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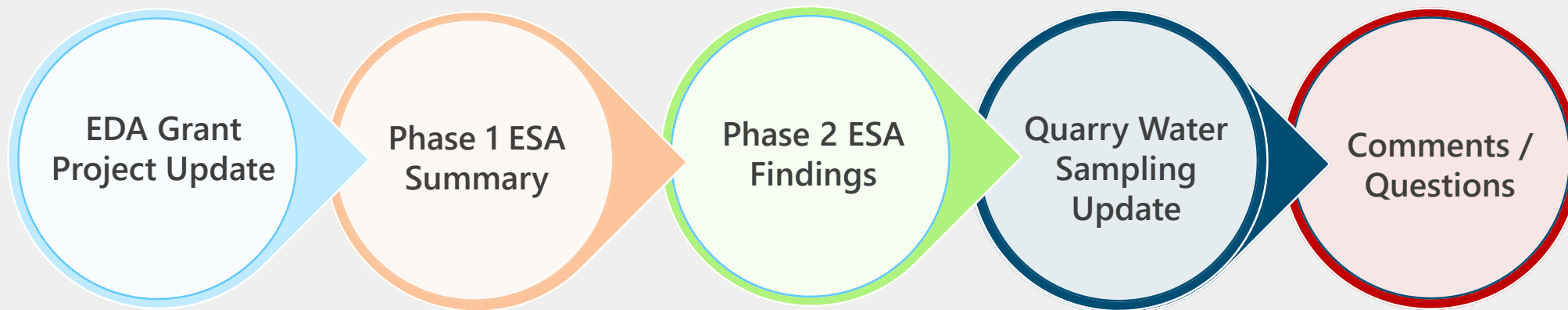
# Town of Cortlandt Quarry Site Improvements Project

Cortlandt Quarry Committee Meeting | 10 October 2023





# Agenda



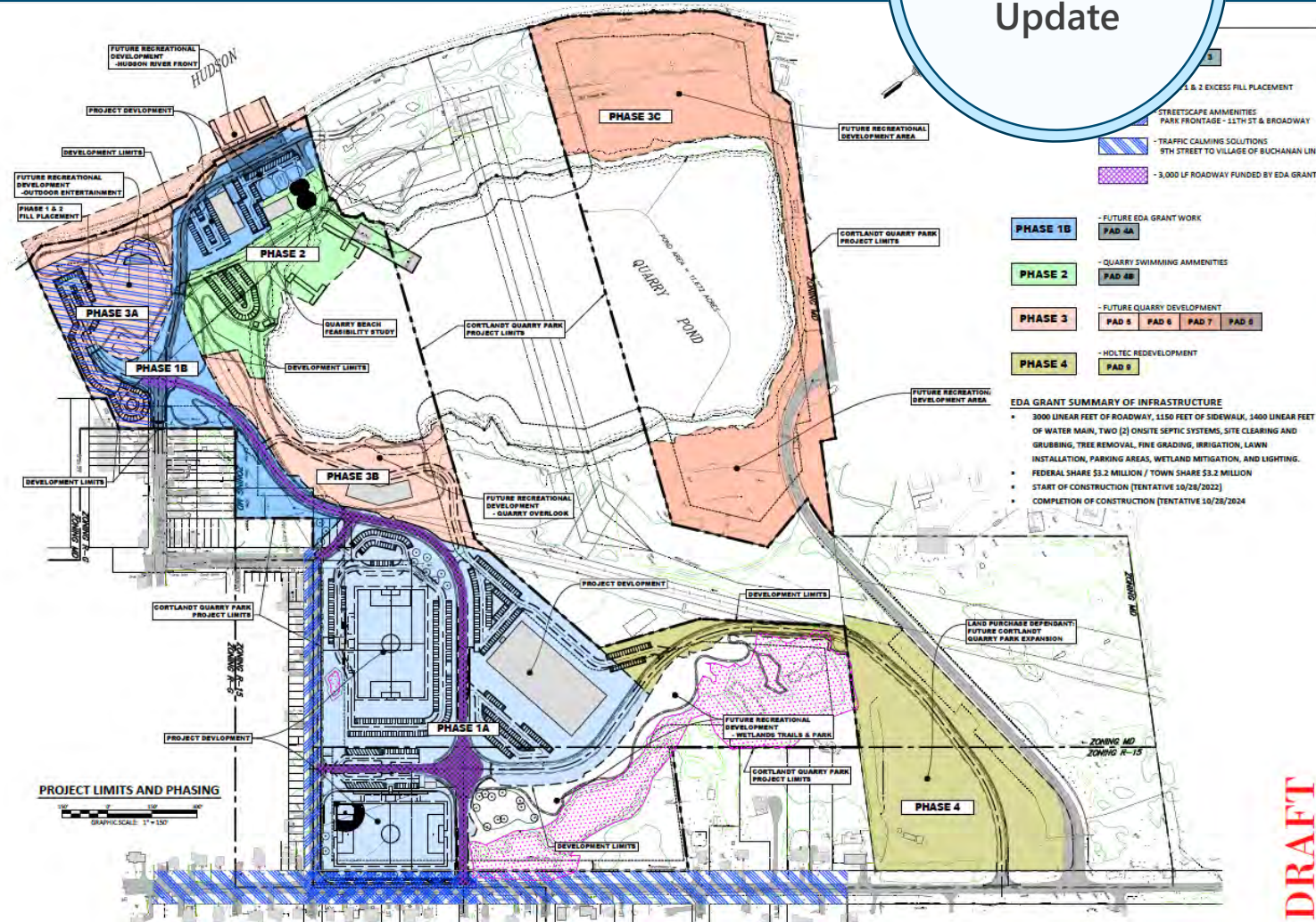


# Update from Last Meeting

## EDA Grant Project Update

### Design Development Progress

- 30% Site Plan approval by Town
- Environmental reports - ongoing
- Phase II ESA
- Soil Testing
  - Infiltration Testing – Stormwater Design
  - Percolation Testing – Subsurface Wastewater Design
- 60% Site Plan development
- Coordination with Town

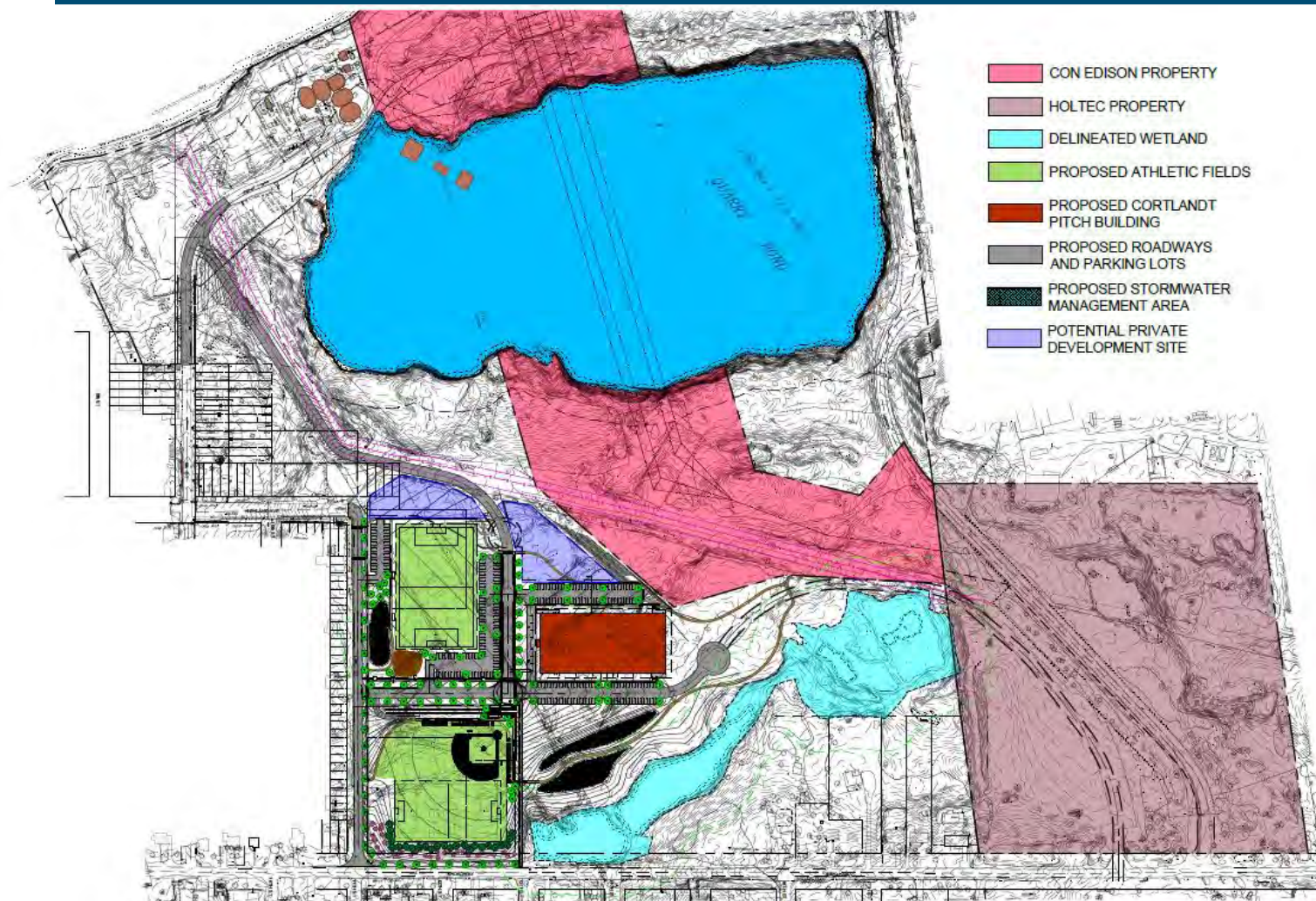






# EDA Grant Summary

EDA Grant  
Project  
Update



## EDA Grant Summary of Infrastructure

- 3,000 LF of Road; 1,150 LF of Sidewalk
- Two (2) on-site Septic Systems
- Parking Areas / Site Lighting
- Associated Site Work
- Fed Share-\$3.2M / Town Share-\$3.2M
- Start of Construction (Tentative 2024)
- Completion of Construction (Tentative 2025)





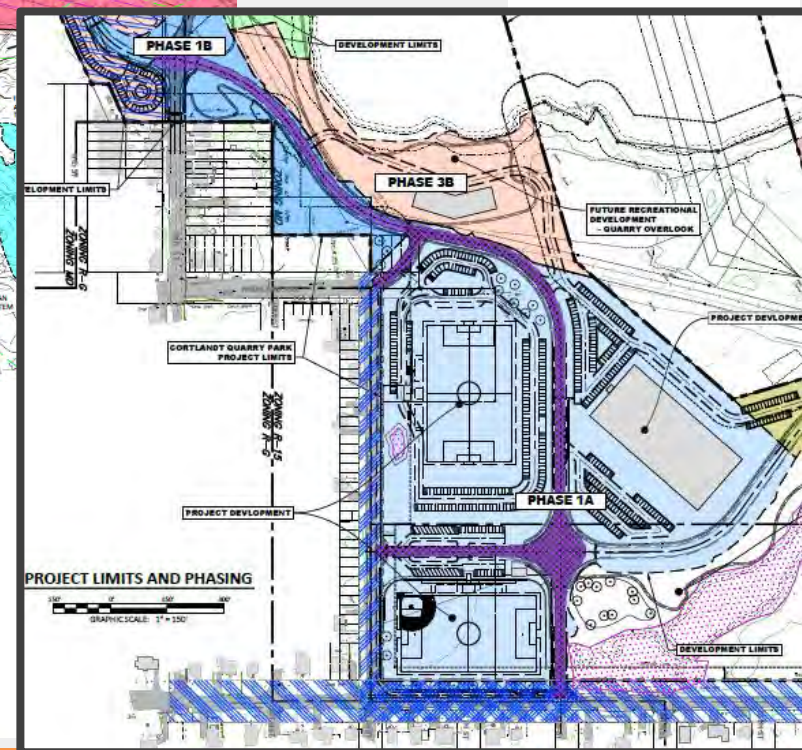
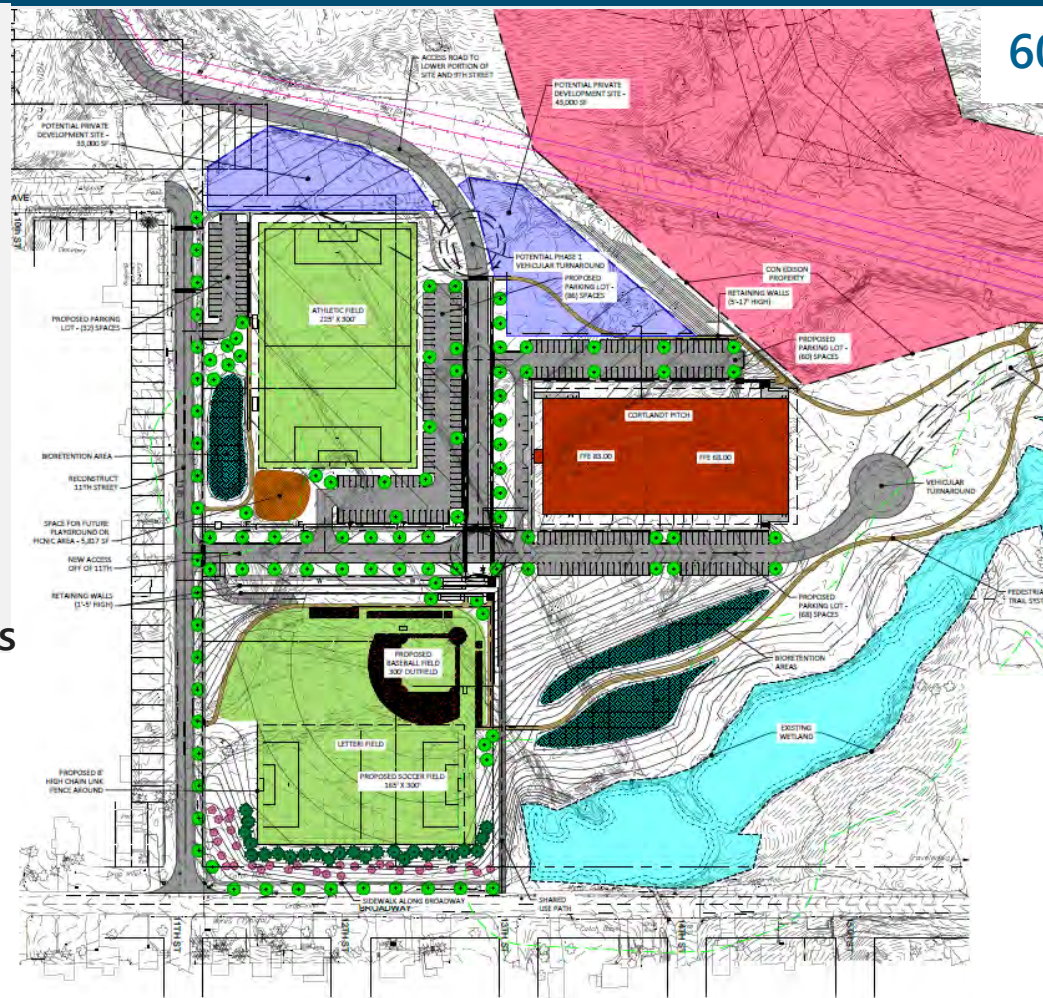
# 30% to 60% Design

EDA Grant  
Project  
Update

## Design Development

- Upper portion of site only
- Design allows for all future phases
- Cortlandt Pitch
- Potential development sites
- 11<sup>th</sup> Street improvements
- Site access
- Athletic fields
- Stormwater
- Pedestrian and vehicular access

- CON EDISON PROPERTY
- HOLTEC PROPERTY
- DELINEATED WETLAND
- PROPOSED ATHLETIC FIELDS
- PROPOSED CORTLANDT PITCH BUILDING
- PROPOSED ROADWAYS AND PARKING LOTS
- PROPOSED STORMWATER MANAGEMENT AREA
- POTENTIAL PRIVATE DEVELOPMENT SITE





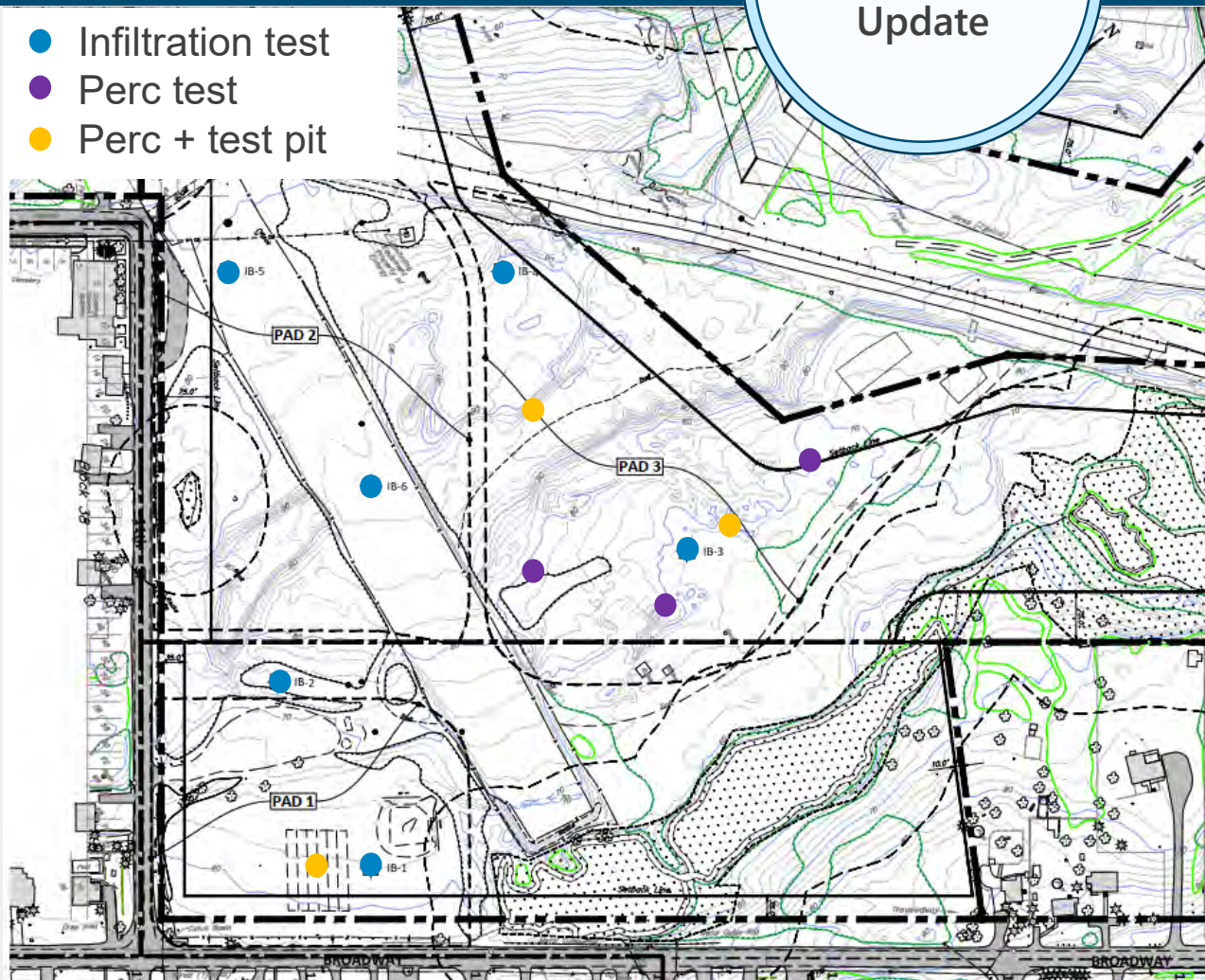


# Geotechnical Investigation

EDA Grant  
Project  
Update

## Field Work and Engineering Report

- Completed July 2023
- Infiltration tests, percolation tests, and test pits required for structural, wastewater, and stormwater designs
- Groundwater present at most of site from 4-5 feet below grade
- Pile foundation is recommended for building
- Footing drains not required with piles





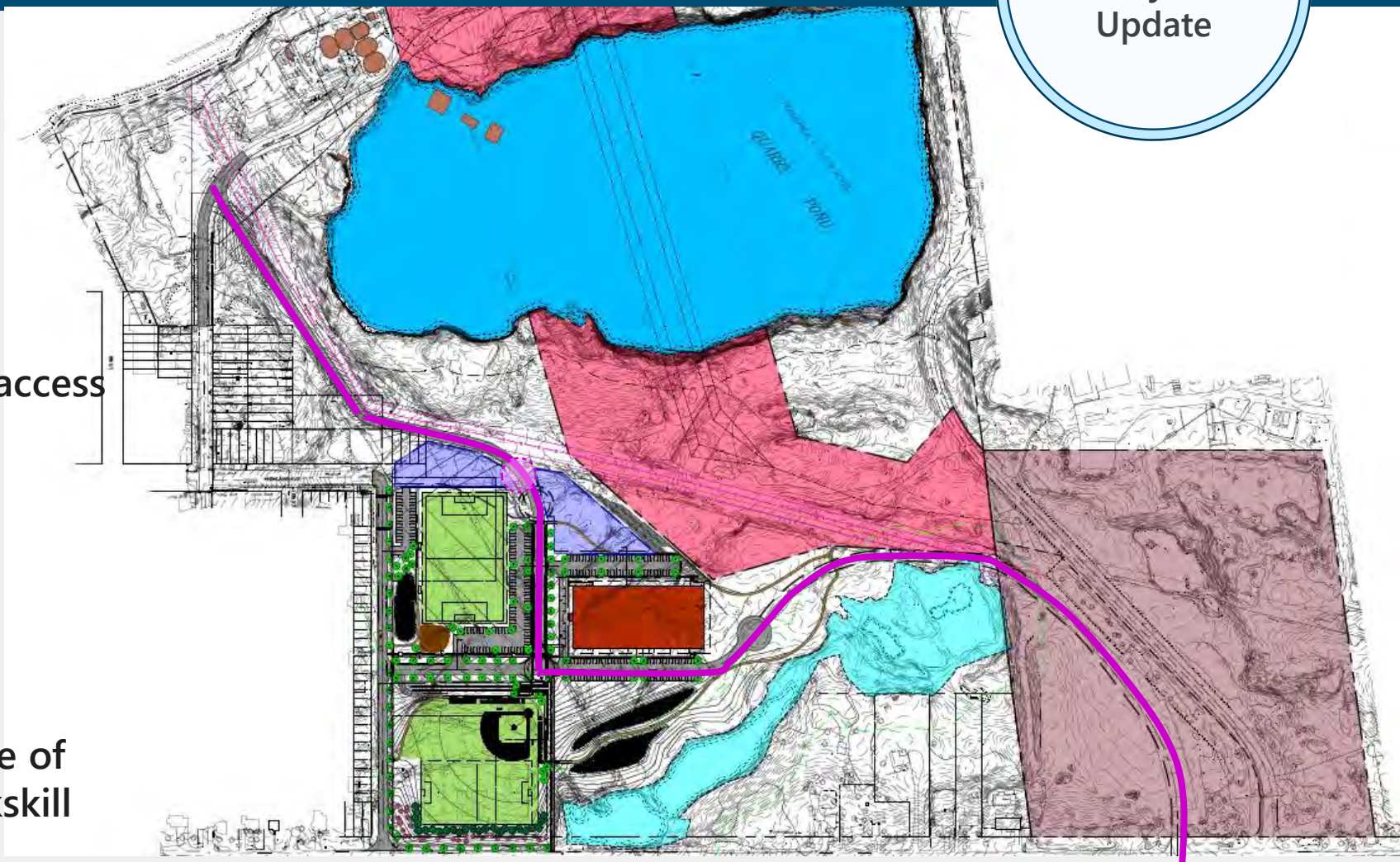


# Future Considerations

EDA Grant  
Project  
Update

## Associated Work

- Cortlandt Pitch
  - Building orientation
  - Building type
- Holtec
  - Conversations continue
  - Land acquisition or northern access
- Lower Quarry
  - No immediate environmental concerns
  - Not covered with EDA grant
- Sanitary Sewer Extension
  - To be evaluated
  - To be coordinated with Village of Buchanan and/or City of Peekskill







# Phase I ESA - Findings

## Phase 1 ESA Summary

### Phase I ESA Summary

Six (6) Recognized Environmental Conditions (RECs) Were Identified During Phase 1 Study:

- A) Previously Reported Petroleum Spills at LaFarge
- B) Debris & Urban Fill (Cinders, Metal, Glass, etc.)
- C) Diesel Generators, Petroleum Storage Tanks, Surface Staining
- D) Former Chemical Storage Areas
- E) Hudson River Shoreline (PCBs)
- F) Previously Reported Spills at the Former Standard Oil Petroleum Bulk Storage (PBS) Facility

### Other Issues Identified:

- Spoil piles in the center of the property
- Potential radiological impacts (IPEC)
- Gypsum dust in quarry pond



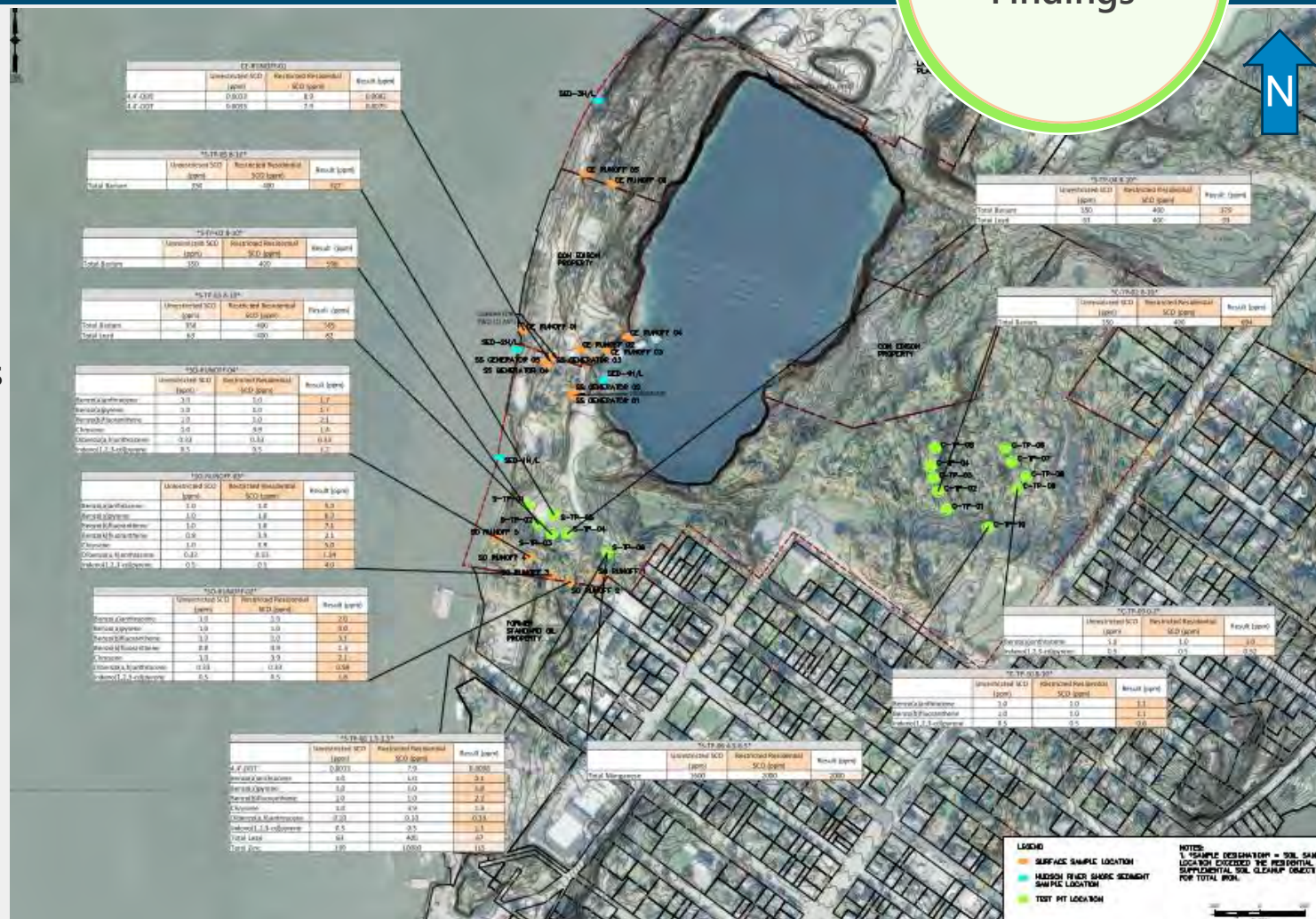




## Phase 2 ESA Findings

## Sampling & Laboratory Analysis

- Sixteen (16) Subsurface Soil Samples (Test Pits)
- Sixteen (16) Surface Soil Samples
- Six (6) Hudson River Shoreline Sediment Samples
- Two (2) Quarry Pond Shoreline Sediment Samples
- Two (2) Quarry Pond Samples
- One (1) Groundwater Sample
- Radiological Evaluation







# Phase 2 ESA - Findings

Phase 2 ESA  
Next Steps

## Phase II ESA Findings

- A. PFOA/PFOS detected in Groundwater below NYSDEC Draft WQGVs for recreational use.
- B. Barium detected above restricted residential use soil cleanup objectives (RRUSCOs).
- C. No obvious indications of petroleum impacts.
- D. Pesticides detected above unrestricted use soil cleanup objectives (UUSCOs).
- E. No obvious indications of PCB impacts to Hudson River shoreline sediment.
- F. Low concentrations of petroleum-derived compounds detected in surface soil.

## Other Identified Issues:

- Petroleum Spill: Heavy staining/odors detected in former processing area. NYSDEC Spill Department Was Notified.
- Radiological: No obvious indication of radiological impacts.
- Gypsum Dust: Not evident after visual inspection.







# Phase 2 ESA - Next Steps

Phase 2 ESA Findings

## Phase II ESA Recommendations

- A. No further action recommended adjacent to LaFarge parcel.
- B. Collection of additional samples to estimate potential horizontal and vertical extent of noted barium detections.
- C. No further action is recommended. Wastes generated during eventual removal of ASTs/Generators will need to be managed appropriately.
- D. No further action is recommended adjacent to former Con-Edison parcel.
- E. No further action recommended at Hudson River & Quarry Pond Shoreline.
- F. Soil to be managed by an environmental professional, should development occur in this area.

- **Petroleum Spill:** Additional investigation to determine degree and extent of noted impacts.
- **Spoil Piles:** Soil may be reused, in accordance with NYSDEC regulations.
- **Radiological:** No further evaluation is recommended.
- **Gypsum Dust:** No further evaluation is recommended.



## Proposed Surface Soil Samples Proposed Soil Borings

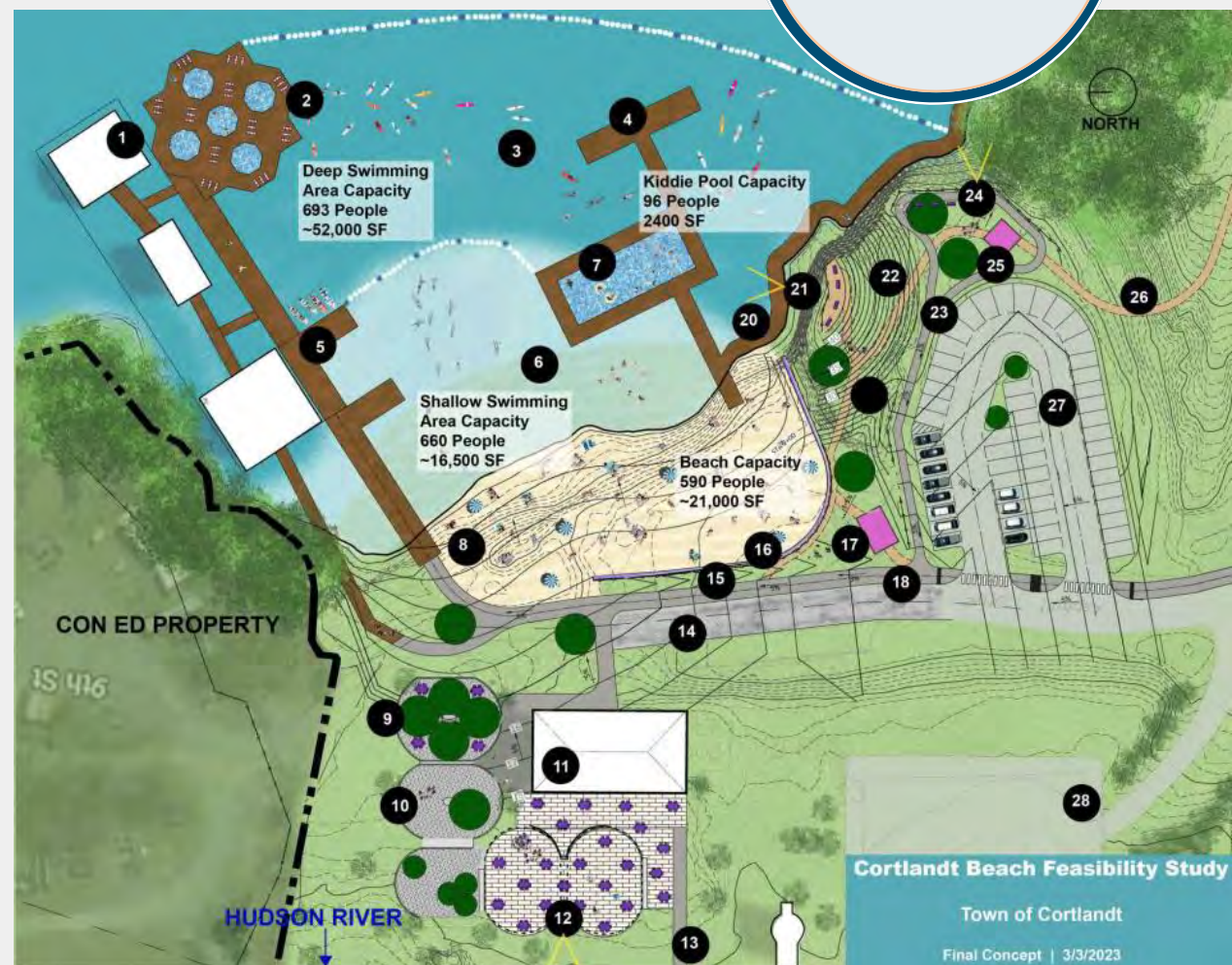






# Quarry Swimming

Quarry Water Sampling

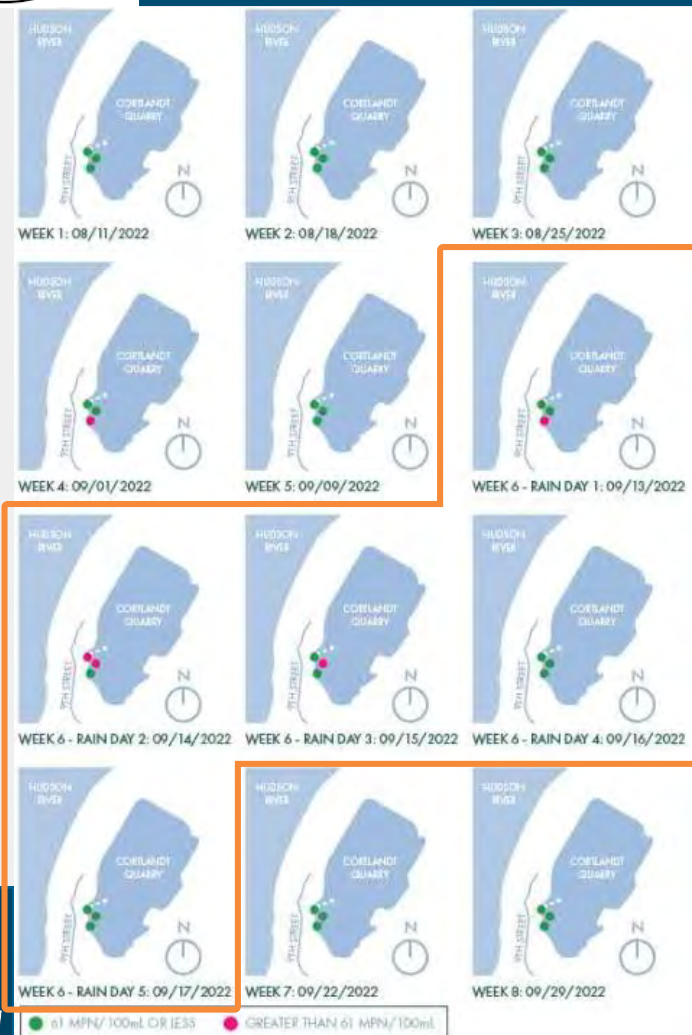






# Quarry Water Sampling

Quarry Water  
Sampling



## 2022 Sampling

- Quarry pond is ~31 acres; max depth 170'-300' (hundred millions/billions of gallons of water)
- Sanitary survey - water sampling:
  - Weekly for 8 weeks - 08/11/2022-09/29/2022, includes 1 set of heavy rains with daily samples for a 5-day period
    - Elevated enterococcus bacteria levels following rainfall events, suspected due to naturally occurring bacteria, not fecal
  - Grab sample – establish baseline water quality (general chemistry, metals, radiologicals, PFAS, etc)
    - No results above EPA/DOH limits
- Final Sanitary Survey Report and Beach Feasibility Study submitted to WCDOH for review – March 2023
- Per WCDOH – sanitary sampling required at least for 2023 and 2024





# Quarry Water Sampling

Quarry Water  
Sampling



## 2023 Sampling

- Sampled 06/22/2023-08/10/2023
- Much more rain in 2023 compared to 2022 – more enterococcus violations
- Other parameters relatively consistent with previous data
- Enterococcus speciation sampling revealed bacteria species present both naturally and in fecal samples
- No sewer, no septic within watershed
- Shallow groundwater flow likely directed away from quarry
- Ultimately WCDOH decision beyond 2024 sampling





# Next Steps/Closing Comments

Comments /  
Questions

- **Continued coordination**
  - Holtec; WCDOH meeting; Cortlandt Pitch; ConEd meeting; Enbridge meeting
- **Environmental Continued Assessments**
  - SEQRA / NEPA
    - Town of Cortlandt intends to serve as Lead Agency for the SEQR process
    - Proposed project assumed to meet criteria for classification as a Type I Action
    - Dissemination by the Town to other interested and involved agencies
    - A Full Environmental Assessment Form (FEAF) is required
  - Threatened and Endangered Species Memo
  - State Historic Preservation Office (SHPO) Coordination
    - Cultural and Historic Resources Review
  - Joint application permit package (NYSDEC and USACE)
- **Phase II ESA – further testing decision**
- **Design Development – Construction Drawings**







# Thank you!



# Questions/Comments?

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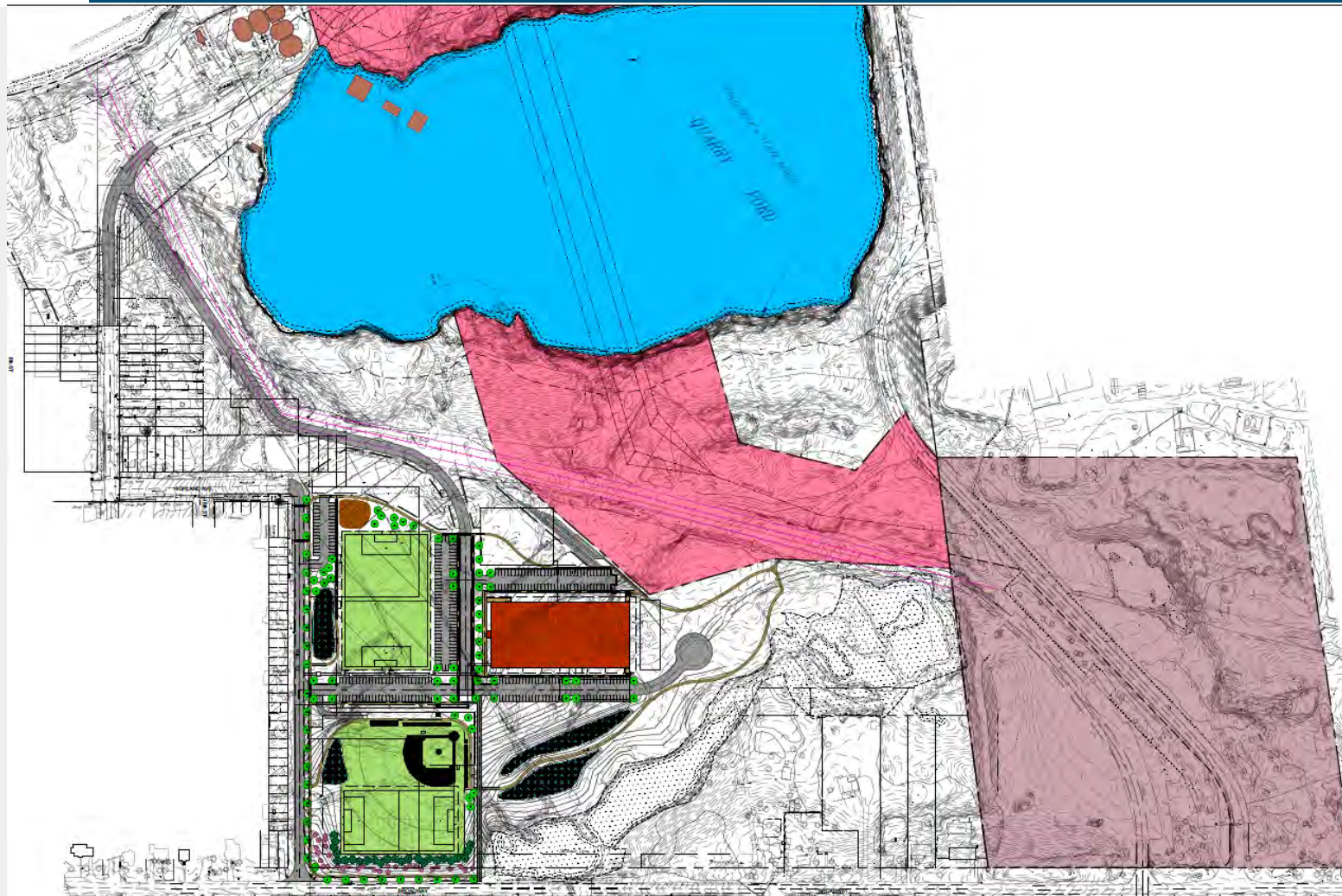


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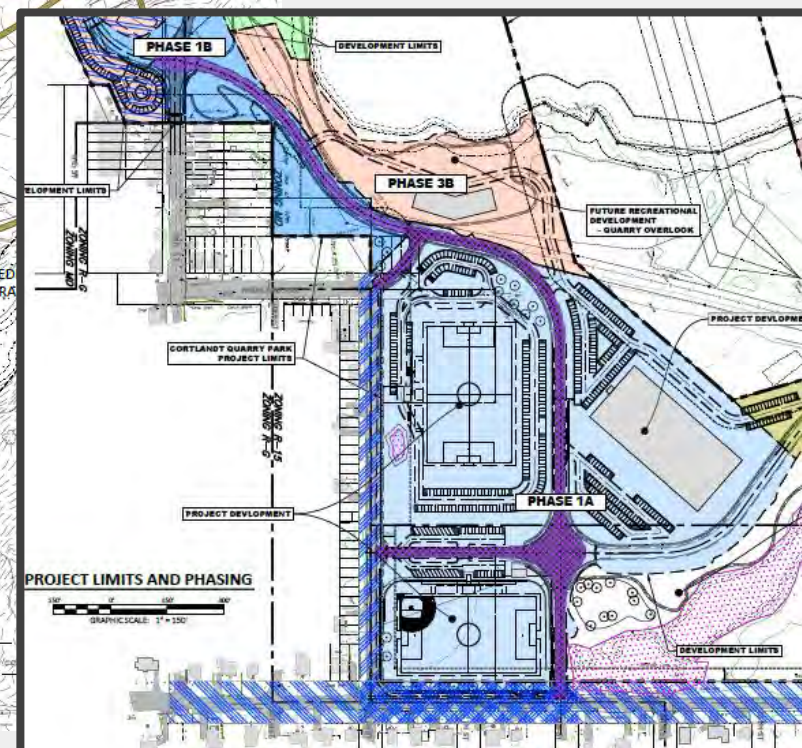
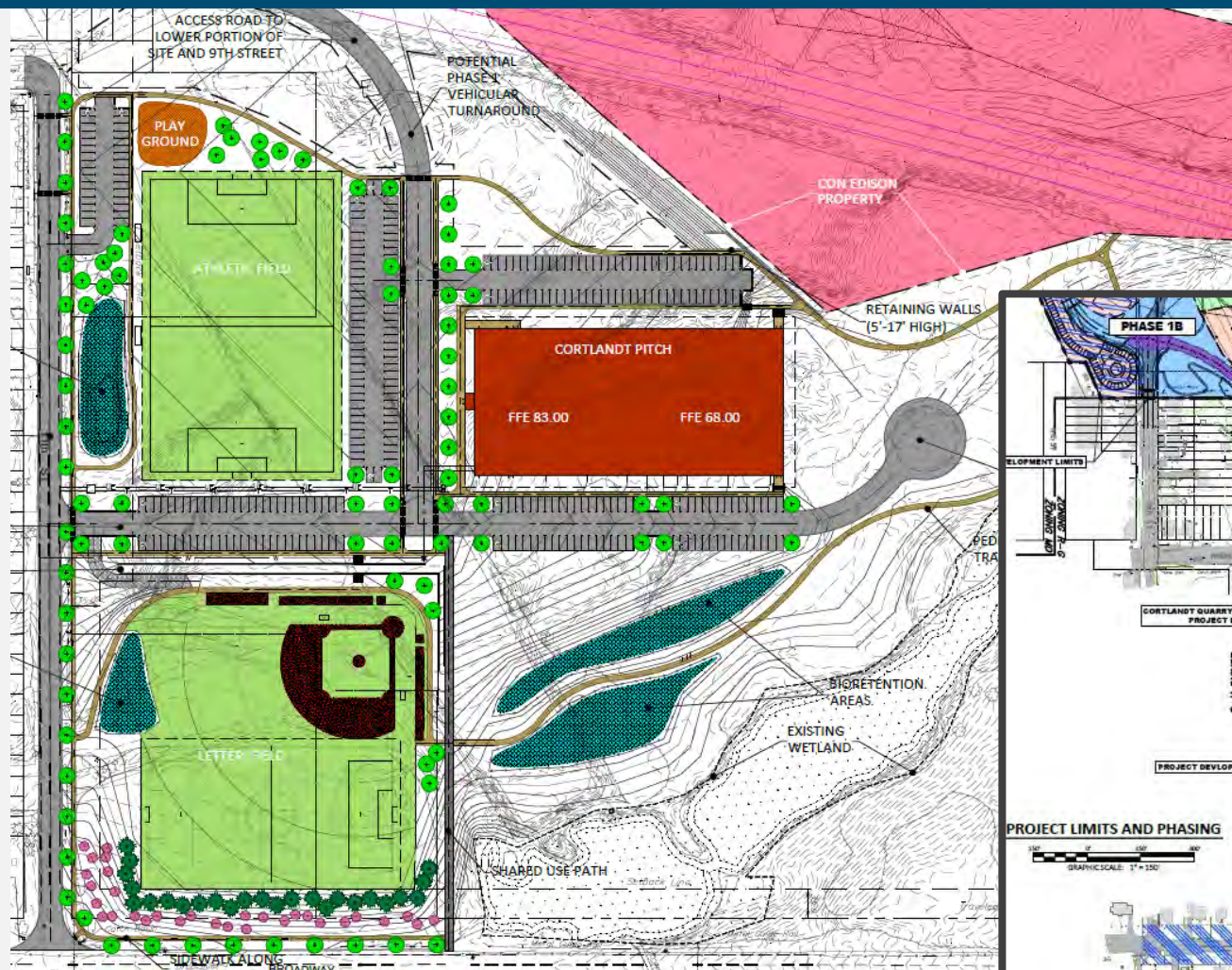
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30% Design







# Cortlandt Pitch Septic

EDA Grant  
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## Cortlandt Pitch Septic Design

- Potentially two options for conventional septic drainfield – large footprint required
- Drip dispersal a potential option
  - Significantly smaller footprint allows for more parking, however pretreatment needed – additional cost
- Final grading layout and percolation tests needed for final wastewater treatment design

