HISTORIC AND DESIGN REVIEW COMMISSION

December 04, 2019

HDRC CASE NO:	**2019-706**
ADDRESS:	5626 SAN FERNANDO ST
LEGAL DESCRIPTION:	NCB 16609 BLK LOT 1
ZONING:	R-4
CITY COUNCIL DIST.:	6
APPLICANT:	Justin Sherwood/Open Air Studios
OWNER:	CITY OF SAN ANTONIO
TYPE OF WORK:	Park improvements
APPLICATION RECEIVED:	November 12, 2019
60-DAY REVIEW:	January 6, 2020
CASE MANAGER:	Rachel Rettaliata

REQUEST:

The applicant requests a Certificate of Appropriateness to:

1. Construct a new shade structure accessibility next to existing playground,
2. Construct a new sidewalk extension to access new shade structure,
3. Install new LED pole lighting to improve site lighting along walking trail. Construction of new LED field lighting to improve lighting around existing Pony Fields has been proposed as an Add/Alternate.

APPLICABLE CITATIONS:

UDC Sec. 35-641. - Design Considerations for Historic and Design Review Commission Recommendations.
In reviewing an application, the historic and design review commission shall be aware of the importance of attempting to find a way to meet the current needs of the City of San Antonio, lessee or licensee of public property. The historic and design review commission shall also recognize the importance of recommending approval of plans that will be reasonable to implement. The best urban design standards possible can and should be employed with public property including buildings and facilities, parks and open spaces, and the public right-of-way. Design and construction on public property should employ such standards because the use of public monies for design and construction is a public trust. Public commitment to quality design should encourage better design by the private sector. Finally, using such design standards for public property improves the identity and the quality of life of the surrounding neighborhoods.

UDC Sec 35-642. – New Construction of Buildings and Facilities:
In considering whether to recommend approval or disapproval of a certificate, the historic and design review commission shall be guided by the following design considerations. These are not intended to restrict imagination, innovation or variety, but rather to assist in focusing on design principles, which can result in creative solutions that will enhance the city and its neighborhoods. Good and original design solutions that meet the individual requirements of a specific site or neighborhood are encouraged and welcomed.
(a) Site and Setting.

(1) Building sites should be planned to take into consideration existing natural climatic and topographical features. The intrusive leveling of the site should be avoided. Climatic factors such as sun, wind, and temperature should become an integral part of the design to encourage design of site-specific facilities which reinforces the individual identity of a neighborhood and promotes energy efficient facilities.
(2) Special consideration should be given to maintain existing urban design characteristics, such as setbacks, building heights, streetscapes, pedestrian movement, and traffic flow. Building placement should
enhance or create focal points and views. Continuity of scale and orientation shall be emphasized.
(3) Accessibility from streets should be designed to accommodate safe pedestrian movement as well as vehicular traffic. Where possible, parking areas should be screened from view from the public right-of-way by attractive fences, berms, plantings or other means.
(4) Historically significant aspects of the site shall be identified and if possible incorporated into the site design. Historic relationships between buildings, such as plazas or open spaces, boulevards or axial relationships should be maintained.
(b) Building Design.
(1) Buildings for the public should maintain the highest quality standards of design integrity. They should elicit a pride of ownership for all citizens. Public buildings should reflect the unique and diverse character of San Antonio
and should be responsive to the time and place in which they were constructed.
(2) Buildings shall be in scale with their adjoining surroundings and shall be in harmonious conformance to the identifying quality and characteristics of the neighborhood. They shall be compatible in design, style and materials. Reproductions of styles and designs from a different time period are not encouraged, consistent with the secretary of the interior's standards. Major horizontal and vertical elements in adjoining sites should be respected.
(3) Materials shall be suitable to the type of building and design in which they are used. They shall be durable and easily maintained. Materials and designs at pedestrian level shall be at human scale, that is they shall be designed to be understood and appreciated by someone on foot. Materials should be selected that respect the historic character of the surrounding area in texture, size and color.
(4) Building components such as doors, windows, overhangs, awnings, roof shapes and decorative elements shall
all be designed to contribute to the proportions and scale of their surrounding context. Established mass/void relationships shall be maintained. Patterns and rhythms in the streetscape shall be continued.
(5) Colors shall be harmonious with the surrounding environment, but should not be dull. Choice of color should reflect the local and regional character. Nearby historic colors shall be respected.
(6) Mechanical equipment or other utility hardware should be screened from public view with materials compatible with the building design. Where possible, rooftop mechanical equipment should be screened, even from above. Where feasible, overhead utilities should also be underground or attractively screened. Exterior lighting shall be an integral part of the design. Interior lighting shall be controlled so that the spillover lighting onto public walkways is not annoying to pedestrians.
(7) Signs which are out of keeping with the character of the environment in question should not be used.
Excessive size and inappropriate placement on buildings results in visual clutter. Signs should be designed to relate harmoniously to exterior building materials and colors. Signs should express a simple clear message with wording kept to a minimum.
(8) Auxiliary design. The site should take into account the compatibility of landscaping, parking facilities, utility and service areas, walkways and appurtenances. These should be designed with the overall environment in mind and should be in visual keeping with related buildings, structures and places.

FINDINGS:

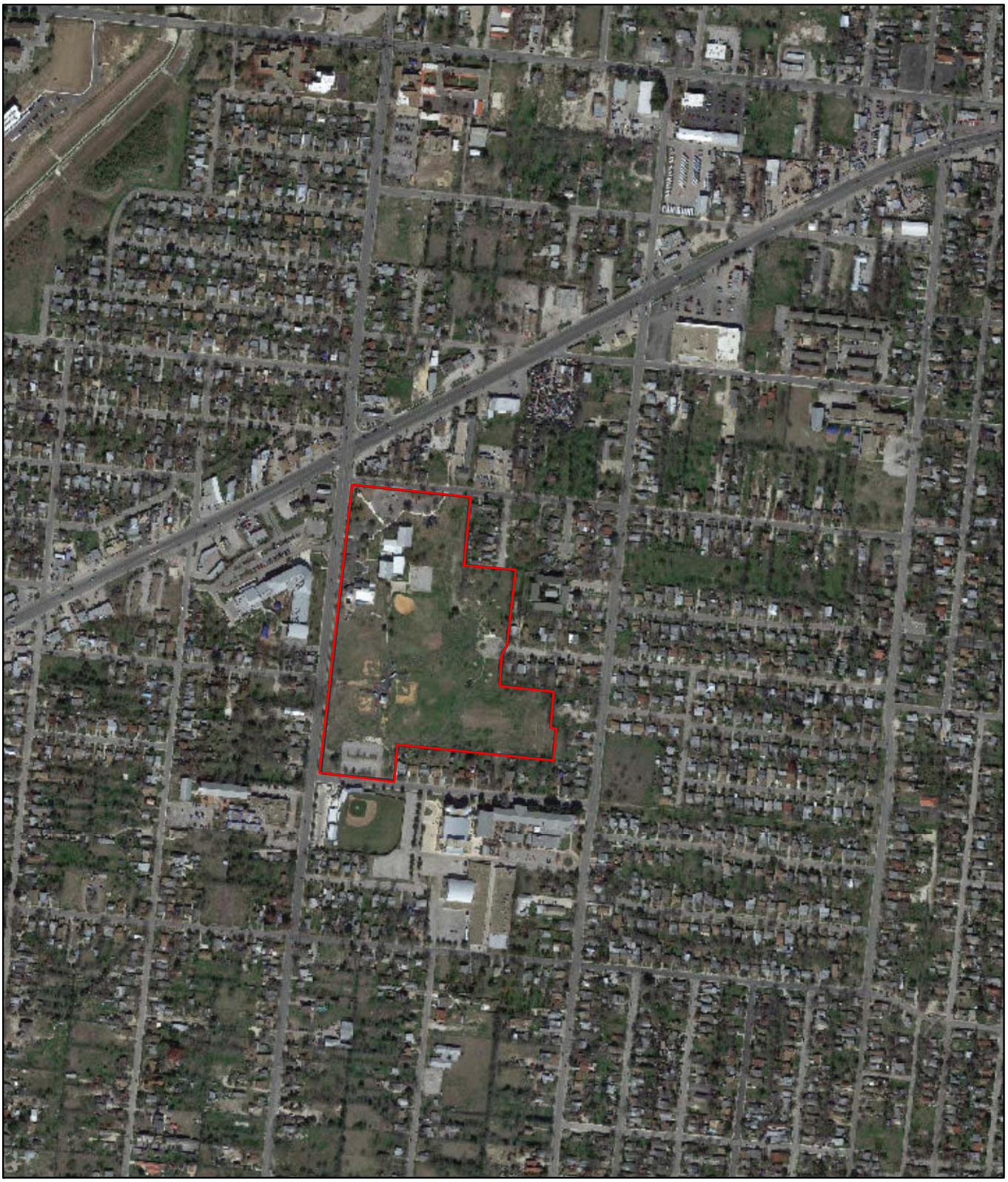
a. The property at 5626 San Fernando, commonly known as Cuellar Park, is located to the west of downtown, outside of the Westlawn neighborhood. The project is funded by the 2017 Bond Program.
b. PAVILION – The applicant has proposed to construct a new metal fabricated shade structure with concrete slab for accessibility next to existing playground. Staff finds the proposal generally consistent with the UDC.
c. SIDEWALKS AND PAVING – The applicant has proposed to install a new sidewalk extension to access new shade structure. Materials include medium broom finished concrete sidewalk and medium broom finished concrete slab. Staff finds the proposal generally consistent with the UDC.
d. LIGHTING – The applicant has proposed to install new LED pole lighting to improve site lighting along walking trail. Construction of new LED field lighting to improve lighting around existing Pony Fields has been proposed as an Add/Alternate. Staff finds the proposal consistent with the UDC.
e. ARCHAEOLOGY – The project shall comply with all federal, state, and local laws, rules, and regulations regarding archaeology.

RECOMMENDATION:

Staff recommends final approval based on findings a through h with the following stipulations:

f. ARCHAEOLOGY – The project shall comply with all federal, state, and local laws, rules, and regulations regarding archaeology.

City of San Antonio One Stop



November 19, 2019

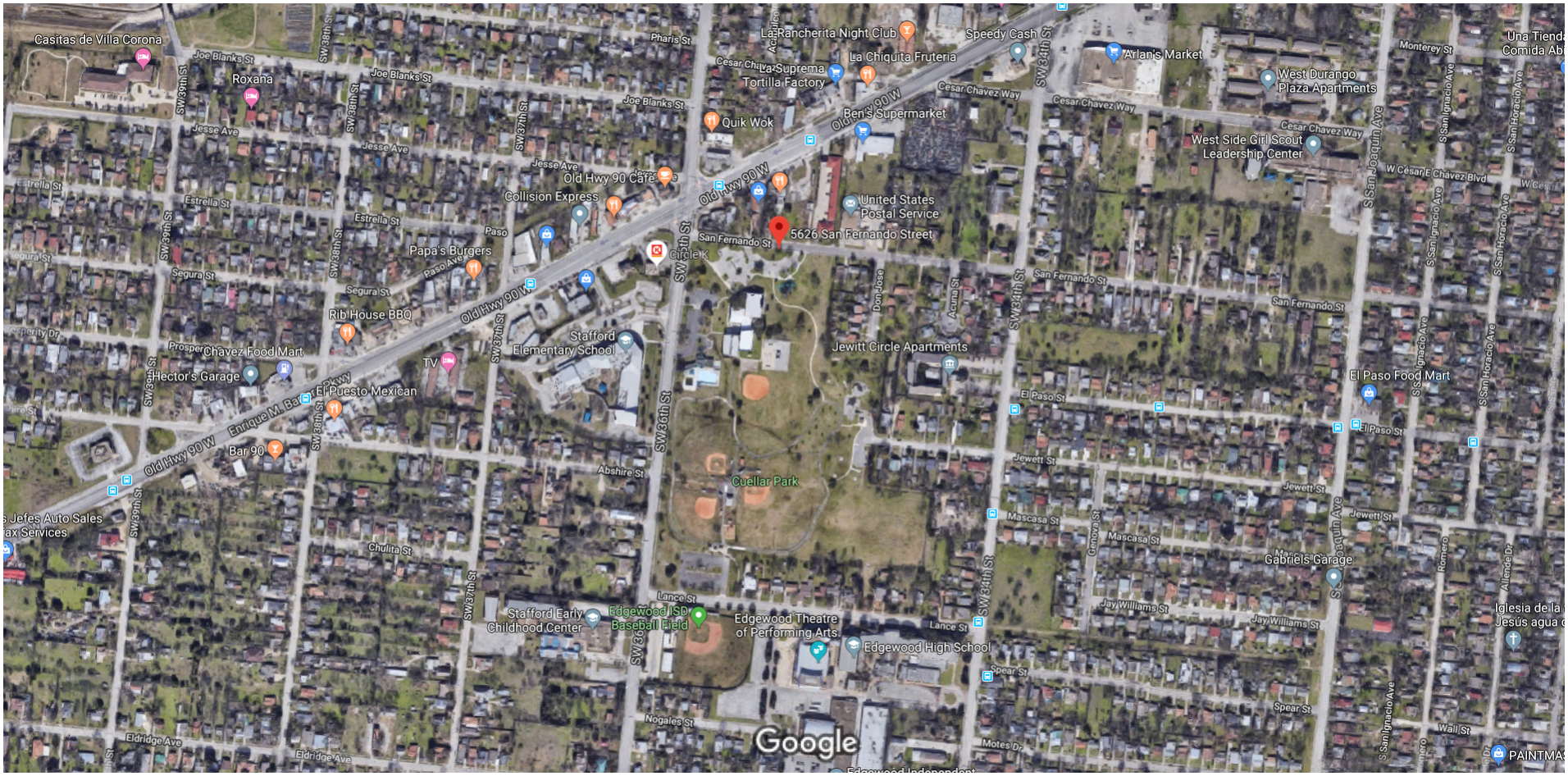
User drawn lines

1:8,000

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

Google Maps 5626 San Fernando St



Imagery ©2019 Google, Imagery ©2019 Maxar Technologies, USDA Farm Service Agency, Map data ©2019 200 ft

Google Maps 5626 San Fernando St

Imagery ©2019 Google, Landsat / Copernicus, Data SIO, NOAA, U.S. Navy, NGA, GEBCO, Imagery ©2019 Maxar Technologies, Map data ©2019 100 ft

Google Maps 5626 San Fernando St

Imagery ©2019 Google, Landsat / Copernicus, Data SIO, NOAA, U.S. Navy, NGA, GEBCO, Data LDEO-Columbia, NSF, NOAA, Imagery ©2019 Maxar Technologies, Map data ©2019 50 ft

Google Maps 5626 San Fernando St

Imagery ©2019 Google, Imagery ©2019 Maxar Technologies, Map data ©2019 100 ft

Google Maps 5626 San Fernando St

Imagery ©2019 Google, Landsat / Copernicus, Data SIO, NOAA, U.S. Navy, NGA, GEBCO, Imagery ©2019 Maxar Technologies, Map data ©2019 50 ft

CITY OF SAN ANTONIO

CUELLAR PARK IMPROVEMENTS

5626 SAN FERNANDO STREET
SAN ANTONIO, TEXAS

DATE OF ISSUE: 11/01/2019

PROJECT NUMBER
23-01652

FUNDING
2017 BOND PROGRAM

CITY COUNCIL

MAYOR

RON NIRENBERG

COUNCIL

ROBERTO TREVINO	DISTRICT 1
JADA ANDREWS-SULLIVAN	DISTRICT 2
REBECCA VIAGRAN	DISTRICT 3
DR. ADRIANA ROCHA GARCIA	DISTRICT 4
SHIRLEY GONZALES	DISTRICT 5
MELISSA CABELLO HAVRDA	DISTRICT 6
ANA SANDOVAL	DISTRICT 7
MANNY PELAEZ	DISTRICT 8
JOHN COURAGE	DISTRICT 9
CLAYTON PERRY	DISTRICT 10

CITY MANAGER

ERIK WALSH

INTERIM DIRECTOR OF TCI

RAZI HOSSEINI, P.E.

INTERIM DIRECTOR OF PARKS AND RECREATION

HOMER GARCIA

PROJECT MANAGER

JAMAAL MORENO
PH. # 210-207-6924

PRIME CONSULTANT

OPEN AIR STUDIOS, LLC
LANDSCAPE ARCHITECT
PH. # 210-908-6736

MEP ENGINEER

CNG ENGINEERING
PH. # 210-224-8841

SHEET INDEX

OUR MISSION: THROUGH INNOVATION AND DEDICATION, WE BUILD AND MAINTAIN SAN ANTONIO'S INFRASTRUCTURE

"Although it is not the responsibility of the City to provide sets of drawings and/or specifications to the successful Contractor for the construction of this project, the City may provide extra or returned sets that are available, if any from the bidding process. All other sets as deemed required by the Contractor, for the purposes of construction of this project, shall be obtained and paid by the Contractor."

TRANSPORTATION AND CAPITAL IMPROVEMENTS DEPARTMENT

MUNICIPAL PLAZA BUILDING 114 W. COMMERCE SAN ANTONIO, TX 78238 PH # 210-207-8413 FAX # 210-207-2197

I. STORMWATER POLLUTION PREVENTION-CLEAN WATER ACT SECTION 402

Texas Pollutant Discharge Elimination System (TPDES) TXR 150000: Stormwater Discharge Permit or Construction General Permit (CGP) required for projects with 1 or more acres distrubed soil. Projects with any disturbed soil must protect for erosion and sedimentation in accordance with Item 540.

☐ No Action Required ☒ Required Action

Action No.

1. Prevent stormwater pollution by controlling erosion and sedimentation in accordance with TPDES Permit TXR 150000.
2. Comply with the Storm Water Pollution Prevention Plan (SW3P) and revise when necessary to control pollution or required by the Engineer.
3. Post Construction Site Notice (CSN) with SW3P information on or near the site, accessible to the public and Texas Commission on Environmental Quality (TCEQ), Environmental Protection Agency (EPA) or other inspectors.
4. When Contractor project specific locations (PSL's) increase disturbed soil area to 5 acres or more, Contractor shall submit Notice of Intent (NOI) to TCEQ and the COSA Inspector.
5. NOI required: ☐ Yes ☒ No

Note: If amount of soil disturbance changes, permit requirements may change.

II. WORK IN OR NEAR STREAMS, WATERBODIES AND WETLANDS CLEAN WATER ACT SECTIONS 401 AND 404

US Army Corps of Engineers (USACE) Permit required for filling, dredging, excavating or other work in any potential USACE jurisdictional water, such as, rivers, creeks, streams, or wetlands.

The Contractor shall adhere to all of the terms and conditions associated with the following permit(s):

☒ No Permit Required

☐ Nationwide Permit (NWP) 14 - Pre-construction Notice (PCN) not Required

☐ Nationwide Permit 14 - PCN Required

☐ Individual 404 Permit Required

☐ Other Nationwide Permit Required: NWP# _____

Required Actions: List waters of the US permit applies to, location in project and check Best Management Practices (BMPs) planned to control erosion, sedimentation and post-project total suspended solids (TSS).

1.

2.

3.

4.

401 Best Management Practices: (Not applicable if no USACE permit)

Erosion	Sedimentation	Post-Construction TSS
☐ Temporary Vegetation	☐ Silt Fence	☐ Vegetative Filter Strips
☐ Blankets/Matting	☐ Rock Berm	☐ Retention/Irrigation Systems
☐ Mulch	☐ Triangular Filter Dike	☐ Extended Detention Basin
☐ Sodding	☐ Sand Bag Berm	☐ Constructed Wetlands
☐ Interceptor Swale	☐ Straw Bale Dike	☐ Wet Basin
☐ Diversion Dike	☐ Brush Berms	☐ Erosion Control Compost
☐ Erosion Control Compost	☐ Erosion Control Compost	☐ Mulch Filter Berm and Socks
☐ Mulch Filter Berm and Socks	☐ Mulch Filter Berm and Socks	☐ Compost Filter Berm and Socks
☐ Compost Filter Berm and Socks	☐ Compost Filter Berm and Socks	☐ Vegetation Lined Ditches
	☐ Stone Outlet Sediment Traps	☐ Sand Filter Systems
	☐ Sediment Basins	☐ Sedimentation Chambers
		☐ Grassy Swales

III. CULTURAL RESOURCES

Cultural resources fall under the Antiquities Code of Texas and/or the National Historic Preservation Act, as amended in 1966. If a previously unidentified archeological site is encountered during construction work, activities should be immediately stopped in the vicinity and the City Archeologist (210-207-7306) notified and/or the SHPO.

☒ No Action Required ☐ Required Action

Action No.

1.

2.

3.

4.

IV. VEGETATION RESOURCES

Preserve native vegetation to the extent practical. Contractor must adhere to Construction Specification Requirements Specs 162,164, 192, 193, 506, 730, 751, 752 in order to comply with requirements for invasive species, beneficial landscaping, and tree/brush removal commitments.

☐ No Action Required ☒ Required Action

Action No.

1. Ensure that a tree permit is in place for this project, if required.
2. Follow the tree preservation/mitigation plan provided in the design plan set. If there are any questions or concerns, please contact the City Arborist at 210-207-0278, before any work begins.

V. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS.

☒ No Action Required ☐ Required Action

Action No.

1. MIGRATORY BIRD NESTS: Schedule construction activities as needed to meet the following requirements:

   A. Do not remove or destroy any active migratory bird nests (nests containing eggs and/or flightless birds) at any time of year. If there are any active nests, they shall not be removed until the nests become inactive.

   B. On/in structures, if there are any active nests, they shall not be removed until all nests become inactive. After inactive nests are removed and/or before nest activity begins, deterrent materials may be applied to the structures to prevent future nest building.

2. Deterrent material should be placed (and maintained) after October 1 or before February 15.
3. The preferred nesting season for migratory birds is from February 15 through October 1. When practicable, schedule construction operations outside of the preferred nesting season.

If any of the listed species are observed, cease work in the immediate area, do not disturb species or habitat and contact the COSA Inspector immediately. The work may not remove active nests from bridges and other structures during nesting season of the birds associated with the nests. If caves or sinkholes are discovered, cease work in the immediated area, and contact the COSA Inspector immediately.

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES

General (applies to all projects):

Comply with the Hazard Communication Act (the Act) for personnel who will be working with hazardous materials by conducting safety meetings prior to beginning construction and making workers aware of potential hazards in the workplace. Ensure that all workers are provided with personal protective equipment appropiate for any hazardous materials used.

Obtain and keep on-site Material Safety Data Sheets (MSDS) for all hazardous products used on the project, which may include, but are not limited to the following categories: Paints, acids, solvents, asphalt products, chemical additives, fuels and concrete curing compounds or additives. Provide protected storage, off bare ground and covered, for products which may be hazardous. Maintain product labelling as required by the Act.

Maintain an adequate supply of on-site spill response materials, as indicated in the MSDS. In the event of a spill, take actions to mitigate the spill as indicated in the MSDS, in accordance with safe work practices, and contact the COSA Inspector immediately. The Contractor shall be responsible for the proper containment and cleanup of all product spills.

Contact the COSA Inspector if any of the following are detected:

* Dead or distressed vegetation (not identified as normal)
* Trash piles, drums, canister, barrels, etc.
* Undesirable smells or odors
* Evidence of leaching or seepage of substances

Hazardous Materials or Contamination Issues Specific to this Project:

☒ No Action Required ☐ Required Action

Action No.

1.

2.

3.

Does the project involve the demolition of a span bridge?

☐ Yes ☒ No (No further action required)

If "Yes", a pre- demolition notification must be submitted to the Texas Department of State Health Services. The contractor shall contact the Project Engineer 25 calendar days prior to the demolition of the bridges(s) on the project to assist with the notification.

VII. OTHER ENVIRONMENTAL ISSUES

(includes regional issues such as Edwards Aquifer District, etc.)

☒ No Action Required ☐ Required Action

Action No.

1.

2.

3.

Cuellar Park (2017 Bond)
November 2019

ENVIRONMENTAL_PERMITS, ISSUES_AND_COMMITMENTS

EPIC

FILE: epic.2015-10-09 SAT.dgn	DN: COSA	CK: COSA	DW:	CK:
©TxDOT NOVEMBER 2018	CONT	SECT	JOB	HIGHWAY
REVISIONS	DIST		COUNTY	SHEET NO.

OPENAIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN

2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248

P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

REGISTERED LANDSCAPE ARCHITECT
MATTHEW A. MOORE
2484
STATE OF TEXAS
11/01/19

PROJECT #: CSA20171
DESIGNED BY: JS
DRAWN BY: JS
REVIEWED BY: MM

ISSUED: NOV. 01, 2019

SHEET TITLE:
E.P.I.C. SHEET

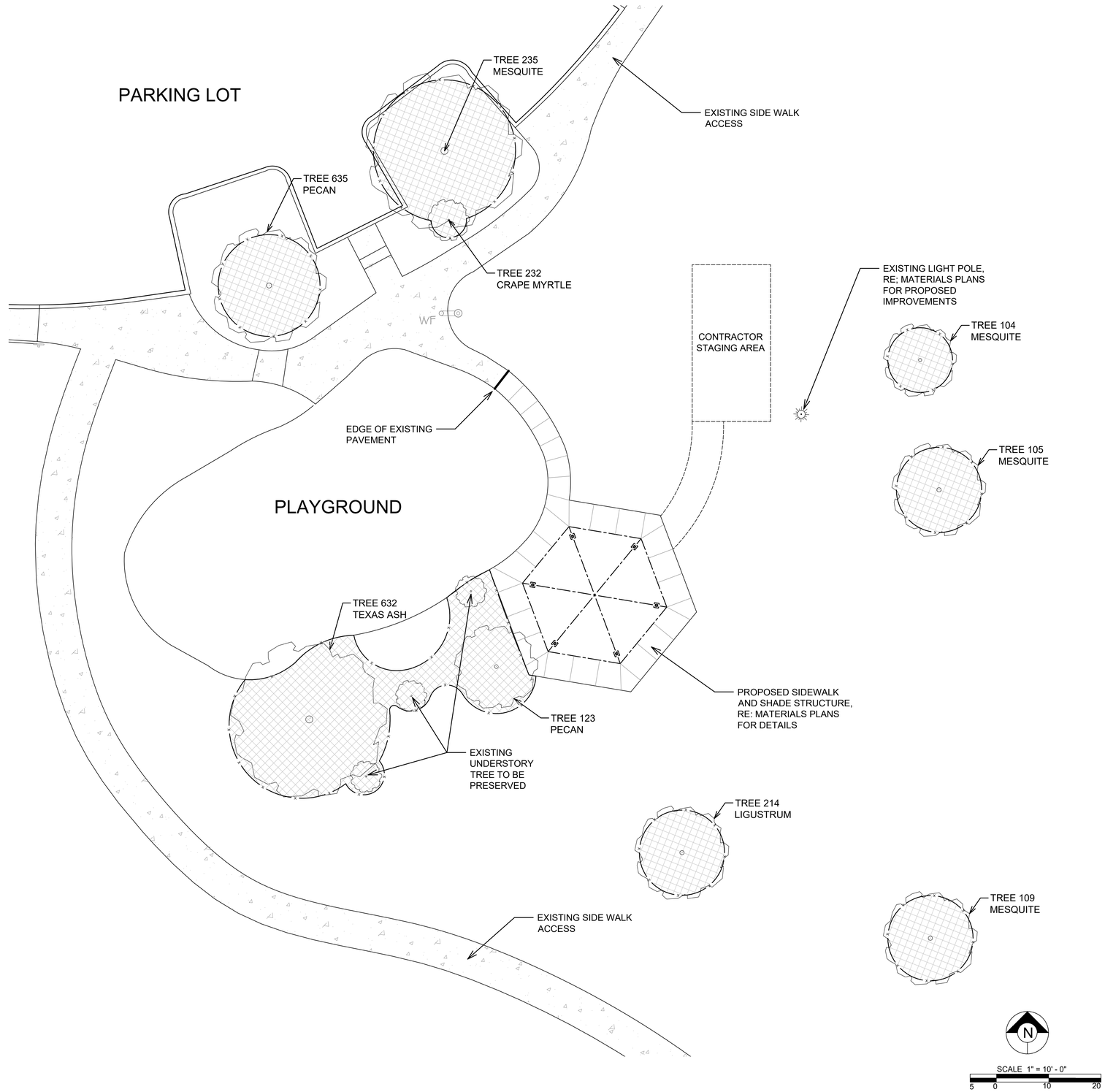
SHEET NUMBER:
L0.00

TREE PROTECTION NOTES

1. ROOT PRUNING
   A. Prune roots within root zone areas of trees using hand-digging techniques.
   B. Cut roots measuring one inch (1") in diameter or larger using sharpened pruning shears or pruning saw to make a clean, smooth-cut surface. Do not chop roots.
   C. Large roots measuring three inches (3") in diameter and larger shall be cut using a sharpened saw.
   D. Cut roots flush with edge of soil to limit root exposure.
   E. Apply appropriate, non-toxic pruning paint labeled for horticultural use immediately to all wounds on trees.
2. Route underground utility lines around tree root zone areas where possible.
3. Where excavating is required within root zones, hand excavate and tunnel under or around roots to minimize damage and to preserve roots measuring one inch (1") in diameter and larger.
4. Where excavation is unavoidable within root zone areas, proper tree root pruning techniques shall be used.
5. Do not allow exposed roots to dry out before permanent backfill is in place.
6. Maintain existing natural grade within the dripline of trees.
7. Solid fill within root zone areas shall be free of harmful chemicals and adequate for supporting healthy root growth.
8. Where existing grade around trees is below proposed finish grade place up to a maximum of three inches (3") of clean bank sand in a single layer to make the transition to new grade. Do not compact. Hand grade to required elevation. Large surface roots (that were exposed prior to construction) shall remain exposed.
9. Contractor to receive written authorization from the landscape architect prior to initiation of any construction activity and/or tree preservation activities that take place within the tree preservation zone.
10. There shall not be storage of any materials, equipment, soil etc. under dripline of existing trees.
11. If construction activity is to occur close to any trees not identified for protection, contractor is responsible to install additional protection fencing if required.
12. All sidewalks installed under tree's dripline to be hand dug. Landscape architect to approve location prior to digging, etc.
13. If hand grading is required within dripline, no fill should be added. Contractor to have approval from certified arborist before grading areas under tree dripline.
14. Refer to civil drawings for all existing and proposed utilities, rights of ways, and easements.
15. Refer to tree preservation specifications for pruning of existing trees where vehicular traffic or construction conflicts with existing tree canopy.
16. Contractor to stake tree protection fencing for landscape architect approval. Contact landscape architect 48 hours prior to installation.
17. Contractor to supply on-site certified arborist to supervise all tree protection, re-location, pruning, fertilizing, etc. work.
18. All preserved trees to have tree protection fencing placed around trees at radius equal to 6" per diameter inch (1") of trunk of tree.
19. All wounds to the trunk, limbs, and root system of oak trees in the city that expose sapwood shall be painted within thirty minutes of the wound being created with asphaltic or exterior oil or latex based paint.

LEGEND

	EXISTING TREE TO BE PRESERVED
	EXISTING TREE TO BE REMOVED
	HARDWOOD MULCH
—— x ——	TREE PROTECTION FENCE



OPENAIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN

2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248

P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

REGISTERED LANDSCAPE ARCHITECT
MATTHEW J. MOORE
2484
STATE OF TEXAS
11/01/19

PROJECT #: CSA20171
DESIGNED BY: JS
DRAWN BY: JS
REVIEWED BY: MM

ISSUED: NOV. 01, 2019

SHEET TITLE:
TREE PRESERVATION PLAN

SHEET NUMBER:
TP. 01

TREE INVENTORY CUELLAR PARK

Tag #	Species	Tree Code	Size (inches)	Heritage (Y/N)	Save (Y/N)	Exempt Code	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	Notes
105	MESQUITE	S2	18		Y							18					
632	TEXAS ASH	S1	30	Y	Y									30			
123	PECAN	S1	16		Y					16							
635	PECAN	S1	22		Y					22							
109	MESQUITE	S2	18		Y							18					
232	CRAPE MYRTLE	S1	8		Y					8							
235	MESQUITE	S2	30	Y	Y											30	
104	MESQUITE	S2	14		Y							14					
214	JAPANESE LIGUS	NN	14		Y												
			Sub. Tot. Inches=				0	0	0	46	0	50	0	30	0	30	0
			Total inches by category=					0		46		50		30		30	
			Preservation percentage=				#DIV/0!		Significant		100%		Heritage Preservation		100%		
			Mitigation required (Commercial) =				0		Commercial (inches)		XX						
			Mitigation required (Residential) =				0		Residential (inches)		-62		Heritage Mitigation (inches)			0	
										Exemption Codes			dditional Inches Preserved for Mitigatio			0	
										1 - Tree is in ROW							
										2 - Tree is in poor health							

** Small species: Condalia, Redbud, Tx. Mountain Laurel, Tx. Persimmon, Hawthorn, Possumhaw - mitigated at 1:1 for Heritage*

*** Ashe Juniper, Huisache, Mesquite, Arizona Ash, Hackberry protected at 10" dbh and mitigated at 1:1 for Heritage*

**** Mitigation Trees: Unprotected-sized trees to be used for mitigation calculations; subtract inches from mitigation owed*

Additional Inches Needed to meet Mitigation Requirements 0

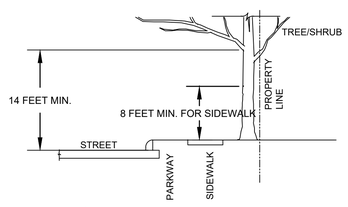
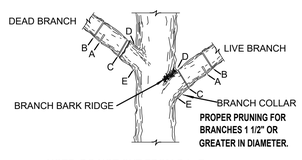


FIGURE No.2:

A MINIMUM BRANCH CLEARANCE OF 14 FEET ABOVE STREET ELEVATION MUST BE MAINTAINED FROM THE PROPERTY LINE TO THE CURB LINE AS PRESCRIBED BY PROJECT MANAGER.

5 BRANCH CLEARANCE DETAIL

NOT TO SCALE



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.

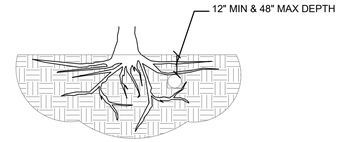
FOR OAKS ONLY: PAINT ALL WOUNDS OR CUTS WITH PRUNING PAINT WITHIN 20 MIN TO PREVENT THE SPREAD OF OAK WILT.

4 BRANCH PRUNING DETAIL

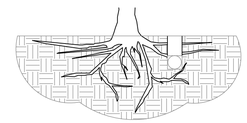
NOT TO SCALE

TREES THAT ARE MARKED TO BE PRESERVED ON A SITE PLAN AND FOR WHICH UTILITIES MUST PASS TROUGH THEIR ROOT PROTECTION ZONES MAY REQUIRE TUNNELING AS OPPOSED TO OPEN TRENCHES. THE DECISION TO TUNNEL WILL BE DETERMINED ON A CASE BY CASE BASIS BY THE ARBORIST.

TUNNELS SHALL BE DUG THROUGH THE ROOT PROTECTION ZONE IN ORDER TO MINIMIZE ROOT DAMAGE.



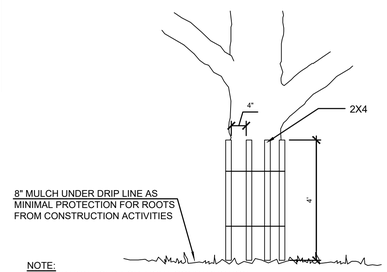
TUNNEL TO MINIMIZE ROOT DAMAGE (TOP) AS OPPOSED TO SURFACE-DUG TRENCHES IN ROOT PROTECTION ZONE WHEN THE 5' MINIMUM DISTANCE FROM TRUNK CAN NOT BE ACHIEVED.



OPEN TRENCHING MAY BE USED IF EXPOSED TREE ROOTS DO NOT EXCEED 3" OR ROOTS CAN BE BENT BACK.

3 BORING THRU TREE ROOT ZONE

NOT TO SCALE

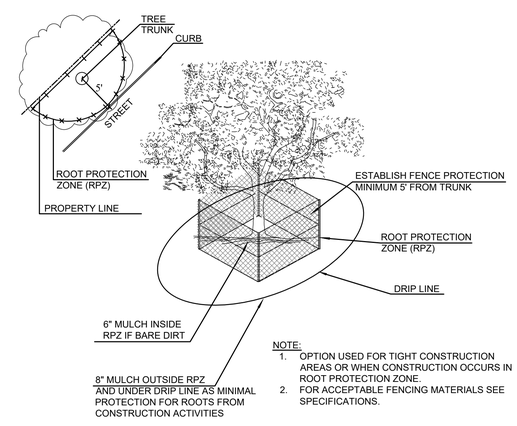


NOTE:
1. OPTION USED FOR TIGHT CONSTRUCTION AREAS OR WHEN CONSTRUCTION OCCURS IN ROOT PROTECTION ZONE.
2. FOR ACCEPTABLE FENCING MATERIALS SEE SPECIFICATIONS.

NOTE:
WRAP TREE TRUNK WITH 2"X4" STUDS AND ROPE OR BAND IN PLACE AS NEEDED TO PROTECT TREES IN WORK AREAS.

2D LEVEL II B FENCE PROTECTION

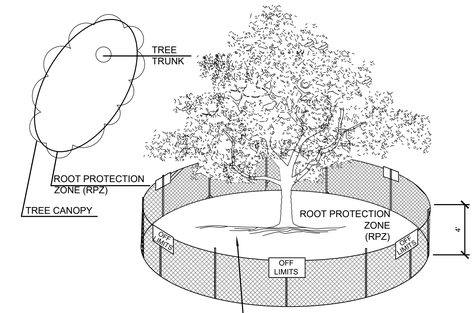
NOT TO SCALE



NOTE:
1. OPTION USED FOR TIGHT CONSTRUCTION AREAS OR WHEN CONSTRUCTION OCCURS IN ROOT PROTECTION ZONE.
2. FOR ACCEPTABLE FENCING MATERIALS SEE SPECIFICATIONS.

2C LEVEL II A FENCE PROTECTION

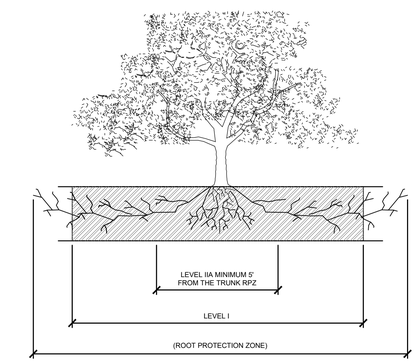
NOT TO SCALE



NOTE:
1. THE FENCING SHOWN ABOVE IS DIAGRAMATIC ONLY AND WILL CONFORM TO THE DRIP LINE AND LIMITED TO PROJECT BOUNDARY.
2. FOR ACCEPTABLE FENCING MATERIALS SEE SPECIFICATIONS.

2B LEVEL I & FENCE PROTECTION

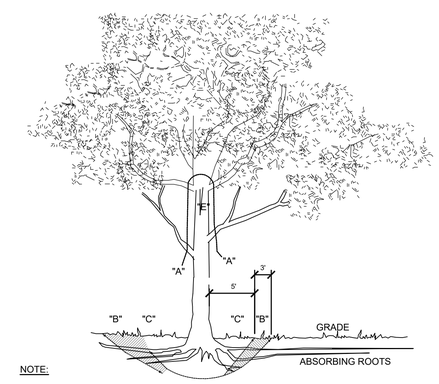
NOT TO SCALE



ROOT PROTECTION ZONE-THE ROOT PROTECTION ZONE IS A CIRCULAR AREA AROUND A TREE THAT IS BASED ON THE DIAMETER OF THE TREE. EACH 1 INCH DIAMETER OF THE TREE EQUALS 6 INCH RADIUS FOR ROOT PROTECTION ZONE.

2A LEVEL I & FENCE PROTECTION ELEVATION

NOT TO SCALE



NOTE:

A" REMOVE BULKY TREE PARTS "SHRED" AND/OR HAUL SEPARATELY.

"B" BEGIN EXCAVATION APPROX. 8' FROM THE TRUNK - CUT THRU ANCHOR ROOTS AT AN ANGLE - 3' TO 4' DEEP

"C" USING TREE TRUNK AS A LEVER PUSH AT POINT "E" TO REMOVE TREE BOLE AND LARGE FEEDER ROOTS (4" TO 10" IN DIAM.)

"D" BACKFILL HOLE AND CLEAN UP.

1 TREE REMOVAL DIAGRAM

NOT TO SCALE

OPENAIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN

2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248

P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

REGISTERED LANDSCAPE ARCHITECT
MATTHEW LAMONTAGNE
2484
STATE OF TEXAS
11/01/19

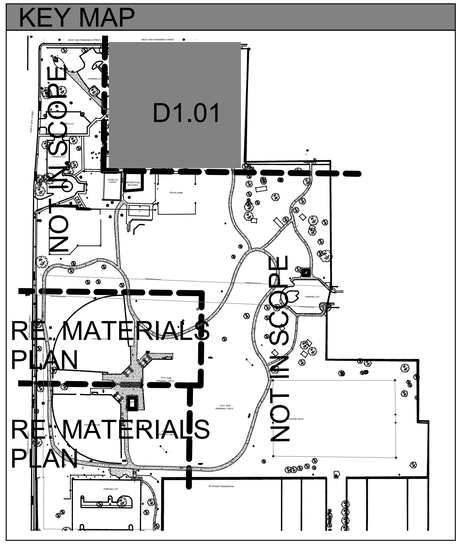
PROJECT #: CSA20171
DESIGNED BY: JS
DRAWN BY: JS
REVIEWED BY: MM

ISSUED: NOV. 01, 2019

SHEET TITLE:
TREE PRESERVATION DETAILS

SHEET NUMBER:
TP.02

KEY MAP



DEMOLITION NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING HIMSELF FAMILIAR WITH THE SPECIFICATIONS AND ALL SUBMITTAL REQUIREMENTS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE LANDSCAPE ARCHITECT FOR SITE INSPECTIONS AS SPECIFIED IN THE SPECIFICATIONS. FAILURE TO NOTIFY THE LANDSCAPE ARCHITECT DOES NOT RELIEVE THE CONTRACTOR FROM INSPECTION APPROVAL AND WILL REQUIRE THE CONTRACTOR TO INSTALL WORK AS REQUIRED FOR APPROVAL BY THE LANDSCAPE ARCHITECT AND AT THE COST OF THE CONTRACTOR.

2. CONTRACTOR SHALL COORDINATE CONSTRUCTION PHASING AND STAGING AREA LOCATION (IF NEEDED) WITH THE OWNER. CONTRACTOR SHALL INSTALL A CONSTRUCTION FENCE AROUND PROPOSED SITE WORK AREAS WHERE APPROPRIATE AND IS RESPONSIBLE FOR THE SAFETY & SECURITY OF ALL ACTIVITIES AROUND THE CONSTRUCTION SITE. CONSTRUCTION FENCING SHALL MEET ALL CITY, STATE, AND FEDERAL GUIDELINES. RE: DEMOLITION FOR AREAS TO BE REMOVED, EROSION CONTROL, STAGING AREA (IF NEEDED), AND CONSTRUCTION PHASING FOR THE SITE.

3. DURING THE SITE DEMOLITION PROCESS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ADJACENT SITE ITEMS, EXISTING SITE STRUCTURES, EXISTING PAVING, AND EXISTING SITE UTILITIES UNLESS NOTED OTHERWISE ON PLANS. THE CONTRACTOR IS REQUIRED BY LAW TO NOTIFY TEXAS ONE CALL (800-245-4545) 72 HOURS PRIOR TO ANY EXCAVATION. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE OF SAID UTILITIES WHETHER OR NOT TEXAS ONE CALL IS NOTIFIED. ALL REMOVED MATERIAL FROM SITE SHALL BE HAULED-OFF AND DISPOSED OF ACCORDINGLY.

4. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH OTHER CONTRACTORS AS REQUIRED TO ACCOMPLISH ALL CONSTRUCTION OPERATIONS. ALL PIPING, CONDUIT, SLEEVES, ETC. SHALL BE SET IN PLACE PRIOR TO INSTALLATION OF CONSTRUCTION ITEMS.

5. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL ITEMS AS CALLED OUT PER THE PLAN AND THEIR TRANSPORT OFF-SITE.

6. CONTRACTOR SHALL REFER TO TREE PRESERVATION PLANS FOR ALL PROTECTED TREES ON SITE. PROPOSED SITE IMPROVEMENTS ARE NOT TO DISTURB ANY EXISTING TREES ON SITE. RE: TREE PRESERVATION PLANS FOR TREE PROTECTION DETAILS. TREE PROTECTION METHODS AND FENCING MUST BE IN PLACE PRIOR TO START OF DEMOLITION.

7. CONTRACTOR SHALL REFER TO M.E.P PLANS FOR ALL ELECTRICAL DEMOLITION WORK ON SITE.

8. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS ON SITE AND CONTACT LANDSCAPE ARCHITECT FOR DIRECTION IF DISCREPANCIES ARE FOUND WITHIN THE FIELD.

9. ALL EXISTING IMPROVEMENTS, MATERIALS, UTILITIES, AND PLANT MATERIAL TO REMAIN WITHIN NEW CONSTRUCTION AREA SHALL BE PROPERLY AND ADEQUATELY PROTECTED FROM DAMAGE DURING DEMOLITION OPERATIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESTORE TO THE ORIGINAL CONDITION OF THESE EXISTING ITEMS THAT ARE DAMAGED OR DISTURBED IN ANY WAY.

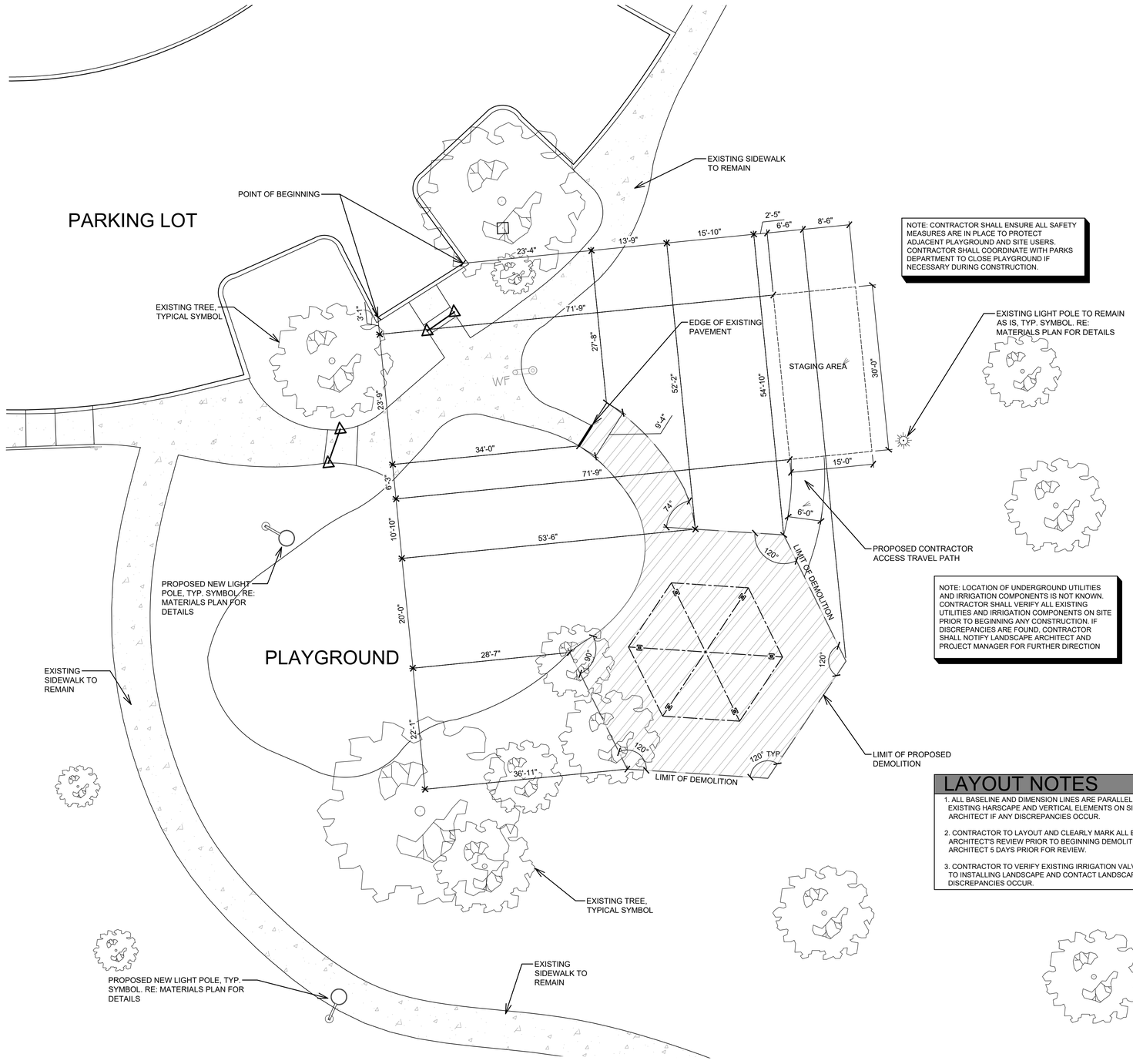
10. STREETS AND ADJACENT PROPERTY SHALL BE PROTECTED THROUGHOUT THE WORK AS REQUIRED BY LOCAL CODES AND REGULATIONS.

11. REFER TO STATE/CITY STANDARD PLANS AND SPECIFICATIONS WHERE APPLICABLE.

12. DURING DEMOLITION OPERATIONS, EVERY EFFORT SHALL BE MADE TO CONTROL DUST PER CITY REQUIREMENTS.

13. THE ENTIRE DEMOLITION AREA SHALL BE GRUBBED. GRUBBING SHALL INCLUDE ALL STUMPS AND ROOT SYSTEMS OF REMOVED PLANT MATERIAL AND ANY OTHER DELETERIOUS ITEMS. GRUBBING SHALL BE TO THE DEPTHS AS REQUIRED TO REMOVE THESE ITEMS.

14. CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS AND FORMS PRIOR TO INSTALLATION OF PROPOSED ELEMENTS.



NOTE: CONTRACTOR SHALL ENSURE ALL SAFETY MEASURES ARE IN PLACE TO PROTECT ADJACENT PLAYGROUND AND SITE USERS. CONTRACTOR SHALL COORDINATE WITH PARKS DEPARTMENT TO CLOSE PLAYGROUND IF NECESSARY DURING CONSTRUCTION.

NOTE: LOCATION OF UNDERGROUND UTILITIES AND IRRIGATION COMPONENTS IS NOT KNOWN. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES AND IRRIGATION COMPONENTS ON SITE PRIOR TO BEGINNING ANY CONSTRUCTION. IF DISCREPANCIES ARE FOUND, CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT AND PROJECT MANAGER FOR FURTHER DIRECTION

LAYOUT NOTES

1. ALL BASELINE AND DIMENSION LINES ARE PARALLEL AND PERPENDICULAR TO EXISTING HARSCAPE AND VERTICAL ELEMENTS ON SITE. CONTACT LANDSCAPE ARCHITECT IF ANY DISCREPANCIES OCCUR.

2. CONTRACTOR TO LAYOUT AND CLEARLY MARK ALL ELEMENTS FOR LANDSCAPE ARCHITECT'S REVIEW PRIOR TO BEGINNING DEMOLITION. CONTACT LANDSCAPE ARCHITECT 5 DAYS PRIOR FOR REVIEW.

3. CONTRACTOR TO VERIFY EXISTING IRRIGATION VALVE LOCATIONS IN FIELD PRIOR TO INSTALLING LANDSCAPE AND CONTACT LANDSCAPE ARCHITECT IF ANY DISCREPANCIES OCCUR.

OPENAIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN

2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248

P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

REGISTERED LANDSCAPE ARCHITECT
MATTHEW J. MOORE
2484
STATE OF TEXAS
11/01/19

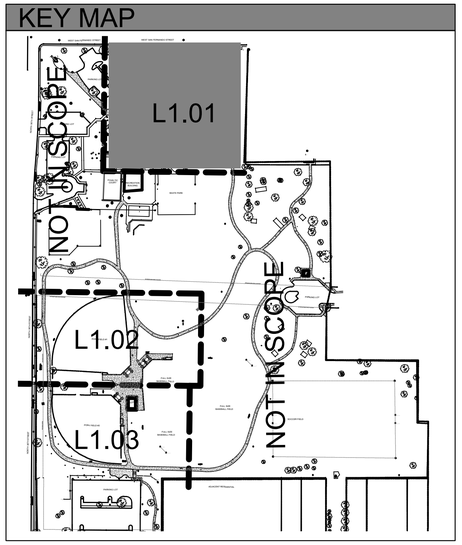
PROJECT #: CSA20171
DESIGNED BY: JS
DRAWN BY: JS
REVIEWED BY: MM

ISSUED: NOV. 01, 2019

SHEET TITLE:
DEMOLITION PLAN

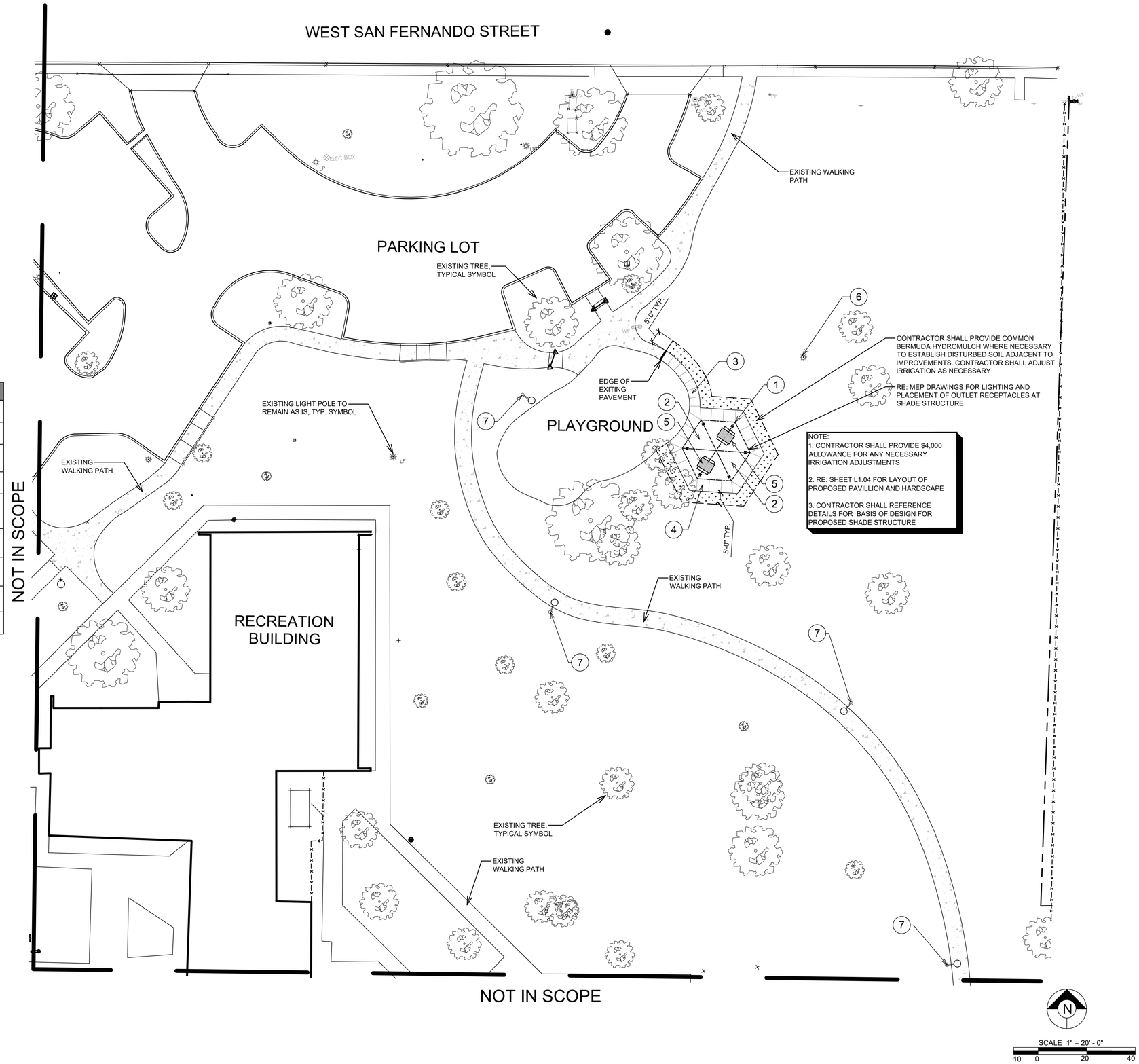
SHEET NUMBER:
D1.01

KEY MAP



MATERIALS LEGEND

1.	28' DIAMETER SHADE STRUCTURE BY COVERWORX, MODEL #HX-28-SW. RE: DETAIL L2.02
2.	5" THICK MEDIUM BROOM FINISH CONCRETE SLAB WITH 12" TURN DOWN AT EDGE, RE: DETAIL L2.01
3.	4'-6" WIDE MEDIUM BROOM FINISH CONCRETE SIDEWALK CONTINUATION, 4" THICK. RE: DETAIL L2.01
4.	5'-0" WIDE MEDIUM BROOM FINISH CONCRETE SIDEWALK, 4" THICK. RE: DETAIL L2.01
5.	BM1200 STEEL FRAME PICNIC TABLE FROM TREE TOP PRODUCTS. COLOR TO BE CEDAR. ANCHOR TABLE TO SHADE STRUCTURE CONCRETE SLAB WITH EYE BOLT WEDGE ANCHOR AND CHAIN LOCK, 2 PER TABLE. FINAL LOCATION OF TABLE TO BE DETERMINED BY LANDSCAPE ARCHITECT, RE: DETAIL L2.02
6.	REPLACE EXISTING POLE LAMP WITH LED FIXTURE, RE: MEP DRAWINGS FOR DETAILS
7.	***ADD/ALT #1*** NEW LINE VOLTAGE LED TRAIL LIGHT, RE: MEP DRAWINGS FOR DETAILS
8.	***ADD/ALT #2*** 40' HEIGHT YOKE MOUNTED LED SPORTS LIGHT WITH UPLIGHT HOOD, BY BEACON LIGHTING FOR PONY FIELD 1 AND PANEL WORK AT EXISTING PANEL WITH CONDUIT RUNS NEEDED. RE: MEP DRAWINGS FOR DETAILS
9.	***ADD/ALT #3*** 40' HEIGHT YOKE MOUNTED LED SPORTS LIGHT WITH UPLIGHT HOOD, BY BEACON LIGHTING. RE: MEP DRAWINGS FOR DETAILS



OPENAIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN

2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248

P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

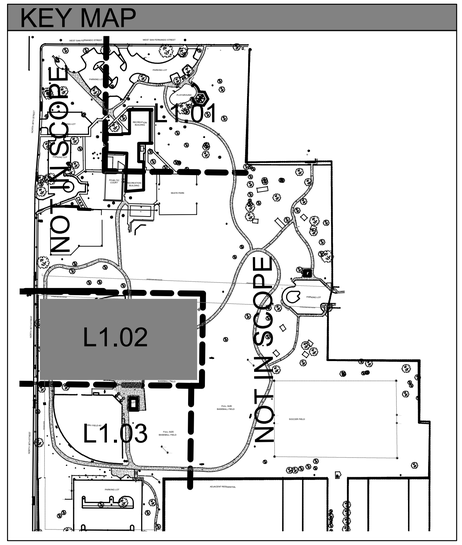
REGISTERED LANDSCAPE ARCHITECT
MATTHEW MOORE
2484
STATE OF TEXAS
11/07/19

PROJECT #: CSA20171
DESIGNED BY: JS
DRAWN BY: JS
REVIEWED BY: MM
ISSUED: NOV. 07, 2019

SHEET TITLE:
MATERIALS PLAN

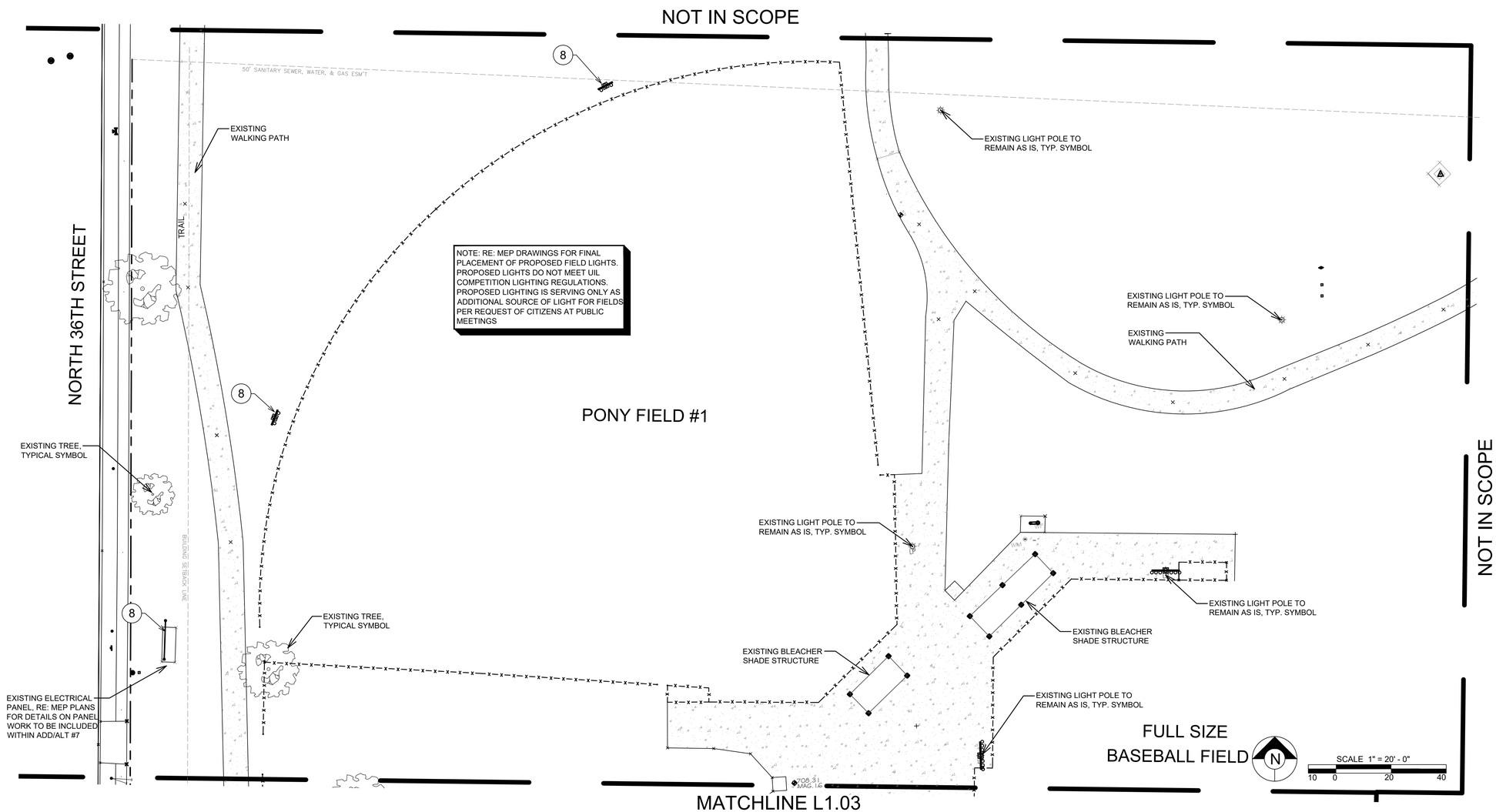
SHEET NUMBER:
L1.01

KEY MAP



MATERIALS LEGEND

1.	28' DIAMETER SHADE STRUCTURE BY COVERWORX, MODEL #HX-28-SW. RE: DETAIL L2.02
2.	5" THICK MEDIUM BROOM FINISH CONCRETE SLAB WITH 12" TURN DOWN AT EDGE, RE: DETAIL L2.01
3.	4'-6" WIDE MEDIUM BROOM FINISH CONCRETE SIDEWALK CONTINUATION, 4" THICK. RE: DETAIL L2.01
4.	5'-0" WIDE MEDIUM BROOM FINISH CONCRETE SIDEWALK, 4" THICK. RE: DETAIL L2.01
5.	BM1200 STEEL FRAME PICNIC TABLE FROM TREE TOP PRODUCTS. COLOR TO BE CEDAR. ANCHOR TABLE TO SHADE STRUCTURE CONCRETE SLAB WITH EYE BOLT WEDGE ANCHOR AND CHAIN LOCK, 2 PER TABLE. FINAL LOCATION OF TABLE TO BE DETERMINED BY LANDSCAPE ARCHITECT, RE: DETAIL L2.02
6.	REPLACE EXISTING POLE LAMP WITH LED FIXTURE, RE: MEP DRAWINGS FOR DETAILS
7.	***ADD/ALT #1*** NEW LINE VOLTAGE LED TRAIL LIGHT, RE: MEP DRAWINGS FOR DETAILS
8.	***ADD/ALT #2*** 40' HEIGHT YOKE MOUNTED LED SPORTS LIGHT WITH UPLIGHT HOOD, BY BEACON LIGHTING FOR PONY FIELD 1 AND PANEL WORK AT EXISTING PANEL WITH CONDUIT RUNS NEEDED. RE: MEP DRAWINGS FOR DETAILS
9.	***ADD/ALT #3*** 40' HEIGHT YOKE MOUNTED LED SPORTS LIGHT WITH UPLIGHT HOOD, BY BEACON LIGHTING. RE: MEP DRAWINGS FOR DETAILS



OPENAIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN

2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248

P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

REGISTERED LANDSCAPE ARCHITECT
MATTHEW A. MOSCOSO
2484
STATE OF TEXAS
11/07/19

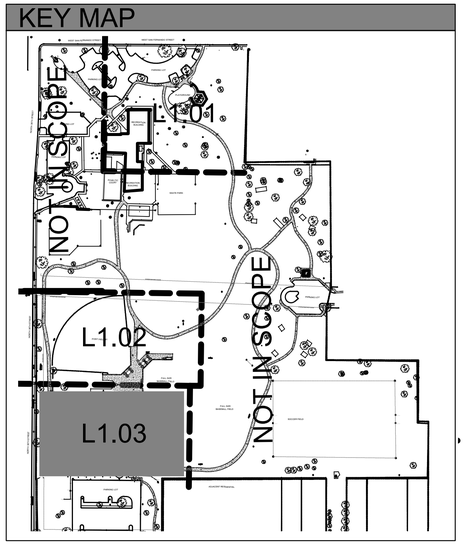
PROJECT #: CSA20171
DESIGNED BY: JS
DRAWN BY: JS
REVIEWED BY: MM

ISSUED: NOV. 07, 2019

SHEET TITLE:
MATERIALS PLAN

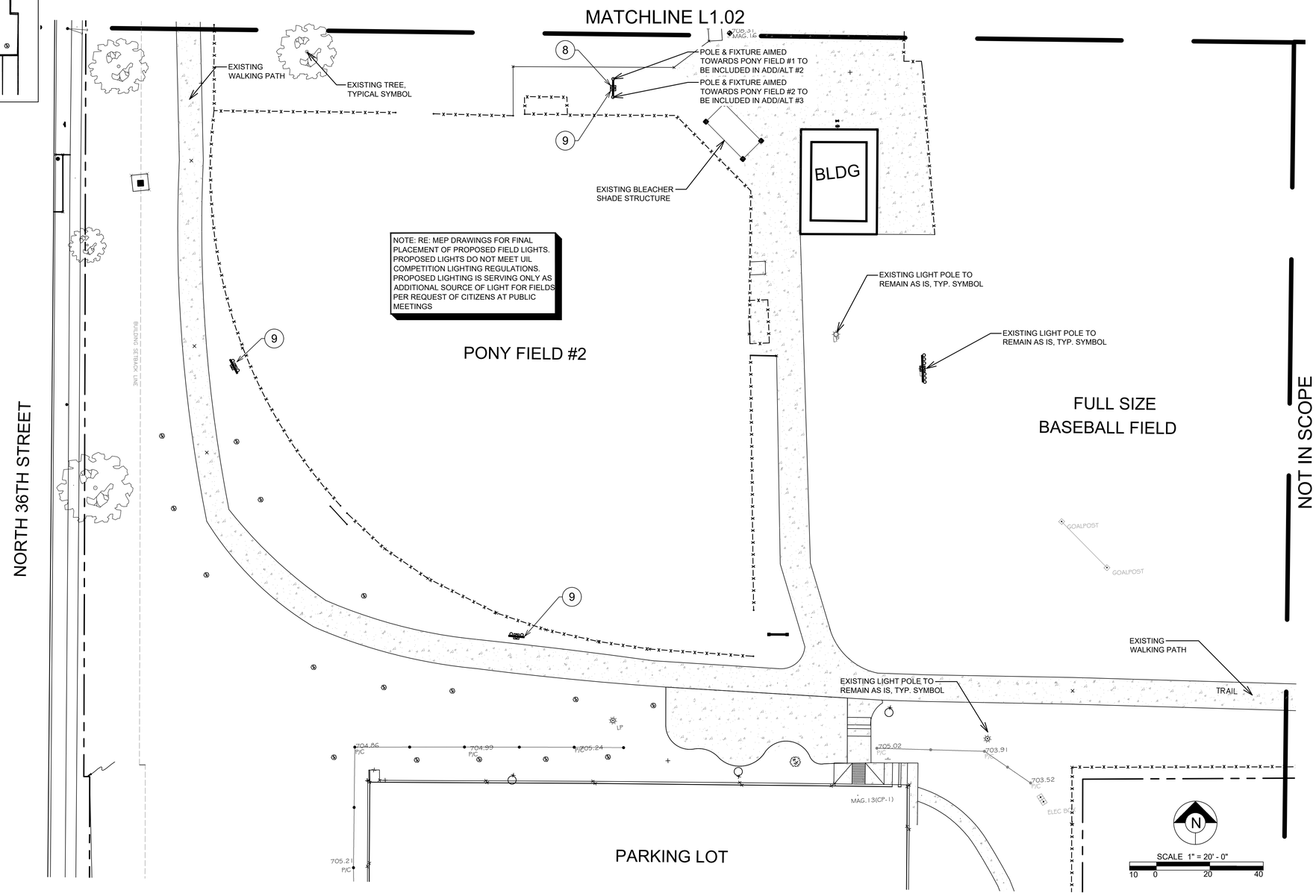
SHEET NUMBER:
L1.02

KEY MAP



MATERIALS LEGEND

1.	28' DIAMETER SHADE STRUCTURE BY COVERWORX, MODEL #HX-28-SW. RE: DETAIL L2.02
2.	5" THICK MEDIUM BROOM FINISH CONCRETE SLAB WITH 12" TURN DOWN AT EDGE, RE: DETAIL L2.01
3.	4'-6" WIDE MEDIUM BROOM FINISH CONCRETE SIDEWALK CONTINUATION, 4" THICK. RE: DETAIL L2.01
4.	5'-0" WIDE MEDIUM BROOM FINISH CONCRETE SIDEWALK, 4" THICK. RE: DETAIL L2.01
5.	BM1200 STEEL FRAME PICNIC TABLE FROM TREE TOP PRODUCTS. COLOR TO BE CEDAR. ANCHOR TABLE TO SHADE STRUCTURE CONCRETE SLAB WITH EYE BOLT WEDGE ANCHOR AND CHAIN LOCK, 2 PER TABLE. FINAL LOCATION OF TABLE TO BE DETERMINED BY LANDSCAPE ARCHITECT, RE: DETAIL L2.02
6.	REPLACE EXISTING POLE LAMP WITH LED FIXTURE, RE: MEP DRAWINGS FOR DETAILS
7.	***ADD/ALT #1*** NEW LINE VOLTAGE LED TRAIL LIGHT, RE: MEP DRAWINGS FOR DETAILS
8.	***ADD/ALT #2*** 40' HEIGHT YOKE MOUNTED LED SPORTS LIGHT WITH UPLIGHT HOOD, BY BEACON LIGHTING FOR PONY FIELD 1 AND PANEL WORK AT EXISTING PANEL WITH CONDUIT RUNS NEEDED. RE: MEP DRAWINGS FOR DETAILS
9.	***ADD/ALT #3*** 40' HEIGHT YOKE MOUNTED LED SPORTS LIGHT WITH UPLIGHT HOOD, BY BEACON LIGHTING. RE: MEP DRAWINGS FOR DETAILS



OPENAIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN

2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248

P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

REGISTERED LANDSCAPE ARCHITECT
MATTHEW MOSCOSO
2484
STATE OF TEXAS
11/07/19

PROJECT #: CSA20171
DESIGNED BY: JS
DRAWN BY: JS
REVIEWED BY: MM
ISSUED: NOV. 07, 2019

SHEET TITLE:
MATERIALS PLAN

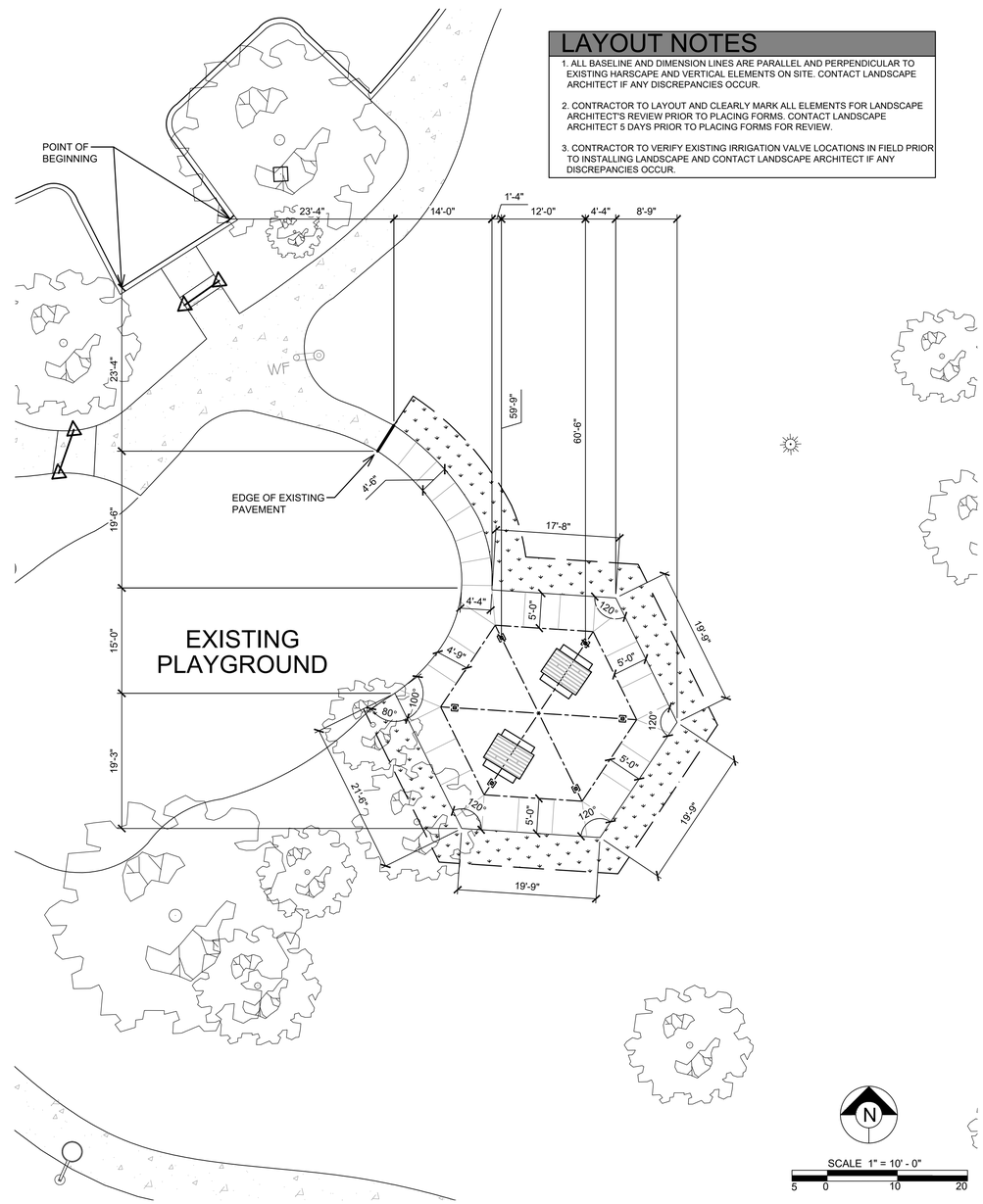
SHEET NUMBER:
L1.03

LAYOUT NOTES

1. ALL BASELINE AND DIMENSION LINES ARE PARALLEL AND PERPENDICULAR TO EXISTING HARSCAPE AND VERTICAL ELEMENTS ON SITE. CONTACT LANDSCAPE ARCHITECT IF ANY DISCREPANCIES OCCUR.

2. CONTRACTOR TO LAYOUT AND CLEARLY MARK ALL ELEMENTS FOR LANDSCAPE ARCHITECT'S REVIEW PRIOR TO PLACING FORMS. CONTACT LANDSCAPE ARCHITECT 5 DAYS PRIOR TO PLACING FORMS FOR REVIEW.

3. CONTRACTOR TO VERIFY EXISTING IRRIGATION VALVE LOCATIONS IN FIELD PRIOR TO INSTALLING LANDSCAPE AND CONTACT LANDSCAPE ARCHITECT IF ANY DISCREPANCIES OCCUR.



OPENAIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN

2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248

P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

REGISTERED LANDSCAPE ARCHITECT
MATTHEW MOSCOSO
2484
STATE OF TEXAS
11/01/19

PROJECT #: CSA20171
DESIGNED BY: JS
DRAWN BY: JS
REVIEWED BY: MM

ISSUED: NOV. 01, 2019

SHEET TITLE:
SHADE STRUCTURE AND SIDEWALK LAYOUT PLAN

SHEET NUMBER:
L1.04

GENERAL NOTES

1. SHOP DRAWINGS SIGNED AND SEALED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF TEXAS, TO BE PROVIDED TO LANDSCAPE ARCHITECT PRIOR TO BEGINNING CONSTRUCTION ON ANY STRUCTURE OR SITE ITEM. REINFORCEMENT SHOWN IS FOR GRAPHICAL REPRESENTATION ONLY AND SHALL NOT BE CONSTRUCTED AS PART OF ANY GRADE BEAMS, PIERS, CAPS, SEAT WALLS, CONNECTIONS, ETC. SHOP DRAWINGS SHALL INDICATE ALL MEMBERS, CONNECTIONS, WELDS, FASTENINGS, MATERIALS, WIND LOADING CAPACITY, ETC. PRIOR TO FABRICATION AND INSTALLATION.

2. ALL CONCRETE SAWCUTS TO BE A MIN. WIDTH OF $\frac{1}{4}$" AND A MIN. DEPTH OF $\frac{3}{8}$".

3. CONTRACTOR SHALL SUPPLY SHOP DRAWINGS FOR ALL PROPOSED LIGHTS AND SHADE STRUCTURE TO LANDSCAPE ARCHITECT FOR REVIEW AND APROVAL.

METAL FABRICATION, PREPARATION, AND COATINGS

1. ALL METAL COMPONENTS TO BE STEEL WITH PRIMER COATING OR ALUMINUM AS INDICATED.

2. SUBMIT SPECIFICATIONS ON ALUMINUM AND STEEL GRADE AND QUALITY FOR APPROVAL.

3. WELDS TO BE CONTINUOUS AND NEAT, GRIND SMOOTH AND FLUSH, GRIND INSIDE CORNERS TO SMOOTH ROUNDED FORM.

4. PREPARATION: BLAST AND GRIND/WIRE BRUSH TO REMOVE ALL MILL SCALE AND SURFACE FLAKING, AND AS RECOMMENDED BY PRIMER MANUFACTURER.

5. COATING APPLICATION: PRIMER - SHOP APPLY BY SPRAY APPLICATOR ONE SMOOTH 5-10 MIL (DRY) COAT OF SHERWIN-WILLIAMS MACROPOXY 646 FAST CURE EPOXY UNIVERSAL PRIMER (NO MORE THAN 10 MIL THICK). CURE TIME AS RECOMMENDED BY MANUFACTURER. SUBMIT PRIMER / INTERMEDIATE / TOPCOAT SYSTEM FOR APPROVAL.

A. INTERMEDIATE - SHOP APPLY BY SPRAY APPLICATION ONE SMOOTH 2-4 MIL COAT (DRY) OF SHERWIN WILLIAMS COROTHANE II POLYURETHANE OR APPROVED EQUAL. CURE TIME AS RECOMMENDED BY MANUFACTURER.

B. TOP COAT - SHOP APPLY BY SPRAY APPLICATOR ONE SMOOTH 2-4 MIL COAT OF SHERWIN-WILLIAMS COROTHANE II POLYURETHANE (GLOSS FLAT FINISH) OR APPROVED EQUAL CURE TIME AS RECOMMENDED BY MANUFACTURER.

C. TOUCH UP - TOUCH UP WITH POLYURETHANE TOP COAT ON SITE TO ACHIEVE SMOOTH FINISH IF REQUIRED. DUE TO MINOR DAMAGE TO COATING DURING INSTALLATION, RE-PRIME AND RE-PAINT INTERMEDIATE COAT PER MANUFACTURE'S RECOMMENDATIONS IF BARE METAL IS EXPOSED.

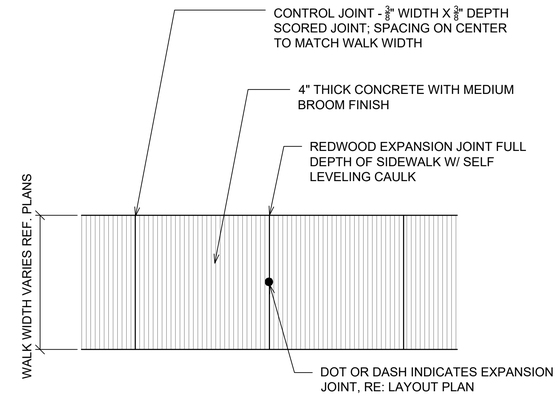
D. COLOR - TO BE SELECTED BY CONSULTANT. SUBMIT PAINTED METAL SAMPLES FOR APPROVAL.

ADD/ALTERNATE DESCRIPTIONS, RE: L1.01-L1.06 FOR LOCATION

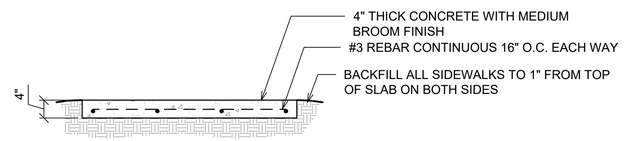
1. ***ADD/ALT #1*** NEW LINE VOLTAGE LED TRAIL LIGHT, RE: MEP DRAWINGS FOR DETAILS

2. ***ADD/ALT #2*** 40' HEIGHT YOKE MOUNTED LED SPORTS LIGHT WITH UPLIGHT HOOD BY BEACON LIGHTING. FOR PONY FIELD 1 AND PANEL WORK AT EXISTING PANEL WITH CONDUIT RUNS NEEDED. RE: MEP DRAWINGS FOR DETAILS

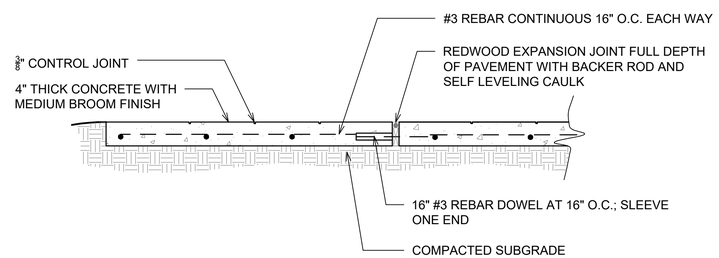
3. ***ADD/ALT #3*** 40' HEIGHT YOKE MOUNTED LED SPORTS LIGHT WITH UPLIGHT HOOD BY BEACON LIGHTING, RE: MEP DRAWINGS FOR DETAILS



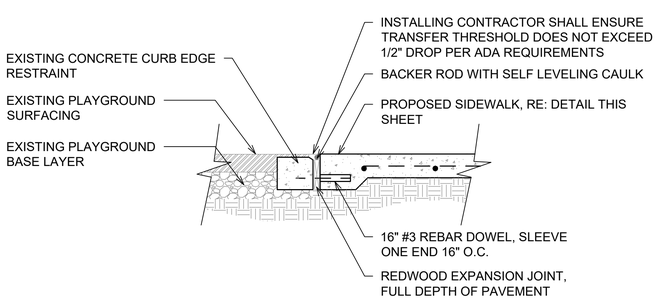
4 SIDEWALK FINISH
SCALE: 3/8" = 1' - 0"



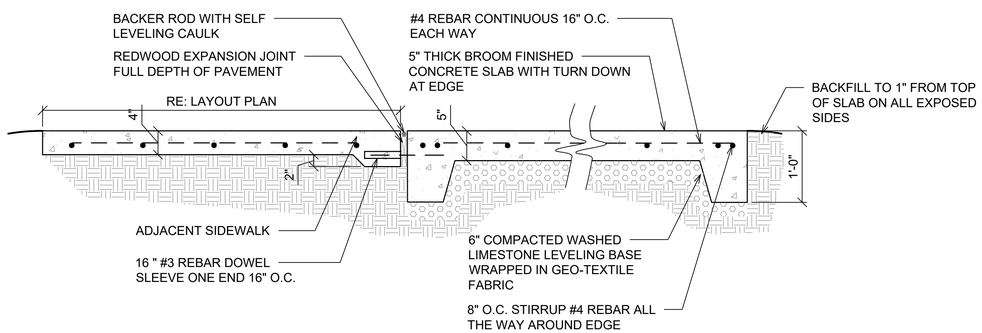
3 TYPICAL SIDEWALK
SCALE: 3/4" = 1' - 0"



2 SIDEWALK CONTROL JOINT/EXPANSION JOINT
SCALE: 1" = 1' - 0"



5 SIDEWALK TRANSITION AT PLAYGROUND EDGE
SCALE: 1" = 1' - 0"



1 SHADE STRUCTURE CONCRETE SLAB DETAIL AND SIDEWALK JOINT
SCALE: 1" = 1' - 0"

OPENAIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN

2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248

P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

REGISTERED LANDSCAPE ARCHITECT
MATTHEW A. MOSCOSO
2484
STATE OF TEXAS
11/07/19

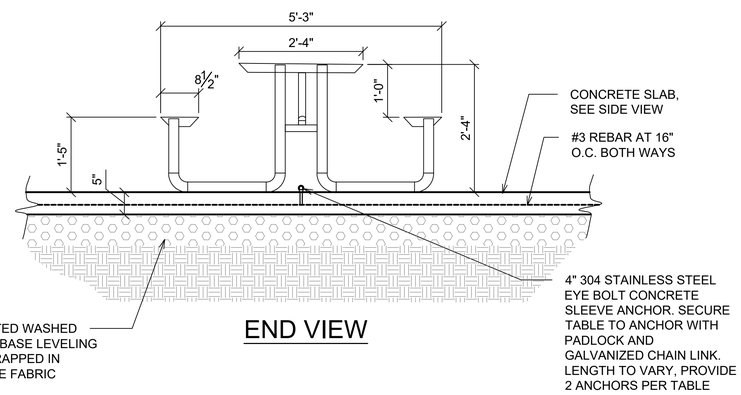
PROJECT #: CSA20171
DESIGNED BY: JS
DRAWN BY: JS
REVIEWED BY: MM

ISSUED: NOV. 07, 2019

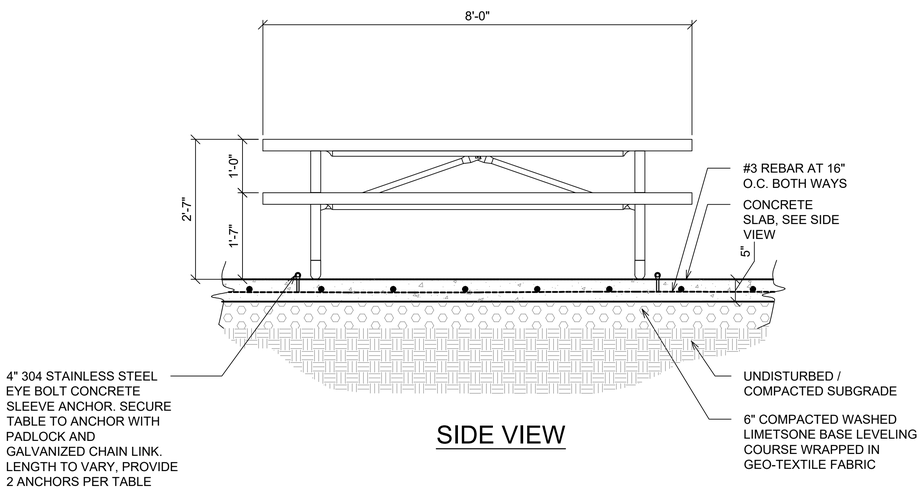
SHEET TITLE:
HARDSCAPE SITE DETAILS

SHEET NUMBER:
L2.01

BM 1200 STEEL FRAME PICNIC TABLE FROM
TREE TOP PRODUCTS. COLOR TO BE CEDAR.
CONTACT 1-866-511-5642

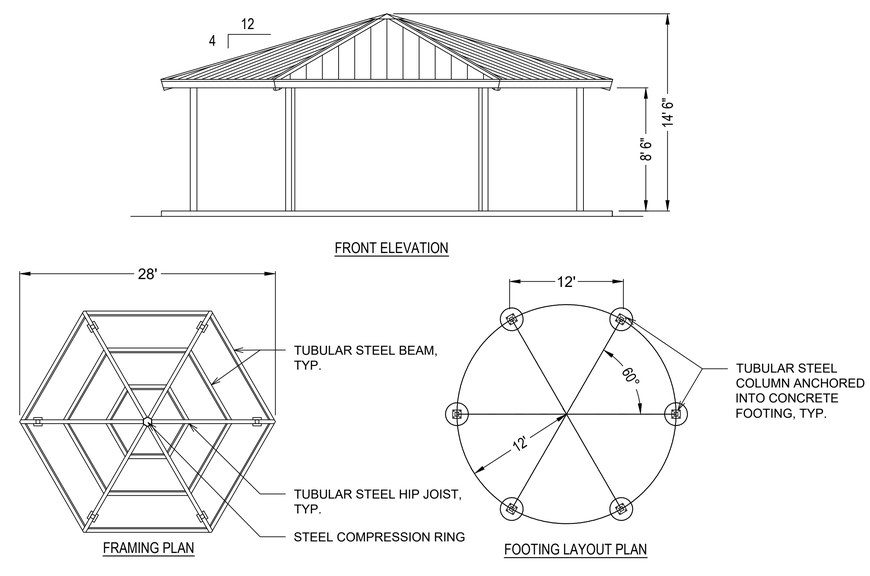


3 TREE TOP STEEL FRAME PICNIC TABLE
SCALE: 3/4" = 1' - 0"



2 TREE TOP STEEL FRAME PICNIC TABLE
SCALE: 3/4" = 1' - 0"

NOTE: CONTRACTOR SHALL INCLUDE SIGNED AND SEALED STRUCTURAL ENGINEER DRAWINGS FROM COVERWORX WITHIN BID AND SUPPLY SHOP DRAWINGS TO LANDSCAPE ARCHITECT FOR REVIEW PRIOR TO CONSTRUCTION. CONTACT DEBRA FINCH W/ PAUL E. ALLAN CO. AT 214-697-1320. CoSA TO PAY FOR REQUIRED PERMIT FEES. CONTRACTOR SHALL BE RESPONSIBLE FOR PERMITTING PROPOSED SHADE STRUCTURE.



1 COVERWORX SHADE STRUCTURE - TYP
SCALE: NOT TO SCALE

OPENAIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN

2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248

P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

REGISTERED LANDSCAPE ARCHITECT
MATTHEW J. MOCZYGEMBA
2484
STATE OF TEXAS
11/01/19

PROJECT #: CSA20171
DESIGNED BY: JS
DRAWN BY: JS
REVIEWED BY: MM

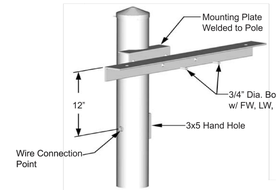
ISSUED: NOV. 01, 2019

SHEET TITLE:
SITE FURNITURE AND SHADE STRUCTURE DETAILS

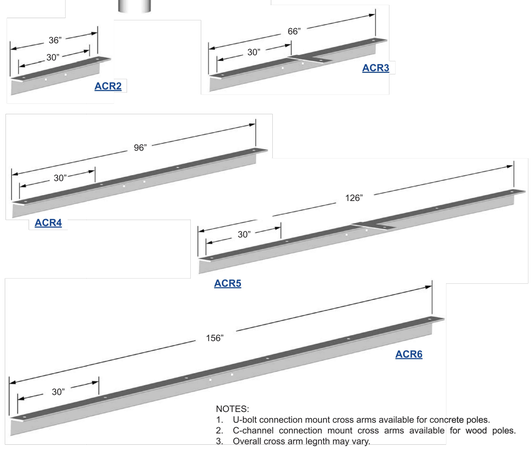
SHEET NUMBER:
L2.02

NOTE: CONTRACTOR SHALL INCLUDE SIGNED AND SEALED STRUCTURAL ENGINEER DRAWINGS FOR ALL PROPOSED LIGHT POLES WITHIN BID AND SUPPLY SHOP DRAWINGS TO LANDSCAPE ARCHITECT AND MEP FOR REVIEW PRIOR TO CONSTRUCTION. RE: MEP DRAWINGS FOR DETAILS ON LIGHT FIXTURE COUNTS, PLACEMENT, CONDUIT RUNS, AND PANEL WORK TO BE PERFORMED

Cross Arm Brackets



Catalog Number	EPA (ft²)	Weight (lbs)
ACR2	1.74	30
ACR3	2.73	47
ACR4	3.97	68
ACR5	5.95	103
ACR6	7.37	127



NOTES:
1. U-bolt connection mount cross arms available for concrete poles.
2. C-channel connection mount cross arms available for wood poles.
3. Overall cross arm legnth may vary.

ALP AMERICAN LITEPOLE
Phone: (866) 474-7200 • Fax: (817) 924-7049
American Lite Pole reserves the right to change any portion of this publication without notice in order to promote product improvement and allow for material availability.

INTERCEPT® FLOODLIGHT

Cat.# | Job | Type | HUBBELL Outdoor Lighting | Approvals

SPECIFICATIONS

Intended Use:
Intercept is a superior high output, high efficiency LED flood light, featuring a unique optical design that virtually eliminates glare with minimal impact on performance. It is available in a variety of flood distributions for lighting applications such as general and security lighting for large areas, port and rail centers, airport apron lighting and interior or exterior sports.

Construction:
- Heavy duty die-cast aluminum housing
- Light engine is thermally isolated from driver components
- UV stabilized polyester powder paint finish
- Horizontal and vertical aiming

LED:
- Modular optical assemblies enable 3 unique performance packages
- 90K lumens, 880 Watts
- 60K lumens, 580 Watts
- 48K lumens, 440 Watts
- 3000K, 4000K, 5000K CCT
- 70, 80 or 90 CRI

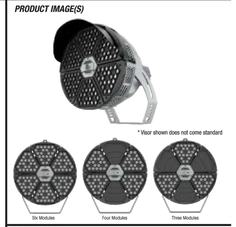
Optical/Electrical:
- Four distributions to maximize performance: 2x2, 3x3, 4x4, 5x5
- -40°C TO 40°C operating temp range
- 20kA surge protection device standard
- 0-10V dimming driver standard, dimming leads must be extended for connection to control systems (CD option)
- 120-480V operation 50/60Hz
- Driver RoHS compliant and IP65

Installation:
- Heavy duty yoke mount secured with ¾" bolt

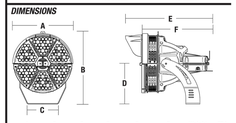
Listings:
- IP66, Listed to UL1598 for use in wet locations
- Patent Pending

Warranty:
For more information visit:
http://www.hubbelllighting.com/resources/warranty/

PRODUCT IMAGE(S)



DIMENSIONS



A	B	C	D	E	F	Weight	EPA
23.5" (597mm)	28.3" (719mm)	12.0" (305mm)	15.6" (401mm)	32.66" (812mm)	26.32" (668mm)	100 Lbs * (EPA with visor) 45 Kg.	4.2 (3.9 ft²)

CERTIFICATIONS/LISTINGS
c UL us IP66

ORDERING INFORMATION

VFS - ____ - ____ - ____ - ____ - ____ - ____ - ____ - ____

SERIES	MOUNT	ENGINE-WATTS	CCT	DISTRIBUTION	VOLTAGE	CORD	CONTROL OPTIONS	OPTIONS
VFS Flood Sports Lighting	Y Yoke UMY Under Mount Yoke	63L-440 440W 84L-660 660W 12BL-880 880W	3K7 3000K, 70 CRI 4K7 4000K, 70 CRI 5K7 5000K, 70 CRI 57K7 5700K, 70 CRI 4K8 4000K, 80 CRI 5K8 5000K, 80 CRI 57K8 5700K, 80 CRI 4K9 4000K, 90 CRI 5K9 5000K, 90 CRI 57K9 5700K, 90 CRI	2 2x2 3 3x3 4 4x4 5 5x5 AV Aviation Optics[2]	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V	3C 3' Prewired SEOWA cord 6C 6' Prewired SEOWA Cord 12C[1] 12' Prewired SEOWA Cord	CD Continuous dimming SWP SiteSync pro-Comm SWF SiteSync field-Comm NXMI NX Fixture Module DMX DMX/RDM	LGC Less Glare Control SF Single Fuse DF Double Fuse GL Glass Lens

ACCESSORIES (ORDER SEPARATELY)

ACCESSORIES	
VFSVISOR	Top Visor
93093927	Laser Aiming Assembly
93101964	Safety Cable
93096023	Intercept Slip-Fit Adapter
CONTROL ACCESSORIES	
SWUSB*	SiteSync interface software loaded on USB flash drive for use with owner supplied PC (Windows based only). Includes SiteSync license, software and USB radio bridge node
SWTAB*	Windows tablet and SiteSync interface software. Includes tablet with pre loaded software, SiteSync license and USB radio bridge node.
SWBRG	SiteSync USB radio bridge node only. Order if a replacement is required or if an extra bridge node is requested.

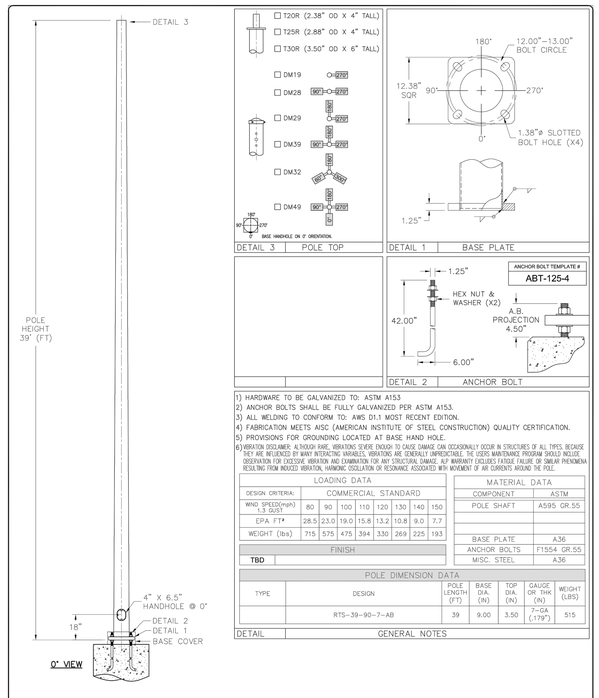
[1] Includes glass lens
[2] 12' cord is default option

* When ordering SiteSync at least one of these two interface options must be ordered per project.
+ If needed, an additional Bridge Node can be ordered.

HUBBELL Outdoor Lighting
Hubbell Outdoor Lighting • 701 Millennium Boulevard • Greenville, SC 29607 • Phone: 864-678-1000
Due to our continued efforts to improve our products, product specifications are subject to change without notice.

5 TYPICAL SPORTS LIGHT FIXTURE
SCALE: NOT TO SCALE

4 TYPICAL SPORTS LIGHT CROSS BEAM
SCALE: NOT TO SCALE



1) HARDWARE TO BE GALVANIZED TO: ASTM A153
2) ANCHOR BOLTS SHALL BE FULLY GALVANIZED PER ASTM A153.
3) ALL WELDING TO CONFORM TO: AWS D1.1 MOST RECENT EDITION.
4) FABRICATION MEETS AISC (AMERICAN INSTITUTE OF STEEL CONSTRUCTION) QUALITY CERTIFICATION.
5) PROVISIONS FOR GROUNDING LOCATED AT BASE HAND HOLE.
6) VIBRATION DISCLAIMER: ALTHOUGH RARE, VIBRATIONS SEVERE ENOUGH TO CAUSE DAMAGE CAN OCCASIONALLY OCCUR IN STRUCTURES OF ALL TYPES. BECAUSE THEY ARE INFLUENCED BY MANY INTERACTING VARIABLES, VIBRATIONS ARE GENERALLY UNPREDICTABLE. THE USERS MAINTENANCE PROGRAM SHOULD INCLUDE OBSERVATION FOR EXCESSIVE VIBRATION AND EXAMINATION FOR ANY STRUCTURAL DAMAGE. ALP WARRANTY EXCLUDES FATIGUE FAILURE OR SIMILAR PHENOMENA RESULTING FROM INDUCED VIBRATION, HARMONIC OSCILLATION OR RESONANCE ASSOCIATED WITH MOVEMENT OF AIR CURRENTS AROUND THE POLE.

LOADING DATA									
DESIGN CRITERIA:	COMMERCIAL STANDARD								
WIND SPEED(mph) 1.3 GUST	80	90	100	110	120	130	140	150
EPA FT*	28.5	23.0	19.0	15.8	13.2	10.8	9.0	7.7
WEIGHT (lbs)	715	575	475	394	330	269	225	193

FINISH
TBD

MATERIAL DATA	
COMPONENT	ASTM
POLE SHAFT	A595 GR.55
BASE PLATE	A36
ANCHOR BOLTS	F1554 GR.55
MISC. STEEL	A36

POLE DIMENSION DATA						
TYPE	DESIGN	POLE LENGTH (FT)	BASE DIA. (IN)	TOP DIA. (IN)	GAUGE OR THK (IN)	WEIGHT (LBS)
	RTS-39-90-7-AB	39	9.00	3.50	7-GA (.179")	515

DETAIL | GENERAL NOTES

American LitePole
AMERICAN LITE POLE
2800 S. HULEN, SUITE 200
FORT WORTH, TX 76109
817-924-3682 PH.
817-924-7049 FAX
** CONFIDENTIAL **
THE INFORMATION CONTAINED IN THIS DRAWING IS PROPRIETARY AND CONFIDENTIAL. UNAUTHORIZED DUPLICATION OR DISSEMINATION OF THIS DOCUMENT IS STRICTLY PROHIBITED WITHOUT PRIOR WRITTEN NOTICE FROM AMERICAN LITE POLE.

REV. | DATE | BY | REVISION DESCRIPTION
PROJECT NAME:
DESCRIPTION: ROUND TAPERED STEEL ANCHOR BASE 39' x 9.0" x 7 GA
PO NUMBER: 061014 | DRAWN BY: BM
QUOTE NUMBER: | SCALE: NTS | QTY: | CHKD BY: CKR
DRAWING NUMBER: RTS-39-90-7-AB | REV:

3 TYPICAL SPORTS LIGHT POLE
SCALE: NOT TO SCALE

VIPER S

Cat.# | Job | Type | BEACON | Approvals

STRIKE
SMALL VIPER LUMINAIRE

SPECIFICATIONS

Intended Use:
The Beacon Viper luminaire is available with a wide choice of different LED Wattage configurations and optical distributions designed to replace HID lighting up to 400W MH or HPS.

Construction:
- Manufactured with die cast aluminum.
- Coated with a polyester finish that meets ASTM B117 corrosion test requirements and ASTM D522 cracking and loss of adhesion test requirements.
- External hardware is corrosion resistant.
- One piece optical cartridge system consisting of an LED engine, LED lamps, optics, gasket and stainless steel bezel.
- Cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one piece optical system.
- Two-piece silicone and micro-cellular polyurethane foam gasket ensures a weather-proof seal around each individual LED.

Electrical:
- 100V through 277V, 50 Hz to 60 Hz (UNV), or 347V or 480V input.
- Power factor is ≥.90 at full load.
- Dimming drivers are standard, but must contact factory to request wiring leads for purpose of external dimming controls.
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is certified by UL for use at 600VAC at 90°C or higher.
- Plug disconnects are certified by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only.
- Fixture electrical compartment shall contain all LED driver components and shall be provided with a push-button terminal block for AC power connections.
- Surge protection - 20kA.
- Optional 7-pin ANSI C136.41-2013 twist-lock photo control receptacle available. Compatible with ANSI C136.41 external wireless control devices.
- Lifeshield™ Circuit - protects luminaire from excessive temperature. The device shall activate at a specific, factory-preset temperature, and progressively reduce power over a finite temperature range. Operation shall be smooth and undetectable to the eye. Thermal circuit is designed to "fail on", allowing the luminaire to revert to full power in the event of an interruption of its power supply, or faulty wiring connection to the drivers. The device shall be able to co-exist with other 0-10V control devices (occupancy sensors, external dimmers, etc.).

Controls/Options:
- Available with an optional passive infrared (PIR) motion sensor capable of detecting motion 360° around the luminaire. When no motion is detected for the specified time, the Motion Response system reduces the wattage to factory preset level, reducing the light level accordingly. When motion is detected by the PIR sensor, the luminaire returns to full wattage and full light output. Please contact Beacon Products if project requirements vary from standard configuration.
- Available with Energeni for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night (see www.beaconproducts.com/products/energeni).
- In addition, Viper can be specified with **SiteSync™** wireless control system for reduction in energy and maintenance costs while optimizing light quality 24/7. For more details, see ordering information or visit: www.hubbelllighting.com/sitesync

Installation:
- Mounting options for horizontal arm, vertical tenon or traditional arm mounting available. Mounting hardware included.

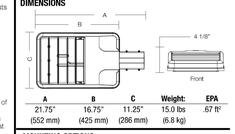
Finish:
- IFS polyester powder-coat electrostatically applied and thermocured. IFS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish.
- The finish meets the AAMA 2604 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds.

Certifications/Ratings:
- DesignLights Consortium (DLC) qualified, consult DLC website for more details: http://www.designlights.org/QPL
- Certified to UL 1598, UL 8750 and CSA C22.2 No.250.0
- IDA approved
- This product is approved by the Florida Fish and Wildlife Conservation Commission. Separate spec available at: http://www.beaconproducts.com/products/vipersmall

Warranty:
Five year limited warranty for more information visit: www.hubbelllighting.com/resources/warranty

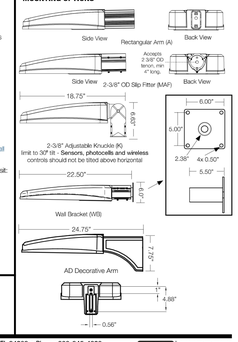
PRODUCT IMAGE(S)

DIMENSIONS



A	B	C	Weight:	EPA
21.75" (552 mm)	16.75" (425 mm)	11.25" (286 mm)	15.0 lbs (6.8 kg)	.67 ft²

MOUNTING OPTIONS

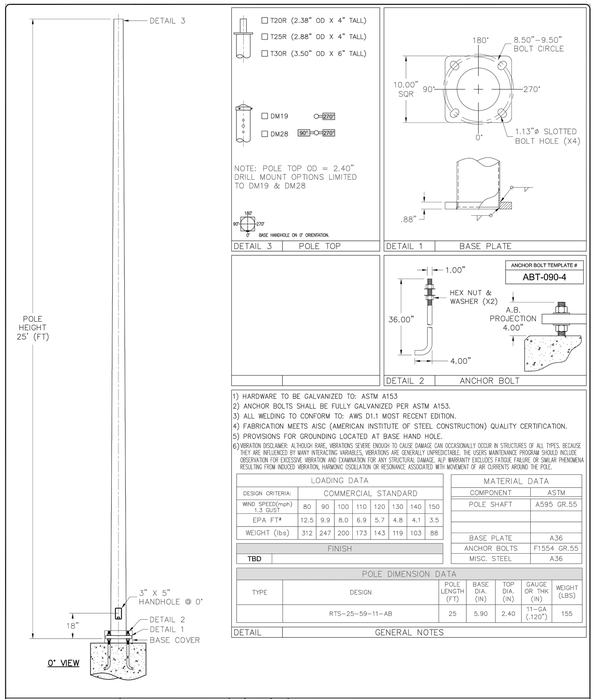


CERTIFICATIONS/LISTINGS
c US
*3000K and warmer CCTs only

BEACON
Beacon Products • 2041 58th Avenue Circle East Bradenton, FL 34203 • Phone: 800-345-4928
Due to our continued efforts to improve our products, product specifications are subject to change without notice.

HUBBELL Lighting

2 TYPICAL TRAIL LIGHT FIXTURE
SCALE: NOT TO SCALE



1) HARDWARE TO BE GALVANIZED TO: ASTM A153
2) ANCHOR BOLTS SHALL BE FULLY GALVANIZED PER ASTM A153.
3) ALL WELDING TO CONFORM TO: AWS D1.1 MOST RECENT EDITION.
4) FABRICATION MEETS AISC (AMERICAN INSTITUTE OF STEEL CONSTRUCTION) QUALITY CERTIFICATION:
5) PROVISIONS FOR GROUNDING LOCATED AT BASE HAND HOLE.
6) VIBRATION DISCLAIMER: ALTHOUGH RARE, VIBRATIONS SEVERE ENOUGH TO CAUSE DAMAGE CAN OCCASIONALLY OCCUR IN STRUCTURES OF ALL TYPES. BECAUSE THEY ARE INFLUENCED BY MANY INTERACTING VARIABLES, VIBRATIONS ARE GENERALLY UNPREDICTABLE. THE USERS MAINTENANCE PROGRAM SHOULD INCLUDE OBSERVATION FOR EXCESSIVE VIBRATION AND EXAMINATION FOR ANY STRUCTURAL DAMAGE. ALP WARRANTY EXCLUDES FATIGUE FAILURE OR SIMILAR PHENOMENA RESULTING FROM INDUCED VIBRATION, HARMONIC OSCILLATION OR RESONANCE ASSOCIATED WITH MOVEMENT OF AIR CURRENTS AROUND THE POLE.

LOADING DATA									
DESIGN CRITERIA:	COMMERCIAL STANDARD								
WIND SPEED(mph) 1.3 GUST	80	90	100	110	120	130	140	150
EPA FT*	12.5	9.9	8.0	6.9	5.7	4.8	4.1	3.5
WEIGHT (lbs)	312	247	200	173	143	119	103	88

FINISH
TBD

MATERIAL DATA	
COMPONENT	ASTM
POLE SHAFT	A595 GR.55
BASE PLATE	A36
ANCHOR BOLTS	F1554 GR.55
MISC. STEEL	A36

POLE DIMENSION DATA						
TYPE	DESIGN	POLE LENGTH (FT)	BASE DIA. (IN)	TOP DIA. (IN)	GAUGE OR THK (IN)	WEIGHT (LBS)
	RTS-25-59-11-AB	25	5.90	2.40	11-GA (.120")	155

DETAIL | GENERAL NOTES

American LitePole
AMERICAN LITE POLE
2800 S. HULEN, SUITE 200
FORT WORTH, TX 76109
817-924-3682 PH.
817-924-7049 FAX
** CONFIDENTIAL **
THE INFORMATION CONTAINED IN THIS DRAWING IS PROPRIETARY AND CONFIDENTIAL. UNAUTHORIZED DUPLICATION OR DISSEMINATION OF THIS DOCUMENT IS STRICTLY PROHIBITED WITHOUT PRIOR WRITTEN NOTICE FROM AMERICAN LITE POLE.

REV. | DATE | BY | REVISION DESCRIPTION
PROJECT NAME:
DESCRIPTION: ROUND TAPERED STEEL ANCHOR BASE 25' x 5.9" x 11 GA
PO NUMBER: 061014 | DRAWN BY: BM
QUOTE NUMBER: | SCALE: NTS | QTY: | CHKD BY: CKR
DRAWING NUMBER: RTS-25-59-11-AB | REV:

1 TYPICAL TRAIL LIGHT POLE
SCALE: NOT TO SCALE

OPENAIR STUDIOS LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN

2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248

P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

REGISTERED LANDSCAPE ARCHITECT MATTHEW A. MOORE 2484 STATE OF TEXAS
11/01/19

PROJECT #: CSA20171
DESIGNED BY: JS
DRAWN BY: JS
REVIEWED BY: MM

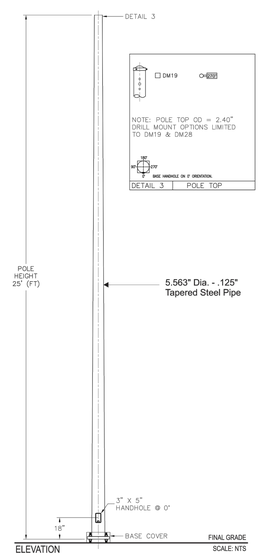
ISSUED: NOV. 01, 2019

SHEET TITLE:
TYPICAL LIGHT DETAILS

SHEET NUMBER:
L2.03

DocuSign Envelope ID: 4EB06074-9E49-465D-91E8-37D643F453F0

ME #: 46307



ELEVATION

McFarland Engineering
464 N. Hiddenbrook Dr.
Advance, NC 27006
Structural Sign Design & Engineering Services
Ph: (281) 813-7439
Fax: (888) 712-5364
Email: sean@signstructures.com
Web: www.signstructures.com

CUELLAR PARK

Address: 5626 SAN FERNANDO ST

City/State: SAN ANTONIO, TX

Client: OPEN AIR STUDIOS

ENGINEERING OF VERTICAL SUPPORT AND FOUNDATION ONLY. NO CABINET ENGINEERING PROVIDED OR IMPLIED.

Initial Drawing: (46307) AB

NC Firm Registration: F-1136
Texas Expiration Date: 6/30/2020
Texas Firm Registration: F-6996

The electronic seal appearing on this document was authorized by Sean M. McFarland, PE on November 7, 2019.

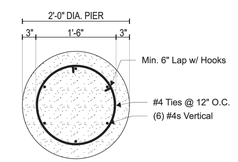
Date: 11-7-2019
Sheet #: 5 or 6

STATE OF TEXAS
SEAN M. McFARLAND
88579
LICENSED
PROFESSIONAL ENGINEER

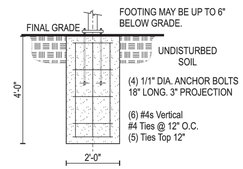
DocuSigned by:
Sean McFarland
18DD4704DCE5405...

DocuSign Envelope ID: 4EB06074-9E49-465D-91E8-37D643F453F0

ME #: 46307



PLAN VIEW
3/4"=1'-0"
2500 PSI CONCRETE (MIN.)
TYPICAL OF ONE PIER



2500 PSI CONCRETE (MIN.)
TYPICAL OF ONE PIER
SCALE: 3/8" = 1'

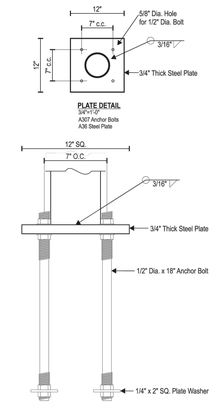


PLATE DETAIL
3/4"=1'-0"
A307 Anchor Bolts
A36 Steel Plate

PLATE DETAIL
NTS
A307 Anchor Bolts
A36 Steel Plate

McFarland Engineering
464 N. Hiddenbrook Dr.
Advance, NC 27006
Structural Sign Design & Engineering Services
Ph: (281) 813-7439
Fax: (888) 712-5364
Email: sean@signstructures.com
Web: www.signstructures.com

CUELLAR PARK

Address: 5626 SAN FERNANDO ST

City/State: SAN ANTONIO, TX

Client: OPEN AIR STUDIOS

ENGINEERING OF VERTICAL SUPPORT AND FOUNDATION ONLY. NO CABINET ENGINEERING PROVIDED OR IMPLIED.

Initial Drawing: (46307) AB

NC Firm Registration: F-1136
Texas Expiration Date: 6/30/2020
Texas Firm Registration: F-6996

The electronic seal appearing on this document was authorized by Sean M. McFarland, PE on November 7, 2019.

Date: 11-7-2019
Sheet #: 6 or 6

STATE OF TEXAS
SEAN M. McFARLAND
88579
LICENSED
PROFESSIONAL ENGINEER

DocuSigned by:
Sean McFarland
18DD4704DCE5405...

2 LIGHT POLE FOOTING DETAILS

SCALE: NOT TO SCALE

Date:	11/7/19	City, State:	San Antonio, TX	SHEET:	1 OF 3
Client:	**Open Air Studios**	Overall Height:	25'-0"	Sean M. McFarland, PE	
Sign:	Cuellar Park	Wind Speed	115 mph	McFarland Engineering	

Sign Description 5626 San Fernando St

Columns: 1

ME Job: 46307 C

Height: 0'-7"

Width: 1'-7"

Table of Contents

Content:	Page
BASE PLATE / ANCHOR BOLTS	
ULTIMATE LOADS	
42 KSI STEEL PIPE	
30PSF	
Design Loads	1
Support Design	1-3

Structural Variables and Code Loading Specifications

Cabinet Type: Miscellaneous

Structural Section: Steel Pipe - 42000psi

Number of Zones: 2

Code: 2018 IBC

Wind Speed: 115

Wind Exposure: C

Wind Loads Per ASCE 7-16

Sign Sections:

Zone	Cabinet Wt. Per Sq. Ft.	Weight	Transition (Y or N)
1	20	8.0 #/FT	
2	0	8.0 #/FT	y
3	0		
4	0		
5	0		
6	0		
7	0		
8	0		

STATE OF TEXAS
SEAN M. McFARLAND
88579
LICENSED
PROFESSIONAL ENGINEER

DocuSigned by:
Sean McFarland
18DD4704DCE5405...

State License: Texas - 88579

Geometry:

Zone	Top Elevation	Height	* Approx. Width	Pressure	Force	Approx. Weight
1	25.00 FT	0.58 FT	1.58 FT *	30.00 PSF	0.03 K	23 #
2	24.42 FT	24.42 FT	0.46 FT *	12.48 PSF	0.14 K	195 #
				Total Wind Force =	0.17 K	218 #

1 ULTIMATE LOAD CALCULATIONS

SCALE: NOT TO SCALE

Date:	11/7/19	City, State:	San Antonio, TX	SHEET:	2 OF 3
Client:	**Open Air Studios**	Overall Height:	25'-0"	Sean M. McFarland, PE	
Sign:	Cuellar Park	Wind Speed	115 mph	McFarland Engineering	

5626 San Fernando St

ME Job: 46307 C

Moments at Transitions:

Zone	Lateral Force	2 Mom. Arm
1	0.03 K	24.71 FT
2	0.14 K	12.21 FT
		2.41 K-FT

Section Properties: 1.04 IN^3

Structural Sections to be used:

Zone	Option	Pipe (Tapered) Dim.	Wall t.	Weight	Sxx	d/t	Sxx Req'd
2	Pipe (Tapered)	5.56 IN	0.125 IN	8.0 #/FT	2.70 IN^3	21.50	1.04 IN^3

Structure Required

# Req'd	Size	Wall Thickness
1	5.56 IN	0.125 IN

Date:	11/7/19	City, State:	San Antonio, TX	SHEET:	3 OF 3
Client:	**Open Air Studios**	Overall Height:	25'-0"	Sean M. McFarland, PE	
Sign:	Cuellar Park	Wind Speed	115 mph	McFarland Engineering	

5626 San Fernando St

ME Job: 46307 C

Pier Footing

Pier Footing Design:

d = A / 2 * (1 + (1 + (4.36 * h) / A)^1/2))

where A = (2.34 * P) / (S1 * b)

Select the footing and soil type:

Footing: Round

Vert. Soil Bearing (psf): 1500

Lat. Soil Bearing (psf): 150

Mmax =	2,409 #-FT	
Pmax (Lateral) =	169 #	
LSBP =	150 PCF	
S1 =	330 PCF X d	
d =	2.000 FT	*For use with Round Footing*
A =	0.60 FT^2	
h =	14.258 FT	
d =	3.365 FT	
USE:	2.00 FT. RND. X	4.00 FT DEEP PIER w/ (6) #4's @ 12" O.C.
		#4's @ 12" O.C. (5) Ties Top 12"
		18" Long Bolts - 3" Extension. 2" Washers

Soil Bearing Check:

DLmax =	218 LBS	
Area of Footing =	3.14 FT^2	
Actural SBP =	70 PSF	
Allowable SBP =	900 PSF	(Includes code allowed 20% increase for every foot of footing below 12" into natural grade.)

70 PSF < 900 PSF THEREFORE OK

Baseplate Design -

D = 5.56 IN
e = 0.72 IN
b eff = 1.95 IN
e eff = 1.75 IN
plate t = 0.75 IN

A36 Steel Fy= 36ksi
E70 Electrodes Fw= 928 #/in/16th
A307 A.B.'s Ft=20 ksi
# of Bolts = 4
Column Mom = 2,409 #-FT
Dia. Bolt 0.5

P Bolt = M * 12 (in/ft) / 2 bolts (D + e + t) — 2,056 # < 3,926 #

t req'd = [(6*P*e eff* 2 bolts)/(.75*Fy(b eff + 2*t))]^1/2 — .681 IN < 0.75 IN

USE: (4) 3/4" Baseplate - 4" High

Weld = M * 12 (in/ft) / Fw (3.1415 * D^2/4) — 1.28 16th's < 3.00 16th's

USE: (4) 1/2" Dia. Bolts w/ 3/4" Baseplate. Weld to Support with (1) 3/16" Fillet Weld.

OPENAIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN

2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248

P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

REGISTERED LANDSCAPE ARCHITECT
MATTHEW A. MOORE
2484
STATE OF TEXAS
11/01/19

PROJECT #: CSA20171

DESIGNED BY: JS

DRAWN BY: JS

REVIEWED BY: MM

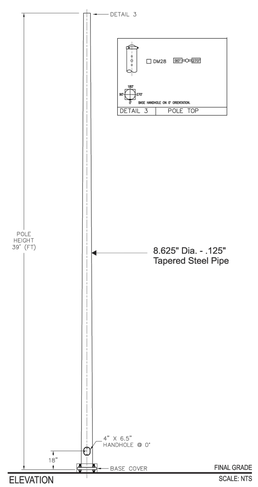
ISSUED: NOV. 01, 2019

SHEET TITLE:
TRAIL LIGHT STRUCTURAL DETAILS

SHEET NUMBER:
L2.04

DocuSign Envelope ID: 4EB06074-9E49-465D-91E8-37D643F453F0

ME #: 46307



ELEVATION

McFarland Engineering
464 N. Hiddenbrook Dr.
Advance, NC 27006
Structural Sign Design & Engineering Services
Ph: (281) 813-7439
Fax: (888) 712-5364
Email: sean@signstructures.com
Web: www.signstructures.com

CUELLAR PARK

Address: 5626 SAN FERNANDO ST
City/State: SAN ANTONIO, TX
Client: OPEN AIR STUDIOS

ENGINEERING OF VERTICAL SUPPORT AND FOUNDATION ONLY. NO CABINET ENGINEERING PROVIDED OR IMPLIED.

Initial Drawing: (46307) AB

NC Firm Registration: F-1136
Texas Expiration Date: 6/30/2020
Texas Firm Registration: F-8996

The electronic seal appearing on this document was authorized by Sean M. McFarland, PE on November 7, 2019.

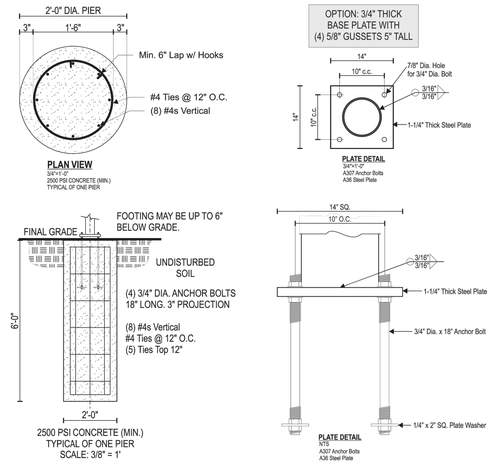
Date: 11-7-2019
Sheet #: 3 OF 6

STATE OF TEXAS
SEAN M. McFARLAND
88579
LICENSED PROFESSIONAL ENGINEER

DocuSigned by: Sean McFarland
18DD47D4DCE5405...

DocuSign Envelope ID: 4EB06074-9E49-465D-91E8-37D643F453F0

ME #: 46307



McFarland Engineering
464 N. Hiddenbrook Dr.
Advance, NC 27006
Structural Sign Design & Engineering Services
Ph: (281) 813-7439
Fax: (888) 712-5364
Email: sean@signstructures.com
Web: www.signstructures.com

CUELLAR PARK

Address: 5626 SAN FERNANDO ST
City/State: SAN ANTONIO, TX
Client: OPEN AIR STUDIOS

ENGINEERING OF VERTICAL SUPPORT AND FOUNDATION ONLY. NO CABINET ENGINEERING PROVIDED OR IMPLIED.

Initial Drawing: (46307) AB

NC Firm Registration: F-1136
Texas Expiration Date: 6/30/2020
Texas Firm Registration: F-8996

The electronic seal appearing on this document was authorized by Sean M. McFarland, PE on November 7, 2019.

Date: 11-7-2019
Sheet #: 4 OF 6

STATE OF TEXAS
SEAN M. McFARLAND
88579
LICENSED PROFESSIONAL ENGINEER

DocuSigned by: Sean McFarland
18DD47D4DCE5405...

2 LIGHT POLE FOOTING DETAILS

SCALE: NOT TO SCALE

Date: 11/7/19 | City, State: San Antonio, TX | SHEET: 1 OF 3
Client: **Open Air Studios** | Overall Height: 39'-0" | Sean M. McFarland, PE
Sign: Cuellar Park | Wind Speed: 115 mph | McFarland Engineering

Sign Description 5626 San Fernando St

Columns: 1
ME Job: 46307 B
Height: 2'-4"
Width: 2'-9"

Table of Contents

Content:	Page
Design Loads	1
Support Design	1-3

BASE PLATE / ANCHOR BOLTS
ULTIMATE LOADS
42 KSI STEEL PIPE
30PSF

Structural Variables and Code Loading Specifications

Cabinet Type: Miscellaneous
Structural Section: Steel Pipe - 42000psi
Number of Zones: 2
Code: 2018 IBC
Wind Speed: 115
Wind Exposure: C
Wind Loads Per ASCE 7-16

Sign Sections:

Zone	Cabinet Wt. Per Sq. Ft.	Weight	Transition (Y or N)
1	20	12.0 #/FT	
2	0	12.0 #/FT	y
3	0		
4	0		
5	0		
6	0		
7	0		
8	0		

STATE OF TEXAS
SEAN M. McFARLAND
88579
LICENSED PROFESSIONAL ENGINEER

DocuSigned by: Sean McFarland
BDD47D4DCE5405...

State License: Texas - 88579

Geometry:

Zone	Top Elevation	Height	* Approx. Width	Pressure	Force	Approx. Weight
1	39.00 FT	2.33 FT	2.25 FT *	30.00 PSF	0.16 K	133 #
2	36.67 FT	36.67 FT	0.72 FT *	12.65 PSF	0.33 K	440 #
				Total Wind Force =	0.49 K	573 #

1 ULTIMATE LOAD CALCULATIONS

SCALE: NOT TO SCALE

Date: 11/7/19 | City, State: San Antonio, TX | SHEET: 2 OF 3
Client: **Open Air Studios** | Overall Height: 39'-0" | Sean M. McFarland, PE
Sign: Cuellar Park | Wind Speed: 115 mph | McFarland Engineering

5626 San Fernando St

ME Job: 46307 B

Moments at Transitions:

Zone	Lateral Force	2 Mom. Arm
1	0.16 K	37.83 FT
2	0.33 K	18.33 FT
	12.07 K-FT	

Section Properties: 5.23 IN^3

Structural Sections to be used:

Zone	Option	Pipe (Tapered) Dim.	Wall t.	Weight	Sxx	d/t	Sxx Req'd
2	Pipe (Tapered)	8.63 IN	0.125 IN	12.0 #/FT	7.20 IN^3	69.00	5.23 IN^3

Structure Required

# Req'd	Size	Wall Thickness
1	8.63 IN	0.125 IN

Date: 11/7/19 | City, State: San Antonio, TX | SHEET: 3 OF 3
Client: **Open Air Studios** | Overall Height: 39'-0" | Sean M. McFarland, PE
Sign: Cuellar Park | Wind Speed: 115 mph | McFarland Engineering

5626 San Fernando St

ME Job: 46307 B

Pier Footing

Pier Footing Design: *Select the footing and soil type:*

d = A / 2 * (1 + (1 + (4.36 * h) / A)^1/2))
where A = (2.34 * P) / (S1 * b)

Footing: Round
Vert. Soil Bearing (psf): 1500
Lat. Soil Bearing (psf): 150

Mmax =	12,070 #-FT
Pmax (Lateral) =	491 #
LSBP =	150 PCF
S1 =	600 PCF X d
d =	2.000 FT
A =	0.96 FT^2
h =	24.590 FT
d =	5.566 FT
USE:	2.00 FT. RND. X 6.00 FT DEEP PIER w/ (8) #4's @ 12" O.C.

#4's @ 12" O.C. (5) Ties Top 12"
18" Long Bolts - 3" Extension. 2" Washers

Soil Bearing Check:

DLmax =	573 LBS
Area of Footing =	3.14 FT^2
Actual SBP =	182 PSF
Allowable SBP =	1,500 PSF (Includes code allowed 20% increase for every foot of footing below 12" into natural grade.)

182 PSF < 1,500 PSF THEREFORE OK

Baseplate Design -

D =	8.63 IN	A36 Steel	Fy= 36ksi
e =	0.69 IN	E70 Electrodes	Fw= 928 #/in/16th
b eff =	3.75 IN	A307 A.B.'s	Ft=20 ksi
e eff =	2.25 IN	# of Bolts =	4
plate t =	1.25 IN	Column Mom =	12,070 #-FT

Dia. Bolt 0.75

P Bolt = M * 12 (in/ft) / 2 bolts (D + e + t) — 6,855 # < 8,800 #

t req'd = [(6*P*e eff* 2 bolts)/(.75*Fy(b eff + 2*t))]^1/2 — 1.047 IN < 1.25 IN

Weld = M * 12 (in/ft) / Fw (3.1415 * D^2/4) — 2.67 16th's <(2) 3.00 16th's

USE: (4) 3/4" Dia. Bolts w/ 1 1/4" Baseplate. Weld to Support with (2) 3/16" Fillet Welds.
OPTION: 3/4" Thick BASEPLATE with (4) 5/8" Gussets 5" Tall

OPEN AIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN

2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248

P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

REGISTERED LANDSCAPE ARCHITECT
MATTHEW A. MOSCOSO
2484
STATE OF TEXAS
11/01/19

PROJECT #: CSA20171
DESIGNED BY: JS
DRAWN BY: JS
REVIEWED BY: MM

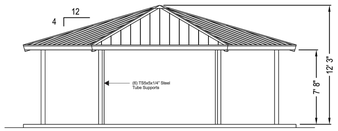
ISSUED: NOV. 01, 2019

SHEET TITLE:
FIELD LIGHT STRUCTURAL DETAILS

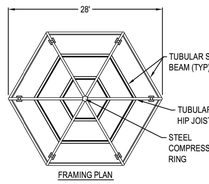
SHEET NUMBER:
L2.05

DocuSign Envelope ID: 4EB06074-9E49-465D-91E8-37D643F453F0

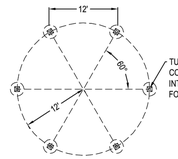
ME #: 46307



FRONT ELEVATION



FRAMING PLAN



FOOTING LAYOUT PLAN

☑ SELECT DESIRED COLOR:

☐ WHITE	☐ ROMAN BLUE	☐ CHARCOAL	☐ TERRATONE
☐ CLAY	☐ SURREY BEIGE	☐ TUDOR BROWN	☐ EVERGREEN
☐ IVORY	☐ ASH GREY	☐ MATTE BLACK	☐ BRANDYWINE
☐ PATRICIAN BRONZE	☐ LIGHT STONE	☐ AUTUMN RED	☐ HARTFORD GREEN

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. ALL DIMENSIONS ARE CONSIDERED TRUE AND REFLECT MANUFACTURER'S SPECIFICATIONS.
3. DO NOT SCALE DRAWING.
4. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info REFERENCE NUMBER 4168-014.

HEXAGONAL STRUCTURES

MODEL: HX-28-SW - STEELWORX HEXAGONAL SHELTER - 28'

McFarland Engineering
464 N. Huddlebrook Dr.,
Advance, NC 27006
STRUCTURAL SIGN DESIGN & ENGINEERING SERVICES
Ph: (281) 813-7439
Fax: (888) 712-5364
Email: sean@signstructures.com
Web: www.signstructures.com

CUELLAR PARK

Address: 5626 SAN FERNANDO ST
City/State: SAN ANTONIO, TX
Client: OPENAIR STUDIOS

ENGINEERING OF VERTICAL SUPPORT AND FOUNDATION ONLY. NO CABINET ENGINEERING PROVIDED OR IMPLIED.

Initial Drawing: (46307) AB

NC Firm Registration: F-1136
Texas Expiration Date: 6/30/2020
Texas Firm Registration: F-8996

The electronic seal appearing on this document was authorized by Sean M. McFarland, PE on November 7, 2019.

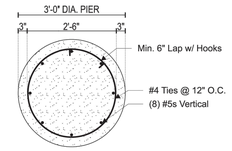
Date: 11-7-2019
Sheet #: 1 or 6

STATE OF TEXAS — SEAN M. McFARLAND — 88579 — LICENSED PROFESSIONAL ENGINEER

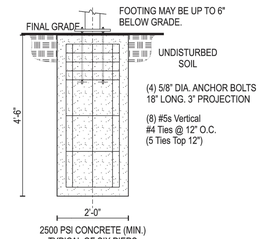
DocuSigned by: Sean McFarland — 1BDD47040CE5405...

DocuSign Envelope ID: 4EB06074-9E49-465D-91E8-37D643F453F0

ME #: 46307



PLAN VIEW
12"=1'-0"
2500 PSI CONCRETE (MIN.)
TYPICAL OF ONE PIER



2500 PSI CONCRETE (MIN.)
TYPICAL OF SIX PIERS
SCALE: NTS

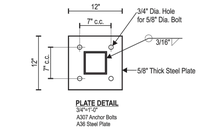


PLATE DETAIL
3/4"=1'-0"
A307 Anchor Bolts
A36 Steel Plate

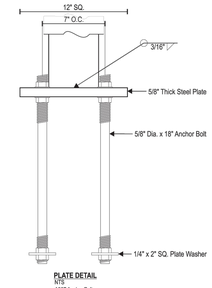


PLATE DETAIL
NTS
A307 Anchor Bolts
A36 Steel Plate

McFarland Engineering
464 N. Huddlebrook Dr.,
Advance, NC 27006
STRUCTURAL SIGN DESIGN & ENGINEERING SERVICES
Ph: (281) 813-7439
Fax: (888) 712-5364
Email: sean@signstructures.com
Web: www.signstructures.com

CUELLAR PARK
Address: 5626 SAN FERNANDO ST
City/State: SAN ANTONIO, TX
Client: OPENAIR STUDIOS
ENGINEERING OF VERTICAL SUPPORT AND FOUNDATION ONLY. NO CABINET ENGINEERING PROVIDED OR IMPLIED.
Initial Drawing: (46307) AB
NC Firm Registration: F-1136
Texas Expiration Date: 6/30/2020
Texas Firm Registration: F-8996
The electronic seal appearing on this document was authorized by Sean M. McFarland, PE on November 7, 2019.

Date: 11-7-2019
Sheet #: 2 or 6

STATE OF TEXAS — SEAN M. McFARLAND — 88579 — LICENSED PROFESSIONAL ENGINEER
DocuSigned by: Sean McFarland — 1BDD47040CE5405...

2 SHADE STRUCTURE FOOTING DETAILS

SCALE: NOT TO SCALE

Date:	11/7/19	City, State:	San Antonio, TX	SHEET:	1 OF 3
Client:	Open Air Studios	Overall Height:	13'-1"		Sean M. McFarland, PE
Sign:	Cuellar Park	Wind Speed	115 mph		McFarland Engineering

Sign Description — 5626 San Fernando St

Columns: 6
ME Job: 46307 A
Height: 2'-4"
Width: 28'-0"

BASE PLATE / ANCHOR BOLTS & FOOTING ONLY
VERTICAL SUPPORTS
ULTIMATE LOADS
30PSF

Table of Contents

Content:	Page
Design Loads	1
Support Design	1-2
General Notes	3

Structural Variables and Code Loading Specifications

Cabinet Type: Miscellaneous
Structural Section: Tube Steel - 46000psi
Number of Zones: 2

Code: 2018 IBC
Wind Speed: 115
Wind Exposure: C
Wind Loads Per ASCE 7-16

Sign Sections:

Zone	Cabinet Wt. Per Sq. Ft.	Weight	Transition (Y or N)
1	20	15.6 #/FT	
2	0	15.6 #/FT	y
3	0		
4	0		
5	0		
6	0		
7	0		
8	0		

STATE OF TEXAS — SEAN M. McFARLAND — 88579 — LICENSED PROFESSIONAL ENGINEER
DocuSigned by: Sean McFarland — 1BDD47040CE5405...

State License: Texas - 88579

Geometry:

Zone	Top Elevation	Height	* Approx. Width Width	Pressure	Force	Approx. Weight
1	13.08 FT	4.67 FT	14.00 FT *	22.66 PSF	1.48 K	1,744 #
2	8.41 FT	8.41 FT	2.09 FT *	16.99 PSF	0.30 K	788 #
				Total Wind Force =	1.78 K	2,533 #

1 ULTIMATE LOAD CALCULATIONS

SCALE: NOT TO SCALE

Date:	11/7/19	City, State:	San Antonio, TX	SHEET:	2 OF 3
Client:	Open Air Studios	Overall Height:	13'-1"		Sean M. McFarland, PE
Sign:	Cuellar Park	Wind Speed	115 mph		McFarland Engineering

5626 San Fernando St

ME Job: 46307 A

Moments at Transitions:

Zone	Lateral Force	2 Mom. Arm
1	1.48 K	10.75 FT
2	0.30 K	4.21 FT
	17.16 K-FT	

Section Properties: 1.13 IN^3

Structural Sections to be used:

Zone	Option	Tubes Dim.	Wall t.	Weight	Sxx	d/t	Sxx Req'd
2	Tubes	5.00 IN	0.250 IN	16 #/FT	6.37 IN^3	20.00	1.13 IN^3

Structure Required

# Req'd	Size	Wall Thickness
6	5.00 IN	0.250 IN

Date:	11/7/19	City, State:	San Antonio, TX	SHEET:	3 OF 3
Client:	Open Air Studios	Overall Height:	13'-1"		Sean M. McFarland, PE
Sign:	Cuellar Park	Wind Speed	115 mph		McFarland Engineering

5626 San Fernando St

ME Job: 46307 A

Pier Footings (6)

Pier Footing Design: *Select the footing and soil type:*

d = A / 2 * (1 + (1 + (4.36 * h) / A)^1/2))
where A = (2.34 * P) / (S1 * b)

Footing: Round
Vert. Soil Bearing (psf): 1500
Lat. Soil Bearing (psf): 150

Mmax =	2,860 #-FT
Pmax (Lateral) =	296 #
LSBP =	150 PCF
S1 =	356 PCF X d
d =	2.000 FT
A =	0.97 FT^2
h =	9.650 FT
d =	3.725 FT
USE:	2.00 FT. RND. X 4.50 FT DEEP PIERS

Soil Bearing Check:

DLmax =	2,533 LBS
Area of Footing =	3.14 FT^2
Actual SBP =	806 PSF
Allowable SBP =	1,050 PSF

(Includes code allowed 20% increase for every foot of footing below 12" into natural grade.)

806 PSF < 1,050 PSF THEREFORE OK

Baseplate Design -

D =	5.00 IN	A36 Steel	Fy= 36ksi
e =	1.00 IN	E70 Electrodes	Fw= 928 #/in/16th
b =	5.00 IN	A307 A.B.'s	Ft=20 ksi
d =	5.00 IN	# of Bolts = 4	Dia. Bolt 0.625
Baseplate t =	0.63 IN	Column Mom = 2,860 #-FT	

P Bolt = M * 12 (in/ft) / 2 bolts (D + e + t) — 2,590 # < 6,100 #

t req'd = [(6*P*e^2 bolts)/(.75 * Fy (D+2*t))] ^1/2 — .429 IN < 0.63 IN

Weld = M * 12 (in/ft) / Fw (b*d + D^2/3) — 1.11 16th's < 3.00 16th's

USE: (4) 5/8" Dia. Bolts w/ 5/8" Baseplate. Weld to Support with (1) 3/16" Fillet Weld.
18" Long Anchor Bolts, 3" Extension Above Concrete (MAX). 2" Embedded Washers.

OPENAIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN

2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248

P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

REGISTERED LANDSCAPE ARCHITECT — MATTHEW A. MOORE — 2484 — STATE OF TEXAS
11/01/19

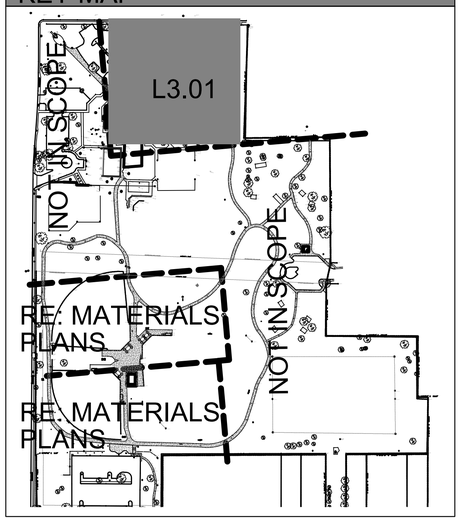
PROJECT #: CSA20171
DESIGNED BY: JS
DRAWN BY: JS
REVIEWED BY: MM

ISSUED: NOV. 01, 2019

SHEET TITLE:
SHADE STRUCTURE STRUCTURAL DETAILS

SHEET NUMBER:
L2.06

KEY MAP

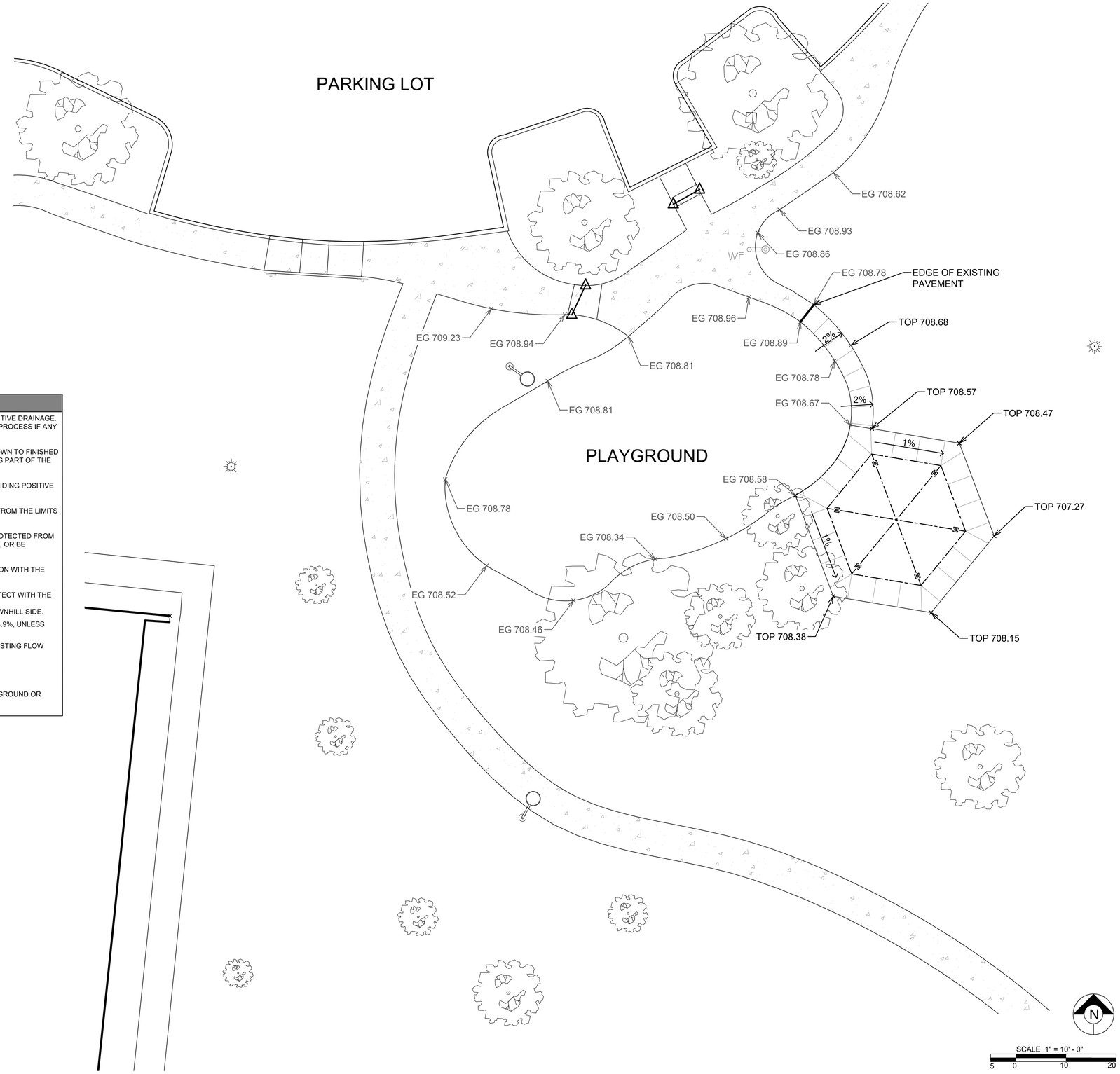


GRADING NOTES

1. ALL AREAS TO BE DISTURBED BY CONSTRUCTION SHALL BE FINE GRADED TO ACHIEVE POSITIVE DRAINAGE. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IN WRITING FOR CLARIFICATION AND PROCESS IF ANY AREA WITHIN CONSTRUCTION LIMITS DOES NOT ACHIEVE PROPER DRAINAGE.
2. ALL PROPOSED GRADES INDICATED ARE FINISHED GRADES. THE PROPOSED PAVING IS SHOWN TO FINISHED GRADE AND THE CONTRACTOR IS RESPONSIBLE FOR EXCAVATIONS AND IMPROVEMENTS AS PART OF THE OVERALL GRADING.
3. ALL LANDFORMS SHALL BE GRADED TO BE A SMOOTH, FLOWING, ROUNDED SURFACE PROVIDING POSITIVE DRAINAGE AND VISUAL LAND FORM CONTINUITY.
4. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL CLEARED BRUSH, DEBRIS, ETC, FROM THE LIMITS OF CONSTRUCTION, DISPOSE OF MATERIALS OFF SITE.
5. EXISTING TREES THAT ARE IDENTIFIED ON THE DRAWINGS TO BE PRESERVED SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. CONSTRUCTION EQUIPMENT SHALL NOT OPERATE, PARK, OR BE STOPPED UNDER THE CANOPIES OF EXISTING TREES.
6. WHEN CLEARING FOR GRADING, THE CONTRACTOR SHALL COORDINATE TREE PRESERVATION WITH THE LANDSCAPE ARCHITECT AND OWNER'S REPRESENTATIVE.
7. GRADING FOR ALL IMPROVEMENTS SHALL OCCUR AS DIRECTED BY THE LANDSCAPE ARCHITECT WITH THE FOLLOWING GUIDELINES:
   a. ALL WALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2% IN THE DIRECTION OF THE DOWNHILL SIDE.
   b. THE LONGITUDINAL SLOPE OF ALL WALKS AND/OR TRAILS SHALL BE NO GREATER THAN 4.9%, UNLESS OTHERWISE NOTED.
   C. ALL GRADES SHALL BE FURNISHED TO A SMOOTH, FLOWING CONTOUR; MAINTAINING EXISTING FLOW PATTERNS, UNLESS DIRECTED OTHERWISE.
8. REFER TO LAYOUT SHEETS FOR ALL LAYOUT INFORMATION.
9. CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND MARKING OF ALL EXISTING UNDERGROUND OR ABOVE GROUND UTILITIES WITHIN THE PROJECT AREA.

GRADING LEGEND

EG	EXISTING GRADE XXX.XX
TOP	TOP OF PAVEMENT XXX.XX



OPENAIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN

2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248

P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

REGISTERED LANDSCAPE ARCHITECT
MATTHEW LAMONTAGNE
2484
STATE OF TEXAS
11/01/19

PROJECT #: CSA20171
DESIGNED BY: JS
DRAWN BY: JS
REVIEWED BY: MM

ISSUED: NOV. 01, 2019

SHEET TITLE:
GRADING PLAN

SHEET NUMBER:
L3.01

ELECTRICAL SYMBOLS & ABBREVIATIONS

[SOME SYMBOLS MAY NOT BE USED ON THIS PROJECT]

CNG ENGINEERING
MEP DESIGN | PLANNING | COMMISSIONING
1917 N NEW BRAUNFELS AVE, SUITE 201
SAN ANTONIO, TEXAS 78208
T 210.224.8841 F 210.224.8224
www.cngengineering.com
TBPE FIRM # F-7964

SYMBOL / DESCRIPTION

GENERAL

SYMBOL	DESCRIPTION
PB	PULL BOX
	EQUIPMENT CONNECTION, HARD WIRED
WP	LOCKABLE GFCI, DUPLEX RECEPTACLE 20A, 125V, 3W, NEMA 5-20R (WP = NEMA 3R WHILE IN USE)

PANELBOARDS (26 24 16)

SYMBOL	DESCRIPTION
	EXISTING PANELBOARD, SURFACE MOUNTED

INTERIOR & EXTERIOR LIGHTING (26 51 00 & 26 56 00)

SYMBOL	DESCRIPTION
	POLE LIGHT FIXTURE
	DOWNLIGHT LIGHT FIXTURE
	SPORTS LIGHTING POLE WITH SPORTS LIGHTS

RACEWAYS (26 05 33)

SYMBOL	DESCRIPTION
UGE	UNDERGROUND UTILITY LINE
UGE	EXISTING UNDERGROUND UTILITY LINE
	CONDUIT CONCEALED IN WALL OR CEILING WITH ONE PHASE, NEUTRAL AND GROUND CONDUCTOR U.N.O.
	UNDERGROUND BRANCH CIRCUIT
PANEL-2,4,6 IG G N	BRANCH CIRCUIT HOMERUN, WITH PANEL AND BREAKER POSITION INDICATED. SMALL TICK(S) = PHASE CONDUCTORS, LARGE TICK = NEUTRAL CONDUCTOR AND LARGE TICK WITH CIRCLE = GROUND CONDUCTOR.

ABBREVIATION / DESCRIPTION

ABBREVIATION	DESCRIPTION
A	AMPERE(S)
ABV	ABOVE
AIC	AMPERE INTERRUPTING CAPACITY
AFG	ABOVE FINISHED GRADE
BFF	BELOW FINISHED FLOOR
BLDG	BUILDING
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
COND	CONDUCTOR
DIA	DIAMETER
DIST	DISTRIBUTION
DN	DOWN
DWGS	DRAWINGS
EC	EMPTY CONDUIT
EMT	ELEC. METALLIC TUBING
EQMT	EQUIPMENT
EXTG	EXISTING
FC	FOOT CANDLES
FLEX	FLEXIBLE METAL CONDUIT
FN	FULL NEUTRAL
FT	FEET, FOOT
GALV	GALVANIZED
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFI	GROUND FAULT INTERRUPTER
GND	GROUND
HID	HIGH INTENSITY DISCHARGE
HP	HORSE POWER
HOA	HAND OFF AUTOMATIC
HZ	HERTZ

REFERENCE SYMBOLS

SYMBOL	DESCRIPTION
	CIRCUIT END EXTENSION
X	KEYED NOTE TAG, HEXAGON
X	ADDENDUM, ASI, ASR, PR TAG
1 E1.0	ENLARGED PLAN, DETAIL TAG
5 E303	ELEVATION TAG
5 E303	SECTION TAG

ABBREVIATION / DESCRIPTION

ABBREVIATION	DESCRIPTION
ID	INSIDE DIAMETER
IMC	INTERMEDIATE STEEL CONDUIT
IN	INCHES
JB	JUNCTION BOX
KV	KILOVOLT
KVA	KILOVOLT AMPERE
KW	KILOWATT
KWH	KILOWATT HOUR
LB	POUND
MAX	MAXIMUM
MH	MOUNTING HEIGHT
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MTG	MOUNTING
NA	NOT APPLICABLE
NC	NORMALLY CLOSED
NF	NON FUSED
NO	NORMALLY OPEN
N.T.S.	NOT-TO-SCALE
OC	ON CENTER
OH	OVERHEAD
P	POLE
PEC	PHOTO CELL
PNL	PANELBOARD
PVC	POLY VINYL CHLORIDE CONDUIT
PWR	POWER
RGS	RIGID GALVANIZED STEEL CONDUIT
RMC	RIGID METAL CONDUIT
SC	SPLIT CIRCUIT
SN	SOLID NEUTRAL
SQFT	SQUARE FEET,FOOT
SW	SWITCH
TC	TIME CLOCK
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
V	VOLT(S)
VP	VAPOR PROOF
W	WIRE
WP	WEATHERPROOF
XFMR	TRANSFORMER
Z	IMPEDENCE
1P	ONE POLE
2P	TWO POLE
3P	THREE POLE
O	PHASE

GENERAL NOTES

1. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH EXISTING CONDITIONS AND REVIEW ALL RELATED DRAWINGS AND SPECIFICATIONS PRIOR TO BID.
2. THE DRAWINGS ARE DIAGRAMMATICAL. CONTRACTOR SHALL VERIFY FIELD CONDITIONS AND DETERMINE CONDUIT ROUTING AND EXACT LOCATIONS OF EQUIPMENT AND DEVICES. NOTIFY THE ARCHITECT/ENGINEER IF THE APPROXIMATE CONDUIT ROUTING SHOWN ON PLANS IS NOT FEASIBLE. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY CONFLICTS PRIOR TO ROUGH-IN.
3. LOCATIONS OF DEVICES ARE DIAGRAMMATICAL. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY CONFLICTS PRIOR TO ROUGH-IN.
4. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT ISSUE OF THE NATIONAL ELECTRIC CODE AND ALL APPLICABLE LOCAL CODES. ALL WORK SHALL MATCH THE EXISTING BUILDING'S ELECTRICAL INSTALLATION. ALL SYSTEMS SHALL BE INSTALLED IN A WORKMANLIKE MANNER IN ACCORDANCE WITH APPLICABLE STANDARDS AND SPECIFICATIONS APPROVED BY ALL AUTHORITIES HAVING JURISDICTION.
5. PROVIDE A TYPED PANEL DIRECTORY FOR EACH NEW OR MODIFIED ELECTRICAL PANEL. DIRECTORY SHALL IDENTIFY THE CIRCUIT NUMBER, DEVICES SERVED, AND LOCATION OF DEVICES BY ROOM NUMBER. FILE COPY OF DIRECTORIES WITH THE OWNER'S REPRESENTATIVE WHEM WORK IS COMPLETED, AND PROVIDE COPIES WITH THE OWNER'S MANUALS.
6. IDENTIFY PANEL AND CIRCUIT NUMBER FOR ALL INSTALLED ELECTRICAL DEVICES ON THE OUTSIDE OF THE JUNCTION BOX.
7. REFER TO SHEETS E1.1 AND E1.2 FOR ADDITIONAL GENERAL NOTES.

DEMOLITION GENERAL NOTES

1. CONDUCT ALL DEMOLITION WORK IN SUCH MANNER TO MAINTAIN A SAFE WORK ENVIRONMENT AND IN ACCORDANCE WITH APPLICABLE SAFETY RULES AND PROCEDURES WITHIN NEC, NESC, NECA, AND OSHA REQUIREMENTS.
2. CONTRACTOR SHALL REQUEST AND REVIEW ANY HAZARDOUS MATERIALS SURVEYS FROM THE OWNER'S REPRESENTATIVE. OBSERVE RECOMMENDED PRECAUTIONS AND VERIFY THE STATUS OF ANY REMEDIAL WORK RECOMMENDED OR NOTED WITHIN THE HAZARDOUS MATERIAL SURVEY. NOTIFY THE OWNER'S REPRESENTATIVE IF ANY HAZARDOUS MATERIALS ARE SUSPECTED OR OBSERVED DURING THE COURSE OF EXECUTING THIS CONTRACT.
3. SURVEY AREAS OF THE FACILITY SCHEDULED FOR RENOVATION OR PARTIAL DEMOLITION PRIOR TO ANY WORK BEING PROFORMED. SUBMIT A REPORT OF THIS PRE-WORK SURVEY DETAILING ANY UTILIZATION EQUIPMENT OR SYSTEMS THAT ARE NOT IN GOOD WORKING ORDER IN ADVANCE OF ANY DEMOLITION WORK AND REVIEW WITH THE OWNER'S REPRESENTATIVE.
4. RESTORE CIRCUITS, UTILIZATION EQUIPMENT, AND SYSTEMS AFFECTED BY SELECTIVE DEMOLITION TO THE CONDITION NOTED IN THE PRE-WORK SURVEY REPORT. ELECTRICAL CIRCUITS WITH A PORTION OF THE LOAD REMOVED SHALL HAVE THE REMOVED LOADS ASSOCIATED CIRCUITRY TERMINATED IN SUCH A MANNER THAT THE REMAINING LOAD REMAINS FULLY OPERATIONAL.
5. THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL FOR SALVAGED MATERIAL. REQUEST THAT THE OWNER PROVIDE DIRECTION ON DISPOSITION OF SALVAGED MATERIAL FIVE (5) WORKING DAYS PRIOR TO REMOVAL. IF SO DIRECTED BY THE OWNER, SALVAGED MATERIAL SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE DELIVERED BY THE CONTRACTOR TO A LOCATION AS DIRECTED. REMOVE AND DISPOSE ANY SALVAGED MATERIAL NOT RETAINED BY THE OWNER.
6. VERIFY LOCATION AND QUANTITY OF ITEMS TO BE REMOVED. NO ALLOWANCE WILL BE MADE BECAUSE OF CONTRACTOR'S UNFAMILIARITY WITH THESE DETAILS.
7. LIGHTS SCHEDULED FOR DEMOLITION SHALL HAVE THEIR ASSOCIATED CIRCUITRY REMOVED UNLESS OTHERWISE NOTED. ASSOCIATED CIRCUITRY IS DEFINED AS ALL WIRE, CONDUIT, JUNCTION BOXES, DEVICE BOXES, WIRING DEVICES, COVER PLATES, PROTECTIVE DEVICE, AND PANEL, ETC. ASSOCIATED WITH THE ITEM SCHEDULED FOR REMOVAL. CONDUIT FOR ITEMS SCHEDULED FOR REMOVAL AND IN INACCESSIBLE AREAS SHALL BE EMPTIED AND SEALED OR OTHERWISE TERMINATED IN A SAFE MANNER ACCEPTABLE TO THE OWNER.
8. DAMAGED AREAS CAUSED BY REMOVAL OF ANY OF THE ABOVE ITEMS AND WHICH ARE NOT CONCEALED BY NEW CONSTRUCTION SHALL BE REPAIRED TO MATCH ADJACENT SURFACES. OPENINGS CREATED BY THE REMOVAL OF THESE ITEMS THROUGH FIRE RATED WALLS SHALL BE FIRE STOPPED.
9. REMOVE ABANDONED CONDUIT TO POINT OF CONCEALMENT BEHIND INACCESSIBLE SURFACES. ENTIRELY REMOVE ABANDONED WIRING.
10. IF A CONDUIT RUN IS EXPOSED OR A SURFACE RACEWAY LEFT WITHOUT A MOUNTING SURFACE DUE TO REMOVAL OF A PARTITION, THE RACEWAY SHALL BE REROUTED AS ACCEPTABLE TO THE OWNER/ARCHITECT.
11. PROTECT ELECTRICAL EQUIPMENT, OUTLETS, AND DEVICES THAT ARE SCHEDULED TO BE RELOCATED. REPAIR, RESTORE, OR REPLACE ITEMS DAMAGED WHEM REMOVED TO THE APPROVAL OF THE OWNER. NOTIFY THE OWNER/ARCHITECT/ENGINEER OF ANY ELECTRICAL EQUIPMENT, OUTLETS AND/OR DEVICES WHICH ARE SCHEDULED TO BE RE-USED THAT ARE FOUND TO BE UNUSABLE.
12. CONTRACTOR SHALL UPDATE PANELBOARD DIRECTORIES AT EACH PANEL WHERE CIRCUIT MODIFICATIONS ARE MADE

LIGHTING GENERAL NOTES

1. ELECTRICAL DRAWINGS INDICATE GENERAL LOCATIONS OF LIGHTING FIXTURES ONLY. FOR EXACT LOCATIONS AND SPACING, SEE ARCHITECTURAL DRAWINGS. IF CONTRACTOR DETERMINES THAT THERE IS A DIFFERENCE IN QUANTITY OF FIXTURES SHOWN ON THE ARCHITECTURAL AND ELECTRICAL DRAWINGS, HE SHALL USE THE HIGHER NUMBER OF THE TWO QUANTITIES FOR BIDDING AND THEN CONTACT THE DESIGN TEAM FOR FINAL RESOLUTION.
2. EXTERIOR LIGHTING TO BE CONTROLLED BY THE EXISTING LIGHTING CONTROL SYSTEM.
3. REFERENCE LIGHTING FIXTURE SCHEDULE FOR ADDITIONAL FIXTURE INFORMATION.

OPENAIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN

2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248

P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

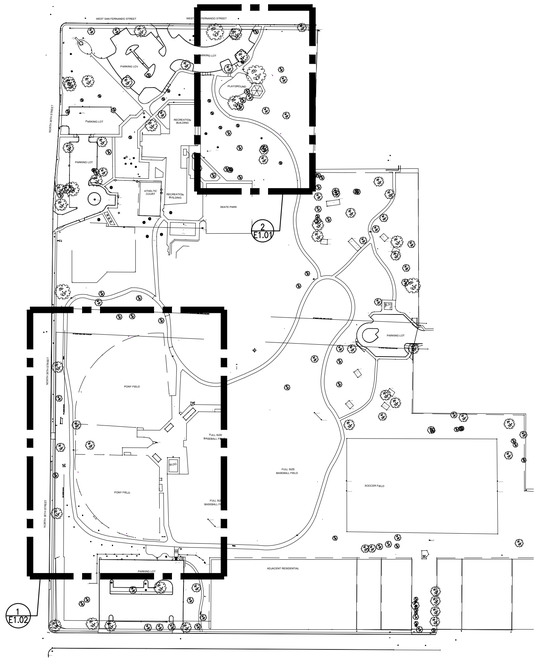
STATE OF TEXAS
DOUGLAS W. SCHULZE
80707
LICENSED
PROFESSIONAL ENGINEER
10/30/2019

PROJECT #: CSA20171
DESIGNED BY: J.C.
DRAWN BY: A.A.
REVIEWED BY: D.S.

ISSUED: 11/01/2019

SHEET TITLE:
ELECTRICAL SYMBOLS & ABBREVIATIONS

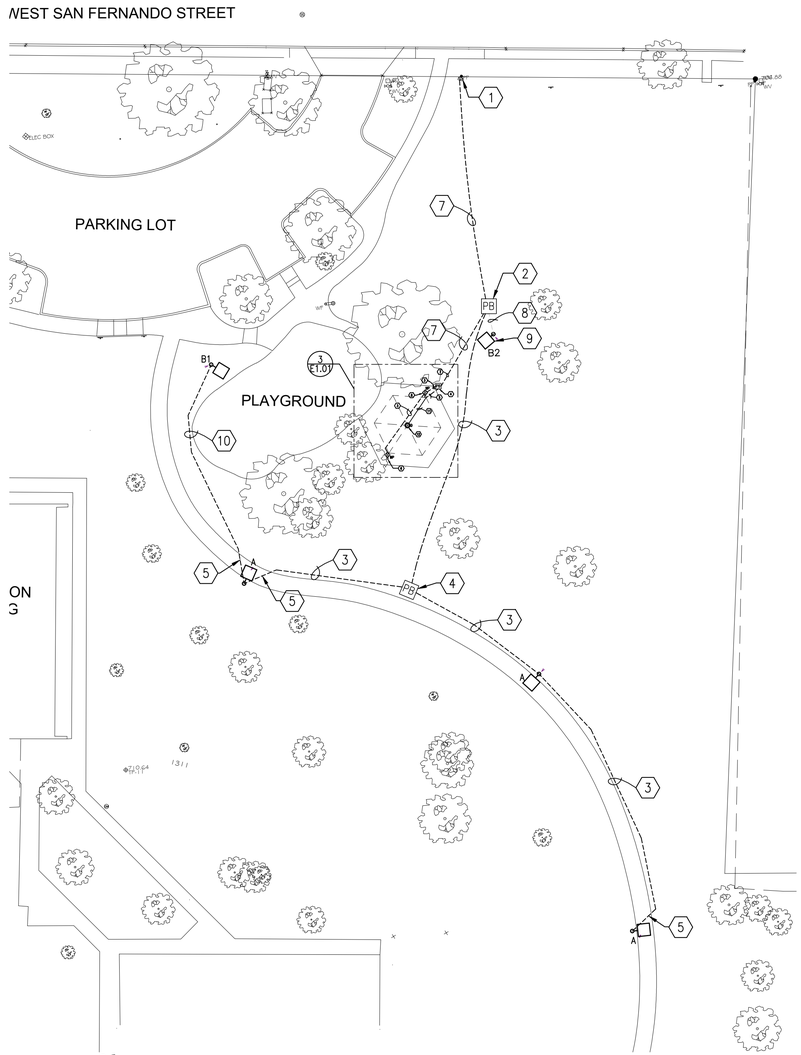
SHEET NUMBER:
E1.00



N

1 PARTIAL OVERALL ELECTRICAL SITE PLAN

SCALE: NOT TO SCALE



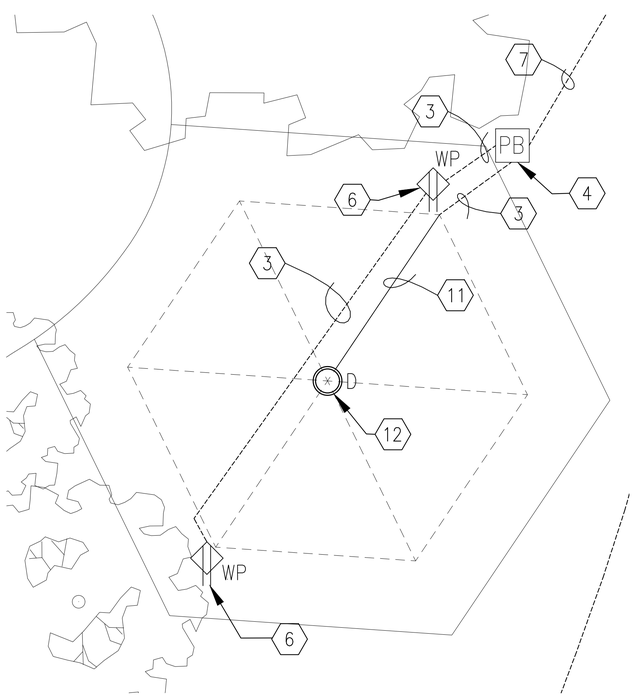
N

2 ELECTRICAL SITE PLAN - PLAYGROUND

SCALE: 1" = 30'

GRAPHIC SCALE

30' 20' 10' 0 15' 30' 45'



N

3 ENLARGED ELECTRICAL SITE PLAN - PAVILION

SCALE: 1" = 15'

GRAPHIC SCALE

15' 10' 5' 0

KEYED NOTES: (THIS SHEET ONLY)

1. EXISTING METERED SERVICE, ELECTRICAL PANEL AND TIMECLOCK TO REMAIN. REFER TO SHEET E2.01, DETAIL NO. 1 FOR ADDITIONAL INFORMATION.
2. INTERCEPT ELECTRICAL CONDUIT SERVING LIGHT POLE AND LEAVE READY FOR INSTALLATION OF IN-GRADE JUNCTION BOX AND EXTENSION OF CIRCUIT TO NEW POLE MOUNTED PEDESTRIAN LIGHT. PROVIDE MEDIUM DUTY PULLBOX PER TYPICAL DETAIL 1/E3.01.
3. PROVIDE UNDERGROUND BRANCH CIRCUIT WITH (2)#10, (1)#10 GND. IN 1" C.
4. PROVIDE MEDIUM DUTY PULLBOX PER TYPICAL DETAIL 1/E3.01.
5. PROVIDE BORE UNDER CONCRETE SIDEWALK FOR NEW UNDERGROUND BRANCH CIRCUIT.
6. GFCI RECEPTACLE WITH LISTED WHILE-IN-USE LOCKABLE COVER. PROVIDE DIE-CAST ALUMINUM WHILE-IN-USE COVER EQUAL TO INTERMATIC WP1030MXD. REFER TO DETAIL 3/E3.01.
7. PROVIDE UNDERGROUND BRANCH CIRCUIT WITH (4)#10, (1)#10 GND. IN 1" C.
8. RECONNECT EXISTING POLE MOUNTED LIGHT FIXTURE AT NEW PULLBOX. UNDERGROUND ELECTRICAL CIRCUIT TO EXISTING LIGHT POLE TO REMAIN.
9. ALTERNATE 1: REPLACE EXISTING LIGHTING FIXTURES WITH NEW LED LIGHTING FIXTURE AS SPECIFIED. VERIFY CIRCUIT CONFIGURATION AND VOLTAGE PRIOR TO PURCHASING FIXTURES. EXTEND 2#10,#10G, IN 1"C TO NEW POLE MOUNTED PEDESTRIAN LIGHTING FIXTURE. COORDINATE MOUNTING BRACKET REQUIREMENTS WITH EXISTING POLE TO REMAIN.
10. ALTERNATE 1: PROVIDE UNDERGROUND BRANCH CIRCUIT TO NEW LIGHT POLE WITH (2)#10, (1)#10 GND. IN 1" C.
11. PROVIDE BRANCH CIRCUIT TO CEILING FOR PAVILION LIGHT FIXTURE WITH (2)#10, (1)#10 GND. IN 1" C. COORDINATE WITH PAVILION VENDOR TO ACCOMMODATE USE OF HOLLOW SUPPORT STRUCTURE FRAME TO HOUSE CONDUIT AND WIRING FOR FIXTURE MOUNTED TO CEILING.
12. COORDINATE WITH PAVILION VENDOR TO PROVIDE FLAT SURFACE FOR INSTALLATION OF DOWNLIGHT TO INTERIOR CEILING ABOVE CENTER OF PAVILION.

GENERAL NOTES: (THIS SHEET ONLY)

A. CONDUCT ALL DEMOLITION WORK IN SUCH A MANNER AS TO MAINTAIN A SAFE WORK ENVIRONMENT AND IN ACCORDANCE WITH APPLICABLE SAFETY RULES AND PROCEDURES WITHIN NEC, NECA AND OSHA REQUIREMENTS.

B. SURVEY AREAS OF THE FACILITY SCHEDULED FOR RENOVATION OR PARTIAL DEMOLITION PRIOR TO ANY WORK BEING PERFORMED. SUBMIT REPORT OF THE PRE-WORK SURVEY DETAILING ANY UTILIZATION EQUIPMENT OR SYSTEMS THAT ARE NOT IN GOOD WORKING ORDER IN ADVANCE OF ANY DEMOLITION WORK AND REVIEW WITH THE OWNER'S REPRESENTATIVE.

C. CONTRACTOR TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO EXCAVATION OR DEMOLITION. CONTRACTOR SHALL BE RESPONSIBLE TO USE CALL 811 FOR LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO DIGGING OR TRENCHING.

D. RESTORE CIRCUITS, UTILIZATION EQUIPMENT AND SYSTEMS AFFECTED BY SELECTIVE DEMOLITION TO THE CONDITION NOTED IN THE PRE-WORK SURVEY REPORT. ELECTRICAL CIRCUITS WITH A PORTION OF THE LOAD REMOVED SHALL HAVE THE REMOVED LOADS ASSOCIATED CIRCUITRY TERMINATED IN SUCH A MANNER THAT THE REMAINING LOAD REMAINS FULLY OPERATIONAL.

E. THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL FOR SALVAGED MATERIAL. REQUEST THAT THE OWNER PROVIDE DIRECTION ON DISPOSITION OF SALVAGED MATERIAL FIVE(5) WORKING DAYS PRIOR TO REMOVAL. IF SO DIRECTED BY THE OWNER, SALVAGED MATERIAL SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE DELIVERED BY THE CONTRACTOR TO A LOCATION AS DIRECTED. REMOVE AND DISPOSE ANY SALVAGED MATERIAL NO RETAINED BY THE OWNER.

F. DAMAGED AREAS CAUSED BY REMOVAL OF ANY OF THE ABOVE ITEMS AND WHICH ARE NOT CONCEALED BY NEW CONSTRUCTION SHALL BE REPAIRED TO MATCH ADJACENT SURFACES.

G. CONTRACTOR SHALL SUBMIT WRITTEN REQUEST TO SHUT OFF POWER TO THE SITE OR ELECTRICAL DEMOLITION AND NEW WORK 10 DAYS PRIOR TO SHUTOFF.

H. FOR SYMBOLS AND ABBREVIATIONS, REFER TO SHEET E0.0.

I. PROVIDE SCH. 80 PVC DIRECT-BURIAL CONDUITS. BURY CONDUITS A MINIMUM OF 24" BELOW FINISHED GRADE OR PAVEMENT. PROVIDE CONCRETE CAP NOT LESS THAN 2" THICK ABOVE DIRECT BURIED LOW VOLTAGE CONDUITS WHERE SUBJECT TO VEHICULAR OR EXCAVATION DAMAGE OR WHERE MINIMUM BURIAL DEPTH CANNOT BE ACHIEVED.

J. CONTRACTOR SHALL POT-HOLE AROUND/NEAR ALL EXISTING UTILITIES SHOWN ON SITE PLAN TO VERIFY LOCATION AND DEPTH PRIOR TO BEGINNING ANY CONSTRUCTION. IF DISCREPANCIES ARE FOUND, CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT AND PROJECT MANAGER FOR FURTHER DIRECTION.

K. REFER TO DETAIL 2/E3.01 FOR LIGHT POLE FOOTING DETAILS.

L. REFER TO DETAIL 5/E3.01 and 6/E3.01 FOR TRENCHING DETAILS.

CNG ENGINEERING
MEP DESIGN | PLANNING | COMMISSIONING
1917 N NEW BRAUNFELS AVE, SUITE 201
SAN ANTONIO, TEXAS 78208
T 210.224.8841 F 210.224.8224
www.cngengineering.com
TBPE FIRM # F-7964

OPENAIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN
2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248
P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

STATE OF TEXAS
DOUGLAS W. SCHULZE
80707
LICENSED
PROFESSIONAL ENGINEER
12/31/2019

PROJECT #: CSA20171
DESIGNED BY: J.C.
DRAWN BY: A.A.
REVIEWED BY: D.S.
ISSUED: 11/01/2019

SHEET TITLE:
ELECTRICAL SITE PLAN

SHEET NUMBER:
E1.01

KEYED NOTES: (THIS SHEET ONLY)

1. PROVIDE PROVIDE EMPTY 1-1/4" CONDUIT WITH PULLSTRING AT INDICATED LOCATION.
2. ALTERNATE 2: PROVIDE UNDERGROUND BRANCH CIRCUIT TO SPORT LIGHTING POLE WITH (2)#8, (1)#8 GND, IN 1-1/4" C. (SCH. 80 PVC)
3. ALTERNATE 3: PROVIDE UNDERGROUND BRANCH CIRCUIT TO SPORT LIGHTING POLE WITH (2)#8, (1)#8 GND, IN 1-1/4" C. (SCH. 80 PVC)
4. ALTERNATE 2: PROVIDE SPORT LIGHTING POLE WITH (2) SPORTS LIGHTS. REFER TO GENERAL NOTE K ON THIS SHEET FOR AIMING AND CONTROL DETAILS.
5. ALTERNATE 2: PROVIDE SPORT LIGHTING POLE WITH (1) SPORTS LIGHT. REFER TO GENERAL NOTE K ON THIS SHEET FOR AIMING AND CONTROL DETAILS.
6. ALTERNATE 3: PROVIDE SPORT LIGHTING POLE WITH (2) SPORTS LIGHTS. REFER TO GENERAL NOTE K ON THIS SHEET FOR AIMING AND CONTROL DETAILS.
7. ALTERNATE 3: PROVIDE (1) SPORTS LIGHT TO BE MOUNTED TO SPORTS LIGHTING POLE AT LOCATION. REFER TO GENERAL NOTE K ON THIS SHEET FOR AIMING AND CONTROL DETAILS.
8. PROVIDE MEDIUM DUTY PULLBOX PER TYPICAL DETAIL 1/E3.01.
9. EXISTING METERED SERVICE, AND ELECTRICAL EQUIPMENT TO REMAIN. REFER TO SHEET E2.01, DETAIL NO. 2 FOR ADDITIONAL INFORMATION.
10. ALTERNATE 2: ADD SURGE PROTECTION DEVICE TO EXISTING PANEL
11. PROVIDE BORE UNDER CONCRETE SIDEWALK FOR NEW UNDERGROUND BRANCH CIRCUIT.

GENERAL NOTES: (THIS SHEET ONLY)

A. CONDUCT ALL DEMOLITION WORK IN SUCH A MANNER AS TO MAINTAIN A SAFE WORK ENVIRONMENT AND IN ACCORDANCE WITH APPLICABLE SAFETY RULES AND PROCEDURES WITHIN NEC, NECA AND OSHA REQUIREMENTS.

B. SURVEY AREAS OF THE FACILITY SCHEDULED FOR RENOVATION OR PARTIAL DEMOLITION PRIOR TO ANY WORK BEING PERFORMED. SUBMIT REPORT OF THE PRE-WORK SURVEY DETAILING ANY UTILIZATION EQUIPMENT OR SYSTEMS THAT ARE NOT IN GOOD WORKING ORDER IN ADVANCE OF ANY DEMOLITION WORK AND REVIEW WITH THE OWNER'S REPRESENTATIVE.

C. CONTRACTOR TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO EXCAVATION OR DEMOLITION. CONTRACTOR SHALL BE RESPONSIBLE TO USE CALL 811 FOR LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO DIGGING OR TRENCHING.

D. RESTORE CIRCUITS, UTILIZATION EQUIPMENT AND SYSTEMS AFFECTED BY SELECTIVE DEMOLITION TO THE CONDITION NOTED IN THE PRE-WORK SURVEY REPORT. ELECTRICAL CIRCUITS WITH A PORTION OF THE LOAD REMOVED SHALL HAVE THE REMOVED LOADS ASSOCIATED CIRCUITRY TERMINATED IN SUCH A MANNER THAT THE REMAINING LOAD REMAINS FULLY OPERATIONAL.

E. THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL FOR SALVAGED MATERIAL. REQUEST THAT THE OWNER PROVIDE DIRECTION ON DISPOSITION OF SALVAGED MATERIAL FIVE(5) WORKING DAYS PRIOR TO REMOVAL. IF SO DIRECTED BY THE OWNER, SALVAGED MATERIAL SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE DELIVERED BY THE CONTRACTOR TO A LOCATION AS DIRECTED. REMOVE AND DISPOSE ANY SALVAGED MATERIAL NO RETAINED BY THE OWNER.

F. DAMAGED AREAS CAUSED BY REMOVAL OF ANY OF THE ABOVE ITEMS AND WHICH ARE NOT CONCEALED BY NEW CONSTRUCTION SHALL BE REPAIRED TO MATCH ADJACENT SURFACES.

G. CONTRACTOR SHALL SUBMIT WRITTEN REQUEST TO SHUT OFF POWER TO THE SITE OR ELECTRICAL DEMOLITION AND NEW WORK 10 DAYS PRIOR TO SHUTOFF.

H. FOR SYMBOLS AND ABBREVIATIONS, REFER TO SHEET E0.0.

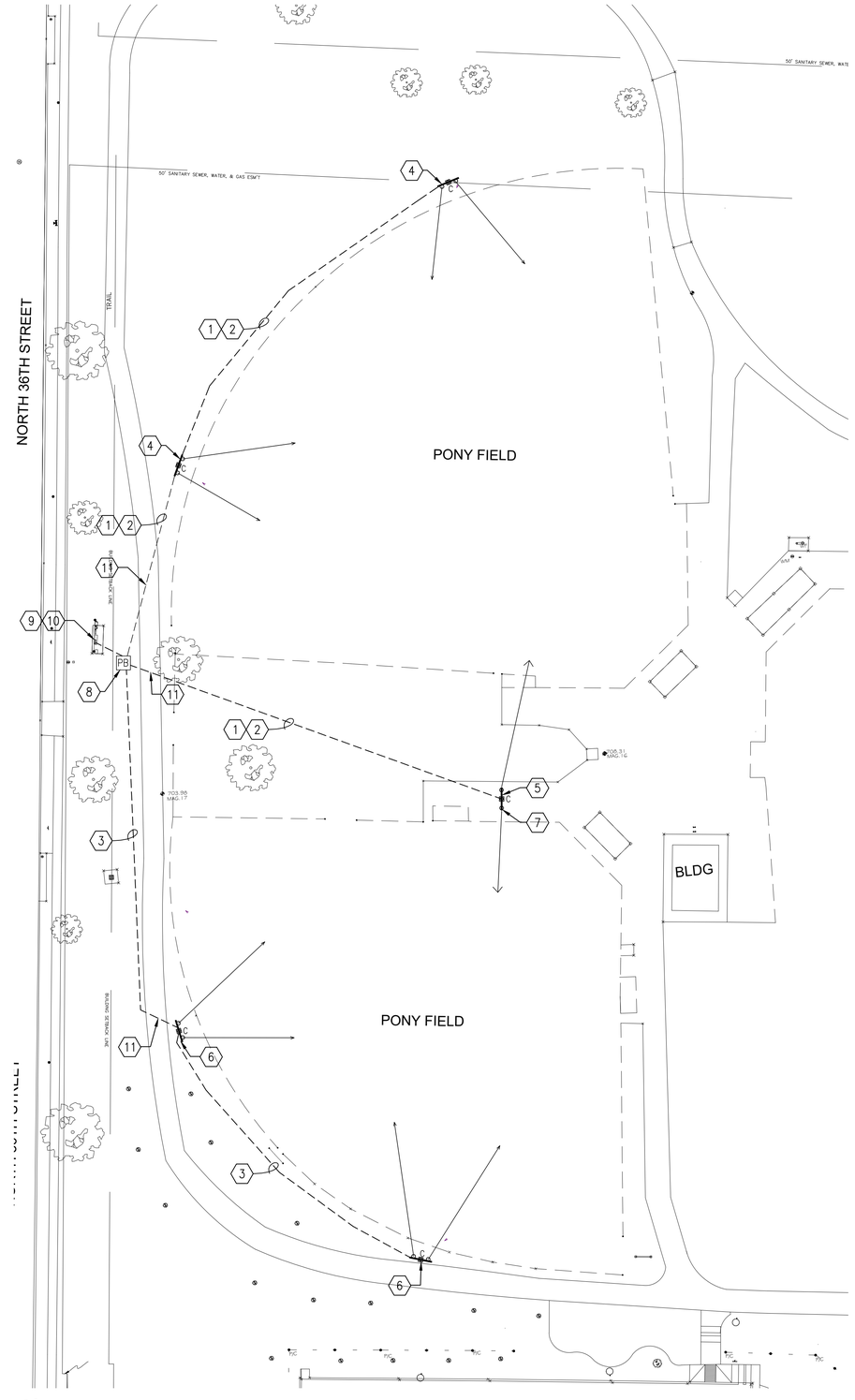
I. PROVIDE SCH. 80 PVC DIRECT-BURIAL CONDUITS. BURY CONDUITS A MINIMUM OF 24" BELOW FINISHED GRADE OR PAVEMENT. PROVIDE CONCRETE CAP NOT LESS THAN 2" THICK ABOVE DIRECT BURIED LOW VOLTAGE CONDUITS WHERE SUBJECT TO VEHICULAR OR EXCAVATION DAMAGE OR WHERE MINIMUM BURIAL DEPTH CANNOT BE ACHIEVED.

J. CONTRACTOR SHALL POT-HOLE AROUND/NEAR ALL EXISTING UTILITIES SHOWN ON SITE PLAN TO VERIFY LOCATION AND DEPTH PRIOR TO BEGINNING ANY CONSTRUCTION. IF DISCREPANCIES ARE FOUND, CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT AND PROJECT MANAGER FOR FURTHER DIRECTION.

K. SPORTS LIGHTING FIXTURES SHALL BE AIMED AS SHOWN ON PLANS WITH BEAM ANGLES ALL BELOW 90 DEGREES FROM NADIR. LIGHTING FIXTURES TO BE CONTROLLED THROUGH EXISTING TIME CLOCK SYSTEM. REFER TO SHEET

NOTE:

PROPOSED LIGHTS DO NOT MEET UIL COMPETITION LIGHTING REGULATIONS. PROPOSED LIGHTING IS SERVING ONLY AS ADDITIONAL SOURCE OF LIGHT FOR FIELDS PER REQUEST OF CITIZENS AT PUBLIC MEETINGS.



N

1 **ELECTRICAL SITE PLAN - PONY FIELDS**

SCALE: 1" = 30'

GRAPHIC SCALE

30' 20' 10' 0 15' 30' 45'

CNG ENGINEERING
MEP DESIGN | PLANNING | COMMISSIONING
1917 N NEW BRAUNFELS AVE, SUITE 201
SAN ANTONIO, TEXAS 78208
T 210.224.8841 F 210.224.8224
www.cngengineering.com
TBPE FIRM # F-7964

OPENAIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN

2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248

P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

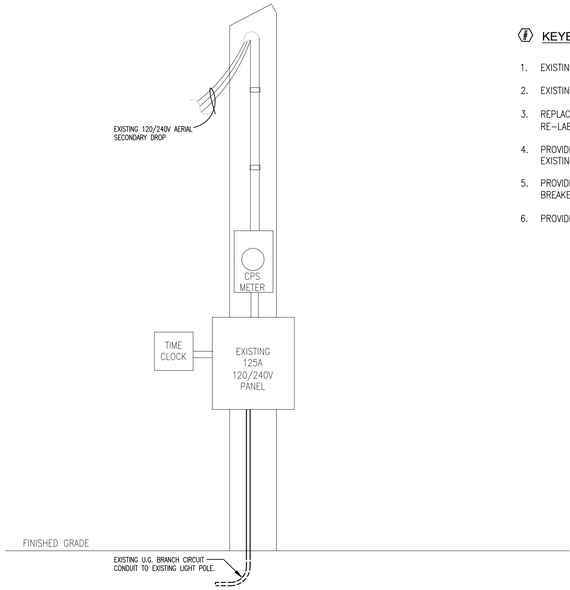
STATE OF TEXAS
DOUGLAS W. SCHULZE
80707
LICENSED
PROFESSIONAL ENGINEER
TBPE F-7964

PROJECT #: CSA20171
DESIGNED BY: J.C.
DRAWN BY: A.A.
REVIEWED BY: D.S.

ISSUED: 11/01/2019

SHEET TITLE:
ELECTRICAL SITE PLAN

SHEET NUMBER:
E1.02

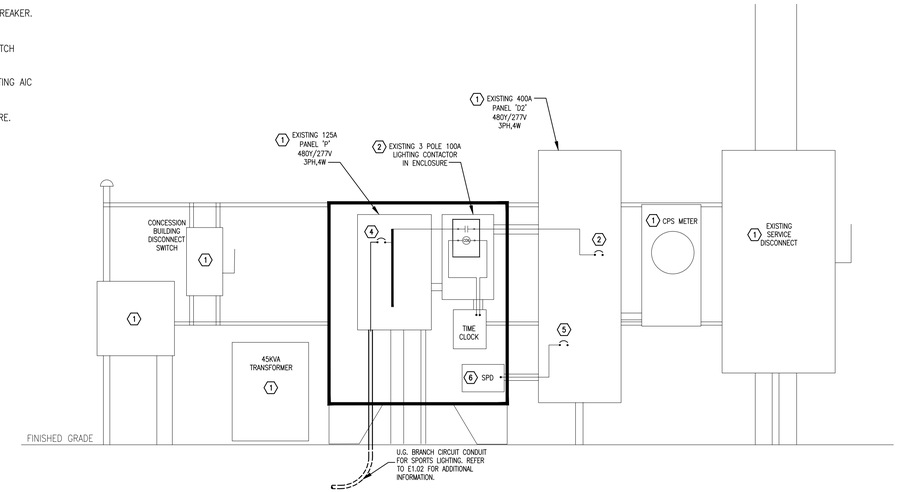


1 EXISTING ELECTRICAL SERVICE - PLAYGROUND

SCALE: NOT TO SCALE

KEYED NOTES: (THIS SHEET ONLY)

1. EXISTING ELECTRICAL EQUIPMENT TO REMAIN.
2. EXISTING LIGHTING CONTACTOR SERVING PANEL 'P' TO REMAIN.
3. REPLACE EXISTING 125A, 3 POLE 'TRANSFORMER' BREAKER WITH A NEW 100A 3 POLE BREAKER. RE-LABEL BREAKER 'PANEL P'. MATCH EXISTING AIC BREAKER RATINGS.
4. PROVIDE NEW 30A, 2 POLE BREAKER FOR SPORTS LIGHTING POLE BRANCH CIRCUITS. MATCH EXISTING AIC BREAKER RATINGS.
5. PROVIDE NEW 30A, 3 POLE BREAKER FOR NEW SURGE PROTECTION DEVICE. MATCH EXISTING AIC BREAKER RATINGS. CONNECT TO SPD WITH (3)#10, (1)#10 GND. IN 1" RGS.
6. PROVIDE NEW SURGE PROTECTION DEVICE (SPD). INSTALL INSIDE EXISTING N3R ENCLOSURE.



2 ALTERNATE 2: EXISTING ELECTRICAL SERVICE - PONY FIELDS

SCALE: NOT TO SCALE

ANALYSIS OF PROJECTED ELECTRICAL LOAD
CUELLAR PARK LIGHTING

11/1/2019

PLAYGROUND AREA
SERVICE VOLTAGE: 240/120V, 1Ph., 3W

LOAD DESCRIPTION		NOTES	CONNECTED LOAD, VA	NEC LOAD kVA	NEC LOAD AMPERES
EXISTING LOADS (FROM UTILITY DEMAND):		NOTES			
PRIOR 12 MONTH PEAK DEMAND (APRIL, 2019)	2 kW @ 1 PF	1	2,000	2.0	8
REMOVED LOADS		NOTES			
LIGHTING (REMOVED AS ALTERNATE 1)			(2,000)	(2.0)	(8)
			SUBTOTAL	**(2)**	**(8)**

NEW OR ADDED LOADS

LOAD DESCRIPTION	DEMAND FACTOR	NOTES	CONNECTED LOAD, kVA	NEC LOAD kVA	NEC LOAD AMPERES
GENERAL PURPOSE RECEPTACLES	1.00	2	0.4	0.4	2
EXTERIOR LIGHTING	1.25		2.3	2.9	12
CONNECTED NEW LOADS SUBTOTAL			**2.7**	**3.3**	**14**
NET SUBTOTAL OF EXISTING, DEMO, AND NEW LOADS				1.3	5.2
LOAD GROWTH ALLOWANCE	25%			8	31
TOTAL				**9**	**36**
SERVICE ENTRANCE DESIGN (TRANSFORMER/ MAIN PANEL)					**100**

NOTES:
1 EXISTING DEMAND LOAD DETERMINED IN ACCORDANCE WITH NEC 220.87
2 LOAD GROWTH ALLOWANCE IS CALCULATED AT 25% OF SERVICE PANEL RATING (125A)
3 PROJECT MODIFICATIONS RESULT IN A NET REDUCTION OF ENERGY CONSUMPTION.

ANALYSIS OF PROJECTED ELECTRICAL LOAD
CUELLAR PARK LIGHTING

11/1/2019

PONY FIELDS
SERVICE VOLTAGE: 480/277V, 3 Ph., 4W (NEC T220.12)

LOAD DESCRIPTION		NOTES	CONNECTED LOAD, VA	NEC LOAD kVA	NEC LOAD AMPERES
EXISTING LOADS (FROM UTILITY DEMAND):		NOTES			
PRIOR 12 MONTH PEAK DEMAND (RECEIVED FROM CPSE 8/23/2019)	23 kW @ 0.8 PF	1	28,750	35.9	43

NEW OR ADDED LOADS

LOAD DESCRIPTION	DEMAND FACTOR	NOTES	CONNECTED LOAD, kVA	NEC LOAD kVA	NEC LOAD AMPERES
EXTERIOR LIGHTING	1.25		2.1	2.6	3
CONNECTED NEW LOADS SUBTOTAL			**2**	**3**	**3**
NET SUBTOTAL OF EXISTING, DEMO, AND NEW LOADS				39	46
LOAD GROWTH ALLOWANCE	10%			4	5
TOTAL				**42**	**51**
SERVICE ENTRANCE DESIGN (TRANSFORMER/ MAIN PANEL)					**400**

NOTES:
1 EXISTING DEMAND LOAD DETERMINED IN ACCORDANCE WITH NEC 220.87

EXISTING PLAYGROUND PANEL

PROJECT : CUELLAR PARK LIGHTING
PROJECT # : 0023-19
LOCATION : PLAYGROUND
NOTES :
MAIN CIRCUIT BREAKER :
MAIN LUGS ONLY : 125A
BUSSING : 125A
VOLTAGE : 120/240V, 1-PH, 3-W
INTERRUPTING : 10 kAIC RMS SYM
ENCLOSURE : NEMA 3R
MOUNTING : SURFACE
OCP TYPES : PLUG-IN
PROVIDE : NEUTRAL BUS
GROUND BUS

CKT	AMPS	POLE	CIRCUIT DESCRIPTION	LOAD	TYPE	PH	TYPE	LOAD	CIRCUIT DESCRIPTION	AMPS	POLE	CKT
1	20*	2	**PLAYGROUND PAVILION & PATH LIGHTING****	**1,160**	2	A			SPARE	20	1	2
3				**1,160**	2	B			SPARE	20	1	4
5	**20**	**1**	**PAVILION RECEPTACLES**	**360**	0	A			SPARE	20	1	6

	PANEL VA	SUB FEED	FEED THRU	TOTAL CONN	TOTAL DEMAND VA	TOTAL DEMAND AMPS
PHASE A	1,520	0	0	1,520	1,848	15
PHASE B	1,160	0	0	1,160	1,410	12
TOTAL	2,679	0	0	2,679	3,259	14

NOTES :
*CONNECT NEW LIGHTING TO EXISTING CIRCUIT ON PANEL.
**LOAD REFLECTS BASE BID ONLY, WITHOUT ALT 1 REPLACEMENT OF CURRENT LIGHT.

REVISIONS: *CNG ENGINEERING, PLLC. R3.1 - Nov. 4*

EXISTING PANEL 'P'

PROJECT : CUELLAR PARK LIGHTING
PROJECT # : 0023-19
LOCATION : PONY FIELDS
NOTES :
MAIN CIRCUIT BREAKER :
MAIN LUGS ONLY : 125A
BUSSING : 225A
VOLTAGE : 480/277V, 3PH, 4W
INTERRUPTING : 18kAIC
ENCLOSURE : NEMA 1 INSIDE EXISTING ENCLOSURE
MOUNTING : SURFACE
CB TYPE : BOLT-ON
PROVIDE : NEUTRAL BUS
GROUND BUS

CKT	AMPS	POLE	CIRCUIT DESCRIPTION	LOAD	TYPE	PH	TYPE	LOAD	CIRCUIT DESCRIPTION	AMPS	POLE	CKT
1	20*	2	EXISTING TRACK LIGHTS	4,432	2	A	2	4,432	EXISTING TRACK LIGHTS	20*	2	2
3				4,432	2	B	2	4,432				4
5	30**	2	SPORTS LIGHTING	2,095	2	C			SPARE	20	1	6
7				2,095	2	A			SPARE	20	1	8
9	20	1	SPARE			B			SPARE	20	1	10
11	20	1	SPARE			C			SPARE	20	1	12
13	20	1	SPARE			A			SPARE	20	1	14
15	20	1	SPARE			B			SPARE	20	1	16
17	20	1	SPARE			C			SPARE	20	1	18
19	20	1	SPARE			A			SPARE	20	1	20
21	20	1	SPARE			B			SPARE	20	1	22
23	20	1	SPARE			C			SPARE	20	1	24
25	20	1	SPARE			A			SPARE	20	1	26
27	20	1	SPARE			B			SPARE	20	1	28
29	20	1	SPARE			C			SPARE	20	1	30

	PANEL VA	SUB FEED	FEED THRU	TOTAL CONN	TOTAL DEMAND VA	TOTAL DEMAND AMPS
PHASE A	10,959	-	-	10,959	13,699	49
PHASE B	8,864	-	-	8,864	11,080	40
PHASE C	2,095	-	-	2,095	2,619	9
TOTAL	21,918	-	-	21,918	27,398	33

NOTES :
* ESTIMATED LOAD AT 80% OF BREAKER SIZE
** NEW 30A BREAKER

REVISIONS: *CNG ENGINEERING, PLLC. R3.1 - Nov. 4*

LIGHTING FIXTURE SCHEDULE

TYPE	LAMPS	MOUNTING	MOUNT HEIGHT	VOLTS	WATTS	DESCRIPTION	MANUFACTURER AND CATALOG NO.
A	LED	POLE	20	240	66	POLE MOUNTED PEDESTRIAN SCALE LED ARE LIGHT. TYPE 3 DISTRIBTUION. BUG RATING 1-0-2	BEACON LIGHTING - VP-S-36L-65-3K7-3 POLE - RTS-25-59-11-AN-(FINISH)-D19-BC
B1	LED	POLE	20	240	66	POLE MOUNTED PEDESTRIAN SCALE LED ARE LIGHT. TYPE 4 DISTRIBTUION. BUG RATING 1-0-2	BEACON LIGHTING - VP-S-36L-65-3K7-4 POLE - RTS-25-59-11-AN-(FINISH)-D19-BC
B2	LED	POLE	20	240	66	POLE MOUNTED PEDESTRIAN SCALE LED ARE LIGHT. TYPE 4 DISTRIBTUION. BUG RATING 1-0-2. MOUNTED ON EXISTING POLE. MODIFY EXISTING YOKE FOR INSTALLATION.	BEACON LIGHTING - VP-S-36L-65-3K7-4
C	LED	POLE	40	480	419	YOKE MOUNTED LED SPORTS LIGHT WITH UPLIGHT HOOD. MOUNTED WITH BEAM ANGLES ALL BELOW 90 DEGREES FOR NADIR. 40' POLE WITH CROSS ARM. PROVIDE 2 FIXTURE HEADS PER POLE, MOUNT AS SHOWN ON PLANS.	BEACON LIGHTING - VFS-Y-63L-440-3K7-6-480-3C POLE - RTS-39-90-7-AB-G-ACR2
D	LED	SURFACE	12	240	55	ROUND, EDGE-LIT, LOW PROFILE FIXTURE. DIE CASE ALUMINUM HOUSING WITH CORROSION RESISTANT POWDER COAT FINISH AND ONE PIECE MOLDED SILICONE GASKET. IP65 AND UL1598 LISTED FOR USE IN WET LOCATIONS. INCLUDE BIRD DETERRENT SHIELD.	BEACON LIGHTING - SRT1-55-3K7-5QW-240 BIRD DETERRENT - SRT1-BRD

CNG ENGINEERING
MEP DESIGN | PLANNING | COMMISSIONING
1917 N NEW BRAUNFELS AVE, SUITE 201
SAN ANTONIO, TEXAS 78208
T 210.224.8841 F 210.224.8224
www.cngengineering.com
TBPE FIRM # F-7964

OPENAIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN
2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248
P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

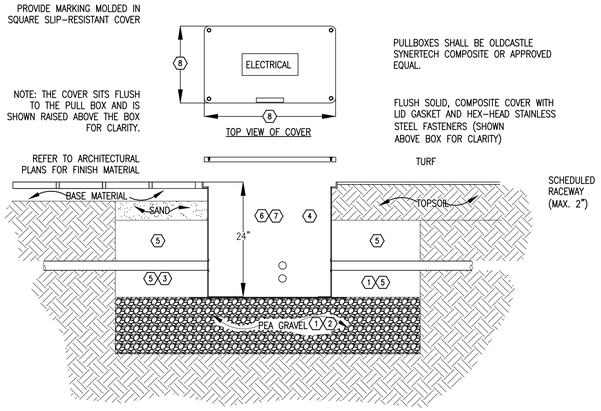
STATE OF TEXAS
DOUGLAS W. SCHULZE
86707
LICENSED
PROFESSIONAL ENGINEER
10/31/2019

PROJECT #: CSA20171
DESIGNED BY: J.C.
DRAWN BY: A.A.
REVIEWED BY: D.S.

ISSUED: 11/01/2019

SHEET TITLE:
ELECTRICAL DIAGRAMS, LOAD ANALYSIS AND SCHEDULES

SHEET NUMBER:
E2.01

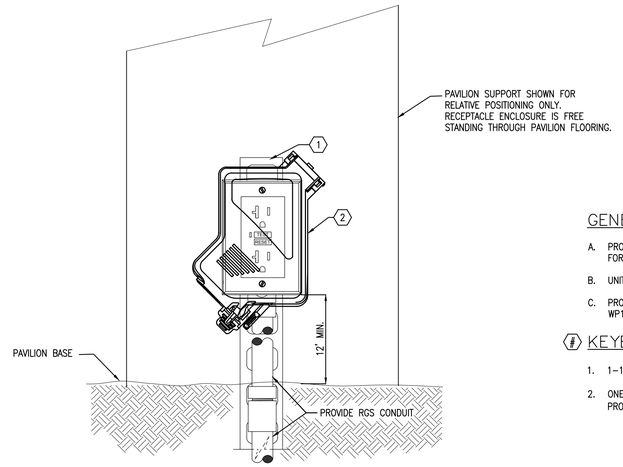


1 MEDIUM DUTY PULLBOX (NON-DELIVERATE TRAFFIC)

SCALE: N.T.S.

KEYED NOTES: (DETAIL 2 ONLY)

1. OVEREXCAVATE 18" ALL AROUND ENCLOSURE AND 12" ADDITIONAL DEPTH.
2. PLACE 1/2" CRUSHED STONE OR PEA GRAVEL AT BASE OF EXCAVATED HOLE.
3. PLACE 1/2" SQUARE GALVANIZED HARDWARE CLOTH BELOW PULLBOX, 6" LARGER IN EACH DIMENSION.
4. INSTALL PULLBOX PER MANUFACTURER'S WRITTEN DIRECTIONS.
5. USE HAND OPERATED MECHANICAL TAMPER TO COMPACT BACKFILL TO SAME LEVEL.
6. CONDUIT(S) EXITING FROM SIDE OF PULLBOX.
7. ALL WIRING SPLICES AT PULLBOX SHALL BE MADE WITH CONNECTORS LISTED FOR DIRECT BURIAL. POLARIS SLWB SERIES OR APPROVED EQUIVALENT.
8. PROVIDE 9" X 11" SIZE BOX



3 PAVILION RECEPTACLE DETAIL

SCALE: N.T.S.

GENERAL NOTES: (DETAIL 3 ONLY)

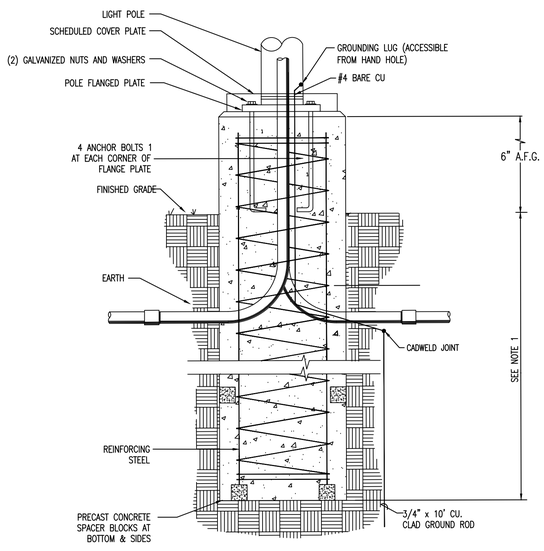
A. PROVIDE HOT DIPPED GALVANIZED FLOOR MOUNT POST BASE AS BRACING FOR RECEPTACLE AND UNISTRUT MOUNTING.

B. UNIT SHALL BE PAINTED TO MATCH LANDSCAPE.

C. PROVIDE DIE-CAST ALUMINUM WHILE-IN-USE COVER EQUAL TO INTERMATIC WP1250MVXD.

KEYED NOTES: (DETAIL 3 ONLY)

1. 1-1/4" X 1-1/4" GALVANIZED STEEL CHANNEL. (TYPICAL)
2. ONE(1) WEATHERPROOF J-BOX WITH A 20-AMP GFI RECEPTACLE. PROVIDE A "WHILE-IN-USE" COVER.

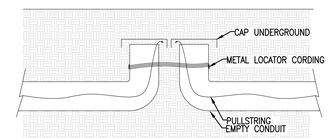


NOTES:

1. REFER TO STRUCTURAL DRAWINGS FOR POLE BASE DIAMETER, DEPTH CONCRETE, AND REINFORCEMENT REQUIREMENTS.
2. PROVIDE RUBBED FINISH AT EXPOSED SURFACE OF BASE.
3. PROVIDE 1" CHAMFER FINISH AT TOP EDGE.
4. CONDUIT WITHIN CONCRETE BASE SHALL BE RIGID GALVANIZED STEEL (RGS), WRAPPED WITH UL LISTED CORROSION PROTECTIVE TAPE OR PVC COATED RGS.
5. RE: SPECIFICATIONS FOR UNDERGROUND BRANCH CONDUIT REQUIREMENTS.

2 POLE FOOTING DETAIL

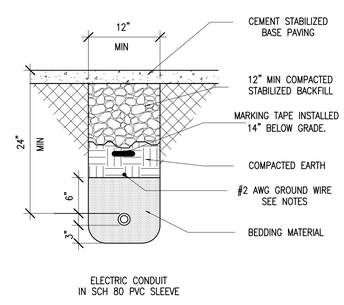
SCALE: N.T.S.



4 TYPICAL UNDERGROUND CONDUIT TERMINATION

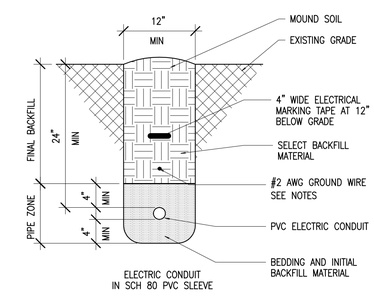
SCALE: N.T.S.

AT FUTURE POLE LOCATIONS



5 TRENCHING DETAIL PAVEMENT CROSSING AREAS

NOT TO SCALE



6 TRENCHING DETAIL GRASSLAND AREAS

NOT TO SCALE

TRENCHING NOTES (DETAIL 5 AND 6 ONLY):

A. AT EACH ELECTRICAL SERVICE POINT: INSTALL A BARE, #2 AWG COPPER WIRE IN ONE CONTINUOUS LENGTH TO A POINT APPROXIMATELY 100' FROM THE SERVICE POINT IN ONE OF THE NEW TRENCHES INSTALLED FROM THE SERVICE POINT. INSTALL THIS WIRE AT THE TOP OF THE BEDDING MATERIAL LAYER OF THE BACKFILL. DO NOT BRING THIS WIRE UP INTO ANY CAMPSITE POWER OUTLETS, THIS WIRE WILL ONLY BE CONNECTED TO THE NEW GROUND ROD AT EACH SERVICE LOCATION. THE PURPOSE OF THIS WIRE IS TO PROVIDE A LOW RESISTANCE GROUND PATH IN ADDITION TO THE GROUND ROD.

B. WHERE MORE THAN ONE CONDUIT IS INSTALLED IN A TRENCH, THE CONDUITS SHALL BE SEPARATED BY A MINIMUM OF 2" OF BEDDING AND TRENCH WIDTH SHALL BE ADJUSTED AS NECESSARY TO ACCOMMODATE MULTIPLE CONDUITS, IF THE CONDUITS ARE STACKED VERTICALLY, THEY SHALL BE SEPARATED BY A MINIMUM OF 4" OF BEDDING MATERIAL AND THE TRENCH DEPTH SHALL BE ADJUSTED ACCORDINGLY TO MAINTAIN THE DEPTHS TO TOP OF CONDUIT SHOWN ON THESE DETAILS.

CNG ENGINEERING
MEP DESIGN | PLANNING | COMMISSIONING
1917 N NEW BRAUNFELS AVE, SUITE 201
SAN ANTONIO, TEXAS 78208
T 210.224.8841 F 210.224.8224
www.cngengineering.com
TBPE FIRM # F-7964

OPENAIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN

2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248

P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

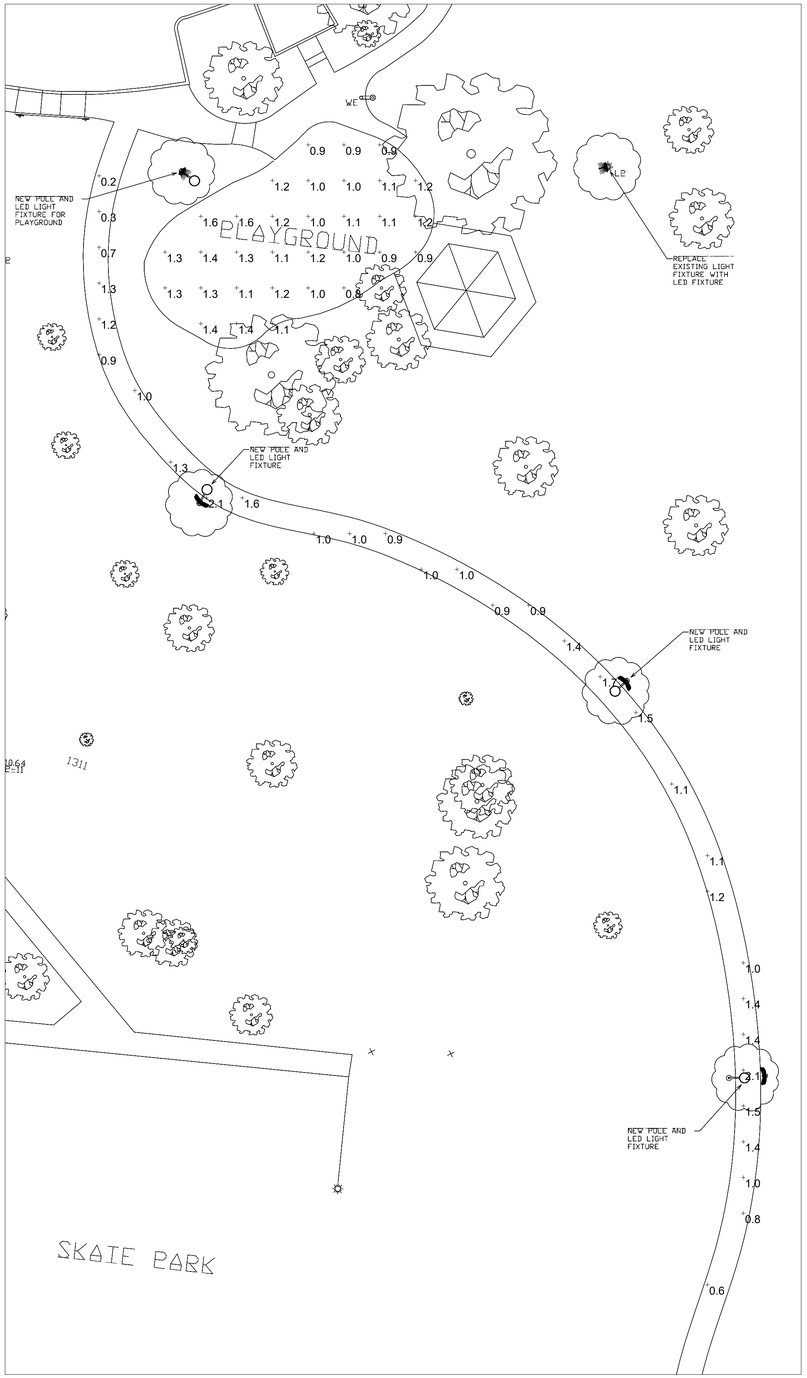
STATE OF TEXAS
DOUGLAS W. SCHULZE
80707
LICENSED
PROFESSIONAL ENGINEER
10/30/2019

PROJECT #: CSA20171
DESIGNED BY: J.C.
DRAWN BY: A.A.
REVIEWED BY: D.S.

ISSUED: 11/01/2019

SHEET TITLE:
ELECTRICAL DETAILS

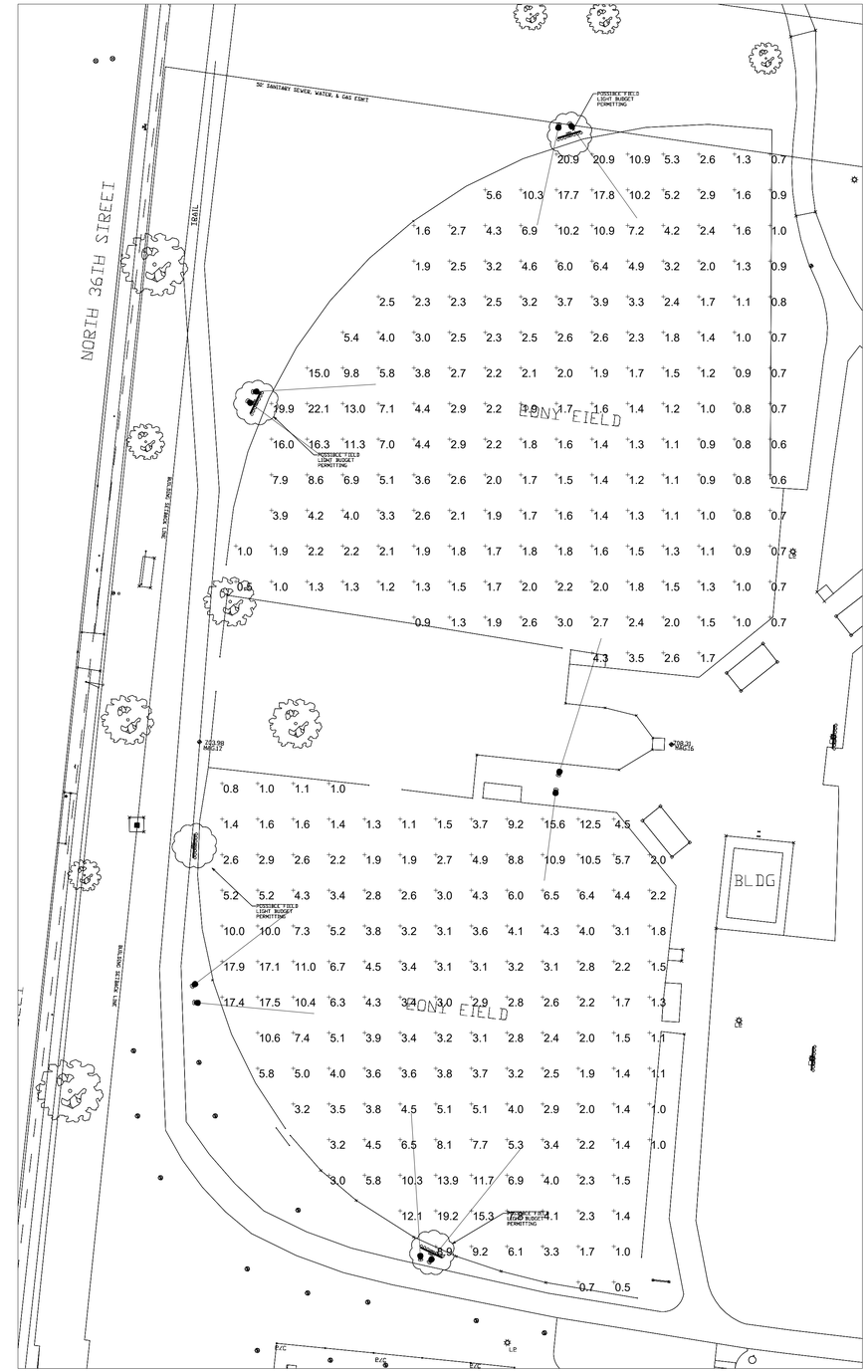
SHEET NUMBER:
E 3.01



N

1 PHOTOMETRICS - PLAYGROUND

NOT TO SCALE



N

2 PHOTOMETRICS - PONY FIELDS

NOT TO SCALE

CNG ENGINEERING
MEP DESIGN | PLANNING | COMMISSIONING
1917 N NEW BRAUNFELS AVE, SUITE 201
SAN ANTONIO, TEXAS 78208
T 210.224.8841 F 210.224.8224
www.cngengineering.com
TBPE FIRM # F-7964

OPENAIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN

2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248

P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

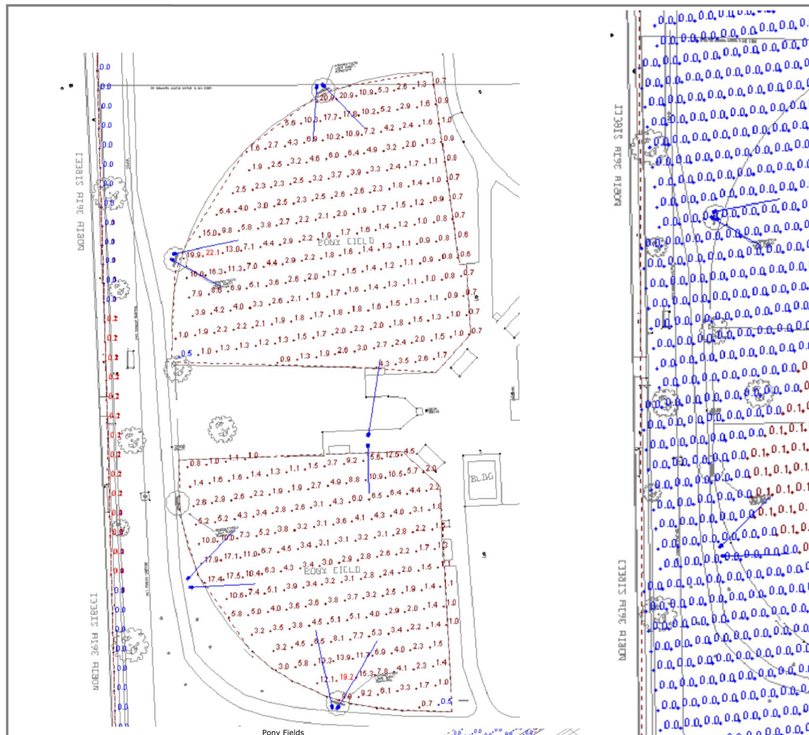
STATE OF TEXAS
DOUGLAS W. SCHULZE
80707
LICENSED
PROFESSIONAL ENGINEER
10/24/2019

PROJECT #: CSA20171
DESIGNED BY: J.C.
DRAWN BY: A.A.
REVIEWED BY: D.S.

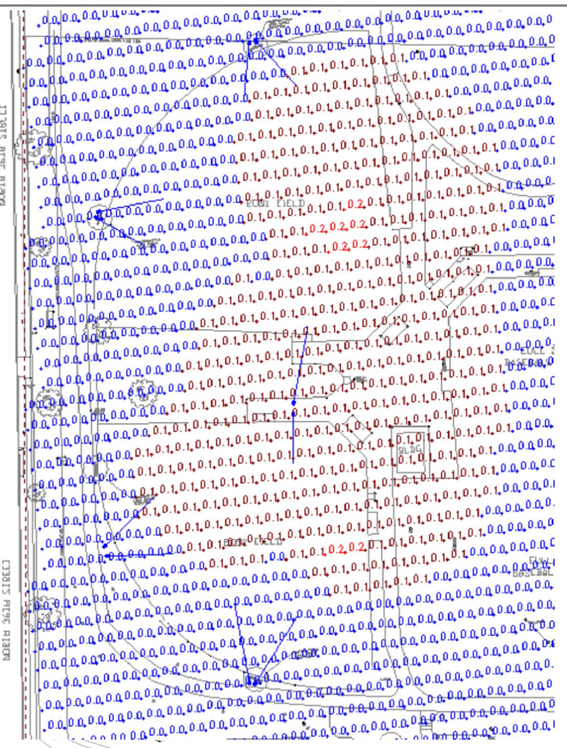
ISSUED: 11/01/2019

SHEET TITLE:
ELECTRICAL
LIGHTING
PHOTOMETRICS

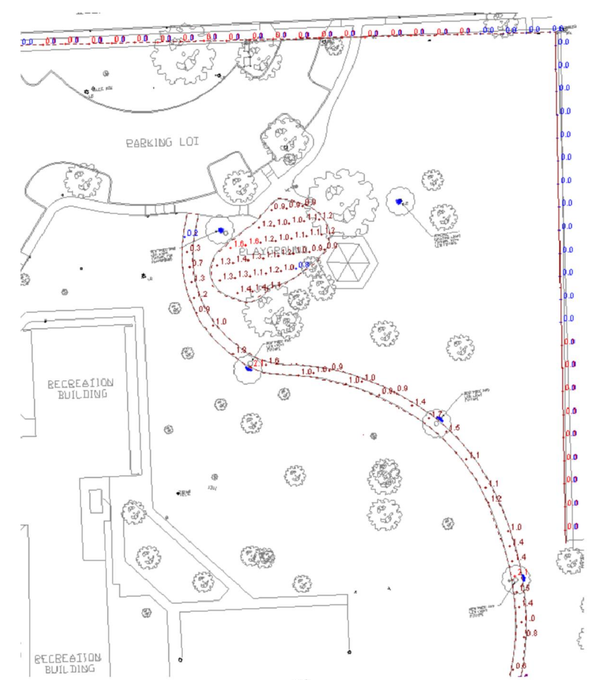
SHEET NUMBER:
E4.01



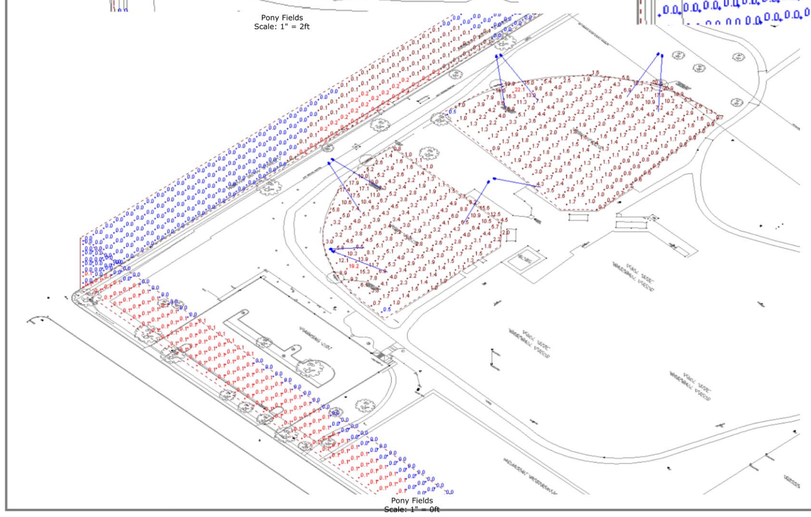
Pony Fields
Scale: 1" = 2ft



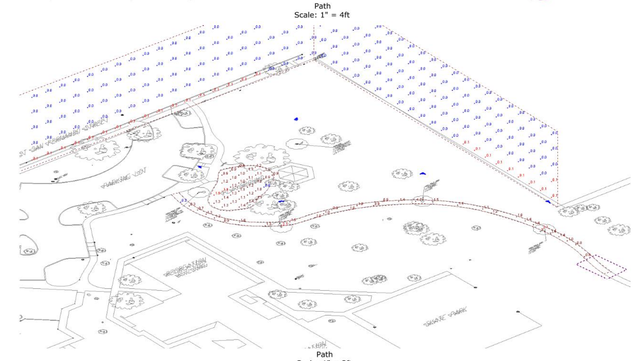
Pony Field Ceiling at 73' Above Grade
Scale: 1" = 1ft



Path
Scale: 1" = 4ft



Pony Fields
Scale: 1" = 6ft



Path
Scale: 1" = 3ft

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Ceiling	+	0.0 fc	0.2 fc	0.0 fc	N/A	N/A
East Property Line	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
North Property Line	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Path	+	1.1 fc	2.1 fc	0.2 fc	10.5:1	5.5:1
Playground	+	1.1 fc	1.6 fc	0.8 fc	2.0:1	1.4:1
Pony Field North	+	3.5 fc	22.1 fc	0.5 fc	44.2:1	7.0:1
Pony Field South	+	4.8 fc	19.2 fc	0.5 fc	38.4:1	9.6:1
South Property Line	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
West Property Line	+	0.0 fc	0.2 fc	0.0 fc	N/A	N/A

Schedule

Symbol	Label	QTY	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp	LLF	Wattage
	C	3	VP-S-36L-65-3K7-3	LARGE VIPER	X-70-CRI DATA SHOWN IS SCALED FROM TEST 11604137.05	1	6802	1	65
	D	2	VP-S-36L-65-3K7-4	LARGE VIPER	X-70-CRI	1	6688	1	66.6674
	M	10	VFS-Y-63L-440-3K7-6-277-3C	SPORTS LIGHT 3K 63LEDS 6X6		1	43178	1	418.53

Cuellar Park
Preliminary Photometric Calculations

Designer
Amy McFadd
Date
8/23/2019
Scale
Not to Scale
Drawing No
Summary
1 of

1 **PHOTOMETRICS**
NOT TO SCALE

CNG ENGINEERING
MEP DESIGN | PLANNING | COMMISSIONING
1917 N NEW BRAUNFELS AVE, SUITE 201
SAN ANTONIO, TEXAS 78208
T 210.224.8841 F 210.224.8224
www.cngengineering.com
TBPE FIRM # F-7964

OPENAIR STUDIOS
LANDSCAPE ARCHITECTURE

LANDSCAPE ARCHITECTURE
PLANNING
URBAN DESIGN

2722 W. BITTERS RD, STE #114
SAN ANTONIO, TX 78248

P: 210-908-6736
WWW.GOOPENAIR.COM

PROJECT:
CUELLAR PARK

OWNER:
CITY OF SAN ANTONIO

LOCATION:
SAN ANTONIO, TEXAS

STATE OF TEXAS
DOUGLAS W. SCHULZE
80707
LICENSED
PROFESSIONAL ENGINEER
10/28/2019

PROJECT #: CSA20171
DESIGNED BY: J.C.
DRAWN BY: A.A.
REVIEWED BY: D.S.
ISSUED: 11/01/2019

SHEET TITLE:
ELECTRICAL LIGHTING PHOTOMETRICS

SHEET NUMBER:
E4.02