SECTION 2
CONSTRUCTION GUIDELINES

SELECTION & PLACEMENT OF RECYCLING & TRASH CONTAINERS

ANNEX C
1. **Purpose:** To provide a process for selection and placement of trash and recycling containers on campus.

2. **Scope:** This Standard Operating Procedure #3 (SOP #3) standardizes the method of selecting and placing trash and recycling containers on campus to ensure that containers meet the needs of the University and are serviceable. This applies to interior and exterior recycling and trash containers and is intended to work in conjunction with the University Design Manual, University Policy Statement #110, and the Environmental Health & Safety Office Policy Statement #38.

3. **Definition of Terms:**

   I. **Container:** A broad term referring to any individual building interior or exterior receptacle, bin, can, or enclosure on campus for the purpose of trash and recycling collection.

   II. **Enclosure:** A more specific term referring to a custom purchased or custom-built recycling and trash cabinet incorporating two or more collection “streams” or sections within one container.

   III. **Stream:** A specific term referring to one of several recycling and trash features such as “Landfill” (previously referred to as “Trash”), “Containers” (previously and separately referred to as “Aluminum Cans” and “Plastic and Glass Bottles”), and “Paper” (previously and separately referred to as “Office Blend” and “News Blend”).

4. **Responsibilities:** The following parties will be involved in the process of approving, siting, and installing recycling containers and trash cans on campus:

   I. **Building Environmental Services & Recycling (BES&R):**
      a. Determines where exterior recycling and trash sets should be sited.
      b. Determines where interior trash and recycling sets in academic and administrative buildings should be sited.
      c. Ensures that recycling and trash containers are paired up.
      d. Researches containers to find the ones that best suit servicing requirements while maintaining aesthetic appeal and fiscal responsibility.
      e. Designs and maintains signs above or on waste containers and enclosures.

   II. **Housekeeping:** (NOTE: This refers to the Housekeeping group that is responsible for the particular building):
      a. Works with BES&R to ensure that containers and signage are consistent with the rest of campus.
      b. Determines where interior trash and recycling sets in their respective buildings are located.
      c. Ensures that exterior sets of containers are located at building entrances and other high-traffic areas that generate waste, such as outdoor dining and seating.
      d. Ensures that recycling and trash containers are paired up.

   III. **Planning Design and Construction (PDC):** (If included as part of a project)
      a. Designs spaces to accommodate sets of recycling and trash containers, with or without enclosures, in all new construction and renovations.
      b. Specifies areas where enclosures have been financially justified for aesthetic, safety, or performance purposes.
      c. Includes funding in projects to cover costs for purchasing necessary recycling and trash containers and specified enclosures.
IV. Real Estate and Land Use (RELU)
   a. Provide feedback on criteria for aesthetically acceptable outdoor trash and recycling containers.
   b. Provide feedback on preferred locations for siting outdoor containers.

5. General Requirements:
   Recycling containers and trash cans must be placed together and side-by-side to always provide users with a sorting option. Trash cans must be placed with a recycling container, and recycling containers must be placed with a trash can. All sorting options must be clearly labeled.

A. EXTERIOR CONTAINERS:
   I. Customer:
      a. Contact BES&R for help in determining appropriate sizes, types, and locations for containers.
      b. Provide funding account to BES&R for ordering.
   II. Building Environmental Services & Recycling (BES&R):
      a. Provides input on size, number, and type of recycling and trash containers needed.
      b. Identifies acceptable locations for container placement.
      c. Orders agreed-upon number of containers.
      d. Assembles containers and places them in agreed-upon location(s).

B. INTERIOR CONTAINERS:
   I. Customer:
      a. Contact BES&R for help in determining appropriate sizes, types, and locations for containers.
      b. Provide funding account to BES&R for ordering.
   II. BES&R:
      a. Provides input on size, number, and type of trash and recycling containers needed.
      b. Identifies acceptable locations for container placement.
      c. Cleans locations designated for trash and recycling containers.
      d. Places trash and recycling containers.
      e. In cases where custom cabinet “enclosures” have been financially justified for aesthetic, safety, or performance reasons, BES&R will work with FM Shops to have enclosures built to specifications or custom cabinet “enclosures” may be purchased by BES&R.
      f. BES&R places rigid liners inside enclosures once enclosures are complete.

C. PLANNING DESIGN AND CONSTRUCTION (PDC):
   It is the goal of the University to improve performance and cost-effectiveness of recycling and trash containers. This may include placing recycling and trash containers in “enclosures” when justification and funding allow. All projects should consider appropriate use of stand-alone containers as well as “enclosures” if justified to meet aesthetic, safety, or performance criteria.
For new construction and major renovation projects, it is the goal of the University to standardize recycling and trash containers and “enclosures”. Enclosure styles and standards will be reviewed and updated by the PDC to provide affordable and consistent designs and commercially available enclosures that match building décor and do not detract from aesthetics.

I. Customer:
   a. Project will not be treated any differently from the Customer standpoint, although the cost estimate will provide a line item for container replacement.

II. PDC:
   a. Work with Customer and BES&R to find potential locations for recycling and trash collection.
   b. Coordinate with BES&R to include proper measurements and style(s) for containers.
   c. Ensure that funding for interior recycling and trash bins (deskside bins, etc.) and exterior recycling and trash sets are included in Project Budget.

III. BES&R:
   a. Work with Customer and PDC to find potential locations for recycling and trash collection.
   b. Work with Facilities Management Shops and contractor to provide measurements and specifications when custom enclosures are justified and funded.

6. Specific Procedures:

A. Placement of Containers:
   I. Trash and Recycling Containers are always placed side-by-side.
   II. Containers that are improperly placed or do not meet safety and serviceability requirements may be removed or relocated by the servicing section.
   III. A minimum of one set of publicly accessible trash and recycling containers will be located on every floor of the building (lobby, dining areas, etc.). Interior sets of bins will have three collection streams (“Containers”, “Paper”, “Landfill”). Review the Standard Design and Sample Plan for Recycling & Trash Enclosure Cabinets at the end of this document.
   IV. A set of recycling and trash containers should be visible and within 20 feet of each major entrance to a building. Exterior sets will have two collection streams (“Containers” and “Landfill”).
   V. All departments must have a designated area accessible by recycling staff for use as a “central recycling area” for that department. This may be a mail room, copy room, break room etc., and must have space for a minimum of three containers (“Landfill”, “Containers”, and “Paper”). In rare cases, department facilities with few staff will be allowed to designate a nearby indoor public collection area as their central recycling area.

B. Selection of containers:
   I. Containers must meet serviceability requirements as specified in the University Design Manual. Requirements include (but are not limited to):
      a. Access to interior containers via the front. This allows heavy bags to be pulled out sideways rather than lifted above waist height. As a result, minimizing the risk of injury while allowing employees to maintain a more ergonomically correct position. (reference EH&S Policy Statement #38).
b. Volume of exterior recycling containers is between 32-gallons (minimum) and 38-gallons (maximum) to allow staff to safely handle full bags and prevent bags from tearing due to weight.

c. Volume of exterior trash containers is a minimum of 32-gallons.

d. Restrictive cut outs on the top of the containers to prevent contamination of recycling containers (examples: 2-inch-wide slots for paper, and 6-inch diameter circles for aluminum cans, and plastic and glass bottles).

e. Function and affordability should be primary considerations.

II. Containers that do not meet serviceability requirements will not be serviced and may be removed by the servicing section.

III. Final approval of selection and placement of recycling and trash containers on campus rests with the Associate Vice Chancellor for Facilities Management.

C. Inquiries:
I. All inquiries about recycling and trash will be addressed to the Recycling Section.

7. Recycling & Trash Enclosure Cabinets:

A. Summary:
I. As a State-funded institution, UNC Charlotte is required by NC General Statutes to provide recycling containers in all buildings. All new construction is to include recycling and trash "enclosure" cabinets for use by the public. Enclosure cabinets have the following advantages:
   1. Purchased or built to standardize user experience with public waste facilities across campus.
   2. Allows waste collection sites to be placed in accessible locations without blocking egress or creating Safety or Fire hazards.
   3. Ensure that recycling and trash containers are not easily moved or removed.

II. Enclosures are to be located near vending areas, lobbies, and entrances. In new construction, occupants should pass by at least one trash and recycling "enclosure" between any given entrance and their destination. The most efficient solution in most buildings will be to place enclosures near all entrances.

III. Existing buildings may continue with their current set of recycling and trash containers until otherwise renovated.

B. Standard Design for Enclosure Cabinets:

The standards recycling and trash enclosure cabinets are as follows:


2. Top slanted towards front to discourage use as a shelf or table.


4. Service doors on front of enclosure cabinets to be opened with concealed finger-holds rather than door pulls.
5. Appropriately sized to fit rectangular 23-gallon container (20”W x 11”D x 30”H) or round 32-gallon container (24”Dia. x 28”H) (University will supply).

6. A minimum of 8” should be left between one end of the built-in cabinet and continuing wall space to allow for collection of flattened cardboard boxes for recycling.

7. Enclosure finishes should be consistent across campus, durable, and easy to clean. Black and dark green are preferred colors. Laminate or paint finish may be used dependent on the other finishes in the area.

8. Durable, engraved plastic or metal signage should be included on each section. Appropriate wording will be provided by BES&R.

9. Framed sign holders (minimum 8.5” X 11”) for periodically updated messages should be located on the front doors or above the unit corresponding with each enclosed section (stream).

10. Design will incorporate ADA accessibility requirements.

C. Sample Diagrams of Recycling and Trash Enclosure with 32-Gallon Containers:

TOP VIEW
ANY DEVIATIONS FROM THE STANDARDS LISTED ABOVE MUST BE APPROVED BY OFFICE OF WASTE REDUCTION AND RECYCLING STAFF.