

**B
&L**

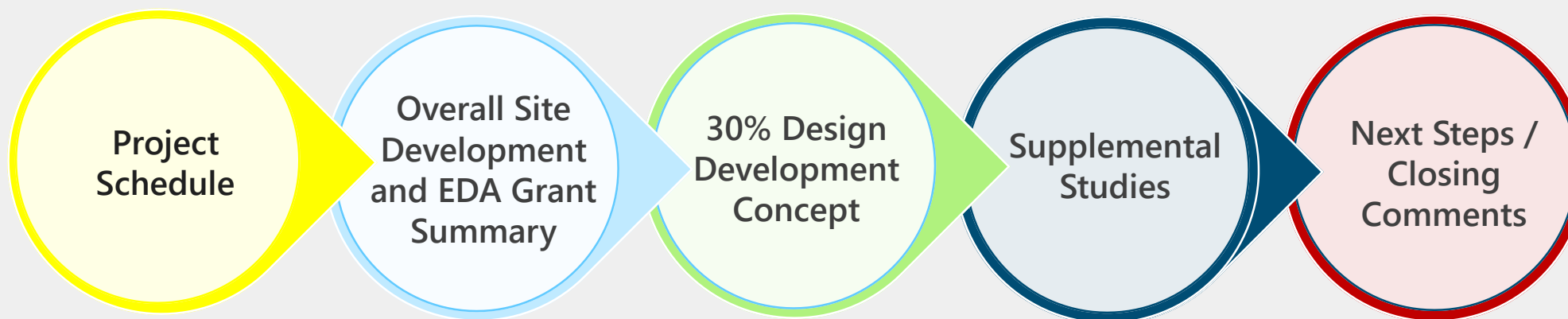


Town of Cortlandt Quarry Site Improvements Project

Cortlandt Quarry Town Board Meeting | 30 January 2023



Agenda





Project Schedule

Project
Schedule

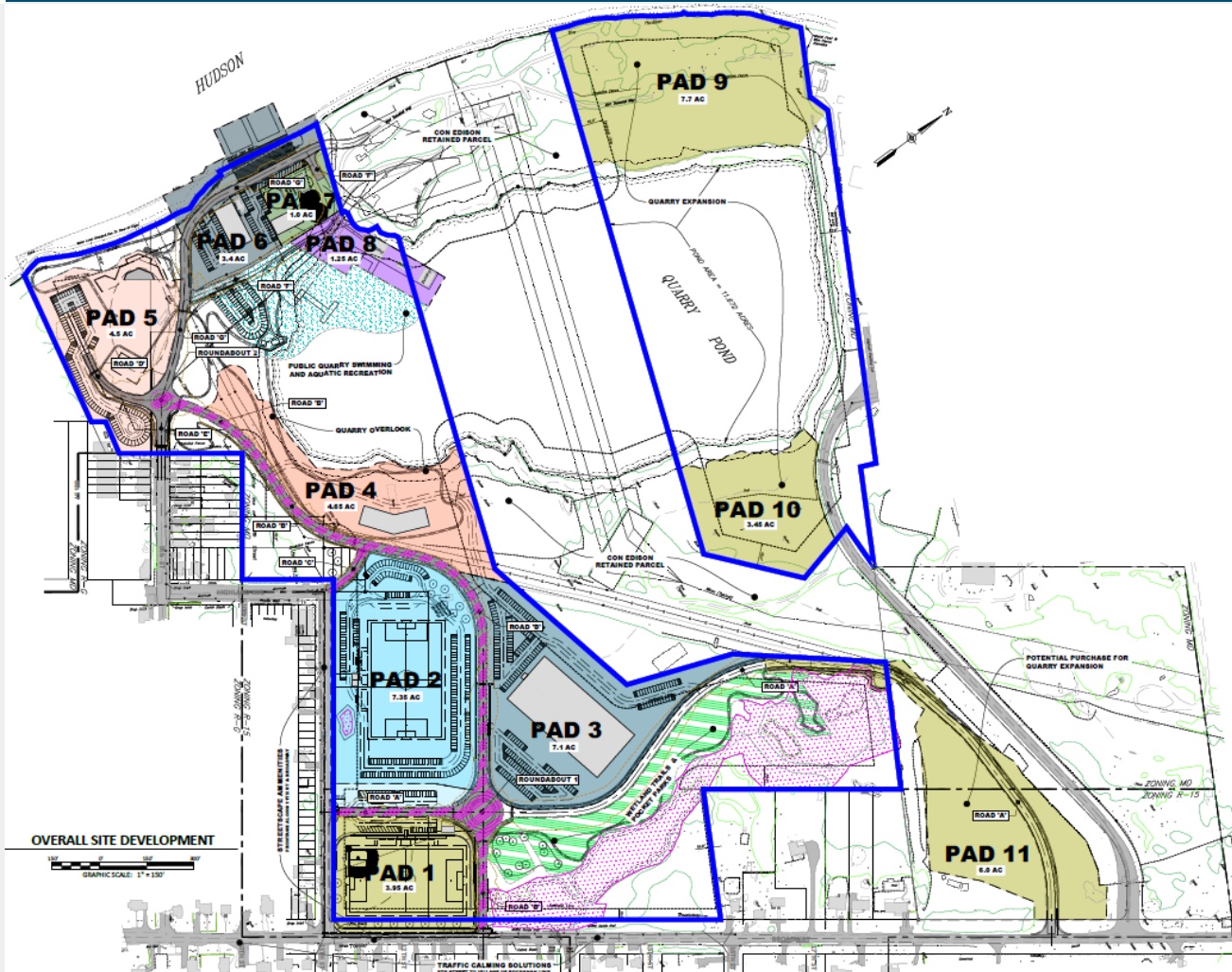
JANUARY 2022	PROJECT KICK-OFF
FEBRUARY – SEPTEMBER 2022	PROJECT DESIGN TEAM SITE VISITS
FEBRUARY – DECEMBER 2022	DESIGN DEVELOPMENT
10 MAY 2022	CORTLANDT QUARRY COMMITTEE MEETING #1
24 MAY 2022	BEACH FEASIBILITY STUDY MTG WITH SUPERVISOR
AUGUST – SEPTEMBER 2022	QUARRY POND WATER QUALITY SAMPLING
04 OCTOBER 2022	PROJECT UPDATE MEETING WITH SUPERVISOR
20 OCTOBER 2022	CORTLANDT QUARRY COMMITTEE MTG #2
28 NOVEMBER 2022	PROJECT UPDATE MEETING WITH SUPERVISOR
30 JANUARY 2023	TOWN BOARD MEETING #1
BEYOND JANUARY 2023...	60% DESIGN DEVELOPMENT – DEPENDENT ON TOWN DIRECTION



REOI

Requests Used in Pre-Development Phase to Assess Developer Interest

Overall Site Development and EDA Grant Summary



SITE DEVELOPMENT LEGEND

- | | |
|---------------|---|
| PAD 1 | - LETTERI FIELD REHABILITATION - 3.95 AC
PAD SITE WORK FUNDED BY EDA GRANT |
| PAD 2 | - MULTIPURPOSE FIELD - 7.35 AC
PAD SITE WORK FUNDED BY EDA GRANT |
| PAD 3 | - CORTLANDT PITCH INDOOR SOCCER - 7.1 AC
PAD SITE WORK FUNDED BY EDA GRANT |
| PAD 4 | - FUTURE DEVELOPMENT - 4.65 AC
E.G. QUARRY OVERLOOK / RESTAURANT |
| PAD 5 | - FUTURE DEVELOPMENT - 4.5 AC
E.G. DISCOVERY CENTER / RESTAURANT / COMMERCIAL SITE |
| PAD 6 | - FUTURE DEVELOPMENT - 3.4 AC
E.G. MARINA / BEACH |
| PAD 7 | - FUTURE DEVELOPMENT - 1.0 AC
E.G. RESTAURANT / SHOPPES / ART WALK / CATERING FACILITY |
| PAD 8 | - FUTURE DEVELOPMENT 1.25 AC
E.G. PIER / RESTAURANT / SHOPPES |
| PAD 9 | - QUARRY EXPANSION - 7.7 AC
ONLY PEDESTRIAN ACCESS CONTEMPLATED TO THIS SITE. WOULD REQUIRE A LICENSE AGREEMENT OR EASEMENT WITH ADJOINING PROPERTY OWNER. |
| PAD 10 | - QUARRY EXPANSION - 3.45 AC
WOULD REQUIRE A LICENSE AGREEMENT OR EASEMENT WITH ADJOINING PROPERTY OWNER. |
| PAD 11 | - POTENTIAL QUARRY EXPANSION - 6.0 AC
WOULD REQUIRE A LICENSE AGREEMENT OR EASEMENT WITH ADJOINING PROPERTY OWNER. |
| | - FUTURE RECREATIONAL DEVELOPMENT
PUBLIC QUARRY SWIMMING AND AQUATIC RECREATION |
| | - FUTURE RECREATIONAL DEVELOPMENT
WETLAND TRAILS & POCKET PARKS |
| | - 3,000 LF OF ROADWAY TO BE FUNDED BY EDA GRANT |



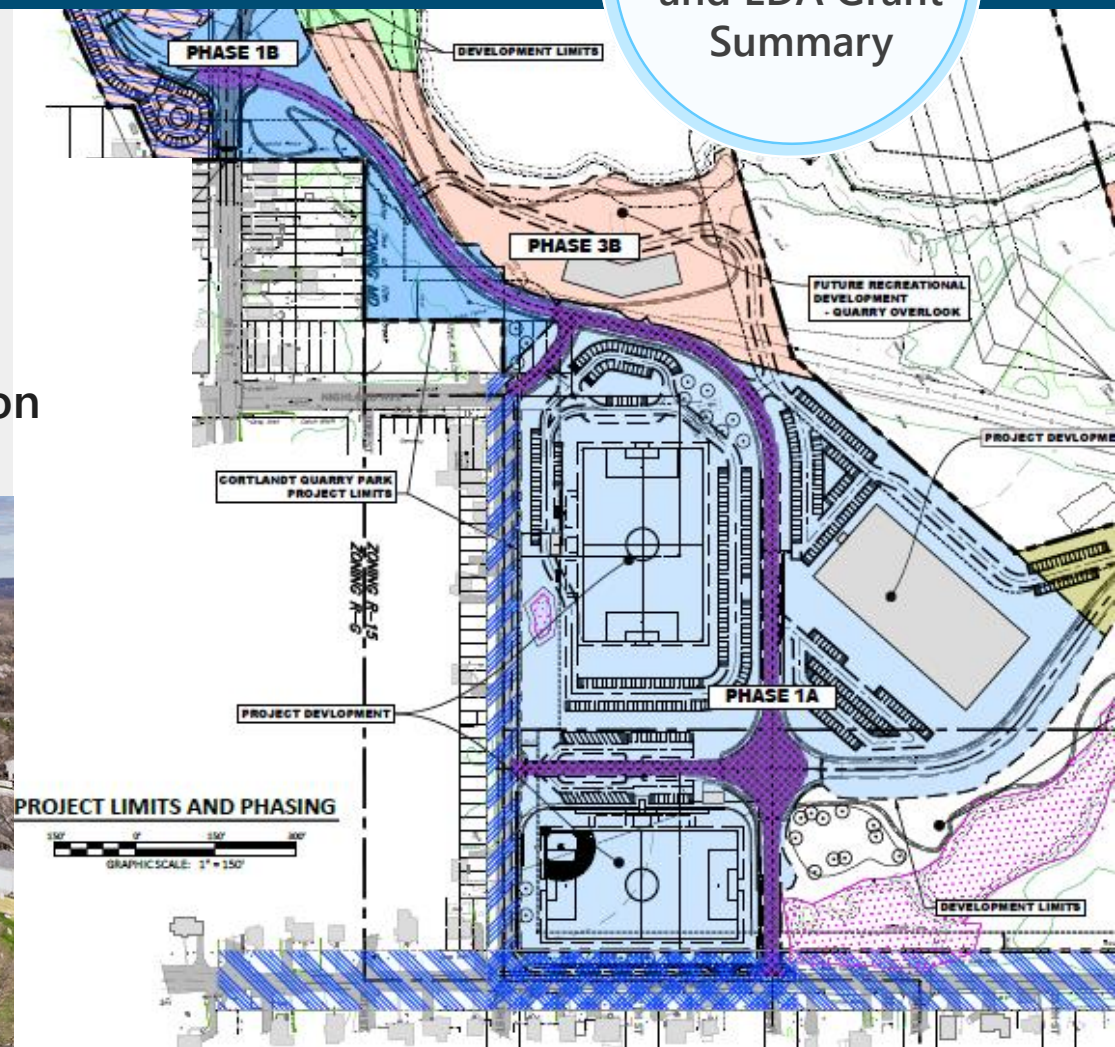
EDA Grant Summary

Project Number 01-79-15041

Overall Site
Development
and EDA Grant
Summary

Parameters of the EDA Grant:

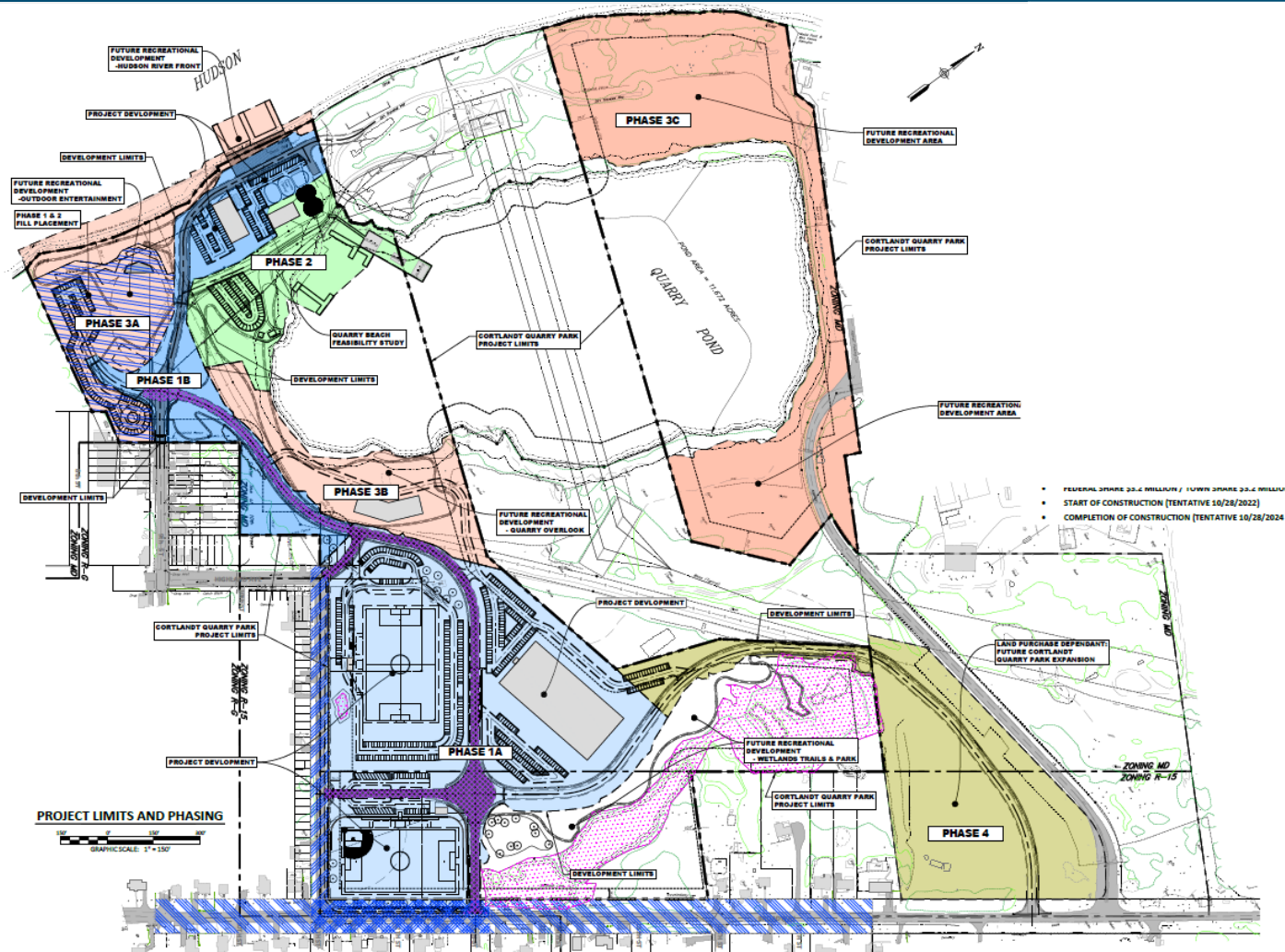
- 3,000 lineal feet of Roadway
- 1,150 lineal feet of Sidewalk
- Two (2) on-site Septic Systems
- Site Clearing and Grubbing
- Tree Removals
- Fine Grading
- Irrigation
- Lawn Installation
- Parking Areas
- Wetland Mitigation
- Site Lighting





B&L 30% Phasing Plan

30% Design
Development
Concept



LEGEND - PROJECT PHASE

PHASE 1A

- EDA GRANT

PAD 1 PAD 2 PAD 3

- PHASE 1 & 2 EXCESS FILL PLACEMENT

- STREETSCAPE AMMENITIES
PARK FRONTAGE - 11TH ST & BROADWAY

- TRAFFIC CALMING SOLUTIONS
9TH STREET TO VILLAGE OF BUCHANAN LINE

- 3,000 LF ROADWAY FUNDED BY EDA GRANT

PHASE 1B

- FUTURE EDA GRANT WORK

PAD 4A

PHASE 2

- QUARRY SWIMMING AMMENITIES

PAD 4B

PHASE 3

- FUTURE QUARRY DEVELOPMENT

PAD 5 PAD 6 PAD 7 PAD 8

PHASE 4

- HOLTEC REDEVELOPMENT

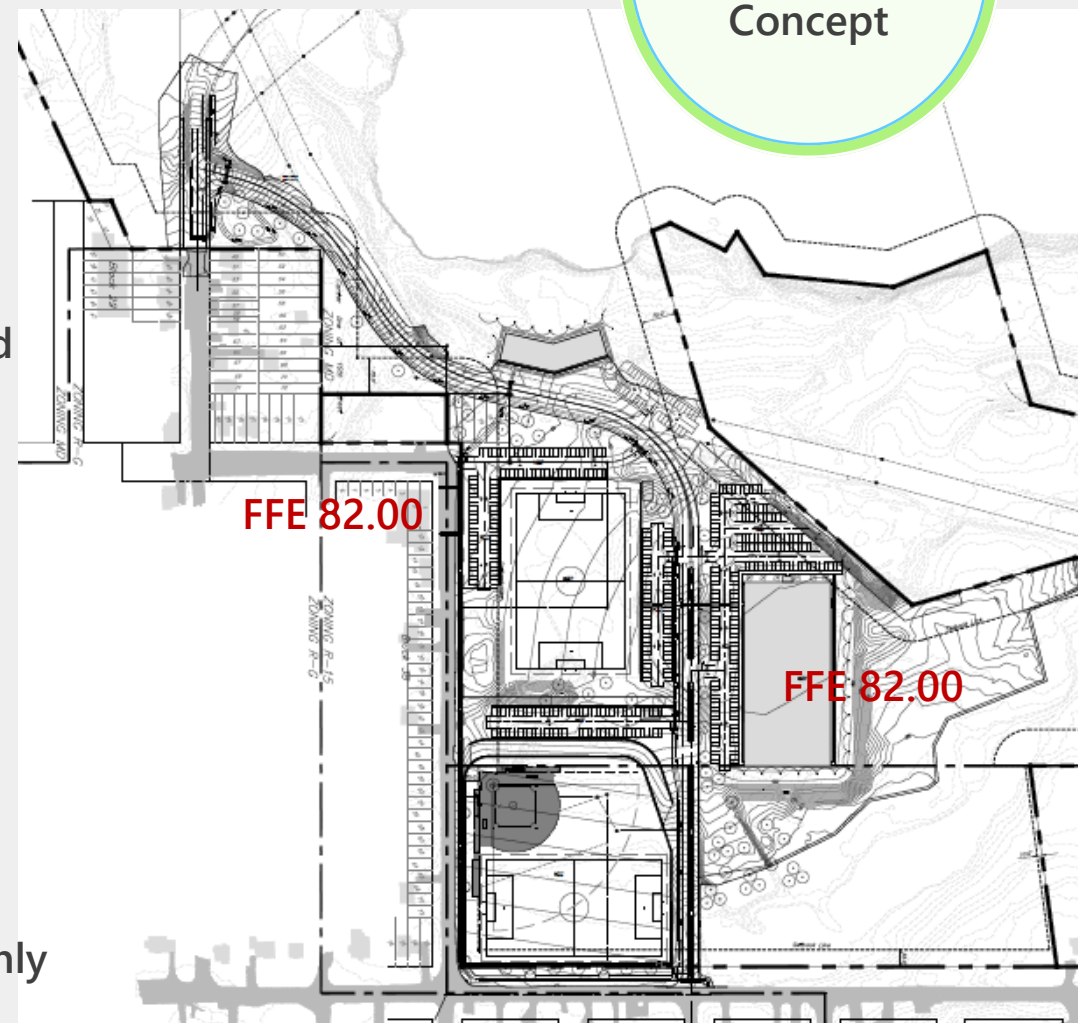
PAD 9



30% Design Considerations

30% Design
Development
Concept

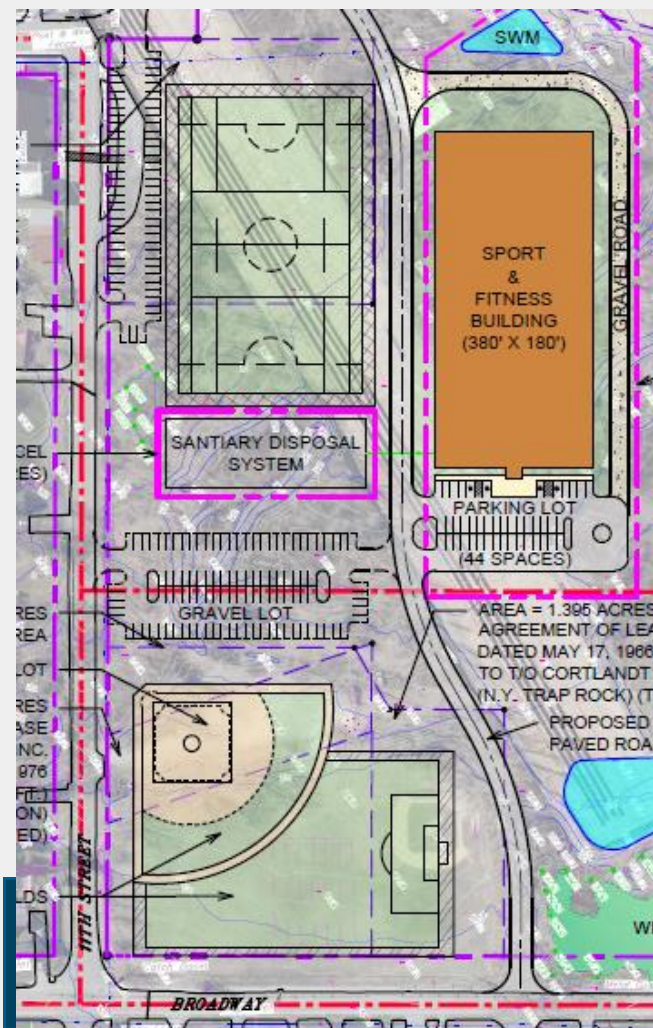
- Grading requirements
 - Balance cut and fill
 - Maintain roadways of <8% grade to greatest extent
 - Proposed height of Cortlandt Pitch building – 35'
 - Existing gas pipeline constraints
 - No cut below existing grades within pipeline easement
 - Enbridge to confirm possibility of fill within easement if req'd
- Tree clearing
 - Required to create clear, level sites for development
 - May open up views from surrounding streets
 - Strategic grading to establish finished grades at key heights
 - Strategic locations for proposed trees in final design
- Parking
 - Concept level only is shown
 - Final locations and occupancy to be determined by public uses
 - Possibility of sharing parking lots with private developments
- Connection of upper site to lower site
 - Interior to the site
 - Access off of 9th Street for emergency / maintenance purposes only





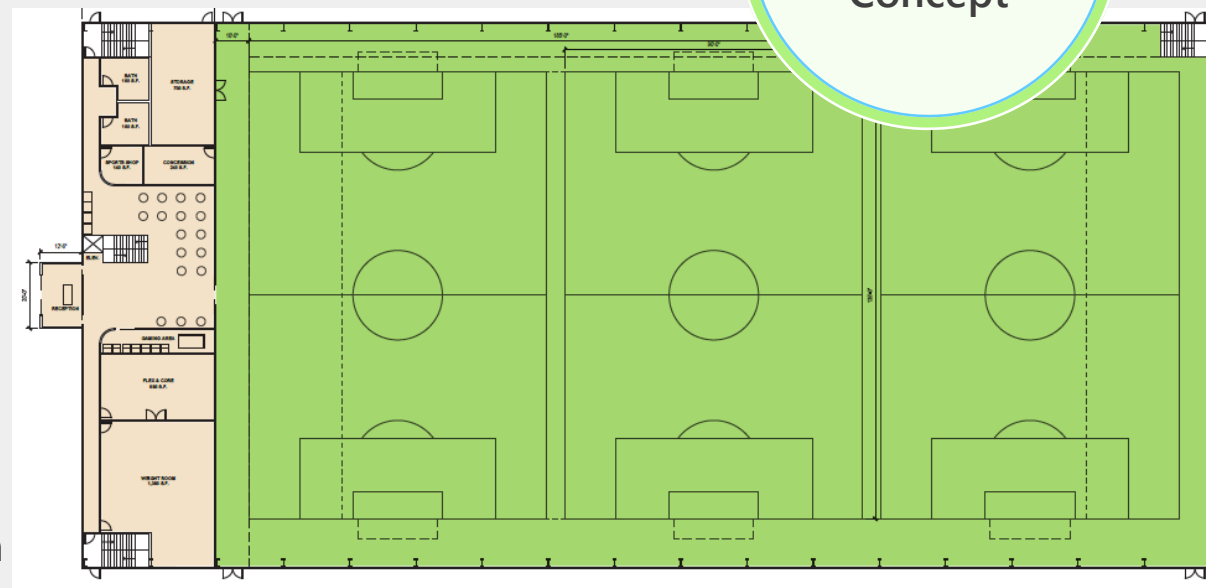
Cortlandt Pitch

30% Design
Development
Concept



Private Development

- Indoor Soccer and Sports Facility
- Development of PAD site #3
- +/- 70,000 square feet
- Building Height – 35' +/-
- Parking lot(s)
- Subsurface Septic System
 - Pretreatment process
 - Pressurized dosing system
- Outdoor athletic field
- Earthwork
 - Requires extensive cut
 - Requires retaining walls
- Orientation
- Further coordination required
- Coord mtgs – 04/27 and 12/12

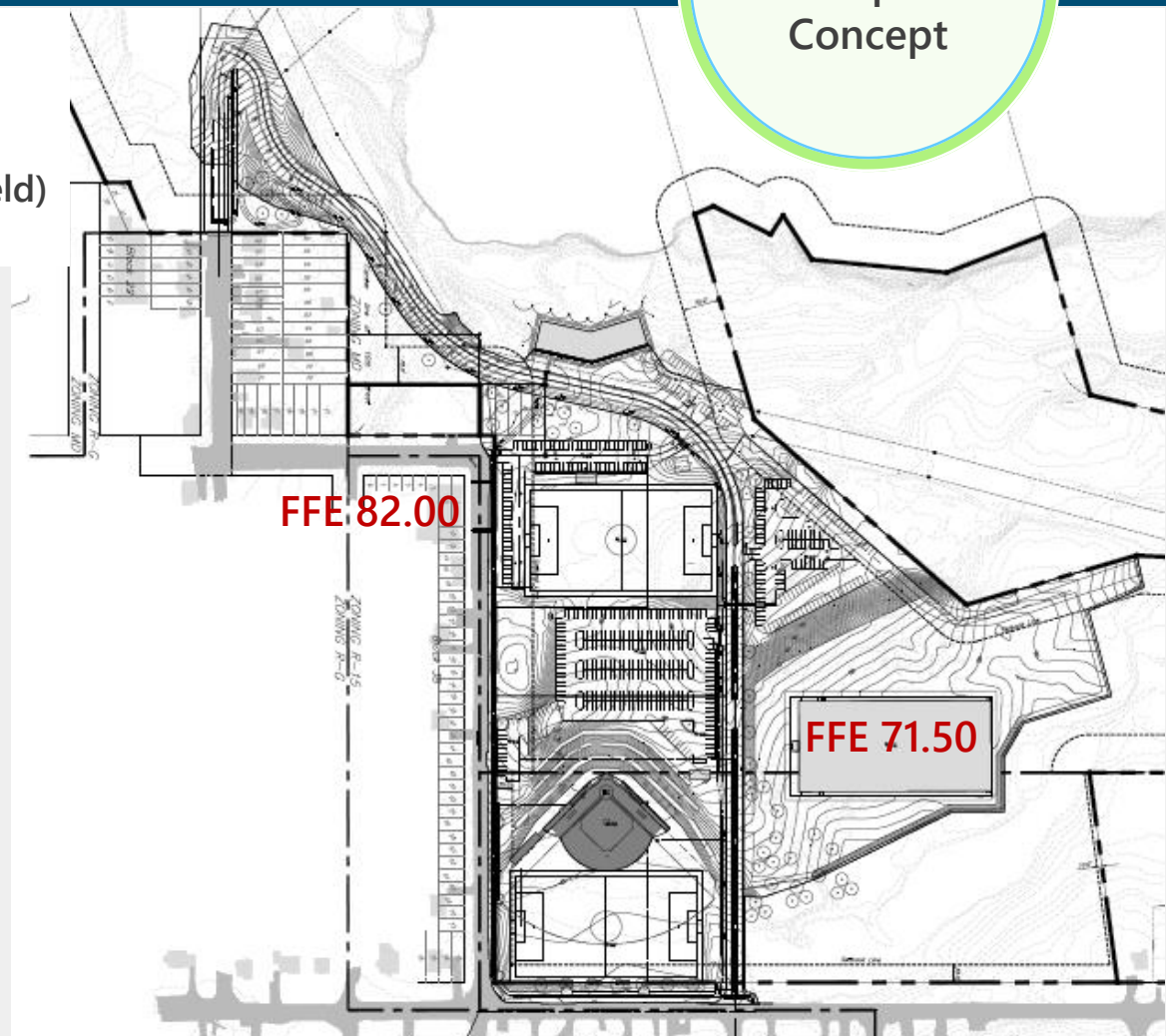
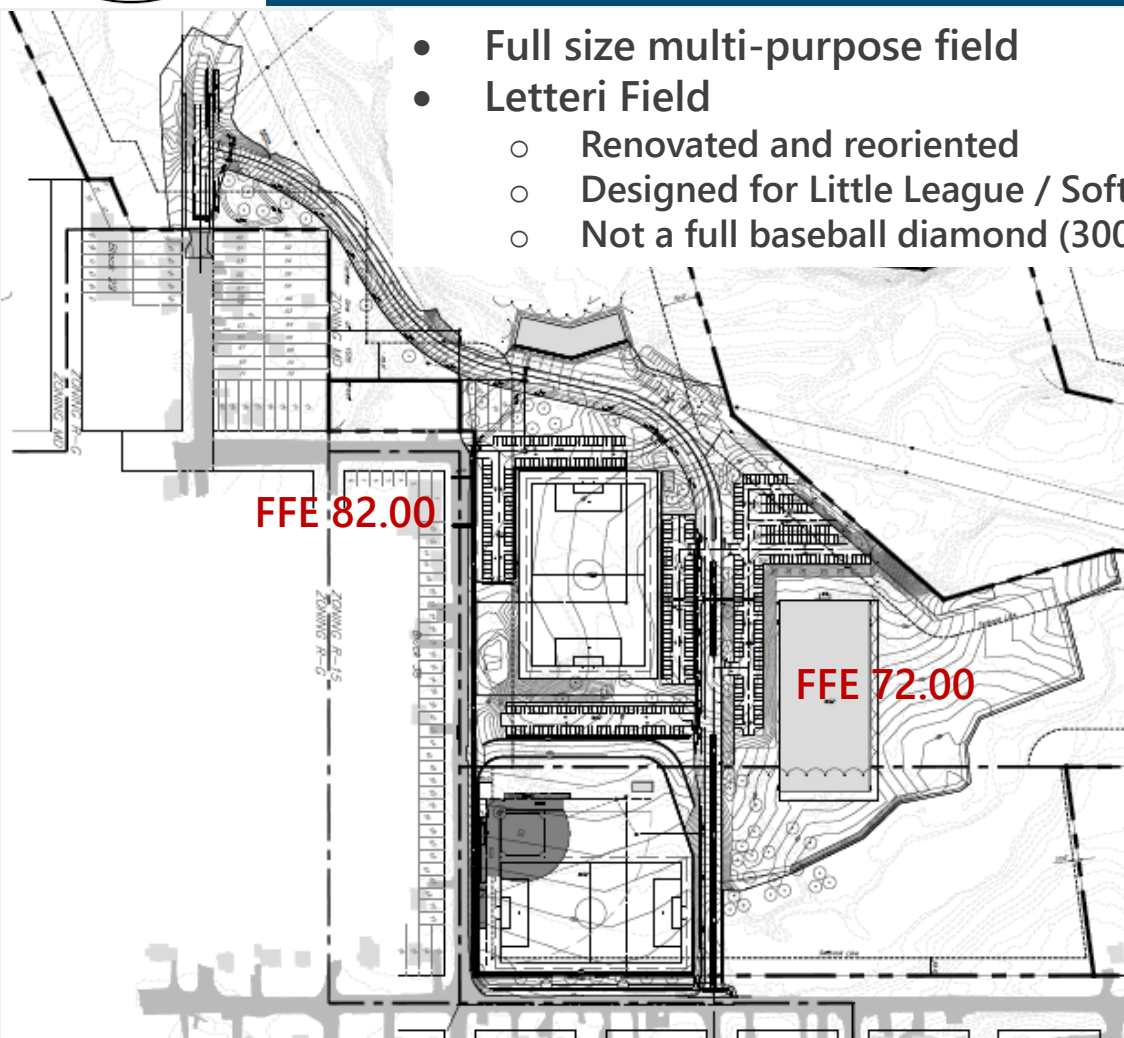




30% Design Plans

30% Design
Development
Concept

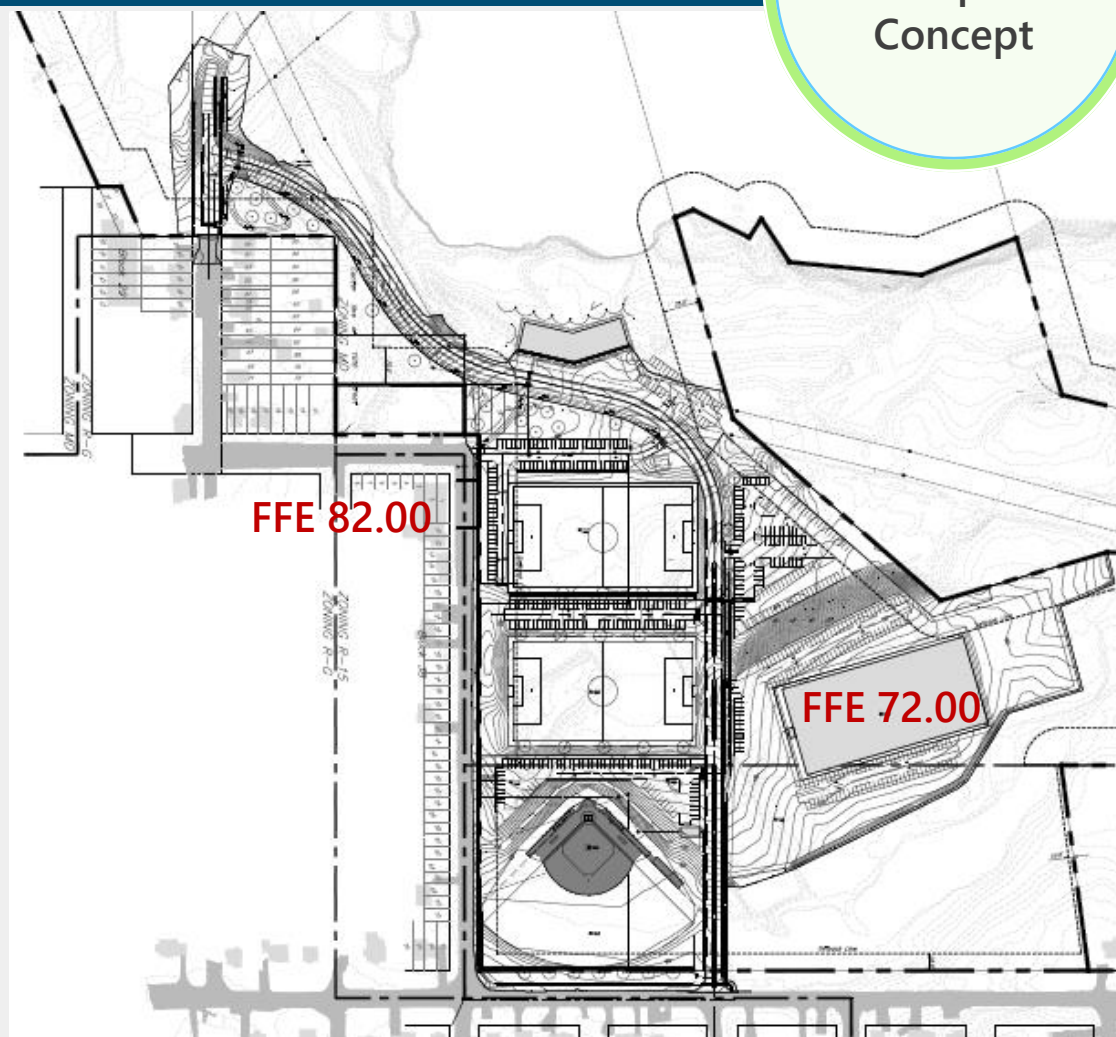
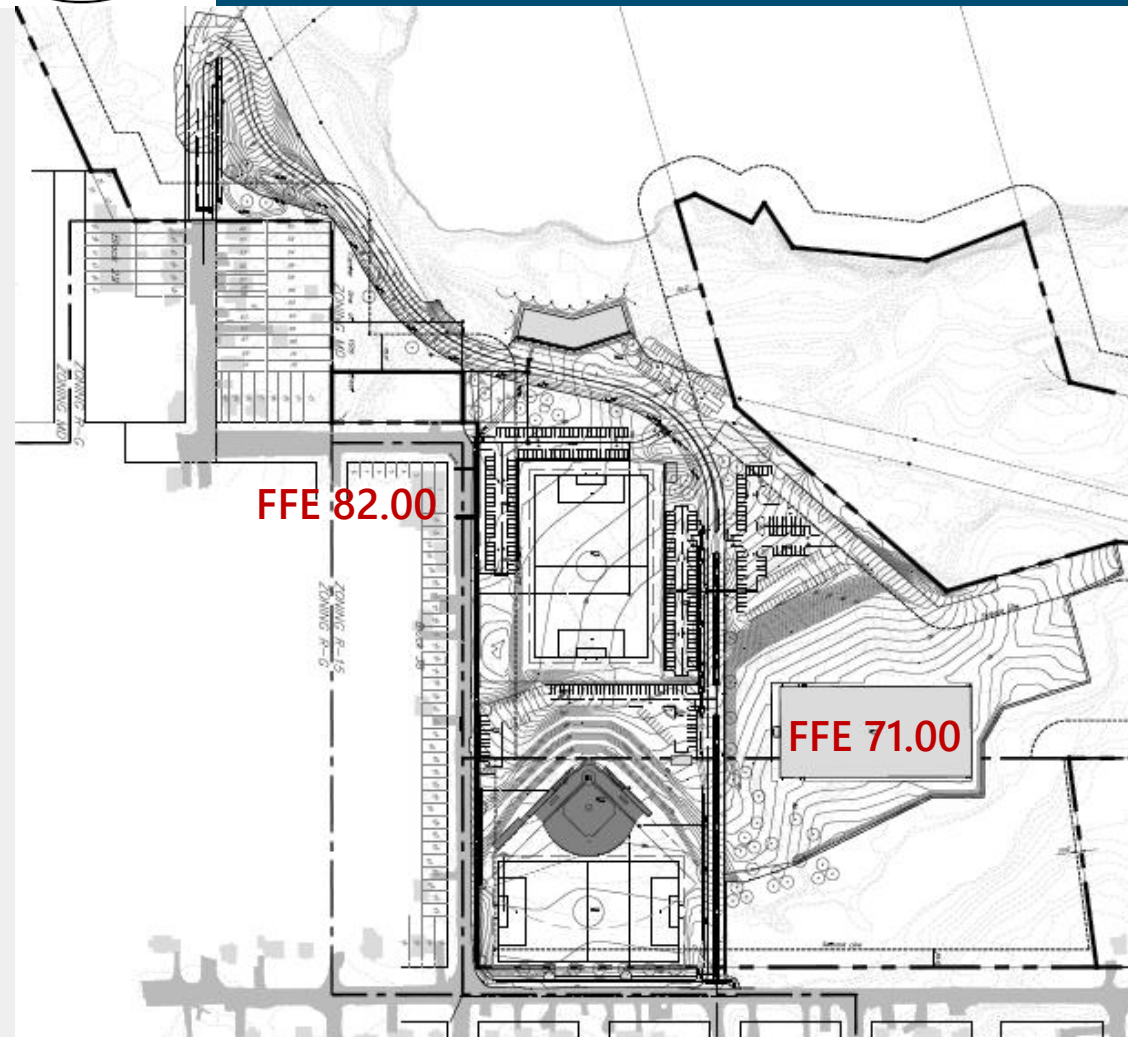
- Full size multi-purpose field
- Letteri Field
 - Renovated and reoriented
 - Designed for Little League / Softball (200' outfield)
 - Not a full baseball diamond (300' outfield)





30% Design Plans

30% Design
Development
Concept





Supplemental Studies

Supplemental
Studies

- ☐ REOI - Requests Used in Pre-Development Phase to Assess Developer Interest
 - Town Planning Department
- ☐ Structural Assessments
- ☐ Sanitary Investigations
- ☐ Quarry Water Quality Assessments
- ☐ Environmental Assessments
- ☐ Onsite Soil Investigations
 - Phase II ESA Studies
 - Soil Sampling





Structural Assessments

Supplemental
Studies

Structural Evaluation

- Site Visits – 02/09/2022 and 03/29/2022 – above water investigation
- Structural Conditions Assessment Report – 05/03/2022 / Rev 10/25/2022 – Findings:
 - Generally sound / fair to good condition
 - Structures are functional / can be repurposed
 - Areas of deterioration can be patched / repaired extending the life of buildings



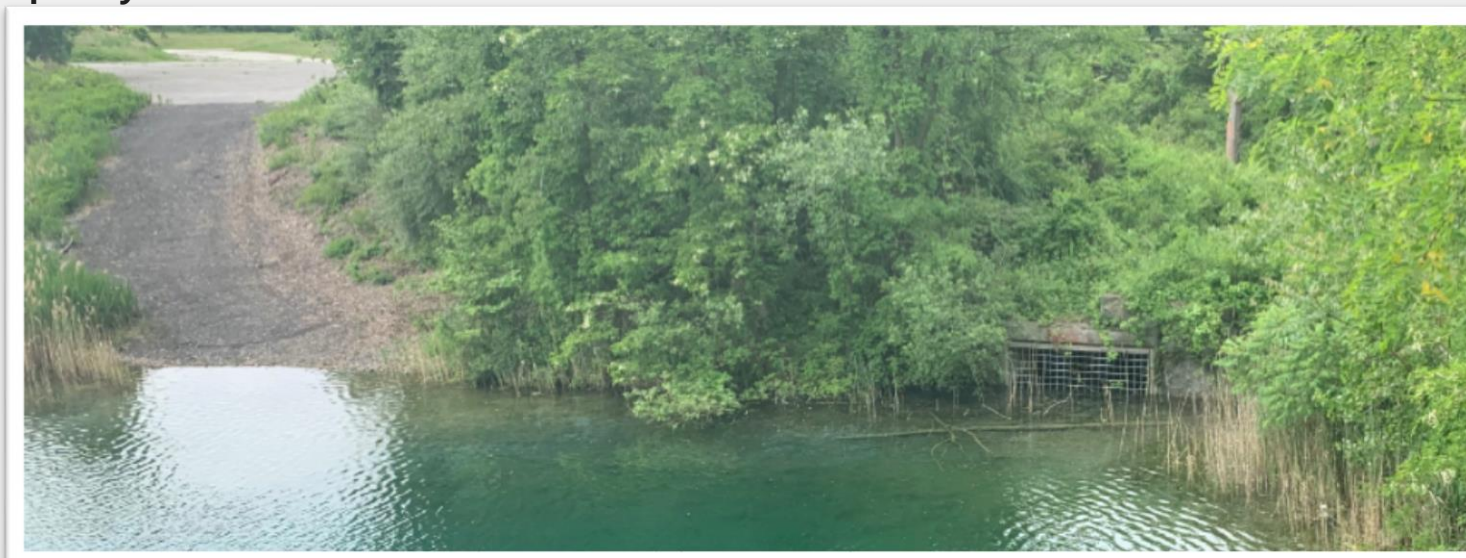


Structural Assessments

Supplemental
Studies

Structural Evaluation

- Site Visit – *09/02/2022* - Underwater investigation
 - Exposed wall and foundation systems show they are visually acceptable and in fair to good condition
- Site Visit – *01/06/2023* – Spillway tunnels investigation
 - Appears this was used to load barges with stone from quarry





Sanitary Assessments

Supplemental
Studies

Sanitary / Wastewater Evaluation for Southern Portion of Site

- Evaluated two different wastewater management alternatives for the proposed development:
 - Soil-Based Treatment System(s) (STS)
 - Water Resource Recovery Facility (WRRF)
- Limiting Site Parameters include:
 - Base flood elevation
 - Projected sea level rise
 - Site topography / Steep slopes (slopes greater than 15% un acceptable for STSs)
 - Soil parameters:
 - Hydrologic soil groups (suitable soils for subsurface discharge - ~15% of site – southeast corner - Letteri Field)
 - Depth to groundwater (~20% acceptable; ~20% potential – to be confirmed by test pits)
 - Depth to bedrock – shallow bedrock (~67% of southern portion of site)





Sanitary Assessments

Supplemental
Studies

Alternative 1 – Soil-Based Treatment System(s) STS

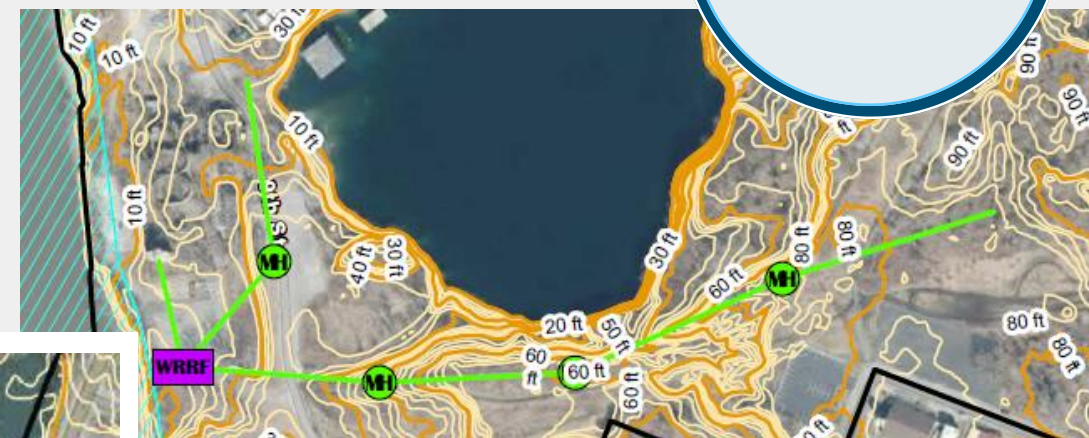
- Anticipated Cost: \$5,530,000



Lower Site



Upper Site / Letteri Field



Alternative 2 – Water Resource Recovery Facility (WRRF)

- Anticipated Cost: \$7,240,000

Anticipated Design Flows

Cortlandt Pitch (with Public Bathrooms)	7,600 gpd
Restaurant (with Cidery & Catering Hall)	5,000 gpd
Public Bathrooms (for Beach & Marina)	7,120 gpd



Sanitary Assessments

Supplemental Studies

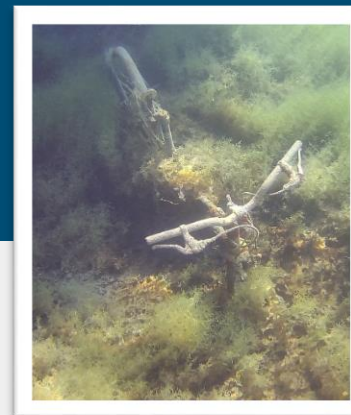


Alternative 3 – Sewer Extension

- To be evaluated
- To be coordinated with Village of Buchanan and/or City of Peekskill



Quarry Water Quality



Supplemental
Studies

Beach Feasibility Study – Supplement to EDA Grant Project

- Quarry pond is +/- 31 acres; max depth 170'-300'
- Sanitary Survey Report
 - Water Sampling – Each week for (8) weeks
 - 08/11/2022 through 09/29/2022
 - Includes one (1) set of heavy rains – daily samples for a 5-day period
 - Grab Sample – To establish baseline water quality for: radiologicals, metals, PFAS, etc.
- Beach Shoreline – assumed +/- 250 feet in length
- Underwater assessment of ex. objects
- Additional Items to Evaluate for Public Swimming:
 - Quarry Bottom Slopes – Survey to be completed by Badey & Watson

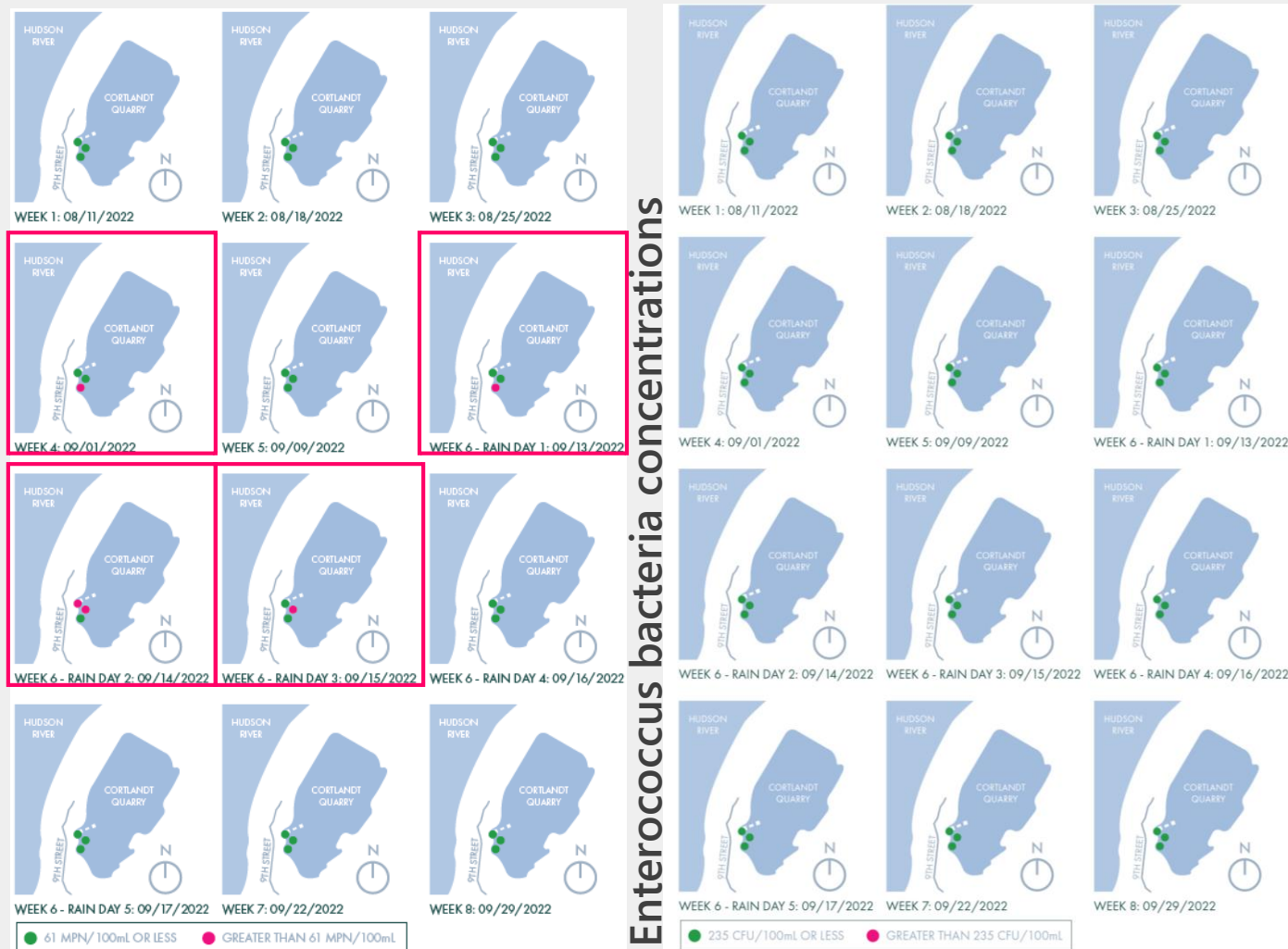




Quarry Water Quality

Supplemental Studies

- **Enterococcus bacteria** concentrations - exceeded regulatory limits at one or more sample locations 4x
- **E.coli bacteria** concentrations - below NYCRR bathing beach regulatory limits



- No significant findings prohibiting public swimming
 - Data represents only one period of sampling and water quality analyses
 - Final approval by WCDOH
 - Potential for additional testing requirements for next two years



Environmental Assessments

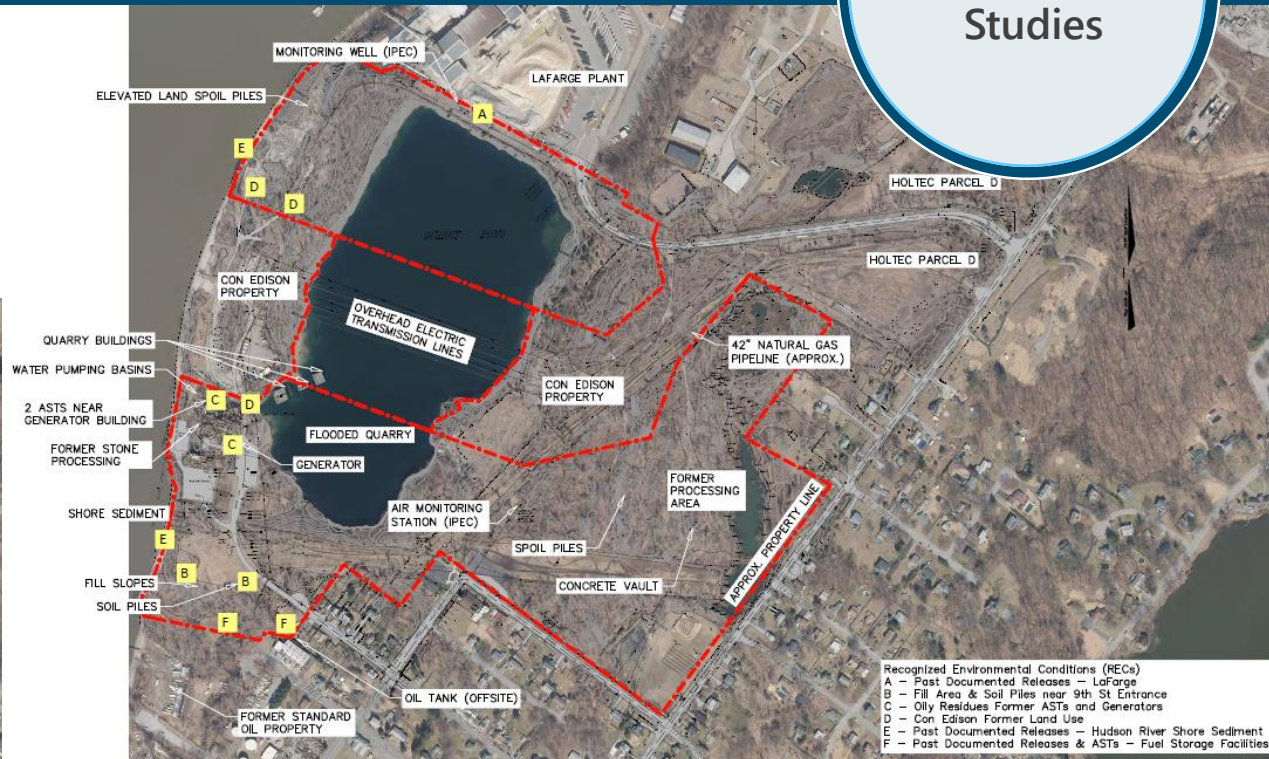
Supplemental Studies

Environmental Studies

- Site visits – 05/04/2022-05/06/2022 – Environmental investigations
- Wetland Delineation

Legend

- Survey Limits
- Delineated Wetlands
- Open Wetland Boundary
- Delineated Streams



Phase I Environmental Site Assessment/ EPA All-Appropriate Inquiry – August 2022

- Environmental records review, interviews, site recon
- Recognized Environmental Conditions (RECs)



Environmental Assessments

Supplemental
Studies

Phase II Environmental Site Investigations – B&L Proposal

<u>Task</u>	<u>Lump Sums</u>
Task 1 - Assess groundwater quality adjacent to the LaFarge operations	\$ 5,900
Task 2 - Assess fill areas – Southern and Central portions of the site	\$ 28,600
Task 3 - Oil Residue and Soil Assessment near generators and tanks	\$ 6,900
Task 4 - Assess former Con Edison waste storage area	\$ 5,600
Task 5 - Hudson River shoreline sediment quality	\$ 4,800
Task 6 - Assessment of impacts to site from former bulk fuel storage facility	\$ 3,400
Task 7 - Radiological data review and field Investigation	\$ 20,100
Task 8 - Evaluate gypsum dust on quarry pond	\$ 2,200
Task 9 - Phase II Investigation Report	<u>\$ 7,900</u>
Proposal Total	\$ 85,400





Next Steps/Closing Comments

Next Steps /
Closing
Comments

- Continued coordination
 - Meetings to date:
 - 01 April 2022 – Holtec meeting; 06 April 2022 – WCDOH meeting; 27 April 2022 – Cortlandt Pitch meeting; 18 July 2022 – Holtec meeting; 17 November 2022 – ConEd meeting; 12 December 2022 – Cortlandt Pitch meeting; 14 December 2022 – 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)





Next Steps/Closing Comments

Next Steps /
Closing
Comments

- **Progress 60% design development drawings and details**
 - Access off Broadway at 13th Street
 - Proposed PAD Site #3 final elevation
- **Coordination with Potential Developers**
 - Coordinate with Town Planning Department
 - Extended scope to accommodate for future developers beyond Cortlandt Pitch
 - Not currently part of the EDA grant
- **Onsite Investigations**
 - Soil Testing
 - Advance six (6) infiltration borings in accordance with NYSDEC guidelines
 - Perform soil sampling and Standard Penetration Testing (SPT) in accordance with "Standard Test Method for Standard Penetration Test (SPT) and Split Barrel Sampling of Soils"





Thank you!



Questions/Comments?

Town of Cortlandt Quarry Site Improvements Project
Cortlandt Quarry Town Board Meeting | 30 January 2023

