

SF Trash Can Replacement Project

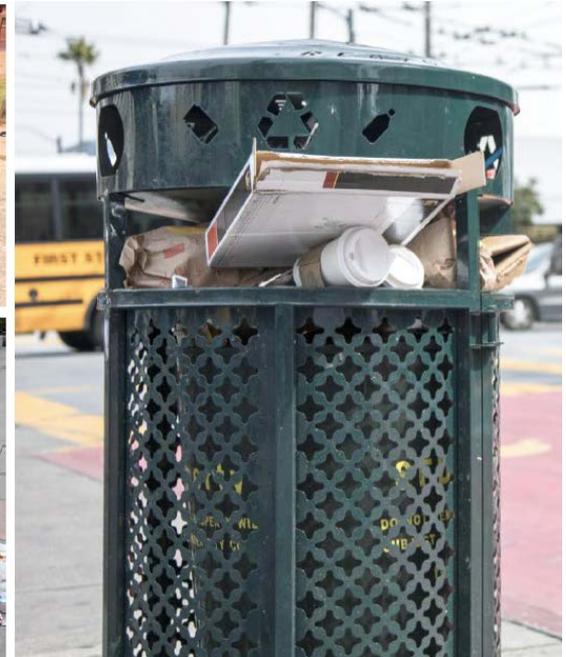
Budget and Finance Committee Meeting, July 21, 2021



EXISTING TRASH CANS

Problems with current trash cans:

1. Overflowing and raiding
2. Durability – locks are easily broken
3. Non-rollable liner
4. Rats and other pests
5. Vandalism and high maintenance cost



DESIGN CRITERIA FOR NEW TRASH CANS

- Ability to accommodate a minimum of 32 gallon rolling toter.
- Weather protection – prevents rain from pouring into can / proper drainage
- Incorporate recycling exchange
- Discourage improper use – such as disposal of household waste
- Durable locking mechanism
- Durable materials that can withstand daily use by public; anti-vandalism
- Anti-rats
- ADA compliance
- Incorporate electronic sensor

INITIAL CONCEPT DESIGNS



APPROVED CONCEPT DESIGNS



Salt & Pepper



Slim Silhouette



Soft Square

APPROVED CONCEPT DESIGN

Salt & Pepper

Salt and pepper's unique profile stands out from afar, easily distinguishable for someone looking to discard items. The silhouette denotes two separate refuse areas, with cans and bottles for redemption exchange above and regular trash below. Steel fins welded to ribs give Salt and Pepper a durable frame, as well as providing visibility for security and deterrence to graffiti. A shroud minimizes the size of items capable of being discarded, discouraging oversized, obstructive items. The bold new form also communicates the city's efforts to usher in a new, more cleanly era on the streets of San Francisco.



APPROVED CONCEPT DESIGN

Salt & Pepper



APPROVED CONCEPT DESIGN

Salt & Pepper



APPROVED CONCEPT DESIGN

Salt & Pepper

Salt and Pepper design allows for multiple top solutions. “Stacked” employs a simple shroud, limiting size of items thrown in garbage. “Side by side” incorporates a secure “chute” design (similar to some public mailboxes) that more thoroughly discourages harvesting of discarded items.



Stacked

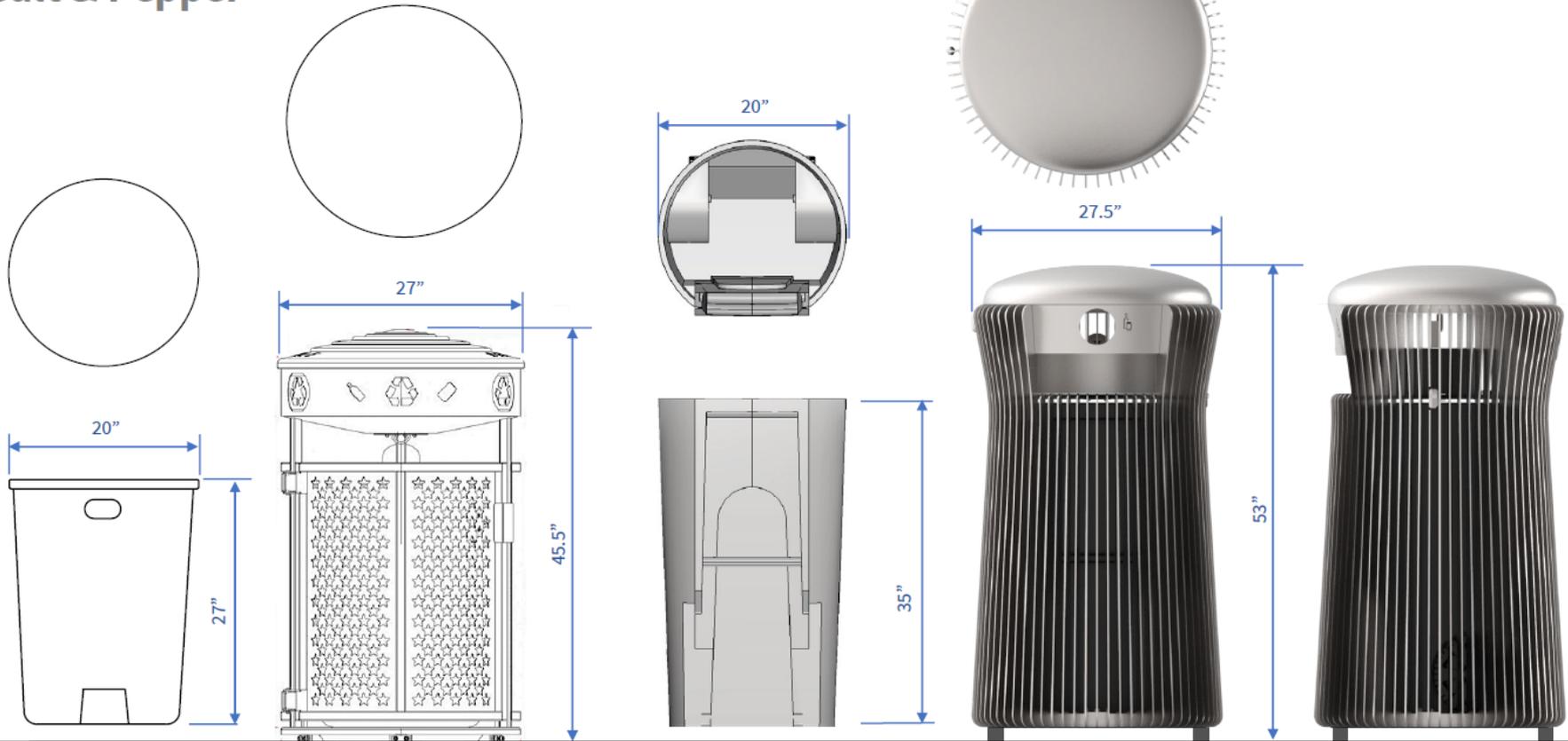


Side by side

APPROVED CONCEPT DESIGN

Custom Toter

Salt & Pepper



Renaissance liner

Current Renaissance Receptacle

Salt & Pepper- liner/toter

Salt & Pepper - Top & Front

Salt & Pepper- Side

APPROVED CONCEPT DESIGN

Slim Silhouette

Slim Silhouette's slim side profile allows more space on the sidewalks for people to move about freely while clearly presenting discard options on the front face, trash or recycle exchange. This single sided access and the chute shaped trash opening makes rummaging more difficult, so more trash stays inside. The trash and recycle openings have a generously rounded bezel inviting people in. The stainless steel pipe construction ensures longer lasting beauty with easier cleanability and less flat surface for graffiti. Slim Silhouette keeps the streets clean with personality!



APPROVED CONCEPT DESIGN

Slim Silhouette

Curved slanted top draws eye around while discouraging item placement

Funnel and recycle exchange visible through pipes



Spun bezels with rounded edge invite people to discard their trash



APPROVED CONCEPT DESIGN

Slim Silhouette

Cans / bottles area.
Slid off into the toter
when serviced

Sensor located
below shelf

Pill shaped
custom toter



City seal and
key lock

1/2" diameter pipe
construction

APPROVED CONCEPT DESIGN

Slim Silhouette

As we move toward engineering and product realization, we have envisioned two options for construction, Full Pipes and Partial Pipes. Depending on the capabilities of the selected manufacturer and unit cost one option may offer advantages over the other.



Full Pipes

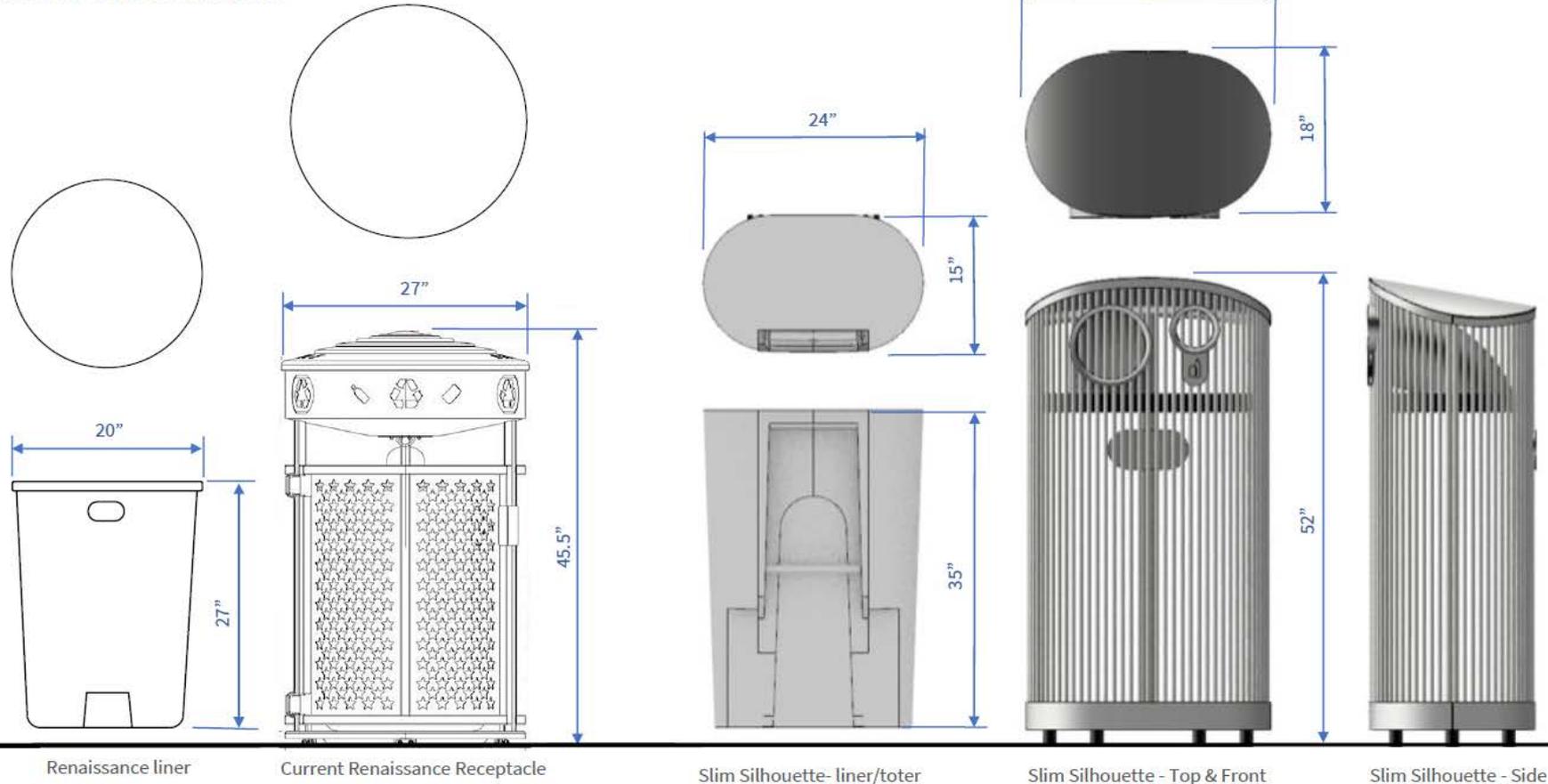


Partial Pipes

APPROVED CONCEPT DESIGN

Custom Toter

Slim Silhouette



APPROVED CONCEPT DESIGN



Soft Square

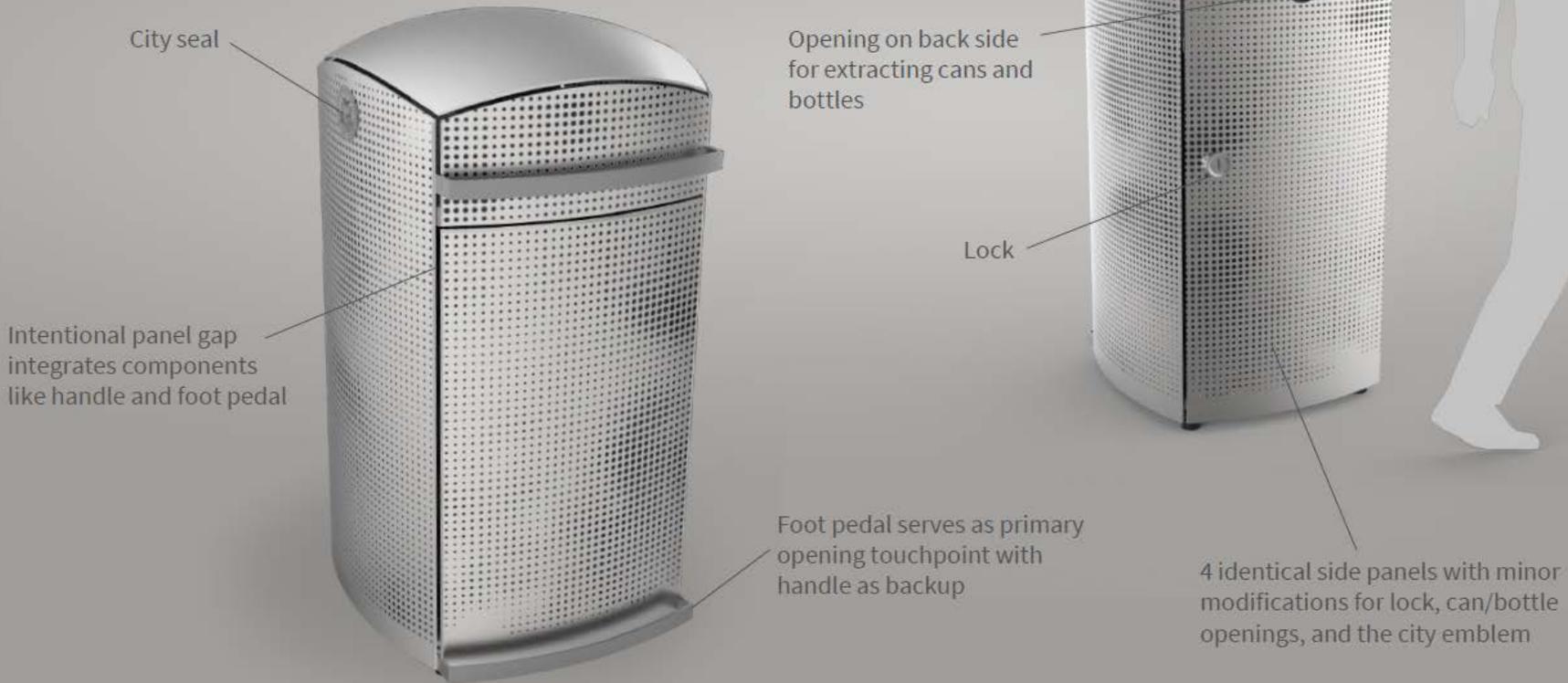
Soft Square keeps an identifiable trash can silhouette while bringing the aesthetic into the 21st century. Designed as a kit of parts, Soft Square is comprised of four curved panels, an adjustable base, and a domed top. Intentional gap separations between the panels allow for an elegant integration of components including the handle, foot pedal and hinge. Openings for the trash and bottles/cans are behind the front hopper door giving the design a clean

appearance. The hopper design also makes it extremely difficult for over filling and rummaging. The stainless steel construction can be customized through different perforation patterns.



APPROVED CONCEPT DESIGN

Soft Square



APPROVED CONCEPT DESIGN

Soft Square



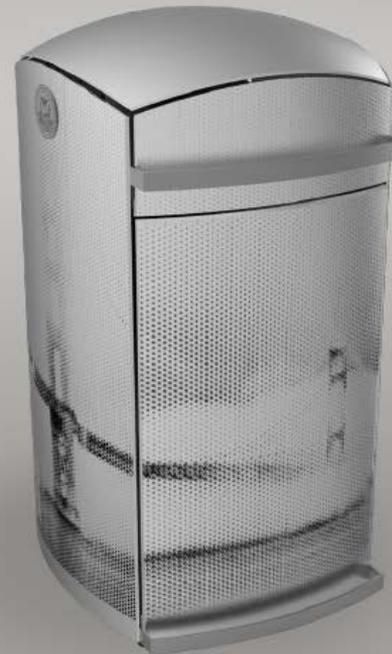
APPROVED CONCEPT DESIGN

Soft Square

Soft Square's side panels could potentially be fabricated with a range of perforated patterns. This would give the opportunity for trash receptacles to be tailored to different neighborhoods in the city, or for different locations. For example, a park may employ a more natural looking, free form type of pattern, while the business district's pattern might be more angular or geometrical.



Fog



Fog GGB

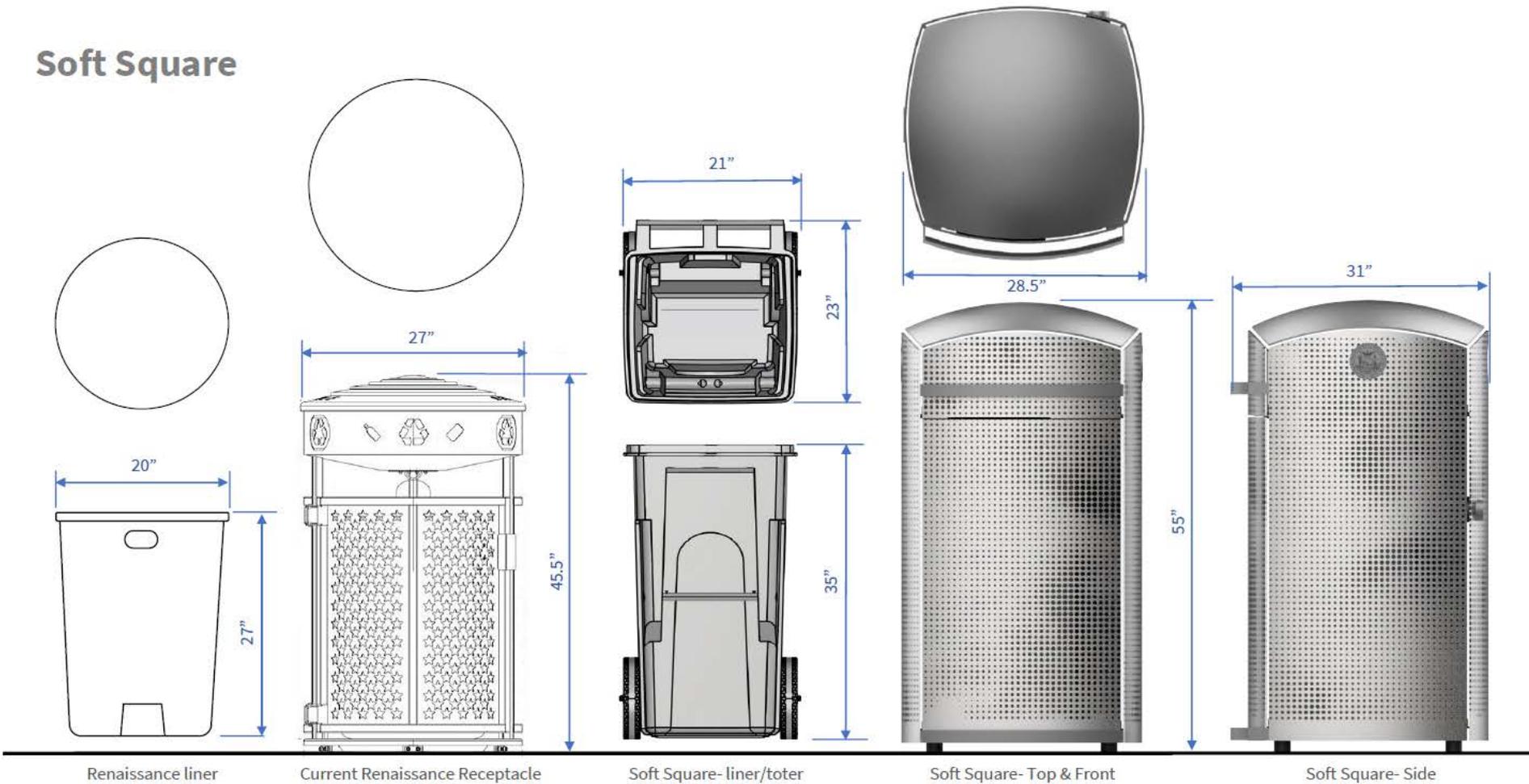


Memphis

APPROVED CONCEPT DESIGN

Non-custom toter

Soft Square



SCHEDULE & NEXT STEPS

DESIGN PHASE

- Concept Design RFP Release – Nov 2018
- Industrial Designer on board – April 2019
- Concept Design Development – April 2019 to July 2020
- Public Outreach – Sept 2020
 - Online survey – over 350 responses received
 - Virtual meeting with key constituents (CBDs, Merchant Groups)
- Press Release – Sept 2020
- Civic Design Review Phase 1 & 2 Approval – Sept 2020

PROTOTYPING PHASE

- Reviewed Quotes and Company Qualifications - Dec 2020 – April 2021
- Waiver for Competitive Solicitation Requirement Approved by Office of Contract Administration (OCA) – April 2021
 - Admin Code Reg 21.5(e) Pilot Project with a Term Not to Exceed Two Years
- Chapter 14B Subcontracting Goal Waiver Approved by Contract Monitoring Division (CMD) – May 2021
- 30-Day Union Notification Period – June 2021
- **Civil Service Commission Approval** – July 2021
- **BOS Approves Release of Reserve** – July 2021
- **Execute Contractor Agreement** – Aug 2021
- **Prototype Design Refinement** – Aug 2021 to Oct 2021
- **Prototype Fabrication** – Oct 2021 to Nov 2021
- **60-Day Trial** – Nov 2021 to Jan 2022 (exact date to be determined)
- **Design and Performance Evaluation** – Jan to Feb 2022
- **Design Modification (if necessary)** –Feb 2022
- **Final Design Completion** – March 2022
- **RFP for large quantity procurement** - TBD

SCHEDULE

	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
Contract & Award												
Office of Contract Administration Approval - Pilot Project												
Chapter 14B Subcontracting Goal waiver request												
30-Day Union Notification Period												
Civil Service Commission Approval												
BOS Approves Release of Reserve												
Execute Contractor Agreement												
Design Refinement												
Presentation to SF Coalition / discuss placement of pilot cans												
Prototype Fabrication												
Trash Can Installation												
60-Day Trial Period												
Design & Performance Evaluation												
Design Modification (if necessary)												
Final Design Completion												
RFP for Large Quantity Procurement												

* Schedule and dates are estimated based on current project information and progression.

BUDGET

	Budget
Design	
Trash Can	\$ 67,500.00
Toter	\$ 10,000.00
Prototype	
Trash Can (Qty: 15)	\$ 300,000.00 *
Toter (Qty: 10)	\$ 20,000.00
Project Management	\$ 40,000.00
Off-the-shelf Trashcan Purchase (Prop Q.)	\$ 10,000.00
Contingency (20%)	\$ 89,500.00
Total	\$ 537,000.00

** The cost for trash can prototypes is an estimate based on the current concept design; the final cost will be provided at the conclusion of the design refinement phase when manufacturing details are developed.*