SECTION 323300 - SITE FURNISHINGS

Revise this Section by deleting and inserting text to meet Project-specific requirements.

1. GENERAL
   * + 1. SUMMARY
          1. Section Includes:

Seating.

Tables.

Bicycle lockers.

Trash receptacles.

Ash receptacles.

Planters.

* + - 1. REFERENCES
         1. ASTM International

ASTM A36 - Standard Specification for Carbon Structural Steel

ASTM A47 - Standard Specification for Ferritic Malleable Iron Castings

ASTM A48 - Standard Specification for Gray Iron Castings

ASTM A53 - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless

ASTM A123 - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products

ASTM A135 - Standard Specification for Electric-Resistance-Welded Steel Pipe

ASTM A153 - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware

ASTM A240 - Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications

ASTM A312 - Standard Specification for Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes

ASTM A480 - Standard Specification for General Requirements for Flat-Rolled Stainless and Heat-Resisting Steel Plate, Sheet, and Strip

ASTM A500 - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes

ASTM A513 - Standard Specification for Electric-Resistance-Welded Carbon and Alloy Steel Mechanical Tubing

ASTM A554 - Standard Specification for Welded Stainless Steel Mechanical Tubing

ASTM A664 - Standard Practice for Identification of Standard Electrical Steel Grades in ASTM Specifications

ASTM A924 - Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process

ASTM A1011 - Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High- Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength

ASTM A1107 - Standard Specification for Resilient Connectors Between Reinforced Concrete Manhole Structures and Corrugated Steel Drainage Pipes

ASTM B26 - Standard Specification for Aluminum-Alloy Sand Castings

ASTM B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate

ASTM B211 - Standard Specification for Aluminum and Aluminum-Alloy Rolled or Cold Finished Bar, Rod, and Wire

ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes

ASTM B429 - Standard Specification for Aluminum-Alloy Extruded Structural Pipe and Tube

* + - * 1. American Wood Protection Association

AWPA M4 - Standard For The Care Of Preservative-Treated Wood Products

AWPA U1 - Use Category System: User Specification For Treated Wood

* + - 1. SUBMITTALS
         1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
         2. Manufacturer’s installation instructions shall be provided along with product data.
         3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
         4. Product Data: For each type of product.

Delete Paragraph below if not required.

Retain "Samples" Paragraph below for single-stage Samples, with a subordinate list if applicable. Retain "Samples for Initial Selection" and "Samples for Verification" Paragraphs for two-stage Samples.

* + - * 1. Samples: For each exposed product and for each color and texture specified.
        2. Samples for Initial Selection: For units with factory-applied finishes.
        3. Samples for Verification: For each type of exposed finish, not less than 6-inch- long linear components and 4-inch- square sheet components.

Include full-size Samples of [**bench**] [**table**] [**bicycle rack**] [**trash receptacle**] [**ash receptacle**] <**Insert product**>. Approved samples may be incorporated into the Work.

* + - * 1. Product Schedule: For site furnishings.[**Use same designations indicated on Drawings**].

Retain "Material Certificates" Paragraph below to require submittal of material certificates from manufacturers.

* + - * 1. Material Certificates: For site furnishings manufactured with preservative-treated wood.

Indicate type of preservative used and net amount of preservative retained.[**For products receiving a waterborne treatment, include statement that moisture content of treated materials was reduced to levels specified before shipment to Project site.**]

* + - * 1. Maintenance Data: For site furnishings to include in maintenance manuals.
        2. Maintenance Material Submittals: Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

Bench Replacement [**Slats**] [**Planks**]: No fewer than [**two**] <**Insert number**> full-size units for each size indicated.

Trash Receptacle Inner Containers: [**Five**] <**Insert number**> full-size units for each size indicated, but no fewer than [**two**] <**Insert number**> units.

Anchors: <**Insert type and number**>.

1. PRODUCTS
   * + 1. SEATING <**Insert drawing designation**>

Copy this article and re-edit for each product.

Insert drawing designation. Use these designations on Drawings to identify each product.

* + - * 1. Manufacturers

A&T Iron Works, INC., 25 Cliff St, New Rochelle, NY 10801, (914) 632-8992.

BCI Burke Company, 660 Van Dyne Rd, Fond Du Lac, WI 54937, (920) 921-9220.

Bison, Inc., 603 L St, Lincoln, NE 68508, (402) 474-3353.

Canterbury Designs, 6195 Maywood Ave, Huntington Park, California, 90255, (800) 935- 7111.

Columbia Cascade Company, P.O. Box 1039, Camas, WA 98607-0039, (503) 223-1157

Approved equivalent.

* + - * 1. Frame: [**Cast aluminum**] [**Cast iron**] [**Steel**] [**Stainless steel**] [**Wrought iron**] [**Cedar**] [**Teak**].

If sizes of units or components are critical and are not indicated on Drawings, insert in "Seat ( and Back)" Paragraph below to suit Project.

* + - * 1. Seat[**and Back**]:

Material:

Aluminum Sheet: [**Perforated**] [**Expanded**] metal.

[**Painted**]Steel: [**Perforated metal**] [**Expanded metal**] [**Evenly spaced, parallel flat straps or bars**] [**Evenly woven, flat straps or bars**] [**Edge framed, evenly spaced, parallel rods or rolled bars**].

Stainless Steel: [**Perforated metal**] [**Expanded metal**] [**Evenly spaced, parallel flat straps or bars**] [**Evenly woven, flat straps or bars**] [**Edge framed, evenly spaced, parallel rods or rolled bars**].

Wood: [**Douglas fir**] [**Pine**] [**Cedar**] [**Redwood**] [**Teak**] <**Insert species**>; formed into [**evenly spaced parallel slats**] [**planks**].

[**Recycled**] [**Plastic**] [**Fiberglass**] Planks: [**Evenly spaced, parallel**].

[**Recycled**] [**Plastic**] [**Fiberglass**] Sheet: [**Solid**] [**Perforated**].

Seat Height: [**As indicated**] <**Insert dimension**>.

Seat Surface Shape: [**Flat**] [**Contoured or dished**].

If bench has no back, and arm or seat is highest element, delete "Overall Height" Subparagraph below.

Overall Height: [**As indicated**] <**Insert dimension**>.

Overall Width: [**As indicated**] <**Insert dimension**>.

Overall Depth: [**As indicated**] <**Insert dimension**>.

Arms: [**None**] [**One, as indicated**] [**Two, one at each end**] [**Three, one at each end and in center**] <**Insert requirements**>.

Arm Material: Match [**frame**] [**seat**].

Consider retaining "Weight" Subparagraph below to help specify quality. When comparing similar products made from same materials, heavier units may provide better quality.

Weight: <**Insert weight**>.

Retain "Seating Configuration" Subparagraph below for multiple seating units or revise to suit Project; delete if not applicable.

Seating Configuration: Multiple units[**as indicated**].

[**Straight**] [**Angled**] [**Curved**] shape.

Closed [**hexagon**] [**circle**] [**shape indicated**] around a [**tree trunk**] [**planter**] [**light post**] <**Insert central element**>.

* + - * 1. Aluminum Finish: [**Mill finish**] [**Color coated**].

Retain "Color" Subparagraph below if aluminum is color coated.

Color: [**As selected by Director’s Representative from manufacturer's full range**] [**As indicated in a site furnishing schedule**] <**Insert color**>.

* + - * 1. Steel Finish: [**Galvanized and**] [**color**] [**PVC-color**] coated.

Color: [**As selected by Director’s Representative from manufacturer's full range**] [**As indicated in a site furnishing schedule**].

* + - * 1. Stainless Steel Finish: [**ASTM A480, No. 6**].
        2. Wood Finish: [**Unfinished**] [**Factory-applied transparent finish**] [**Factory-applied stain and transparent finish**] [**Factory-applied opaque finish**] [**Manufacturer's standard finish**].

Retain "Stain" Subparagraph below if retaining third option in "Wood Finish" Paragraph above.

Stain: [**Manufacturer's standard**] <**Insert stain type and color**>.

* + - * 1. [**Fiberglass**] [**HDPE**] Color: [**As selected by Director’s Representative from manufacturer's full range**] [**As indicated in a site furnishing schedule**] <**Insert description**>.
        2. Graphics: [**Surface-applied**] [**Engraved**] [**Attached brass plaque with engraved**] copy, content, and style [**according to manufacturer's standard**] [**as indicated on Drawings**].
      1. TABLES <**Insert drawing designation**>

Copy this article and re-edit for each product.

Insert drawing designation. Use these designations on Drawings to identify each product.

* + - * 1. Manufacturers

A&T Iron Works, INC., 25 Cliff St, New Rochelle, NY 10801, (914) 632-8992.

BCI Burke Company, 660 Van Dyne Rd, Fond Du Lac, WI 54937, (920) 921-9220.

Bison, Inc., 603 L St, Lincoln, NE 68508, (402) 474-3353.

Canterbury Designs, 6195 Maywood Ave, Huntington Park, California, 90255, (800) 935- 7111.

Columbia Cascade Company, P.O. Box 1039, Camas, WA 98607-0039, (503) 223-1157

Approved equivalent.

* + - * 1. Frame: **[Cast aluminum] [Cast iron] [Steel] [Stainless steel] [Wrought iron] [Cedar] [Teak].**

If sizes of units or components are critical and are not indicated on Drawings, insert in "Table Top" Paragraph below to suit Project.

* + - * 1. Table Top:

Material:

Aluminum Sheet: [**Perforated**] [**Expanded**] metal.

[**Painted**]Steel: [**Perforated metal**] [**Expanded metal**] [**Evenly spaced, parallel flat straps or bars**] [**Evenly woven, flat straps or bars**] [**Edge framed, evenly spaced, parallel rods or rolled bars**].

Stainless Steel: [**Perforated metal**] [**Expanded metal**] [**Evenly spaced, parallel flat straps or bars**] [**Evenly woven, flat straps or bars**] [**Edge framed, evenly spaced, parallel rods or rolled bars**].

Wood: [**Douglas fir**] [**Pine**] [**Cedar**] [**Redwood**] [**Teak**]; formed into [**evenly spaced parallel slats**] [**planks**].

[**Recycled**] [**Plastic**] [**Fiberglass**] Planks: [**Evenly spaced, parallel**].

[**Recycled**] [**Plastic**] [**Fiberglass**] Sheet: [**Solid**] [**Perforated**].

Surface Shape: [**Round**] [**Hexagon**] [**Shape indicated**] <**Insert shape**>.

Feature: [**Center umbrella hole**] <**Insert feature**>.

* + - * 1. Aluminum Finish: [**Mill finish**] [**Color coated**].

Retain "Color" Subparagraph below if aluminum is color coated.

Color: [**As selected by Director’s Representative from manufacturer's full range**] [**As indicated in a site furnishing schedule**] <**Insert color**>.

* + - * 1. Steel Finish: [**Galvanized and**] [**color**] [**PVC-color**] coated.

Color: [**As selected by Director’s Representative from manufacturer's full range**] [**As indicated in a site furnishing schedule**] <**Insert color**>.

* + - * 1. Stainless Steel Finish: [**ASTM A480, No. 6**].
        2. Wood Finish: [**Unfinished**] [**Factory-applied transparent finish**] [**Factory-applied stain and transparent finish**] [**Factory-applied opaque finish**] [**Manufacturer's standard finish**].

Retain "Stain" Subparagraph below if retaining third option in "Wood Finish" Paragraph above.

Stain: [**Manufacturer's standard**] <**Insert stain type and color**>.

* + - * 1. [**Fiberglass**] [**HDPE**] Color: [**As selected by Director’s Representative from manufacturer's full range**] [**As indicated in a site furnishing schedule**] <**Insert description**>..
        2. Graphics: [**Surface-applied**] [**Engraved**] [**Attached brass plaque with engraved**] copy, content, and style [**per manufacturer's standard**] [**as indicated on Drawings**].
      1. BICYCLE LOCKERS <**Insert drawing designation**>

Copy this article and re-edit for each product.

Insert drawing designation. Use these designations on Drawings to identify each product.

* + - * 1. Manufacturers:

American Bicycle Security Company, 401 S Beckwith Rd, Santa Paula, CA 93060, (805) 933-3688

Columbia Cascade Company, P.O. Box 1039, Camas, WA 98607-0039, (503) 223-1157

Cora Bike Rack, P.O. Box 1647, Bellingham, WA, 98227-1647

CycleSafe, 5211 Cascade Rd SE Ste 210, Grand Rapids, MI 49546, (616) 954-9977.

Approved equivalent.

* + - * 1. Bicycle Locker Construction:

Locker: [**Molded one-piece fiberglass**] [**Steel sheet, 0.053 inch thick**] [**Steel sheet, 0.053 inch thick, with perforated metal sides**] [**with welded tubular steel frame**].

Door: [**Molded one-piece fiberglass**] [**Steel sheet, 0.053 inch thick**] [**with tubular steel frame**] [**Match locker**].

View [**Window**] [**Grille**]: [**Lexan, 12 inches square**] [**Perforated metal**].

Lock: [**Manufacturer's standard**] [**Key lock with internal locking bar**] [**Coin/token lock**].

Provide [**four**] <**Insert number**> keys.

Overall Height: [**As indicated**] <**Insert dimension**>.

Overall Width: [**As indicated**] <**Insert dimension**>.

Overall Depth: [**As indicated**] <**Insert dimension**>.

Capacity: Designed to accommodate [**one**] [**two**] bicycle(s).

Installation Method: [**Locker anchored at finished grade to substrate indicated**] [**Locker anchored below finished grade to substrate indicated**] [**As indicated**].

Locker Configuration: [**Multiple**] [**Four**] <**Insert number**> units[**as indicated**], in [**straight row**] [**curved shape**] [**shape indicated**].

* + - * 1. Steel Finish: Color coated.

Color: [**As selected by Director’s Representative from manufacturer's full range**] [**As indicated in a site furnishing schedule**] <**Insert description**>..

* + - * 1. Fiberglass Color: [**As selected by Director’s Representative from manufacturer's full range**] [**As indicated in a site furnishing schedule**] <**Insert description**>.
      1. TRASH RECEPTACLES <**Insert drawing designation**>

Copy this article and re-edit for each product.

Insert drawing designation. Use these designations on Drawings to identify each product.

* + - * 1. Manufacturers:

A&T Iron Works, INC., 25 Cliff St, New Rochelle, NY 10801, (914) 632-8992.

BCI Burke Company, 660 Van Dyne Rd, Fond Du Lac, WI 54937, (920) 921-9220.

Bison, Inc., 603 L St, Lincoln, NE 68508, (402) 474-3353.

Canterbury Designs, 6195 Maywood Ave, Huntington Park, California, 90255, (800) 935- 7111.

Columbia Cascade Company, P.O. Box 1039, Camas, WA 98607-0039, (503) 223-1157

Approved equivalent.

* + - * 1. Aluminum Facing Surrounds: [**Aluminum sheet**] [**Perforated aluminum sheet**] [**Grid in tubular frame**] [**Evenly patterned, parallel flat aluminum straps, bars, or tubular shapes**] [**Match benches**].
        2. Steel Facing Surrounds: [**Steel sheet**] [**Perforated-steel sheet**] [**Evenly patterned, parallel flat steel straps, bars, or tubular shapes**] [**Evenly patterned, parallel round steel rods, bars, or tubular shapes**] [**Grid in tubular frame**] [**Match benches**].
        3. Stainless Steel Facing Surrounds: [**Steel sheet**] [**Perforated-steel sheet**] [**Evenly patterned, parallel flat steel straps, bars, or tubular shapes**] [**Evenly patterned, parallel round steel rods, bars, or tubular shapes**] [**Grid in tubular frame**] [**Match benches**].
        4. Wood Facing Surrounds: [**Evenly spaced, Douglas fir slats**] [**Evenly spaced pine slats**] [**Evenly spaced cedar slats**] [**Redwood panels**] [**Evenly spaced redwood slats**] [**Teak panels**] [**Evenly spaced teak slats**] [**Match benches**].
        5. Fiberglass Facing Surrounds: Molded fiberglass shape.
        6. Plastic Facing Surrounds: [**Molded HDPE shape**] [**Evenly spaced HDPE slats**] [**Evenly spaced, recycled HDPE slats**] [**Match benches**].

Retain "Support Frames" Paragraph below if support frames are a part of unit. Designs with slatted facing surrounds and other repeating parallel members typically require support framing; sheet or molded materials may not.

* + - * 1. Support Frames: [**Steel**] [**Galvanized steel**]; welded.
        2. Trash Receptacles:

Receptacle Shape and Form: [**Round cylinder**] [**Round cylinder with tapered funnel top**] [**Round, tapered column**] [**Square column**] [**Rectangular column**] [**As indicated**]; with opening for depositing trash in [**lid or top**] [**side of lid or top**] [**receptacle side**].

Delete "Lids and Tops" Subparagraph below if uncovered top suits Project.

Lids and Tops: [**Matching facing panels**] [**Aluminum**] [**Steel**] [**HDPE**] [**Recycled HDPE**] secured by cable or chain, hinged, swiveled, or permanently secured.

Description: [**Flat rim ring lid with center opening**] [**Dome top**] [**Arched top**] [**Elevated flat or shallow dome rain-cap lid**] [**Combination ash sand pan and rim lid**] [**Combination ash sand pan and dome top**] [**Combination ash sand pan and elevated flat or shallow dome rain-cap lid**].

Retain first subparagraph below if openings are covered by flaps.

Opening for depositing trash covered by [**self-closing, spring-loaded-hinged, push-in**] [**rotating**] weather flap.

Receptacle Height: [**As indicated**] <**Insert dimension**>.

Overall Width: [**As indicated**] <**Insert dimension**>.

Consider retaining "Weight" Subparagraph below to help specify quality. When comparing similar products made from same materials, heavier units may provide better quality. See the Evaluations.

Weight: <**Insert weight**>.

Inner Container: [**Aluminum**] [**Galvanized-steel sheet**] [**Perforated-metal**] [**Fiberglass**] [**Rigid plastic**] container with [**drain holes**] [**lift-out handles**]; designed to be removable and reusable.

Disposable Liners: Provide receptacle designed to accommodate disposable liners.

Capacity: Not less than [**22 gal.**] [**28 gal.**] [**30 gal.**] [**32 gal.**] [**40 gal.**] [**55 gal.**] <**Insert value**>.

Service Access: [**Removable lid or top**] [**Fixed lid or top, side access**]; inner container and disposable liner lift or slide-out for emptying[**; lockable with padlock hasps**] [**; keyed lock with two keys per receptacle**] [**; self-latching hinge**].

Post Mount: [**Color-coated steel pipe; color to match receptacle**] [**Galvanized-steel pipe**] [**Wood**]; for mounting [**one**] [**two**] [**three**] receptacle(s).

* + - * 1. Aluminum Finish: [**Mill finish**] [**Color coated**].

Retain "Color" Subparagraph below if aluminum is color coated.

Color: [**As selected by Director’s Representative from manufacturer's full range**] [**As indicated in a site furnishing schedule**] <**Insert description**>.

* + - * 1. Steel Finish: [**Galvanized and**] [**color**] [**PVC-color**] coated.

Color: [**As selected by Director’s Representative from manufacturer's full range**] [**As indicated in a site furnishing schedule**] <**Insert description**>.

* + - * 1. Stainless Steel Finish: [**ASTM A480, No. 6**].
        2. Wood Finish: [**Unfinished**] [**Factory-applied transparent finish**] [**Factory-applied stain and transparent finish**] [**Factory-applied opaque finish**] [**Manufacturer's standard finish**].

Retain "Stain" subparagraph below if retaining third option in "Wood Finish" Paragraph above.

Stain: [**Manufacturer's standard**].

* + - * 1. [**Fiberglass**] [**HDPE**] Color: [**As selected by Director’s Representative from manufacturer's full range**] [**As indicated in a site furnishing schedule**] <**Insert description**>.
        2. Graphics: [**Surface-applied**] [**Engraved**] [**Attached brass plaque with engraved**] copy, content, and style [**according to manufacturer's standard**] [**as indicated on Drawings**].

Copy: [**Litter**] [**Trash**] [**Waste**] [**Recycle**].

* + - 1. DRINKING FOUNTAINS
         1. Drinking Fountains <Insert drawing designation>: **[Concrete] [Painted cast iron or steel][, pedestal][, wheelchair accessible][, freeze resistant][, vandal resistant]**.

Concrete Drinking Fountains

Cast-Iron or Steel Drinking Fountains

Standards:

Comply with NSF 61 “Drinking Water Systems Components - Health Effects” and NSF 372 “Drinking Water System Components - Lead Content”.

Retain first subparagraph below for wheelchair-accessible drinking fountains.

Comply with Uniform Code A117.1 “Accessible and Usable Buildings and Facilities”.

Design Consultant to review code references and verify that the referenced sections/tables are current. Note that code references shall be based on the current version of the Uniform Code.

Retain "with offset to receptor" option in "Pedestal" subparagraph below for wheelchair-accessible drinking fountains.

Pedestal: **[Rectangular] [Round]** <Insert shape>, **[with offset to receptor] [with side receptor(s)][, with bottle filler][, freeze resistant][, vandal resistant].**

Receptor(s):

Number: [**One**] [**Two**] [**Three**].

Material: **[Bronze] [Chrome-plated brass or stainless steel]** <Insert material>.

Shape: **[Rectangular] [Round] [Rounded front]** <Insert shape>.

Bubbler: One for each receptor, with adjustable stream regulator.

Retain subparagraph below for all non-secure installations.

Bottle filler: Push-button activation.

Drain: Grid type with NPS 1-1/4 tailpiece.

Maximum Water Flow: [**0.15 gpm**] [**0.5 gpm**] <Insert value>.

Controls: **[Foot pedal] [Push bar] [Push button]** <Insert control>.

Access to Internal Components: Panel in pedestal.

Supply Piping: [**NPS 3/8**] [**NPS 1/2**] with shutoff valve.

Drain Piping: [**NPS 1-1/4**] [**NPS 1-1/2**] minimum trap and waste.

Retain "Freeze-Resistant Supply Fitting" and "Bury Depth, Grade to Valve Components" subparagraphs below for freeze-resistant drinking fountains.

Freeze-Resistant Supply Fittings: Underground freeze-resistant shutoff and flow-control valve assembly.

Bury Depth, Grade to Valve Components: [**36 inches**] [**48 inches**] [**60 inches**] <Insert dimension>.

* + - 1. ASH RECEPTACLES <**Insert drawing designation**>

Copy this article and re-edit for each product.

Insert drawing designation. Use these designations on Drawings to identify each product.

* + - * 1. Manufacturers:

A&T Iron Works, INC., 25 Cliff St, New Rochelle, NY 10801, (914) 632-8992.

BCI Burke Company, 660 Van Dyne Rd, Fond Du Lac, WI 54937, (920) 921-9220.

Bison, Inc., 603 L St, Lincoln, NE 68508, (402) 474-3353.

Canterbury Designs, 6195 Maywood Ave, Huntington Park, California, 90255, (800) 935- 7111.

Columbia Cascade Company, P.O. Box 1039, Camas, WA 98607-0039, (503) 223-1157

Approved equivalent.

* + - * 1. Aluminum Facing Surrounds: [**Aluminum sheet**] [**Perforated aluminum sheet**] [**Grid in tubular frame**] [**Evenly patterned, parallel flat aluminum straps, bars, or tubular shapes**] [**Match benches**].
        2. Steel Facing Surrounds: [**Steel sheet**] [**Perforated-steel sheet**] [**Evenly patterned, parallel flat steel straps, bars, or tubular shapes**] [**Evenly patterned, parallel round steel rods, bars, or tubular shapes**] [**Grid in tubular frame**] [**Match benches**].
        3. Stainless Steel Facing Surrounds: [**Steel sheet**] [**Perforated-steel sheet**] [**Evenly patterned, parallel flat steel straps, bars, or tubular shapes**] [**Evenly patterned, parallel round steel rods, bars, or tubular shapes**] [**Grid in tubular frame**] [**Match benches**].
        4. Fiberglass Facing Surrounds: Molded fiberglass shape.

Retain "Support Frames" Paragraph below if support frames are a part of unit. Designs with slatted facing surrounds and other repeating parallel members typically require support framing; sheet or molded materials may not.

* + - * 1. Support Frames: [**Steel**] [**Galvanized steel**]; welded.
        2. Ash Receptacles:

Receptacle Shape and Form: [**Round cylinder**] [**Round cylinder with tapered funnel top**] [**Round, tapered column**] [**Square column**] [**Rectangular column**] [**As indicated**]; with opening for depositing trash in [**lid or top**] [**side of lid or top**] [**receptacle side**].

Some options in "Function" Subparagraph below (e.g., uncovered receptacles) may be more suitable for locations protected from direct exposure to the weather, such as under canopies and in protected doorways.

Function: [**Uncovered receptacle with sand pan**] [**Uncovered receptacle with bowl and funnel**] [**Covered receptacle with sand pan**] [**Covered receptacle with bowl and screen**] [**Covered receptacle with slots**] [**Uncovered receptacle with sand pan attaching to side of trash receptacle**] for depositing cigarette butts; fire-proof design; bowl and pan removable for cleaning.

Delete "Lids and Tops" Subparagraph below if uncovered top suits Project.

Lids and Tops: [**Matching facing panels**] [**Aluminum**] [**Steel**] [**HDPE**] [**Recycled HDPE**] secured by cable or chain, hinged, swiveled, or permanently secured.

Description: [**Flat rim ring lid with center opening**] [**Dome top**] [**Arched top**] [**Elevated flat or shallow dome rain-cap lid**] [**Combination ash sand pan and rim lid**] [**Combination ash sand pan and dome top**] [**Combination ash sand pan and elevated flat or shallow dome rain-cap lid**].

Receptacle Height: [**As indicated**] <**Insert dimension**>.

Overall Width: [**As indicated**] <**Insert dimension**>.

Consider retaining "Weight" Subparagraph below to help specify quality. When comparing similar products made from same materials, heavier units may provide better quality. See the Evaluations.

Weight: <**Insert weight**>.

Post Mount: [**Color-coated steel pipe; color to match receptacle**] [**Galvanized-steel pipe**] [**Wood**]; for mounting [**one**] [**two**] [**three**] receptacle(s).

Accessories: [**Sand sifter**] [**Butt stub-out**] <**Insert accessory**>.

* + - * 1. Aluminum Finish: [**Mill finish**] [**Color coated**].

Retain "Color" Subparagraph below if aluminum is color coated.

Color: [**As selected by Director’s Representative from manufacturer's full range**] [**As indicated in a site furnishing schedule**] <**Insert description**>.

* + - * 1. Steel Finish: [**Galvanized and**] [**color**] [**PVC-color**] coated.

Color: [**As selected by Director’s Representative from manufacturer's full range**] [**As indicated in a site furnishing schedule**] <**Insert description**>.

* + - * 1. Stainless Steel Finish: [**ASTM A480, No. 6**].
        2. [**Fiberglass**] [**HDPE**] Color: [**As selected by Director’s Representative from manufacturer's full range**] [**As indicated in a site furnishing schedule**] <**Insert description**>.
      1. PLANTERS <**Insert drawing designation**>

Copy this article and re-edit for each product.

Insert drawing designation. Use these designations on Drawings to identify each product.

* + - * 1. Manufacturers:

Country Casual, 7601 Rickenbacker Drive, Gaithersburg, Maryland 20879, (800) 289-8325

DuMor, P.O. Box 142, Mifflintown, PA 17059, (800) 598 – 4018.

The Fibrex Group, INC., 4165 Pruden Blvd, Suffolk, VA 23434, (800) 346-4458

Kay Park Recreation, 1301 Pine St, Janesville, IA 50647, (800) 553-2476.

Approved equivalent.

* + - * 1. Aluminum Facing Surrounds: [**Aluminum sheet**] [**Perforated aluminum sheet**] [**Grid in tubular frame**] [**Evenly patterned, parallel flat aluminum straps, bars, or tubular shapes**] [**Match benches**].
        2. Steel Facing Surrounds: [**Steel sheet**] [**Perforated-steel sheet**] [**Evenly patterned, parallel flat steel straps, bars, or tubular shapes**] [**Evenly patterned, parallel round steel rods, bars, or tubular shapes**] [**Grid in tubular frame**] [**Match benches**].
        3. Stainless Steel Facing Surrounds: [**Steel sheet**] [**Perforated-steel sheet**] [**Evenly patterned, parallel flat steel straps, bars, or tubular shapes**] [**Evenly patterned, parallel round steel rods, bars, or tubular shapes**] [**Grid in tubular frame**] [**Match benches**].
        4. Wood Facing Surrounds: [**Evenly spaced, Douglas fir slats**] [**Evenly spaced pine slats**] [**Evenly spaced cedar slats**] [**Redwood panels**] [**Evenly spaced redwood slats**] [**Teak panels**] [**Evenly spaced teak slats**] [**Match benches**].
        5. Fiberglass Facing Surrounds: Molded fiberglass shape.
        6. Plastic Facing Surrounds: [**Molded HDPE shape**] [**Evenly spaced HDPE slats**] [**Evenly spaced, recycled HDPE slats**] [**Match benches**].

Retain "Support Frames" Paragraph below if support frames are a part of unit. Designs with slatted facing surrounds and other repeating parallel members typically require support framing; sheet or molded materials may not.

* + - * 1. Support Frames: [**Steel**] [**Galvanized steel**]; welded.
        2. Planter Shape and Form: [**Round cylinder**] [**Round cylinder with tapered funnel top**] [**Round, tapered column**] [**Square column**] [**Rectangular column**] [**As indicated**].

Retain "Style" Paragraph below if applicable; revise to suit Project.

* + - * 1. Style: [**To match benches**] [**As indicated by manufacturer's designation**].
        2. Overall Height: [**As indicated**] <**Insert dimension**>.
        3. Overall [**Diameter**] [**Width**]: [**As indicated**] <**Insert dimension**>.
        4. Overall Depth: [**As indicated**] <**Insert dimension**>.

Consider retaining "Weight" Paragraph below to help specify quality. When comparing similar products made from same materials, heavier units often provide better quality. See the Evaluations.

* + - * 1. Weight: <**Insert weight**>.
        2. Inner Container: [**Aluminum**] [**Galvanized-steel sheet**] [**Fiberglass**] [**Rigid plastic**] container[**with drain holes**].
        3. Capacity: Not less than [**22 gal.**] [**28 gal.**] [**30 gal.**] [**32 gal.**] [**40 gal.**] [**55 gal.**].
        4. Installation Method: [**Freestanding**] [**Freestanding with weighted base**] [**Anchored to substrate indicated on Drawings**] [**Wall mounted**] [**Post mounted**] [**Mounted on elevated leg angles anchored at finished grade to substrate indicated on Drawings**] [**Mounted on elevated leg angles anchored below finished grade to substrate indicated on Drawings**] [**As indicated on Drawings**].

Post Mount: [**Color-coated steel pipe; color to match receptacle**] [**Galvanized-steel pipe**] [**Wood**]; for mounting [**one**] [**two**] [**three**] planter(s).

* + - * 1. Aluminum Finish: Color coated.

Color: [**As selected by Director’s Representative from manufacturer's full range**] [**As indicated in a site furnishing schedule**] <**Insert description**>.

* + - * 1. Steel Finish: [**Galvanized and**] [**color**] [**PVC-color**] coated.

Color: [**As selected by Director’s Representative from manufacturer's full range**] [**As indicated in a site furnishing schedule**] <**Insert description**>.

* + - * 1. Stainless Steel Finish: [**ASTM A480, No. 6**].
        2. Wood Finish: [**Unfinished**] [**Factory-applied transparent finish**] [**Factory-applied stained and transparent finish**].

Stain: <**Insert stain type and color**>.

* + - * 1. [**Fiberglass**] [**HDPE**] Color: [**As selected by Director’s Representative from manufacturer's full range**] [**As indicated in a site furnishing schedule**] <**Insert description**>.

Retain one option in "Finish" Subparagraph below for fiberglass; otherwise, delete subparagraph.

Finish: [**Smooth**] [**Textured**].

* + - 1. MATERIALS
         1. Aluminum: Alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated; free of surface blemishes and complying with the following:

Rolled or Cold-Finished Bars, Rods, and Wire: ASTM B211.

Extruded Bars, Rods, Wire, Profiles, and Tubes: ASTM B221.

Structural Pipe and Tube: ASTM B429.

Sheet and Plate: ASTM B209.

Castings: ASTM B26.

* + - * 1. Steel and Iron: Free of surface blemishes and complying with the following:

Plates, Shapes, and Bars: ASTM A36.

Steel Pipe: Standard-weight steel pipe complying with ASTM A53, or electric-resistance-welded pipe complying with ASTM A135.

Tubing: Cold-formed steel tubing complying with ASTM A500.

Mechanical Tubing: Cold-rolled, electric-resistance-welded carbon or alloy steel tubing complying with ASTM A513, or steel tubing fabricated from steel complying with ASTM A1011 and complying with dimensional tolerances in ASTM A500; zinc coated internally and externally.

Sheet: Commercial steel sheet complying with ASTM A1011.

Revise "Perforated Metal" Subparagraph below if specific pattern is critical for Project.

Perforated Metal: From steel sheet not less than [**0.075-inch**] [**0.090-inch**] [**0.120-inch**] nominal thickness; manufacturer's standard perforation pattern.

Revise "Expanded Metal" Subparagraph below if specific designation is critical.

Expanded Metal: Carbon-steel sheets, deburred after expansion, and complying with ASTM F1267.

Malleable-Iron Castings: ASTM A47, grade as recommended by fabricator for type of use intended.

Gray-Iron Castings: ASTM A48, Class 200.

* + - * 1. Stainless Steel: Free of surface blemishes and complying with the following:

Sheet, Strip, Plate, and Flat Bars: ASTM A240 or ASTM A666.

Pipe: Schedule 40 steel pipe complying with ASTM A312.

Tubing: ASTM A554.

* + - * 1. Wood: Surfaced smooth on four sides with eased edges; kiln dried, free of knots, solid stock of species indicated.

Wood Species:[**Manufacturer's standard.**]

Retain one wood species below or revise to suit Project.

Douglas Fir: Clear Grade, vertical grain.

Pine: Southern pine; No. 2 or better[**; preservative treated, kiln dried after treatment**].

[**Eastern White**] [**Red**] [**Yellow**] Cedar: Select Grade or better.

Redwood: [**Clear all heart**] [**Construction heart or better**], free-of-heart center.

Teak (Tectona Grandis): Clear Grade.

<**Insert wood species**>: <**Insert grade, if applicable, and other requirements**>.

The sustainable design link is broken. Consult with Project Manager if sustainable design requirements are applicable to the Project.

Manufacturers may apply sealers and colorants for durability or if required for local climates; insert other treatments in "Finish" Subparagraph below to suit Project.

Finish: Manufacturer's standard [**stain**] [**and**] [**transparent sealer**] [**transparent wood-preservative treatment and sealer**].

* + - * 1. Fiberglass: Multiple laminations of glass-fiber-reinforced polyester resin with UV-light stable, colorfast, nonfading, weather- and stain-resistant, colored polyester gel coat, and with manufacturer's standard finish.
        2. Plastic: Color impregnated, color and UV-light stabilized, and mold resistant.

Retain "Polyethylene" or "Polyethylene with Recycled Content" Subparagraph below.

The sustainable design link is broken. Consult with Project Manager if sustainable design requirements are applicable to the Project.

Polyethylene: Fabricated from virgin plastic HDPE resin.

* + - * 1. Anchors, Fasteners, Fittings, and Hardware: [**Stainless steel**] [**Brass**] [**Galvanized steel**] [**Zinc-plated steel**] [**Manufacturer's standard, corrosion-resistant-coated or noncorrodible materials**]; commercial quality[**, tamperproof, vandal and theft resistant**] [**, concealed, recessed, and capped or plugged**].

Indicate locations of anchors and brackets on Drawings.

Angle Anchors: For inconspicuously bolting legs of site furnishings to [**on**] [**below**]-grade substrate; [**one per leg**] [**extent as indicated**].

Antitheft Hold-Down Brackets: For securing site furnishings to substrate; [**two per unit**] [**extent as indicated on Drawings]**.

Retain "Nonshrink, Nonmetallic Grout" or "Erosion-Resistant Anchoring Cement" subparagraph below if site furnishings are set in pipe sleeves or voids in concrete; otherwise, delete both paragraphs.

* + - * 1. Nonshrink, Nonmetallic Grout: Premixed, factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C1107; recommended in writing by manufacturer, for exterior applications.
        2. Erosion-Resistant Anchoring Cement: Factory-packaged, nonshrink, nonstaining, hydraulic-controlled expansion cement formulation for mixing with potable water at Project site to create pourable anchoring, patching, and grouting compound; resistant to erosion from water exposure without needing protection by a sealer or waterproof coating; recommended in writing by manufacturer, for exterior applications.

Retain "Galvanizing" Paragraph below if ferrous components are used to fabricate site furnishings.

* + - * 1. Galvanizing: Where indicated for steel and iron components, provide the following protective zinc coating applied to components after fabrication:

Zinc-Coated Tubing: External, zinc with organic overcoat, consisting of a minimum of 0.9 oz./sq. ft. of zinc after welding, a chromate conversion coating, and a clear, polymer film. Internal, same as external or consisting of 81 percent zinc pigmented coating, not less than 0.3 mil thick.

Hot-Dip Galvanizing: According to ASTM A123, ASTM A153, or ASTM A924.

* + - 1. WOOD-PRESERVATIVE-TREATED MATERIALS

Retain this article if using treated wood components.

* + - * 1. Preservative Treatment: Pressure-treat wood according to AWPA U1, Use Category UC3b, and the following:

Use preservative chemicals acceptable to authorities having jurisdiction and containing no arsenic or chromium. Use chemical formulations that do not bleed through or otherwise adversely affect finishes. Do not use colorants to distinguish treated materials from untreated materials.

Kiln-dry lumber and plywood after treatment to a maximum moisture content, respectively, of 19 and 15 percent. Do not use materials that are warped or do not comply with requirements for untreated materials.

* + - 1. FABRICATION
         1. Metal Components: Form to required shapes and sizes with true, consistent curves, lines, and angles. Separate metals from dissimilar materials to prevent electrolytic action.
         2. Welded Connections: Weld connections continuously. Weld solid members with full-length, full-penetration welds and hollow members with full-circumference welds. At exposed connections, finish surfaces smooth and blended, so no roughness or unevenness shows after finishing and welded surface matches contours of adjoining surfaces.
         3. Pipes and Tubes: Form simple and compound curves by bending members in jigs to produce uniform curvature for each repetitive configuration required; maintain cylindrical cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of handrail and railing components.
         4. Preservative-Treated Wood Components: Complete fabrication of treated items before treatment if possible. If cut after treatment, apply field treatment complying with AWPA M4 to cut surfaces.
         5. Exposed Surfaces: Polished, sanded, or otherwise finished; all surfaces smooth, free of burrs, barbs, splinters, and sharpness; all edges and ends rolled, rounded, or capped.
         6. Factory Assembly: Factory assemble components to greatest extent possible to minimize field assembly. Clearly mark units for assembly in the field.
      2. GENERAL FINISH REQUIREMENTS
         1. Appearance of Finished Work: Noticeable variations in same piece are unacceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
      3. ALUMINUM FINISHES

Revise this article if less-durable, nonpowder-coat, baked-enamel finish suits Project and product. Most manufacturers listed in the Evaluations finish products with baked, polyester, powder-coat finish. Verify availability with manufacturers.

* + - * 1. Powder-Coat Finish: Manufacturer's standard polyester powder-coat finish complying with finish manufacturer's written instructions for surface preparation, including pretreatment, application, baking, and minimum dry film thickness.
      1. STEEL AND GALVANIZED-STEEL FINISHES

Revise "Powder-Coat Finish" Paragraph below if less-durable, nonpowder-coat, baked-enamel finish suits Project and product. Most manufacturers listed in the evaluations finish products with baked, polyester, powder-coat finish. Verify availability with manufacturers.

* + - * 1. Powder-Coat Finish: Manufacturer's standard polyester, powder-coat finish complying with finish manufacturer's written instructions for surface preparation, including pretreatment, application, baking, and minimum dry film thickness.
        2. PVC Finish: Manufacturer's standard, UV-light stabilized, mold-resistant, slip-resistant, matte-textured, dipped or sprayed-on, PVC-plastisol finish, with flame retardant added; complying with coating manufacturer's written instructions for pretreatment, application, and minimum dry film thickness.
      1. IRON FINISHES

Revise "Powder-Coat Finish" Paragraph below if less-durable, nonpowder-coat, baked-enamel finish suits Project and product. Most manufacturers listed in the evaluations finish products with baked, polyester, powder-coat finish. Verify availability with manufacturers.

* + - * 1. Powder-Coat Finish: Manufacturer's standard polyester powder-coat finish complying with finish manufacturer's written instructions for surface preparation, including pretreatment, application, baking, and minimum dry film thickness.
      1. STAINLESS STEEL FINISHES
         1. Surface Preparation: Remove tool and die marks and stretch lines, or blend into finish.
         2. Polished Finishes: Grind and polish surfaces to produce uniform finish, free of cross scratches.

Run directional finishes with long dimension of each piece.

Directional Satin Finish: ASTM A480, No 4.

Dull Satin Finish: ASTM A480, No. 6.

1. EXECUTION
   * + 1. EXAMINATION
          1. Examine areas and conditions, with Installer present, for compliance with requirements for correct and level finished grade, mounting surfaces, installation tolerances, and other conditions affecting performance of the Work.
          2. Proceed with installation only after unsatisfactory conditions have been corrected.
       2. INSTALLATION
          1. Comply with manufacturer's written installation instructions unless more stringent requirements are indicated. Complete field assembly of site furnishings where required.
          2. Unless otherwise indicated, install site furnishings after landscaping and paving have been completed.
          3. Install site furnishings level, plumb, true, and [**securely anchored**] [**positioned**] at locations indicated on Drawings.

Retain "Post Setting" or "Posts Set into Voids in Concrete" Paragraph below if site furnishings are supported by embedded pipe or tubing posts, or revise to suit Project.

* + - * 1. Post Setting: Set cast-in support posts in concrete footing with smooth top, shaped to shed water. Protect portion of posts above footing from concrete splatter. Verify that posts are set plumb or at correct angle and are aligned and at correct height and spacing. Hold posts in position during placement and finishing operations until concrete is sufficiently cured.
        2. Posts Set into Voids in Concrete: Form or core-drill holes for installing posts in concrete to depth recommended in writing by manufacturer of site furnishings and larger than OD of post. Clean holes of loose material, insert posts, and fill annular space between post and concrete with [**nonshrink, nonmetallic grout**] [**or**] [**anchoring cement**], mixed and placed to comply with anchoring material manufacturer's written instructions, with top smoothed and shaped to shed water.

Retain "Pipe Sleeves" Paragraph below if site furnishings are installed in pipe sleeves.

* + - * 1. Pipe Sleeves: Use steel pipe sleeves preset and anchored into concrete for installing posts. After posts have been inserted into sleeves, fill annular space between post and sleeve with [**nonshrink, nonmetallic grout**] [**or**] [**anchoring cement**], mixed and placed to comply with anchoring material manufacturer's written instructions, with top smoothed and shaped to shed water.

END OF SECTION 323300