



# River Point - 2100 2nd St, SW

Square 613 / Lot 10

Rendering - Southwest Corner (enlarged)



# River Point - 2100 2nd St, SW

Square 613 / Lot 10

Rendering - Waterfront

June 2, 2017



A56

# Flood Protection Strategy

**River Point - 2100 2nd St, SW**

Square 613 / Lot 10

June 5, 2017



**Flood Zone:** AE (SFHA)

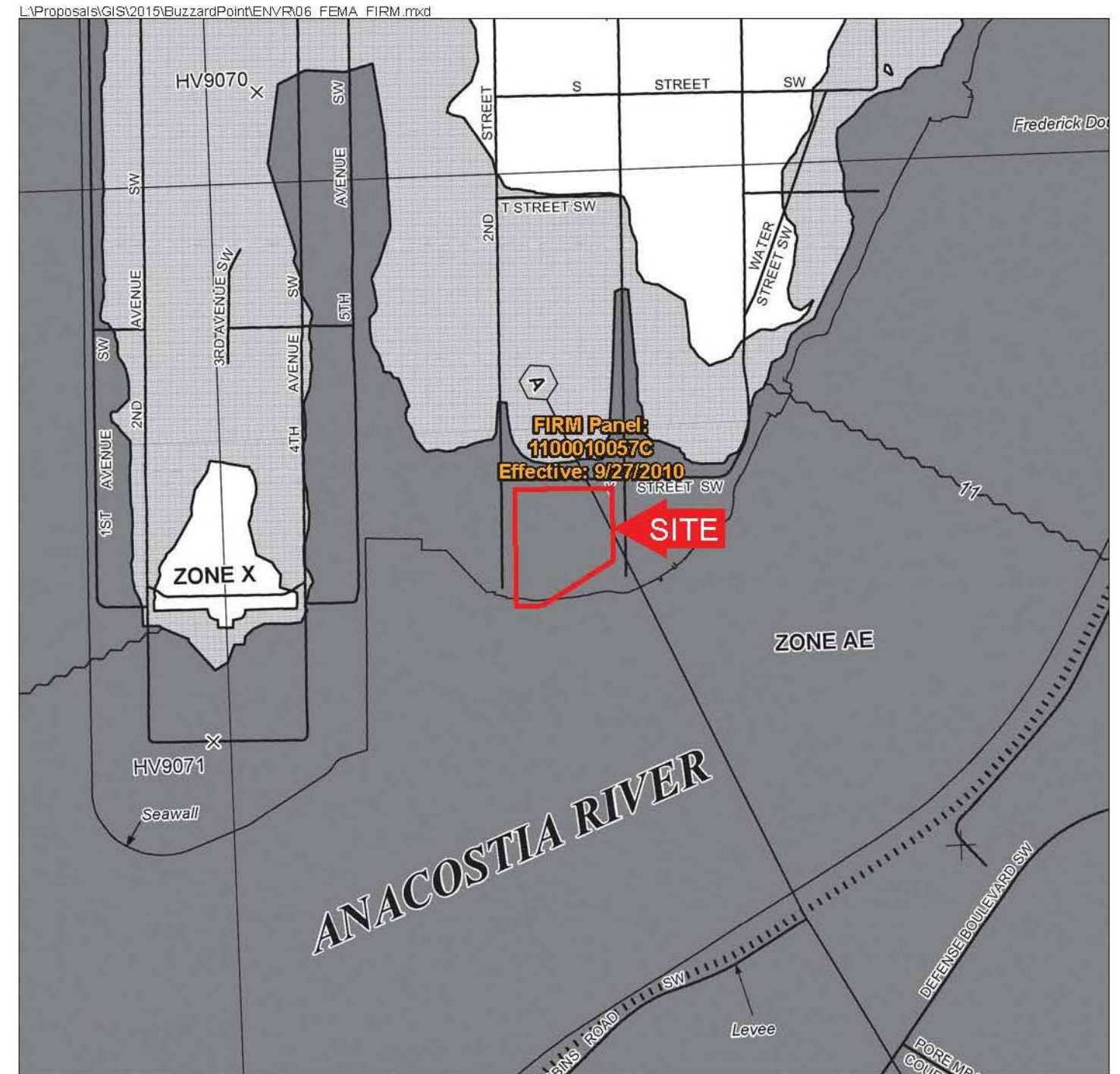
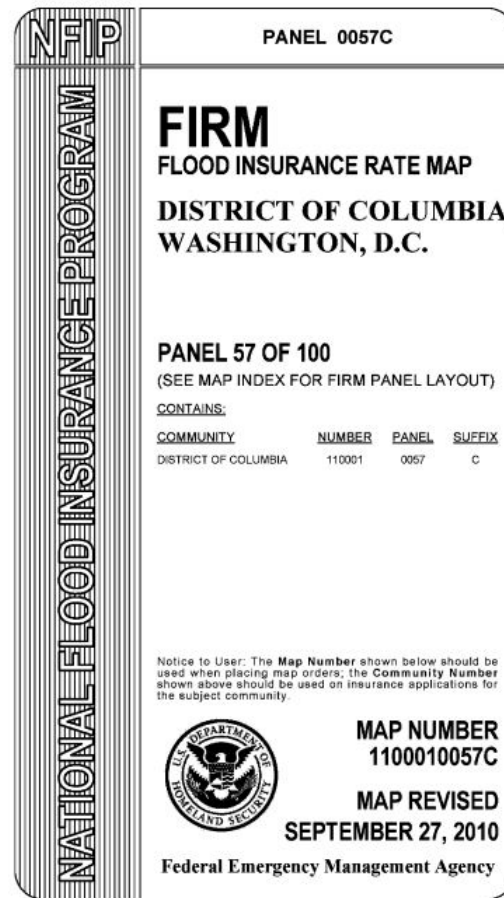
**BFE =** Base Flood Elevation  
100-yr flood = 10.6' NAVD88

**DFE =** Design Flood Elevation  
100-yr flood + **1.5'** = 10.6' + 1.5' = 12.1' NAVD88  
(DCMR 20, Chapter 31, Section 3105.3)

**DFE =** Design Flood Elevation (**Proposed Enhanced**)  
100-yr flood + **2'** = 10.6' + 2' = 12.6' NAVD88  
12.6' NAVD88 + 0.1' = **12.7' DC Datum**

Existing Ground Floor = 9.95' DC Datum (33" below proposed DFE)

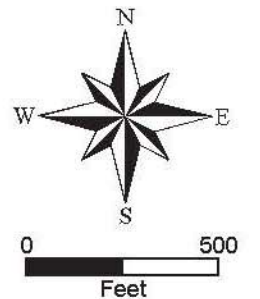
Conversion from NAVD88 to DC Datum:  
NAVD88 = North American Vertical Datum of 1988  
DC Datum = NAVD88 + 0.1'



FEMA Flood Insurance Rate Map (FIRM)  
Buzzard Point  
Original Scale: 1" = 500'

- Letters of Map Revision (LOMR)
- FIRM Panel Boundary
- FIRM Panel Not Printed

For FIRM Panel legend, search by panel number using FEMA's Flood Map Service Center:  
<https://msc.fema.gov/portal/advanceSearch>



# River Point - 2100 2nd St, SW

Square 613 / Lot 10

## FIRM Map & Design Flood Elevation

May 16, 2017

## FLOOD PROTECTION STRATEGY:

### 1. Code Modification

to change from FEMA's definition of Residential Use to Mixed Use to allow for existing below grade parking levels which are located below the base flood elevation.

Modification will follow requirements per DCRA Administrative Bulletin CC2016-02, Special Flood Hazard Areas; Garages below the base flood elevation in buildings or structures with residential occupancies; Permits; and Code Modification Applications.

**2. Flood protection** will be provided by means of the following and per regulations in Flood Hazard Rules, DCMR 20, Chapter 31; ASCE 24 and FEMA Technical Bulletins:

A. Dry floodproofing method to be accomplished through the use of flood-damage resistant materials up to Design Flood Elevation of 12.7' and use of removable flood shields (active barriers) to be deployed in preparation for a flood event (per Dry Floodproofing Requirements of Chapter 6, ASCE 24). Sump pumps shall be provided to handle inevitable seepage. See sheets F8 & F9 for a typical exhibit of a manual flood shield for this project.

B. **Flood Emergency Operation Plan** will be provided.  
It will include:

- a. Established chain of command & responsibility defined
- b. Procedure for notification of necessary parties
- c. Flood warning time shall be a minimum of 12 hours
- d. List of specific duties assigned
- e. Method of installation
- f. Evacuation plan for all personnel
- g. Identified ingress and egress routes
- h. Annual training and exercise program for personnel coordinated with community officials
- i. Plan shall be posted permanently in two conspicuous locations with the structure.

NOTE: plan to be consulted with DOEE and DC HSEMA to ensure that it does not conflict with other emergency plans prepared for the area

C. **Inspection and Maintenance Plan** will be provided.  
It will include maintenance and inspection of the following:

- a. Mechanical equipment (sump pumps, generators)
- b. Flood shields equipment
- c. Walls and wall penetrations
- d. Berms that might have excessive vegetative growth

### 3. FEMA Floodproofing Certificate (FEMA Form 81-65)

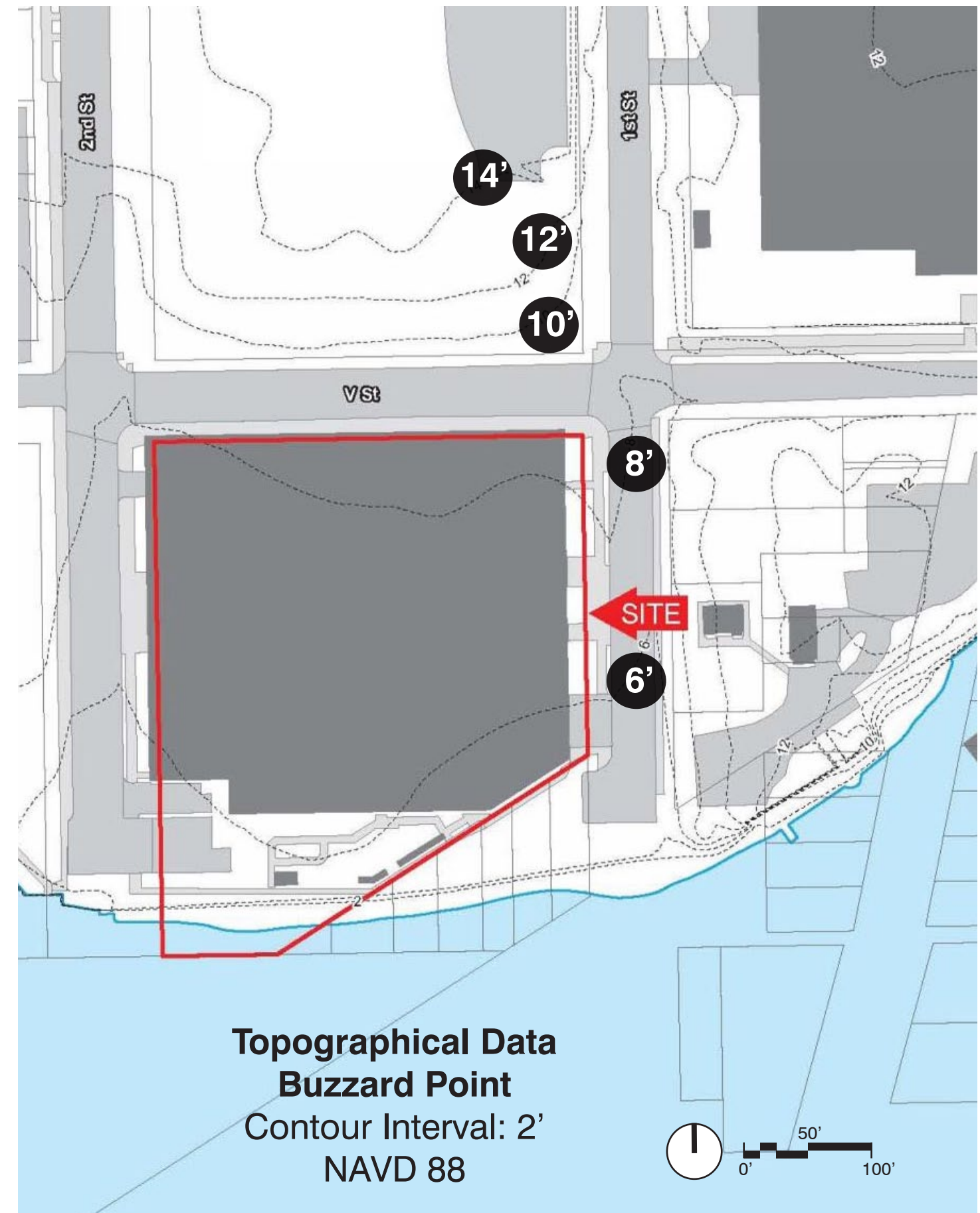
(to be submitted to DOEE at various stages of design, permitting and construction)

### 4. FEMA Elevation Certificate (FEMA Form 81-31)

(to be submitted to DOEE at various stages of design, permitting and construction)

# River Point - 2100 2nd St, SW

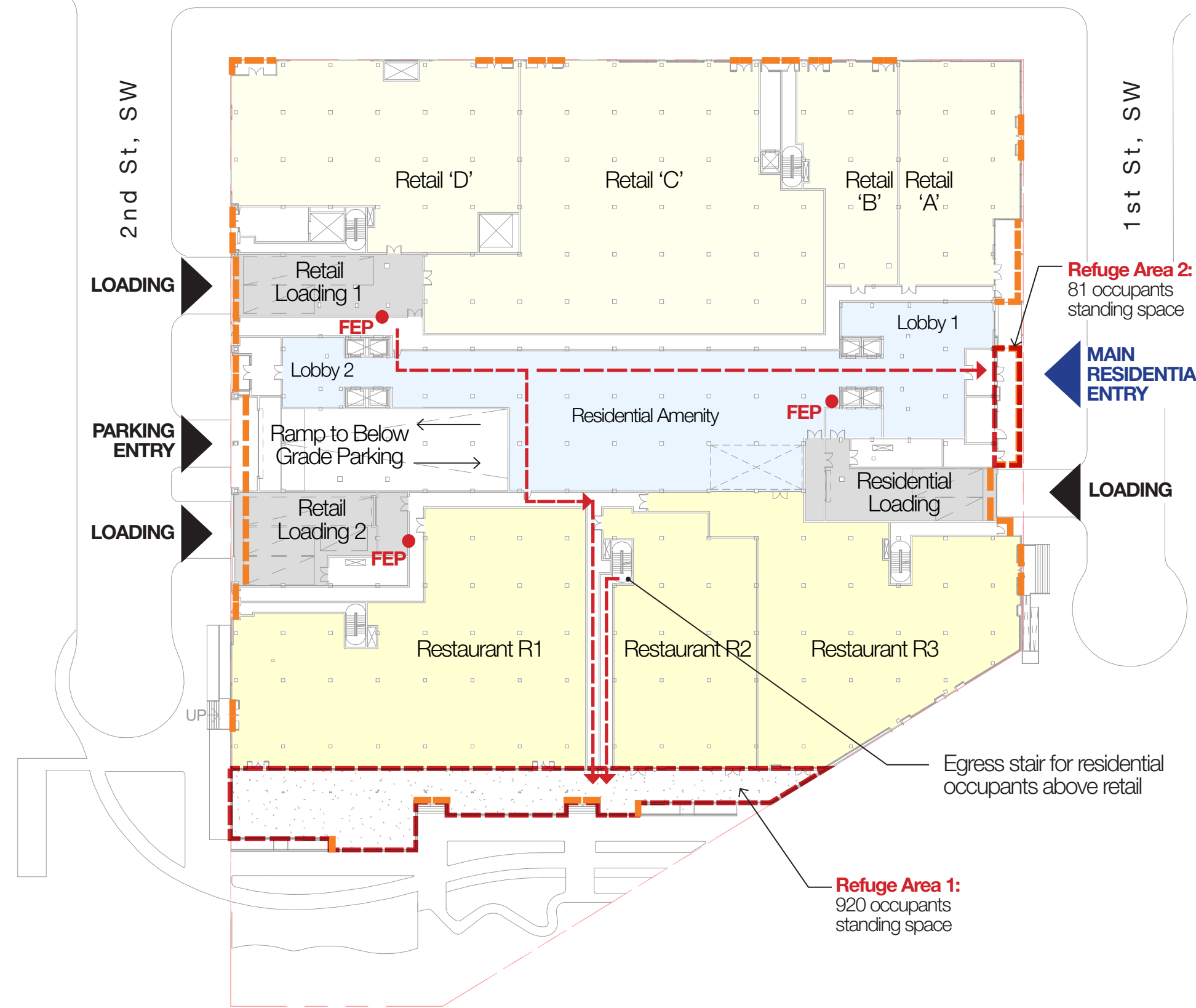
Square 613 / Lot 10



## Flood Protection Strategy & Topo Map

May 16, 2017





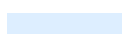



V Street, SW

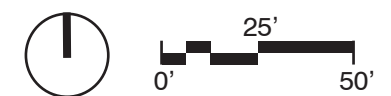


## FLOOD EVENT EMERGENCY EGRESS PLAN

### GENERAL NOTES:

1. The flood emergency plan (FEP) shall be posted permanently in at least two conspicuous locations within the structure. Proposed locations are conceptual and will be finalized during permitting.
2. Provisions will be made for the evacuation of all occupants before the building is isolated by flood waters.
3. Two Refuge Areas during a flood event have been designated for occupants who do not evacuate prior to the onset of flooding: Southern Terrace and Mid-Block on 1st Street.
4. IBC 2012, Table 1004.1.2 'Maximum floor area allowances per occupant' has been used to calculate standing space load (5 sf net per person).

-  LOCATION OF REMOVABLE FLOOD SHIELDS
-  ESCAPE PATH TO REFUGE AREA DURING A FLOOD EVENT
-  REFUGE AREA FOR OCCUPANTS WHO DID NOT EVACUATE PRIOR TO THE ONSET OF FLOODING
-  LOCATION OF A POSTED FLOOD EMERGENCY PLAN (FEP)
-  RESIDENTIAL
-  RETAIL
-  RESTAURANT
-  LOADING, BACK OF HOUSE



# River Point - 2100 2nd St, SW

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## Flood Protection - Egress Plan

June 2, 2017








F10

# Public Realm Design



Legend

-  proposed building footprint
-  existing paved area
-  existing green space
-  property line
-  existing tree



Existing Conditions (Sheet L4)

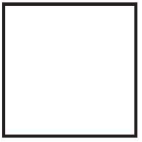
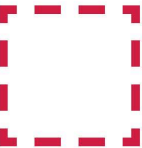

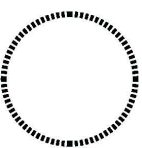

June 5, 2017

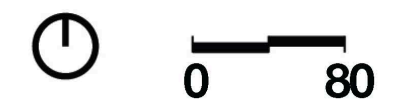
**WEST 8**





Legend

-  proposed building footprint
-  property line
-  existing tree - to be relocated
-  existing tree - to be removed (22)
-  existing tree - outside impact area



Site Tree Preservation (Sheet L7)

June 5, 2017

**WEST 8**



Existing Crepe Myrtles to be Relocated to Third Floor Courtyards (Sheet L7)