

## SECTION 09924

### INTERIOR PAINTED METAL

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Includes But Not Limited To
  - 1. Preparing and painting new interior metal surfaces as described in Contract Documents.
  - 2. Preparing and painting following interior metal surfaces as described in Contract Documents
    - a. Metal cabinet door frame at television cabinets
- B. Related Sections
  - 1. Section 09901 - General Painting Requirements

##### 1.2 SYSTEM DESCRIPTION

- A. Ferrous Metal - Use MPI(a) INT 5.1B Waterborne Light Industrial Finish system for new work and MPI(r) RIN 5.1B Waterborne Light Industrial Finish system for previously painted work.
- B. Galvanized Metal - Use MPI(a) INT 5.3J Latex Finish system for new work and MPI(r) RIN 5.3AH Latex Finish system for previously painted work.
- C. Aluminum - Use MPI(a) INT 5.4E Waterborne Light Industrial Finish system for new work and MPI(r) REX 5.4E Light Industrial Finish system for previously painted work
- D. Use MPI Premium Grade finish requirements for new work and deteriorated existing work. Use MPI Custom Grade requirements for sound existing work.

##### 1.3 SEQUENCING

- A. Paint brackets furnished under Section 05584 prior to installation.
- B. Paint metal speaker grilles, which are to be painted to match ceiling, before attachment to speakers and before installation of sound system.

#### PART 2 PRODUCTS

##### 2.1 MATERIALS

- A. Gloss / Sheen Level Required - Semi-Gloss
- B. Products listed in edition of MPI Approved Product List current at time of bidding and later and following products are approved, providing they meet VOC requirements in force where Project is located.
- C. Primers
  - 1. Ferrous Metal - MPI Product 107
  - 2. Galvanized Metal - MPI Product 134
  - 3. Aluminum - MPI Product 951
- B. Finish Coats - MPI Product 110, G5

#### PART 3 EXECUTION

##### 3.1 APPLICATION

- A. General
  - 1. See appropriate paragraphs of Section 09901.
  - 2. Systems specified are in addition to prime coats furnished under other Sections.
- B. New Surfaces - Remove rust spots by sanding and immediately spot prime. If all traces of rust cannot be removed, apply rust blocker recommended by Paint Manufacturer before applying full primer coat.

END OF SECTION

## SECTION 09925

### INTERIOR PAINTED WOOD

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Includes But Not Limited To
  - 1. Preparing and painting new woodwork and wood doors not requiring transparent finish, as described in Contract Documents.
  
- B. Related Sections
  - 1. Section 09901 - General Painting Requirements

##### 1.2 SYSTEM DESCRIPTION

- B. Use MPI(a) INT 6.3T or U Latex Finish system for new work and MPI(r) Rin 6.3U Latex Finish system for previously painted work.
  
- C. Use MPI Premium Grade finish requirements for new work and deteriorated existing work. Use MPI Custom Grade requirements for sound existing work.

#### PART 2 PRODUCTS

##### 2.1 MATERIALS

- A. Gloss / Sheen Level Required - Semi-Gloss
  
- B. Products listed in edition of MPI Approved Product List current at time of bidding and later are approved, providing they meet VOC requirements in force where Project is located.
  
- C. Woodwork
  - 1. Primer Coat - MPI Products 39 or 45
  - 2. Finish Coats - MPI Product 110, G5

#### PART 3 EXECUTION

##### 3.1 APPLICATION

- A. General - See appropriate paragraphs of Section 09901.
  
- B. Interface With Other Work
  - 1. Properly clean and paint light cove interiors before installation of light fixtures.
  - 2. Where back-priming is required, apply one coat of primer.
  
- C. New Surfaces
  - 1. Spot prime nail holes, cracks, and blemishes before and after puttying.
  - 2. Apply stain blocker or other product recommended by Paint Manufacturer to knots before applying primer coat.

END OF SECTION



**DIVISION 10**  
**SPECIALTIES**

**10100 VISUAL DISPLAY BOARDS**

10115 MARKER BOARDS  
10125 MAGAZINE RACKS

**10400 IDENTIFYING DEVICES**

10445 INTERIOR CODE SIGNS

**10500 LOCKERS**

10513 ALL-WELDED STEEL LOCKERS

**10520 FIRE PROTECTION SPECIALTIES**

10523 FIRE EXTINGUISHERS AND CABINETS

**10700 TELEPHONE SPECIALTIES**

10751 TELEPHONE ENCLOSURES

**10800 TOILET, BATH, AND LAUNDRY ACCESSORIES**

10811 COMMERCIAL TOILET ACCESSORIES

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## SECTION 10115

### MARKERBOARDS

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Products Installed and Supplied Under This Section
  - 1. Markerboard units
- B. Related Sections
  - 1. Section 09110 - Blocking

##### 1.2 REFERENCES

- A. Porcelain Enamel Institute
  - 1. PEI-1001 'Specifications for Architectural Porcelain Enamel'

##### 1.3 SUBMITTALS

- A. Product Data
  - 1. Manufacturer's literature or cut sheet
  - 2. Maintenance instructions
  - 3. Color selection
- B. Quality Assurance / Control - Manufacturer's written installation instructions.

##### 1.4 WARRANTY

- A. Letter from Manufacturer certifying Contract Documents have been complied with and guarantee against faulty workmanship and materials for five years.

#### PART 2 PRODUCTS

##### 2.1 COMPONENTS

- A. Markerboard
  - 1. Shall be the "Shadeline Alternating shaded bars" by Magnatag as the design standard.
  - 2. Face shall be 20 gauge porcelain-like white steel printed face designed for use with markers. The horizontal lines shall be 3/4" high.
  - 3. Core shall be pressure form and hot-glued pressure-laminate with 1" thick honeycomb core.
  - 4. Backing shall be solid textured aluminum moisture-barrier plate.
  - 5. Color white.
  - 6. Alternating shade shall be in the horizontal direction.
- B. Trim
  - 1. Extruded aluminum with a satin etched and anodized finish 6063-T5 Alloy.
    - a. Extrusions shall match thickness of units without wedging.
    - b. Color as selected by Architect.
    - c. Round all sharp edges. Frame shall be strong impact-resistant radius corners.
- C. Accessories
  - 1. Provide one set of "Write-on Tools"
  - 2. Provide one set of "Magnet Kit"
  - 3. Provide one aluminum accessory tray 5'-0" long with required mechanical fasteners in silver color.

## 2.2 APPROVED MANUFACTURER

- A. Magnatag Visible Systems 2031 O'Neill Road, Macedon, NY 14502 USA (800) 624-4154, [www.magnatag.com](http://www.magnatag.com)
- B. Equal as approved by Architect or County Representative.

## 2.3 FABRICATION

- A. Prefabricate units at factory and ship to jobsite in one piece complete with mounting attachments suitable for wall conditions. Units shall be of first quality and lamination done by approved standards of industry. Furnish printed cleaning instructions with each shipment. Marker trays may be removed for shipment. Refer to Contract Documents for markerboard size.

## PART 3 EXECUTION

### 3.1 INSTALLATION

- A. Mount boards square and level. Anchor board securely to wall and shim as necessary to provide permanent installation and smooth operation.
- B. Mount boards flush to wall with concealed hangers at top and bottom, or by combination of hangers and clips. Where clips are used, use two top clips minimum per board. Use two bottom clips per board on boards 60 inches long or shorter, three bottom clips on boards over 60 inches long.
- C. Mounting fasteners shall penetrate framing 3/4 inch minimum.
- D. Provide blocking across the entire length of the markerboard. Do not install markerboard unit the blocking has been installed.

END OF SECTION



**SECTION 10125**  
**MAGAZINE RACKS**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Products Installed and Supplied Under This Section
  - 1. Magazine rack units
- B. Related Sections
  - 1. Section 09110 - Blocking

**1.2 REFERENCES**

- A. Architectural Woodwork Institute
  - 1. AWI, 'Architectural Woodwork Standards, 1<sup>st</sup> Edition, October 1, 2009.

**1.3 SUBMITTALS**

- A. Product Data
  - 1. Manufacturer's literature or cut sheet
  - 2. Color selection
- B. Quality Assurance / Control - Manufacturer's written installation instructions.

**1.4 WARRANTY**

- A. Letter from Manufacturer certifying Contract Documents have been complied with and guarantee against faulty workmanship and materials for five years.

**PART 2 PRODUCTS**

**2.1 COMPONENTS**

- A. Magazine Rack
  - 1. Shall be the "12 Pocket Wood Magazine Rack - DISE4331 - " wall mounted by Display Rack as the design standard.
  - 2. Face, back and dividers shall be made from hardboard and the sides shall be solid stock. Face shall have a scoop type design to allow maximum visibility and easy access to materials.
  - 3. Size shall be 11 1/4" wide by 3 3/4" deep by 48 3/4" high.

**2.2 APPROVED MANUFACTURER**

- A. Display Rack (800) 658-8788, [www.displayrackstore.com](http://www.displayrackstore.com)
- B. Equal as approved by Architect or County Representative.

**2.3 FABRICATION**

- A. Prefabricate units at factory and ship to jobsite in one piece complete with mounting attachments suitable for wall conditions. Units shall be of first quality. Refer to Contract Documents for quantity.

**PART 3 EXECUTION**

**3.1 INSTALLATION**

- A. Mount magazine racks square and level. Anchor racks securely to wall and shim as necessary to provide permanent installation and smooth operation.
- B. Mount racks flush to wall with concealed hangers at top and bottom, or as required by manufacturer.
- C. Mounting fasteners shall penetrate framing 3/4 inch minimum.
- D. Provide blocking across the entire length of the magazine racks. Do not install magazine racks the blocking has been installed.

END OF SECTION

**SECTION 10445**  
**INTERIOR CODE SIGNS**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Includes but not limited to -
  - 1. Furnish and install interior signs as described in Contract Documents.
- B. Related Sections
  - 1. Division 06 - Installation

**PART 2 PRODUCTS**

**2.1 MANUFACTURED UNITS**

- A. Accessibility Signs
  - 1. Mens - equilateral triangle 1/4" thick, 12" long edges, with the base parallel to floor and vertex pointing upward - ANSI 1-A117.1 Symbol for men..
  - 2. Women's - circle 1/4" thick, 12" in diameter - ANSI 1 A117.1 Symbol for women.
  - 3. Mount in center of door or on wall as indicated at 60 inches above floor to symbol center.
  - 4. Blue background with white symbol, engraved.

**2.2 MANUFACTURER**

- A. Inland Pacific - Spokane, WA (800) 541-4000
- B. CCSW Graphics - Corpus Christi, TX (800)322-4515
- C. Mark Master - Tampa, FL (800)441-6275
- D. South Texas Graphics Specialities, Inc. - Houston, TX (713)467-4499
- E. AA White Company - Providence, RI (401)453-4300

**PART 3 EXECUTION**

**3.1 INSTALLATION**

- A. Install signs square and plumb and in accordance with manufacturer's instructions and details..
- B. Mount with vandal resistant screws. Screws shall be recessed and flush to face of signs.

**END OF SECTION**

## SECTION 10513

### ALL-WELDED STEEL LOCKERS

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. All-welded steel lockers.

##### 1.2 RELATED SECTIONS

- A. Section 09110 – Non-Load Bearing Wall Framing / Blocking.

##### 1.3 REFERENCES

- A. ASTM A 653 – Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- B. ASTM A 1008 – Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability.

##### 1.4 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions.
- B. Shop Drawings: Submit manufacturer's shop drawings, indicating construction, materials, dimensions, door frames, doors, handles, locks, ventilation, options, accessories, finish, locker layout, anchoring, and installation details.
- D. Samples: Submit manufacturer's premier color samples.
- E. Warranty: Submit manufacturer's warranty in writing to cover all material furnished and installed for one (1) year from date of substantial completion. The warranty shall cover replacement of any non-conforming item at manufacturers' and installers' cost, including but not limited to cost of connection, re-installation and repair of adjacent work affected by such corrective work.

##### 1.5 QUALITY ASSURANCE

- A. Pre-installation Meeting: Convene pre-installation meeting 2 weeks before start of installation of lockers. Require attendance of parties directly affecting work of this section, including Contractor, Architect, installer, and manufacturer's representative. Review installation, adjusting, cleaning, protection, and coordination with other work.

##### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Storage: Store materials in clean, dry area indoors in accordance with manufacturer's instructions.
- C. Handling: Protect materials and finish during handling and installation to prevent damage.

#### PART 2 PRODUCTS

##### 2.1 MANUFACTURER

- A. Design criteria is based on Model No. 5332W by Lyon Workspace Products, PO Box 671, Aurora, Illinois 60507. (800) 323-0082 [www.lyonworkspace.com](http://www.lyonworkspace.com) E-Mail [lyon@lyonworkspace.com](mailto:lyon@lyonworkspace.com)
- B. Materials shall be the products of one manufacturer and shall be either the one upon which the design is based or from one of the approved list. Approved manufacturers:
  - 1. Art Metal Products, 401 Jim Moran Blvd, PO Box 4157, Deerfield Beach, FL 33442 (800) 252-5633, [www.artmetalproducts.com](http://www.artmetalproducts.com)
  - 2. Hallowell, 5711 Distribution Dr., Memphis, TN 38141 (901) 375-0022 [www.hallowell-list.com](http://www.hallowell-list.com)

3. Penco Products, Inc. 99 Brower Ave, PO Box 378, Oaks, PA 19456 (800) 562-1000  
www.pencoproducts.com

## 2.2 ALL-WELDED STEEL LOCKERS

- A. Model: All-Welded Lockers.
- B. Style: Six tier as indicated on the Drawings.
- C. Locker Size: 12 inches wide by 12 inches deep by 12 inches high per opening.
- D. Locker Configuration: Two lockers single row.
- E. Construction: All welded. Pre-assembled, with seams and joints welded. Bolts, screws, and rivets not used in assembly of locker bodies.
- F. Material:
1. Steel: ASTM A 1008, Class I, mild-annealed, cold-rolled steel, free from surface imperfections
  2. Fasteners: Zinc plated or other comparable rust-retardant treatment.
- G. Body:
1. 16-gauge steel.
  2. Flanged to give double thickness of metal at back, top, and bottom of sides, top, and bottom.
  3. Backs: 1-piece for each locker module, 18-gauge steel.
  4. Tops: 1-piece for each locker module, 16-gauge steel.
  5. Bottoms: 1-piece for each locker module, 16-gauge steel, with front and back channel reinforcements.
  6. Seams and Joints: MIG welded.
- H. Door Frame:
1. Integral part of sides, top, and bottom of locker.
  2. Side Containing Latch: Additional flange to form door strike.
  3. Tops, Bottoms, and Intermediate Bottoms: Additional flange to form door strike at top and bottom of door.
  4. Door frame shall be 16-gauge formed steel channels.
- I. Doors:
1. 1-piece, 14-gauge steel.
  2. Both vertical edges formed into channel-shaped formation. Top and bottom flanged at 90-degree angle.
  3. Single-Tier Locker Doors: 14-gauge steel pan stiffener welded on 6-inch centers inside channel-shaped formation of hinge side of door. Standard for single-point latch.
    - a. Door Thickness: 1 inch.
- J. Ventilation:
1. Six (6") louvers top and bottom in portion of door not covered by stiffener panel.
- K. Hinges:
1. Type: Shall be not less than 2" high, .050" steel, 5 knuckle, full loop design forming double thickness on each leaf. Hinges to be set in slot in door and frame and projection welded to frame and securely attached to door. Hinge pin to be spun over at ends to resist removal.
  2. Single-Tier lockers to have three hinges – on right hand side of door.
- L. Multi-Point Locking Device:
1. Single-Tier Lockers, 48 Inches and Higher, Locking Device: Engage frame at 3 points.
  2. Channel-Shaped Locking Device:
    - a. Full-length reinforcing ribs.
    - b. Quiet design using nylon-guide inserts to reduce metal-to-metal contact.
    - c. Zinc-alloy latch finger with nano roller at point of contact with door jamb.
  3. Lock Bar: Enclosed on 3 sides and operate within channel formation of door.
  4. Locking Device: Prelocking so mechanism can be locked in open position. Door locking automatically when closed.
  5. Door Jambs:
    - a. Single-Tier Lockers, 48 Inches and Higher: 3 door jambs.
    - b. Safety Reverse Nose for Each Jamb: Eliminate hazard of sharp-pointed edges protruding into locker.
    - c. Easily replaceable soft rubber bumper for each jamb.
- M. Handles:
1. Recessed Handles:
    - a. 4-1/8 inches wide by 6-1/16 inches high by 1-1/4 inches deep.

- b. Light-grain, chrome-plated, die-cast zinc alloy, with minimum tensile strength of 40,000 psi.
- c. Flush-front appearance.
- d. Finger lift activates door lock. Padlock attachment to be integral part of lift which shall be attached directly to locking bar and protected by fixed handle housing.

### 2.3 ACCESSORIES

- A. Number Plates:
  - 1. Aluminum.
  - 2. Size: 2-3/4 inches wide by 1 inch high.
  - 3. Numbers: Clearly etched numbers a minimum of 3/8 inch high.
  - 4. Attachment: Attach in prepunched holes near top of doors.
- B. Locks: None.
- C. Bottoms: Painted galvanized steel.
- D. Anchoring: Anchor lockers to walls in accordance with manufacturer's instructions.
- E. Provide require ADA lockers as required by local governing agency and the American With Disability Act.

### 2.4 FINISH

- A. General: Factory applied finish in accordance with manufacturer's instructions.
- B. Standard Finish: Exposed steel parts shall be thoroughly cleaned, given bonding and rust-inhibitive phosphate treatment, and electrostatically sprayed with powder coat. Baked-on finish.
- C. Color:
  - 1. Body, Frame, and Accessories Color: Shall be selected by architect from manufacturers premier color selection.
  - 2. Door and Hinge Color: Shall be selected by architect from manufacturers premier color selection.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Examine areas to receive lockers. Notify Architect if areas are not acceptable. Do not begin installation until unacceptable conditions have been corrected.

### 3.2 INSTALLATION

- A. Install lockers in accordance with manufacturer's instructions at locations indicated on the Drawings.
- B. Install lockers plumb, level, square, rigid, with flush installation.
- C. Use manufacturer's supplied hardware.
- D. Anchoring: Anchor lockers to walls as indicated on the Drawings.
- E. Joints: Provide flush hairline joints against adjacent surfaces.
- F. Number Plates: Attach number plates to face of doors level with 2 aluminum rivets. Attach in sequence as indicated on the Drawings.
- G. Repair minor damages to finish in accordance with manufacturer's instructions and as approved by Architect.
- H. Remove and replace defective or damaged components that cannot be successfully repaired as determined by Architect.

### 3.3 ADJUSTING

- A. Adjust doors, locks, and operating hardware to function properly and for smooth operation without binding.

### 3.4 CLEANING

- A. Clean surfaces promptly after installation in accordance with manufacturer's instructions.
- B. Do not use harsh cleaning materials or methods that could damage finish.

**3.5 PROTECTION**

- A. Protect installed lockers from damage during construction.

**END OF SECTION**

## SECTION 10523

### FIRE EXTINGUISHERS AND CABINETS

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Products Supplied But Not Installed Under This Section
  - 1. Wall hung extinguishers
  - 2. Extinguishers with cabinets
- B. Related Sections
  - 1. Section 06201 - Installation

##### 1.2 SUBMITTALS

- A. Product Data
  - 1. Manufacturer's literature or cut sheets for cabinets and extinguishers
  - 2. Maintenance instructions for extinguishers

##### 1.3 WARRANTY

- A. Provide Manufacturer's standard, written warranty on fire extinguisher.

#### PART 2 PRODUCTS

##### 2.1 MANUFACTURED UNITS

- A. Fire Extinguishers
  - 1. Ten pound dry chemical ABC stored pressurized type equipped with pressure gauge and which does not need recharging except after use.
  - 2. Instructions for repairs, maintenance, and recharging shall be attached.
  - 3. Unit shall be tested and approved by UL and have minimum 4A:60-B:C UL rating. UL rating shall appear on extinguisher labels and be attached to and a part of fire extinguisher units.
  - 4. Approved Manufacturers -
    - a. Amerex Corp, Trussville, AL (205) 655-3271 [www.amerex-fire.com](http://www.amerex-fire.com)
    - b. Ansul Incorporated, Marinette, WI (800) 862-6785 or (715) 735-7411 [www.ansul.com](http://www.ansul.com)
    - c. General Fire Extinguisher Corp, Northbrook, IL (800) 323-6452 or (847) 272-7500 [www.genfire.com](http://www.genfire.com)
- B. Fire Extinguisher Cabinets
  - 1. Recessed type and have white baked enameled steel tubs with white baked enamel return trim and doors, Polycarbonate bubble with handle, no handle with cylinder locks for Dayroom/patient side.
  - 2. Supply each cabinet with one fire extinguisher specified above.
  - 3. Quality Standard - DC-1704 with standard security lock 1902 by Potter Roemer for Dayroom/patient areas.
  - 4. Quality Standard - 1770 Series by Potter Roemer for nurses' station
  - 4. Acceptable Manufacturers -
    - a. J L Industries, Bloomington, MN (800) 554-6077 or (612) 835-6850 [www.jlindustries.com](http://www.jlindustries.com)
    - b. Larsen's Manufacturing Co, Minneapolis, MN (800) 527-7367 or (763) 571-1181 [www.larsensmfg.com](http://www.larsensmfg.com)
    - c. Modern Metal Products / Technico, Owatonna, MN (800) 435-5544 or (507) 451-7114
    - d. Potter-Roemer, Cerritos, CA (800) 366-3473 or (714) 430-5300 [www.potterroemer.com](http://www.potterroemer.com)
    - e. Samson / J L Industries, City of Commerce, CA (800) 228-9489 or (323) 726-9070
    - f. Equal as approved by Architect before bidding.



**PART 3 EXECUTION**

**3.1 INSTALLATION**

- A. Securely mount cabinets and hangers plumb with wall surfaces.
- B. Trim for cabinets shall be neat in appearance.

END OF SECTION

## SECTION 10751

### TELEPHONE ENCLOSURE

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Products Installed and Supplied Under This Section
  - 1. Telephone Enclosures as described in Contract Documents.
  - 2. The telephone shall be provided and Installed by Owner.
- B. Related Sections
  - 1. Section 09110 - Blocking
  - 2. Section 16000 - Electrical

##### 1.2 REFERENCES

- A. ASTM A 167, standard specification for stainless and heat-resisting chromium - nickel plate, sheet, and strip.
- B. ASTM A 480, general requirements for flat-rolled stainless and heat-resisting steel plate, sheet, and strip.

##### 1.3 QUALITY ASSURANCE

- A. Provide telephone enclosure assembly as a complete unit produced by a single manufacturer, including necessary mounting accessories, fittings and fastening.

##### 1.4 SUBMITTALS

- A. Product Data
  - 1. Manufacturer's literature or cut sheet
  - 2. Manufacturer's installation instructions.
  - 3. Maintenance instructions
  - 4. Color selection

##### 1.5 WARRANTY

- A. Provide manufacturer's warranty project specific including but not limited to Project Name, Address and Owner information. certifying Contract Documents have been complied with and guarantee against faulty workmanship and materials for five years.

#### PART 2 PRODUCTS

##### 2.1 COMPONENTS

- A. Telephone Enclosure
  - 1. All reference to model numbers and other pertinent information herein are intended to establish standards of performance, quality and construction and are based upon equipment designed and manufactured by RedyRef.
  - 2. Telephone enclosure shall be model number MS2200AC by RedyRef. The design standard shall be as follows:
    - a. Enclosure shall be 23 5/8" high by 30" wide by 12" deep.
    - b. Enclosure with "1C2" box type mounting pattern.
    - c. Welded construction
    - d. 22 GA perforated stainless steel acoustic rear panel with No. 4 satin finish. Filled with 1" thick fiberglass acoustic insulation. Heavy GA steel back and phone mount.

- e. Stainless steel flat writing shelf, 16 GA with No. 4 satin finish
  - f. 22 GA stainless steel exterior acoustic side divider panel with 22 GA perforated stainless steel on interior with No. 4 satin finish steel interior reinforcement and filled with 1" thick fiberglass acoustic insulation. 14 GA trim strip stainless steel No. 4 on top front and bottom edges.
- B. Equal as approved by Architect and County Representative prior to bidding.

## **2.2 APPROVED MANUFACTURER**

- A. RedyRef, 38-61 11<sup>th</sup> Street, Long Island City, NY 718-784-3690, [www.redyref.com](http://www.redyref.com).
- B. Equal as approved by Architect or County Representative prior to bidding.

## **2.3 FABRICATION**

- A. Telephone enclosure shall be fabricated at manufacturer's location and shipped knocked down in package container. Contractor shall field assemble the unit per manufacturer's instructions.
- B. Prior to ordering telephone enclosure, coordinate with Owner supplied telephone for required mounting pattern of telephone. Submit the requirements for the telephone mounting to the manufacturer prior to fabrication.

## **PART 3 EXECUTION**

### **3.1 INSTALLATION**

- A. Mount telephone enclosure square and level. Anchor enclosure securely to wall. Ensure backer board is in place prior to installation. If backer board is not installed, immediately notify Architect and do not proceed until all issue has been corrected.
- B. Install enclosure per requirements with the American with Disabilities Act (ADA).
- C. Install Owner provided telephone. Ensure telephone is left in working order. Coordinate with County "RCIT" Department for other requirements.

END OF SECTION

## SECTION 10811

### COMMERCIAL TOILET ACCESSORIES

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Products Supplied But Not Installed Under This Section
  - 1. Accessories for Rest Rooms, Shower Rooms, and Nurses Stations
- B. Related Sections
  - 1. Section 06110 - Blocking
  - 2. Section 06201 - Installation

##### 1.2 SUBMITTALS

- A. Product Data - Manufacturer's literature or cut sheets
- B. Shop Drawings - Schedule showing items used, location where installed, and proper attaching devices for substrate.

#### PART 2 PRODUCTS

##### 2.1 MANUFACTURED UNITS

- A. Approved Products
  - 1. Rest Rooms/ Showers -
    - a. Mirrors - Handicapped Framed Stainless Steel Mirror with Exposed Front Mounting Security Fasteners. Size as shown on Drawings.
      - 1) Acorn Model HC1813
      - 2) Equal as approved prior to bidding
    - b. Grab Bars - Front mount, 18 ga, type 304 stainless steel, 1-1/2 inch diameter, satin finish, Enclosure Plate 11 ga min., and non-slip finish with welded flanges and sanded edges in configuration shown on Drawings.
      - 1) Bradley Model SA Series
      - 2) Acorn Model 1109 Series
      - 3) PSI Model GB-600 Series
      - 4) ASI Model No's 162 thru 169
      - 5) Brey Krause Model D7500-SEC Series
      - 5) Equal as approved prior to bidding.
    - c. Grab Bars at Showers - "L" Shape Front mount, 18 ga, type 304 stainless steel, 1-1/2 inch diameter, satin finish, Enclosure Plate 11 ga min., and non-slip finish with welded flanges and sanded edges in configuration shown on Drawings.
      - 1) Bradley Model SA Series
      - 2) Acorn Model 1109 Series
      - 3) PSI Model GB-600 Series
      - 4) ASI Model No's 165M x
      - 5) Brey Krause Model D-7200-SEC Series
      - 5) Equal as approved prior to bidding.
    - d. Soap Dispenser - Owner supplied and Contractor installed
    - e. Toilet Paper Dispenser - Recessed. Flange, cabinet and door shall be constructed of 22 ga stainless steel, welded construction with burr-free edges, tumbler lock keyed alike with other accessories. Satin finish.
      - 1) Bradley Model 5412
      - 2) Equal as approved prior to bidding

- f. Towel Dispenser, Recessed - Cabinet constructed of 22 ga stainless steel welded construction with seamless corners and burr-free edges, door constructed of 18 ga stainless steel, 1/2" return, concealed full length stainless steel piano hinge and tumbler lock keyed alike with other accessories, 22 ga stainless steel rolled edge on dispenser opening and satin finish.
  - 1) Bradley Model 2442
  - 2) Equal as approved prior to bidding
- g. Shower seat - Main frame 1-1/4" square, 16 ga, support arms 1" (O.D.) Round tubing, 16 ga wall thickness, flanges 3" (O.D.) 7ga with three mounting holes, wall brackets 7 ga with two .375 diameter mounting holes, seat top 14 ga, locking hinge assembly 7 ga. All parts of 304 series stainless steel with satin finish.
  - 1) Brey-Krause Model S-6205-SS (L shape)
  - 2) Brey-Krause Model S-6505-01-SS (Small Rectangle shape)
  - 3) Bradley Model 9558 (Nurse's Restroom Only)
  - 4) ASI Model 8203 (Nurse's Restroom Only)
  - 5) Equal as approved prior to bidding
- 2. Janitor's Closet -
  - a. Utility Shelf - Size as shown on Drawings.
    - 1) Bobrick Model B-239
    - 2) Equal as approved prior to bidding
- 3. Screening/Medication - Recessed paper towel dispenser and waste receptacle. Cabinet shall be 22 ga stainless steel and all welded construction with seamless corners and burr-free edges. Door shall be 18 ga stainless steel. 1/2" return for maximum rigidity. Secured to cabinet with a concealed full length stainless steel piano-hinge. Towel dispenser shall be 22 ga stainless steel, rolled edge on dispenser opening. Two tumbler locks keyed alike with other accessories. Satin finish.
  - 1) Bradley Model 2027
  - 2) Equal as approved prior to bidding
- 4. Wash Area - Recessed paper towel dispenser and waste receptacle. Cabinet shall be heavy gauge stainless steel with all welded construction. Flange shall be 22 ga stainless steel in one piece seamless construction 1" wide with 1/4" return. Door shall be 18 ga stainless steel, warp resistant with full length piano hinge and tumbler lock keyed alike with other accessories. Satin finish.
  - 1) Bradley Model 244
  - 2) Equal as approved prior to bidding

## 2.2 MANUFACTURERS

- A. Acorn, 800-488-8999 ext 4271, [www.acorneng.com](http://www.acorneng.com)
- B. ASI - American Specialties Inc, Yonkers, NY (914) 476-9000 [www.americanspecialties.com](http://www.americanspecialties.com)
- C. Bobrick, Washroom Equipment Inc., North Hollywood, CA 808-553-1600, [www.bobrick.com](http://www.bobrick.com)
- D. Bradley Corp, Menomonee Falls, WI (414) 251-6000 [www.bradleycorp.com](http://www.bradleycorp.com)
- E. Brey-Krause Manufacturing Company, 1209 W. Lehigh Street Bethlehem, PA 18018 USA, [www.breykrause.com](http://www.breykrause.com)
- F. PSI LLC, 14200 James Road, Rogers, MN, 800-245-3172, [www.psillcmn.com](http://www.psillcmn.com)

## PART 3 EXECUTION

### 3.1 INSTALLATION

- A. Provide mounting devices proper for base structure. Coordinate with each manufacturer's installation instruction to ensure proper blocking is installed across the entire width/length of the fixtures.
- B. Locate as follows
  - 1. Robe Hook - Coordinate with Owner for located. Ensure blocking is installed.

END OF SECTION



**DIVISION 11**

**EQUIPMENT**

**11500 VISUAL SECURITY EQUIPMENT**

- 11521 SECURITY CAMERAS / MONITORS
- 11522 DIGITAL VIDEO RECORDER

END OF TABLE OF CONTENTS





## SECTION 11521

### SECURITY CAMERAS / MONITORS

#### PART 1 – GENERAL

##### 1.1 SUMMARY

- A. Includes But Not Limited To
  - 1. Furnish and install ceiling mounted cameras with hardware, cables and all necessary items for a complete and functioning system as described in Contract Documents.
  - 2. Furnish and install conduit for cables from cameras, monitors and back to telecommunication's room.
  - 3. Connect all surveillance cameras to the digital video recorder in the telecommunications room and monitors at nurse's stations.
- B. Related Sections
  - 1. Section 11522 – Digital Video Recorder
  - 2. Section 16010 – Basic Electrical Requirements
  - 3. Section 13381 – Satellite/Cable and TV Systems/Monitors

##### 1.2 REFERENCES

- A. Federal Communications Commission (FCC) ([www.fcc.gov](http://www.fcc.gov))
  - 1. FCC CFR 47 part 15 class B – Telecommunication- Radio Frequency Devices- Digital Device- Emission.
- B. Institute of Electrical and Electronics Engineers, Inc. (IEEE) ([www.ieee.org](http://www.ieee.org))
  - 1. IEEE 802.3af compliance. Power over Ethernet.
- C. International Organization for Standardization (ISO)
  - 1. 9001 – Quality System.
- D. Underwriters Laboratories, Inc. (UL) ([www.ul.com](http://www.ul.com))
  - 1. UL 1950.
- E. Meets NEMA Type 1 and IP20 standards (in-ceiling models)

##### 1.3 QUALITY ASSURANCE

- A. Manufacturer:
  - 1. The manufacture of the camera components shall have a minimum of 10 years experience in manufacturing of similar types of systems and who can refer to similar installations providing satisfactory service.
- B. Installer:
  - 1. The installer contractor shall be authorized and trained by the manufacturer to design, install, test and maintain the system.
  - 2. The installing contractor shall be an experienced firm regularly engaged in the installation of security systems and must have a minimum of ten (10) years experience in the design, installation and testing of these security system. A list of similar systems of a similar nature and scope shall be provided on request.
- C. Quality Assurance / Control:
  - 1. All references to model numbers and other pertinent information herein are intended to establish standards of performance, quality and construction and are based upon equipment designed and manufactured by Bosch Security Systems Inc..
- D. Video Surveillance System
  - 1. Listed by UL, EN and FCC specifically for the required loads. Provide evidence of compliance upon request.

##### 1.4 SUBMITTALS

- A. Product Data:

1. Manufacture's literature or cut sheets on camera, equipment, cables, monitors and users and installation manuals for all equipment and software programs for complete video management system.
2. Manufacture's written warranty. Warranty shall be project specific with project name, address, date and owner information.
3. Shop drawings indicating location and camera placement. Identify any blind spots in layout. Full schematic of system, including wiring information for all devices.
4. Closeout – Users

## **1.5 DELIVERY, STORAGE AND HANDLING**

- A. Deliver materials in manufacture's original, unopened, undamaged containers and unharmed original identification labels.
- B. Protect store materials from environmental and temperature conditions following manufacturer's instructions.
- C. Handle and operate products and systems according to manufacturer's instructions.

## **1.6 WARRANTY**

- A. Provide manufacturer's warranty covering three (3) years for CCTV products for replacement and repair of defective equipment.

## **1.7 MAINTENANCE**

- A. Make ordering of new equipment for expansions, replacements and spare parts available to dealers and end users.
- B. Provide factory direct technical support from 8:00 a.m. to 8:00 p.m. via phone and e-mail.

## **PART 2 – PRODUCTS**

### **2.1 GENERAL**

- A. All equipment and materials used shall be standard components that are regularly manufactured and used in the manufacturer's system.
- B. All systems and components shall have been thoroughly tested and proven in actual use.
- C. All systems and components shall be provided with the availability of a toll-free (U.S. and Canada), 24-hour technical assistance program (TAP) from the manufacturer.- The TAP shall allow for immediate technical assistance for either the dealer/installer or the end user at no charge for as long as the product is installed.
- D. All systems and components shall be provided with a one-day turnaround repair express and 24-hour parts replacement. The repair and parts express shall be guaranteed by the manufacturer on warranty and nonwarranty items.

### **2.2 MANUFACTURE**

- A. Approved Manufacturer shall be Bosch Security Systems Inc., 130 Perinton Parkway, Fairport, NY 14450, (800)-289-0096, [www.boshsecurity.us](http://www.boshsecurity.us)
- B. The cameras shall be Bosch, model number VDC-455V04-20 vandal/tamper resistant Color.
- C. Equal as approved by Architect and County Representative prior to bidding.

### **2.3 SYSTEM DESCRIPTION**

- A. Performance Requirement

- a. FlexiDome XT
- b. Flush mount
- c. VDA-455CMT-Corner Mount as described in construction documents.
- d. Color dome camera designed using a 1/3-inch format CCD imager.
- e. 540 TVL of horizontal resolution
- f. 90 degree vertical view
- g. Extended sensitivity with NightSense
- h. Bilinx bi-directional communication

## 2.4 DOME AND CAMERA

- A. The product specified shall be a vandal/tamper resistant, 540 TVL resolution color dome camera designed for outdoor applications using a 1/3-inch format CCD imager. The unit is prepackaged in a cast aluminum housing with a heater, a polycarbonate dome bubble, and a hardened inner liner capable of withstanding the equivalent of 120 lbs of force. The dome bubble is supplied with a UV blocking anti-scratch coating. The camera comes complete with the following automatic iris, integral, varifocal lenses, as required by the application, to allow manual zoom and focus adjustment:
  - 1. 3.7 to 12.0 mm, F1.6-360, varifocal lens.
- B. The camera module setups and adjustments shall be made using an on-screen display in conjunction with push button keys. In addition, the dome camera specified shall be equipped with a coaxial communications transceiver that incorporates a technology [Bosch Bilinx] to allow camera setup via the coaxial cable using bi-directional communication. The manufacturer shall offer optional configuration software [Bosch VP-CFGSFT] that operates in conjunction with the bi-directional communication technology for adjustment of the camera from the head-end side of the coaxial cable.
- C. The camera module positioning shall be adjustable along three (3) axes to allow a viewing adjustment range of 360° pan, 90° tilt, and ±90° azimuth.
- D. The manufacturer of the specified dome camera shall provide an adjustment cap for the lens to be used during setup to ensure that the image sharpness (focus) and the field of view remain the same when the setup is complete and the dome bubble is installed.
- E. The specified camera shall be equipped with a heater and be capable of operating in the temperature range of -50°C to 50°C (-58°F to 122°F).
- F. The manufacturer shall offer models of the camera for use in NTSC (60 Hz) or PAL (50 Hz) CCTV systems. The cameras shall operate within the voltage range of 10.8 to 39 VDC or 12 to 28 VAC, 45-65Hz and require no more than 6 watts of power to operate.
- G. The camera shall have line-lock capability when powered by AC to synchronize the camera to the power line zero crossing for roll-free vertical interval switching. For vertical synchronization in multiphase power installations, the camera shall provide 0 to 358° of continuously adjustable vertical phase delay. Crystal-lock shall be selected when DC voltage is supplied or the line-lock function is switched off
- H. The manufacturer of the specified color dome camera shall provide optional hardware to allow the camera to be surface mounted, wall mounted, pendant pipe mounted, and internal corner mounted. The camera shall be designed to mount to a standard 4S electrical box and a suspended ceiling.
- I. A UTP (unshielded twisted pair) adapter, that allows a balanced video signal to be transmitted over UTP video cable, shall be available as an optional accessory from the manufacturer to allow a UTP video cable to be connected to the standard BNC connector.

## 2.5 ELECTRICAL SPECIFICATIONS

- A. Rated Voltage: 12 VDC or 24 VAC, 50/60 Hz.
- B. Voltage Range: 10.8 to 39 VDC or 12 to 28 VAC, 45 to 65 Hz.
- C. Power Consumption: 4 W (6 W with heater option).
- D. Imager: Interline transfer CCD, 1/3-inch image format.
- E. Active Picture Elements:
  - 1. PAL: 752 H x 582 V.
  - 2. NTSC: 768 H x 494 V.
- F. Sensitivity 3200K:
  - 1. Usable picture (30 IRE):
    - a VDC-455V03:
      - (1) NightSense: 0.18 lx (0.016 fc).
      - (2) Color: 0.44 lx (0.041 fc).
    - b VDC-455V04:
      - (1) NightSense: 0.23 lx (0.021 fc).
      - (2) Color: 0.58 lx (0.53 fc).
    - c VDC-455V09:
      - (1) NightSense: 0.18 lx (0.016 fc)
      - (2) Color: 0.44 lx (0.041 fc)
  - 2) Usable picture (50 IRE)
    - a VDC-455V03:
      - (1) NightSense: 0.39 lx (0.036 fc).
      - (2) Color: 0.98 lx (0.091 fc).
    - b VDC-455V04:
      - (1) NightSense: 0.5 lx (0.048 fc).
      - (2) Color: 1.3 lx (0.12 fc).
    - c VDC-455V09:
      - (1) NightSense: 0.39 lx (0.036 fc)
      - (2) Color: 0.98 lx (0.091 fc).
  - 3) Full video (100 IRE)
    - a VDC-455V03:
      - (1) NightSense: 1.6 lx (0.15 fc).
      - (2) Color: 3.9 lx (0.36 fc).
    - b VDC-455V04:
      - (1) NightSense: 2.0 lx (0.19 fc).
      - (2) Color: 5.1 lx (0.48 fc).
    - c VDC-455V09:
      - (1) NightSense: 1.6 lx (0.15 fc).
      - (2) Color: 3.9 lx (0.36 fc).
- G. Horizontal Resolution: 540 TVL.
- H. Video S/N: 50 dB.
- I. Automatic Gain Control: 20 dB maximum
- J. Auto Black: On/Off Selectable.
- K. Electronic shutter: Flickerless.
- L. NightSense: Auto, Forced, Off Selectable.
- M. Sharpness Correction: Horizontal and Vertical, Symmetrical.
- N. White Balance: Automatic Sensing (2500 to 9000 K) and Hold.

- O. Video Output: Composite Video 1.0 Vp-p, 75 Ohm
- P. Synchronization: Internal or Line Lock
- Q. Connector: Flying Leads

## **2.6 OPTICAL SPECIFICATIONS**

- A. Varifocal: Manual Zoom and Focus Adjustment.
- B. Automatic Iris Control.
- C. Viewing Angle:
  - 1. 2.6 to 6 mm: Wide 98.5 x 75.3 degrees (H x V), Tele 48.1 x 36.2 degrees.
  - 2. 3.7 to 12 mm: Wide 76.1 x 55.8 degrees (H x V), Tele 23.8 x 17.9 degrees.
  - 3. 9 to 22 mm: Wide: 31.2 x 22.8 degrees (H x V), Tele: 12.8 x 9.6 degrees.

## **2.7 ENVIRONMENTAL SPECIFICATIONS**

- A. Operating Temperature: -50° to +50°C (-58° to +122°F) – with heater on.
- B. Storage Temperature: -40° to +70°C (-40° to +158°F).
- C. Humidity: 5% to 93% relative humidity.
- D. Impact Protection:
  - 1. IEC 60068-2-75 test Eh, 50 J
  - 2. EN 50102, exceeding IK 10

## **2.8 MECHANICAL SPECIFICATIONS**

- A. Weight: Approx. 740 g (1.63 lb).
- B. Color: white (RAL 9010), black inner liner.
- C. Material:
  - 1. Bubble: Polycarbonate, clear, UV-blocking, anti-scratch coating.
  - 2. Trim Ring: Aluminum.
- D. Mounting: Flush on hollow surface.

## **2.9 ACCESSORIES**

- A. Accessories
  - 1. Lenses
    - a. VDC-455V04-20, NTSC, 3.7 to 12 mm F1.6 lens.
  - 2. Mounts
    - a. Flush Mount for FlexiDome Series.
    - b. VDA-455CMT Corner Mount for FlexiDome Series.

## **PART 3 – EXECUTION**

### **3.1 EXAMINATION**

- A. Before commencing installation of cameras, inspect ceiling to insure the plywood backing has been installed above the drop-in acoustical ceiling tile as well as the splay wires at the four corners of the ceiling tile the cameras will be installed. Notify Architect in writing of defects or conditions that will prevent satisfactory of camera installation. Installation work shall not proceed until satisfactory conditions are provided.

- B. Field verify all conditions, identify all furniture or other obstacles that can obstruct the field of view of the cameras and make the necessary adjustment in camera placement to ensure the best coverage.
- C. Examine areas to receive devices and notify adverse conditions affecting installation or subsequent operation. Do not begin installation until unacceptable conditions are corrected.
- D. Ensure all parts are included in packages prior to installation.

### **3.2 PREPARATION**

- A. Protect devices from damage during construction
- B. Ensure operating temperature and humidity are within range accepted and recommended by manufacturer.

### **3.3 INSTALLATION**

- A. Follow manufactures installation requirements for devices and install at locations indicated on plans.
- B. Ensure selected location is secure and offers protection from accidental damage.
- C. Location must provide reasonable temperature and humidity conditions, free from sources of electrical and electromagnetic interference.
- D. Connect cameras to DVR and Monitors at Nurse's Station and ensure they are in functioning order
- E. Install cameras in ceiling unless stated otherwise (patient rooms corner mount). Ensure cameras view all areas possible including concealed spaces.
- F. Install cameras with vandal resistant mechanical fasteners. Secure all units in compliance with Code requirements.
- G. Do Not install cameras to ceiling if the plywood backer board behind the suspended ceiling tile or gypsum board is not in place. Notify Architect immediately of the situation. Do not proceed until the issue has been resolved.
- H. Ensure all cabling is RG6 rated.
- I. Ensure all debris has been removed and properly exposed at the completion of the installation. Ensure all surfaces have been left undamaged in any way from the installation of the system. If surfaces have been damaged, repair or replace damaged items to the satisfaction of the Architect and Owner at no cost to the Owner.
- J. Install cabling in conduit.

### **3.4 FIELD QUALITY CONTROL**

- A. Test snugness of mounting screws of all installed equipment.
- B. Test proper operation of all video system devices
- C. Determine and report all problems to the manufacturer's customer service department

### **3.5 ADJUSTING**

- A. Make proper adjustment to video system devices for correct operation in accordance with manufacturer's instructions.
- B. Make any adjustment of camera settings to comply with specific customer's need.
- C. Make any adjustment to the security monitors to comply with specific customer's need.

### **3.6 DEMONSTRATION**

- A. Demonstrate at final inspection that video management system and devices function properly.
- B. Demonstrate at final inspection camera's functionality and video recording capabilities.

END OF SECTION

## SECTION 11522

### DIGITAL VIDEO RECORDER

#### PART 1 – GENERAL

##### 1.1 SUMMARY

- A. Includes But Not Limited To
  - 1. Furnish and install Digital Video Recorder (DVR), all necessary components, hardware, software, for a complete and functioning system as described in Contract Documents.
  - 2. Make final connections from security cameras to DVR and ensure system is in functioning order.
  - 3. Install software for complete interface between cameras, DVR and computer stations. Provide training for software applications
- B. Related Sections
  - 1. Section 16010 – Basic Electrical Requirements
  - 2. Section 11521 – Security Cameras / Monitors

##### 1.2 QUALITY ASSURANCE

- A. Manufacturer:
  - 1. The manufacture of the Digital Video Recorder components shall have a minimum of 10 years experience in manufacturing of similar types of systems and who can refer to similar installations providing satisfactory service.
- B. Installer:
  - 1. The installer contractor shall be authorized and trained by the manufacturer to design, install, test and maintain the system.
  - 2. The installing contractor shall be an experienced firm regularly engaged in the installation of security systems, digital video recorders and must have a minimum of ten (10) years experience in the design, installation and testing of these security system. A list of similar systems of a similar nature and scope shall be provided on request
- C. Quality Assurance / Control:
  - 1. All references to model numbers and other pertinent information herein are intended to establish standards of performance, quality and construction and are based upon equipment designed and manufactured by Samsung Electronics.

##### 1.3 SUBMITTALS

- A. Product Data:
  - 1. Manufacture's literature or cut sheets on Digital Video Recorder, equipment and cable.
  - 2. Manufacture's written warranty.
  - 3. Shop drawings indicating location and DVR placement. Coordinate with Owner and County I.T. department prior to installation.

#### PART 2 – PRODUCTS

##### 2.1 GENERAL

- A. All equipment and materials used shall be standard components that are regularly manufactured and used in the manufacturer's system.
- B. All systems and components shall have been thoroughly tested and proven in —actual use.
- C. All systems and components shall be provided with the availability of a toll-free (U.S. and Canada), 24-hour technical assistance program (TAP) from the manufacturer.- The TAP shall



allow for immediate technical assistance for either the dealer/installer or the end user at no charge for as long as the product is installed.

- B. All systems and components shall be provided with a one-day turnaround repair express and 24-hour parts replacement. The repair and parts express shall be guaranteed by the manufacturer on warranty and nonwarranty items.

## 2.2 MANUFACTURE

- A. Approved Vendor shall be Samsung Electronics
- B. The Digital Video Recorder (DVR) shall be Samsung, model number SHR-8162 with built in DVD recorder with internet access.
- C. Equal as approved by Architect and Client prior to bidding.

## 2.3 MATERIALS

- A. The Digital Video Recorder shall have 16 channel capabilities.
  - 1. Video Input, Loop Through 16 channels
  - 2. Video Output, Composite 5 channels (Normal 1ch, SPOT 4ch), VGA 800 x 600 / 1024 x 768 / 1280 x 1024 (60Hz), HDMI 1080P.
    - a. Provide RJ45 Card for Output.
  - 3. Audio Input/Output 16 ch/1channel.
  - 4. Recording Audio CH 16 channel.
  - 5. Recording Resolution and Frame Rate
    - a. NTSC: CIF (352x240) – 480ips, half D1(704x240) – 480ips, D1 (704 x 480) – 480ips.
    - b. Pal: CIF (352 x 288) – 400ips, Half D1 (704 x 288) – 400ips, D1 (704 x 576) – 400ips.
  - 6. Play Back Resolution and Frame
    - a. NTSC: CIF (352 x 240) – 480ips, Half D1 (704 x 240) – 240ips, D1 (704 x 480) – 120ips
    - b. Pal: CIF (352 x 288) – 400ips, Half D1 (704 x 288) – 200ips, D1 (704 x 576) – 100ips.
  - 7. Storage
    - a. Internal – With DVD-RW:HDD, Max 5 2.5TB (500GB x 5)
    - b. Extended I/F – SATA I/F (2 Port) / 1Port Max 4 HDD I/F / Max 4 TB I/F (500 GB x 8)
  - 8. Network
    - a. Interface – LAN 1 Port (10/100/1000 Base T Ethernet)
    - b. Protocol – ADSL (PPPoE) DHCP, DNS, NTP
  - 9. Control
    - a. RS-485 1 port
    - b. Mouse – Support (USB)
  - 10. Back-up
    - a. DVD-RW. DVD RW (-R, +R, -RW, +RW)
    - b. Back up Viewer Format – AVI/Power Player (Include Player)
    - c. USB – USB 2.0 (3 Ports)
  - 11. Client S/W
    - a. Support OS – Windows 2000, Windows XP, windows Vista
    - b. Web Viewer – Support Live / REC / Search
    - c. Remote Viewer – Net -1
  - 12. Power Requirement – AC 100 – 230V, 50/60 Hz / 60W
  - 13. Power Consumption – approx 75W
  - 14. Operating Temperature – 0 deg C – 40 deg C
  - 15. Operating Humidity – 20% - 85% RH
  - 16. Dimensions 440(W) x 88 (H) x 430 (D) mm
  - 17. Weight 7.8 kg
  - 18. Software – Complete interface software

## **2.9 WARRANTY**

- A. Provide a 2 years, parts and labor written warranty. Submit warranty with project name, address and Owner information.

## **PART 3 – EXECUTION**

### **3.1 EXAMINATION**

- A. Before commencing installation of Digital Video Recorder, inspect area to ensure power is provided. Coordinate location of the DVR in the existing rack with County of Riverside I.T. Department and Owner. Notify Architect in writing of defects or conditions that will prevent satisfactory of DVR installation. Installation work shall not proceed until satisfactory conditions are provided.
- B. Ensure that the integrity of the fire walls are maintained. Seal all penetration to comply with current building codes and all requirements form governing agencies are adhered to.

### **3.2 INSTALLATION**

- A. Follow manufactures installation requirements.
- B. Connect cameras to DVR and ensure the system is in functioning order
- C. Install software to all computer stations identified by the Client and provide training.
- D. Ensure the DVR is connected to the Facilities internet system.
- E. Ensure all debris has been removed and properly exposed at the completion of the installation. Ensure all surfaces have been left undamaged in any way from the installation of the system. If surfaces have been damaged, repair or replace damaged items to the satisfaction of the Architect and Owner at no cost to the Owner.

END OF SECTION

**DIVISION 12**  
**FURNISHINGS**

**12300 MANUFACTURED CASEWORK**

12322 PLASTIC-LAMINATE-FACED CASEWORK

END OF TABLE OF CONTENTS



## SECTION 12322

### PLASTIC LAMINATE-FACED CASEWORK

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Products Supplied But Not Installed Under This Section
  - 1. Cabinetry in Nurses' Station and Medication Room.
- B. Related Sections
  - 1. Section 06201 - Installation
  - 2. Section 15440 - Plumbing fixtures and connections

##### 1.2 REFERENCES

- A. American National Standards Institute
  - 1. ANSI A161.2-1979 (R1987), 'Performance Standards for Fabricated High Pressure Decorative Laminate Countertops'
- B. National Electrical Manufacturer's Association
  - 1. NEMA LD 3-1991, 'High Pressure Decorative Laminates'

##### 1.3 SUBMITTALS

- A. Product Data - Manufacturer's literature

#### PART 2 PRODUCTS

##### 2.1 COMPONENTS

- A. Cabinets
  - 1. Construct cabinetry from 45 lb/sq ft density pre-finished flakeboard and 1/4 inch thick pre-finished wood fiber hardboard.
    - a. Finish exposed exterior surfaces with high pressure laminate.
    - b. Finish exposed interior surfaces with high pressure laminate or polyester balancing sheet, matte finish.
  - 2. Edge Finish - Finish edges on ends, standards, shelves, doors, drawers, and drawer box with extruded barbed 'Tee' shape polyethylene edging matching laminate color.
  - 3. Hardware - Casework Manufacturer's best standard in all cases where there is an option.
- B. Plastic Laminates
  - 1. Quality -
    - a. Counter tops shall have rolled front edge and backsplash with plastic laminate meeting requirements of NEMA LD 3 - PF 42.
    - b. Other laminates shall meet requirements of NEMA LD 3 -
      - 1) Vertical Applications - GP 28.
      - 2) Horizontal (other than countertops) - GP 38.
    - c. Balancing Material - BK 20
    - d. AWI Quality Grade - Premium
  - 2. Assemblies -
    - a. Counter tops shall meet requirements of ANSI A161.2.
    - b. Adhesives for other than post-formed types shall be spray grade, high heat resistant, neoprene contact adhesive.

##### 2.2 ACCEPTABLE MANUFACTURERS

- A. Any prefabricated cabinetry or product of millwork shop meeting requirements of AWI custom grade and this Section are approved upon approval of Architect before bidding.

#### PART 3 EXECUTION - Not Used

END OF SECTION

