP). The City's LHMP is Annex to the Contra Costa County Multi-jurisdiction Hazard Mitigation Plan (MJHMP), which covered the unincorporated county, 10 municipalities and 25 special purpose districts. Prior to joining the Contra Costa MJHMP, the City was annexed to the Association of Bay Area Government's MJHMP from February 6, 2012 to March 2016; the planning for the Contra Costa MJHMP began a few months after the ABAG plan expired.

Hazard mitigation is the use of long-term and short-term policies, programs, projects, and other activities to alleviate the death, injury, and property damage that can result from a disaster. Contra Costa County and a partnership of local governments within the county have developed a hazard mitigation plan to reduce risks from natural disasters in the Contra Costa County Operational Area—defined as the unincorporated county and incorporated jurisdictions within the geographical boundaries of the county. The plan complies with federal and state hazard mitigation planning requirements.

A core planning team consisting of a contract consultant and Contra Costa County Office of Emergency Services staff was assembled to facilitate this plan update. A planning partnership was formed by engaging eligible local governments within the Operational Area. A 13-member steering committee was assembled to oversee the plan update, consisting of both governmental and non-governmental stakeholders within the Operational Area. Coordination with other county, state, and federal agencies involved in hazard mitigation occurred throughout the plan update process. Organization efforts included a review of the 2011 Contra Costa County Hazard Mitigation Plan, the California statewide hazard mitigation plan, and existing programs that may support hazard mitigation actions.

The planning team implemented a multi-media public involvement strategy utilizing the outreach capabilities of the planning partnership that was approved by the Steering Committee. The strategy included public meetings, a hazard mitigation survey, a project website, the use of social media (Facebook, Twitter and Nextdoor) and multiple media releases.

FEMA approved the 2018 MJHMP plan on April 19, 2018, and it expires five years after the approval date. The current update meets federal requirements for updating hazard mitigation plans on a five-year cycle. The City of San Pablo staff and consultant has prepared a jurisdiction-specific annex to this plan. Today, staff continues to meet and track the implementation of the LHMP. A complete copy of the Contra Costa County MJHMP and the City of San Pablo LHMP can be viewed from the City of San Pablo webpage: <https://www.sanpabloca.gov/2583/-Local-Hazard-Mitigation-Plan>.

Review of the Flood Management Plan

As a requirement of the National Flood Insurance Program's Community Rating System, the City of San Pablo is required to conduct an annual evaluation report of the Flood Management Section of the LHMP. The report represents the 2019 annual evaluation report from July 2018 to July 2019. This report is an evaluation of progress made in implementation of the Flood Management Section of the LHMP. The City of San Pablo Council will receive this report through the September 3, 2019 Council Meeting. It is available to the public through the City of San Pablo website:

<https://www.sanpabloca.gov/DocumentCenter/View/4392/2019-CRS-Recertification-Progress-Report?bidId=>.

Analysis of Flooding Mitigation Actions

All MJHMP planning partners reviewed their recommended actions to classify each action based on the hazard it addresses and the type of mitigation it involves. Mitigation types used for this categorization are as follows:

- **Prevention**—Government, administrative or regulatory actions that influence the way land and buildings are developed to reduce hazard losses. Includes planning and zoning, floodplain laws, capital improvement programs, open space preservation, and stormwater management regulations.
- **Property Protection**—Modification of buildings or structures to protect them from a hazard or removal of structures from a hazard area. Includes acquisition, elevation, relocation, structural retrofit, storm shutters, and shatter-resistant glass.
- **Public Education and Awareness**—Actions to inform citizens and elected officials about hazards and ways to mitigate them. Includes outreach projects, real estate disclosure, hazard information centers, and school-age and adult education.
- **Natural Resource Protection**—Actions that minimize hazard loss and preserve or restore the functions of natural systems. Includes sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- **Emergency Services**—Actions that protect people and property during and immediately after a hazard event. Includes warning systems, emergency response services, and the protection of essential facilities.
- **Structural Projects**—Actions that involve the construction of structures to reduce the impact of a hazard. Includes dams, setback levees, floodwalls, retaining walls, and safe rooms.
- **Climate Resilient**—Actions that incorporate methods to mitigate and/or adapt to the impacts of climate change. Includes aquifer storage and recovery activities, incorporating future-conditions projections in project design or planning, or actions that specifically address jurisdiction-specific climate change risks, such as sea level rise or urban heat island effect.
- **Community Capacity Building**—Actions that increase or enhance local capabilities to adjust to potential damage, to take advantage of opportunities, or to respond to consequences. Includes staff training, memorandums of understanding, development of plans and studies, and monitoring programs.

Goals, Objectives and Actions

San Pablo's hazard mitigation plan identifies goals for reducing long-term vulnerabilities to identified hazards (44 CFR Section 201.6(c)(3)(i)). The MJHMP Steering Committee established a guiding principle, a set of goals and measurable objectives for the LHMP plan, based on data from the preliminary risk assessment and the results of the public involvement strategy. The guiding principle, goals, objectives and actions all support each other. Goals were selected to support the guiding principle. Objectives were selected that met multiple goals. Actions were prioritized based on the action meeting multiple objectives.

Goals

The following are the mitigation goals for the LHMP:

1. Save (or protect) lives and reduce injury.
2. Increase resilience of infrastructure and critical facilities.
3. Avoid (minimize, or reduce) damage to property.
4. Encourage the development and implementation of long-term cost-effective and environmentally sound mitigation projects.
5. Build and support capacity to enable local government and the public to prepare for, respond to and recover from the impact of natural hazards

The effectiveness of a mitigation strategy is assessed by determining how well these goals are achieved.

Objectives

The selected objectives meet multiple goals, as listed below and shown on Table 17-1 of the Contra Costa County Hazard Mitigation Plan Volume 1 – Planning Area-Wide Elements. Therefore, the objectives serve as a standalone measurement of the effectiveness of a mitigation action, rather than as a subset of a goal. The objectives also are used to help establish priorities.

Contra Costa County Hazard Mitigation Plan; Volume 1—Planning-Area-Wide Elements

Table 17-1. Objectives for Natural Hazard Mitigation Plan Update		
Objective Number	Objective Statement	Goals for Which It Can Be Applied
O-1	Increase resilience of infrastructure and critical facilities.	2, 3, 5
O-2	Sustain reliable local emergency operations and facilities during and after a disaster.	1, 5
O-3	Inform the public on the risk from hazards of concern and increase awareness, preparation, mitigation, response, and recovery activities to promote public safety.	1, 3, 5
O-4	Minimize the impacts of known hazards on current and future land uses by providing incentives for hazard mitigation.	1, 3, 5
O-5	Prevent or discourage new development in hazardous areas or ensure that, if building occurs in high-risk areas, it is done in a way to minimize risk.	1, 3, 5
O-6	At the local government level, continually improve understanding of the location and potential impacts of hazards, using the best available data and science.	1, 2, 3, 4, 5
O-7	Encourage all development to meet applicable standards for life safety	1, 2, 3, 5
O-8	Monitor plan progress annually to integrate the local hazard mitigation plan with the results of disaster- and hazard-specific planning efforts.	1, 2, 3, 5
O-9	Promote development and use of floodplain management best practices through programs such as CRS.	3, 4, 5

O-10	Provide or improve flood protection with flood control structures and drainage maintenance plans.	2, 3, 4
O-11	Enhance codes and their enforcement where feasible, so that new construction can withstand the impacts of known hazards and to lessen the impact of development on the environment's ability to absorb the impact of natural hazards.	1, 3
O-12	Consider the impacts of known hazards in all planning mechanisms that address current and future land uses within the planning area.	1, 3
O-13	Eliminate or minimize disruption of local government operations caused by known hazards.	1, 3, 4
O-14	Consider open space land uses within identified high-hazard risk zones.	1, 2, 3, 4, 5
O-15	Retrofit, acquire or relocate identified high-risk structures, including those known to experience repetitive losses.	1, 3, 4
O-16	Establish a partnership among all levels of government and the business community to improve and implement methods to protect property	1, 2, 3, 4, 5
O-17	Encourage hazard mitigation measures that promote and enhance natural processes and minimize adverse impacts on the ecosystem.	2, 3, 4
O-18	Promote and implement hazard mitigation plans and projects that are consistent with state, regional, and local climate action and adaptation goals, policies, and programs.	1, 2, 3, 4, 5

Action Plan

The table below lists the actions and the plans that make up the City of San Pablo local hazard mitigation action plan and shown on Table 13-14 of the Contra Costa County Hazard Mitigation Plan Volume 2 – Planning Partner Annexes, Section 13 City of San Pablo.

Table 13-14. Hazard Mitigation Action Plan Matrix						
Applies to new or existing assets	Hazards Mitigated	Objectives Met	Responsible Agency ^a	Estimated Cost	Sources of Funding	Timeline
SP-1— Where appropriate, support retrofitting or relocation of structures in high hazard areas, prioritizing structures that have experienced repetitive losses.						
Existing	All Hazards	1, 4, 7, 9, 12, 14, 15, 17	Engineering, *Development Services	High	HMGP, PDM, FMA	Short-term
SP-2— Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions in the community, including the City of San Pablo General Plan and Climate Action Plan.						
New and Existing	All Hazards	1, 4, 5, 7, 11, 12, 14, 17	Development Services	Low	Staff Time, General Funds	Ongoing
SP-3— Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.						
New and Existing	All Hazards	3, 8, 16	All City departments	Low	Staff Time, General Funds	Short-term
SP-4— Continue to maintain good standing and compliance under the NFIP through implementation of floodplain management programs that, at a minimum, meet the NFIP requirements:						
<ul style="list-style-type: none"> Enforce the flood damage prevention ordinance. Participate in floodplain identification and mapping updates. Provide public assistance/information on floodplain requirements and impacts. 						
New and Existing	Flood	3, 5, 6, 9, 10, 11, 15	Development Services - Building /Public Works	Low	Staff Time, General Funds	Ongoing

SP-5—Through the ongoing implementation of the City's 4-year work plan that is part of its Capital Improvements Program (CIP), identify feasible and cost-effective projects that are eligible for funding under FEMA's Hazard Mitigation Assistance (HMA) suite of grant programs and pursue funding for those projects.

New and Existing	All Hazards	1,7,10,13,15	Public Works-Engineering	High	FEMA HMA Grant Funding, CIP for local match	Short-term
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SP-6—Develop a Debris management plan for all hazards of concern that will easily integrate in to future updates to the hazard mitigation plan.

Existing	All Hazards	2,6,13,17,18	Development Services/Public Works	Medium	General Funds, HMA grants, EPA Grants	Short-term
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SP-7— Acquire the current Corporation Year that is both seismically vulnerable and subject to flooding and dam failure inundation, and restore the vacated parcel to a connected open space use.

Existing	Dam Failure, Flood and Earthquake	1,2,15,17	Public Works, Development Services	High	FEMA HMA grants, General funds for local match.	Long-term
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SP-8— Complete the Storm-Drain Network Development and Modeling Plan which will include a drainage system needs assessment. Once the needs have been identified, package projects that would be eligible for FEMA grant funding and prioritize projects for the pursuit of FEMA HMA grant funding when those opportunities arise. These projects would be above and beyond those targeted under action SP-5.

New and Existing	Urban drainage –Flood	1,7,10,13,15	Public Works-Engineering	High	FEMA HMA Grant Funding, CIP for local match	Short-term
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SP-9—Update the City's Comprehensive Emergency Management Plan (CEMP) such that it is consistent with the risk assessment of the hazard mitigation plan

New and Existing	All hazards	2,6,13,16	Police Department	Medium	EMPG, Bay Area UWASI, General Funds	Short-term
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Applies to new or existing assets	Hazards Mitigated	Objectives Met	Responsible Agency ^a	Estimated Cost	Sources of Funding	Timeline
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SP-10— Strengthen the City zoning ordinance to manage landslide risk with the creation of a Hillside Zoning Overlay District that would include standards/policies to reduce vulnerability from landslides/earth movement.

New	Landslide	3,4,5,6,7,11, 12	Development Services	Low	General Funds	Short-term
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SP-11—Geographic Information System (GIS) data consolidation initiative. Integrate a consolidated GIS data package that includes the best available data and science on risk from natural hazards into all city departments GIS capabilities. This initiative could be expanded to a county-wide initiative leveraging the partnership created through the development of this multi-jurisdictional hazard mitigation plan.

New and Existing	All Hazards	3,6,12,16	Information Technology Division	Medium	HMGP (possible 5% initiative), General Funds	Short-term
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SP-12—Prepare and conduct a disaster planning for small business workshop utilizing the information on risk and vulnerability contained in this plan.

New and Existing	All Hazards	3,6,16	Public Works-Engineering	Low	General Funds	Short-term
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SP 13—Consider the acquisition and use of drone technology with Light Imaging Detection and Ranging (LiDAR) capability to monitor hillside geomorphology during the wet weather season to monitor landslide conditions.

New and Existing	Landslide	3,6,12,16	Public Works-Engineering	High	HMGP (possible 5% initiative), General Funds	Long-term
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SP-14—Consider the deployment of a data backup initiative such as "Rack Space" to backup and store critical data offsite.

New and Existing	All Hazards	3,6,12,16	Information Technology Division	Medium	HMGP (possible 5% initiative), General Funds	Short-term
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SP-15—Develop Disaster Documentation Program: to include tracking disasters affecting San Pablo, and tracking via photos, high water marks or other perishable data and damage incurred during and after disaster events. This data can be used for tracking and trending, and ultimately mitigation planning.

New	All Hazards	3,6,12,16	All City Departments	Low	General Funds	Short-term
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SP-16—Continue the City's participation in the Community Rating System (CRS) program						
New and Existing	Flood	3, 5, 6, 9, 10, 11, 15	Building Department/Public Works	Low	Staff Time, General Funds	Ongoing
SP-17—Where appropriate, install green infrastructures (bio-swales) within the public right of way and City owned parcels that are adjacent to vulnerable water courses to filter and reduce storm drain runoff to prevent creek bank erosion and flooding.						
New and Existing	Flood	9, 17, 18	Public Works	Low	California Natural Resources Agency, EPA, HMGP (possible 5% initiative), General Fund.	Long-term
SP-18—Develop or expand open space uses (such as pedestrian trails) adjacent to vulnerable water courses where feasible and cost-effective.						
New and Existing	Flood	5, 9, 17	Public Works	Low	HMGP (possible 5% initiative), General Fund	Long-term
SP-19— Identify and track capital project needs that have not been identified through the City's current capital improvement program for possible grant funding, based on damage following hazard events.						
New and Existing	All Hazards	1, 15	Public Works	Medium	HMGP (possible 5% initiative), General Fund	Long-term
a. Where multiple responsible agencies are listed, an asterisk (*) identifies the lead agency.						

Review and Incorporation of Resources and Projects

The following technical reports, plans, projects and regulatory mechanisms were reviewed to make up for the San Pablo Hazard Mitigation Action Plans.

- City of San Pablo Municipal Code – The municipal code was reviewed for the full capability assessment and for identifying opportunities for action plan integration.
 - Implementation: Plan review and inspection of public and private improvements and developments.
 - Applicable HMP Action Plan No.: SP-1, SP-2, SP-3 and SP-4
 - Status: On-going
 - Recommendation: Continue implementing the code.
- City of San Pablo Flood Damage Prevention Ordinance—The flood damage prevention ordinance was reviewed for compliance with the National Flood Insurance Program.
 - Implementation: Plan review and inspection of public and private improvements and developments.
 - Applicable HMP Action Plan No.: SP-1, SP-2, SP-3 and SP-4
 - Status: On-going
 - Recommendation: Continue implementing the ordinance
- Flood Manual Plan – The Annual Flood Management Plan and Stormwater Drainage Ordinance (Municipal Code Chapter 13.04) was reviewed for compliance with the National Flood Insurance Program.
 - Implementation: Plan review and inspection of public and private improvements and developments.
 - Applicable HMP Action Plan No.: SP-1, SP-2, SP-3 and SP-4
 - Status: On-going
 - Recommendation: Continue implementing the plan
- San Pablo General Plan 2030 Volume I: General Plan Policies – The General Plan, including the Housing, Land Use and Physical Design, Circulation, Conservation, Economic Development, Open Space and Conservation, and

Safety and Noise Elements were reviewed for information regarding goals and policies consistent with hazard mitigation for carry over as goals and objectives.

- Implementation: Plan review and inspection of public and private improvements and developments.
 - Applicable HMP Action Plan No.: SP-1, SP-2, SP-3, SP-4, SP-10, and SP-18.
 - Status: Adopted April 18, 2011, Plan Map update in 2018, Housing Element Adopted in April 2015.
 - Recommendation: Continue implementing the policies.
- Capital Improvement Plan – The Capital Improvement Plan was reviewed to identify cross-planning initiatives for inclusion of flooding mitigation projects for this fiscal year. Implementation of the projects are driven by funding and grant availabilities. The recommendation is to complete all projects and continue on-going updates and/or monitoring.
 - Storm Water Mapping and Modeling
 - Scope: Mapping of the City's storm drainage system and future improvements.
 - Applicable HMP Action Plan No.: SP-8 and SP-11.
 - Status: Existing infrastructure mapping completed in Summer of 2018. Mapping of future stormdrain systems is on-going.
 - San Pablo Complete Streets Project (SPA-CST)
 - Scope: Includes storm drainage improvements.
 - Applicable HMP Action Plan No.: SP-1, SP-2, SP-3, SP-4, SP-8 and SP-11.
 - Status: Completed in Spring of 2019.
 - New City Hall Construction (CIH-CON)
 - Scope: Construction of a new City Hall building at a new location, which includes installation of bio-retention facilities.
 - Applicable HMP Action Plan No.: SP-1, SP-2, SP-3, SP-4, SP-8 and SP-17.
 - Status: In construction. Anticipated completion in Spring of 2020.
 - El Portal Drive Urban Greening Project (POR-GRN)
 - Scope: Includes installation of a bio-retention facility on the street.
 - Applicable HMP Action Plan No.: SP-1, SP-2, SP-3, SP-4, SP-8, SP-11 and SP-17.
 - Status: Anticipated construction and completion in Fall of 2019.
 - Wildcat Creek Restoration and Greenway Trail Project (WCC-TRL)
 - Scope: Restoration of the creek by widening the floodway.
 - Applicable HMP Action Plan No.: SP-1, SP-2, SP-3, SP-4, SP-8, SP-10, SP-11 and SP-18.
 - Status: In design. Anticipated construction is in Spring of 2020.
 - Rumrill Blvd. Complete Streets Project (RUM-CST)
 - Scope: Includes storm drainage improvements and installation of bio-retention facilities.
 - Applicable HMP Action Plan No.: SP-1, SP-2, SP-3, SP-4, SP-8, SP-11, SP-17 and SP-18.
 - Status: In design. Anticipated construction is in Fall of 2020.
 - El Portal and Fordham Retaining Wall Stabilization Project (POR-SET)
 - Scope: Stabilization of the creek outfall retaining wall.
 - Applicable HMP Action Plan No.: SP-1, SP-2, SP-3, SP-4, Sp-5, SP-8 and SP-11.

- Status: In planning.

Notable past projects:

- Randy Lane Drainage Relocation (RLN-DRN)
 - Scope: Storm drain system improvement to prevent existing flooding.
 - Applicable HMP Action Plan No.: SP-1, SP-2, SP-3, SP-4, Sp-5, SP-8 and SP-11.
 - Status: Completed in Summer of 2018
- Chesley Ave. Drainage Repair Project (CHL-DRN)
 - Scope: Repair a collapsed portion of the storm drain system and prevent flooding on Chesley Ave.
 - Applicable HMP Action Plan No.: SP-1, SP-2, SP-3, SP-4, Sp-5, SP-8 and SP-11.
 - Status: Completed in Summer of 2018
- Replace Drain Pipe Under Hillcrest Road (HIL-DRN)
 - Scope: Replacement of concrete gutters the crushed underdrain pipes through a hill to prevent flooding and soil saturation.
 - Applicable HMP Action Plan No.: SP-1, SP-2, SP-3, SP-4, Sp-5, SP-8, SP-10 and SP-11.
 - Status: Completed in Spring 2018.
- Monitor/Replace Hydraulugs by Princeton Plaza (PPZ-HYD)
 - Scope: Monitor hills due to flooding and groundwater activity.
 - Applicable HMP Action Plan No.: SP-1, SP-2, SP-3, SP-4, Sp-5, SP-8, SP-10 and SP-11.
 - Status: Construction was completed in summer of 2016, monitoring is ongoing.
- Subdrain Inspection/Cleaning by Princeton Plaza (PPZ-SDR)
 - Scope: Inspection/cleaning of drains up to 15 to 20 feet in depth.
 - Applicable HMP Action Plan No.: SP-1, SP-2, SP-3, SP-4, Sp-5, SP-8, SP-10 and SP-11.
 - Status: Completed in Spring 2018.
- Other Projects and Plans – Other City of San Pablo plans and projects were reviewed to identify cross-planning initiatives for inclusion hazard preparation and mitigation projects for this fiscal year. Implementation of the projects are driven by funding and grant availabilities. The recommendation is to complete all plans and projects and adopt its action plans when necessary.
 - City of San Pablo Comprehensive Emergency Management Plan Update
 - Scope: Provides updated guidance for the City's response to extraordinary emergency situations associated with natural, man-made and technological disasters.
 - Applicable HMP Action Plan No.: SP-1, SP-2, SP-3, SP-4, SP-6, SP-11 and SP-12, SP-13 and SP-14.
 - Status: In Planning. Anticipated completion date in Fall of 2019.