



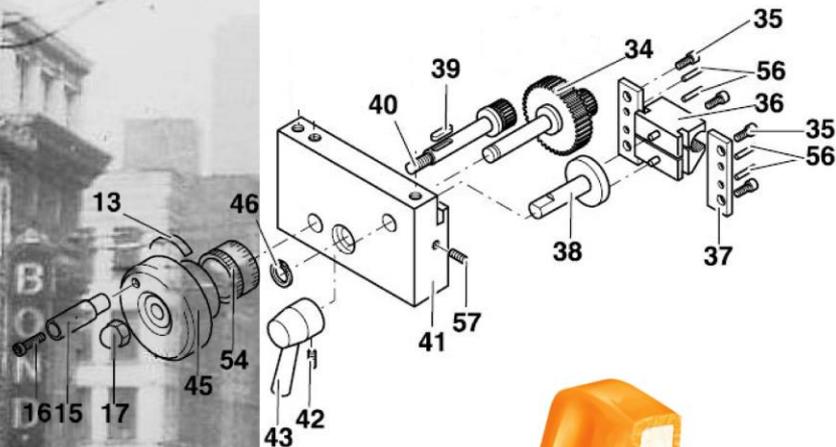
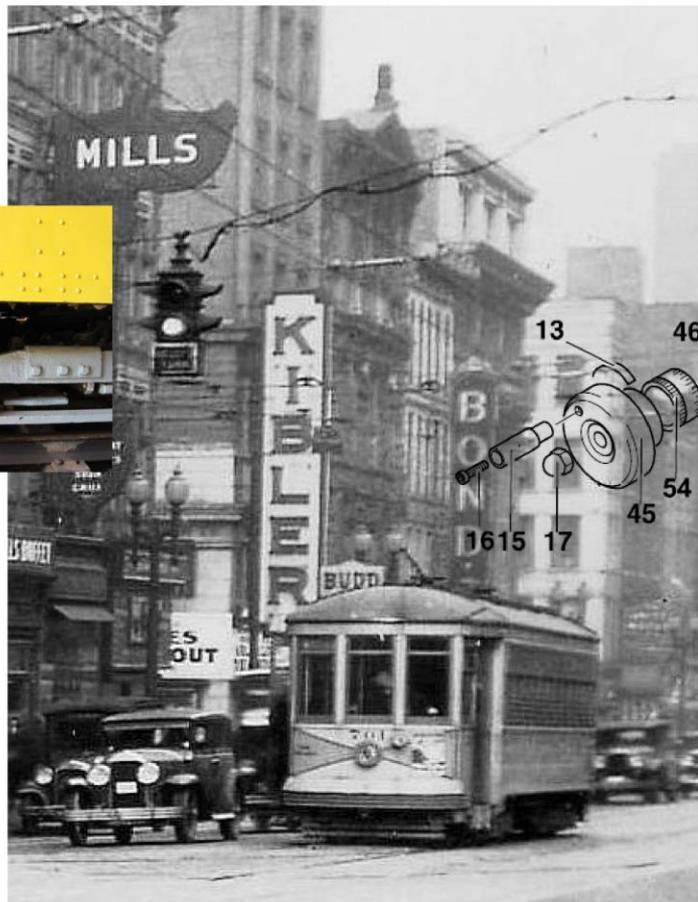
STREETCAR DISTRICT ART SERIES

30 SEPTEMBER 2015

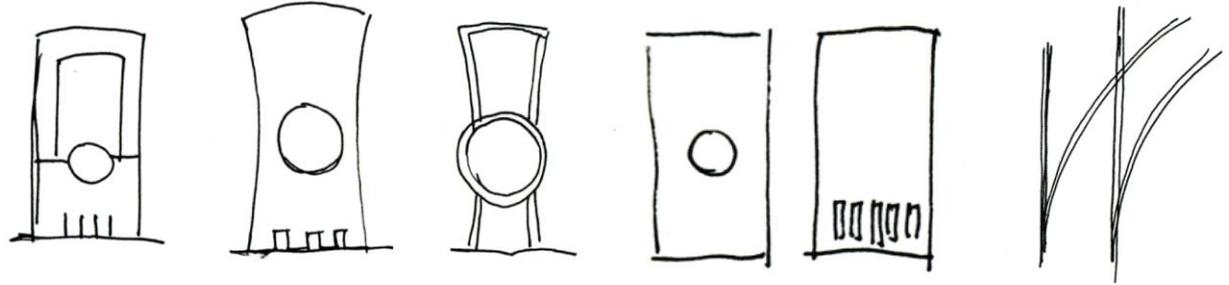
NEIGHBORHOOD DESIGN CENTER



TOM HUBBARD STUDIO



CONCEPTUAL APPROACH



CELEBRATORY

CONTEMPORARY

ABSTRACT

DURABLE

LOW MAINTENANCE

RETRO

SITE SPECIFIC

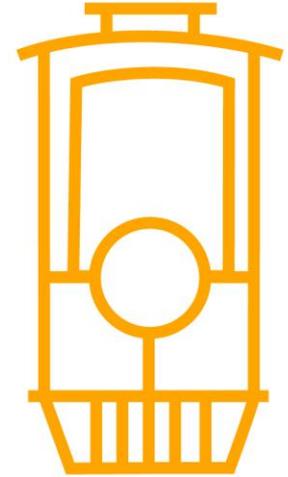
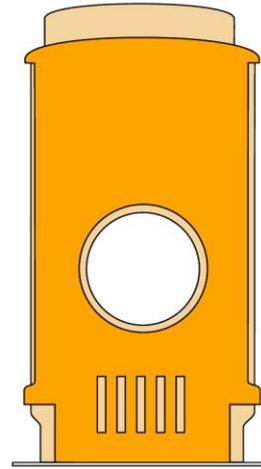
HISTORY

MY APPROACH IS ROOTED IN MY DESIGN TRAINING AND THE BELIEF THAT THE SOLUTION OFTEN COMES FROM THE PROBLEM. THROUGH A PROCESS OF INQUIRY, RESEARCH AND IMMERSION, I EXPLORE, INTERPRET AND DISTILL VISUAL OPPORTUNITIES TO REACH A SOLUTION THAT IS SPECIFIC, UNIQUE AND MEANINGFUL.

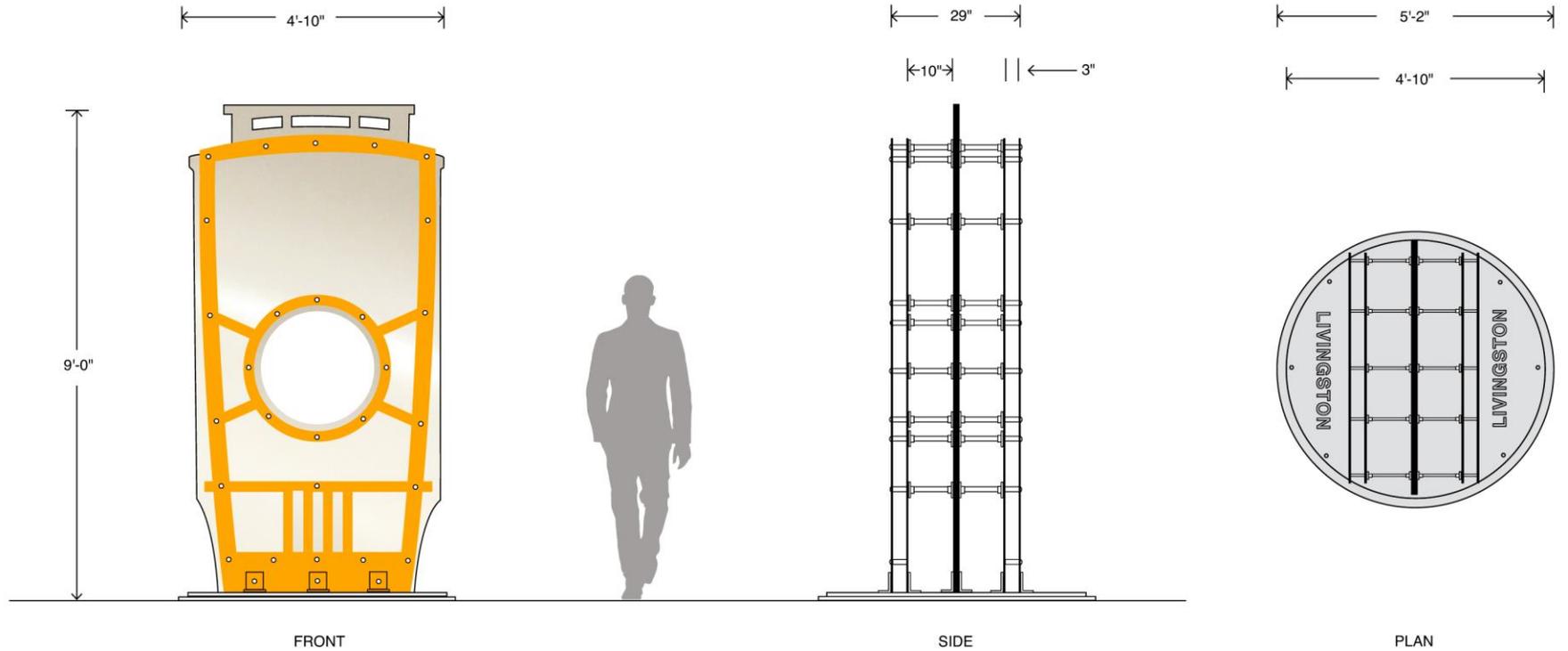
- **SYMBOLICALLY BRING THE STREETCARS BACK TO LIVINGSTON AVENUE**
- **ABSTRACTED & EXPLODED VIEW OF A STREETCAR**
- **UPDATED HISTORIC COLOR PALETTE AND THE VISUAL VOCABULARY OF THE STREETCARS**
- **PERCHED ON A LOW RISE NEAR THE STREET AND CROSSWALK FOR IMPACT & VISIBILITY**
- **SERVES AS A MARKER OR A GATEWAY ELEMENT TO THE PARK AND THE NEIGHBORHOOD**



PROCESS



SCULPTURE



MATERIALS & FABRICATION

0.375" CRS PLATE

1.5" CRS PLATE

0.5" STAINLESS STEEL PLATE TYPE 316

1.0" STAINLESS STEEL PLATE TYPE 316

1.25" DIA STAINLESS TUBE

WATER JET CUTTING

TIG WELDING

MECHANICAL CONNECTIONS

SECURITY FASTENERS

STAINLESS STEEL ANCHORS

CONCRETE FOOTERS

CRUSHED STONE

POWDER COATING

PASSIVATE & ELECTROPOLISH



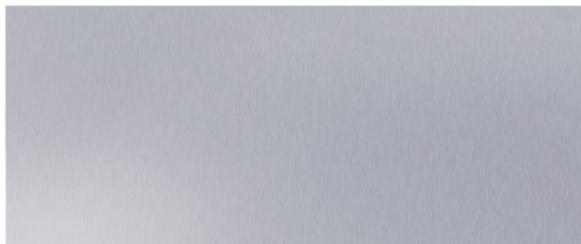
CALIFORNIA POPPY PS-4012



TANGELO GLAZE PPB-4020



HD WHITE PEARL PMB-2214



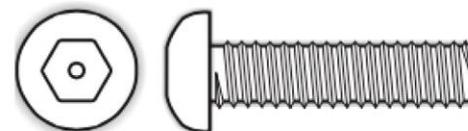
316 STAINLESS STEEL



CRUSHED STONE



T-GROOVE NUT



HEX-PIN BOLT



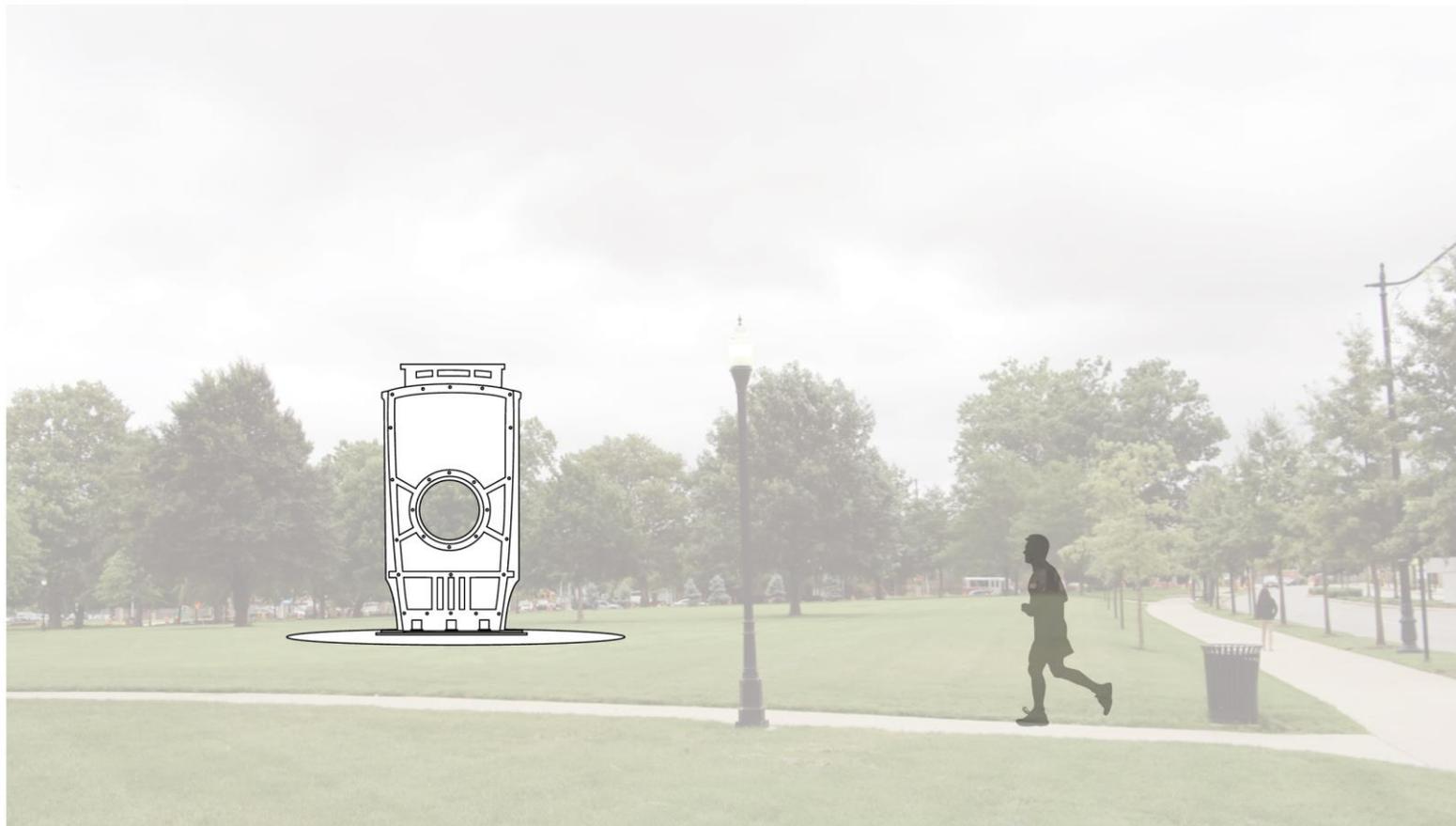
SITE

- BRING THE STREETCARS BACK
- PERCHED ON A LOW RISE NEAR THE STREET AND CROSSWALK
- MARKER OR GATEWAY ELEMENT



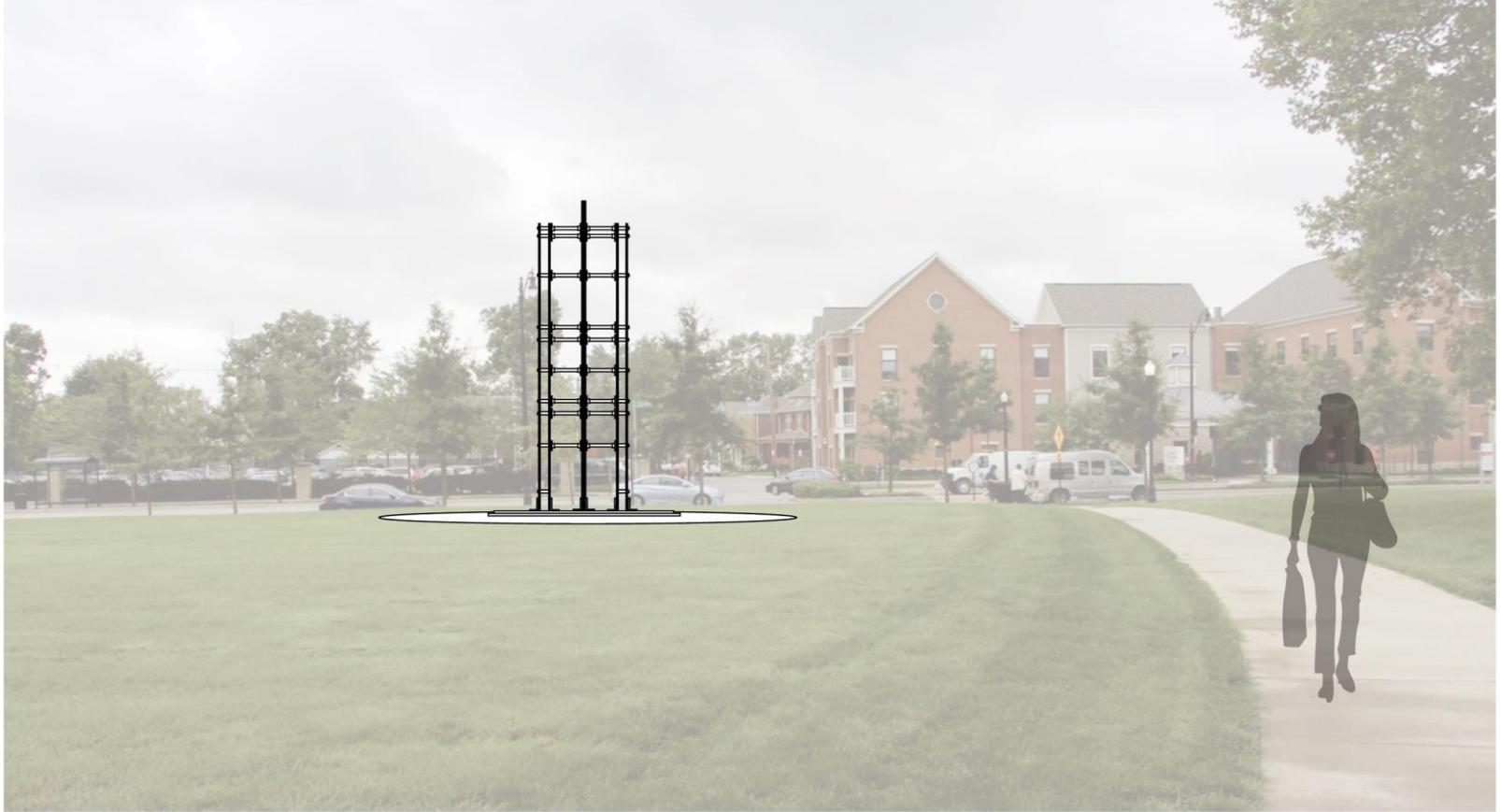
SITE

VIEW TO THE EAST



SITE

VIEW TO THE SOUTH



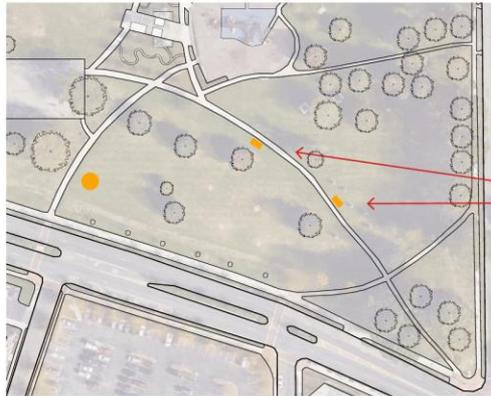
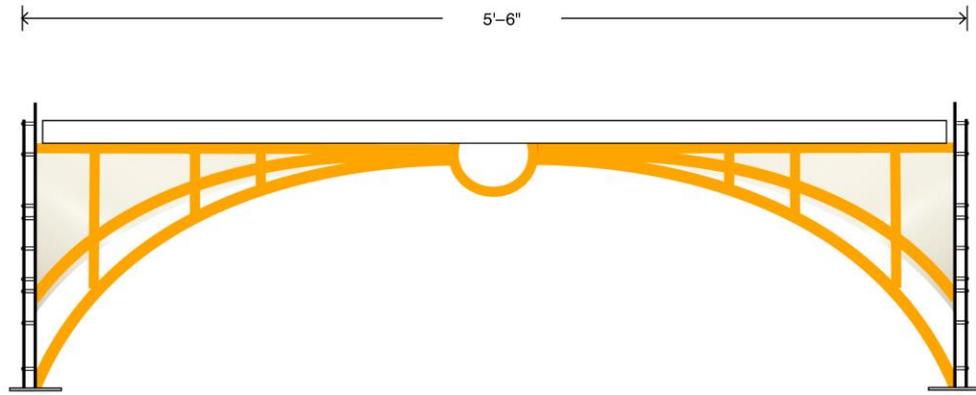
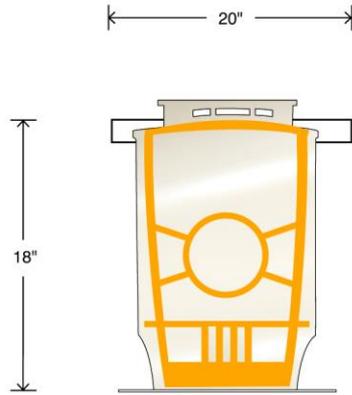
PRELIMINARY BUDGET



\$26,250	FABRICATION:	IMAX INDUSTRIES – MATERIALS, LABOR, POWDER COATING, ANCHORS
7,000	ARTIST FEE:	DESIGN/PROJECT MANAGEMENT
1,000	ENGINEERING:	STRUCTURAL ENGINEER – STAMPED CONSTRUCTION DRAWINGS
5,500	INSTALLATION:	SUPERIOR ERECTION CO – TRANSPORT, LABOR, EQUIPMENT
3,000	FOUNDATION:	PREMIER COMMERCIAL CONSTRUCTION CO – LABOR, MATERIALS
2,000	LANDSCAPING:	SURVEY, EXCAVATION, CRUSHED STONE BED
1,200	PERMITTING:	CITY OF COLUMBUS – PERMITTING, REVIEW, INSPECTION
250	DOCUMENTATION:	PHOTOGRAPHY, PRINTING
500	INSURANCE:	GENERAL LIABILITY
300	TRAVEL/PER DIEM:	TRAVEL, FOOD & LODGING
250	TRANSPORT:	PAINESVILLE > BRECKSVILLE
47,250	TOTAL	
2,750	CONTINGENCY:	10% = \$5000
\$50,000	GRAND TOTAL	



STREETCAR BENCHES



PROPOSED BENCH LOCATIONS

BUDGET PERMITTING

QUANTITY: 2

SIMILAR CONSTRUCTION METHODS & MATERIALS AS SCULPTURE

WOOD SLAT SEAT:

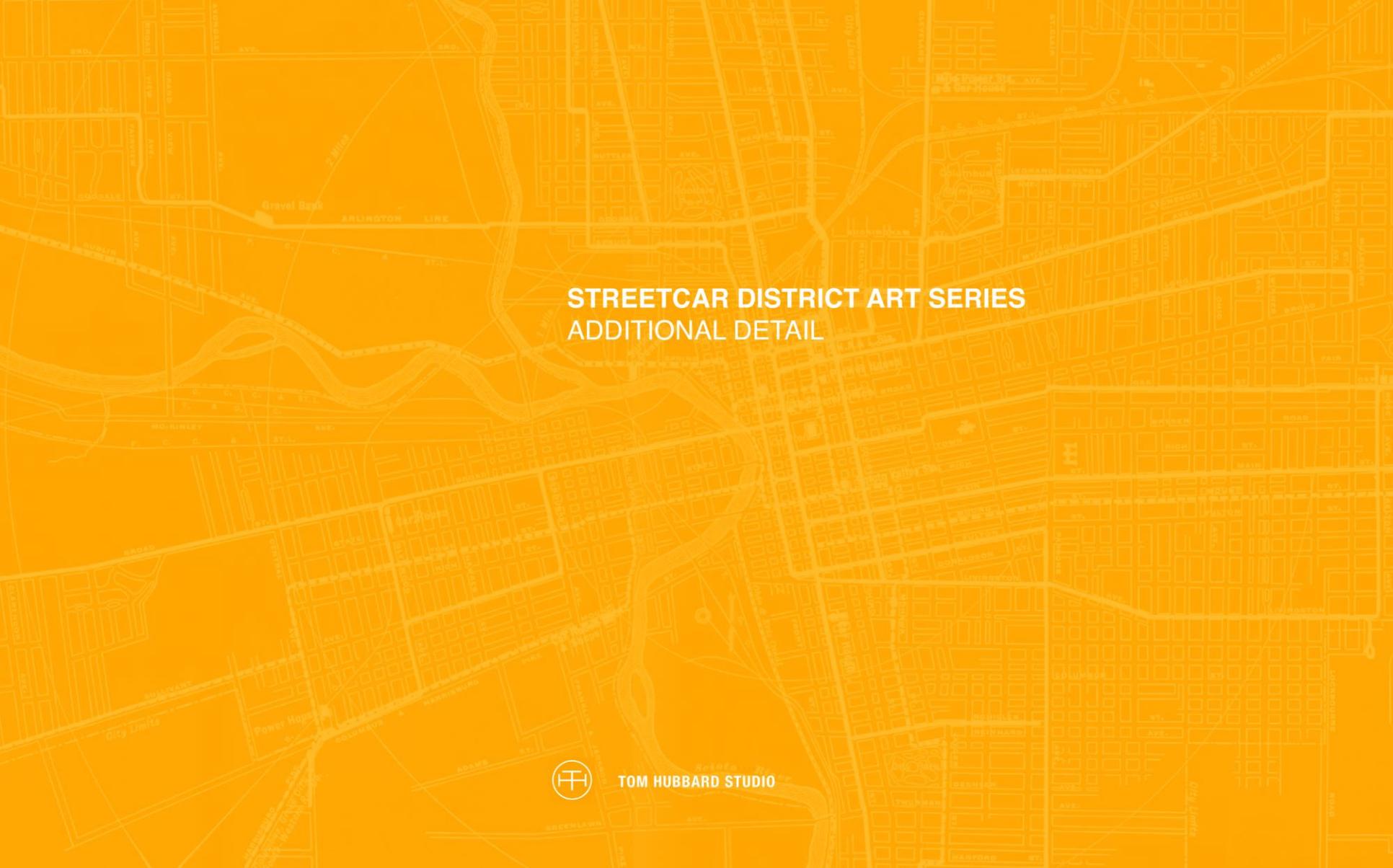
BLACK LOCUST LUMBER FOR DURABILITY

NOMINAL LUMBER 2x4 / 2x6





THANK YOU

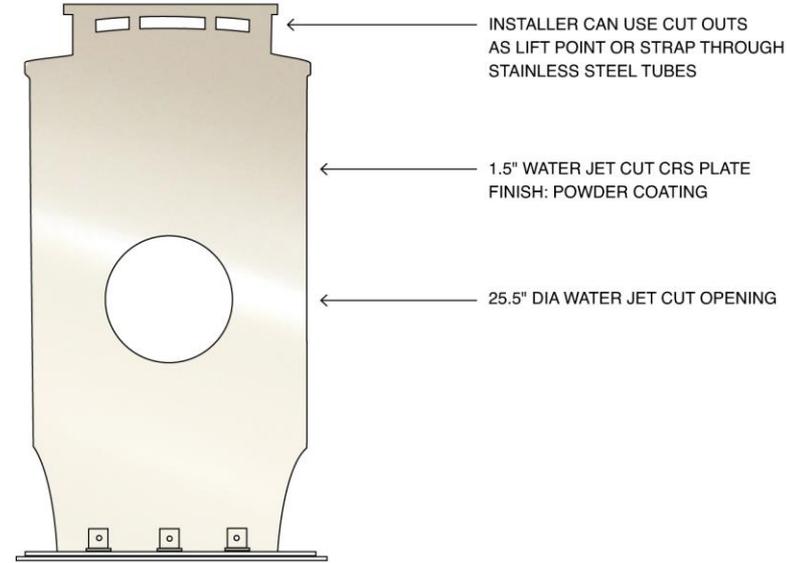
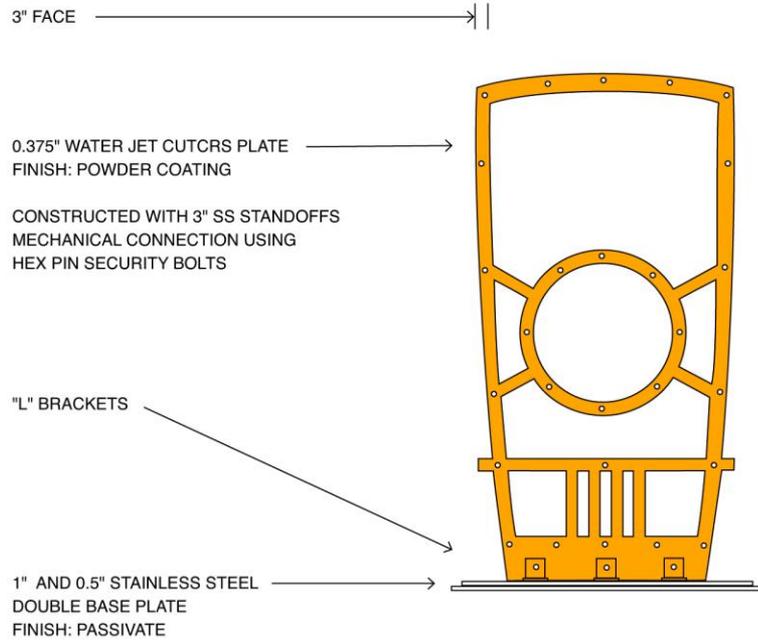


STREETCAR DISTRICT ART SERIES
ADDITIONAL DETAIL



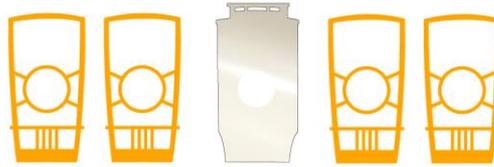
TOM HUBBARD STUDIO

CONSTRUCTION



CONSTRUCTION

CONSTRUCTED OF 5 CRS PLATES
WITH STAINLESS STEEL STANDOFFS



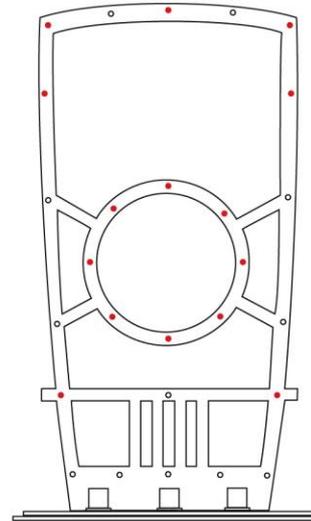
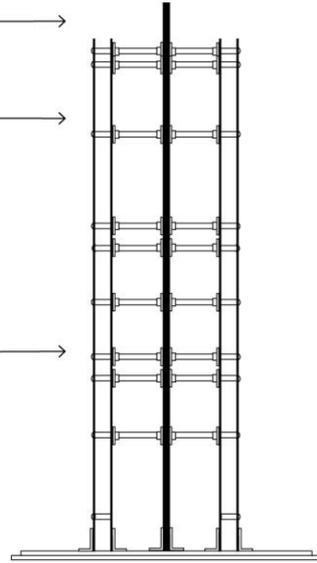
1.5" CRS PLATE
FINISH: POWDER COAT

0.375" CRS PLATE
FINISH: POWDER COAT

3" SS THREADED TUBE
MECHANICAL CONNECTION USING
SS HEX-PIN BOLTS

1.25" DIA SS PIPE FOR STABILITY
PIPES MECHANICALLY CONNECT
TO CRS PLATE THRU SS HUBS
WITH SET SCREWS
FINISH: PASSIVATE & ELECTROPOLISH

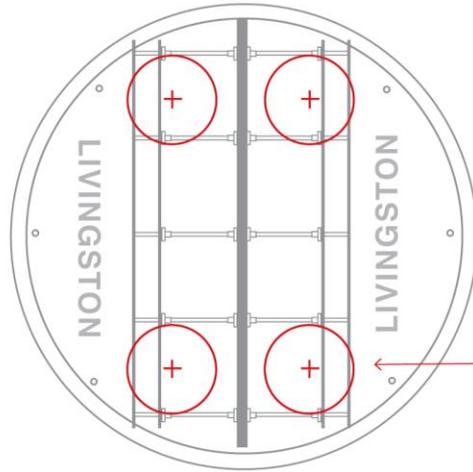
"L" BRACKETS
FINISH: POWDER COAT
SS ANCHORS



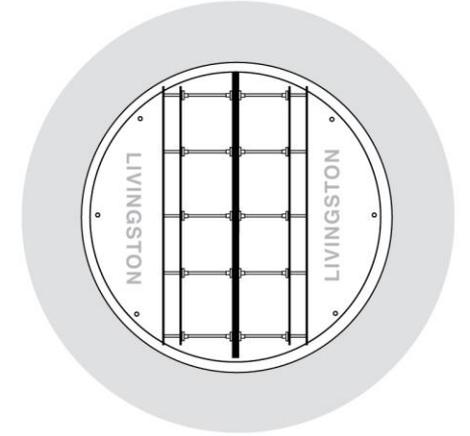
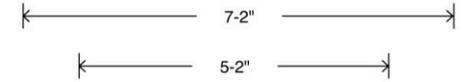
BOLTS SHOWN IN RED INDICATE
THREADED TUBES SPANNING
ALL 5 PLATES



CONSTRUCTION



CONCRETE FOOTERS WITH
STAINLESS STEEL ANCHORS



BASE PLATE

TYPE IS CUT FROM TOP PLATE ONLY
BOTTOM PLATE SHOWS THROUGH

MECHANICALLY CONNECT 2 TOP PLATES
USING STAINLESS STEEL HEX-PIN BOLTS

FINISH: PASSIVATE

FOUNDATION

4 - 12" DIA x 40" DEEP CONCRETE FOOTERS
WITH 0.5" STAINLESS STEEL ALL THREAD ANCHORS

MECHANICALLY CONNECT SCULPTURE TO FOUNDATION
USING T-GROOVE SECURITY NUTS

BACKFILL UNDER BASE PLATE USING #411 GRAVEL TO AID
DRAINAGE AND MINIMIZE FROST HEAVE

2" DEEP x 24" WIDE CRUSHED STONE FILL
AROUND BASE FOR VISUAL CONTINUITY & EASE
OF MAINTENANCE



PRELIMINARY PRODUCTION SCHEDULE

9/30	PRESENTATION
10/19 – 10/31	CONTRACT/INSURANCE
11/1 – 11/20	CONSTRUCTION DRAWINGS
11/21 – 11/30	FINAL DESIGN REVIEW: PARKS DEPARTMENT, CAC
12/1 – 1/10	DESIGN REVISIONS
1/11 – 1/29	STRUCTURAL ENGINEER REVIEW
2/1 – 3/1	CITY OF COLUMBUS: PLAN REVIEW & PERMITTING
3/10 – 7/1	FABRICATION
7/10 – 7/25	SITE PREPARATION
7/25 – 8/22	FOUNDATIONS
8/25 – 9/1	TRANSPORT
9/1 – 9/15	INSTALLATION
9/15 – 9/20	LANDSCAPING
9/20 – 10/1	DEDICATION



POWDER COATING

Powder coating is a dry finishing process that uses finely ground particles of pigment and resin that are electrostatically charged and sprayed onto electrically grounded parts. The charged powder particles adhere to the part and are held there until melted and fused into a uniform coating in a curing oven. Since its introduction more than 40 years ago, powder coating has grown in popularity and is now widely used by many manufacturers of common household and industrial products. In North America, it is estimated that more than 5,000 finishers apply powder to produce high-quality, durable finishes on a wide variety of products. Powder coated finishes resist scratches, corrosion, abrasion, chemicals and detergents, and the process can cut costs, improve efficiency and facilitate compliance with environmental regulations.

MAINTENANCE & CARE

Maintaining the good looks of your powder coated products is just like caring for your car – and is a smart way to protect your investment. Over time with exposure to the elements, powder coatings may show signs of weathering such as loss of gloss, chalking and slight color change. A simple regular clean will minimize the effects of weathering and will remove dirt, grime and other build-up detrimental to all powder coatings.

The best method of cleaning is by regular washing of the coating using a solution of warm water and non-abrasive, pH neutral detergent solution. Surfaces should be thoroughly rinsed after cleaning to remove all residues. All surfaces should be cleaned using a soft cloth or sponge or a soft natural bristle brush.

WARNING

Do not under any circumstances use strong solvents such as thinners or solutions containing chlorinated hydrocarbons, esters or ketones. Abrasive cleaners or cutting compounds should not be used.

STAINLESS STEEL

Stainless steel is not just one type of material that remains “stain-less” in all circumstances. Instead, there are over 200 grades of stainless steel with different levels of corrosion resistance.

Stainless steel needs to be cleaned to maintain a good appearance and preserve corrosion resistance. Stainless steel components will not corrode under normal atmospheric conditions provided the correct grade has been selected and appropriate fabrication procedures followed.

Paint and graffiti can be treated with proprietary alkaline or solvent-based paint strip- pers. The use of hard scrapers or knives should be avoided as the underlying stain- less steel surface may become scratched.

Do not use wire wool or hard objects to remove stubborn stains.

Do not use chlorine containing cleaning agents such as bleach or strong acids (e.g. mortar removers).

•A stainless steel cleaning agent containing phosphoric acid will remove salt spray or deicing salt

Do not Pressure Wash





TOM HUBBARD STUDIO

info@tomhub.com
www.tomhub.com

440-409-8003