ALEXANDRIA WATERFRONT
PUMP HOUSE / PAVILION DEVELOPMENT

APRIL 15, 2019

THOMPSONS ALLEY SITE PLAN OPTIONS
GENERATOR SCREENING OPTIONS
THOMPSONS ALLEY
OPTION A

PARCEL C BOUNDS
OPTION A
A-1 | WOOD RAIL

ALEXANDRIA WATERFRONT | PUMP HOUSE - PAVILION DEVELOPMENTS
OPTION A
A-3 | FULL WOOD SCREEN

ALEXANDRIA WATERFRONT | PUMP HOUSE - PAVILION DEVELOPMENTS
• THOMPSONS ALLEY PUMP STATION IS SITED SO THAT THE BUILDING IS RELOCATED ENTIRELY OUTSIDE OF PARCEL C, AVOIDING THE DEED HEIGHT RESTRICTION OF 10’-0”.

• REQUIRES MINIMAL DISTURBANCE TO EXISTING SITE ELEMENTS (OFFICE BUILDING STAIR), UTILITIES (ELECTRICAL LINE) AND EXISTING VEGETATION.

• BOTH PUMPS AND GENERATOR ARE ACCESSIBLE BY CRANE VIA THOMPSONS ALLEY LOADING AREA.

• TRASH ROOM AND TRANSFORMER ENCLOSURE ARE ACCESSIBLE VIA THOMPSONS ALLEY LOADING AREA.

• PUMP STATION WET WELL MAY REQUIRE ADDITIONAL STRUCTURAL DESIGN IN ORDER TO ACCOMMODATE TERRACED PLANTING ABOVE. Terraced planting is incorporated in order to eliminate the need for a guardrail on the landside of the Promenade.

• ENERGY DISSIPATOR ACCESS HATCH (3’-0” SQ.) IS REQUIRED ON PROMENADE. Access hatch is able to be incorporated as a paver tray.

• OUTFALL LANDS UNDER PROPOSED DOCK / GANGWAY WHICH COULD PRESENT MAINTENANCE CHALLENGES.
OPTION A
SECTION INFORMATION

SECTION A

FL 33.52'  DEED HEIGHT LIMIT
30'-0''
30'-0''
10'-0''
FL 13.52'
FL 3.52'

KEY PLAN

EXISTING SEAPORT FOUNDATION
EXISTING SHORELINE
PROPOSED LAYOUT

SECTION B

FL 53.52'  DEED HEIGHT LIMIT
30'-0''
30'-0''
10'-0''
FL 13.52'
FL 3.52'

FL 33.52'
FL 26.48'
FL 33.52'

COA CITY ZONING HEIGHT LIMIT
(CD ZONE)

COA CITY ZONING HEIGHT LIMIT
(WPR ZONE)
MAX. BUILDING HEIGHT PER
COA–NPS PARCEL C AGREEMENT
SEAPORT FOUNDATION HEIGHT
(VARIES WITH TIDES, TYP.)

COA CITY ZONING HEIGHT LIMIT
(CD ZONE)
OPTION A
EXISTING VS. PROPOSED VIEWS

EXISTING CONDITIONS

EXISTING CONDITIONS
THOMPSONS ALLEY
OPTION B

AVERAGE FINISHED GRADE
OPTION B
SITE PLAN

OFFICE BUILDING

THOMPSONS ALEY

QUEEN STREET

PROPOSED TREE
EXISTING SEAPORT FOUNDATION
EXISTING SHORELINE
PARCEL C BOUNDS

ALEXANDRIA WATERFRONT | PUMP HOUSE - PAVILION DEVELOPMENTS
OPTION B
B-2 | DECORATIVE ENCLOSURE W/ CABLE RAIL
NOTES

- THOMPSONS ALLEY PUMP STATION IS SITED SUCH THAT THE BUILDING HEIGHT IS IN COMPLIANCE WITH CITY ZONING HEIGHT LIMIT, NPS PARCEL C HEIGHT LIMIT, AND DEED HEIGHT LIMIT. Compliance with deed height restriction is based on City definition of ‘average finished grade’.

- SITE DESIGN PROVIDES EXTERIOR PUBLIC SPACE (AMPHITHEATER SEATING) ADJACENT TO PROMENADE. TERRACED VEGETATED BUFFER ADJACENT TO PUMP STATION SOFTENS EDGE OF UTILITY BUILDING.

- BOTH PUMPS AND GENERATOR ARE ACCESSIBLE BY CRANE VIA THOMPSONS ALLEY LOADING AREA.

- TRASH ROOM AND TRANSFORMER ENCLOSURE ARE ACCESSIBLE VIA THOMPSONS ALLEY LOADING AREA.

- ENERGY DISSIPATOR ACCESS HATCH (3’-0” SQ.) IS REQUIRED ON PROMENADE. Access hatch is able to be incorporated as a paver tray.

- OUTFALL LANDS UNDER PROPOSED DOCK / GANGWAY WHICH COULD PRESENT MAINTENANCE CHALLENGES.

- REQUIRES SIGNIFICANT DISTURBANCE TO EXISTING SITE ELEMENTS [OFFICE BUILDING STAIR], UTILITIES [ELECTRICAL LINE] AND EXISTING VEGETATION.
KEY PLAN

SECTION INFORMATION

SECTION A

COA CITY ZONING HEIGHT LIMIT
(CD ZONE)

COA CITY ZONING HEIGHT LIMIT
(WPR ZONE)
MAX. BUILDING HEIGHT PER
COA—NPS PARCEL C AGREEMENT

SEAPORT FOUNDATION HEIGHT
(VARIES WITH TIDES, TYP.)
DEED HEIGHT LIMIT

AVERAGE FINISHED GRADE

SECTION B

COA CITY ZONING HEIGHT LIMIT
(CD ZONE)

COA CITY ZONING HEIGHT LIMIT
(WPR ZONE)
MAX. BUILDING HEIGHT PER
COA—NPS PARCEL C AGREEMENT

SEAPORT FOUNDATION HEIGHT
(VARIES WITH TIDES, TYP.)
DEED HEIGHT LIMIT

AVERAGE FINISHED GRADE
OPTION B
EXISTING VS. PROPOSED VIEWS

EXISTING CONDITIONS

EXISTING CONDITIONS
THOMPSONS ALLEY
OPTION C

MIRRORED BUILDING
OPTION C
GRADING PLAN

MEET EXISTING TERRACE GRADES.

TIE INTO EXISTING GRADES BEYOND THIS POINT.

TIE INTO EXISTING GRADES BEYOND THIS POINT.
OPTION C
C-2 | DECORATIVE ENCLOSURE W/ CABLE RAIL
OPTION C
C-3 | FULL WOOD SCREEN
NOTES

• THOMPSONS ALLEY PUMP STATION IS SITED SUCH THAT THE BUILDING IS LOCATED ENTIRELY ON NEW FILL TO AVOID DEED HEIGHT RESTRICTION. UTILITY PROGRAMMING OF PUMP STATION IS MIRRORED.

• GENERATOR IS ACCESSIBLE BY CRANE VIA THOMPSONS ALLEY LOADING AREA.

• TRASH ROOM AND TRANSFORMER ENCLOSURE ARE ACCESSIBLE VIA THOMPSONS ALLEY LOADING AREA BY WAY OF PEDESTRIAN PATH.

• ENERGY DISSIPATOR ACCESS HATCH (3’-0” SQ.) IS REQUIRED ON PROMENADE. Access hatch is able to be incorporated as a paver tray.

• REQUIRES SIGNIFICANT DISTURBANCE TO EXISTING SITE ELEMENTS (OFFICE BUILDING STAIR), UTILITIES (ELECTRICAL LINE) AND EXISTING VEGETATION.

• PUMPS ARE ACCESSIBLE BY CRANE VIA QUEEN STREET END GARDEN. In order to properly remove and maintain pumps, crane access along the Promenade may be required.

• PIPE LAYOUT REQUIRES MULTIPLE BENDS BETWEEN PUMP STATION AND ENERGY DISSIPATOR, WHICH MAY DECREASE THE EFFICIENCY OF THE PUMPS.
OPTION C
SECTION INFORMATION

SECTION A

SECTION B

KEY PLAN

EXISTING SEAPORT FOUNDATION
EXISTING SHORELINE
PROPOSED LAYOUT

ALEXANDRIA WATERFRONT | PUMP HOUSE - PAVILION DEVELOPMENTS
OPTION C
EXISTING VS. PROPOSED VIEWS

EXISTING CONDITIONS

EXISTING CONDITIONS
THOMPSONS ALLEY
OPTION C ALTERNATE

MIRRORED BUILDING
OPTION C ALT.
C-2 | DECORATIVE ENCLOSURE W/ CABLE RAIL

ALEXANDRIA WATERFRONT | PUMP HOUSE - PAVILION DEVELOPMENTS
THOMPSONS ALLEY PUMP STATION IS SITED SUCH THAT THE BUILDING IS LOCATED ENTIRELY ON NEW FILL TO AVOID DEED HEIGHT RESTRICTION. UTILITY PROGRAMMING OF PUMP STATION IS MIRRORED.

PAVED AREA BENEATH PUMP STATION SERVES AS A PUBLIC GATHERING SPACE AND MAY BE FURNISHED WITH FLEXIBLE SEATING.

GENERATOR IS ACCESSIBLE BY CRANE VIA THOMPSONS ALLEY LOADING AREA.

TRASH ROOM AND TRANSFORMER ENCLOSURE ARE ACCESSIBLE VIA THOMPSONS ALLEY LOADING AREA.

ENERGY DISSIPATOR ACCESS HATCH (3’-0” SQ.) IS REQUIRED ON PROMENADE. Access hatch is able to be incorporated as a paver tray.

REQUIRES DISTURBANCE TO EXISTING SITE ELEMENTS (OFFICE BUILDING STAIR), UTILITIES (ELECTRICAL LINE) AND EXISTING VEGETATION.

PUMPS ARE ACCESSIBLE BY CRANE VIA QUEEN STREET END GARDEN. In order to properly remove and maintain pumps, crane access along the Promenade may be required.

PIPE LAYOUT REQUIRES MULTIPLE BENDS BETWEEN PUMP STATION AND ENERGY DISSIPATOR, WHICH MAY DECREASE THE EFFICIENCY OF THE PUMPS.
OPTION C ALT.
SECTION INFORMATION

SECTION A

- COA CITY ZONING HEIGHT LIMIT (CD ZONE)
- COA CITY ZONING HEIGHT LIMIT (WPR ZONE)
- MAX. BUILDING HEIGHT PER COA-NPS PARCEL C AGREEMENT
- SEAPORT FOUNDATION HEIGHT (VARYING WITH TIDES, TYP.)

SECTION B

- COA CITY ZONING HEIGHT LIMIT (CD ZONE)
- COA CITY ZONING HEIGHT LIMIT (WPR ZONE)
- MAX. BUILDING HEIGHT PER COA-NPS PARCEL C AGREEMENT
- SEAPORT FOUNDATION HEIGHT (VARYING WITH TIDES, TYP.)

KEY PLAN

EXISTING SEAPORT FOUNDATION
EXISTING SHORELINES
PROPOSED LAYOUT
THOMPSONS ALLEY
OPTION D

OFFICE BUILDING ADJACENT
OPTION D
SITE PLAN

QUEEN STREET
TECHNICAL DRAWING

OFFICE BUILDING

EXISTING SHORELINE
EXISTING SEAPORT FOUNDATION
PARCEL C BOUNDS

PROPOSED TREE
OPTION D
D-2 | DECORATIVE ENCLOSURE W/ CABLE RAIL
OPTION D
D-3 | FULL WOOD SCREEN

ALEXANDRIA WATERFRONT | PUMP HOUSE - PAVILION DEVELOPMENTS
NOTES

- PUMP STATION IS SITED SUCH THAT IT IS ENTIRELY OUT OF THE VIEWSHED OF BLACKWALL HITCH; ALTHOUGH LOCATED IN CLOSE PROXIMITY TO THE OFFICE BUILDING, THE VIEW FROM THE BUILDING TERRACE IS SIGNIFICANTLY OPEN AS COMPARED TO OTHER OPTIONS.

- SITE DESIGN SHIFTS BULKHEAD LINE EAST, PROVIDING EXTERIOR PUBLIC SPACE (PAVED PLAZA) ADJACENT TO PROMENADE. PAVED AREA BENEATH PUMP STATION SERVES AS A PUBLIC GATHERING SPACE AND MAY BE FURNISHED WITH FLEXIBLE SEATING.

- GENERATOR, TRASH ROOM AND TRANSFORMER ENCLOSURE ARE ACCESSIBLE VIA QUEEN STREET END GARDEN BY WAY OF COMBINED PEDESTRIAN / VEHICULAR PATH.

- LAYOUT DOES NOT PROVIDE SUFFICIENT SPACE FOR PIPE BENDS, THUS INCREASING THE SIZE OF THE ENERGY DISSIPATOR. Required access hatch is able to be incorporated as a paver tray.

- REQUIRES SIGNIFICANT DISTURBANCE TO EXISTING SITE ELEMENTS (OFFICE BUILDING STAIR), UTILITIES (ELECTRICAL LINE) AND EXISTING VEGETATION.

- PUMPS ARE ACCESSIBLE BY CRANE VIA QUEEN STREET END GARDEN. In order to properly remove and maintain pumps, crane access along the Promenade may be required.

- OUTFALL LANDS UNDER PROPOSED DOCK / GANGWAY WHICH COULD PRESENT MAINTENANCE CHALLENGES.
OPTION D
ELEVATION INFORMATION

ELEVATION

- EL 24.68' PROPOSED PUMP STATION HEIGHT
- EL 5.58' EXISTING GRADE

KEY PLAN

1. VIEW FROM PROMENADE
2. VIEW FROM QUEEN STREET END GARDEN
3. VIEW FROM THOMPSONS ALLEY
4. VIEW FROM PEDESTRIAN PATH

ALEXANDRIA WATERFRONT | PUMP HOUSE - PAVILION DEVELOPMENTS
OPTION D
EXISTING VS. PROPOSED VIEWS

EXISTING CONDITIONS

EXISTING CONDITIONS
THOMPSONS ALLEY
OPTION D ALTERNATE

OFFICE BUILDING ADJACENT
AVERAGE FINISHED GRADE
OPTION D ALT.
SITE PLAN

THOMPSONS ALEY

OFFICE BUILDING

QUEEN STREET

EXISTING SHORELINE

EXISTING SEAPORT FOUNDATION

PROPOSED TREE

PARCEL C BOUNDS

ALEXANDRIA WATERFRONT | PUMP HOUSE - PAVILION DEVELOPMENTS
MEET EXISTING TERRACE GRADES.

TIE INTO EXISTING GRADES BEYOND THIS POINT.

TIE INTO EXISTING GRADES BEYOND THIS POINT.

PUMP STATION
AFG: 14.68'

GRADE CALCULATIONS

ALEXANDRIA WATERFRONT | PUMP HOUSE - PAVILION DEVELOPMENTS
OPTION D ALT.  
D-1 | WOOD RAIL
OPTION D ALT.  
D-3 | FULL WOOD SCREEN
THOMPSONS ALLEY PUMP STATION IS SITED SUCH THAT THE BUILDING HEIGHT IS IN COMPLIANCE WITH CITY ZONING HEIGHT LIMIT, NPS PARCEL C HEIGHT LIMIT, AND DEED HEIGHT LIMIT. Compliance with deed height restriction is based on City definition of ‘average finished grade’.

SITE DESIGN PROVIDES TERRACED VEGETATED BUFFER BETWEEN PUMP STATION AND SHIFTED BULKHEAD LINE (EAST), SOFTENING EDGE OF UTILITY BUILDING.

GENERATOR AND TRASH ROOM ARE ACCESSIBLE VIA OFFICE BUILDING PATHWAY; TRANSFORMER ENCLOSURE IS ACCESSIBLE VIA QUEEN STREET END GARDEN.

LAYOUT DOES NOT PROVIDE SUFFICIENT SPACE FOR PIPE BENDS, THUS INCREASING THE SIZE OF THE ENERGY DISSIPATOR. Required access hatch is able to be incorporated as a paver tray.

REQUIRES SIGNIFICANT DISTURBANCE TO EXISTING SITE ELEMENTS (OFFICE BUILDING STAIR), UTILITIES (ELECTRICAL LINE) AND EXISTING VEGETATION.

PUMPS ARE ACCESSIBLE BY CRANE VIA QUEEN STREET END GARDEN. In order to properly remove and maintain pumps, crane access along the Promenade may be required.

OUTFALL LANDS UNDER PROPOSED DOCK / GANGWAY WHICH COULD PRESENT MAINTENANCE CHALLENGES.
OPTION D ALT.
SECTION INFORMATION

SECTION A

KEY PLAN

SECTION B
OPTION D ALT.
ELEVATION INFORMATION

ELEVATION

[Diagram showing elevation details with key points labeled as 1, 2, 3, 4]

KEY PLAN

[Diagram showing key plan with numbered areas 1, 2, 3, 4]

VIEW FROM PROMENADE
VIEW FROM QUEEN STREET END GARDEN
VIEW FROM THOMPSONS ALLEY
VIEW FROM FOUNDERS PARK
THOMPSONS ALLEY
OPTION E

FOUNDERS PARK ADJACENT
OPTION E
E-1 | WOOD RAIL
OPTION E
E-2 | DECORATIVE ENCLOSURE W/ CABLE RAIL

1

2

3
• PUMP STATION IS SITED SUCH THAT IT IS ENTIRELY OUT OF THE VIEWSHED OF BLACKWALL HITCH; ALTHOUGH LOCATED IN CLOSE PROXIMITY TO THE OFFICE BUILDING, THE VIEW FROM THE BUILDING TERRACE TOWARDS THE POTOMAC RIVER IS FULLY OPEN AS COMPARED TO OTHER OPTIONS.

• SITE DESIGN SHIFTS BULKHEAD LINE WEST, TO BE MORE IN KEEPING WITH THE EXISTING SHORELINE. AN EXTERIOR PUBLIC SPACE (PAVED PLAZA) IS PROVIDED ADJACENT TO THE PROMENADE; THE PAVED AREA BENEATH THE PUMP STATION SERVES AS A PUBLIC GATHERING SPACE AND MAY BE FURNISHED WITH FLEXIBLE SEATING.

• GENERATOR, TRASH ROOM, PUMPS AND TRANSFORMER ENCLOSURE ARE ACCESSIBLE VIA QUEEN STREET END GARDEN BY WAY OF COMBINED PEDESTRIAN / VEHICULAR PATH.

• LAYOUT DOES NOT PROVIDE SUFFICIENT SPACE FOR PIPE BENDS, THUS INCREASING THE SIZE OF THE ENERGY DISSIPATOR. Required access hatch is able to be incorporated as a paver tray.

• REQUIRES SIGNIFICANT DISTURBANCE TO EXISTING SITE ELEMENTS (OFFICE BUILDING STAIR), UTILITIES (ELECTRICAL LINE) AND EXISTING VEGETATION.

• STRUCTURAL COORDINATION IS REQUIRED TO DETERMINE THE IMPACT OF CONSTRUCTION IN CLOSE PROXIMITY TO THE OFFICE BUILDING; UNDERGROUND ELEMENTS ARE TO BE OUT OF THE LOAD PLANE OF ADJACENT STRUCTURAL FOOTINGS.
OPTION E
SECTION INFORMATION

SECTION A

SECTION B
OPTION E
ELEVATION INFORMATION

ELEVATION

KEY PLAN

1. VIEW FROM PROMENADE
2. VIEW FROM QUEEN STREET END GARDEN
3. VIEW FROM THOMPSONS ALLEY
4. VIEW FROM FOUNDERS PARK
OPTION E
EXISTING VS. PROPOSED VIEWS

EXISTING CONDITIONS

EXISTING CONDITIONS
ALEXANDRIA WATERFRONT
PUMP HOUSE / PAVILION
DEVELOPMENT

APRIL 15, 2019

WATERFRONT PARK GENERATOR SCREENING OPTIONS
OPTION A
WOOD RAIL
OPTION B
DECORATIVE ENCLOSURE W/ CABLE RAIL
OPTION C
FULL WOOD SCREEN
ALEXANDRIA WATERFRONT
PUMP HOUSE / PAVILION DEVELOPMENT

APRIL 15, 2019

PUMP STATION COMPONENTS
PUMP STATION COMPONENTS

**ELECTRICAL ROOM**

Houses electrical equipment associated with pumps. Room is required to be enclosed and above the 10.2' catastrophic flood elevation.

**GENERATOR ENCLOSURE**

Houses 16'-9" x 6'-7" x 9'-6" emergency generator with 3'-0" working clearance around. Enclosure is required to be open air for exhaust purposes and above the 10.2' catastrophic flood elevation.

**CITY STORAGE SPACE**

Unprogrammed interior building space serving as sole access point to generator enclosure (via access hatch and ladder) and trash collection room (via double door).

**TRASH COLLECTION ROOM**

At grade storage location for trash, collected via below grade trash screening chute. Direct connection to city storage space for maintenance.

OVERALL SYSTEM COMPONENTS

**PUMP STATION**

**CHECK VALVE**

**VAULT**

**WET WELL**

**ENERGY DISSIPATOR**

**STORMWATER OUTFALL PIPE**

**PEDESTRIAN PROMENADE**

**LOWER BOARDWALK**

**RIP RAP**

**STRUCTURAL BULKHEAD**