

MEMORANDUM



TO: Robert Vogel, Building Commissioner & Zoning Enforcement Officer
CC: Karen Joseph, Town Planner
Janet Carter Bernardo, Project Peer Reviewer
FROM: Woodard & Curran
DATE: September 12, 2023
RE: Stearns Meadow Drinking Water Treatment Plant
Building Height Details

This memorandum serves to provide additional detail regarding the building height for the Stearns Meadow Drinking Water Treatment Facility, to be located at 453 Chief Justice Cushing Highway.

Design efforts for the new drinking water treatment facility have made every effort to present a structure that meets the building height guidelines and roof pitch requirements presented in the Town of Scituate Zoning Bylaws, while not sacrificing any needs of the treatment facility.

The attached figure shows the building massing, the calculations for average height of the facility, and the maximum heights for the different portions of the building. The building is built into the grade of the existing site in order to take advantage of the topography from treatment process hydraulics, as well as to provide the ability to minimize the building footprint in order to maximize the buffer to abutting properties.

Building Average Height

The average height of the facility meets the requirement for average building height to be no more than 35'-0" in Zones R-1, R-2, and R-3, with an average building height of 34'-4".

Maximum Building Height

The maximum building height of the proposed facility is 45'-1", which exceeds the maximum height requirement of 40'-0". The maximum building height is within the water treatment process area. The height is driven by space requirements for maintenance or future replacement of equipment within treatment process tankage, which has already been minimized to limit building height.

Roof Pitch

The pitch of the roof is shown as 6:12 at the garage area, and both 5:12 and 4:12 at treatment process area. As noted in Section 750.1, civic buildings and industrial buildings are exempt from these standards. The design team has made every effort to follow the spirit of the standards, while considering the unique needs of the water treatment facility as well as building aesthetics. These roof pitches take into consideration the size of the building, and were designed to minimize additional height associated with the roof.

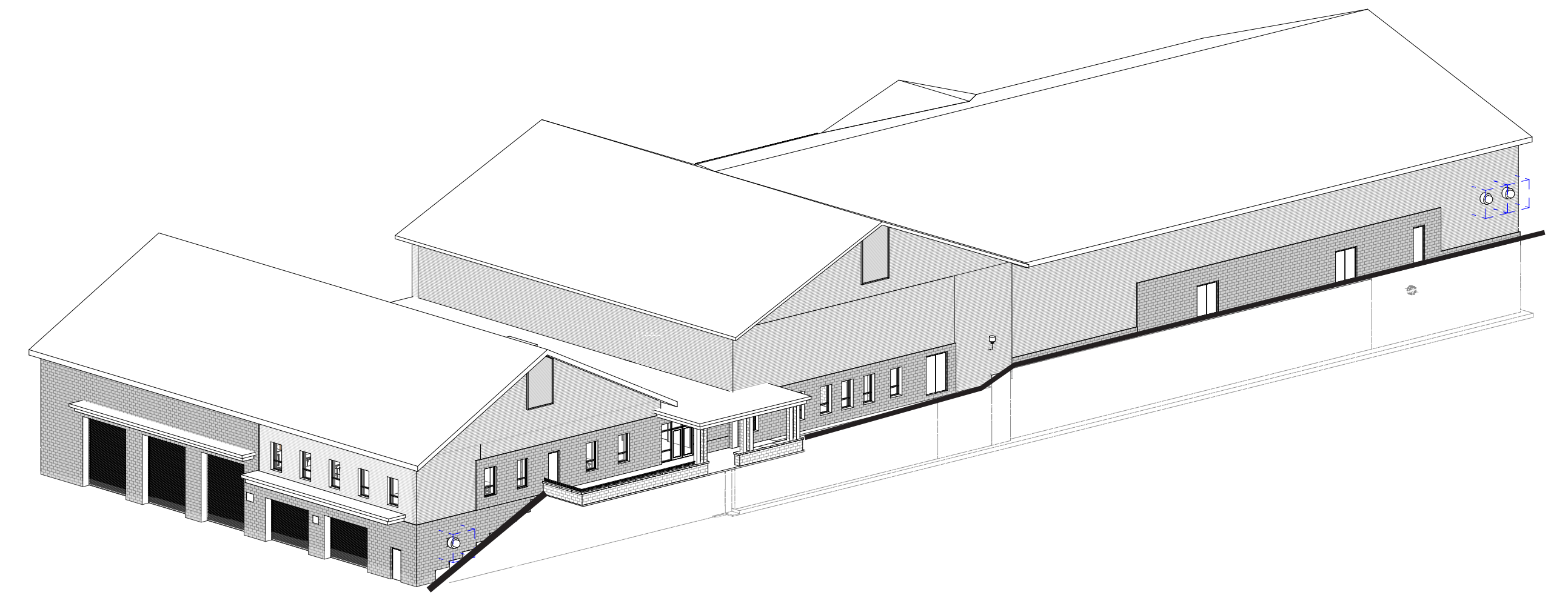
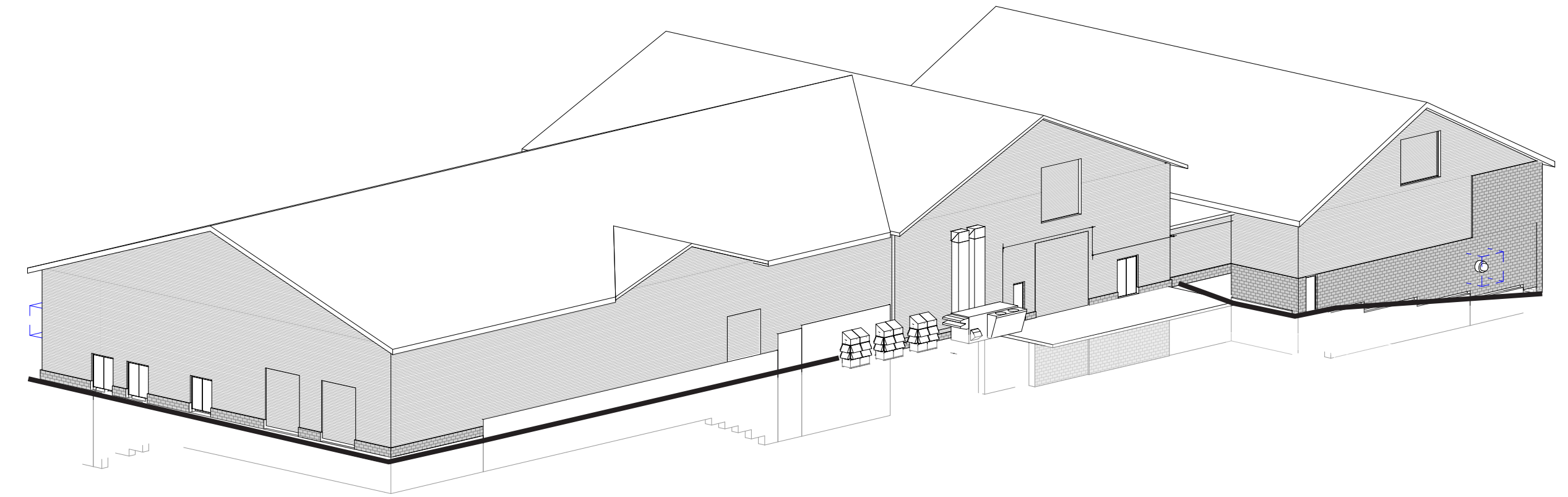
WEST ELEVATION

Selected points every 20'
 Heights taken from closest intermediate grade
*inches converted to decimals

1	32.125
2	33.125
3	33.125
4	34.125
5	35.125
6	35.125
7	36.125
8	37.125
9	37.125
10	38.125
11	38.125
12	40.125
13	18.5
14	31.33
15	32.33
16	35.25
17	36.25

Max Height
**Height taken from average grade to ridge height

83.5 (Garage)	44'-0"
87.5 (Flat Roof)	19'-2"
93 (Processing)	45'-1"



Average = 34' - 4"

- AVERAGE HEIGHT
- AVERAGE GRADE
- INTERMEDIATE GRADE
- BELOW GRADE BUILDING OUTLINE

