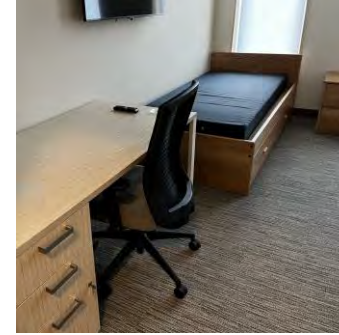
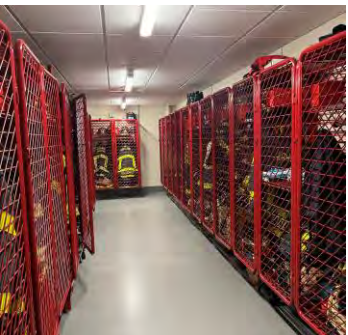
An aerial photograph showing a large, dense wooded area in the center. To the left is a parking lot with several cars. To the right are some buildings and a circular driveway. A road runs along the top of the image.

NEW FIRE STATION
NORTHBOROUGH, MA

JANUARY 25, 2024

AGENDA – DESIGN REVIEW #2

- Previous Meeting
 - Joint Listening Session: Process, Precedent Images + Open Discussion
- Design Process
- Review of Submission



DESIGN PROCESS APPROACH

- Developed program that reflected current + future FD operational needs
- Developed plan options for that program
- Developed building forms that matched those needs
- Studied context: Neighboring + town buildings + other precedent buildings
- Reviewed building materials that responded to what we heard from the committee + community for longevity, aesthetics + sustainability perspectives
- Presented multiple elevation studies to the building committee for discussion + approval
- Designed for the unified whole for all sides of the building - taking into account operations + layout, user needs + comforts, aesthetic expectations, energy consumption + costs



NORTHBOROUGH TOWN BUILDINGS: NORTHBOROUGH FREE LIBRARY, TOWN OFFICES



NORTHBOROUGH TOWN BUILDINGS: SENIOR CENTER, POLICE DEPARTMENT, SCHOOLS



NORTHBOROUGH TOWN BUILDINGS: TOWN FIRE STATIONS, OLD TOWN HALL



NORTHBOROUGH BUILDINGS: INDUSTRIAL + COMMERCIAL

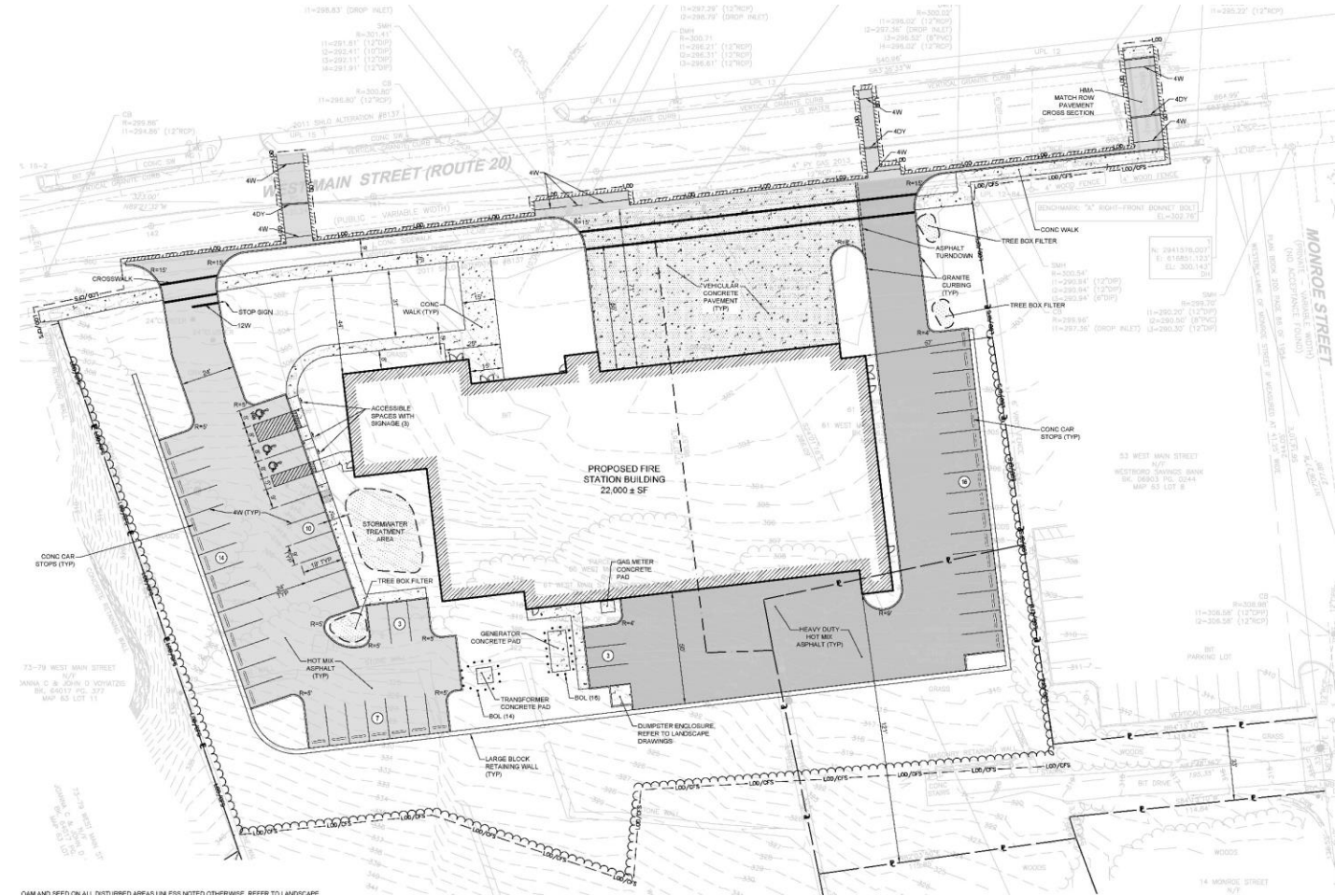


OTHER NORTHBOROUGH STRUCTURES OF NOTE: CHURCHES + MONUMENTS, AQUEDUCT



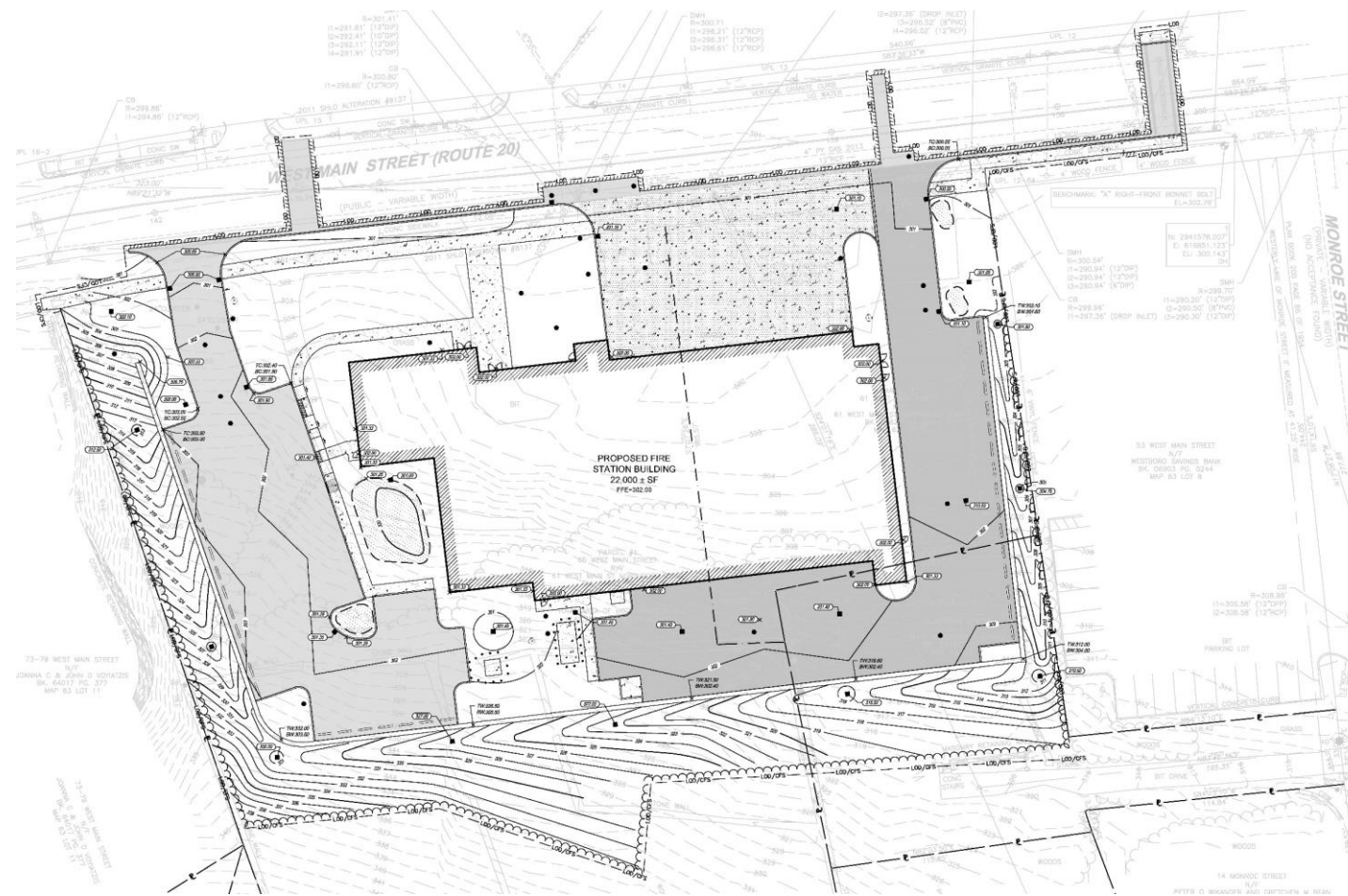
PLACEMENT OF BUILDING, PARKING + PLANTING TO SUPPORT OPERATIONS

- Site requirements
 - Separate parking to promote safety for public parking + movement of vehicles
 - Parking: 23 staff east of apparatus + 30 guest on west side
 - Retaining wall to contain hillside
 - Plantings that promote safety
- Requirements to support operations
 - Clear + best line-of-sight
 - Apparatus bay depth + aprons to accommodate vehicles + turning requirements



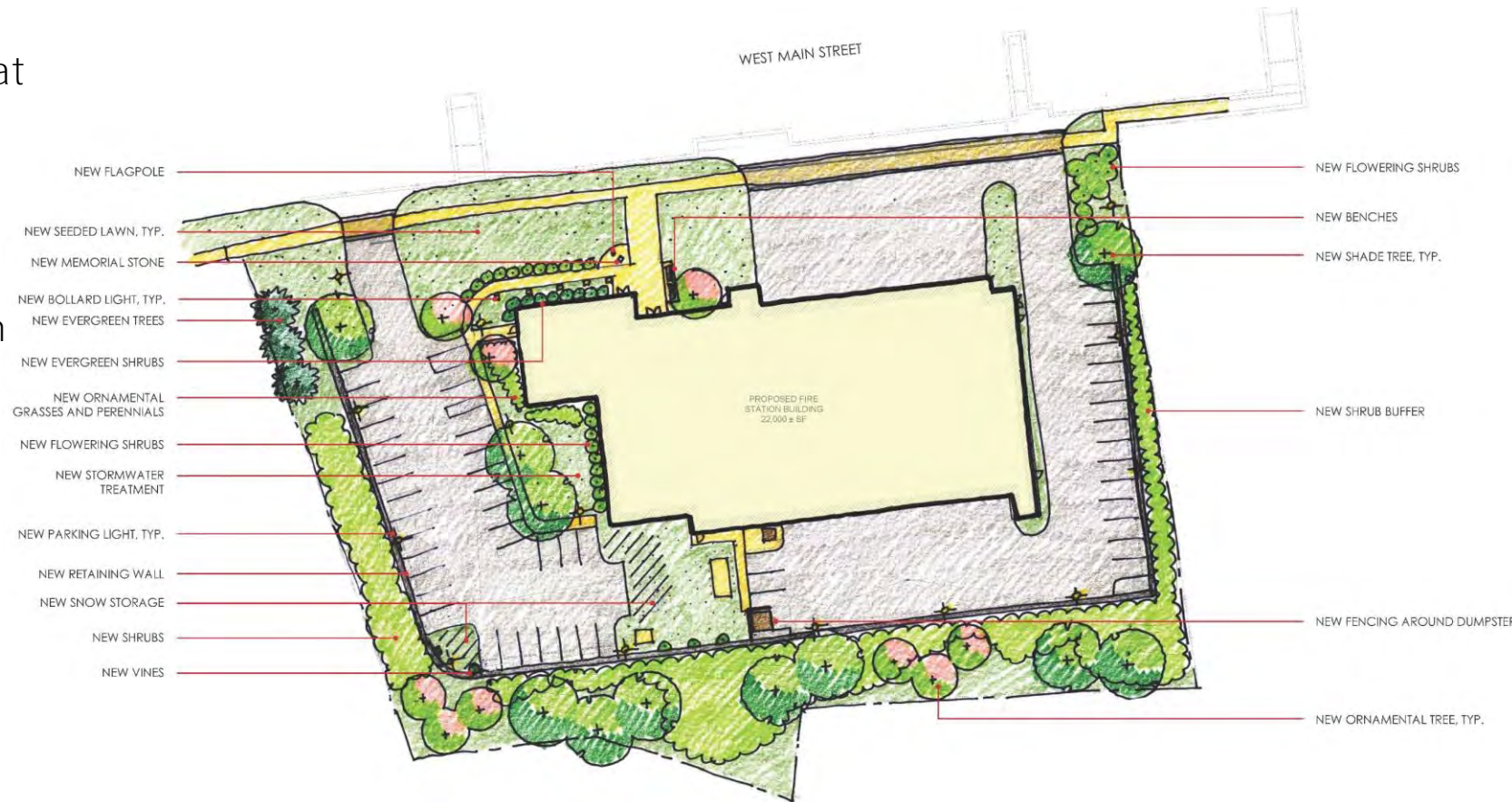
PLACEMENT OF BUILDING, PARKING + PLANTING TO SUPPORT OPERATIONS

- Roadways + parking area materials
 - Stop sign
 - Granite curbing
- Aprons to support fire apparatus
- Concrete sidewalks
- Stormwater treatment
- Grading
- Retaining wall – delegated design
 - Design ongoing
- Transformer/generator + dumpster locations + enclosures/protection



PLACEMENT OF BUILDING, PARKING + PLANTING TO SUPPORT OPERATIONS

- Plantings
 - Planting opportunities that promote safety; Maintain line-of-sight at all times
 - Plantings to work with final retaining wall design
- Site elements
 - Flagpoles
 - Site Lighting: bollards + pole lighting
 - Benches
 - Signage
 - Stormwater treatment
 - Dumpster containment



SCHEMATIC DESIGN - LEVEL 1 FLOOR PLAN

- FD Operations spaces on east side of site
 - 6 apparatus bay doors facing north + south – best location for vehicular movement
- FD Administrative areas on west side of site
 - Entry faces West Main St.
 - All public spaces accessible from entry lobby



SCHEMATIC DESIGN - LEVEL 2 FLOOR PLAN

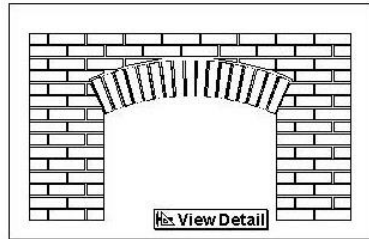
- FD Living areas on west side of site
 - No direct public access
 - Access for staff to apparatus bays by way of 2 stairs + 1 slide pole
 - Outdoor areas located at the rear of building on west + south side



FIRE STATION NEIGHBORING SITES + BUSINESSES

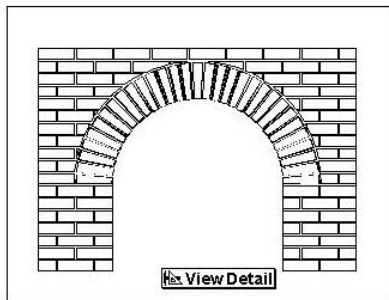


ARCH FORM + CONSTRUCTION PRECEDENT STUDY



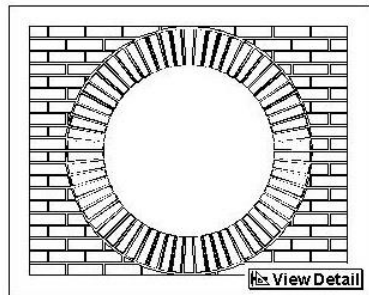
Arch Types: Segmental

FIG. 2b

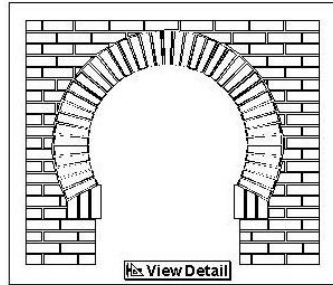


Arch Types: Semicircular

FIG. 2c

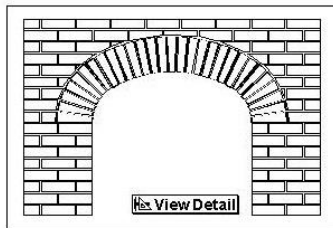


Arch Types: Bullseye



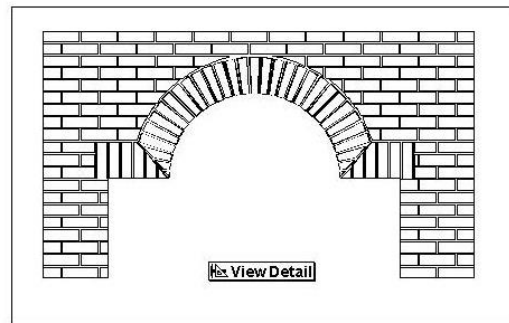
Arch Types: Horseshoe

FIG. 2e

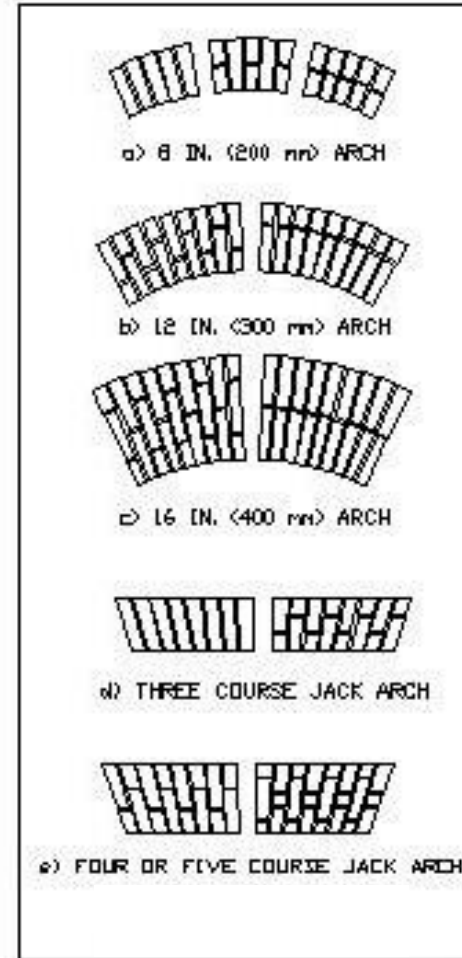


Arch Types: Multicentered

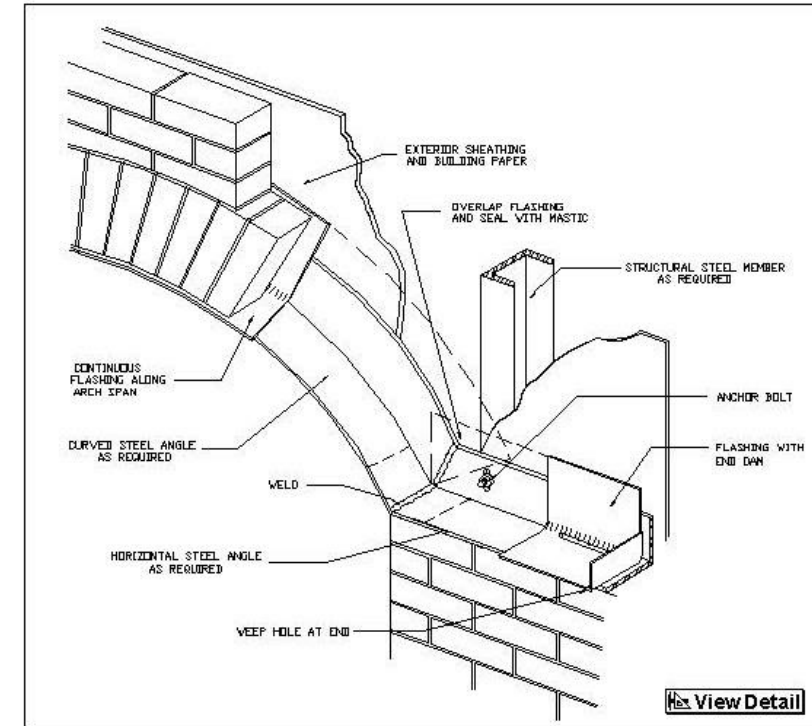
FIG. 2f



Arch Types: Venetian



Typical Arch Configurations



Arch Supported by Curved Steel Angle

H.H. RICHARDSON: MATERIALS, TOWERS, BANDING, WINDOW PATTERNS, ENTRIES



Henry Adams House, Washington DC



Benjamin Warder House, Washington DC



Sir Hubert House, Bushey England



Converse Memorial Library, Malden MA



Union Passage Station, New London CT



Winn Memorial Library, Woburn MA



Ames Free Library, North Easton MA

SCHEMATIC DESIGN – NORTHEAST ELEVATION



SCHEMATIC DESIGN – NORTH ELEVATION



SCHEMATIC DESIGN – NORTHWEST ELEVATION



SCHEMATIC DESIGN – WEST MAIN STREET ELEVATION



SCHEMATIC DESIGN – WEST ELEVATION



SCHEMATIC DESIGN – SOUTHWEST ELEVATION



SCHEMATIC DESIGN – EAST ELEVATION



SCHEMATIC DESIGN – SOUTH ELEVATION



SCHEMATIC DESIGN – SOUTHEAST ELEVATION



NEXT STEPS

- Meeting with Committee to approve schematic design for cost estimate
- Design Review Meeting continuation to address issues noted
- Zoning Board
- Planning Board
- Community Information Meeting #3



THANK YOU

