POSTER BOARDS

LIFE CYCLES - A COMMUNITY DRIVEN PUBLIC ART PROJECT

SIJIA CHEN STUDIO

PART 1: ICON DESIGN

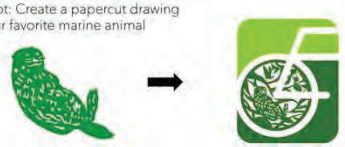
- Bicycle inspired visual elements
- Letter "E" representing Emeryville

- The wheels' designs will be developed through the project's community engagement program. The public can nominate specific nature inspired figurative images(e.g. animals, plants, etc.) to be included, and submit their own original designs that they believe represents the natural beauty and heritage of Emeryville

Design #1

Design #1 Community Engagement Example

Prompt: Create a papercut drawing of your favorite marine animal



Submission: A sea otter

Final Logo Design

Design #2

Design #2 Community Engagement Example

Prompt: What insects do you think are the most important to a healthy ecosystem?

Reponses: Bees & Butterflies

Final Logo Design

Design #3

Design #3 Community Engagement Example

Prompt: Create a papercut drawing of your favorite springtime event

Submission: Roaming butterflies and pollinating bees

Final Logo Design

Signage Applications

LIFE CYCLES - A COMMUNITY DRIVEN PUBLIC ART PROJECT

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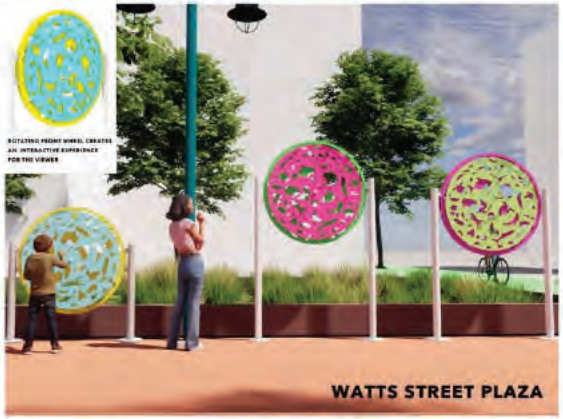
PART 3: STREET PLAZA SCULPTURES

- Inspired by bicycle wheels and nature, these placemaking sculptures provide seating areas, interactive experiences, and intimate settings for viewers to closely observe the sculptures' form and visual content
- All images shown through the artworks' perforations are placeholders, the final designs will be developed and selected through the project's community engagement program


HUBBARD STREET PLAZA


HUBBARD STREET PLAZA


WATTS STREET PLAZA


WATTS STREET PLAZA


HAVEN STREET PLAZA


HOLDEN STREET PLAZA


HOLDEN STREET PLAZA


HAVEN STREET PLAZA

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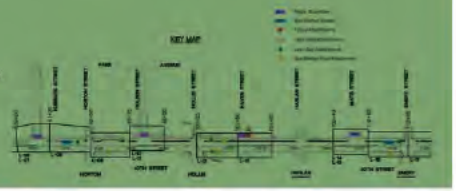
PART 2: Street Furniture Attachments

•The street furniture artworks will infuse color and life onto the monochromatic lean bars, fences, bus shelters, and light poles. Figurative depictions of local plants and animals will transform 40th street into an ecosystem of exploration, taking the public on a treasure hunt to discover each work

•The animals, plants, and images shown through the artworks' perforations are placeholders. The public can nominate specific nature inspired figurative images(e.g. animals, plants, etc.), and submit their own original perforation designs



Bus Shelter Screens

Bus Shelter Attachments

Lean Bar Attachments

Fence Attachments

Light Pole Attachments

What's Growing, Emeryville?

Playful Nature Sculptures at Enormous Scale

We are inspried by the blend of creative and industrial energy, as well as the blend of nature and man-made spaces in Emeryville. Our proposal aims to match the playfulness and strong graphic nature of existing artwork, to scale up the color scheme of the natural environment, and to add a size and subject matter that hasn't been seen yet.

OUR DESIGN GOALS ARE:

1) THE BIGGEST IMPACT

We believe COLOR AND SIZE have the greatest impact in place-making art. Not only do big structures call attention to the project, they work as photo opportunities and wayfinders. We propose four unique plaza sculptures, along with multiple streetscape elements that add an eye-catching addition to every block of the map.

2) ALWAYS HANDMADE

All of our designs are based on original drawings, papercuts and hand-built models. We believe in retaining the slightly imperfect 'hand of the artist' which keeps the work from looking computer or AI generated and speaks to your artist-made past. This proposal blends the team's specialties as public artists: Addie Boswell's community-based murals and graphic illustrations and Matt Cartwright's large, organic sculptures.

3) COMMUNITY-BUILT

As visiting artists, we are guests in your house, and our design process starts with you. Through workshops, worksheets and social media, we will gather art and ideas from citizens to form theWayfinding Icon and the Community Tapestry art. Citizen feedback will also inform the Plaza Installations in large and small ways.

Note: Because this is a collaborative proposal, much of the detail will change based on community input and architectural reviews. Consider the streetscape designs as placeholders at the moment.

Our color scheme is based on the natural and built structures of the community, including light-pole-green, sedge green, sign-yellow, flower-power pink, and opalescent shell-white.

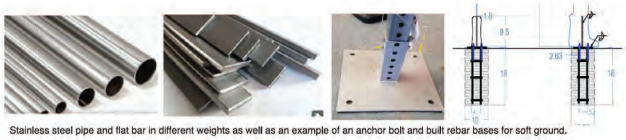
WAYFINDING ICON

Like the brilliant 'Signs of the Times' art, we would stick to the simplicity of the original bike and pedestrian icons, but with a twist. Through community workshops and social media outreach, Addie will ask the community to re-imagine this icon in different ways – by adding to the bike itself, by remaking the commuter, and even by cutting the icon apart and rebuilding it. Citizen's ideas will give a large variety of 'remixed' icons – some examples are shown below. The artist team will compile and edit these down to three-five finals icons for the community to vote on.

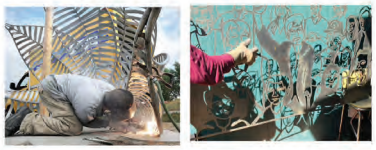
MATERIALS & PROCESS

After brainstorming with the community, and compiling all the ideas and art they are willing to share, Addie and Matt make paper models and architectural drawings of the final sculptures and flat pieces. These will eventually be uploaded and made into graphic files and sent for engineering review. Here are some of their brainstorming images for this project: paper models, collages and drawings.

Our primary material is powder-coated steel, chosen for its durability and its professional finished look. All the Plaza Installations are made in Matt Cartwright's signature organic style, which uses stainless steel pipe and flat bar which are cold-formed through rolling and manipulating by hand. Flower Toppers and Leaf Lounge toppers will be made of lighter-weight aluminum to save weight and allow for more shaping. All joints are welded and sanded (including base flanges), which are bolted to pre-existing concrete surfaces. In the case of soft-mounting, Matt can build a concrete footer below grade.



Stainless steel pipe and flat bar in different weights as well as an example of an anchor bolt and built rebar bases for soft ground.



All metal pieces are welded and tabbed (at left) or laser-cut (at right) before being powder-coated with Prismatic Powder and given a heavy-duty varnish. As you can see from these pictures, using strong metal shapes casts interesting shadows and interplays of light on the surface throughout the day.

FinishedPublic Art Projects by the team include: a series of freestanding figures for a library entrance, a large sculpture celebrating noise called Malabar, a two-sided metal gate design and the Kissing Bench.

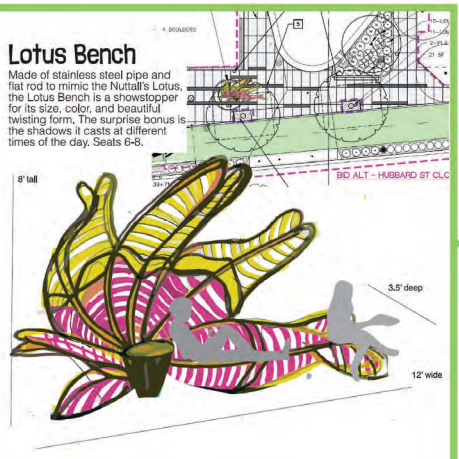



4 PLAZA INSTALLATIONS

Our big impact structures take a magnifying glass to nature with enormous plant structures (which put humans at a snakes-eye view.) All of these are interactive and include seating with the primary function to grab attention and provide place-making that is unique to each individual plaza.

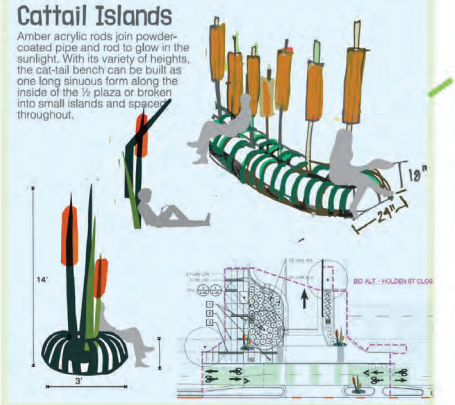
Lotus Bench

Made of stainless steel pipe and flat rod to mimic the Nuttall's Lotus, the Lotus Bench is a showstopper for its size, color, and beautiful twisting form. The surprise bonus is the shadows it casts at different times of the day. Seats 6-8.



Cattail Islands

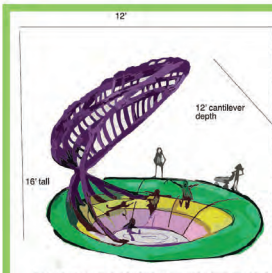
Amber acrylic rods join powder-coated pipe and rod to glow in the sunlight. With its variety of heights, the cat-tail bench can be built as one long sinuous form along the inside of the ½ plaza or broken into small islands and spaced throughout.



Shell-ter and Soft Seating

With the same basic build as the Lotus, the open clam-shell continues onto the ground plane with the addition of slightly-sloped Wetpour rubber, inviting kids and adults to lounge and play. When surrounded by stone benches, this provides the most protected 'soft' place in the corridor and is bound to be a destination for families.

Made of cold-formed steel rod and flat bar, the Shell-ter will be powder-coated in an irridescent white to mimic shell interior and make the overhang feel lighter.



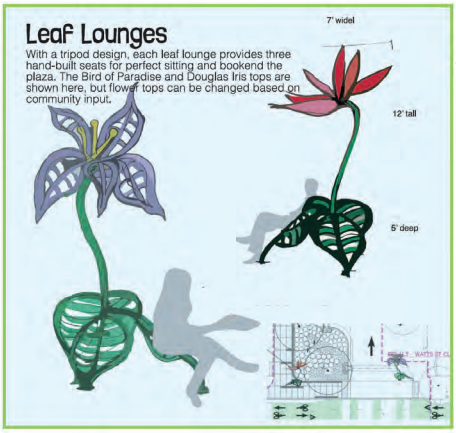
rubber-pour play area is 12-15' diameter with a slight slope to create the curve of the shell

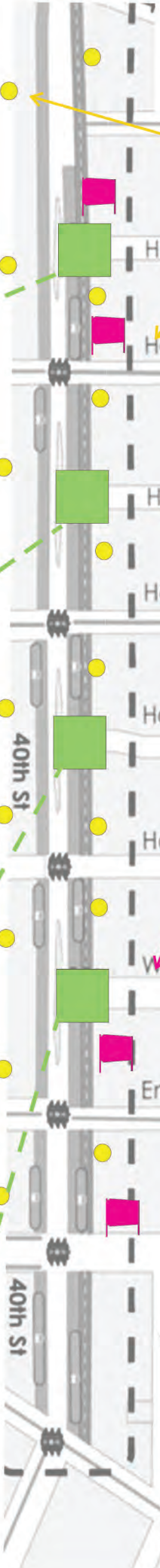
View looking at the shell front-on.

View B: Looking from Haven St sidewalk south to 40th St

Leaf Lounges

With a tripod design, each leaf lounge provides three hand-built seats for perfect sitting and bookend the plaza. The Bird of Paradise and Douglas Iris tops are shown here, but flower tops can be changed based on community input.



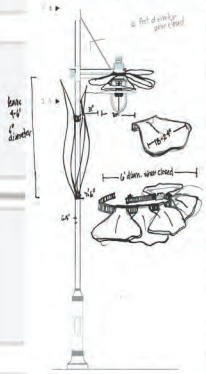


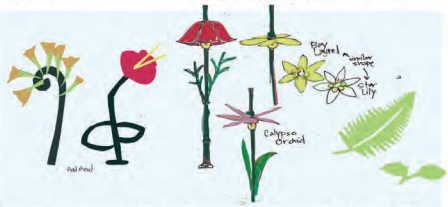
STREETSCAPE INSTALLATIONS

To make the biggest impact, we've chosen installations that are at eye-level and above, that are brightly colored, and that have a playful bent. All installations follow the color scheme and can be mixed-and-matched, depending on which elements appeal most to the public and the committee. These are our initial recommendations.

16 FLOWER TOPPERS

Costumes for your streetlights! With two flower heads and two twining leaves, each flower topper provides a pop of color and a chuckling surprise to drivers and walkers. Flower Toppers are placed strategically between the plaza blocks on light poles that are unhindered by tree cover, on both sides of the street.





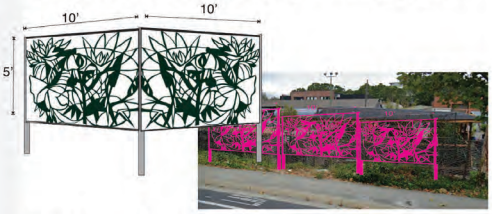
Drawings and suggestions from the community(like these) about their favorite flowers will help us decide what kind of toppers to put on light poles. We anticipate three different designs.

THE COMMUNITY TAPESTRY

The Community Tapestry is a composition based on citzen's designs around the theme *What's Growing, Emeryville?* This includes native plants as well as the more intangible elements of community. Hence, the tapestry will be multidimensional and unique. This simple floral design is used to illustrate the different ways the Community Tapestry can be used.

as Metal Panels

5x10' Laser-cut metal panels pack a graphic punch, match the theme of our sculptures, and can be powdercoated in multiple colors. When mounted on metal posts, they can be installed in medians and other softscapes at any height and viewed from both sides.



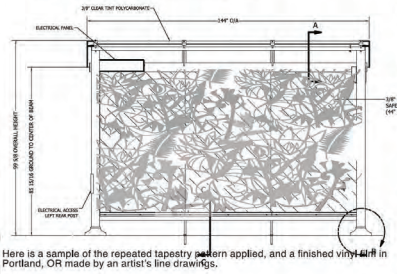
as Acrylic Panels

A full-color version of the Tapestry can be painted on multiple 5x10' Aluminum Composite Panels (ACM) Panels with acrylic paint and mounted on metal posts, or even attached to existing walls and fences, with property owners permission. A full-color mural will have huge impact and can be painted by the community as well.

as Bus Shelter Overlays

The tapestry can also be made into a repeated pattern to create a low-cost vinyl wrap to apply to all the existing bus shelters in the corridor and the new bus depot. The translucent window cling pulls the design in and deters graffiti for a low-cost addition.

We recommend using the Community Tapestry as 'bookends' for the corridor, with locations on or near 40th and San Pablo and on or near 40th ad Hubbard Ave. These panels can be particularly helpful on long uninterrupted walls or parking lots, as these sample locations show.



Here is a sample of the repeated tapestry pattern applied, and a finished vinyl wrap in Portland, OR made by an artist's line drawings.

Icon 1

Icon 2

Icon 3

Icon on City Kiosk

Icon on City Finger Board

Icon on City Directional Signage

Rolling Along / Icon-- for Wayfinding Signage

40th Street Streetscape Project | Emeryville, CA

Rolling Along | Overall Concept

Rolling Along is an integrated public art proposal for the 40th St Streetscape project. All 3 components- Iconic Streetscape Artwork, and Plaza Installations are connected via their subject matter and sensibility. ***Bringing Nature into the Urban Streetscape*** is achieved with whimsical drawings of local animals riding various self-propelled wheeled vehicles. Featured animals are those that most represent the spirit and ethos of Emeryville. Final selections of animals and the aesthetic sensibility would happen during community engagement sessions. This episodic artwork presents a thickened aesthetic experience that enlivens and augments the urban design for 40th Street and related plazas.

Icon Design Concept

The Icon Design presents a grouping of animals who are riding together. Community spirit and common ground are communicated with this concept. There are three schematic designs that are meant to serve as props for the community sessions where stakeholders would discuss their favorite ideas that best represent Emeryville.

Streetscape Installation

For the streetscape component, a series of about twenty episodic drawings would be attached to streetlight poles and bus shelters with drawings (custom high pressure laminate) that are double-sided (viewable from both sides). These drawings portray animals that are personified as riders of a diverse array of wheeled vehicles while displaying differing personalities. The range of animals, wheeled vehicles, and personality-types are meant to capture the spirit and ethos of Emeryville. As such, these "props" would be used to initiate community engagement sessions where the specific animals, vehicles, and personality-types would be chosen.

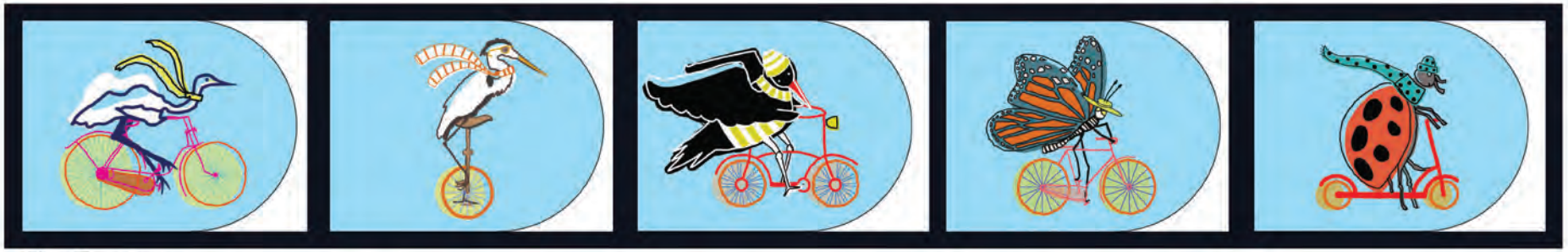
Plaza Installations

The installations for the plazas are interactive and sculptural in nature. Each plaza would hold one large cone that invites viewing. The viewer sees one of four animals that are projected against a background that represents their habitat- a bird image against the sky, a squirrel in a tree, a raccoon on the ground, and a seal in the water (pointed toward the ground). These engaging pieces are visceral in nature- as they are back lit and vivid, they evoke surprise and delight.

Together, these 3 components are meant to celebrate Emeryville. Graphic elements and plaza installations are located throughout the 40th Street site in order to make an inter-connected aesthetic experience, one that offers new insights upon repeat visits.

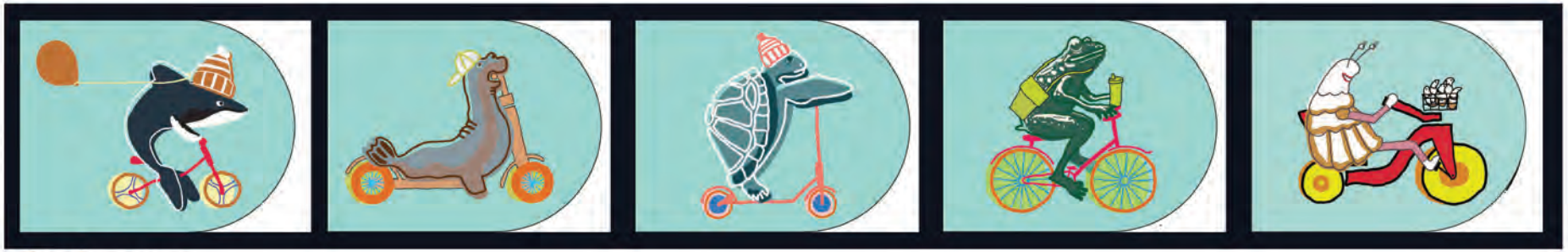
Artists | UrbanRock Design

Jeanine Centuori & Russell Rock

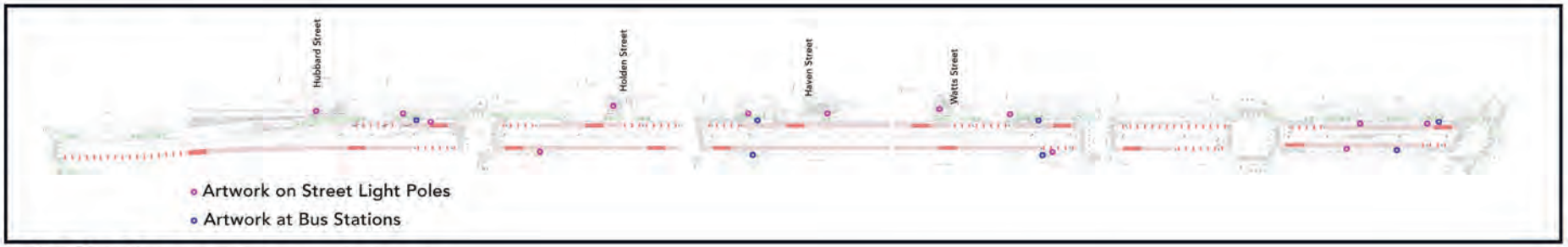


Sky Creatures

Land Creatures



Sea Creatures



Site Plan / locations of 20 streetscape installations

Streetlight Pole Example

Streetlight Pole Example

Streetlight Pole Example

Rolling Along / Streetscape Artwork

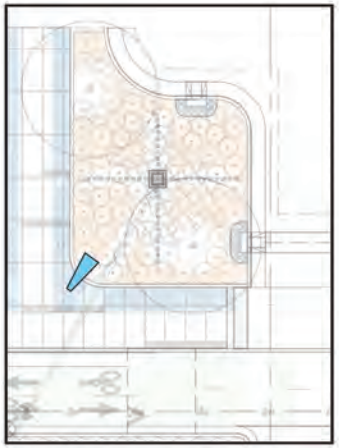
40th Street Streetscape Project | Emeryville, CA

A series of 20 graphic drawings of local fauna riding on self-powered wheeled vehicles will be attached to streetlight poles and bus stations along 40th Street. This playful rendition of personified animals riding along the multi-modal path is meant to inspire delight and a sense of place.

These images are to be double sided (imagery on both sides), and printed with a durable process by Fossil Graphics. Final artwork including selection of animals evoking Emeryville would be selected during community engagement sessions.

Artists |
UrbanRock Design

Jeanine Centuori & Russell Rock



Watts St Plaza Plan--
indicating location of sculpture

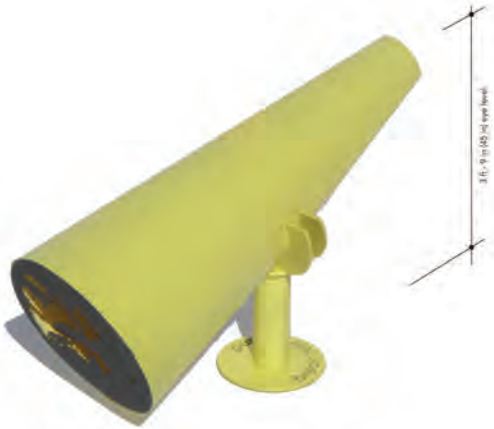
View of Owl face inside cone

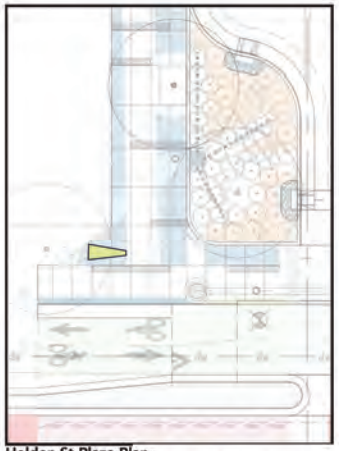
Watts St Plaza sculpture / bears the inscription "sky's the limit"

Haven St Plaza Plan--
indicating location of sculpture

View of Squirrel face inside cone

Haven St Plaza sculpture / bears the inscription "put down roots"





Holden St Plaza Plan--
indicating location of sculpture

View of Raccoon face inside cone

Holden St Plaza sculpture / bears the inscription "break new ground"

Hubbard St Plaza Plan--
indicating location of sculpture

View of Seal face inside cone

Hubbard St Plaza sculpture / bears the inscription "uncharted waters"

Rolling Along / Plaza Installation Artwork

40th Street Streetscape Project | Emeryville, CA

Plaza Installation Artwork Concept

Large sculptural view cones are to be installed in each of four plazas. They contain metalic cut images of iconic animals. These animals would also be identified during the community engagement sessions. The imagery is highly contrasted due to the nature of the darkened cone interior and backlighting. Each of the four images are layered onto an environment corresponding with the specific animal-- the Sky (for the owl), the Land (for the raccoon), Trees (for the squirrel) ,and the metaphoric Sea (for the seal, though this points toward the ground). These mysterious forms are meant to inspire wonder as seen from afar and discovery upon close viewing.

Artists | UrbanRock Design

Jeanine Centuori & Russell Rock

CITY OF EMERYVILLE 40TH STREETSCAPE PUBLIC ART PROJECT

Final Conceptual Design Proposal – Phase Two 8/22/24

TEAM DONAHUE

Overall Concept & Identity of Place

Artwork and graphics inspired by the defining characteristics of the City of Emeryville communicate the unique identity of this place while drawing visitors into and through the 40th Street corridor.

Up to twelve sculptures affixed to street light poles plus four larger free-standing pieces within the new neighborhood plazas create a family of images, enlivening the multi-block experience and adding dramatic punctuation at key pedestrian locations. The artworks, combined with new city graphics abstracted from the artwork, capture the city's richness and enhance the street design.

The free-standing pieces in each of the four plazas are individual artworks that, together, reflect four defining characteristics of Emeryville – Waterfront Wildlands (nature), Emeryville Connects (bikes & connectivity), All Are Welcome (diversity), Art & Innovation (creativity). Each of the plaza sculptures captures one of these themes, lit from within. The 12 simpler pieces affixed to street-light posts on both sides of the street (at least one per block) include details from the major themes with a focus on Emeryville's natural setting.

The rhythmic experience of the artworks while travelling on a bus, in a car, riding a bike, or walking provides a distinctive linear identity to the corridor day or night when seen up close or from afar linking the bayfront wildlands with the urban core. The works in the plazas are slightly removed from the street's travel lanes, highlighting the quieter more nuanced neighborhood experience.

The plazas themselves are reconceived as eddy-like spaces often found at the margins of wetlands. Stained concrete bands rippling through the concrete paving and curving inland from the bay simulate a series of small waves superimposed on the urban grid leading toward the vegetated upland at the bioretention basin. Each plaza sculpture is located within this high ground, reminiscent of the beloved mudflat sculptures that once graced the Emeryville shoreline. Stainless steel phrases embedded in the concrete relate the characteristic theme of each plaza.

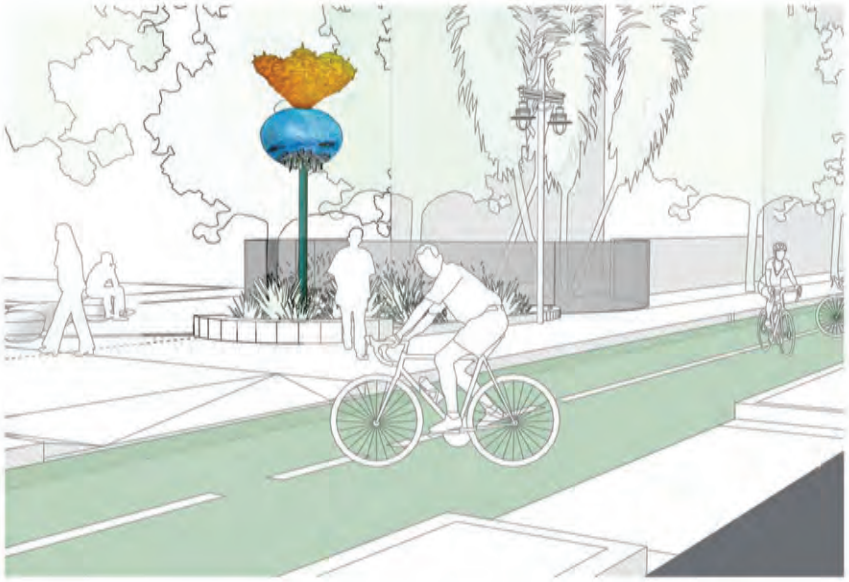
Wayfinding and identity graphic options, reflecting the city's defining characteristics consistent with the artworks, will be refined and selected through a creative public outreach process.

MATERIALS AND SIZES

PLAZA SCULPTURES (*4 with forms 3D scanned to preserve a reproducible record*)
- Mounted on 6" diam x ¼" thick steel pipe (same as light poles) min. 10' above ground extending to 16' height set in concrete footings within bio-retention planters.
- Made in two parts, each 3' high x 4' wide x 4' deep weighing up to 250 lbs, or 500 lbs total.
- Material is ¾" to ½" thick cast Forton gypsum with fiberglass and integral pigment with additional fiberglass rebar and mounting hardware. Additional color using water glass by Keim mineral paints. Sacrificial anti-graffiti coating on exposed surfaces.
- Integral micro lighting powered by solar panel embedded in top.

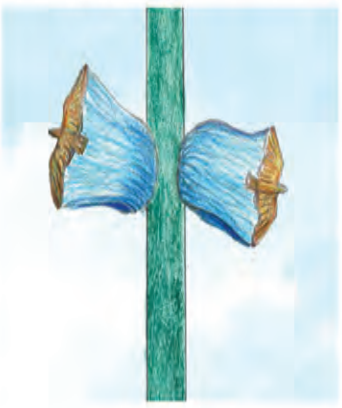
LIGHT POLE SCULPTURES (*up to 12 with forms 3D scanned to preserve a reproducible record*)
- Mounted on street light poles min. 10' above ground extending to 12' height using stainless steel sign mounting brackets. Designed to meet light pole structural loads and maintenance rqts.
- Made in two parts +/- 1'-6" wide x 1'-6" high x 3" deep weighing up to 30 lbs each, or 60 lbs total.
- Four separate sculptures will be cast from molds three times each for a total of 12 pieces.
- Material, additional color, and anti-graffiti coating same as Plaza Sculptures.

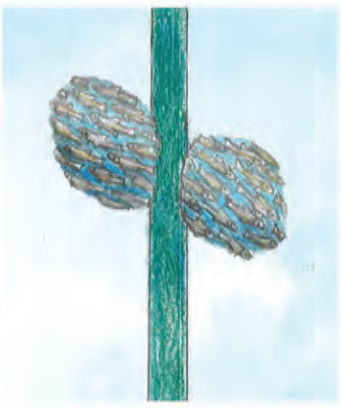
PAVING INSERTS and STAINED CONCRETE BANDS (*stainless steel embedded in concrete paving*)
- Lettering – ¼" thick laser-cut stainless steel 6" high x ½" wide affixed to flat bar by SS rods.
- Wave bands – Color-stained scored concrete bands, avg. 8" wide x +/- 10' length, within existing poured concrete paving.
- Located within plazas a minimum of 3' from known utility lines.



Plaza Sculptures

Light Pole Sculptures

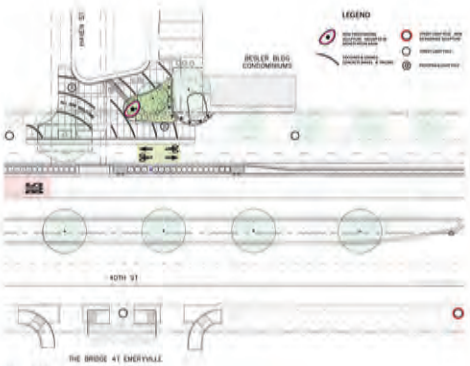




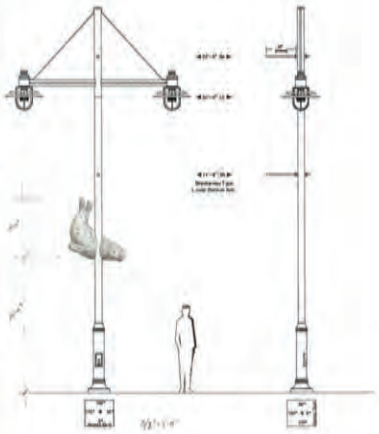
CITY OF EMERYVILLE 40TH STREETSCAPE PUBLIC ART PROJECT

Final Conceptual Design Proposal – Phase Two 8/22/24

TEAM DONAHUE

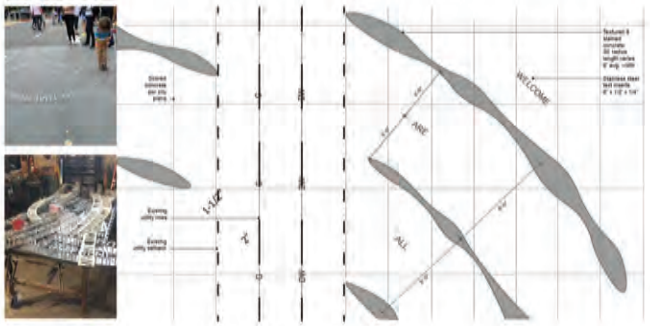


HAVEN PLAZA
"ALL ARE WELCOME"



PLAZAS

Stainless Steel Paving Inserts & Stained Concrete Wave Bands

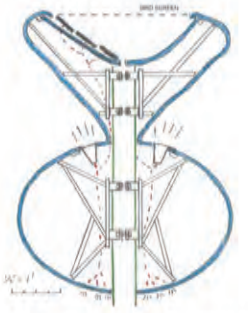


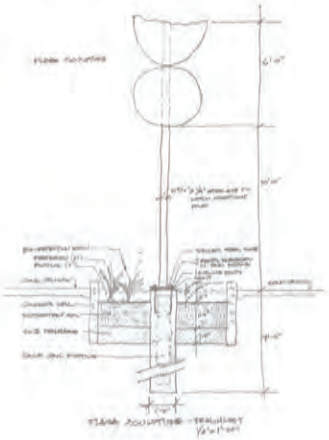
PLAZA SCULPTURES

Specifications

The attachment hardware for the Plaza sculptures will be custom fabricated for this project. I have used this design pole attachment successfully on a much larger installation of public art, *Rising Expectations* (below) consists of three components. Inside the sculpture are compression brackets which have welded steel supports for the shell of the sculpture.

The compression brackets are tightened inside the sculptures. During installation compression is applied by tightening the bolts on each bracket through the access hatch on the lower ellipsoid shape. The upper funnel shape forms are using the same compression brackets. The upper funnel shape has a two-part hatch cover that looks a little like a funnel-shaped itself and has a water drainage hole that goes down through the center of the pole and drains out the bottom.





PLAZA SCULPTURES

Lighting

The lighting design for the Plaza sculptures uses standard garden lighting fixtures repurposed for the sculptures. The fixtures of this type that I have many years of experience with are Urpower. These lights have their easily serviced solar panel separate from the lighting fixture with wired connections between the two. The panels contain the battery for the nighttime power and are turned on and off automatically with light levels. Hardware cloth wire mesh will protect these panels from bird nesting.

10 of these solar panels will be installed in the top of the funnel shape sculpture out of public view. Five spotlights will face upward illuminating the funnel-shape from below. The individually inset LED lights will be in the underside of the ellipsoid facing down to viewers in the Plaza. These inset lights will be appropriate to the content of each sculpture. In the All Are Welcome example shown, the little LED lights will illuminate the upside-down city, kind of like how we view San Francisco, and the spot lights will illuminate the underside of the birds above. In the Emeryville Wildlands sculpture, the diving penguins are illuminated from below with the eyes of the fish below lit by the LED lights. For the Emeryville Connects sculpture, the map is illuminated from below and the front and rear tail lights of bicycle riders are lit by LED. For the Art & Innovation sculpture, the DNA forms are lit from below and the gauges, dials, and other equipment behind the hands are lit from within by LED.

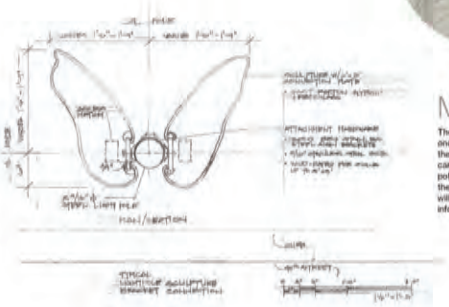
LIGHT POLE SCULPTURES

Specifications

The public art sculptures proposed for this project rely on a cast material Forton gypsum fiberglass. I have used this material for over 30 years. A project of mine in Palo Alto, entitled *Headwaters* (left) is constructed of this material and has endured for 27 years without any damage or needed repairs. The sculptures that are proposed for these 40th St. locations would all be at 10 feet or higher.

Each of the two components of the sculptures will be attached to the poles with standard signage hardware, which is sufficient to withstand the wind and gravity forces. This hardware is all stainless steel supplied by Grangers and its brand name is Tapco. This attachment mechanism will allow for easy removal and re-installation if the pieces need to be removed in the future.

The pieces are configured and sized to extend +/- 1'-0" from the face of the poles so that they will not conflict with the routine maintenance tasks, such as changing light bulbs. They are smaller than the 3' x 3' signs that are allowed to be attached to the poles, with a smaller wind loading effect than the signs – a primary consideration for pole stability. Based upon our experience elsewhere, the combined weight of 60lbs max. (30 lbs max each component) should not affect the structural integrity of the poles. Structural certification will be completed as part of the final design.



Maintenance

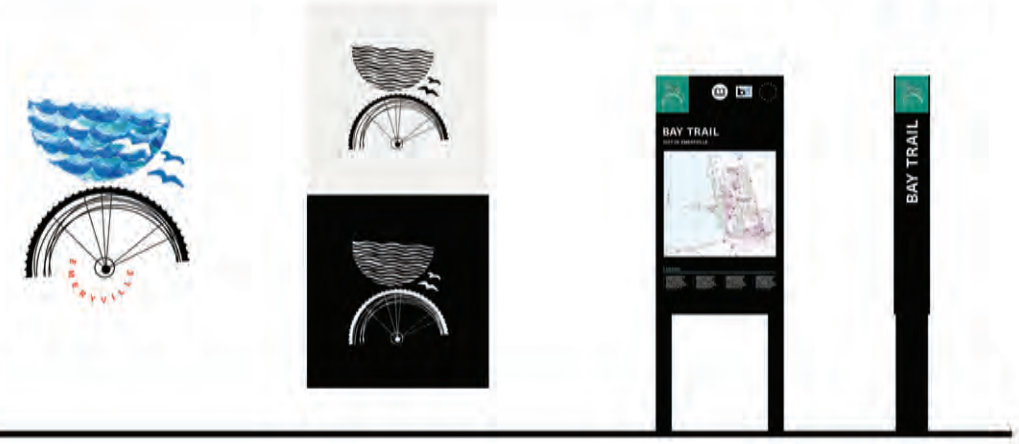
The sculptures can be maintained by hosing down with water once a year. But the dirt from the air will not degrade the look of the sculptures very much as they will have the light and form to carry the experience. I will give the city the molds for the light pole sculptures in case some of these need to be replaced in the future. Also, I will scan all of the sculptures so that the forms will be preserved and can be recast if need be from this digital information.

Final Conceptual Design Proposal – Phase Two 8/22/24

TEAM DONAHUE

Icon

The icon design encapsulates Emeryville's unique blend of the natural and urban landscape and is a visual shorthand for the spirit of innovation and community depicted in the proposed artwork for the 40th Street corridor. The icon captures the essential elements – symbols, color palette, and shapes – of the sculptures and distills them into a simpler, graphic form.



SPIRIT OF E'VILLE

PETE GOLDLUST & MELANIE GERMOND | CONCEPTUAL DESIGN PROPOSAL | 40th Streetscape Public Art Project, City of Emeryville, CA

OUR TEAM

PETE AND MELANIE and their two sons live in Eugene, Oregon. They have been married since 1996 and have been collaborating since well before that. Over the past 15 years, they've been awarded over 30 public art commissions in a variety of media: murals, metalwork, concrete, terrazzo, glass; and sculptural installations with recycled plastics, textiles, and other materials. Pete received his MFA from the School of the Art Institute of Chicago in 2001. He has exhibited internationally, and his work has been featured in publications ranging from *Art in America* to *Ripley's Believe It Or Not!* Melanie has worked as a graphic designer for over 20 years and taught art in public schools.

JOEY ENOS (Community Outreach Partner) is an artist based in the San Francisco Bay Area. He received a Master of Fine Arts from UC Berkeley Art Practice in 2014. He also attended The San Francisco Art Institute and The School of the Art Institute of Chicago, receiving a Bachelor of Fine Arts Degree. Joey has been working to capture and document the history of the Emeryville Mudflats Sculptures. CCA and Enos received a Cal Humanities grant to collect oral histories for the Robert Sommer Photography Collection at The California College of Art Archives.

CONCEPT: It came from the mudflats . . .

SPIRIT OF E'VILLE celebrates the interplay between two specific aspects of Emeryville's creative character:

1. The flora and fauna that inhabit the uniquely rich environment of the bay and shoreline ecosystem; and
2. The invented sculptural beings that inhabited the mudflat landscape alongside them for over two decades.

Our team shares a long-standing interest in the work of self-taught artists and particularly in artist-built environments. We've been tremendously excited to learn about the rich history of sculpture-making that was such a prominent part of Emeryville's identity during the time that this practice flourished. We're very much inspired to bring to the 40th Street Streetscape a sense of the self-motivated creativity that spontaneously appeared... morphed... metastasized... and then finally vanished from the Emeryville Mudflat Sculpture Garden. It is our honor to revive and celebrate the historical legacy of this unique homegrown artmaking tradition throughout the ***Spirit of E'ville*** artwork.

IMAGERY and COMMUNITY INPUT

The content and imagery for every element in ***Spirit of E'ville*** is a free-flowing mixture of the actual wildlife of Emeryville along with the invented creatures of the Mudflats sculpture garden era. The artwork will create an intermingling between real, remembered, and imagined residents of the shoreline. Imagery-rich installations across the length of 40th Street will provide venues for Emeryville's iconic and beloved sculptural beings to once again be knit into the visual fabric of the community.

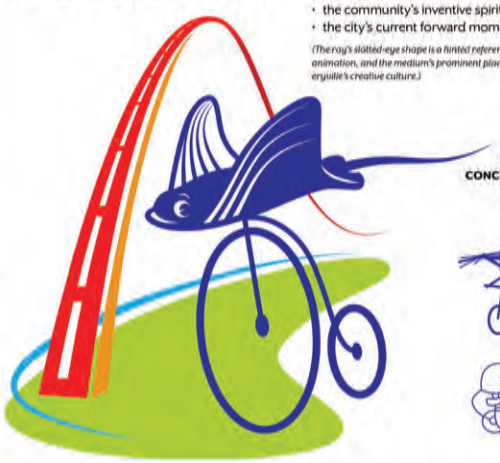
All of the specific creatures populating the artwork will be determined with input from Emeryville residents via extensive community outreach efforts centered on the *Mudflats Maker Week Celebration*. All imagery will be translated into a cohesive visual language and graphic style, as shown in our mockups, concept drawings and models.

WAYFINDING ICONOGRAPHY

This group of initial symbols represents our effort to graphically bring together several characteristic aspects of Emeryville:

- the bay environment;
- the community's inventive spirit; and
- the city's current forward momentum

(The ray's slotted-eye shape is a hinted reference to early animation, and the medium's prominent place in Emeryville's creative culture.)



COLLABORATION

We thrive on the collaborative process, and constantly seek out opportunities for new creative partnerships and local community input.

We are delighted to have the chance to invite Emeryville native, artist/historian **Joey Enos** into our team. We expect to rely on Joey's insight and understanding to help insure that we can appreciate Emeryville's particular identity in a way that will be necessary to designing successful, responsive public art and iconography.

We're grateful to have Joey's guidance as we seek out the many local voices needed to assemble the visual vocabulary of the ***Spirit of E'ville*** artwork. And we look forward to working with this community in an extended week-long conversation (see below) that will lead us to a tone-appropriate icon to represent Emeryville's forward motion.

CONCEPT LOGOS / PEDESTRIAN WAYFINDING SIGNAGE EXAMPLES

CONCEPT DRAWINGS

Local Flora & Fauna:

Historic Mudflats Sculptures:

COMMUNITY OUTREACH FRAMEWORK

Community outreach will be coordinated with our team's community liaison, Joey Enos.

Emeryville Mudflats Maker Week Celebration

Our team will be in residence in Emeryville to present a dedicated week-long mini-festival celebrating the Mudflats sculptures and the wildlife of the Bay. A series of workshops and artmaking activities, co-hosted by local partner organizations, will provide opportunities for community members to celebrate the Mudflats' actual and invented creatures, and to explore artmaking through the creative use of reclaimed materials.

MUDFLATS MAKER WEEK will:

- celebrate Emeryville's vital artistic history with current residents who may or may not have been here to experience the sculptures themselves;
- provide hands-on opportunities for community members to participate in this local artistic tradition that emerged on the Mudflats from the creative reuse of found materials; and
- create an outlet for direct creative input into the specific imagery to be developed into the 40th Street public artwork.

IN-PERSON AND ONLINE SURVEYS will seek community members' input into the creatures that should inhabit the 40th Street public artwork.

SAMPLE QUESTIONS:

- What is your favorite memory of the Mudflats sculptures?
- Did you have any favorite sculptures?
- Please rank your top three among the following Mudflat sculpture creatures.... (image list here)
- Name a favorite local animal or plant that lives in Emeryville. What is it about this creature that you like?
- Is there a creature that represents or symbolizes Emeryville for you? Why?

SAMPLE WORKSHOP EXERCISE:

Using reclaimed materials, we'll make sculptures and collages of your favorite Emeryville wildlife. Together we'll write short stories (just a few sentences) about this creature — where you encounter it, what you like (or dislike) about it, how it has attracted your attention, and what its most notable features are. Then we'll use recycled cardboard, paper, and other materials to build sculptural structures and make collages. We'll explore various construction techniques and fastening systems to make small structures out of these materials. Then, using paint pens and other marking tools, we'll embellish these constructions with your writings about your creature.

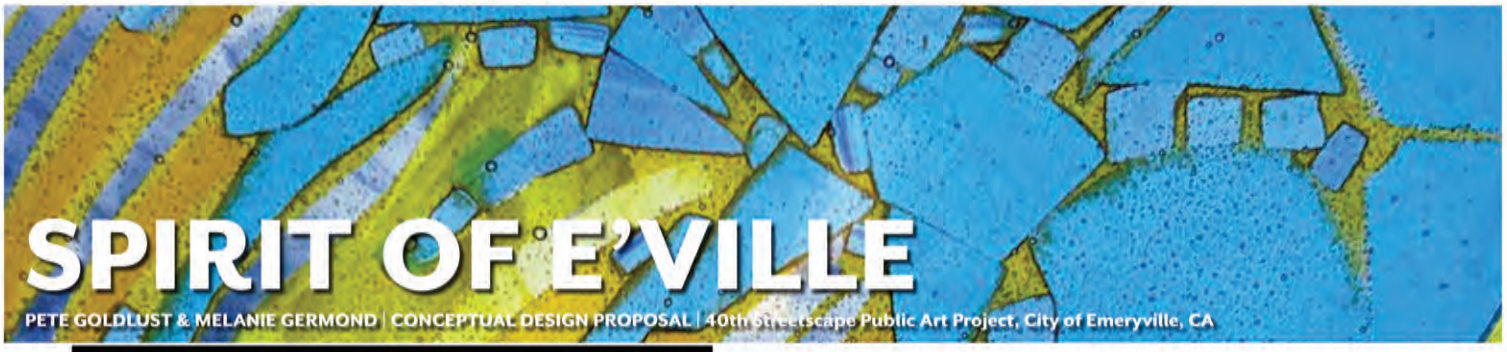
COMMUNITY INPUT INTO THE PUBLIC ARTWORK

All participants' creations will be photographed, recorded and tallied, to help our team learn what animals are most emblematic of Emeryville to those who live here. By offering opportunities to creatively interpret the area's wildlife, we look to draw out an understanding of which of Emeryville's creatures hold significance among people in the community. The input we receive from these creative workshop activities represents a high level of consideration and engagement from community participants. We expect that some of the creature designs that come out of these workshops will make their way into the various public art elements.

SCOPE OF PROPOSED PUBLIC ART

- **25 unique post-mounted installations** *(approximately 50 individual panels)*
- **4 unique plaza sculptures**
- **6 bus shelter glass treatments**

● = lamppost/bus-shelter post-mounted installation ▬ = plaza installation location ▭ = bus shelter glass treatment



SPIRIT OF E'VILLE

PETE GOLDLUST & MELANIE GERMOND | CONCEPTUAL DESIGN PROPOSAL | 40th Streetscape Public Art Project, City of Emeryville, CA

STREETSCAPE INSTALLATIONS

25 Unique Post-Mounted Metal & Glass Tile Installations* on Lampposts & Bus Shelters

** About 50 Individual Panels*

Panels vary in size up to 48" max. They are composed of vividly colored, 9mm thick fused-glass tiles, contained in a robust frame construction made of laser-cut aluminum. Surface finish is powdercoat with a UV protective clear topcoat.

Each cell within the panel frame holds an individually cut tile. (The Bat Ray model, for instance, contains 30 separate tiles.) The small, chunky dimensions of each tile make them very durable and resistant to damage. Individual tiles are cushioned with silicone/rubber within each protective cell.

Both sides of the panels are also protected by a layer of polycarbonate, set between the glass and metal frame.

PLAQUES
An engraved stainless steel plaque accompanies each installation. Plaques are mounted at eye level on each pole, providing information about the creature depicted in the installation above.

MAINTENANCE
In the event that damage should occur to individual tiles, the polycarbonate layer will contain any damaged glass, and prevent any loose fragments from falling out of the frame. Individual tiles can be removed and replaced when necessary. The artists are able to provide replacement tiles if needed. Digital files of all tilework will also be provided, allowing the city to order replacement tiles to be cut by local vendors as well.

POLE ATTACHMENT
Panels are positioned at or above 12' high, attached by a bracket similar to the U-channel stand attached to the Ray model. The legs of each U-channel bracket sit tight against a vertical post (either a lamppost or the vertical extension of a bus shelter post). Each bracket includes a minimum of two slots (not included on model), through which stainless steel strapping attaches the artwork to its post. Extended posts on bus shelters are provided by Tolar Manufacturing, the vendor providing the shelters.

6 Unique Bus Shelter Glass Treatments

- Full color graphics, similar in style to the metalwork imagery throughout the other artwork, are printed as interlayers and integrated into the three street-facing window panels of bus shelters.
- These graphics mimic the brilliant, swirling, texture and color of the hand-crafted glasswork used throughout the plaza sculptures and post-mounted works.
- The windows of the shelters take on the look of custom glasswork, closely coordinated with these other art elements. Digitally printed interlayers are provided and installed by Tolar Mfg. during construction of shelters.

SPIRIT OF E'VILLE

PETE GOLDLUST & MELANIE GERMOND | CONCEPTUAL DESIGN PROPOSAL | 40th Streetscape Public Art Project, City of Emeryville, CA

4 UNIQUE PLAZA INSTALLATIONS

Each plaza will feature one unique stainless steel and glass sculpture featuring an iconic local animal. Ambient daylight shining through the colored glasswork provides a dramatic street presence at each spot.

Our model for the Haven plaza features the endangered **California Red Legged Frog** (illustratively shown paired here with a dragonfly companion which would be mounted 12' up on a lamppost).

Other plazas may include local shoreline animals as well as Mudflats Sculpture creatures, like the iconic Monty Python-inspired **Trojan Rabbit**. The final mix of creatures, like all elements of this proposal, is to be determined with input from community outreach efforts centered on the Mudflats Maker Week Celebration.

Two of the plaza sculptures are large, approximately 6'h x 6'w, and two are smaller, roughly 3' x 3', all with a depth of ~6". Each of these vividly colored translucent structures forms an animal profile that can be viewed from both front and back. They may be positioned to be visible at a distance from both 40th Street and the cross street at each plaza intersection, providing an instantly recognizable wayfinding landmark at each site.

CONSTRUCTION

Each sculpture consists of 1/4" thick laser-cut stainless steel, cage-like outer structure, featuring a line-work design, which encases a glasswork and polycarbonate inner structure. The cut linework of the metal plate is densely interwoven forming a sturdy network of 1/4" thick bars, tightly spaced with gaps of up to only 1/2" wide.

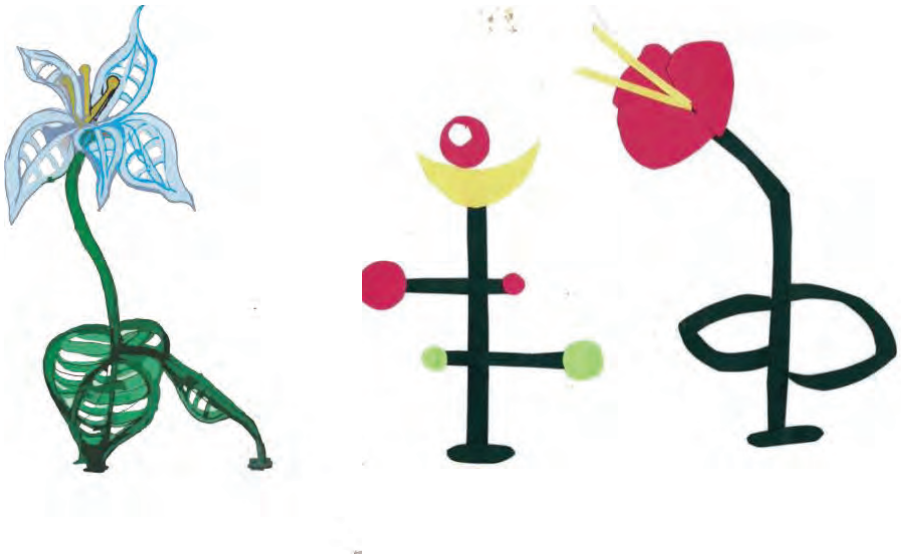
The core inner structure is composed of vividly colored, translucent fused glass tiles set into a silicone/rubber cushioned stainless steel framework allowing for thermal expansion/contraction. Tiles are approximately 8-10" at their longest side, individually formed using Bullseye glass, fused to a thickness of 9 mm, and extremely durable (see sample).

On either side of the inner glasswork are two layers of clear polycarbonate. The polycarbonate is spaced from the glass by 1/2" to fully protect the glass from any impact. Both faces of the sculpture are removable to allow access for replacement or cleaning of the polycarbonate if needed.

Each sculpture is mounted on an 18" cylindrical footer of reinforced concrete. If placed within the garden areas, these footers may include an above-ground rise of up to 24" high, to elevate the sculpture above plantings. If placed on paved areas, sculptures may be mounted at ground level.

What's Growing, Emeryville?

Playful nature sculptures at enormous scale.



Addie Boswell & Matt Cartwright

What's Growing, Emeryville?

Conceptual Proposal by Addie Boswell & Matt Cartwright

Our Inspiration:

We were struck by the blend of creative and industrial energy in Emeryville. The MudFlats Art, the history of stockyards and dog races, and the more contemporary designs like the murals and 'Signs of the Times' reflect those blends. There is also a nice blend of natural and man-made structures and spaces in your corridor. Our proposal aims to match the playfulness and strong graphic nature of existing art, the collaborative creativity of your history, and the color scheme of nature and city (though scaled up a touch!) We will add to that with a size and subject matter that we didn't see in town.

Our theme: **What's Growing, Emeryville?** refers to plants and flowers as well as the more diverse and intangible aspects of the community. The Streetscape Improvement isn't just about bike lanes, after all, it is about livability and equal access and much more. The answers that your citizens give to the question "What's Growing?" will inform all of our art, most notably the Wayfinding Icon and the Community Tapestry.

Our main aims:

1) **THE BIGGEST IMPACT.** We believe color and size have the most impact in place-making art. Not only do big structures call attention to the project, they work as photo opportunities and wayfinders, and are designed to advertise themselves organically, through citizen attention over time. Between our large plaza installations and our streetscape elements, we propose having an eye-catching addition to every block of the map.

2) **ALWAYS HAND-MADE.** All of our designs are based on original drawings and papercuts and hand-built models. We believe in retaining the slightly imperfect 'hand of the artist' that is notable in your other installations. This keeps the work from looking computer or AI generated and speaks to your artist-made past. All of these designs are made expressively for Emeryville and won't be found anywhere else in the country.

3) **COMMUNITY BUILT.** Our proposal uses your citizens as partner artists and advisors throughout the entire design process. Through the worksheet exercise, hands-on workshops, and social media activity, we will gather ideas, words, drawings, and collages from the community to work into the Community Tapestry and Wayfinding Icon. These community ideas and interactions will also inform and inspire all of our large structures, and we see thus as a necessary first step in our design process. (See example worksheets/workshops at end).

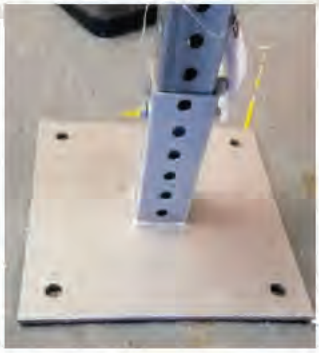
Note: Because this is a collaborative proposal, much of the detail will change based on community input and architectural reviews. As one example, we have included many local plants we are drawn to, such as the fiddlehead fern, birds-of-paradise, and lotus. Are these relevant to your citizens? Maybe they will mention dune grass or dragonflies, and we could add these ideas into our designs. We would also aim to be transparent with our process, by posting the community art on a website or Instagram page and sending creative updates. The interactive nature of our installations also increases community involvement, with the mural option adding another public participation aspect.

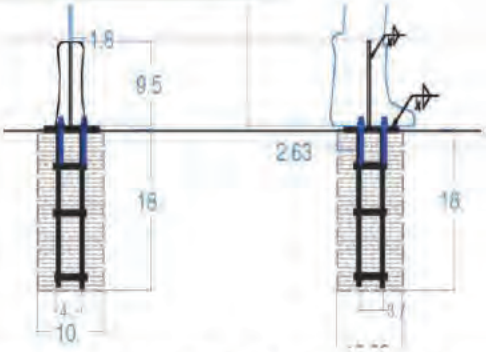
Color Scheme

Our color scheme is based on the natural and built structures of the community, including light-pole-green, sedge green, sign-yellow, flower-power pink, and opalescent shell-white, dialed up just a tad. We would be interested in painting some of the regular streetscape options (like the benches and bike plinths) with our color scheme if the city is willing to go for some extra pops.

Materials

Our proposal rests on powder-coated steel for its durability and professional finished look. All large structural forms are made in Matt Cartwright's signature organic style of stainless steel pipe and flat bar that are cold-formed through rolling and manipulating by hand. All joints are welded and sanded, including base flanges which are bolted to a concrete base at or below ground.





Stainless Steel pipe and Stainless Steel flat bar comes in a variety of sizes. Matt's typical working size is 1 ½ - 3" pipe and 1/8 – 3/16" flat bar though he can modify to fit the design. Mounting flanges are 3/8 – ½" thick to make 5x5" plate footing flanges as needed. These are spaced across the sculptures and bolted directly to concrete. In the case of soft-mounting, Matt can build a concrete footer below grade. (at right)

Besides the raw materials Matt uses to build, other supplies include:

- Prismatic Powders for the bright powder-coating colors,
- Colored Acrylic Tubing for the Cat-tails, and acrylic disc for Lotus Bench, provided through TAP Plastics
- NovaColor Mural Paint for any mural portions, with possible painting on Aluminum Composite Panels, many brands.

Suggested Colors of Prismatic Powder Coating. White may need a second coat of Fusion Pearl to create the true opalascent look.

Cattail Islands will have this extruded acrylic rod built around the pipe. We suggest Flourescent Amber for a natural look, though the pink and green could make a fun addition.

Rubbapour Brand Wetpour can be mixed and applied by a professional installer. It comes in these colors.

PROCESS

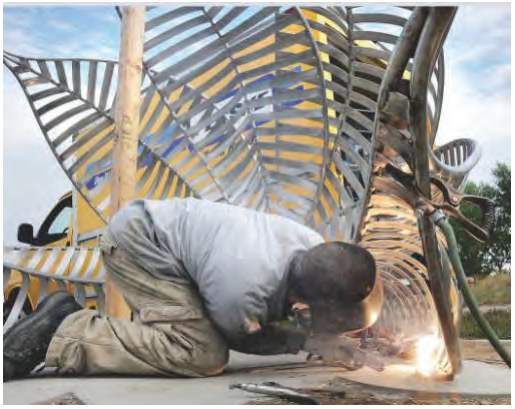
After brainstorming with the community and compiling all the ideas and art they are willing to share, Addie and Matt make paper models and architectural drawings of the final sculptures and flat pieces. These will eventually be uploaded and made into graphic files and sent for engineering review. Here are some of their brainstorming images for this project: paper models, collages and drawings.




Fabrication happens as a partnership between Matt Cartwight Designs and local businesses that he contracts specialized work out too. First all metal pieces are laser-cut, welded and tabbed, As you can see from these pictures, using strong metal shapes casts interesting shadows and interplays of light on the surface throughout the day. After the metal is sanded smooth, it is sent to the powder-coater. Current businesses that matt partners with are:

- Advanced Powdercoating in Portland
- IRC Aluminum & Stainless, who do water-jet and laser cutting
-





Community Collaboration Plan

As visiting artists, we are guests in your house, and our aim is to reflect your citizens, not to speak for them. Addie's mural philosophy is "more hands on the wall," as she has found that the impact of public art relates directly to the ownership your citizens have over it.

Icon Design through Worksheets (see end pages)

Worksheets are open-ended and playful, made to get citizens brainstorming broadly about an Icon Remix. These worksheets could be handed out through your channels and public places along the corridor, with a QR code or Instagram page that makes it easy for citizens to turn their ideas into the artists.

Artist Residency & Public Workshops

During a two week residency in Emeryville, Addie would visit multiple public spaces, give a short presentation on the project, and lead the community in making art from the theme. Her favorite spaces to visit are libraries, schools and outdoor events like Farmers Markets, but she would also reach out to larger businesses along the corridor about hosting a workshop for employees or customers. (Especially Peets, IKEA, Pixar, and others suggested by the committee.) These tactile workshops use our team's favorite brainstorming materials: paper and mixed-media recyclables. If citizens choose to share their art with the project, Addie will photograph it for their records. The art could also be posted to a website or Instagram page about the project.

These workshops will also act as informal listening sessions with the community, as Design Boards would be posted and attendees will be encouraged to vote on favorite aspects, write comments, and generally converse more. The residency is also a chance for the team to meet with the architects and city planners to further tweak design ideas.

Workshop Blurb: Join the Public Art!

Join public artist Addie Boswell to learn about the new 40th Street art elements and follow the process she uses to make thumbnail sketches, collages, and small architectural models for our new streetscape. Your designs will be displayed on the community webpage, integrated into a community tapestry and used to inform all of the designs. All ages welcome and no experience necessary. We want your ideas!

Community Updates

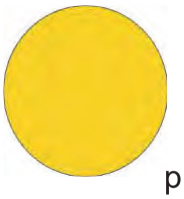
While Addie and Matt work the community art into final designs, the public can still be involved through the voting process (when finalist icons are presented) and through social media updates. They may get to participate again when the Community Tapestry is ready to be either painted or installed, and at the Grand Opening Celebration. Last but not least, our work is meant to be interactive in form, and the community can continue to 'participate' in the project long after it is done by visiting and using all the work they helped design.

COMPONENT ONE: Wayfinding Icon

Like the brilliant ‘Signs of the times’ Art, we would stick to the simplicity of the original bike/pedestrian icons, but with a twist. Addie will ask the community to reimagine this icon in different ways – by adding to the bike itself, by remaking the commuter, and even by cutting the icon apart and rebuilding it. (see the sample worksheet for examples.) Their ideas will give a large variety of ‘remixed’ icons, and from these we will compile three-five finals for the community to vote on. This may be a rendering of the bicycle in a stylized manner, a fun addition to the basic bike or a whole new figure that the community invents. We can also post the community ideas on social media or a website and potentially create stickers or posters of some of the favorites.

STREETSCAPE INSTALLATIONS

To make the biggest impact, we've chosen installations that are at eye-level and above, that are brightly colored, and that have a playful bent. All installations follow the color scheme and can be mixed-and-matched, depending on which elements appeal most to the public and the committee. These are our initial recommendations.



Flower Toppers (16)

Costumes for your streetlights! With two flower heads and two twining leaves, each flower topper provides a pop of color and a chuckling surprise to drivers and walkers. These are estimated placements on the corridor: Flower Toppers would be placed strategically between the plaza blocks on light poles that are unhindered by tree cover, on both sides of the street.

The Community Tapestry

Up to 400 square feet of community art!

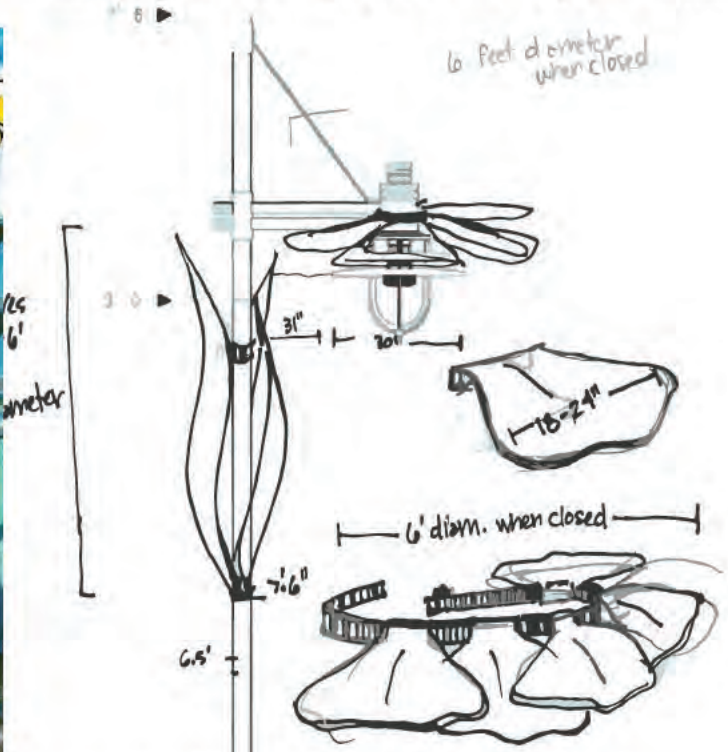
Addie would design the tapestry from the art she gathers during outreach activities. The Tapestry can be configured in various ways to be useful within the corridor, and we are proposing these three options, which can be mixed and matched depending on feedback.

- 5x10' Metal panels applied singly or in groupings
- 5x10' Painted mural panels applied as a group in 1-2 places
- Bus Shelter overlays, applied as needed.

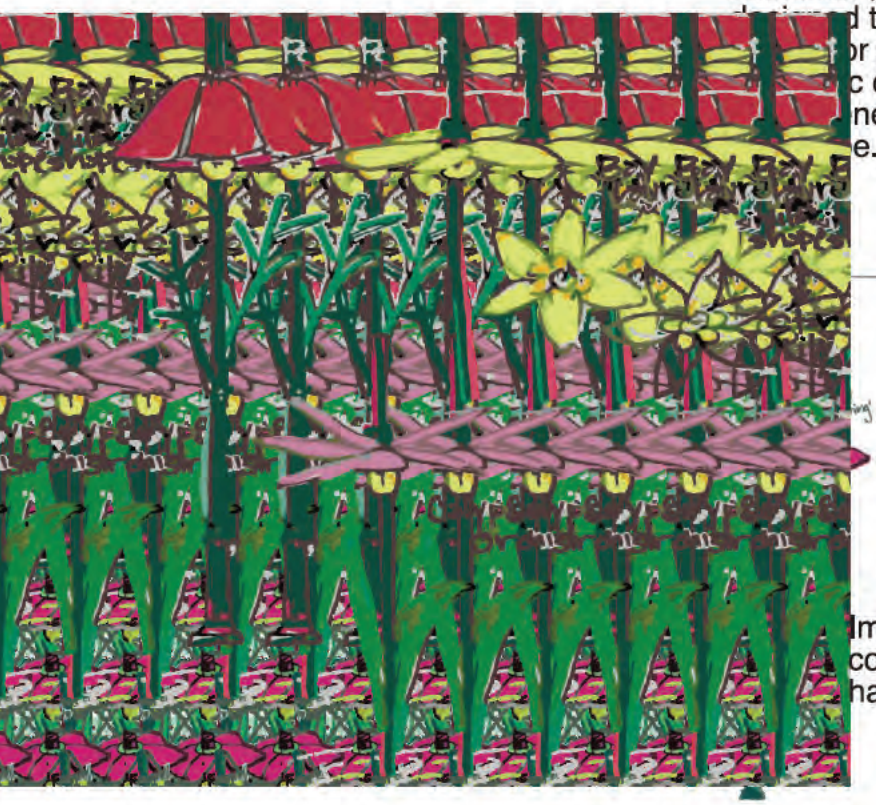
We recommend using the Community Tapestry first as 'bookends' for the streetscape map, with locations on or near 40TH & San Pablo Avenue and 40TH & Hubbard Avenue. Those blocks both have empty fencing stretches that would easily accommodate a freestanding piece. But there are countless other potential spots for the community mural (Bon Mot yellow building, stone plaza, bus depot and more.) We would look forward to working with stake holders to find the best spot for this. The community will be very invested in these pieces, and the more visible the better!

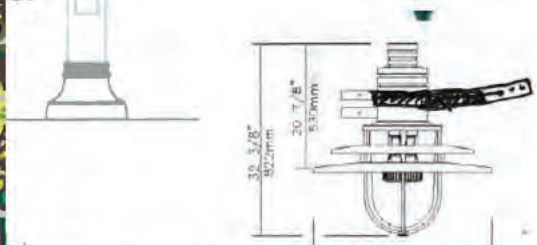
FLOWER TOPPERS

Costumes for your streetlights! With two flower heads and two twining leaves, each flower topper provides a pop of color and a chuckling surprise to drivers and walkers. These are estimated placements on the corridor: Flower Toppers would be placed strategically between the plaza blocks on light poles that are unhindered by tree cover, on both sides of the street.



Leaves and flower petals laser-cut from aluminum, shaped and powder-coated. They are designed to slide onto band clamps and then be bolted or glued together to hold their form around the pole's diameter pole. Band clamps can then be tightened to cinch the pieces on, but removed for maintenance.





Suggested attachment doesn't impede bulb changes, but can be modified based on engineering review.

Imagine the different flower toppers the community can imagine! We anticipate having three different designs to spread

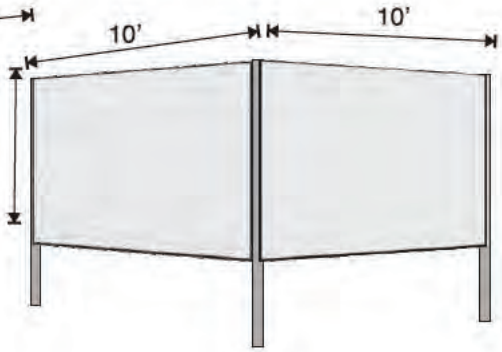
THE COMMUNITY TAPESTRY PROCESS

The Community Tapestry is a compilation of ideas, sketches, and collages taken from your citizens and put into one overarching design, which is either narrative or pattern-based. This is a similar process Addie uses for every public art project. Here is a simplified example

1) GATHER IDEAS around a theme. In this case, the communal theme is "What's Growing Emeryville?" and would include all plant/flower imagery as well as more intangible ideas like creativity, kindness or commerce.

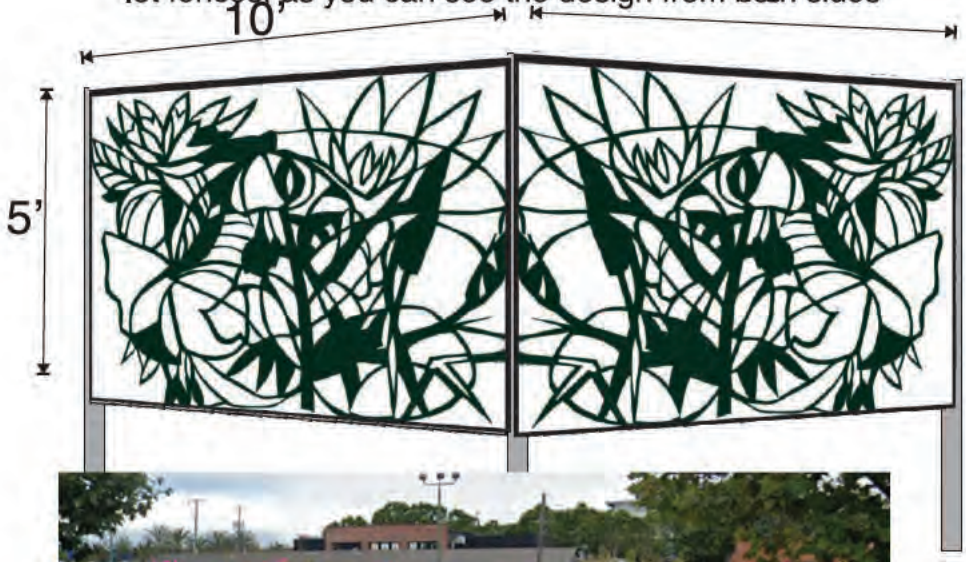
2) Compose Ideas into a large, professional design. Often this is sized to a particular wall or place, but for Emeryville, I would compose a more open-ended wallpaper design which could be utilized in different ways. Here is the same design in black and white and color, featuring some overlapping flower shapes.

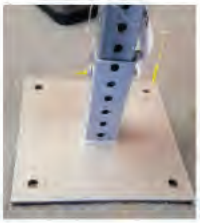
3) Fabricate & Install Tapestry. . The Tapestry can be configured in various ways to be useful within the corridor. Depending on community and committee input, as well as the final locations chosen for the Tapestry, the design will be either laser-cut from 5x10' stainless steel metal panels, or painted on 5x10' ACM (Aluminum Composite) materials. These can be mounted on metal posts to sit above ground or attached to existing fencing and walls, with property or city permission.



Option One: Metal Panels

Can be mounted in many combinations. They work well as a corner piece at an intersection, or on multiple panels that stand in front of unappealing spaces like parking lot fences, as you can see the design from both sides



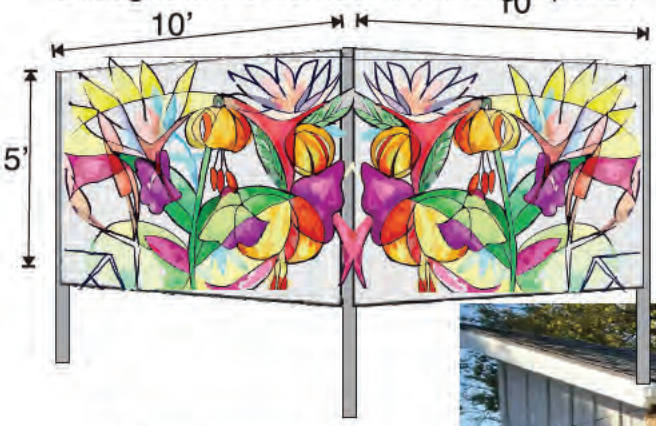


Possible instllation outside the Pottery and More Store as ideal, as panels could be installed in the median beyond the sidewalks.ther potential spots

{Panels can also be layered together to create a two or three colored panels like these. In addition, elements of the panel can be painted with bright pops of color.

Option 2: Painted Mural Panels

A good chance to get more color in the Corridor, painted murals can also involve the community in the making. These panels can be arranged in any combination to cover a large surface with one design, or a repeated image could be posted at various points throughout the corridor on a single panel.



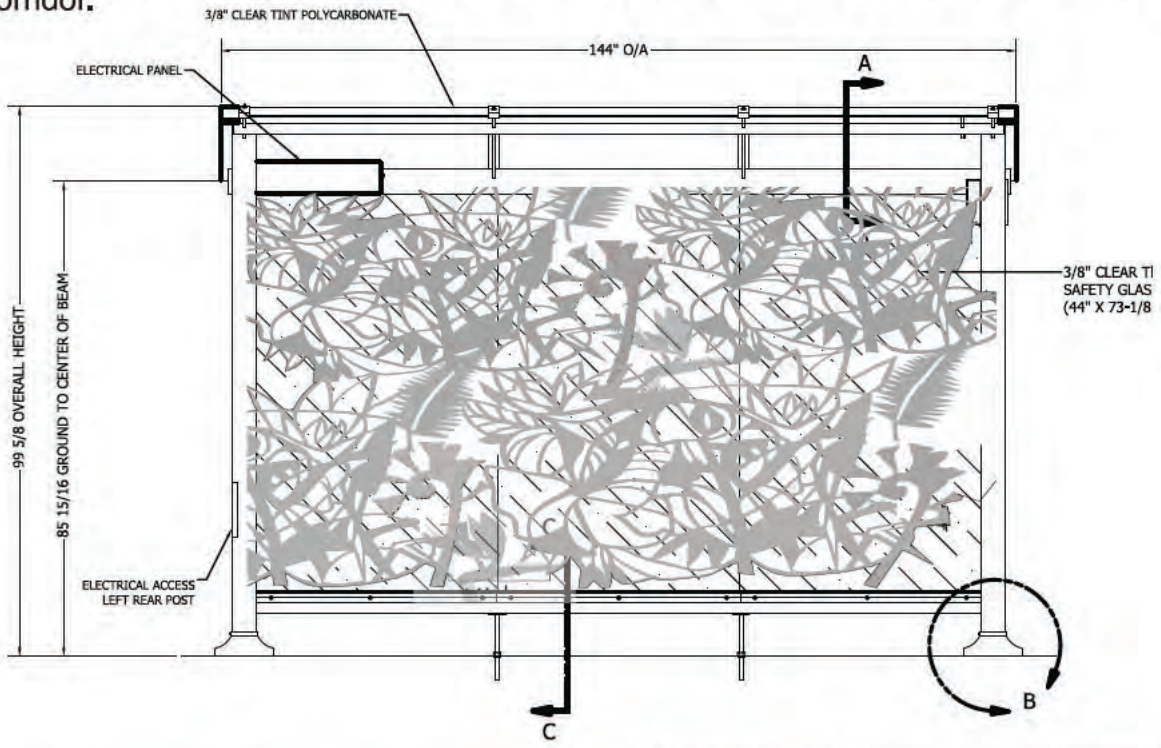
DIBOND

an example of NovaColor on ACM panels outside a

Murals can make a huge impact, and I would be excited to post murals at or above grade on both ends of the corridor. These lightweight Aluminum Composite Sheets (ACM) to allow for easy relocation when screwed directly onto existing walls. Possible installation along the empty fence or outside walls of the Black & White Liquor Store (with owner permission) would be an ideal introduction point to the Corridor.

Bus Shelter Overlays

Window cling is a low-cost alternative to add to bus shelters. A simple translucent pattern will tie the art together and prevent graffiti, as well matching with your nature-based posters on the sides. These can be applied to all existing and new shelters in the corridor.



A bus shelter in Portland, OR with a simple artist-designed line drawing.

OPTIONAL ADDITIONAL STREETSCAPE

Depending on interest from the public and the art committee, these are some additional streetscape ideas that are relatively low-cost and could substitute for flower toppers or Tapestry Installations.

1) powder-coating benches and bike racks in our signature colors of hot pink or bright green

2) Bike Lane Surprises. We are very interested in using thermoplastic on the ground-plane! These are examples of a similar project in Portland 20 years ago, where citizen artists made icon additions that the city workers added to bike lanes throughout the city – people searched for them. You could imagine a similar project with all the community feedback during the outreach!

PLAZA INSTALLATIONS

These are our big impact structures and put a magnifying glass to nature with enormous plant structures (putting humans at a snakes-eye view.) All of these are interactive and include seating with the primary function to grab attention and provide places to rest and places to meet up.

Hubbard Street Full Plaza: The Giant Lotus Bench
Made of stainless steel pipe and flat rod to mimic the Nuttall's Lotus, the Lotus Bench is a showstopper for its size, color, and beautiful twisting form. The surprise bonus is the shadows it casts at different times of the day. Seats 6-8.

Holden Street ½ Plaza: Cattail Islands
Amber acrylic rods join powder-coated pipe and rod to glow in the sunlight. With its variety of heights, the cat-tail bench can be built as one long sinuous form along the inside of the ½ plaza or broken into small islands and spaced throughout.

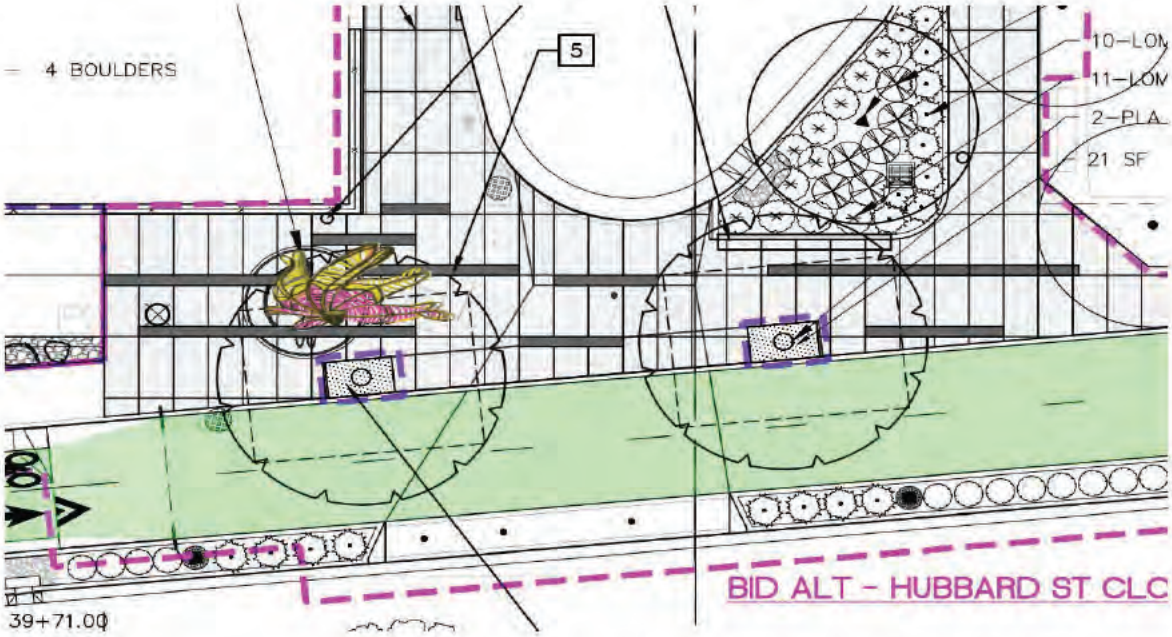
Haven Street Full Plaza: Shell-ter and Soft Seating
With the same basic structure as the Lotus, the open clam-shell continues onto the ground plane with the addition of slightly-sloped Wetpour rubber, inviting kids and adults to lounge and play. When surrounded by stone benches, this provides the most protected 'soft' place in the corridor and is bound to be a destination for families.

Watts Street ½ Plaza: Two Leaf Lounges
With a tripod design, each leaf lounge provides three hand-built seats for perfect sitting and bookend the plaza. The Bird of Paradise and Douglas Iris tops are shown here, but flower tops can be changed based on community input.

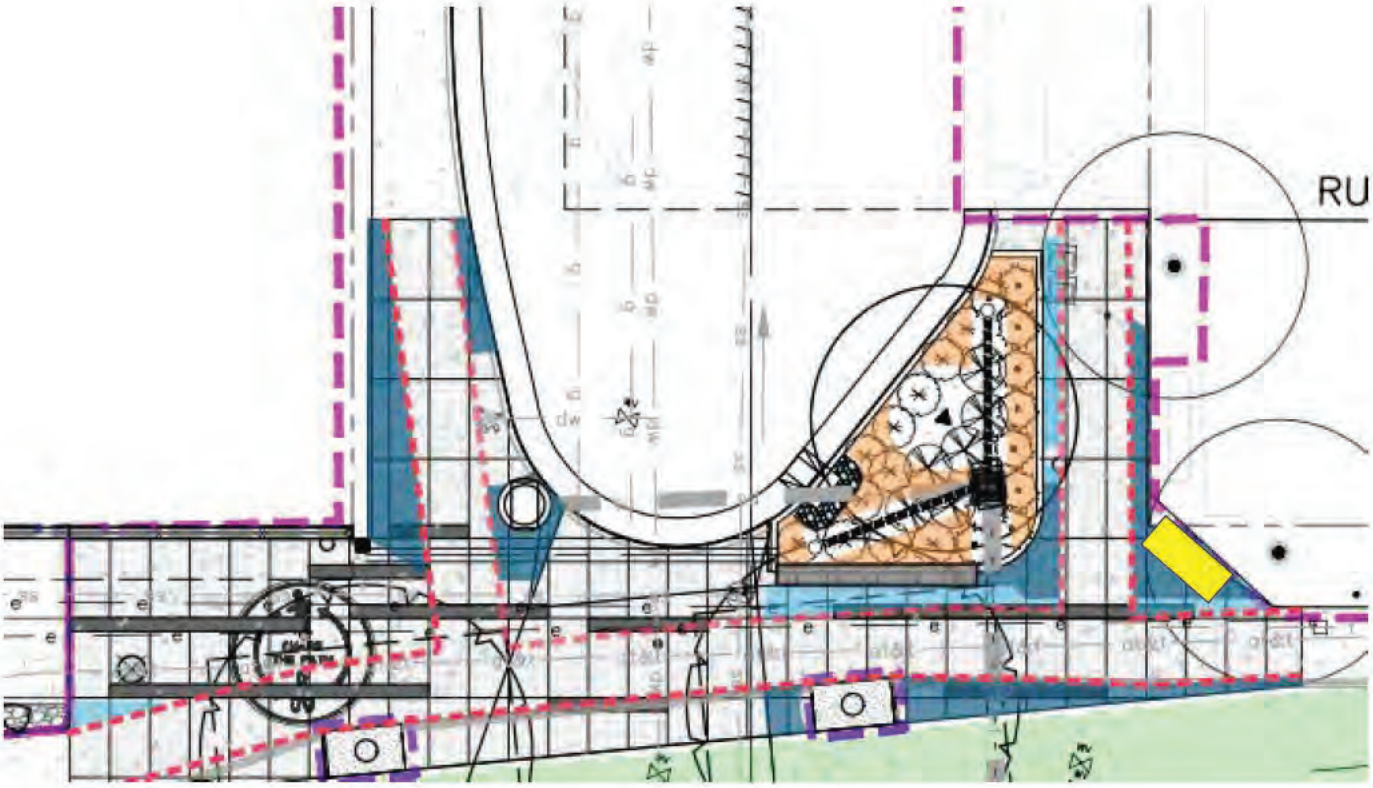
HUBBARD STREET PLAZA:
Giant Lotus Bench

Inspired by the bright colors and interesting form of the Nuttall's Lotus, the Lotus Bench is a showstopper for its size, color, and beautiful twisting form. The surprise bonus is the shadows it casts at different times of the day. Seats 3-4 on each side of the middle 'table' so 6-8 capacity.

Stainless Steel pipe and flat bar with 5x5' plate footing flanges. Middle table in cast-concrete, topped with 12" acrylic disk that filters light (in same amber as cattails.) Size can be modified to fit plaza better. Powdercoated flower-power pink and caution yellow for Nuttall's Lotus.

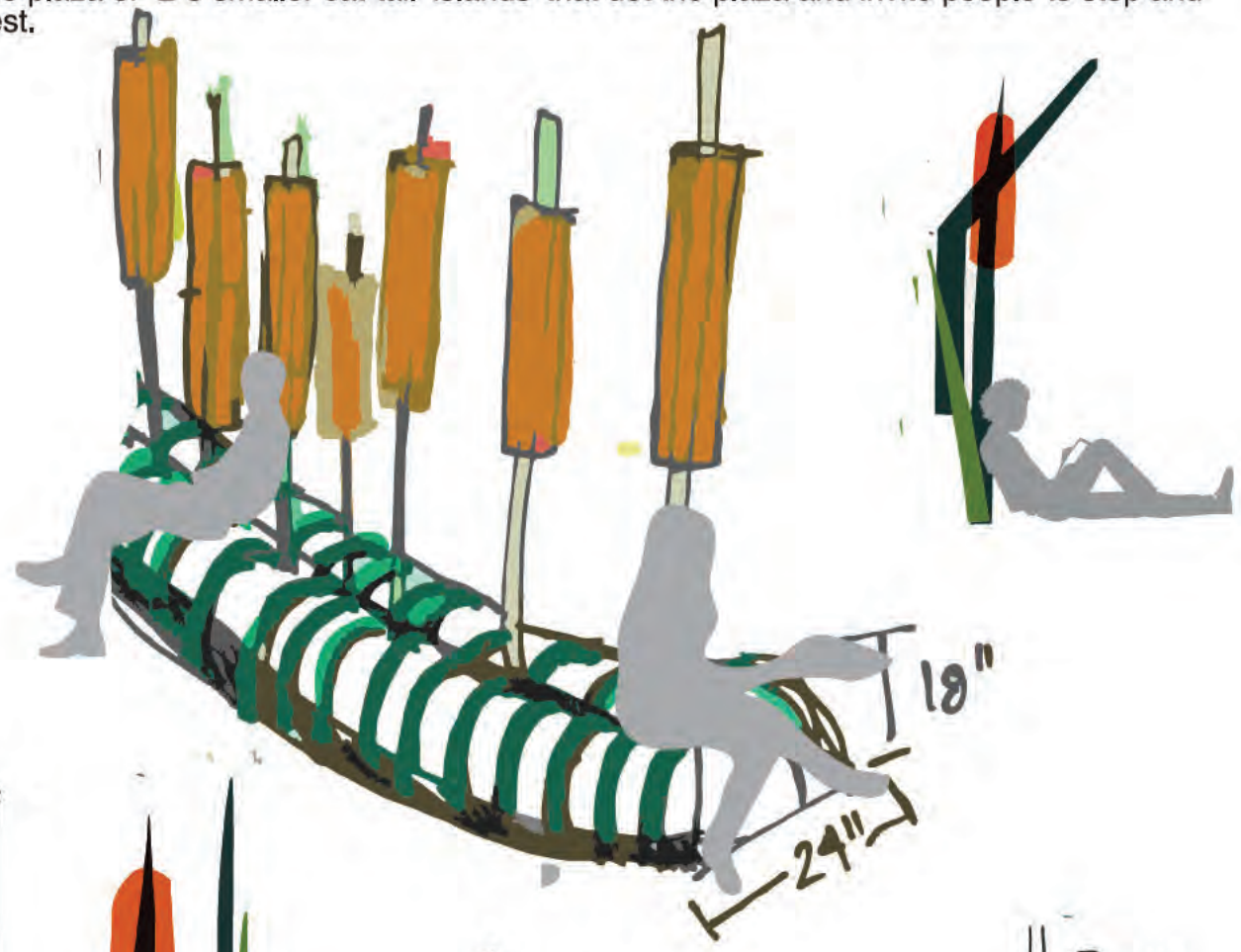


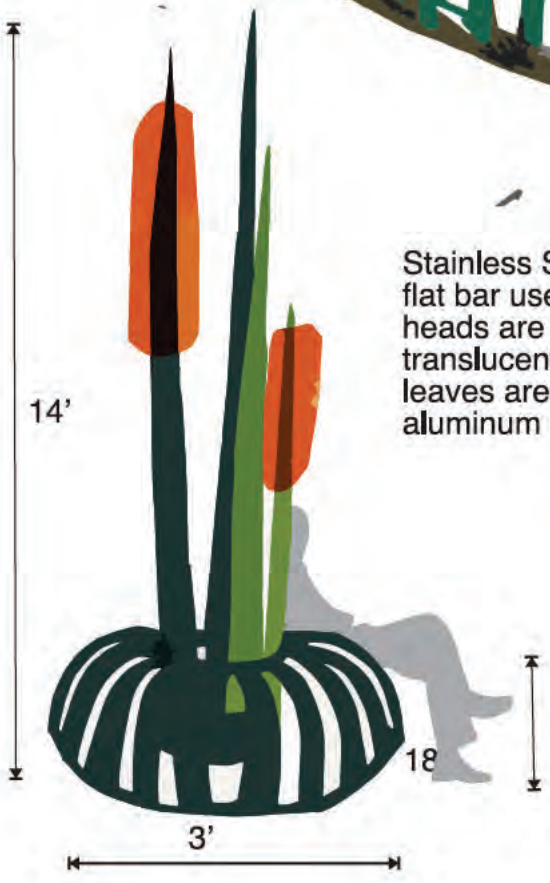
Original placement ideas above takes as middle point in the plaza. However, in light of access, may be best if used at the new placement below. Potential to create two smaller lotus that seat 3-4 or modify in other ways.



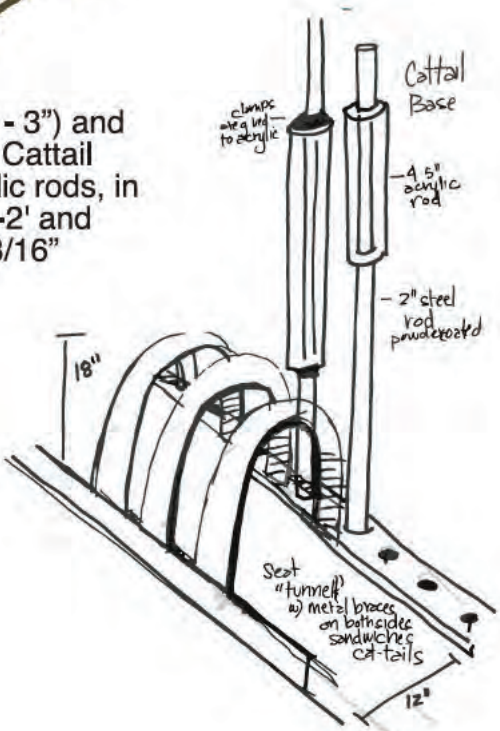
HOLDEN 1/2 PLAZA:Cat-tail Benches

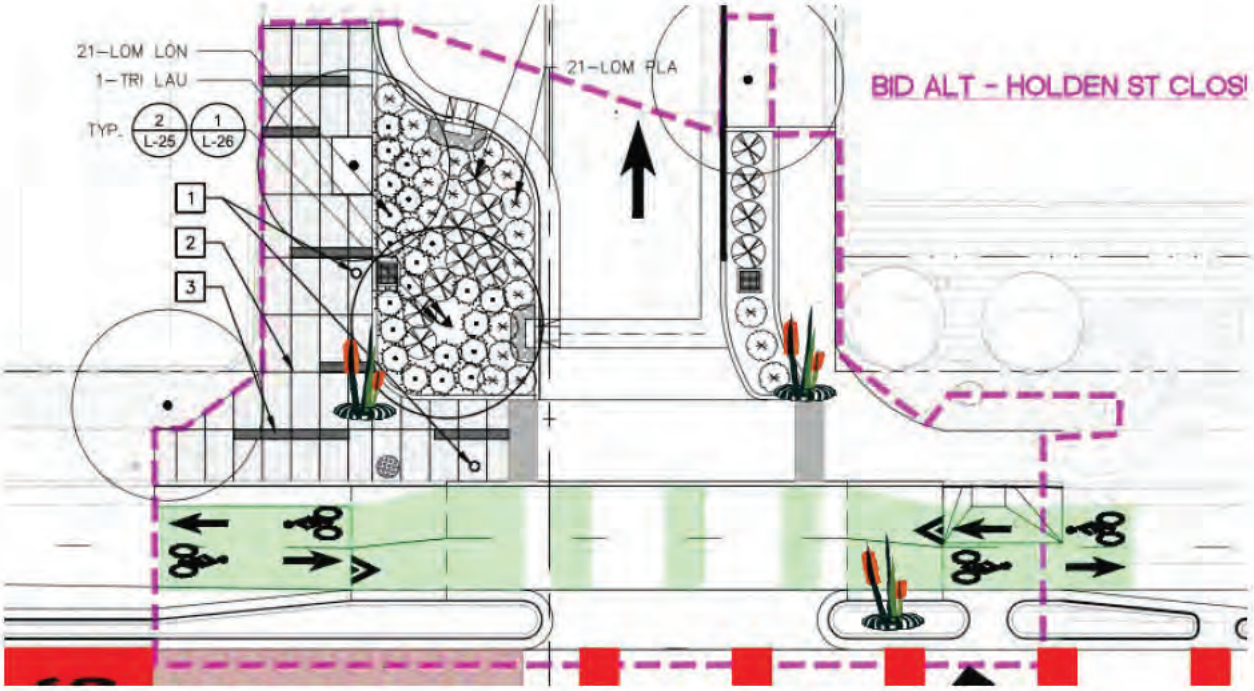
A nod to the marshy area of town, these add a more vertical shape to our other structures. With translucent acrylic rods, these cat-tail flowers filter light and have a strong structural shape. The cat-tail bench could be made as a long curving bench that hugs the inside of the plaza or 2-3 smaller cat-tail 'islands' that dot the plaza and invite people to stop and rest.



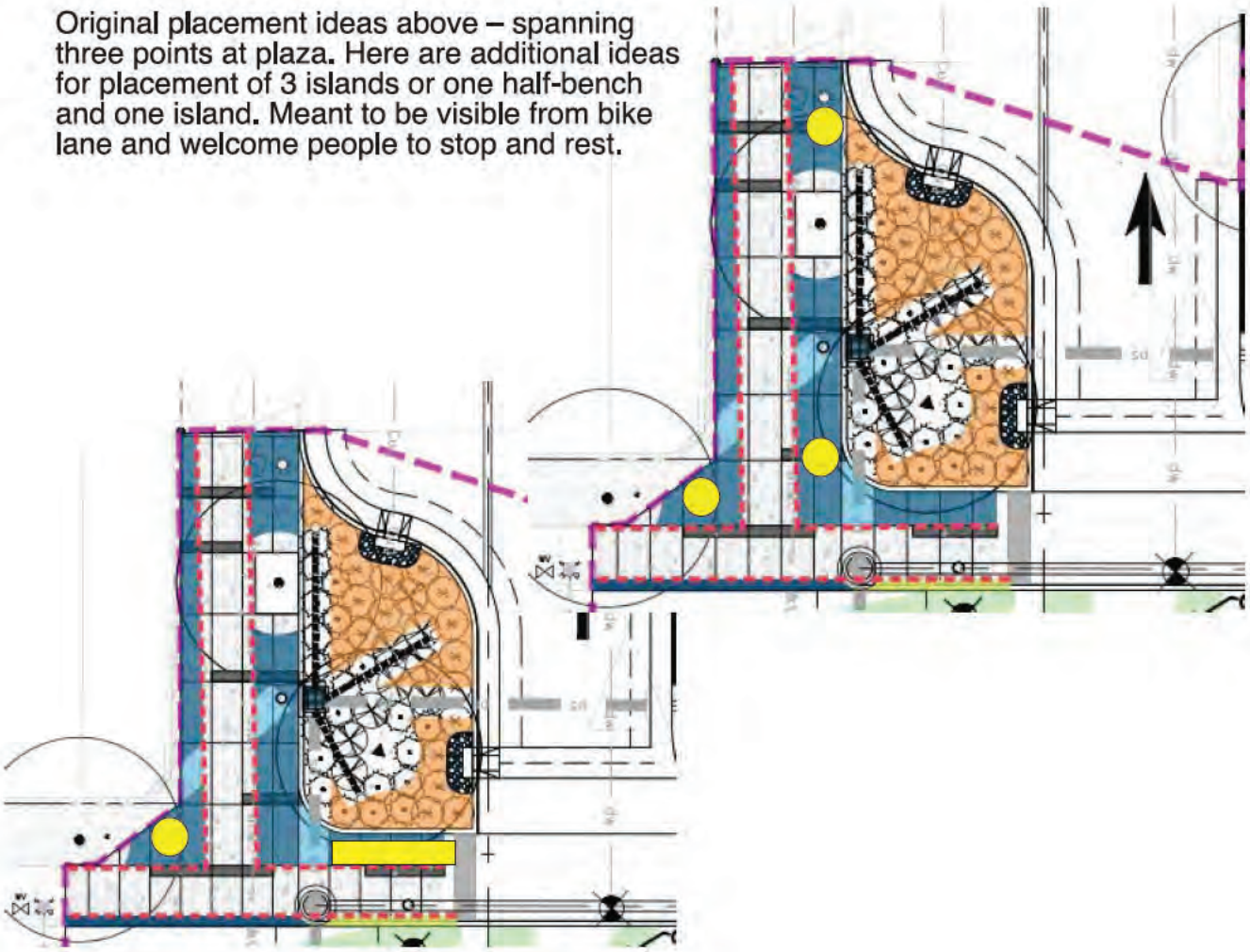


Stainless Steel pipe (1½ - 3") and flat bar used for seating, Cattail heads are extruded acrylic rods, in translucent Amber, 4"x 1-2' and leaves are made of 1/8-3/16" aluminum

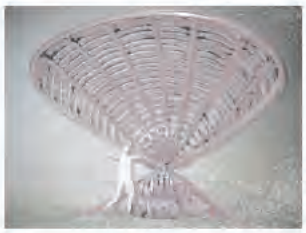




Original placement ideas above – spanning three points at plaza. Here are additional ideas for placement of 3 islands or one half-bench and one island. Meant to be visible from bike lane and welcome people to stop and rest.



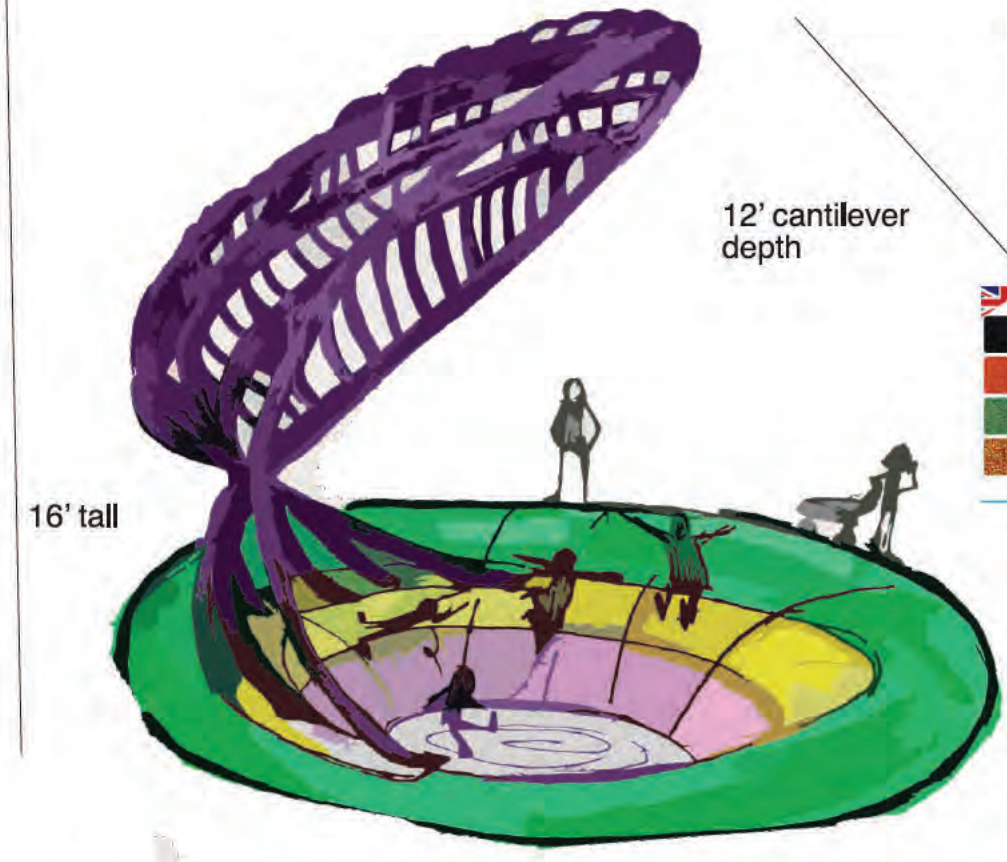
HAVEN STREET PLAZA
Shell-ter & Soft Seating



Inspired by the bay and the historic Shellmounds, this design creates a yawning calm shell that is built on top and continues onto the ground plane with the addition of Wetpour rubber. If this surface is slightly sloped into a concave shape, it will continue the shell illusion and invite kids and adults to lounge and play. When surrounded by stone benches, this provides the most protected 'soft' place in the corridor and is bound to be a destination for families.

Stainless Steel pipe and flat bar make a balanced structure that is 1600 lbs heavy. The cantilevered design is grounded by a six-point base which is bolted directly to concrete. Paper model shows the Shell-ter from different directions. Powder-coating the shell-ter in iridescent white with purple/pink undertones will keep it from feeling heavy.

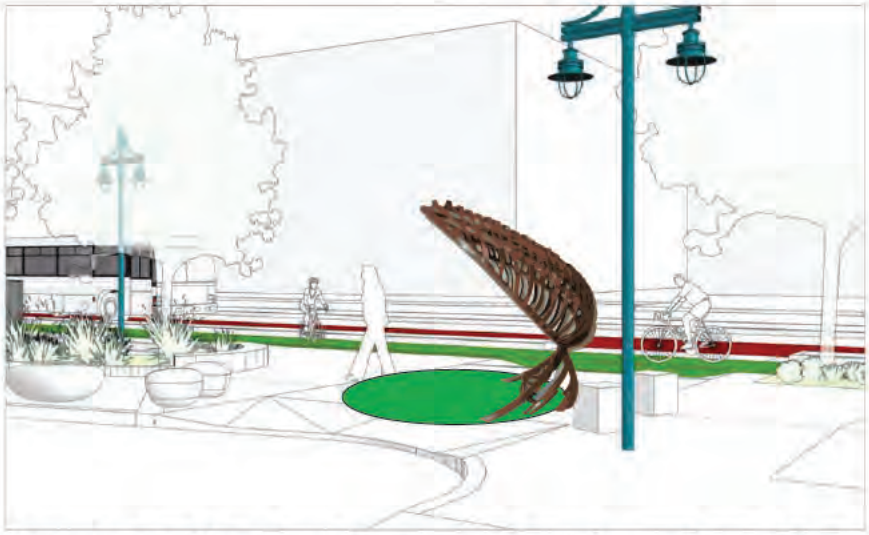
12'



12' cantilever depth

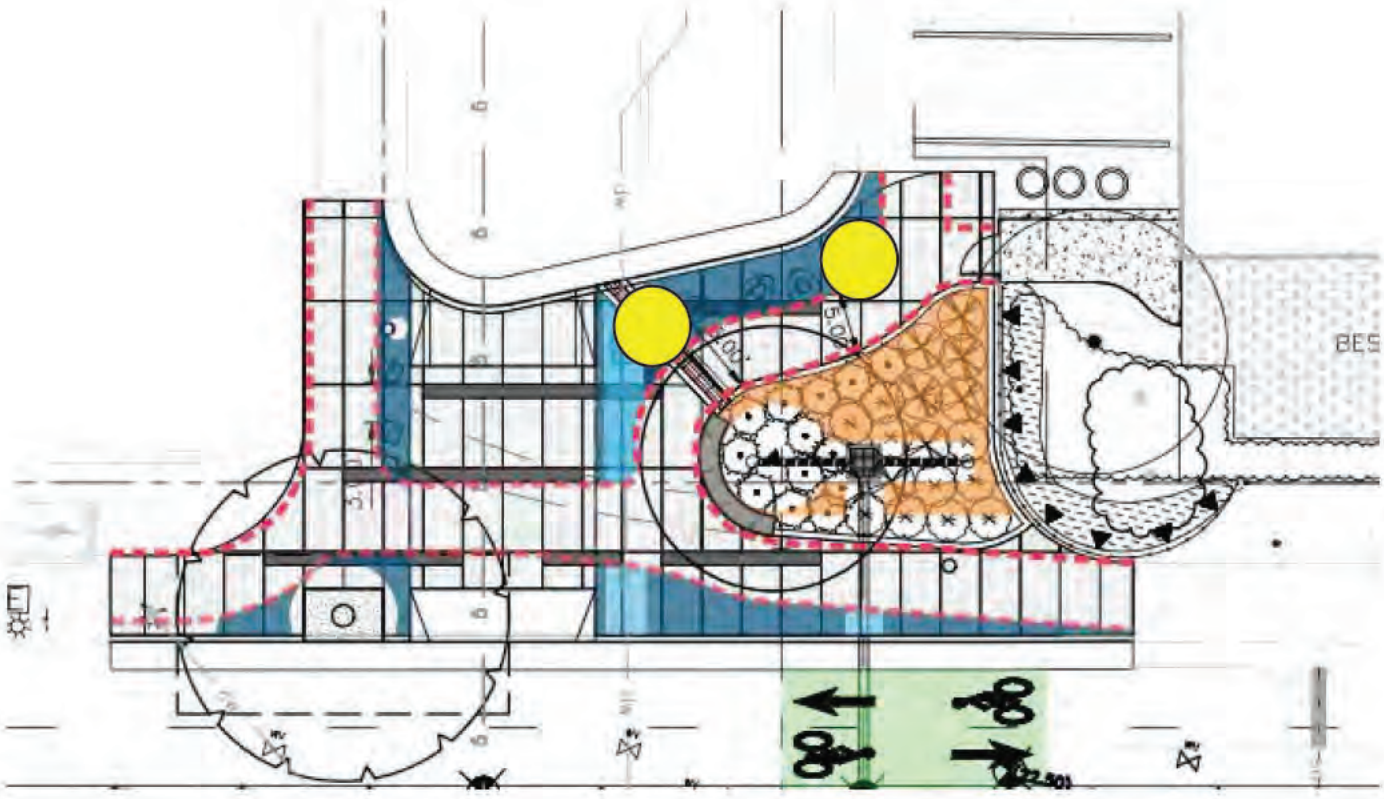
16' tall

rubber-pour play area is 12-15' diameter with a slight slope to create the curve of the shell



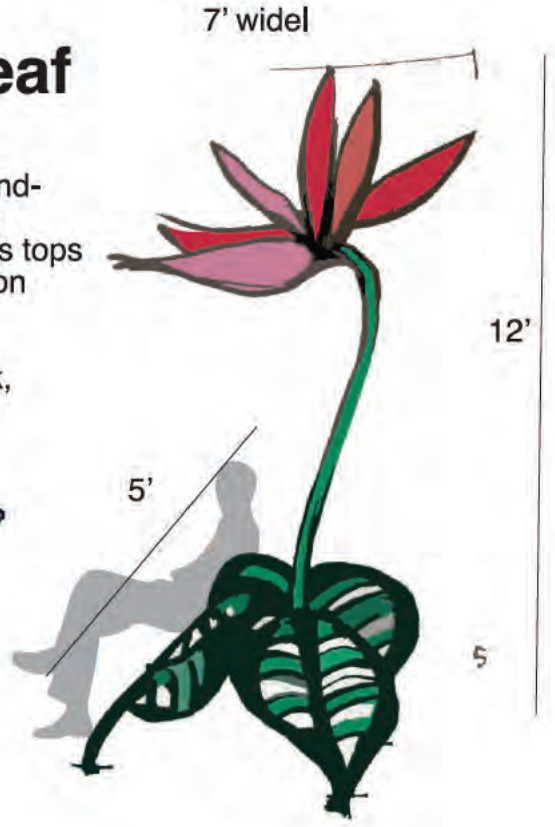
View B: Looking from Haven St sidewalk south to 40th St

Original Intent for this structure was to have it centrally located in the open plaza, with the cantilevered shell backing up to a wall or street edge and making the shell-ter feel protected. In light of access, best place mounts would seem to be below, with structure backing up to cut-off. Rubbapour surface does not impede right-of-way if no slope and can be modified to fit any ground-plane. Without approximately 8' diameter of surface area for soft seating, the intent of design would be nullified and it would need to be reworked. Perhaps two miniature shell-ters that are kid sized?



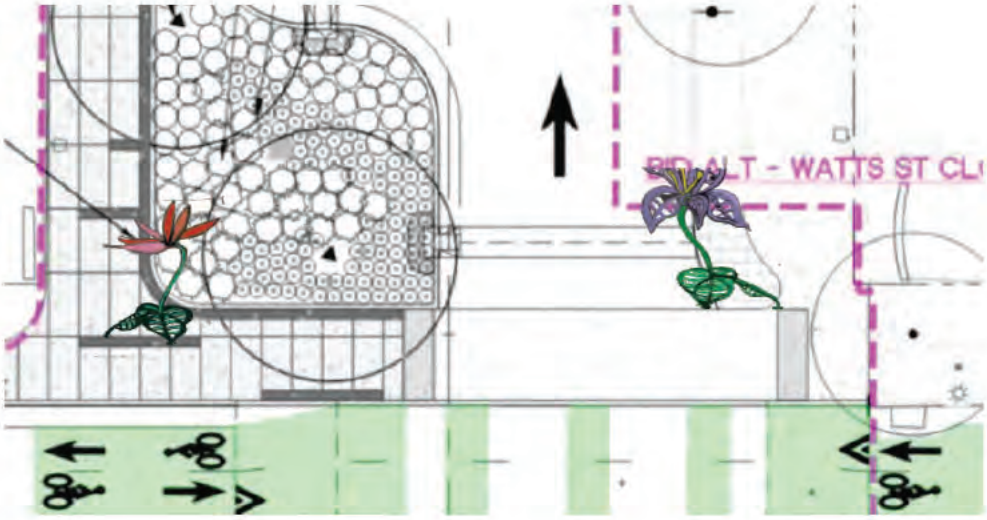
WATTS 1/2 PLAZA: Two Leaf Lounges w) unique tops.

With a tripod design, each leaf lounge provides three hand-built seats for perfect sitting and we recommend them to bookend the plaza. The Bird of Paradise and Douglas Iris tops are shown here, but flower tops can be changed based on community input, as shown by these drawings.
Color: powdercoated deep green base, with top colors depending on ultimate flower chosen, (flower-power pink, caution yellow and iridescent white)

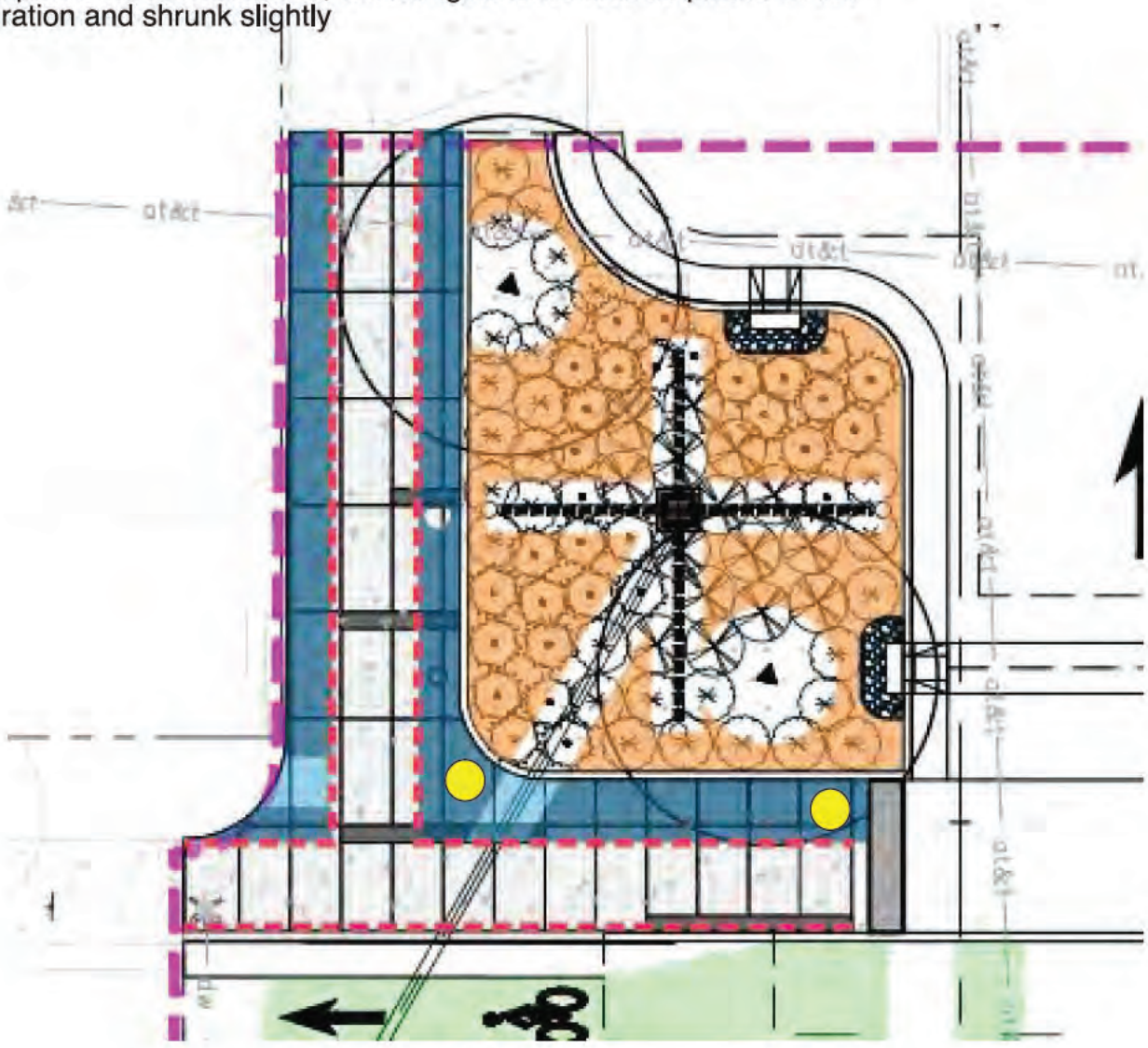


Stainless Steel pipe and flat bar make structure. 1/8" aluminum or acrylic may be used for flower parts.

Each leaf tip is grounded by a 5x5" plate which is bolted directly to concrete with anchor bolts. Tripod design also helps stability. 600 lbs



Original placement ideas above, but lounges could also be placed in this configuration and shrunk slightly



Plazas: Compiled Structural Details

Watts Street ½ Plaza: Two Leaf Lounges
Materials: Stainless Steel pipe (1½ - 3”), Stainless Steel flat bar (1/8 - 3/16 x3”) with ½” thick 5x5’ plate footing flanges. 1/8” aluminum or acrylic may be used for flower parts.
Size: Tripod base covers roughly 5’ in diameter, heights to top of flowers 12’ at highest, flower heads span 5-7’ depending on unique shapes.
Color: powdercoated deep green base, with top colors depending on ultimate flower chosen, (flower-power pink, caution yellow and iridescent white)
Installation. Tripod design has three base plates welded on. Anchor bolts screwed directly to concrete. Weight: 600 lbs each

Holden Street ½ Plaza: Cattail Islands
Materials: For sating: Stainless Steel pipe (1½ - 3”), Stainless Steel flat bar (1/8 -3/16 x3”) with ½” thick 5x5’ plate footing flanges. Cat-tail heads are extruded acrylic rods, in translucent Amber, 4”x 1-2’ and leaves are made of 1/8-3/16” aluminum
Size: Single bench spans 18” high x 1” deep, so double bench is 18” by 2’, and round island is 18” x 3’ diameter. Heights of cattails range from 8-12’
Color: powdercoated deep green base, with two-tones of green on leave and amber-yellow flowers that filter sunlight.
Installation: Anchor bolts on both edges of seating are screwed directly to concrete. Can be moved by man-power if no crane access. Weight: 600 lbs island, 800 lbs ½ bench

Haven Street Full Plaza: Shell-ter and Soft Seating
Materials: Stainless Steel pipe (1½ - 3”), Stainless Steel flat bar (1/8 - 3/16 x3”) with ½” thick 5x5’ plate footing flanges. 1/8” aluminum or acrylic may be used for flower parts.
Size: Initial proposal was for structure 12-16’ tall, 12’ diameter to overhang shape as well as soft seating on ground plane. This can be modified to fit Plaza and access needs, though negates some of the soft-seating potential.
Color: powdercoated iridescent white with potential darker color on outer shell). Rubbapour in intersecting circles in pink and green.
Weight: 1600 lbs
Installation: Crane Required

Hubbard Street Full Plaza: The Giant Lotus Bench
Materials: Stainless Steel pipe (1½ - 3”), Stainless Steel flat bar (1/8 - 3/16 x3”) with ½” thick 5x5’ plate footing flanges. Middle table in cast-concrete, topped with 12” acrylic disk that filters light (in same amber as cattails.)
Size: 3.5’ deep x 8’ tall x 12’ long. Can be modified to fit plaza better.
Color: powdercoated flower-power pink and caution yellow for Nuttall’s Lotus.
Installation. Six base plates along with concrete middle make bench extremely stable. Bolted directly to concrete. Weight: 1000 lbs.
Installation: Flat-bed to dead-end site. Man-power possible if no crane access.

BUDGETS

A note about budgets:
As freelance, we don't have the capacity to obtain multiple bids or engineering reviews for individual components until we have a design contract. Additionally, our designs are built around community collaboration and many details of the structures as well as installation sites may change based on community feedback and discussions with city personnel and engineers.

For the Proposal, we are including estimates for all work outsourced from Addie Boswell and Cartwright Design (primarily powder-coating & laser-cutting.) Depending on California rules, additional engineering reviews, welding certificates, installation plans may need to be added, and we've built room into the Installation & Miscellaneous budgets to cover these.

ATTACHMENT B:

Description	Budgeted Amount
Artist's design, labor and project management fees	$83,000
All subcontracted and consultant costs, including engineers, electricians, fabricators, studio and overhead costs	$125,000
Materials, fabrication, transportation, delivery, storage and installation of all art components	$232,000
General and Automobile liability, Professional Liability and Fine Arts Insurance as Required	$2,000
Traffic controls and permit fees, as necessitated by any work obstructing the right of way	n/a
Fees associated with permits for the project such as electrical permits	$8,000
A mandated contingency justified by the uncertainties presented in the Conceptual Design Proposal	$50,000
All other costs associated with the Artwork	

Rough BUDGET by Element

Category	Details	Cost Per	TOTAL
Icon & Community Outreach	Includes workshops at various venues, managing outreach through worksheets/QR codes, gathering all graphics and designing print-ready icon		**$60,000**
Streetscape Installations			**$110,000**
	16 Streetlight Flower "Collars" with two heads and 2 leaves mounted to bands	$4000 ea	$64,000
	Community Tapestry Design, made into 10x20' (200 sf) Metal Fence Panels OR 10x40 Mural painted on wall or ACM Panels (400 sf)	$43,000 $43,000	$43,000
	Vinyl Wraps for bike shelters, installed.	$750 ea	$3000
PLAZA Installations			**$185,000**
	WATTS Leaf Lounges w) single seats	$15,000 ea	$30,000
	2) HOLDEN Cat-tail Bench		$30,000
	3) HAVEN Giant Lotus Bench:		$55,000
	4) HUBBARD SHELL-TER and play area		$70,000
Delivery & INSTALLATION:	Truck elements to site, Scissor lift for flower collars, footings and potential crane to move large pieces.		**$85,000**
MISC	Insurance, architectural reviews, etc		**$10,000**
Contingency	10%		**$50,000**

ESTIMATED SCHEDULE

Winter, 2024: Community Outreach & Research/meetings with committee & stakeholders

- Artist Residency Scheduled for workshops
- Worksheets and social media
- Meetings with engineers/architects and city for design requirements
- Secure all additional contractors/installers needed for project.
- Media Blitz for gaining community input
- R&D, to-size models made for new elements like flower toppers, cattail tops, misc.

Spring, 2025 (March-May)

- Final Proposed Designs and Specifications sent to structural engineer
- Smaller components printed/made
- Wayfinding Icon proposed and voted on
- Final Graphics of Icon finished
- Commuinity Tapestry design started

Summer-Fall, 2025:

- Community paint-out organized
- Installation of all elements
- Truck and install crew secured
- Grand ‘opening’ planned

Maintenance

Community Involvement is the best way to protect work over time, because citizens take ownership and pride in the longevity of the pieces and are the first to spot damage.

- Plaza structures, flower collars and metal panels can be cleaned with power-washing and with normal non-abrasive cleaners, recommended once/month. The beauty of Matt's ribbed design is that water and debris doesn't get stuck in the pieces, and they don't provide large canvases for graffiti.
- Sun Damage: Powder-coating will eventually fade, especially when exposed to direct sun day after day. 10-15 years with very little change. Recommend 10 year review to decide on facelift of powder-coat.
- Most of the damage we've seen to the steel pieces are human-caused, as these examples show. Graffiti removal materials or spot painting in powder-coat colors can fix. Artists can provide fix colors.
- RubbaPour Surfaces will degrade over time, especially if they get good use. 10-year warranty standard.
- Painted Murals on surfaces will hold their color for 10-20 years, depending on wall face and sun exposure. Recommend 10 year review to decide on facelift of color. Graffiti should be dealt with by city personnel at once.
- Bolt attachments to concrete should be checked regularly during regular street upkeep, tightening or replacing as needed.
- Flower Collars need engineering and testing for wind resistance.

examples of damage to powder-coating at ground level.

About the Artists

Addie Boswell is an artist and writer who specializes in collaborative public art that tells a story. Stories revolve around shared work and a sense of place or season, and always reference real and specific communities with strong lines and vivid color. No matter the theme, her mission is to capture the inherent beauty of regular days and the inherent dignity of ordinary citizens. AS a community-based artist, Addie often works with hundreds of collaborators over the f.. of t. She has made art with grade school students, retirees, hospital patients, houseless communities, gril schouts and library patrons. Her work can be found in …

Matt Cartwright is a designer and fabricator who has worked around the country to design and build functional art, sculpture and custom furniture. He is known especially for his organic shapes and innovative design, which often makes use of recycled materials. He is most prolific with metal, but will use just about any new, reclaimed or surplus material that he encounters, as he likes to see how things can be rearranged or combined to evoke and enhance emotion. He enjoys any project that allows him to work in a scale and place with which people can interact. His sculptures can be found in Colorado, California, Washington, and Oregon.

Though working In different media, both Boswell and Cartwright like collaborating and working outside of the studio. They are long-time Portland residents and bike commuters. (In fact, Cartwright is famous for the “River City Bicycle People” made of scrapped bikes that graces the eastside Skyline and Boswell’s board book “Go, Bikes, Go!” was inspired by her rides through the city.) They resonate with the scrappy and creative history of Emeryville and are eager to work with your citizens.

COMPARABLE PROJECTS: Cartwright

COMPARABLE PROJECTS: Boswell

SPIRIT OF E'VILLE

PETE GOLDLUST & MELANIE GERMOND | CONCEPTUAL DESIGN PROPOSAL | 40th Streetscape Public Art Project, City of Emeryville, CA

OUR TEAM

PETE AND MELANIE and their two sons live in Eugene, Oregon. They have been married since 1996 and have been collaborating since well before that. Over the past 15 years, they've been awarded over 30 public art commissions in a variety of media: murals, metalwork, concrete, terrazzo, glass; and sculptural installations with recycled plastics, textiles, and other materials. Pete received his MFA from the School of the Art Institute of Chicago in 2001. He has exhibited internationally, and his work has been featured in publications ranging from *Art in America* to *Ripley's Believe It Or Not!* Melanie has worked as a graphic designer for over 20 years and taught art in public schools.

JOEY ENOS (Community Outreach Partner) is an artist based in the San Francisco Bay Area. He received a Master of Fine Arts from UC Berkeley Art Practice in 2014. He also attended The San Francisco Art Institute and The School of the Art Institute of Chicago, receiving a Bachelor of Fine Arts Degree. Joey has been working to capture and document the history of the Emeryville Mudflats Sculptures. CCA and Enos received a Cal Humanities grant to collect oral histories for the Robert Sommer Photography Collection at The California College of Art Archives.

CONCEPT: It came from the mudflats . . .

SPIRIT OF E'VILLE celebrates the interplay between two specific aspects of Emeryville's creative character:

1. The flora and fauna that inhabit the uniquely rich environment of the bay and shoreline ecosystem; and
2. The invented sculptural beings that inhabited the mudflat landscape alongside them for over two decades.

Our team shares a long-standing interest in the work of self-taught artists and particularly in artist-built environments. We've been tremendously excited to learn about the rich history of sculpture-making that was such a prominent part of Emeryville's identity during the time that this practice flourished. We're very much inspired to bring to the 40th Street Streetscape a sense of the self-motivated creativity that spontaneously appeared... morphed... metastasized... and then finally vanished from the Emeryville Mudflat Sculpture Garden. It is our honor to revive and celebrate the historical legacy of this unique homegrown artmaking tradition throughout the ***Spirit of E'ville*** artwork.

IMAGERY and COMMUNITY INPUT

The content and imagery for every element in ***Spirit of E'ville*** is a free-flowing mixture of the actual wildlife of Emeryville along with the invented creatures of the Mudflats sculpture garden era. The artwork will create an intermingling between real, remembered, and imagined residents of the shoreline. Imagery-rich installations across the length of 40th Street will provide venues for Emeryville's iconic and beloved sculptural beings to once again be knit into the visual fabric of the community.

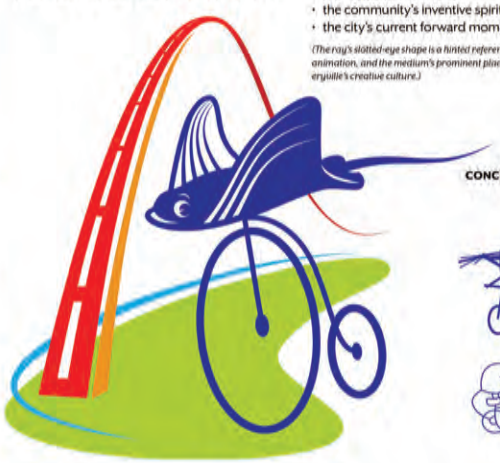
All of the specific creatures populating the artwork will be determined with input from Emeryville residents via extensive community outreach efforts centered on the *Mudflats Maker Week Celebration*. All imagery will be translated into a cohesive visual language and graphic style, as shown in our mockups, concept drawings and models.

WAYFINDING ICONOGRAPHY

This group of initial symbols represents our effort to graphically bring together several characteristic aspects of Emeryville:

- the bay environment;
- the community's inventive spirit; and
- the city's current forward momentum

(The ray's slotted-eye shape is a hinted reference to early animation, and the medium's prominent place in Emeryville's creative culture.)



COLLABORATION

We thrive on the collaborative process, and constantly seek out opportunities for new creative partnerships and local community input.

We are delighted to have the chance to invite Emeryville native, artist/historian **Joey Enos** into our team. We expect to rely on Joey's insight and understanding to help insure that we can appreciate Emeryville's particular identity in a way that will be necessary to designing successful, responsive public art and iconography.

We're grateful to have Joey's guidance as we seek out the many local voices needed to assemble the visual vocabulary of the ***Spirit of E'ville*** artwork. And we look forward to working with this community in an extended week-long conversation (see below) that will lead us to a tone-appropriate icon to represent Emeryville's forward motion.

CONCEPT LOGOS / PEDESTRIAN WAYFINDING SIGNAGE EXAMPLES

CONCEPT DRAWINGS

Local Flora & Fauna:

Historic Mudflats Sculptures:

COMMUNITY OUTREACH FRAMEWORK

Community outreach will be coordinated with our team's community liaison, Joey Enos.

Emeryville Mudflats Maker Week Celebration

Our team will be in residence in Emeryville to present a dedicated week-long mini-festival celebrating the Mudflats sculptures and the wildlife of the Bay. A series of workshops and artmaking activities, co-hosted by local partner organizations, will provide opportunities for community members to celebrate the Mudflats' actual and invented creatures, and to explore artmaking through the creative use of reclaimed materials.

MUDFLATS MAKER WEEK will:

- celebrate Emeryville's vital artistic history with current residents who may or may not have been here to experience the sculptures themselves;
- provide hands-on opportunities for community members to participate in this local artistic tradition that emerged on the Mudflats from the creative reuse of found materials; and
- create an outlet for direct creative input into the specific imagery to be developed into the 40th Street public artwork.

IN-PERSON AND ONLINE SURVEYS will seek community members' input into the creatures that should inhabit the 40th Street public artwork.

SAMPLE QUESTIONS:

- What is your favorite memory of the Mudflats sculptures?
- Did you have any favorite sculptures?
- Please rank your top three among the following Mudflat sculpture creatures.... (image list here)
- Name a favorite local animal or plant that lives in Emeryville. What is it about this creature that you like?
- Is there a creature that represents or symbolizes Emeryville for you? Why?

SAMPLE WORKSHOP EXERCISE:

Using reclaimed materials, we'll make sculptures and collages of your favorite Emeryville wildlife. Together we'll write short stories (just a few sentences) about this creature — where you encounter it, what you like (or dislike) about it, how it has attracted your attention, and what its most notable features are. Then we'll use recycled cardboard, paper, and other materials to build sculptural structures and make collages. We'll explore various construction techniques and fastening systems to make small structures out of these materials. Then, using paint pens and other marking tools, we'll embellish these constructions with your writings about your creature.

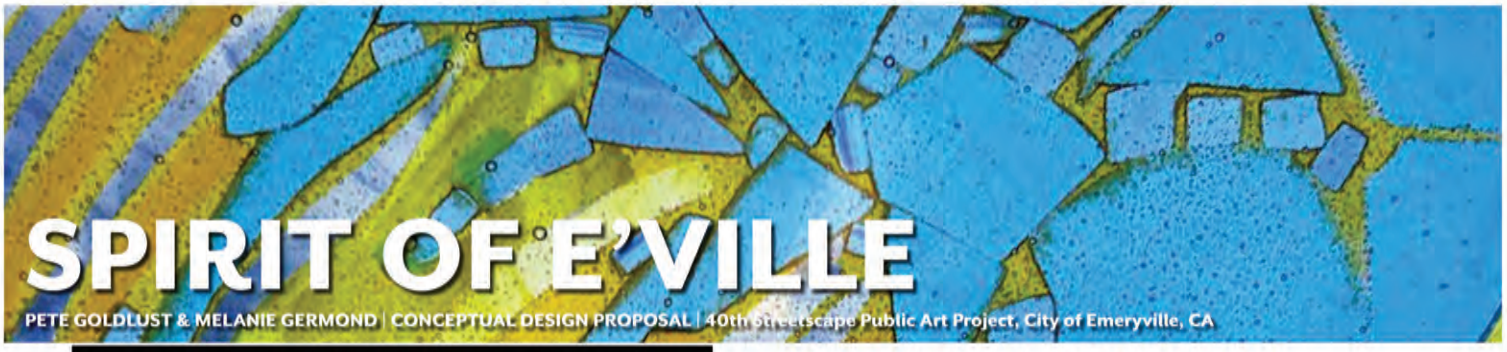
COMMUNITY INPUT INTO THE PUBLIC ARTWORK

All participants' creations will be photographed, recorded and tallied, to help our team learn what animals are most emblematic of Emeryville to those who live here. By offering opportunities to creatively interpret the area's wildlife, we look to draw out an understanding of which of Emeryville's creatures hold significance among people in the community. The input we receive from these creative workshop activities represents a high level of consideration and engagement from community participants. We expect that some of the creature designs that come out of these workshops will make their way into the various public art elements.

SCOPE OF PROPOSED PUBLIC ART

- **25 unique post-mounted installations** *(approximately 50 individual panels)*
- **4 unique plaza sculptures**
- **6 bus shelter glass treatments**

● = lamppost/bus-shelter post-mounted installation ▬ = plaza installation location ▭ = bus shelter glass treatment



SPIRIT OF E'VILLE

PETE GOLDLUST & MELANIE GERMOND | CONCEPTUAL DESIGN PROPOSAL | 40th Streetscape Public Art Project, City of Emeryville, CA

STREETSCAPE INSTALLATIONS

25 Unique Post-Mounted Metal & Glass Tile Installations* on Lampposts & Bus Shelters

** About 50 Individual Panels*

Panels vary in size up to 48" max. They are composed of vividly colored, 9mm thick fused-glass tiles, contained in a robust frame construction made of laser-cut aluminum. Surface finish is powdercoat with a UV protective clear topcoat.

Each cell within the panel frame holds an individually cut tile. (The Bat Ray model, for instance, contains 30 separate tiles.) The small, chunky dimensions of each tile make them very durable and resistant to damage. Individual tiles are cushioned with silicone/rubber within each protective cell.

Both sides of the panels are also protected by a layer of polycarbonate, set between the glass and metal frame.

PLAQUES
An engraved stainless steel plaque accompanies each installation. Plaques are mounted at eye level on each pole, providing information about the creature depicted in the installation above.

MAINTENANCE
In the event that damage should occur to individual tiles, the polycarbonate layer will contain any damaged glass, and prevent any loose fragments from falling out of the frame. Individual tiles can be removed and replaced when necessary. The artists are able to provide replacement tiles if needed. Digital files of all tilework will also be provided, allowing the city to order replacement tiles to be cut by local vendors as well.

POLE ATTACHMENT
Panels are positioned at or above 12' high, attached by a bracket similar to the U-channel stand attached to the Ray model. The legs of each U-channel bracket sit tight against a vertical post (either a lamppost or the vertical extension of a bus shelter post). Each bracket includes a minimum of two slots (not included on model), through which stainless steel strapping attaches the artwork to its post. Extended posts on bus shelters are provided by Tolar Manufacturing, the vendor providing the shelters.

6 Unique Bus Shelter Glass Treatments

- Full color graphics, similar in style to the metalwork imagery throughout the other artwork, are printed as interlayers and integrated into the three street-facing window panels of bus shelters.
- These graphics mimic the brilliant, swirling, texture and color of the hand-crafted glasswork used throughout the plaza sculptures and post-mounted works.
- The windows of the shelters take on the look of custom glasswork, closely coordinated with these other art elements. Digitally printed interlayers are provided and installed by Tolar Mfg. during construction of shelters.

SPIRIT OF E'VILLE

PETE GOLDLUST & MELANIE GERMOND | CONCEPTUAL DESIGN PROPOSAL | 40th Streetscape Public Art Project, City of Emeryville, CA

4 UNIQUE PLAZA INSTALLATIONS

Each plaza will feature one unique stainless steel and glass sculpture featuring an iconic local animal. Ambient daylight shining through the colored glasswork provides a dramatic street presence at each spot.

Our model for the Haven plaza features the endangered **California Red Legged Frog** (illustratively shown paired here with a dragonfly companion which would be mounted 12' up on a lamppost).

Other plazas may include local shoreline animals as well as Mudflats Sculpture creatures, like the iconic Monty Python-inspired **Trojan Rabbit**. The final mix of creatures, like all elements of this proposal, is to be determined with input from community outreach efforts centered on the Mudflats Maker Week Celebration.

Two of the plaza sculptures are large, approximately 6'h x 6'w, and two are smaller, roughly 3' x 3', all with a depth of ~6". Each of these vividly colored translucent structures forms an animal profile that can be viewed from both front and back. They may be positioned to be visible at a distance from both 40th Street and the cross street at each plaza intersection, providing an instantly recognizable wayfinding landmark at each site.

CONSTRUCTION

Each sculpture consists of 1/4" thick laser-cut stainless steel, cage-like outer structure, featuring a line-work design, which encases a glasswork and polycarbonate inner structure. The cut linework of the metal plate is densely interwoven forming a sturdy network of 1/4" thick bars, tightly spaced with gaps of up to only 1/2" wide.

The core inner structure is composed of vividly colored, translucent fused glass tiles set into a silicone/rubber cushioned stainless steel framework allowing for thermal expansion/contraction. Tiles are approximately 8-10" at their longest side, individually formed using Bullseye glass, fused to a thickness of 9 mm, and extremely durable (see sample).

On either side of the inner glasswork are two layers of clear polycarbonate. The polycarbonate is spaced from the glass by 1/2" to fully protect the glass from any impact. Both faces of the sculpture are removable to allow access for replacement or cleaning of the polycarbonate if needed.

Each sculpture is mounted on an 18" cylindrical footer of reinforced concrete. If placed within the garden areas, these footers may include an above-ground rise of up to 24" high, to elevate the sculpture above plantings. If placed on paved areas, sculptures may be mounted at ground level.

ABOUT OUR TEAM

PETE GOLDLUST & MELANIE GERMOND, Artists
Pete and Melanie and their two sons live in Eugene, Oregon. They have been married since 1996 and have been collaborating since well before that. Over the past 15 years, they've been awarded over 30 public art commissions in a variety of media: murals, metalwork, concrete, terrazzo, glass; and sculptural installations with recycled plastics, textiles, and other materials. Pete received his MFA from the School of the Art Institute of Chicago in 2001. He has exhibited internationally, and his work has been featured in publications ranging from *Art in America* to *Ripley's Believe It or Not!* Melanie has worked as a graphic designer for over 20 years and taught art in public schools.

JOEY ENOS, Community Outreach Partner
Joey Enos is an artist based in the San Francisco Bay Area. He received a Master of Fine Arts from UC Berkeley Art Practice in 2014. He also attended The San Francisco Art Institute and The School of the Art Institute of Chicago, receiving a Bachelor of Fine Arts Degree. Joey has been working to capture and document the history of the Emeryville Mudflats Sculptures. CCA and Enos received a Cal Humanities grant to collect oral histories for the Robert Sommer Photography Collection at The California College of Art Archives.

CONCEPT

SPIRIT OF E'VILLE: IT CAME FROM THE MUDFLATS . . . .

Spirit of E'ville celebrates the interplay between two specific aspects of Emeryville's creative character:

1. The flora and fauna that inhabit the uniquely rich environment of the bay and shoreline ecosystem; and
2. The invented sculptural beings that inhabited the mudflat landscape alongside them for over two decades.

Our team shares a long-standing interest in the work of self-taught artists and particularly in artist-built environments. We've been tremendously excited to learn about the rich history of sculpture-making that was such a prominent part of Emeryville's identity during the time that this practice flourished. We're very much inspired to bring to the 40th Street Streetscape a sense of the self-motivated creativity that spontaneously appeared… morphed… metastasized… and then finally vanished from the Emeryville Mudflat Sculpture Garden. It is our honor to revive and celebrate the historical legacy of this unique homegrown artmaking tradition throughout the *Spirit of E'ville* artwork.

Imagery & Community Input: The content and imagery for every element in *Spirit of E'ville* is a free-flowing mixture of the actual wildlife of Emeryville along with the invented creatures of the Mudflats sculpture garden era. The artwork will create an intermingling between real, remembered, and imagined residents of the shoreline. Imagery-rich installations across the length of 40th Street will provide venues for Emeryville's iconic and beloved sculptural beings to once again be knit into the visual fabric of the community. The specific creatures populating the artwork will be determined with input from Emeryville residents via extensive community outreach efforts centered on the **Mudflats Maker Week Celebration**. All imagery will be translated into a cohesive visual language and graphic style, as shown in our mockups, concept drawings and models.

Wayfinding Iconography: This group of initial symbols represents our effort to graphically bring together several characteristic aspects of Emeryville: the bay environment; the community's inventive spirit; and the city's current forward momentum. *(The ray's slotted-eye shape is a hinted reference to early animation, and the medium's prominent place in Emeryville's creative culture.)*

Collaboration: We thrive on the collaborative process, and constantly seek out opportunities for new creative partnerships and local community input. We are delighted to have the chance to invite Emeryville native, artist/historian **Joey Enos** into our team. We expect to rely on Joey's insight and understanding to help insure that we can appreciate Emeryville's particular identity in a way that will be necessary to designing successful, responsive public art and iconography. We're grateful to have Joey's guidance as we seek out the many local voices needed to assemble the visual vocabulary of the *Spirit of E'ville* artwork. And we look forward to working with this community in an extended week-long conversation (see below) that will lead us to a tone-appropriate icon to represent Emeryville's forward motion.

COMMUNITY OUTREACH FRAMEWORK

Community outreach will be coordinated with our team's community liaison, Joey Enos.

EMERYVILLE MUDFLATS MAKER WEEK CELEBRATION

Our team will be in residence in Emeryville to present a dedicated week-long mini-festival celebrating the Mudflats sculptures and the wildlife of the Bay. A series of workshops and artmaking activities, co-hosted by local partner organizations, will provide opportunities for community members to celebrate the Mudflats' actual and invented creatures, and to explore artmaking through the creative use of reclaimed materials.

Mudflats Maker Week will:

- celebrate Emeryville's vital artistic history with current residents who may or may not have been here to experience the sculptures themselves;
- provide hands-on opportunities for community members to participate in this local artistic tradition that emerged on the Mudflats from the creative reuse of found materials; and
- create an outlet for direct creative input into the specific imagery to be developed into the 40th Street public artwork.

In-person and online surveys will seek community members' input into the creatures that should inhabit the 40th Street public artwork.

Sample questions:

- What is your favorite memory of the Mudflats sculptures?
- Did you have any favorite sculptures?
- Please rank your top three among the following Mudflat sculpture creatures…. (image list here)
- Name a favorite local animal or plant that lives in Emeryville.
- What is it about this creature that you like?
- Is there a creature that represents or symbolizes Emeryville for you? Why?

Sample workshop exercise:
Using reclaimed materials, we'll make sculptures and collages of your favorite Emeryville wildlife. Together we'll write short stories (just a few sentences) about this creature — where you encounter it, what you like (or dislike) about it, how it has attracted your attention, and what its most notable features are. Then we'll use recycled cardboard, paper, and other materials to build sculptural structures and make collages. We'll explore various construction techniques and fastening systems to make small structures out of these materials. Then, using paint pens and other marking tools, we'll embellish these constructions with your writings about your creature.

Community input into the public artwork:
All participants' creations will be photographed, recorded and tallied, to help our team learn what animals are most emblematic of Emeryville to those who live here. By offering opportunities to creatively interpret the area's wildlife, we look to draw out an understanding of which of Emeryville's creatures hold significance among people in the community. The input we receive from these creative workshop activities represents a high level of consideration and engagement from community participants. We expect that some of the creature designs that come out of these workshops will make their way into the various public art elements.

SCOPE OF PROPOSED PUBLIC ART

- 25 unique post-mounted installations *(approximately 50 individual panels)*
- 4 unique plaza sculptures
- 6 bus shelter glass treatments

PLAZA INSTALLATIONS

4 UNIQUE PLAZA SCULPTURES

- Each plaza will feature one unique stainless steel and glass sculpture featuring an iconic local animal. Ambient daylight shining through the colored glasswork provides a dramatic street presence at each spot.

- Our physical model for one of the plazas features the endangered California Red Legged Frog. Other plazas may include local shoreline animals as well as Mudflats Sculpture creatures, like the iconic Monty Python-inspired Trojan Rabbit. The final mix of creatures, like all elements of this proposal, is to be determined with input from community outreach efforts centered on the *Mudflats Maker Week Celebration*.

- Two of the plaza sculptures are large, approximately 6'h x 6'w, and two are smaller, roughly 3' x 3', all with a depth of ~6". Each of these vividly colored translucent structures forms an animal profile that can be viewed from both front and back. They may be positioned to be visible at a distance from both 40th Street and the cross street at each plaza intersection, providing an instantly recognizable wayfinding landmark at each site.

- Sculptures may be paired with a companion post-mounted installation from the streetscape installations scope.

CONSTRUCTION

- Each sculpture consists of a 1/4" thick laser-cut stainless steel, cage-like outer structure, featuring a linework design, which encases a glasswork and polycarbonate inner structure. The cut linework of the metal plate is densely interwoven forming a sturdy network of 1/4" thick bars, tightly spaced with gaps of up to only 1/2" wide.

- The core inner structure is composed of vividly colored, translucent fused glass tiles set into a silicone/rubber cushioned stainless steel framework allowing for thermal expansion/contraction. Tiles are approximately 8-10" at their longest side, individually formed using Bullseye glass, fused to a thickness of 9 mm, and extremely durable (see sample).

- On either side of the inner glasswork are two layers of clear polycarbonate. The polycarbonate is spaced from the glass by 1/2" to fully protect the glass from any impact. Both faces of the sculpture are removable to allow access for replacement or cleaning of the polycarbonate if needed.

- Each sculpture is mounted on an 18" diameter cylindrical footer of reinforced concrete. If placed within the garden areas, these footers may include an above-ground rise of up to 24" high, to elevate the sculpture above plantings. If placed on paved areas, sculptures may be mounted at ground level.

Notes about the Red Legged Frog sculpture physical model:

- *The structure of this model includes the same fused glasswork and protective polycarbonate and stainless steel layers as the full-scale sculptures.*

- *The layers of this model's structure are visible around the edge of this model. The actual sculpture will include a solid stainless steel rim that contains these layers (among other scaled fabrication differences.)*

STREETSCAPE INSTALLATIONS

25 UNIQUE POST-MOUNTED METAL & GLASS TILE INSTALLATIONS* ON LAMPPOSTS & BUS SHELTERS
(**about 50 individual panels)*

- Panels vary in size up to 48" max. They are composed of vividly colored, 9mm thick fused-glass tiles, contained in a robust frame construction made of laser-cut aluminum. Surface finish is powdercoat with a UV protective clear topcoat.

- Each cell within the panel frame holds an individually cut tile. (The *Bat Ray* physical model, for instance, contains 30 separate tiles.) The small, chunky dimensions of each tile make them very durable and resistant to damage. Individual tiles are cushioned with silicone/rubber within each protective cell.

- Both sides of the panels are also protected by a layer of polycarbonate, set between the glass and metal frame.

Pole Attachment
Panels are positioned at or above 12' high, attached by a bracket similar to the U-channel stand attached to the *Bat Ray* physical model. The legs of each U-channel bracket sit tight against a vertical post (either a lamppost or the vertical extension of a bus shelter post). Each bracket includes a minimum of two slots (not included on model), through which stainless steel strapping attaches the artwork to its post. Extended posts on bus shelters are provided by Tolar Manufacturing, the vendor providing the shelters.

Plaques
An engraved stainless steel plaque accompanies each installation. Plaques are mounted at eye level on each pole, providing information about the creature depicted in the installation above.

Maintenance
In the event that damage should occur to individual tiles, the polycarbonate layer will contain any damaged glass, and prevent any loose fragments from falling out of the frame. Individual tiles can be removed and replaced when necessary. The artists are able to provide replacement tiles if needed. Digital files of all tilework will also be provided, allowing the city to order replacement tiles to be cut by local vendors as well.

6 UNIQUE BUS SHELTER WINDOW TREATMENTS

- Full color graphics, similar in style to the metalwork imagery throughout the other artwork, are printed as interlayers and integrated into the three street-facing window panels of bus shelters.

- These graphics mimic the brilliant, swirling texture and color of the hand-crafted glasswork used throughout the plaza sculptures and post-mounted works.

- The graphics may be as transparent as necessary for safety purposes.

- The windows of the shelters take on the look of custom glasswork, closely coordinated with these other art elements. Digitally printed interlayers are provided and installed by Tolar Mfg. during construction of shelters.

MATERIALS / DIMENSIONS / MAINTENANCE

PLAZA INSTALLATION SCULPTURES

Approximate max. weight of sculptures is 900 lbs. each.
Dimensions: max 6' h x 6' w x 6" d

Maintenance
Exterior surfaces of sculptures are stainless steel plate with a nondirectional sanded finish. Any scratched surfaces may be touched up by re-sanding with a hand-held orbital sander. Clean exterior with water as necessary. Hose off occasionally to remove debris. No bleach.

Face plates are attached with tamper-resistant (Torx head) stainless steel screws. Faces may be removed for maintenance of internal and external components.

On either side of the inner glasswork are two layers of clear polycarbonate (min. ~0.118" thick). The polycarbonate is flush mounted behind the ¼" plate surface. It is spaced away from the glass to fully protect the glass from any impact.

Any damaged glass tiles and polycarbonate panes may be individually removed and replaced. The artists are available to provide these parts. The artists will also provide the City with digital files suitable for re-cutting these parts as necessary. This can be done by a local laser-cutting/waterjet cutting vendor with commonly available equipment.

POLE-MOUNTED TILE PANEL INSTALLATIONS

Approximate weight of sculptures is 10-35 lbs. each. (most are 10-20 lbs.)
Dimensions: max 48" h x 24" w x 1.5" d (most are under 24" x 24")

Structural frames are laser-cut aluminum. Surface finish is powdercoat with a UV protective clear topcoat.
Interior tiles are 9mm thick fused-glass tiles. Each tile is sandwiched between two layers of ~0.118" polycarbonate, to protect against impact damage. Each tile is seated with silicone/rubber glazing.

Components are assembled with stainless steel and aluminum barrel screws. Faces may be removed for maintenance of internal and external components.

Pole Attachment
Panels are positioned at or above 12' high, attached by a bracket similar to the U-channel stand attached to the *Bat Ray* physical model. The legs of each U-channel bracket sit tight against a vertical post (either a lamppost or the vertical extension of a bus shelter post). Each bracket includes a minimum of two slots (not included on model), through which stainless steel strapping attaches the artwork to its post. Extended posts on bus shelters are provided by Tolar Manufacturing, the vendor providing the shelters.

Maintenance
In the event that damage should occur to individual tiles, the polycarbonate layer will contain any damaged glass, and prevent any loose fragments from falling out of the frame. Any damaged glass tiles and polycarbonate panes may be individually removed and replaced. The artists are available to provide these parts. The artists will also provide the City with digital files suitable for re-cutting these parts as necessary. This can be done by a local laser-cutting/waterjet cutting vendor with commonly available equipment. Clean exterior with water as necessary. Hose off occasionally to remove debris. No bleach.

BUS SHELTER WINDOW TREATMENTS

Digitally printed interlayers are provided and installed within existing window panes by Tolar Mfg. during construction of shelters. No additional maintenance is necessary.

INSTALLATON

Equipment to be used

PLAZA INSTALLATION SCULPTURES

Delivery: One 20’ flatbed
Installation: One reach forklift (6000 lb. cap.). Attachment to concrete footer using stainless steel J bolts. Plywood to be used to protect ground surfaces. Permits obtained as required.

POLE-MOUNTED TILE PANELS

Delivery: One 12’ trailer
Installation: One 19’ scissor lift. Permits obtained as required.

BUS SHELTER WINDOW TREATMENTS

Digitally printed interlayers are provided and installed by Tolar Mfg. during construction of shelters.

TIMELINE

Design and approvals / October 2024 – October 2025
Community outreach - Maker Week Celebration / March 2025
Fabrication / October 2025 – March 2026
Installation / Summer 2026

BUDGET NOTES

Budget spreadsheet and estimates are attached.

POST-MOUNTED PANELS / ESTIMATE #1

SendCutSend invoice #SU48K050 includes fabrication of aluminum components for one art panel.
Cost: $616.94 per panel

SendCutSend invoice #S856B230 includes fabrication of polycarbonate components for one art panel.
Cost: $96.18 per panel

Glass purchased from Bullseye Glass / Cost: $80 per panel

Hardware components purchased from McMaster-Carr and others / Cost: ~ $40 per panel

Assembly (in-house) / Cost: $750 per panel

Per-panel cost: $1583 ea.
Total cost (50 panels): $79,150

POST-MOUNTED PANELS / ESTIMATE #2

Supereous estimate #2024187:
Aluminum (5' x 10' x 1/8") per sheet: material ($345) + laser cutting ($551) = $896 x 3 sheets
Cost: $2688 total

Supereous estimate #2020782:
Aluminum (5' x 10' x 1/4") per sheet: material ($739) + laser cutting ($788) = $1527 x 7 sheets
Cost: $10,689 total

Custom Powderworks estimate (phone): Powder coating / $800 per sheet x 10 sheets
Cost: $8,000 total

Glass purchased from Bullseye Glass / Approx. $80 per panel x 50 panels
Cost: $4,000 total

Hardware components purchased from McMaster-Carr and others / Approx. $40 per panel x 50 panels
Cost: $2,000 total

Glass cutting and assembly (in-house) / $750 per panel
Cost: $37,500

Total cost (50 panels): $64,877

PLAZA SCULPTURES / ESTIMATE #1

DEKA estimate 8/16/24: $167,000
4 Plaza sculptures, similar to Red-Legged Frog design
Includes drafting, engineering, materials, fabrication, transportation, installation, concrete, site work

Total cost: $167,000

PLAZA SCULPTURES / ESTIMATE #2

Supereous estimate 2020840: $6,308
Materials, laser cutting

SO Metal estimate 8/18/24: $36,100
4 Plaza sculptures, similar to Red-Legged Frog design
Includes materials, fabrication, transportation, installation, concrete, site work

Total cost: $42,408 (does not include drafting, engineering)

Pete Goldlust & Melanie Germond

40TH STREETSCAPE PUBLIC ART

Preliminary Artwork Production Budget / draft 8/15/22

DESCRIPTION	Amount budgeted	Notes
Artist Design Fee	75,000	15%
Project Management Fee	25,000	5%
Plaza Sculptures / 4 sculptures		
Engineering, fabrication, concrete, delivery, installation, etc. (Estimate: DEKA)	167,000	
Glass material and fabrication (by artists)	17,000	
Post-mounted panels / 22 lampposts + 3 bus shelter posts (25 posts w/50 panels total)		
Fabrication, glass, assembly, etc. (Estimates: Supereous, Custom Powderworks)	64,900	
Delivery	4,000	
Bus shelter structural alteration / 3 post extensions (Estimate: Tolar Mfg)	4,500	
Installation / inc. all equipment, materials, etc. (Estimate: DEKA)	5,000	
Bus shelter interlayer graphics / 6 shelters		
Photography fees	6,000	
Fabrication and installation (Estimate: Tolar Mfg)	30,600	
Community Outreach / City Icon & Mudflats Maker Week Celebration		
Design (included in overall project design fee)	0	
Travel (airfare/lodging/transportation/food)	7,500	
Coordination / Joey Enos, Community Liaison	5,000	
Administration	5,000	
Workshops / Honoraria, publicity, misc. expenses	6,000	
Materials / art supplies, publicity, printing, misc.	3,000	
Professional services (additional engineering/surveying/electrical/etc.)	3,000	
Studio overhead (project-related space/equipment/utilities/etc.)	8,000	
Travel / installation (airfare/lodging/transportation/food)	4,000	
Documentation of Artwork (photography/video)	1,500	
Permits / Fees	1,500	
Insurance (general & professional liability/auto/installation/etc.)	6,500	
Contingency	50,000	10%
Total	**$500,000**	

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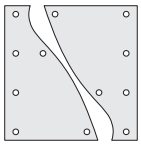
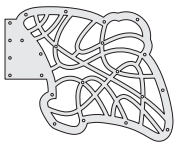
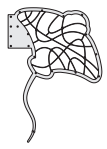
Line				
1		**5052 H32 Aluminum (.125")** **5.604 x 5.716 in** Emeryville_sample_01_bat_rays_d05_TWO_WEDGES.ai	Deburring	Qty: **1** Item total: **$15.09**
2		**5052 H32 Aluminum (.125")** **15.927 x 12.824 in** Emeryville_sample_01_bat_rays_d05_FACEPLATE.ai	Matte black powder	Qty: **2** Item total: **$198.26**
3		**5052 H32 Aluminum (.250")** **15.927 x 22.982 in** Emeryville_sample_01_bat_rays_d05_BEZEL.ai	Matte black powder	Qty: **3** Item total: **$403.59**

Ship To:
Pete Goldlust
[redacted]

Bill To:
[redacted]

Subtotal:	**$616.94**
Shipping:	**FREE**
Tax:	**$0.00**
Total:	**$616.94 PAID**
	Visa (x8903)

SendCutSend

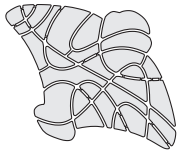
S856B230

[redacted]

Aug 1, 2024 2:12 PM

Line

1



Polycarbonate-Clear (.118")

13.631 x 11.574 in

Emeryville_sample_01_bat_rays_d07_POLYCARBONATE.ai

Qty: **2**

Item total: **$96.18**

Ship To:
Pete Goldlust
[redacted]

Bill To:
[redacted]

Subtotal:	**$96.18**
Shipping:	**FREE**
Tax:	**$0.00**
Total:	**$96.18 PAID**
	Visa (x8903)

DOWNLOAD INVOICE

Supereous LLC

Laser Cutting, Waterjet Cutting
Router Cutting & Fabrication

[redacted]

Invoice

Date	Invoice #
3/18/2024	**20204187**

Bill To

Pete Goldlust

[redacted]

Ship To

PO	Terms	Project	Att:
	Due on receipt	**UofO**	

Quantity	Description	Price Each	Amount
1	Back .050"	155.00	155.00
1	Front Middle C- 1/8"	551.00	551.00
1	.050" 5'x10'	145.00	145.00
1	1/8" 5'x10'	345.00	345.00

[redacted]

Total	$1,196.00
Payments/Credits	$0.00
Balance Due	$1,196.00

Thank you...we appreciate your business

Supereous Inc

Laser Cutting - Waterjet Cutting
Router Cutting & Fabrication

Date	Estimate #
7/17/2023	2020782

Estimate

Customer:

Pete Goldlust

[redacted]

Att:	Project

Description	*Rate*	*Qty*	Total
02 Front A .050" 5052 Laser Cutting	183.00	1	183.00
02 Front A .125" 5052 Laser Cutting	326.00	1	326.00
02 Front A .187" 5052 Laser Cutting	482.00	1	482.00
02 Front A .25" 5052 Laser Cutting	788.00	1	788.00
03 Front B .050" 5052 Laser Cutting	110.00	1	110.00
03 Front B .125" 5052 Laser Cutting	197.00	1	197.00
03 Front B .187" 5052 Laser Cutting	284.00	1	284.00
03 Front B .25" 5052 Laser Cutting	464.00	1	464.00
04 Back .050" 5052 Laser Cutting	88.00	1	88.00
.050" 5052 Material	138.00	1	138.00
.125" 5052 Material	341.00	1	341.00
.187" 5052 Material	547.00	1	547.00
.25" 5052 Material	739.00	1	739.00

[redacted]

PRELIMINARY ESTIMATE

DATE: 08 19 2024

DEKA

TO:

PETE GOLDLUST
[redacted]

PROJECT NAME:
GOLDLUST SCULPTURES
PLEASE RECYCLE THIS PAPER

DEKA **FABRICATION**
[redacted]

THIS DOCUMENT IS A PRELIMINARY ESTIMATE, AND NOT TO BE USED FOR OFFICIAL QUOTING PURPOSES

DESCRIPTION	TOTAL
GENERAL CONDITIONS	20,750.00
DESIGN DRAWINGS	4,500.00
MATERIAL	34,957.50
SUBCONTRACTORS	20,000.00
FABRICATION	43,200.00
INSTALLATION	32,800.00
10.50% EMERYVILLE SALES TAX	10,306.54
TOTAL	**$166,514.04**

THIS DOCUMENT IS A PRELIMINARY ESTIMATE, AND NOT TO BE USED FOR OFFICIAL QUOTING PURPOSES

24622
SCOPE OF WORK

DATE: 08 19 2024

TO:

PETE GOLDLUST
[redacted]

DEKA

PROJECT NAME:
GOLDLUST SCULPTURES
PLEASE RECYCLE THIS PAPER

DEKA **FABRICATION**
[redacted]

SCOPE OF WORK STATEMENT

This Preliminary Estimate is not meant for Quoting purposes and only to assist in the initial design/selection process.

The estimated numbers are for:

1. Design-Detailing, Fabrication, and Installation of 4x Sculptures:
    a. Approximately 2x: 6'x6' and 2x: 3'x3' overall
    b. Anchored into a concrete foundation
    c. 2x laser-cut 1/4" stainless steel faces, enclosing 2x protective polycarbonate sheets and 1x fused-glass layer (provided by artist), with protective rolled stainless rim

*See attached redlined document for reference

Deka Quote Notes 08/14/24

Supereous Inc

Laser Cutting - Waterjet Cutting
Router Cutting & Fabrication

Date	Estimate #
8/20/2024	2020840

Estimate

Customer:

Pete Goldlust

[redacted]

Att:	Project
	Emeryville

Description	*Rate*	*Qty*	**Total**
Bezel, Laser Cutting, 5'x10' 1/4" 304 Mill Stainless Steel	2,086.00	1	2,086.00
Face, Laser Cutting, 5'x10' 16ga 304 #4 Stainless Steel	2,216.00	1	2,216.00
Holder, Laser Cutting, 5'x10' 1/4" 304 Mill Stainless Steel	2,006.00	1	2,006.00

[redacted]

SO Metal, LLC

ESTIMATE 8/21/24 NON-BINDING

Pete Goldlust

Notes

EMERYVILLE 40TH STREET PLAZA PROJECT
Sculpture: face plates, flange, rim, inner layered core
Dims: 6' h x 6"w x 6"d
Material: stainless steel

ITEM	Unit cost	Total (x4)
Welding / Fabrication from supplied parts	$4.000 ea	$16,000
Excavation / Concrete	$4,000 ea	$16,000
Shipping (includes four sculptures)		$2,500
Installation	$800 ea	$1,600
TOTAL		**$36,100**

40th Street Streetscape Project

UrbanRock Design [Russell Rock and Jeanine Centuori]

PUBLIC ART PROPOSAL

An integrated art project for the City of Emeryville, CA

JEANINE CENTUORI

RUSSELL ROCK

TITLE: ROLLING ALONG

NARRATIVE

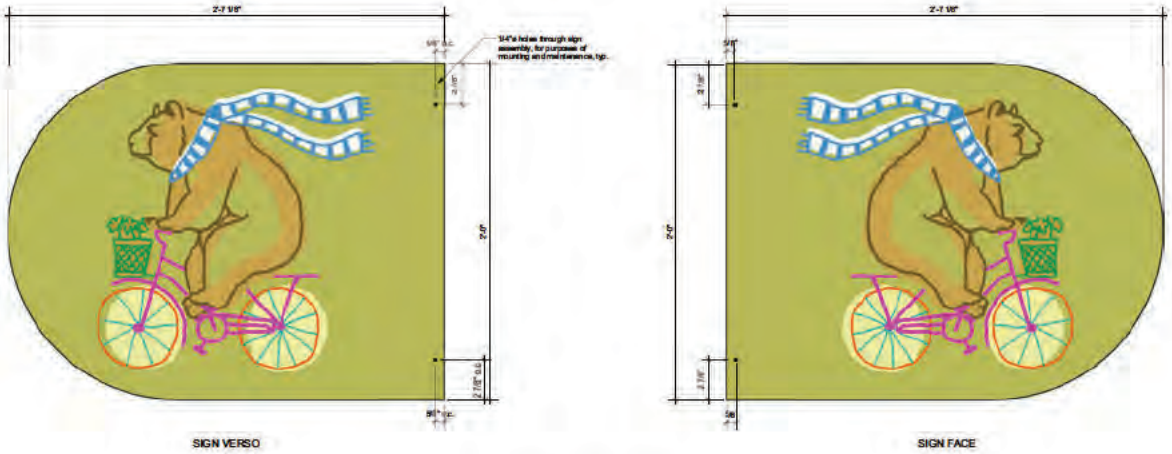
Our concept for the 40th Street Art Project embraces the theme of ***Bringing Nature into the Urban Streetscape*** with a playful rendition of the wide range of fauna found within Emeryville.

1. Streetscape Installation
For the streetscape component, a series of about twenty episodic drawings would be attached to streetlight poles and bus shelters with drawings (custom high pressure laminate) that are double-sided (viewable from both sides). These drawings portray animals that are personified as riders of a diverse array of wheeled vehicles while displaying differing personalities. The range of animals, wheeled vehicles, and personality-types are meant to capture the spirit and ethos of Emeryville. As such, these "props" would be used to initiate community engagement sessions where the specific animals, vehicles, and personality-types would be chosen.

2. Icon
The icon is very much a work-in-progress. The concept displayed in this preliminary drawing is that of a grouping of several animals derived from the collection that are displayed along the streetscape. This group of animals represent the comradery and collective spirit of the community– all are riding together on a path. The vision for the icon would be further refined and finalized after community engagement sessions.

3. Plaza Installations
The installations for the plazas are interactive and sculptural in nature. Each plaza would hold one large cone that invites viewing. The viewer sees one of four animals that are projected against a background that represents their habitat- a bird image against the sky, a squirrel in a tree, a raccoon on the ground, and a seal in the water. These engaging pieces are visceral in nature- as they are back lit and vivid, they evoke surprise and delight.

TECHNICAL DATA- Streetscape Installations



SAMPLE GRAPHIC OF 1 SIGN ARTWORK
20 UNIQUE SIGNS
CHPL CUSTOM HIGH PRESSURE LAMINATE PANELS 1/2" THICK
OR
ACG™ ALUMINUM COMPOSITE GRAPHIC™ PANELS,
1/4" THICK LAMINATED ASSEMBLY,
PRINTED BOTH SIDES
10 YEAR LIGHTFAST GUARANTEE
TO BE FASTENED TO 4"Ø LIGHT POLE
USING BAND-IT® STRAPPING OR EQUAL

Locations

There are (20) proposed streetscape artworks. Twelve are to be attached to street light poles, and eight are to be attached to bus shelters. The Site Plan on the presentation board indicates locations.

Size

Each element is 2 ft high by 2 ft - 7 in wide by ½ inch thick.

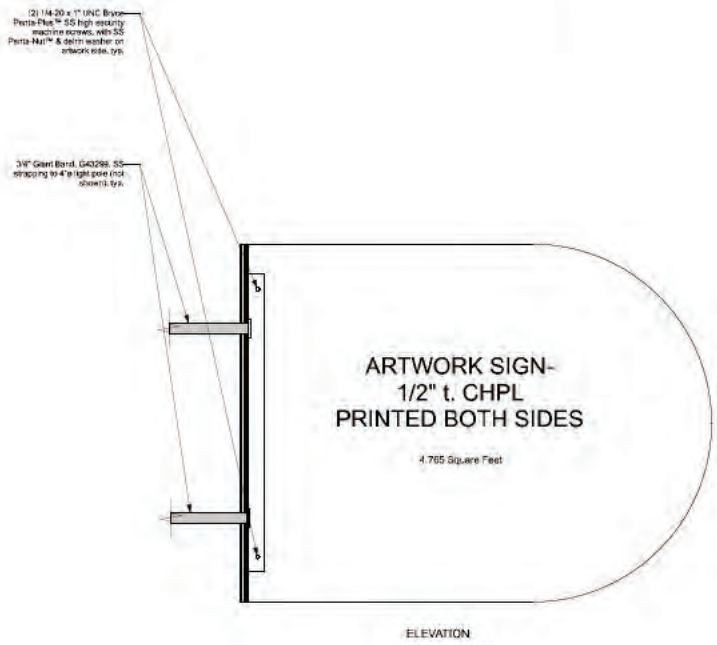
Weight and Material

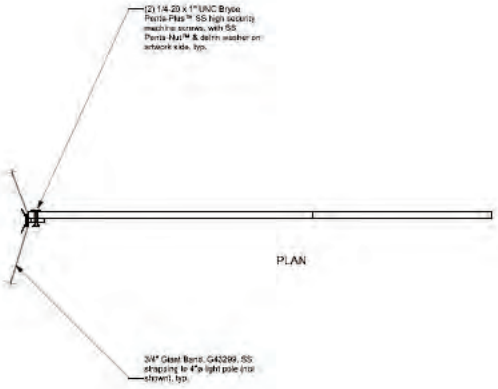
The material is Custom High Pressure Laminate (FOSSIL CHPL), a proprietary process by Fossil Industries[redacted]. Each piece weighs 17+ pounds. Fossil CHPL has an anit-graffiti coating and comes with a ten-year colorfast guarantee. *Fossil Graphics* work is located in many public environments including state and national parks.

Engineering and Attachment Details

The attachment detail for these artworks would be reviewed, approved, and stamped by a California Licensed Structural Engineer. These elements would be removable for the purpose of maintenance.

ATTACHMENT DETAIL





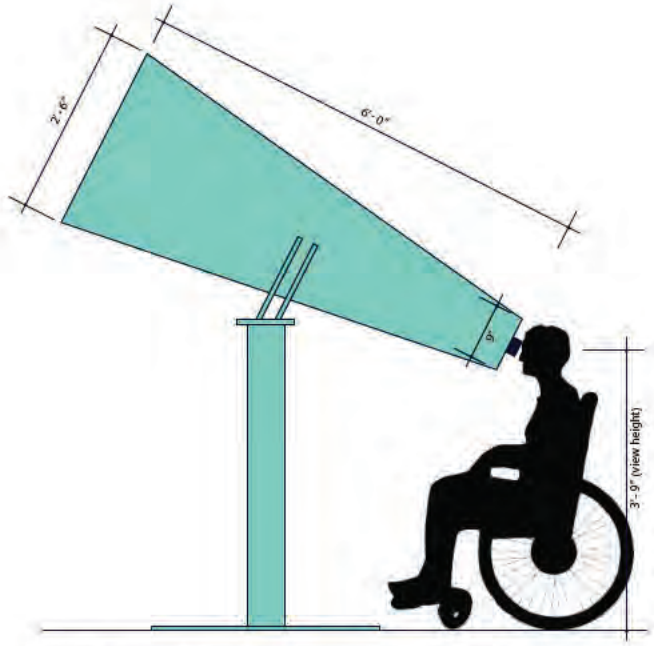
Attachment Detail

The attachment detail, shown here, is a vertical bracket, and (2) ¾ inch bands with buckles. This detail would be reviewed and approved by a structural engineer. It is similar to the detail that is used on the "insects" project that is located at City Hall in Emeryville.

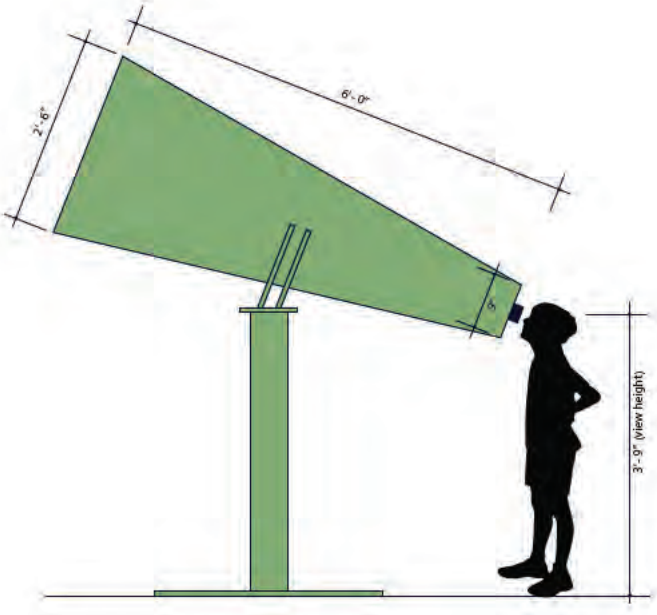
TECHNICAL DATA- Plaza Sculptures

Locations

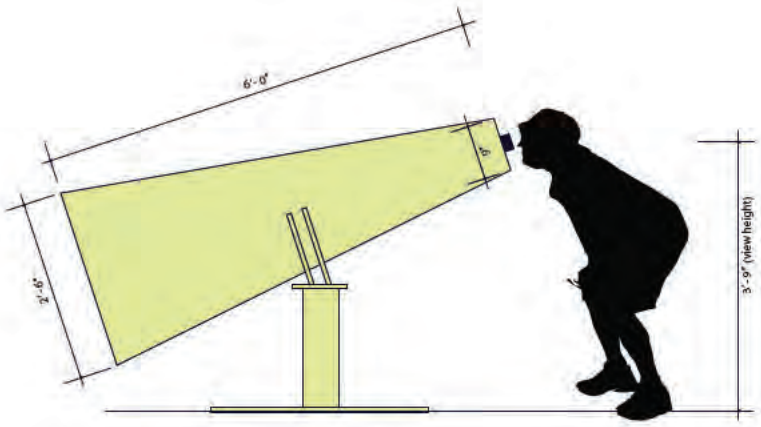
There are (4) cones proposed, one in each plaza. Cone locations and imagery in each are shown on the boards.



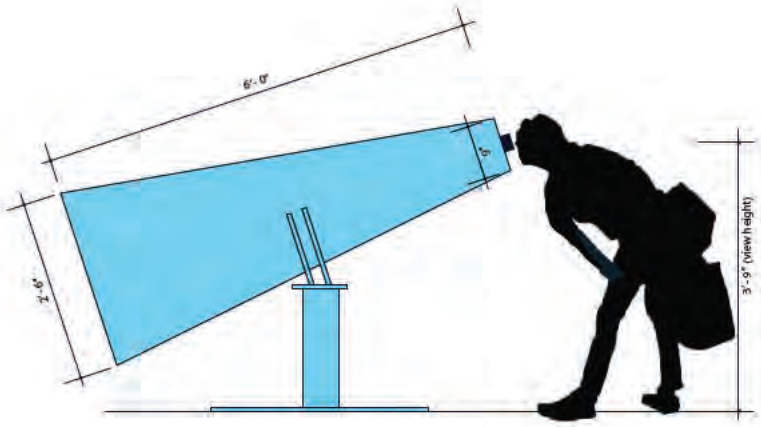
Watts Street Plaza



Haven Street Plaza (pointed toward tree)



Holden Street Plaza (pointed toward ground)



Hubbard Street Plaza (pointed toward water)

Size

The cone shapes are all the same configuration and size. Each truncated cone is 6 ft long, 2'-6 in in diameter at the large end, and 9 in in diameter at the small end. **The view height for each cone is 3 ft – 9 in (45 inches) from the ground to the viewport.** The angle and orientation of each cone varies. This height accommodates wheel chair users, children, and adults who may bend slightly to see the viewport.

Weight and Material

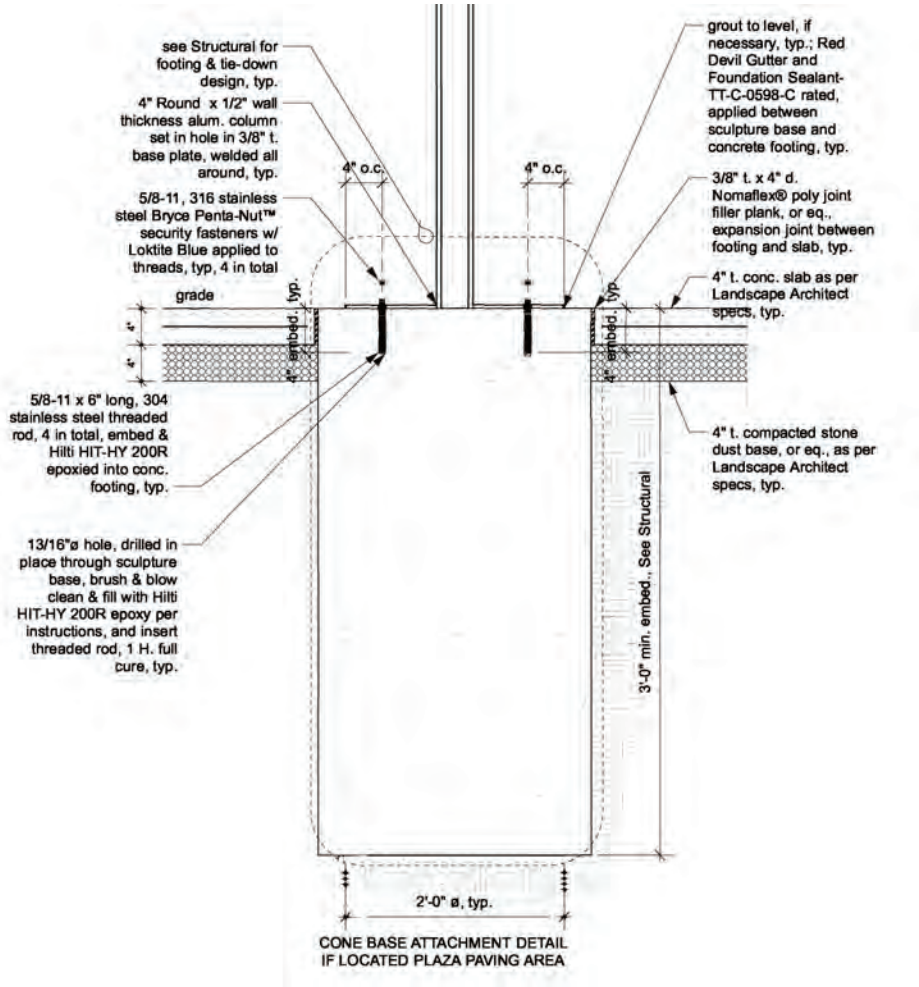
The weight of each sculpture is about 250 pounds. They are made of aluminum that

would be powder-coated, each with a different color. The wall thickness of the cone form is ¼ inch, the round base plate is 3/8 inch thick, the image disc is 3/8 inch thick, and the vertical element is a 6-inch diameter tube with a ¼-inch wall thickness. All seams and connections are to be welded. Each sculpture is a different powder-coated color by Tiger Drylac with an anti-graffiti clear top coat.

Powder-coat Colors:

Engineering and Footing Details

The footing and connection detail for these artworks would be reviewed, approved, and stamped by a California Licensed Structural Engineer. This proposed detail is one that we have used many times for our public sculptures. The exact specifications would be reviewed and revised by an engineer. Here is an example of what we envision.



INSTALLATION procedures & Timeline

Upon final approval of the artwork, preparation would begin for the installations including: identifying staging areas at the site, obtaining traffic control permits, securing equipment rentals, and coordination with the general contractor. We (UrbanRock Design) anticipate performing the installation of the (4) plaza sculptures and the installation of the streetscape artwork.

Fabrication and Installation Timeline

Design Development & Community Outreach	6 weeks
Engineering and Permits	4 weeks
Fabrication of Art Elements & Site Preparation / Foundations	12 weeks
Shipping Artworks to Emeryville	1 week
Installation of Streetscape Artworks	1 week
Installation of Plaza Artworks	1 week
TOTAL TIME	25 weeks

BUDGET

ITEM		AMOUNT
Professional Fees		
Artist Fee (18%)	$90,000	
Structural Engineering	$5,000	
Community Meeting (materials, travel)	$5,000	
		$100,000
Fabrication and Material Costs		
<u>(20) Streetscape Artworks</u>		
Production of Artworks		
(by Fossil Graphics, quote attached / tax added to quote)	$17,200	
Hardware for Artworks-- Brackets, Buckles, and Band		
(from Warnco Banding Items, tax and shipping added to quote)	$1,000	
Preparation of attachment mechanisms		
(by UrbanRock Design)	$10,000	
<u>(4) Plaza Sculptures</u> (by Made in America, quote attached)	$236,000	
		$264,200
Shipping		
Streetscape Artwork / Crating and Shipping to Emeryville, CA	$1,000	
(4) Sculptures / Crating and Shipping to Emeryville, CA	$8,000	
		$9,000
Installation		
<u>Streetscape Artworks</u>		
Equipment Rental / bucket lift for 5 days	$10,000	
Equipment Rental / Extended boom forklift	$2,000	
Traffic Control Fee	$15,000	
Installation Labor for streetscape artwork/ 5 days	$7,500	
Artist Travel (for installation)	$1,500	
<u>Plaza Sculptures</u>		
Equipment Rental (bucket lift for 5 days)	$10,000	
Equipment Rental / Extended boom forklift	$2,000	
Traffic Control Fee	$15,000	
Installation Labor for streetscape artwork/ 5 days	$7,500	
Artist Travel (for installation)	$1,500	
		$72,000
Contingency	$54,800	
		$54,800
TOTAL		**$500,000**

ESTIMATES

(20) Streetscape Artworks Graphics

FOSSIL INDUSTRIES [redacted] ES, INC.

QUOTE F104984

DATE: 8-13-24

PAGE: 1

To: Russell Rock
UrbanRock Design
[redacted]

Account Executive: Linda Peters
ID #: 1852180.01

Tag Name:

Part Number	Qty	Description	Each	Ext
ED12-052-PT4	20	1/2" Double Sided Exterior CHPL Graphic. Panel Size: 24"H x 31.125"W Custom Shape. 4 Threaded Inserts w/ Tamper Resistant Bolts.	778.00	15,560.00
99810	1	COLOR SAMPLE: (8" x 10" x 1/8") CHPL. **Created from Client Provided File.** -Used in production for color matching and resolution. -Cost includes shipping Sample. See File Prep Guide for More Information.	40.00	40.00
.....		Shipping Estimate is based on destination being a non-residence that has a forklift if necessary.	0.00	0.00

All FOSSIL graphics feature 12-Color HD Printing and our Fossilized Surface®.

Digital files must conform to Fossil File Prep Guidelines (FossilGraphics.com)
Electronic layout proofs provided at no charge.

Features are indicated in Part Numbers:
"-P" = Custom Shape; "-T" = Threaded Inserts; "-D" = Double Sided; "-H" = Holes; "MURAL" - indicates panels built to go directly beside another panel.

Shipping to zip code: 94608. Estimate based on destination being a business that has a forklift on site. Shipping charges include packaging and insurance.

Quote valid 90 days. Order produced under our standard Terms and Conditions of Sale (FossilGraphics.com/terms). For installation info or to determine best thickness of graphic to meet your requirements (FossilGraphics.com/guide).

Subtotal:	$15,600.00
Subtotal:	15,600.00
Shipping:	871.00
0 %Tax:	0.00
TOTAL:	$16,471.00
Deposit Due:	9,883.00
After Delivery Amount Due	6,588.00

TERMS: 60% Deposit / Balance Net 10 After Delivery

Please sign as your authorization to produce: _____ ____/____/____

Hardware for Streetscape Artworks

Warnco Banding Items

From: Ron Felscher [redacted]

To: [redacted]

Cc: [redacted]

Date: Tuesday, August 13, 2024 at 07:37 AM PDT

Good morning Russell,

D00999	2-Bolt Straight Leg 200/300 SS Brack-It 50/Box	$ 504.66/Box
C206R9	BAND-IT 3/4" 201SS (.030) Band 100'/Roll -Red Tote	$ 87.50/box
C25699	3/4" BAND-IT 201SS Buckles 100/Box	$ 124.30/Box

I would have to order the first item, probably a couple of weeks.
The other parts are in stock.

We will pay the UPS shipping charge.

Thank you.

Ron Felscher
Operations Manager
Warnco, Inc.
[redacted]

s(4) Plaza Sculptures

MIA Made in America Fine Art

[redacted]

Estimate

Date	Estimate #
8/12/2024	53

Name / Address

URBAN ROCK DESIGN
[redacted]

Project

Description	Qty	Rate	Total
FABRICATION OF 4 CONE SCULPTURES VIEW CONES ON PEDESTAL DIMENSIONS OF EACH CONE 6' LONG x 2'-6" DIAMETER x 9" DIAMETER		200,000.00	200,000.00
ROLLING PLATE 1/4 PLATE FOR CONE SHAPE		10,000.00	10,000.00
POWDER COATING		8,000.00	8,000.00
WATERJET CUTTING		10,000.00	10,000.00
MATERIAL ALUMINUM (8) 4' x 8' x 1/4 in PLATE (2) 4' x 8' x 3/8" 20'-6 in x 1/4 in THICK TUBE 14 - 16 WEEKS TO FINISH JOB		8,000.00	8,000.00

Total	$236,000.00

WARRANTY / Streetscape Artworks

FOSSIL
INDUSTRIES

Fossil Industries, Inc. (Manufacturer) warrants for a period of ten (10) years from the date of purchase, that under normal use its' CHPL – Custom High Pressure Laminate; ACG™ – Aluminum Composite Graphic™ and AG – Acrylic Graphic graphics will be free of manufacturing defects that cause fading, delamination, peeling, blistering or cracking.

To ensure the best results from your purchase, please review Fossil's "Panel Thickness and Installation Guide" and "Care & Maintenance". These documents are found on our website under "Resources" and contains information that may affect your warranty and the enjoyment of your purchase.

Manufacturer does not give warranty as to merchantability or fitness for a particular use, nor will any oral statement constitute a warranty or amend a specific warranty. Manufacturer shall have no obligation or liability to any person or entity for any loss, damage or injury in connection with or arising from the purchase, use, or inability to use this product, or for any special, indirect, collateral, incidental, consequential or exemplary damages such as, but not limited to, loss of anticipated profits, costs of installation, repair, removal, disposal, shipping or other economic loss. Fossil is committed to your complete satisfaction and as such our liability is solely to provide a 100% credit for any unused duration of your warranty, which can be applied towards a replacement panel. You have the flexibility to make subtle modifications to your graphic, ensuring your design remains up-to-date and aligned with your current needs or preferences. Your new graphic is covered by its own 10-year warranty. This ensures continuous protection and peace of mind.

This warranty is supplied to the buyer in place of all other warranties, expressed or implied. Claims resulting from misuse, willful destruction, acts of God, force majeure, improper installation or fabrication will be disallowed. This limited warranty acknowledges that some material and image degradation is expected over time as normal wear. It applies solely to factors affecting the image that dramatically impact the standard viewing of the graphic. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state, therefore, some limitations stated above may not apply to you.

With each order you will receive a "Project Detail Sheet" which includes your Contact Information, Order # and your actual Warranty. Please save that document for your records.

MAINTENANCE PLAN: Streetscape Artworks

CLEANING FOSSIL PANELS

FOSSIL Graphics are protected with our exclusive finish and are easy to clean. The surface is so smooth and inert that an annual soap & water washing should be all that is needed to keep graphics looking clean and bright.

Pre-Clean: Prior to applying any chemical solutions, it's important to pre-clean the panel to remove any surface particles that may become abrasive when wiping the surface. Additionally, avoid cleaning panels when they are exposed to sunlight
or when they are hot, as this can affect the cleaning efficacy and the panel's integrity.

Mild Cleaning Agents: For mild cleaning needs, many stains can be effectively wiped off using a damp cloth. For more comprehensive cleaning, disinfection, or removal of tougher stains and graffiti, several effective solutions are available. Our top recommendation is Krud Gutter Graffiti Remover by Rust-Oleum®, an environmentally friendly product proficient in removing difficult stains like permanent marker and dried latex paint. Other recommended products include 3M Citrus Adhesive Remover, Alcohol, Household Bleach, Clorox All Purpose Cleaner, Fantastic Multi-Purpose Cleaner, Plastix Cleaner, Simple Green, Soap & Water, Vinegar, WD-40, and Windex. Be sure to follow the manufacturers suggestions.

Strong Cleaning Agents: Tough stains on FOSSIL Graphics: Some staining agents, especially those with grease bases paint or ink, will require the use of a strong cleaning agent for removal. Once again, our top recommendation is Krud Gutter Graffiti Remover by Rust-Oleum®, an environmentally friendly product proficient in removing difficult stains like permanent marker and dried latex paint. Other recommended products include: Xylene Solvent; Kerosene; Turpentine; Lacquer Thinner; Mineral Spirts; Chromic Acid (30%); Hydroxide; Hydrochloric Acid and Sulfuric Acid (35%). Do not use Goof Off or MEK. Use of other solvents should be tested on a small, non-conspicuous area first. Use a soft cloth and follow cleaning agents procedure with a detergent rinse and a water rinse. If you are not satisfied with the result of the cleaning,
repeat the procedure until the stain is removed. Be sure to follow the manufacturers suggestions.

PANELS: MAINTENANCE

The top surface of your FOSSIL Graphics does not require any maintenance. To keep the sides of your FOSSIL Graphics looking vibrant and to protect the edges from chafing, apply a liquid sealant such as Nu Finish (www.nufinish.com) polymer auto wax or Thompson's Waterproofing Wood Protector® to the sides of your panel on an annual basis.

PANELS: SURFACE REPAIR

Minor blemishes, nicks and light scratches can be concealed using a polymer based surface treatment such as Meguiar's® PlastX™ Clear Plastic Cleaner & Polish.

MAINTENANCE PLAN Plaza Sculptures

The piece has the following powder-coated colors:

Tiger Drylac Color RAL 6034, RAL 5012, RAL 6011, and RAL 1016

CARE AND MAINTENANCE

Once applied, powder coating needs to be properly cared for, just like any paint. Powder used on exterior applications needs to be cleaned 2 – 3 times per year.

Pressure cleaning

The most efficient method of cleaning powder coated surfaces is with a pressure washer using filtered water under low pressure. Mild detergent may be used, but do not use chlorine or harsh cleaning solutions. It is very important that low pressure be used in pressure cleaning. If the pressure is strong enough to move the metal surface, it may be strong enough to damage the finish as well. Avoid using unfiltered tap water or ground water when cleaning the powder coated finish, and pay attention to where the wind blows the water from sprinkler systems. Unfiltered water often causes staining on outdoor products due to sulfur, iron oxide, chlorine, fluoride, and other minerals commonly found in hard water or ground water in certain states. Only filtered water should be used to clean and rinse powder coated products whenever possible.

Avoid Abrasives

Avoid harsh, abrasive cleaners such as steel wool and scourers. Treat the powder coating as you would treat your car paint.

Avoid Solvents

Any use of a solvent-based cleaner will void any warranty that is issued. Where a solvent is absolutely necessary to remove materials from the surface, such as adhesives, the weakest possible solvent should be used (e.g. methylated spirits, white spirits or isopropyl alcohol). A small and unobtrusive area should be tested prior to attempting to use solvents on significant surfaces. After removal of the surface contaminant, the solvent should be dried from the film, and the area that has been wiped with solvent should be washed with a solution of mild liquid detergent and then rinsed with clean water to ensure complete removal of any solvent residues. Under no circumstances should strong solvents be used. Examples of inappropriate chemicals for cleaning or any contact with powder coatings are gasoline, kerosene, xylene, caustic cleaners (especially kitchen and bathroom detergents) and paint thinners. Always flush metal that has been exposed to cleaner with copious amounts of fresh clean water. If the local water is high in mineral salts, finish powder coated metal cleaning with deionized water and/or a chamois.

Damage Repair

Where mechanical damage to the powder coating has occurred such that the substrate is exposed, it is certain that the underlying chromate film has been damaged. In order to achieve the maximum corrosion resistance, it is necessary to replace the pretreatment. In some cases it will be possible to apply a suitable chromate pretreatment on site, apply a suitable primer and

repaint the damaged area in
accordance with the recommendations above. Where on-site application of a chromate pretreatment is not possible, the application of a high performance etch primer to the aluminum is essential to the repair process. Application of a suitable touch-up paint is the only recommended method of damage repair.

CONTACTS

Public Artists

Russell Rock and Jeanine Centuori- UrbanRock Design

[redacted]

Engineer

TBD

Foundation Contractor

TBD

Metal Fabricator

Carlos Fuentes
Made in America

[redacted]

Graphics Fabricator

Fossil Industries Inc.

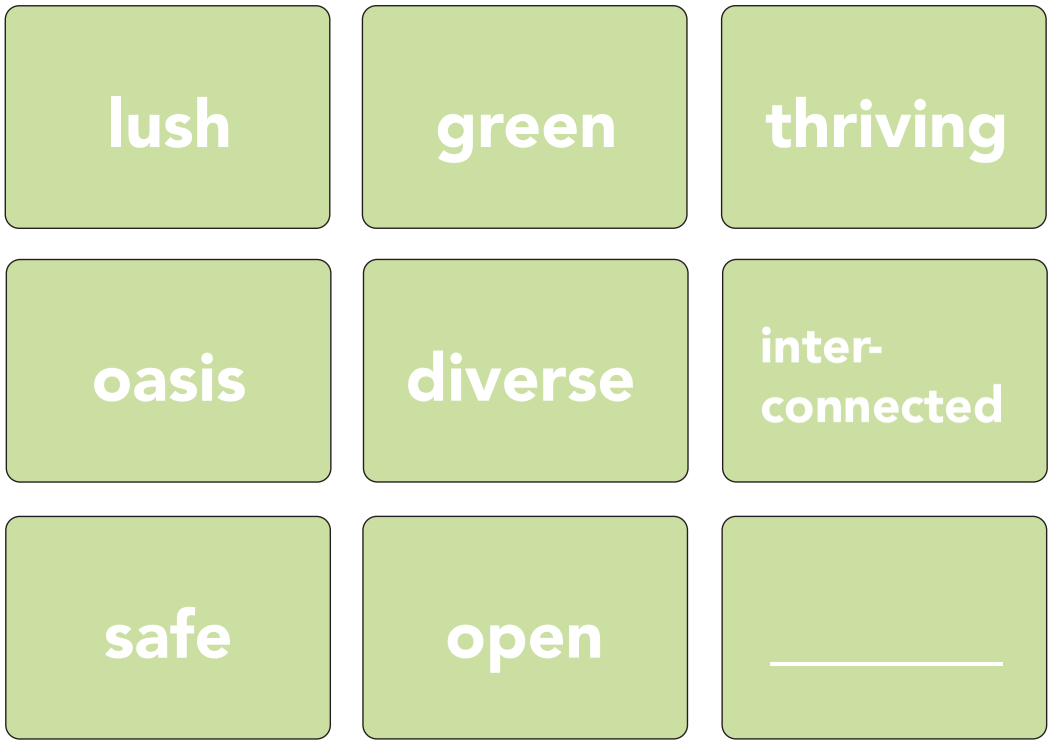
[redacted]

COMMUNITY ENGAGEMENT STRATEGY

The strategy for these sessions are to prompt participants to first think about the community in qualitative terms with the use of adjectives printed on cards. Local animals would then be chosen in a similar manner. These foundational ideas would then inform the selections of Icon designs, Streetscape Artwork, and Plaza Installations. This process is meant to allow for accessible and open dialog and discussion about the artwork. A sense of ownership and common ground would be achieved with this process.

1 Emeryville Environment

Cards would be prepared and distributed to participants. They would be prompted to "choose 3 of these qualities that best represent the environment of Emeryville. You may also fill in the blank card with an adjective."



2 Emeryville Community

Next, participants would be prompted to "choose 3 of these qualities that best represent the community spirit of Emeryville. You may also fill in the blank card with an adjective."

resourceful	tightknit	creative
playful	bold	iconoclastic
supportive	welcoming	_____

3 Emeryville Wildlife

Next, participants would be prompted to "choose 3 local animals that inhabit the sky, land, and sea that best represent Emeryville."

_____

4 Icon Designs

These images of Icon Designs would be printed at full-scale.

Participants would be prompted with the following: "referring to your chosen qualities of the local environment and community spirit, which of these best represents Emeryville?"

5 Streetscape Artwork

These images of Streetscape Artwork would be printed at full-scale.

Participants would be prompted with the following: "referring to your chosen qualities of the local environment and community spirit, which of these best represents Emeryville?"

6 Plaza Artwork

Models of these Plaza Artworks would serve to clearly illustrate the form, and a large view cone would illustrate the experience. Participants would be asked to identify four iconic local animals from the Sky, Trees, Ground, and Sea that best represent Emeryville.

City of Emeryville 40th Streetscape Public Art Project

Final Conceptual Design Proposal
PHASE TWO 8/22/24

Presented by Scott Donahue, John Northmore Roberts, Lesley Gasparetti

Overall Concept & Identity of Place

Artwork and graphics inspired by the defining characteristics of the City of Emeryville communicate the unique identity of this place while drawing visitors into and through the 40th Street corridor.

Up to twelve sculptures affixed to street light poles plus four larger free-standing pieces within the new neighborhood plazas create a family of images, enlivening the multi-block experience and adding dramatic punctuation at key pedestrian locations. The artworks, combined with new city graphics abstracted from the artwork, capture the city's richness and enhance the street design.

The free-standing pieces in each of the four plazas are individual artworks that, together, reflect four defining characteristics of Emeryville—Waterfront Wildlands (nature), Emeryville Connects (bikes & connectivity), All Are Welcome (diversity), Art & Innovation (creativity). Each of the plaza sculptures captures one of these themes, lit from within. The 12 simpler pieces affixed to street-light posts on both sides of the street (at least one per block) include details from the major themes with a focus on Emeryville's natural setting.

The rhythmic experience of the artworks while travelling on a bus, in a car, riding a bike, or walking provides a distinctive linear identity to the corridor day or night when seen up close or from afar linking the bayfront wildlands with the urban core. The works in the plazas are slightly removed from the street's travel lanes, highlighting the quieter more nuanced neighborhood experience.

The plazas themselves are reconceived as eddy-like spaces often found at the margins of wetlands. Stained concrete bands rippling through the concrete paving and curving inland from the bay simulate a series of small waves superimposed on the urban grid leading toward the vegetated upland at the bioretention basin. Each plaza sculpture is located within this high ground, reminiscent of the beloved mudflat sculptures that once graced the Emeryville shoreline. Stainless steel phrases embedded in the concrete relate the characteristic theme of each plaza.

Wayfinding and identity graphic options, reflecting the city's defining characteristics consistent with the artworks, will be refined and selected through a creative public outreach process.

MATERIALS AND SIZES

PLAZA SCULPTURES *(4 with forms 3D scanned to preserve a reproducible record)*

- Mounted on 5" diam x ¼" thick steel pipe (same as light poles) min. 10' above ground extending to 16' height set in concrete footings within bio-retention planters.
- Made in two parts, each 3' high x 4' wide x 4' deep weighing up to 250 lbs, or 500 lbs total.
- Material is 3/8" to ½" thick cast Forton gypsum with fiberglass and integral pigment with additional fiberglass rebar and mounting hardware. Additional color using water glass by Keim mineral paints. Sacrificial anti-graffiti coating on exposed surfaces.
- Integral micro lighting powered by solar panel embedded in top.

LIGHT POLE SCULPTURES *(up to 12 with forms 3D scanned to preserve a reproducible record)*

- Mounted on street light poles min. 10' above ground extending to 12' height with stainless steel sign brackets. Designed to meet light pole structural loads and maintenance rqts.
- Made in two parts +/- 1'-6" wide x 1'-6" high x 2' deep weighing up to 30 lbs each, or 60 lbs total.
- Four separate sculptures will be cast from molds three times each for a total of 12 pieces.
- Material, additional color, and anti-graffiti coating same as Plaza Sculptures.

PAVING INSERTS and STAINED CONCRETE BANDS (*stainless steel embedded in concrete paving)*

- Lettering – ¼" thick laser-cut stainless steel 6" high x ½" wide affixed to flat bar by SS rods.
- Wave bands – Color-stained scored concrete bands, avg. 6" wide x +/- 10' length within existing poured concrete paving.
- Located within plazas a minimum of 3' from known utility lines.

PLAZA SCULPTURES – Attachments & Lighting (for detailed specifications see appendix)

ATTACHMENTS

The attachment hardware for the Plaza sculptures will be custom fabricated for this project. I have used this design pole attachment successfully on a much larger installation of public art. Rising Expectations consists of three components. Inside the sculpture are compression brackets which have welded steel supports for the shell of the sculpture.

The compression brackets are tightened inside the sculptures. During installation compression is applied by tightening the bolts on each bracket through the access hatch on the lower ellipsoid shape. The upper funnel shape forms are using the same compression brackets. The upper funnel shape has a two-part hatch cover that looks a little like a funnel-shaped itself and has a water drainage hole that goes down through the center of the pole and drains out the bottom.

LIGHTING

The lighting design for the Plaza sculptures uses standard garden lighting fixtures repurposed for the sculptures. The fixtures of this type that I have many years of experience with are Urpower. These lights have their easily serviced solar panel separate from the lighting fixture with wired connections between the two. The panels contain the battery for the nighttime power and are turned on and off automatically with light levels. Hardware cloth wire mesh will protect these panels from bird nesting.

10 of these solar panels will be installed in the top of the funnel shape sculpture out of public view. Five spotlights will face upward illuminating the funnel-shape from below. The individually inset LED lights will be in the underside of the ellipsoid facing down to viewers in the Plaza. These inset lights will be appropriate to the content of each sculpture. In the All Are Welcome example shown, the little LED lights will illuminate the upside-down city, kind of like how we view San Francisco, and the spot lights will illuminate the underside of the birds above. In the Emeryville Wildlands sculpture, the diving penguins are illuminated from below with the eyes of the fish below lit by the LED lights. For the Emeryville Connects sculpture, the map is illuminated from below and the front and rear tail lights of bicycle riders are lit by LED. For the Art & Innovation sculpture, the DNA forms are lit from below and the gauges, dials, and other equipment behind the hands are lit from within by LED.

LIGHT POLE SCULPTURES – Attachments (for detailed specifications, see appendix)

The public art sculptures proposed for this project rely on a cast material Forton gypsum and fiberglass. I have used this material for over 30 years. A project of mine in Palo Alto, entitled Headwaters (right) is constructed of this material and has endured for 27 years without any damage or needed repairs. The sculptures that are proposed for these 40th St. locations would all be at 10 feet or higher.

Each of the two components of the sculptures will be attached to the poles with standard signage hardware, which is sufficient to withstand the wind and gravity forces. This hardware is all stainless steel supplied by Grangers and its brand name is Tapco. This attachment mechanism will allow for easy removal and re-installation if the pieces need to be removed in the future.

The pieces are configured and sized to extend +/- 1’-6” from the face of the poles so that they will not conflict with the routine maintenance tasks, such as changing light bulbs. They are smaller than the 3’ x 3’ signs that are allowed to be attached to the poles, with a smaller wind loading effect than the signs—a primary consideration for pole stability. Based upon our experience elsewhere, the combined weight of 60lbs max. (30 lbs max each component) should not affect the structural integrity of the poles. Structural certification will be completed as part of the final design.

MAINTENANCE

No maintenance is possible. However dust and dirt will settle on the sculptures enhancing some relief work but diminishing the color. Once a year hosing down with water of the sculptures will enhance the color. LED light bulbs do burn out and lithium ion batteries do wear out. The garden repurposed lighting may have to be replaced. Judging from my light fixture the endurance would be at least five years, probably more. The lightbulbs can be changed by accessing them through the hatch of the ellipsoid form. The solar panels can be replaced by accessing them through the upper side of the funnel form. Scans of each of the sculptures will be provided for the City’s use as an accurate depiction in case a replacement or repair is needed. In addition, molds of the light pole sculptures will be provided for casting replacements or additional pieces if needed in the future.

Installation Procedures

PLAZA

SCULPTURES

The plaza sculptures will be located within the new bioretention basins at each plaza. Installation of the concrete piers, bolts, and steel poles for the sculpture will require close coordination of the scheduling and site access with the work of the general contractor overseeing the plaza construction. Installation of the sculptures on the poles will also require coordination but can be installed after the major plaza construction is complete.

The sculpture pier locations will be shown on the artist site plans, reviewed and approved by the city, and coordinated with the city’s engineering improvement plans. The proposed locations will be marked by the general contractor subject to the approval of the artist. The 18" diameter piers will be drilled to the specified depth using standard drilling equipment followed by assembly and installation of the reinforcing and city inspection. Poured concrete will include installation of the j-bolts. Once the concrete is sufficiently cured, the poles will be delivered to the site and bolted to the concrete piers.

Subsequent installation of the sculptures on the poles will be scheduled when the plaza is clear and fully accessible to the artist, best before the final landscape installation. The artist will deliver and install the pieces using his own equipment. The lighting of the sculptures is integral to the sculptures and will not require connections to outside power sources. The Plaza sculptures will be installed using a rolling A-frame and chain hoists. Scaffolding will be used to make the connections of the compression brackets. The individual parts will be delivered using my truck and my labor to install.

PAVEMENT INSERTS

The stainless-steel lettering inserts will be fabricated off-site and delivered for installation by the artist's sub-contractor as an integral part of the concrete paving reinforcement. The final location of the pieces as shown on the artist site plans will have been reviewed and approved by the city and coordinated with the city's engineering improvement plans. The final location will be subject to the approval of the artist. The pieces will be installed to be flush with the finish grade of the concrete paving. Coordination of the scheduling and site access with the general contractor will be required. The concrete pour and finishing will be by the general contractor for the plaza.

STAINED CONCRETE "WAVE BANDS"

The stained and textured concrete wave bands will be shown on the artist site plans, reviewed and approved by the city and coordinated with the city engineering improvement plans. The bands will be scored into the concrete by the general contractor's concrete installation sub-contractor according to the plans and subject to the approval of the artist. The concrete bands will be textured by the concrete installer consistent with the etched concrete specified in the city improvement plans. A separate sample of the textured concrete will be poured for approval of the texture and subsequent staining. Approximately 30 days after the concrete pour, the general contractor will apply stain to the "wave bands" to match an approved sample.

LIGHT POLE SCULPTURES

The light pole sculptures will be mounted to twelve existing light poles using stainless steel mounting hardware 10 feet above the sidewalk at their lowest point. Installation of the sculptures will be coordinated with the city of Emeryville for a proper time. Traffic mitigation will be used. Scaffolding assembled for this purpose will be temporarily installed at each light pole sequentially. I will be using my own equipment and labor to do these installations. I will be using my truck for this installation and will provide evidence of commercial liability insurance.

TEAM DONAHUE
EMERYVILLE 40TH STREET ART – BUDGET
August 22, 2024

1) ARTIST FEES & PROJECT MGMT (20%)			$ 100,000
• SD	$ 60,000		
• JNR	$ 30,000		
• LG	$ 10,000		
2) SUBCONSULTANTS			$ 28,000
• Structural Eng	$ 8,000		
• Landscape Arch	$ 10,000		
• Graphic Design	$ 10,000		
3) MATERIALS, FABRICATION, INSTALLATION			$ 283,500
• Plaza Sculpture piers and poles install	$ 28,000		
• Stainless Text			
o Fabrication	$ 47,500		
o Install ($63/lf)	$ 5,000		
• Stained Concrete bands add ($10/sf)	$ 3,000		
• Plaza & Light Pole Sculptures (SD)	$ 200,000		
4) INSURANCE (SD) – allowance			$ 3,000
5) TRAFFIC CONTROLS – allowance			$ 3,000
6) PERMITS – allowance			$ 10,000
7) CONTINGENCY (10%)			$ 50,000
8) OTHER			$ 22,500
• Workshop Process		$ 22,500	
• 2 Workshops, preparation, summary	$ 15,000		
• 2 Presentations	$ 2,500		
• Web Development	$ 3,000		
• Survey review	$ 1,500		
• Facility rental	$ 500		
TOTAL			**$ 500,000**

PAST THE GATE

VISION ~ ARTISTRY ~ CRAFTSMANSHIP

August 22, 2024

John Northmore Roberts

[redacted]

EMERYVILLE ART INSTALLATION

Concrete piers with anchor bolts (4 @ $4,870)	$19,480.00
Purchase, deliver, and store steel poles (4 @ $1,000 ea)	4,000.00
Set Steel Poles (4 @ $1,130)	4,520.00
SUBTOTAL POLES	$28,000.00
Set steel bands with letters in concrete base (80lf @ $63/lf)	5,000.00
Stained concrete bands (add to ex. concrete 300sf @ $10/sf)	3,000.00
TOTAL BASE BUDGET	$36,000.00

Budget by:

[redacted]

Greg Wrenn

[redacted]

Lightmart
[redacted]

Quote
#QUO32950
8/13/2024

Bill To

john
john Northmore Roberts & Associates
[redacted]

TOTAL
$3,184.67
Expires: 9/12/2024

Expires	Exp. Close	Sales Rep
9/12/2024	8/13/2024	1015 Doug Durkin

QTY	Item	Options	Rate	Amount
4	**20S05RS125X** 20 Foot Round Straight Steel Light Pole, 5 Inch Diameter, 11 Gauge Powder Coat Choices: Black, Dark Bronze, Gray, or White		$587.00	$2,348.00
4	**S&H-SUR** Shipping Surcharge: 2-4 Poles To Commercial Address Residential ADD +$85 ESTIMATED TO SHIP: 10-12 WEEKS		$149.00	$596.00

Subtotal	$2,944.00
Tax Total (%)	$240.67
Total	$3,184.67

DELIVERY INFORMATION: Lightmart and its freight carriers do not unload products. Unloading is the sole responsibility of the recipient and/or customer and recipient and/or customer is required to provide all necessary equipment and/or manpower at the time of delivery. **DELIVERY CLAIMS**: Claims must be made within 7 days of delivery to avoid claim denial. Please make sure all items are received in good condition and that there is no concealed damage prior to signing for the delivery. Notation of damage must be made on the carrier's delivery document. **RETURNS**: New products with their packaging intact may be returned at customer's expense only if you notify us in writing within 14 days of receipt of product and you obtain a Return Authorization number. A minimum restocking fee of 25% will apply to all returns. All poles, brackets, and custom or built-to-order products are **NON-RETURNABLE** and **NON-REFUNDABLE**.

QUO32950

Stainless Steel Estimate for Paving Inserts

"ALL ARE WELCOME"
"EMERYVILLE CONNECTION"
"WATERFRONT WILDLAND"
"ARTS & INNOVATION"

- Welded to a stainless steel sub frame (as designed before)
- 6" Tall
- Material to be 1/4 Brushed finish Stainless Steel
- With a shop drawing explaining design intentions
- All portions laser cut

Materials: $6000
Templates: $1000
Fabrication: $21,000
Laser cutting: $5000
(4) Shop drawings: $3500

Budget: $47,500 +/-
Roughly $11,000 per unit

Community Outreach Design Process for Iconographic Wayfinding Image

GOAL

To reach community consensus on an iconographic wayfinding image for the City of Emeryville.

OBJECTIVES

- To align the preferred wayfinding image to the approved public art themes of the 40th Streetscape Public Art Project.
- To develop a preferred wayfinding image that reflects creative community input refined through a creative outreach process.
    - Design Team to conduct two public community workshops under the sponsorship of the project's Working Subcommittee appointed by the City Council, facilitated and advertised by staff, to review options and select a preferred approach—Wkshp #1 Present findings to date and receive input on options, Wkshp #2 Review refined options and find consensus on Preferred Option. Concurrently conduct on-line survey of preferences for options reviewed at each workshop.
    - Present the art and urban design concepts approved for the 40th Streetscape Public Art Project as the basis for consideration of wayfinding options.
    - Review at least three initial options for wayfinding images developed by the team to be complementary to the approved 40th Streetscape Art Concepts as a prompt for discussion.
    - Receive input on the initial options and discuss potential additional options or ideas suggested by the community. Reach consensus on options to be refined.
    - Refine up to six options reflecting initial community input for review and discussion in a second workshop. Facilitate discussion to develop consensus on a Preferred Option.
    - Develop final wayfinding images for approval of the Working Subcommittee that reflects consensus community input.
- Approval of the final iconographic wayfinding image by Public Art Committee, Transportation Committee, Bike and Pedestrian Advisory Committee, and City Council.

Deliver final camera-ready electronic files of final approved design to the City of Emeryville.

FORTON FMG Casting System

Polymer Additive System for Enhancing Alpha Gypsums

PRODUCT OVERVIEW

Forton™ MG is a four component system which consists of an alpha gypsum blended with three specialty additives. The additive system is based on the VF-812 water based polymer emulsion (50% solids) and greatly enhances the physical properties of alpha gypsum products. VF-812 drastically reduces water permeability, making it suitable for both interior and exterior applications (for exterior use, product must be sealed – see "Finishing" section).

The **Forton™ MG** system is easy to use and can be cast solid, rotationally cast, layed up by hand with glass fiber or sprayed. Fully cured pieces can be painted, sanded, machined and polished. **Forton™ MG** is used to make lightweight pieces that are very strong and water-resistant. Applications include making architectural elements, reproducing sculpture and special effects.

Vibrant colors are possible by adding pigments. Metal powders (bronze, copper, brass, etc.) can be added to give the look of real metal castings at a fraction of the cost. You can duplicate the look of marble or ceramic by adding inexpensive fillers. The **Forton™ MG** system meets **ASTM E-84, Class A (or 1)** flame rating for building materials.

Physical Properties of FMG Composite

Density: 95-100 lbs./ft^3

Working Time: 20-30 minutes*

Demold time: 60-90 minutes*

Color: Bright White

Tensile Ultimate, psi: 3,500-5,100 (24-35 MPa)

Flexural Ultimate, psi: 3,500-9,400 (24-65 MPa)

Compressive Strength, psi: 6,000-9,000 (41-62 MPa)

Impact Resistance ASTM D256: 170 in.lb./in^2

Coeffecient of Thermal Expansion: 11.1 x 10-6in/in/°F

Water Vapor Diffusion Coeffecient: 250 mμ

Freeze/Thaw Resistance: 300 cycles

Water Absorption: 0.8% after 24 hour water soak

Maximum Usable Temperature: 200°F (93°C)

All values measured after 14 day air cure.
Values were obtained using FGR 95 Alpha Gypsum from USG Corp. using 11.7% glass fibers.
*Depending on mass and environmental conditions. Time can be reduced with the addition of Aluminum Sulfate Accelerator.

PROCESSING RECOMMENDATIONS

PREPARATION...

Handling & Storage - Store and use material at room temperature (73°F/23°C). These products have a limited shelf life and should be used as soon as possible. Colder temperatures will slow the working/cure times, while warmer temperatures will reduce working times. Individual components should be stored in a dry environment at room temperature. Humid conditions will cause gypsum and resin to lose effectiveness. Do not allow the liquid VF-812 to freeze.

Mold Preparation - If casting or laying up into a urethane rubber mold, first apply a release agent such as Ease Release™ 2831. Newly mixed Forton™ MG can be released from another Forton™ MG surface using a minimum of three coats of Sonite™ Wax. If you want to paint your finished casting, we suggest using a silicone rubber mold (Mold Max™ Silicone), as no release agent is required to facilitate demold.

Because no two applications are quite the same, a small test application to determine suitability for your project is recommended if performance of this material is in question.

Required Materials - Assemble all components and accessories before you begin. You will need:

- Forton™ MG System Components (See Description Below)
- Measuring Containers
- Mixing Containers
- Weighing Scale (Digital Gram or Triple Beam Balance)
- Mechanical / Power Mixer (Jiffy or Hanson Mixer)
- NIOSH Approved Dust Mask
- Window Screen Or Similar For Filtering Mixture

System Components - The Forton™ MG System consists of four components (an alpha gypsum and three specialty additives).

Component 1 - Alpha Gypsum: You can not use just any gypsum/plaster product. **You must use an Alpha Gypsum** such as FGR 95 from USG Corp., Densite HL from Georgia Pacific, Crystacal R from British Gypsum or equivalent.

Component 2 - VF-812: White liquid. 50% solids polymer that crosslinks with Component 3 and gives Forton™ MG water resistant properties.

Component 3 - MF-415 Resin: Fine white powder. Enhances physical properties of the overall mix.

Component 4 - Ammonium Chloride Hardener: Crystalline Powder - looks like sugar. Added as a pH adjustor to ensure the proper cross-linking of the VF-812 and the MF-415 Resin.

MEASURING & MIXING...

Important: Use only fresh materials. Old materials (gypsum, polymer) will give inconsistent results.

To minimize dust inhalation, we recommend wearing a NIOSH approved dust mask while weighing and mixing components. You must use an accurate digital gram scale to weigh Parts A and B properly. Do not use an analog scale or attempt to measure components by volume.

Important: Components must be mixed in proper sequence. A power mixer should be used to mix all components.

1. Shake or stir VF-812 well. Dispense required amount into mixing container.
2. Combine All Dry Ingredients: Combine Alpha Gypsum + MF-415 + Hardener by weight into a suitable size mixing container. Mix dry components thoroughly with mixing paddle, power mixer, etc. until well blended. If adding fillers such as bronze powder, blend with dry components before adding to VF-812.
3. Sift dry ingredients into VF-812 liquid and mix all components with a power mixer. Continue mixing until all dry powder components are thoroughly dispersed (minimum 90 seconds).

Mix Design - Component quantities will vary depending on the size of the batch you are making. Below is a standard Forton™ MG mix design:

Parts By Weight

Alpha Gypsum	VF-812 Polymer	MF-415 Resin	Hardener
100	50	10	0.48

Working times and demold times will vary depending on mass, environmental temperatures and use of accelerator.

Accelerating Forton™ MG - The set and demolding times of the FMG system can be reduced by the use of an accelerator. For hand layup a solution of 1 lb of FMG Accelerator (Aluminum Sulfate) into 10 lbs of water can easily be made.

Mix the Forton™ MG components into a creamy slurry. Then add the accelerator while mixing. A good starting point is to add 1 tablespoon of accelerator for every 10 lbs of gypsum in the mix. The goal is to add just enough to accelerate the set time but not cause a snap set. Note: Local conditions and mix design can affect the strength of an accelerator. Experimentation will be required.

Retarding Forton™ MG - Some applications may call for a large quantity of Forton™ MG to be mixed and poured in a single mold (mass casting) or for "master batching" (a large amount is mixed and poured into many different molds for production casting). To achieve the longer working time and demold time necessary for these applications, citric acid can be added to the mix. A good starting point is to add citric acid in a quantity of 0.05% of the weight of the gypsum in the mix. The citric acid should be premixed into the VF-812 prior to adding dry components.

POURING & APPLICATION...

After thoroughly mixing components, the mixture is ready to be poured into a mold. For best results:

1. Pour a small amount of the Forton™ MG mix into the mold and brush or slush a face coat on all surfaces. This helps to break surface tension and ultimately reduce air bubbles. Tip: Slowly pour the face coat material through a window screen, kitchen colander or equivalent. This helps to eliminate any clumps or unmixed material that could affect the surface finish.
2. After a face coat is applied, the remaining mixture can be slowly poured into the mold.

Further Reducing Entrapped Air - Air bubbles are sometimes a concern with polymer modified gypsums and will vary depending on conditions. There are additional steps you can take to help reduce entrapped air:

1. Vibration - By placing the filled mold on a vibrating table, air will rise and dissipate from the mold surface.
2. Pressure - Requires pressure vessel and compressor. After mixture is poured into mold, place mold in a pressure vessel and subject mixture to 60 PSI (4.2 kg/cm^2) air pressure for one hour. NOTE: Molds must also have been cured under the same pressure. Otherwise, when the Forton™ MG is pressure cast in the mold, air bubbles trapped in the rubber will compress and the casting will be distorted. Pressure Casting is the only way to completely eliminate bubbles from your mix. Vacuuming material does not work.

Making Architectural Elements - Hand Lay-Up Technique - Forton™ MG can be reinforced with all typical "E" glass fiber reinforcements used in the composites industry. This includes continuous strand surfacing mats up to bi-axial and tri-axial woven glass fiber fabrics. Therefore, Forton™ MG can be used in a wide range of production/laminating processes. ASTM 1355 requires that a minimum of 5% glass fiber reinforcement is used. The flexural properties of Forton™ MG are very responsive to the amount and type of glass fiber reinforcement used, up to 15% of the composite weight.

Hand Lay Up Using Fiberglass Matting - For best results, use ¾ oz. or 1 oz. Chopped Strand Mat or Continuous Strand Mat. Mix Forton™ MG at the "standard" mix design and brush a face coat into a mold. Let set until the appearance starts to turn from shiny to dull, or until you can no longer see your fingerprint if touched. Mix another batch and brush a layer over initial face coat. Lay matting over fresh material and let material penetrate matting. Brush with a clean paint brush, applying light pressure over surface to minimize entrapped air. After a uniform coating is attained, apply another layer of matting and brush again. Apply a minimal amount of Forton™ MG - just enough to wet out the surface. Repeat as necessary until ⅜" (10 mm) thickness is attained.

Hand Lay Up Technique Using Chopped Glass - Another technique for making strong, lightweight elements is to mix chopped fiber directly into the Forton™ MG standard mix. Adding chopped fiber takes much less time than layering chopped matte. The chopped fiber will be added to the mix as a percentage of the total weight. Fiber can be added in concentrations of 5% to 12%.

How To Proceed - A face coat should first be applied to the mold surface. This initial coat should be the standard Forton™ MG mix design and contain no fiber. This ensures a fine surface finish with no exposed fibers. Next, a backup mix can be created that will have fibers added. Calculate the total weight of Forton™ MG required for the backup mix. Based on this, calculate and dispense the amount of fiber needed (5%-12% of the total weight). Fibers should be added to a thoroughly mixed Forton™ MG Slurry. Mix thoroughly with a power mixer until fibers are uniformally dispersed. Do not overmix. Apply mixture with gloved hand or spatula over face coat. Another application may be required to attain 3/8" (10 mm) thickness.

FINISHING & PERFORMANCE...

Post Finishing - After elements have fully cured, they can be sanded or sand blasted to achieve the desired surface texture. "Wet Sanding" is advisable to minimize dust particles and build up on sand paper.

For Exterior Use, Apply A Sealer - Because the Forton™ MG system substantially reduces the water absorption rate of alpha gypsums, elements made with Forton™ MG are suitable for exterior use. Elements must, however, be sealed with a suitable siloxane sealer or concrete / masonry sealer such as Euclid Chemical Baracade Silane 40 WB or Baracade Silane 100 C. Elements can also be painted with an outdoor acrylic paint.

Making "Cold Cast Bronze" Elements - Reproducing the look of bronze is a common application for Forton™ MG because you can achieve the look of real bronze at a fraction of the cost. For making solid castings, the following proportions will work well. –325 mesh bronze powder is recommended and should be pre-mixed with dry Forton™ MG components prior to adding to VF-812.

Parts By Weight

Alpha Gypsum	VF-812 Polymer	MF-415 Resin	Hardener	Bronze Powder
100	70	10	0.48	150

Optional: Pigments can be added to the system to affect the finished look of the cold cast part. For example, adding a dark pigment (black or dark brown) to the mix will give the final casting added definition and dimension when working with bronze powder. Powdered iron oxide pigments and SO-Strong™ color tints work well with the Forton™ MG system.

Metal powders (bronze, copper, brass, nickel silver, etc.) are available from Smooth-On or your Smooth-On distributor.

Post Finishing Cold Cast Bronze Elements - To bring forth the metallic finish, buff with 0000 steel wool. Patina coloring can then be achieved using various cold patinas. Casting should be sealed with wax, lacquer or clear acrylic spray to prevent oxidation.

Adding Pigments And Fillers - Because Forton™ MG blends easily with different materials, realistic effects can be achieved with the addition of various pigments and/or fillers. Liquid or dry pigments can be added during mixing. Other metal powders can be added to attain specific metal finishes (copper, pewter, silver). A marble finish can be attained by adding marble dust (calcium carbonate), 150 parts by weight to original mix formula. Quarry Tone™ fillers from Smooth-On can be added to give a granite look. Adding malachite will give a realistic porcelain finish. Wood grain finishes can be attained by adding powdered pecan shells or similar fillers. Metal powders and fillers are pre-mixed with dry components by weight. Amount of filler to be added depends on desired effect. Some experimentation may be necessary.

PACKAGING...

Forton™ MG Component packaging is as follows:

Component 1: VF-812 Polymer -

Unit	Weight
5 Gallon Pail	40 lbs. (18.1 kg)
55 Gallon Drum	480 lbs. (217.7 kg)

Component 2: MF-415 Resin -

Unit	Weight
3.5 Gallon Pail	25 lbs. (11.3 kg)
Bag	50 lbs. (22.7 kg)

Component 3: Ammonium Chloride Hardener -

Unit	Weight
1 Gallon Pail	6 lbs. (2.7 kg)
3.5 Gallon Pail	25 lbs. (11.3 kg)

Forton™ MG is also available in convenient "kit packaging" for test projects and smaller applications. Packaging as follows:

Forton™ MG Starter Kit* -

Product	Packaging	Weight
VF-812 Polymer	1 Gallon Pail	7 lb (3.2 kg)
MF-415 Resin	Envelope	1 lb (.5 kg)
Ammonium Chloride Hardener	Envelope	.05 lb (22 g)
USG FGR 95 Gypsum	Bag in a box	10 lbs (4.5kg)
Chopped "E" Glass	Envelope	1 lb (.5 kg)

Forton™ MG Sculptor Kit* -

Product	Packaging	Weight
VF-812 Polymer	5 Gallon Pail	40 lb (18.1 kg)
MF-415 Resin	(8) 1 lb Envelopes	8 lb (3.6 kg)
Ammonium Chloride Hardener	(8) .05 lb Envelopes	.4 lb (176 g)

* Sold as units only. Individual components not sold separately.

Forton™ MG Accelerator - Available in three convenient sizes: 1.59 oz (45 g) 1 lb (454 g) 12 lbs (5.4 kg).

Call Us Anytime With Questions About Your Application.

[redacted] is loaded with information about mold making, casting and more.

TECHNICAL DATA SHEET

EXTERIOR MINERAL BONDING PRIMER

PRODUCT DESCRIPTION

Mineral Bonding Primer is a sol-silicate primer designed to prepare exterior previously painted surfaces, glossy and tough to paint surfaces for subsequent painting with mineral paints and limewash. It provides tenacious adhesion and is ideal when multiple types of masonry are present, providing a uniform mineral surface. This primer has a sanded texture and can make uneven and aged masonry appear more uniform. Fills small cracks up to 1/32".

FIELD OF APPLICATION

Mineral Bonding Primer is used to bond to exterior previously painted and difficult to paint surfaces. It provides added adhesion when renovating or coating sound acrylic and silicone resin-based coatings, acrylic stucco, terracotta, brick, masonry and cement fiber siding. Do not use on floors or previous elastomeric coatings or oil base painted surfaces.

Mineral Bonding Primer is not a finish coat and can only be used as a base coat/primer; it must be over coated with 2 coats of a KEIM Mineral Masonry Paint or Limewash.

PRODUCT PROPERTIES

- Moisture vapor permeable, will never peel due to hydrostatic pressure
- Penetrates masonry and existing coatings and fuses—won't peel or lose adhesion
- Copolymer modification provides mechanical bond to previously painted surfaces (as outlined)
- Provides a uniform mineral surface for subsequent mineral and limewash topcoats and improves overall appearance
- Apply to a variety of mineral surfaces
- Noncombustible—won't add fuel or noxious smoke in case of fire
- Naturally mold, algae and fungus resistant—no pesticides used
- Subtle, sand texture

Technical data

Density	1.6 g/cm³
VOC (ASTM D6886)	< 1 g/liter
Organic Content	< 5%
Cured pH value	Approximately 11
Vapor Diffusion	sd (H2O) = <0.01 m
Water Absorption Coefficient	W=0.20 kg/m2 h 0.5 (acc. to DIN EN 1504)
Vapor Permeability (ASTM E96)	77 Perms
Flashpoint	Non-Flammable
Mildew Resistance ASTM D3273/D3274	Passes—No fungal growth

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Gloss at 85° ISO 2813	0.5 Mineral Matte Flat
All test results performed on 1 coat of Mineral Bonding Primer applied at 275—325 sf/gallon	

Environmental Compliance

EPA	YES
LEED	YES
CARB	YES
SCAQMD	YES
Greenguard Gold	YES
Cradle to Cradle	YES

Colors:
White Matte Flat

SPECIFICATIONS/SYSTEMS

Use as a primer system for Keim Mineral Masonry Paint and Limewash.

SURFACE PREPARATION

The substrate must be sound, solid, dry, clean and free of dust, grease, oils, salts, moss, algae and other substances that would prevent penetration and bonding. Old, oil base paints, loose substrate layers and loose latex or acrylic layers must be removed. Repair damaged areas as needed before painting.

APPLICATION

Mineral Bonding Primer may be applied by brush, roller or airless spray.

- Brush - Use a nylon/polyester brush
- Roller - Use a ½" to ¾" nap synthetic roller cover
- Airless Spray
  - Pressure: 3000 psi, minimum
  - Tip: .035 in
  - Remove filters from gun and pump, use 30 mesh filter on siphon tube only

Prime coat
Ready to use, apply as supplied. Allow it to dry 12 hours or overnight before recoating.

Application conditions
Ambient and substrate temperature: 40°F and rising and below 95°F. Do not apply it in direct sunlight or on sun-heated substrates. Protect coated surfaces from direct sunlight, wind, and rain during and after application for a minimum of 12 hours.

Drying times
Drying times are temperature, humidity and coverage dependent.

	@ 40-50°F	@ 50°F +
Touch:	4--6 hour	2--4 hours
Recoat:	24--48 hours	12 hours

Coverage

SUBSTRATE	COVERAGE*
Brick and Masonry	200—250 SF/GAL
Cement fiber Siding	250—300 SF/GAL
CMU Block (smooth)	100--150 SF/GAL
CMU Block (split faced)	50—75 SF/GAL
Portland Stucco	125—176 SF/GAL
*Stated values are based on our experience. Surface texture, porosity, application conditions and type of equipment used will all IMPACT consumption. Apply test area to determine actual coverage on your surface.	

Cleaning
Clean spills, spatters, hands, and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with a compliant cleanup solvent to prevent rusting of the equipment. Tools should be kept in the paint material or in water during work breaks.

Mixing with other products
Do not mix with water or other products.

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PACKAGING
Gallon and 4 Gallon

STORAGE
Approx. 12 months in tightly closed container under cool, frost-free conditions. Protect from heat and direct sunlight.

DISPOSAL
Dispose of completely emptied containers in accordance with local, state and federal waste regulations. Any residues must be emptied out of containers before recycling.

HAZARDOUS SUBSTANCE CLASS
n/a

TRANSPORT HAZARD CLASS
n/a

SAFETY INSTRUCTIONS

Provide appropriate protection for surfaces which are not to be coated (e.g. glass, natural stone, ceramics etc.). Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with plenty of water. Protect the eyes and skin from splashes.

Keep out of reach of children.

The stated values and properties are the result of extensive development work and practical experience. Our recommendations for application, whether given verbally or in writing, are intended to provide assistance in the selection of our products and do not establish a contractual relationship. In particular, they do not release those purchasing and applying our products from the duty of establishing for themselves, with due care, the suitability of our products for the intended application. Standard building industry practices must be complied with.

We retain the right to make modifications to improve the products or their application. This edition supersedes all earlier editions.

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TECHNICAL DATA SHEET

KEIM FIXATIVE + CONSOLIDANT

1. PRODUCT DESCRIPTION

KEIM Fixative is a clear binder, thinner and consolidation agent made from pure, liquid potassium silicate. It dries completely clear and develops a natural mineral matte finish which leaves the masonry surface completely natural in appearance without altering existing colors.

2. FIELD OF APPLICATION

Use KEIM Fixative as a binder and dilution for pure silicate-based, two-component paint systems, KEIM Purkristalat and KEIM Décor Paints. It may be used as a dilution for KEIM Granital. Also use KEIM Fixative as a vapor permeable primer on very porous masonry surfaces to reduce absorbency and extend coverage of subsequent mineral topcoats. It also helps to minimize variable porosity across surfaces that are highly porous resulting in a more uniform topcoat appearance. Use KEIM Fixative as an anti-dusting finish on interior or exterior brick, stone, stucco, concrete or any masonry surfaces. Fixative "ties down" loose masonry dust and elements and consolidates masonry to eliminate future dusting. Use KEIM Fixative as a mild consolidant for friable and damaged masonry, brick and stone. The penetrating action strengthens and restores weakened and decayed masonry by re-bonding the molecular structure on a cellular level. It fills voids and consolidates them. It is not a sealer as the stone remains breathable, but it will limit the absorption of ambient moisture to a slower rate, then that of an untreated stone.

Recommended Uses:

- Interior and exterior
- Above grade
- Aged, decayed and friable masonry and brick
- Cast and precast concrete
- Natural stone
- Stucco surfaces

3. PRODUCT PROPERTIES

KEIM Fixative penetrates and bonds permanently with the substrate, is highly moisture vapor permeable, extremely resistant to weathering and is incombustible. KEIM Fixativ contains no organic additives.

- Forms covalent chemical bonds, similar to those in original substrate—no synthetic polymers
- Extremely weather resistant
- Non-film forming, will not develop a hard crust
- Extremely moisture vapor permeable
- High binding power and fixing action
- Non-flammable
- UV resistant
- Hinders fungal and mold growth
- Resistant to acid rain and pollution
- Low viscosity allows deep penetration
- Environmentally friendly with low environmental impact

Technical data

Specific weight	approx. 1.17 g/cm³
Penetration Depth	Class II:= 10 mm
Active Content	100%
pH value	11.3
Vapor Permeability ASTM E 96	93+ perms
Solubility in water	Fully miscible
VOC	< 1 g/liter

Color: Clear (tea colored)

Environmental Compliance

EPA	YES
LEED	YES
CARB	YES
SCAQMD	YES

4. SPECIFICATIONS/SYSTEMS

For proper performance, porous surface must be thoroughly soaked and saturated with Fixative. Depending on surface porosity, level

of decay, etc. multiple and successive applications may be required.

5. SURFACE PREPARATION

The mineral substrate must be absorbent, sound, dry, clean and free from dust and grease. Loose areas, dirt, oily substances, release agents, curing compounds, moss and algae must be completely removed.

6. APPLICATION

Pretreat highly absorbent or sanding surfaces or as a consolidant:
Dilute Fixative with clean water in ratio of 1:1, 1:2 or 1:3. Apply diluted Fixative by flooding surface with brush, roller or airless spray. Multiple coats may be required if the surface is extremely porous, sanding or decayed.

To mix with Purkristalat or Décor Paints:
Soak 5 kg of color powder in 4 liters of KEIM Fixativ.

Anti-dusting applications:
Dilute Fixative with clean water in a ratio of 1:3. Apply diluted fixative by flooding surface with brush, roller or airless spray. Multiple coats may be required if surface is extremely porous, sanding or decayed.

To dilute Purkristalat, Décor Paints, or Granital:
Refer to relevant technical data sheet.

Application conditions
Ambient and substrate temperature: 40°F and rising. Do not apply in direct sunlight or on sun-heated substrates. Equipment and tools must be clean. The surface of the building material must be clean, dry and absorbent and may have to be cleaned beforehand. The quantity to be applied by flooding depends on the absorbency of the substrate (apply onto trial area). Nonabsorbent surfaces cannot be treated with Fixative. Avoid direct sunlight and exposure to strong wind. Protect coated surfaces from direct sunlight, wind and rain during and after application for a minimum of 12 hours.

Drying times
Drying times are temperature, humidity and coverage dependent.

	@ 40-50°F	@ 50°F +
Touch:	4--6 hour	2--4 hours
Reapply or topcoat:	10--24 hours	10 hours

Cleaning
Clean spills, spatters, hands, and tools immediately after use with water.

Coverage*

SUBSTRATE	COVERAGE*
Cast or Pre-Cast Concrete	250—300 SF/GAL
Fiber Cement Siding	250—300 SF/GAL
Portland Stucco	125—175 SF/GAL
CMU Block (smooth) and brick	75—100 SF/GAL
CMU Block (split faced or fluted)	25—50 SF/GAL
Gunite/Shotcrete	75—125 SF/GAL
Brick/Natural Stone Masonry	200—250 SF/GAL
*Stated values are based on our experience on smooth surfaces. Surface texture, porosity, application conditions and type of equipment used will all vary consumption. Only a test application, using desired mixing ratio and under production conditions will fore-cast consumption of the system components accurately.	

7. PACKAGING

4-liter (1.05 gal) and 24 liter (6.34 gal) Steel Pail

8. STORAGE

Approx. 12 months in tightly closed container under cool, frost-free conditions. Protect from heat and direct sunlight.

9. DISPOSAL

Dispose of completely emptied containers in accordance with local, state and federal waste regulations.

HAZARDOUS SUBSTANCE CLASS
Not Applicable

LIMITATIONS

Do not apply to polished stone or previously painted surfaces. Not for use below grade.

10. SAFETY INSTRUCTIONS

KEIM Fixative is alkaline.
Provide appropriate protection for surfaces which are not to be treated (e.g. glass, sidewalks, pavers, landscaping, etc.). Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with plenty of water. Protect the eyes and skin from splashes.
Keep out of reach of children.

The stated values and properties are the result of extensive development work and practical experience. Our recommendations for application, whether given verbally or in writing, are intended to provide assistance in the selection of our products and do not establish a contractual relationship. In particular, they do not release those purchasing and applying our products from the duty of establishing for themselves, with due care, the suitability of our products for the intended application. Standard building industry practices must be complied with. We retain the right to make modifications to improve the products or their application. This edition supersedes all earlier editions.

The information and recommendations set forth in this Technical Data Sheet are based upon tests conducted by or on behalf of KEIM Mineral Coatings. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult [redacted] for the latest in product technical information.

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TECHNICAL DATA SHEET

PSS 20® ECO GRAFFITI PROTECTION SYSTEM

1. PRODUCT DESCRIPTION

PSS 20 is a breathable, completely reversible, and indiscernible system for protection against graffiti, tape and adhesive, gum, heel marks and airborne soiling for masonry, concrete and stone and mineral painted surfaces. Use on interior or exterior facades, walls, planters, etc.
PSS 20 is made of vegetable polysaccharides and water with a high viscosity and is completely biodegradable and safe to use. PSS 20 is a natural sustainable product that is harmless to man, animal life and the environment. PSS 20 is sprayed on to the wall in at least one or more coats with an Airless sprayer, where on drying it forms a gossamer-thin protective film, normally invisible to the eye and creates a fully breathable type of coating. PSS 20 should be applied by professionals and skilled tradesmen.

2. FIELD OF APPLICATION

PSS 20 can be applied to all washable substrates. In the case of water-repellent substrates (e.g., those treated with hydrophobic agents), the surface tension must first be reduced with a pre-treatment or primer. PSS 20 should only be used on vertical surfaces. PSS 20 is especially suitable for all kinds of natural and artificial stone facades, clinker, concrete, brick, mineral coatings, metal, and aluminum facades and is ideal for protecting public art.

3. PRODUCT PROPERTIES

PSS 20 is a "sacrificial" finish that does not seal the surface. It has no VOC or harmful ingredients. PSS 20 protective film is much more effective than permanent graffiti sealers by forming an invisible layer that naturally "breathes", allowing moisture vapor to escape without compromising the graffiti protection. In historic and preservation applications, PSS 20 can be easily reversed as it does not form a permanent bond with the surface. Soiled or tagged PSS 20 is easily removed from the surface with hot water, carrying with it all the dirt, spray paint, algae, dust, oil stains, etc. A replacement layer of PSS 20 is then reapplied to the surface, to continue to provide a protective barrier.

- Non-yellowing
- Completely reversible—does not permanently bond to surface
- Almost indiscernible upon application—does not dramatically alter the appearance of the surface
- Ideal for protecting delicate and historic surfaces
- Does not alter vapor permeability of surface
- Protects murals and public art
- Very U.V. and weather resistant
- > 95% biodegradable
- No VOC's or solvents, made from plant materials
- Chemically nonreactive
- Easy removal of soiled finish with warm water washing
- No toxic gases produced on decomposition by heat

Technical data

Specific Weight	approx. 1.1 g/cm³
pH Value @ 20°C	approx. 6.5 (neutral)
Boiling point	100° C
Dry Film Thickness	1—1.5 mils per coat (minimum 2 coats required)
Water vapor permeability: according to DIN 52615:	Sd-value 0.012 m
Water Vapor Permeability ASTM E 96	80 perms
Carbonization: (LPM Construction materials lab Test No. A-13'041-1 of 18.03.93)	Good retardant effect
Viscosity	6000-7200 cpa
Flashpoint	Non-Flammable
VOC	0 g/liter
All test results performed on 2 coats PSS20 applied at 200--250 SF/GAL and 14-day cure @ 77°F & 50% RH	

Color and Appearance
Clear, slightly cloudy gel—dries clear

Environmental Compliance

EPA	YES
LEED	YES
CARB	YES
SCAQMD	YES

4. SURFACE PREPARATION

The substrate must be sound, clean, and free of oil, dust, grease, and silicone. For absorbent substrates: Thoroughly pre-wet substrate with clean water and allow excess water to run off. Surface should be saturated but not show signs of surface water (puddles or pools).
For non-absorbent substrates:
Substrate must be clean and dry at the time of application.

5. APPLICATION

PSS 20 is applied to the surface in two or three coats using airless spray equipment at a pressure of 1450 - 2900 psi. When spraying, both vertical and horizontal overlapping pattern should be used, which together will correspond to a normal coat of PSS 20. Do not apply in hot conditions. Application in temperatures above 90°F may lead to rapid evaporation of the water in the finish leading to adhesion problems.
Note: PSS 20 is very slippery in its liquid state.

Drying times
Drying times are temperature, humidity, and coverage dependent.

	@ 40-50°F	@ 50°F +
Touch:	4--6 hour	2--4 hours
Recoat:	24--48 hours	24 hours

Coverage*

SUBSTRATE	COVERAGE*
Masonry or Brick	100—200 SF/GAL
Natural Stone Masonry	100—250 SF/GAL
Cast or Pre-Cast Concrete	150—250 SF/GAL
Portland Stucco	75—125 SF/GAL
Mineral Paint Finish or Mural	150—250 SF/GAL
Metal Surfaces	200—250 SF/GAL

*Stated values are based on our experience on smooth surfaces and are for one coat. Multiple coats will require more material. Surface texture, porosity, application conditions and type of equipment used will all vary consumption. Only a test application under production conditions will forecast consumption accurately.

Cleaning
Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with a compliant cleanup solvent to prevent rusting of the equipment.

6. GRAFFITI REMOVAL

Graffiti on the PSS 20 protective film can be easily removed with hot water, without the need for chemicals. Remove soiled PSS 20 with a hot water pressure washer fitted with an adjustable fan nozzle. Saturate the surface to soften the outer layer of PSS 20. The water temperature should be between 60-70° C. Use the least amount of pressure possible, to avoid damaging the surface. On soft surfaces, a pressure of less than 250 psi is recommended. When the PSS 20 protective film is saturated, it will swell and begin to "slough" off. Peel off together with the graffiti. As the graffiti is no longer bonded, it can be easily collected and disposed of in the solid state. The graffiti does not come into contact with the actual surface and there is no "ghosting" or etching of the surface. Once the surface is cleaned and dried, a replacement coat of PSS 20 should be reinstalled immediately.

Further details on application and graffiti removal are available from Keim.

7. PACKAGING

25-liter plastic jerry can

8. STORAGE

Approximately 2 years in tightly closed container under cool, frost-free conditions. Protect from heat and direct sunlight.

9. DISPOSAL

Dispose of completely emptied containers in accordance with local, state, and federal waste regulations.

HAZARDOUS SUBSTANCE CLASS

n/a

10. LIMITATIONS AND CAUTIONS

PSS 20 should not be used on floors or other horizontal surfaces. Do not apply below 38°F or above 90°F. When removing PSS 20 be careful as it is slippery once removed with hot water.

11. SAFETY INSTRUCTIONS

Provide appropriate protection for surfaces which are not to be coated (e.g. glass, natural stone, ceramics etc.). Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with plenty of water. Protect the eyes and skin from splashes. Keep out of reach of children.

FORTON FMG Casting System

Polymer Additive System for Enhancing Alpha Gypsums

PRODUCT OVERVIEW

Forton™ MG is a four component system which consists of an alpha gypsum blended with three specialty additives. The additive system is based on the VF-812 water based polymer emulsion (50% solids) and greatly enhances the physical properties of alpha gypsum products. VF-812 drastically reduces water permeability, making it suitable for both interior and exterior applications (for exterior use, product must be sealed – see "Finishing" section).

The **Forton™ MG** system is easy to use and can be cast solid, rotationally cast, layed up by hand with glass fiber or sprayed. Fully cured pieces can be painted, sanded, machined and polished. **Forton™ MG** is used to make lightweight pieces that are very strong and water-resistant. Applications include making architectural elements, reproducing sculpture and special effects.

Vibrant colors are possible by adding pigments. Metal powders (bronze, copper, brass, etc.) can be added to give the look of real metal castings at a fraction of the cost. You can duplicate the look of marble or ceramic by adding inexpensive fillers. The **Forton™ MG** system meets **ASTM E-84, Class A (or 1)** flame rating for building materials.

Physical Properties of FMG Composite

Density: 95-100 lbs./ft^3

Working Time: 20-30 minutes*

Demold time: 60-90 minutes*

Color: Bright White

Tensile Ultimate, psi: 3,500-5,100 (24-35 MPa)

Flexural Ultimate, psi: 3,500-9,400 (24-65 MPa)

Compressive Strength, psi: 6,000-9,000 (41-62 MPa)

Impact Resistance ASTM D256: 170 in.lb./in^2

Coeffecient of Thermal Expansion: 11.1 x 10-6in/in/°F

Water Vapor Diffusion Coeffecient: 250 mμ

Freeze/Thaw Resistance: 300 cycles

Water Absorption: 0.8% after 24 hour water soak

Maximum Usable Temperature: 200°F (93°C)

All values measured after 14 day air cure.
Values were obtained using FGR 95 Alpha Gypsum from USG Corp. using 11.7% glass fibers.
*Depending on mass and environmental conditions. Time can be reduced with the addition of Aluminum Sulfate Accelerator.

PROCESSING RECOMMENDATIONS

PREPARATION...

Handling & Storage - Store and use material at room temperature (73°F/23°C). These products have a limited shelf life and should be used as soon as possible. Colder temperatures will slow the working/cure times, while warmer temperatures will reduce working times. Individual components should be stored in a dry environment at room temperature. Humid conditions will cause gypsum and resin to lose effectiveness. Do not allow the liquid VF-812 to freeze.

Mold Preparation - If casting or laying up into a urethane rubber mold, first apply a release agent such as Ease Release™ 2831. Newly mixed Forton™ MG can be released from another Forton™ MG surface using a minimum of three coats of Sonite™ Wax. If you want to paint your finished casting, we suggest using a silicone rubber mold (Mold Max™ Silicone), as no release agent is required to facilitate demold.

Because no two applications are quite the same, a small test application to determine suitability for your project is recommended if performance of this material is in question.

Required Materials - Assemble all components and accessories before you begin. You will need:

- Forton™ MG System Components (See Description Below)
- Measuring Containers
- Mixing Containers
- Weighing Scale (Digital Gram or Triple Beam Balance)
- Mechanical / Power Mixer (Jiffy or Hanson Mixer)
- NIOSH Approved Dust Mask
- Window Screen Or Similar For Filtering Mixture

System Components - The Forton™ MG System consists of four components (an alpha gypsum and three specialty additives).

Component 1 - Alpha Gypsum: You can not use just any gypsum/plaster product. **You must use an Alpha Gypsum** such as FGR 95 from USG Corp., Densite HL from Georgia Pacific, Crystacal R from British Gypsum or equivalent.

Component 2 - VF-812: White liquid. 50% solids polymer that crosslinks with Component 3 and gives Forton™ MG water resistant properties.

Component 3 - MF-415 Resin: Fine white powder. Enhances physical properties of the overall mix.

Component 4 - Ammonium Chloride Hardener: Crystalline Powder - looks like sugar. Added as a pH adjustor to ensure the proper cross-linking of the VF-812 and the MF-415 Resin.

MEASURING & MIXING...

Important: Use only fresh materials. Old materials (gypsum, polymer) will give inconsistent results.

To minimize dust inhalation, we recommend wearing a NIOSH approved dust mask while weighing and mixing components. You must use an accurate digital gram scale to weigh Parts A and B properly. Do not use an analog scale or attempt to measure components by volume.

Important: Components must be mixed in proper sequence. A power mixer should be used to mix all components.

1. Shake or stir VF-812 well. Dispense required amount into mixing container.
2. Combine All Dry Ingredients: Combine Alpha Gypsum + MF-415 + Hardener by weight into a suitable size mixing container. Mix dry components thoroughly with mixing paddle, power mixer, etc. until well blended. If adding fillers such as bronze powder, blend with dry components before adding to VF-812.
3. Sift dry ingredients into VF-812 liquid and mix all components with a power mixer. Continue mixing until all dry powder components are thoroughly dispersed (minimum 90 seconds).

Mix Design - Component quantities will vary depending on the size of the batch you are making. Below is a standard Forton™ MG mix design:

Parts By Weight

Alpha Gypsum	VF-812 Polymer	MF-415 Resin	Hardener
100	50	10	0.48

Working times and demold times will vary depending on mass, environmental temperatures and use of accelerator.

Accelerating Forton™ MG - The set and demolding times of the FMG system can be reduced by the use of an accelerator. For hand layup a solution of 1 lb of FMG Accelerator (Aluminum Sulfate) into 10 lbs of water can easily be made.

Mix the Forton™ MG components into a creamy slurry. Then add the accelerator while mixing. A good starting point is to add 1 tablespoon of accelerator for every 10 lbs of gypsum in the mix. The goal is to add just enough to accelerate the set time but not cause a snap set. Note: Local conditions and mix design can affect the strength of an accelerator. Experimentation will be required.

Retarding Forton™ MG - Some applications may call for a large quantity of Forton™ MG to be mixed and poured in a single mold (mass casting) or for "master batching" (a large amount is mixed and poured into many different molds for production casting). To achieve the longer working time and demold time necessary for these applications, citric acid can be added to the mix. A good starting point is to add citric acid in a quantity of 0.05% of the weight of the gypsum in the mix. The citric acid should be premixed into the VF-812 prior to adding dry components.

POURING & APPLICATION...

After thoroughly mixing components, the mixture is ready to be poured into a mold. For best results:

1. Pour a small amount of the Forton™ MG mix into the mold and brush or slush a face coat on all surfaces. This helps to break surface tension and ultimately reduce air bubbles. Tip: Slowly pour the face coat material through a window screen, kitchen colander or equivalent. This helps to eliminate any clumps or unmixed material that could affect the surface finish.
2. After a face coat is applied, the remaining mixture can be slowly poured into the mold.

Further Reducing Entrapped Air - Air bubbles are sometimes a concern with polymer modified gypsums and will vary depending on conditions. There are additional steps you can take to help reduce entrapped air:

1. Vibration - By placing the filled mold on a vibrating table, air will rise and dissipate from the mold surface.
2. Pressure - Requires pressure vessel and compressor. After mixture is poured into mold, place mold in a pressure vessel and subject mixture to 60 PSI (4.2 kg/cm^2) air pressure for one hour. NOTE: Molds must also have been cured under the same pressure. Otherwise, when the Forton™ MG is pressure cast in the mold, air bubbles trapped in the rubber will compress and the casting will be distorted. Pressure Casting is the only way to completely eliminate bubbles from your mix. Vacuuming material does not work.

Making Architectural Elements - Hand Lay-Up Technique - Forton™ MG can be reinforced with all typical "E" glass fiber reinforcements used in the composites industry. This includes continuous strand surfacing mats up to bi-axial and tri-axial woven glass fiber fabrics. Therefore, Forton™ MG can be used in a wide range of production/laminating processes. ASTM 1355 requires that a minimum of 5% glass fiber reinforcement is used. The flexural properties of Forton™ MG are very responsive to the amount and type of glass fiber reinforcement used, up to 15% of the composite weight.

Hand Lay Up Using Fiberglass Matting - For best results, use ¾ oz. or 1 oz. Chopped Strand Mat or Continuous Strand Mat. Mix Forton™ MG at the "standard" mix design and brush a face coat into a mold. Let set until the appearance starts to turn from shiny to dull, or until you can no longer see your fingerprint if touched. Mix another batch and brush a layer over initial face coat. Lay matting over fresh material and let material penetrate matting. Brush with a clean paint brush, applying light pressure over surface to minimize entrapped air. After a uniform coating is attained, apply another layer of matting and brush again. Apply a minimal amount of Forton™ MG - just enough to wet out the surface. Repeat as necessary until ⅜" (10 mm) thickness is attained.

Hand Lay Up Technique Using Chopped Glass - Another technique for making strong, lightweight elements is to mix chopped fiber directly into the Forton™ MG standard mix. Adding chopped fiber takes much less time than layering chopped matte. The chopped fiber will be added to the mix as a percentage of the total weight. Fiber can be added in concentrations of 5% to 12%.

How To Proceed - A face coat should first be applied to the mold surface. This initial coat should be the standard Forton™ MG mix design and contain no fiber. This ensures a fine surface finish with no exposed fibers. Next, a backup mix can be created that will have fibers added. Calculate the total weight of Forton™ MG required for the backup mix. Based on this, calculate and dispense the amount of fiber needed (5%-12% of the total weight). Fibers should be added to a thoroughly mixed Forton™ MG Slurry. Mix thoroughly with a power mixer until fibers are uniformally dispersed. Do not overmix. Apply mixture with gloved hand or spatula over face coat. Another application may be required to attain 3/8" (10 mm) thickness.

FINISHING & PERFORMANCE...

Post Finishing - After elements have fully cured, they can be sanded or sand blasted to achieve the desired surface texture. "Wet Sanding" is advisable to minimize dust particles and build up on sand paper.

For Exterior Use, Apply A Sealer - Because the Forton™ MG system substantially reduces the water absorption rate of alpha gypsums, elements made with Forton™ MG are suitable for exterior use. Elements must, however, be sealed with a suitable siloxane sealer or concrete / masonry sealer such as Euclid Chemical Baracade Silane 40 WB or Baracade Silane 100 C. Elements can also be painted with an outdoor acrylic paint.

Making "Cold Cast Bronze" Elements - Reproducing the look of bronze is a common application for Forton™ MG because you can achieve the look of real bronze at a fraction of the cost. For making solid castings, the following proportions will work well. –325 mesh bronze powder is recommended and should be pre-mixed with dry Forton™ MG components prior to adding to VF-812.

Parts By Weight

Alpha Gypsum	VF-812 Polymer	MF-415 Resin	Hardener	Bronze Powder
100	70	10	0.48	150

Optional: Pigments can be added to the system to affect the finished look of the cold cast part. For example, adding a dark pigment (black or dark brown) to the mix will give the final casting added definition and dimension when working with bronze powder. Powdered iron oxide pigments and SO-Strong™ color tints work well with the Forton™ MG system.

Metal powders (bronze, copper, brass, nickel silver, etc.) are available from Smooth-On or your Smooth-On distributor.

Post Finishing Cold Cast Bronze Elements - To bring forth the metallic finish, buff with 0000 steel wool. Patina coloring can then be achieved using various cold patinas. Casting should be sealed with wax, lacquer or clear acrylic spray to prevent oxidation.

Adding Pigments And Fillers - Because Forton™ MG blends easily with different materials, realistic effects can be achieved with the addition of various pigments and/or fillers. Liquid or dry pigments can be added during mixing. Other metal powders can be added to attain specific metal finishes (copper, pewter, silver). A marble finish can be attained by adding marble dust (calcium carbonate), 150 parts by weight to original mix formula. Quarry Tone™ fillers from Smooth-On can be added to give a granite look. Adding malachite will give a realistic porcelain finish. Wood grain finishes can be attained by adding powdered pecan shells or similar fillers. Metal powders and fillers are pre-mixed with dry components by weight. Amount of filler to be added depends on desired effect. Some experimentation may be necessary.

PACKAGING...

Forton™ MG Component packaging is as follows:

Component 1: VF-812 Polymer -

Unit	Weight
5 Gallon Pail	40 lbs. (18.1 kg)
55 Gallon Drum	480 lbs. (217.7 kg)

Component 2: MF-415 Resin -

Unit	Weight
3.5 Gallon Pail	25 lbs. (11.3 kg)
Bag	50 lbs. (22.7 kg)

Component 3: Ammonium Chloride Hardener -

Unit	Weight
1 Gallon Pail	6 lbs. (2.7 kg)
3.5 Gallon Pail	25 lbs. (11.3 kg)

Forton™ MG is also available in convenient "kit packaging" for test projects and smaller applications. Packaging as follows:

Forton™ MG Starter Kit* -

Product	Packaging	Weight
VF-812 Polymer	1 Gallon Pail	7 lb (3.2 kg)
MF-415 Resin	Envelope	1 lb (.5 kg)
Ammonium Chloride Hardener	Envelope	.05 lb (22 g)
USG FGR 95 Gypsum	Bag in a box	10 lbs (4.5kg)
Chopped "E" Glass	Envelope	1 lb (.5 kg)

Forton™ MG Sculptor Kit* -

Product	Packaging	Weight
VF-812 Polymer	5 Gallon Pail	40 lb (18.1 kg)
MF-415 Resin	(8) 1 lb Envelopes	8 lb (3.6 kg)
Ammonium Chloride Hardener	(8) .05 lb Envelopes	.4 lb (176 g)

* Sold as units only. Individual components not sold separately.

Forton™ MG Accelerator - Available in three convenient sizes: 1.59 oz (45 g) 1 lb (454 g) 12 lbs (5.4 kg).

Call Us Anytime With Questions About Your Application.

[redacted] is loaded with information about mold making, casting and more.

UNIFILO® 500 SERIES

BRING TAILORED SOLUTIONS TO PULTRUSION

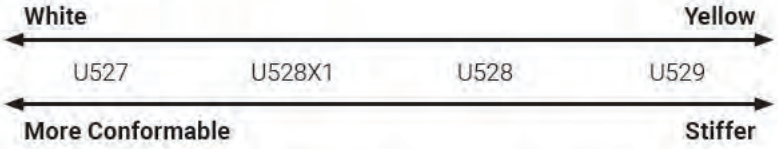
Unifilo® 500 Series continuous filament mat represent a large choice of tailored reinforcement solutions for efficient manufacture of high performance profiles by pultrusion process.

- Produced with patented Advantex® corrosion resistant E-CR glass by Owens Corning.
- Made of continuous filaments randomly-oriented and bonded together w a thermoset binder.

Product Benefits

Customized for multiple needs

- Unifilo® 500 Series mats are available with varying levels of binder to match up with specific customer applications.



Freedom of design and white color

- U527 product easily adapts to complex die shapes and preserves part white color.
- U528X1 product offers a great balance between softness, white color and good tensile strength requirements.

Productivity and high performance

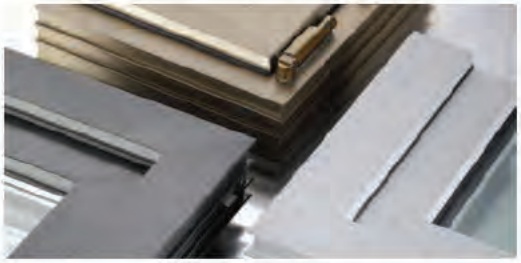
- U528 product is easy to splice and enables excellent processability. It provides very good mechanical and di-electrical properties to molded parts.
- U529 product higher tensile strength fits the requirement for most challenging profiles and fast pultrusion process speed.

Corrosion resistance

- Excellent corrosion resistance with Advantex® Glass compared to standard E-glass: providing longer service life in applications facing corrosion.

Application

UNIFILO® 500 Series mats are compatible with unsaturated polyester, vinyl ester, acrylic and epoxy resins and designed for the reinforcement of pultruded shapes including gratings, ladder rails, frames, insulators. They are also proven to be well suited for compression molding of di-electrical laminates.



Availability

Unifilo® 500 Series mats are available in Europe and Asia-Pacific. U529 is available in North America.
All products are made to order. Additional widths are available upon request by your Owens Corning contact.

NOMINAL MAT WEIGHT (G/M²)	MAT WEIGHT (OZ./SQ.FT.)	ROLL WIDTH (CM)	ROLL WIDTH (IN)
225 - 300 - 450 - 600 - 900	0.75 - 1.0 - 1.5 - 2.0 - 3.0	127 - 138	50 - 54.3

Packaging (Standard Reference)

Each roll is wound on a 103mm internal diameter cardboard tube and wrapped with a transparent stretch film.
Upon customer request:

- Paper tube holds printed information allowing 100% traceability once roll is slit
- Rolls can be slit into 3-40cm stripes.

NOMINAL MAT WIDTH (CM)	ROLL DIAMETER	ROLLS PER PALLET	PALLET SIZE (CM)
3 to 40	55	≥12 (to box capacity)	4 boxes on 114 x 114 pallet
40 to 70	55	12	114 x 114
70 to 105	55	8	114 x 114
105 to 210	55	4	114 x 114
>210	55	2 - 8	Wooden Crate

Labeling

Each roll bears a label detailing the product description, product code, real weight, roll width, roll number and date of manufacture; in case of stripes, only one label per cardboard box will be provided.

Storage

Unless otherwise specified, it is recommended to store glass fiber products in a cool, dry area. Ideal conditions are at a temperature between 10°C and 35°C and a relative humidity between 35% and 85%. The glass fiber products must remain in their original packaging material until the point of usage. If the storage temperature is below 15°C, it is recommended that the product be stored in the workshop, within its original packaging, at least 24 hours prior to use to help prevent condensation. The packaging is not waterproof. Be sure to protect the product from the weather and other sources of water. When stored properly, there is no known shelf life to the product, but retesting is advised after three years from the initial production date to insure optimum performance.

Americas

Owens Corning Composite Materials, LLC.

[redacted]

Europe

European Owens Corning Fiberglas Sprl.

[redacted]

Asia Pacific

Owens Corning Shanghai Regional Headquarters

[redacted]

Pub number: 10010965-D. Unifilo 500 series_CFM_product data sheet_emea-ap_10-2018_Rev2. January 2019. English.

TECHNICAL DATA SHEET

SOLDALIT®

SOL-SILICATE ALL SURFACE MINERAL FINISH

MONOCHROME COLORS

PRODUCT DESCRIPTION

SOLDALIT® Sol-silicate All Surface Mineral Finish is our very best exterior finish for previously painted masonry surfaces and for bare masonry of all types. SOLDALIT uses a proprietary formula combining silica-sol and potassium silicate binders, inorganic mineral pigments and fillers and an acrylate copolymer to form both chemical and mechanical bonds, even on the most difficult to paint substrates, without primer coats. This new-generation mineral silicate paint is ideal for finishing ceramic glazed tile and terra cotta, glass, non-ferrous metals, granite, marble, pebble-dash concrete and previous acrylic or latex painted surfaces. It is also ideal for all masonry surfaces exposed to severe weather conditions. Tenacious adhesion is enhanced with SOLDALIT's nanoparticle technology that allows penetration of even the densest mineral or masonry substrates and provides a mechanical anchor to most existing organic, latex, or acrylic paints that are in sound condition.

SOLDALIT meets all requirements of DIN 18.363, 2.4.1 "silicate emulsion paint".

FIELD OF APPLICATION

SOLDALIT is applied typically as a 2 or 3 coat system and is recommended for new construction and renovation of sound acrylic and silicone resin-based paints, acrylic stucco, terracotta, bare masonry, all types of concrete, stone, and most other mineral substrates. It is ideal for restoration of historic structures and facades due to high vapor permeability coupled with water repellency. It may be applied over polymer modified cementitious patching compounds that are fully cured. Do not use over aged alkyd or oil-based paints, varnish, or lacquer. SOLDALIT is suitable for vertical facade installations and inclined surfaces. Do not use on floors.

PRODUCT PROPERTIES

SOLDALIT protects masonry surfaces from the action of weather and prevents the penetration of atmospheric pollutants. It utilizes only lightfast inorganic mineral pigments and fillers, and colors will not fade, even in harsh U.V. environments. SOLDALIT is available in a smooth or sand texture base.

- Sol-Silicate binder system penetrates masonry and chemically bonds—won't peel or lose adhesion
- Copolymer modification provides mechanical bond to previously painted surfaces (as outlined)
- Lightfast mineral pigments—guaranteed not to fade or lose brilliance
- Apply to a variety of mineral surfaces
- Very water vapor permeable, microporous
- Completely resistant to pollution
- Provides extreme weather resistance and water repellency
- Noncombustible—won't add fuel or noxious smoke in case of fire
- Beautiful, mineral matte finish
- Anti-static, inert finish—won't attract or trap dirt or dust for walls that stay cleaner
- Naturally mold, algae and fungus resistant—no pesticides used

ENVIRONMENTAL COMPLIANCE

UL Greenguard Gold	YES
EPA	YES
LEED	YES
CARB	YES
SCAQMD	YES
Cradle to Cradle Health	Gold
Cradle to Cradle	Silver

Technical data

Density	1.6 g/cm³
VOC (ASTM D6886)	< 1 g/liter
Organic Content	< 5%
Cured pH value	Approximately 11
Vapor Diffusion	sd (H2O) = <0.01 m
Water Absorption Coefficient	W=0.20 kg/m2 h 0.5 (acc. to DIN EN 1504)
Lightfastness of color pigment (Fb-Code acc. to BFS technical bulletin No. 26)	A1 Best in class rating No color change after 4 years
Vapor Permeability (ASTM E96)	77 Perms
Flashpoint	Non-Flammable
Accelerated Weathering ASTM G154	2016 Hours Passes No change or deterioration of any type
Wind Driven Rain ASTM E514	Passes No water leakage
Mildew Resistance ASTM D3273/D3274	Passes—No fungal growth
Alkali Resistance ASTM D1308	Passes—no visible change at 24 hours
Chloride Ion Permeability	Permeability Class: Very Low
Surface Burning Characteristics ASTM E 84-08	Class A Flame Spread Index = 0; Smoke Developed Index = 0
Gloss at 85° ISO 2813	0.5 Mineral Matte Flat
All test results performed on 2 coats Soldalit applied at 300—350 sf/gallon	

Colors:
Interior/Exterior single chroma mineral oxide colors.

9001S Titanium Yellow


9002S Yellow Oxide


9003S Red Oxide


9004 Umbra


9005 Green Oxide


9006 Ultramarine Blue


9007 Brown Oxide


9008 Black Oxide


9009S Cobalt Blue


9010S Dark Red Oxide


9011S Orange Oxide


9012S Chrome Green

BOX COLORED PAINT

To ensure consistency of color on large areas, all colored paint should be thoroughly mixed with a power drill and paddle for 1—3 minutes. Box paint together in larger containers and remix. Continue boxing and mixing for consistent color.

SPECIFICATIONS/SYSTEMS

For proper waterproofing and weather resistant performance, 2 coats of SOLDALIT must be applied at recommended coverage rates. Surface should be fully coated, with no pinholes, runs or holidays.

Concrete and cementitious patches (all types)
Pretreat: Keim Heavy Duty Cleaner (if needed)
1 coat SOLDALIT diluted 10% with Soldalit Dilution
1 coat SOLDALIT as supplied

CMU Block
1 coat Contact Plus Grob Block Filler (as desired)
1 coat SOLDALIT diluted 10% with Soldalit Dilution
1 coat SOLDALIT as supplied

Masonry (brick and stone) and stucco
Pretreat extremely porous surfaces (if needed): Soldalit Dilution (mixed 1:3 with water)
1 coat SOLDALIT diluted 10% with Soldalit Dilution
1 coat SOLDALIT as supplied

Previously Painted Mineral Surfaces
1 coat SOLDALIT diluted 10% with Soldalit Dilution
1 coat SOLDALIT as supplied

Hard, Glossy Mineral Surfaces and Terracotta
Scuff sand or abrade glossy surfaces (if needed)
1 coat SOLDALIT diluted 10% with Soldalit Dilution
1 coat SOLDALIT as supplied

Added Water Repellency (on any mineral surface)
Pretreat: Silan 100 Silane Water Repellency applied in multiple coats as needed to saturate surface. CRITICAL RECOAT: Apply first coat of Soldalit within 4—8 hours. DO NOT ALLOW SILAN 100 TO DRY COMPLETELY.
1 coat SOLDALIT diluted 10% with Soldalit Dilution
1 coat SOLDALIT as supplied

Patched, Cracked and Irregular Mineral Surfaces
1 coat of SOLDALIT Sand Texture Base (Grob)* diluted 10% with Soldalit Dilution
1 coat of SOLDALIT as supplied

*Texture base is designed to provide a more uniform final appearance by adding a slight sand texture and can help fill-in cracks and voids up to 1/16" wide and deep. It is several shades lighter than the final color to allow for full coverage of finish. The maximum particle size is 0.5mm quartz granules.

SURFACE PREPARATION

The substrate must be sound, solid, dry, clean, and free of dust, grease, oils, salts, moss, algae, and other substances that would prevent penetration and bonding. Old oil-based coatings, loose substrate layers and loose latex or acrylic layers must be removed. Repair damaged areas as needed before painting. Clean mineral surfaces as needed with KEIM Heavy Duty or Light Duty Cleaner or KEIM Bio Cleaner.

Soft, porous, or friable mineral surfaces, where substrate porosity is variable or aged existing mineral coats may be stabilized and consolidated by pretreatment with SOLDALIT Dilution. Mix 1 part Dilution with 3 parts fresh water and apply to porous surface to saturation. Allow surface to dry 12 hours before proceeding.

APPLICATION

SOLDALIT may be applied by brush, roller, or airless spray.

- Brush - Use a nylon/polyester brush
- Roller - Use a ½" to ¾" nap synthetic roller cover
- Airless Spray
  - Pressure: 3000 psi, minimum
  - Tip: .035 in
  - Remove filters from gun and pump, use 30 mesh filter on siphon tube only

First coat

SOLDALIT may be diluted up to 10% with Soldalit Dilution depending on the substrate porosity or to slow down dry in hot conditions. Allow it to dry 12 hours or overnight before recoating.

Topcoat
Apply SOLDALIT undiluted, as supplied. There is no recoat window after the first coat has dried. NOTE: For extreme weather conditions or critical, intensive color shades it is recommended to apply a three-coat system.

Application conditions
Ambient and substrate temperature: 40°F and rising and below 95°F. Do not apply in direct sunlight or on sun-heated substrates. Protect coated surfaces from direct sunlight, wind, and rain during and after application for a minimum of 12 hours.

Drying times
Drying times are temperature, humidity, and coverage dependent.

	@ 40-50°F	@ 50°F +
Touch:	4--6 hour	2--4 hours
Recoat:	24--48 hours	12 hours

Coverage

SUBSTRATE	COVERAGE*
Cast or Pre-Cast Concrete	275—325 SF/GAL
Fiber Cement Siding	275—325 SF/GAL
Brick and Masonry	225—275 SF/GAL
CMU Block (smooth)	100--150 SF/GAL
CMU Block (split faced or fluted)	50—75 SF/GAL
Portland Stucco	150—200 SF/GAL
*Stated values are based on our experience with a smooth finish. Surface texture, porosity, application conditions and type of equipment used will all vary consumption. Only a test application under pro-duction conditions will forecast consumption of the system accurately.	

Clean Up

Clean tools immediately after use with water. Tools should be kept in the paint material or in water during work breaks.

This product may permanently etch and irreversibly bond to mineral surfaces it is splashed onto including concrete, masonry, glass, and metal. Clean spills, overspray, etc. immediately with soap and water.

Mixing with other products

To maintain the specific features of SOLDALIT and the related system products, they must not be mixed with other products or additives, nor must they be diluted with water.

PACKAGING
Quart, Gallon and 4 Gallon

STORAGE
Approx. 12 months in tightly closed container under cool, frost-free conditions. Protect from heat and direct sunlight.

DISPOSAL
Dispose of completely emptied containers in accordance with local, state, and federal waste regulations. Any residues must be emptied out of containers before recycling.

HAZARDOUS SUBSTANCE CLASS
n/a

TRANSPORT HAZARD CLASS
n/a

SAFETY INSTRUCTIONS

CAUTION! SKIN OR EYE CONTACT MAY CAUSE TEMPORARY IRRITATION

Use proper protective equipment and clothing. Avoid breathing spray mist. Open windows and doors or use other fresh air supply during application indoors or wear respiratory protection (NIOSH Approved). Wash hands and skin after handling. Keep container closed when not in use. FIRST AID: If swallowed, give two glasses of water. Do not induce vomiting. Call for medical help immediately. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If breathing is difficult, give oxygen. In case of skin irritation, consult a physician. In case of contact, immediately flush eyes, and skin with plenty of water; get medical help if needed.

The stated values and properties are the result of extensive development work and practical experience. Our recommendations for application, whether given verbally or in writing, are intended to provide assistance in the selection of our products and do not establish a contractual relationship. In particular, they do not release those purchasing and applying our products from the duty of establishing for themselves, with due care, the suitability of our products for the intended application. Standard building industry practices must be complied with. We retain the right to make modifications to improve the products or their application. This edition supersedes all earlier editions.

Chart showing the strength of fiberglass rebar.
6 mm/quarter-inch fiberglass rebar I intend to use on the inside of my sculpture castings.

Property	Data for products on sale										
Diameter(mm)	4	6	8	10	14	20	22	25	30	36	40
Cross section(mm2)	12	28	50	73	134	278	355	478	671	961	1190
Density(g/m3)	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Ultimate tensilestrength(Mpa)	1100	1100	1100	980	764	716	695	675	637	575	509
Ultimate shear strength(Mpa)	>150	>150	>150	>150	>150	>150	>150	>150	>150	>150	>150
Weight(g/m)	32	51	100	150	275	570	700	970	1350	2044	2380
Ultimate tensile(KN)	18	36	54	72	117	225	270	342	450	585	640
E-modulus(GPa)	>40	>40	>40	>40	>40	>40	>40	>40	>40	>40	>40

GRAINGER

Sign Mounting Brackets: 4 in to 12 in Round, Strap-On, Stainless Steel, Unfinished, Silver, 1 PR

Item **1DYJ6** Mfr. Model **037-00011**

Web Price
$34.10 / pair

Qty 1

Add to Cart

Ship | Pickup

Expected to arrive
Wed. Aug 21.

Ship to **94601** | Change

Shipping Weight **0.7 lbs**

Ship Availability Terms

Add to List

Product Details

Catalog Page 1853

Brand **TAPCO**

Mounts To **Sign Post**

Compatible Sign Post **4 in to 12 in Round**

Mounting Bracket Type **Leg Strapping Bracket**

Hardware Type **Mounting Bracket**

Mounting Bracket Attachment Method **Strap-On**

Mounting Bracket Style **No Series**

Mounting Bracket Adjustment Angle **No Adjustment**

Number of Sides **1**

Material **Stainless Steel**

Finish **Unfinished**

Color **Silver**

Includes
(2) +4SS Flared Leg Brackets, (2) 5/16 x 5/8 in Hex Head Bolts, (2) 3/8 in Nylon Washers, (4) End Pieces, (2) 36 in Pre Cut Straps, (2) 5/16 x 1-3/4 in Hex Head Bolts, (2) 5/16 in Hex Nuts

Documents

BRKT Flared Users Guide

GRAINGER®

FOR THE ONES WHO GET IT DONE

Supplies & Solutions for Every Industry®

ACCESS TO EXPERTS WITH ANSWERS | 24/7 CUSTOMER SERVICE | FAST DELIVERY

4ZH33

39F186

35XF80

BRADY. TAPCO Safe travels:

U-Channel Sign Posts

- Prepunched mounting holes

Aluminum/Composite Sign Posts—Use open-profile posts for signs up to 12" x 18", closed-profile for signs up to 30" x 30". Closed-profile posts are pointed for easy installation and include a top cap.

Breakaway Steel Sign Posts—Constructed of Rib-Bak high-carbon billet that is 25% stronger than other U-Channel posts. Mounting holes on 1" centers. Mounting hardware sold separately.

U-Channel Profile	Post lb./ft.	Post Dim.	Post Color	Post Finish	Item No.
Aluminum, Composite Sign Posts—Brady					
Closed	3.5 lb/ft	8 ft	Green	Unfinished	4ZH35
Closed	3.5 lb/ft		White	Unfinished	4ZH33
Open	2.5 lb/ft		Green	Unfinished	4ZH34
Open	2.5 lb/ft		White	Unfinished	4ZH32
Breakaway Steel Sign Posts—Tapco					
Open	2 lb/ft	8 ft x 3 3/16 in x 1 15/32 in	Green	Powder Coated	6T437
Open	2 lb/ft		Silver	Galvanized	4LNK2
Open	1.12 lb/ft	8 ft x 2 1/4 in x 7/8 in	Green	Powder Coated	39F187
Open	1.12 lb/ft		Silver	Galvanized	39F193
Open	2 lb/ft	7 ft x 3 3/16 in x 1 15/32 in	Green	Powder Coated	39F188
Open	2 lb/ft		Silver	Galvanized	39F191
Open	1.12 lb/ft	7 ft x 2 1/4 in x 7/8 in	Green	Powder Coated	4LNK3
Open	1.12 lb/ft		Silver	Galvanized	4LNK4
Open	2 lb/ft	6 ft x 3 3/16 in x 1 15/32 in	Green	Powder Coated	3JY32
Open	2 lb/ft		Silver	Galvanized	39F189
Open	1.12 lb/ft	6 ft x 2 1/4 in x 7/8 in	Green	Powder Coated	39F186
Open	1.12 lb/ft		Silver	Galvanized	39F192
Open	2 lb/ft	3 ft x 3 3/16 in x 1 15/32 in	Green	Powder Coated	53JH65
Open	2 lb/ft		Silver	Galvanized	53JH66
Open	2 lb/ft	12 ft x 3 3/16 in x 1 15/32 in	Green	Powder Coated	6G764
Open	2 lb/ft		Silver	Galvanized	39F190
Open	2 lb/ft	10 ft x 3 3/16 in x 1 15/32 in	Green	Powder Coated	6G763
Open	2 lb/ft		Silver	Galvanized	4LNJ9
Steel Sign Posts—Brady					
Open	2 lb/ft	8 ft x 3 21/64 in x 3 in	Green	Baked Enamel	35XF84
Open	2 lb/ft	6 ft x 3 21/64 in x 1 1/2 in	Green	Baked Enamel	35XF86
Open	2 lb/ft	12 ft x 3 21/64 in x 3 in	Green	Baked Enamel	35XF76
Open	2 lb/ft	10 ft x 3 1/8 in x 1 1/2 in	Green	Baked Enamel	35XF80

TAPCO Safe travels: BRADY.

Round Sign Posts

- All sign bases are black

Steel Sign Posts—High-tensile galvanized steel posts resist corrosion. Not punched.

Sign Post with Flexible Spring Base—Square base mounts to concrete or asphalt. Holds signs up to 18" x 24", includes mounting hardware and post installation kit. Not punched.

Portable Sign Posts with Bases—488F11 holds signs up to 18" x 24". 1VC44 and 1DYJ4 handle signs up to 24" x 24"; mounting hardware included. 1VC44 has holes on 1" centers. Prepunched.

35ZP21

1DYJ5

488F11

1DYJ3

Post Dim.	Post Color	Post Finish	Wall Thickness	Holes on 1 in. Centers	Brand	Item No.
Sign Posts, Steel						
10 ft x 2 3/8 in	Silver	Galvanized	16 ga	No	Tapco	9A908
12 ft x 2 3/8 in	Silver	Galvanized	(.065 in)	Yes	Tapco	35ZP21

Post Dim.	Post Color	Post Finish	Base Wt.	Base Dia.	Brand	Item No.
Sign Post with Flexible Spring Base, Polypropylene						
5 ft x 8 in x 8 in	White	Unfinished	1 lb	8 in	Brady	1DYJ5
Portable Sign Post with Base, Steel						
4 ft 3 in x 1 5/8 in	Black	Enamel	24 lb	14 in	Lyle	488F11
Portable Sign Post with Base, Iron						
4 ft x 17 in x 17 in	Black	Enamel	35 lb	17 in	Brady	1VC44
Portable Sign Posts with Bases, PVC Post with Rubber Base						
5 ft	White	Unfinished	30 lb	15 in	Brady	1DYJ3
5 ft		Unfinished	60 lb	15 in	Brady	1DYJ4

TAPCO Safe travels: BRADY.

Square Sign Posts

These posts are for signs up to 36" x 36". Have holes on 1" centers. Steel posts resist corrosion.

8LV68

35ZP22

Post Dim.	Post Color	Post Finish	Wall Thickness	Brand	Item No.
Steel, Prepunched Full Length of Post					
8 ft x 2 in x 2 in	Silver	Galvanized	14 ga (0.0781 in)	Tapco	8LV68
	Natural	Zinc Plated	14 ga	Brady	15Y869
10 ft x 1 3/4 in x 1 3/4 in	Silver	Galvanized	14 ga (0.0781 in)	Tapco	49AE50
10 ft x 2 in x 2 in	Silver	Galvanized		Tapco	8LV69
12 ft x 1 3/4 in x 1 3/4 in	Silver	Galvanized		Tapco	49AE51
12 ft x 2 in x 2 in	Silver	Galvanized		Tapco	35ZP22

Sign Bases and Accessories

TAPCO Safe travels: BRADY. ZING DESIGNOVATIONS, INC.

Compatible Sign Post Style and Size		Base Shape	Base Wt.	Base Material	Base Color	Base Dia.	Brand	Item No.
Surface Mount Sign Post Bases								
Round, Square	2 3/8 in Round, 2 in x 2 in	Round	6 lb	Aluminum	Silver	15 in	Tapco	3YVU7
U-Channel	2 3/4 in x 1 1/2 in	Round	7 lb	Aluminum	Silver	14 1/2 in	Lyle	488F10
	1 1/4 in x 1 1/2 in	Round	8 lb	Aluminum	Silver	14 1/2 in	Brady	4VL34
Portable Sign Post Bases								
Round, Square, U-Channel	2 3/8 in Round, 2 in x 2 in Square, 3 3/16 in x 1 9/32 in U-Channel	Round	70 lb	Concrete	Silver	18 in	Tapco	9RX15
Square	1 3/4 in	Cone	72 lb	Rubber	Black	18 in	Zing	488D02
	2 in x 2 in	Cone	125 lb	Concrete	Gray	18 in	Tapco	3SZP20
	2 in x 2 in	Pyramid (Square)	250 lb	Concrete	Gray	18 in	Tapco	3SZP18

Material	Ground Type for Anchor	No. of Holes	Compatible Sign Post Style and Size		Brand	Item No.
Breakaway Surface-Mount Sign Post Anchors						
Cast Iron	Concrete	3	Square	2 in x 2 in	Designovations Inc.	6XDH8
		3	Square	2 1/2 in x 2 1/2 in	Designovations Inc.	6XDJ0
Breakaway In-Ground Sign Post Anchor						
Steel	Standard Soil	0	Round	2 3/8 in	Tapco	3PND9
Surface-Mount Sign Post Anchors						
Galvanized Steel	Asphalt, Concrete	4	Square	2 in x 2 in	Tapco	25AZ05
		4	Square	1 3/4 in x 1 3/4 in	Tapco	49AE52
Anchor Sleeves—36 in L						
Galvanized Steel	Asphalt, Concrete, Standard Soil	0	Square	1 3/4 in x 1 3/4 in	Tapco	49AE49
		0	Square	2 in x 2 in	Tapco	49AE47
Anchor Sleeve—48 in L						
Galvanized Steel	Asphalt, Concrete, Standard Soil	0	Square	2 in x 2 in	Tapco	49AE48

Description	Material	Color	Brand	Item No.
Manual Post Driver and Sign Post Drive Cap				
Manual Fence Post Drivers	Steel	Black/Gray	—	9ANX7
	Steel Alloy	Silver	Tapco	3PNJ2

Description	Compatible Sign Post	Brand	Item No.
Sign Mounting Hardware			
Sign Mounting Brackets, Strap-On	4 in to 12 in Round	Tapco	1DYJ6
Single-Sided Sign Mounting Brackets, Clamp-On	2 3/8 in Round	Tapco	9FPR4
Double-Sided Sign Mounting Brackets, Clamp-On	2 3/8 in Round	Tapco	8LV70
Street Sign Cross-Piece Bracket, Bolt-On	—	Tapco	3PNG7
Vandal Resistant Sign Mounting Hardware, Bolt-On	1 3/4 in x 1 3/4 in Square, 1.12 lb/ft U-Channel, 2 in x 2 in Square, 2 lb/ft U-Channel	Tapco	4ZH36
Vandal Resistant Sign Mounting Brackets Kit, Clamp-On	2 3/8 in Round	Tapco	24WH48

3YVU7

4VL34

9RX15

488D02

3PND9

49AE47

9ANX7

3PNJ2

1DYJ6

9FPR4

6XDH8

4ZH36

Product Details

Catalog Page

1853

Brand

TAPCO

Mounts To

Sign Post

Compatible Sign Post

4 in to 12 in Round

Mounting Bracket Type

Leg Strapping Bracket

Hardware Type

Mounting Bracket

Mounting Bracket Attachment Method

Strap-On

Mounting Bracket Style

No Series

Mounting Bracket Adjustment Angle

No Adjustment

Number of Sides

1

Material

Stainless Steel

Finish

Unfinished

Color

Silver

Includes

(2) +4SS Flared Leg Brackets, (2) 5/16 x 5/8 in Hex Head Bolts, (2) 3/8 in Nylon Washers, (4) End Pieces, (2) 36 in Pre Cut Straps, (2) 5/16 x 1-3/4 in Hex Head Bolts, (2) 5/16 in Hex Nuts

UNSPSC

55121908

Country of Origin

Canada (subject to change)

Product Details Feedback

TECHNICAL DATA SHEET

EXTERIOR MINERAL BONDING PRIMER

PRODUCT DESCRIPTION

Mineral Bonding Primer is a sol-silicate primer designed to prepare exterior previously painted surfaces, glossy and tough to paint surfaces for subsequent painting with mineral paints and limewash. It provides tenacious adhesion and is ideal when multiple types of masonry are present, providing a uniform mineral surface. This primer has a sanded texture and can make uneven and aged masonry appear more uniform. Fills small cracks up to 1/32".

FIELD OF APPLICATION

Mineral Bonding Primer is used to bond to exterior previously painted and difficult to paint surfaces. It provides added adhesion when renovating or coating sound acrylic and silicone resin-based coatings, acrylic stucco, terracotta, brick, masonry and cement fiber siding. Do not use on floors or previous elastomeric coatings or oil base painted surfaces.

Mineral Bonding Primer is not a finish coat and can only be used as a base coat/primer; it must be over coated with 2 coats of a KEIM Mineral Masonry Paint or Limewash.

PRODUCT PROPERTIES

- Moisture vapor permeable, will never peel due to hydrostatic pressure
- Penetrates masonry and existing coatings and fuses—won't peel or lose adhesion
- Copolymer modification provides mechanical bond to previously painted surfaces (as outlined)
- Provides a uniform mineral surface for subsequent mineral and limewash topcoats and improves overall appearance
- Apply to a variety of mineral surfaces
- Noncombustible—won't add fuel or noxious smoke in case of fire
- Naturally mold, algae and fungus resistant—no pesticides used
- Subtle, sand texture

Technical data

Density	1.6 g/cm³
VOC (ASTM D6886)	< 1 g/liter
Organic Content	< 5%
Cured pH value	Approximately 11
Vapor Diffusion	sd (H2O) = <0.01 m
Water Absorption Coefficient	W=0.20 kg/m2 h 0.5 (acc. to DIN EN 1504)
Vapor Permeability (ASTM E96)	77 Perms
Flashpoint	Non-Flammable
Mildew Resistance ASTM D3273/D3274	Passes—No fungal growth

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[redacted]

Stand
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Gloss at 85° ISO 2813	0.5 Mineral Matte Flat
All test results performed on 1 coat of Mineral Bonding Primer applied at 275—325 sf/gallon	

Environmental Compliance

EPA	YES
LEED	YES
CARB	YES
SCAQMD	YES
Greenguard Gold	YES
Cradle to Cradle	YES

Colors:
White Matte Flat

SPECIFICATIONS/SYSTEMS

Use as a primer system for Keim Mineral Masonry Paint and Limewash.

SURFACE PREPARATION

The substrate must be sound, solid, dry, clean and free of dust, grease, oils, salts, moss, algae and other substances that would prevent penetration and bonding. Old, oil base paints, loose substrate layers and loose latex or acrylic layers must be removed. Repair damaged areas as needed before painting.

APPLICATION

Mineral Bonding Primer may be applied by brush, roller or airless spray.

- Brush - Use a nylon/polyester brush
- Roller - Use a ½" to ¾" nap synthetic roller cover
- Airless Spray
  - Pressure: 3000 psi, minimum
  - Tip: .035 in
  - Remove filters from gun and pump, use 30 mesh filter on siphon tube only

Prime coat
Ready to use, apply as supplied. Allow it to dry 12 hours or overnight before recoating.

Application conditions
Ambient and substrate temperature: 40°F and rising and below 95°F. Do not apply it in direct sunlight or on sun-heated substrates. Protect coated surfaces from direct sunlight, wind, and rain during and after application for a minimum of 12 hours.

Drying times
Drying times are temperature, humidity and coverage dependent.

	@ 40-50°F	@ 50°F +
Touch:	4--6 hour	2--4 hours
Recoat:	24--48 hours	12 hours

Coverage

SUBSTRATE	COVERAGE*
Brick and Masonry	200—250 SF/GAL
Cement fiber Siding	250—300 SF/GAL
CMU Block (smooth)	100--150 SF/GAL
CMU Block (split faced)	50—75 SF/GAL
Portland Stucco	125—176 SF/GAL
*Stated values are based on our experience. Surface texture, porosity, application conditions and type of equipment used will all IMPACT consumption. Apply test area to determine actual coverage on your surface.	

Cleaning
Clean spills, spatters, hands, and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with a compliant cleanup solvent to prevent rusting of the equipment. Tools should be kept in the paint material or in water during work breaks.

Mixing with other products
Do not mix with water or other products.

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PACKAGING
Gallon and 4 Gallon

STORAGE
Approx. 12 months in tightly closed container under cool, frost-free conditions. Protect from heat and direct sunlight.

DISPOSAL
Dispose of completely emptied containers in accordance with local, state and federal waste regulations. Any residues must be emptied out of containers before recycling.

HAZARDOUS SUBSTANCE CLASS
n/a

TRANSPORT HAZARD CLASS
n/a

SAFETY INSTRUCTIONS

Provide appropriate protection for surfaces which are not to be coated (e.g. glass, natural stone, ceramics etc.). Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with plenty of water. Protect the eyes and skin from splashes.

Keep out of reach of children.

The stated values and properties are the result of extensive development work and practical experience. Our recommendations for application, whether given verbally or in writing, are intended to provide assistance in the selection of our products and do not establish a contractual relationship. In particular, they do not release those purchasing and applying our products from the duty of establishing for themselves, with due care, the suitability of our products for the intended application. Standard building industry practices must be complied with.

We retain the right to make modifications to improve the products or their application. This edition supersedes all earlier editions.

Keim Mineral Coatings of America, Inc
[redacted]

Stand
01/17 USA

TECHNICAL DATA SHEET

KEIM FIXATIVE + CONSOLIDANT

1. PRODUCT DESCRIPTION

KEIM Fixative is a clear binder, thinner and consolidation agent made from pure, liquid potassium silicate. It dries completely clear and develops a natural mineral matte finish which leaves the masonry surface completely natural in appearance without altering existing colors.

2. FIELD OF APPLICATION

Use KEIM Fixative as a binder and dilution for pure silicate-based, two-component paint systems, KEIM Purkristalat and KEIM Décor Paints. It may be used as a dilution for KEIM Granital. Also use KEIM Fixative as a vapor permeable primer on very porous masonry surfaces to reduce absorbency and extend coverage of subsequent mineral topcoats. It also helps to minimize variable porosity across surfaces that are highly porous resulting in a more uniform topcoat appearance. Use KEIM Fixative as an anti-dusting finish on interior or exterior brick, stone, stucco, concrete or any masonry surfaces. Fixative "ties down" loose masonry dust and elements and consolidates masonry to eliminate future dusting. Use KEIM Fixative as a mild consolidant for friable and damaged masonry, brick and stone. The penetrating action strengthens and restores weakened and decayed masonry by re-bonding the molecular structure on a cellular level. It fills voids and consolidates them. It is not a sealer as the stone remains breathable, but it will limit the absorption of ambient moisture to a slower rate, then that of an untreated stone.

Recommended Uses:

- Interior and exterior
- Above grade
- Aged, decayed and friable masonry and brick
- Cast and precast concrete
- Natural stone
- Stucco surfaces

3. PRODUCT PROPERTIES

KEIM Fixative penetrates and bonds permanently with the substrate, is highly moisture vapor permeable, extremely resistant to weathering and is incombustible. KEIM Fixativ contains no organic additives.

- Forms covalent chemical bonds, similar to those in original substrate—no synthetic polymers
- Extremely weather resistant
- Non-film forming, will not develop a hard crust
- Extremely moisture vapor permeable
- High binding power and fixing action
- Non-flammable
- UV resistant
- Hinders fungal and mold growth
- Resistant to acid rain and pollution
- Low viscosity allows deep penetration
- Environmentally friendly with low environmental impact

Technical data

Specific weight	approx. 1.17 g/cm³
Penetration Depth	Class II:= 10 mm
Active Content	100%
pH value	11.3
Vapor Permeability ASTM E 96	93+ perms
Solubility in water	Fully miscible
VOC	< 1 g/liter

Color: Clear (tea colored)

Environmental Compliance

EPA	YES
LEED	YES
CARB	YES
SCAQMD	YES

4. SPECIFICATIONS/SYSTEMS

For proper performance, porous surface must be thoroughly soaked and saturated with Fixative. Depending on surface porosity, level

of decay, etc. multiple and successive applications may be required.

5. SURFACE PREPARATION

The mineral substrate must be absorbent, sound, dry, clean and free from dust and grease. Loose areas, dirt, oily substances, release agents, curing compounds, moss and algae must be completely removed.

6. APPLICATION

Pretreat highly absorbent or sanding surfaces or as a consolidant:
Dilute Fixative with clean water in ratio of 1:1, 1:2 or 1:3. Apply diluted Fixative by flooding surface with brush, roller or airless spray. Multiple coats may be required if the surface is extremely porous, sanding or decayed.

To mix with Purkristalat or Décor Paints:
Soak 5 kg of color powder in 4 liters of KEIM Fixativ.

Anti-dusting applications:
Dilute Fixative with clean water in a ratio of 1:3. Apply diluted fixative by flooding surface with brush, roller or airless spray. Multiple coats may be required if surface is extremely porous, sanding or decayed.

To dilute Purkristalat, Décor Paints, or Granital:
Refer to relevant technical data sheet.

Application conditions
Ambient and substrate temperature: 40°F and rising. Do not apply in direct sunlight or on sun-heated substrates. Equipment and tools must be clean. The surface of the building material must be clean, dry and absorbent and may have to be cleaned beforehand. The quantity to be applied by flooding depends on the absorbency of the substrate (apply onto trial area). Nonabsorbent surfaces cannot be treated with Fixative. Avoid direct sunlight and exposure to strong wind. Protect coated surfaces from direct sunlight, wind and rain during and after application for a minimum of 12 hours.

Drying times
Drying times are temperature, humidity and coverage dependent.

	@ 40-50°F	@ 50°F +
Touch:	4--6 hour	2--4 hours
Reapply or topcoat:	10--24 hours	10 hours

Cleaning
Clean spills, spatters, hands, and tools immediately after use with water.

Coverage*

SUBSTRATE	COVERAGE*
Cast or Pre-Cast Concrete	250—300 SF/GAL
Fiber Cement Siding	250—300 SF/GAL
Portland Stucco	125—175 SF/GAL
CMU Block (smooth) and brick	75—100 SF/GAL
CMU Block (split faced or fluted)	25—50 SF/GAL
Gunite/Shotcrete	75—125 SF/GAL
Brick/Natural Stone Masonry	200—250 SF/GAL
*Stated values are based on our experience on smooth surfaces. Surface texture, porosity, application conditions and type of equipment used will all vary consumption. Only a test application, using desired mixing ratio and under production conditions will fore-cast consumption of the system components accurately.	

7. PACKAGING

4-liter (1.05 gal) and 24 liter (6.34 gal) Steel Pail

8. STORAGE

Approx. 12 months in tightly closed container under cool, frost-free conditions. Protect from heat and direct sunlight.

9. DISPOSAL

Dispose of completely emptied containers in accordance with local, state and federal waste regulations.

HAZARDOUS SUBSTANCE CLASS
Not Applicable

LIMITATIONS

Do not apply to polished stone or previously painted surfaces. Not for use below grade.

10. SAFETY INSTRUCTIONS

KEIM Fixative is alkaline.
Provide appropriate protection for surfaces which are not to be treated (e.g. glass, sidewalks, pavers, landscaping, etc.). Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with plenty of water. Protect the eyes and skin from splashes.
Keep out of reach of children.

The stated values and properties are the result of extensive development work and practical experience. Our recommendations for application, whether given verbally or in writing, are intended to provide assistance in the selection of our products and do not establish a contractual relationship. In particular, they do not release those purchasing and applying our products from the duty of establishing for themselves, with due care, the suitability of our products for the intended application. Standard building industry practices must be complied with. We retain the right to make modifications to improve the products or their application. This edition supersedes all earlier editions.

The information and recommendations set forth in this Technical Data Sheet are based upon tests conducted by or on behalf of KEIM Mineral Coatings. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult [redacted] for the latest in product technical information.

Keim Mineral Coatings of America, Inc
[redacted]

Stand
01/17 USA

TECHNICAL DATA SHEET

PSS 20® ECO GRAFFITI PROTECTION SYSTEM

1. PRODUCT DESCRIPTION

PSS 20 is a breathable, completely reversible, and indiscernible system for protection against graffiti, tape and adhesive, gum, heel marks and airborne soiling for masonry, concrete and stone and mineral painted surfaces. Use on interior or exterior facades, walls, planters, etc.
PSS 20 is made of vegetable polysaccharides and water with a high viscosity and is completely biodegradable and safe to use. PSS 20 is a natural sustainable product that is harmless to man, animal life and the environment. PSS 20 is sprayed on to the wall in at least one or more coats with an Airless sprayer, where on drying it forms a gossamer-thin protective film, normally invisible to the eye and creates a fully breathable type of coating. PSS 20 should be applied by professionals and skilled tradesmen.

2. FIELD OF APPLICATION

PSS 20 can be applied to all washable substrates. In the case of water-repellent substrates (e.g., those treated with hydrophobic agents), the surface tension must first be reduced with a pre-treatment or primer. PSS 20 should only be used on vertical surfaces. PSS 20 is especially suitable for all kinds of natural and artificial stone facades, clinker, concrete, brick, mineral coatings, metal, and aluminum facades and is ideal for protecting public art.

3. PRODUCT PROPERTIES

PSS 20 is a "sacrificial" finish that does not seal the surface. It has no VOC or harmful ingredients. PSS 20 protective film is much more effective than permanent graffiti sealers by forming an invisible layer that naturally "breathes", allowing moisture vapor to escape without compromising the graffiti protection. In historic and preservation applications, PSS 20 can be easily reversed as it does not form a permanent bond with the surface. Soiled or tagged PSS 20 is easily removed from the surface with hot water, carrying with it all the dirt, spray paint, algae, dust, oil stains, etc. A replacement layer of PSS 20 is then reapplied to the surface, to continue to provide a protective barrier.

- Non-yellowing
- Completely reversible—does not permanently bond to surface
- Almost indiscernible upon application—does not dramatically alter the appearance of the surface
- Ideal for protecting delicate and historic surfaces
- Does not alter vapor permeability of surface
- Protects murals and public art
- Very U.V. and weather resistant
- > 95% biodegradable
- No VOC's or solvents, made from plant materials
- Chemically nonreactive
- Easy removal of soiled finish with warm water washing
- No toxic gases produced on decomposition by heat

Technical data

Specific Weight	approx. 1.1 g/cm³
pH Value @ 20°C	approx. 6.5 (neutral)
Boiling point	100° C
Dry Film Thickness	1—1.5 mils per coat (minimum 2 coats required)
Water vapor permeability: according to DIN 52615:	Sd-value 0.012 m
Water Vapor Permeability ASTM E 96	80 perms
Carbonization: (LPM Construction materials lab Test No. A-13'041-1 of 18.03.93)	Good retardant effect
Viscosity	6000-7200 cpa
Flashpoint	Non-Flammable
VOC	0 g/liter
All test results performed on 2 coats PSS20 applied at 200--250 SF/GAL and 14-day cure @ 77°F & 50% RH	

Color and Appearance
Clear, slightly cloudy gel—dries clear

Environmental Compliance

EPA	YES
LEED	YES
CARB	YES
SCAQMD	YES

4. SURFACE PREPARATION

The substrate must be sound, clean, and free of oil, dust, grease, and silicone. For absorbent substrates: Thoroughly pre-wet substrate with clean water and allow excess water to run off. Surface should be saturated but not show signs of surface water (puddles or pools).
For non-absorbent substrates:
Substrate must be clean and dry at the time of application.

5. APPLICATION

PSS 20 is applied to the surface in two or three coats using airless spray equipment at a pressure of 1450 - 2900 psi. When spraying, both vertical and horizontal overlapping pattern should be used, which together will correspond to a normal coat of PSS 20. Do not apply in hot conditions. Application in temperatures above 90°F may lead to rapid evaporation of the water in the finish leading to adhesion problems.
Note: PSS 20 is very slippery in its liquid state.

Drying times
Drying times are temperature, humidity, and coverage dependent.

	@ 40-50°F	@ 50°F +
Touch:	4--6 hour	2--4 hours
Recoat:	24--48 hours	24 hours

Coverage*

SUBSTRATE	COVERAGE*
Masonry or Brick	100—200 SF/GAL
Natural Stone Masonry	100—250 SF/GAL
Cast or Pre-Cast Concrete	150—250 SF/GAL
Portland Stucco	75—125 SF/GAL
Mineral Paint Finish or Mural	150—250 SF/GAL
Metal Surfaces	200—250 SF/GAL

*Stated values are based on our experience on smooth surfaces and are for one coat. Multiple coats will require more material. Surface texture, porosity, application conditions and type of equipment used will all vary consumption. Only a test application under production conditions will forecast consumption accurately.

Cleaning
Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with a compliant cleanup solvent to prevent rusting of the equipment.

6. GRAFFITI REMOVAL

Graffiti on the PSS 20 protective film can be easily removed with hot water, without the need for chemicals. Remove soiled PSS 20 with a hot water pressure washer fitted with an adjustable fan nozzle. Saturate the surface to soften the outer layer of PSS 20. The water temperature should be between 60-70° C. Use the least amount of pressure possible, to avoid damaging the surface. On soft surfaces, a pressure of less than 250 psi is recommended. When the PSS 20 protective film is saturated, it will swell and begin to "slough" off. Peel off together with the graffiti. As the graffiti is no longer bonded, it can be easily collected and disposed of in the solid state. The graffiti does not come into contact with the actual surface and there is no "ghosting" or etching of the surface. Once the surface is cleaned and dried, a replacement coat of PSS 20 should be reinstalled immediately.

Further details on application and graffiti removal are available from Keim.

7. PACKAGING

25-liter plastic jerry can

8. STORAGE

Approximately 2 years in tightly closed container under cool, frost-free conditions. Protect from heat and direct sunlight.

9. DISPOSAL

Dispose of completely emptied containers in accordance with local, state, and federal waste regulations.

HAZARDOUS SUBSTANCE CLASS

n/a

10. LIMITATIONS AND CAUTIONS

PSS 20 should not be used on floors or other horizontal surfaces. Do not apply below 38°F or above 90°F. When removing PSS 20 be careful as it is slippery once removed with hot water.

11. SAFETY INSTRUCTIONS

Provide appropriate protection for surfaces which are not to be coated (e.g. glass, natural stone, ceramics etc.). Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with plenty of water. Protect the eyes and skin from splashes. Keep out of reach of children.

TECHNICAL DATA SHEET

SOLDALIT®

SOL-SILICATE ALL SURFACE MINERAL FINISH

MONOCHROME COLORS

PRODUCT DESCRIPTION

SOLDALIT® Sol-silicate All Surface Mineral Finish is our very best exterior finish for previously painted masonry surfaces and for bare masonry of all types. SOLDALIT uses a proprietary formula combining silica-sol and potassium silicate binders, inorganic mineral pigments and fillers and an acrylate copolymer to form both chemical and mechanical bonds, even on the most difficult to paint substrates, without primer coats. This new-generation mineral silicate paint is ideal for finishing ceramic glazed tile and terra cotta, glass, non-ferrous metals, granite, marble, pebble-dash concrete and previous acrylic or latex painted surfaces. It is also ideal for all masonry surfaces exposed to severe weather conditions. Tenacious adhesion is enhanced with SOLDALIT's nanoparticle technology that allows penetration of even the densest mineral or masonry substrates and provides a mechanical anchor to most existing organic, latex, or acrylic paints that are in sound condition.

SOLDALIT meets all requirements of DIN 18.363, 2.4.1 "silicate emulsion paint".

FIELD OF APPLICATION

SOLDALIT is applied typically as a 2 or 3 coat system and is recommended for new construction and renovation of sound acrylic and silicone resin-based paints, acrylic stucco, terracotta, bare masonry, all types of concrete, stone, and most other mineral substrates. It is ideal for restoration of historic structures and facades due to high vapor permeability coupled with water repellency. It may be applied over polymer modified cementitious patching compounds that are fully cured. Do not use over aged alkyd or oil-based paints, varnish, or lacquer. SOLDALIT is suitable for vertical facade installations and inclined surfaces. Do not use on floors.

PRODUCT PROPERTIES

SOLDALIT protects masonry surfaces from the action of weather and prevents the penetration of atmospheric pollutants. It utilizes only lightfast inorganic mineral pigments and fillers, and colors will not fade, even in harsh U.V. environments. SOLDALIT is available in a smooth or sand texture base.

- Sol-Silicate binder system penetrates masonry and chemically bonds—won't peel or lose adhesion
- Copolymer modification provides mechanical bond to previously painted surfaces (as outlined)
- Lightfast mineral pigments—guaranteed not to fade or lose brilliance
- Apply to a variety of mineral surfaces
- Very water vapor permeable, microporous
- Completely resistant to pollution
- Provides extreme weather resistance and water repellency
- Noncombustible—won't add fuel or noxious smoke in case of fire
- Beautiful, mineral matte finish
- Anti-static, inert finish—won't attract or trap dirt or dust for walls that stay cleaner
- Naturally mold, algae and fungus resistant—no pesticides used

ENVIRONMENTAL COMPLIANCE

UL Greenguard Gold	YES
EPA	YES
LEED	YES
CARB	YES
SCAQMD	YES
Cradle to Cradle Health	Gold
Cradle to Cradle	Silver

Technical data

Density	1.6 g/cm³
VOC (ASTM D6886)	< 1 g/liter
Organic Content	< 5%
Cured pH value	Approximately 11
Vapor Diffusion	sd (H2O) = <0.01 m
Water Absorption Coefficient	W=0.20 kg/m2 h 0.5 (acc. to DIN EN 1504)
Lightfastness of color pigment (Fb-Code acc. to BFS technical bulletin No. 26)	A1 Best in class rating No color change after 4 years
Vapor Permeability (ASTM E96)	77 Perms
Flashpoint	Non-Flammable
Accelerated Weathering ASTM G154	2016 Hours Passes No change or deterioration of any type
Wind Driven Rain ASTM E514	Passes No water leakage
Mildew Resistance ASTM D3273/D3274	Passes—No fungal growth
Alkali Resistance ASTM D1308	Passes—no visible change at 24 hours
Chloride Ion Permeability	Permeability Class: Very Low
Surface Burning Characteristics ASTM E 84-08	Class A Flame Spread Index = 0; Smoke Developed Index = 0
Gloss at 85° ISO 2813	0.5 Mineral Matte Flat
All test results performed on 2 coats Soldalit applied at 300—350 sf/gallon	

Colors:
Interior/Exterior single chroma mineral oxide colors.

9001S Titanium Yellow


9002S Yellow Oxide


9003S Red Oxide


9004 Umbra


9005 Green Oxide


9006 Ultramarine Blue


9007 Brown Oxide


9008 Black Oxide


9009S Cobalt Blue


9010S Dark Red Oxide


9011S Orange Oxide


9012S Chrome Green

BOX COLORED PAINT

To ensure consistency of color on large areas, all colored paint should be thoroughly mixed with a power drill and paddle for 1—3 minutes. Box paint together in larger containers and remix. Continue boxing and mixing for consistent color.

SPECIFICATIONS/SYSTEMS

For proper waterproofing and weather resistant performance, 2 coats of SOLDALIT must be applied at recommended coverage rates. Surface should be fully coated, with no pinholes, runs or holidays.

Concrete and cementitious patches (all types)
Pretreat: Keim Heavy Duty Cleaner (if needed)
1 coat SOLDALIT diluted 10% with Soldalit Dilution
1 coat SOLDALIT as supplied

CMU Block
1 coat Contact Plus Grob Block Filler (as desired)
1 coat SOLDALIT diluted 10% with Soldalit Dilution
1 coat SOLDALIT as supplied

Masonry (brick and stone) and stucco
Pretreat extremely porous surfaces (if needed): Soldalit Dilution (mixed 1:3 with water)
1 coat SOLDALIT diluted 10% with Soldalit Dilution
1 coat SOLDALIT as supplied

Previously Painted Mineral Surfaces
1 coat SOLDALIT diluted 10% with Soldalit Dilution
1 coat SOLDALIT as supplied

Hard, Glossy Mineral Surfaces and Terracotta
Scuff sand or abrade glossy surfaces (if needed)
1 coat SOLDALIT diluted 10% with Soldalit Dilution
1 coat SOLDALIT as supplied

Added Water Repellency (on any mineral surface)
Pretreat: Silan 100 Silane Water Repellency applied in multiple coats as needed to saturate surface. CRITICAL RECOAT: Apply first coat of Soldalit within 4—8 hours. DO NOT ALLOW SILAN 100 TO DRY COMPLETELY.
1 coat SOLDALIT diluted 10% with Soldalit Dilution
1 coat SOLDALIT as supplied

Patched, Cracked and Irregular Mineral Surfaces
1 coat of SOLDALIT Sand Texture Base (Grob)* diluted 10% with Soldalit Dilution
1 coat of SOLDALIT as supplied

*Texture base is designed to provide a more uniform final appearance by adding a slight sand texture and can help fill-in cracks and voids up to 1/16" wide and deep. It is several shades lighter than the final color to allow for full coverage of finish. The maximum particle size is 0.5mm quartz granules.

SURFACE PREPARATION

The substrate must be sound, solid, dry, clean, and free of dust, grease, oils, salts, moss, algae, and other substances that would prevent penetration and bonding. Old oil-based coatings, loose substrate layers and loose latex or acrylic layers must be removed. Repair damaged areas as needed before painting. Clean mineral surfaces as needed with KEIM Heavy Duty or Light Duty Cleaner or KEIM Bio Cleaner.

Soft, porous, or friable mineral surfaces, where substrate porosity is variable or aged existing mineral coats may be stabilized and consolidated by pretreatment with SOLDALIT Dilution. Mix 1 part Dilution with 3 parts fresh water and apply to porous surface to saturation. Allow surface to dry 12 hours before proceeding.

APPLICATION

SOLDALIT may be applied by brush, roller, or airless spray.

- Brush - Use a nylon/polyester brush
- Roller - Use a ½" to ¾" nap synthetic roller cover
- Airless Spray
  - Pressure: 3000 psi, minimum
  - Tip: .035 in
  - Remove filters from gun and pump, use 30 mesh filter on siphon tube only

First coat

SOLDALIT may be diluted up to 10% with Soldalit Dilution depending on the substrate porosity or to slow down dry in hot conditions. Allow it to dry 12 hours or overnight before recoating.

Topcoat
Apply SOLDALIT undiluted, as supplied. There is no recoat window after the first coat has dried.
NOTE: For extreme weather conditions or critical, intensive color shades it is recommended to apply a three-coat system.

Application conditions
Ambient and substrate temperature: 40°F and rising and below 95°F. Do not apply in direct sunlight or on sun-heated substrates. Protect coated surfaces from direct sunlight, wind, and rain during and after application for a minimum of 12 hours.

Drying times
Drying times are temperature, humidity, and coverage dependent.

	@ 40-50°F	@ 50°F +
Touch:	4--6 hour	2--4 hours
Recoat:	24--48 hours	12 hours

Coverage

SUBSTRATE	COVERAGE*
Cast or Pre-Cast Concrete	275—325 SF/GAL
Fiber Cement Siding	275—325 SF/GAL
Brick and Masonry	225—275 SF/GAL
CMU Block (smooth)	100--150 SF/GAL
CMU Block (split faced or fluted)	50—75 SF/GAL
Portland Stucco	150—200 SF/GAL
*Stated values are based on our experience with a smooth finish. Surface texture, porosity, application conditions and type of equipment used will all vary consumption. Only a test application under pro-duction conditions will forecast consumption of the system accurately.	

Clean Up

Clean tools immediately after use with water. Tools should be kept in the paint material or in water during work breaks.

This product may permanently etch and irreversibly bond to mineral surfaces it is splashed onto including concrete, masonry, glass, and metal. Clean spills, overspray, etc. immediately with soap and water.

Mixing with other products

To maintain the specific features of SOLDALIT and the related system products, they must not be mixed with other products or additives, nor must they be diluted with water.

PACKAGING
Quart, Gallon and 4 Gallon

STORAGE
Approx. 12 months in tightly closed container under cool, frost-free conditions. Protect from heat and direct sunlight.

DISPOSAL
Dispose of completely emptied containers in accordance with local, state, and federal waste regulations. Any residues must be emptied out of containers before recycling.

HAZARDOUS SUBSTANCE CLASS
n/a

TRANSPORT HAZARD CLASS
n/a

SAFETY INSTRUCTIONS

CAUTION! SKIN OR EYE CONTACT MAY CAUSE TEMPORARY IRRITATION

Use proper protective equipment and clothing. Avoid breathing spray mist. Open windows and doors or use other fresh air supply during application indoors or wear respiratory protection (NIOSH Approved). Wash hands and skin after handling. Keep container closed when not in use. FIRST AID: If swallowed, give two glasses of water. Do not induce vomiting. Call for medical help immediately. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If breathing is difficult, give oxygen. In case of skin irritation, consult a physician. In case of contact, immediately flush eyes, and skin with plenty of water; get medical help if needed.

The stated values and properties are the result of extensive development work and practical experience. Our recommendations for application, whether given verbally or in writing, are intended to provide assistance in the selection of our products and do not establish a contractual relationship. In particular, they do not release those purchasing and applying our products from the duty of establishing for themselves, with due care, the suitability of our products for the intended application. Standard building industry practices must be complied with. We retain the right to make modifications to improve the products or their application. This edition supersedes all earlier editions.