



STATE OF NEW YORK  
OFFICE OF GENERAL SERVICES  
DESIGN AND CONSTRUCTION GROUP  
THE GOVERNOR NELSON A. ROCKEFELLER  
EMPIRE STATE PLAZA  
ALBANY, NY 12242



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**ADDENDUM NO. 2 TO PROJECT NO. M2981**

**PROVIDE NEW DOMESTIC WATER SERVICES  
KINGSTON STATE ARMORY  
25 KIERSTED AVENUE  
KINGSTON, NY**

September 4, 2012

**NOTE:** This Addendum forms a part of the Contract Documents. Insert it in the Project Manual.  
Acknowledge receipt of this Addendum in the space provided on the Bid Form.

**SPECIFICATIONS**

1. 331102 PLASTIC WATER PIPE & FITTINGS: Page 331102 – 1, Article 2.02, erroneously lists SDR 11 piping. Delete “SDR 11” from the pressure rating chart. All plastic water service piping shall be SDR 9 and conform to CTS diameters.
2. 083500 ACCESS DOORS: Add the accompanying section to the project manual. This specification forms part of the Contract Documents.
3. 330516 PRECAST CONCRETE VAULT: Add the accompanying section to the project manual. This specification forms part of the Contract Documents.

**DRAWINGS**

4. Revised Drawings:
  - a. Drawings Nos. G-001, G-002, C-101, C-102, C-501, C-502, each noted “Revised Drawing (ADD. #1)” accompany this Addendum and supersede the originally issued drawings.
5. Addendum Drawing:
  - a. Drawing No. C-503 accompanies this Addendum and forms part of the Contract Documents.

**END OF ADDENDUM**

James Dirolf, P.E.  
Director of Design

## **SECTION 083500**

### **ACCESS DOORS**

#### **PART 1 GENERAL**

##### **1.01 RELATED WORK SPECIFIED ELSEWHERE**

- A. Precast Concrete Vault: Section 330516.

##### **1.02 SUBMITTALS**

- A. Shop Drawings: Show details of each hatch type, elevation and construction for each door type, loading data, conditions at openings, location and installation requirements for finish hardware.
- B. Product Data: Manufacturer's catalog sheets, specifications, and installation instructions.

##### **1.03 COORDINATION**

- A. Coordinate door sizes with concrete openings shown on the drawings.
- B. Locate frame drains with proper pitch to provide proper drainage.
- C. Verify that all mounting surfaces are straight, plumb and secure, as applicable

##### **1.04 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver doors and frames in heavy paper cartons or other protective packaging.

##### **1.05 WARRANTY**

- A. Provide 25-year manufacturer's warranty.

#### **PART 2 PRODUCTS**

##### **2.01 ACCESS DOORS & ACCESORIES**

- A. Double leaf access doors shall be BILCO COMPANY of New Haven, CT, "JD" double leaf, channel frame, aluminum with automatic hold-open and operating arms, Model JD-AL or approved equal. Sizes shall be as shown on the drawings.
- B. Door leaves shall be ¼ inch aluminum diamond pattern plate, reinforced to support a minimum live load of 300 psf with a maximum deflection of 1/150<sup>th</sup> of

the span. Manufacturer to provide structural calculations stamped by a registered professional engineer, upon request.

- C. Channel frame shall be ¼ inch extruded aluminum with bend down anchor tabs around the perimeter. A continuous EPDM gasket shall be mechanically attached to the aluminum frame to create a barrier around the entire perimeter of the cover and significantly reduce the amount of dirt and debris that may enter the channel frame.
- D. A frame drain shall be provided with a 1-1/2" drain coupling. Drain to be piped through side of curb to discharge on slab or through side of top slab to discharge on grass.
- E. Hardware: Corrosion-resistant throughout.
  - 1. Hinges: Heavy forged aluminum hinges designed for horizontal installation, each having a minimum 1/4" (6.3 mm) diameter Type 316 stainless steel pin, shall be provided and shall pivot so the cover does not protrude into the channel frame.
  - 2. Cover shall be equipped with a hold open arm which automatically locks the cover in the open position.
  - 3. Cover shall be fitted with the required number and size of compression spring operators enclosed in telescopic tubes to provide, smooth, easy, and controlled cover operation throughout the entire arc of opening and to act as a check in retarding downward motion of the cover when closing. The upper tube shall be the outer tube to prevent accumulation of moisture, grit, and debris inside the lower tube assembly. The lower tube shall interlock with a flanged support shoe fastened to a formed 1/4" gusset support plate. Springs shall have an electro coated acrylic finish. Spring tubes shall be constructed of a reinforced nylon 6/6 based engineered composite material.
  - 4. Type 316 stainless steel snap lock with fixed handle shall be mounted on the underside of the cover.
  - 5. A removable exterior turn/lift handle with a spring loaded ball detent shall be provided to open the cover and the latch release shall be protected by a flush, gasketed, removable screw plug.
  - 6. Safety chain supplied by the door manufacturer and shall be heavy-duty stainless steel with safety hook.

## 2.02 - FABRICATION

- A. Doors shall be prefabricated and ready for installation. They shall be mill finished with a bituminous coating applied to exterior of the frames.

### **PART 3 EXECUTION**

#### **3.01 INSTALLATION**

- A. Install doors at the locations indicated on the drawings and according to the manufacturer's instructions. Set square and parallel to building walls.
- B. Install hatch in accordance with OSHA regulations.

**END OF SECTION**

## SECTION 330516

### PRECAST CONCRETE VAULT

#### PART 1 - GENERAL

##### 1.01 - RELATED SECTIONS

- A. Section 083500 – Access Doors

##### 1.02 - REFERENCES

- A. ASTM A185 - Steel Welded Wire, Fabric, Plain, for Concrete Reinforcement.
- B. ASTM A615 - Deformed and Plain Billet - Steel Bars for Concrete Reinforcement.

##### 1.03 - SUBMITTALS

- A. Shop Drawings: Indicate dimensions and details for vault, including top slab, and acknowledging locations of pipe penetrations.
  - 1. Submit fully dimensioned fabrication and erection drawings. Drawings shall show all markings, details of shape, connections, plates, inserts, clearances, openings and other requirements detailed on the plans. Requirements and details for handling and erection shall also be shown.
  - 2. Fabrication shall not be started until shop drawings have been approved. Where drawings are “Make Corrections Noted” fabrication may be progressed in conformity with the notes thereon, but revised copies shall be submitted for formal approval and record.

##### 1.04– QUALITY ASSURANCE

- A. Qualifications of Precast Structural Concrete Manufacturer: All Work included herein shall be manufactured by and installed under the supervision of a competent and reputable manufacturer who shall produce a Precast Structural Concrete Product similar and equal to the Standard product, with modifications as shown or herein specified.
- B. Design:
  - 1. Design procedure, requirements and allowable stresses shall conform to “A.C.I. Standard Building Code Requirements for Reinforced Concrete (A.C.I. 318)” as currently revised.
  - 2. Deviations from details shown on the drawing or herein specified, when such items are of a minor nature, may be waived by the Owner in order to accept the approved manufacturer’s standard product, such deviations

are anticipated in connections and items of similar nature. Any additional cost due to such deviations accepted by the Owner shall be borne solely by the Contractor.

3. Exceptions to the aforementioned design criteria are the following items: Concrete plank, hollow-core slab, channel slabs, assembled block units and precast joists. Design of these units shall conform to the "Design Recommendations for Precast Concrete Structures (ACI 550R-96)" as currently revised.

C. Concrete Test:

1. Except for precast items designed and controlled by ACI 550R-96, standard concrete tests shall be made with the fabricator's equipment under the supervision of the inspecting laboratory or Engineer. A minimum of one test for slump, one air content determination test, and two compression test cylinders shall be taken from the first pour of concrete on each day that concrete is placed. Also one slump test and one air content determination shall be taken from the first pour of concrete after the lunch period. Additional compression test cylinders shall be taken, and additional tests made for slump and air content at the discretion of the Owner's Representative. Each cylinder shall be so marked that it can be identified with the precast item made from the same concrete batch.

### **1.05 - DELIVERY, STORAGE AND HANDLING**

- A. Store products on firm, level ground.
- B. Handle products in a manner, which will not induce unnecessary stresses, cause cracks to occur or damage the product in any way.
- C. Any cracked or otherwise defective materials will be rejected.
- D. Precast items shall be handled, lifted and/or supported at points shown on the approved shop drawings or at supporting points at which the Work will set when in service. Such supporting points shall insure against any detrimental deflection, overstressing and cracking or chipping of concrete.

### **1.06 - ENVIRONMENTAL REQUIREMENTS**

- A. Do not mix or place mortar if ambient temperature is below 40 degrees F.
- B. Do not excavate or backfill during inclement weather or when precipitation is occurring.
- C. Do not backfill over or with wet or frozen materials.

### **1.07 - COORDINATION**

- A. Coordinate with excavation, backfilling and installation of piping.

## **PART 2 - PRODUCTS**

### **2.01 - COMPONENTS**

- A. Vault: Reinforced precast concrete of the following materials:
  - 1. Concrete: ASTM C150 normal Portland cement Type I; minimum 4,000 psi (27.6 MPa) strength at 28 days. Water and air entraining admixture is to be ASTM C 260 compliant.
  - 2. Reinforcement: ASTM A615 reinforcing bars and ASTM A185 welded wire fabric.
  - 3. Access Hatch: Bilco brand or equal. Integrally cast into top slab of vault. See Specification Section 083500.

### **2.02 - FABRICATION**

- A. All precast concrete items shall be shop fabricated in accordance with these Specifications and with the drawings. Work shall not proceed until approval of the proposed fabricator has been given by the Engineer.
- B. Forms for precast items shall be of rigid construction, true in required shape and provide close control of dimensions and details shown on approved shop drawings. They shall be thoroughly cleaned and prepared before each casting. Forms shall be constructed with tight joints and smooth surfaces and in a manner that will permit removal without defacing the cast concrete.
- C. All reinforcing shall be free from loose and flaky rust, oil, grease and other coatings. Reinforcing shall be accurately positioned and securely held in place by devices that will not be exposed on or mar exposed surfaces.
- D. All plates, inserts, etc., shall be galvanized. They shall be provided, located and anchored as required by the Contract and approved shop drawings.
- E. Concrete shall be compacted and vibrated as required to insure contact with all of the reinforcement and to flow the concrete in place completely filling all corners and angles of the forms.
- F. After removal from the forms precast items shall be moist cured and protected from premature drying.
- G. Pipe Entry: Provide openings as required.

### **PART 3 - EXECUTION**

#### **3.01 - EXAMINATION**

- A. Verify existing site conditions.
- B. Verify existing grades are as indicated on the plans.
- C. Verify items provided by other sections of work are properly sized and located.
- D. Verify that rough openings for piping are as required.

#### **3.02 - INSTALLATION**

- A. Form bottom of excavation clean and smooth to correct elevation. Compact bottom of the excavation to a minimum of 95 percent of maximum dry density.
- B. Install crushed stone as leveling course.
- C. Place bottom footing on firm, level surface.
- D. Place vault in center of compacted area. Utilize a placement method which will not damage or crack the structure.
- E. Place sections plumb and level, trim to the correct elevations.
- F. Cut and fit for pipe. Seal openings in wall around pipe with brick and mortar. Establish elevations and pipe inverts for inlets and outlets as indicated on the plans. Trowel surfaces smooth.
- G. Mount casting in a 1 inch (25 mm) mortar bed over access opening in slab or dome top. Install firm, level and to the required elevation.

#### **3.03 - FIELD QUALITY CONTROL**

- A. Request inspection prior to backfilling around structure and prior to surface restoration.

#### **3.04 - PROTECTION**

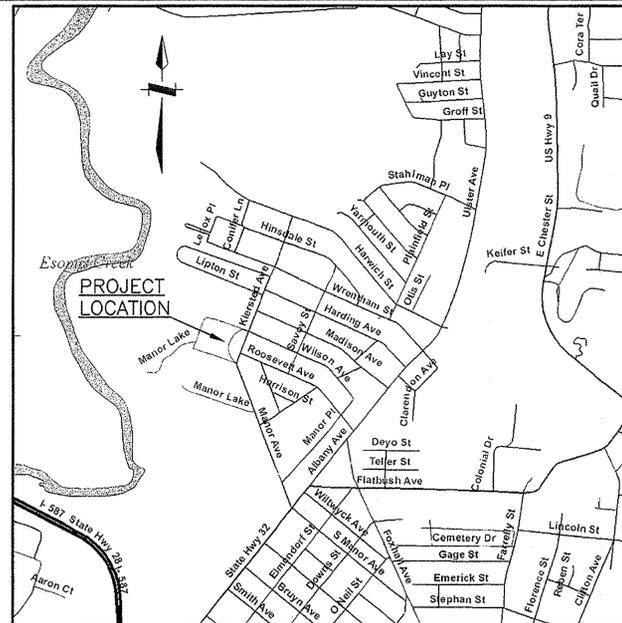
- A. Protect structure from damage and displacement until project is accepted by the Owner.

**END OF SECTION**

# PROVIDE NEW DOMESTIC WATER SERVICES

## KINGSTON STATE ARMORY 25 KIERSTED AVENUE KINGSTON, NEW YORK

O.G.S. PROJECT NO. M2981-C  
BID DOCUMENTS

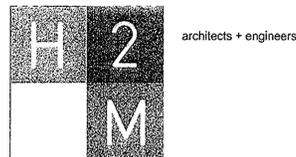


**KEY PLAN**

### INDEX OF DRAWINGS

#### CONSTRUCTION

G-001	TITLE SHEET
G-002	GENERAL NOTES
C-101	WATER SERVICE PLAN
C-102	WATER SERVICE PLAN
C-501	PIPING DETAILS
C-502	RPZ DETAILS
C-503	RESTORATION DETAILS



ANDREW M. CUOMO  
Governor

ROANN M. DESTITO  
Commissioner

JAMES M. DAVIES, A.I.A.  
Deputy Commissioner  
Design and Construction

G-001

8-29-2012 REVISED DRAWING  
(ADD # 2)

**GENERAL NOTES**

**1. NOTIFICATION AND MISCELLANEOUS**

- (a) Notify the New York State Office of General Services (NYS OGS) Director's representative, Army Superintendent and the City of Kingston's Water Department prior to starting work, connecting to existing water main, chlorinating and flushing of newly installed water main.
- (b) The Contractor must provide advance notice of excavation to each operator of underground facilities listed in the Central Registry of the City of Kingston per Industrial Code 753 (cited as 12 NYCRR 753).
- (c) The Contractor shall coordinate all shutdowns of existing mains with NYS OGS and the facility manager. Notify all consumers of shutdowns at least twenty-four (24) hours in advance of, and immediately prior to, shutdown.
- (d) Location and sizes of all existing water mains and valves shown on the drawings were determined from old records or field inspections. The actual sizes, locations and types shall be verified by the Contractor in the field.
- (e) Locations of all underground utilities, gas mains, electric and telephone conduits, and storm drains were obtained from old maps, surveys, drawings or records supplied by others or field inspections performed by utility companies and others. The NYS OGS and the Consulting Engineers do NOT guarantee or accept responsibility for any damage to such facilities due to discrepancies in location and size shown on the Plans, nor will any compensation be made to the Contractor for any inconvenience caused him by encountering the aforementioned utilities which are not shown, or incorrectly shown, on the plans.
- (f) The Contractor shall perform daily clean-up operations which include sweeping of roadways, sidewalks, etc., removal of debris and excess construction material, all to the satisfaction of the NYS OGS construction representative and the proper road authority.
- (g) The Contractor shall conform to the standard traffic requirements of the New York State Manual of Uniform Traffic Control Devices for work in Public Roadways.
- (h) Miscellaneous work including protection of existing curbing; hand-digging around and brazing of poles and signs; removing and replacing mailboxes, signs, etc.; protection of underground utilities; crossing under, over or adjacent to underground utilities, surface or subsurface structures; sheeting required due to location of water main and close proximity of existing utilities, curbs, etc.; protection of pedestrian and vehicular traffic, etc.,
- (i) Drawings do not include necessary components for construction safety. The Contractor should have his insurance company safety engineer visit the job site periodically.

**2. SITE PROTECTION AND MISCELLANEOUS WORK**

The Contractor shall perform, but not be limited to, the following miscellaneous work to install the water main at the proper location:

- (a) The Contractor shall place a sufficiency of yellow, type C, steady burn lights on or near any work accessible to the public, and keep them burning sunset to sunrise; it shall erect suitable railings or barriers on the work as required and deemed necessary for the safety of the work.
- Under no conditions are flares and mechanical equipment to be left on or operating overnight. ALL EXCAVATIONS ARE TO BE BACKFILLED BEFORE CLOSE OF DAYS WORK. The entire work area is to be left in a safe condition.
- The proposed project is in the vicinity of a developed area and it is the Contractor's responsibility to ensure that sufficient safety precautions are taken during the completion of this contract. Consequently, the Contractor will be responsible for any safety related problems that may occur.
- The NYS OGS reserves the right (after 24 hours notice in writing) to remedy any neglect on the part of the Contractor regarding the protection of the work which may come to its attention, except that in cases of emergency, it shall have the right to remedy any neglect without notice; and in either case to deduct the cost of such remedy from money due the Contractor.
- (b) Tunneling under or around existing drains, utilities, manholes or other irremovable structures.
- (c) Hand digging around and bracing any poles, signs or other existing surface or subsurface structures.
- (d) Tunneling under and protection of concrete curbs.
- (e) Any sheeting required due to the location of the water main and proximity of existing utilities, curbs, sidewalks, driveway aprons, etc.
- (f) Providing protection of underground utilities such as drains, electrical cables, gas mains, conduits, sewer and sewer laterals, etc., including additional costs to cross under, over or adjacent to these underground utilities.

**3. PIPE**

Type K, soft temper copper tubing shall be installed where indicated on the contract plans. All underground piping after the RPZ vault shall be HDPE cold water service tubing manufactured from PE4710 high density polyethylene resin. Tubing shall be SDR-9 and conform to CTS diameters. All HDPE piping shall be installed in accordance with AWWA C901.

**4. COVER**

Pipe shall be installed to provide a minimum 4'-0" cover to finished grade.

**5. TESTING**

All testing and sampling shall be done in strict accordance with the specifications requirements.

Following installation, the water services shall be flushed and left to stand for a minimum of 24 hours prior to the collection of samples. For this project two (2) sets of a minimum of two (2) bacteria samples are required, and shall be taken at locations determined by the owner's representative.

**6. FITTINGS**

All water service fittings shall be cast bronze in accordance with ANSI/ASME B62. All connections of water service tubing shall be made using bronze fittings. All connections prior to the meter must be made with flare-type fittings. Compression gasket fittings may be used after the meters.

**7. WATER MAIN SHUTDOWNS**

The Water Main Contractor shall not operate any existing valves or hydrants. The Army Superintendent, NYS OGS Representative, and City of Kingston Water Department shall be notified 24 hours prior to the commencement of water main related work and 72 hours prior to requiring a shutdown on existing mains or building service lines.

**8. APPROVAL**

All work in conjunction with the water services, appurtenances and restoration shall be performed in accordance with the Standard Specifications of the NYS OGS, the City of Kingston Water Department, to the approval of the Engineer and in accordance with the New York State Sanitary Code.

**9. DRAINAGE & SEWER CROSSINGS**

Water services crossing drainage and sanitary piping shall be laid (18-inch minimum vertically) under the pipe unless specifically indicated to cross over on the Plans.

Invert information for drainage and sanitary piping shall be verified in the field via test holes, prior to installing the new services. No separate payment, other than items provided in the contract, shall be made to the contractor to install the new services above, below or around the existing drainage facilities. Proper clearances and cover must be maintained.

**10. RESTORATION OF WORK AREA**

All areas disturbed during construction shall be permanently restored at the completion of the project, including but not limited to asphalt and concrete roadways/driveways, sidewalks, and grass/landscape areas.

**11. WORKING HOURS**

Working hours shall be Monday through Friday, 7:00 a.m. - 3:00 p.m. unless otherwise noted or as determined by the Army Superintendent.

**12. INCOMPLETE UTILITY INFORMATION**

The contractor shall test hole and locate top and bottom of all marked and known buried utility facilities prior to doing any excavation. No additional payment will be made for delays associated with hitting of marked or mis-marked utilities due to lack of digging the proper size, quantity and depth of test holes.

**13. TRENCH COMPACTION**

Trench compaction on all water service trenches shall be by the mechanical tamping method. Jetting of trenches will not be permitted.

**14. UTILITY NOTES**

The utilities as shown on the contract plans were obtained from records provided by NYS OGS. The contractor shall be responsible for obtaining a utility mark-out prior to the commencement of the water main installation.

**15. WATER SERVICES**

The tapping of water mains and the furnishing of the saddle, corporation stop, curb stop & box shall be performed by the Kingston Water Department.

The contractor shall install type 'K' copper tubing from the water main through the RPZ. The contractor is responsible for the furnishing and installation of the meter pit, meter setter, piping, and associated fittings. The water meter will be supplied and installed by the Kingston Water Department. The contractor shall transition to HDPE water service tubing after the RPZ vault as indicated on the contract plans.

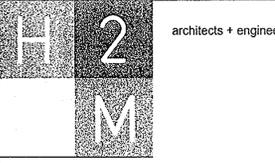
**LEGEND**

---	EXISTING PROPOSED CONCRETE CURB	○	EXISTING GAS VALVE	---	EXISTING WATER MAIN
---	EXISTING CONCRETE CURB TO BE REMOVED	⊗	EXISTING UTILITY POLE	---	ABANDONED WATER MAIN
---	EXISTING DROP CURB	⊗	EXISTING SANITARY SEWER MANHOLE	---	EXISTING WATER SERVICE
---	EXISTING PROPOSED BELGIUM BLOCK CURB	⊗	PROPOSED SANITARY SEWER MANHOLE	⊗	EXISTING WATER VALVE
---	EXISTING PROPOSED CONCRETE CURB W/ GUTTER	⊗	EXISTING BLOW-OFF PIT	⊗	EXISTING HYDRANT ASSEMBLY
---	EXISTING EDGE OF ASPHALT PAVEMENT	⊗	EXISTING LEACHING POOL	⊗	EXISTING TEE
---	EXISTING BURIED CONCRETE BASE	⊗	PROPOSED LEACHING POOL	⊗	EXISTING CROSS
---	EXISTING PROPOSED CONCRETE SIDEWALK	⊗	EXISTING CATCH BASIN	⊗	EXISTING REDUCER
---	EXISTING DRAINAGE PIPE	⊗	PROPOSED CATCH BASIN	⊗	EXISTING PLUG
---	PROPOSED DRAINAGE PIPE	⊗	EXISTING SIGN	⊗	EXISTING PLUG & BLOW-OFF
---	EXISTING FENCE	⊗	EXISTING DRAINAGE MANHOLE	⊗	EXISTING BENDS (ANGLES VARY)
---	EXISTING CONTOUR	⊗	PROPOSED DRAINAGE MANHOLE	⊗	EXISTING SLEEVE
---	EXISTING UNDERGROUND TELEPHONE LINE	⊗	EXISTING TELEPHONE MANHOLE	⊗	EXISTING CURB STOP
---	EXISTING UNDERGROUND FIBER OPTIC TELEPHONE LINE	⊗	EXISTING ELECTRIC MANHOLE	⊗	EXISTING WATER METER
---	EXISTING SEWER MAIN	⊗	EXISTING CLEANOUT	⊗	PROPOSED WATER MAIN W/ OFFSET BENDS
---	PROPOSED SEWER MAIN	⊗	EXISTING DRAINAGE INLET (CIRCULAR)	⊗	PROPOSED WATER SERVICE
---	EXISTING SEWER HOUSE CONNECTION LINE	⊗	EXISTING DRAINAGE INLET (RECTANGULAR)	⊗	PROPOSED WATER VALVE
---	PROPOSED SEWER HOUSE CONNECTION LINE	⊗	BOLLARD	⊗	PROPOSED HYDRANT ASSEMBLY
---	EXISTING GAS MAIN	⊗	FLAG POLE	⊗	PROPOSED TEE
---	EXISTING GAS SERVICE	⊗	PEDESTRIAN RAMP	⊗	PROPOSED CROSS
---	EXISTING UNDERGROUND ELECTRIC	⊗	TRAFFIC CONTROL BOX	⊗	PROPOSED REDUCER
---	EXISTING UNDERGROUND ELECTRIC SERVICE	⊗	TRAFFIC CONTROL POLE OR TRAFFIC LIGHT SUPPORT POLE	⊗	PROPOSED CAP
---	EXISTING FORCE MAIN	⊗	CABLE BOX	⊗	PROPOSED PLUG
---	EXISTING UNDERGROUND CABLE TELEVISION	⊗	LARGE ROCK OR BOULDER	⊗	PROPOSED PLUG & BLOW-OFF
---	EXISTING UNDERGROUND TRAFFIC SIGNAL CABLE OR TRAFFIC SENSING LINE	⊗	SMALL ROCK OR BOULDER	⊗	PROPOSED BENDS (ANGLES VARY)
---	PROPOSED MAP LINE	⊗	ELECTRIC BOX	⊗	PROPOSED SLEEVE
---	EXISTING PROPERTY LINE	⊗	GUIDE POLE	⊗	PROPOSED CURB STOP
---	PROPOSED PROPERTY LINE	⊗	GROUND LIGHT	⊗	PROPOSED WATER METER
---	PROPOSED RIGHT-OF-WAY LINE	⊗	SPRINKLER HEAD	⊗	PROPOSED CONCRETE BLOCKING
---	EXISTING RIGHT-OF-WAY LINE	⊗	BUSH	⊗	
---	EXISTING PROPOSED EASEMENT LINE	⊗	FIRE ALARM BOX	⊗	
---	EXISTING PROPOSED ROOF DRAIN LINE	⊗	MAIL BOX	⊗	
---	EXISTING PROPOSED RETAINING WALL	⊗	MONUMENT	⊗	
---	EXISTING DIRT TRAIL OR DIRT ROAD	⊗	STAKE	⊗	
---	EXISTING EDGE OF WOODS	⊗	NAIL	⊗	
---	TOP OF CURB ELEVATION	⊗	HANDICAP SYMBOL	⊗	
---	BOTTOM OF CURB ELEVATION	⊗	DECIDUOUS TREE	⊗	
---	SPOT ELEVATION	⊗	EVERGREEN TREE	⊗	
---	INVERT ELEVATION & RIM ELEVATION OF MANHOLE	⊗	WOODED AREA	⊗	
---		⊗	SHRUB	⊗	
---		⊗	LIGHT POLE	⊗	
---		⊗	HEDGE	⊗	



**Serving New York**  
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 ROANN M. DESTITO  
 Commissioner  
 JAMES M. DAVIES, A.I.A.  
 Deputy Commissioner, Design and Construction

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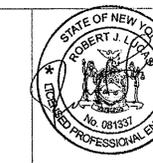
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**CONTRACT:**

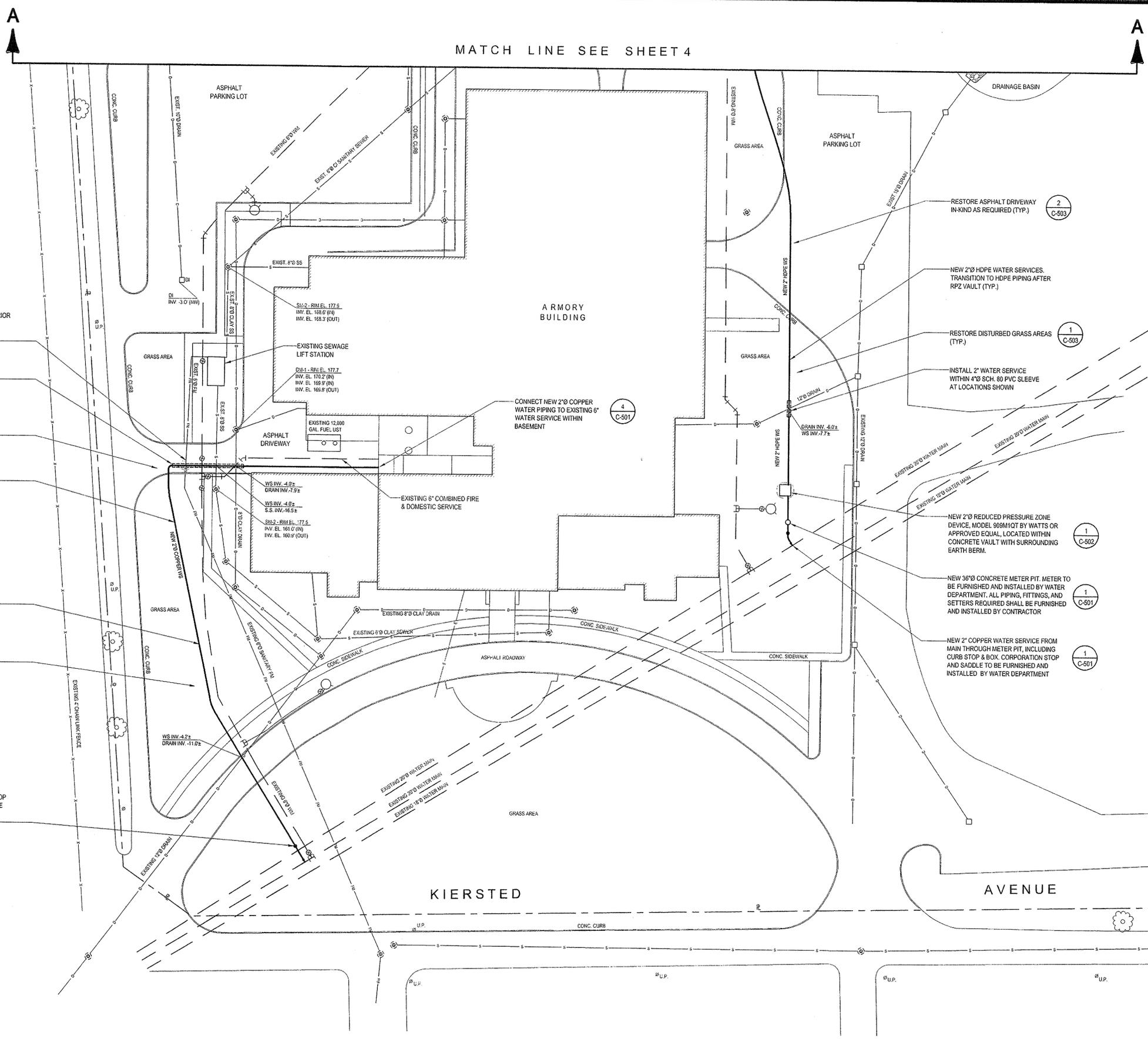
**C-CONSTRUCTION**

**TITLE:**  
 PROVIDE NEW DOMESTIC WATER SERVICES

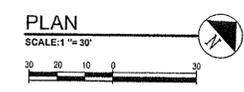
**LOCATION:**  
 KINGSTON STATE ARMOY  
 KINGSTON, NEW YORK

**CLIENT:**  
 DIVISION OF MILITARY AND NAVAL AFFAIRS

8-29-2012	REVISED DRAWING (ADD. #2)	
8-08-2012	BID DOCUMENTS	
MARK	DATE	DESCRIPTION
PROJECT NUMBER:	M2981-C	
DESIGNED BY:	R.J.L.	
DRAWN BY:	D.J.R.	
FIELD CHECK:		
APPROVED:		
SHEET TITLE:	GENERAL NOTES	
DRAWING NUMBER:	G-002	
SHEET	2 OF 7	



MATCH LINE SEE SHEET 4



VERIFY SEWER/FM INVERT IN FIELD PRIOR TO START VIA TEST HOLES. OFF-SET WATER SERVICE AS REQUIRED TO PROVIDE 18" VERTICAL SEPARATION

INSTALL 2" WATER SERVICE WITHIN 4'0" SCH. 80 PVC SLEEVE AT LOCATION SHOWN

RESTORE ASPHALT DRIVEWAY IN-KIND AS REQUIRED (TYP.)

MAINTAIN MIN 10' MIN. SEPARATION FROM SANITARY FACILITIES (TYP.)

NEW 2"0 TYPE 'K' COPPER PIPING

RESTORE DISTURBED GRASS AREAS (TYP.)

NEW 2" COPPER WATER SERVICE FROM MAIN TO BUILDING, INCLUDING CURB STOP & BOX, CORPORATION STOP AND SADDLE TO BE FURNISHED AND INSTALLED BY WATER DEPARTMENT

RESTORE ASPHALT DRIVEWAY IN-KIND AS REQUIRED (TYP.)

NEW 2"0 HDPE WATER SERVICES. TRANSITION TO HDPE PIPING AFTER RPZ VAULT (TYP.)

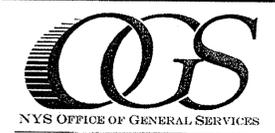
RESTORE DISTURBED GRASS AREAS (TYP.)

INSTALL 2" WATER SERVICE WITHIN 4'0" SCH. 80 PVC SLEEVE AT LOCATIONS SHOWN

NEW 2"0 REDUCED PRESSURE ZONE DEVICE, MODEL 909M1QT BY WATTS OR APPROVED EQUAL, LOCATED WITHIN CONCRETE VAULT WITH SURROUNDING EARTH BERM.

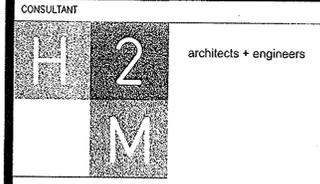
NEW 36"0 CONCRETE METER PIT. METER TO BE FURNISHED AND INSTALLED BY WATER DEPARTMENT. ALL PIPING, FITTINGS, AND SETTERS REQUIRED SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR

NEW 2" COPPER WATER SERVICE FROM MAIN THROUGH METER PIT, INCLUDING CURB STOP & BOX, CORPORATION STOP AND SADDLE TO BE FURNISHED AND INSTALLED BY WATER DEPARTMENT



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CONTRACT:	C-CONSTRUCTION
TITLE:	PROVIDE NEW DOMESTIC WATER SERVICES
LOCATION:	KINGSTON STATE ARMORY KINGSTON, NEW YORK
CLIENT:	DIVISION OF MILITARY AND NAVAL AFFAIRS

PROJECT NUMBER:	M2981-C
DESIGNED BY:	RUL
DRAWN BY:	DJR
FIELD CHECK:	
APPROVED:	
SHEET TITLE:	WATER SERVICE PLAN

DRAWING NUMBER:	C-101
SHEET	3 OF 7

Aug 31, 2012 - 11:17am K:\Region 1\Army\wator\wom\051\_C-101\_Rev.dwg

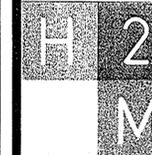


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CONSULTANT



architects + engineers

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F: (831) 694-4122

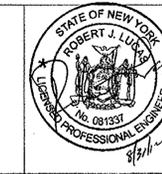
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F: (831) 950-0322

11 Computer Drive West  
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Albany, NY 12205  
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F: (518) 221-7558

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CONTRACT: C-CONSTRUCTION

TITLE: PROVIDE NEW DOMESTIC WATER SERVICES

LOCATION: KINGSTON STATE ARMY  
KINGSTON, NEW YORK

CLIENT: DIVISION OF MILITARY  
AND NAVAL AFFAIRS

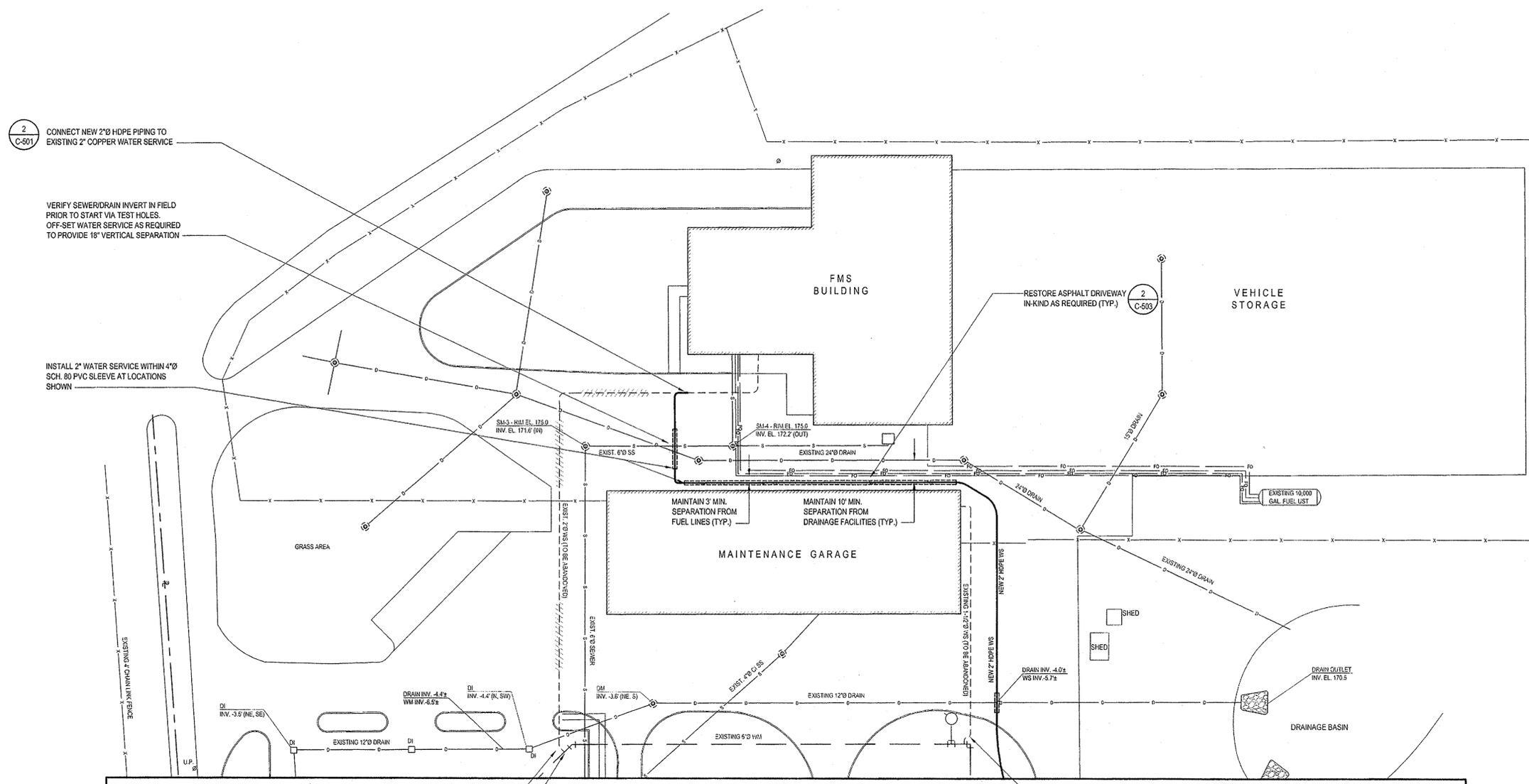
MARK	DATE	DESCRIPTION
	8-29-2012	REVISED DRAWING (ADD. #2)
	8-08-2012	BID DOCUMENTS

PROJECT NUMBER:	M2981-C
DESIGNED BY:	RJA
DRAWN BY:	DJR
FIELD CHECK:	
APPROVED:	
SHEET TITLE:	

WATER SERVICE PLAN

DRAWING NUMBER: C-102

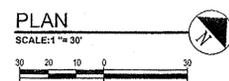
SHEET 4 OF 7



MATCH LINE SEE SHEET 3

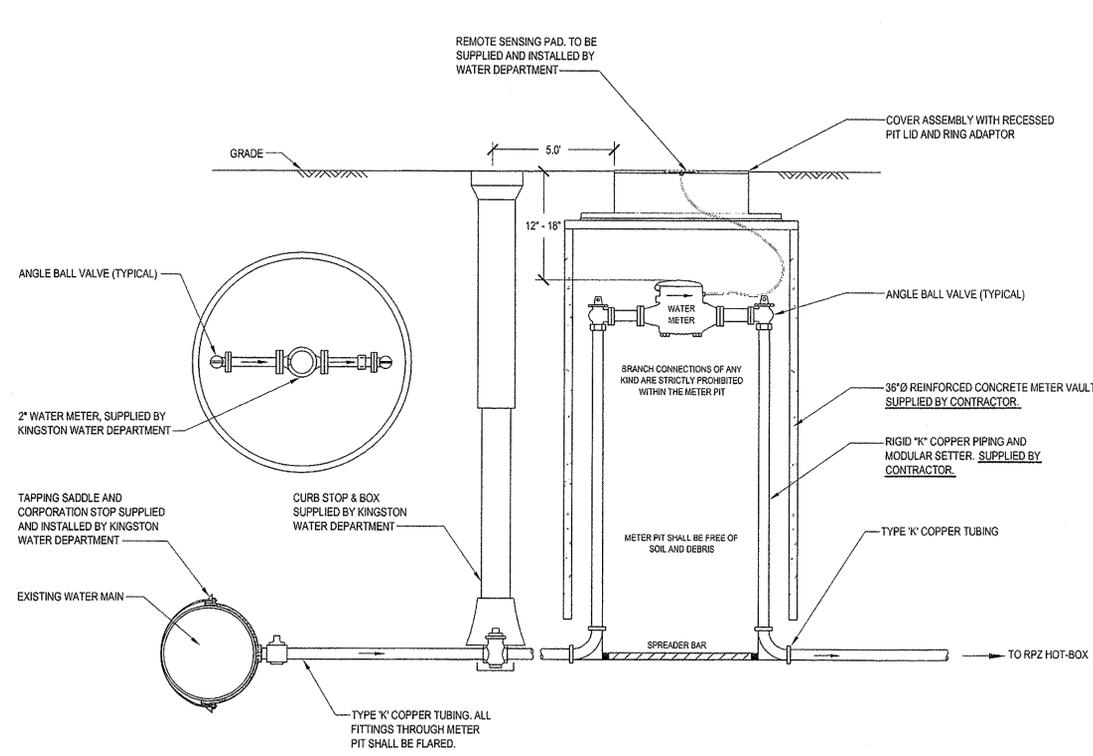
2 C-503 RESTORE ASPHALT DRIVEWAY IN-KIND AS REQUIRED (TYP.)  
ABANDON EXISTING 2" WATER SERVICE. TURN-OFF CORP. STOP. DISCONNECT AND CRIMP PIPING

ABANDON EXISTING 1-1/2" WATER SERVICE. TURN-OFF CORP. STOP. DISCONNECT AND CRIMP PIPING

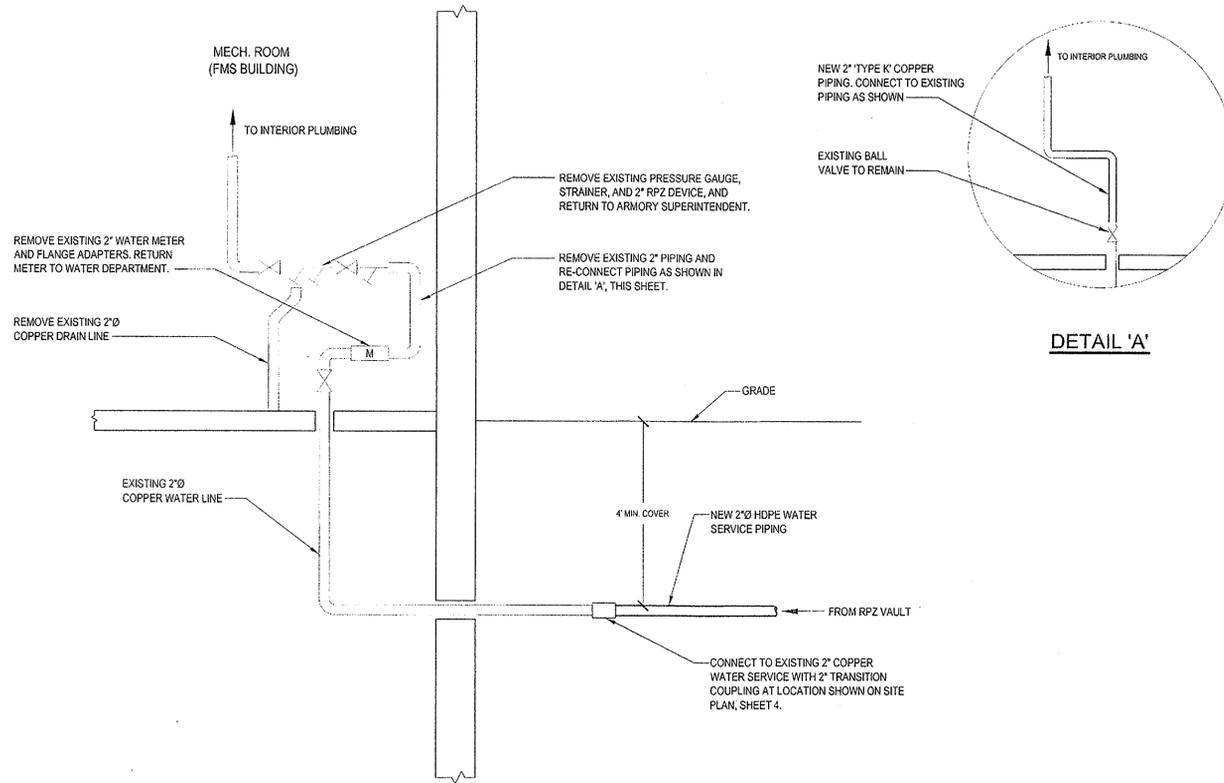


2024 11-01 04:27

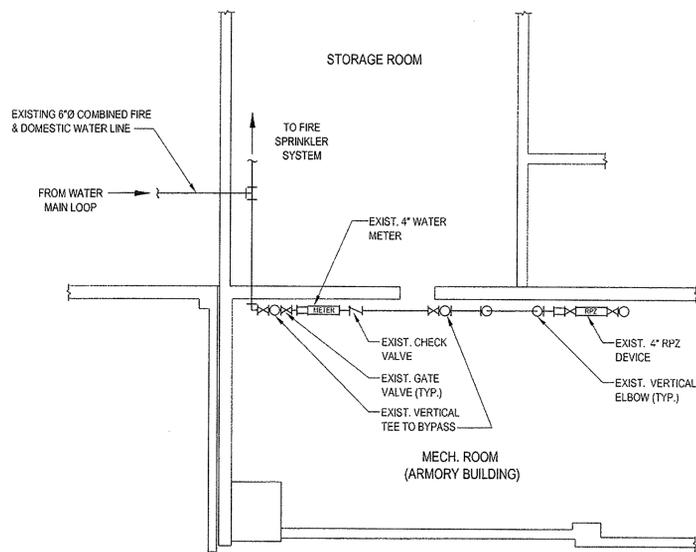
Aug 3, 2012 11:17am  
M:\pds\0501-110 - Kingsfor Army/Water Mar\03\_C-10\_Rev.dwg



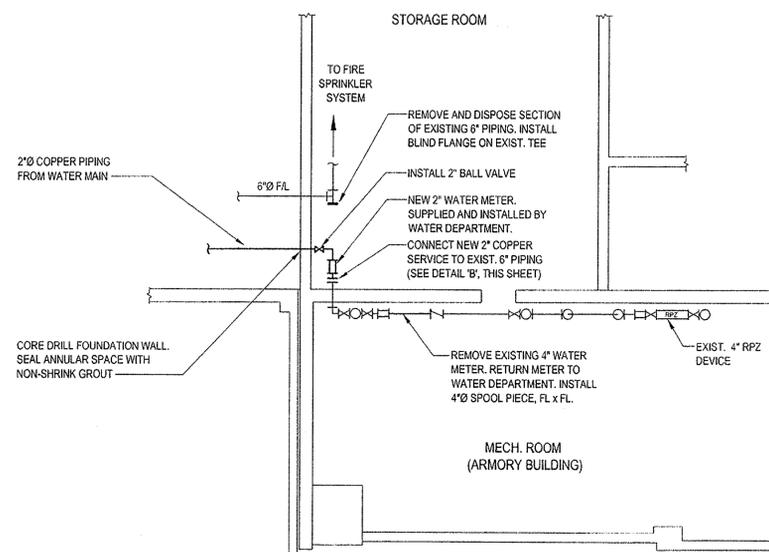
1 2-Inch Water Service & Meter Detail  
NO SCALE



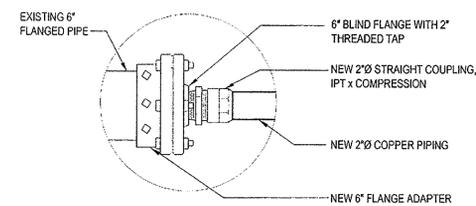
2 Water Service Connection Detail - FMS Bldg.  
NO SCALE



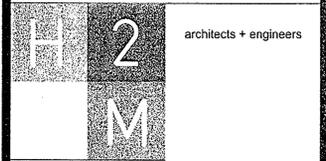
3 Existing Water Service Plan  
Armory Bldg. - Basement  
NO SCALE



4 New Water Service Plan  
Armory Bldg. - Basement  
NO SCALE



DETAIL 'B'



575 Broad Hollow Road  
Melville, NY 11747  
P: (631) 755-8000  
F: (631) 994-4122

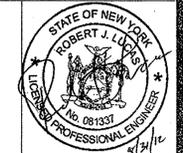
175 Pinetown Road  
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F: (631) 393-4322

11 Computer Drive West  
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Albany, NY 12205  
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119 Cherry Hill Road  
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F: (973) 334-6507

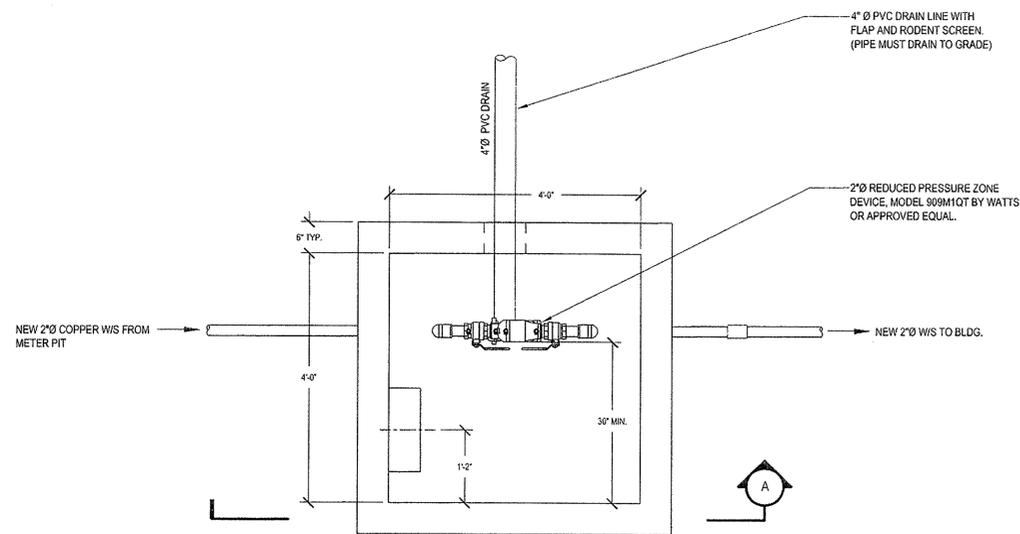
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CONTRACT:	C-CONSTRUCTION
TITLE:	PROVIDE NEW DOMESTIC WATER SERVICES
LOCATION:	KINGSTON STATE ARMORY KINGSTON, NEW YORK
CLIENT:	DIVISION OF MILITARY AND NAVAL AFFAIRS

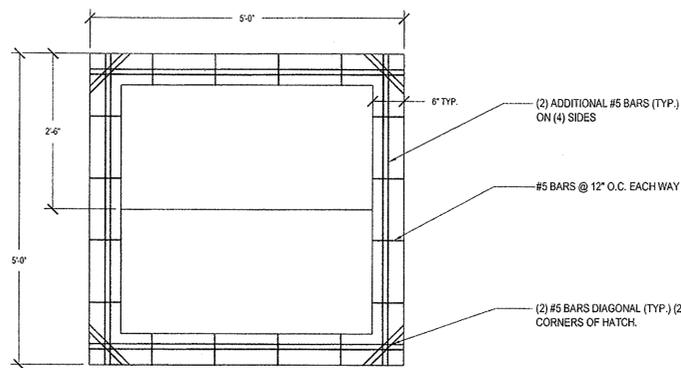
MARK	DATE	DESCRIPTION
	8-29-2012	REVISED DRAWING (ADD. #2)
	8-08-2012	BID DOCUMENTS
PROJECT NUMBER:	M2981-C	
DESIGNED BY:	R.J.L.	
DRAWN BY:	D.J.R.	
FIELD CHECK:		
APPROVED:		

SHEET TITLE:	PIPING DETAILS
DRAWING NUMBER:	C-501
SHEET	5 OF 7



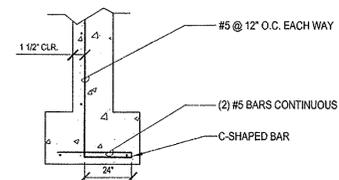
3  
C-502 REINFORCED CONCRETE VAULT  
MIN. 4,000 P.S.I.

1 RPZ Vault - Plan View  
SCALE: 3/4" = 1'-0"

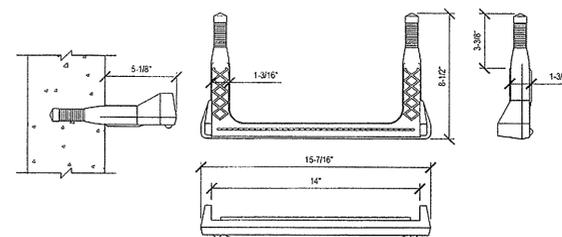


2 RPZ Vault Top Slab Detail  
NO SCALE

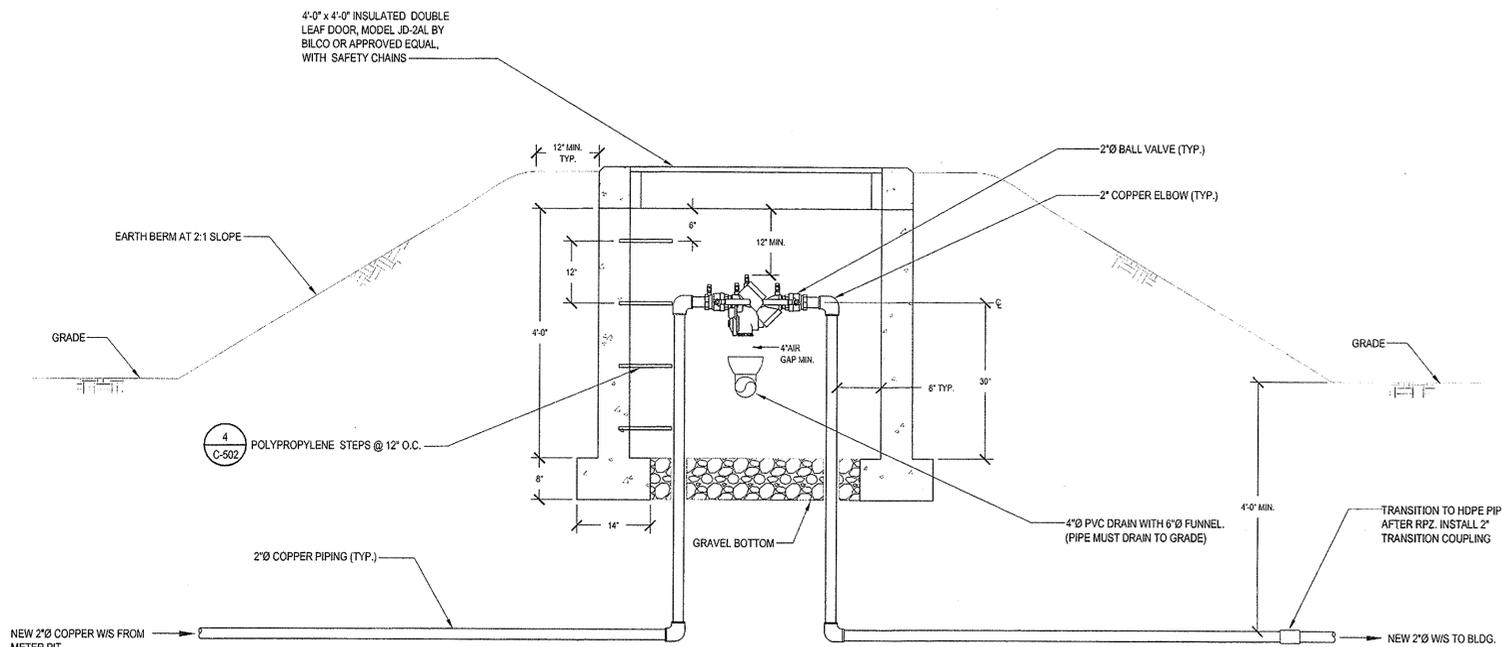
REINFORCING NOTE:  
ASTM, A-615 - GRADE 60. ALL LIFTING HOLES TO  
BE PROPERLY MORTARED FLUSH TO WALLS.



3 Wall Reinforcing  
NO SCALE



4 Typical Vault Step Detail  
NO SCALE



RPZ Vault - Section 'A'  
SCALE: 3/4" = 1'-0"

BACKFLOW PREVENTION DEVICE GENERAL NOTES:

1. ALL CONNECTIONS SHALL BE DOWNSTREAM OF THE REDUCED PRESSURE ZONE DEVICE. BYPASSING OF A BACKFLOW PREVENTION DEVICE IS A VIOLATION OF NEW YORK STATE HEALTH DEPARTMENT RULES AND REGULATIONS.
2. INSTALLATIONS SHALL BE IN ACCORDANCE WITH ALL APPLICABLE ULSTER COUNTY DEPARTMENT OF HEALTH SERVICES AND NEW YORK STATE HEALTH DEPARTMENT REGULATIONS. BACKFLOW PREVENTION DEVICES SHALL BE INDICATED ON NEW YORK STATE DEPARTMENT OF HEALTH ACCEPTABLE LIST.
3. A NEW YORK STATE HEALTH DEPARTMENT CERTIFIED BACKFLOW PREVENTION DEVICE TESTER SHALL TEST THE REDUCED PRESSURE ZONE DEVICE ON INSTALLATION AND AT LEAST ANNUALLY WITH RESULTS REPORTED TO THE ULSTER COUNTY DEPARTMENT OF HEALTH ON NEW YORK STATE FORM DOH 1013.
4. DRAINAGE SHALL BE POSITIVE AND VISIBLE.
5. THE PLUMBER SHALL BE LICENSED BY THE CITY OF KINGSTON.
6. SHUTOFF VALVES ON THE DOMESTIC RPZ DEVICE MUST BE BALL TYPE AND BE BY SAME MANUFACTURER AS BACKFLOW PREVENTION DEVICE.
7. TEST COCKS SHALL BE POSITIONED TO FACILITATE TESTING.
8. DEVICES MUST BE PROTECTED AGAINST FREEZING & FLOODING.
9. PROPER MAINTENANCE WILL BE PERFORMED BY OWNER.
10. THE CONTRACTOR SHALL NOTIFY THE WATER UTILITY AT LEAST 24 HOURS PRIOR TO STARTING ANY WORK.
11. TO MINIMIZE OVERALL BERM HEIGHT, THE VAULT SHALL BE DUG INTO THE GROUND TO THE PROPER DEPTH SO THE DRAIN LINE EXITS AT GRADE.

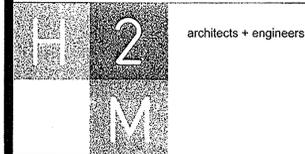


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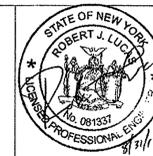
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FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE  
NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS  
AND IS A CLASS 'A' MISDEMEANOR.



CONTRACT: C-CONSTRUCTION

TITLE: PROVIDE NEW DOMESTIC WATER SERVICES

LOCATION: KINGSTON STATE ARMYORY  
KINGSTON, NEW YORK

CLIENT: DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
	8-29-2012	REVISED DRAWING (ADD. #2)
	8-08-2012	BID DOCUMENTS

PROJECT NUMBER: M2981-C

DESIGNED BY: RUL

DRAWN BY: DJR

FIELD CHECK:

APPROVED:

SHEET TITLE:

RPZ DETAILS

DRAWING NUMBER: C-502

SHEET 6 OF 7

Aug 31, 2017 11:10 AM V:\Acad\SC05\1100 - Kingston Armyory Water Meter - C-502.dwg

