

Art Plan

Art is a significant part of many urban parks. When implemented thoughtfully, it has the potential to inspire civic pride and create a dynamic sense of place. In keeping with the idea of Republic Square as a place of performance, the art plan should constantly offer visitors exciting and new experiences, focusing on temporary installations that will change throughout the year. The Park should function more as a gallery than as a permanent collection and offer a wide variety of artists the opportunity to display their work in a prominent public setting.

As a note of caution, art can also make a park feel cluttered, haphazard and not well planned. It is important that the location and content of art in Republic Square, especially permanent pieces, be carefully considered in terms of how it will relate to and support the Park and its context. Accordingly, a transparent, multi-step process for reviewing proposed permanent art for the Park should be established.

A: 5th St Mexican-American Heritage Corridor- The proposed Heritage Corridor will run along 5th St from Republic Square to Saltillo Plaza. As one of the terminus points and a historically significant site for Austin's Mexican-American community, the Park should be a feature component of the Heritage Corridor. In addition to interpretative signage, art is a great way to celebrate Mexican-American history and culture. The area along 5th St could showcase temporary and perhaps permanent work that supports the Heritage Corridor. The area just south of the Market Space should incorporate a paving design that references Mexican and Mexican-American arts, a potential design for which might be patterned after Northern Mexican textile designs.

Because physical improvements to the Park are likely to begin before a fully realized plan for the Heritage Corridor has been established, it is important that at this stage in the Park's evolution the area along 5th St should avoid incorporating permanent art. Instead, to best accommodate the

ultimate cohesiveness of the Heritage Corridor, this area should be designed to allow for future interventions dictated by the as yet undeveloped Heritage Corridor Plan.

B: Plaza Area- This 2,500 square foot plaza is designed for flexibility and can accommodate temporary art rotations that require a flat hardscape surface.

C: Seat Wall Inscriptions- This section of the seat wall along the interior of the arc promenade could be inscribed by artists with subtle images and text to create a sense of playfulness and discovery. This application should be thoughtful and done in a high quality manor. Artists should have previous experience working with granite. Themes might include fossils, Native American symbols or text, cultural themes, or playful elements that involve acorns, leaves, bark or other oak-related elements.

D: CapMetro Transit Stops- These transit stops could be designed to artfully incorporate sculptural forms, play or vegetation to create an aesthetically rich experience and raise the profile of public transit. This should be considered within the constraints of appropriate design for the park and may be subject to review by boards and commissions.

E: Existing Deck- This can act as a stage for out-door theater and performance art oriented toward the main lawn. Column tops should also be rethought to include carvings, art, light features or the Mexican busts if these are to remain the Park's core.

F: Main Lawn- The main lawn itself could be the setting for theater, performance art of temporary art installations.

G: Planting Area- This area of the Park along 4th St could be activated by hosting rotating art installations from local and world artists.

H: Corner Icon- This large sculpture acts as an icon for the Park and should be sized (between 18' and 24' high) and located to be visible from as far away as the corner of 2nd St and Guadalupe St to

increase awareness of the Park. See page 95 for more detail on this Park element.

I: Meadow- This meadow located within the protected Auction Oak Area could be provide a soft and natural setting for rotating art pieces. These pieces would need to be light weight to prevent compaction and would need to be appreciated from outside the protection zone.

J: In addition to being used for advertising, banners at pole lights could showcase reproductions of 2-dimensional art.

K: Planting Plan- Seasonal changes or management of plantings around the site may include plants with specific ephemeral qualities or seasonal interest. These plants may also be unexpected or uncommon for urban areas, which creates a level of contextual interest. Some common examples include the planting of crop species, exotic species or plants with specific cultural interest in large numbers.

L: Community Chalk Boards- Many communities have had success in establishing features that harbor spontaneous community activity. Given the nature of Republic Square as a place of gathering and communication, a feature like this would be context appropriate and draw users into the park. Regular cleaning and removal of inappropriate material would need to occur on a regular basis, and inexpensive drawing materials would need to be available for users.

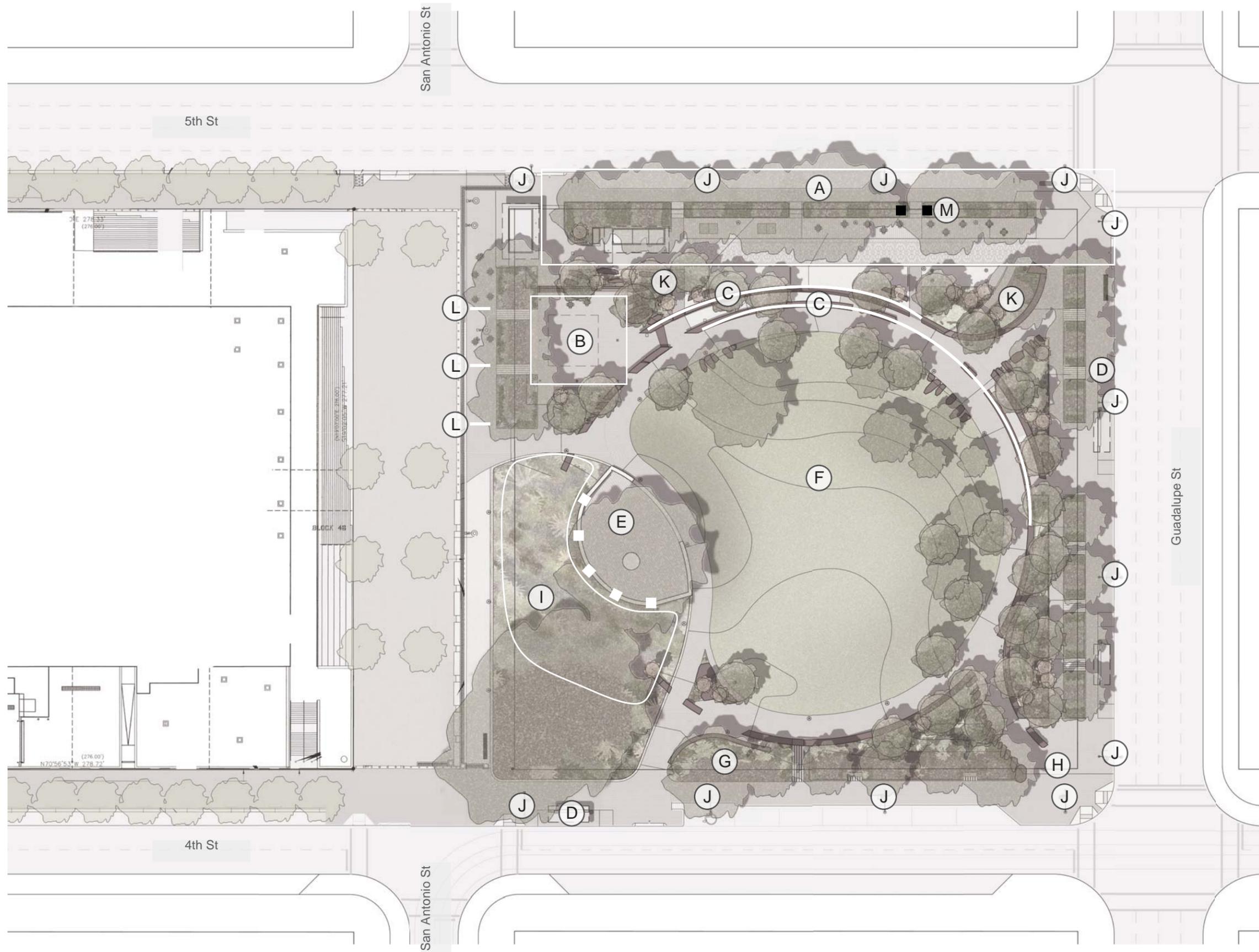
M: Mexican Busts- The Park's existing Mexican busts currently placed just north of the Auction Oaks should be relocated to the Park's northeast corner. As noted in the Signage, Wayfinding and Interpretive Elements section above, this corner is an ideal spot to anchor the Heritage Corridor with a permanent feature.



C- Text and images could be inscribed in the granite seat wall around the arc promenade.



M- The Mexican busts should be relocated to support the 5th St Mexican-American Heritage Corridor.



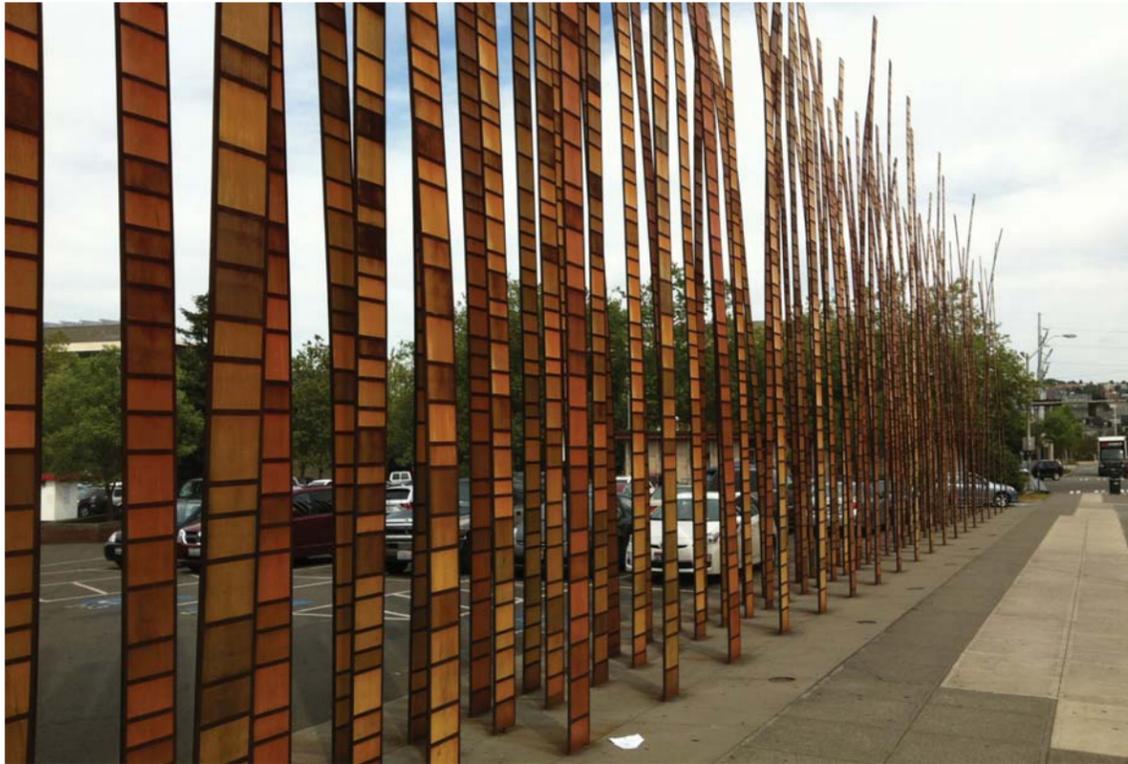
Art Plan

Legend

- A: 5th St Mexican-American Heritage Corridor
- B: Plaza Area
- C: Seat Wall Inscriptions
- D: CapMetro Transit Stops
- E: Existing Deck
- F: Main Lawn
- G: Planting Area
- H: Corner Icon
- I: Meadow
- J: Banners
- K: Planting
- L: Community Chalk Boards
- M: Mexican Busts

11%

Area of Park dedicated to arts or creative programming; Baseline is 2%



Sculptural elements are helpful in defining a sense of place and creating a memory for visitors. All permanent art work should be well funded and contribute to the legacy of the Park.



E- The existing wall surrounding the deck could be used for sculptural features that are either permanent or temporary. This would help create a better sense of purpose for the columns and further define the space.



Artwork in the context of the Park should feel context appropriate and create a sense of wonder.



Temporary art might be made of found objects and designed to decompose into the landscape.



L- Community scribble boards create a sense of interaction and change, while providing an activity for visitors of all ages and abilities.



K- Management of the landscape can contribute to a feel of spontaneity and interest in the Park. Demonstration gardens, seasonal displays and art projects should all be a part of the landscape management plan.



View from 4th St looking west toward the Park; the feature should have a significant presence at night to provide some interest for the after-hours crowd along 4th St.



View from 3rd St looking north toward the Park; the vantage point from 2nd St is significantly blocked by street trees and other overhead features, so this visual relationship is more related to the 3rd St area.



Although it is impossible to say what exactly makes a given sculpture "iconic," a common characteristic is the overall simplicity that makes for an easily recognizable image. Robert Indiana's LOVE, Arturo Di Modica's Charging Bull and Lawrence Argent's "I See What You Mean" (AKA the Giant Blue Bear) are good examples of iconic sculptures.



Sculptural relief is a potential technique that would allow for an overall simple form with more complex narrative elements that would tell the story of the Park's human history.



Jean DeBuffet's "Monument au Fantome" provides an interactive and tactile experience for visitors at Discovery Green.



Materials, textures and forms that encourage visitors to touch or otherwise engage with the Icon may help to create a memorable experience.

Corner Icon

As outlined in the Art Plan, the Corner Icon should be a large, recognizable sculpture. It will serve multiple purposes within the Park. As a wayfinding device its height and nighttime lighting will increase the Park's visibility within the surrounding neighborhood. As a sculptural element it will add to the Park's aesthetics and will be a distinct image that is easily associated with the Park in people's memories.

The Corner Icon should tell the story of the Republic Square's human history, i.e. how people have used this space differently over time. It should have a simple, easily recognizable form and a rich texture that is inviting to touch. It should also be designed to engage the other senses.

Given its prominence in Downtown, the Corner Icon has the potential to become an image that is closely associated with Austin in the minds of residents and visitors. Accordingly, it is recommended that a respected and proven artist be hired to develop the Icon. It is important that this artist work in coordination with other members of the design team to ensure that Icon feels appropriate to the Park and its context both spatially and materially.

Lighting

Lighting in Republic Square should be used to establish a look and feel that distinguish the Park from other places within the city and the world.

In compliance with local design regulations, the entire lighting palette of the Park must meet the minimum qualifications of the "Dark Skies" designation. All Park fixtures must be fully shielded to prevent light from shining above the bulb (full cut-off), meaning that overhead lighting fixtures will be the primary method of illumination. Park lighting should be set on a photocell to ensure the Park is illuminated at all times during the night, making it particularly important to select LED fixtures when possible because of their significantly longer life-spans.

A: "Great Streets" Street Light- This is the standard "Great Streets" pole light, but shall be painted black and include banner arms on all locations around the park. Banner arms shall include a stainless steel wire along the top armature to prevent birds from landing. It should also include the pedestrian light option.

B: Custom Pole Light- Intended to become a ubiquitous and engaging Park element, this feature has a familiar form that is playfully scaled element. Their placement within the Park will be organized to reinforce the Arc Promenade and the 5th St Corridor. The construction consists of a 4" diameter heavy-wall steel pole, topped with a 30" diameter, 1/4" wall steel pipe section that functions as a shade. Three LED fixtures situated within the shade provide an array of warm light in a full-cutoff configuration. The space within the shade includes three angled attachment points for the shade and several spike clusters that will keep birds from landing. The top rim of the shade should be finished in such a way to prevent birds from perching.

C: Bollard Light- This fixture will light pathways leading into the park from Guadalupe St.

Manufactured by DesignPlan, it is contemporary yet subtle and includes compact fluorescent lamping.

D: Step Light- This shielded LED fixture shall be imbedded into the cast in place steps.

E: Existing Tree Lights- These existing uplights, associated with the deck and "Auction Oaks," should remain in place.

F: Bench Seat Lights- Linear LED lighting shall be attached to the bottom of long bench seating to create glowing edges within the plaza .

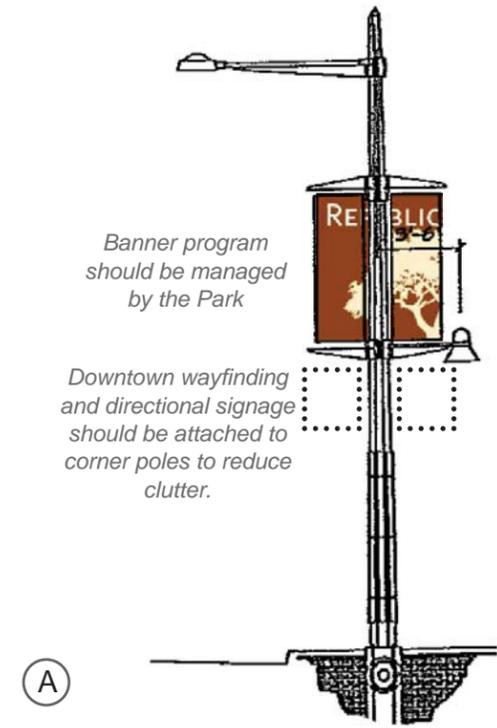
G: Police Call Box Light- A blue LED light is set at the top of these features for visibility at night.

H: Building Lighting- These LED wall mounted fixtures will provide area lighting immediately adjacent to doors and prominent building faces.

I: CapMetro Stop Lighting- Fixtures and features affiliated with CapMetro stops should be implemented to complement park lighting.

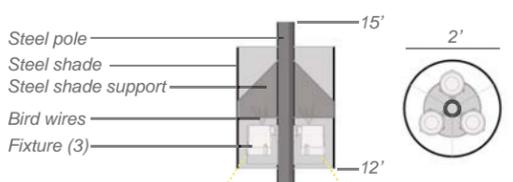
J: Flood Lighting- Slender poles topped with area lights shall be carefully placed amongst the trees in at least three locations and shall be set to cast light on the center of the Main Lawn. These fixtures should be on a circuit that can be controlled independently of other Park lighting to allow evening events to use or not to uses these lights as needed.

K: Corner Icon Lighting- This feature will create a strong visual connection between the Park and adjacent entertainment districts at night, a time when these districts are often most active. The feature must be engaging, dynamic and include some specific interest when illuminated that cannot be experienced during the day.



A

"Great Streets" lighting should include banner arms with bird deterrents and pedestrian lighting. Having the pedestrian level light match the Park light would be preferred, but may not be feasible with Austin Energy.



B



C

Design Plan Mini-facet Bollard, Black finish.

D



Bega 2197 LED used for stair risers, Black finish.

F



Crossover LED Linear Strip Light (24"), mounted in a down-light configuration.

Three Targetti Pyros LED fixtures with 40W equivalent output will be in each feature. This creates a total output of 120W per feature. These fixtures will be pointed downward, with the bottom edge of the fixture just above the bottom edge of the shade to meet dark skies standards.

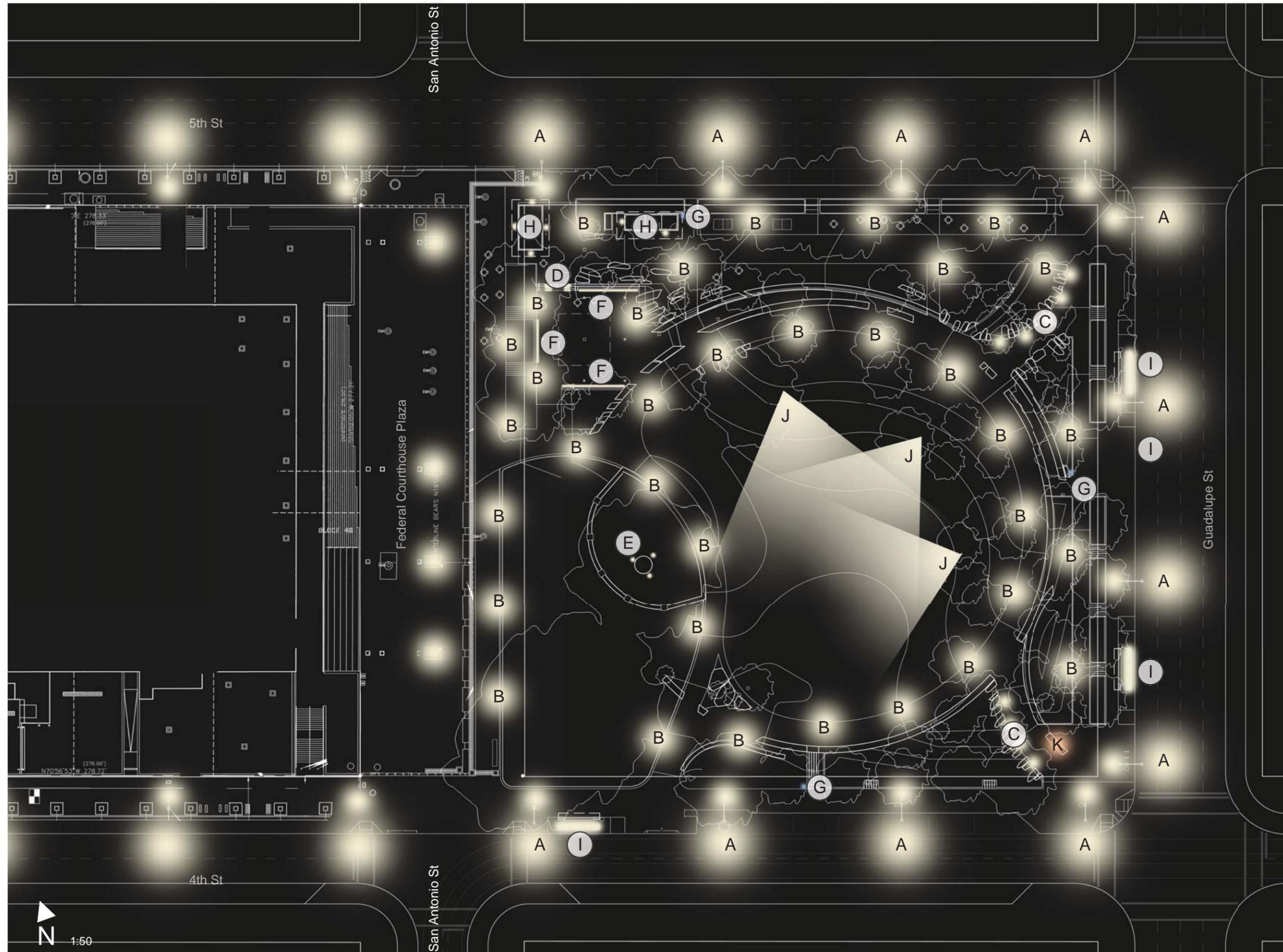


B



J

Lithonia LED area light; Mount on a 14-16' straight black pole. A warm temperature LED should be used.



Lighting Plan

Legend

- A: "Great Streets" Street Light
- B: Custom Pole Light
- C: Bollard Light
- D: Step Light
- E: Existing Tree Lights
- F: Bench Seat Lights
- G: Police Call Box Light
- H: Building Lighting
- I: METRO Stop Lighting
- J: Flood Lighting
- K: Corner Icon Lighting

40%

Total area that reads below .5 foot candles;
which is the minimum amount recommended;
Baseline is 98%

Utilities and Utilities Plan

Potable water service will be taken off of the existing water line under 5th St. The existing line is about five feet off the proposed curb line. Three meters are proposed, one to serve the Food Kiosk and a double service (two meters) to serve the Support Building and the site irrigation system. In order to avoid excessive trenching around existing trees, two new separate tap locations are proposed. In the future a separate line can be installed to serve the irrigation system from a proposed future reclaimed water line under 5th St. The Support Building meter and the irrigation meter are separated to allow the future reclaimed water service line to be installed with the state required minimum nine-foot offset from the potable water service. The hose bibs and bottle filling station on the site will all be served off of a potable water line fed from the Support Building.

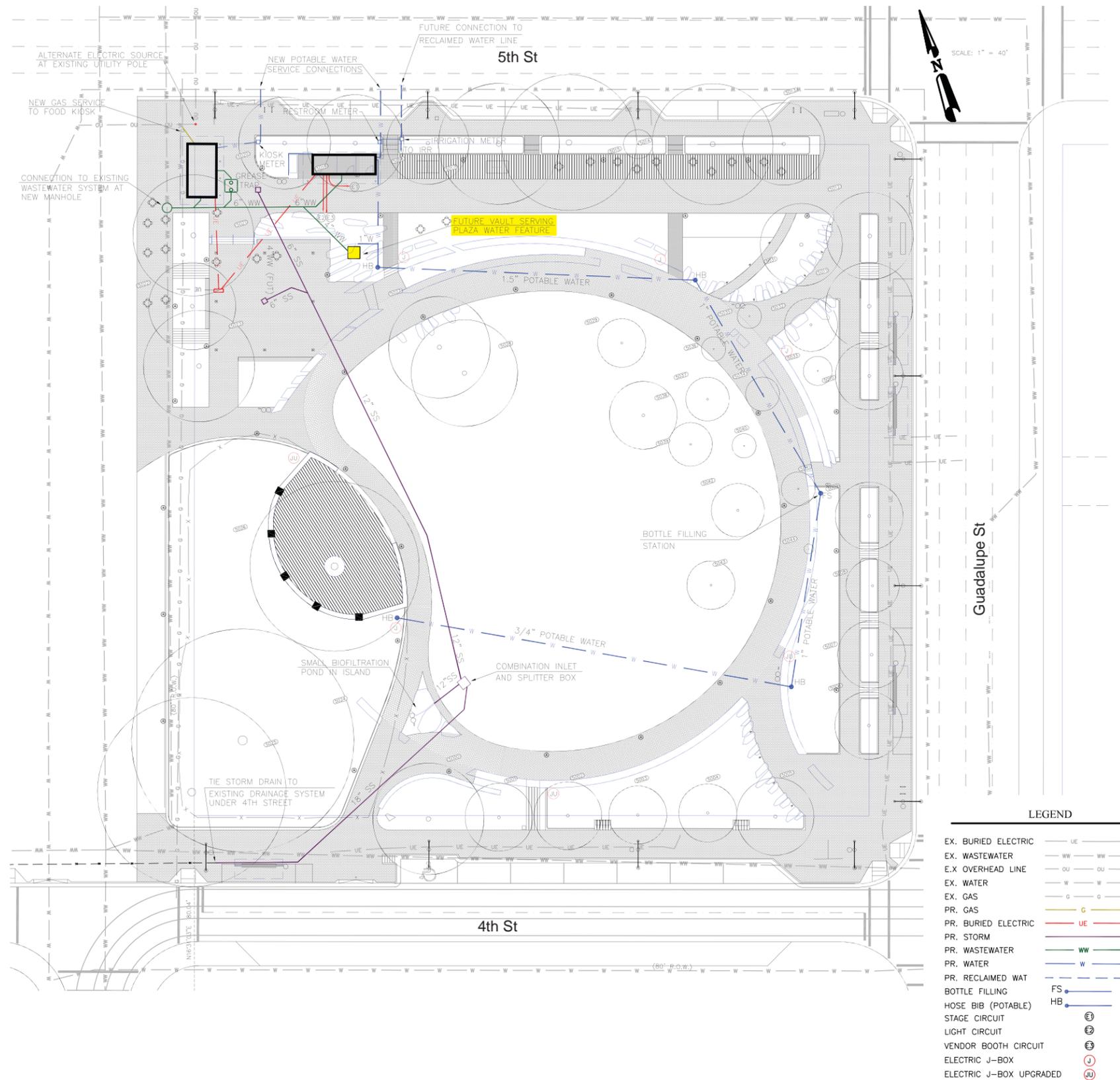
Wastewater service will be taken from an existing wastewater line that runs under the recently abandoned section of San Antonio St. Since the Food Kiosk will have food service, a monitoring manhole will likely be required by the City's industrial Waste Division of the Austin Water Utility. The plan indicates that this manhole will be placed on the existing wastewater line about 45 feet south of the northwest property corner. On-site wastewater lines will serve the Food Kiosk and the Support Building. A wastewater stub will also be provided to the location of a future service vault for a proposed water feature in the plaza area in the northwest corner of the Park. A grease trap will be required for the Food Kiosk if on-site cooking is performed. The exact size of the grease trap is dependent on the exact configuration of the kitchen; however, it will likely be situated on the east side of the kiosk due to the presence of trees and utilities on the south and west side of the structure. The grease trap can be recessed below grade in a manner that will only show two small manhole lids at the surface.

It is anticipated that the Food Kiosk will require natural gas service. This service can be taken off of an existing gas line near the northwest corner of the site. A meter installation would be required on the

northwest corner of the Food Kiosk. Actual design of the gas service line and meter will be performed by Texas Gas Service.

The Park currently contains an electric service rack (with a meter) near the western property boundary, about 80 feet south of 5th St. Service to this rack could be upgraded to provide the Food Kiosk and the Support Building with separate meters. General-purpose circuits for the Park (for vendor booths, internal lighting and event power on the south side of the Main Lawn) will be served from a sub panel mounted inside the Support Building. Alternatively, new electric service could be provided from an existing utility pole located at the northwest corner of the Park. Underground conduit could be provided from this pole to a wall-mounted meter at each building. If required, telecom services could be routed underground from the existing utility pole near the northwest property corner.

Most of the Park drainage will occur via overland flow to a proposed inlet/splitter box to be located near the southwest corner of the Main Lawn. A small diameter drain (consisting of six and 12" diameter pipe) will convey flow from two inlets in the northwest quadrant of the site to the splitter box. Flow will proceed from the splitter box to a small water quality feature (biofiltration or rain garden) located in a triangular shaped island in the sidewalk near the southwest corner of the Main Lawn. Discharge from the water quality feature and overflow from the splitter box would flow to the existing 4th St drainage system, connecting to the existing storm drain system near the southwest corner of the property. The drainage plan assumes that some runoff from the site perimeter will flow directly into the existing street drainage system.





Irrigation Plan

The initial irrigation supply will be provided by a domestic water supply connection— protected by a double check backflow preventer. As adjacent development occurs, a scenario in which partnerships with adjacent developments north, east and south would allow for rooftop rainwater to be collected and stored in an on-site cistern located under the great lawn may prove to be more sustainable. This cistern would supply all Park irrigation requirements, supplemented with domestic water only when the cistern is temporarily interrupted or depleted. This future auxiliary water usage shall comply with TCEQ regulations and the irrigation shall be installed with purple pipe. This rainwater collection scenario would require significant cooperation from a number of different parties and organizations, but as Austin’s population grows and water demand rises, the initial challenge may prove worthwhile. The trade-offs associated with this scenario should be evaluated as the O&M plan continues to advance during later stages of the project.

A: Auction Oaks – An existing drip ring is installed under the deck. For the natural area containing the other auction oaks, two hose bibs will be installed at the north and south corners of the deck. To prevent any conflicts or destruction of the delicate root systems, no trenching or construction shall occur in this area. Instead, this area will be irrigated by hand.

B: Trees – All other trees shown to have two adjustable deep water bubblers. Hand trench within driplines using airspace as required to avoid root damage.

C: Shrub Beds – Assume subsurface drip line at 18” o.c. installed at a depth of 4” below surface.

D: Turf– Assume subsurface drip line with emitters at 12” o.c. installed a depth of 6” below surface. In the event PARD takes on Park maintenance, drip line irrigation will be rethought. A secondary pop-up or rotor type spray head system will be manually controlled to provide a ‘rinse’ prior to significant events scheduled in the park.

Planting and Turf

This concept is oriented around a large maintained lawn area with ornamental plantings that soften the back of the existing deck wall and provide a buffer against bus activity and noise.

A: Existing Mulch- Undisturbed areas below the "Auction Oaks."

B: Main Lawn- Species TBD (Need careful research on sun/shade and maintenance issues).

C: Creek Edge Planting- Plantings at the park entries are inspired by the relationship and character of plants that occur in our local creek systems. In general, there are plants right near the water line that are typically tucked between rocks, and very randomly spaced. Upper bank plantings are counter to that character, as described in item D.

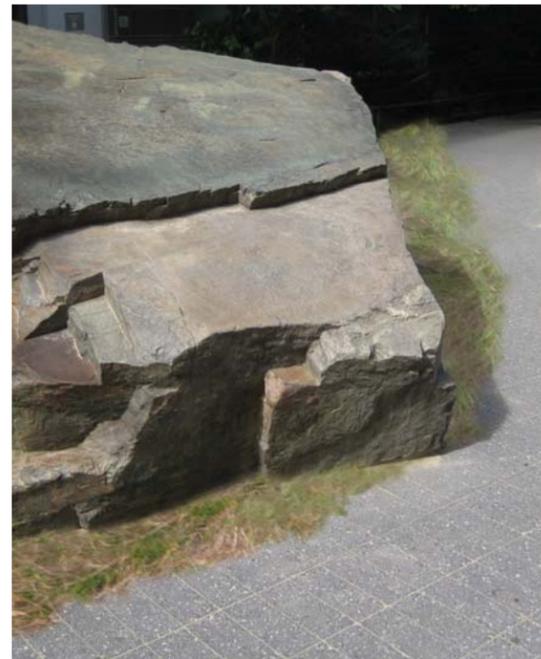
D: Bank Planting- As a counter to the Creek Edge planting areas, replications of the upper portions of creek banks should occur on the higher sides of planting areas. This should be more densely planted, with a focus on leafy, deciduous plants.

E: Lavender and Seasonal Planting- Limited areas around the plaza space provide an opportunity for dramatic displays of seasonal interest. This may be achieved by mass plantings of species with particular interest in all four seasons. With a vibrant context, the plaza is sure to be a popular place to host events or gather during regular park hours.

F: Wildflower and Short Grass Meadow- To de-clutter and truly set a Central Texas scene for the "Auction Oaks," a managed meadow area is recommended for the existing planting area. This space receives good sunlight and could be managed to create a greater sense of nature within the park. This would also allow volunteer efforts to be focused more on ornamental

plantings in more visible parts of the park, and greatly reduce foot traffic. This meadow could be managed by a local interest group and developed as a working showcase for prairie restoration right in the heart of the city. The plant mix should include a range of grasses, forbs and wildflowers, with an emphasis on establishing a colony of Bluebonnets. These plant communities also provide a consistent food source for insects and other creatures that can add a subtle level of liveliness to the Park. Maintenance management plans for the meadow must clearly set expectations for the establishment and care of the landscape, and include a 5-year maintenance plan and an alternative plans if the landscape does not establish. Any landscape work within the full critical root zone (CRZ) of the "Auction Oaks" must be done by hand.

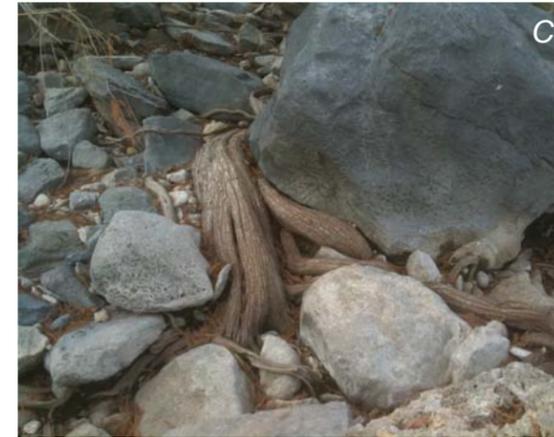
G: Hardy Foundation Plantings- These are plantings that provide structure to the edges of the park and can handle contact. They should be able to be sourced at 4" or 1 gallon size due to the fact that they are often planted in critical root zone areas.



Plantings on the edges of walkways should help blur the line between sitework and landscape...much like the deposited soils from a creek overlaying limestone creek bed.



Turf:
Bermuda Hybrid, pending the success of turf installed at Wooldridge Square



Inland Sea Oats
Little Bluestem
Sideoats Gramma
Berkely Sedge
Rain Lily (bulb)
Columbine
Cedar Sage
Society Garlic
Noliana Grass
Horseherb
Frogfruit

Limestone or Granite cobbles and rounded boulders



American Beautyberry
Turks Cap
Softleaf Yucca
Fall Aster
Deer Muhly
Daffodils (bulb)
Agarita
White Mistflower
Skeletonleaf Goldeneye
Mountain Pea
Pigeonberry



Bearded Iris
Lavender
Native Skullcap (Heartleaf)
Ornamental Kale/Cabbage
Bluebonnets (container grown)
Mexican Feather Grass
Blackeye Susan
White and/or Purple Coneflower
Vegetable Plants (corn, chard, etc)
Delphinium
Foxglove



Seed Mix:
Bluebonnet
Sunflower
Indian Paintbrush
Buffalo Grass var Texoca
Blue Gramma (native)
Sideoats Gramma var Haskell
Gaillardia
Evening Primrose
Mexican Hat

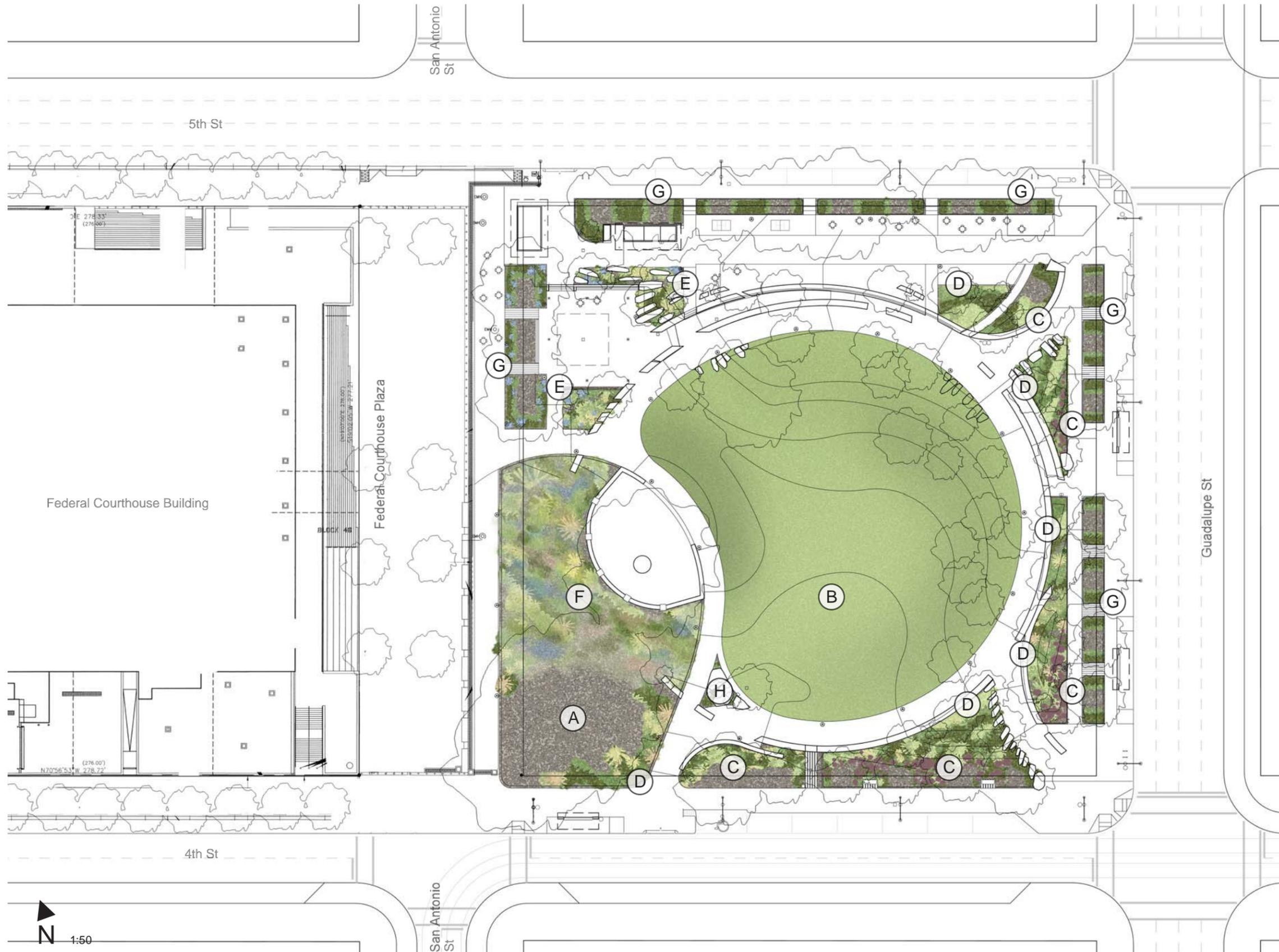


Bicolor Iris
Maiden Grass
Native Lantana
Inland Sea Oats
Upright Rosemary
Texas Mountain Laurel
Dwarf Yaupon
Texas Sage

Planting and Turf Plan

Legend

- A: Existing Mulch
- B: Main Lawn
- C: Creek Edge Planting
- D: Bank Planting
- E: Lavender and Seasonal Planting
- F: Wildflower and Short Grass Meadow
- G: Hardy Foundation Plantings
- H: Rain Garden



137%
 Percent increase of habitat area for birds and squirrels; Baseline is 38,671 SF

22%
 Percent of Park with seasonal plantings; Baseline is 6%

Soils

Tests on native site soils were done by the Department of Soils and Crop Science at Texas A&M (refer to Appendix A for the full report). These tests revealed some deficiencies in available nutrients and moderate or low levels of organics. Minor soil amendments should adequately address these issues. The level of soil compaction caused by years of heavy use and a lack of restricted areas throughout the site is of greater concern. Following soil improvements, care should be taken to protect against re-compaction resulting from construction and heavy use.

A: Meadow Soils- Existing container plantings in this area should be relocated to elsewhere on site. Mulch and surface material should be removed. Soil should then be lightly tilled and raked to remove stones and large pieces of organic material in preparation for a native seed application.

B: Airspade and Amendments- Where CRZ bulk density tests indicate a need, soils should be airspaded to a recommended depth for de-compaction and amended with compost to expand oxygen and water availability to tree roots (granular or liquid-injected fertilizers may also be recommended). Cover in mulch after completion to keep soils from drying. To the extent possible, expand the amount of healthy rooting space available to all existing trees.

C: Full-Depth Amended Soils- These areas outside of CRZs shall be amended with either on-site material mixed with compost and sand amendments or imported material, depending on the workability of soils that are intended to be installed by large machinery. Some areas may be compacted to allow for paving or other surfaces, but the soils will continue to provide a high level of nutrition for adjacent trees.

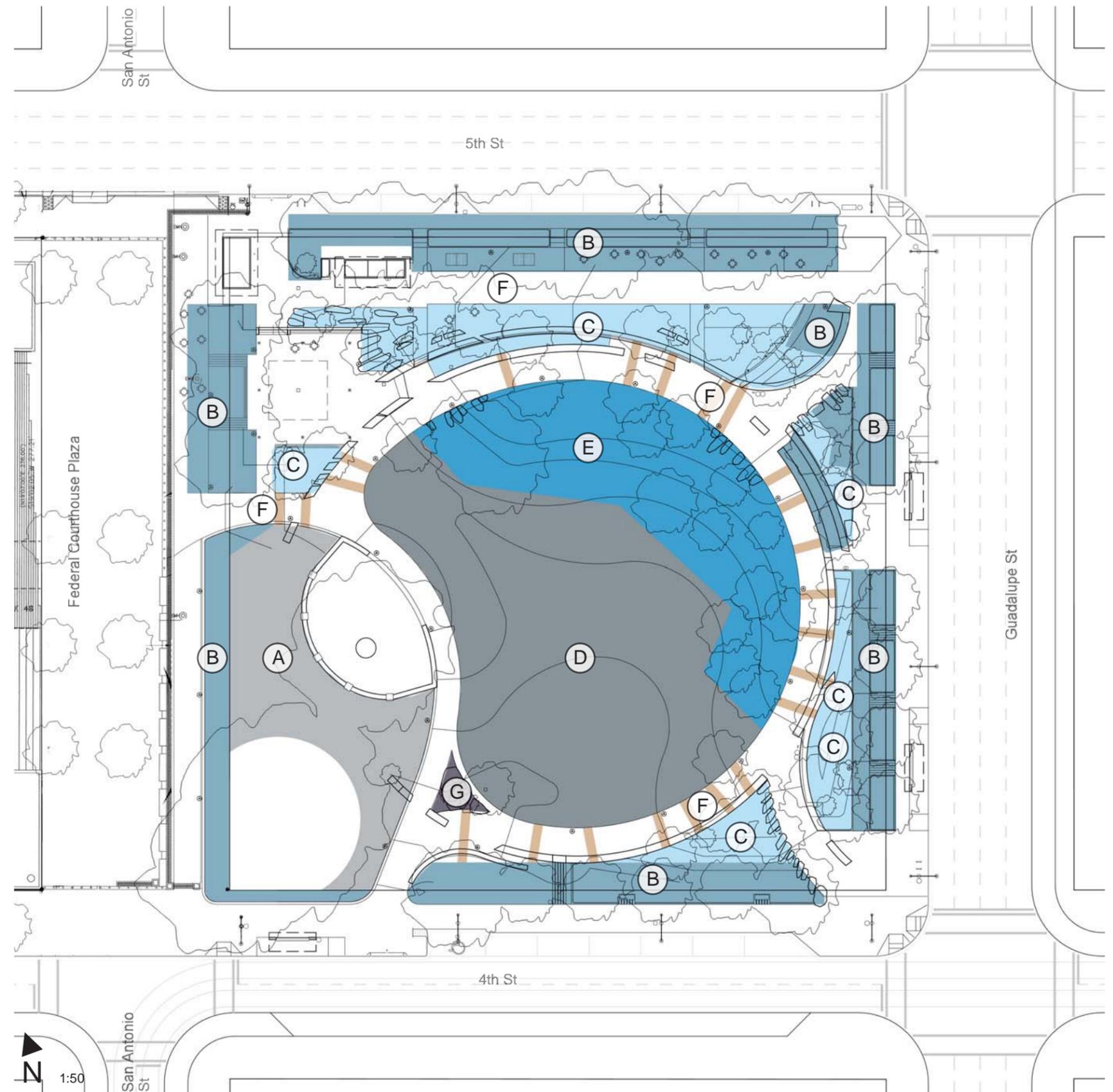
D: Lawn Profile- The flat portion of the Main Lawn shall have a full 12" of soil below proposed grades removed to address compacted soils

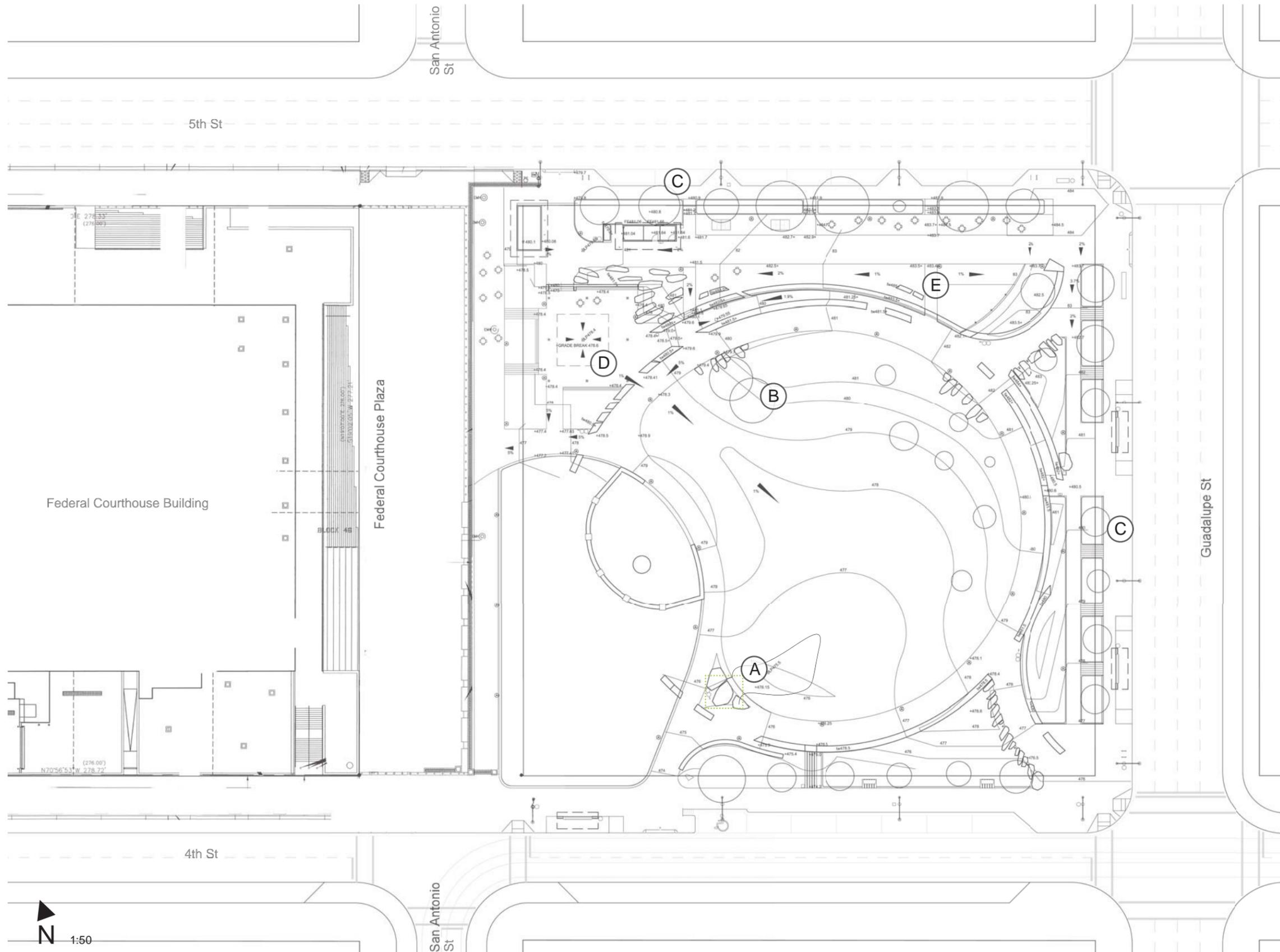
and remove parking lot debris which have limited soil quality for decades. The replacement profile shall consist of 2" of rich topsoil mixed with bank sand with 10" of free-draining soil mix with moderate sand content and some organic content below. This material should be watered and tested for noxious weed growth (i.e. Nut Sedge) prior to application on site. This material should be fine graded and free of lumps, clods or stones larger than 1/2". The quality of this surface has a direct impact on the look and feel of the final lawn surface. Soils should be rolled to an appropriate density prior to planting and may need to be rolled in several lifts to achieve even density.

E. Slope Soil Improvements- This area should be de-compacted to a 12" depth in all areas outside of the 25% CRZ of existing trees (the number of existing trees and root zones prohibit a full 12" excavation). Once loose, existing soils should be amended with compost and rolled to achieve a stable density. A final layer of top soil matching the Lawn Profile outlined in item D should be applied and again rolled for stable density.

F: Root Tunnels- In areas where root zones of existing or proposed material would benefit, 24"x 24" tunnels filled with healthy soils should be created to connect large areas of adjacent soil. These tunnels may be dug by mechanical means outside of existing CRZs, but may need to be dug using an airspade if existing trees are present. Concrete above these features may require additional depth or reinforcement depending on final structural recommendations.

G: Rain Garden: In this area shall feature a soil profile specially engineered to rapidly drain storm water and remove heavy metals and suspended solids (a typical 3" top dressing of organic bark mulch will have already removed most suspended solids). A soil additive will also remove harmful bacteria like that associated with pet waste.





Grading

Proposed grading in the Park works to create an interesting, accessible and logical ground plane. Proposed conditions in most areas are similar in elevation to what is there today, with the majority of new grading occurring around the arc promenade and walls. Grades are somewhat exaggerated at the corners of 4th and 5th St in an effort to create a strong sense of entry and create deeper soil areas for proposed plantings. Final designs should avoid impacts to full CRZ of existing trees wherever possible. Impacts include cut, fill, and/or compaction of the soil. Contractor activity during construction should take soil protections into account.

A: The plan works to sheet flow as much water as possible toward the southwest corner of the Park (the natural low point of the site), and capture this water in a high-flow rain garden area that is capable of removing both suspended solids and bacterial agents from storm water. The lawn area may detain a small amount of water depending on water quality requirements.

B: Grading should not occur within the 50% CRZ of existing trees if possible, and any necessary work in those areas should either be done by hand or air spade. Impacts are considered more than 4" of cut or fill and/or compaction of the soil.

C: Root pruning may be necessary prior to grading or excavation. This work should be directed and observed by a City Arborist.

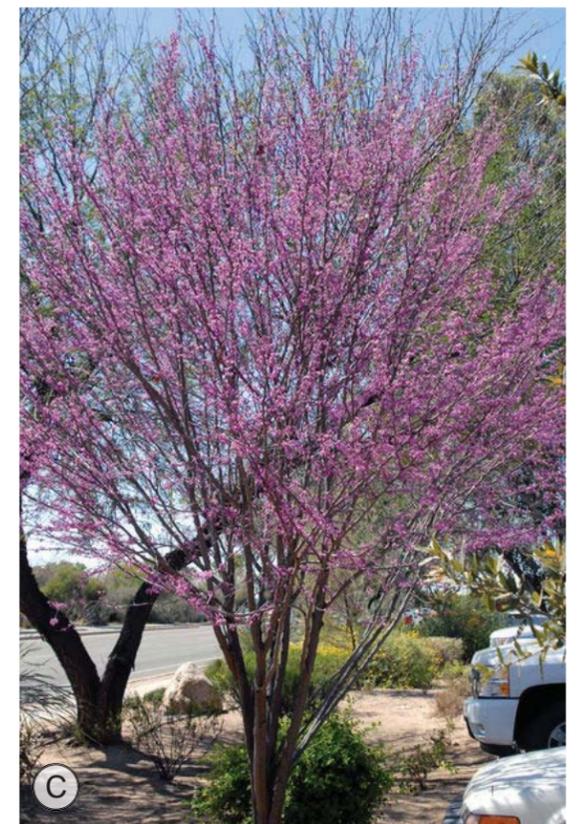
D: A grade break is proposed within the plaza space in preparation for a future water feature. Having this in place will allow for minimal disturbance of the plaza during the installation of that system.

E: Slopes in game areas should be set for optimum conditions depending on what games are planned.

Trees

New trees should emphasize seasonal interest, drought tolerance, and resistance to bird roosting (open form/habit). All trees should also have regional parent material. The trees selected are all deciduous to allow light to penetrate the Park in winter months. The shape and growth of new trees should be managed to avoid roosting conditions or blocked views. This plan has been present to Urban Forestry Board, the recommendations of which have been implemented to the greatest extent possible.

- A: Bigtooth Maple
- B: Burr Oak
- C: Texas Redbud
- D: Anacacho Orchid



Phased replacement of trees along streetscapes should occur based on City efforts to diversify the urban forest and as a response to the natural life cycle of existing trees. Because they are deciduous and provide fall color complementary to trees interior to the Park, Red Oaks are recommended to replace existing Live Oaks as they decline or die.



All layouts and clearance requirements, including those applicable to ADA routes, bus stops and other vehicular access routes, should not require pruning more than 25% of the live canopy.

Care and ongoing management of existing trees should focus on reducing roosting areas, and improving the overall form of trees above grade. Low limbs should be removed and other structural improvements may need to be made. Refer to the soils section of this document for below grade recommendations.

- E: "Auction Oaks"
- F: Existing Trees
- G: Mexican Sycamore (Existing)
- H: Cedar Elm (Existing)

I: Relocated Tree: To accommodate new Park construction, trees 5036 (5" Burr Oak), 5041 (7" Cedar Elm, and 5037 (7" Shumard Oak) should be relocated, a relatively simple process given the small size of the trees.

Some root pruning and preventative root control devices will be needed to ensure root health. Continuous root trenches are recommended at curb lines, as well as areas where significant grading is proposed adjacent to large root zones. Root barriers should be implemented at curbs and in areas adjacent to either existing or proposed trees.

- J: Root Pruning
- K: Root Barrier |||||



Root pruning can be done as a preventative measure before starting invasive excavations.



Companies such as DeepRoot make both rigid and plastic barriers to help control root growth under pavements.

Texas Red Oaks should be the tree of choice for replacement of Live Oaks along the Park perimeter.





Trees Plan

Legend

- A: Bigtooth Maple
- B: Burr Oak
- C: Texas Redbud
- D: Anacacho Orchid
- E: Auction Oaks
- F: Existing Trees
- G: Mexican Sycamore (Existing)
- H: Cedar Elm (Existing)
- I: Relocated Trees
- J: Root Pruning
- I: Root Barrier - - - - -

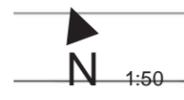
Tree Impact Summary

- 5th St; No new impact as proposed,
 4th St No new impact as proposed,
 Guadalupe St; No new impact as proposed
 San Antonio St (plaza); 3355 SF
- % of row as CRZ existing- 60%
 - % of row as 50% CRZ existing- 28.5%
 - % of row as impervious existing- +-10%
 - % of row as impervious proposed- 27%
 - % of "impact" on site CRZ proposed- 547 SF of 2025 SF= 27%
 - % of "impact" on site 50% CRZ proposed- 58 SF of 962 SF= 6%
 - Maximum impact to 50% CRZ on an individual tree- 50 of 258 SF= 19%
- Park- 77,294 SF
- % of site as CRZ existing (24,923 SF) 32%
 - % of site as 50% CRZ existing (7,349 SF) 9.5%
 - % of site as impervious cover existing- 15%
 - % of site as impervious cover proposed- 38%
 - % of "impact" on site CRZ proposed- 5201 SF of 24923 SF= 21%
 - % of "impact" on site 50% CRZ proposed- 72.5 SF of 7,349 SF= 1%
 - Maximum impact to 50% CRZ on an individual tree- 15 of 254 SF= 6%

20%
 Tree canopy conducive to grackle habitat;
 Baseline is 26%

26%
 Tree canopy cover with seasonal interest;
 Baseline is (13)%

49%
 Total existing tree canopy cover; Baseline is 40%



Sustainability

Many of the sustainability goals listed for the project did not receive as high of a priority as the physical improvements planned for the Park when voted on by the public (refer to pages 63 and 64), but some general sustainability goals should be incorporated as a basic part of Park operations.

Water Consumption: The Park should always work to reduce demand for potable water, and maintaining a high quality urban park will require regular and intensive maintenance. A few projects that should be considered include:

- Use of reclaimed water for hosing off surfaces, filling water barrels, and other manual watering tasks. This would require running a reclaimed water loop in addition to potable water lines, and would require additional equipment and signage to reduce the likelihood that people would drink from these sources.
- Use of reclaimed water for toilet flushing would reduce a minor source of demand on the site, but there are many challenges in getting these systems approved by Texas Commission for Environmental Quality (TCEQ) and may not be feasible at such a small scale. It may be worth installing a second set of water lines that can be connected to a reclaimed source when regulations are modified.
- Irrigation will require the most water of any proposed improvements. It is likely that a potable source will be needed during the early parts of the project, but a reclaimed line is planned for 5th St and should provide a logical source of sustainable water in the future. More information on this topic is outlined in the Irrigation section of this plan.
- If a water feature is implemented on site, measures should be taken to ensure that this feature uses advanced technology and design to minimize water loss, or is able to run using reclaimed (non-interactive) water.

- All building fixtures should include gallons per minute (GPM) reduction features, and toilets should limit gallons-per-flush to the greatest extent possible.
- Events planned for the Park should be given a water use budget, and should be required to create a water use plan as part of their application process. Feedback on what potential uses require potable or non-potable water should be issued to event organizers and enforced to the greatest extent possible.

Electric Consumption: Both daily operational and event demand for electricity should be tracked and minimized when possible. Keeping the Park lit during night hours, and high demand for power during events will create a significant demand within the park even if innovative technology is used, which has implications for both cost and regional environment.

- The Park should consider buying carbon credits to offset Park use. The goal would be to provide a “carbon neutral” park to the public.
- Events may be required to prove purchase of carbon offsets for their events, and provide an energy budget as part of the event application process.
- LED and other low-demand technology should be used to the greatest extent possible.
- Electric use at the kiosk should be monitored, and the kiosk operator should have to purchase carbon offsets that match their average electric use.
- Outlets and other sources of electric service should be well secured in all areas not intended for regular use by the public. This will reduce the likelihood of illicit use or after hours use.
- The Park lighting system may need to be organized so that a reduced percentage of light fixtures stay on during late hours.
- If a fountain is installed, it must include proper pump sizing and technology to reduce demand.

Storm Water Quality: The Park does have a role to play in the overall health of adjacent waterways. The Park is a popular destination for dogs and their owners, which comes with a serious amount of contamination that can harm water systems.

- Dog waste collection must be well managed for both quality of experience and water quality reasons. Programs that track the DNA of frequent offenders or creating a peer-enforced environment are both ways to reduce dog waste problems.
- Application of fertilizers, pesticides, or other “weed and feed” products in turf or planting areas should be carefully managed by a trained professional. Organic or water-soluble products should be used as much as possible. This issue should be addressed by the operations and management plan for the Park in some detail.
- The lawn space in the Park can function as a vegetation filter strip, which has the ability to remove a tremendous amount of suspended solid from storm water. Sheet flow and surface drainage toward the lawn space should be maximized.
- The inclusion of a water quality feature in the low point of the lawn drainage area should work to reduce what suspended solids are left in stormwater, as well as neutralize bacterial agents in the water. This would be the last line of water quality before water enters Shoal Creek.

Air Quality: There is a direct correlation between air quality and healthy vegetation, but there are also operational considerations that can be implemented that contribute to air quality.

- A mature, healthy tree is capable of removing around 0.65 tons of CO₂ from the ambient air per year. This fact makes the management of tree canopy critical in providing air quality benefits related to the park. The proposed plan would include enough trees to offset an additional 22-25 tons of CO₂ from the atmosphere. Ground

vegetation and lawn also contributes to this effort.

- The purchase of carbon offsets or renewable power for supply of all park electrical demand helps to improve air quality at a regional level.
- Management of idling delivery and event vehicles should be controlled in the operations of the park. Event plans should submit a plan for reducing idling and/or have some understanding of limits to idling associated with event use of the park.
- Fly ash content no less than 20% should be utilized for all concrete in the park construction. Due to extreme heat requirements in the production of portland cement, approximately 1 ton of CO₂ is produced for every 1 ton of portland cement. By maximizing the amount of fly ash in our concrete mix, we can have a profound impact on the carbon footprint of the initial park development.
- The use of local materials was a high priority for local stakeholders and is a good strategy in providing a “local” feel to the park aesthetics. It also has some air quality benefits from a regional standpoint. Much of the material proposed for park construction and finishes is easily found within 250 miles of the site. Exceptions might be plastics, sheet metals, lpe material, or other building fixtures.

Waste Management in the Park should work toward Austin’s Zero Waste initiatives that are in development. This should be planned for both daily trash/waste demand and event waste.

- Events should provide a waste management plan and list all partners involved in the processing of trash. All events should be required to recycle and should comply with the City’s Zero Waste plan as it takes shape.
- Park trash bins should be used for events, but must be emptied and washed prior to event completion.
- The Park may need to add compost bins at some point in the future, which may require

an additional bin along side recycling and mixed trash.

- Debris and cuttings collected during park maintenance should be recycled. A waste management plan for Park grounds maintenance and support building should be developed as part of a larger operations plan.
- The kiosk operator should include a recycling program initially and eventually comply with a zero waste program. The collection and disposal of kiosk trash during day-to-day operations should be developed as part of a larger operations plan.

Architectural Considerations

The addition of architectural elements within the Park represents a prominent, but necessary, change to uses historically incorporated in to the Park. As evidenced by great parks around the country, modest structures can be designed and incorporated into park settings without dominating scenery or changing sense of place. Structures proposed within Republic Square should follow this idea, yet express an identity that is essentially Austin.

Building program in the Park should plan to include the following elements:

A: Food Kiosk- The food kiosk building is the largest architectural footprint proposed for the site. The Park can support a structure between 250 and 275 square feet, with all features needed to operate the kiosk located within this area. Due to the small size, food preparation may need to occur off-site. The appearance of the building should be appropriate within the context of a historic park. The form should be simple and exterior materials should be durable. Finishes for the building should reflect the overall color palette for the park which includes wood finishes (lpe), dark green and black. Awnings for the building may be louvered steel (painted), wood (lpe) or a durable fabric (black or dark green). Building elevations and roof shape should respect the canopy of overhead trees to the greatest extent possible. Electric meters will need to be located along the 5th St façade of the building, and shall be clustered with other utility-related features as much as possible on the north face. Trash collection may require a large rolling bin stored along the 5th St side of the building. A small screen or enclosure may be needed to screen trash bins. The grease trap will be located on the south side of the building, with direct access to an existing sanitary manhole. Lighting for the building should include perimeter lighting that remains on at all times after dark. A “barrow program” for limited game equipment should be incorporated into the storage and programming of the kiosk.

B: Bathroom Facility- The site should include bathrooms for park users and in support of the

food kiosk. This building should be as small as possible, but meet the basic requirements of ADA. Similar to the kiosk, the appearance of the building should be appropriate within the context of a historic park. The form should be simple and exterior materials should be durable. Finishes for the building should reflect the overall color palette for the Park which includes wood finishes (lpe), dark green and black. Building elevations and roof shape should respect the canopy of overhead trees to the greatest extent possible. Electric meters will need to be located along the 5th St façade of the building, and shall be clustered with other utility-related features as much as possible on the north face. Lighting for the building should include perimeter lighting that remains on at all times after dark. Interiors of the building should be easy to clean with hoses, and safety considerations should be incorporated into lock/latch systems for doors. An ATM associated with the Park may need to be incorporated into the structure, as well as park storage or office space.

C: Park Storage- A 150 square foot storage space with 4' wide rolling door should be incorporated into the Park. This area will be reserved for park operational storage and possibly miscellaneous program storage (game equipment, etc). A small office space or desk for a possible park manager should be located in this building, as well as irrigation and master lighting controls.

D: Park Office- Depending on the type of management proposed for the Park, a small area dedicated to the park manager may need to be located within the park or added to another proposed building nearby. This space could be as small as 140 square feet and should have conditioned air, internet service and phone service.

E: METRO Rapid Platform(s) and METRO Rail Platform(s)- Proposed platform covers should be no larger than 8' x 20' with a minimum roof height of 10'. Backless seating or lean-bars are preferred but limited bench seating should be included under covered areas if required. The appearance of the structure should be

appropriate within the context of a historic park. The form should be simple and exterior materials should be durable. Finishes should reflect the overall color palette for the park which includes wood finishes (lpe), dark green and black. Building elevations and roof shape should respect the canopy of overhead trees to the greatest extent possible. Lighting should include area lighting that remains on at all times after dark. Light sources shall limit light trespass into the park area. A minimum clear zone of 10' from back of structure to Park property line must be maintained. There should be no poles, ramps, railings or fixtures of any kind in this zone. Refer to the hardscape section of this document for surface treatments.

All buildings should be analyzed for their degree of appropriateness for the site, adjacent conditions, operational realities, and long-term impact on the scenery of the park.



The structure within Market Square Park in Houston has a somewhat contemporary look that complements the feel of the park.



Comments from the Downtown Design Commission indicate a preference for a structure that meets the 21st century appeal of the new Federal Courthouse building.



Bryant Park in New York City includes a variety of kiosk structures that complement the historic nature of the park.

Local Board and Commission Reviews

Design Workshop presented the proposed improvements at Republic Square to a range of local boards and commissions.

Art in Public Places (AIPP)

- PARD to follow up with AIPP on roles and budgets once overall design budgets are set.
- There was some interest in having AIPP participate in the “corner icon” feature; it was clarified that this would not likely be part of the design team’s task.

Parks Board

- There was interest in providing more definitive direction on proposed Mexican-American cultural features.

Downtown Austin Alliance

- No actionable items.

Downtown Commission

- No actionable items.

Design Commission

James Shieh

- Concern that the park does not have enough formal program.
- Questioned the usefulness of the park after sunset.
- Interest in providing area for mobile food vendors so there are more food options and greater flexibility than the kiosk.

Evan Taniguchi

- Suggested that we explore use of water generated by the federal courthouse building.

Dean Almy

- Interest in providing service for mobile food vendors so there are more food options and greater flexibility than the kiosk.
- Mention of pedestrian route between Guadalupe and 4th St transit stops...needs to be an efficient transfer.

Juan Cotera

- City grid is the most important historic characteristic of downtown.
- The park should work to define its self as a square...not a rectangle.
- Define the park as a part of the grid.
- The plan needs more definition of cultural heritage content.
- Cultural themes could be woven into the park...“discovered.”

Hope Hasbrouck

- Needs to see sections that show relationships between park and courthouse.
- Interested in connecting materials of courthouse and proposed work to create a “district” feel.
- Interested in plan “alignments” with courthouse building.
- “21st Century Architecture” was mentioned for style/feel.

Jeannie Wiginton

- No specific action/content items noted.

The master plan concept was approved: however, Republic Square will need to return at design development level so that the commission can provide input on the aesthetic architectural qualities of the structures and for the incorporation of historic relevance of the site.

Heritage Society of Austin

- No actionable items.

Land Facilities and Programming

- No actionable items.

PARD Urban Forestry

- Avoid impacts to full critical root zone (CRZ) of existing trees wherever possible. Impacts include cut, fill, and/or compaction of the soil.
- Do not impact the half CRZ of any tree to be preserved. Impacts include more than 4” of cut or fill and/or compaction of the soil.
- Trees that have impacts in excess of allowable amounts must be shown to be removed and mitigation planned.
- Existing tree canopy heights must take precedence over vertical clearance needs for equipment and materials needed for construction, therefore plans must account for design implementation.
- Maintenance management plans for landscape elements including the meadow under the Auction Oaks and trees proposed for transplant must clearly set expectations for the establishment and care of the landscape, and include a 5-year maintenance plan and an alternative plans if the landscape does not establish. Any landscape work within the full CRZ of the Auction Oaks must be done by hand.
- Expand oxygen and water availability to tree roots by performing soil aeration and amending within the full critical root zones of trees wherever CRZ bulk density tests indicate a need. To the extent possible, expand the amount of rooting space available to all existing trees.
- New plantings shall be given adequate rooting space and must be spaced appropriately to accommodate their full mature size.
- Any new hardscape within the full critical root zone (CRZ) of any tree should allow root growth and water infiltration after installation.
- ADA accessibility requires an 8-foot clearance over ADA designated pathways. Ensure that tree pruning of over 25% of the live canopy will not be required to meet ADA clearance requirements over new ADA designated pathways.
- There was some concern related to the low diversity of proposed trees.
- All proposed Red Oaks should be originated from a local or western seed source.

The Texas Historic Commission (THC) will review a final draft of the plan.

Park Operations and Management

Design and construction are only a small part of any park's life. Long after these tasks have been completed, a strong Operations and Maintenance (O&M) Plan is what separates great parks from parks that could have been great. A complete O&M report for Republic Square has been prepared by ETM Associates for the Downtown Austin Alliance. This report provides analysis of O&M case studies from comparable parks, an estimated operating budget for the Park based on the Preferred Concept, and recommendations for establishing a focused management plan, outlined in four options for management partnerships based on existing and potential public and private Austin organizations.

For more information, refer to "Republic Square Park- Austin, Texas: Final Report" by ETM Associates, L.L.C., a draft of which was published December 2012.

