

Golden Gate Park Reservoir and Pump Station

Civic Design Review Phase 1 Revision | Design Options | October 20, 2014

BUILDING DESIGN & CONSTRUCTION
S.F. DEPARTMENT OF PUBLIC WORKS

Golden Gate Park Reservoir and Pump Station - Site Analysis & Design

Existing Site Analysis:

The Recycled Water Storage Reservoir and Pump Station will be located in the existing compost facility of Golden Gate Park. The proposed underground reservoir and above ground pump station will be located immediately east of the existing Central Pump Station and Underground Reservoir Numbers 1 & 2. The new and old reservoirs will be linked so that recycled water is used in all three reservoirs for irrigation. The new pump station supplies recycled water to the Presidio and Lincoln Park. The existing pump station supplies water to Golden Gate Park. Composting will occur on top of the underground reservoir and next to the pump station. The composting yard is screened by trees from public view.

GGP Compost Yard factors and activities that will have a direct effect upon the reservoir and pump station design include:

- Heavy equipment operations, including bulldozers, loaders, large dump trucks, trump and branch shredders, mixers, tractor trailer rigs, and other heavy equipment.
- Stockpiling of sand, straw and manure, trimmings and wood chips, and miscellaneous debris of broken concrete, boulders, and aggregates.
- Severe localized dust, sawdust, and blowing sand conditions.

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Architectural Design Concept:

The existing rectangular pump station is protected from the compost yard by a tall “C” shaped wall. This wall keeps dust and debris out of the pump station and was originally designed to allow stockpiling against the surface. The new pump station and yard will require the same protection on three sides. All openings to the new yard and pump station will be located on the North elevation, away from the compost yard. This “protective barrier wall” is used as the primary design element. Two design options are explored as follows:

- Option 1: Independent Wall + Box. The “barrier wall” begins at the highest point as an independent free standing wall. From there it wraps around the pump station and yard and ends as an independent free standing wall, just outside of the yard.
- Option 2: Spiral Wall + Box. The undulating “barrier wall” fully wraps around the pump station. It then extends partially around the yard and again ends as a free standing element just outside the yard.

Landscape Design Concept:

Given the compost yard is located in Golden Gate Park, Landscaping will be used to screen the industrial facility from public view. The existing compost yard is fully paved as required for operations. No landscaping will occur in the yard. SFPUC will work with Recreation and Park Department to replace any landscape screening that will be removed during construction. The location of excavation for new pipes is still in the process of determination.



0 1,500 3,000 Feet



— PREFERRED PIPELINE ALIGNMENT

■ CUSTOMER AREA SERVED

Surrounding Area







- 1 Compost facility & compost area
- 2 (E) Central Pump Station
- 3 Underground Reservoir No 1 & 2
- 4 Screens of Trees

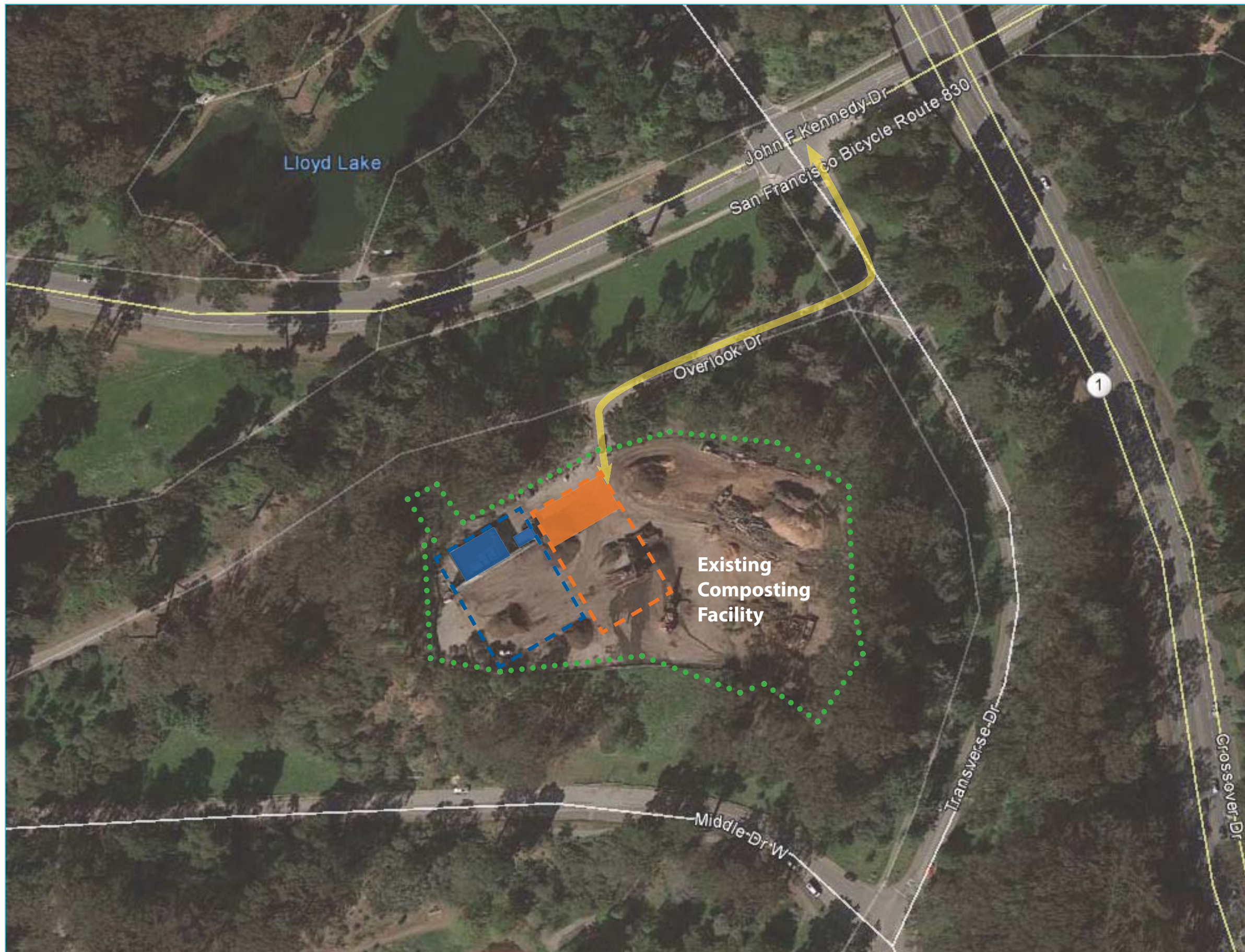


Existing Site Conditions



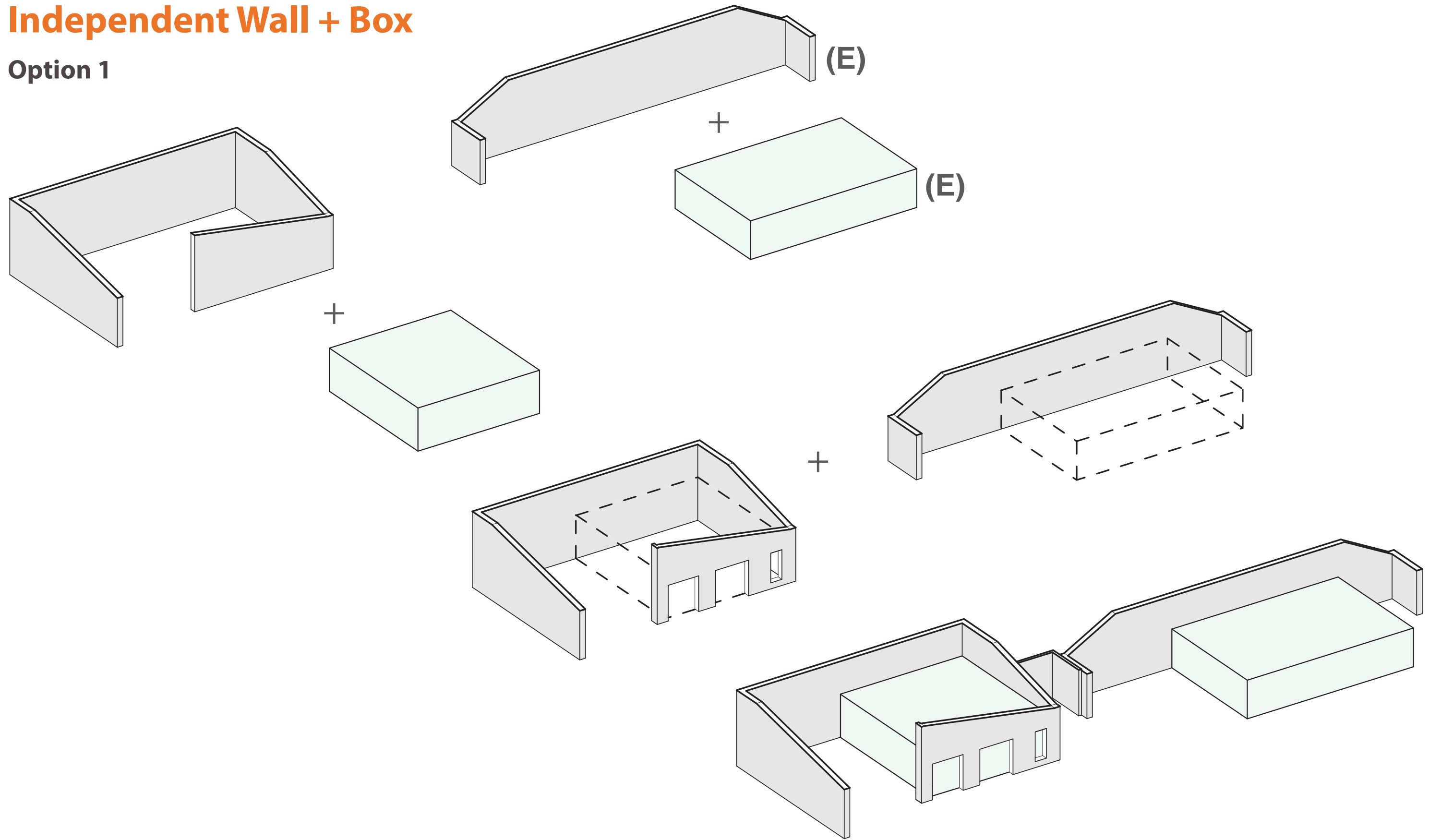
Legend

-  (E) Pump Station
-  (E) Buried Reservoir 1&2
-  (E) Fence Line
-  Proposed Buried Reservoir 3
-  Proposed Pump Station
-  Entry & Exit



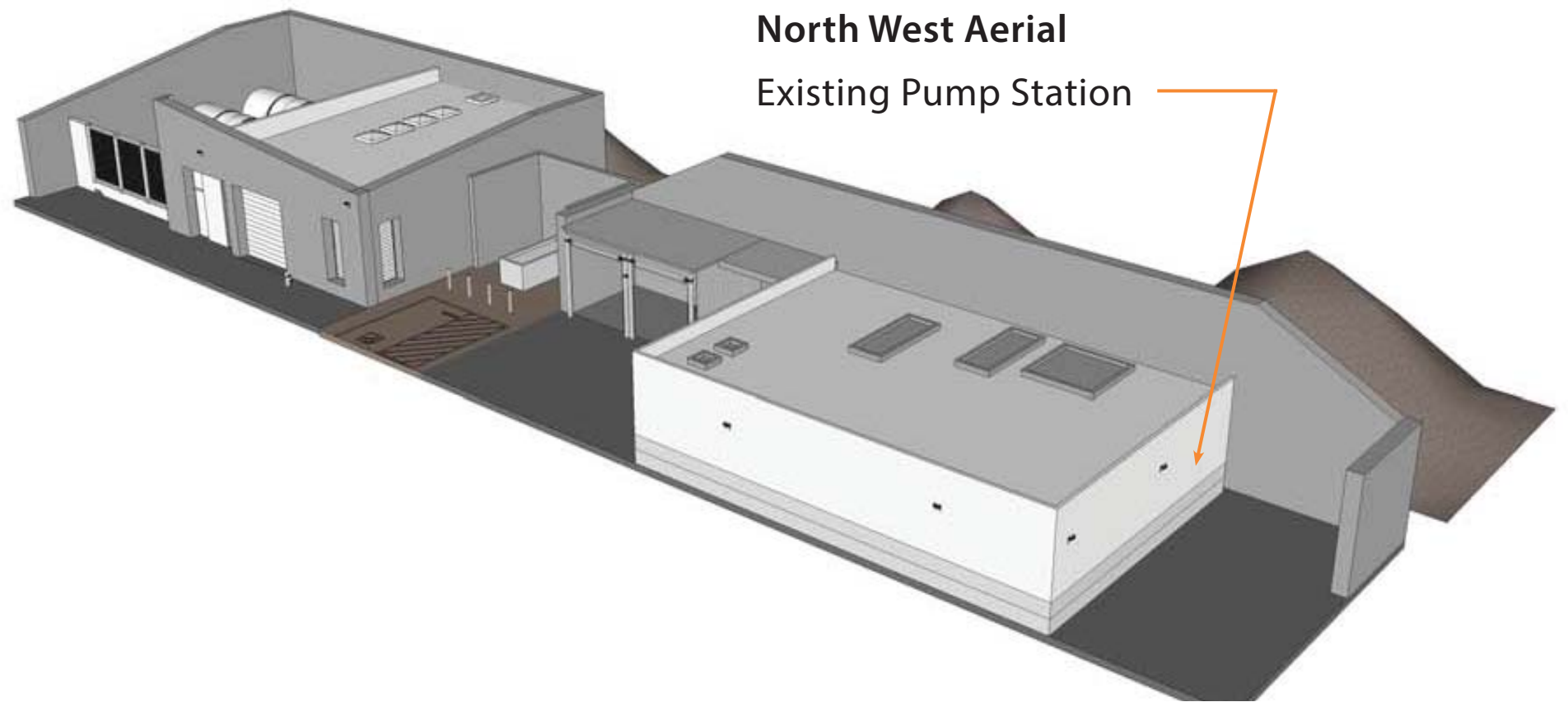
Independent Wall + Box

Option 1





North East Aerial
Existing Pump Station



North West Aerial
Existing Pump Station



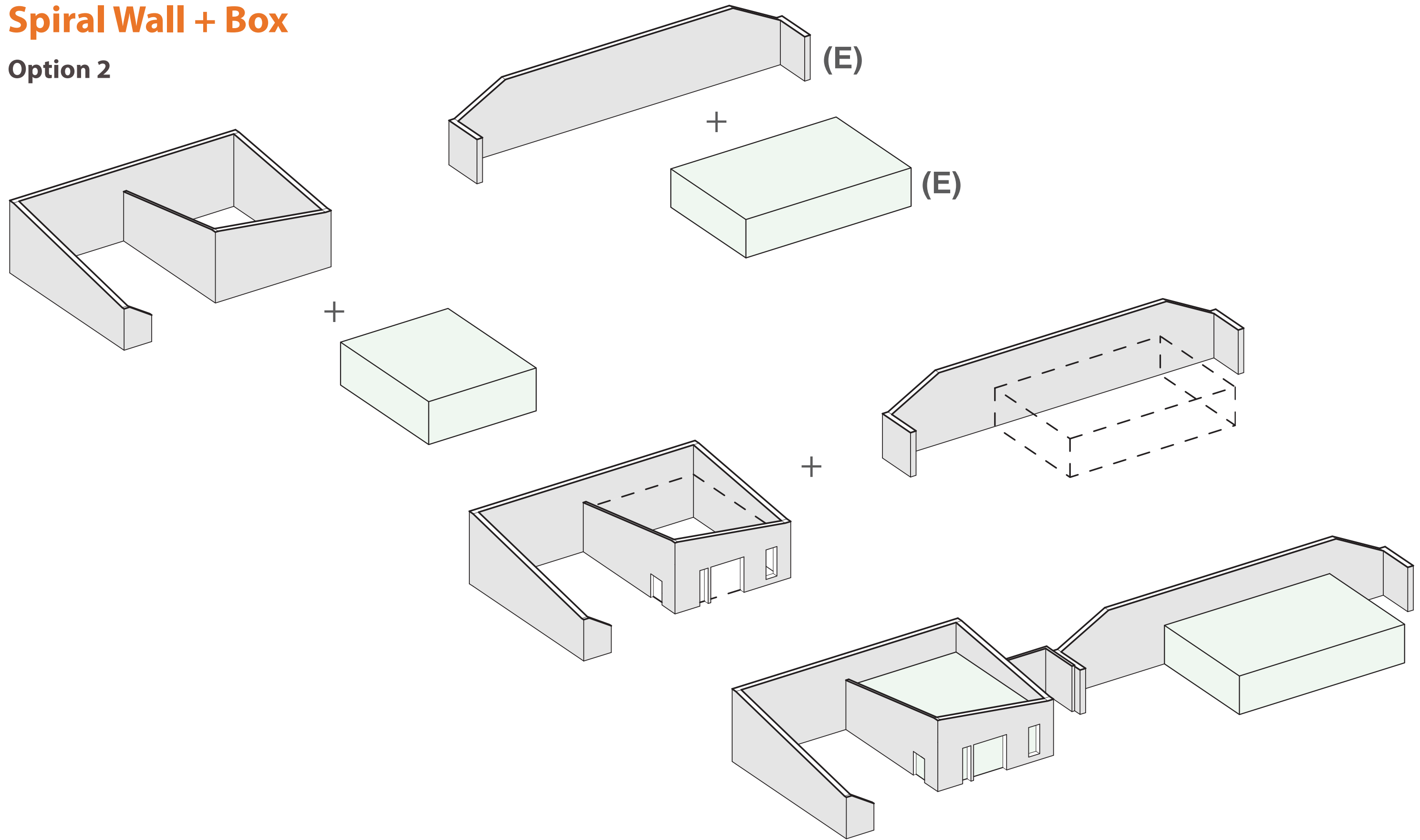
North West Perspective



North East Perspective

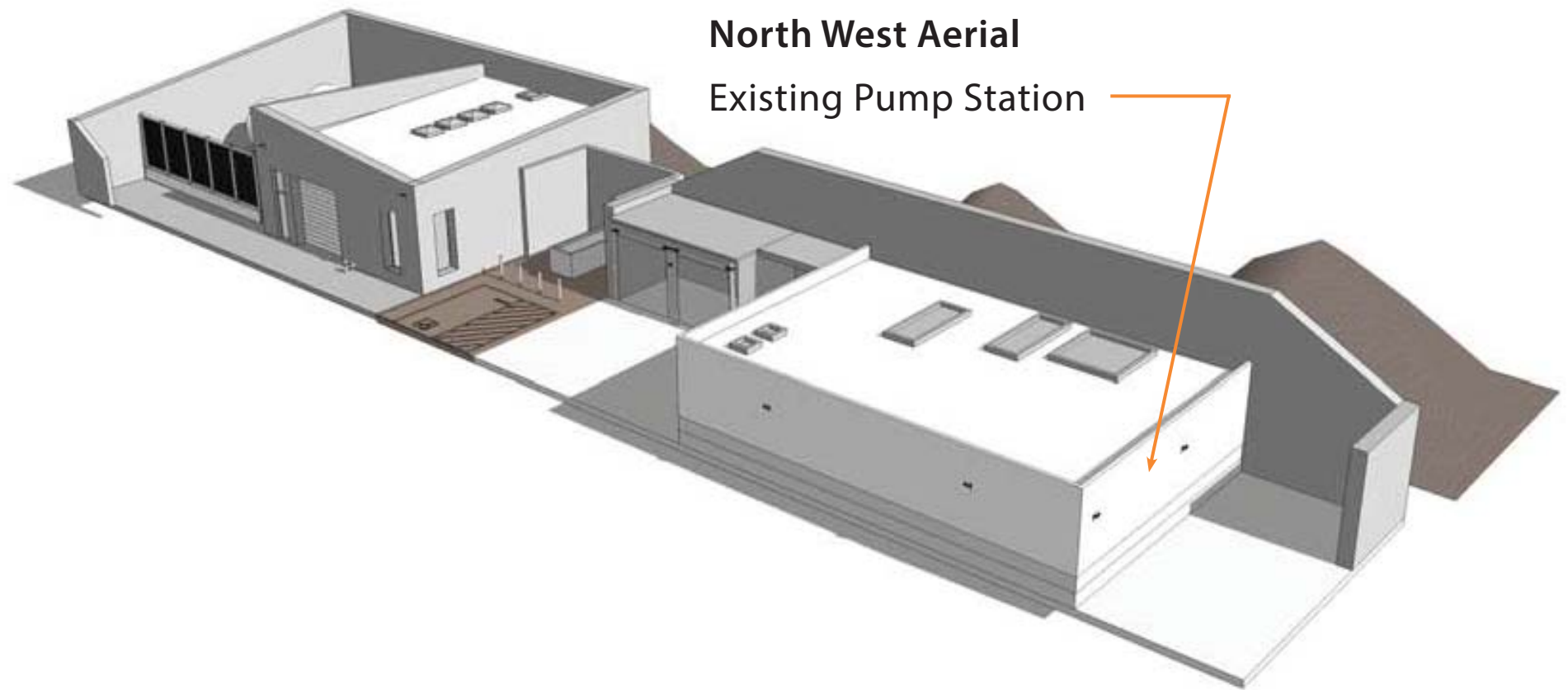
Spiral Wall + Box

Option 2





North East Aerial
Existing Pump Station



North West Aerial
Existing Pump Station



North West Perspective



North East Perspective

