

# Sunnyside Sanitary Lift Station

Flood Resiliency Improvements  
Conceptual Design

# Agenda

- Purpose of Conceptual Design
- Design Criteria
- Conceptual Design
- Estimated Time to Design & Construct
- Estimated Costs
- Tentative Plans

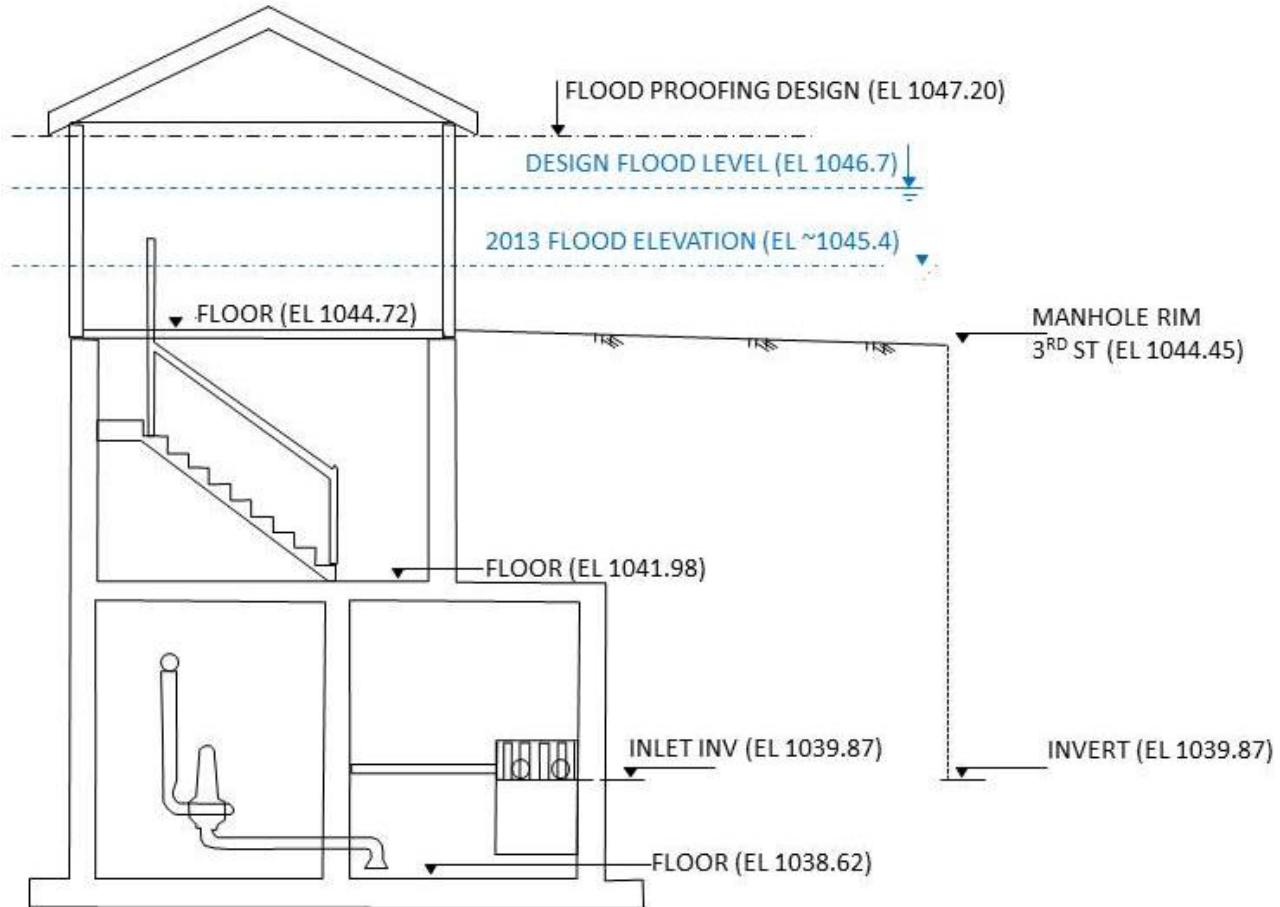
# Purpose of Conceptual Design

- Establish the basis of design criteria for improvements
- Allow review and discussion of improvements outside of typical design & construction framework

# Design Criteria

- Design Flood Elevation
- Limitations and Modernization of Existing Lift Station
- Operational Requirements

# Design Flood Elevation



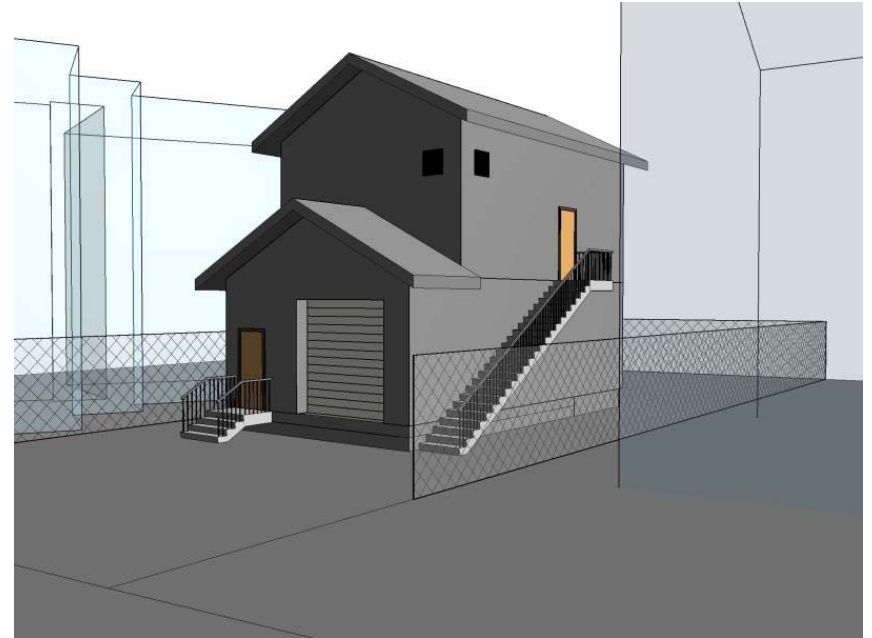
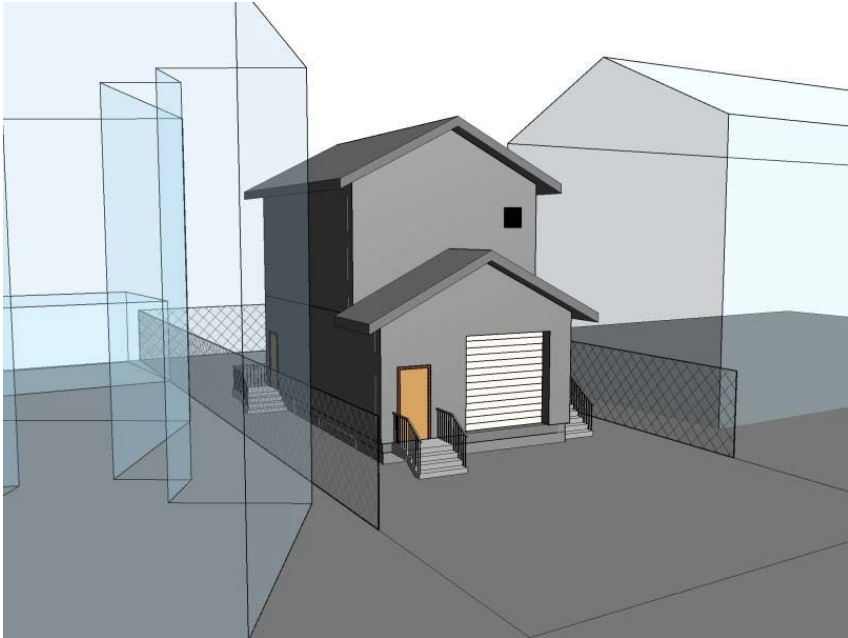
# Limitations & Modernization

- Limitations:
  - Existing at-grade building
- Modernization:
  - Alberta Building Code
  - Electrical Systems
  - Mechanical Systems

# Operational Requirements

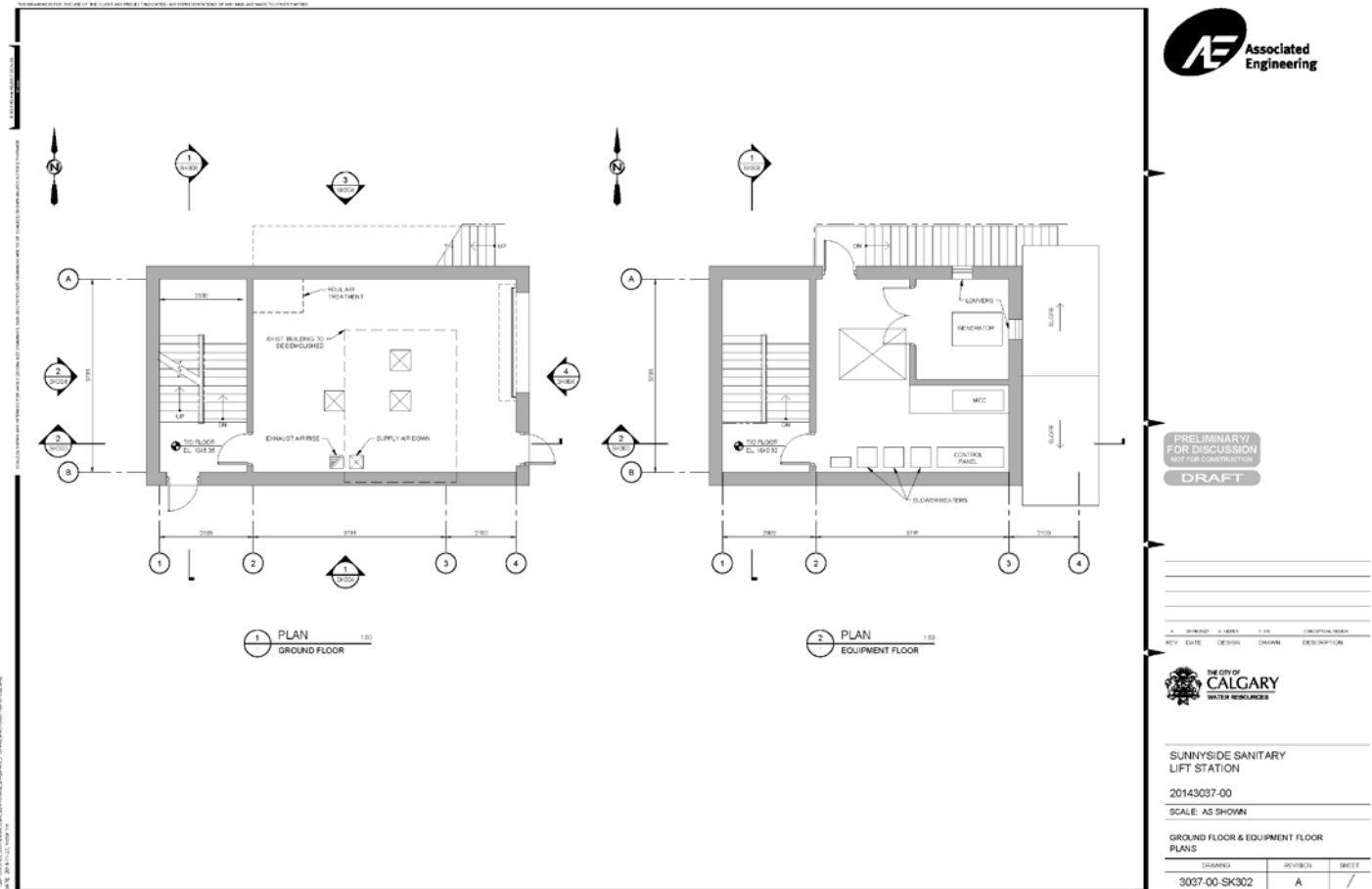
- Maintain Existing Service Levels Outside of 1 in 100 year Flooding Conditions
  - No change in pumping or storage capacity
- Operational During 1 in 100 year Flooding Conditions
  - Functionality of lift station will be unaffected, although sanitary system may be non-functional
  - Contribute to returning sanitary catchment to functionality

# Conceptual Design

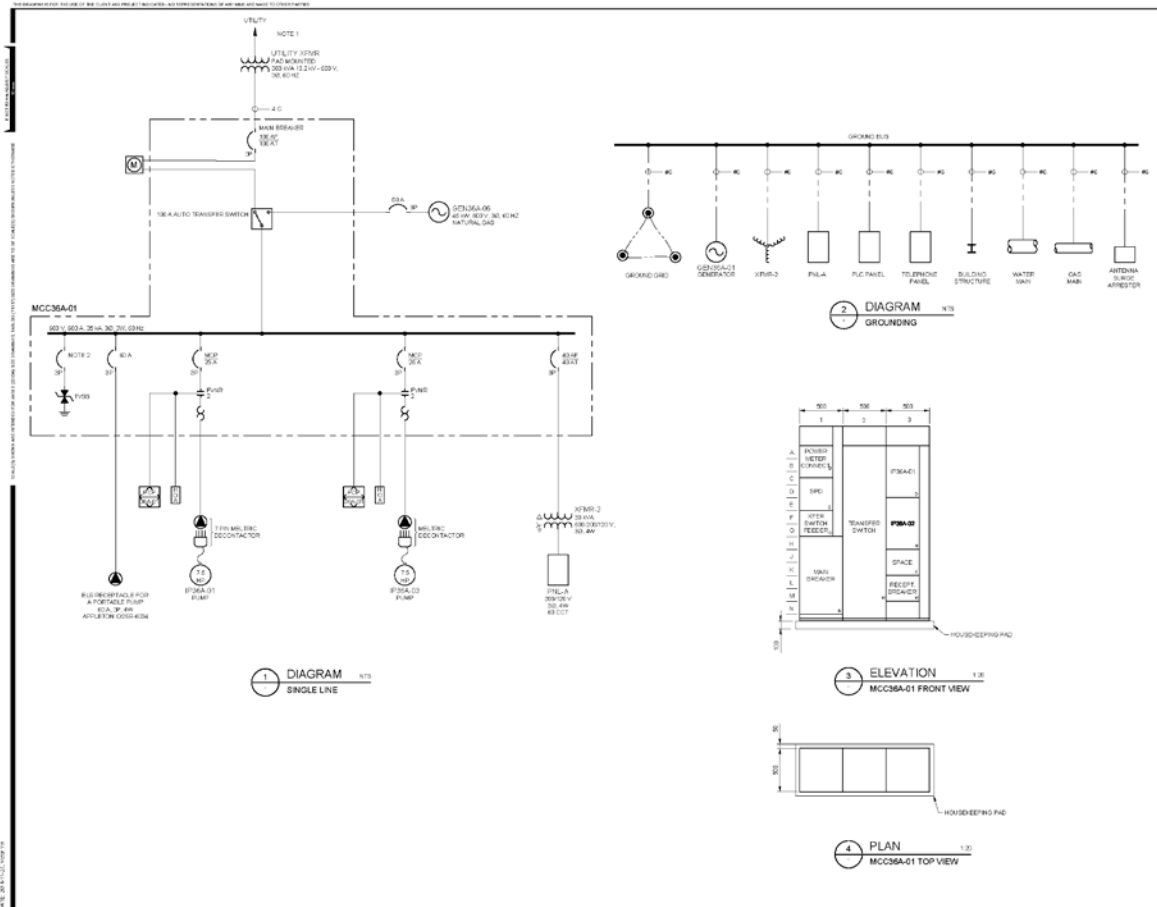




# Conceptual Design



# Conceptual Design



PRELIMINARY  
FOR DISCUSSION  
NOT FOR CONSTRUCTION  
**DRAFT**

| REV | DATE | DESIGN | DRAWN | DESCRIPTION |
|-----|------|--------|-------|-------------|
|     |      |        |       |             |



SUNNYSIDE SANITARY  
LIFT STATION  
20143037-00  
SCALE: AS SHOWN  
SINGLE LINE DIAGRAM

| DRAWING       | REVISION | SHEET |
|---------------|----------|-------|
| 3037-00-SK800 | A        | /     |



# Estimated Time & Cost Design & Construction

- 12 to 18 Months for Detailed Design work and Public Consultations
- 12 Months for Construction work
- \$X.X M ( $\pm 30\%$ ) for Detailed Design & Construction

# Tentative Plans

- Detailed Design to begin in 2015 once budget is confirmed in February
- Investigate interim measures if project is deferred due to budgetary issues