HISTORIC AND DESIGN REVIEW COMMISSION

October 18, 2017

HDRC CASE NO:	**2017-532**
ADDRESS:	3623 AVENUE B
LEGAL DESCRIPTION:	
ZONING:	R-6,HS
CITY COUNCIL DIST.:	2
LANDMARK:	Brackenridge Park
APPLICANT:	Susan McFarland/McFarland Architecture
OWNER:	City of San Antonio , City of San Antonio
TYPE OF WORK:	Modifications to the pedestrian entrance of the existing parking structure

REQUEST:

The applicant is requesting a Certificate of Appropriateness for approval to modify an existing pedestrian entrance on the north façade of the existing parking structure to include modifications site work and landscaping.

APPLICABLE CITATIONS:

UDC Section 35-673. – Site Design Standards

(a) Solar Access. The intent of providing and maintaining solar access to the San Antonio River is to protect the river's specific ecoclimate. The river has a special microclimate of natural and planted vegetation that requires certain levels and balanced amounts of sunlight, space and water. Development must be designed to respect and protect those natural requirements, keeping them in balance and not crowding or altering them so that vegetation does not receive more or less space and water, but particularly sunlight, than is required for normal expected growth.

(1) Building Massing to Provide Solar Access to the River. Building massing shall be so designed as to provide direct sunlight to vegetation in the river channel as defined:

A. The area to be measured for solar access shall be a thirty-foot setback from the river's edge or from the river's edge to the building face, which ever is lesser, parallel to the river for the length of the property.

B. The solar calculations shall be measured exclusive to the applicant's property; that is, shades and shadows of other buildings shall not be included in the calculations. The solar calculations shall only measure the impact of new construction and additions. The shading impact of historic buildings on the site may be excluded from the calculations.

C. The defined area shall receive a minimum of 5.5 hours of direct sunlight, measured at the winter solstice, and 7.5 hours of direct sunlight, measured at the summer solstice.

D. Those properties located on the south side of the river (whose north face is adjacent to the river) shall only be required to measure the sunlight in the 30-foot setback on the opposite bank of the river.

E. Those properties within the river improvement overlay district not directly adjacent to the river are still subject to the provisions of this section. To determine the solar access effect of these buildings on the river the applicant must measure the nearest point to the river of an area defined by a thirty-foot setback from the river's edge, parallel to the river for the length of their property that would be affected by their building. For those buildings on the south side of the river, the 30-foot setback shall be measured only on the opposite bank.

F. However, in those cases where the above conditions cannot be met due to the natural configuration of the river, existing street patterns, or existing buildings, the HDRC may approve a buildings mass and height as allowed by table 674-2.

G. If there is a conflict with this section and another section of this chapter this section shall prevail.

(2) Prohibition of Structures, Buildings, Roofs or Skywalks Over the River Channel. No structure, building, roof or skywalk may be constructed over the river channel, or by-pass channel with the exception of structures for flood control purposes, open air pedestrian bridges at ground or river level, and street bridges. The river channel is the natural course of the river as modified for flood control purposes and the Pershing-Catalpa ditch.

(b) Building Orientation. Buildings should be sited to help define active spaces for area users, provide pedestrian connections between sites, help animate the street scene and define street edges. Consideration to both the street and riverside should be given. The placement of a building on a site should therefore be considered within the context of the

block, as well as how the structure will support the broader design goals for the area.

(1) Two or More Buildings on a Site.

A. Cluster buildings to create active open spaces such as courtyards along the street and river edges. Site plazas and courtyards, if possible, so that they are shaded in the summer and are sunny in the winter.

(2) Primary and Secondary Entrances

A. Orient a building's primary entrance toward the street with subordinate entrances located on the riverside and/or the interior of the property. On a major thoroughfare street it is acceptable to provide the primary entrance through a common courtyard and then to a street.

B. The primary entrance shall be distinguished by architectural features such as, but not limited to: an entry portal; change in material or color; change in scale of other openings; addition of columns, lintels or canopies.

C. Secondary entrances shall have architectural features that are subordinate to the primary entrance in scale and detail. For purposes of this division subordinate means that the entrance is smaller in height and width, and has fewer or simpler architectural elements.

(c) Topography and Drainage. The natural contours of occasional hillsides and riverbanks contribute to the distinct character of the San Antonio River and shall be considered in site designs for new development. Site plans shall minimize the need for cut and fill. It should be considered as an opportunity for positive enhancements through the creative use of terraces and retaining walls.

(1) Visual Impacts of Cut and Fill. Divide a grade change of more than ten (10) vertical feet into a series of benches and terraces. Terrace steep slopes following site contours. When creating site benches, using sloped "transitional areas" as part of the required landscaping is appropriate.

(2) Minimize the Potential for Erosion at the Riverbank. Grade slopes at a stable angle not to exceed four to one (4:1) and provide plant material that will stabilize the soil such as vigorous ground covers, vines or turf planting that are native and noninvasive species as found on the permissible plant list maintained by the parks and recreation department. Use of stabilizing materials such as geo-web or geo-grid is permitted as long as plant material is used to conceal the grid.

Use of terraced walls is permitted when there is a slope of more than four to one (4:1).

(3) Retaining Walls. Limit the height of a retaining wall to less than six (6) feet. If the retaining wall must exceed six (6) feet, a series of six-foot terrace walls is acceptable. Walls at dams and locks are excluded from this requirement. If in the opinion of the historic preservation officer a higher wall is consistent with the adopted conceptual plan of the river, a higher wall (not to exceed twelve (12) feet) is allowed. Materials used for the walls may include limestone, stucco, brick, clay, tile, timber, or textured concrete. (see Figure 673-2)

(4) Enhance or Incorporate Acequias Into The Landscape Design and Drainage Scheme of the Site. Where archeological evidence indicates a site contains or has contained a Spanish colonial acequia, incorporate the original path of the acequia as a natural drainageway or a landscape feature of the site by including it as part of the open space plan, and a feature of the landscape design.

(5) Design of Stormwater Management Facilities to be a Landscape Amenity. Where above ground stormwater management facilities are required, such facilities shall be multi-purpose amenities. For example, water quality features can be included as part of the site landscaping and detention facilities can be included as part of a hardscape patio. Using an open concrete basin as a detention pond is prohibited.

(6) Walls and Fences at Detention Areas.

A. When the topography of the site exceeds a four to one (4:1) slope and it becomes necessary to use a masonry wall as part of the detention area, use a textured surface and incorporate plant materials, from the plant list maintained by the parks department, that will drape over the edge to soften the appearance of the structure.

B. The use of solid board or chain link fence with or without slats is prohibited. A welded wire, tubular steel, wrought iron or garden loop is permitted.

(7) Roof Drainage into the River.

A. All roof drainage and other run-off drainage shall conform to public works department standards so that they \ drain into sewer and storm drains rather than the river. Drainage of this type shall not be piped into the river unless the outlet is below the normal waterline of the river at normal flow rates.

B. All downspouts or gutters draining water from roofs or parapets shall be extended underground under walks and patios to the San Antonio River's edge or stormwater detention facility so that such drainage will not erode or otherwise damage the Riverwalk, landscaping or river retaining walls.

C. All piping and air-conditioning wastewater systems shall be kept in good repair. Water to be drained purposely from these systems, after being tested and adjudged free from pollution, shall be drained in the same manner prescribed in subsection (7)A. above.

(d) Riverside Setbacks. Riverside setbacks for both buildings and accessory structures are established to reinforce the

defined character of the specific river improvement overlay district and help to define an edge at the river pathway that is varied according to the relationship of the river and the street. In the more urban areas, buildings should align closer to the river edge, while in more rural areas the buildings should be set farther away.

(1)Minimum setback requirements are per the following Table 673-1.

Description	RIO-1	RIO-2	RIO-3	RIO-4	RIO-5	RIO-6
Riverside Setback	20 FT	15 FT	0 FT	20 FT	50 ft	100 FT

(2)Designation of a development node district provides for a minimum riverside setback of zero (0) feet.

(e)Landscape Design. Lush and varied landscapes are part of the tradition of the San Antonio River. These design standards apply to landscaping within an individual site. Additional standards follow that provide more specific standards for the public pathway along the river and street edges.

(1)Provide Variety in Landscape Design. Provide variety in the landscape experience along the river by varying landscape designs between properties. No more than seventy-five (75) percent of the landscape materials, including plants, shall be the same as those on adjacent properties. (see Figure 673-4).

(2) Planting Requirements in Open Space Abutting the River. On publicly-owned land leased by the adjoining property owner, if applicable, and/or within privately owned setbacks adjacent to the river, a minimum percentage of the open space, excluding building footprint, lease space under bridges and parking requirements, are required to be planted according to Table 673-2.

A. Planting requirements in RIO-4, RIO-5, and RIO-6 should continue the restoration landscape efforts along the river banks. Planting in these RIO districts is to be less formal so as to maintain the rural setting of the river.

B. In "RIO-3," if existing conditions don't meet the standards as set out in Table 673-2, the owner or lessee will not have to remove paving to add landscaping in order to meet the standards until there is a substantial remodeling of the outdoor area. Substantial remodeling will include replacement of seventy-five (75) percent of the paving materials, or replacement of balcony and stair structures.

(f) Plant Materials. A number of soil conditions converge in the San Antonio area to create unique vegetation ecosystems. Along the route of the San Antonio River, the soil conditions vary greatly from the northern boundary near Hildebrand to the city limits near Mission San Francisco de la Espada (Mission Espada) and therefore native and indigenous plants will vary accordingly. Landscaping should reflect the unique soil characteristics of the specific site.

(1) Incorporate Existing Vegetation. Extend the use of landscape materials, including plants, shrubs and trees that are used in the public areas of the river onto adjacent private areas to form a cohesive design.

(2) Use indigenous and noninvasive species characteristic of the specific site as found on the permissible plant list maintained by the parks and recreation department or the Unified Development Code Plant List found in Appendix E. In "RIO-3," plantings of tropical and semi-tropical plants with perennial background is permitted.

(3) Install Trees to Provide Shade and to Separate Pedestrians From Automobile Traffic. Install street trees along the property line or in the ROW abutting all streets according to minimum requirement standards established in subsection 35-512(b), except where this conflicts with existing downtown Tri-Party improvements in "RIO-3." In "RIO-3" the owner has the option of placing trees at the property line, or along the street edge.

(g) Paving Materials. An important San Antonio landscape tradition is the use of decorative surfaces for paving and other landscape structures. Paving materials and patterns should be carefully chosen to preserve and enhance the pedestrian experience.

(1) Vary Walkway, Patio and Courtyard Paving to Add Visual Interest on the Riverside of Properties Abutting the River. Pervious paving is encouraged where feasible and appropriate to the site.

A. A maximum of six hundred (600) square feet is allowed for a single paving material before the paving material must be divided or separated with a paving material that is different in texture, pattern, color or material. A separation using a different material must be a minimum of twenty-four (24) inches wide, the full width of the pathway.

B. A maximum of one hundred (100) lineal feet is allowed in a walkway before the pattern must change in districts "RIO-2," "RIO-3," and "RIO-4." A maximum of five hundred twenty-eight (528) lineal feet is allowed before the pattern must change in districts "RIO-1," "RIO-5" and "RIO-6." The change of material at five hundred twenty-eight (528) lineal feet will define and delineate one-tenth-mile markers.

C. In "RIO-3," the Riverwalk pathway shall be delineated by using a separate material that is clearly distinguished from the adjacent patio paving materials. If the historic Hugman drawings indicate a sidewalk width and pattern on the site, that paving pattern and material shall be replicated.

(h) Site Walls and Fences. Site walls and fences are used to help divide spaces, screen unsightly objects and provide privacy. However, the character of the San Antonio River is such that walls shall not be erected in such a way as to block

views of the river from public spaces.

(1) Use of Site Walls to Define Outdoor Spaces.

A. Use of low scale walls (twenty-four (24) inches to forty-eight (48) inches) to divide space, create a variety in landscaping and define edges is permitted.

B. Solid walls (up to seventy-two (72) inches) are permitted to: screen mechanical equipment, garbage receptacles and other unsightly areas; and provide privacy at the back of lots up to the front building face.

(2) Site Wall and Fence Materials.

A. On properties abutting the river, site walls and fence materials may be constructed of: stone, block, tile, stucco, wrought iron, tubular steel, welded wire or a combination of masonry and metal, cedar posts and welded wire or garden loop or other materials having similar characteristics. All other properties, not abutting the river may use the above listed materials plus wood fencing.

B. All chain link fences are prohibited for properties abutting the river. For properties that do not abut the river chain link is only allowed in the rear yard if not readily visible from the right-of-way. Barbed wire, razor wire, and concertina are prohibited in all RIO districts.

(i) Street Furnishings. Street furnishings are exterior amenities, including but not limited to, tables, chairs, umbrellas, landscape pots, wait stations, valet stations, bicycle racks, planters, benches, bus shelters, kiosks, waste receptacles and similar items that help to define pedestrian use areas. Handcrafted street furnishings are particularly important in San Antonio, and therefore this tradition of craftsmanship and of providing street furniture is encouraged.

(1) Prohibited Street Furnishings in Riverwalk Area. The following street furnishings are prohibited within the publicly owned portion of the Riverwalk area, whether or not the property is leased, and on the exterior of the riverside of buildings directly adjacent to the publicly owned portion of the river:

A. Vending machines.

B. Automatic teller machines.

C. Pay phones.

D. Photo booths.

E. Automated machines such as, but not limited to, penny crunching machines, blood pressure machines, fortune-telling machines, video games, animated characters and other machines that are internally illuminated, or have moving parts, or make noise, or have flashing lights.

F. Inanimate figures such as horses, kangaroos, bears, gorillas, mannequins or any such animal, cartoon or human figure. This section does not affect public art as defined in Appendix "A" of this chapter.

G. Monitors (i.e., television screens, computer screens).

H. Speakers.

(2) Street Furnishing Materials.

A. Street furnishings shall be made of wood, metal, stone, terra cotta, cast stone, hand-sculpted concrete, or solid surfacing material, such as Corian or Surell.

B. Inexpensive plastic resin furnishings are prohibited.

(3) Advertising on Street Furnishings.

A. No commercial logos, trademarks, decals, product names whether specific or generic, or names of businesses and organizations shall be allowed on street furnishings.

B. Product or business advertising is prohibited on all street furnishings.

C. Notwithstanding the restrictions above, applications may be approved for purposes of donor or non-profit recognition.

(4) Street furnishings, such as tables and chairs may not be stored (other than overnight storage) in such a way as to be visible from the river pathway.

(j) Lighting. Site lighting should be considered an integral element of the landscape design of a property. It should help define activity areas and provide interest at night. At the same time, lighting should facilitate safe and convenient circulation for pedestrians, bicyclists and motorists. Overspill of light and light pollution should be avoided.

(1) Site Lighting. Site lighting shall be shielded by permanent attachments to light fixtures so that the light sources are not visible from a public way and any offsite glare is prevented.

A. Site lighting shall include illumination of parking areas, buildings, pedestrian routes, dining areas, design features and public ways.

B. Outdoor spaces adjoining and visible from the river right-of-way shall have average ambient light levels of between one (1) and three (3) foot-candles with a minimum of 0.5-foot candles and a maximum of six (6) foot-candles at any point measured on the ground plane. Interior spaces visible from the river right-of-way on the river level and ground floor level shall use light sources with no more than the equivalent lumens of a one hundred-watt incandescent bulb. Exterior balconies, porches and canopies adjoining and visible from the river

right-of-way shall use light sources with the equivalent lumens of a sixty-watt incandescent bulb with average ambient light levels no greater than the lumen out put of a one hundred-watt incandescent light bulb as long as average foot candle standards are not exceeded. Accent lighting of landscape or building features including specimen plants, gates, entries, water features, art work, stairs, and ramps may exceed these standards by a multiple of 2.5. Recreational fields and activity areas that require higher light levels shall be screened from the river hike and bike pathways with a landscape buffer.

C. Exterior light fixtures that use the equivalent of more than one hundred-watt incandescent bulbs shall not emit a significant amount of the fixture's total output above a vertical cut-off angle of ninety (90) degrees. Any structural part of the fixture providing this cut-off angle must be permanently affixed.

D. Lighting spillover to the publicly owned areas of the river or across property lines shall not exceed one-half (½) of one (1) foot-candle measured at any point ten (10) feet beyond the property line.

(2) Provide Lighting for Pedestrian Ways That is Low Scaled for Walking. The position of a lamp in a pedestrian-way light shall not exceed fifteen (15) feet in height above the ground.

(3) Light Temperature and Color.

A. Light temperature and color shall be between 2500° K and 3500° K with a color rendition index (CRI) of eighty (80) or higher, respectively. This restriction is limited to all outdoor spaces adjoining and visible from the river right-of-way and from the interior spaces adjoining the river right-of-way on the river level and ground floor level. Levels shall be determined by product specifications.

(4) Minimize the Visual Impacts of Exterior Building Lighting.

A. All security lighting shall be shielded so that the light sources are not visible from a public way.

B. Lighting (uplighting and downlighting) that is positioned to highlight a building or outdoor artwork shall be aimed at the object to be illuminated, not pointed into the sky.

C. Fixtures shall not distract from, or obscure important architectural features of the building. Lighting fixtures shall be a subordinate feature on the building unless they are incorporated into the over-all design scheme of the building.

(5) Prohibited Lighting on the Riverside of Properties Abutting the River.

A. Flashing lights.

B. Rotating lights.

C. Chaser lights.

D. Exposed neon.

E. Seasonal decorating lights such as festoon, string or rope lights, except between November 20 and January 10.

F. Flood lamps.

(6) Minimize the visual impacts of lighting in parking areas in order to enhance the perception of the nighttime sky and to prevent glare onto adjacent properties. Parking lot light poles are limited to thirty (30) feet in height, shall have a 90° cutoff angle so as to not emit light above the horizontal plane.

(k) Curbs and Gutters.

(1) Construct Curb and Gutter Along the Street Edge of a Property.

A. Install curbs and gutter along the street edge at the time of improving a parcel.

B. In order to preserve the rural character of RIO-5 and RIO-6, the HPO in coordination with public works and the development services department may waive the requirement of curbs and gutters.

(l) Access to Public Pathway Along the River. These requirements are specifically for those properties adjacent to the river to provide a connection to the publicly owned pathway along the river. The connections are to stimulate and enhance urban activity, provide path connections in an urban context, enliven street activity, and protect the ambiance and character of the river area.

(1) A stair, ramp or elevator connecting the publicly owned pathway at the river to private property along the river is allowed by right at the following locations:

A. At all street and vehicular bridge crossings over the river.

B. Where publicly owned streets dead end into the river.

C. Where the pedestrian pathway in the Riverwalk area is located at the top of bank and there is a two-foot or less grade change between the private property and the pathway.

(2) If there is a grade change greater than two (2) feet between the private property and the publicly owned pathway at the river then the following conditions apply:

A. Access to the publicly owned pathway is limited to one (1) connection per property, with the exception that connections are always allowed at street and vehicular bridge crossings. For example if one (1) property extends the entire block face from street crossing to street crossing the owner would be allowed three (3) access points if

the distance requirements were met.

B. The minimum distance between access points shall be ninety-five (95) feet. Only street and vehicular bridge connections are exempted. Mid-block access points must meet this requirement.

C. Reciprocal access agreements between property owners are permitted.

(3) Clearly define a key pedestrian gateway into the site from the publicly owned pathway at the river with distinctive architectural or landscape elements.

A. The primary gateway from a development to the publicly owned pathway at the river shall be defined by an architectural or landscape element made of stone, brick, tile, metal, rough hewn cedar or hand-formed concrete or through the use of distinctive plantings or planting beds.

(m) Buffering and Screening. The manner in which screening and buffering elements are designed on a site greatly affects the character of the river districts. In general, service areas shall be screened or buffered. "Buffers" are considered to be landscaped berms, planters or planting beds; whereas, more solid "screens" include fences and walls. When site development creates an unavoidable negative visual impact on abutting properties or to the public right-of-way, it shall be mitigated with a landscape design that will buffer or screen it.

(1) Landscape Buffers Shall be Used in the Following Circumstances: To buffer the edges of a parking lot from pedestrian ways and outdoor use areas, (such as patios, and courtyards), and as an option to screening in order to buffer service areas, garbage disposal areas, mechanical equipment, storage areas, maintenance yards, equipment storage areas and other similar activities that by their nature create unsightly views from pedestrian ways, streets, public ROWs and adjoining property.

(2) Screening Elements Shall be Used in the Following Circumstances: To screen service areas, storage areas, or garbage areas from pedestrian ways.

(3) Exceptions for Site Constraints. Due to site constraints, in all RIOs and specifically for "RIO-3" where there is less than ten (10) feet to provide for the minimum landscape berm, a screen may be used in conjunction with plantings to meet the intent of these standards. For example a low site wall may be combined with plant materials to create a buffer with a lesser cross sectional width.

(4) Applicable Bufferyard Types. Table 510-2 establishes minimum plant materials required for each bufferyard type. For purposes of this section, type C shall be the acceptable minimum type.

(5) Applicable Screening Fence and Wall Types. Screening fences and walls shall be subject to conditions of subsection 35-673(h), Walls and Fences.

(n) Service Areas and Mechanical Equipment. Service areas and mechanical equipment should be visually unobtrusive and should be integrated with the design of the site and building. Noise generated from mechanical equipment shall not exceed city noise regulations.

(1) Locate service entrances, waste disposal areas and other similar uses adjacent to service lanes and away from major streets and the river.

A. Position utility boxes so that they cannot be seen from the public Riverwalk path, or from major streets, by locating them on the sides of buildings and away from pedestrian and vehicular routes. Locating them within interior building corners, at building offsets or other similar locations where the building mass acts as a shield from public view is preferred.

B. Orient the door to a trash enclosure to face away from the street when feasible.

C. Air intake and exhaust systems, or other mechanical equipment that generates noise, smoke or odors, shall not be located at the pedestrian level.

(2) Screening of service entrance shall be compatible with the buildings on the block face.

A. When it would be visible from a public way, a service area shall be visually compatible with the buildings on the block face.

B. A wall will be considered compatible if it uses the same material as other buildings on the block, or is painted a neutral color such as beige, gray or dark green or if it is in keeping with the color scheme of the adjacent building.

(o) Bicycle Parking. On-site bicycle parking helps promote a long term sustainable strategy for development in RIO districts. Bicycle parking shall be placed in a well lit and accessible area. UDC bicycle parking requirements in UDC 35-526 can be met through indoor bicycle storage facilities in lieu of outdoor bike rack fixtures.

FINDINGS:

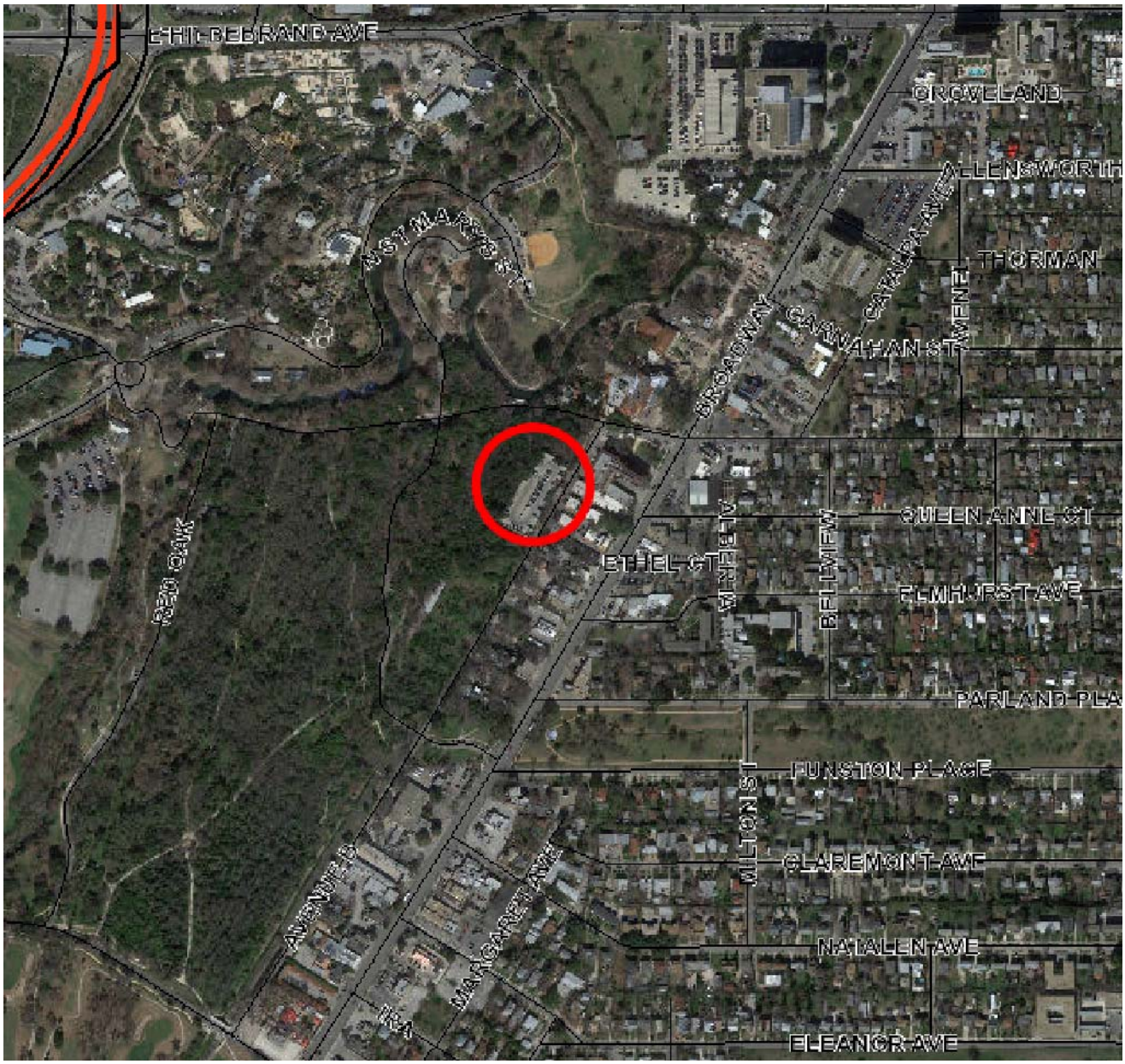
a. The applicant is requesting a Certificate of Appropriateness for approval to perform entrance modifications to the existing pedestrian entrance to include landscaping and site work modifications. The applicant received a Certificate of Appropriateness at the September 20, 2017, Historic and Design Review Commission hearing for the construction of an additional level of parking on top of the existing structure.
b. SITE WORK – The applicant has proposed site work that includes the installation of new paving details at the modified pedestrian entrance, the addition of landscaping elements including a gravel lined swale, gravel mulch, boulders, yucca and other plants. The applicant has noted the installation of two Yaupon trees to replace two cedar elms that are to be removed. A total of three small cedar elms will be removed. Staff finds the proposed modifications to be appropriate and consistent with the UDC.
c. SITE WORK – A new pedestrian pathway will be installed that will lead to the modified pedestrian entrance and to near the automobile entrance to the garage. Staff finds the proposed modifications to be appropriate and consistent with the UDC.
d. MODIFIED ENTRANCE – The applicant has proposed to create a pedestrian entrance on the north façade of the structure that will include the removal of three parking stalls and the installation of new paving, a new entrance opening and bollards. Staff finds the proposed modifications to be appropriate and consistent with the UDC.

RECOMMENDATION:

Staff recommends approval as submitted based on findings a through d.

CASE MANAGER:

Edward Hall



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Printed:Sep 15, 2017

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Two Cedar Elms
to be Removed
PARKING
Looking Southwest
toward Garage
along Avenue B

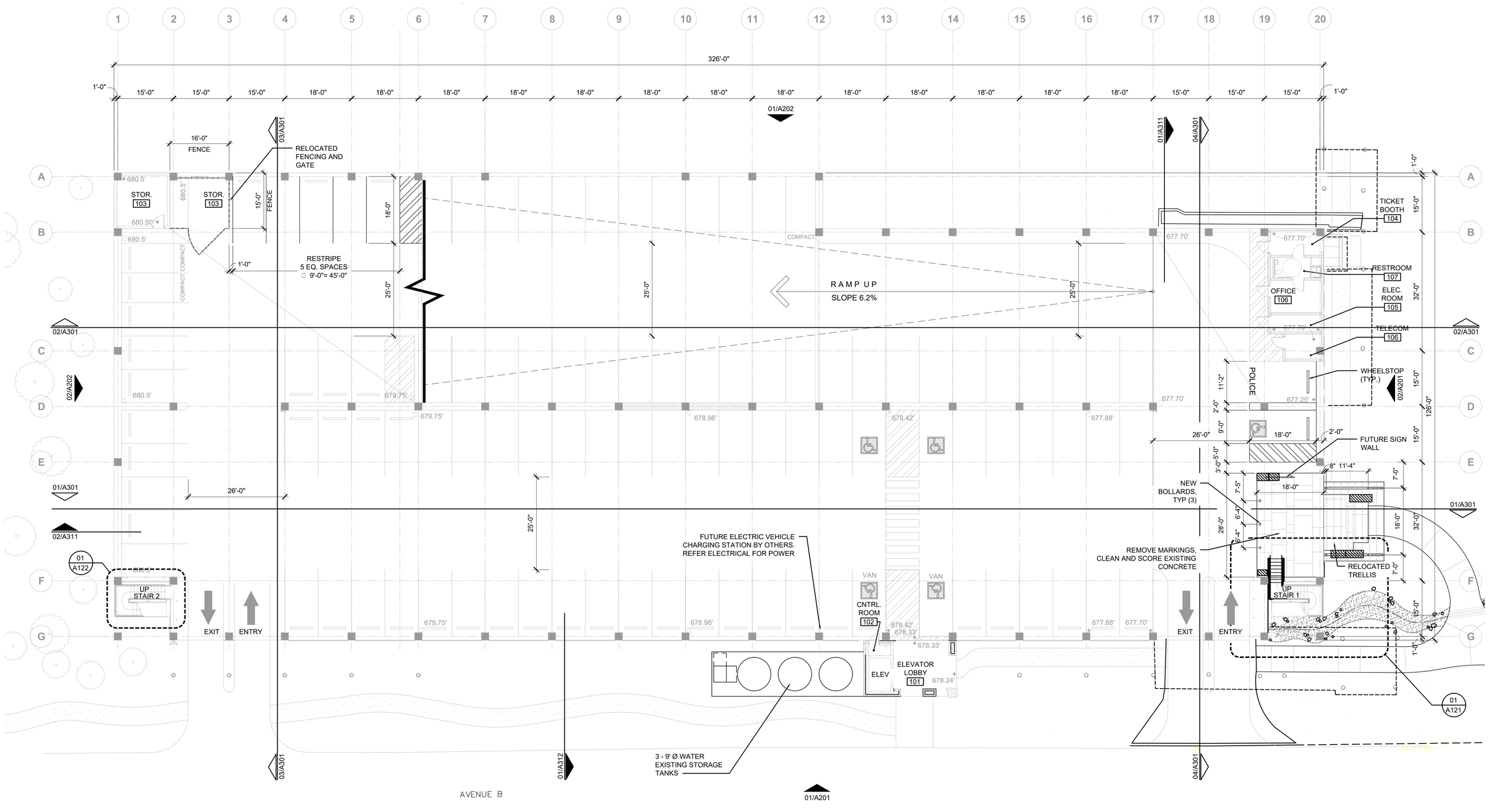
Two Cedar Elms
to be Removed
View toward Museum
from Garage

GENERAL NOTES

1. CONTRACTOR MUST FIELD VERIFY ALL MEASUREMENTS AND CONDITIONS PRIOR TO PROCEEDING WITH THE WORK.
2. ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE 2015 INTERNATIONAL BUILDING CODE WITH LOCAL AMENDMENTS, AND WITH ALL OTHER CODES, ORDINANCES AND REQUIREMENTS SET FORTH BY THE CITY OF SAN ANTONIO, TEXAS.
3. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL CAREFULLY REVIEW THE DRAWINGS, SPECIFICATIONS, DETAILS AND NOTES FOR INFORMATION REGARDING THE INTENDED SCOPE OF WORK PRIOR TO PROCEEDING WITH THE WORK.

LEGEND

..... BARRIER CABLE



01 FLOOR PLAN - LEVEL 1

SCALE: 3/32" = 1'-0"

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REGISTERED ARCHITECT SUSAN M. McFARLAND 14018 STATE OF TEXAS

August 11, 2017

BRACKENRIDGE PARK GARAGE EXPANSION

3623 Avenue B
San Antonio, Texas 78209

ISSUED FOR:

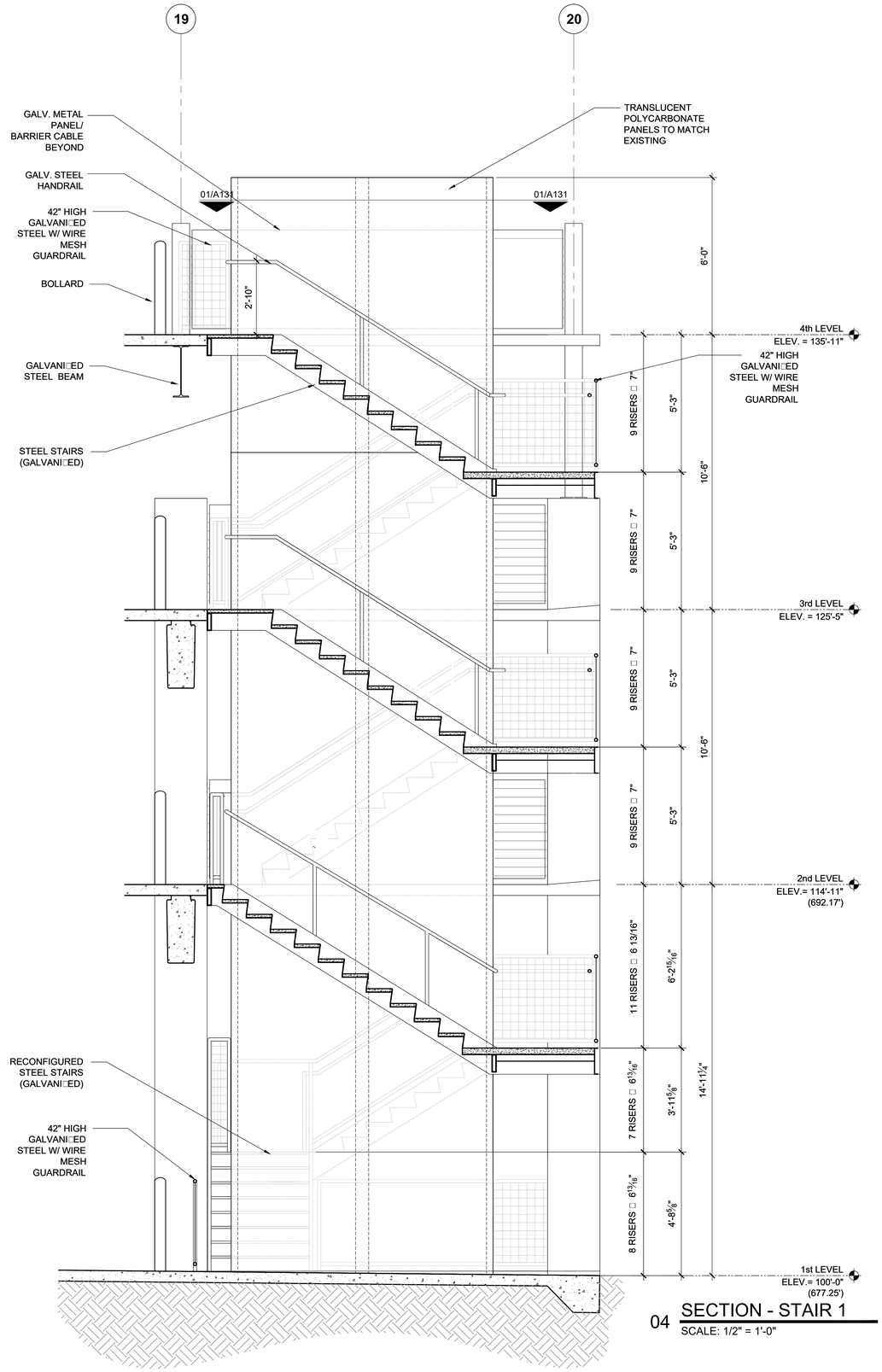
NO.	DATE	DESCRIPTION
1	11AUG17	CONSTRUCTION

TITLE: FLOOR PLAN LEVEL 1

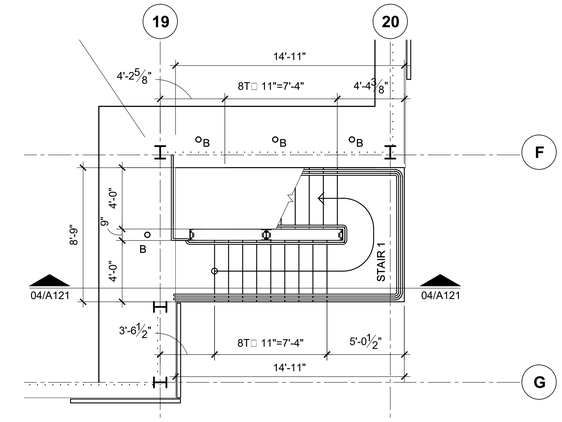
SHEET: A111

LEGEND

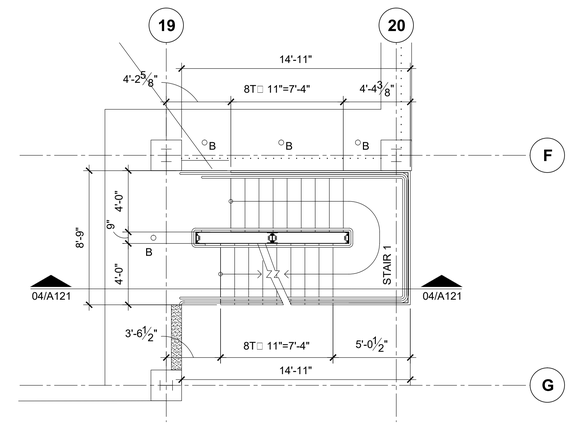
○B	PIPE BOLLARD - RE: 10/A313 (TYP. ALL LEVELS)



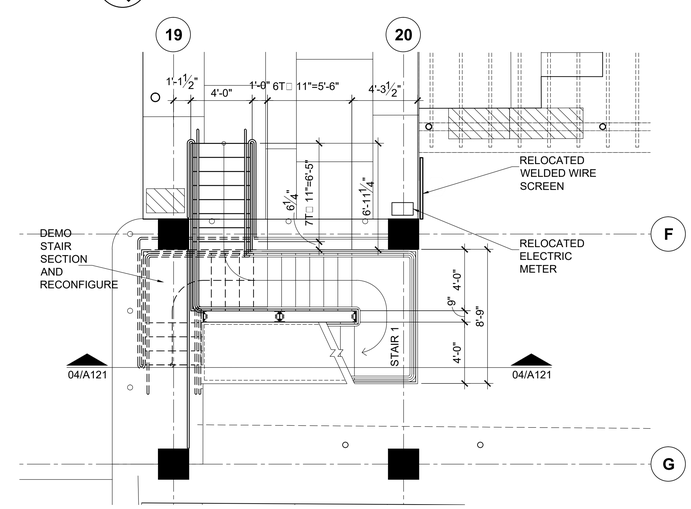
04 SECTION - STAIR 1
SCALE: 1/2" = 1'-0"



03 ENLARGED PLAN - 4th LEVEL
SCALE: 1/4" = 1'-0"



02 ENLARGED PLAN - 3rd LEVEL
SCALE: 1/4" = 1'-0"



01 ENLARGED PLAN - 1st LEVEL
SCALE: 1/4" = 1'-0"

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REGISTERED ARCHITECT SUSAN W. McFARLAND 14018 STATE OF TEXAS

August 11, 2017

BRACKENRIDGE PARK GARAGE EXPANSION

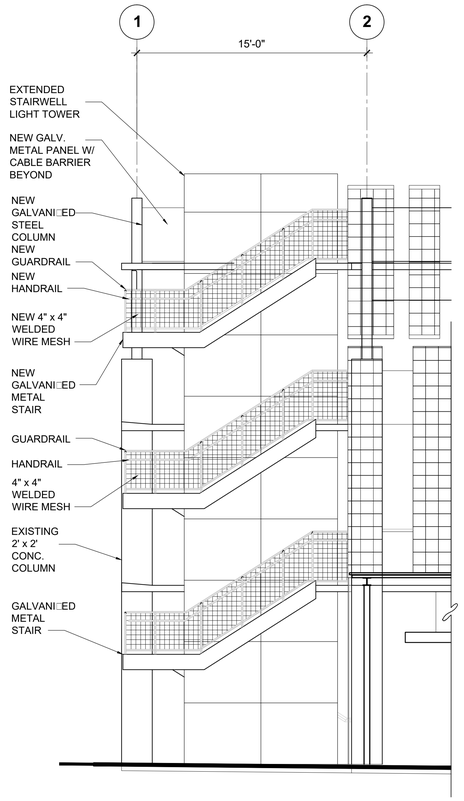
3623 Avenue B
San Antonio, Texas 78209

ISSUED FOR:

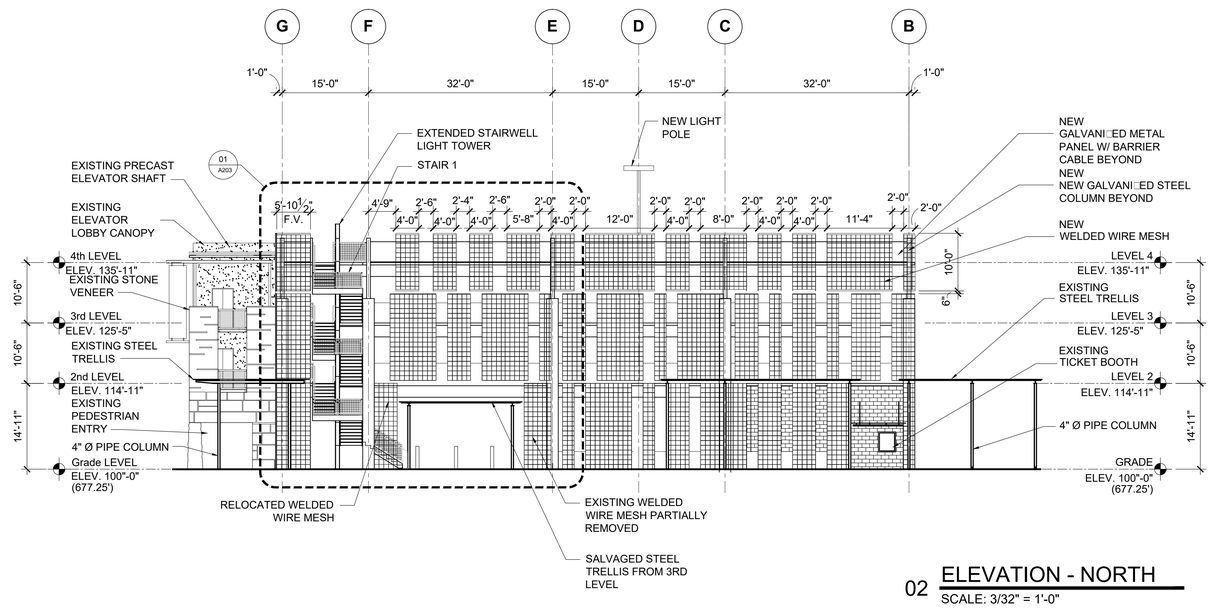
NO.	DATE	DESCRIPTION
1	11AUG17	CONSTRUCTION

TITLE: STAIR 1 PLANS/ SECTION

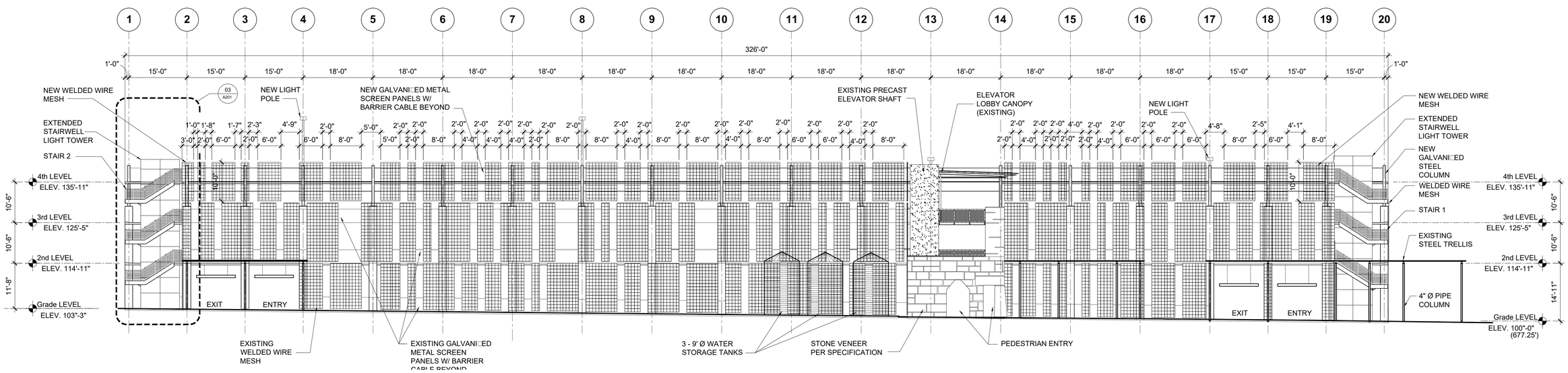
SHEET: **A121**



03 ELEVATION - NORTH
SCALE: 1/4" = 1'-0"



02 ELEVATION - NORTH
SCALE: 3/32" = 1'-0"



01 ELEVATION - EAST
SCALE: 3/32" = 1'-0"

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REGISTERED ARCHITECT SUSAN W. McFARLAND 14018 STATE OF TEXAS

August 11, 2017

BRACKENRIDGE PARK GARAGE EXPANSION

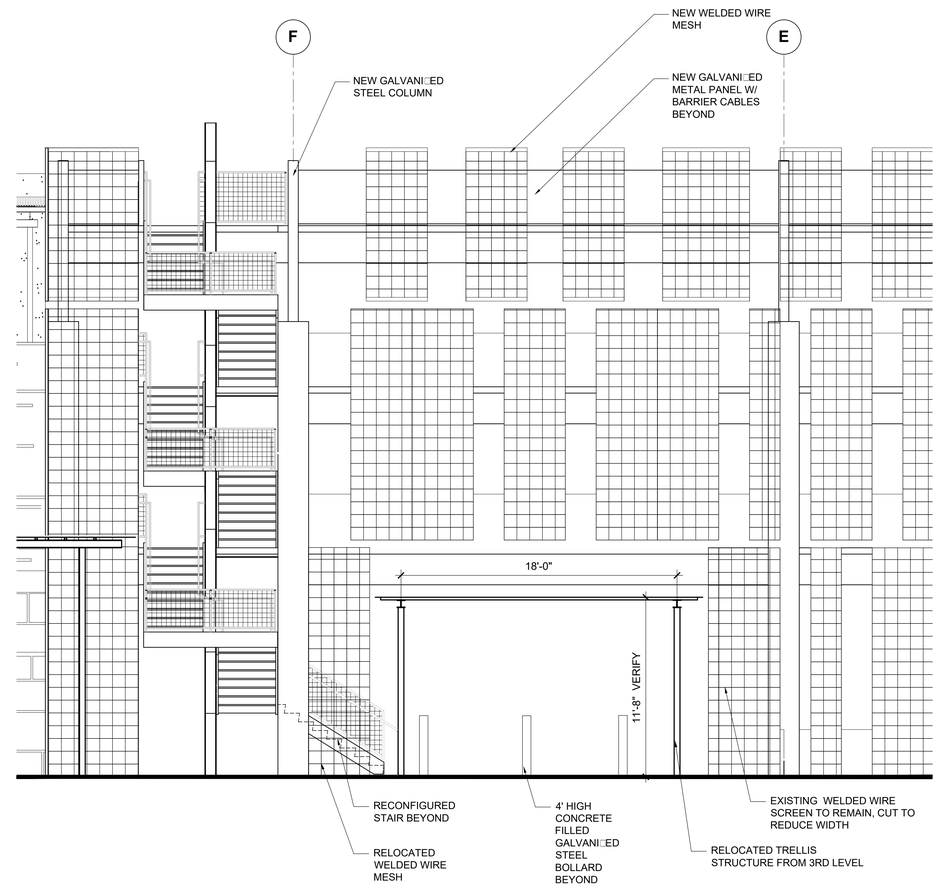
3623 Avenue B
San Antonio, Texas 78209

ISSUED FOR:

NO.	DATE	DESCRIPTION
1	11AUG17	CONSTRUCTION

TITLE: EXTERIOR ELEVATIONS

SHEET: A201



01 ELEVATION - ENTRY
SCALE: 1/4" = 1'-0"

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REGISTERED ARCHITECT
SUSAN W. McFARLAND
14018
STATE OF TEXAS

August 11, 2017

BRACKENRIDGE PARK GARAGE EXPANSION

3623 Avenue B
San Antonio, Texas 78209

ISSUED FOR:

NO.	DATE	DESCRIPTION
1	11AUG17	CONSTRUCTION

TITLE: ENTRY ELEVATION

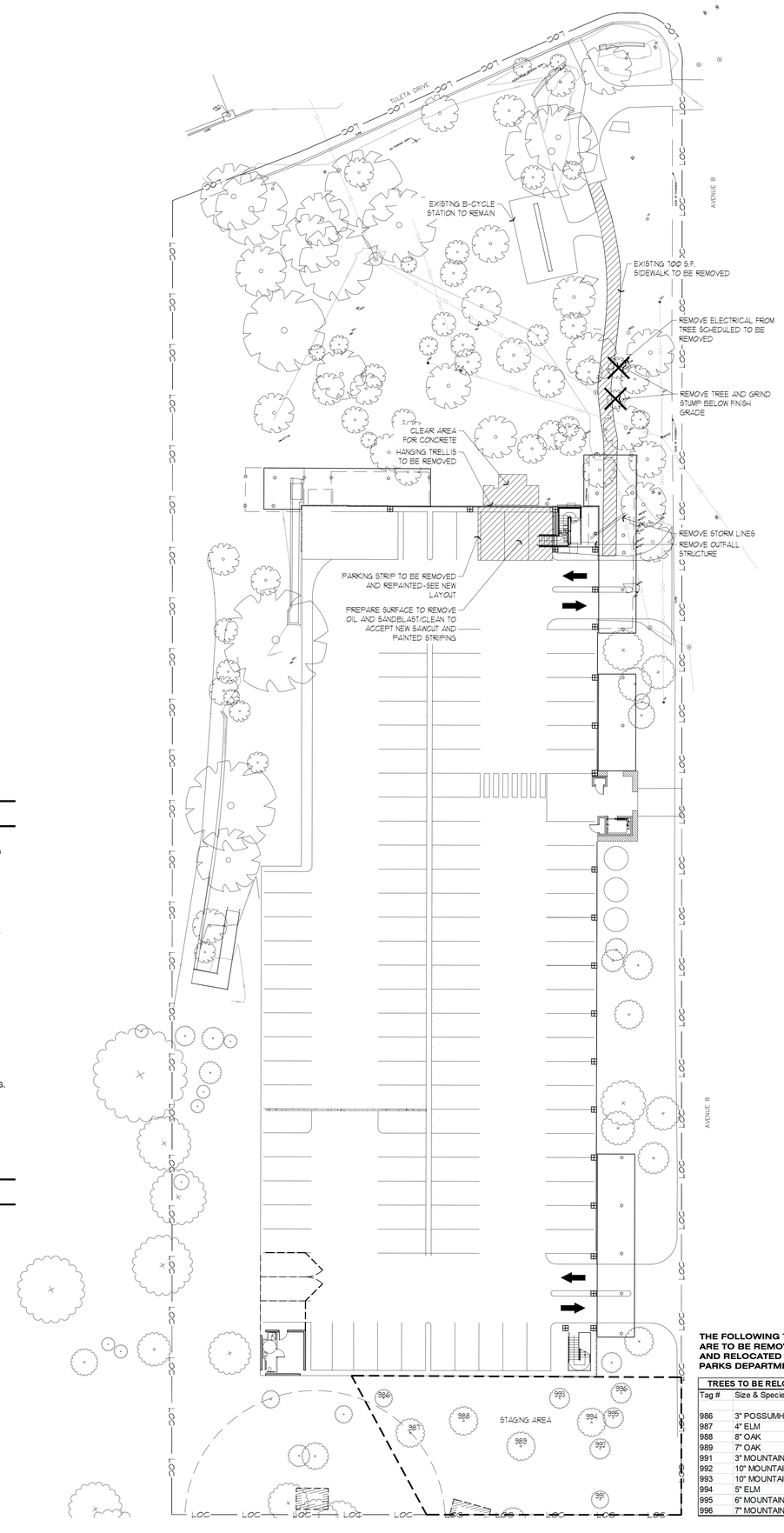
SHEET: **A203**

GENERAL DEMOLITION NOTES

1. ALL EXISTING ITEMS/UTILITIES NOT SPECIFICALLY NOTED TO BE REMOVED SHALL REMAIN AND SHALL BE PROTECTED FROM DAMAGE. ANY ITEMS OR UTILITIES REMOVED OR DAMAGED DURING DEMOLITION THAT WERE TO REMAIN SHALL BE REPLACED BY CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
2. ALL EXISTING TREES SHALL REMAIN UNLESS IDENTIFIED FOR DEMOLITION ON TREE PRESERVATION PLAN. ALL TREES TO REMAIN SHALL BE PROTECTED. CONTRACTOR SHALL IMMEDIATELY NOTIFY LANDSCAPE ARCHITECT SHOULD ANY QUESTIONS ARISE REGARDING EXISTING TREES.
3. THE CONTRACTOR SHALL SAW CUT EXISTING PAVEMENT, CURBS AND SIDEWALKS AT LOCATIONS SHOWN ON THE PLANS. NO JAGGED OR IRREGULAR CUTS IN PAVEMENT, CURBS, OR SIDEWALKS WILL BE ACCEPTED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS, AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THE PROJECT.
5. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND LANDSCAPE ARCHITECT IF THERE ARE ANY QUESTIONS FOR DEMOLITION WORK ON THIS PROJECT.
6. EXISTING UTILITIES SHOWN ON THIS LAYOUT WERE OBTAINED FROM A SURVEY OF VISIBLE FEATURES AT THE SITE AND RECORD MAPS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND EXPOSING CONFLICTS PRIOR TO CONSTRUCTION.
7. IT IS ESSENTIAL THAT, 48 HOURS PRIOR TO CONSTRUCTION, ALL UTILITY COMPANIES BE NOTIFIED TO LOCATE AND TAG THEIR UNDERGROUND FACILITIES.
8. DEMOLITION DEBRIS TO BE DISPOSED OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATIONS.
9. THE GENERAL CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH LANDSCAPE ARCHITECT PRIOR TO MOBILIZATION TO DISCUSS AND MARK ALL TREES TO BE PROTECTED AND REMOVED.

LEGEND

Demo Area



THE FOLLOWING TREES ARE TO BE REMOVED AND RELOCATED BY THE PARKS DEPARTMENT:

TREES TO BE RELOCATED	
Tag #	Size & Species
986	3" POSSUMHAW
987	4" ELM
988	8" OAK
989	7" OAK
991	3" MOUNTAIN LAUREL
992	10" MOUNTAIN LAUREL
993	10" MOUNTAIN LAUREL
994	5" ELM
995	6" MOUNTAIN LAUREL
996	7" MOUNTAIN LAUREL

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REGISTERED LANDSCAPE ARCHITECT
ROBERT C. EVANS
STATE OF TEXAS
8/11/2017

BRACKENRIDGE PARK GARAGE EXPANSION

3623 Avenue B
San Antonio, Texas 78209

ISSUED FOR:

NO.	DATE	DESCRIPTION
	11AUG17	CONSTRUCTION

TITLE: Demolition Plan

SHEET: L1.0

TREE PRESERVATION NOTES:

1. ALL TREES SHALL REMAIN UNLESS NOTED ON THE PLANS.
2. NO SITE PREPARATION WORK SHALL BEGIN IN AREAS WHERE TREE PRESERVATION AND TREATMENT MEASURES HAVE NOT BEEN COMPLETED.
3. ALL EXISTING TREES DENOTED TO REMAIN SHALL BE PROTECTED AT THE ROOT PROTECTION ZONE(RPZ). THE RPZ SHALL BE DETERMINED BY TREE SIZE (RECOMMENDED 12" RADIUS FROM TRUNK FOR EVERY 1" IN DIAMETER OF TRUNK AT 4.5' FROM GROUND) WITH A MINIMUM 5' DIAMETER FROM THE TRUNK.
4. A CHAIN LINK FENCE BARRIER DELINEATING THE RPZ SHALL BE ERECTED AND MAINTAINED BY THE CONTRACTOR UNTIL CONSTRUCTION IS COMPLETED.
5. RPZ SHALL BE SUSTAINED IN A NATURAL STATE AND SHALL BE FREE FROM VEHICULAR OR MECHANICAL TRAFFIC.
6. THE RPZ SHALL BE COVERED WITH MULCH AND BE MAINTAINED BY GENERAL CONTRACTOR DURING CONSTRUCTION PHASE TO REDUCE MOISTURE STRESS.
7. DURING CONSTRUCTION, NO EXCESS SOIL, ADDITIONAL FILL MATERIAL, EQUIPMENT, LIQUIDS, OR CONSTRUCTION DEBRIS SHALL BE PLACED INSIDE THE PROTECTION BARRIER, NOR SHALL ANY SOIL BE REMOVED FROM WITHIN THE BARRIER.
8. ANY DAMAGE DONE TO EXISTING TREE CROWNS OR ROOT SYSTEMS SHALL BE CUT CLEANLY IMMEDIATELY AFTER INJURY. ALL WOUNDS TO LIVE OAKS SHALL BE PAINTED WITH PRUNING PAINT WITHIN 30 MINUTES AFTER DAMAGE. ROOTS EXPOSED DURING CONSTRUCTION OPERATIONS WILL BE CUT CLEANLY.
9. THE PROPOSED FINISH GRADE AND ELEVATION OF LAND WITHIN THE RPZ OF ANY TREE TO BE PRESERVED SHALL NOT BE RAISED OR LOWERED MORE THAN THREE INCHES. WELLING AND RETAINING METHODS ARE ALLOWED OUTSIDE THE RPZ.
10. THE RPZ SHALL REMAIN PERVIOUS, I.E. GROUNDCOVER OR TURF AT COMPLETION OF LANDSCAPE INSTALLATION.
11. THE ASSOCIATED TREE PROTECTION DETAIL COMPLIES WITH THE MINIMUM TREE PROTECTION GUIDELINES FROM THE CITY OF SAN ANTONIO. WHERE POSSIBLE, PROVIDE FENCE TO TREE DRIP LINE OR GROUP TREES IN FENCE PERIMETER TO PROVIDE INCREASED PROTECTION.
12. WHERE TREES HAVE BEEN REMOVED FROM CAMPUS IRRIGATION, GENERAL CONTRACTOR SHALL SUPPLY SUPPLEMENTAL WATER ONCE A WEEK DURING THE DURATION OF CONSTRUCTION. COORDINATE W/ L.A. FOR AMOUNT OF WATER TO BE APPLIED.
13. NO WORK SHALL BEGIN IN AREAS WHERE TREE PRESERVATION AND TREATMENT MEASURES HAVE NOT BEEN COMPLETED AND APPROVED.
14. TREES WHICH ARE DAMAGED OR LOST DUE TO THE CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED PER UDC 35-523 (f) MITIGATION.
15. TREES MUST BE MAINTAINED IN GOOD HEALTH THROUGHOUT THE CONSTRUCTION PROCESS. MAINTENANCE MAY INCLUDE BUT IS NOT LIMITED TO: WATERING THE ROOT PROTECTION ZONE, WASHING FOLIAGE, FERTILIZATION, PRUNING, ADDITIONAL MULCH APPLICATIONS AND OTHER MAINTENANCE AS NEEDED ON THE PROJECT.
16. ROOTS SHALL BE CUT WITH A ROCK SAW OR BY HAND, NOT BY AN EXCAVATOR OR OTHER ROAD CONSTRUCTION EQUIPMENT.

TREE RELOCATION NOTES:

1. PRIOR TO DIGGING TREES, EXCAVATE NEW PLANTING PITS WITH VERTICAL SIDES AND SLIGHTLY RAISED CENTERS. LOOSEN SUBSOIL IN BOTTOM. REFER TO TREE PLANTING NOTES IN SPECIFICATIONS.
2. USE SOIL EXCAVATED FROM NEW TREE LOCATIONS TO REFILL HOLES CREATED BY TREES BEING LOCATED. FILL HOLE WITH SOIL AND COMPACT TO MATCH SURROUNDING GRADE. COORDINATE BACKFILL MATERIAL WITH GEOTECH ENGINEER PRIOR TO PLACEMENT.
3. PRIOR TO DIGGING, TRIM TREES SELECTIVELY, ON ADVICE OF ARBORIST. MOISTEN BALL AREA THOROUGHLY AT LEAST TWO DAYS BEFORE DIGGING, WITH APPROXIMATELY 20 GALLONS OF ROOT STIMULATOR MIXTURE AT SPECIFIED RATIO IN POTABLE WATER. SPRAY TREE WITH ANTI-TRANSPIRANT.
4. CUT BALL TO A DEPTH SUFFICIENT TO CONTAIN MAJOR ROOT STRUCTURE. THE DIAMETER OF THE ROOT BALL SHALL BE THE SAME AS THE ROOT PROTECTION ZONE (1 FOOT DIAMETER PER CALIPER INCH) TO A MAXIMUM WIDTH OF 8 FEET. CUT EXPOSED ROOTS WITH CLIPPERS. BURLAP AND WIRE BALLS TIGHTLY. SECURE BALLS WITH A STRAPPING SYSTEM THAT SUPPORTS THE BALL AND UTILIZES A MINIMUM OF FOUR STRAPS. CONNECT CRANE CABLE LOCK TO STRAP LIFT ON BALL (NOT TREE TRUNK). PAD VULNERABLE UNPROTECTED TRUNK AREAS. PROTECT BALL FROM CRACKING OR BREAKING APART.
5. LIFT TREE, MAINTAINING IT IN A VERTICAL POSITION, AND SET IT ONTO FLAT BED TRAILER. KEEP ROOT BALL MOIST. DO NOT LIFT TREE BY STRAPS WRAPPED AROUND THE TREE TRUNK.
6. IF PLANTING IS DELAYED MORE THAN SIX HOURS FROM TIME OF DIGGING, SET BALLED AND BURLAP STOCK ON THE GROUND, HEEL THEM IN, AND BACKFILL AND COVER THE ROOT BALLS WITH MULCH; WATER AS NECESSARY TO PREVENT ROOT BALL FROM DRYING OUT.
7. TO PLANT TREES, SET THE ROOT BALL ON LAYER OF COMPACTED PLANTING SOIL MIX, PLUMB AND IN CENTER OF PIT WITH TOP OF BALL AT ELEVATION SPECIFIED IN THE PLANS. LOOSEN BURLAP AT BASE OF TRUNK. WHEN SET, PLACE PLANTING SOIL MIX AROUND BASE AND SIDES OF BALL, WORKING EACH LAYER TO SETTLE BACKFILL AND ELIMINATE VOIDS AND AIR POCKETS. WHEN EXCAVATION IS APPROXIMATELY 2/3 FILLED, WATER THOROUGHLY UNTIL NO MORE WATER IS ABSORBED. COMPLETE PLACEMENT OF BACKFILL.
8. DISH TOP OF BACKFILL WITH 4-INCH TALL RING, 6 FEET IN DIAMETER. MULCH TO DEPTH OF 3 INCHES INSIDE RING. INJECT ROOT STIMULATOR INTO THE BALL AND APPLY TO TRANSITION ZONE AT BALL'S EDGE. REMOVE BROKEN LIMBS AND PAINT SCARS. GUY AND STAKE ONLY IF REQUIRED TO MAINTAIN TREE IN PROPER ALIGNMENT.
9. DO NOT LEAVE OPEN EXCAVATED TREE HOLES OVERNIGHT WITHOUT COVER OR APPROPRIATE BARRICADES.

SEE SHEET L1.2 FOR TREE PRESERVATION TABLE

LANDSCAPE ORDINANCE COMPLIANCE

PROPERTY DESCRIPTION
Property Description: NCB 0, Lot 0, Block 0, Parcel Key 525642
Zoned: R6 HS-RIO-1
Owner's Representative: Brady Haynes (bradyhaynes@wittemuseum.org)
Watering Method: Non-Potable Irrigation

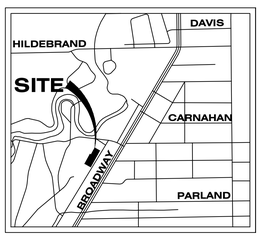
LANDSCAPE POINT TABLE

SCOPE OF WORK FOR THIS PROJECT IS LIMITED TO THE ADDITION OF A PARKING DECK ABOVE THE EXISTING STRUCTURE. SITE WORK IS LIMITED TO THE EXPANSION OF A NEW SIDEWALK CONNECTION FROM THE GARAGE TO TULETA AVE. ASIDE FROM CANOPY REQUIREMENT, NO OTHER LANDSCAPE ORDINANCE CRITERIA IS REQUIRED.

FINAL CANOPY COVERAGE

Lot Size	**101,611 SF**
Canopy Required (x 15%, CRAG)	**15,241 SF**
Existing Trees:	
(18) Cedar Elms (875)	**15,750 SF**
TOTAL CANOPY PROVIDED =	**15,750 SF**
	(15% CANOPY)

LOCATION MAP

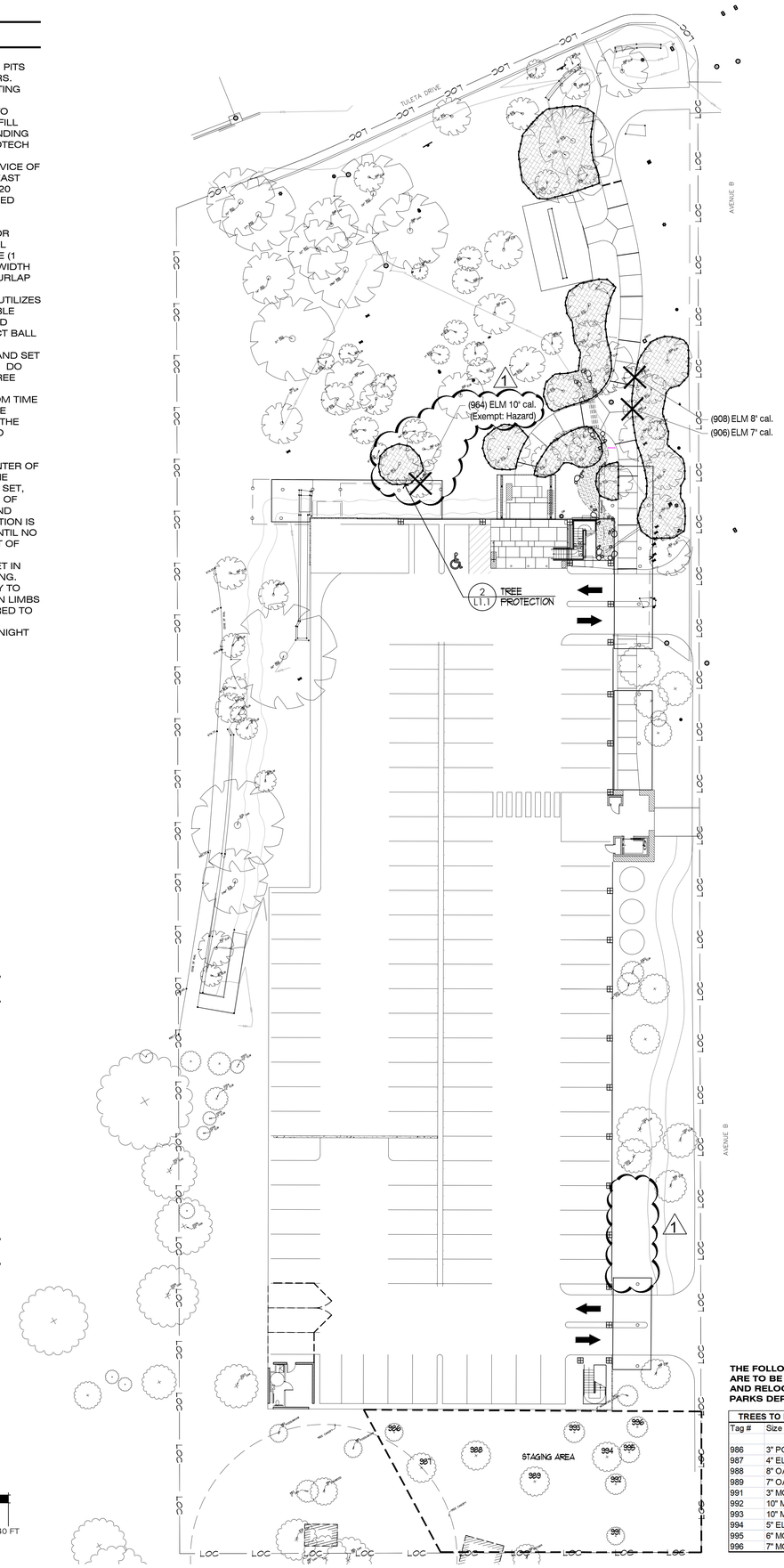


LEGEND

- **ROOT PROTECTION ZONE**
- **ROOT PROTECTION FENCE**
- **TREES TO BE SAVED**
- **TREES TO BE REMOVED**
- **TREES TO BE RELOCATED**

NORTH

0 10 20 40 FT
SCALE: 1" = 20'-0"



THE FOLLOWING TREES ARE TO BE REMOVED AND RELOCATED BY THE PARKS DEPARTMENT:

TREES TO BE RELOCATED	
Tag #	Size & Species
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987	4" ELM
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993	10" MOUNTAIN LAUREL
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REGISTERED LANDSCAPE ARCHITECT
JOSEPH C. RIALTO
STATE OF TEXAS

8/11/2017

BRACKENRIDGE PARK GARAGE EXPANSION

3623 Avenue B
San Antonio, Texas 78209

ISSUED FOR:

NO.	DATE	DESCRIPTION
1	11OCT17	ADDENDUM 2
	11AUG17	CONSTRUCTION

TITLE: Tree Preservation Plan

SHEET: L1.1

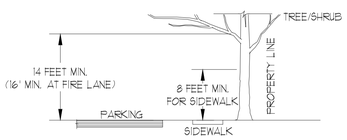
TREE INVENTORY:

Tag #	Species	Understory Species* 5.0" - 11.5" Removed	Understory Species* 5.0" - 11.5" Preserved	Significant Tree 6" - 23.5" Removed	Significant Tree 6" - 23.5" Preserved	Significant Tree** 10.0" - 23.5" Removed	Significant Tree** 10.0" - 23.5" Preserved	Heritage 3:1 Removed	Heritage 3:1 Preserved	Heritage 1:1 Removed	Heritage 1:1 Preserved	Additional Inches Preserved for Mitigation *** Preserved
901	ELM				15							
902	ELM				17							
903	ELM				14							
904	ELM				17							
905	ELM				7							
906	ELM			7								
907	ELM				11							
908	ELM			8								
909	ELM				18							
910	ELM				12	1						
911	ELM				12							
912	ELM				8							
913	ELM				11							
914	ELM				11							
915	ELM				16							
916	ELM				17							
917	ELM				10							
918	ELM				9							
919	ELM				9							
920	ELM				7							
921	ELM				15							
922	ELM				10							
923	ELM				9							
924	ELM				14							
925	ELM				13							
926	ELM				12							
927	ELM				10							
928	ELM				19							
929	ELM				10							
930	ELM				8							
931	ELM				16							
932	ELM				7							
933	OAK								35			
934	ELM								25			
935	ELM				9							
936	ELM				12							
937	ELM				7							
938	ELM				6							
939	ELM				11							
940	ELM				19							
941	ELM				14							
942	ELM				11							
943	OAK								29			
944	OAK								28			
945	ELM				6							
946	OAK								28			
947	OAK				22							
948	OAK				20							
949	OAK								27			
950	OAK								25			
951	OAK				19							
952	OAK				12					1		
953	ELM				12							
954	ELM				9							
955	ELM				10							
956	ELM (MULTI-TRUNK)				9							
957	ELM				12							
958	ELM				9							
959	ELM				10							
960	ELM (MULTI-TRUNK)				9							
961	ELM				13							
962	ELM				15							
963	ELM				14							
964	ELM (9") ****									1		
965	ELM				6					1		
966	ELM				11							
967	ELM				12							
968	ELM				9							
969	OAK								39		1	
970	ELM				9							
971	ELM				11							
972	ELM				6							
973	ELM				8							
974	ELM				8							
975	OAK								34			
976	OAK								24		1	
977	ELM				13							
978	ELM				8							
979	OAK				23							
980	OAK								29			
981	OAK								28			
982	POSSUMHAW											4
983	OAK											2
984	DOGWOOD											4
985	POSSUMHAW											3
986	POSSUMHAW											3
987	ELM		4									
988	OAK				8							
989	OAK				7							
990	RETAMA		4									
991	MOUNTAIN LAUREL											3
992	MOUNTAIN LAUREL		10									
993	MOUNTAIN LAUREL		10									
994	ELM		5									
995	MOUNTAIN LAUREL		6									
996	MOUNTAIN LAUREL		7									
997	MOUNTAIN LAUREL											4
998	ELM				17							
999	ELM				20							
1000	ELM				17							
1001	ELM				16							
1002	ELM				19							
2001	ELM				12							
2002	ELM				12							
2003	ELM				10							
2004	ELM				12							
2005	ELM				7							
2006	ELM				7							
2007	OAK								25		1	
2008	OAK								30			
2009	OAK								32			
2010	OAK								27			
Sub. Tot. Inches=		0	46	15	942	0	0	0	465	0	0	23
Total inches by category=			46		957		0		465		0	
Preservation percentage=		100%				98%				100%		
Mitigation required (Commerci		-27.6				-559.2				0		
Total Mitigation (inches)		-609.8										

No category to fall below 10% preservation;
Preserved- Tree to remain that meets root protection zone requirements described in section 35-523 of the UDC.
Mitigation 1:1 for significant trees below minimum preservation requirements; 3:1 for heritage trees below 100% preservation
** Small species: Condalia, Redbud, Tx. Mountain Laurel, Tx. Persimmon, Hawthorn, Possumhaw - these are mitigated at 1:1 for Heritage Tree.*
*** Ashe Juniper, Huisache, Mesquite, Arizona Ash, Hackberry protected at 10" dbh and mitigated at 1:1 for heritage trees*
**** Mitigation Trees: Unprotected-sized trees to be used for mitigation calculations; subtract inches from mitigation owed*
***** Tree in poor condition; Removed as safety precaution per recommendation of City Arborist*
****** Tree in cluster of 3 or more, less than 10" apart, counts for 105% value*

THE FOLLOWING TREES ARE TO BE REMOVED AND RELOCATED BY THE PARKS DEPARTMENT:

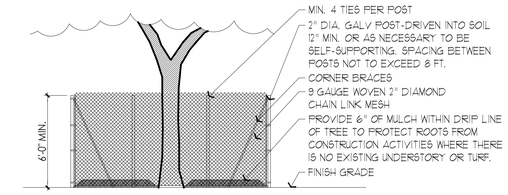
TREES TO BE RELOCATED	
Tag #	Size & Species
986	3" POSSUMHAW
987	4" ELM
988	8" OAK
989	7" OAK
991	3" MOUNTAIN LAUREL
992	10" MOUNTAIN LAUREL
993	10" MOUNTAIN LAUREL
994	5" ELM
995	6" MOUNTAIN LAUREL
996	7" MOUNTAIN LAUREL



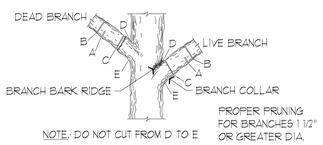
A MINIMUM BRANCH CLEARANCE OF 14 FEET ABOVE PARKING LOT/DRIVE LANES (16 FEET ABOVE FIRE LANES) MUST BE MAINTAINED.

1 DETAIL: TREE BRANCH CLEARANCE
SCALE: N.T.S.

NOTE:
THE DRAWING BELOW DETAILS COMPLIANCE W/ THE MINIMUM TREE PROTECTION GUIDELINES FROM THE CITY OF SAN ANTONIO.



2 DETAIL: TREE PROTECTION
SCALE: 1/4"= 1'-0"



PROPER PRUNING FOR BRANCHES 1 1/2" OR GREATER DIA.

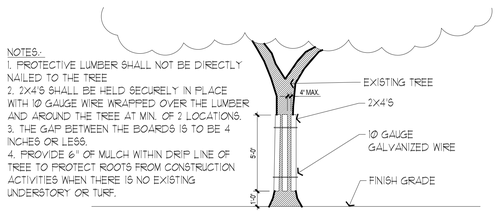
NOTE: DO NOT CUT FROM D TO E

A. FIRST CUT- TO PREVENT THE BARK FROM BEING PEELED WHEN THE BRANCH FALLS.
B. SECOND CUT- TO REDUCE THE WEIGHT OF BRANCH.
C. FINAL CUT- ALLOW FOR HEALING COLLAR BUT NO STUBS.
D. BRANCH RIDGES- INDENT PROPERLY BRANCH RIDGES WHICH ARE SITE FOR DECAY.

FOR OAKS ONLY:- PAINT ALL WOUNDS OR CUTS WITH PRUNING SPRAY WITHIN 20 MINUTES TO PREVENT SPREAD OF OAK WILT

3 DETAIL: BRANCH PRUNING
SCALE: N.T.S.

NOTES:-
1. PROTECTIVE LUMBER SHALL NOT BE DIRECTLY NAILED TO THE TREE
2. 2X4'S SHALL BE HELD SECURELY IN PLACE WITH 10 GAUGE WIRE WRAPPED OVER THE LUMBER AND AROUND THE TREE AT MIN. OF 2 LOCATIONS.
3. THE GAP BETWEEN THE BOARDS IS TO BE 4 INCHES OR LESS.
4. PROVIDE 6" OF MULCH WITHIN DRIP LINE OF TREE TO PROTECT ROOTS FROM CONSTRUCTION ACTIVITIES WHEN THERE IS NO EXISTING UNDERSTORY OR TURF.



4 DETAIL: 2X4 TREE PROTECTION
SCALE: 1/4"= 1'-0"

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REGISTERED LANDSCAPE ARCHITECT
JERRY C. EWING
STATE OF TEXAS
8/11/2017

BRACKENRIDGE PARK GARAGE EXPANSION

3623 Avenue B
San Antonio, Texas 78209

ISSUED FOR:

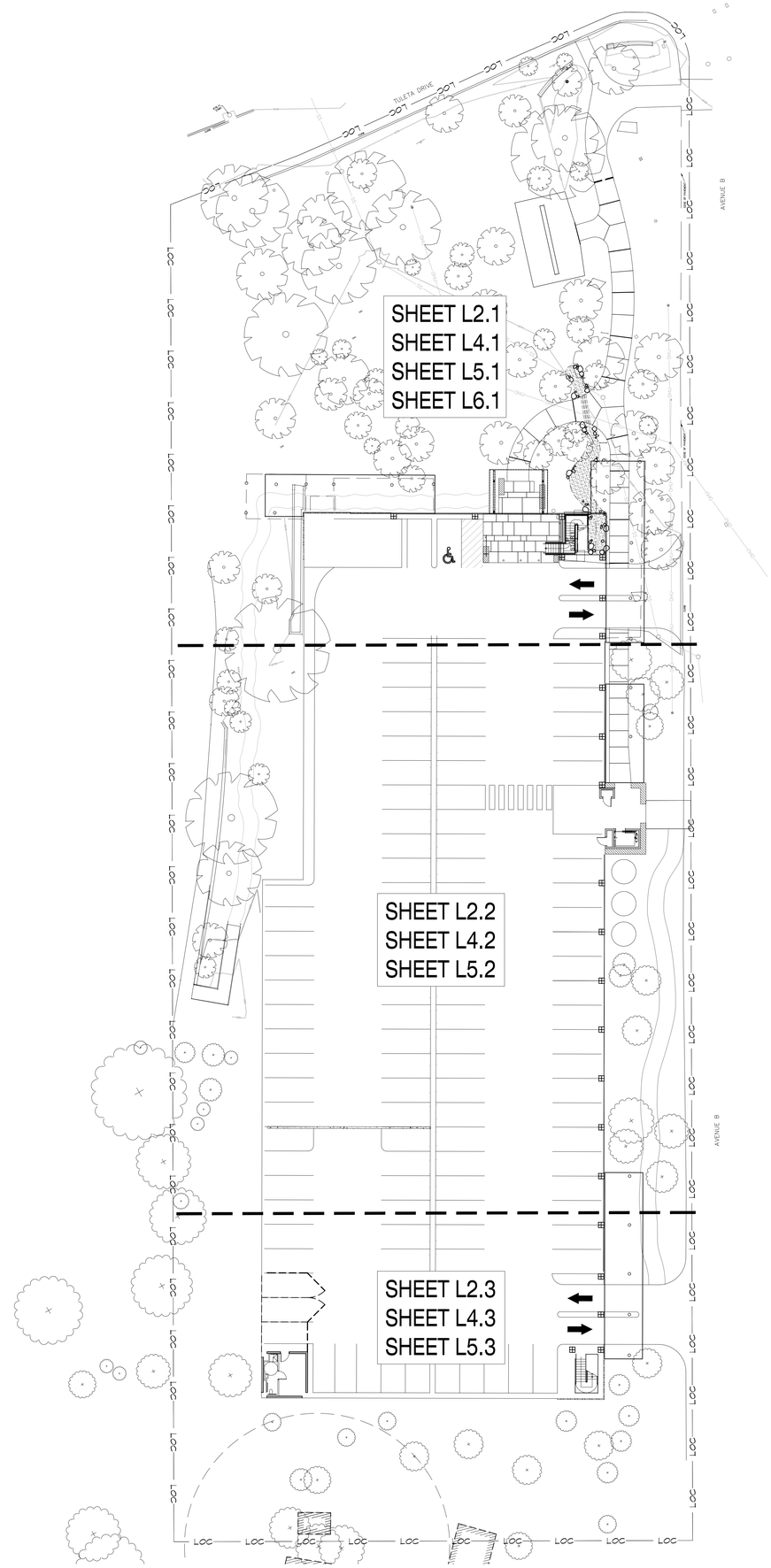
NO.	DATE	DESCRIPTION
1	11OCT17	ADDENDUM 2
	11AUG17	CONSTRUCTION

TITLE: **Tree Preservation Tables**

SHEET: L1.2

GENERAL CONSTRUCTION NOTES

1. THE GENERAL CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH LANDSCAPE ARCHITECT PRIOR TO MOBILIZATION TO DISCUSS AND MARK ALL TREES TO BE PROTECTED AND REMOVED.
2. THE GENERAL CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY EXISTING CONDITIONS THAT PREVENT CONSTRUCTION AS DETAILED.
3. ALL DIMENSIONS MUST BE VERIFIED ON SITE. NOTIFY THE LANDSCAPE ARCHITECT IF THERE ARE ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.
4. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT OF ANY QUESTIONS THAT MAY ARISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OF DIMENSIONS NECESSARY FOR THE CONSTRUCTION OF THIS PROJECT.
5. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING SUBGRADE FOR ALL HARDSCAPE AND PLANTING AREAS. SUBGRADE FOR PLANTING AREAS SHALL BE 12" BELOW LABELED FINISH GRADE TO RECEIVE 12" SOIL MIX BY LANDSCAPE CONTRACTOR. DO NOT EXCAVATE IN THE ROOT PROTECTION ZONE OF EXISTING TREES. THOSE AREAS ARE TO RECEIVE 2" OF COMPOST MIXED INTO THE SOIL BY HAND AT TIME OF PLANTING.
6. SUBGRADE FOR TURF AREAS SHALL BE ESTABLISHED 6" BELOW LABELED FINISH GRADE TO RECEIVE 6" TURF SOIL MIX BY LANDSCAPE CONTRACTOR.
7. CONTRACTOR SHALL ALERT LANDSCAPE ARCHITECT WHEN SUBGRADE HAS BEEN ESTABLISHED FOR REVIEW PRIOR TO BACKFILLING WITH SOIL MIX.
8. POSITION STANDARD WHEEL STOPS 18" OFF FACE OF CURB AND SECURE WITH (2) 18" LONG #4 BARS.



NORTH

0 10 20 40 FT
SCALE: 1"=20'-0"

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STATE OF TEXAS

8/11/2017

BRACKENRIDGE PARK GARAGE EXPANSION

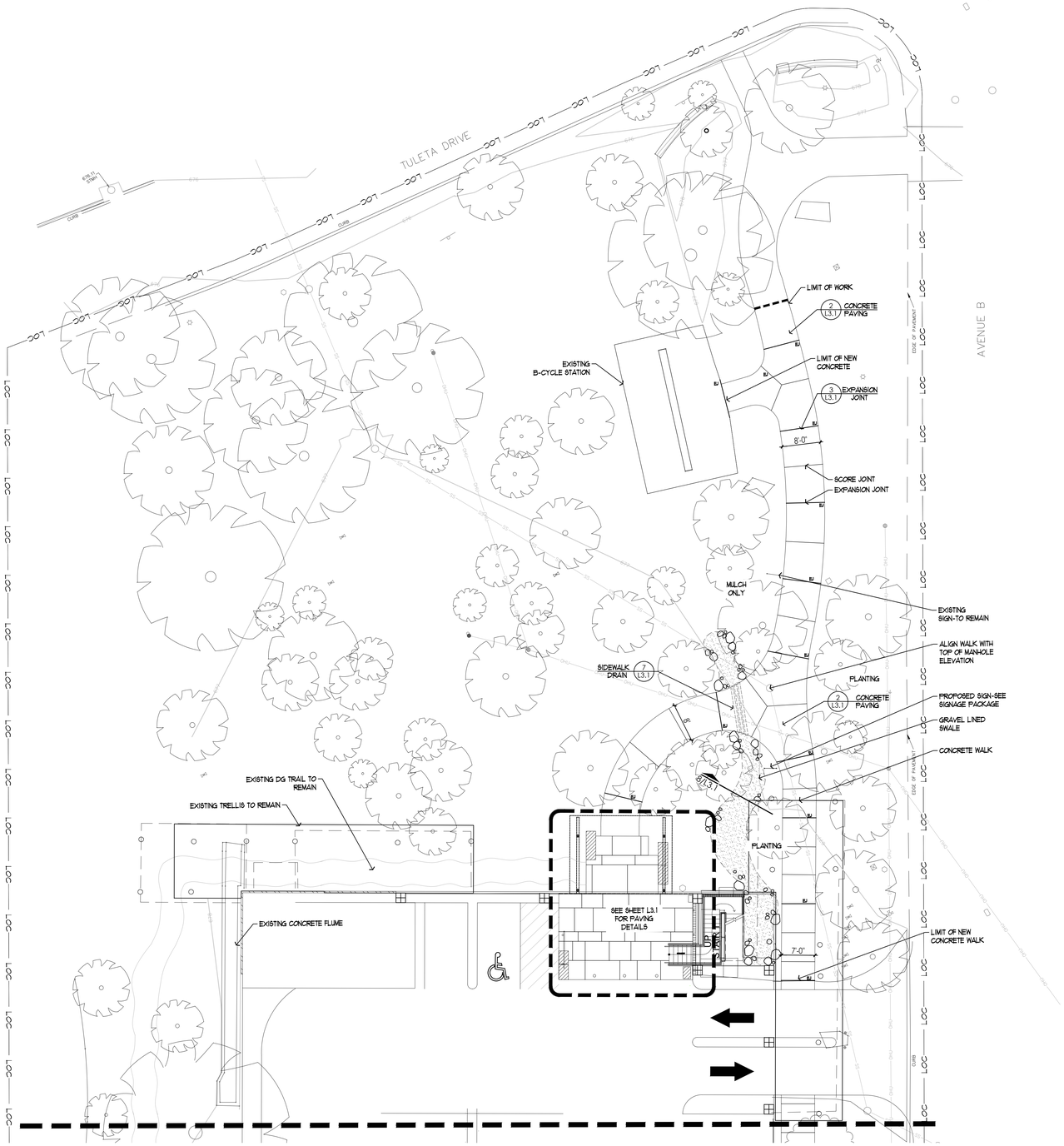
3623 Avenue B
San Antonio, Texas 78209

ISSUED FOR:

NO.	DATE	DESCRIPTION
	11AUG17	CONSTRUCTION

TITLE: Reference Plan

SHEET: L2.0



MATCHLINE SEE SHEET L2.2

NORTH

0 5 10 20 FT
SCALE: 1" = 10'-0"

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8/11/2017

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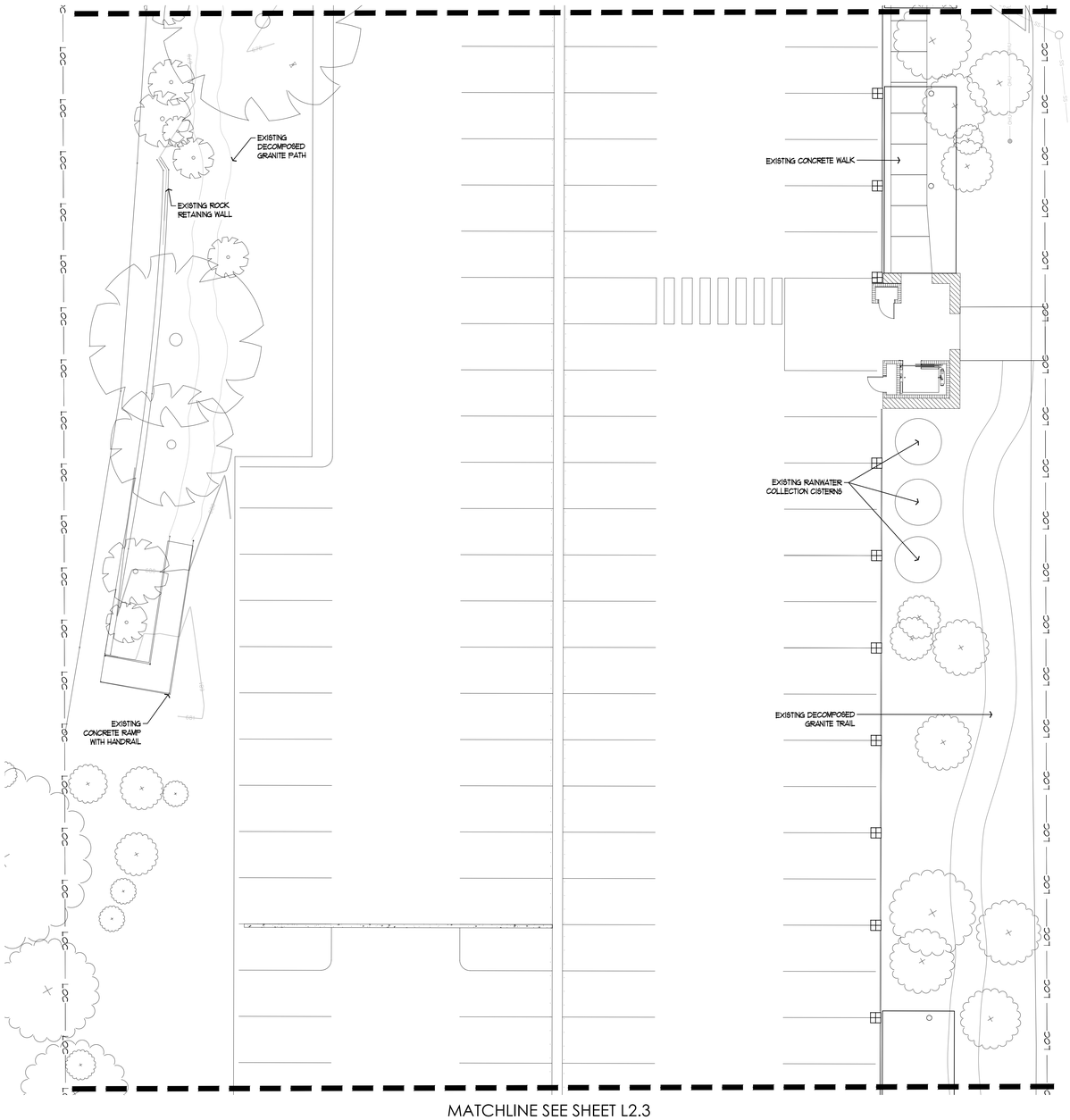
ISSUED FOR:

NO.	DATE	DESCRIPTION
	11AUG17	CONSTRUCTION

TITLE: Layout Plan

SHEET: L2.1

MATCHLINE SEE SHEET L2.1



MATCHLINE SEE SHEET L2.3

NORTH

0 5 10 20 FT
SCALE: 1" = 10'-0"

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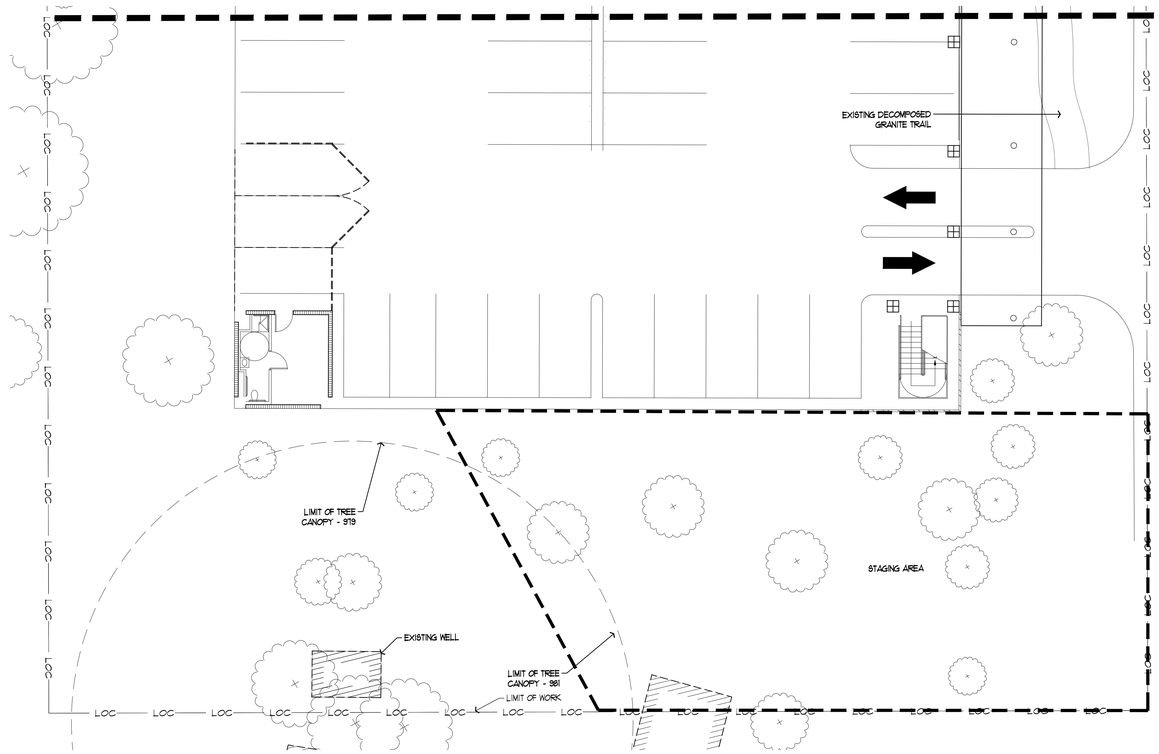
SHEET: L2.2

MATCHLINE SEE SHEET L2.2



NORTH

0 5 10 20 FT
SCALE: 1" = 10'-0"

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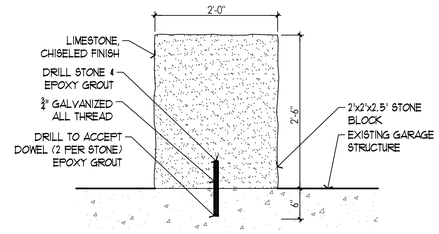
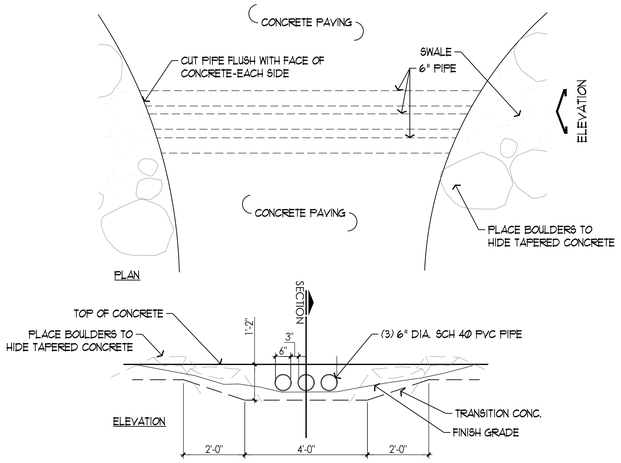
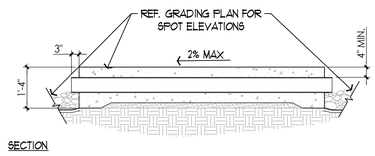
SHEET: L2.3

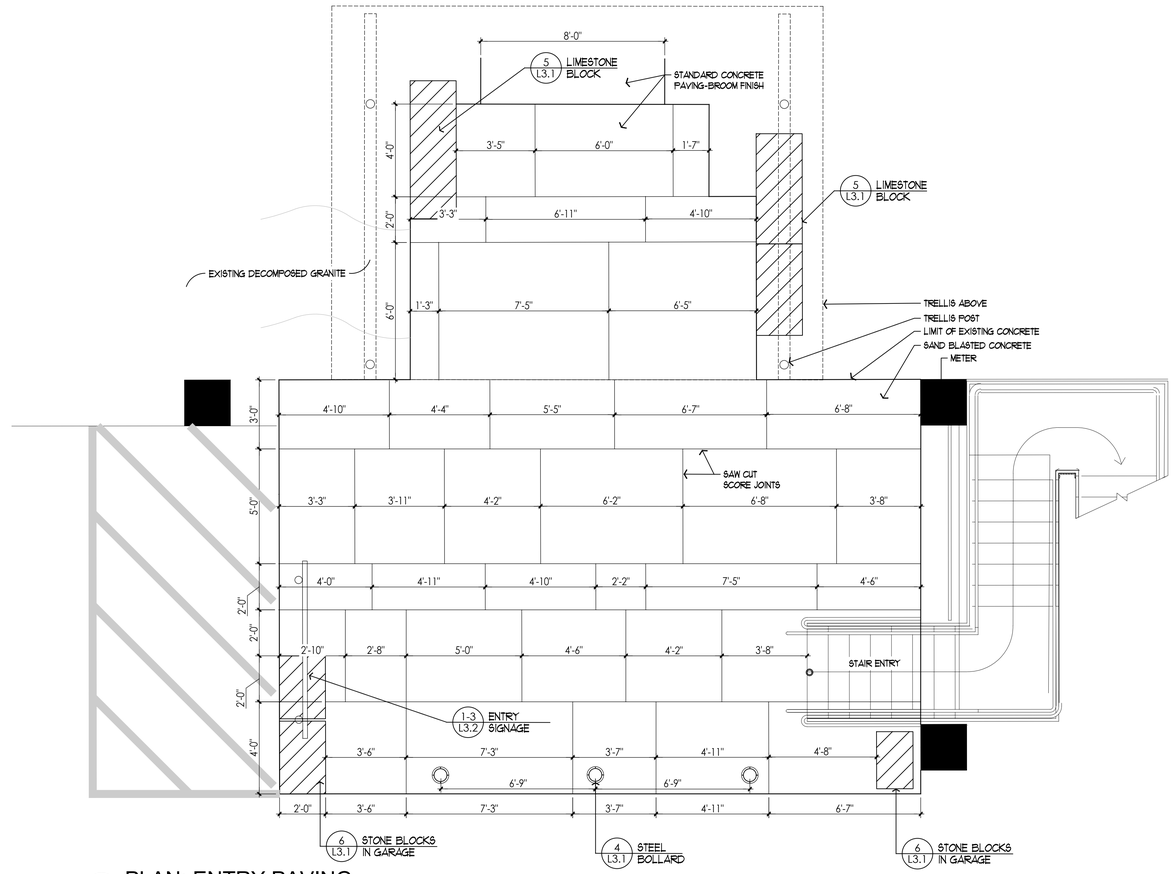


6 SECTION: STONE BLOCKS IN GARAGE
SCALE: 1"= 1'-0"

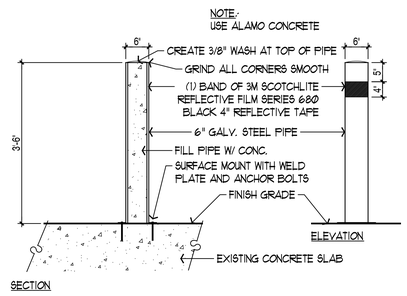




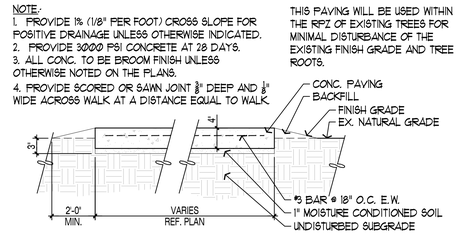
7 DETAIL: SIDEWALK DRAIN
SCALE: 1/2"= 1'-0"



1 PLAN: ENTRY PAVING
SCALE: 3/8"= 1'-0"

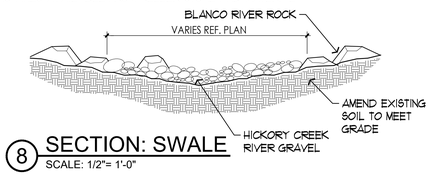


4 DETAIL: 6 INCH PIPE BOLLARD
SCALE: 3/4"= 1'-0"



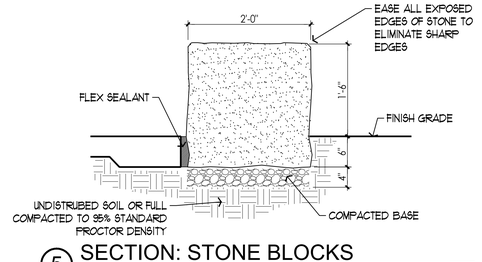
2 SECTION: FLOATING SIDEWALK
SCALE: 1"= 1'-0"

NOTE: "HICKORY CREEK" RIVER ROCK 2"-4" AND "BLANCO" RIVER ROCK 8"-12" WITH NO FINES AVAILABLE FROM KELLER STONE AND MATERIAL



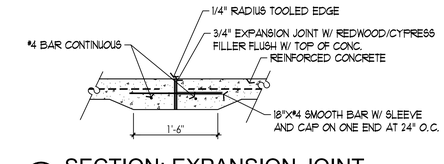
8 SECTION: SWALE
SCALE: 1/2"= 1'-0"

NOTES:
1. USE CREAMY LEUDERS LIMESTONE AS AVAILABLE FROM SAN JACINTO MATERIALS (210) 736.0924. DRILL MARKS ARE ACCEPTABLE. ALL EXPOSED FACES SHALL BE NATURAL CLEFT FACE OR CHISELED TO RESEMBLE CLEFT FACE.
2. COORDINATE WITH LANDSCAPE ARCHITECT FOR COLOR RANGE
3. STONES SHALL BE 24" X 24" BY RANDOM LENGTH NOT LESS THAN 30" LONG.



5 SECTION: STONE BLOCKS
SCALE: 1"= 1'-0"

NOTE:
AT EXPANSION JOINT, INCREASE DEPTH OF SLAB 2" TO ACCOMMODATE DOWEL. FOR 4" CONC. THICKNESS SHALL BE 6" AND FOR 6" CONC. THICKNESS SHALL BE 8" DEEP AT EXP. JOINT



3 SECTION: EXPANSION JOINT
SCALE: 1"= 1'-0"

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NO.	DATE	DESCRIPTION
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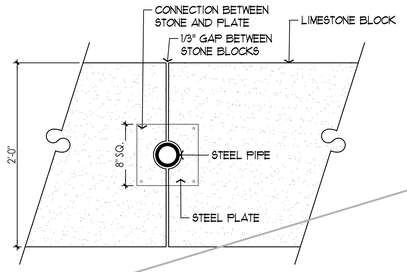
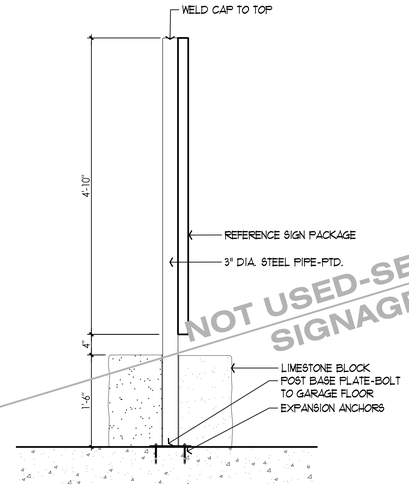
TITLE: **Landscape Details**

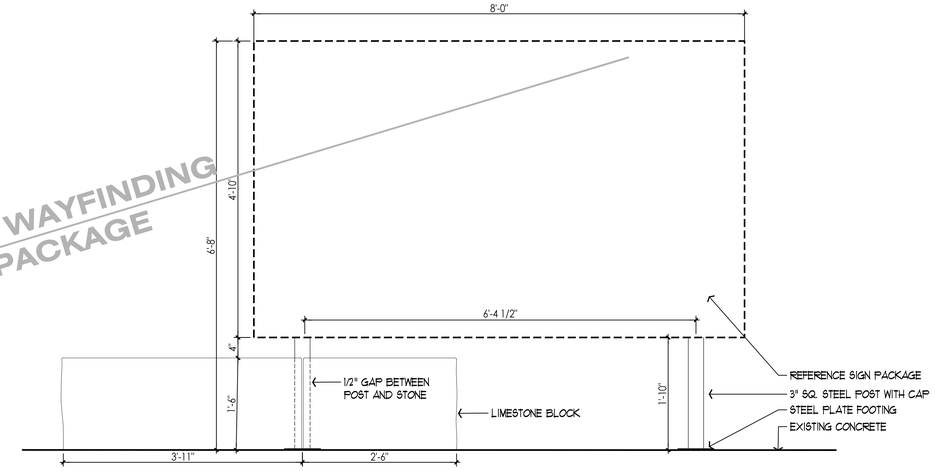
SHEET: L3.1



3 PLAN: STEEL POST IN LIMESTONE BLOCK
SCALE: 1 1/2"= 1'-0"

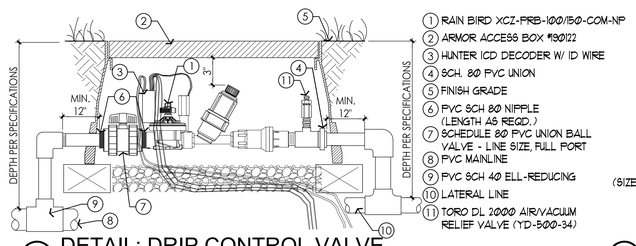


2 SECTION: SIGN POST
SCALE: 1"= 1'-0"

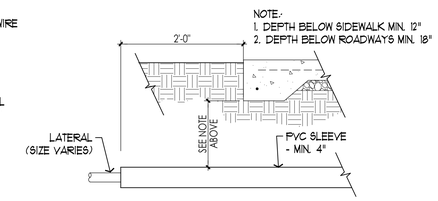


1 ELEVATION: ENTRY SIGNAGE
SCALE: 1"= 1'-0"

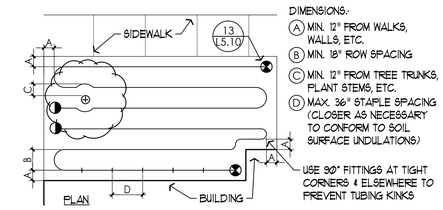
NOT USED-SEE WAYFINDING SIGNAGE PACKAGE



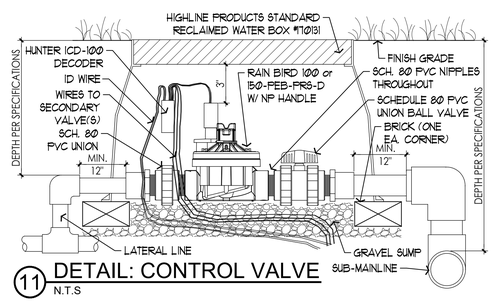
10 DETAIL: DRIP CONTROL VALVE
NOT TO SCALE



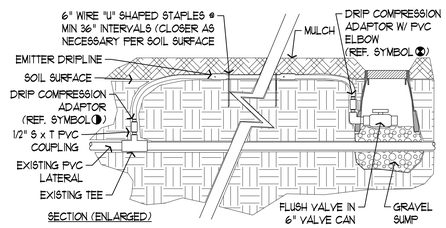
7 DETAIL: SLEEVE UNDER HARDSCAPE
SCALE: 1" = 1'-0"



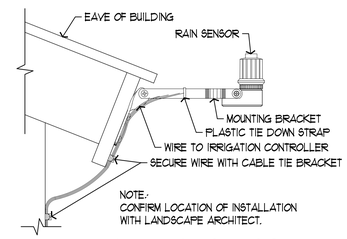
4 DETAIL: DRIP TUBE SPACING
N.T.S.



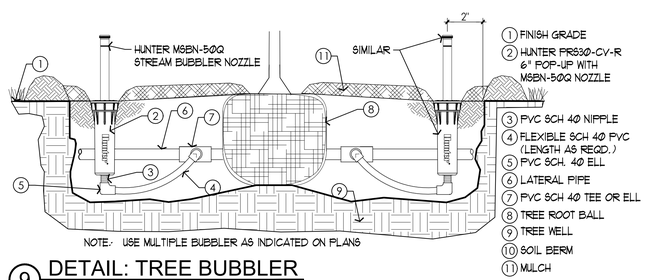
11 DETAIL: CONTROL VALVE
N.T.S



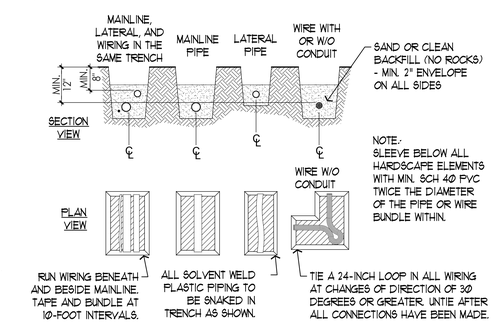
8 DETAIL: DRIP TUBING CONNECTION
N.T.S.



5 DETAIL: RAIN SENSOR
SCALE: 3" = 1'-0"



9 DETAIL: TREE BUBBLER
SCALE: 3" = 1'-0"



6 DETAIL: PIPE, WIRE & TRENCHING
NOT TO SCALE

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STATE OF TEXAS
8/11/2017

BRACKENRIDGE PARK GARAGE EXPANSION

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SHEET: L3.2

PLANT LIST:

TREES	QTY	KEY	UNIT	COMMON NAME	SCIENTIFIC NAME	SIZE	HEIGHT (FT)	SPREAD (FT)	REMARKS
	2	YAU	EA	Pride of Houston Yaupon	*Ilex vomitoria 'Pride of Houston'*	#15 cont.	4	2.5	Full and symmetrical
SHRUBS, GROUNDCOVERS, AND VINES									
	12	TLY	EA	Twisted Leaf Yucca	*Yucca rupicola*	#3 cont.	2	1	
	18	TUR	EA	Turk's Cap	*Malvaviscus arboreus 'drummondii'*	#3 cont.	2	1	
	9	CRV	EA	Crossvine	*Bignonia capreolata*	#5 cont.	36" runners		3' spacing

GENERAL LANDSCAPE NOTES:

1. ALL QUANTITIES SHOWN ON PLANS TO BE VERIFIED BY LANDSCAPE CONTRACTOR. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL LABELED PLANT MATERIAL ON PLANS (NOT TABULATION).

2. ALL PLANTS MUST COMPLY WITH THE AMERICAN STANDARDS FOR NURSERY STOCK, BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. AND MEET OR EXCEED HEIGHT AND SPREAD REQUIREMENTS LISTED ON THE PLANT SCHEDULE.

3. CONTRACTOR SHALL TAKE ALL NECESSARY STEPS TO PROTECT EXISTING UTILITIES AT ALL TIMES.

LANDSCAPE PLANTING NOTES:

1. ALL TREES AND SHRUB AREAS TO BE MULCHED TO A DEPTH OF 4 INCHES WITH DECOMPOSED GRANITE OR DOUBLE SHREDDED BARK MULCH. MAINTAIN A 1FT. AREA FROM THE BASE OF THE TREE FREE OF MULCH TO ALLOW OXYGEN EXCHANGE. NATIVE BARK MULCH SHALL BE DOUBLE SHREDDED HARDWOOD. RIVER GRAVEL SHALL BE A BLEND OF 2" TO 4" HICKORY CREEK RIVER GRAVEL AVAILABLE FROM KELLER MATERIALS OR APPROVED EQUAL. LARGE AND MEDIUM BOULDERS SHOWN SHALL BE BLANCO ROCK 12"-24" FLAT GRAY LARGE BOULDERS AND 8-12" ROUND BLANCO MEDIUM BOULDERS REFERENCE PLAN FOR MULCH TYPE PER AREA. PROVIDE SAMPLE OF EACH FOR APPROVAL BY LANDSCAPE ARCHITECT (SIMILAR TO THE MAIN WITTE CAMPUS FEATURE).

2. POCKET PLANT ALL SHRUBS AND GRASSES. SUPPLEMENT AND BACK FILL EACH HOLE WITH COMPOSTED SOIL MIX. PROVIDE SAMPLE FOR APPROVAL BY L.A.

3. FOR PLANTING AREAS UNDER EXISTING TREES, LANDSCAPE CONTRACTOR SHALL TAKE SPECIAL PRECAUTIONS TO MINIMIZE DISTURBANCE OF ROOT ZONE. USE HAND TOOLS TO EXCAVATE FOR NEW PLANT MATERIAL TO MINIMIZE ROOT DISTURBANCE.

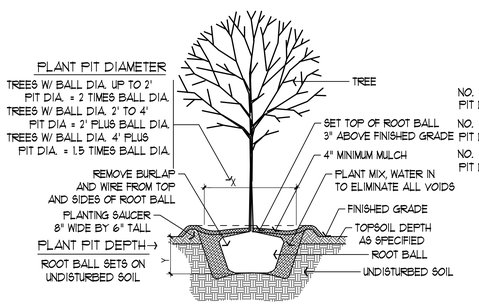
4. ALL BACKFILL FOR PLANTING AREAS SHALL BE A SOIL MIX WITH THE FOLLOWING COMPONENTS:
   1/3 CUBIC YARD TOPSOIL
   1/3 CUBIC YARD COMPOSTED MANURE
   1/3 CUBIC YARD SAND
   1 1/2 POUNDS SULFUR
   1/2 POUND GENERAL ALL-PURPOSE FERTILIZER
   ("MIXED SOIL WITH COMPOST" AVAILABLE FROM NEW EARTH IS AN ACCEPTABLE SUBSTITUTION FOR THE MIX LISTED ABOVE. FERTILIZER IS STILL REQUIRED.) PROVIDE SAMPLE FOR APPROVAL BY LANDSCAPE ARCHITECT.

5. LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY QUESTIONS REGARDING APPLICATION OF PROPOSED PLANT MATERIAL PRIOR TO INSTALLATION.

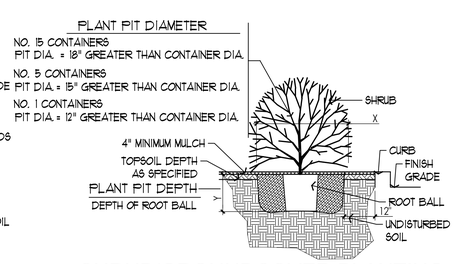
6. LANDSCAPE CONTRACTOR SHALL MAINTAIN ALL TREES, SHRUBS, AND GROUNDCOVER IN A HEALTHY STATE UNDER THE CONTRACT UNTIL FINAL ACCEPTANCE BY THE OWNER.

7. STAKE OR GUY TREES ONLY IF THEY ARE NOT ABLE TO STAND VERTICAL ON THEIR OWN.

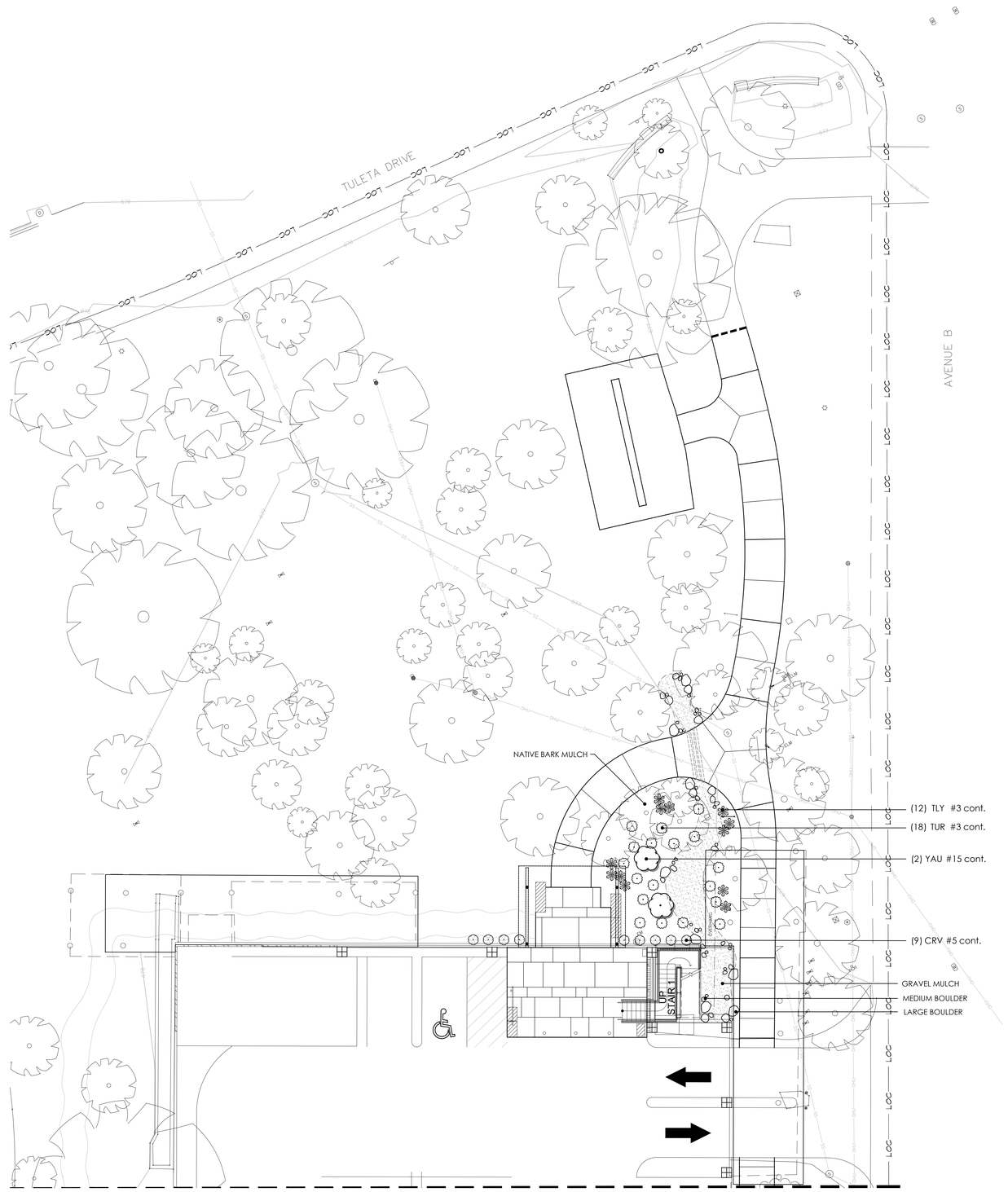
8. CONTAINER GROWN TREES SHALL BE PROVIDED AND INSTALLED SUBJECT TO SPECIFIED LIMITATIONS OF THE "AMERICAN STANDARDS FOR NURSERY STOCK" FOR CONTAINER STOCK.



2 SECTION: TREE PLANTING
SCALE: NOT TO SCALE



1 SHRUB/GROUNDCOVER PLANTING
SCALE: NOT TO SCALE



MATCHLINE SEE SHEET L4.2

NORTH
0 5 10 20 FT
SCALE: 1" = 10'-0"

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JERRY C. BUTLER
STATE OF TEXAS
8/11/2017

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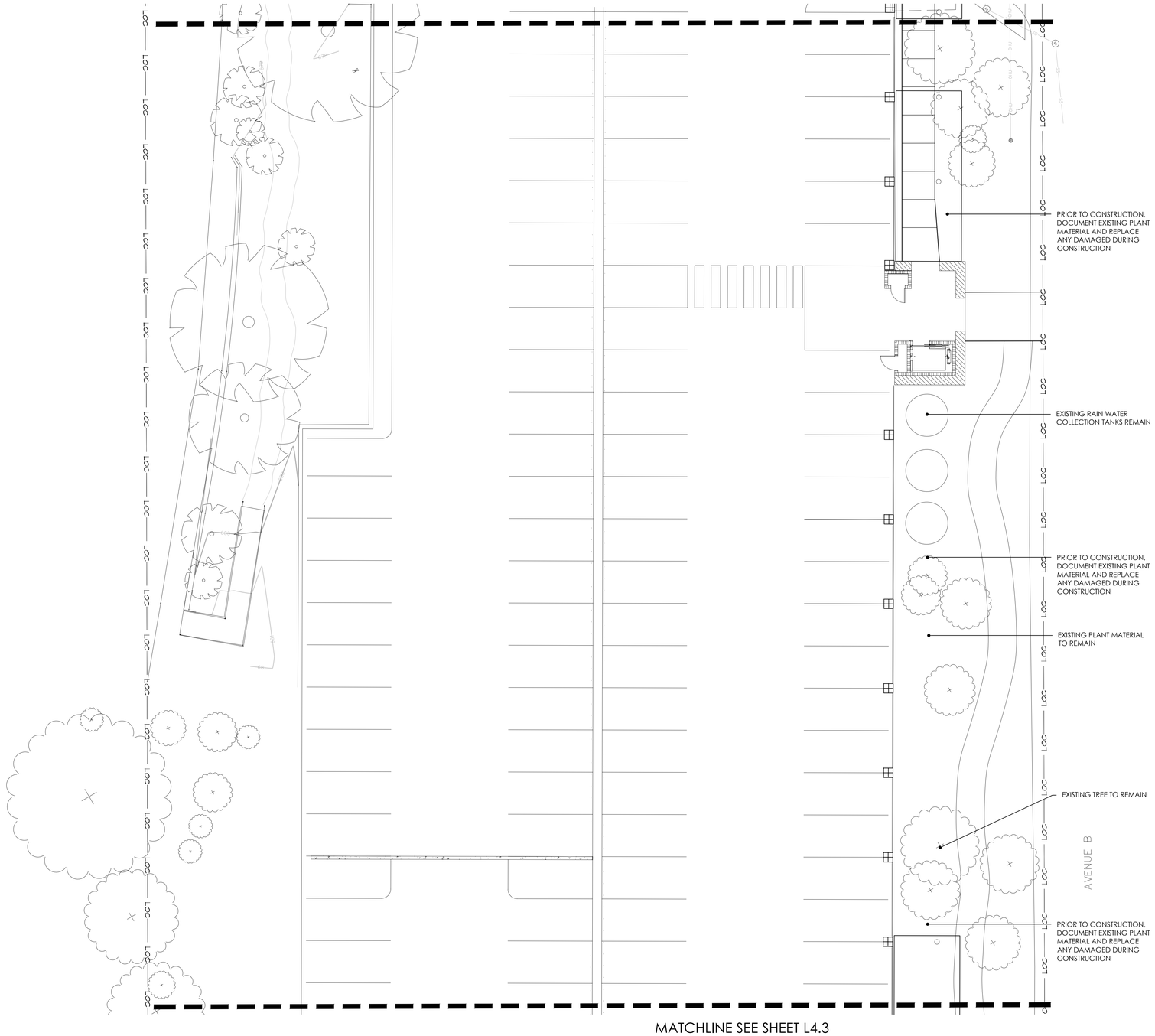
MATCHLINE SEE SHEET L4.1



MATCHLINE SEE SHEET L4.3

NORTH

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MARK C. FOX
STATE OF TEXAS

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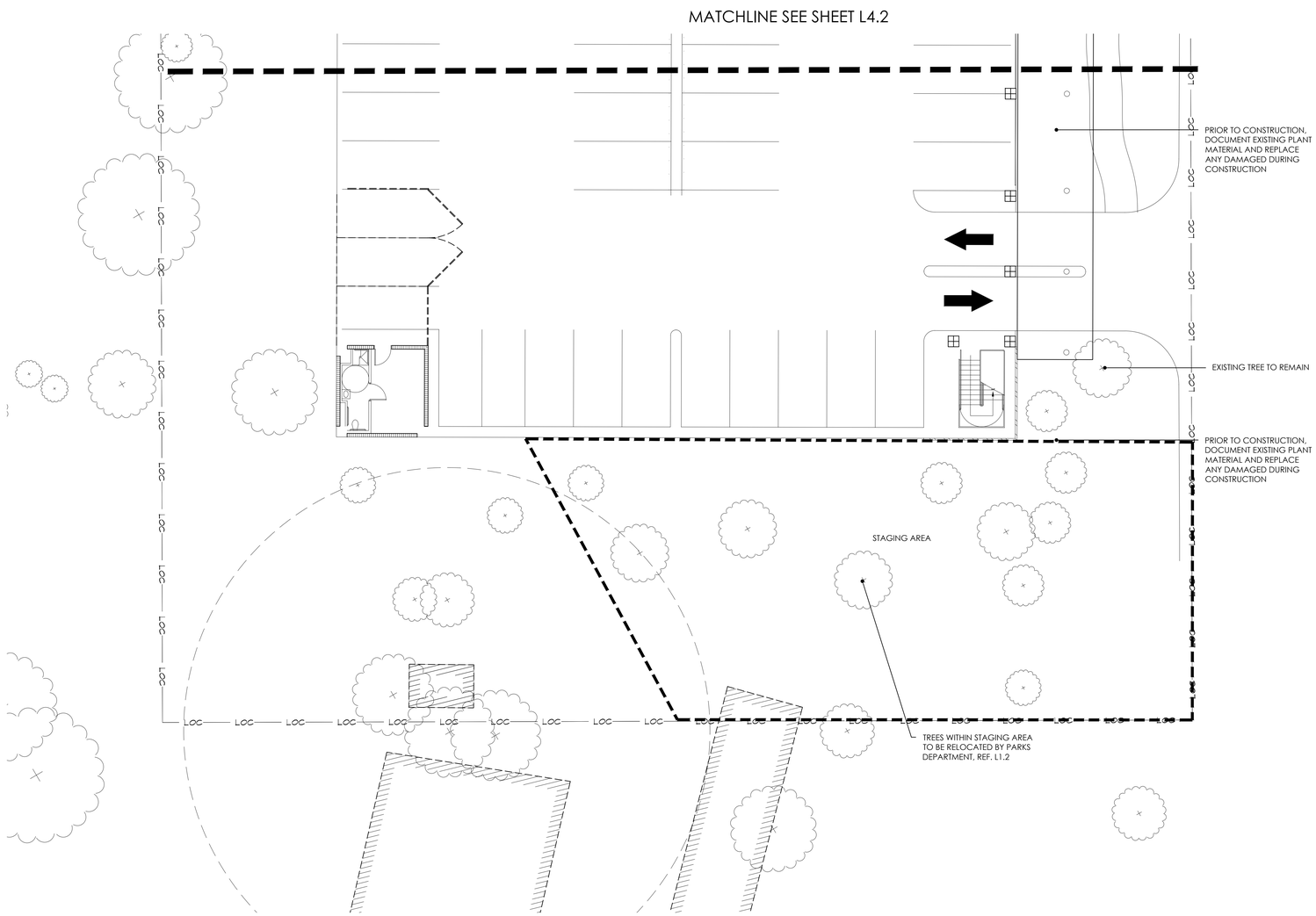

NORTH

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SCALE: 1" = 10'-0"

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ROBERT C. FOSTER
STATE OF TEXAS
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SHEET: L4.3

IRRIGATOR'S STATEMENT

This irrigation plan conforms to the irrigation design equipment standards set out in 35-510(j) and 35-511(c)(6) of the City of San Antonio Unified Development Code and also complies with the requirements of chapter 344, 344.72-344.77 of the Texas Administrative Code.

The irrigation system does not provide 100% coverage of the site, refer plans and/or specifications for area(s) to be covered. The drawings may be diagramatic in nature for clarity. Some piping or components may be shown larger than scale or appear to be in hardscape areas. The installer should take this into consideration and interpret the design to provide full coverage of the areas shown with all piping in sleeves, common trenches, at the back of curbs or in other planted areas. The installer is responsible for providing all work contained in the drawings, notes, specifications and details. The installer is required by law to notify at least two (2) working days prior to any excavation one of the following:

- Lone Star Notification Center 1-800-669-8344
- Texas One Call 1-800-245-4545
- DigTess 1-800-344-8377

The installer shall verify that static water supply pressure exceeds the design pressure by a minimum of 10%. If less notify in writing this office, the owner, or owner's representative for a resolution. Installer shall hold harmless this office, the owner, or owner's representative for failure to make such notification prior to starting construction and thereby accepts all costs and obligations for system supply pressure corrections.

Stanley F. Albus, ASLA
Licensed Irrigator #4058
Rialto Studio, Inc., 2425 Broadway, Suite 105
San Antonio, Texas 78215 210-828-1155

IRRIGATION NOTES

1. Contractor to submit as built drawings of the automatic irrigation system as described on the drawing and within these notes. Illustrate on the drawing location of as built equipment with two triangulating measurements from permanent objects, as follows:
   A. All valves electrical, quick coupling and isolation.
   B. All wire junctions and splice boxes.
   C. All ending locations of extra valve wires and mainline.
   D. Location of irrigation controller and rain and freeze sensor.
   Drawings are to be sealed by a licensed Irrigator with the State of Texas. Submit as built drawings to the Landscape Architect or Owner's representative.
2. All mainline and lateral line piping and control wires under paving shall be installed in separate sleeves. Lateral line sleeves shall be a minimum of twice (2X) the diameter of the pipe to be sleeved. Mainline and control wire sleeves shall be of adequate size to allow for removal and repair. Minimum sleeve size shall be 2" O.D.
3. Contractor to install all backflow prevention devices and all piping between the point of connection and the backflow preventer as per local and governing authorities.
4. Final location of the backflow preventer and automatic controller shall be approved by the owner's authorized representative.
5. 120 VAC electrical power source at controller location shall be provided by others.
6. All sprinkler heads shall be set perpendicular to finish grade and a minimum of 6" away from walls, rocks, sidewalk, fences, etc. unless otherwise specified.
7. The Irrigation Contractor shall flush and adjust all sprinkler heads and valves for optimum coverage with minimal over spray onto walks, streets, walls, etc.
8. It is the responsibility of the Irrigation Contractor to familiarize himself with all grade differences, location of walls, retaining walls, structures and utilities. The irrigation contractor shall repair or replace all items damaged by his work. He shall coordinate his work with other contractors for the location and installation of pipe sleeves through walls, under roadways and paving, etc.
9. All work shall be installed in accordance with applicable codes and ordinances as per local and governing authorities and the National Electrical Code and it's governing authorities.
10. All irrigation main lines shall be PVC Schedule 40 Solvent - Weld with a min. 12" cover. All lateral lines shall be PVC class 200 solvent weld with 8" min. cover.
11. Do not willfully install the sprinkler system as shown on the drawings when it is obvious in the field that unknown obstructions, grade differences or differences in the area dimensions exist that might not have been considered in the design. Such obstructions or differences should be brought to the attention of the owner's authorized representative. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.
12. All sprinkler equipment not otherwise detailed or specified shall be installed as per manufacturer's recommendations and specifications.
13. The irrigation contractor shall install serviceable check valves on all heads in areas where post valve shut-off draining of the irrigation head causes flooding or as directed by the owner's authorized representative.
14. The contractor shall be a Registered Licensed Irrigator in the State of Texas. Contractor must conform to all codes as stated in section 34 of the Texas Water Code and TNRCC.
15. All remote control valves, gate valves, and quick couplers shall be installed in an Ametek standard valve box.
16. Waterproof Connectors to be used on all wire connections.
17. Irrigation Contractor shall procure all permits, licenses, tests and inspections, and pay all charges and fees and give all necessary notices for the completion of work.
18. Refer to specifications for additional detailed information.
19. All valves shall be adjusted to minimize wind drift, atomization (fogging), and to achieve maximum coverage. Adjust the operating pressure of valves at farthest or highest head from valve. Do not adjust output at the nozzle unless absolutely necessary.
20. Contractor shall not disturb roots of existing trees. There shall be no machine trenching below the dripline of existing trees.
21. Extreme care shall be exercised in excavating and working near utilities. Contractor shall verify the location and condition of all utilities and be responsible for damage to any utilities.
22. Contractor shall clearly mark all exposed excavations, materials and equipment. Cover or barricade trenches when the contractor is not on the site. Take all necessary safety precautions to protect and prevent injury to any persons on the site.
23. Prior to project turn over the Irrigation Contractor will be required to conduct a final walk thru with the Owner or their representatives. The walk thru is to establish 100% completion of the irrigation installation and function according to specifications. If three malfunctions or installation discrepancies occur the walk thru will be ceased and rescheduled for a later date after repairs have been made at the Contractors liability.
24. The irrigation design does not provide full 100% coverage of the site. See plans and specifications for areas to be irrigated. Contractor is responsible for 100% coverage on all irrigated areas.
25. The irrigation contractor is required by law to notify Texas One Call (800-245-4545) 72 hours prior to any excavation.
26. The drawings are generally diagrammatic and represent the intent of the work to be installed. For clarity purposes some irrigation lines may be shown in hardscape areas without access sleeves. These lines shall be installed in a common trench or at the back of curb in landscape areas.
27. All work called for on the drawings by notes or details shall be furnished and installed whether or not specifically mentioned in the specifications.
28. The Contractor shall verify the on-site static pressure by submitting a letter certifying that on-site pressure exceeds design pressure by 10%. If on-site pressure does not exceed design pressure by 10%, contact the Owner's representative for resolution. If construction work is started prior to receiving certification letter, the Contractor assumes all costs for changes required to meet on-site pressure.

WATER SCHEDULE

ZONE PERFORMANCE DATA (RUN TIMES @ 80% E.T.)

ZONE NO.	APPLICATION	VALVE SIZE	FLOW RATE		AVE. PREC. RATE		MINUTES FOR .8"
1	SHRUB DRIP	1"	10.2	GPM	0.65	IN./HR	92
2	SHRUB DRIP	1"	5.2	GPM	0.65	IN./HR	92
3	SHRUB DRIP	1"	11.6	GPM	0.65	IN./HR	92
4	SHRUB DRIP	1"	4.5	GPM	0.65	IN./HR	92

NOTE: This is intended to serve as a guide only. Contractor should evaluate actual water needs and schedule each zone to ensure proper plant growth and development.

LEGEND

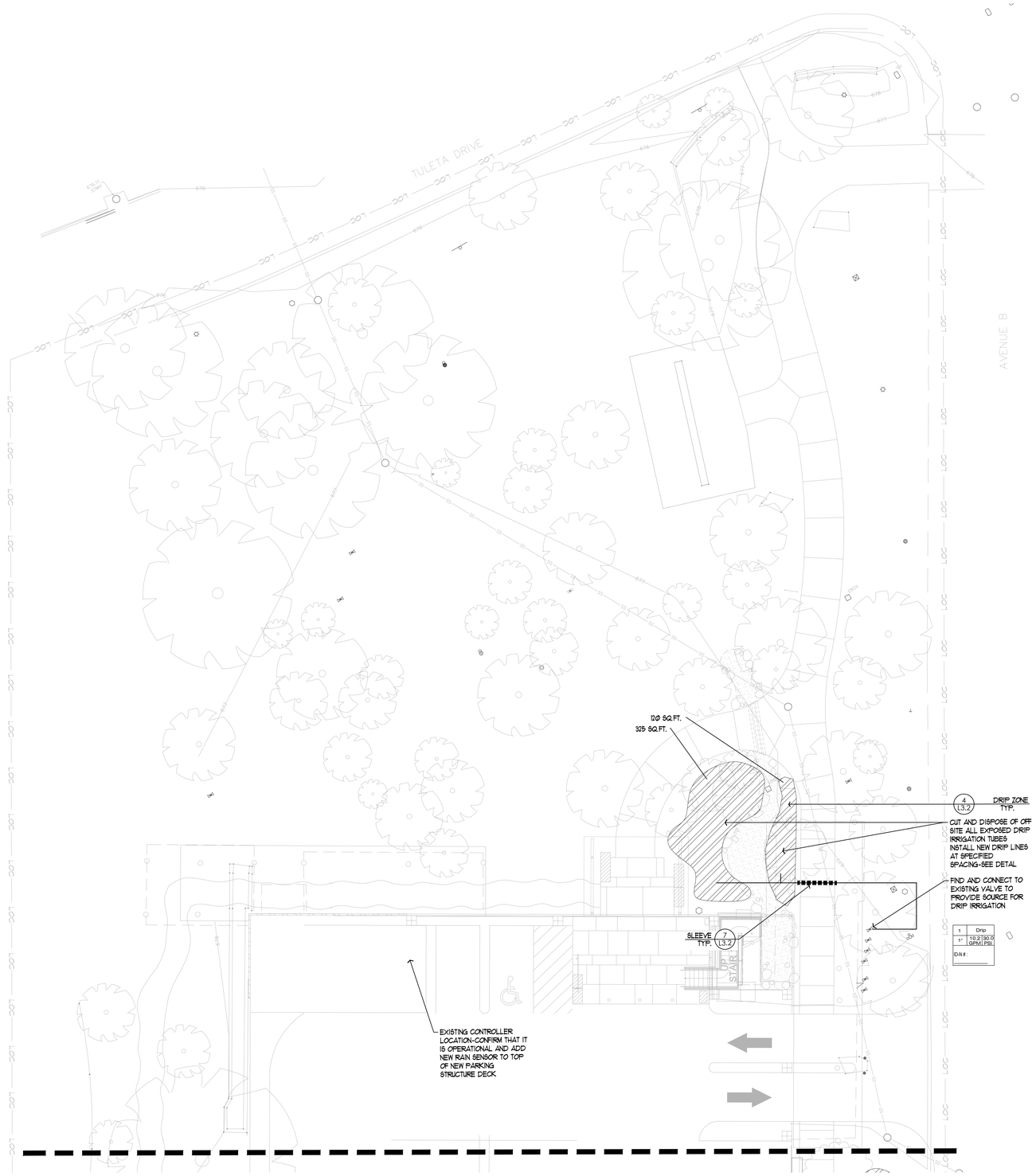
1	TREE BUBBLER	STATION NUMBER / TYPE OF APPLICATION
1"	10.0 GPM / 30.0 PSI	VALVE SIZE / FLOW / ZONE PRESSURE
Hunter 6" PRS30-CV-R PCN-10 Nozzle		HEAD & NOZZLE DATA

(S)R SENSOR

DRIP TUBING - RAIN BIRD XFDP-06-12
(.6 GPH, 12" EMITTER SPACING, TYP. 18" ROW SPACING)

SCHEDULE 40 PVC MAINLINE
CLASS 200 & 215 PVC LATERAL LINES
SCHEDULE 40 PVC SLEEVES

FRICTION LOSS	
ZONE 3: SHRUB DRIP (11.6 GPM)	
1.25" MAINLINE (PVC SCH. 40)	0.3
ELEVATION LOSS	0.0
1" DRIP ZONE COMBINED	53.0
TOTAL DESIGN PRESSURE	56.3
TOTAL PRESSURE REQUIRED	61.0



INSTALLATION NOTES

1. Unlabeled pipe is .5"
2. Sleeves to be twice the the total diameter of the pipes within.
3. Install wiring in a separate sleeve within mainline sleeve, size as necessary.
4. Any excavation under drip line of existing tree requires hand trenching.
5. The non-potable irrigation system is an expansion of an existing irrigation system. Backflow prevention is currently in place; test and repair per cosa requirements. Find and connect to existing mainline as necessary for new zones. Install wiring with piping as needed for new system control.

MATCHLINE SEE SHEET L5.2

PREVAILING WIND NORTH 0 5 10 20 FT SCALE: 1" = 10'-0"

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STATE OF TEXAS
STANLEY F. ALBUS
4058
LICENSED IRRIGATOR
8·11·2017

BRACKENRIDGE PARK GARAGE EXPANSION

3623 Avenue B
San Antonio, Texas 78209

ISSUED FOR:

NO.	DATE	DESCRIPTION
	11AUG17	CONSTRUCTION

TITLE: Irrigation Plan

SHEET: L5.1

LEGEND

1	TREE BUBBLER		STATION NUMBER / TYPE OF APPLICATION
1"	10.0 GPM	30.0 PSI	VALVE SIZE / FLOW / ZONE PRESSURE
Hunter 6" PRS30-CV-R PCN-10 Nozzle			HEAD & NOZZLE DATA

(S)R SENSOR

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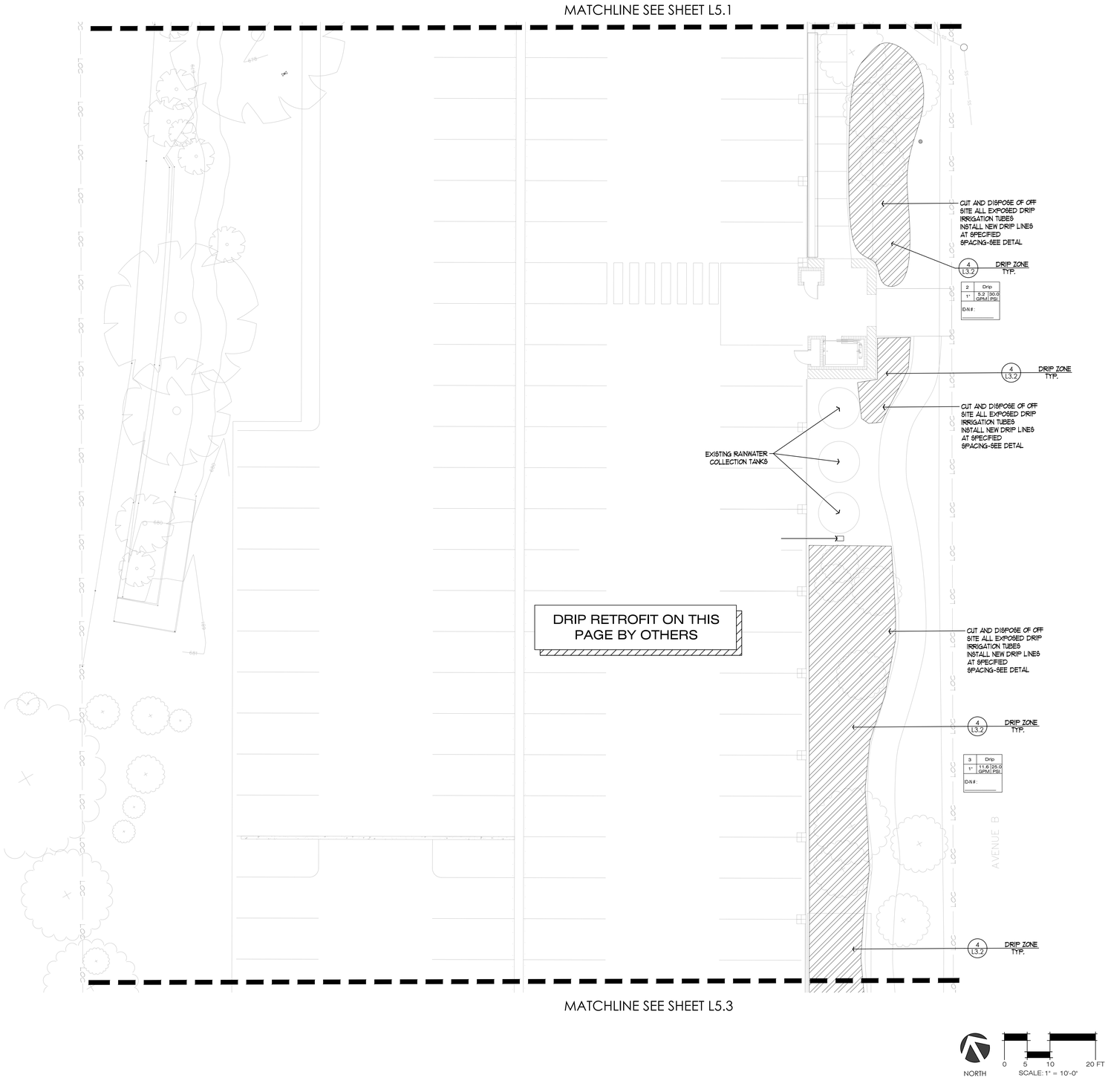
SCHEDULE 40 PVC SLEEVES



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STATE OF TEXAS
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4058
8·11·2017

BRACKENRIDGE PARK GARAGE EXPANSION

3623 Avenue B
San Antonio, Texas 78209

ISSUED FOR:

NO.	DATE	DESCRIPTION
	11AUG17	CONSTRUCTION

TITLE: Irrigation Plan

SHEET: L5.2

LEGEND

1	TREE BUBBLER		STATION NUMBER / TYPE OF APPLICATION
1"	10.0 GPM	30.0 PSI	VALVE SIZE / FLOW / ZONE PRESSURE
Hunter 6" PRS30-CV-R PCN-10 Nozzle			HEAD & NOZZLE DATA

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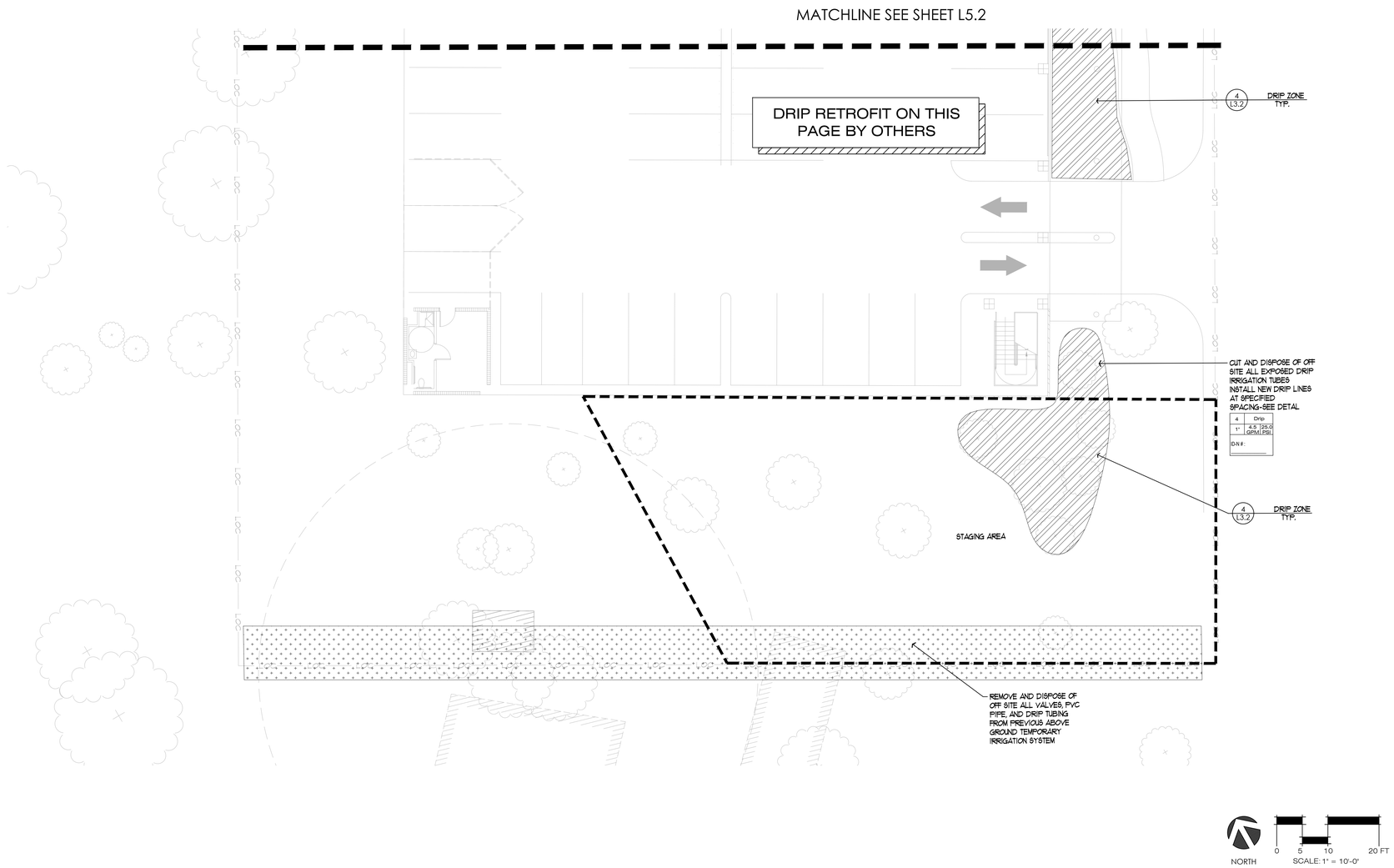

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3623 Avenue B
San Antonio, Texas 78209

ISSUED FOR:

NO.	DATE	DESCRIPTION
	11AUG17	CONSTRUCTION

TITLE: **Irrigation Plan**

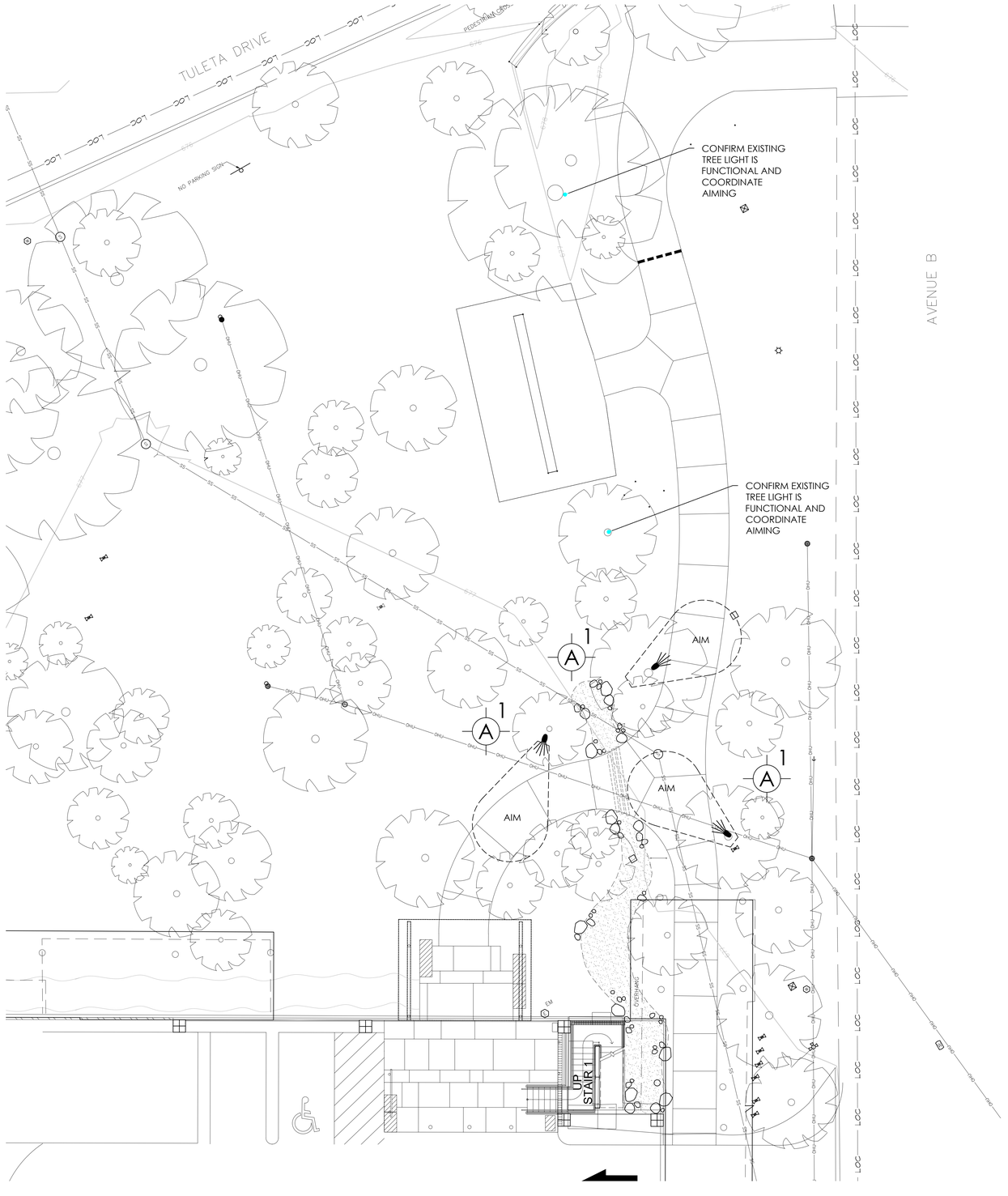
SHEET: L5.3

Landscape Lighting Notes:

1. ALL SITE UNDERGROUND CONDUIT SHALL BE BURIED A MINIMUM OF 24 INCHES DEEP BELOW FINISH GRADE UNLESS OTHERWISE NOTED.
2. COORDINATE ALL REMOTE TRANSFORMER LOCATIONS WITH LANDSCAPE ARCHITECT PRIOR TO EXCAVATION. WIRE SIZE SHALL BE SUFFICIENT TO LIMIT VOLTAGE DROP TO THE FIXTURE.
3. ALL EXCAVATION WITHIN THE RPZ OF EXISTING TREES SHALL BE DONE BY HAND OR AIR SPADE TO PRESERVE TREE ROOTS. DO NOT CUT ANY STRUCTURAL ROOTS. AVOID OR CUT CLEANLY ALL NON STRUCTURAL FEEDER ROOTS ENCOUNTERED.
4. PAINT ALL CONDUIT AND JUNCTION BOXES DARK BRONZE. SUPPLY COLOR TO LANDSCAPE ARCHITECT FOR APPROVAL. SEE TREE LIGHTING DETAIL.
5. PRIOR TO ANY EXCAVATION, CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION MEETING TO IDENTIFY AND ESTABLISH APPROPRIATE CONDUIT ROUTES FOR LANDSCAPE LIGHTING.
6. ELECTRICAL CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY QUESTIONS REGARDING THE LOCATION OF PROPOSED LIGHT FIXTURES PRIOR TO INSTALLATION - ESPECIALLY QUESTIONS THAT MAY AFFECT OR ALTER THE WARRANTY OF SAID MATERIAL.
7. REFERENCE ELECTRICAL DRAWINGS FOR CIRCUITING, FIXTURE SPECIFICATIONS AND ADDITIONAL NOTES.
8. SUBSTITUTIONS OR FIXTURES PROVIDED BY MANUFACTURERS NOT LISTED IN THE SCHEDULE ARE NOT ACCEPTABLE.
9. ELECTRICAL CONTRACTOR SHALL PROVIDE LABOR AND EQUIPMENT TO CONDUCT AIMING TO SATISFY LANDSCAPE ARCHITECT OF ALL TREE MOUNTED FIXTURES.

Landscape Lighting Legend:

SYMBOL (3 / A)	FIXTURE COUNT / FIXTURE TYPE
(A)	TREE MOUNTED DOWN LIGHT - AVAILABLE FROM MOON VISIONS BULLET SERIES BR30 WITH 14WATT PAR 30 LED LAMP, BRONZE TEXTURE FINISH WITH DSA8 GLARE SHIELD. USE TREE MOUNT BOX-BRONZE



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REGISTERED LANDSCAPE ARCHITECT
JEROME C. KOZLOWSKI
STATE OF TEXAS
8/11/2017

BRACKENRIDGE PARK GARAGE EXPANSION

3623 Avenue B
San Antonio, Texas 78209

ISSUED FOR:

NO.	DATE	DESCRIPTION
	11AUG17	CONSTRUCTION

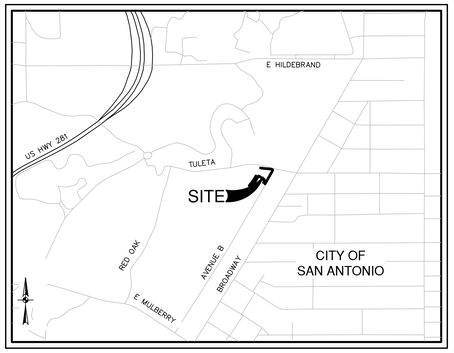
TITLE: Lighting Plan

SHEET: L6.1

BRACKENRIDGE PARK GARAGE EXPANSION

SAN ANTONIO, TEXAS

CIVIL CONSTRUCTION PLANS



LOCATION MAP

NOT–TO–SCALE

SHEET INDEX

Sheet Description	Sheet No.
COVER SHEET	C0.00
STORMWATER POLLUTION PREVENTION PLAN	C1.00
STORMWATER POLLUTION PREVENTION PLAN DETAILS	C1.10
FIRE PREVENTION PLAN	C2.00
DEMOLITION PLAN	C3.00
SITE, GRADING AND DRAINAGE PLAN	C4.00

PREPARED FOR:

THE WITTE MUSEUM
3801 BROADWAY
SAN ANTONIO, TEXAS 78209

AUGUST 2017

STATE OF TEXAS
CARA C. TACKETT
89491
LICENSED
PROFESSIONAL ENGINEER
08/16/17

PAPE-DAWSON ENGINEERS
SAN ANTONIO I AUSTIN I HOUSTON I FORT WORTH I DALLAS
2000 NW LOOP 410 I SAN ANTONIO, TX 78213 I 210.375.9000
TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028800

SHEET C0.00

PD JOB NO. 3302-07 BRACKENRIDGE PARK GARAGE EXPANSION

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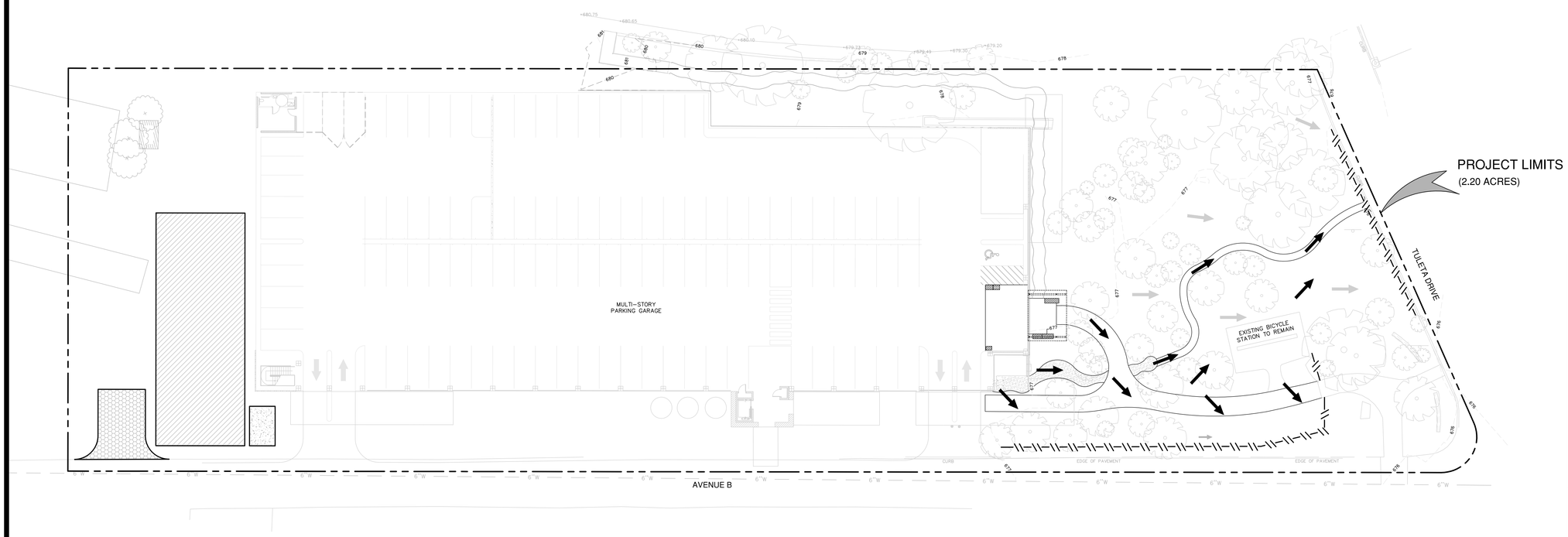

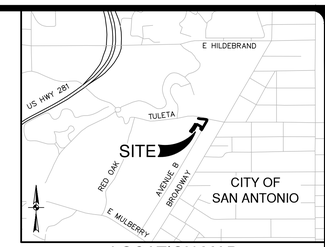

LOCATION MAP
NOT–TO–SCALE

SCALE: 1"= 20'
0' 20' 40' 60'

LEGEND

- PROJECT LIMITS
- 976 EXISTING GRADE
- 970 PROPOSED GRADE
- SILT FENCE
- FLOW ARROW (EXISTING)
- FLOW ARROW (PROPOSED)
- STABILIZED CONSTRUCTION ENTRANCE/EXIT (FIELD LOCATE)
- CONSTRUCTION EQUIPMENT, VEHICLE & MATERIALS STORAGE AREA (FIELD LOCATE)
- CONCRETE TRUCK WASH–OUT PIT (FIELD LOCATE)

GENERAL NOTES

1. DO NOT DISTURB VEGETATED AREAS (TREES, GRASS, WEEDS, BRUSH, ETC.) ANY MORE THAN NECESSARY FOR CONSTRUCTION.

2. CONSTRUCTION ENTRANCE/EXIT LOCATION, CONCRETE WASH–OUT PIT, AND CONSTRUCTION EQUIPMENT AND MATERIAL STORAGE YARD TO BE DETERMINED IN THE FIELD.

3. STORM WATER POLLUTION PREVENTION CONTROLS MAY NEED TO BE MODIFIED IN THE FIELD TO ACCOMPLISH THE DESIRED EFFECT. ALL MODIFICATIONS ARE TO BE NOTED ON THIS EXHIBIT AND SIGNED AND DATED BY THE RESPONSIBLE PARTY.

4. RESTRICT ENTRY/EXIT TO THE PROJECT SITE TO DESIGNATED LOCATIONS BY USE OF ADEQUATE FENCING, IF NECESSARY.

5. ALL STORM WATER POLLUTION PREVENTION CONTROLS ARE TO BE MAINTAINED AND IN WORKING CONDITIONS AT ALL TIMES.

6. FOR A COMPLETE LISTING OF TEMPORARY STORM WATER POLLUTION PREVENTION CONTROLS REFER TO THE TPDES STORM WATER POLLUTION PREVENTION PLAN.

7. STORM WATER POLLUTION PREVENTION STRUCTURES SHOULD BE CONSTRUCTED WITHIN THE SITE BOUNDARIES. SOME OF THESE FEATURES MAY BE SHOWN OUTSIDE THE SITE BOUNDARIES ON THIS PLAN FOR VISUAL CLARITY.

8. AS SOON AS PRACTICAL, ALL DISTURBED SOIL THAT WILL NOT BE COVERED BY IMPERVIOUS COVER SUCH AS PARKWAY AREAS, EASEMENT AREAS, EMBANKMENT SLOPES, ETC. WILL BE STABILIZED PER APPLICABLE PROJECT SPECIFICATIONS.

9. BEST MANAGEMENT PRACTICES MAY BE INSTALLED IN STAGES TO COINCIDE WITH THE DISTURBANCE OF UPGRADIENT AREAS.

10. BEST MANAGEMENT PRACTICES MAY BE REMOVED IN STAGES ONCE THE WATERSHED FOR THAT PORTION CONTROLLED BY THE BEST MANAGEMENT PRACTICES HAS BEEN STABILIZED IN ACCORDANCE WITH TPDES REQUIREMENTS.

11. UPON COMPLETION OF THE PROJECT, INCLUDING SITE STABILIZATION, AND BEFORE FINAL PAYMENT IS ISSUED, CONTRACTOR SHALL REMOVE ALL SEDIMENT AND EROSION CONTROL MEASURES, PAYING SPECIAL ATTENTION TO ROCK BERMS IN DRAINAGE FEATURES.

12. WHERE VEGETATED FILTER STRIPS ARE INDICATED, CONTRACTOR SHALL VERIFY THAT SUFFICIENT VEGETATION EXISTS, OTHERWISE CONTRACTOR SHALL PLACE SILT FENCING IN LIEU OF VEGETATED FILTER STRIP.

13. SHADED AREA ▭ DENOTES LIMITS OF DISTURBED AREAS. OTHER AREAS WITHIN THE PROJECT LIMITS, WITH THE EXCEPTION OF A CONSTRUCTION EQUIPMENT AND MATERIAL STORAGE YARD, ARE NOT A PART OF THIS TPDES STORM WATER POLLUTION PREVENTION PLAN (SWP3) AND WILL NOT BE DISTURBED BY CIVIL CONSTRUCTION ACTIVITIES. HOUSE CONSTRUCTION ACTIVITIES WILL REQUIRE A SEPARATE STORM WATER POLLUTION PREVENTION PLAN.

14. CPS ENERGY WILL FUNCTION AS A SECONDARY OPERATOR ON THIS PROJECT AND WILL BE INSTALLING ELECTRIC UTILITIES FOR ON–SITE CONSTRUCTION AND OFF–SITE FEED TO THE PROJECT.

SWP3 MODIFICATIONS

DATE	SIGNATURE	DESCRIPTION

THE ENGINEERING SEAL HAS BEEN AFFIXED TO THIS SHEET ONLY FOR THE PURPOSE OF DEMONSTRATING COMPLIANCE WITH THE TPDES–STORM WATER POLLUTION PREVENTION PLAN (SWP3) REGULATIONS.

THIS SHEET HAS BEEN PREPARED FOR PURPOSES OF THE SWP3 ONLY. ALL OTHER CIVIL ENGINEERING RELATED INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE SHEET IN THE CIVIL IMPROVEMENT PLANS.

EXHIBIT 2

NO.	REVISION	DATE	NO.	REVISION	DATE

STATE OF TEXAS
CARA C. TACKETT
89491
LICENSED PROFESSIONAL ENGINEER
08/16/17

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BRACKENRIDGE PARK GARAGE EXPANSION
SAN ANTONIO, TEXAS
STORMWATER POLLUTION PREVENTION PLAN

PLAT NO. •
JOB NO. 3302–07
DATE AUGUST 2017
DESIGNER AK
CHECKED TD DRAWN MF
SHEET C1.00

Date: Aug 16, 2017, 4:45pm User ID: tcamacho
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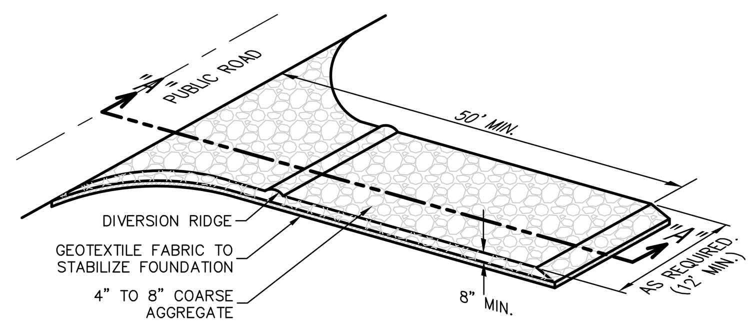
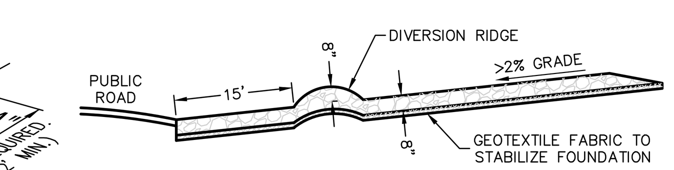


SCHEMATIC OF TEMPORARY CONSTRUCTION ENTRANCE/EXIT



SECTION "A-A" OF A CONSTRUCTION ENTRANCE/EXIT

MATERIALS
1. THE AGGREGATE SHOULD CONSIST OF 4-INCH TO 8-INCH WASHED STONE OVER A STABLE FOUNDATION AS SPECIFIED IN THE PLAN.

2. THE AGGREGATE SHOULD BE PLACED WITH A MINIMUM THICKNESS OF 8-INCHES.

3. THE GEOTEXTILE FABRIC SHOULD BE DESIGNED SPECIFICALLY FOR USE AS A SOIL FILTRATION MEDIA WITH AN APPROXIMATE WEIGHT OF 6 OZ/YD², A MULLEN BURST RATING OF 140 LB/IN², AND AN EQUIVALENT OPENING SIZE GREATER THAN A NUMBER 50 SIEVE.

4. IF A WASHING FACILITY IS REQUIRED, A LEVEL AREA WITH A MINIMUM OF 4-INCH DIAMETER WASHED STONE OR COMMERCIAL ROCK SHOULD BE INCLUDED IN THE PLANS. DIVERT WASTEWATER TO A SEDIMENT TRAP OR BASIN.

INSTALLATION
1. AVOID CURVES ON PUBLIC ROADS AND STEEP SLOPES. REMOVE VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA. GRADE CROWN FOUNDATION FOR POSITIVE DRAINAGE.

2. THE MINIMUM WIDTH OF THE ENTRANCE/EXIT SHOULD BE 12 FEET OR THE FULL WIDTH OF EXIT ROADWAY, WHICHEVER IS GREATER.

3. THE CONSTRUCTION ENTRANCE SHOULD BE AT LEAST 50 FEET LONG.

4. IF THE SLOPE TOWARD THE ROAD EXCEEDS 2%, CONSTRUCT A RIDGE, 6-INCHES TO 8-INCHES HIGH WITH 3:1 (H:V) SIDE SLOPES, ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE PUBLIC ROAD.

5. PLACE GEOTEXTILE FABRIC AND GRADE FOUNDATION TO IMPROVE STABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICIPATED.

6. PLACE STONE TO DIMENSIONS AND GRADE SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND SLOPE FOR DRAINAGE.

7. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN.

8. INSTALL PIPE UNDER PAD AS NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.

COMMON TROUBLE POINTS
1. INADEQUATE RUNOFF CONTROL-SEDIMENT WASHES ONTO PUBLIC ROAD.

2. STONE TOO SMALL OR GEOTEXTILE FABRIC ABSENT, RESULTS IN MUDDY CONDITION AS STONE IS PRESSED INTO SOIL.

3. PAD TOO SHORT FOR HEAVY CONSTRUCTION TRAFFIC-EXTEND PAD BEYOND THE MINIMUM 50-FOOT LENGTH AS NECESSARY.

4. PAD NOT FLARED SUFFICIENTLY AT ROAD SURFACE, RESULTS IN MUD BEING TRACKED ON TO ROAD AND POSSIBLE DAMAGE TO ROAD.

5. UNSTABLE FOUNDATION - USE GEOTEXTILE FABRIC UNDER PAD AND/OR IMPROVE FOUNDATION DRAINAGE.

INSPECTION AND MAINTENANCE GUIDELINES
1. THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

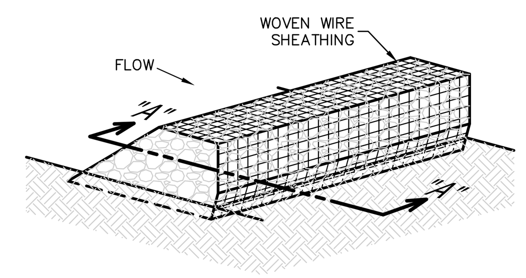
2. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.

3. WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.

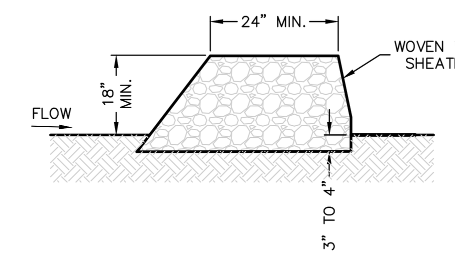
4. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

5. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.

STABILIZED CONSTRUCTION ENTRANCE/EXIT DETAIL
NOT-TO-SCALE



ISOMETRIC PLAN VIEW



SECTION "A-A"

ROCK BERMS
THE PURPOSE OF A ROCK BERM IS TO SERVE AS A CHECK DAM IN AREAS OF CONCENTRATED FLOW, TO INTERCEPT SEDIMENT-LADEN RUNOFF, DETAIN THE SEDIMENT AND RELEASE THE WATER IN SHEET FLOW. THE ROCK BERM SHOULD BE USED WHEN THE CONTRIBUTING DRAINAGE AREA IS LESS THAN 5 ACRES. ROCK BERMS ARE USED IN AREAS WHERE THE VOLUME OF RUNOFF IS TOO GREAT FOR A SILT FENCE TO CONTAIN. THEY ARE LESS EFFECTIVE FOR SEDIMENT REMOVAL THAN SILT FENCES, PARTICULARLY FOR FINE PARTICLES, BUT ARE ABLE TO WITHSTAND HIGHER FLOWS THAN A SILT FENCE. AS SUCH, ROCK BERMS ARE OFTEN USED IN AREAS OF CHANNEL FLOWS (DITCHES, GULLIES, ETC.). ROCK BERMS ARE MOST EFFECTIVE AT REDUCING BED LOAD IN CHANNELS AND SHOULD NOT BE SUBSTITUTED FOR OTHER EROSION AND SEDIMENT CONTROL MEASURES FARTHER UP THE WATERSHED.

INSPECTION AND MAINTENANCE GUIDELINES
1. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE.

2. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED MANNER THAT WILL NOT CAUSE ANY ADDITIONAL SILTATION.

3. REPAIR ANY LOOSE WIRE SHEATHING.

4. THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.

5. THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.

6. THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

MATERIALS
1. THE BERM STRUCTURE SHOULD BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM OPENING OF 1 INCH AND A MINIMUM WIRE DIAMETER OF 20 GAUGE GALVANIZED AND SHOULD BE SECURED WITH SHOAT RINGS.

2. CLEAN, OPEN GRADED 3-INCH TO 5-INCH DIAMETER ROCK SHOULD BE USED, EXCEPT IN AREAS WHERE HIGH VELOCITIES OR LARGE VOLUMES OF FLOW ARE EXPECTED, WHERE 5-INCH TO 8-INCH DIAMETER ROCKS MAY BE USED.

INSTALLATION
1. LAY OUT THE WOVEN WIRE SHEATHING PERPENDICULAR TO THE FLOW LINE. THE SHEATHING SHOULD BE 20 GAUGE WOVEN WIRE MESH WITH 1 INCH OPENINGS.

2. BERM SHOULD HAVE A TOP WIDTH OF 2 FEET MINIMUM WITH SIDE SLOPES BEING 2:1 (H:V) OR FLATTER.

3. PLACE THE ROCK ALONG THE SHEATHING AS SHOWN IN THE DIAGRAM TO A HEIGHT NOT LESS THAN 18".

4. WRAP THE WIRE SHEATHING AROUND THE ROCK AND SECURE WITH TIE WIRE SO THAT THE ENDS OF THE SHEATHING OVERLAP AT LEAST 2 INCHES, AND THE BERM RETAINS ITS SHAPE WHEN WALKED UPON.

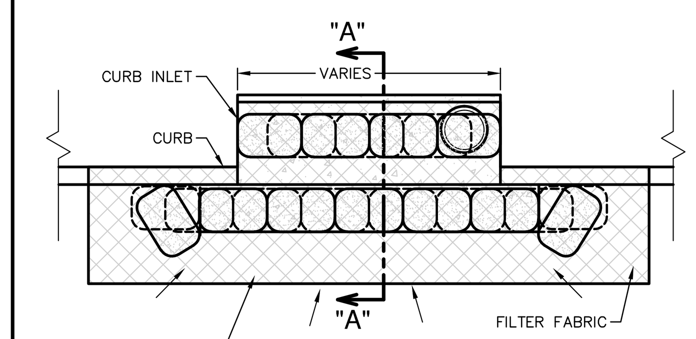
5. BERM SHOULD BE BUILT ALONG THE CONTOUR AT ZERO PERCENT GRADE OR AS NEAR AS POSSIBLE.

6. THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.

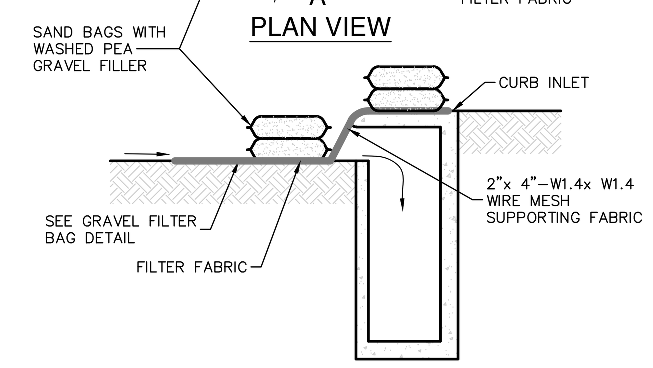
COMMON TROUBLE POINTS
1. INSUFFICIENT BERM HEIGHT OR LENGTH (RUNOFF QUICKLY ESCAPES OVER THE TOP OR AROUND THE SIDES OF BERM).

2. BERM NOT INSTALLED PERPENDICULAR TO FLOW LINE (RUNOFF ESCAPING AROUND ONE SIDE).

ROCK BERM DETAIL
NOT-TO-SCALE



PLAN VIEW



SECTION "A-A"

GENERAL NOTES
1. CONTRACTOR TO INSTALL 2"x4"-W1.4xW1.4 WIRE MESH SUPPORTING FILTER FABRIC OVER THE INLET OPENING. FABRIC MUST BE SECURED TO WIRE BACKING WITH CLIPS OR WIRE TIES AT THIS LOCATION. SAND BAGS FILLED WITH WASHED PEA GRAVEL SHOULD BE PLACED ON TOP OF WIRE MESH ON TOP OF THE INLET AS SHOWN ON THIS DETAIL TO HOLD WIRE MESH IN PLACE. SANDBAGS FILLED WITH WASHED PEA GRAVEL SHOULD ALSO BE PLACED ALONG THE GUTTER AS SHOWN ON THIS DETAIL TO HOLD WIRE MESH IN PLACE. SAND BAGS TO BE STACKED TO FORM A CONTINUOUS BARRIER AROUND INLETS.

2. THE BAGS SHOULD BE TIGHTLY ABUTTED AGAINST EACH OTHER TO PREVENT RUNOFF FROM FLOWING BETWEEN THE BAGS.

INSPECTION AND MAINTENANCE GUIDELINES
1. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.

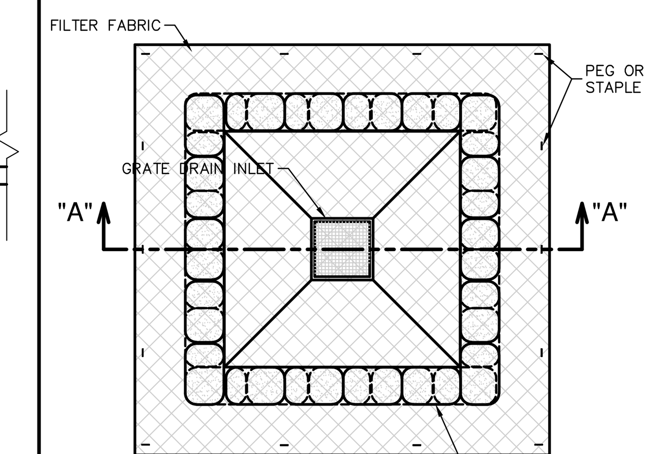
2. REMOVE SEDIMENT WHEN BUILDUP REACHES A DEPTH OF 3 INCHES. REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.

3. CHECK PLACEMENT OF DEVICE TO PREVENT GAPS BETWEEN DEVICE AND CURB.

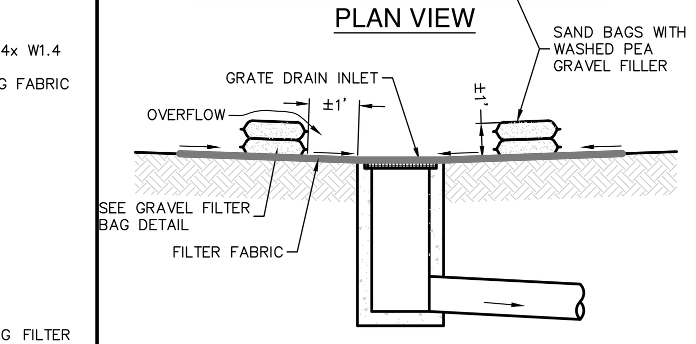
4. INSPECT FILTER FABRIC AND PATCH OR REPLACE IF TORN OR MISSING.

5. STRUCTURES SHOULD BE REMOVED AND THE AREA STABILIZED ONLY AFTER THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

BAGGED GRAVEL CURB INLET PROTECTION DETAIL
NOT-TO-SCALE



PLAN VIEW



SECTION "A-A"

GENERAL NOTES
1. THE SANDBAGS SHOULD BE FILLED WITH WASHED PEA GRAVEL AND STACKED TO FORM A CONTINUOUS BARRIER ABOUT 1 FOOT HIGH AROUND INLETS.

2. THE BAGS SHOULD BE TIGHTLY ABUTTED AGAINST EACH OTHER TO PREVENT RUNOFF FROM FLOWING BETWEEN THE BAGS.

INSPECTION AND MAINTENANCE GUIDELINES
1. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.

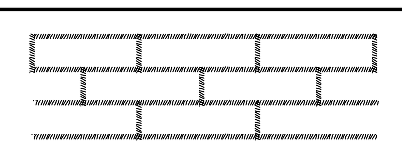
2. REMOVE SEDIMENT WHEN BUILDUP REACHES A DEPTH OF 3 INCHES. REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MATTER THAT IT WILL NOT ERODE.

3. CHECK PLACEMENT OF DEVICE TO PREVENT GAPS BETWEEN DEVICE AND CURB.

4. INSPECT FILTER FABRIC AND PATCH OR REPLACE IF TORN OR MISSING.

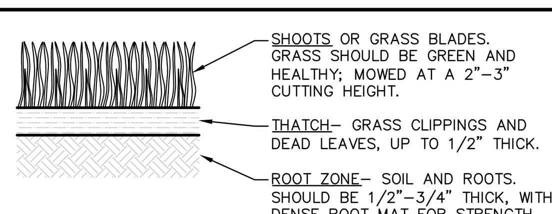
5. STRUCTURES SHOULD BE REMOVED AND THE AREA STABILIZED ONLY AFTER THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

BAGGED GRAVEL GRATE INLET PROTECTION DETAIL
NOT-TO-SCALE



LAY SOD IN A STAGGERED PATTERN. BUTT THE STRIPS TIGHTLY AGAINST EACH OTHER. DO NOT LEAVE SPACES AND DO NOT OVERLAP. A SHARPENED MASON'S TROWEL IS A HANDY TOOL FOR TUCKING DOWN THE ENDS AND TRIMMING PIECES.

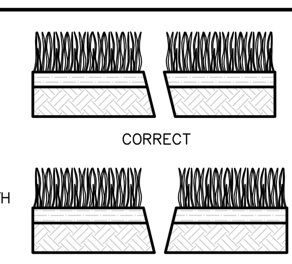
BUTTING - ANGLED ENDS CAUSED BY THE AUTOMATIC SOD CUTTER MUST BE MATCHED CORRECTLY.



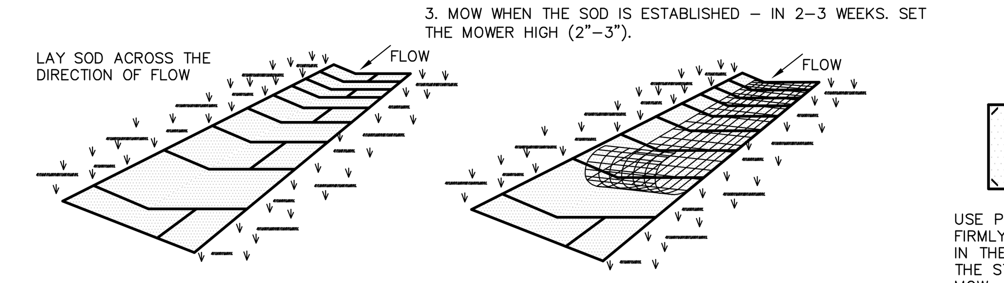
APPEARANCE OF GOOD SOD
NOTES:
1. ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE SOIL.

2. WATER TO A DEPTH OF 4" AS NEEDED. WATER WELL AS SOON AS THE SOD IS LAID.

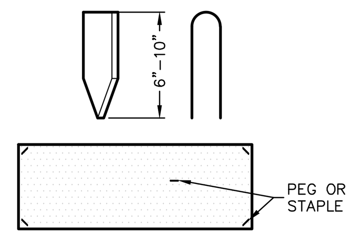
3. MOW WHEN THE SOD IS ESTABLISHED - IN 2-3 WEEKS. SET THE MOWER HIGH (2"-3").



SOD INSTALLATION



IN CRITICAL AREAS, SECURE SOD WITH NETTING. USE STAPLES.



USE PEGS OR STAPLES TO FASTEN SOD FIRMLY - AT THE ENDS OF STRIPS AND IN THE CENTER, OR EVERY 3-4 FEET IF THE STRIPS ARE LONG. WHEN READY TO MOW, DRIVE PEGS OR STAPLES FLUSH WITH THE GROUND.

MATERIALS
1. SOD SHOULD BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4" INCH (± 1/4" INCH) AT THE TIME OF CUTTING. THIS THICKNESS SHOULD EXCLUDE SHOOT GROWTH AND THATCH.

2. PIECES OF SOD SHOULD BE CUT TO THE SUPPLIER'S STANDARD WIDTH AND LENGTH, WITH A MAXIMUM ALLOWABLE DEVIATION IN ANY DIMENSION OF 5%. TORN OR UNEVEN PADS SHOULD NOT BE ACCEPTABLE.

3. STANDARD SIZE SECTIONS OF SOD SHOULD BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED FROM A FIRM GRASP ON ONE END OF THE SECTION.

4. SOD SHOULD BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS.

SITE PREPARATION
1. PRIOR TO SOIL PREPARATION, AREAS TO BE SODDED SHOULD BE BROUGHT TO FINAL GRADE IN ACCORDANCE WITH THE APPROVED PLAN.

2. THE SURFACE SHOULD BE CLEARED OF ALL TRASH, DEBRIS AND OF ALL ROOTS, BRUSH, WIRE, GRADE STAKES AND OTHER OBJECTS THAT WOULD INTERFERE WITH PLANTING, FERTILIZING OR MAINTENANCE OPERATIONS.

3. FERTILIZE ACCORDING TO SOIL TESTS. FERTILIZER NEEDS CAN BE DETERMINED BY A SOIL TESTING LABORATORY OR REGIONAL RECOMMENDATIONS CAN BE MADE BY COUNTY AGRICULTURAL EXTENSION AGENTS. FERTILIZER SHOULD BE WORKED INTO THE SOIL TO A DEPTH OF 3 INCHES WITH A DISC, SPRINGTOOTH HARROW OR OTHER SUITABLE EQUIPMENT. ON SLOPING LAND, THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE CONTOUR.

INSTALLATION IN CHANNELS
1. SOD STRIPS IN WATERWAYS SHOULD BE LAID PERPENDICULAR TO THE DIRECTION OF FLOW. CARE SHOULD BE TAKEN TO BUTT ENDS OF STRIPS TIGHTLY (SEE FIGURE ABOVE).

2. AFTER ROLLING OR TAMPING, SOD SHOULD BE PEGGED OR STAPLED TO RESIST WASHOUT DURING THE ESTABLISHMENT PERIOD. MESH OR OTHER NETTING MAY BE PEGGED OVER THE SOD FOR EXTRA PROTECTION IN CRITICAL AREAS.

GENERAL INSTALLATION (VA. DEPT. OF CONSERVATION, 1992)
1. SOD SHOULD NOT BE CUT OR LAID IN EXCESSIVELY WET OR DRY WEATHER. SOD ALSO SHOULD NOT BE LAID ON SOIL SURFACES THAT ARE FROZEN.

2. DURING PERIODS OF HIGH TEMPERATURE, THE SOIL SHOULD BE LIGHTLY IRRIGATED IMMEDIATELY PRIOR TO LAYING THE SOD, TO COOL THE SOIL AND REDUCE ROOT BURNING AND DIEBACK.

3. THE FIRST ROW OF SOD SHOULD BE LAID IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO AND BUTTING TIGHTLY AGAINST EACH OTHER. LATERAL JOINTS SHOULD BE STAGGERED TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. CARE SHOULD BE EXERCISED TO ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE DRYING OF THE ROOTS (SEE FIGURE ABOVE).

4. ON SLOPES 3:1 OR GREATER, OR WHEREVER EROSION MAY BE A PROBLEM, SOD SHOULD BE LAID WITH STAGGERED JOINTS AND SECURED BY STAPLING OR OTHER APPROVED METHODS. SOD SHOULD BE INSTALLED WITH THE LENGTH PERPENDICULAR TO THE SLOPE (ON CONTOUR).

5. AS SODDING OF CLEARLY DEFINED AREAS IS COMPLETED, SOD SHOULD BE ROLLED OR TAMPED TO PROVIDE FIRM CONTACT BETWEEN ROOTS AND SOIL.

6. AFTER ROLLING, SOD SHOULD BE IRRIGATED TO A DEPTH SUFFICIENT THAT THE UNDERSIDE OF THE SOD PAD AND THE SOIL 4 INCHES BELOW THE SOD IS THOROUGHLY WET.

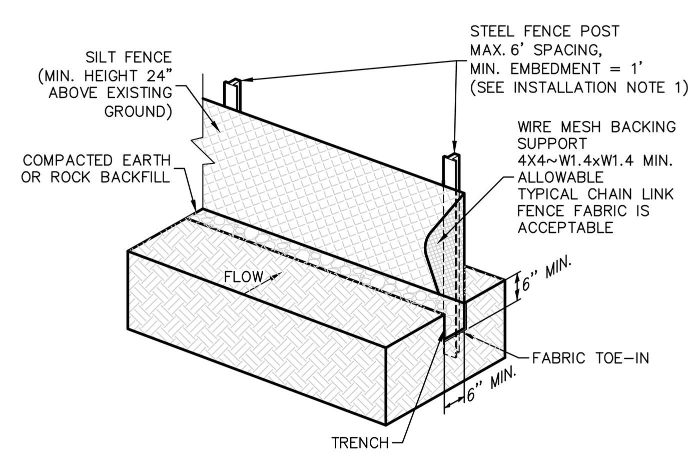
7. UNTIL SUCH TIME A GOOD ROOT SYSTEM BECOMES DEVELOPED, IN THE ABSENCE OF ADEQUATE RAINFALL, WATERING SHOULD BE PERFORMED AS OFTEN AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF AT LEAST 4 INCHES.

8. THE FIRST MOWING SHOULD NOT BE ATTEMPTED UNTIL THE SOD IS FIRMLY ROOTED, USUALLY 2-3 WEEKS. NOT MORE THAN ONE THIRD OF THE GRASS LEAF SHOULD BE REMOVED AT ANY ONE CUTTING.

INSPECTION AND MAINTENANCE GUIDELINES
1. SOD SHOULD BE INSPECTED WEEKLY AND AFTER EACH RAIN EVENT TO LOCATE AND REPAIR ANY DAMAGE.

2. DAMAGE FROM STORMS OR NORMAL CONSTRUCTION ACTIVITIES SUCH AS TIRE RUTS OR DISTURBANCE OF SWALE STABILIZATION SHOULD BE REPAIRED AS SOON AS PRACTICAL.

SOD INSTALLATION DETAIL
NOT-TO-SCALE



ISOMETRIC PLAN VIEW

SILT FENCE
A SILT FENCE IS A BARRIER CONSISTING OF GEOTEXTILE FABRIC SUPPORTED BY METAL POSTS TO PREVENT SOIL AND SEDIMENT LOSS FROM A SITE. WHEN PROPERLY USED, SILT FENCES CAN BE HIGHLY EFFECTIVE AT CONTROLLING SEDIMENT FROM DISTURBED AREAS. THEY CAUSE RUNOFF TO POND, ALLOWING HEAVIER SOLIDS TO SETTLE OUT. IF NOT PROPERLY INSTALLED, SILT FENCES ARE NOT LIKELY TO BE EFFECTIVE.

THE PURPOSE OF A SILT FENCE IS TO INTERCEPT AND DETAIN WATER-BORN SEDIMENT FROM UNPROTECTED AREAS OF A LIMITED EXTENT. SILT FENCE IS USED DURING THE PERIOD OF CONSTRUCTION NEAR THE PERIMETER OF A DISTURBED AREA TO INTERCEPT SEDIMENT WHILE ALLOWING WATER TO PERCOLATE THROUGH. THIS FENCE SHOULD REMAIN IN PLACE UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED. SILT FENCE SHOULD NOT BE USED WHERE THERE IS A CONCENTRATION OF WATER IN A CHANNEL OR DRAINAGE WAY. IF CONCENTRATED FLOW OCCURS AFTER INSTALLATION, CORRECTIVE ACTION MUST BE TAKEN SUCH AS PLACING A ROCK BERM IN THE AREAS OF CONCENTRATED FLOW.

SILT FENCING WITHIN THE SITE MAY BE TEMPORARILY MOVED DURING THE DAY TO ALLOW CONSTRUCTION ACTIVITY PROVIDED IT IS REPLACED AND PROPERLY ANCHORED TO THE GROUND AT THE END OF THE DAY. SILT FENCES ON THE PERIMETER OF THE SITE OR AROUND DRAINAGE WAYS SHOULD NOT BE MOVED AT ANY TIME.

MATERIALS
1. SILT FENCE MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE, OR POLYAMIDE WOVEN OR NONWOVEN FABRIC. THE FABRIC SHOULD BE 36 INCHES, WITH A MINIMUM UNIT WEIGHT OF 4.5 OZ/YD, MULLEN BURST STRENGTH EXCEEDING 190 LB/IN2, ULTRAVIOLET STABILITY EXCEEDING 70%, AND MINIMUM APPARENT OPENING SIZE OF U.S. SIEVE NUMBER 30.

2. FENCE POSTS SHOULD BE MADE OF HOT ROLLED STEEL, AT LEAST 4 FEET LONG WITH TEE OR Y-BAR CROSS SECTION, SURFACE PAINTED OR GALVANIZED, MINIMUM WEIGHT 1.25 LB/FT, AND BRINDELL HARDNESS EXCEEDING 140.

3. WOVEN WIRE BACKING TO SUPPORT THE FABRIC SHOULD BE GALVANIZED 2" X 4" WELDED WIRE, 12 GAUGE MINIMUM.

INSTALLATION
1. STEEL POSTS, WHICH SUPPORT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POSTS MUST BE EMBEDDED A MINIMUM OF 1-FOOT DEEP AND SPACED NOT MORE THAN 8 FEET ON CENTER. WHERE WATER CONCENTRATES, THE MAXIMUM SPACING SHOULD BE 6 FEET.

2. LAY OUT FENCING DOWN-SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. THE FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS ¼ ACRE/100 FEET OF FENCE.

3. THE TOE OF THE SILT FENCE SHOULD BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN-SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G., PAVEMENT OR ROCK OUTCROP), WEIGHT FABRIC FLAP WITH 3 INCHES OF PEA GRAVEL ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.

4. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.

5. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHOULD BE A 3-FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.

6. SILT FENCE SHOULD BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

COMMON TROUBLE POINTS
1. FENCE NOT INSTALLED ALONG THE CONTOUR CAUSING WATER TO CONCENTRATE AND FLOW OVER THE FENCE.

2. FABRIC NOT SEATED SECURELY TO GROUND (RUNOFF PASSING UNDER FENCE).

3. FENCE NOT INSTALLED PERPENDICULAR TO FLOW LINE (RUNOFF ESCAPING AROUND SIDES).

4. FENCE TREATING TOO LARGE AN AREA, OR EXCESSIVE CHANNEL FLOW (RUNOFF OVERTOPS OR COLLAPSES FENCE).

INSPECTION AND MAINTENANCE GUIDELINES
1. INSPECT ALL FENCING WEEKLY, AND AFTER RAINFALL.

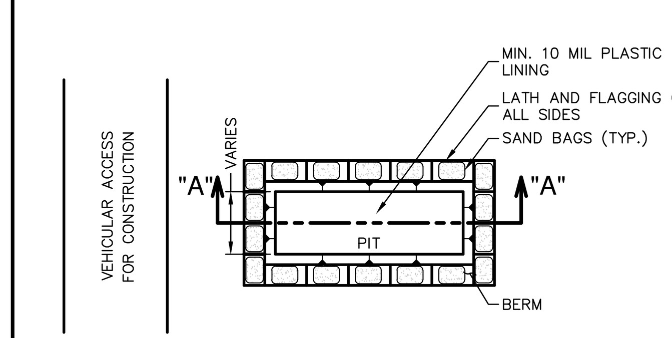
2. REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.

3. REPLACE TORN FABRIC OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE TORN SECTION.

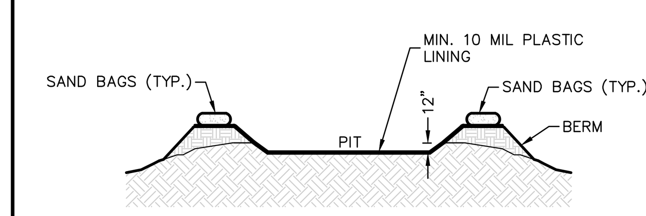
4. REPLACE OR REPAIR SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY. IF A SECTION OF FENCE IS OBSTRUCTING VEHICULAR ACCESS, CONSIDER RELOCATING IT TO A SPOT WHERE IT WILL PROVIDE EQUAL PROTECTION, BUT WILL NOT OBSTRUCT VEHICLES. A TRIANGULAR FILTER DIKE MAY BE PREFERABLE TO A SILT FENCE AT COMMON VEHICLE ACCESS POINTS.

5. WHEN CONSTRUCTION IS COMPLETE, THE SEDIMENT SHOULD BE DISPOSED OF IN A MANNER THAT WILL NOT CAUSE ADDITIONAL SILTATION AND THE PRIOR LOCATION OF THE SILT FENCE SHOULD BE REVEGETATED. THE FENCE ITSELF SHOULD BE DISPOSED OF IN AN APPROVED LANDFILL.

SILT FENCE DETAIL
NOT-TO-SCALE



PLAN VIEW



SECTION "A-A"

GENERAL NOTES
1. DETAIL ABOVE ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.

2. WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.

3. WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF.

4. LOCATE WASHOUT AREA AT LEAST 50 FEET FROM SENSITIVE FEATURES, STORM DRAINS, OPEN DITCHES OR WATER BODIES.

5. TEMPORARY CONCRETE WASHOUT FACILITY SHOULD BE CONSTRUCTED WITH SUFFICIENT QUANTITY AND VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.

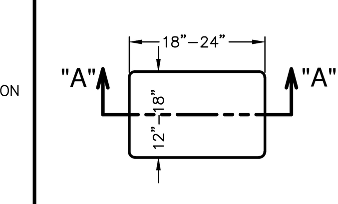
MATERIALS
PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL IN POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

MAINTENANCE
1. WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE SHOULD BE REMOVED AND DISPOSED OF.

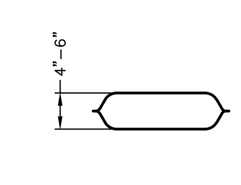
2. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF.

3. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCES CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE BACKFILLED AND REPAIRED.

CONCRETE TRUCK WASHOUT PIT DETAIL
NOT-TO-SCALE



PLAN VIEW



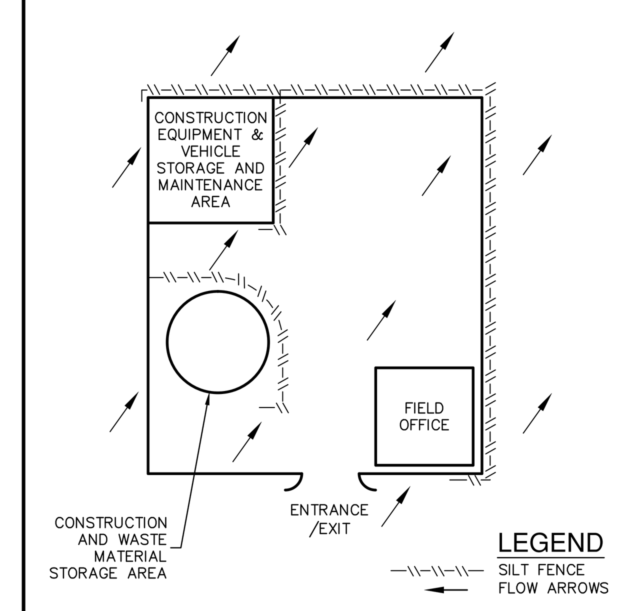
SECTION "A-A"

NOTES:
1. THE FILTER BAG MATERIAL SHALL BE MADE OF POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN FABRIC, MIN. UNIT WEIGHT OF 4 OUNCES/SY, HAVE A MULLEN BURST STRENGTH EXCEEDING 300 PSI AND ULTRAVIOLET STABILITY EXCEEDING 70%.

2. THE FILTER BAG SHALL BE FILLED WITH CLEAN, MEDIUM WASHED PEA GRAVEL TO COARSE GRAVEL (0.31 TO 0.75 INCH DIAMETER).

3. SAND SHALL NOT BE USED TO FILL THE FILTER BAGS.

GRAVEL FILTER BAG DETAIL
NOT-TO-SCALE



CONSTRUCTION STAGING AREA
NOT-TO-SCALE

THE ENGINEERING SEAL HAS BEEN AFFIXED TO THIS SHEET ONLY FOR THE PURPOSE OF DEMONSTRATING COMPLIANCE WITH THE TPDES-STORM WATER POLLUTION PREVENTION PLAN (SWP3) REGULATIONS.

THIS SHEET HAS BEEN PREPARED FOR PURPOSES OF THE SWP3 ONLY. ALL OTHER CIVIL ENGINEERING RELATED INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE SHEET IN THE CIVIL IMPROVEMENT PLANS.

EXHIBIT 3

NO.	REVISION	DATE

NO.	REVISION	DATE

STATE OF TEXAS
CARA C. TACKETT
89491
LICENSED PROFESSIONAL ENGINEER
08/16/17

PAPE-DAWSON ENGINEERS
SAN ANTONIO I AUSTIN I HOUSTON I FORT WORTH I DALLAS
2000 NW LOOP 410 I SAN ANTONIO, TX 78213 I 210.375.9000
TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028800

BRACKENRIDGE PARK GARAGE EXPANSION
SAN ANTONIO, TEXAS

STORMWATER POLLUTION PREVENTION PLAN DETAILS

PLAT NO. .
JOB NO. 3302-07
DATE AUGUST 2017
DESIGNER AK
CHECKED TD DRAWN MF
SHEET C1.10

Date: Aug 16, 2017, 4:45pm User ID: tcamacho
File: P:\H\3302\07\Design\Civil\TP330207DT.dwg

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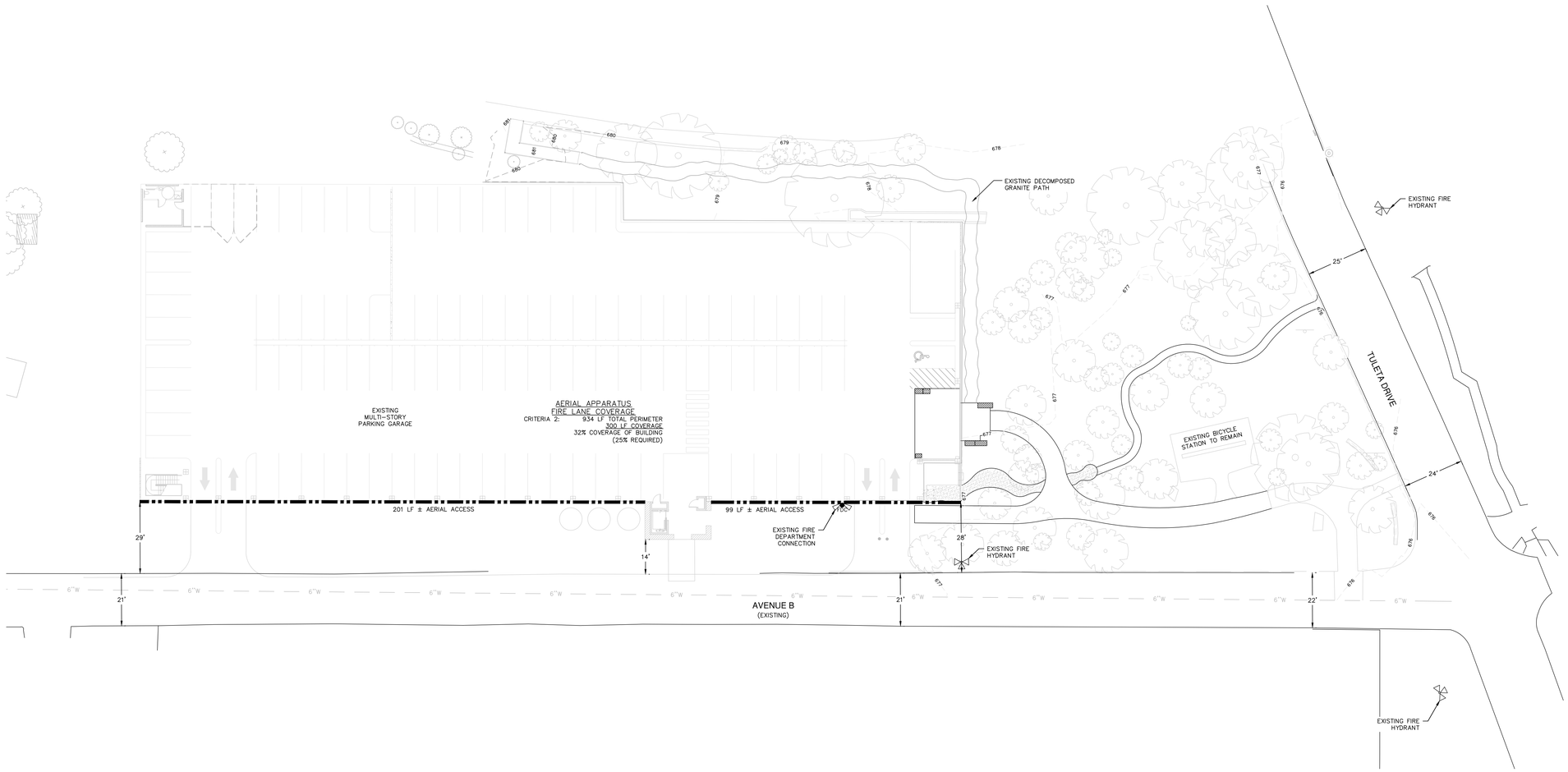

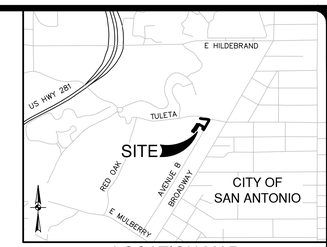

LOCATION MAP
NOT-TO-SCALE

SCALE: 1"= 20'
0' 20' 40' 60'

LEGEND

- FIRE LANE
- PROPOSED FIRE HYDRANT
- EXISTING FIRE HYDRANT
- AERIAL ACCESS

NO.	REVISION	DATE

NO.	REVISION	DATE

STATE OF TEXAS
CARA C. TACKETT
89491
LICENSED PROFESSIONAL ENGINEER
08/16/17

PAPE-DAWSON ENGINEERS
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TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028800

BRACKENRIDGE PARK GARAGE EXPANSION
SAN ANTONIO, TEXAS

FIRE PREVENTION PLAN

PLAT NO. -
JOB NO. 3302-07
DATE AUGUST 2017
DESIGNER AK
CHECKED TD DRAWN MF
SHEET C2.00

Date: Aug 16, 2017, 4:45pm User ID: tcamacho
File: P:\Y\3302\07\Design\Civil\P3302C1.dwg

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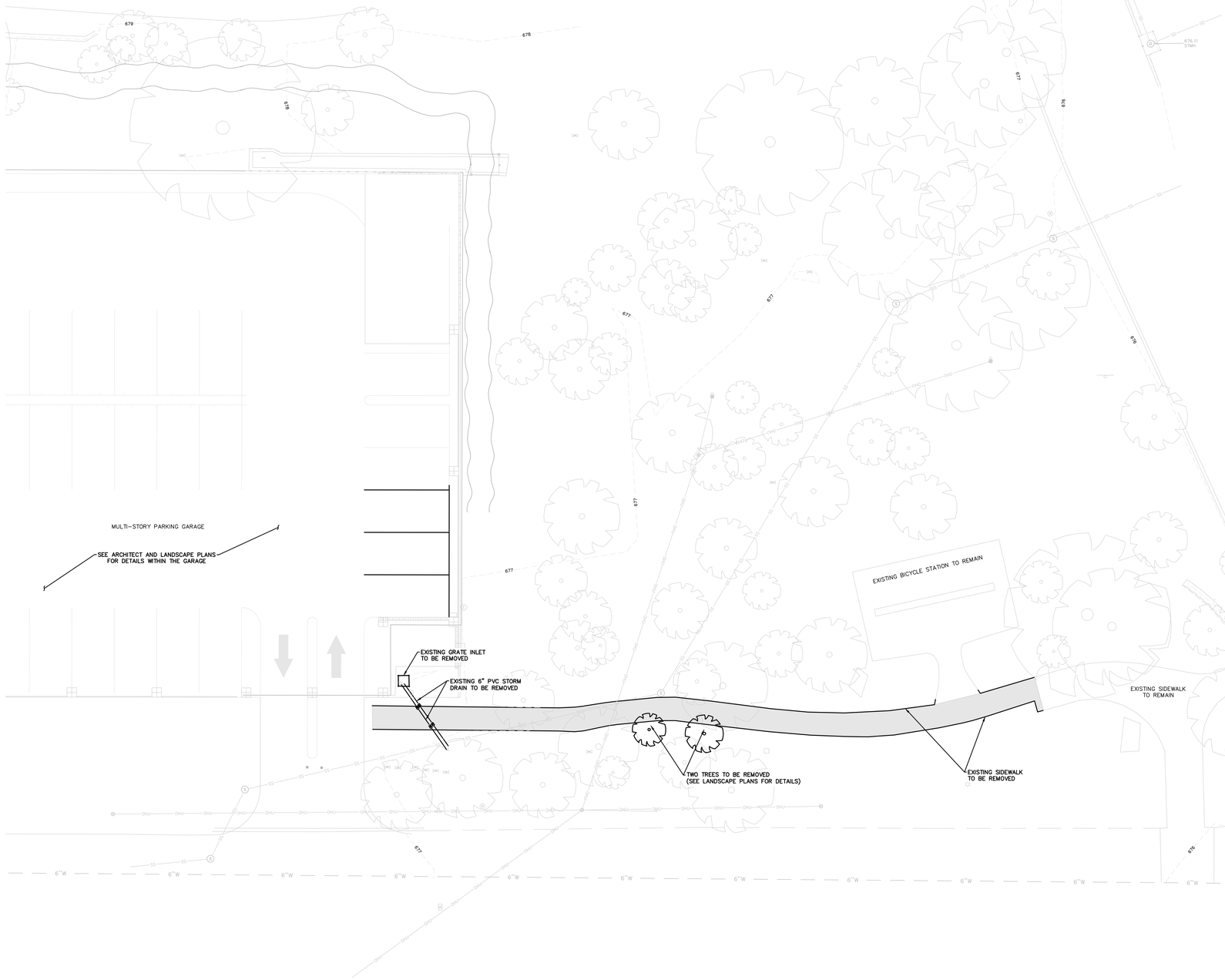

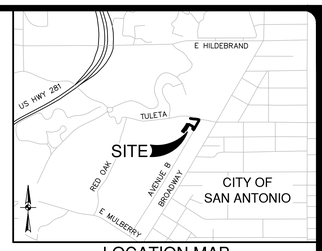

LOCATION MAP

NOT-TO-SCALE

SCALE: 1"= 10'

0' 10' 20' 30'

DEMOLITION NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL NECESSARY PERMITS/APPROVALS BEFORE BEGINNING DEMOLITION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING FROM THE SITE ALL ITEMS SHOWN TO BE DEMOLISHED UNLESS OTHERWISE INDICATED. ALL MATERIALS SHALL BE DEMOLISHED AND REMOVED FROM SITE IN ACCORDANCE WITH ALL APPLICABLE, FEDERAL, STATE AND LOCAL REGULATIONS.
3. ALL EXISTING ITEMS NOT SPECIFICALLY NOTED TO BE DEMOLISHED SHALL REMAIN. CONTRACTOR IS RESPONSIBLE FOR REPLACING EXISTING ITEMS REMOVED DURING DEMOLITION THAT WERE TO REMAIN.
4. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH ALL UTILITY COMPANIES REGARDING REMOVAL OF EXISTING SERVICES, POWER POLES TO BE REMOVED, VERIFYING UTILITIES ARE SHUT OFF OR DISCONNECTED, AND THAT ALL POSSIBLE SAFETY PRECAUTIONS HAVE BEEN ENACTED TO ENSURE THE SAFEST ENVIRONMENT FOR ALL PERSONNEL.
5. LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO THE CONSTRUCTION AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, THROUGHOUT ALL PHASES OF CONSTRUCTION.
6. ALL NECESSARY EROSION CONTROL MEASURES ARE TO BE IN PLACE PRIOR TO CONSTRUCTION. EROSION CONTROL MEASURES ARE TO BE MAINTAINED AND IN WORKING CONDITION AT ALL TIMES.
7. CONTRACTOR SHALL CONFIRM WITH THE OWNER OR HIS DESIGNATE WHETHER TO SALVAGE AND MAKE ARRANGEMENTS TO STORE TRANSPLANTABLE TREES PRIOR TO REMOVAL.
8. FOR TREES SHOWN TO REMAIN, THE CONTRACTOR SHALL INSTALL TREE PROTECTION IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL NOT REMOVE OR DAMAGE ANY TREES WITHOUT A PERMIT TO DO SO.
9. NO PARKING AND/OR STORAGE SHALL BE ALLOWED WITHIN THE DRIP LINE OF THE TREES TO REMAIN.
10. THE CONTRACTOR SHALL SAW CUT EXISTING PAVEMENT, CURBS AND SIDEWALKS AT NEW PAVEMENT, CURB AND SIDEWALK JUNCTURES, NO JAGGED OR IRREGULAR CUTS WILL BE ACCEPTED.
11. THE CONTRACTOR SHALL PROTECT ALL PROPERTY PINS, BENCH MARKS, CONSTRUCTION STAKES, HUBS, OR OTHER KEY CONTROL POINTS. THE CONTRACTOR SHALL BE RESPONSIBLE TO RE-ESTABLISH ANY SUCH POINTS AT THEIR OWN EXPENSE.
12. DEMOLITION CONTRACTOR IS RESPONSIBLE FOR CLEARING THE SITE OF ALL OBSTRUCTIONS THAT EXIST ON THIS SITE PRIOR TO THE START OF CONSTRUCTION OR DURING THE CONSTRUCTION SO AS TO NOT IMPEDE THE BUILDING CONSTRUCTION CONTRACTOR.
13. CONTRACTOR SHALL COORDINATE WITH THE OWNER TO IDENTIFY ANY MATERIAL OR EQUIPMENT SCHEDULED FOR REMOVAL TO BE SALVAGED AND REUSED. CONTRACTOR SHALL REPLACE AT HIS EXPENSE ANY DESTROYED MATERIAL OR EQUIPMENT THAT WAS MARKED FOR SALVAGE.
14. NO EXISTING ASPHALT OR CONCRETE PAVING SCHEDULED FOR REMOVAL SHALL REMAIN ON-SITE OR BE USED AS FILL MATERIAL. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ALL HAZARDOUS MATERIAL OFFSITE FOLLOWING ALL APPLICABLE DISPOSABLE REGULATIONS.
15. CONTRACTOR SHALL REMOVE ALL EXISTING IRRIGATION PIPING ON SITE. CUT AND CAP LATERALS AT PROJECT LIMITS TO ALLOW PROPER FUNCTION OF ZONES EXTENDING OFF-SITE.
16. CONTRACTOR SHALL NOT DEMOLISH ANY PUBLIC WATER OR SANITARY SEWER LINES WITHOUT APPROVAL. EXISTING WATER AND SANITARY SEWER SERVICES SHALL REMAIN OPERATIONAL UNTIL NEW SERVICE IS COMPLETE. CUT AND CAP ANY ABANDONED SANITARY SEWER AND WATER SERVICES AT THE EXISTING MAIN. NO ABANDONED SERVICES SHALL REMAIN CONNECTED TO THE PUBLIC MAIN.
17. THE USE OF EXPLOSIVES WILL NOT BE PERMITTED.
18. ALL WASTE MATERIAL REMAINING AFTER OWNER SALVAGE IS COMPLETE AND RESULTING FROM DEMOLITION OPERATIONS BECOMES THE PROPERTY OF THE CONTRACTOR. APPROPRIATE DISPOSAL OF WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT HIS OWN EXPENSE. OWNER WILL PROVIDE LIST OF ITEMS TO BE SALVAGED.
19. THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE, FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCT BANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT THE CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.
20. THE CONTRACTOR SHALL MAINTAIN THE SITE IN A CLEAN AND ORDERLY MANNER.
21. THE CONTRACTOR SHALL MEET ALL LOCAL, STATE, AND FEDERAL REGULATIONS FOR DUST CONTROL. THE CONTRACTOR SHALL BE RESPONSIBLE AT THEIR OWN EXPENSE FOR ANY FUGITIVE DUST ON ADJOINING PROPERTIES.

NO.	REVISION	DATE	NO.	REVISION	DATE

STATE OF TEXAS
CARA C. TACKETT
89491
LICENSED PROFESSIONAL ENGINEER
08/16/17

PAPE-DAWSON ENGINEERS
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TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028800

BRACKENRIDGE PARK GARAGE EXPANSION

SAN ANTONIO, TEXAS

DEMOLITION PLAN

PLAT NO. *
JOB NO. 3302-07
DATE AUGUST 2017
DESIGNER AK
CHECKED TD DRAWN MF
SHEET C3.00

Date: Aug 16, 2017, 4:45pm User ID: tcamacho
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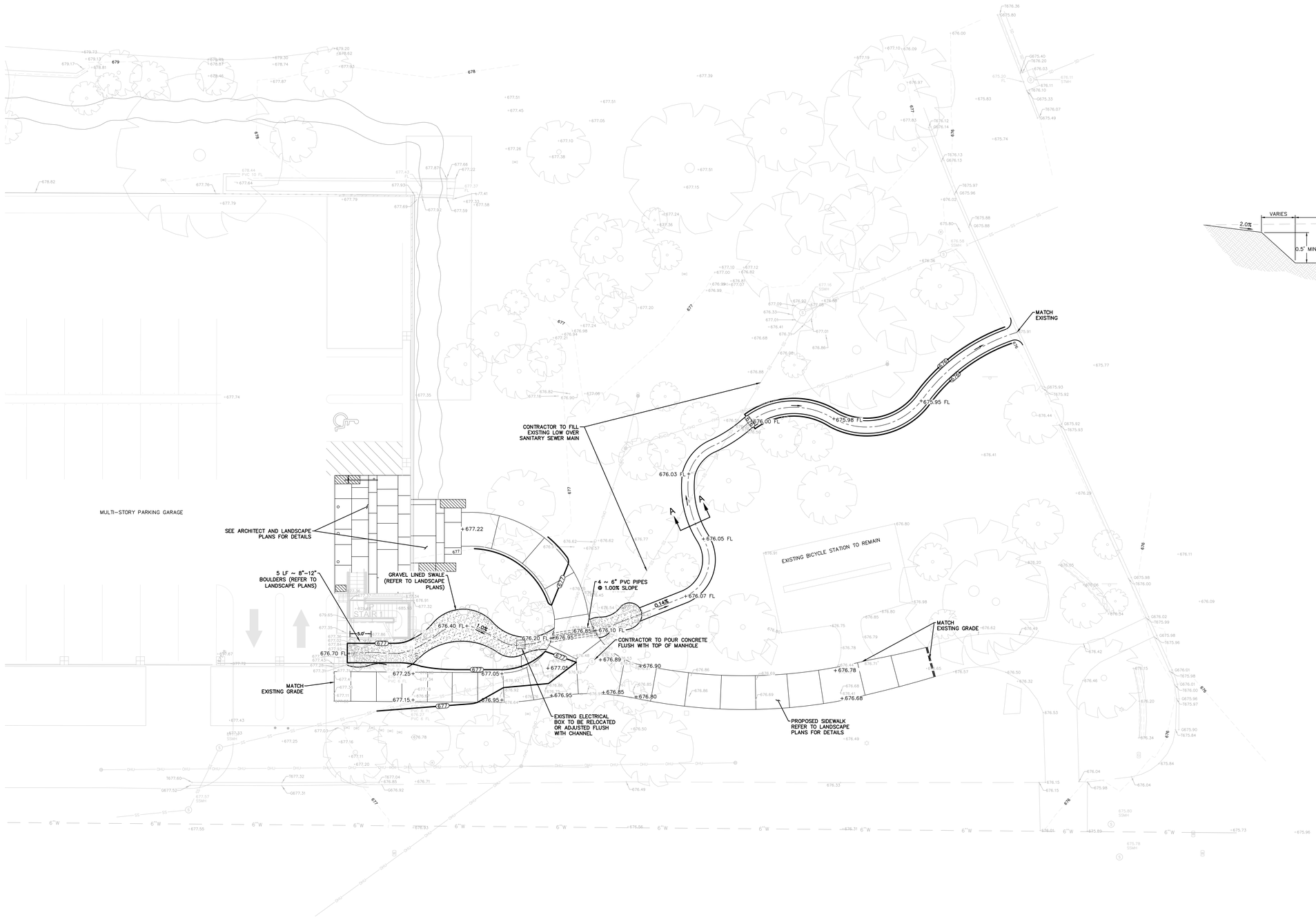
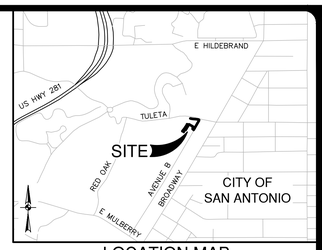




LOCATION MAP

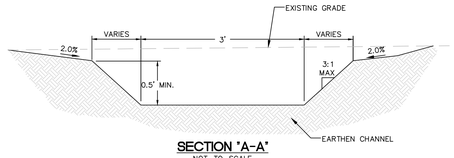
NOT-TO-SCALE

SCALE: 1" = 10'

0' 10' 20' 30'

LEGEND

+676.94	EXISTING ELEVATION
+676.07	PROPOSED ELEVATION
+676.07 FL	PROPOSED FLOW LINE ELEVATION
677	PROPOSED CONTOUR
677	EXISTING CONTOUR



SECTION "A-A"

NOT-TO-SCALE

ADDRESS:

3623 AVENUE B
SAN ANTONIO, TEXAS 78209

NO.	REVISION	DATE

NO.	REVISION	DATE

STATE OF TEXAS
CARA C. TACKETT
89491
LICENSED PROFESSIONAL ENGINEER
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TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028800

BRACKENRIDGE PARK GARAGE EXPANSION

SAN ANTONIO, TEXAS

SITE, GRADING AND DRAINAGE PLAN

PLAT NO. *
JOB NO. 3302-07
DATE AUGUST 2017
DESIGNER AK
CHECKED TD DRAWN MF
SHEET C4.00

Date: Aug 16, 2017, 4:45pm User ID: tcamacho
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