FEASIBILITY STUDY

TOWN OF DEDHAM
POLICE STATION
Dedham, MA

October 5, 2009

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Site & Building Assessment

D&W Project # 09-578

Town of Dedham Police Station Dedham Massachusetts

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INTRODUCTION AND BACKGROUND

Introduction

The Town of Dedham commissioned an assessment of the existing Police Station Building and Site. The objective of this study was to:

1. Inspect and evaluate the condition of the police station and site
2. Provide recommendations and cost assessment to renovate the existing building.

Brief History

The police station is located on High Street in Dedham, Massachusetts. It is centrally located in the downtown business district. The original police station was constructed in 1962 with no major additions or major renovations having been made since the time of the original construction. The existing site is approximately ½ acre. Some parking is provided on site with overflow parking provided on-street. The police station structure is essentially a two story masonry, concrete and steel structure with a full basement and an attached single story, two bay garage and a single story storage and shop structure.

Documentation

This report is based on information gathered by visual observations of the building and site by Dore & Whittier Architects, Inc. and their consultants on July 21, 2009, a review of Owner provided drawings (Kilham, Hopkins, Greeley & Brodie Architects dated Feb 7, 1962 and the Carell Group dated Feruary 21, 1997) as well as discussions with public safety staff.

During our Study a general review of current codes was performed. Codes used in this review include:

Massachusetts State Building Code – Seventh Edition
Massachusetts Accessibility Code – CMR 521 AAB

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INTRODUCTION AND BACKGROUND

Introduction

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Civil Assessment

Nitsch Engineering has performed research of the existing site conditions for the Police Station in Dedham, Massachusetts. Information included in this report is also based on compiled documents gathered by Nitsch Engineering from the town of Dedham and a site walk performed on July 21, 2009.

Our observations and findings are summarized below.

Exiting Property Information

The existing Police Station is located at 600 High Street in downtown Dedham. The existing parcel is approximately 14,700 sf and is bound by Church Street to the west, High Street to the north, and Washington Street to the east. The small onsite parking lot is accessed by a driveway entrance at the corner of Church Street and High Street and another entrance on Washington Street.

Existing Site Utilities

Based on record documents, site observations, and conversations with town officials, the summary descriptions below represent the site utility conditions/assumptions as we understand them at this time.

Storm Drainage

Based on observations from the site visit and the record drawings, a small area of runoff from the parking lot is collected by an onsite catch basin. A quick visual inspection indicated that the catch basin connects to an adjacent oil and gas separator, which discharges to the 8-inch sewer pipe beneath Washington Street. The roof runoff is collected and discharged through a 4-inch clay pipe. The 4-inch clay pipe runs behind the main building on the south side and then continues along the western side of the building before ultimately connecting to the storm drain manhole at the intersection of Church and High Street.

Water

The record site plan indicates that water is fed to the building by a 2" Type K copper service. The service is connected to a 6-inch water main beneath Church Street and enters the building on the western side. Additionally, Dedham GIS indicated that a fire hydrant was located north of the site and at the intersection of High Street and Maple Place. The location of this fire hydrant was confirmed during the site visit.

Sewer

A 6-inch vitrified clay sewer service exits the building along the eastern side and connects to the 8-inch sewer pipe beneath Washington Street. The oil and gas separator, previously described, services the rear maintenance garage. The record plans indicate that another 6-inch vitrified clay pipe connects the oil and gas separator to the main building's sewer service. A wye connection is shown on the plans and appears to be located beneath the sidewalk near the southeast corner of the main building.

Natural Gas

Neither the record plans nor the Dedham's GIS indicated a gas service to the main building. During the site walk on July 21st, pavement markings were observed to indicate that a gas service does exist and is located at the northwest corner of the site. HVAC Assessment indicates gas fired boiler and Plumbing Assessment indicates gas meter outside the building. Since record drawings were not found, further investigation would need to occur to determine the exact location gas service enters into the building.

Possible gas service

Electrical

The plans indicate that the building is serviced by an underground electrical line running from Washington Street into the southeast corner of the main building.

Underground/Above Ground Tanks

The record plans indicate that a 1,520 gallon underground gasoline tank with gas pump is located at the southwest corner of the site. There was no evidence of the gas pump on site during the walk-thru. The gasoline tank also services the maintenance garage by two ½-inch copper pipes inside 2-inch conduit pipes.

Site Conditions and Operations

Soils

Based on the Natural Resources Conservation Service (NRCS) Norfolk & Suffolk Counties Soil Survey, the onsite soil is classified as Urban land. As defined by NRCS, Urban land "consists of areas where 75 percent or more of the land is covered with impervious surfaces, such as buildings, pavement, industrial parks, and railroad yards." Due to the extent of the impervious surfaces, it was impractical to identify the underlying soils. Only an onsite soil investigation will determine soil characteristics and suitability for land uses.

Preliminary Permitting Considerations

Wetlands Protection Act (310 CMR 10.00)

The Wetlands Protection Act ensures the protection of Massachusetts' inland and coastal wetlands, tidelands, great ponds, rivers and floodplains. It regulates activities in coastal and wetlands areas, and contributes to the protection of ground and surface water quality, the prevention of flooding, and storm damage and the protection of wildlife and aquatic habitat.

A review of the Massachusetts Department of Environmental Protection (DEP) wetland layers available on the Massachusetts Geographic Information System (MassGIS), dated April 2007, appear to indicate that the project site does not have any wetlands located on-site.

Surface Water Supply Protection (310 CMR 22.20)

The Massachusetts Department of Environmental Protection (DEP) ensures the protection of surface waters used as sources of drinking water supply from contamination by regulating land use and activities within critical areas of surface water sources and tributaries and associated surface water bodies to these surface water sources.

A review of the Massachusetts DEP resource layers available on the MassGIS, appear to indicate the site is NOT located within a Surface Water Supply Protection Zone.

Natural Heritage & Endangered Species Program

A review of the 13th Edition of the Massachusetts Natural Heritage Atlas prepared by the Natural Heritage and Endangered Species Program (NHESP), dated October 1, 2008, indicates that the site is NOT a Priority Habitat of Rare Species or an Estimated Habitat of Rare Wildlife. The maps also indicate that the area is does not contain any Vernal Pools. In fact, no such areas appear within close proximity to the site.

Flood Plain

Based on the Flood Insurance Rate Map (FIRM), Community Panel Number 250237 0005 C, dated August 13, 1982. The site is located within Zone C (Areas of minimal flooding).

Zoning

According to the Dedham GIS the site is located in the CB (Central Business) Zoning District.

Architectural Assessment

The two story Dedham Police Station was constructed in 1962 with no major additions or renovations to the original building, components or systems. The 8,070 SF building consists of 2 main floors with a full basement, an attached single story, two-bay garage and a single story storage and shop structure. Building users include 60 sworn officers, 9 dispatchers and approximately 1-5 custodians.

Exterior Envelope

The police station is a two-story masonry, concrete and steel structured building. The Town does not own the land that the existing Police Station is situated on. The land is owned by a local Church. The length of lease and the date of termination are unknown.

Walls:
The exterior load bearing walls, consisting of brick veneer on top of concrete masonry block (CMU), is in good condition overall. Brick requires re-pointing in some areas. Spalling concrete was also observed at the foundation. Refer to Structural assessment for additional exterior masonry recommendations. Most of the exterior walls contain approximately 1 ½" of batt insulation with an interior plaster finish. Based on the exterior wall construction, the approximate R value of a typical exterior wall is R 6.3. Some exterior walls do not contain insulation and provide a painted CMU interior finish.

Recommendations:

- Re-point brick
- Address spalling at concrete
- If possible, increase insulation thickness at exterior walls to improve thermal envelop to between R-11.5 and R-13 continuous insulation.

Doors:
The exterior metal doors are in poor to fair condition. Some doors are rusting from the bottom. Drawings indicate that the doors are in-filled with mineral wool insulation. This type of door has a very low R-value. Existing doors are non-security exterior door types.
Recommendations:

- Replace exterior doors for greater security and energy efficiency.

Windows:
The existing exterior windows are double hung wood windows with wood shutters which are in fair condition. Drawings indicate single pane, non-insulated glazing at the windows. Exterior windows at dispatch contain an interior pane of bullet resistant glazing. Other secure areas do not have bullet resistant glazing.

Recommendations:

- Replace windows with aluminum clad wood windows, specifying low-e with argon or high R tripane glass for greater efficiency. Install additional bullet-proof glass as needed.

Roof:
The existing shingle roof is in fair condition. It is unknown how much time is left on the shingle warranty. The roof structure consists of wood plate trusses. Refer to structural assessment for additional information and recommendations regarding the structure. Ceilings have 2" insulation installed, providing an R-value of approximately R-8. It appears some areas have had attic insulation supplemented to provide greater thermal protection.

Recommendations:

- Replace shingle roof and add additional insulation to improve the thermal envelop to minimum R-25 continuous insulation if existing structure can support the additional load. Additional structural analysis is needed to determine the structural capacity of the existing roof; the analysis is outside the scope of this study.

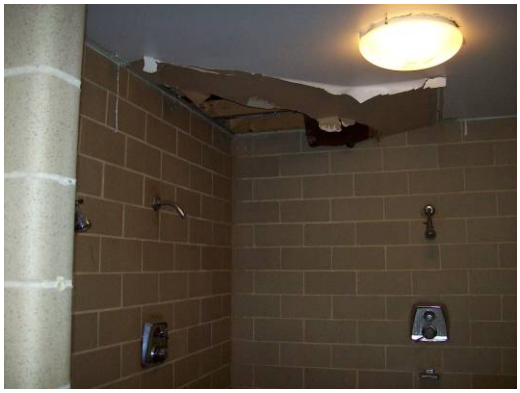
Interior – General Comments

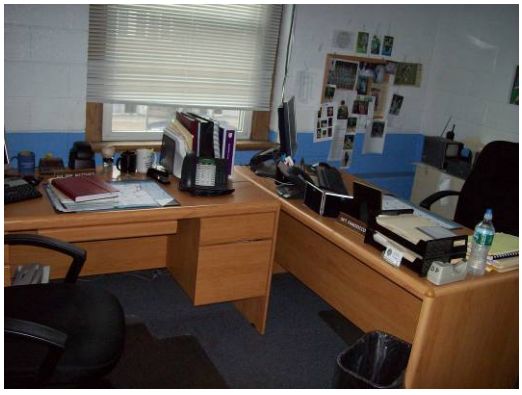
The building consists of a reception area, dispatch area, offices, interview rooms, holding cells, locker area, and storage areas. The following items were identified as areas where the existing facility does not meet the needs of a modern police station:

- The reception area lacks durable furniture and counters are in need of replacement.
- Central Dispatch was remodeled around 12 years ago and is in relatively good shape. However heating and cooling are not adequate.
- The National Fire Protection Association (NFPA)

recommends that dispatch have a dedicated kitchenette and a dedicated restroom. Neither is provided in the existing building due to a lack of space.

- Roll Call occurs in the booking/processing area. This space is too small and cannot be used if a prisoner is in the facility.
- The soft interview room (for interviews where handcuffs are not required for the person being interviewed) does not provide the standard soft interview environment as it serves as a report room and work room as well.
- A hard interview room (for interviews where handcuffs are required for the person being interviewed) is not available due to a lack of space. Interviews are currently being done in the juvenile holding cell.
- The restroom/locker area is undersized for the number of occupants. Additional lockers are stored in corridors, limiting the egress width and circulation space. The shower area is in poor condition. We were told very few of the officers use the showers due to its current condition. There should be a separate male and female shower/locker room. At this point, this facility is shared.
- The kitchen was converted to an office, thus eliminated a break room in the facility. A microwave and small refrigerator were located on a table in the dispatch area.
- Office size and space is limited. Most offices are shared spaces.
- Many storage rooms have been converted to electrical/server rooms without upgrading for adequate ventilation/cooling.
- Electrical/Data equipment are scattered throughout the facility and do not appear to have adequate cooling/ventilation.
- Indoor temperature can vary throughout the building.





Recommendations:

- Plan for renovations/additions to provide adequately sized spaces to allow for proper function of the police station. A multipurpose space could serve as roll call space, conference room, interview room, an area for additional lockers if needed, etc.

- Replace countertops and update furniture as needed.
- Renovate restroom/locker area to promote staff use of the facilities.
- Provide female locker/shower room.
- Provide an adequately ventilated area for electrical/data equipment
- Refer to Mechanical Assessment for HVAC recommendations.

Egress and Life Safety

Several items were noted as limiting egress and affecting the safety of users and visitors within the building in case of emergency. Items that do not meet the current MA Building code Seventh Edition include:

- The boiler room lacks a second means of egress
- The electrical room is also serving as an office. The room should only be used for electrical purposes and the office should be relocated.
- A concrete beam has been chipped away due to a recent plumbing installation. This may affect the structural strength of the beam. Refer to Structural Assessment.
- Corridors are restricted due to storage of various items, including lockers. Corridor spaces are too narrow with excess storage occurring in the walking space.
- Stairs do not meet current accessibility/egress requirements with guard heights below code requirements, stair risers taller than requirements, treads narrower than requirements, and guard openings wider than requirements.
- Stairs are missing a second handrail as required by code.

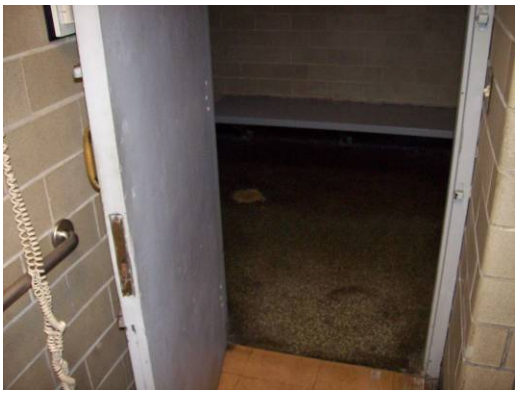
Recommendations

- Relocate offices out of electrical room and provide adequate cooling and ventilation.
- Maintain clear egress paths with adequate width in case of an emergency.
- Modify guards and handrails to comply with code requirements.

ADA Compliance

Requirements for handicap accessibility were non-existent when the building was originally constructed. In 1990, the Americans with Disabilities Act (ADA) was enacted into law by the Federal Government to provide civil rights protections and nondiscrimination on the basis of disability. Since 1990, the original regulations have been updated and new requirements and clarifications have been added several times. Based on these regulations, we have found the following items to be in noncompliance or not accessible to the disabled:

- Toilet rooms/shower rooms are not handicap accessible.
- Most of the toilet rooms are too small to allow for wheel chair turning radius
- Grab bars are not installed
- Showers do not have adjustable shower heads
- Access to the door ways are too narrow
- Width of doors are too narrow
- An elevator is not provided accessibility to other levels
- Drinking fountains are not accessible.
- Room signage is not ADA compliant.
- A handicap accessible cell is not provided.



Recommendations

- Each of the inaccessible features listed above has an impact on the ability of disabled members of the community to access various spaces independently if needed. Any renovation or new construction plans should incorporate the accessibility of these items to accommodate disabled people.

Security

The following items fail to meet current standards for security in a modern Police Station. The following items were noted:

- Security is compromised at the entry vestibule with a large opening above the door.
- Bullet resistant glazing is used at the entry lobby, but the exterior window to the reception area is vulnerable.
- Bullet resistant glazing at exterior windows is open to allow for additional ventilation, but compromises security.

- Prisoner booking and processing serves as a corridor and contains items that could be used as weapons. The desk is not durable and the computer is compromised.
- Steps are integral to the prisoner booking area and offer a hazard to officers transferring a prisoner to/from the Sally port.
- The corridor in the Women's Cells is less than 5' and contains general storage. This creates a security and safety liability.
- Administration area is open to the prisoner processing space and not conveniently located to the rest of the staff. This office is vulnerable to the Sally port as well, with direct unprotected window access.
- Fingerprint area is not durable and is located within the Women's Cell area. This does not allow proper separation of Male/Female/Juvenile prisoners, and the equipment is vulnerable.
- The Sally port is open and not secure.

Recommendations

- Provide barriers to separate areas.
- Relocate items that can be used as weapons to areas not accessible by prisoners.
- Consider a security system in the building or at minimum, doors with some safety measures in places to protect staff/public areas from prisoner holding areas.

Storage

Throughout the facility, there were areas where storage interfered with the proper functioning of the police station. Some areas even caused possible safety hazards including corridors. Some items are stored in rooms where the purpose of the room is not for storage. It is obvious that there is not enough storage which creates these situations. Certain items identified include:

- The evidence garages and storage areas are separated from the rest of the facility and do not offer adequate storage for all pieces of equipment.
- Additional storage is required as storage occurs in corridors and limits office sizes.

- Evidence storage is limited in size and does not allow for processing adjacent to the space. Chain of custody requirements are compromised at this location.

Recommendations

- Reorganize storage areas to maximize on limited storage space on site.

Firing Range

The existing firing range has not been used for quite some time. The officers currently use the Medfield outdoor firing range. This incurs some cost and takes Police Officer's away from Dedham for periods of time. We also identified the following items:

- The firing range requires abatement/cleaning and the HVAC is inadequate for the intended use. Refer to the Hazardous Materials Assessment for additional information
- The bullet trap and baffles appear to require renovation
- Target systems are aged and should be updated

Recommendations

- Renovate firing range on site for police use. If it is decided to use the Medfield outdoor firing range, renovate the firing range area to provide spaces listed in this assessment as insufficient in size or lacking on site, such as soft and hard interview rooms, kitchenette, locker/restroom areas, additional office space, storage space, etc.

Structural Assessment

Purpose

The purpose of this report is to describe, in broad terms, the structure of the existing building, comment on the existing structure, comment on the structural integrity of the building and comment on the structural code issues related to the future renovation and expansion of the existing building.

Scope

1. Description of the existing structure.
2. Evaluation of the structural integrity of the building.
3. Comment on the existing condition.
4. Discuss the primary structural code issues that would influence the renovations and design of any proposed additions to the existing structure.

Basis of the Report

This report is based on visual observations made during our site visit on July 21, 2009, a review of the relevant portions of the 1997 and 2004 reports written by The Carell Group and the drawings of the existing structure dated February 7, 1962 prepared by Kilham, Hopkins, Greeley & Brodie Architects.

Building Description

The police station is located on High Street in Dedham, Massachusetts. The police station was constructed in 1962; no major additions or major renovations have been made since the time of the original construction. The police station structure is essentially a two story masonry, concrete and steel structure with a full basement and an attached single story, two bay garage and a single story storage and shop structure that houses lockers and has some storage space.

The basement under the main structure houses the firing range, boiler room and storage rooms. The basement slab is a 5 inch thick reinforced concrete slab-on-grade.

The first floor is a reinforced concrete slab spanning one way between interior concrete beams supported on reinforced concrete columns and exterior reinforced concrete foundation walls.

The second floor is a 3 inch deep concrete slab on steel form deck on steel bar joists spanning between interior steel beams on steel columns and exterior load bearing masonry walls.

The roof is essentially framed with wood roof trusses clear spanning between load bearing exterior masonry walls.

The roof over the two bay garage, the storage/shop structure and the drive through connecting the garage to the main police station structure is also framed with wood roof trusses supported between exterior masonry walls and steel beams.

All the perimeter walls are supported on reinforced concrete foundation walls on continuous reinforced concrete strip footings. The interior columns are supported on reinforced concrete spread footings.

Existing Conditions

Based on our observations, we found that the structure is performing satisfactorily. We noticed some signs of water leakage in the building. We also observed that one of the first floor concrete beams has been damaged; this damage was caused by a contractor making repairs to the plumbing system. Though this beam has been damaged for a while and is supporting the first floor slab, we would recommend that this beam be repaired. No other signs of apparent distress were observed. No signs of foundation settlement were observed.

Most of the exterior brick façade appears to be in good repair except for some cracks at the corners. One of the major reasons for these cracks could be the lack of control joints in the masonry façade. Spalling of concrete of the exposed foundation wall was observed at a few locations. No excessive deflections or excessive perceptible floor vibrations were observed due to footfall.

Primary Structural Code Issues Related to the Existing Structure

If any repairs, renovations or additions are made to the structure, a check for compliance with 780 CMR, Chapter 34 “Existing Structures” of The Massachusetts State Building Code is required. The intent of 780 CMR, Chapter 34 is to permit repairs, alterations, additions and/or a change of use without requiring full compliance with the code for new construction.

Assuming no major structural renovations are made to the existing building and the additions are structurally separated from the existing building, and the extent of the renovations to the existing building are limited to architectural renovations, such as removal and replacement of ceilings, partitions, interior facing of exterior walls, finishes, etc. and upgrade or replacement of HVAC and electrical systems and since the renovations will exceed 50% of total floor area of the building, the level of work on the existing building would be classified as LEVEL 2 WORK as defined in Chapter 34 of The Massachusetts State Building Code. Relative to LEVEL 2 WORK, the following structural issues have to be addressed for the existing building:

1. Identify load path (or lack thereof) to the foundation for gravity and lateral loads.
2. Evaluate the existing structural elements or systems that may be in need of repair or other remedial action and determine the character and extent of the repairs or remedial action.
3. Determine the net service live load capacity at areas where there are structural changes to floors or roofs.
4. Determine the lateral load capacity of the existing building relative to lateral load resistance required for the level of work to be performed, and, determine what is needed to provide the required lateral load resistance.
5. Determine and evaluate the connectivity of the various structural elements.

6. Determine the existence of anchors connecting floor and roof decks to concrete or masonry walls, and, if they exist, evaluate their ability to provide lateral support to walls and transfer in-place shear from decks to the plane of the walls.
7. Determine the lateral supports of all structural and non-structural masonry walls and provide details.
8. Evaluate existence of brittle connections of precast concrete cladding components.

Any deficiencies noted after evaluation of the items noted above would have to be rectified in the case of the building being renovated.

Specifically, in this case, and from our investigation and study, we have determined the following relative to the 8 points listed above:

1. The load path for gravity loads has been determined and is described under Building Description. The lateral loads are resisted by exterior load bearing masonry walls.
2. The only area in need of structural repair we noted during our visit is the concrete beam that was damaged during past plumbing repairs. A thorough investigation is required to identify any other areas that may be in need of repairs.
3. The net service live load capacity is adequate for its current use based on the structural drawings of the existing structure.
4. An in-depth analysis would be required to determine the lateral load capacity of the structure and this can be conducted at the time of renovations to the police station. It is possible that new shear walls may be required.
5. From our investigation, it was determined that the floor joists are not adequately anchored to the exterior masonry walls. The roof truss connections to the exterior wall would have to be evaluated, these can be evaluated when an investigation is conducted and finishes are removed to expose the framing. All the joists will have to be connected to the exterior masonry walls.
6. This can be verified when a thorough investigation is conducted.
7. This can be verified when a thorough investigation is conducted.
8. There are no major, precast, concrete cladding components on the façade; therefore, no evaluation is required.

Summary

Based on our review, the structure is performing well. Repairs have to be made to reinforce the damaged first floor concrete beam. A thorough investigation of the existing structure is required for the following:

- To determine the connections of the roof framing members.
- To determine whether the existing masonry walls provide support to resist lateral loads.
- To determine the existence of anchors connecting floor and roof deck to concrete or masonry walls.
- To determine the lateral supports of all masonry walls.
- To determine roof capacity in order to increase the R-value at the roof.

HVAC Systems Assessment

Executive Summary

In general, the majority of the building's heating, ventilation and air conditioning (HVAC) systems were originally installed circa 1962. There have been some recent system repairs and upgrades, however the majority of the existing HVAC equipment and distribution systems are old and in poor condition. As part of a building renovation project, we would recommend that the existing HVAC system be replaced in its entirety with a new HVAC system. The new HVAC system should be energy efficient, environmentally friendly and easier to maintain than the existing system.

Heating Plant

Heating for the building is provided by a low pressure steam boiler located in the basement boiler room. The boiler is a Weil McLain Model 688 gas-fired low pressure steam boiler. The boiler appears to have been installed within the past 10 years and appears to be in fair condition. The boiler provides low pressure steam to air handling unit steam heating coils (two units are active/, and two units are abandoned in place), and terminal heating radiation units (convectors and baseboard) located throughout the building.

The condensate receiver and boiler feed unit serving the boiler are in poor condition and in need of replacement.

The main steam and condensate piping appears to be old and in poor condition. Many segments of the piping are un-insulated. It also appears that the original piping insulation located at elbows have been removed (as the insulation for these fittings may have contained asbestos). Sections of the branch steam and condensate piping appear to have been recently replaced as part of a heating system repair project.

Steam Boiler

Boiler Feed Pump

The original boiler also used to serve the building's domestic hot water heating system by supplying steam to a steam-fired domestic hot water heater. This system is no longer in service and has been abandoned in place.

Illustration 1: Abandoned DHW Heater

Steam and Condensate Piping Elbows without Insulation

Air Handling Systems

There are two air handling units installed in the basement. One of these units is in active operation, while the other unit appears to be abandoned in place. The unit which is operating serves the first floor of the building. The unit appears to have been originally installed in 1962 as manufactured by Dunham Bush Co. The unit is a modular indoor air handling unit with steam heating, DX cooling and supply fan sections. The unit operates loudly and it appears that there are condensate drainage problems associated with the unit's cooling coil and drain piping. The unit's associated air cooled condensing unit is installed outdoors at grade adjacent to the building. Insulated, galvanized sheet metal ductwork is routed from the unit to the first floor. The majority of the ductwork appears to be original vintage and in poor condition.

Basement – AHU (Serves First Floor)

AHU Air Cooled Condensing Units

The basement unit that has been abandoned in place previously serve the basement firing range. This unit is located in Storage Room #003. The associated gun range exhaust fan located in Basement Storage Room#005 is also not currently in operation.

Gun Range AHU (Abandoned in Place)

Gun Range Exhaust Fan

The second floor of the building is providing with heating, ventilation and air conditioning from an indoor air handling unit located in the attic of the building. This unit is also a modular indoor air handling unit which appears to be original vintage circa 1962 as manufactured by the Dunham Bush Co. The unit has steam heating, DX cooling and supply fan sections. The unit is old and in poor condition. The unit's associated air cooled condensing unit is installed outdoors at grade adjacent to the building. Insulated, galvanized sheet metal ductwork is routed from the unit in the attic to the second floor. The majority of the ductwork appears to be original vintage and in poor condition.

Attic – AHU (Serves Second Floor)

Terminal Heating Systems

The majority of the rooms in the building also have heating provided by either steam convectors or steam fin tube radiation. The Chief's office has supplemental electric baseboard heating installed. The majority of the steam terminal heating equipment appears to be original vintage and in poor condition.

Steam Fin Tube Radiation Heating

Electric Baseboard Heating

Controls

The majority of the building's automatic temperature control systems are pneumatic type. The control system's compressor is located in the basement boiler room and appears to be in fair condition. During recent HVAC system upgrades it appears that some HVAC system controls have been replaced with stand alone analog electric type controls.

ATC Compressor

Newer Thermostat Controls

Miscellaneous

As part of past HVAC system repair and replacement projects it appears that some original HVAC systems and equipment have been abandoned in place. One example of this is a set of Compressors that are located in the basement Boiler Room which previously served the First and Second Floor Air Handling unit systems before the Outdoor air cooled condensing units shown above were installed.

Compressor (Abandoned in Place)

Compressor (Abandoned in Place)

Plumbing - Fire Protection Systems Assessment

Executive Summary

Building is serviced by municipal water, sanitary sewer and natural gas systems.

Presently, the plumbing systems serving the building are cold water, hot water, sanitary waste and vent system, storm drainage and natural gas. The sloped roofs are drained with exterior gutters and down spouts which discharge to an underground cast iron storm drain which in turn discharges to the municipal storm drainage system.

Fixtures

Fixtures in the building appear to be of mixed vintage reflecting the time of the original installation and subsequent fixture replacements.

The water closets are generally wall hung vitreous china, flush valve type with siphon jet action. The flush valves do not appear to meet water conservation requirements.

The urinals are wall hung vitreous china, flush valve type with blow out action. The flush valves do not appear to meet water conservation requirements.

The lavatories are wall hung vitreous china. The faucets are hot and cold water type and do not meet the water conservation requirements. The piping is standard p-trap and is not insulated to meet the accessibility codes.

The drinking fountains are generally recessed vitreous china with single lever controls. Fixtures appear to be in fair condition. The fixture and controls do not meet accessibility codes.

Locker areas have showers with pressure balanced mixing valves and curbed non-accessible showers.

Mop sinks are floor mounted terrazzo stone with service sink faucet. Faucets do not have a vacuum breaker or check valves on the water piping supplying the fixture.

Service sinks are generally wall hung enamel coated cast iron. The faucets do not have vacuum breakers or check valves on the piping supplying the fixture.

Cells are fitted with institutional stainless steel, toilet lavatory combination units with remote flushing switches. Fixtures are non-compliant. Fixtures are not anti-suicide. There are no accessible units.

Generally while the fixtures are well maintained, they are not code compliant as they are not water conserving nor are they accessible.

Drainage Systems

The sanitary and storm drainage systems are piped with cast iron. The exposed piping is visibly in good condition.

The sanitary drainage system is piped to a municipal sewer system.

The roof is generally flat and is drained by roof drains and a roof drainage system, which exits the building and connects to a municipal storm drainage system.

The piping from the floor drainage in the garage area appear to discharged to a MDC oil/gasoline trap.

The floor drains in the Boiler Room appear to discharge into a small simplex ejector. The ejector discharges into the sanitary drainage system.

Water System

The building is served with a 2" brass water service and 2" meter located in the basement boiler room. There is no backflow device on the service.

The original steam-to-water shell and tube water heater has been removed from service. The domestic hot water is now provided by an electric tank type hot water heater. There is inadequate temperature control on the domestic hot water to the building.

The copper piping where exposed shows signs of corrosion and due to its age is not suitable for re use in a major renovation.

The pipe covering needs to be evaluated for the presence of asbestos.

Natural Gas

There is a existing gas service with a meter located at the rear of the building. Gas is used for building heating only.

Fire Protection

Building is currently not provided with a piped automatic fire suppression system. An automatic fire suppression system will be required in a major renovation.

Electrical Systems Assessment

Executive Summary

The existing electrical systems for this facility range from original vintage to recent upgrades. However in general systems do not meet current codes due to the constant code changes, although they probably met code when installed. Systems are marginally sized and would not be suitable for a full renovation/expansion. Furthermore characteristics such as a single phase electrical service and generator, non-addressable fire alarm, etc. cannot be expanded as they are not compatible with current technologies. In general there is not much that we would recommend salvaging except equipment within dispatch and other supporting equipment to dispatch.

Electrical Distribution

Secondary service originates on exterior pole mounted transformer at rear of lot where it runs underground into the meter officer's office where the electrical equipment is located. There are 2 services, one rated at 100 amperes, 240 volt, singe phase, 3 wire and the second rated at 100 amperes, 240 volt, 3 phase, 3 wire. Both services enter into a common pull box, each in a 2" conduit. The service conductors are of the old cloth insulation. Each service is separately metered with the meters located in the basement, meters are NSTAR #5051869 (1Ø meter) and #5064584 (3Ø meter). The equipment manufactured by Westinghouse appears to be of original vintage and in poor condition. The distribution panel is a split bus panel where it houses the normal as well as the emergency panel breakers and is in violation of current codes. A recent 40A/2P, NEMA 1 breaker has been tapped adjacent to panel MDP to feed the E911 UPS system.

There are other remote panels, including split bus panels, in similar poor condition.

These services cannot be expanded and would require replacement.

Emergency Power System

The emergency power system consists of a 30kw, 120/240V, 1Ø, 3 wire diesel generator located in the motorcycle garage building within a fenced area. The generator set was manufactured by Katolight #SD30FGJ4T2 and is fueled by a remote 275 gallon residential type fuel tank also within the fenced area. The unit has (1) 100 ampere breaker. The automatic transfer switch is a ASCO #D00300020104F10C rated at 104 amperes, 120/240, 1Ø, 3 wire. This space is not a two hour rated room and therefore is in violation of current codes.

Current codes require separation of emergency equipment from non-emergency or commonly referred to as optional standby loads. Also where a facility is used as a PSAP, public safety answering point, a third power branch is required referred to as COPS, Critical Operations Power System.

This generator/ATS would not be suitable for reuse.

Exterior Lighting

Exterior lighting consists mainly of building mounted fixtures due to site constraints. Sallyport has 12" SQ incandescent fixtures with screw in compact fluorescent lamps. Exterior fixtures are in poor condition.

Interior Lighting

Corridor lighting consists of a combination of 4 lamp surface wraparounds with acrylic lenses and surface circlines with (3) PL13's compact fluorescent lamps. Corridor and stair lighting is locally switched.

Offices have 2x2 & 2x4 recessed troffers controlled with a single switch. Surface wraparounds used where GWB ceilings exist. No occupancy sensors exist to turn lights off when space is unoccupied.

Cellblock has surface 2x2 troffers in hallways and 8" SQ recessed incandescent fixtures. Cells have corner mounted incandescent security rated fixture with integral speaker housing. Cell lighting is locally controlled in respective hallway.

Cellblock fixtures are old and provide inadequate light and would not be suitable for reuse.

Other space lighting range from porcelain sockets in radio room, surface 2x2 troffers with T12 lamps in stairs, to industrial strips with T8 lamps in the garage building.

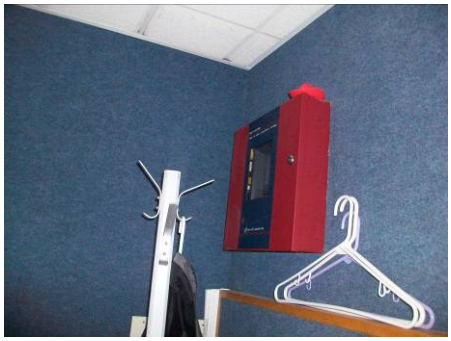
Exit signs are not of the LED type and have inadequate coverage.

Fire Alarm System

The fire alarm system consists of a conventional (non-addressable) system with the FACP located in dispatch. The FACP was manufactured by Fire-Lite #MS-4424B, 4 zones.

Building is not sprinklered, yet it does not have full coverage of detection devices. System is wired with low energy cable.

Stairs have no smokes. Cellblock hallway has heat detectors.



There are no smoke detectors or carbon monoxide detectors in cell areas.

Corridors and some spaces have occasional heat. No horn/strobes noted on 2nd floor. Radio room has (1) heat detector. (Radio room runs hot and needs A/C).

Fire alarm system offers inadequate coverage and would need to be replaced during a renovation.

Security System

Closed circuit TV, CCTV system consists of a web-based Pelco system with 10 cameras and a DX7000 series DVR with approximately 3 day storage capacity located at dispatch. There are (2) exterior corner mounted pan-tilt-zoom cameras, (1) fixed camera at sallyport, (3) fixed cameras in male cell hallway, (1) fixed camera in female cell hallway, (1) fixed camera in juvenile cell, (1) in roll call hallway, and (1) camera in processing.

There are no cameras within the male or female cells or in the garage building.

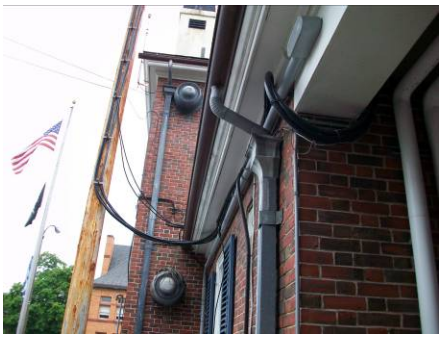
There is no paging system with speakers, paging is done thru phone system. Cells or cellblock have no functional audio communications system for two-way communications. Duress alarm stations/beacons were not noted.

There is no card access system. Cell check performed with Morse Watchman system.

There is no Intrusion security system.

Miscellaneous

There is a monopoint antenna pole +/- 100' high with cables entering building thru attic space.



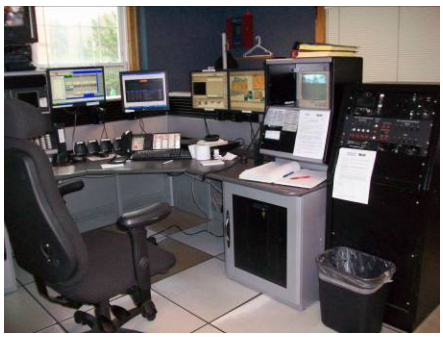
Firing range has been abandoned and is used for storage, electrics are not salvageable.

E911 UPS is located in unsecured open space in basement. Manufacturer is Powerware and is fed with a 40A/2P breaker.

Receptacle coverage in offices is generally inadequate. There is no receptacles in lockers needed to charge portable equipment.

Generally there is (1) data drop per office. Phone wiring runs exposed within office spaces.

Dispatch center with 2 positions and a third open position has a 6" raised floor used for cabling. Center is about 12 years old with equipment consoles recently installed. Center monitors police & fire. There is a Zentron Model 26 for fire station dispatcher. Dispatch controls remote fire station overhead doors and monitors fire station cameras.



Hazardous Materials Assessment

ATC Associates Inc. (ATC) was retained by Dore and Whittier, Inc., to perform a preliminary Hazardous Materials Assessment regarding remediation of environmental hazards at the following site located in Dedham, Massachusetts:

- Dedham Police Station

ATC's representatives performed a site review to determine the locations of hazardous materials that may be affected by the forthcoming proposed renovation work at the police station.

Note: ATC's Hazardous Materials Assessment did not include any sampling and analysis of materials as part of this study.

ATC's Scope of Work for this project included a cursory review of the following hazardous materials typically found in buildings:

1. Lead Containing Materials
2. Asbestos
3. Underground Storage Tanks (UST)
4. Miscellaneous Hazardous Materials (i.e. PCB light ballast's, disposal drums, chemical storage, etc.)

Outlined below is a summary of ATC's findings:

I. Site Background

The building was originally constructed in 1962 and there have been no major renovations performed at the site.

II. Lead-Containing Materials

Based upon the original construction date of 1962, lead paint is most likely present on architectural components throughout the building. This is based upon the fact that the Consumer Product Safety Commission (CPSC) did not ban the sale of commercial paint that contained greater than 0.006% lead until 1976.

The Occupational Safety and Health Administration (OSHA) under their 29 CFR 1926.62 Regulation, consider elemental lead (i.e. >0.0) to be considered lead containing and subject to their worker protection regulations. Therefore, ATC recommends that appropriate lead testing be performed within the building and all results disclosed to the Contractor as part of the Bid Documents for any renovation project.

The building is not considered a residence where children under the age of six (6) would reside, therefore abatement of lead-containing components will not be required as per Massachusetts Department of Public Health (DPH) "Child Lead Poisoning and Prevention Regulations.

ATC also observed a firing range present within the Basement area of the building. According to building personnel, the range is no longer in use. It should be noted that lead-containing bullets/pellets will most likely be present within the back-shield/sandpit area of the range which will require proper removal and disposal. In addition, residual lead dust may be present within the exhaust fan and ductwork as well as on horizontal and vertical surfaces within the room. ATC recommends proper decontamination of the exhaust fan, ductwork and affected surfaces as part of the renovation activities.

As part of the renovation work, appropriate testing of the demolition wastes streams shall take place in order to determine proper disposal procedures in accordance with Massachusetts Department of Environmental Protection (MADEP) and federal Environmental Protection Agency (EPA) Regulations. Under EPA's Resource Conservation and Recovery Act (RCRA) Regulations, appropriate Toxicity Characteristic Leaching Procedure (TCLP) sampling shall be required of the demolition waste streams to determine if the material is considered hazardous waste for lead or other heavy metals.

III. Asbestos Materials

ATC performed a cursory review for suspect asbestos-containing materials (ACM) located in accessible areas of the building. There were no existing asbestos testing or abatement records/reports available for review by ATC. The following suspect asbestos-containing materials were observed by ATC to be present at the site:

- 9" x 9" Floor Tile and Mastic (various colors)
- 12" x 12" Spline Ceiling Tiles and Glue Daubs
- Electrical Components
- Pipe Fittings on Fiberglass Lines
- Hot Water Tank Insulation
- Flex Connectors on HVAC Equipment
- Plaster Skim Coat on Concrete
- Fire Doors
- Carpet Mastic
- Plaster Ceilings
- Plaster Walls
- Ceramic Floor/Wall Tile Grout
- Ceramic Floor/Wall Tile Adhesive
- Sheetrock
- Joint Compound
- Cove Base and Mastic
- Pipe Insulation behind Walls/Ceilings
- Basement Window Caulking & Glazing Compound
- Textured Ceiling Material
- Window Caulking and Glazing Compound
- Door Caulking
- Roof Shingles

ATC recommends that a comprehensive asbestos survey be performed in the building to determine the location of asbestos-containing materials that will be affected by the forthcoming renovation work.

In accordance with MADEP and EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP) Regulations, materials found to be asbestos-containing in the building must be abated prior to renovation/demolition activities.

In addition, all abatement will be required to be performed by a Massachusetts licensed Asbestos Abatement Contractor and all material shall be disposed of as asbestos in accordance with local, state and federal regulations.

IV. Underground Storage Tanks (UST's), Oil & Hazardous Materials

ATC performed an assessment as to the presence and locations of UST's and oil and other hazardous materials (OHM) at the site. ATC's review included a preliminary site investigation as well as discussions with town personnel on past practices and handling of OHM at the site.

The following is a summary of ATC's findings:

1. According to building personnel, one (1) fuel oil containing Underground Storage Tank (UST) and one (1) gasoline UST was removed from the site within the last 10 years. However, there was no documentation available for review by ATC which verified that the tanks were properly removed and disposed. ATC recommends a review of available files at the Massachusetts Department of Environmental Protection (MADEP), Dedham Fire Department and local municipal offices regarding the UST's, contaminated soil removal and any other related information.

2. There is one Boiler Room at the site which contains a Weil McClain gas-fired boiler unit. The unit appears to be new and was installed to replace the former oil burning unit. No visible evidence of previous oil stains were observed on the floor.

3. Miscellaneous hazardous materials (including cleaners and maintenance materials) are present in Storage area outside the Boiler Room that will require proper removal and disposal if to be discarded.

4. Interior soot/ash/brick within the Chimney may require disposal as hazardous materials. Recommend testing ash and bricks if disposal is required.

5. Some old light fixtures were observed in select areas of the building which may contain PCB oil. If leaking ballasts are identified in the future or ballasts are removed during renovations, recommend proper disposal.

Public Safety Programming IV

architecture + design

SPACE NEEDS ANALYSIS

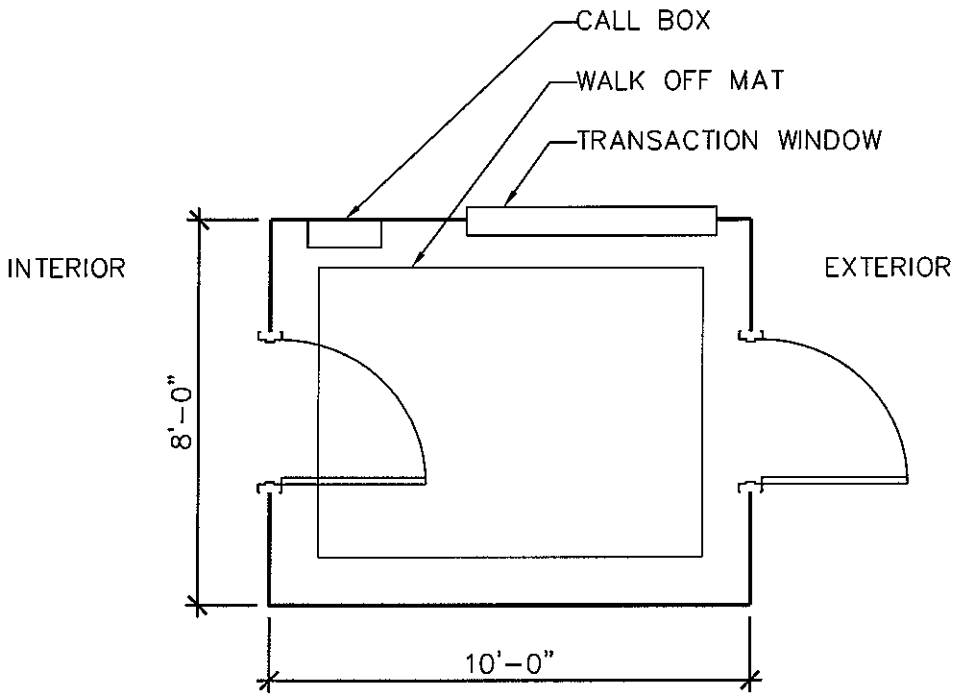
Dedham Police Department
August 20, 2009
This Conceptual Space Needs Analysis is based on information provided to CR/ D&W using the police station questionaire and other information provided by the Owner. This document will be jointly reviewed by CR/ D&W and the Owner.

Programmed Space	Suggested Needs	Recommended Reduced SF
Public Spaces		
Vestibule	80	80
Lobby / Waiting	240	240
Training Room / EOC/ library- [30] occupants at tables	850	750
Training Storage	100	75
Public Restrooms (2) at 145sf ea	260	260
Janitor Closet	30	30
Subtotal	**1560**	**1435**
Administration		
Soft Interview / Complaint Room	100	80
Roll Call / Patrol Room/ Report Room (6 workstations)	500	500
Reception/ Desk Officer	160	160
Police Chief Office	190	190
Executive Officer	160	160
Detective (lieutenant) office	140	140
Operations (lieutenant) office	140	140
Prosecuting (lieutenant) office	140	140
Shift Commander office	190	140
Hearings/ Detail/ Clerk Office	240	240
Chief's Secretery	120	120
Administration	150	150
Detectives (3)	400	300
Detectives (2)	225	200
Juvenile/ School Resource Office	225	200
Supervisors (9) - open office/ with work room	800	740
Investigating and Viewing	80	0
Dispatch - 3 consoles	400	300
Dispatch Restroom	75	60
Dispatch kitchenette	75	50
Records Archive	100	100
Conference Room (6-8 people)	240	180
Work Room	140	0
Server Room/ Radio Room	160	0
Break Room - 2/3 at table	310	180
Duty Bag Storage	50	50
General Storage	180	120
Restrooms - (2) at 65sf	135	135
Janitor Closet	30	30
Subtotal	**5855**	**4805**
Operations		
Sallyport (1 Vehicle)	930	450
Booking + Processing - breathylizer and fingerprint alcove	230	230
Juvenile Interview	75	0
Juvenile Holding/ Juvenile Interview	70	70
Hard Interview - (2) rooms	150	150
Male Holding Rooms - (5) rooms	350	350
Female Holding Rooms - (2) rooms	140	140
Prisoner Storage - (2) sets of lockers	40	40
Evidence Processing	150	150
Evidence Storage	240	240
Found Items Storage	120	120
Computer/ Forensics Lab	160	160
Men's Locker Room - 65 lockers	1150	1150
Women's Locker Room - 15 lockers	400	400
Armory	190	140
Armory Storage	220	160
Bulk Property Storage	120	120
Bike storage/ Motorcycle storage	300	300
Vehicle Processing - Van Storage	450	450
Equipment Storage - (2) radar trailers	450	450
Firing Range - (3) lanes	1800	1800
Range Storage	300	200
Range Mechanical Systems	200	200
Vending/ Ice Machine - (2) machines	20	20
Subtotal	**8255**	**7490**
Building Systems & Circulation		
Elevator	100	100
Machine Room	70	70
Stair - (2) at 360 each	720	720
Mechanical Room	400	400
Generator Electrical Room	70	70
Electrical/ Server Room	100	200
Subtotal	**1460**	**1560**

SPACE NEEDS ANALYSIS

Dedham Police Department
August 20, 2009
This Conceptual Space Needs Analysis is based on information provided to CR/ D&W using the police station questionaire and other information provided by the Owner. This document will be jointly reviewed by CR/ D&W and the Owner.

Programmed Space	Suggested Needs	Recommended Reduced SF
Summary		
Public Space	1560	1435
Administration	5855	4805
Operations Support	8255	7490
Building Systems & Circulation	1460	1560
Total SF	**17130**	**15290**
CR Infrastructure @ 15% (see note below)	2570	2294
CR Building Circulation @ 15% (see note below)	2570	2294
Grand Total SF	**22269**	**19877**



80 SF

VESTIBULE

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

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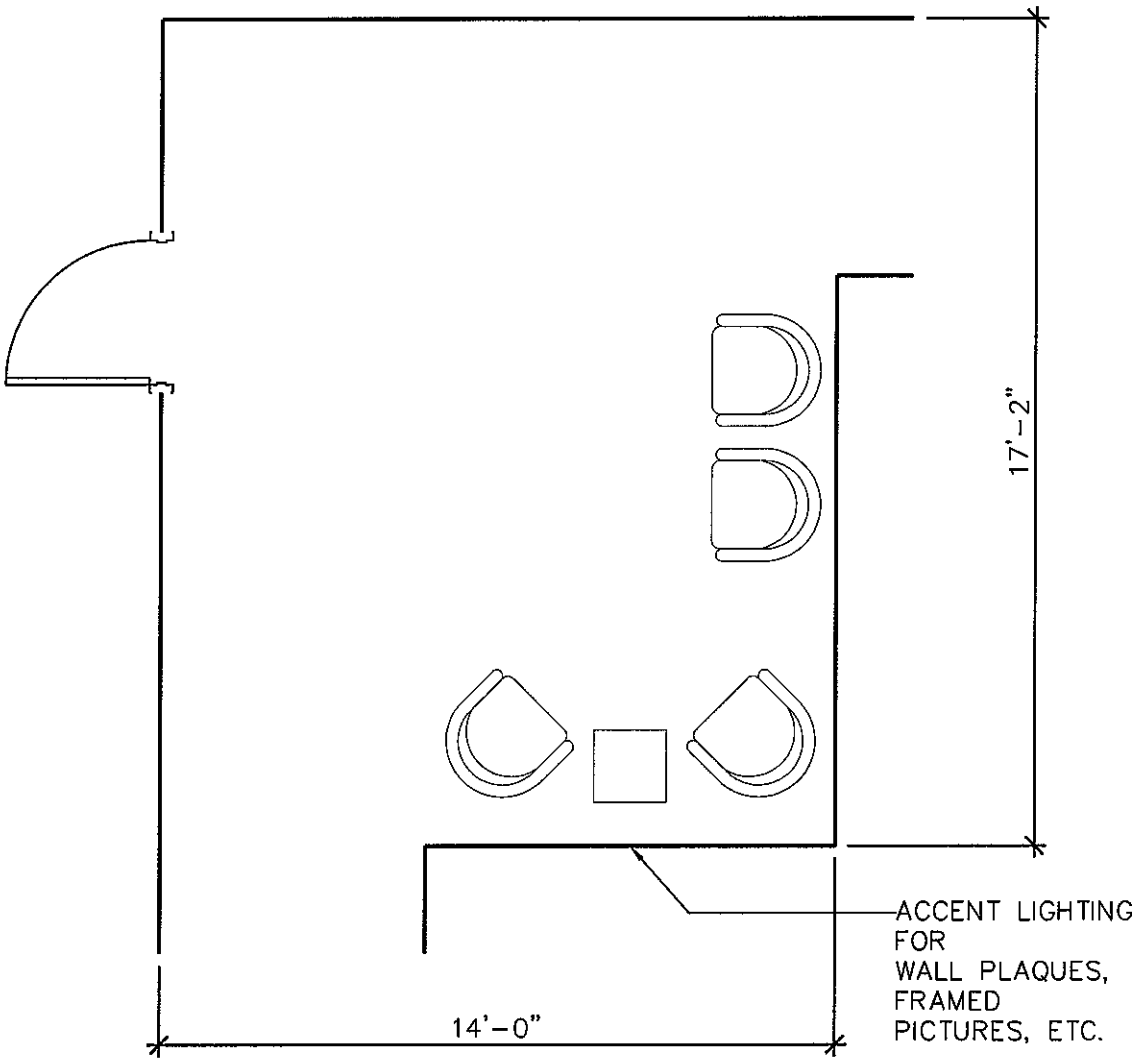

240 SF

LOBBY/WAITING

SCALE: 1/4"=1'-0"

CR architecture + design

D&W DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

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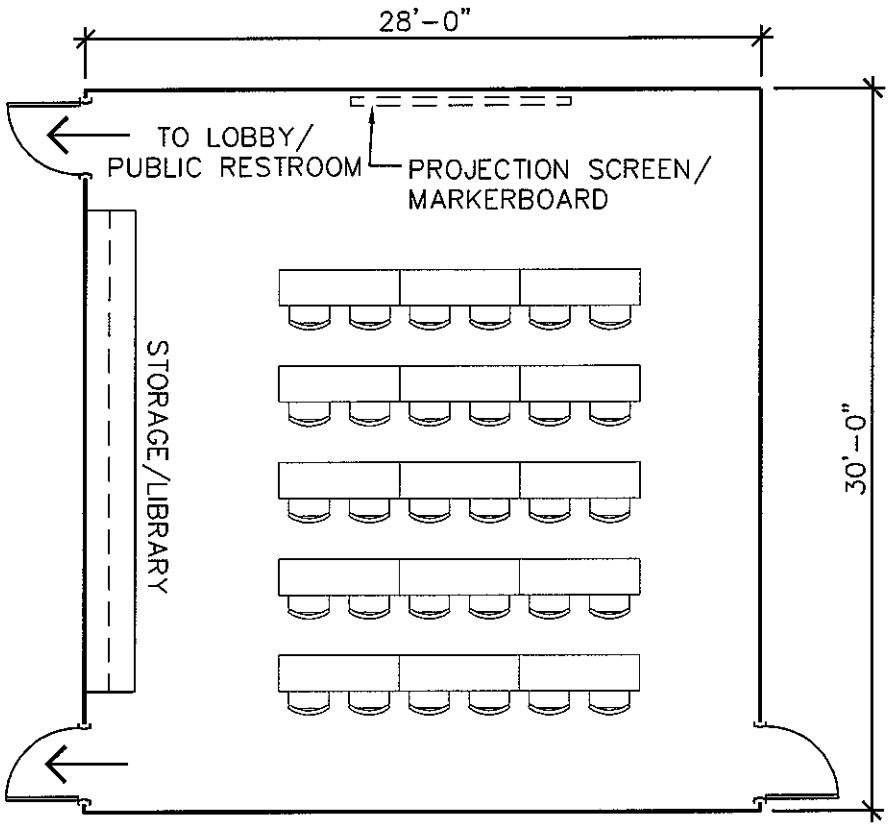

840 SF (30 OCCUPANTS AT TRAINING TABLES)

TRAINING ROOM/EOC/LIBRARY

SCALE: 1/8"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
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DATE
AUGUST 10, 2009

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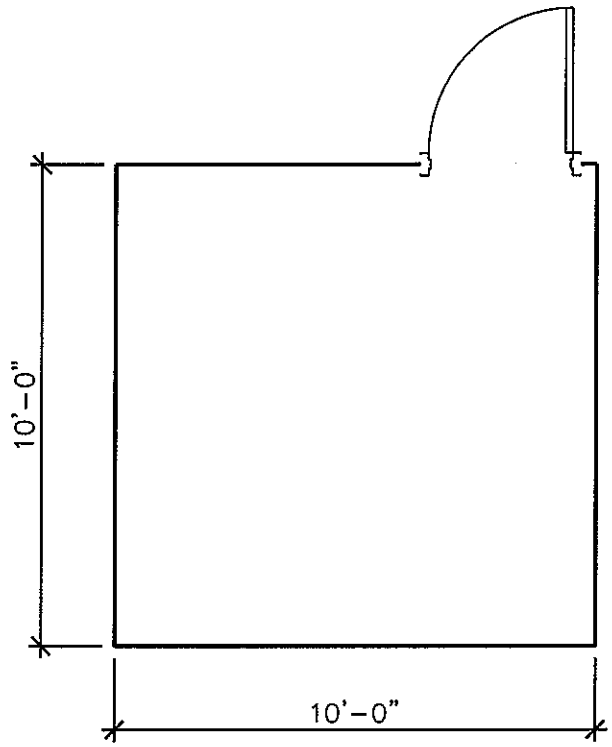

100 SF

TRAINING STORAGE

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
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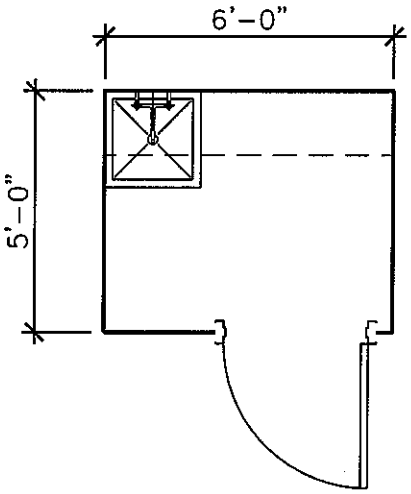

30 SF

JANITOR CLOSET

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

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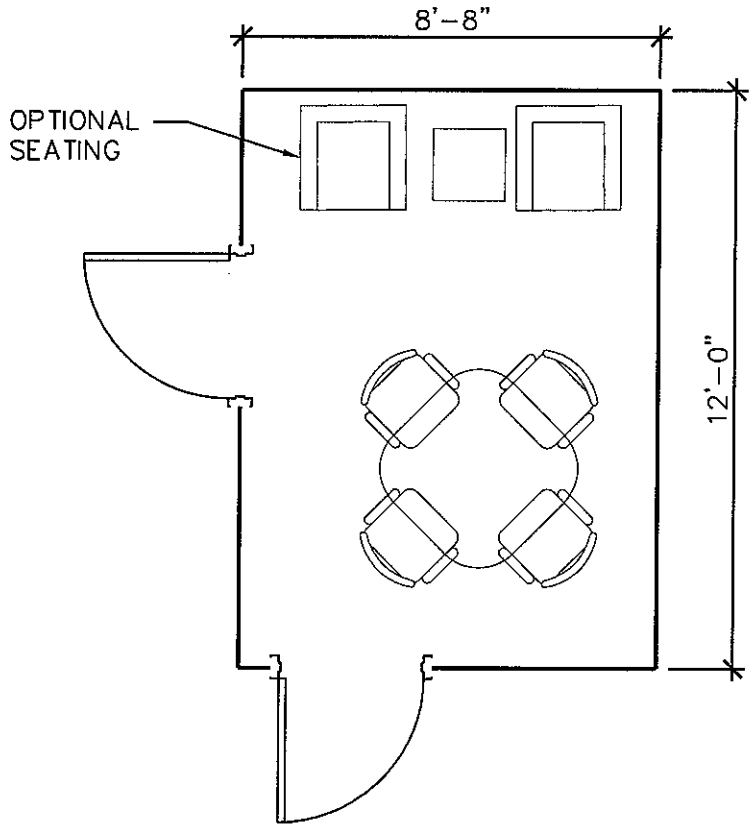
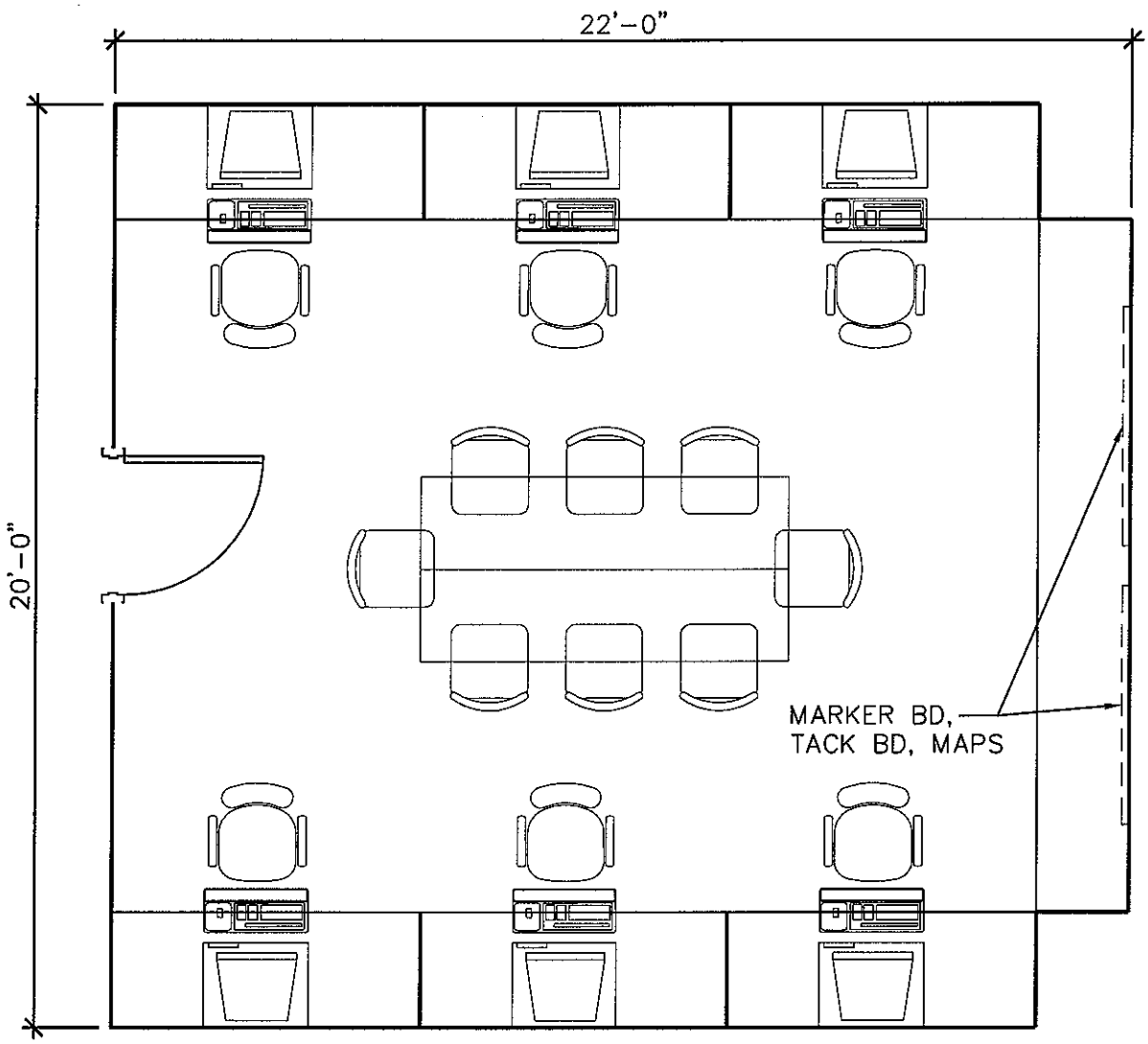


104 SF

SOFT INTERVIEW / COMPLAINT

SCALE: 1/4"=1'-0"



430 SF

ROLL CALL / PATROL ROOM / REPORT ROOM

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
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COMMISSION NO.
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AUGUST 10, 2009

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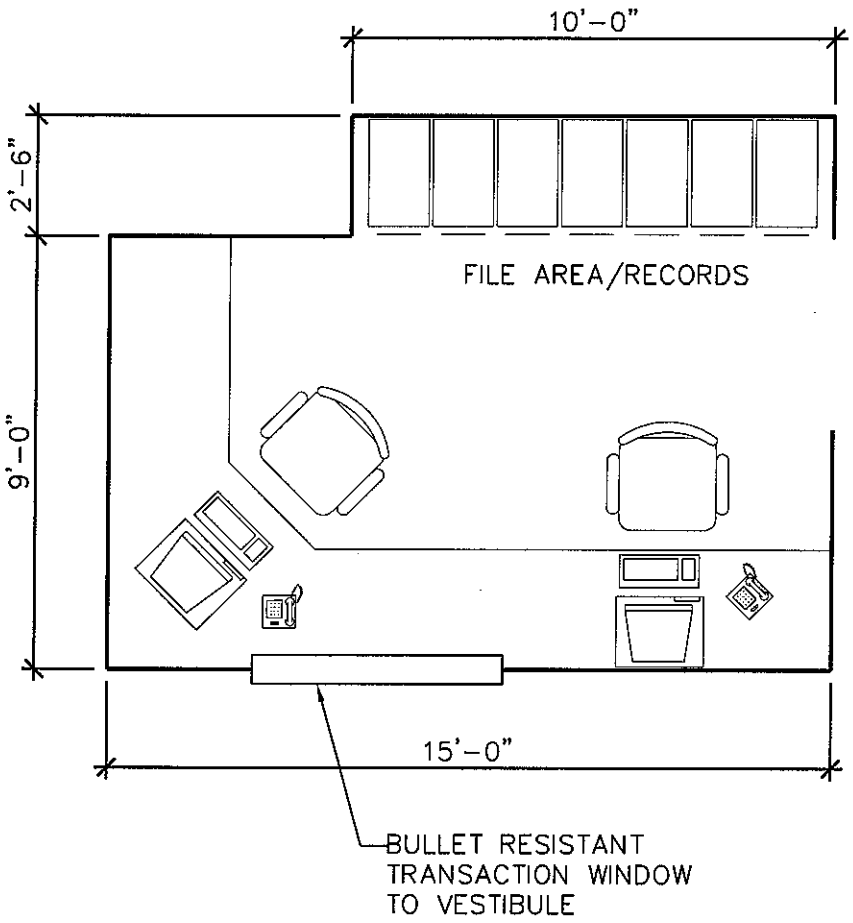

160 SF

RECEPTION/DESK OFFICER

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
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AUGUST 10, 2009

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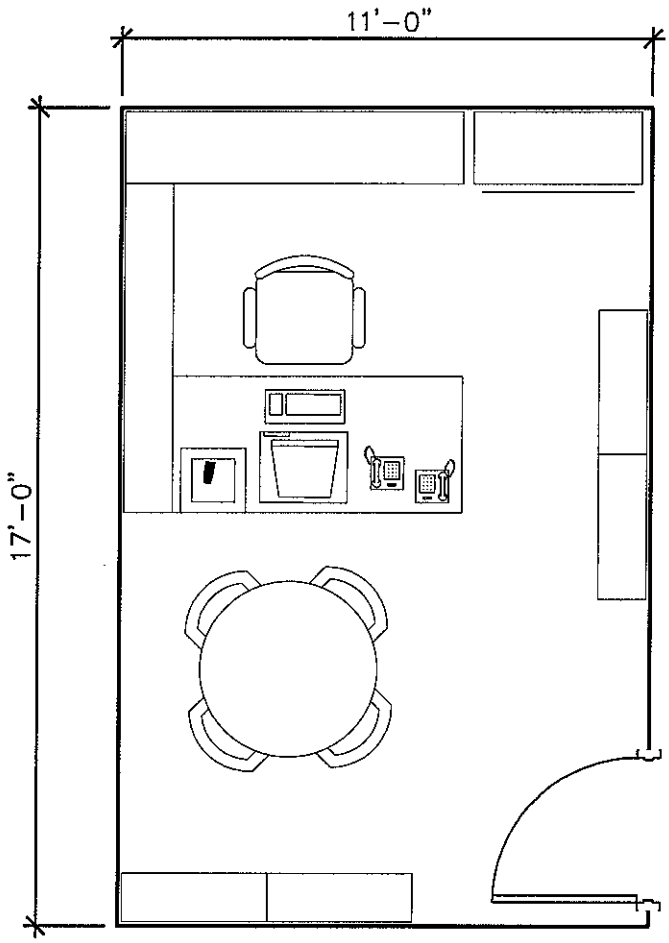

187 SF

POLICE CHIEF'S OFFICE

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

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DATE
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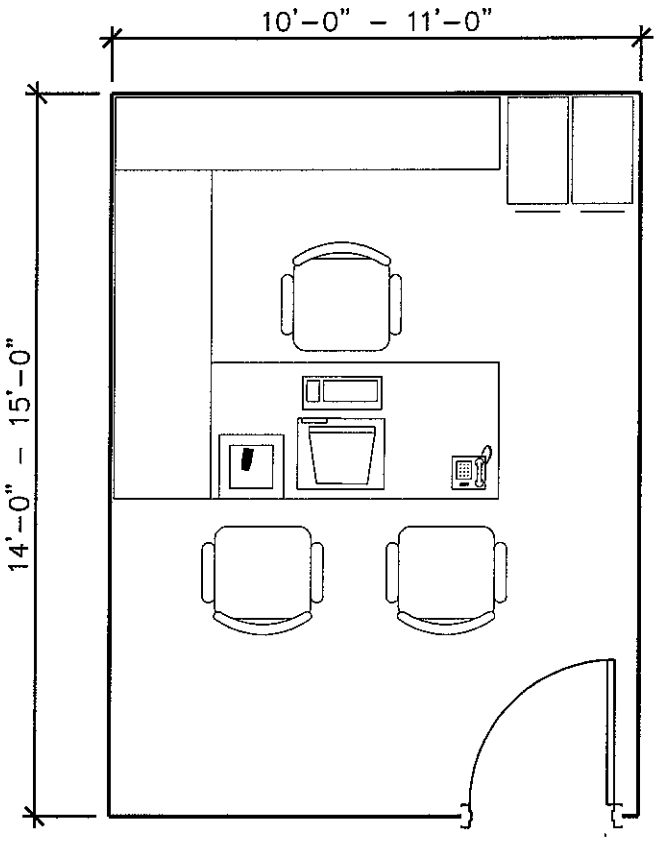

165 SF

EXECUTIVE OFFICER

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

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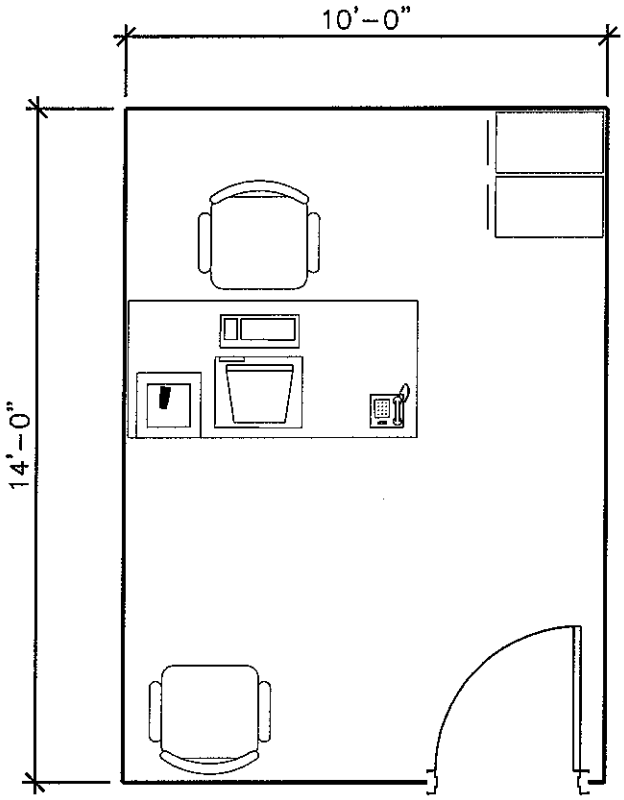

140 SF

DETECTIVE (LIEUTENANT) OFFICE

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

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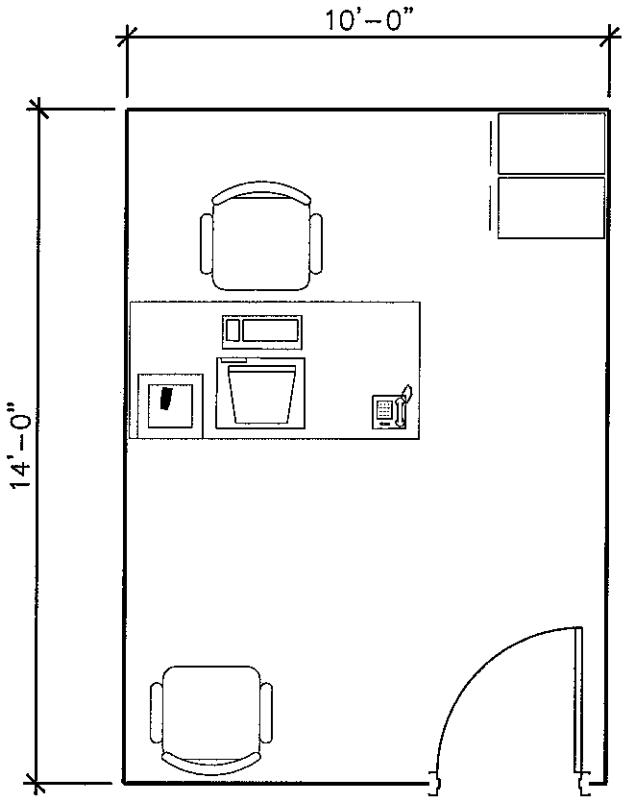

140 SF

OPERATIONS (LIEUTENANT) OFFICE

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

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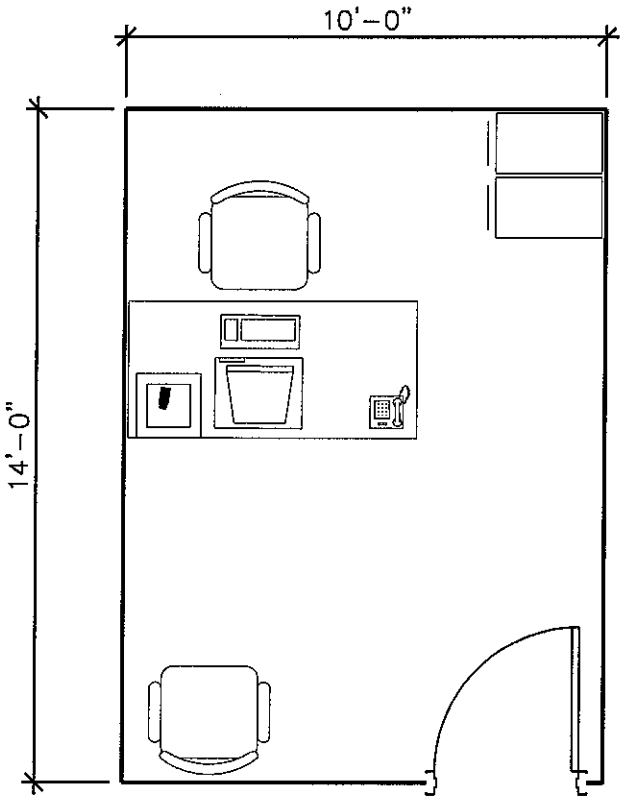


140 SF

PROSECUTING (LIEUTENANT) OFFICE

SCALE: 1/4"=1'-0"

CR architecture + design

DORE & WHITTIER ARCHITECTS, INC.

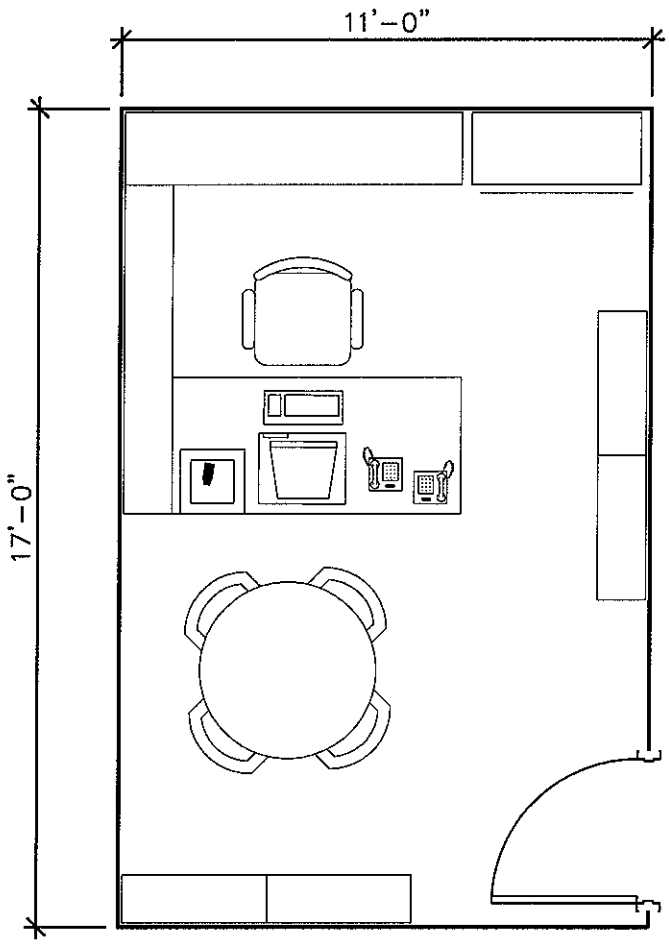
PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:09:17 PM



187 SF

SHIFT COMMANDER'S OFFICE

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

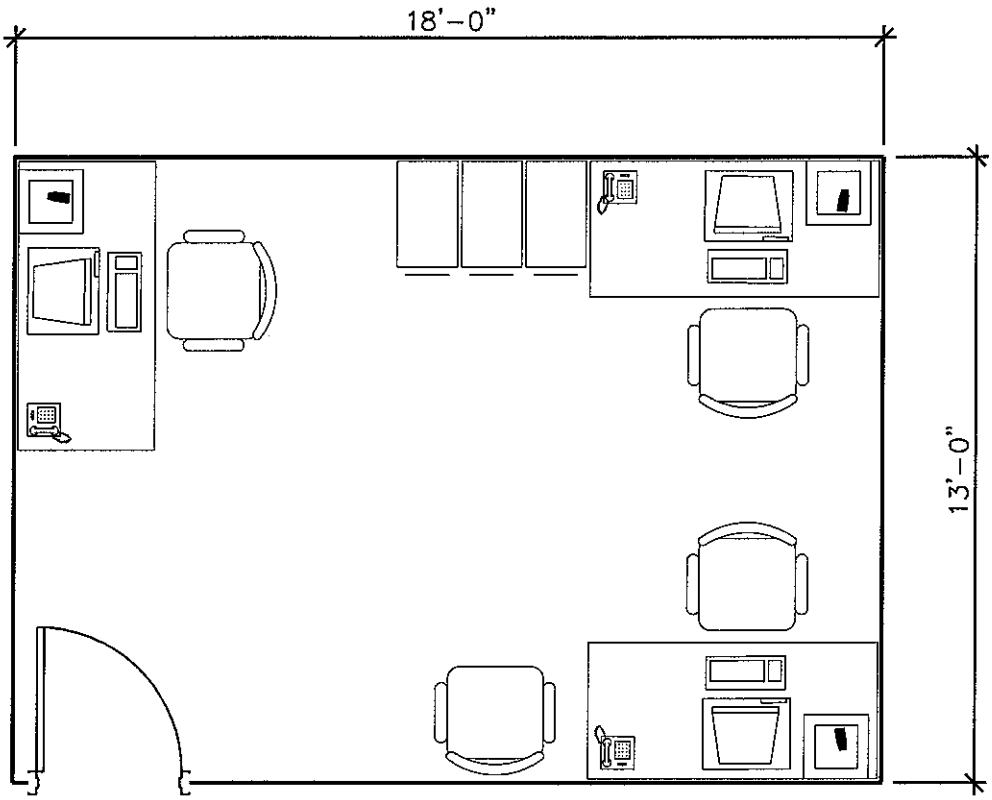
PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:09:41 PM



234 SF

HEARINGS/DETAIL/CLERK OFFICE

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

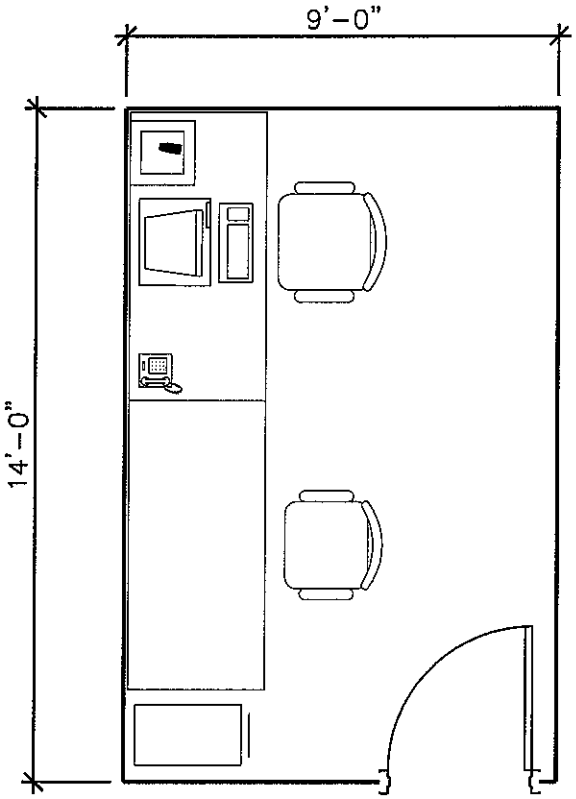
PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:09:58 PM



126 SF

CHIEF'S SECRETARY/OPEN

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

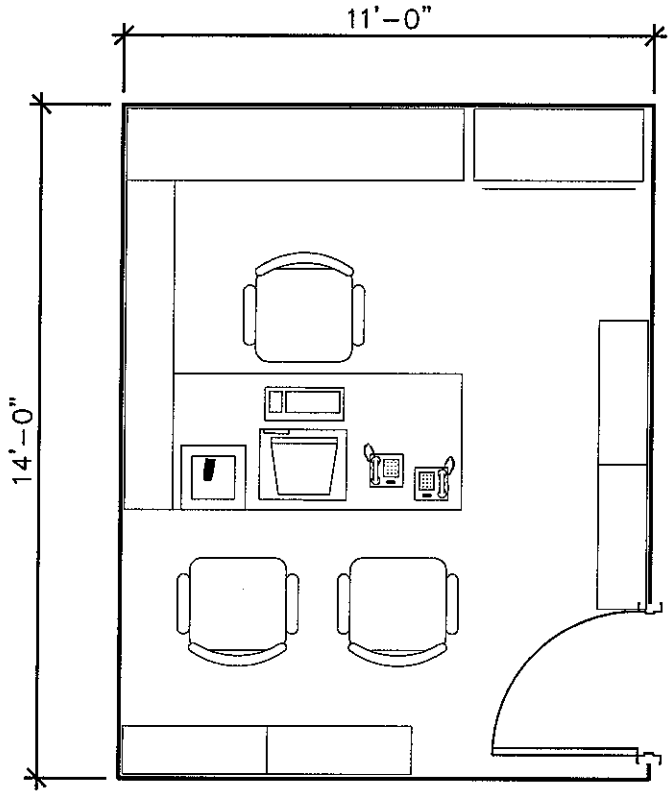
PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:10:28 PM



154 SF

ADMINISTRATION

SCALE: 1/4"=1'-0"

architecture + design

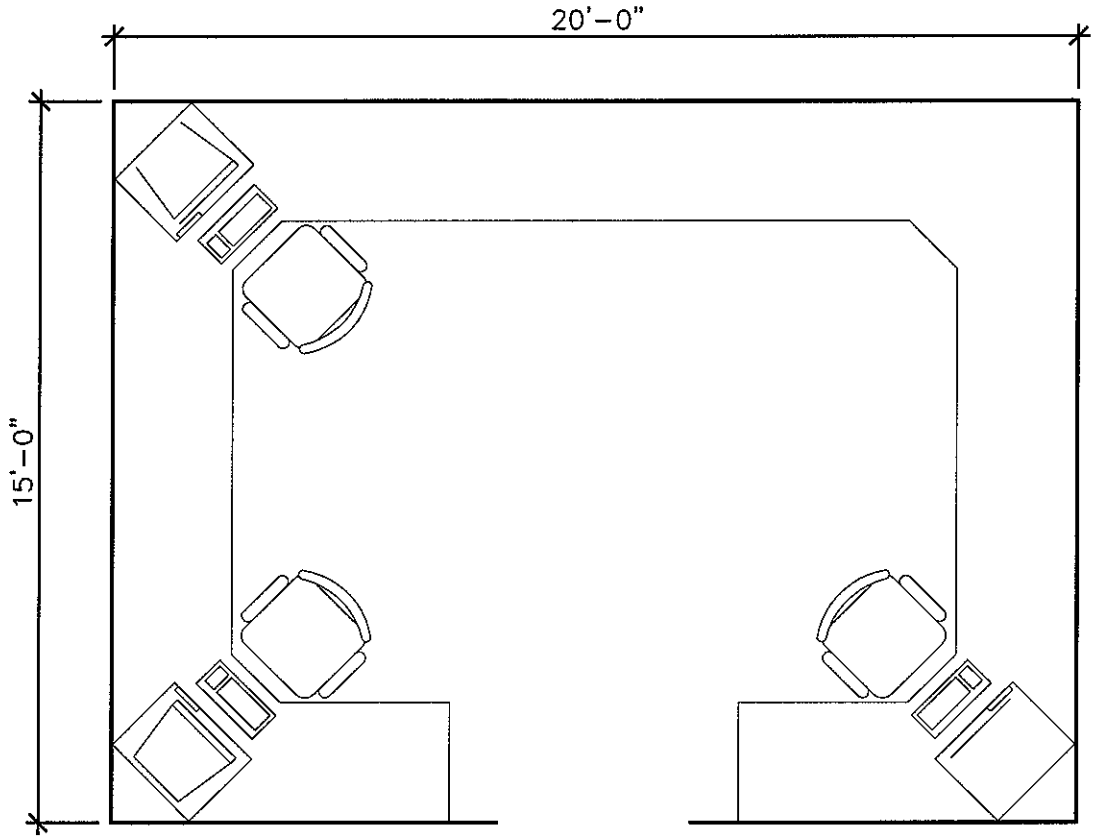
DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009



400 SF

DETECTIVES (3)

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

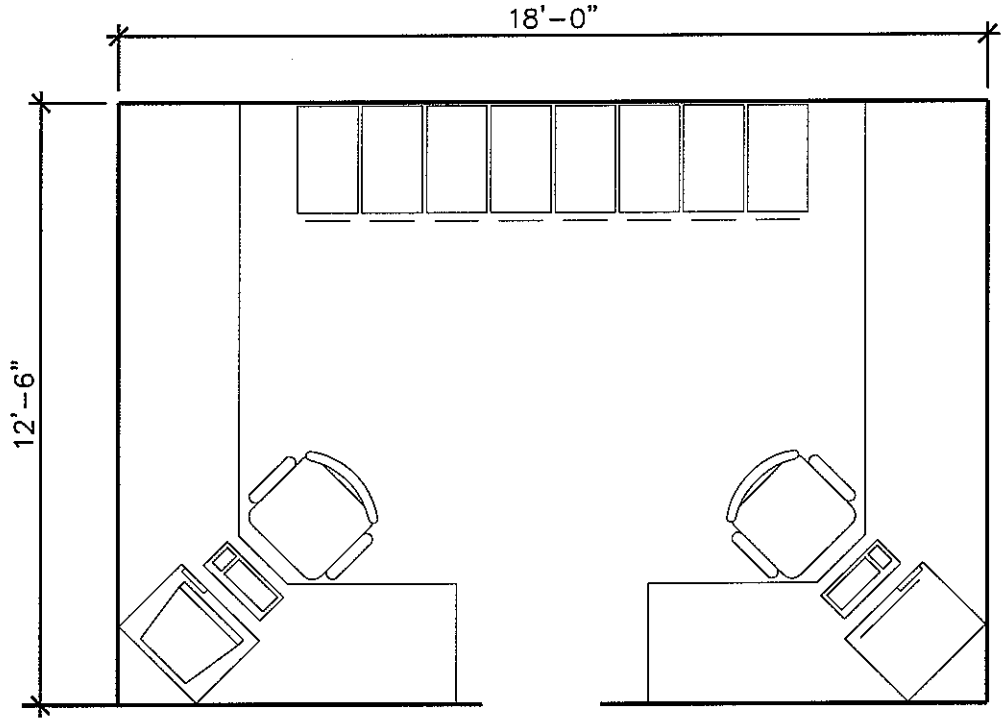
PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:11:14 PM



225 SF

DETECTIVES (2)

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

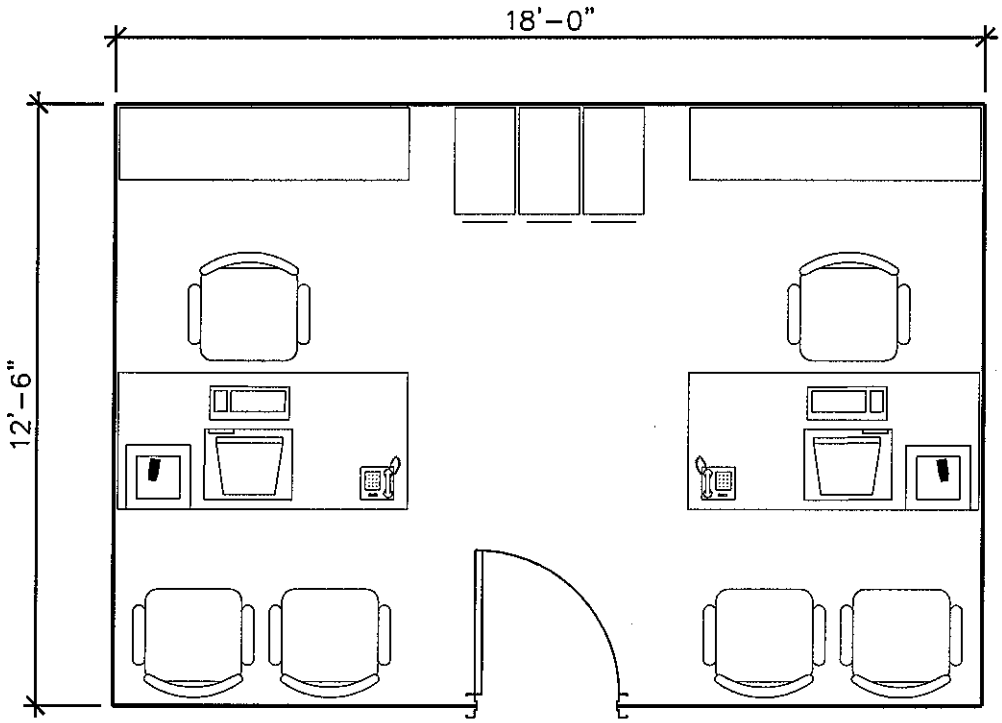
PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:11:30 PM



225 SF

JUVENILE/SCHOOL RESOURCE OFFICE

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

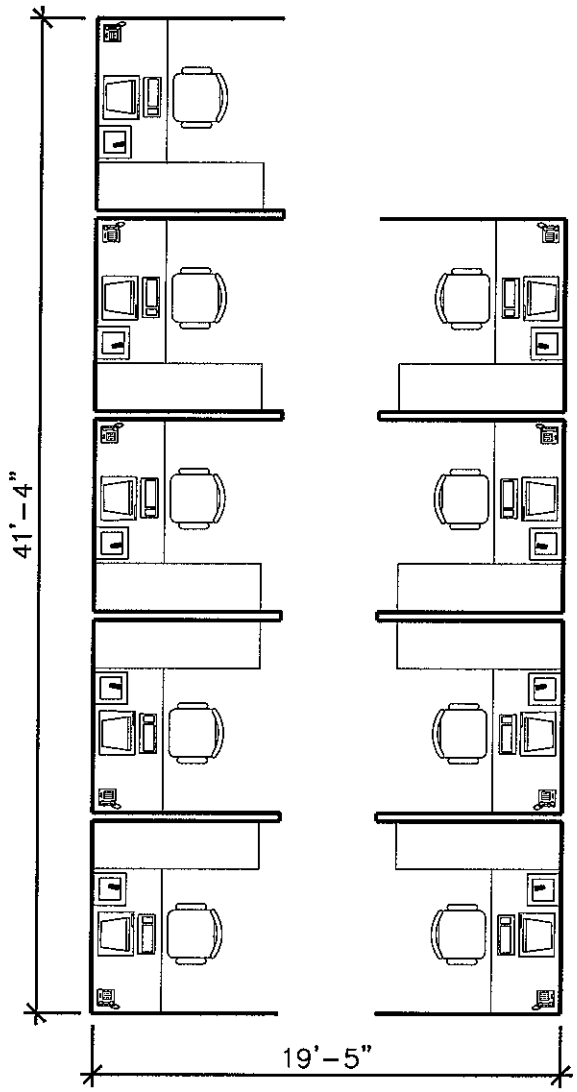
PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:11:45 PM



802 SF (9 CUBICLES 8'x8')

SUPERVISORS

SCALE: 1/8"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

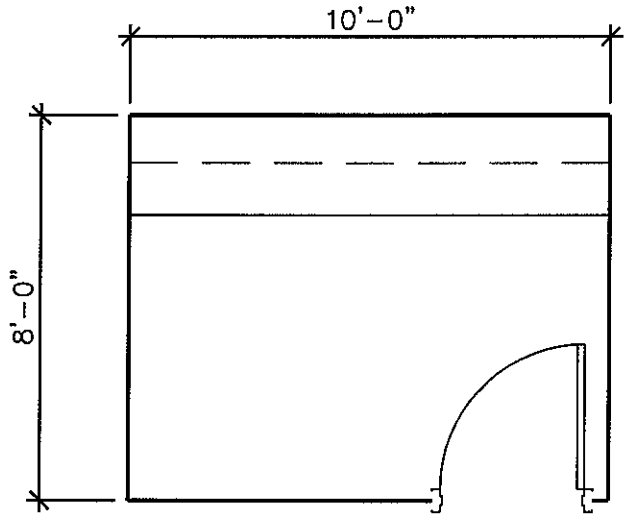
PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:13:18 PM



80 SF

INVESTIGATING + VIEWING

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

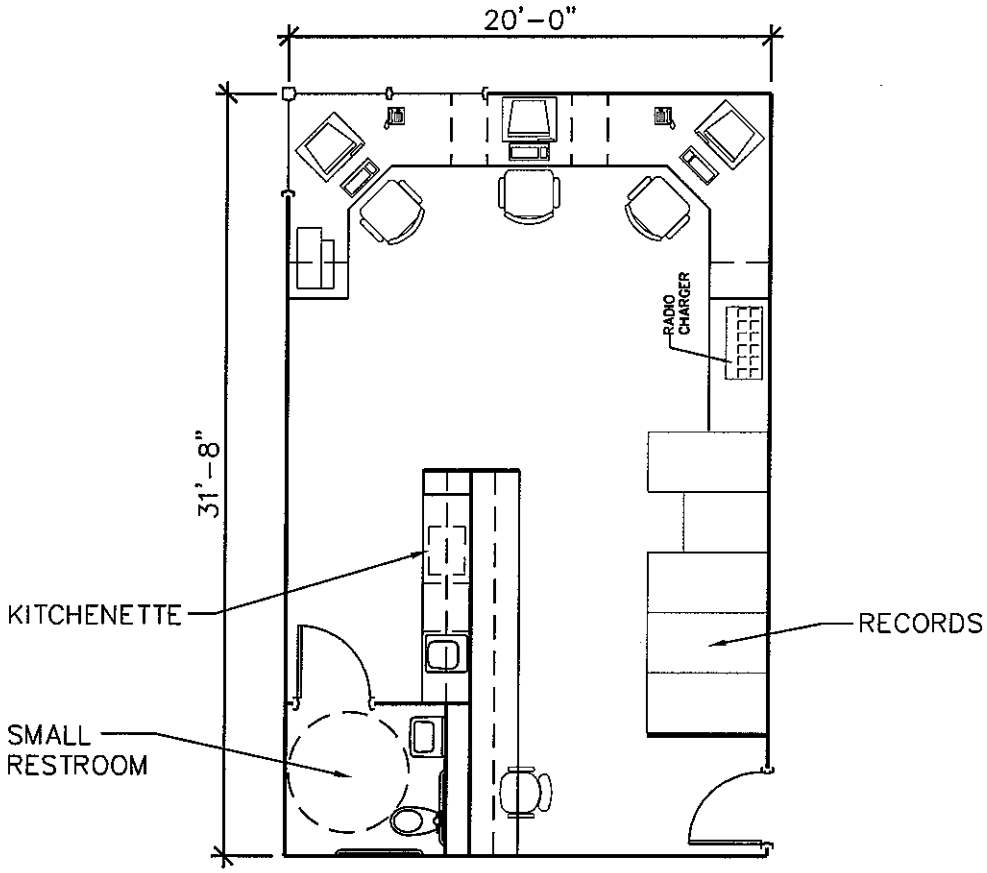
PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:13:36 PM



633 SF

DISPATCH

SCALE: 1/8"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

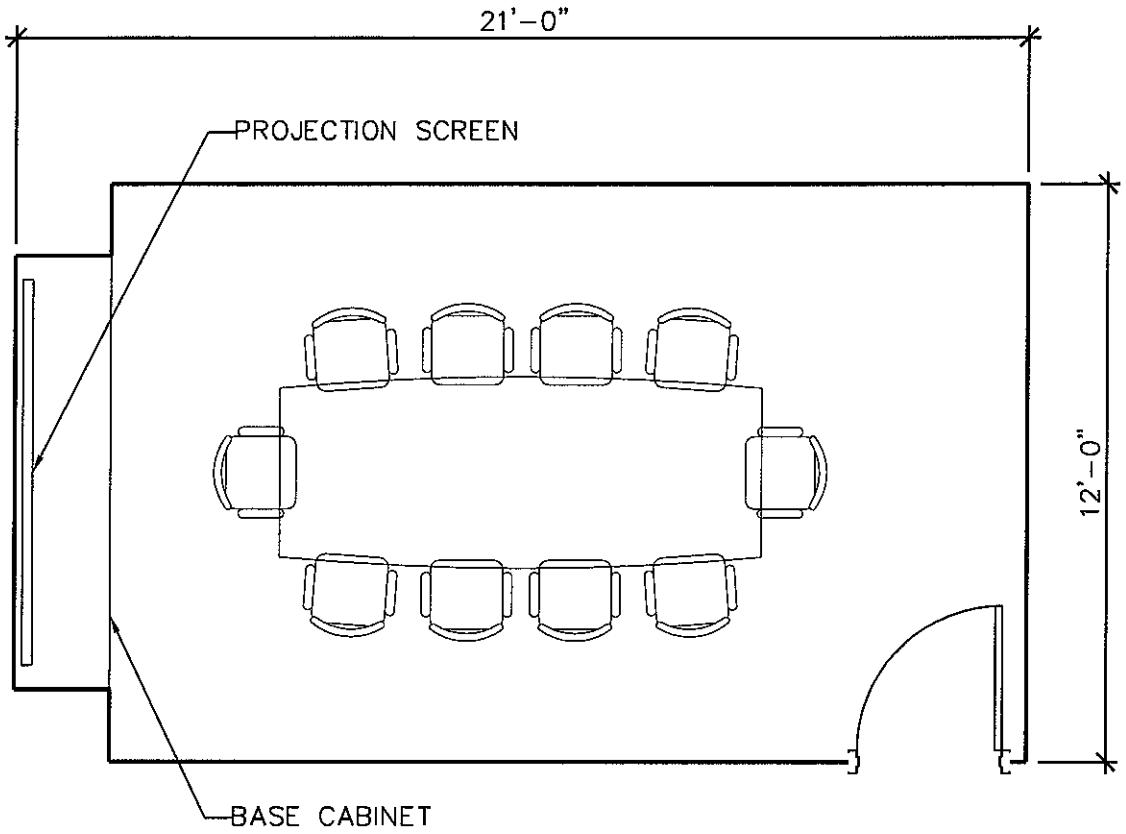
PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:13:52 PM



246 SF

LARGE CONFERENCE ROOM

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

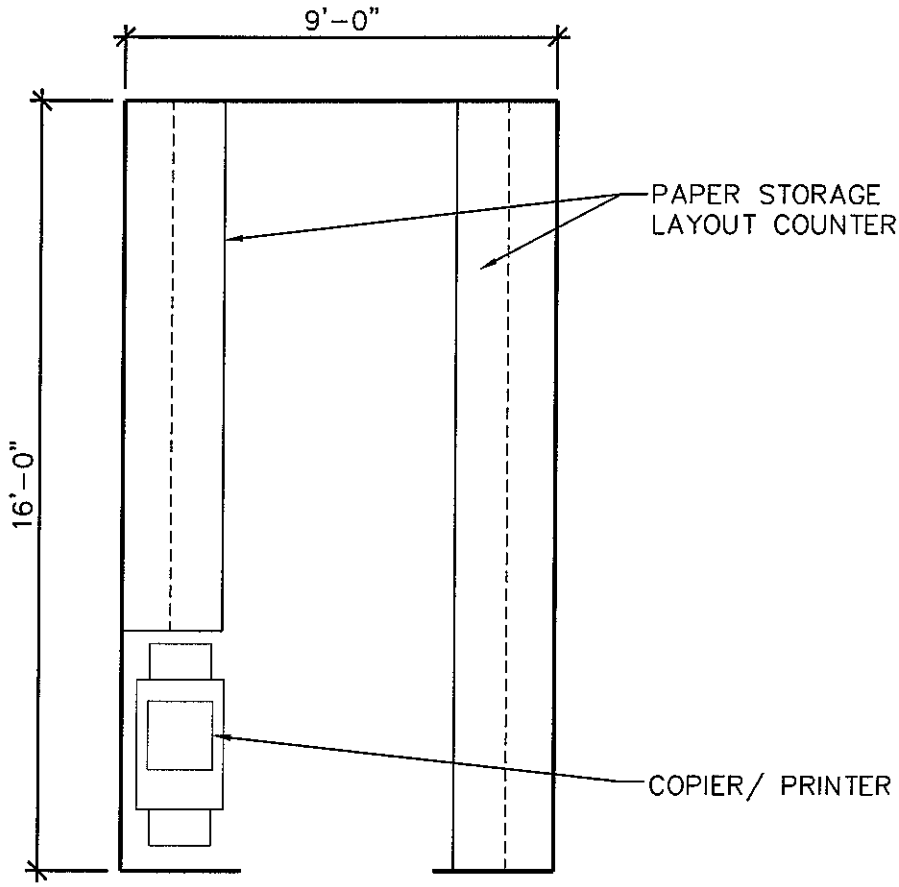
PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:14:09 PM



144 SF

WORK ROOM

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
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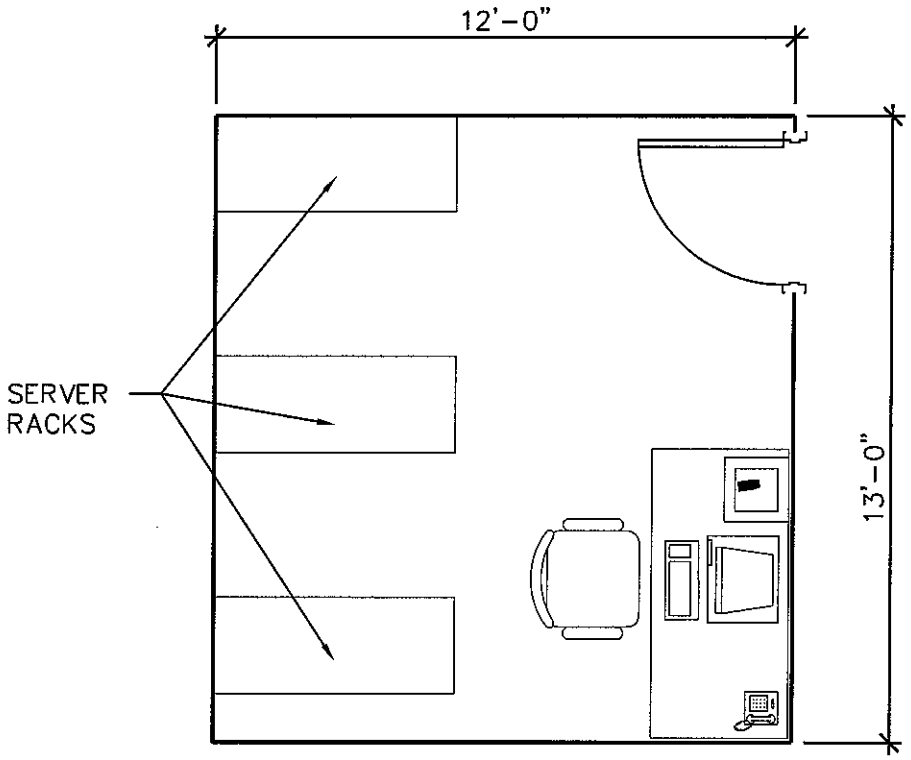
COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:18:30 PM



156 SF

SERVER ROOM

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER
ARCHITECTS, INC.

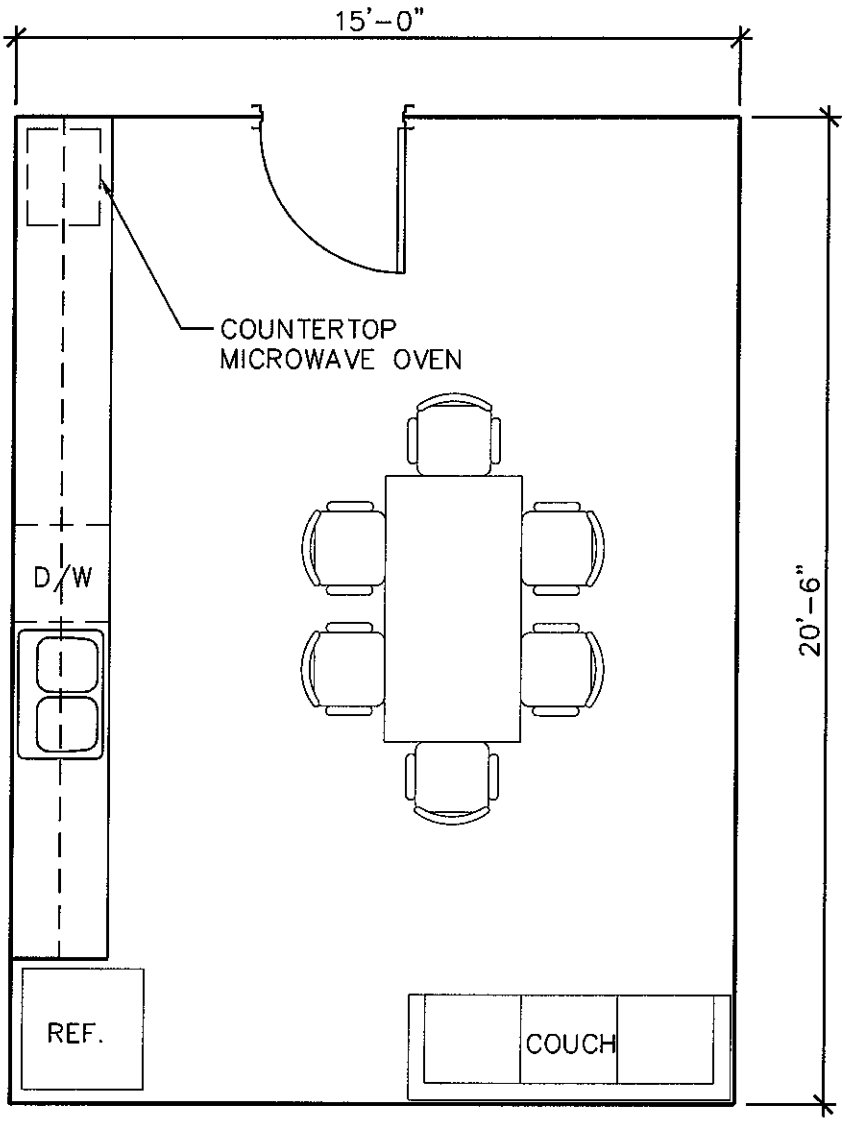
PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:18:46 PM



307 SF

BREAK ROOM

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
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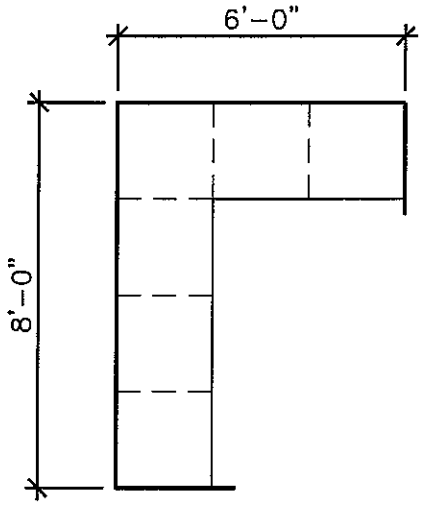
COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:21:28 PM



48 SF

DUTY BAG STORAGE

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
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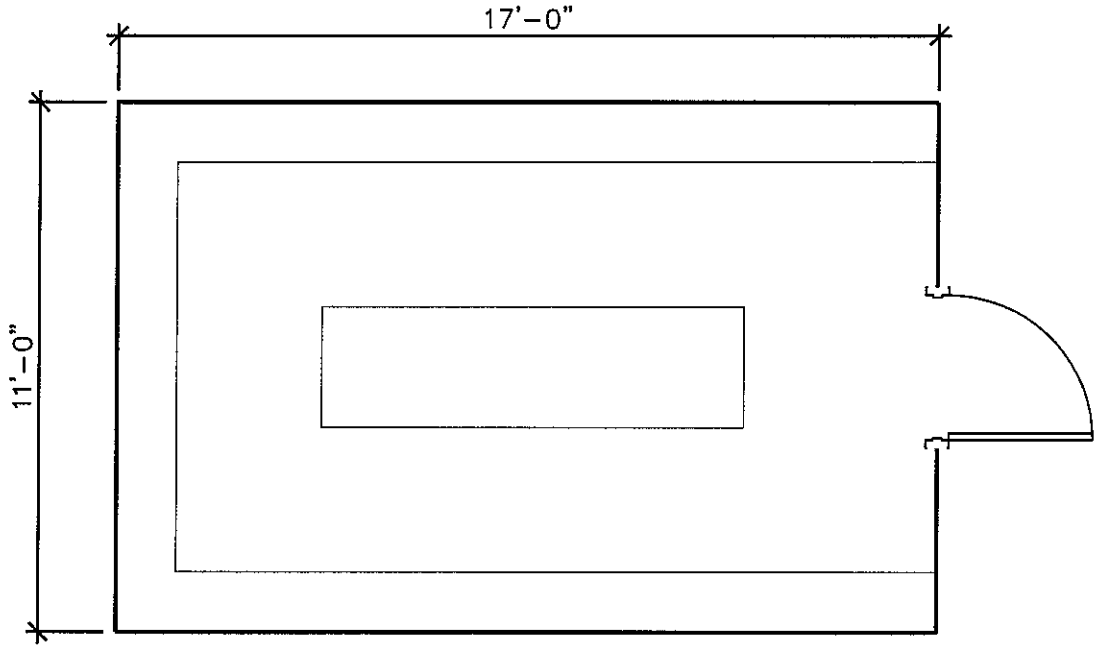
COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:21:50 PM



180 SF

GENERAL STORAGE

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
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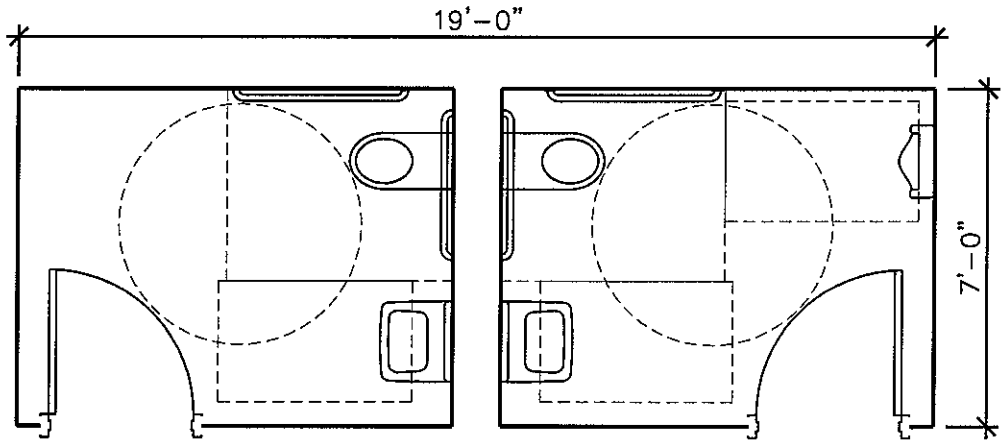
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:29:50 PM



133 SF

RESTROOMS

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

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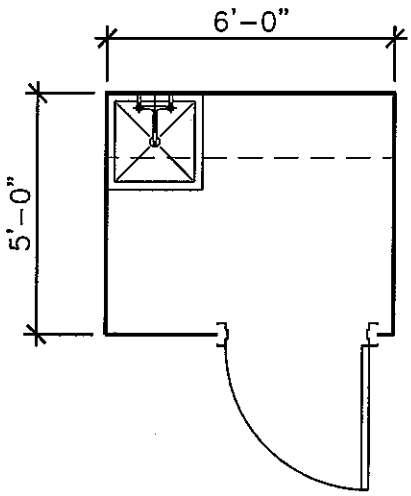
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:30:41 PM



30 SF

JANITOR CLOSET

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

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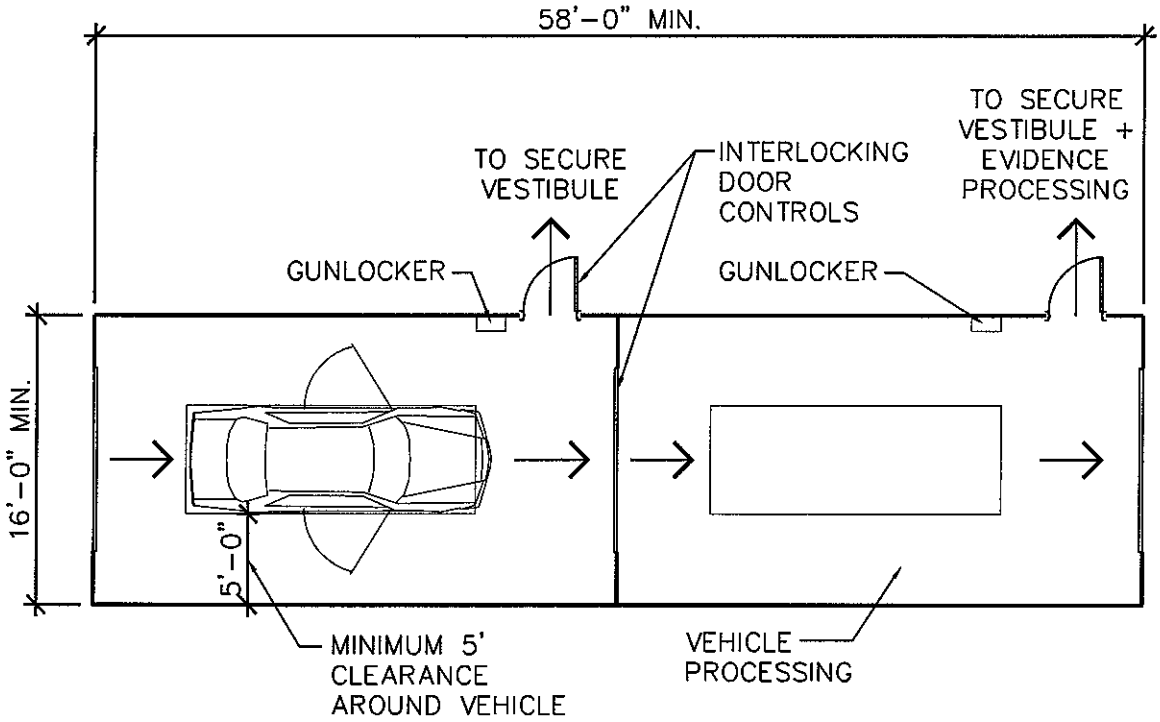
DATE
AUGUST 10, 2009



928 SF

SALLY PORT (VEHICLE)

SCALE: 3/32"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
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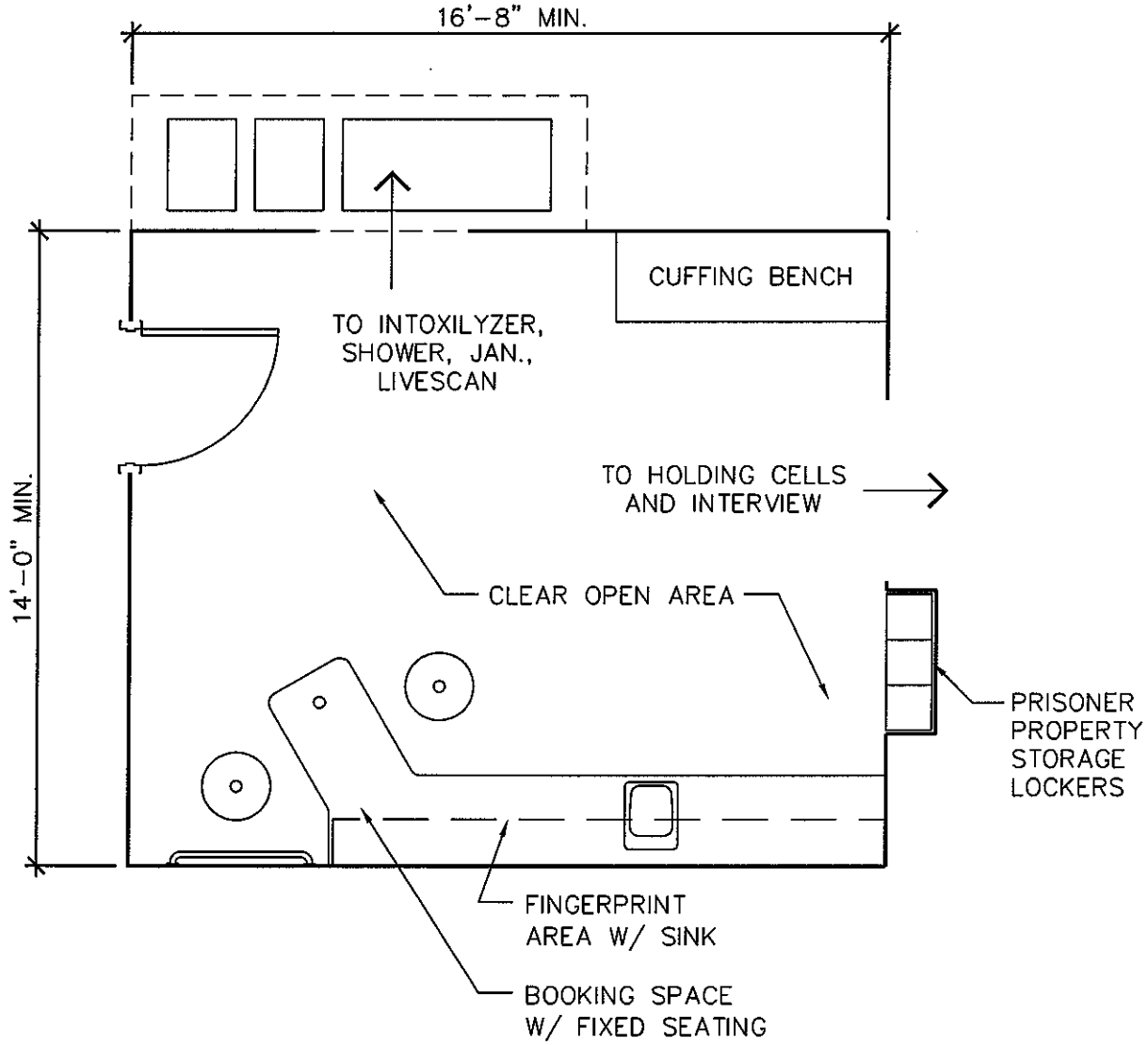
COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:32:09 PM



233 SF

BOOKING + PROCESSING

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
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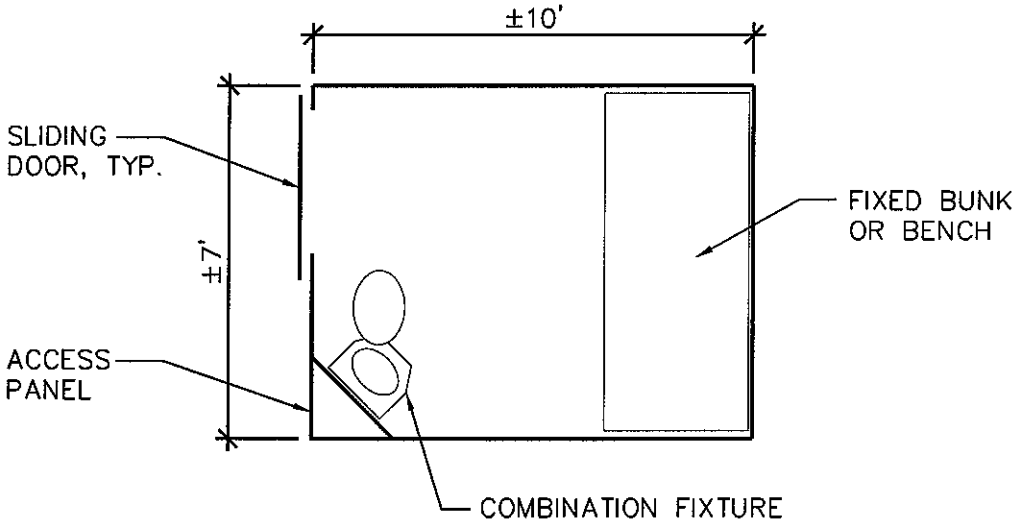
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:32:32 PM



70 SF

JUVENILE HOLDING

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
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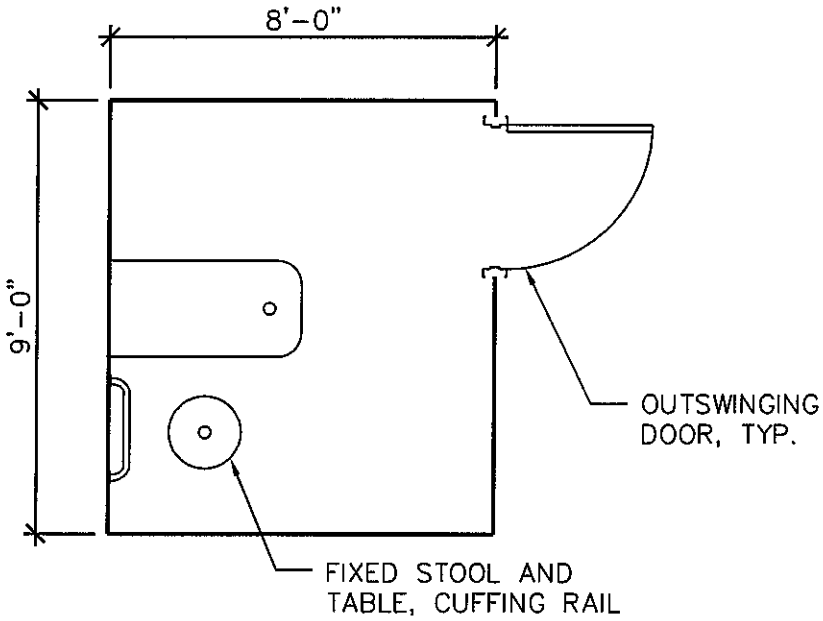
COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

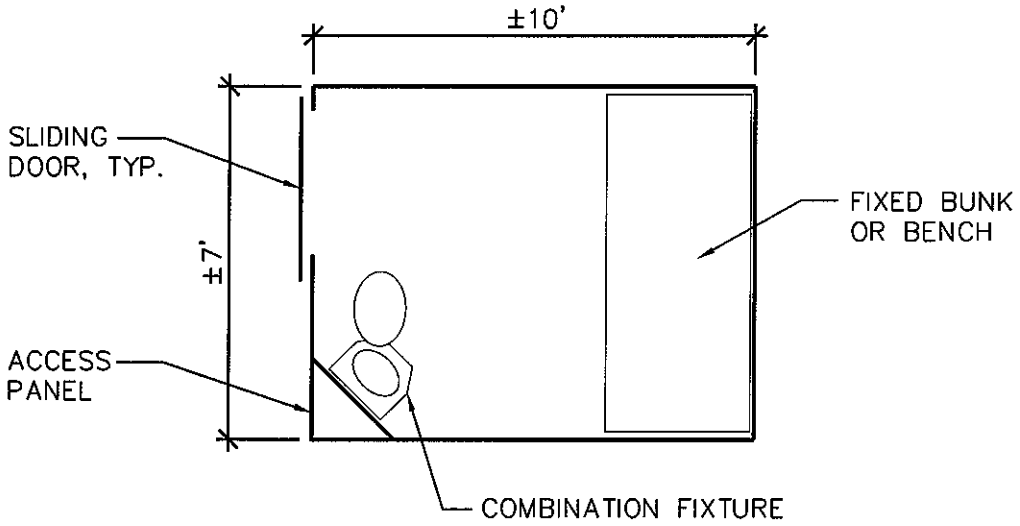
Plotted: Monday, August 10, 2009 2:33:15 PM



72 SF

HARD INTERVIEW (2)

SCALE: 1/4"=1'-0"



70 SF

PRISONER HOLDING (5 MALE, 2 FEMALE)

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

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DATE
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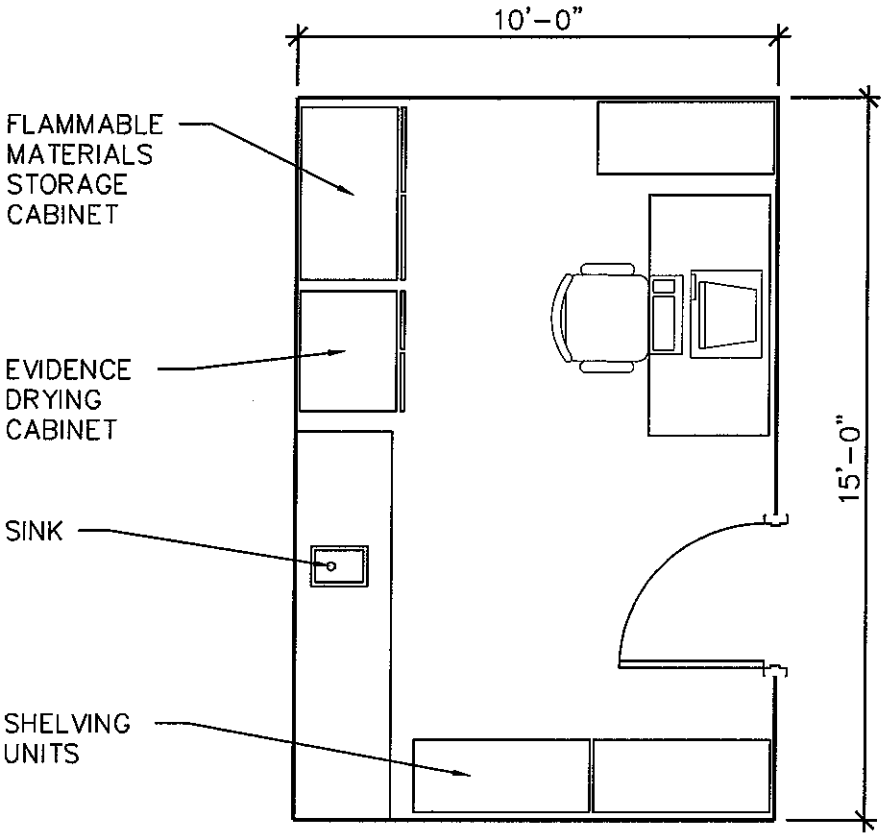

150 SF

EVIDENCE PROCESSING

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

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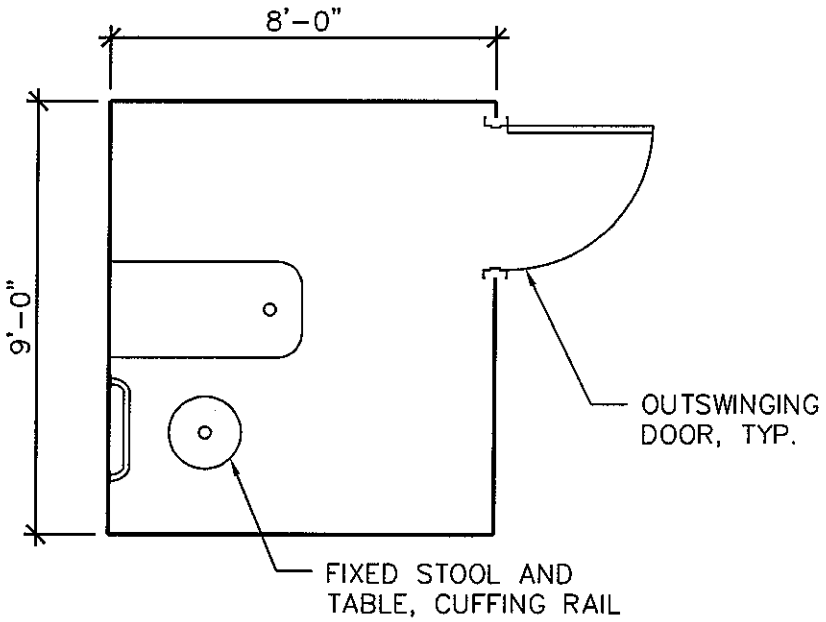
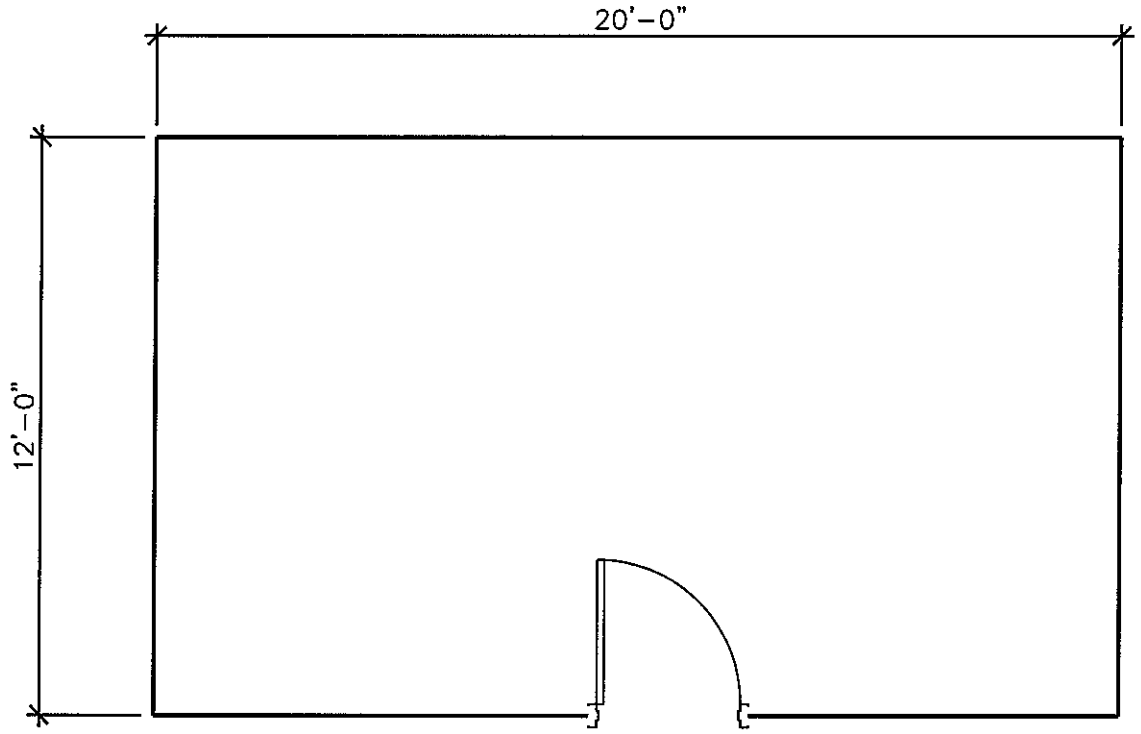


72 SF

JUVENILE INTERVIEW

SCALE: 1/4"=1'-0"



240 SF

EVIDENCE STORAGE

SCALE: 1/4"=1'-0"

CR architecture + design

D&W DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
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COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

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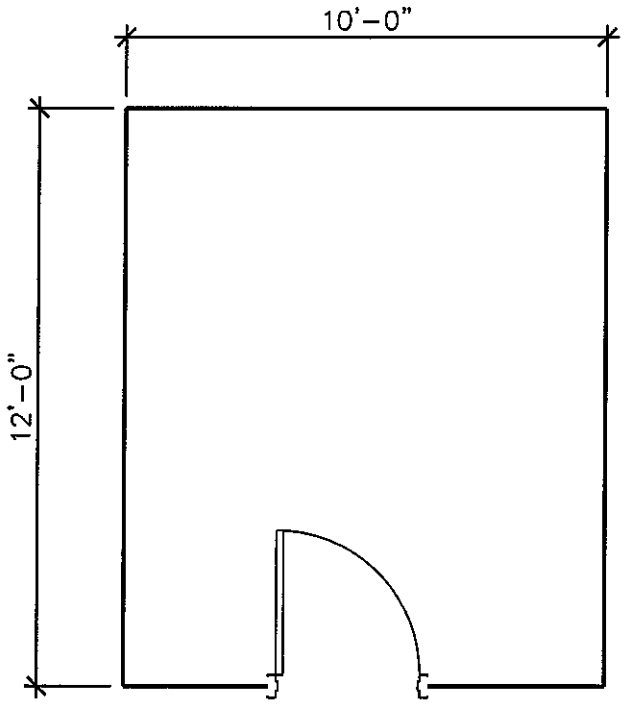

120 SF

FOUND ITEMS STORAGE

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
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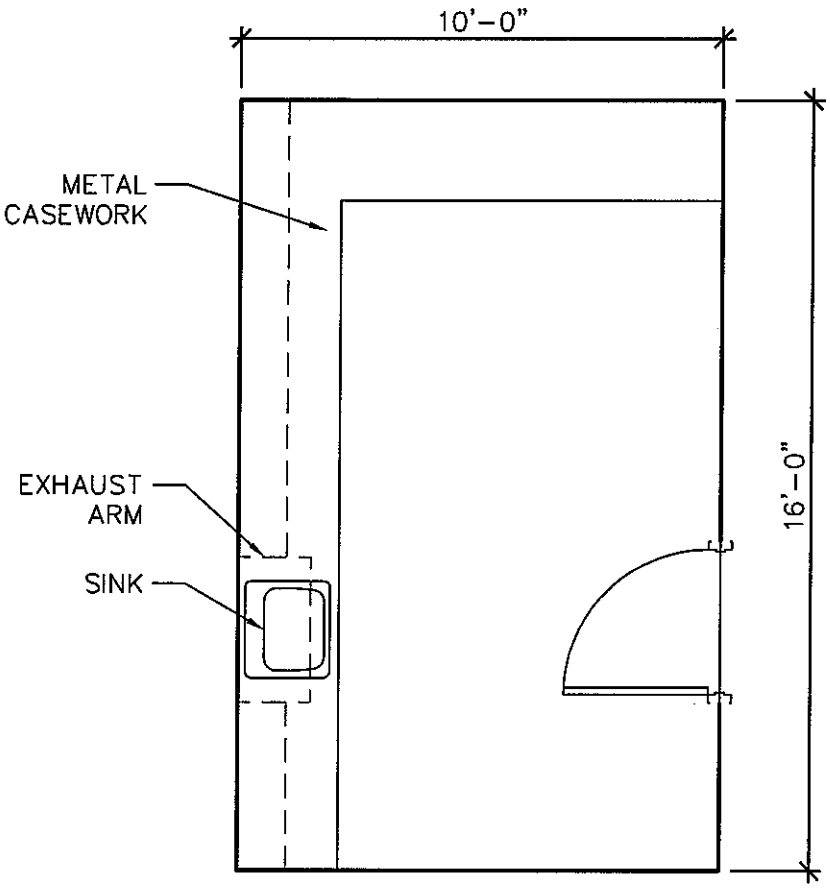
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:35:19 PM



160 SF

COMPUTER/FORENSICS LAB

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
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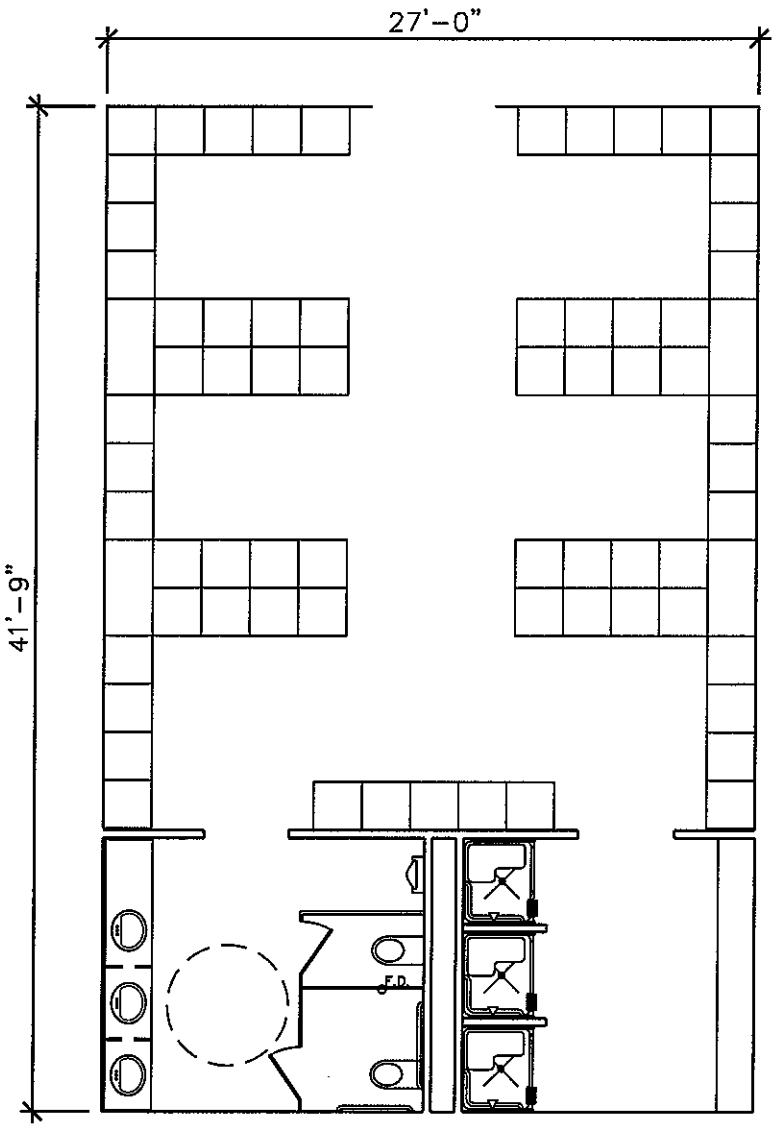
DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:35:34 PM



1127 SF

MEN'S LOCKER ROOM (65 LOCKERS)

SCALE: 1/8"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

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904009.02

DATE
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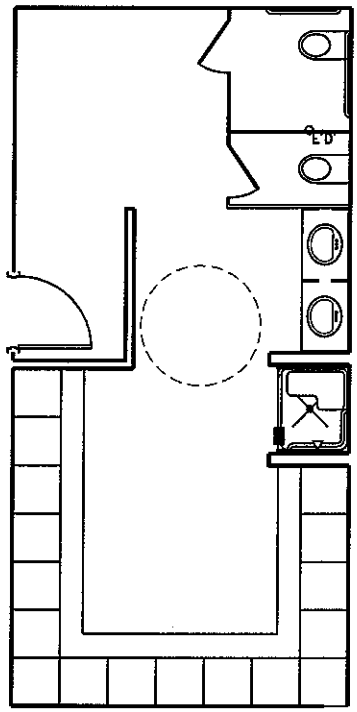
Plotted: Monday, August 10, 2009 2:35:57 PM



406 SF

WOMEN'S LOCKER ROOM (15 LOCKERS)

SCALE: 1/8"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
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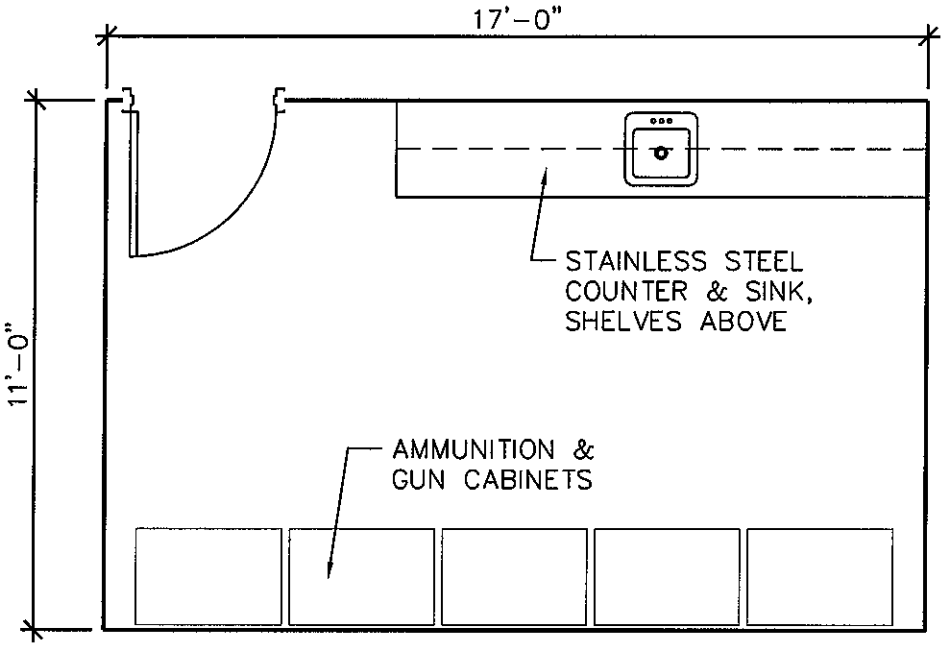
DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:36:41 PM



187 SF

ARMORY + WEAPONS

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
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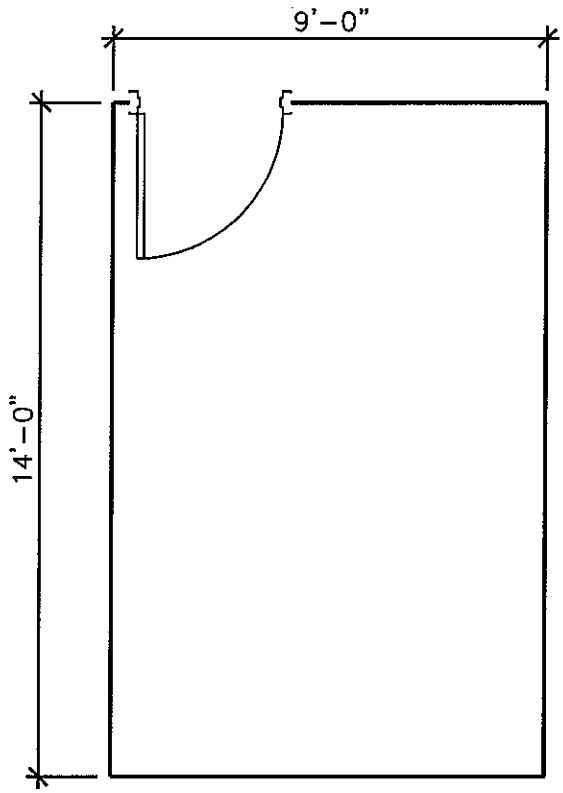


120 SF

BULK PROPERTY STORAGE

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

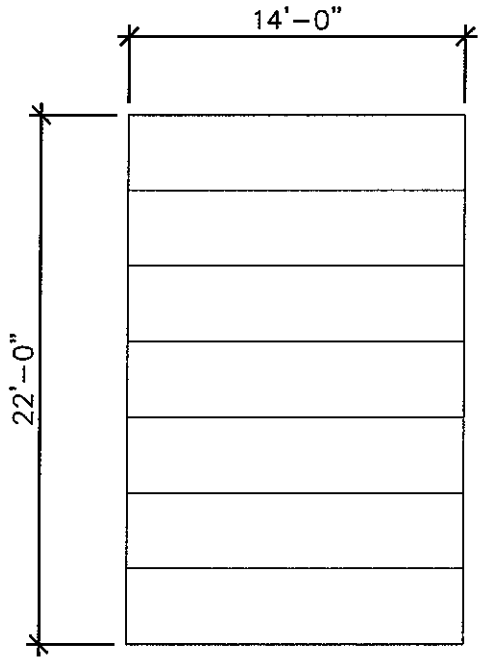
PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:47:03 PM



308 SF

BIKE STORAGE/MOTORCYCLE STORAGE

SCALE: 1/8"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

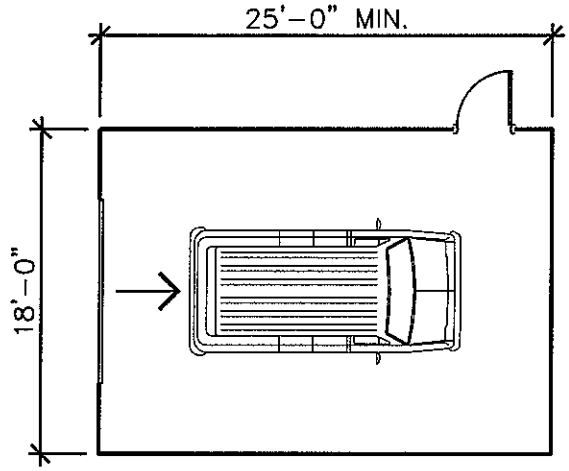
PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:47:20 PM



450 SF

VEHICLE PROCESSING-VAN STORAGE

SCALE: 3/32"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

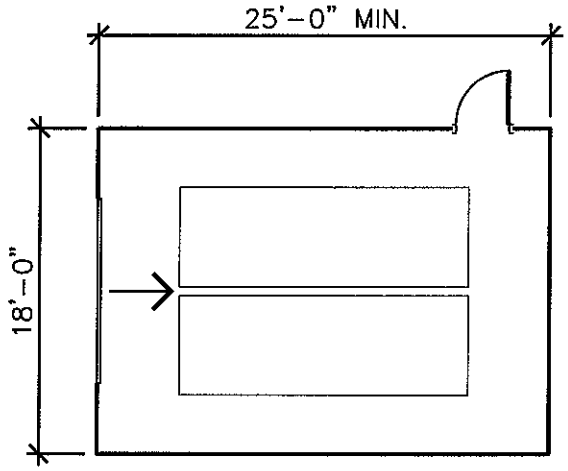
PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:47:56 PM



450 SF

EQUIPMENT STORAGE (2 RADAR TRAILERS)

SCALE: 3/32"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

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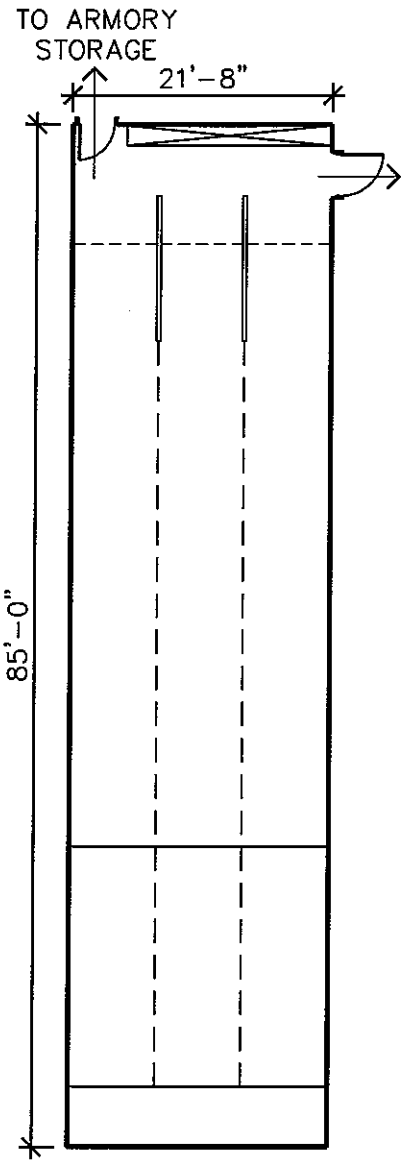

1842 SF

FIRING RANGE (3 LANES)

SCALE: 1/16"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

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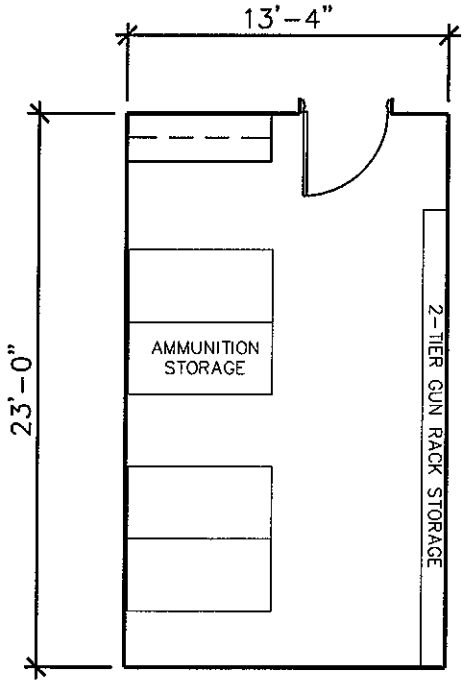


307 SF

RANGE/ARMORY STORAGE

SCALE: 1/8"=1'-0"

CR architecture + design

D&W DORE & WHITTIER ARCHITECTS, INC.

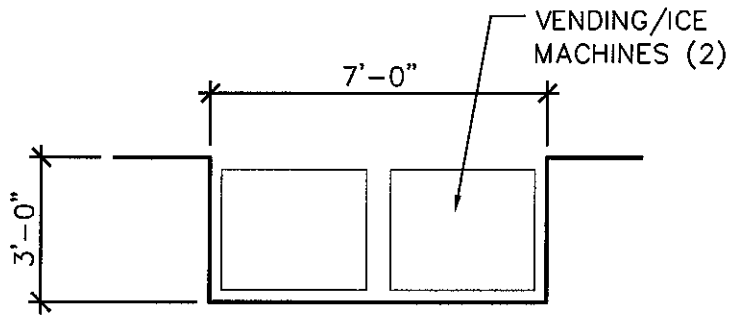
PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO. 904009.02

DATE AUGUST 10, 2009

Plotted: Monday, August 10, 2009 2:49:01 PM



21 SF

VENDING/ICE MACHINE

SCALE: 1/4"=1'-0"

architecture + design

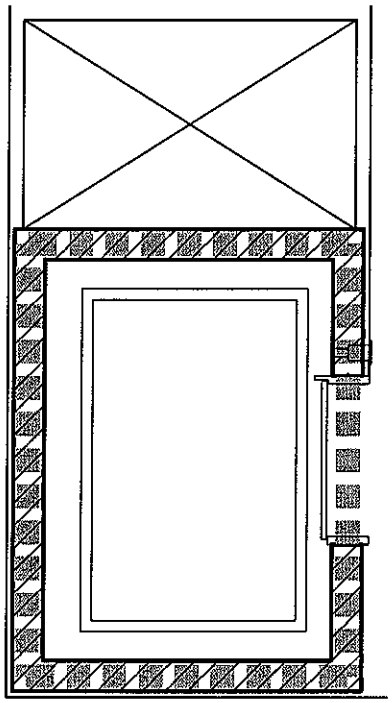
DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009



108 SF

ELEVATOR/MACHINE ROOM

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

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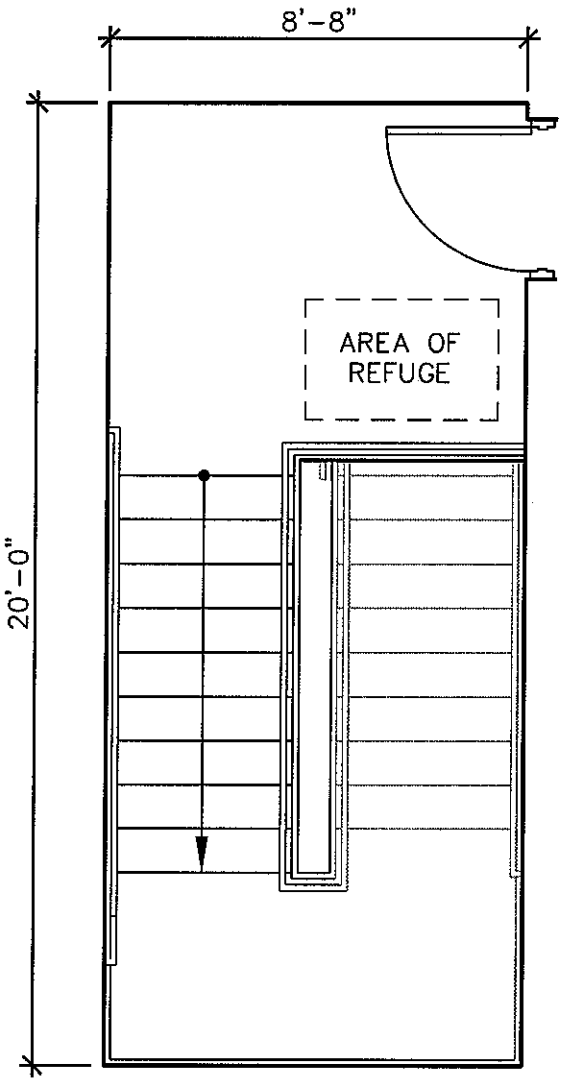

173 SF

STAIR (2)

SCALE: 1/4"=1'-0"

architecture + design

DORE & WHITTIER ARCHITECTS, INC.

PROJECT TITLE

DEDHAM POLICE STATION
NEEDS ASSESSMENT

COMMISSION NO.
904009.02

DATE
AUGUST 10, 2009

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Review of Options V

Dedham Site Review Comparison

Prepared 9-29-09

List of Possible Sites

Site Criteria	Existing Police Station 92-78-90	Gonzalez Field 109-25-90	Saint Mary's Parking 94-62-90	Dexter School 103-18-90	Red Cross/ Russcraft 164-1	Papa Ginos 123-22	Wilson Ave. 136-11	Bank of America 148-30	Bridge Street 39-45	Existing Town Hall 108-108-90
Size	5	1	1	1	4	1	1	1	2	4
Zoning/ Code Compliance	1	1	5	5	1	1	5	1	2	1
Distance from Town Center	1	1	3	4	5	1	3	4	3	1
Access/ Response	2	3	3	4	5	1	2	2	4	2
Security	3	2	1	2	4	1	1	4	2	2
Visibility to traffic	1	2	2	2	3	2	1	2	5	3
Access to City utilities	1	1	1	1	1	1	1	1	1	1
Proximity to Floodplans	1	1	1	1	5	5	1	1	5	1
Wetlands	1	1	1	1	1	1	5	1	1	1
Subtotal	16	13	18	21	29	14	20	17	25	16

Cost Criteria

Cost - Accessed Value Land	$460,600	$250,500	$418,300	$1,452,900	$13,743,800	$2,034,500	$71,000	$972,900	$1,655,700	$334,400
Cost - Accessed Value Buildings	$856,800			$2,702,200	$12,862,500	$2,889,300		$4,445,200	$3,343,700	$2,033,200
Total Accessed Value	**$1,317,400**	**$250,500**	**$418,300**	**$4,155,100**	**$26,606,300**	**$4,923,800**	**$71,000**	**$5,418,100**	**$4,999,400**	**$2,367,600**

Note: Accessed Value from Town of Dedham GIS Site

Building Construction Costs

Site Development Costs

Rate each Site per Criteria using 1= Preferred, 5 = Not Preferred

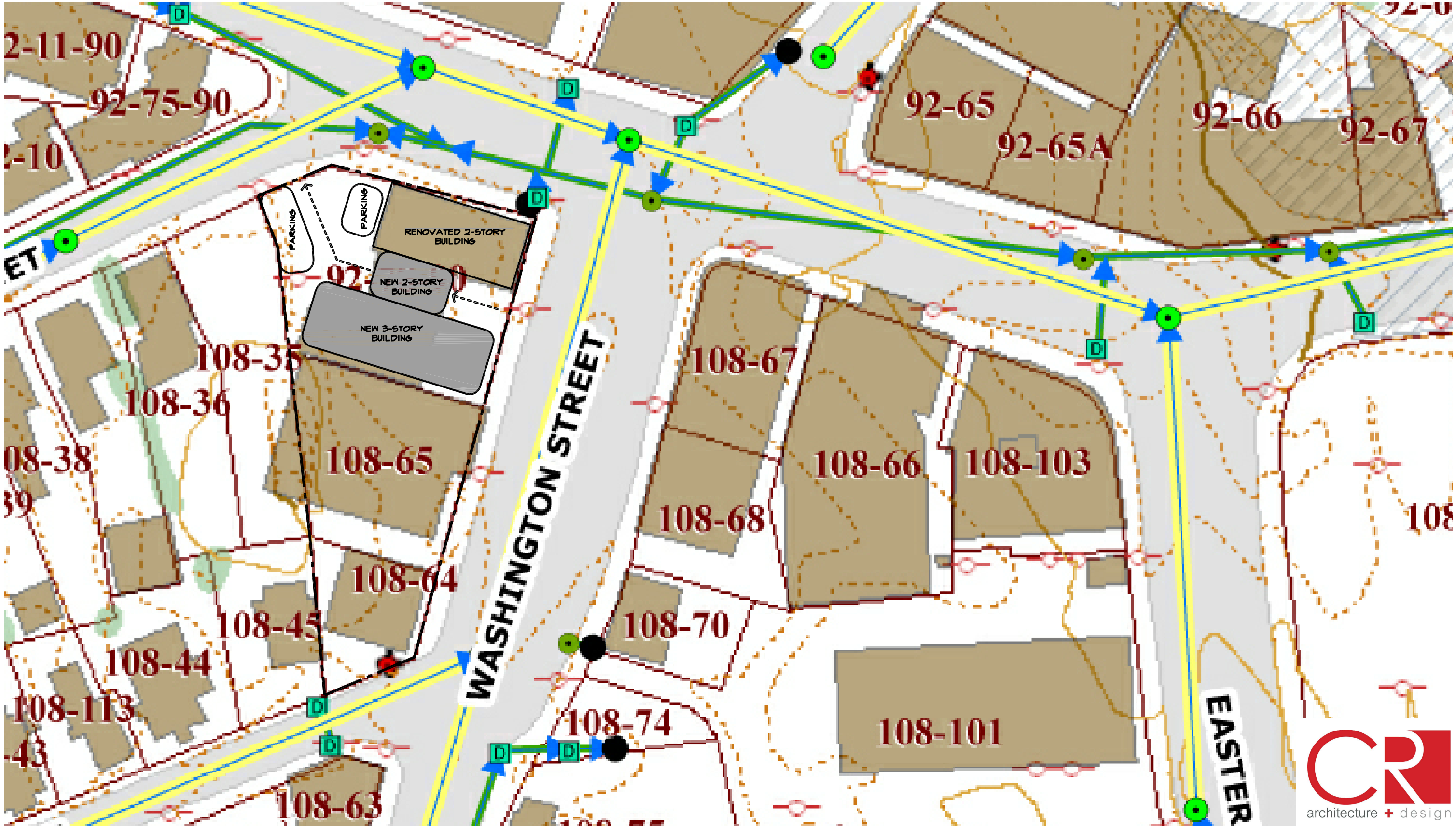
DEDHAM POLICE STATION

SITE REVIEW COMPARISON
Nitsch Project #7453
August 31, 2009

	EXISTING POLICE STATION	GONZALES FIELD	SAINT MARY'S PARKING	DEXTER SCHOOL	RED CROSS / RUSSCRAFT	PAPA GINOS	WILSON AVE.	BANK OF AMERICA	BRIDGE STREET	EXISTING TOWNHALL
MAP LOT BLOCK	92-78-90	109-25-90	94-62-90	103-18-90	164-1	123-22	136-11	148-30	39-45	108-108-90
CRITERIA										
Lot Size (SF)	14,700 (0.3Ac)	101,420 (2.3 Ac)	71,509 (1.6 Ac)	1,271,952 (29.2 Ac)	2,840,112 (65.2 Ac)	209,088 (4.8 Ac)	332,363 (7.6 Ac)	61,420 (1.4 Ac)	274,428 (6.3 Ac)	46,609 (1.1 Ac)
Lot Shape (Description)	Rectangular	Trianglular	Rectangular	Irregular	Rectangular	Rectanglar	Rectanglar	Corner Lot w/ Radius	Rectangular	Sqaure
Frontage	50 (Church St.) 100' (High St.) 150' (Washington St.)	500' (East St.) 100' (High St.)	300' (High Street) 275' (Brookdale Ave.)	1300' (High Street)	2500' (Rustcraft Road)	200' (Eastern Ave.)	550' (Washington St.) 450' (Providence Hwy) 200' (Wilson Ave.)	150' (Washington St.) 300' (Elm Street)	500' (Bridge Street)	200' (Bryant St.)
Zoning	CB	LB	GR	SRA	RDO	HB	SRB	RDO	LM	CB
Existing Site Conditions	Building with surface parking	Grass with limited surface parking	Surface parking	Building, surface parking, and woods	Building, surface parking, and woods	Parking lot	Small Parking lot and Woods	Building with surface parking	Building, surface parking, and woods	Building with surface parking
Distance from Town Center (mi) (Inter. btwn Eastern Ave. and High St.)	-	0.1	0.4	1.3	1.8	0.2	1.1	1.2	1.2	0.1
Slopes	0 to 5 percent	0 to 5 percent	0 to 5 percent	10 to 30 percent	0 to 5 percent	0 to 5 percent	0 to 20 percent	0 to 5 percent	0 to 5 percent	0 to 5 percent
Soils	Urban fill	Urban fill	Urban fill	Varies: Sandy loam w/ rock outcrops	Varies: Urban fill and muck	Urban fill	Varies: Urban fill and muck	Urban fill	Varies: Urban fill and silty loam	Urban fill
Available Municipal Utilities										
-Water	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
-Drainage	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
-Sewer	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Floodplain										
-A (100-Year Floodplain)	NO	NO	NO	* YES (20%)	* YES (75%)	* YES (100%)	NO	NO	NO	NO
-AE (100-Year Floodplain w/ Elev.)	NO	NO	NO	NO	NO	NO	NO	NO	* YES (100%)	NO
-Wetland Resources	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Public Water Supply Zones										
-Zone L, B, A, II	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
-IWPA	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
DEP Tier 1 Classified 21E Site										
-Tier 1A, 1B, 1C. 1D	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
-Tier II	NO	NO	NO	NO	Adjacent Lots (West and South)	NO	NO	NO	NO	NO
Generator of Hazardous Waste										
-MA Regulated Major Facility of Large Quantities	NO	NO	NO	NO	NO	NO	NO	NO	NO	Adjacent Lot (West)
NEHSP										
-Natural Communities	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
-Priority Habitat of Rare Species	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
-Potential Vernal Pools	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
-Estimated Habitat of Rare Wildlife	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
-Certified Vernal Pools	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

ZONING KEY
CB - Central Business
GR - General Residence
HB - Highway Business
LB - Local Business
LM - Limited Manufacturing
RDO - Research, Development, & Office
SRA - Single Residence A
SRB - Single Residence B

* (_%) indicates percentage of site within floodplain



EXISTING POLICE STATION SITE
CONCEPT SITE PLAN

0 25 50 100 150

RENOVATED SQUARE FOOTAGE = 5,620
NEW SQUARE FOOTAGE = 12,780

TOTAL SQUARE FOOTAGE = 18,400

APPROXIMATE PARKING AVAILABLE = 8 SPACES

TOWN OF DEDHAM
POLICE DEPARTMENT

DEDHAM, MA
SEPTEMBER, 2009

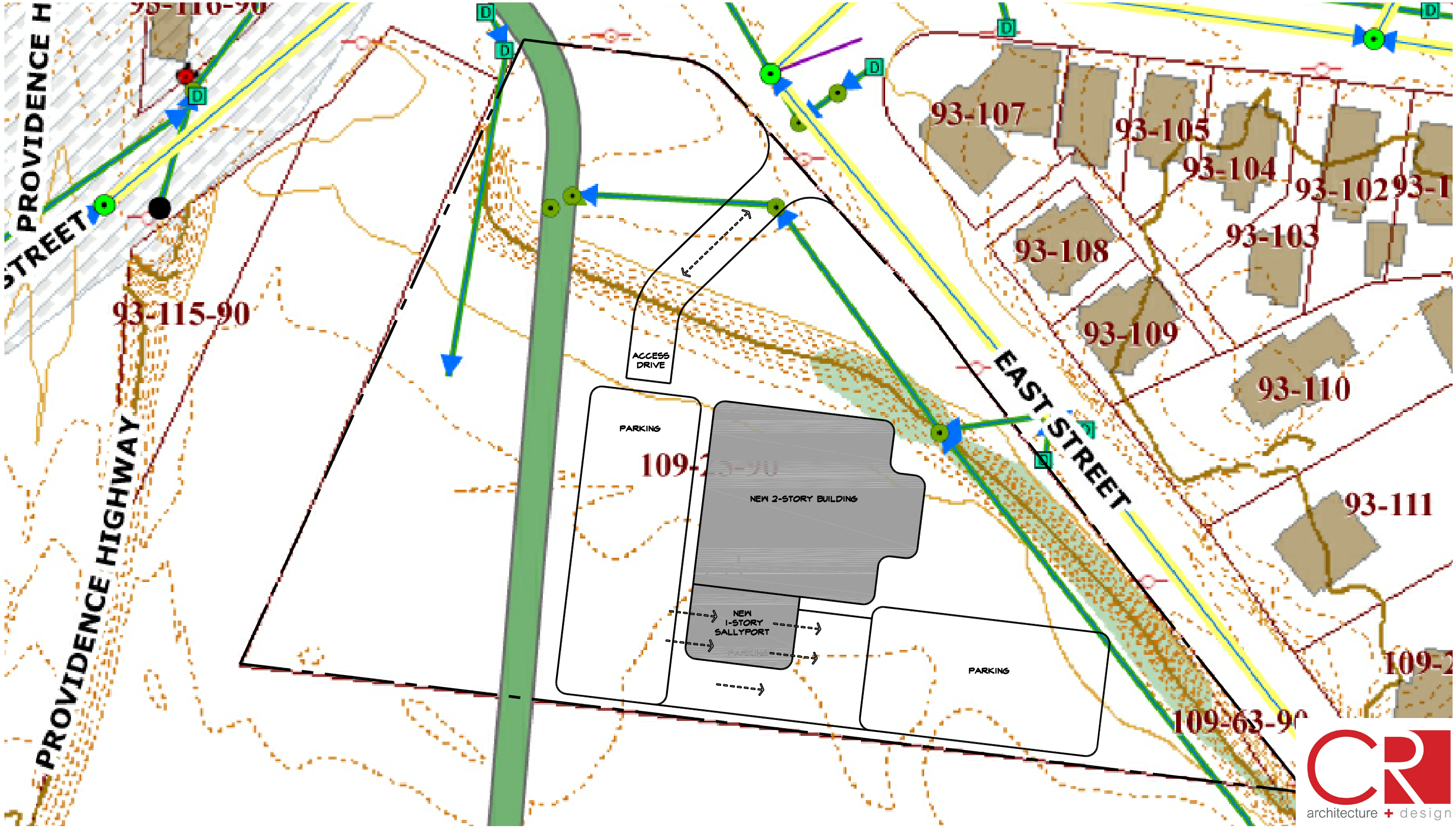
Existing Police Station Site

PROS

- Prime location (central to downtown)
- No costs associated with new site purchase assuming lease continues
- Sustainable practice in re-use of existing building
- Great access to downtown for response
- City Utilities are available
- Site development costs should be minimized
- High visibility for public interaction

CONS

- Small site does not allow for full realization of desired program (under by approximately 3,000 SF)
- Very limited parking available; Does not meet police needs
- Difficulties associated with connecting a new building to an existing building
- Have to deal with inadequacies of existing building arrangement/construction
- Building site is not owned by Police/City
- High visibility causes some security concerns related to vulnerability.



GONZALES FIELD SITE
CONCEPT SITE PLAN

0 25 50 100 150

TOTAL NEW SQUARE FOOTAGE = 22,270

APPROXIMATE PARKING AVAILABLE = 74 SPACES

CR architecture + design

TOWN OF DEDHAM
POLICE DEPARTMENT

DEDHAM, MA
SEPTEMBER, 2009

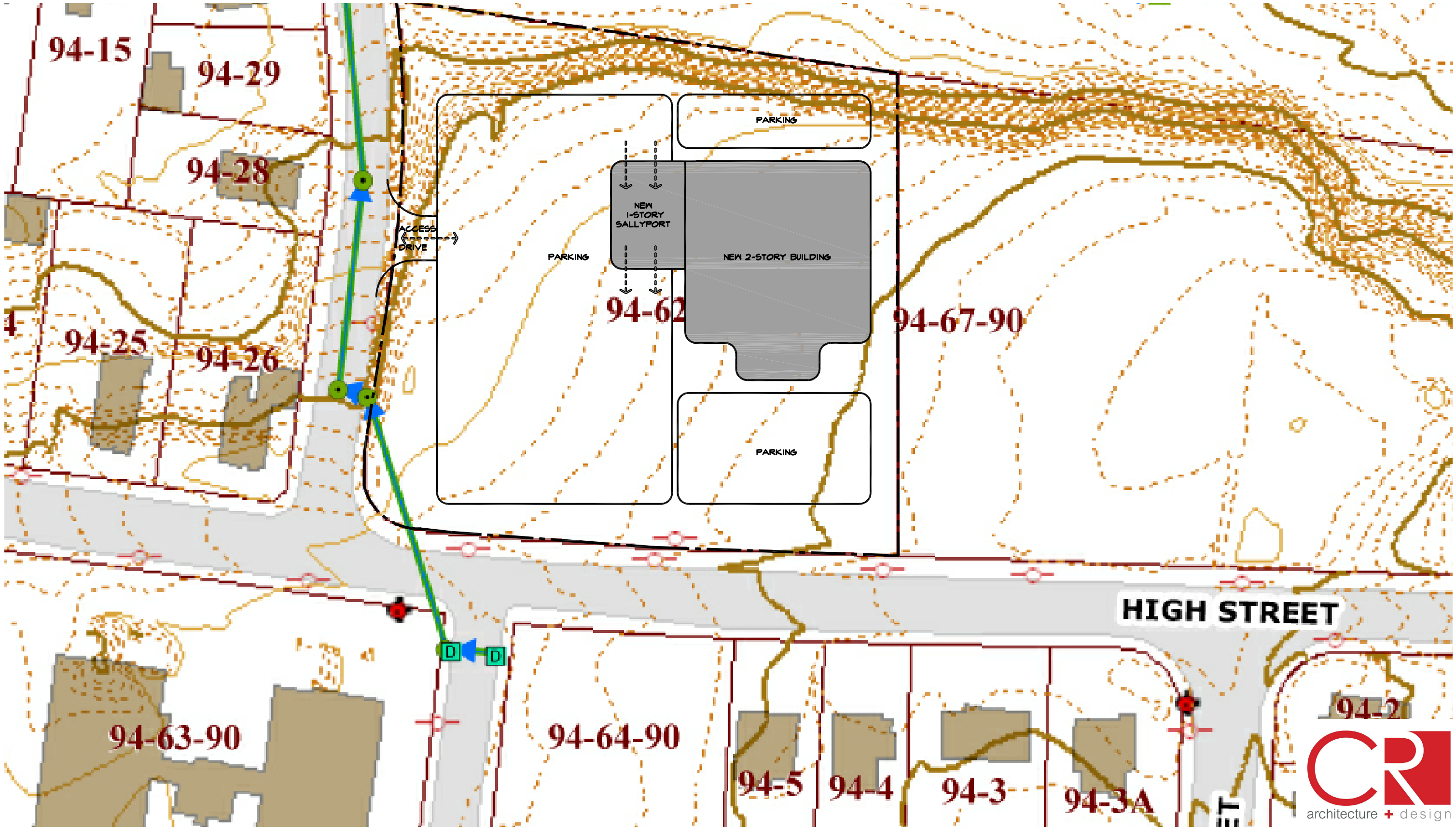
Gonzales Field

PROS

- Ample space to meet program needs and parking requirements
- Located near Town center
- Good visibility from main road and residential area.
- Good local access and access to Town center
- Good opportunities for securing building
- City Utilities available

CONS

- Large slope requires increase in site development costs
- Large culvert runs through site limiting overall development.
- Land purchase costs, Massachusetts's greenspace policy affects use of site
- Elevated roadway adjacent to site offers security concerns



ST. MARY'S PARKING SITE
CONCEPT SITE PLAN

0 25 50 100 150

TOTAL NEW SQUARE FOOTAGE = 22,270

APPROXIMATE PARKING AVAILABLE = 75 SPACES

CR architecture + design

TOWN OF DEDHAM
POLICE DEPARTMENT

DEDHAM, MA
SEPTEMBER, 2009

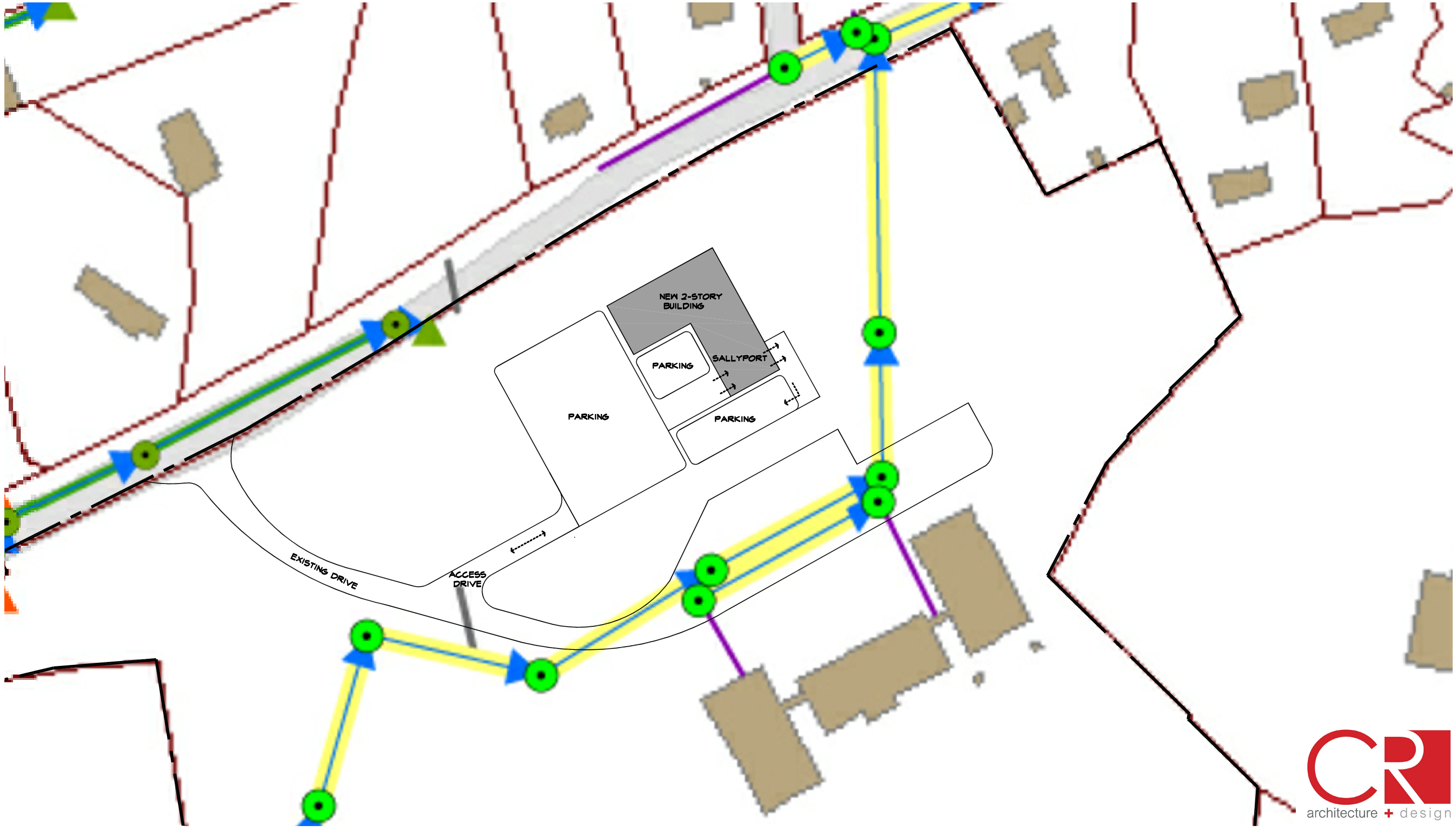
Saint Mary's Parking

PROS

- Ample space to meet program and parking requirements
- Sloping site could allow for upper level and lower level entry
- Good access to two streets for response
- High visibility with potential to maintain security
- City Utilities are available

CONS

- Distance to Town center. No presence in Town center.
- Sloping site may increase site development costs



DEXTER SCHOOL SITE
CONCEPT SITE PLAN

0 50 100 200 300

TOTAL NEW SQUARE FOOTAGE = 22,270

APPROXIMATE PARKING AVAILABLE = 83 SPACES

CR architecture + design

TOWN OF DEDHAM
POLICE DEPARTMENT

DEDHAM, MA
SEPTEMBER, 2009

Dexter School Site

PROS

- Program and site requirements can be met on site
- Potential for providing secure site and building
- City utilities available
- Potential for visibility while maintaining security

CONS

- Limited site access with potential for blockage if utilize existing access drive
- Rock formations and flood plain may increase site development costs and may be prohibitive
- Site Acquisition costs
- No presence in Town center at this location and increases response time to Town center.

EXISTING RED CROSS SITE
CONCEPT SITE PLAN

0 50 100 200 300

TOTAL RENOVATED SQUARE FOOTAGE = 22,270

APPROXIMATE PARKING AVAILABLE = 85 SPACES +

CR architecture + design

TOWN OF DEDHAM
POLICE DEPARTMENT

DEDHAM, MA
SEPTEMBER, 2009

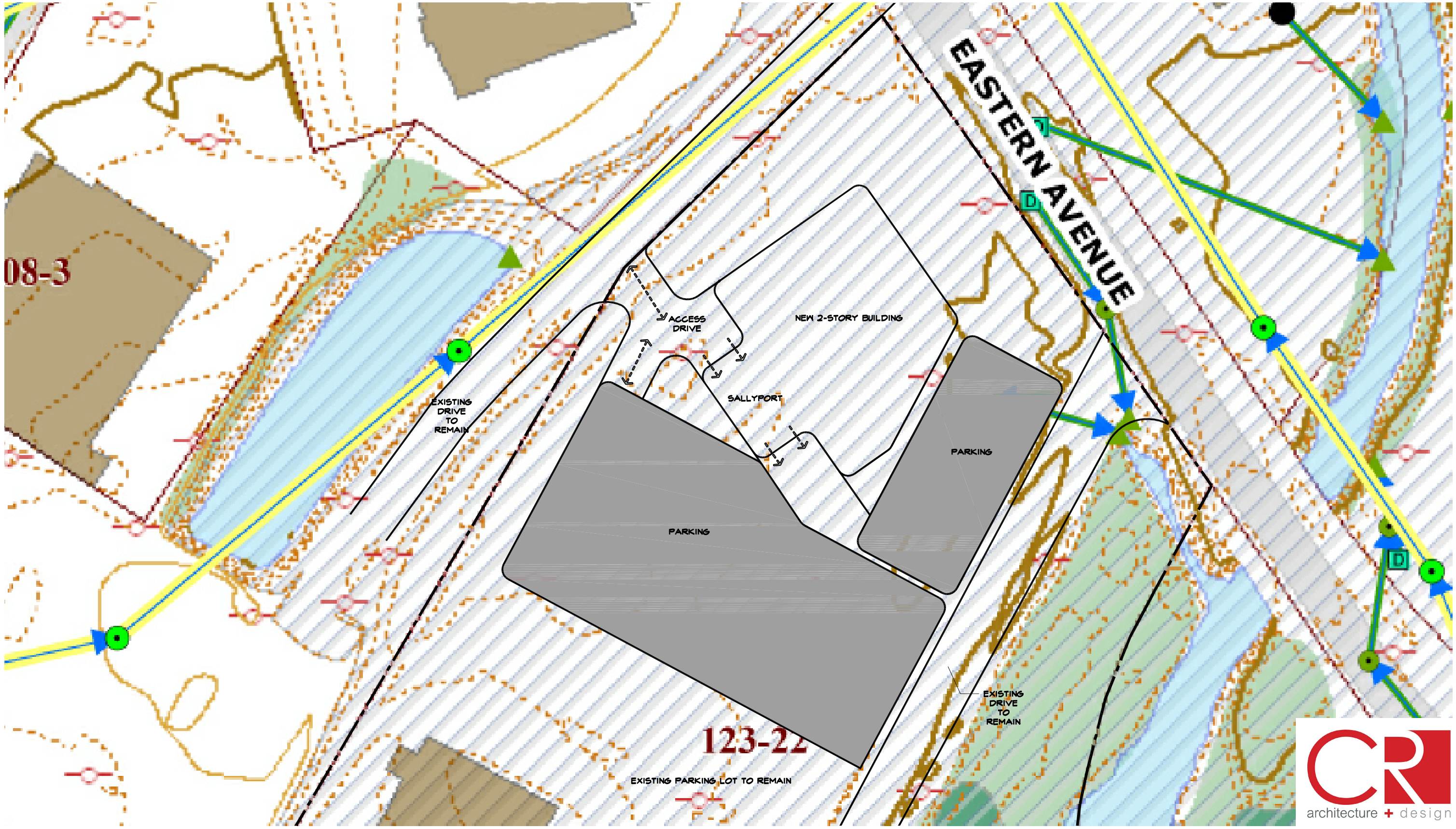
Red Cross/Rustcraft

PROS

- Renovation of portion of existing building will be a cost savings over a complete new build.
- Plenty of space / parking available for future expansion.
- Sustainable practice in re-use of existing building
- Good local site access and access for the public.
- City Utilities available

CONS

- Site and building are far larger than what is actually needed by program. Other building occupants and potential occupants pose a risk to police security.
- Site is 1.8 miles from Town Center. No presence in Town center and longest response to Town center.
- 75% of site is within 100 year floodplain
- Building is visible from street, but not fully used for police so offers some vulnerability without full police visibility.
- With other building occupants, the ability to modify the building to provide optimum security may be limited.



PAPA GINO'S SITE
CONCEPT SITE PLAN

0 25 50 100 150

TOTAL NEW SQUARE FOOTAGE = 22,800

APPROXIMATE PARKING AVAILABLE = 75 SPACES

TOWN OF DEDHAM
POLICE DEPARTMENT

DEDHAM, MA
SEPTEMBER, 2009

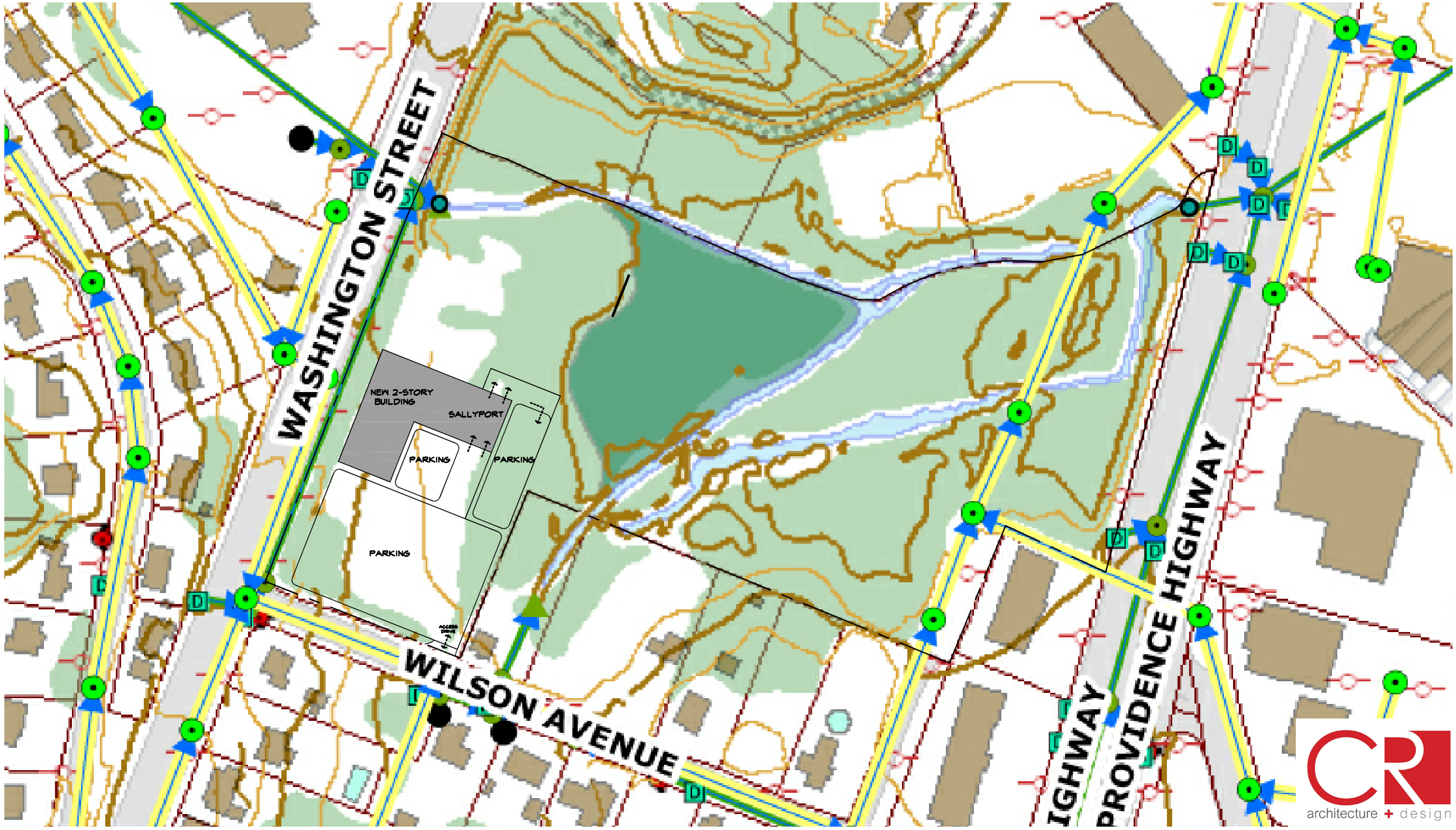
Papa Gino's

PROS

- Ample space to meet program needs and parking requirements
- Existing drives which could be reused
- Close to Town center for good response
- City Utilities available
- Good site access and opportunities for securing building
- High Visibility for public interaction with opportunity to maintain secure perimeter

CONS

- 100% of site within 100 year floodplain
- Land purchase costs



WILSON AVENUE SITE
CONCEPT SITE PLAN

0 50 100 200 300

TOTAL NEW SQUARE FOOTAGE = 22,270

APPROXIMATE PARKING AVAILABLE = 83 SPACES

TOWN OF DEDHAM
POLICE DEPARTMENT

DEDHAM, MA
SEPTEMBER, 2009

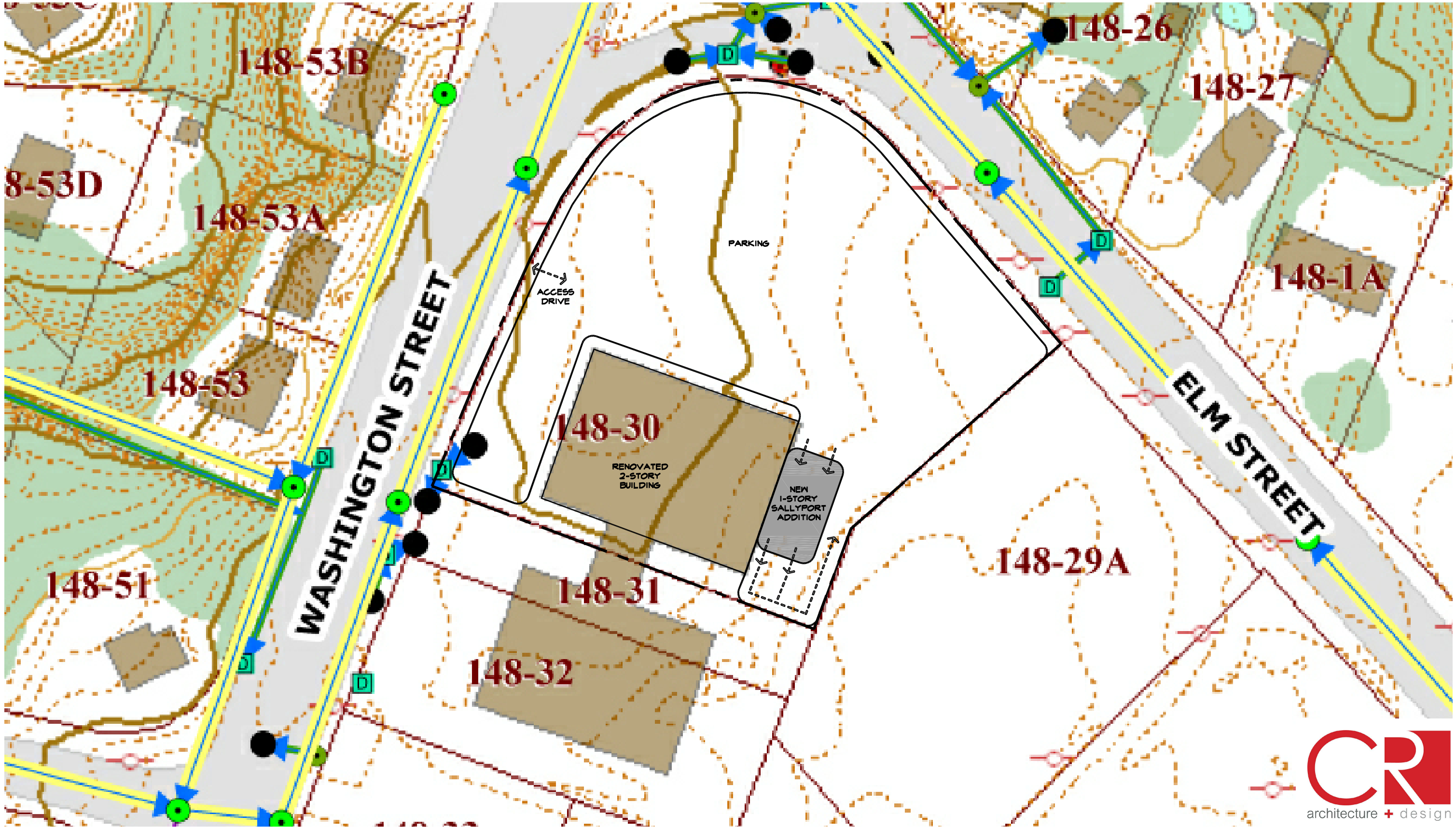
Wilson Avenue

PROS

- Ample space to meet program needs and parking requirements
- Sloping site could allow for upper level and lower level entry
- Good visibility on Washington Street with good street presence while maintaining secure perimeter
- City Utilities available

CONS

- Most of parcel is unusable because of creek/wetlands on site
- Steep contours limit access to site to one corner access point.
- Distance to Town center increases response time and doesn't provide presence in Town.



EXISTING BANK OF AMERICA SITE
CONCEPT SITE PLAN

0 25 50 100 150

RENOVATED SQUARE FOOTAGE = 20,170
NEW SQUARE FOOTAGE = 1,825

TOTAL SQUARE FOOTAGE = 21,995

APPROXIMATE PARKING AVAILABLE = 73 SPACES

CR architecture + design

TOWN OF DEDHAM
POLICE DEPARTMENT

DEDHAM, MA
SEPTEMBER, 2009

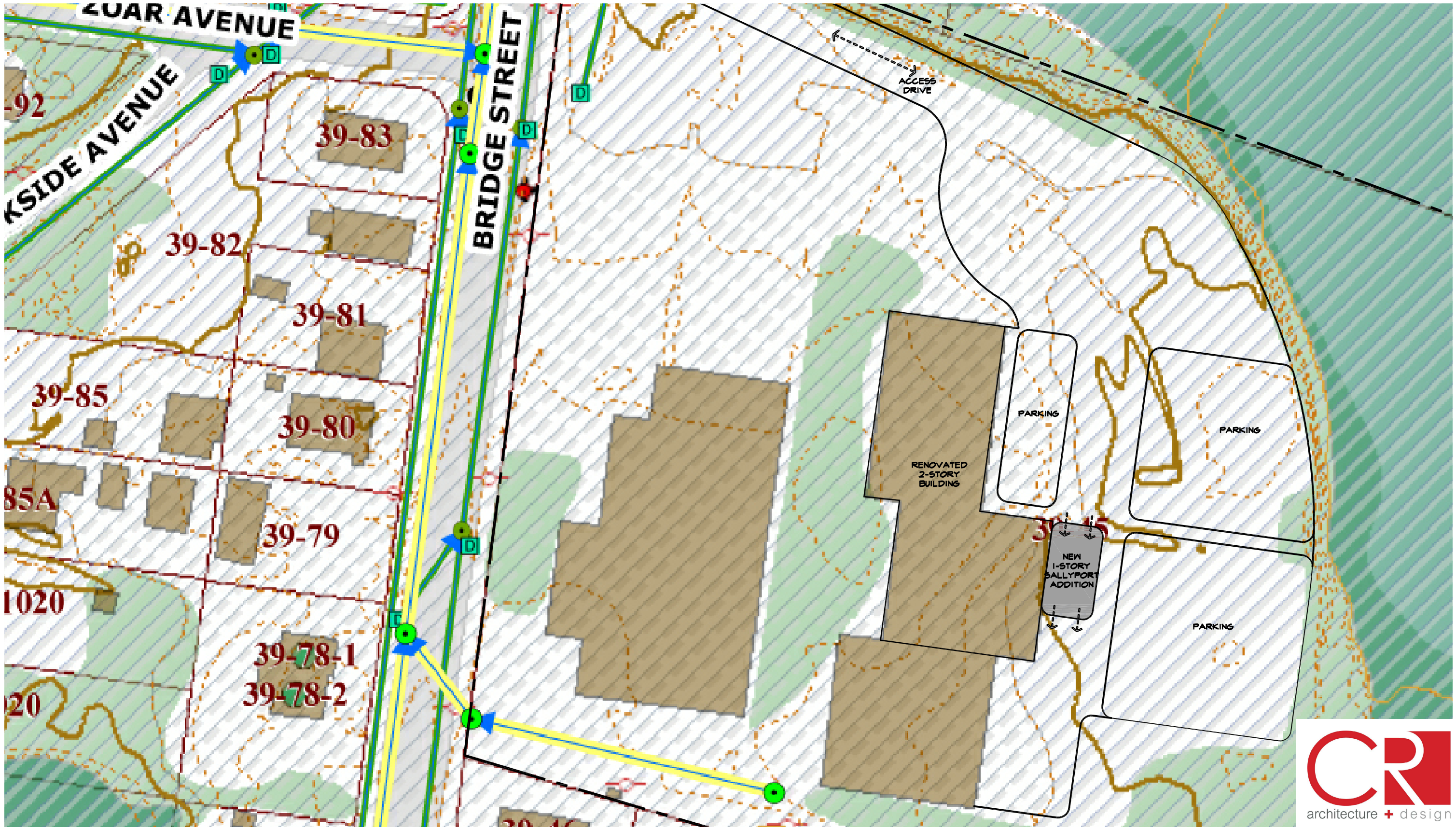
Bank of America

PROS

- Existing building and new addition combined are within 300 SF of requested program
- Ample existing parking already exists on site
- Building is on a corner lot, which could allow access to street from multiple locations (if desired).
- Good site access and visibility on Washington and Elm, with adequate ability to maintain building security.
- Sustainable practice in re-use of existing building\
- City Utilities available

CONS

- Have to deal with some inadequacies of existing building arrangement/construction.
- Construction could disrupt activities in adjacent building
- Site is 1.2 miles from Town Center. No Town center presence and increased response into Town.
- Security issues with additional building square footage connected to police used square footage



architecture + design

EXISTING BRIDGE STREET SITE
CONCEPT SITE PLAN

0 25 50 100 150

RENOVATED SQUARE FOOTAGE = 25,420
NEW SQUARE FOOTAGE = 1,825

TOTAL SQUARE FOOTAGE = 27,245

APPROXIMATE PARKING AVAILABLE = 100 SPACES +

TOWN OF DEDHAM
POLICE DEPARTMENT

DEDHAM, MA
SEPTEMBER, 2009

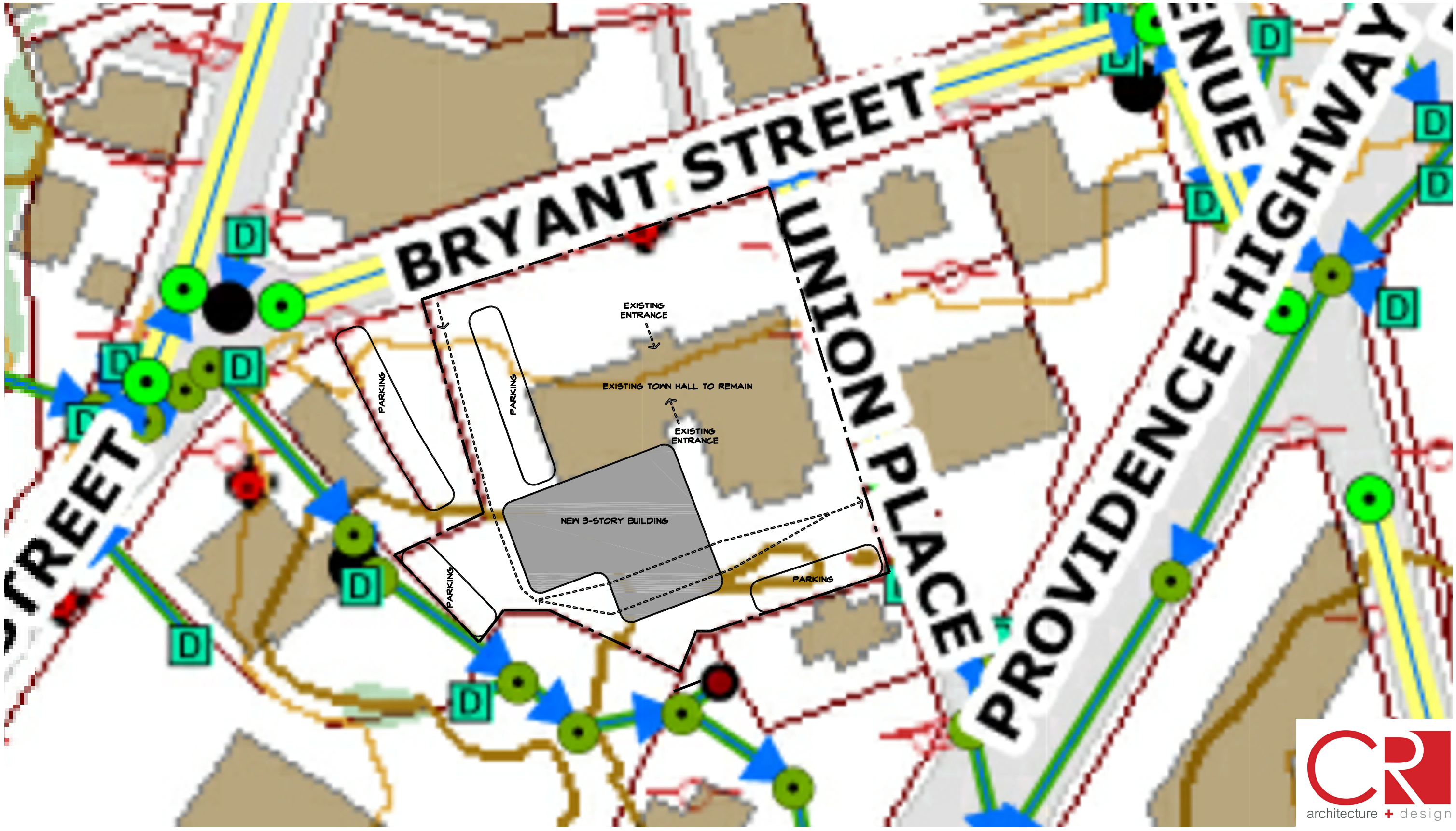
Bridge Street

PROS

- Sustainable practice in re-use of existing building
- Capable of future expansion
- Existing building is shielded from the street by another building for limited visibility, but added security.
- Adequate parking and ability to contain desired program
- City Utilities available

CONS

- Site and building are slightly larger than what is actually needed by program. Unused space or other occupants offer increased risk to security.
- Site is 1.2 miles from Town Center. No Town center presence and increased response time to the Town center.
- Site is in 100 year floodplain
- Limited visibility to public.
- Limited local site access with only one access point that may block response from the site.



EXISTING TOWN HALL SITE
CONCEPT SITE PLAN

0 25 50 100 150

TOTAL NEW SQUARE FOOTAGE = 20,845

APPROXIMATE PARKING AVAILABLE = 38 SPACES

CR architecture + design

TOWN OF DEDHAM
POLICE DEPARTMENT

DEDHAM, MA
SEPTEMBER, 2009

Existing Town Hall

PROS

- Located in Town center
- Provides police presence at town administration building for added security of existing building
- City Owned land
- Good response to Town center
- City Utilities available

CONS

- Small site does not allow for full realization of desired program (under by approximately 1,500 SF)
- Very limited parking available; Does not meet police or existing building needs.
- New building would have to abut existing town hall. Interface with the existing building could present problems.
- Construction could disrupt existing Town Hall activities and/or bother employees
- Existing building access would be disrupted by new building.
- Site access for police limited by amount of building needed on site.
- Limited police visibility at back of the site

Appendix VI

DORE & WHITTIER ARCHITECTS, INC

CR architecture + design

POLICE FACILITY QUESTIONNAIRE

The following questionnaire is being provided as a tool to familiarize you with questions, issues, and data that will be discussed in the beginning stages of your project. To be responsible with our client's time, we have developed this form to allow you to prepare and discuss the following materials prior to our meeting. We have found that our meetings are more productive and efficient as a result of this approach

If more than one person will be providing input into the completion of this form, please compile all the data into one questionnaire to avoid providing conflicting information

When you have completed this, please fax it to our office in care of the contact person you are working with or the Government Studio at 513-721-8181

Please contact us if you have any questions filling out this form.

PROJECT MANAGEMENT

Who will manage the project for the Department?

Daily contact with the design team and contractor

Name William Keegan Title/role Town Administrator

Other members of department building committee and their roles involved in the project

Name	Title/role
Mike Weir	Police Chief
Mike D'Entremont	Lt. / Executive Officer
Eugene Nagone	Facilities Manager
Robert Nelson	Chairman, BPCC

DORE & WHITTIER ARCHITECTS, INC.

CR architecture + design

PROJECT BUDGET

Total Project Cost = Building Hard Cost + Soft Costs

- The term "Total Project Cost" refers to the sum total of all expenses required to design, build, furnish, and move into a completed facility. This typically is divided into two categories, "Building Hard Costs" and "Soft Costs".
- " Building Hard Cost" describes only the cost of the Prime contracts for construction at the time of the time of bid opening. This cost does not include any of the "Soft Costs"
- "Soft Costs" include all other costs associated with designing, building and moving into a completed facility. This cost does not include any of the "Building Hard Cost"

Check the category for each item listed below.	Hard Cost	Soft Cost	Not Included In Project Cost
Land acquisition?	☑	☑	☐
Off-site utility improvements?	☑	☑	☐
Specialty equipment (Emergency generator, UPS, etc.)	☑	☐	☐
Furnishings, workstations, consoles?	☑	☑	☐
Architectural and Engineering fees?	☐	☑	☐
Permits – Building, Zoning, Utilities including Tap Fees?	☐	☑	☐
Surveys – Boundary and Topographic?	☐	☑	☐
Environmental Surveys – Phase 1 and Phase 2 Environmental	☐	☑	☐
Phone system?	☑	☐	☐
Radio/communication system?	☑	☐	☐
Landscaping?	☑	☑	☐
Signage?	☑	☑	☐
Kitchen / Break room Equipment?	☑	☐	☐
Security/AV Systems?	☑	☐	☐
Temporary facilities?	☑	☐	☐
Moving costs?	☐	☑	☐
Utility Costs?	☑	☐	☐
Insurance Costs?	☐	☑	☐
Inspection and testing fees?	☐	☑	☐
Cost of financing?	☐	☑	☐

What is the expected Total Project Cost? .

☐ Total Project Cost (fixed or give a range) ?

☐ Total Project Cost has not been determined It will be determined as part of the design process.

What is the anticipated source(s) of funding? Bonding / Debt Exclusion

Has funding been secured? No

DORE & WHITTIER ARCHITECTS, INC.

CR architecture + design

PROJECT SITE

Is the land acquisition for this project complete? Possible options are available

How many acres are available? (Approximately) 2+ in one location

Describe the previous use for the project site Parking Lot

What other uses are planned for this property other than a Police Station?

- [x] Combined City/Township Hall Public Safety with Fire (Possible)
- [ ] Community Park / Recreational
- [ ] Public Works / Service / Salt Dome
- [x] Other (Describe) Cemetery Expansion (Possible)

What Utilities are available to the Project Site?

[x]	Water	[x]	Telephone
[x]	Sewer	[x]	Cable
[x]	Storm Water	[x]	Fiber Optics
[x]	Electric	[x]	Gas

If possible, provide a list of Utility company contact personnel and contact information

[x]	Water Water District	[ ]	Telephone Verizon
[ ]	Sewer Town	[ ]	Cable/Fiber Optics Comcast, Verizon, RCN
[ ]	Electric NStar	[ ]	Gas NSTAR

Who, besides assigned personnel, will require access to site?

Public (community room) ✓

Maintenance personnel ✓

Other companies _____

DEPARTMENTAL OPERATIONAL ISSUES

Operations

Describe your current operations:

Typical service calls and type _____

Service area: _____

Do you have a community policing program? yes

School resource officers, D.A.R.E? yes

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Does the department provide community training Not in recent history

Do you use bike patrols? Yes

If yes, how many? Five bikes used by approx. ten officers

Do you use K-9 units? No

If yes, how many?

Is community access for filing complaints and picking up records important? Yes

What is the frequency of community visitors to station? Daily - at all hours of the day.

Describe your Investigations division. One Det. Lt, Four full time Det's, two half-time Det's and one full time Juvenile Officer

Do detectives work cases separately or in teams? Both, Dets also work on cases regularly with Dets from other towns / agencies.

Other information that we should know?

An area for fingerprint processing and computer forensic analysis is needed.

Staffing

What are your current staffing levels?

Sworn officers 60

Civilian 9 Dispatchers and 1-5 custodial

What are your future staffing levels?

Current calls per officer 12,272 incidents for calendar year 2008

Current population 23,464 per 2000 census

Anticipated population – 20 years Minimal change

Administrative staff?

Current 2

Future 2

Other staff that will use the facility (fire, clinic, etc.)

SECURE AREA

Sallyport

Is a sallyport required? Yes

Do you anticipate requiring more than one vehicle access at a time? Yes

If so, how many? 2

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Booking/Processing

Do you anticipate booking/processing more than one prisoner at a time? Yes

If so, how many? Ability to process atleast two at one time.

Do you anticipate a separate processing area for juveniles? Yes

Prisoner Holding

Do you plan to provide holding facilities? Yes

If yes, are holding cells to be designed as 8-hour, 5 day or other? We will only hold until courts are open to receive prisoners. Could range from an hour to almost 3 days.

If no, how will you handle temporary detention? I e, cuffing rail, etc.

Do you anticipate more than 2 holding cells? Yes

If so, how many? 4/5 male, atleast 2 female, at least 1 juvenile

Do you anticipate more than one cell for detox? No

Do you anticipate a separate juvenile holding area? Yes

Evidence Processing/Storage

Is the evidence processing done in the same facility? Yes

Is a vehicle evidence processing garage required? Yes

Do you require a separate area for contaminated items? Yes

Do you anticipate requiring an evidence drying area? Yes

Do you require a pass-thru evidence refrigerator? Yes

What type of storage lockers/shelves is desired for evidence storage? We would like a pass thru door into the evidence room for chain of custody issues. Sturdy shelving that has various sizing would help. CD storage is also needed. Room for secure firearms and cash storage is needed — secure drug storage

What type of storage lockers/shelves/room is desired for property storage? Same as evidence

How do you handle large found property items such as bikes? A bulk storage area is needed, eg a portion of a garage with ground level access

PUBLIC AREAS

Interview/Complaint

How many and what type of interview rooms do you require?

Soft interview rooms (with comfortable finishes and furniture)? 1

Hard interview rooms? 2 — One with audio + video recording is needed.

Complaint room? —

Polygraph room? —

Juvenile interview? 1

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Do you anticipate interview rooms near:

Lobby _____

Holding Area _____

Detectives _____

All of the above ✓

Records/Dispatch

Describe your anticipated dispatch and 9-1-1 services? We utilize 2 civilian dispatchers on duty at all times. We have 3 dispatch positions along with an admin position. We have 9 full time dispatchers along with a couple part time.

Does your service require a radio tower? Yes On site? Yes

If yes, what height is anticipated? Depending on ground elevation, up to 120 feet.

How are records stored, retrieved and provided to the public? Storage is electronic and if court activity exists, by defendant name in paper form.

How many file cabinets do you require for records? 50

How many years are records kept readily available? Anywhere from 1 yr to permanent.

Do you need any other type of storage? _____

How many workstations are required at Dispatch? Four

What other equipment needs to be incorporated in the Dispatch Area?

LEEDS computer ✓

Security monitors ✓

Cable TV ✓

Traffic link to Artemis _____

Other _____

Lockers ✓

File Cabinets ✓

GPS Monitor Possible

ADMINISTRATION

Emergency Operations Center (EOC)

Will an EOC be provided? Yes

If so, can the EOC be combined with another space (i e training room or conference room)?

Yes

Training Room

Is a training room required in this station? Yes

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What training will occur at this station?
Computer based distance learning, hands on defensive tactics and firearms training. We would like to have enough space to be able to host training seminars.

Is there a full-time training officer assigned to this station? No

Does the training officer require support staff? NO

Receptionist ____

Assistant ____

Other ____

Where will training reference materials be kept?

Training officer's office ____

Training room ✓

Other ____

Will the training room be used for public meetings or seminars? Yes

Is a separate public entrance required for the training room? Yes - preferably from Lobby.

Maximum number of people to be seated theater style (chairs only) 60

Maximum number of people to be seated classroom style (tables & chairs) 30

What material needs to be stored adjacent to the training room?

Training material ✓

Tables & chairs ✓

Audio/visual equipment ✓

Training props ____

What equipment is required for the training room?

Projection screen ✓

Marker board ✓

Cable TV ✓

Other ____

OFFICE AREA

Who needs private offices?		Quantity of offices
Chief	1	
Assistant Chief(s)	1	
Public Ed		
Captain(s)		
Detective(s) Lt.	1	
Others		
Shift Commander		1

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Who can be located in a small group office? List number of individuals in each office and whether they need individual workstations or can they share workstations with opposite shift employees?

	Name	Individual Workstation	OR	Shared Workstation (with whom)
1	Detail Officer	✓		
	Clerk and Parking Clerk	✓ ✓		
	School Resource Officer	✓		
2	Court Prosecutor	✓		
	Hearings Officer	✓		
3	Chief's Secretary	✓		
	Civilian Admin	✓		
4	Detectives (5)	✓		
	Juvenile officer	✓		
5	Supervisors (9)			✓ share amongst street supervisors

What staff can be located in an open office area? Indicate whether they need individual workstations or can they share workstations with opposite shift employees?

Name	Individual Workstation	OR	Shared Workstation (with whom)
Desk officers			✓

Indicate whether the following administrative functions require dedicated or shared space within other spaces.

Dedicated		Located in which other office or space
	File storage ✓	All
✓ (separate room)	Copy / Fax / Supplies ✓	Chiefs Secretary
	Work Area ✓	Detective - finger print + Computer lab, and firearms
	General Storage ✓	All
	Library ✓	Chief + Shift Commander

Is a conference room required (separate from a training room)? Yes - near Chiefs office

How many people shall conference room hold? 8-10

Will the public have access to the conference room? No

Is access required after 5:00 pm? Yes

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PRIVATE AREA

Patrol Room

Do you need individual work areas in the Patrol Room? _____

If yes, How many? _____

Do you need a separate Briefing Room (other than the training room) at the Patrol Area? Yes, Roll Call room.

If yes, how many people should it accommodate? At least 15

How do officers transfer gear (briefcases, duffels, etc)? Duty bags / briefcase.

Size? _____

Report Room

How many people should the Report Room accommodate? Up to six at any time.

Do you require storage in the Report Room? What type? Yes, law books, print supplies

Armory and Supplies

Describe the type and quantity of armory storage anticipated Long guns - up to 20, Firearms - up to 25, cleaning Kits, Up to 12 wood-target frames, up to 10 knockdown targets, One year supply of ammunition, records storage, misc range supplies.

Will weapons maintenance be performed in the armory? Yes

Exercise Room

How many people are anticipated to workout at the same time? ?

What equipment will be provided?

(Provide list of equipment and dimensions to the Architect)

Locker Room

Is a locker room required? Yes

What size lockers are required? Double width, 30" w/ a power strip in each locker.

Are separate men's and women's locker areas required? Yes

If yes, approximate quantity of each Male - 65
female - 15

Break Room

Is a lunchroom / break room to be provided? Yes

How many people need to be accommodated? Up to 10 at one time

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OTHER ISSUES AND CONCERNS:

Need heated shelter for up to six motorcycles, one electric car, 2- speed radar and one trailer for traffic control devices.

Need a server room with A/C for 5 network related servers, phone server, radio console equipment and E-911 equipment.

An indoor firearms range for live fire training along with computer equipment for shoot/dont shoot scenarios and night time simulation is needed.

Our booking area needs a separate area for live-scan fingerprint processing.

A garage is needed for processing vehicles for evidence, washing vehicle exterior and cleaning interior of vehicles. Garage storage space is needed for traffic related equipment (cones/signage), vehicle supplies and building/grounds maintenance equipment.

WILLIAM G KEEGAN JR
TOWN ADMINISTRATOR

NANCY A BAKER
ASST TOWN ADMINISTRATOR

TOWN OF DEDHAM

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FACSIMILE COVER SHEET

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Dore

OPERATOR