Application for URBAN DESIGN COMMITTEE Review

Department of Planning and Development Review
Planning & Preservation Division
900 E. Broad Street, Room 510
Richmond, Virginia 23219
(804) 646-6335
http://www.richmondgov.com/CommitteeUrbanDesign

Application Type

- ☐ Addition/Alteration to Existing Structure
- ☑ New Construction
- ☐ Streetscape
- ☐ Site Amenity
- ☐ Encroachment
- ☐ Master Plan
- ☐ Sign
- ☐ Other

Review Type

- ☑ Conceptual
- ☐ Final

Project Name: Richmond DPW Commerce Road

Project Address: 1638, 1650, & 1700 Commerce Road Richmond, VA 23224

Brief Project Description (this is not a replacement for the required detailed narrative) : For this development, two new buildings are to be constructed. The first building will be approximately 11,300 S.F. and will serve as an office building for the street maintenance/street cleaning/solid waste operations. The second building will be approximately 12,100 S.F. and will serve as the garage building for the street maintenance/street cleaning operations.

Applicant Information

(on all applications other than encroachments, a City agency representative must be the applicant)

Name: Dexter Goode Email: louis.goode@richmondgov.com

City Agency: Special Capital Projects Phone: 804-646-7531

Address: 900 E. Broad Street, Room 602, Richmond, VA 23219

Main Contact (if different from Applicant): _____

Company: _____ Phone: _____

Email: _____

Submittal Deadlines

All applications and support materials must be filed no later than 21 days prior to the scheduled meeting of the Urban Design Committee (UDC). Please see the schedule on page 3 as actual deadlines are adjusted due to City holidays. **Late or incomplete submissions will be deferred to the next meeting.**

Filing

Applications can be mailed or delivered to the attention of "Urban Design Committee" at the address listed at the top of this page. **It is important that the applicant discuss the proposal with appropriate City agencies, Zoning Administration staff, and area civic associations and residents prior to filing the application with the UDC.**

UDC Background

The UDC is a ten member committee created by City Council in 1968 whose purpose is to advise the City Planning Commission on the design of projects on City property or right-of-way. The UDC provides advice of an aesthetic nature in connection with the performance of the duties of the Commission under Sections 17.05, 17.06 and 17.07 of the City Charter. The UDC also advises the Department of Public Works in regards to private encroachments in the public right-of-way.

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February 12, 2015

Urban Design Committee
Department of Planning and Development Review
Planning & Preservation Division
900 E. Broad Street, Room 510
Richmond, VA 23219

RE: City of Richmond Department of Public Works – Commerce Road Complex

Dear Urban Design Committee:

The City of Richmond Department of Public Works plans to relocate all City operations currently located at the Boulevard / Parker Field Complex as part of the Boulevard / Parker Field Redevelopment Project (Project). This will assist in preparing the Boulevard / Parker Field property for future economic development projects. Phase I of the Project focused on City facilities and operations primarily located in the southeastern corner of the overall site (see attached map / aerial photo). Relocations of City operations from this area of the site are complete. Currently, building hazardous materials abatement, building demolition, soil remediation and general site work are ongoing in the Phase I area, resulting in a clear, flat and environmentally "clean" site prepared for development.

As part of Phase II of the Project, the City of Richmond Department of Public Works (DPW) proposes to relocate four different City / DPW departments from the Boulevard / Parker Field Complex to two City-owned properties located at 1638, 1650, and 1700 Commerce Road (Commerce Road Complex). The four departments relocating to the Commerce Road Complex are Street Cleaning, Street Maintenance, Solid Waste Operations, and Survey. The remaining departments will be relocated to proposed facilities at 3506 N. Hopkins Road (included as a separate project submittal). The City has completed a 'Parker Field Space Study, Part II' (Austin Brockenbrough, August, 20, 2013) for all Departments affected by the relocation project. The space study includes space requirements and space plans for each Department and was incorporated into the proposed facility design. No future expansion is anticipated for this site, as the space planning study incorporated current and projected future expansion and/or contraction for each department. This project will be performed in conjunction with the N. Hopkins Road Complex project submitted under separate cover.

Site Context

The project site is located at 1700 Commerce Road, between Commerce Road and Interstate 95. This area is developed as small industrial/warehouse and the site is currently used for City of Richmond functions such as fleet maintenance, Police Forensics, and storage. The entire site is currently gravel with extremely limited scrub grass areas along Commerce Road. Security gates and chain link fencing surround the site. Directly east of the site is the CSX railway, a Dominion Virginia Power transmission line, and Interstate 95. Other City of Richmond facilities are located across Commerce Road.

Site Programming

The proposed program for the Commerce Road Complex includes two (2) new pre-engineered buildings and includes all mechanical, electrical and plumbing installations. Smaller, existing buildings located on the Commerce Road Complex will be demolished with this project. Both buildings are designed as simple

functional buildings, providing appropriate work environments as described in the 'Parker Field Space Study, Part II' document.

1. Building No. 1: (DPW Operations Administration) – This building will house the Street Maintenance/Street Cleaning/Solid Waste Operations. The total building area is 11,330 square feet and will be USGBC LEED Silver Certified using sustainable design principles to minimize energy usage and maximize daylight harvesting. The building structure is a one story pre-engineered metal building with one-way sloping standing seam metal roof. The front façade of the building faces west towards Commerce Road and generally aligns with the existing Fleet Operations building. The building façade includes red bricks accentuated by grey metal panels to incorporate elements from building materials already on the site.

2. Building No. 2: (Street Maintenance/Street Cleaning) – This is a 12,100 square foot garage in support of the Street Maintenance / Street Cleaning fleet operations. The building structures is a single story pre-engineered metal building with two-way sloping standing seam metal roof. The long facades of the building are oriented north-south and predominated by the overhead doors for vehicle ingress/egress. The west faced faces Commerce Road and is aligned with Building No. 1. All facades of Building No. 2 are grey metal panel cladded and accentuated by split face CMU block base.

The site programming includes 159 regular vehicle spaces for employee/visitor parking and 103 oversized spaces for fleet vehicle parking. Of the regular vehicles spaces, 24 are existing spaces located around the Fleet Operations building at the southern side of the site.

Mechanical

Building No. 1

HVAC:

A split DX air handling unit with an outdoor condensing until (25-ton) will serve as the main Variable Air Volume air-handling unit for Building No. 1. This air handling until will include a supply fan, return fan, hot water coil, DX coil, air-side economizer and filter section with MERV-13 pleated filters. A total energy recovery ventilator will be mounted upstream from the air handling unit to pre-condition the outside air. Cooling coils shall consist of aluminum fins bonded to copper tubing, AHRI-rated and suitable for hot water or refrigerant, as appropriate. The fans shall be statically and dynamically balanced on 200,000-hour life bearings. All fans shall be equipped with variable frequency drives or ECM motors. The outdoor condensing unit will include variable speed compressor(s).

Air Distribution Terminal Units:

Air terminal units shall be single-duct shut-off variable air volume with hot water reheat and direct digital controls (DDC). Each terminal box shall be controlled from a room mounted DDC sensor.

Hot Water Boilers:

Condensing hot water boilers will provide 140/100 F heating hot water to all VAV boxes and unit heaters serving utility spaces.

Ductwork, System Insulation and Piping:

Sheet metal work shall be in accordance with the SMACNA Duct Manual guidelines. Sheet metal work shall be galvanized steel, including angles, bar slips, hangers and straps. Single-wall medium-pressure ductwork shall be rectangular, of S and drive construction. Button punch snap lock construction shall not be permitted. Flexible duct shall be two-element spiral constructed shall be permitted. Flexible duct shall be two-element spiral constructed, UL listed, and meet NFPA 90A and ASTM C-411 and E84.

Rectangular medium- and low-pressure supply ducting shall be lined with 1" thick unfaced insulation. Refigerant piping shall be insulated with 1" thick armflex. Hot water piping shall be insulated with 1-1/2" thick rigid fiberglass.

Hot water piping shall be Schedule 40 black steel or Type 'L' copper. Pipe hangers shall be adjustable steel hangers, Grinnel or equal, single-rod clevis type. Hangers for copper lines two inches and smaller shall be adjustable copper-plated type CT by Grinnel or equal. Where multiple piping is installed parallel to one another, trapeze type hangers shall be used with rollers and/or saddles for support.

Electrical:

A new 600A 208/3/4w electrical service will provide normal power to building lights, receptacles and equipment. Loads will be separated at the panelboard level for individual metering.

Standby Power

Owner furnished 289kW, 208/3/4w diesel generator will provide standby power to the entire building.

All emergency lights will be provided with battery back-up.

Lighting

The new light fixtures will be a combination of direct and indirect lights. LED fixtures will be used throughout.

Lighting control system will include occupancy sensor, time clock and photocell control.

Basic Materials

All conductors will be copper, 600 volt rated with insulation type 'THHW/XHHW'. All conductors will be installed in conduit. Concealed branch circuits will be in EMT. Properly sized ground wires will be installed in all conduits.

Wiring devices will be specification grade. Convenience outlets will be NEMA 5-20R.
Systems

Plumbing:

General

Plumbing systems shall include basic domestic cold water, domestic hot water, waste and vent systems and storm water removal systems. In general, the materials and systems shall be as described below.

Plumbing Fixtures and Installation

The water closets in the public toilets shall be low-flow, floor mounted vitreous china with hands-free flush valves. Urinals shall be 1/8 gallon per flush, also with hands-free flush valves. Water closets in the residential toilets will be vitreous china flush tank type with dual-flush controls for water conservation. Water closets will be elongated. Lavatories will be wall hung, vitreous china with manually operated single lever faucets. Electric water coolers will be wall-mounted, two level stainless

steel meeting ADA (Americans with Disabilities Act) requirements. Where indicated, handicapped water closets and lavatories will meet ADA requirements.

Domestic Water Service

A new water meter will be set up for this building. Wall hydrants shall be provided on each exterior face of the new building. Hose bibbs will be provided in the Mechanical Room. The building domestic water system will utilize "K" hard drawn copper tubing below the floor slab and type "L" hard drawn copper tubing above floor slab. Solder shall be lead free.

Water Heaters

Domestic hot water will be generated via natural gas-fired storage type water heaters located in the Main Mechanical Room. Water will be stored at 140°F. A hot water recirculating system will be utilized to maintain temperature in all areas of the building. Delivered water temperature shall be set at 110°F via a thermostatic mixing valve.

Sanitary, Waste and Vent Systems

The waste and vent systems will utilize standard weight DWV cast iron for above floor piping and PVC for below floor piping. Floor drains shall be installed in all public bathrooms, locker rooms, laundries, custodial closets and Mechanical Rooms. New waste piping shall extend to the existing campus sanitary system. New vents thru the roof will be required.

Insulation

All domestic water piping, condensate drain piping and horizontal storm water piping including roof drain bodies will be insulated with rigid fiberglass insulation having all service jacket. Piping in mechanical equipment rooms and exposed or finished areas will be provided with glass cloth lagging jacket.

Gas Service

Gas for the new laundry dryers, for comfort heating and for domestic water heating shall be extended from the existing City natural gas system. The piping shall be schedule 40 black steel with threaded fitting inside the building and coated schedule 40 black steel with threaded fittings outside the building.

<u>Building No. 2</u>

HVAC:

HVAC for this building will include wall-mounted exhaust fans, controlled via NO and CO sensors, venting to the parking area. The building will be heated using gas-fired heaters and no air-conditioning is planned.

Electrical:

Electrical Distribution

A new 200A 208/3/4w electrical service will provide normal power to building lights, receptacles and equipment.

All emergency lights will be provided with battery back-up.

Lighting

The new light fixtures will be a combination of direct and indirect lights. LED fixtures will be used throughout.

Lighting control system will include occupancy sensor, time clock and photocell control.

Basic Materials

All conductors will be copper, 600 volt rated with insulation type 'THHW/XHHW'. All conductors will be installed in conduit. Concealed branch circuits will be in EMT. Properly sized ground wires will be installed in all conduits.

Wiring devices will be specification grade. Convenience outlets will be NEMA 5-20R.
Systems

Plumbing:

General
Plumbing systems shall include basic domestic cold water, domestic hot water, waste and vent systems and storm water removal systems. In general, the materials and systems shall be as described below.

Hose bibbs will be provided inside the building for vehicle wash-down. Trench drains will be tied into site sanitary system via outdoor oil separator.

A new gas service will be set up for building heating system.

Traffic

There is an existing 40 foot right-of-way, "Page Street", bisecting the Commerce Road Complex. This right-of-way will remain with the proposed development and become the main entrance/exit point for the fleet vehicles accessing this site. The two existing passenger vehicle site entrances located in front of the main office building fronting Commerce Road will be combined into one entrance. This deters employees/visitors from performing an illegal crossing of Commerce Road to enter the site, creating a safer traffic movement pattern. Both entrances on Commerce Road will be designed to meet City of Richmond commercial entrance standards and no turn lanes or tapers are warranted. Adequate stacking space is provided on the Commerce Road entrance #2 to provide room for vehicles to stack while the gate opens.

Stormwater Management / LEED

The existing surface treatment of the site is gravel, which is considered impervious area. The proposed plan includes paving all disturbed surfaces areas. Underground stormwater management facilities will be designed to meet runoff volume control and quality requirements under the 2014 DEQ regulations and the City of Richmond Stormwater Management Design and Construction Standards Manual. The site drains primarily to the east towards Interstate 95. An existing outfall exists and the underground stormwater management facility is planned to outfall at this location.

The project is planned to be certified under USGBC LEED version 3.0 as the project will be registered prior to June 2015.

Construction Elements

Site construction work will begin with perimeter erosion and sediment control measures, demolition, building pad preparation, utility connections and/or relocations, stormwater management facilities for quality and quantity control, electrical and plumbing design, temporary and permanent parking areas

and/or driveways, concrete pedestrian walkways, perimeter landscape design and site lighting. Large extents of this site are gravel and asphalt pavement will be installed throughout the site.

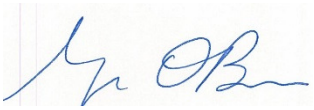
Construction Schedule

Construction is slated to commence in June 2015. The relocation of City operations and occupancy of the new facilities is scheduled to occur in December 2015. After the occupation of the new facilities at both the Commerce Road Complex and the N. Hopkins Road Complex, building abatement and demolition, soil remediation and general site work will proceed on the Boulevard / Parker Field Complex. This construction project will be completed concurrently with the N. Hopkins Road Complex project.

Project Budget and Funding Sources

The Commerce Road Complex and N. Hopkins Road Complex projects are considered one project in the City budget. The total project construction budget inclusive of Commerce Road and N. Hopkins Road is estimated to be $8 million, utilizing funding source 500598-50001-0601-1122-SV0400-102952.

Sincerely,



Meaghan O'Brien, PE
Project Manager

LANDSCAPE LEGEND

- DECIDUOUS TREE (MIN. 2.5" CALIPER, 6' HEIGHT)
- EVERGREEN TREE (MIN. 2.5" CALIPER, 6' HEIGHT)
- EVERGREEN SHRUB (MIN. 2' HEIGHT)

MATERIAL LEGEND

- HEAVY DUTY PAVEMENT
- MEDIUM DUTY POROUS PAVEMENT
- LIGHT DUTY POROUS PAVEMENT
- NEW BUILDINGS
- NEW GREEN AREAS
- NEW SIDEWALK
- NEW GRAVEL AREAS
- STORMWATER MANAGEMENT AREA
- EXISTING ASPHALT

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Dewberry
Dewberry Engineers Inc.

CITY OF RICHMOND FOUR NEW DPW FACILITIES

COMMERCE AND HOPKINS ROAD

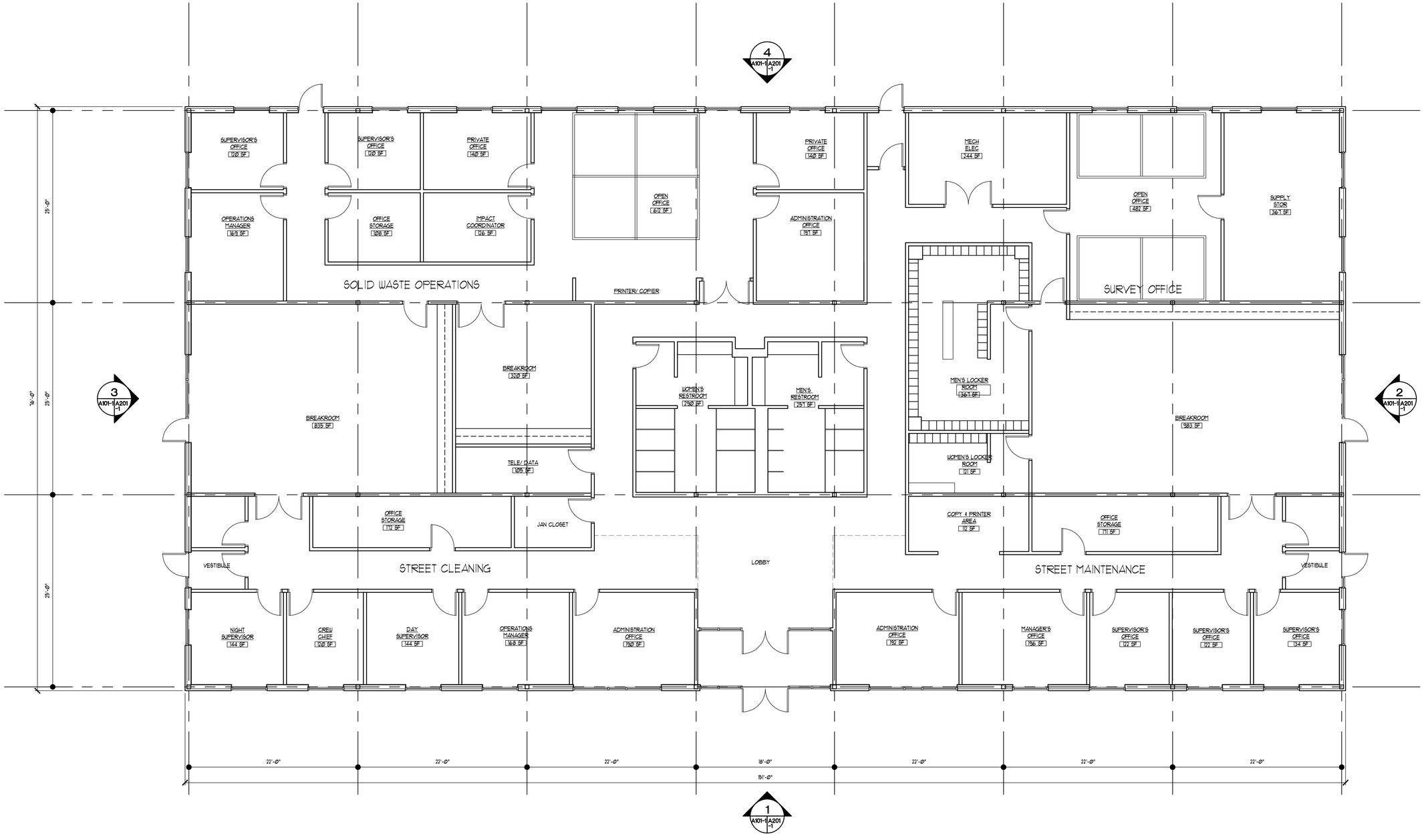
SITE + LANDSCAPING PLAN COMMERCE ROAD

Date: FEBRUARY 2015

REVISIONS	
NO.	DATE

Sheet 1

File Name SITE & LANDSCAPING PLAN.DWG



1 A101-1 BUILDING 1 – FLOOR PLAN

SCALE: 3/16" = 1'-0"

SCALE: 3/16" = 1'-0"

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CITY OF RICHMOND
FOUR NEW DPW FACILITIES
COMMERCE AND HOPKINS ROAD

BUILDING 1
FLOOR PLAN

Date:
FEBRUARY 12, 2015

REVISIONS

NO.	DATE

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A101-1

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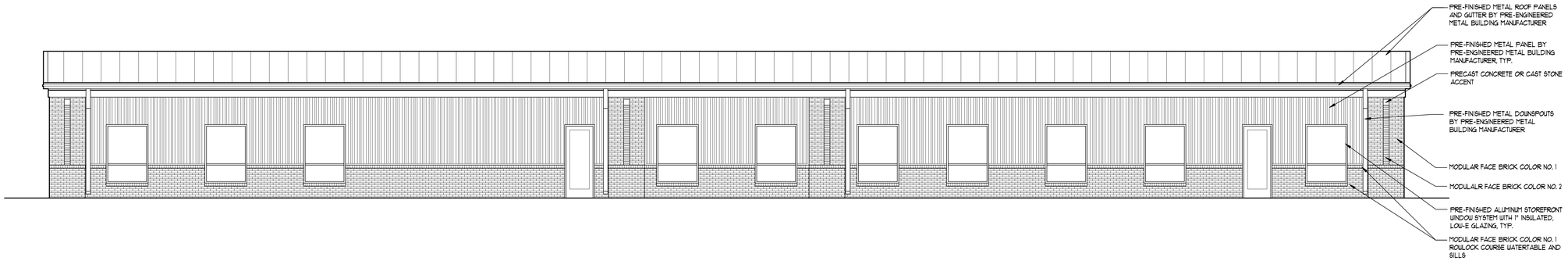
CI-DPU A101-PLAN.DWG



4 A101-1 A201-1 BUILDING 1 – EAST ELEVATION

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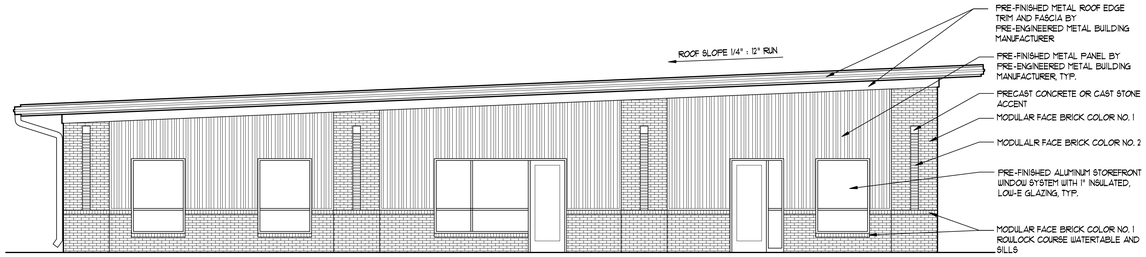

3 A101-1 A201-1 BUILDING 1 – NORTH ELEVATION

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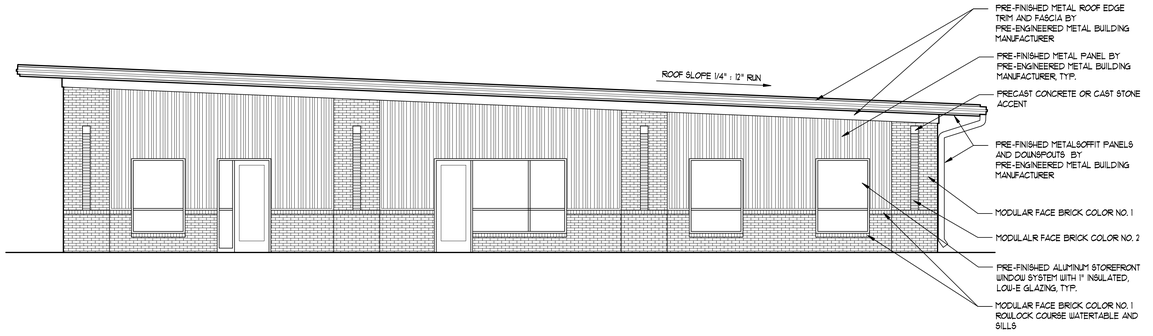

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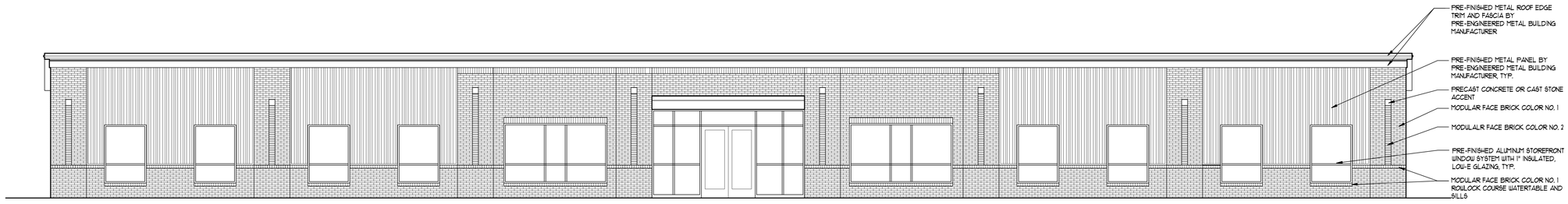

1 A101-1 A201-1 BUILDING 1 – WEST ELEVATION

SCALE: 3/16" = 1'-0"

Ø 1 5 10 20

SCALE: 3/16" = 1'-0"

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CITY OF RICHMOND
FOUR NEW DPW FACILITIES
COMMERCE AND HOPKINS ROAD

BUILDING 1
ELEVATIONS

Date:
FEBRUARY 12, 2015

REVISIONS	
NO.	DATE

Sheet
A201-1

File Name
C1-DPW A201-ELEV.DWG

SOUTH ELEVATION

MODULAR FACE BRICK COLOR 1

MODULAR FACE BRICK COLOR 2

PRE-FINISHED METAL PANEL

WEST ELEVATION

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COMMERCE AND HOPKINS ROAD
BUILDING - 1

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NORTH ELEVATION

MODULAR FACE BRICK COLOR 1

MODULAR FACE BRICK COLOR 2

PRE-FINISHED METAL PANEL

EAST ELEVATION

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CITY OF RICHMOND
FOUR NEW DPW FACILITIES
COMMERCE AND HOPKINS ROAD

BUILDING 2
FLOOR PLAN

Date: FEBRUARY 2, 2015

REVISIONS
NO. DATE

Sheet A101-2

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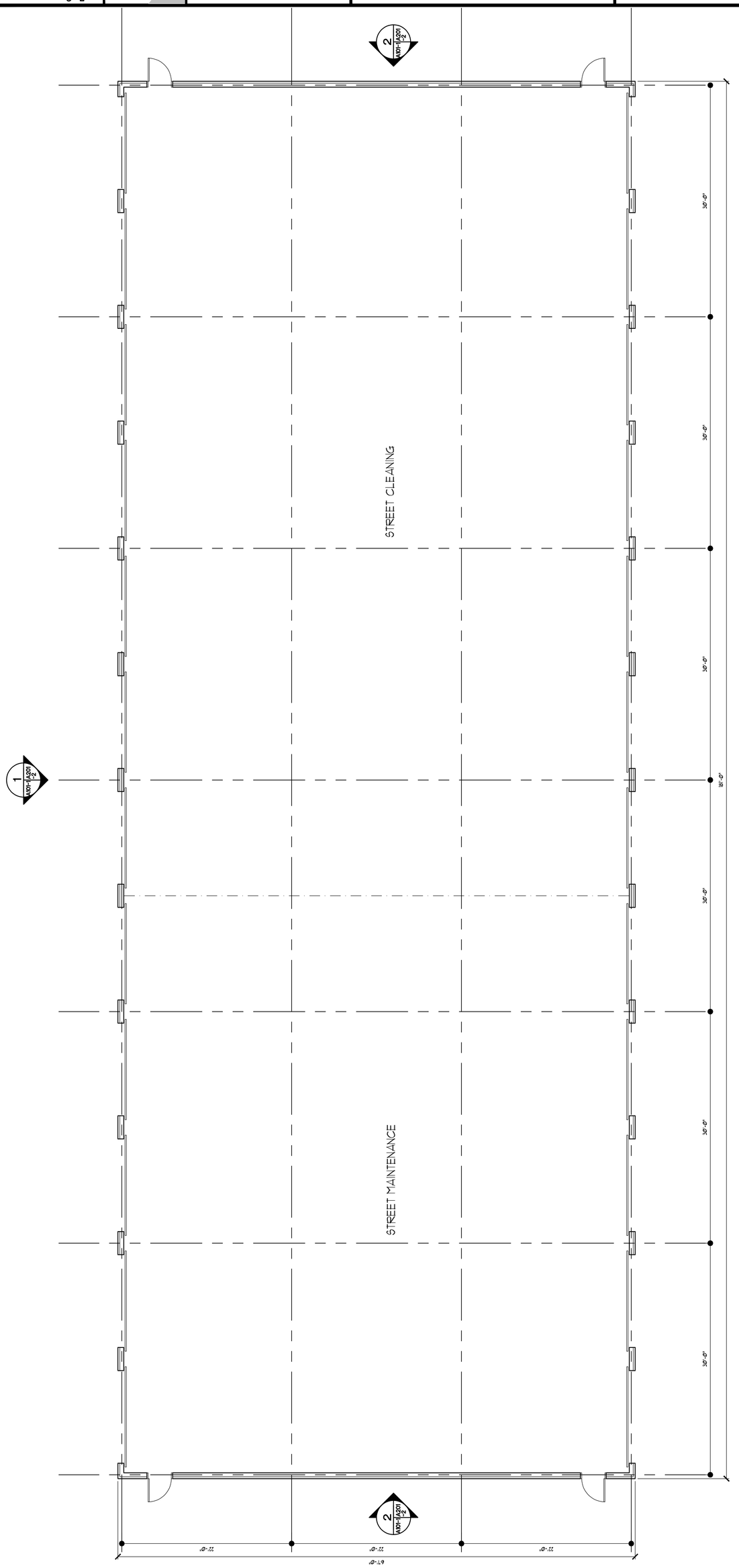

1 A101-2 BUILDING 2 – FLOOR PLAN
SCALE: 3/16" = 1'-0"

1 A101 -2 | A201 -2

BUILDING 2 - NORTH AND SOUTH ELEVATIONS

SCALE: 3/16" = 1'-0"

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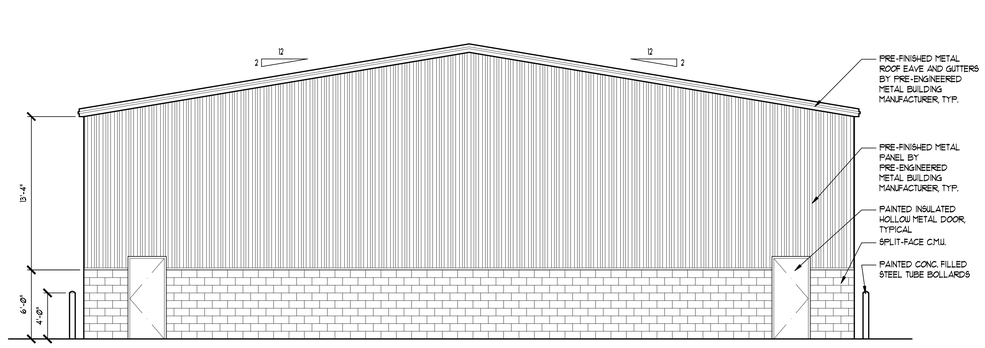
SCALE: 3/16" = 1'-0"



2 A101 -2 | A201 -2

BUILDING 2 - EAST AND WEST ELEVATIONS

SCALE: 3/16" = 1'-0"

0 1 5 10 20

SCALE: 3/16" = 1'-0"

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CITY OF RICHMOND
FOUR NEW DPW FACILITIES
COMMERCE AND HOPKINS ROAD

BUILDING 2
ELEVATIONS

Date:
FEBRUARY 12, 2015

REVISIONS

NO.	DATE

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A201-2

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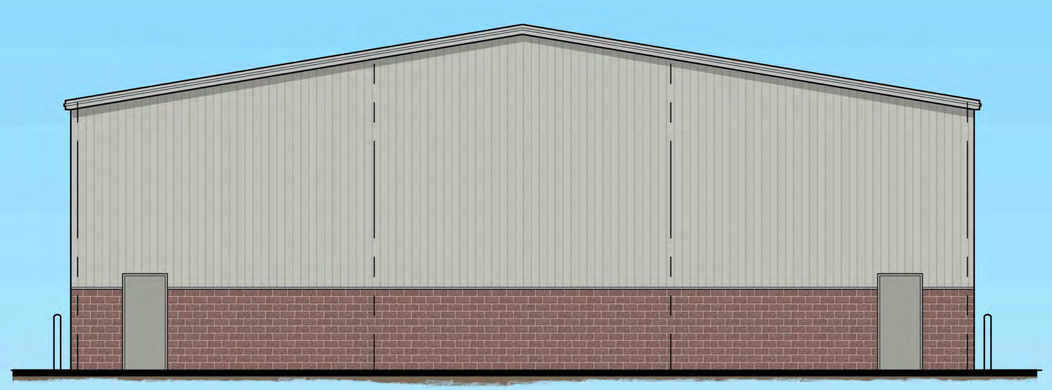

EAST AND WEST ELEVATION.

PRE-FINISHED METAL PANEL

SPLIT FACE C.M.U

NORTH AND SOUTH ELEVATION.

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BUILDING - 2

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