### HISTORIC AND DESIGN REVIEW COMMISSION

November 07, 2018

**HDRC CASE NO:** 2018-536

**COMMON NAME:** San Antonio Zoo - Rhino Exhibit

**ADDRESS:** 3903 N ST MARYS

**ZONING:** R-6, HS

CITY COUNCIL DIST.: 2

**LANDMARK:** Brackenridge Park

**APPLICANT:** Crystal Arguijo/Guido Brothers Construction

OWNER: Ben Barton/San Antonio Zoo
TYPE OF WORK: Construction of a Rhino Exhibit

**APPLICATION RECEIVED:** October 16, 2018

**60-DAY REVIEW:** 

**REQUEST:** 

The applicant is requesting a Certificate of Appropriateness for approval to remodel the existing rhino exhibit through the construction of a timber structure patio deck to feature composite wood decking, a wire mesh railing system with timber posts and rails, painted metal handrails, galvanized cable fencing, a faux rock concrete foundation and storm drainage. The proposed exhibit will result in the removal of two sections of the historic wall structure within the exhibit; one section is  $30^{\circ} - 0^{\circ}$  in length while the other is  $10^{\circ} - 0^{\circ}$  in length. The applicant has noted that historic stone from the sections of the wall that are to be removed will be salvaged on site.

### **APPLICABLE CITATIONS:**

UDC Section. 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, beams, 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 b 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.

Sec. 35-643. - Alteration, Restoration and Rehabilitation.

In considering an application for a certificate to alter, restore, rehabilitate, or add to a building, object, site or structure the historic and design review commission shall be guided by the following general standards of the Secretary of the Interior's Standards for Rehabilitation in addition to any specific design guidelines included in this article:

- (a) Every reasonable effort shall be made to adapt the property in a manner which requires minimal alteration of the building, structure, object, or site and its environment.
- (b) The distinguishing original qualities or character of a building, structure, object, or site and its environment, shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
- (c) All buildings, structures, objects, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
- (d) Changes which may have taken place in the course of time are evidence of the history and development of a building, structure, object, or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.
- (e) Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure, object, or site shall be kept where possible.
- (f) Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should reflect the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historical, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.
- (g) The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting, high pressure washes and other cleaning methods that will damage the historic building's materials shall not be undertaken.
- (h) Every reasonable effort shall be made to protect and preserve archaeological resources affected by, or adjacent to, any project.
- (i) Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with thesize, scale, color, material, and character of the property, neighborhood or environment.

(j) Wherever possible, new additions or alterations to buildings, structures, objects, or sites shall be done in such a manner that if such additions or alterations were to be removed in the future, the essential form and integrity of the building, structure, object, or site would be unimpaired.

#### **FINDINGS:**

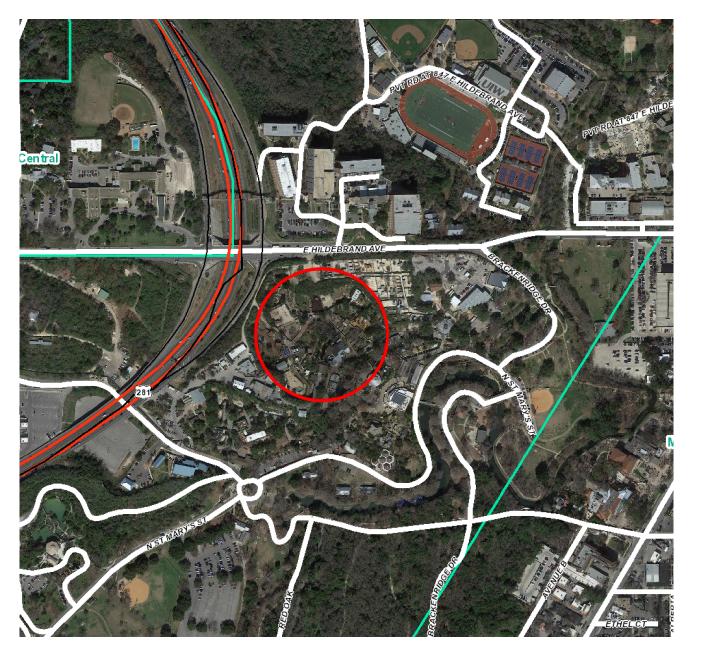
- a. The applicant is requesting a Certificate of Appropriateness for approval to remodel the existing rhino exhibit through the construction of a timber structure patio deck to feature composite wood decking, a wire mesh railing system with timber posts and rails, painted metal handrails, galvanized cable fencing, a faux rock concrete foundation and storm drainage. The proposed exhibit will result in the removal of two sections of the historic, WPA era wall structure within the exhibit; one section is 30' 0" in length while the other is 10' 0" in length. The applicant has noted that historic stone from the sections of the wall that are to be removed will be salvaged on site.
- b. In regards to the proposed exhibit remodel, staff finds that the proposed modifications are in keeping with UDC Sections 35-642 and 35-643 through the use of materials that will complement those that are existing and historic on the site. Staff finds that the faux stone elements proposed should match those existing on site.
- c. Regarding the removal of the WPA era wall, the applicant has noted that historic portions of the wall will be salvaged. Staff finds that salvaged portions of the wall should be incorporated into portions of the exhibit where possible, including to screen new foundation and structural elements. Remaining stone should be stored on site to be used during future projects.

### **RECOMMENDATION:**

Staff recommends approval based on finding a through c with the stipulation that removed stone from the WPA era wall is salvaged to be used within the proposed modifications. Any remaining stone is to be stored on site for use in future projects.

#### **CASE MANAGER:**

**Edward Hall** 





### Flex Viewer

Powered by ArcGIS Server

Printed:Nov 01, 2018

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Here is the Scope of work for Rhino

This project is a remodel of an existing Rhino Exhibit at the San Antonio Zoo. It includes the construction of a timber structure patio deck with composite wood decking. The railing system will be wire mesh and timber posts/rails. Painted metal handrails will be installed on all ramps and stairs that connect existing pathways to the new patio deck. Below the deck a galvanized cable fence will be installed. A fountain and stream structure will be poured using "faux rock" concrete. New storm drainage will be installed and tied into existing storm drain system. Wire mesh railing will be installed on the south wall of the exhibit.

Please let me know if you need anything else so that we can keep the ball rolling.





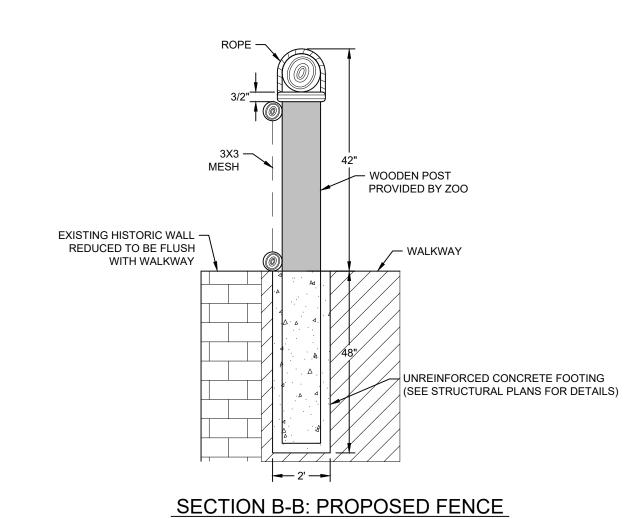




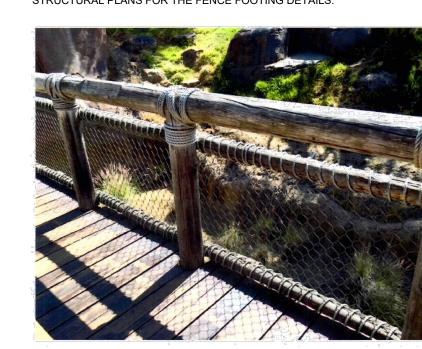




---700--- EXISTING CONTOURS 3 QTY PALO VERDE D MUSEUM (E SPEC) RS TREES TO BE PLANTED BY CONTRACTOR. TREES TO BE SUPPLIED AND LOCATED BY THE ZOO. EXISTING STORM SEWER PIPE PROPOSED STORM SEWER PIPE CROSS SECTION CALLOUT EXISTING FENCE (POST AND RAIL) **EXISTING FENCE** PROPOSED FENCE —*||*——*||*——*||*——*||*——||— PROPOSED HANDRAILS EXISTING FENCE GATE PROPOSED GRATE INLET (SEE SHEET C4.0 FOR DETAILS) EXISTING LIGHT POLE PROPOSED ASPHALT LANDING PROPOSED ASPHALT PAVEMENT EXISTING WALL (TRIANGLE DENOTES FACE OF WALL)



NOTE: FENCE DETAIL PROVIDED ON THESE PLANS AS A GENERAL REFERENCE ONLY, BASED ON AN EXAMPLE PROVIDED BY THE ZOO. CONTRACTOR TO FABRICATE FENCE IN THE FIELD AT THE DIRECTION OF THE ZOO. REFERENCE STRUCTURAL PLANS FOR THE FENCE FOOTING DETAILS.







CAUTION!! EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR
IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND
VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPUBLING EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

THESE DOCUMENTS ARE INCOMPLETE AND FOR INTERIM REVIEW ONLY. "NOT FOR REGULATORY APPROVAL, PERMITTING OR UNDER THE AUTHORIZATION OF: ALONZO C. ALSTON, RA # 2 0 6 7 1

824 BROADWAY ST. #110 SAN ANTONIO, TEXAS 7 8 2 1 5

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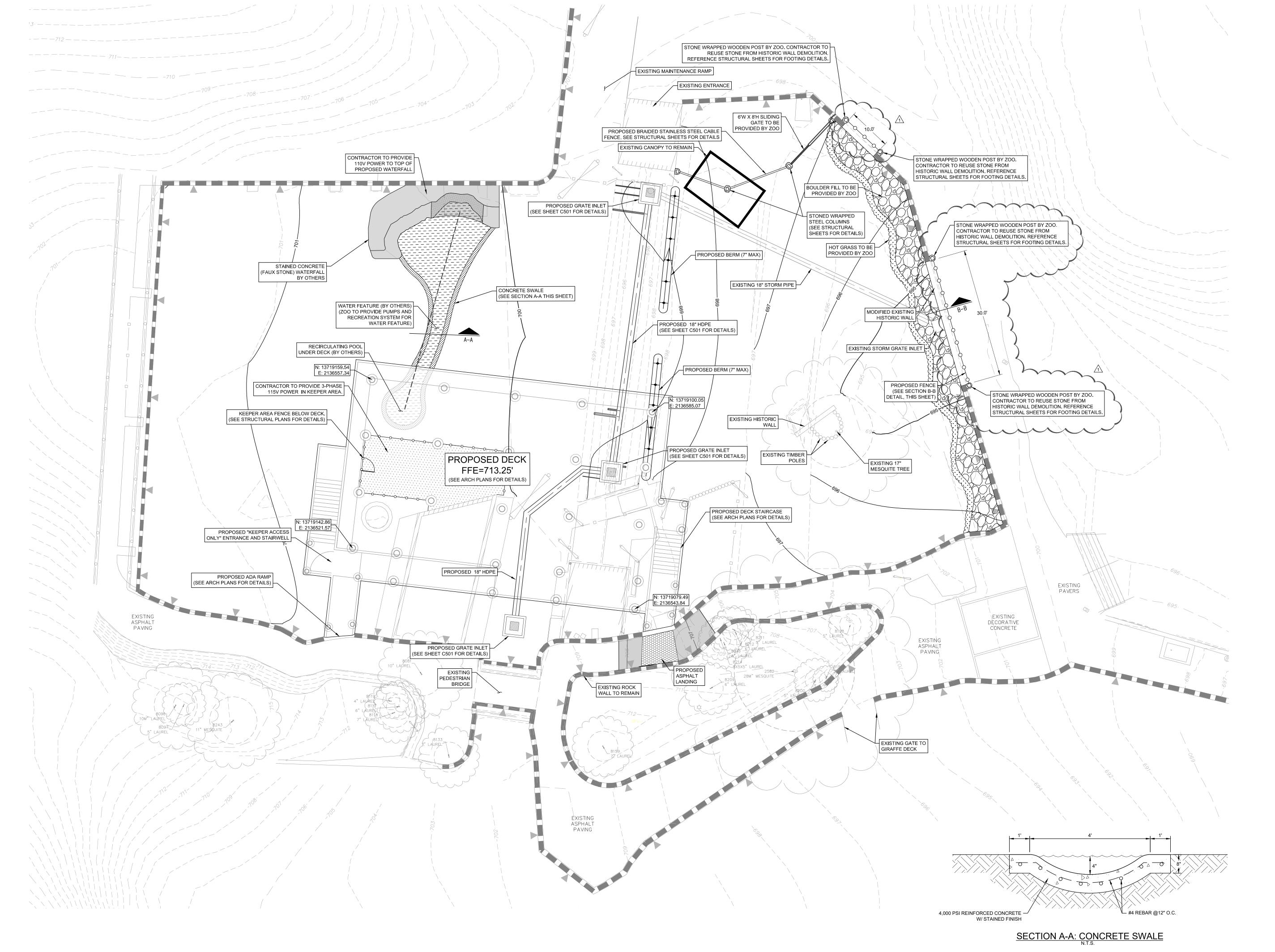
601 NW LOOP 410, SUITE 350,
SAN ANTONIO, TX 78216
PHONE: 210-541-9166
FAX: 210-541-8699
WWW.KIMLEY-HORN.COM
TBPE FIRM NO. 928

REVISIONS HDRC COMMENTS 10/18

PROJECT NO. 2018009 21 September 2018

SHEET

Know what's **below.**• Call before you dig. 





- 1. G.C. TO STORE AND PROTECT REMOVED ITEMS THAT WILL BE REINSTALLED OR REUSED. G.C. SHALL BE RESPONSIBLE FOR REPLACING DAMAGED OR STOLEN ITEMS AS A RESULT OF MISHANDLING OR IMPROPER STORAGE OR SECURITY.
- 2. G.C. SHALL EXERCISE PROPER PRECAUTION TO INSPECT THE CONSTRUCTION SITE AND VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING A BID FOR THE CONSTRUCTION CONTRACT. CONTRACTOR TO NOTIFY ARCHITECT OF ANY DISCREPANCIES IN THE DRAWINGS OR CONDITIONS OF THE SITE IMMEDIATELY. CONTRACTOR IS RESPONSIBLE FOR ANY ERRORS RESULTING FROM FAILURE TO EXERCISE SUCH PRECAUTION. SUCH ERRORS WILL NOT BE CONSIDERED SUBSEQUENTLY AS A BASIS FOR EXTRA MONETARY CONSIDERATION.
- 3. G.C. SHALL VERIFY ALL DIMENSIONS SHOWN ON THE DRAWINGS. ANY ERROR OR INCONSISTENCY SHALL BE REPORTED TO ARCHITECT AND HIS
  DISPOSITION OBTAINED BEFORE ANY WORK IS BEGUN. NO EXTRA CHARGE OR COMPENSATION WILL BE ALLOWED ON ACCOUNT OF DIFFERENCES BETWEEN ACTUAL
  DIMENSIONS OF WORK AND THE MEASUREMENTS INDICATED ON THE CONSTRUCTION DOCUMENTS.
- 4. G.C. TO COORDINATE DEMOLITION WITH NEW CONSTRUCTION TO SALVAGE AND REUSE EXISTING MATERIALS AS NOTED IN THE DRAWINGS.
- 5. IF THERE ARE ANY DISCREPANCIES IN DRAWINGS AND SPECIFICATIONS, THE MOST STRINGENT REQUIREMENTS SHALL PREVAIL.
- 6. WHEN THE DRAWING INDICATES A PRODUCT OR A MATERIAL, BUT THE SPECIFICATION DOES NOT, G.C. SHALL NOTIFY THE ARCHITECT PRIOR TO COMMENCING WORK, AND PROVIDE THE ITEM AS INDICATED AND INSTALL PER THE MANUFACTURER'S DIRECTION.
- 7. ANY DAMAGE TO THE EXISTING FACILITY DUE TO CONSTRUCTION ACTIVITIES SHALL BE REPAIRED BACK TO ORIGINAL CONDITION AT THE G.C.'S EXPENSE.
- 8. G.C. SHALL COORDINATE WORK DESCRIBED IN CONSTRUCTION DOCUMENTS SUCH THAT ALL WORK IS COMPLETED AS INDICATED IN THE DOCUMENTS. ANY ERRORS RESULTING FROM G.C.'S LACK OF COORDINATION AND DIRECTION SHALL BE CORRECTED AT G.C.'S EXPENSE, AND WILL NOT BE CONSIDERED AS A BASIS FOR EXTRA MONETARY CONSIDERATION.

GENERAL CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, AND MATERIALS FOR THE FOLLOWING SCOPE OF WORK:

- 1. CONSTRUCT A WOOD VIEWING DECK (WITH TREX DECK BOARDS) WITHIN THE EXISTING RHINO EXHIBIT LOCATED AT THE SAN ANTONIO ZOO.
- DECK WILL NOT BE COVERED
   IMPROVE SITE WITHIN EXHIBIT SPACE AND SURROUNDING PATHWAY

# DESIGN TEAM

STRUCTURAL ENGINEER ARCHITECT CIVIL KIMLEY-HORN 601 NW LOOP 410, SUITE 350 KIMLEY-HORN 601 NW LOOP 410, SUITE 350 SOL STUDIO ARCHITECTS 824 BROADWAY ST., SUITE 110 SAN ANTONIO, TX 78216 SAN ANTONIO, TX 78215 SAN ANTONIO, TX 78216 PHONE: 210.541.9166 PHONE: 210.541.9166 PHONE: 210. 240.8864 CONTACT: J. BLAKE HODGE, PE CONTACT: NICK HOLSCHER, PE CONTACT: ALONZO ALSTON, RA hodge.blake@kimley-horn.com nick.holscher@kimley-horn.com alston@solstudioarchitects.us

# CODE REVIEW SUMMARY

ADDRESS: 3903 N ST MARY'S ST, SAN ANTONIO, TEXAS 78212

OWNER: SAN ANTONIO ZOO LEGAL DESCRIPTION: ---APPLICABLE CODES:

2015 INTERNATIONAL BUILDING CODE
2015 INTERNATIONAL FIRE CODE
2015 INTERNATIONAL MECHANICAL CODE
2014 NATIONAL ELECTRIC CODE
2015 INTERNATIONAL PLUMBING CODE

2015 INTERNATIONAL PLUMBING CODE
2015 INTERNATIONAL ENERGY CONSERVATION CODE
2012 TAS (TEXAS ACCESSIBILITY STANDARDS)

OCCUPANCY CLASSIFICATION:

CONSTRUCTION TYPE:

V-B

A-5 AMUSEMENT PARK STRUCTURES

FIRE PROTECTION:

NOT A BUILDING

ACTUAL: NOT A BUILDING

BUILDING OCCUPANT LOAD:

NOT A BUILDING

MAX. ALLOWABLE BLDG. AREA AND HEIGHT:

ALLOWABLE: UNLIMITED STORIES - UNLIMITED S.F.

# INDEX OF DRAWINGS

### GENERAL SHEETS

A000 INDEX, VICINITY MAP, GENERAL NOTES, AND CODE SUMMARY

### CIVIL DRAWINGS

C100 GENERAL NOTES
C200 OVERALL SITE PLAN

C300 DEMOLITION PLAN
C400 GRADING PLAN

C500 PROPOSED DRAINAGE AREA MAP

C501 STORM SEWER PLAN
C600 EROSION CONTROL PLAN

C601 EROSION CONTROL DETAILS

### ARCHITECTURAL DRAWINGS

A100 SITE PLAN, FLOOR PLAN AT PATHWAY LEVEL AND SECTIONS
A200 FLOOR PLAN AT EXHIBIT LEVEL AND SECTIONS

### STRUCTURAL DRAWINGS

S001 STRUCTURAL GENERAL NOTES S002 STRUCTURAL ABBREVIATIONS

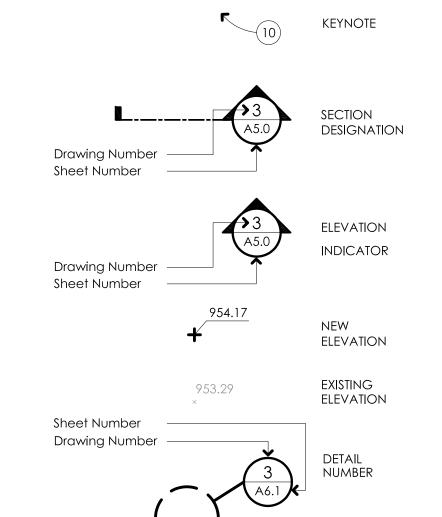
\$101 STRUCTURAL FRAMING PLAN \$102 STRUCTURAL FOUNDATION PLAN

\$200 STRUCTURAL DETAILS \$300 CONCRETE DETAILS

# **ABBREVIATIONS**

| <u>ABBREVIATION</u> | <u>DESCRIPTION</u>   | <u>ABBREVIATION</u> | <u>DESCRIPTION</u>   |
|---------------------|----------------------|---------------------|----------------------|
| AFF                 | ABOVE FINISHED FLOOR | HCWD                | HOLLOW CORE WOOD DOO |
| ALT                 | ALTERNATE            | HVAC                | HEATING, VENTILATING |
| A/C                 | AIR CONDITIONER      |                     | AND AIR CONDITIONING |
| BLDG                | BUILDING             | MAT                 | MATCH                |
| CONC                | CONCRETE             | MAX                 | MAXIMUM              |
| DWGS                | DRAWINGS             | MEZZ                | MEZZANINE            |
| EXT                 | EXTERIOR             | N.I.C.              | NOT IN CONTRACT      |
| EXST                | EXISTING             | RE:                 | REFERENCE            |
| <del>-</del> T      | FEET                 | SQ FT               | SQUARE FEET          |
| Ν                   | INCHES               | SCWD                | SOLID CORE WOOD DOOR |
| GALV                | GALVANIZED           | TYP                 | TYPICAL              |
| GC                  | GENERAL CONTRACTOR   | W/                  | WITH                 |
| GYP. BD.            | GYPSUM BOARD         | WD                  | WOOD                 |
| НМ                  | HOLLOW METAL         |                     |                      |

# REFERENCE SYMBOLS





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824 BROADWAY ST. #110
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SAN ANTONIO ZOO
RHINO RENOVATIONS
3903 N St Mary's St
San Antonio, Texas 78212

17 AUGUST 2018

INDEX, VICINITY MAP, GENERAL NOTES AND CODE SUMMARY

SHEET **A0.0** 

# GENERAL CONSTRUCTION NOTES

SPECIFICATIONS AND REQUIREMENTS.

- 1. ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE CITY'S DESIGN
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES,
- 3. THE CONTRACTOR SHALL CONTACT ALL FRANCHISED UTILITY COMPANIES TO HAVE THEM LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION AND DEPTH OF ALL FRANCHISED UTILITY SERVICES AND ANY REQUIRED RELOCATION AND/OR EXTENSIONS. SERVICES SHOWN ON THE PLANS ARE CONCEPTUAL.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PUBLIC UTILITIES IN THE CONSTRUCTION OF THIS PROJECT. ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ETC., MUST BE ADJUSTED TO PROPER GRADE BY THE CONTRACTOR PRIOR TO AND AFTER PLACING OF PERMANENT PAVING. UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING CONSTRUCTION OF THE PAVING FOR THIS PROJECT.
- 5. BRACING OF UTILITY POLES MAY BE REQUIRED BY UTILITY COMPANIES WHEN TRENCHING OR EXCAVATION IS IN CLOSE PROXIMITY TO THE POLES. THE COST OF BRACING POLES WILL BE BORNE BY THE CONTRACTOR. THERE IS NO SEPARATE PAY ITEM FOR THIS WORK. THE COST IS INCIDENTAL TO THE VARIOUS PAY ITEMS FOR INSTALLATION OF PIPE.
- 6. THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES SHOWN ON THE PLANS WERE OBTAINED FROM AVAILABLE UTILITY COMPANY RECORDS AND PLANS AND ARE CONSIDERED APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ADJACENT AND/OR CONFLICTING UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION IN ORDER THAT ADJUSTMENTS CAN BE MADE TO PROVIDE ADEQUATE CLEARANCES. THE CONTRACTOR SHALL PRESERVE AND PROTECT PUBLIC UTILITIES AT ALL TIMES DURING CONSTRUCTION. ANY DAMAGE TO UTILITIES RESULTING FROM CONTRACTOR'S OPERATIONS SHALL BE RESTORED AT THEIR EXPENSE. THE ENGINEER SHALL BE NOTIFIED WHEN PROPOSED FACILITY GRADES CONFLICT WITH EXISTING UTILITY
- 7. THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY PHYSICAL DAMAGE TO LIMITS OUTSIDE OF CONSTRUCTION, INCLUDING, BUT NOT LIMITED TO FENCES, WALLS, PAVEMENT, GRASS, TREES, AND LAWN SPRINKLER AND IRRIGATION SYSTEMS AT NO COST TO THE OWNER. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT (UNLESS OTHERWISE NOTED) AND IS NOT A SEPARATE PAY ITEM.
- 8. THE CONTRACTOR SHALL REMOVE SURPLUS MATERIAL FROM THE PROJECT AREA. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT AND IS NOT A SEPARATE
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS
- 10. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, AND SPECIAL CONDITIONS, COPIES OF ANY REQUIRED CONSTRUCTION PERMITS, EROSION CONTROL PLANS, SWPPP AND INSPECTION REPORTS.
- 11. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE COMMENCING WORK. NO FIFI D CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS FOR WHICH THE OWNER AND ENGINEER WERE NOT CONTACTED PRIOR TO CONSTRUCTION OF THE AFFECTED ITEM.
- 12. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE ARCHITECT, CITY ENGINEER AND CIVIL ENGINEER OF RECORD DIRECTLY FROM THE TESTING AGENCY.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TO THE ENGINEER A CFRTIFIFD RECORD SURVEY SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF TEXAS DEPICTING THE ACTUAL FIELD LOCATION OF ALL CONSTRUCTED IMPROVEMENTS THAT ARE REQUIRED BY THE JURISDICTIONAL AGENCIES FOR THE CERTIFICATION PROCESS. ALL SURVEY COSTS WILL BE THE CONTRACTOR'S RESPONSIBILITY.
- 14. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES, JURISDICTIONAL AGENCIES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES.
- 15. CONTRACTOR SHALL VERIFY BENCHMARKS AND DATUM PRIOR TO COMMENCING CONSTRUCTION OR STAKING OF IMPROVEMENTS. 16. CONTRACTOR SHALL THOROUGHLY CHECK COORDINATION OF CIVIL, LANDSCAPE, MEP, ARCHITECTURAL, STRUCTURAL, AND OTHER PLANS PRIOR TO COMMENCING CONSTRUCTION. OWNER AND ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCY
- 17. ALL HORIZONTAL DIMENSIONS GIVEN ARE TO FACE OF CURB AND TO PIPE CENTERLINES UNLESS OTHERWISE NOTED ON PLANS.
- 18. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RELOCATION AND INSTALLATION OF FRANCHISED UTILITIES NECESSARY FOR ON AND OFF SITE CONSTRUCTION.

PRIOR TO COMMENCING WITH CONSTRUCTION.

- 19. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH. THE AREAS SHALL THEN BE SEEDED, IRRIGATED, AND STABILIZED AS SPECIFIED IN THE PLANS, AND MAINTAINED UNTIL SOIL IS STABILIZED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE STABILIZED AND MULCHED AS SHOWN ON THE LANDSCAPE, GRADING, AND EROSION CONTROL PLANS.
- 20. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE SHOWN. 21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL
- 22. SOD OR SEED MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES WITHIN 48 HOURS OF COMPLETING FINAL GRADING AND AT ANY OTHER TIME AS NECESSARY TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES.
- 23. THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY WATER MANAGEMENT DISTRICT REPRESENTATIVES.
- 24. THE CONTRACTOR MUST CONSTRUCT AND MAINTAIN A PERMANENT STABLE PROTECTIVE COVER (GRASS) FOR EROSION AND SEDIMENT CONTROL ON ALL LAND SURFACES EXPOSED OR DISTURBED BY CONSTRUCTION OF THE PERMITTED PROJECT. THE PROTECTIVE COVER MUST BE INSTALLED WITHIN FOURTEEN DAYS AFTER FINAL GRADING OF THE AFFECTED LAND SURFACE. A PERMANENT STABLE COVER MUST BE ESTABLISHED WITHIN 60 DAYS OF IT'S INSTALLATION.
- 25. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE THE CIVIL ENGINEER A COPY OF AS-BUILT PLANS IDENTIFYING ALL DEVIATIONS OR VARIATIONS FROM THE ORIGINAL PLANS.
- 26. ALL EXISTING PAVEMENT, ADJACENT UTILITIES, STRUCTURES, ETC., DISTURBED AS A RESULT OF THE NEW CONSTRUCTION, SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 27. ALL WORK REQUIRED BY THESE PLANS SHALL BE CONDUCTED IN CONFORMANCE WITH CURRENT SAFETY CODES AND STANDARDS WITH JURISDICTION OVER THIS

### STORM SEWER DISCHARGE AUTHORIZATION:

- 1. A CONSTRUCTION SITE NOTICE SHALL POSTED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- 2. ALL CONTRACTORS AND SUBCONTRACTORS PROVIDING SERVICES RELATED TO THE SWPPP SHALL SIGN A CONTRACTOR CERTIFICATION STATEMENT ACKNOWLEDGING THEIR RESPONSIBILITIES AS SPECIFIED IN THE SWPPP.
- 3. A COPY OF THE SWPPP, INCLUDING CONTRACTOR CERTIFICATIONS AND ANY REVISIONS. SHALL BE SUBMITTED TO THE CITY AND FILED WITH THE CONSTRUCTION PLANS, AND SHALL BE RETAINED ON-SITE DURING CONSTRUCTION.
- 4. A NOTICE OF TERMINATION (N.O.T.) SHALL BE SUBMITTED TO THE TCEQ BY THE CONTRACTOR WHEN THE SITE HAS 100% OF THE DISTURBED AREAS STABILIZED AND THE SITE NO LONGER HAS STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES, OR THE N.O.T. PERMITTEE OR CO-PERMITTEE NO LONGER HOLDS OPERATIONAL CONTROL OF THE CONSTRUCTION.

### **EROSION CONTROL NOTES**

- 1. ALL EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO SITE DISTURBANCE AND SHALL REMAIN IN PLACE UNTIL FINAL GRADING AND PAVING IS COMPLETE AND A STAND OF GRASS IS ESTABLISHED WITH 70% COVERAGE ACHIEVED.
- 2. CONSTRUCTION OPERATIONS SHALL BE MANAGED SO THAT AS MUCH OF THE SITE AS POSSIBLE IS LEFT COVERED WITH TOPSOIL AND VEGETATION.
- 3. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL EROSION, CONSERVATION, AND SILTATION ORDINANCES. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF PERMANENT DRAINAGE AND THE ESTABLISHMENT OF A STAND OF GRASS SUFFICIENT TO PREVENT EROSION. THE CONTRACTOR MUST USE SEDIMENT FILTERS OR OTHER MEASURES APPROVED BY THE ENGINEER AND CONSTRUCTION MANAGER TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM CLOGGING STORM SEWER PIPES OR PROPOSED OR EXISTING INLETS, OR FROM BEING TRANSPORTED TO ADJACENT PROPERTIES AND STREET RIGHT OF WAYS.
- 4. SITE ENTRY AND EXIT LOCATIONS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON A PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY. WHEN WASHING IS REQUIRED TO REMOVE SEDIMENT PRIOR TO ENTRANCE TO A PUBLIC ROADWAY, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE. ALL FINES IMPOSED FOR TRACKING ONTO PUBLIC ROADS SHALL BE PAID BY THE CONTRACTOR.
- 5. CONTRACTOR IS RESPONSIBLE FOR PROPER MAINTENANCE OF THE REQUIRED EROSION CONTROL DEVICES THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS. EROSION CONTROLS SHALL BE REPAIRED OR REPLACED AS INSPECTION DEEMS NECESSARY, OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ACCUMULATED LT IN ANY EROSION CONTROL DEVICE SHALL BE REMOVED AND SHALL DISTRIBUTED ON SITE IN A MANNER NOT CONTRIBUTING TO ADDITIONAL SILTATION.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR REESTABLISHING ANY EROSION CONTROL DEVICE WHICH THEY DISTURB. EACH CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DEFICIENCIES IN THE ESTABLISHED EROSION CONTROL MEASURES WHICH MAY LEAD TO UNAUTHORIZED DISCHARGE OR STORM WATER POLLUTION, SEDIMENTATION OR OTHER POLLUTANTS. UNAUTHORIZED POLLUTANTS INCLUDE, BUT ARE NOT LIMITED TO, EXCESS CONCRETE DUMPING OR CONCRETE RESIDUE, PAINTS, SOLVENTS, GREASES, FUEL AND LUBE OIL, PESTICIDES, AND SOLID
- 7. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL USE FILTER BARRIER (OR OTHER METHOD APPROVED BY THE ENGINEER AND CITY) AS REQUIRED TO PREVENT ADVERSE OFF SITE IMPACT OR STORM WATER QUALITY FROM SILT AND CONSTRUCTION DEBRIS FLOWING ONTO ADJACENT PROPERTIES AS REQUIRED BY THE CITY, CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, OR LOCAL EROSION. CONSERVATION, AND SILTATION ORDINANCES. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF PERMANENT DRAINAGE FACILITIES AND THE ESTABLISHMENT OF A STAND OF GRASS OR OTHER GROWTH TO PREVENT EROSION.
- 8. CONTRACTOR SHALL PROVIDE ADEQUATE EROSION CONTROL DEVICES DURING THE PHASED CONSTRUCTION OF THIS PROJECT.
- 9. CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL SILT AND DEBRIS OFF SITE FROM THE EXISTING ROADWAYS AND PROJECT SITE THAT ARE A RESULT OF THE PROPOSED CONSTRUCTION.
- 10. BEFORE ANY EARTHWORK IS DONE, THE CONTRACTOR SHALL STAKE OUT AND MARK THE LIMITS OF CONSTRUCTION AND OTHER ITEMS ESTABLISHED BY THE PLANS. THE CONTRACTOR SHALL PROTECT AND PRESERVE CONTROL POINTS AT ALL TIMES DURING THE COURSE OF THE PROJECT. THE GRADING CONTRACTOR SHALL PROVIDE ALL NECESSARY ENGINEERING AND SURVEYING FOR LINE AND GRADE CONTROL POINTS RELATED TO EARTHWORK.
- 11. THE CONTRACTOR SHALL SALVAGE AND PROTECT ALL EXISTING POWER POLES, SIGNS. MANHOLES, TELEPHONE RISERS, WATER VALVES, ETC. DURING ALL CONSTRUCTION PHASES UNLESS NOTED OTHERWISE.
- 12. CONTRACTOR STAGING AREA TO BE AGREED UPON BY OWNER PRIOR TO BEGINNING
- 13. AS INLETS ARE COMPLETED TEMPORARY SEDIMENT BARRIERS SHALL BE INSTALLED.
- 14. SILT FENCE AND INLET SEDIMENT BARRIERS SHALL REMAIN IN PLACE UNTIL REVEGETATION HAS BEEN COMPLETED. 15. DISTURBED AREAS THAT ARE SEEDED OR SODDED SHALL BE CHECKED PERIODICALLY TO SEE THAT GRASS COVERAGE IS PROPERLY MAINTAINED.
- DISTURBED AREAS SHALL BE WATERED, FERTILIZED, AND RESEEDED OR RESODDED, 16. CONTRACTOR SHALL PROMOTE AND PROVIDE FOR A HEALTHY ESTABLISHMENT OF TURF GRASSES WHILE KEEPING IRRIGATION TO A MINIMUM IN ORDER TO REDUCE

EROSION FROM SURFACE RUNOFF.

### **GRADING NOTES**

1. IF A GRADING PERMIT IS REQUIRED FROM THE CITY PRIOR TO STARTING CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR OBTAINING PERMIT AND PAYING ALL ASSOCIATED FEES.

2. CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL

- EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING UTILITIES (SHOWN OR NOT SHOWN) WITHIN SCOPE OF CONSTRUCTION. IF ANY EXISTING UTILITIES ARE DAMAGED, THE CONTRACTOR SHALL REPLACE THEM AT HIS OWN EXPENSE.
- 3. ALL SPOT ELEVATIONS SHOWN ARE TO TOP OF PAVING SURFACE OR FINISHED EARTH GRADE UNLESS NOTED OTHERWISE. ADD 0.50' TO SPOT GRADES SHOWN FOR TOP OF CURB ELEVATIONS. 4. CONTRACTOR TO ENSURE POSITIVE DRAINAGE FROM THE PROPOSED BUILDINGS AND NO PONDING IN PAVED AREAS. CONTRACTOR ADJUSTMENTS TO SPOT GRADES TO MAINTAIN POSITIVE DRAINAGE IS ALLOWED WITH THE PRIOR APPROVAL OF THE

AREAS OF POOR DRAINAGE ARE ENCOUNTERED.

5. THE CONTRACTOR SHALL PROTECT ALL MANHOLE COVERS, VALVE COVERS, VAULT LIDS, FIRE HYDRANTS, POWER POLES, GUY WIRES, AND TELEPHONE BOXES WHICH ARE TO REMAIN IN PLACE AND UNDISTURBED DURING CONSTRUCTION.

ENGINEER. CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO PAVING IF ANY

- 6. ALL EXISTING CONCRETE PAVING, CHANNEL IMPROVEMENTS, SIDEWALK, STRUCTURES AND CURB DEMOLITION SHALL BE REMOVED IN THEIR ENTIRETY AND DISPOSED OF BY THE CONTRACTOR OFF SITE, UNLESS OTHERWISE DIRECTED BY THE OWNER OR
- 7. ALL AREAS DISTURBED BY GRADING OPERATIONS SHALL BE SEEDED, TEMPORARILY IRRIGATED AND MAINTAINED UNTIL A UNIFORM COVERAGE OF 70% MINIMUM DENSITY, AS DETERMINED BY THE OWNER OR OWNER'S REPRESENTATIVE, IS ACHIEVED.
- 8. ALL CLEARING, GRADING, COMPACTION AND SUBGRADE PREPARATION SHALL BE IN ACCORDANCE TO THE RECOMMENDATIONS MADE IN THE GEOTECHNICAL REPORT.
- 9. GRADING CONTRACTOR TO COORDINATE WITH THE FRANCHISED UTILITY COMPANIES FOR ANY REQUIRED UTILITY ADJUSTMENTS AND/OR RELOCATIONS.
- 10. THE CONTRACTOR SHALL CALCULATE HIS OWN EARTHWORK QUANTITIES AND USE TO DETERMINE HIS BID ACCORDINGLY. ANY DEVIATION FROM A BALANCED CUT AND FILL SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT AND CIVIL ENGINEER AND ANY VARIANCE QUANTIFIED ON THE BID.

### STORM SEWER NOTES

9. ALL PRIVATE STORM DRAINS SHALL BE:

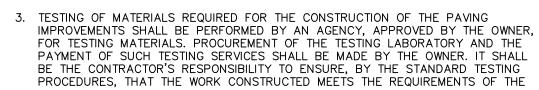
CONNECT ALL UTILITIES TO BUILDING.

- 1. CONTRACTOR SHALL FIELD VERIFY THE VERTICAL AND HORIZONTAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND CONSTRUCTION MANAGER IMMEDIATELY IF A
- 2. CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS SHOWN, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF CURB INLETS, GRATE INLETS, AND ALL UTILITIES CROSSING THE STORM SEWER. FLOW LINES AND RIMS OF PROPOSED INLETS SHALL BE VERIFIED WITH THE PROPOSED GRADE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE PROVIDED AN ELECTRONIC ACAD FILE FOR USE IN CONSTRUCTION STAKING AND LAYOUT.
- 3. THE SITE UTILITY CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE STORM SEWER.
- 4. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION PERMITS. 5. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE COMMENCEMENT OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
- 6. REFERENCE CITY'S DESIGN STANDARDS FOR NEW STORM SEWER SYSTEMS. 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING AND IMPLEMENTING A
- TRENCH PROTECTION PLAN FOR ALL OPEN TRENCH EXCAVATION.
- 8. EXISTING MANHOLE TOPS AND ALL OTHER DRAINAGE FACILITIES SHALL BE ADJUSTED AS REQUIRED TO MATCH FINAL GRADES AS SHOWN ON GRADING PLAN. NO SEPARATE PAY ITEM.
- A. REINFORCED CONCRETE PIPE (RCP), ASTM C 76, CLASS III OR IV AS NOTED B. POLYVINYL CHLORIDE (PVC), SDR 26 C. HIGH DENSITY POLYETHYLENE (HDPE), SMOOTH INTERIOR, AASHTO M252 AND 10. CONTRACTOR IS RESPONSIBLE FOR ALL MATERIALS, LABOR AND COSTS TO

### PAVING AND STRIPING NOTES

- DESIGN CRITERIA MANUAL. 2. THE CONTRACTOR SHALL REFER TO THE PAVING PLAN AND GEOTECHNICAL REPORT
- FOR PAVEMENT THICKNESS AND TYPE. IMPROVEMENTS SHALL BE PERFORMED BY AN AGENCY, APPROVED BY THE OWNER.
- FOR TESTING MATERIALS. PROCUREMENT OF THE TESTING LABORATORY AND THE PAYMENT OF SUCH TESTING SERVICES SHALL BE MADE BY THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE. BY THE STANDARD TESTING PROCEDURES, THAT THE WORK CONSTRUCTED MEETS THE REQUIREMENTS OF THE CITY AND PROJECT SPECIFICATIONS.
- 4. SEE IRRIGATION PLAN AND MEP PLANS FOR LOCATION OF PROPOSED SLEEVING AND
- 5. ALL HANDICAP RAMPING, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO THE AMERICANS WITH DISABILITIES ACT OF 2010 AND THE TEXAS ARCHITECTURAL
- 6. CONTRACTOR TO SUBMIT A PAVEMENT JOINTING PLAN TO THE ENGINEER AND OWNER PRIOR TO THE BEGINNING OF ANY CONCRETE PAVING WORK.
- 7. COORDINATE WITH BUILDING CONTRACTOR ON THE CONSTRUCTION AND PAVING NEAR THE COMPACTOR AND ENCLOSURE

1. ALL WORK AND MATERIALS ON SITE SHALL BE IN ACCORDANCE WITH THE CITY'S



8. ALL EXISTING CONCRETE OR ASPHALT SHOWN TO BE REMOVED SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR OFF SITE.

SAN ANTONIO, TEXAS AUGUST 1, 2018



EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

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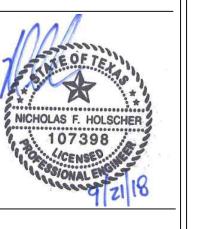
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**Kimley Morn** AND ASSOCIATES, INC.
601 NW LOOP 410, SUITE 350,
SAN ANTONIO, TX 78216
PHONE: 210-541-9166
FAX: 210-541-8699 TBPE FIRM NO. 928





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NA

REVISIONS No. Description Date

PROJECT NO. 2018009 21 September 2018



EXISTING WALL TO BE REMOVED

EXISTING BRICK PAVERS TO BE REMOVED & REPAIRED

EXISTING CONCRETE TO BE REMOVED

EXISTING ASPHALT SIDEWALK TO BE REMOVED & REPAIRED

EXISTING PLANTER TO BE REMOVED

EXISTING MISCELLANEOUS FEATURE TO BE REMOVED

EXISTING FENCE TO BE REMOVED

EXISTING TREE TO BE REMOVED

EXISTING TREE TO REMAIN
(DASHED LINE DENOTES ROOT PROTECTION ZONE)
(REF. DETAIL, SHEET C601 FOR TREE PROTECTION)

EXISTING WALL (TRIANGLE DENOTES FACE OF WALL

EXISTING FENCE GATE

EXISTING FENCE (POST AND RAIL)

EXISTING WATER METER

EXISTING UNKNOWN UTILITY

EXISTING STORM SEWER PIPE

EXISTING FENCE (ORNAMENTAL)

S
EXISTING SANITARY SEWER MANHOLE

EXISTING SANITARY CLEAN OUT

EXISTING WATER VALVE

# DEMOLITION GENERAL NOTES:

- 1. THE CONTRACTOR SHALL MAINTAIN COMPLETE RECORDS INDICATING HOW THE WASTE FROM THE SITE HAS BEEN HANDLED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS IN THE GEOTECHNICAL REPORT. THE SITE, AFTER DEMOLITION SHALL BE GRADED TO ELIMINATE DEPRESSIONS, HOLES, BERMS, DIRT PILES, ETC. THE SITE IS TO BE GRADED UNTIL RELATIVELY SMOOTH AND ATTRACTIVE IN APPEARANCE PRIOR TO STABILIZATION OF EARTH. ANY FILL MATERIAL/FILL AREAS SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR DENSITY AT A MOISTURE AT, OR ABOVE, OPTIMUM MOISTURE CONTENT IN MAXIMUM 8" LIFTS. CONTRACTOR SHALL PROVIDE PROOF IN THE FORM OF LAB TEST KITS THAT THIS HAS BEEN ACHIEVED.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THE ENVIRONMENTAL SITE ASSESSMENT.
- 3. LOCATIONS OF PUBLIC AND PRIVATE UTILITIES SHOWN ARE APPROXIMATE AND MAY NOT BE COMPLETE. CONTRACTOR SHALL CALL 811 AT LEAST 48 HOURS PRIOR TO COMMENCING DEMOLITION OR CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL CONTACT ANY OTHER UTILITY COMPANIES WHO DO NOT SUBSCRIBE TO THE TESS PROGRAM FOR LINE MARKINGS. THE CONTRACTOR BEARS SOLE RESPONSIBILITY FOR VERIFYING LOCATIONS OF EXISTING UTILITIES, SHOWN OR NOT SHOWN, AND FOR ANY DAMAGE DONE TO THESE FACILITIES.
- 4. ALL EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME THE DRAWINGS WERE PREPARED AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTORS RESPONSIBILITY AND SHALL BE DONE BEFORE THEY COMMENCE ANY WORK, IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY AND ALL DAMAGE DUE TO THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO
- 5. IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE 72 HOURS MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION.

SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED

SHALL BE CONTACTED BY THE CONTRACTOR AND THEIR PERMISSION OBTAINED REGARDING THE

METHOD TO USE FOR SUCH WORK.

COMPANIES PRIOR TO BEGINNING CONSTRUCTION.

6. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS, SPECIFICATIONS AND SPECIAL CONDITIONS, COPIES OF

ANY REQUIRED CONSTRUCTION PERMITS, AND EROSION CONTROL PLANS.

- 7. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS FOR WHICH THE OWNER WAS NOT CONTACTED PRIOR TO CONSTRUCTION OF THE AFFECTED ITEM.
- 8. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE DEVELOPER IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
- 9. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, SIGNAGE, ETC., TO THE BEST PRACTICES.
  10. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES AROUND THE SITE PERIMETER
- ARE TO BE INSTALLED.

  11. DAMAGE TO ALL EXISTING CONDITIONS TO REMAIN WILL BE REPLACED AT CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH ALL REGULATIONS GOVERNING THE DEMOLITION, REMOVAL, TRANSPORTATION AND DISPOSAL OF ALL DEMOLITION DEBRIS.
   CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST OSHA STANDARDS FOR
- EXCAVATION AND TRENCHING PROCEDURES. CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING, ETC. AS NECESSARY FOR THESE OPERATIONS, AND SHALL COMPLY WITH ALL OSHA PERFORMANCE CRITERIA.

  14. ANY RECYCLED MATERIAL TO BE STOCKPILED ON THE SITE SHALL BE STORED IN AS SMALL AN AREA
- AS PRACTICABLE AND THE LOCATION OF ANY STOCKPILE SHALL BE PRE-APPROVED BY THE OWNER PRIOR TO STOCKPILING.

  15. FILL MATERIAL SHALL BE PLACED IN ACCORDANCE WITH THE GEOTECH REPORT.



APPLICABLE REGULATIONS, RECEIVE THE REQUIRED PERMITS AND AUTHORIZATIONS, AND

AND SURVEYS REFERENCED ABOVE ARE ACCURATE, COMPLETE, OR COMPREHENSIVE.

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CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

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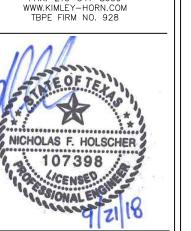
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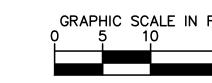
DEMOLITION PLAN

SAN ANTONIO ZOO
RHINO RENOVATIONS
3903 N St Mary's St
San Antonio, Texas 78212

PROJECT NO. 2018009 21 September 2018

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| _ |   | LEGEND   |
|---|---|--|
|   | ———— 700 ————                           | EXISTING CONTOURS  |
|   | 700 —                                   | PROPOSED CONTOURS  |
|   | (869.50TP)                              | PROPOSED SPOT ELEVATION (PAVEMENT)                       |
|   | (869.50SW)                              | PROPOSED SPOT ELEVATION (SIDEWALK)                       |
|   | (868.50FG)                              | PROPOSED SPOT ELEVATION (FINISHED GRADE)                 |
|   | (868.30TG)                              | PROPOSED SPOT ELEVATION (TOP OF GRATE)                   |
|   | (868.30TW)                              | PROPOSED SPOT ELEVATION (TOP OF WALL)                    |
|   | (868.30BW)                              | PROPOSED SPOT ELEVATION (BOTTOM OF WALL)                 |
|   | (868.30TR)                              | PROPOSED SPOT ELEVATION (TOP OF RISER)                   |
|   | (868.30BR)                              | PROPOSED SPOT ELEVATION (BOTTOM OF RISER)                |
|   | (868.30ME)                              | MATCH EXISTING SPOT ELEVATION                            |
|   | (867.3EX)                               | EXISTING SPOT ELEVATION                                  |
|   | (////////////////////////////////////// | MATCH EXISTING ELEVATION                                 |
|   |   | PROPOSED SWALE   |
|   |   | EXISTING WALL (TRIANGLE DENOTE FACE OF WALL              |
|   |   | PROPOSED ADA LANDING<br>(2% MAX SLOPE IN ALL DIRECTIONS) |
|   |   |  |

(699.42ME)—

(700.07ME)

DECK FFE = 713.25'

PROPOSED BERM (7" MAX)

- 4. GENERAL CONTRACTOR TO REFERENCE NOTE 1 REGARDING SPOT ELEVATIONS, COORDINATE WITH DIRT AND LANDSCAPE SUBCONTRACTORS REGARDING PROPOSED SOD AND HYDROMULCH LOCATIONS TO ENSURE ADEQUATE CUT FOR FUTURE VEGETATION.

ALL SPOT GRADES ARE TO TOP OF PAVEMENT (TP) OR TOP OF GRATE (TG), UNLESS OTHERWISE NOTED AS TC (TOP OF CURB). CONTRACTOR TO ADD 6" FOR TOP OF CURB AS NECESSARY.

2. NO EARTHEN SLOPE SHALL BE GREATER THAN 3:1, UNLESS OTHERWISE NOTED. 3. MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS UNLESS OTHERWISE NOTED.

5. EXISTING MANHOLE TOPS, VALVE BOXES, ETC. ARE TO BE ADJUSTED AS REQUIRED TO MATCH PROPOSED GRADES. IF NECESSARY, READJUSTMENTS SHALL BE PERFORMED UPON COMPLETION OF PAVING AND FINE GRADING TO ENSURE A SMOOTH TRANSITION.

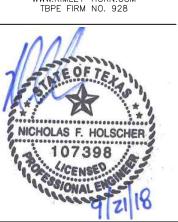
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VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
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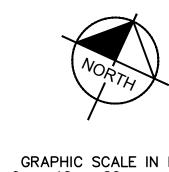
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PROJECT NO. 2018009

21 September 2018



EXISTING CONTOURS PROPOSED CONTOURS DRAINAGE BOUNDARY TIME OF CONCENTRATION PATH FLOW DIRECTION

DRAINAGE BASIN NAME DRAINAGE BASING AREA

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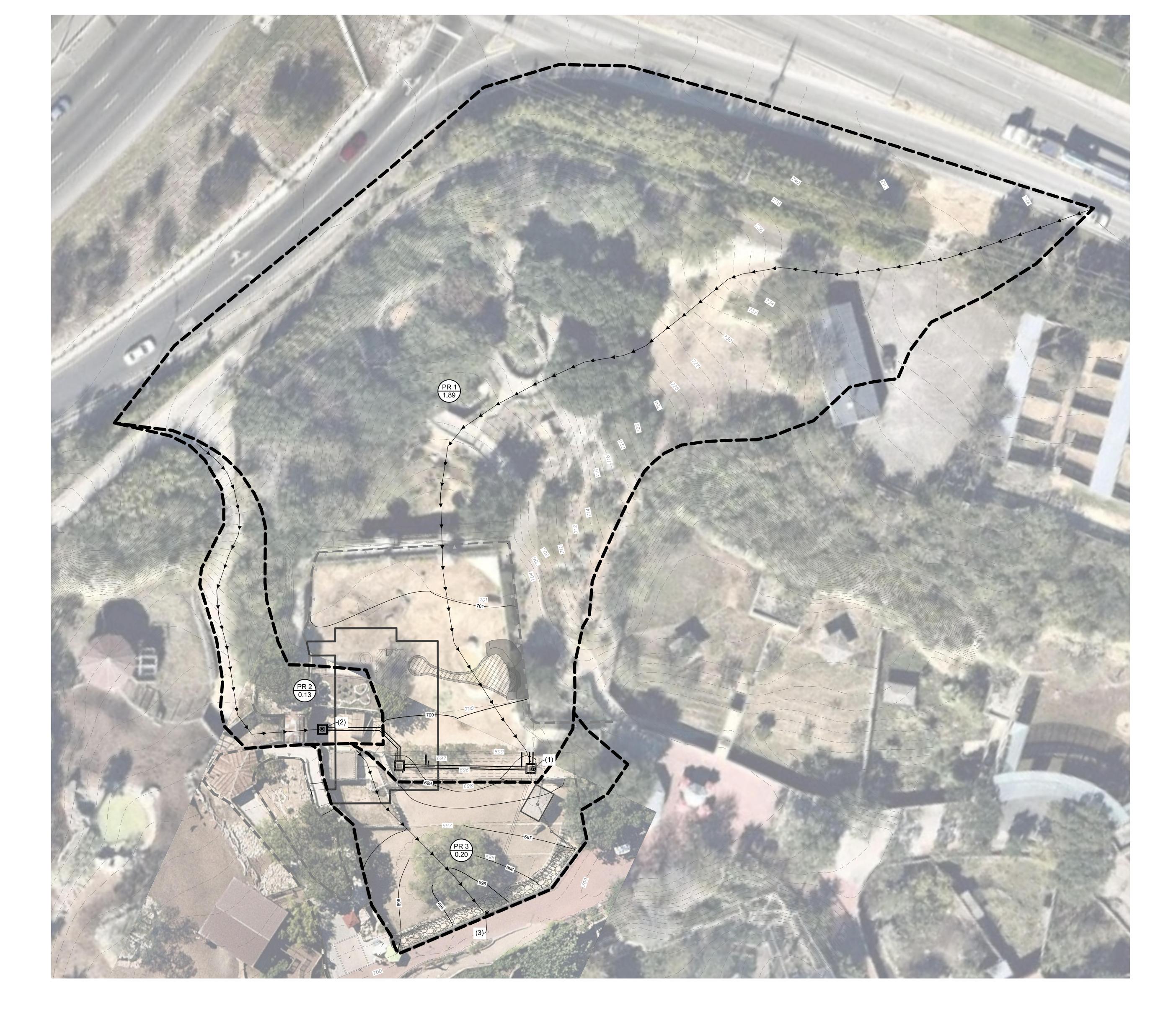
PROPOSED AINAGE AREA MAP

REVISIONS

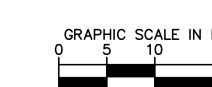
PROJECT NO. 2018009

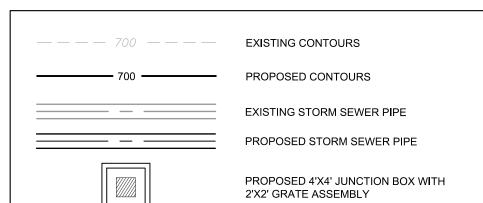
21 September 2018

SHEET



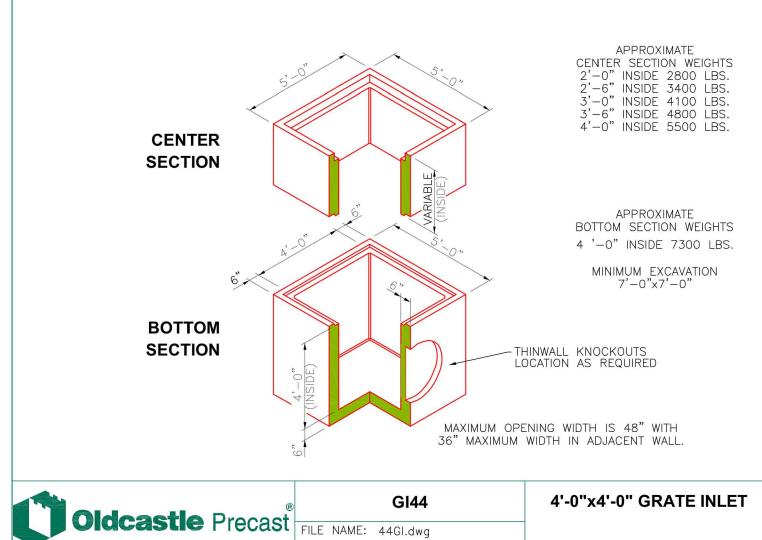
|       | Drainage | Time of       |              |                        | 2-Year                |              |                        | 5-Year                |              |                        | 10-Year               |              |                        | 25-Year               |              |                        | 50-Year               |              |                        | 100-Year              |              |
|-------|----------|---------------|--------------|------------------------|-----------------------|--------------|------------------------|-----------------------|--------------|------------------------|-----------------------|--------------|------------------------|-----------------------|--------------|------------------------|-----------------------|--------------|------------------------|-----------------------|--------------|
| Basin | Area     | Concentration | Runoff Coeff | Runoff<br>Coeffiecient | Rainfall<br>Intensity | Peak<br>Flow |
| Name  | Α        | Тс            | С            | Cf-2                   | I-2                   | Q-2          | Cf-5                   | I-2                   | Q-5          | Cf-10                  | I-10                  | Q-10         | Cf-25                  | I-25                  | Q-25         | Cf-50                  | I-50                  | Q-50         | Cf-100                 | I-100                 | Q-100        |
|       | (ac)     | (min)         |              |                        | (in/hr)               | (cfs)        |
| PR 1  | 1.89     | 12.30         | 0.77         | 1.00                   | 5.04                  | 7.33         | 1.00                   | 5.99                  | 8.71         | 1.00                   | 6.92                  | 10.08        | 1.00                   | 7.86                  | 11.44        | 1.00                   | 9.10                  | 13.24        | 1.00                   | 10.64                 | 15.48        |
| PR 2  | 0.13     | 5.00          | 0.00         | 1.00                   | 7.20                  | 0.77         | 1.00                   | 8.40                  | 0.90         | 1.00                   | 9.41                  | 1.01         | 1.00                   | 11.10                 | 1.19         | 1.00                   | 12.43                 | 1.33         | 1.00                   | 13.54                 | 1.45         |
| PR 3  | 0.20     | 5.00          | 0.00         | 1.00                   | 7.20                  | 0.88         | 1.00                   | 8.40                  | 1.03         | 1.00                   | 9.41                  | 1.15         | 1.00                   | 11.10                 | 1.36         | 1.00                   | 12.43                 | 1.52         | 1.00                   | 13.54                 | 1.66         |





EXISTING STORM SEWER INFORMATION SHOWN IS SHOWN AS APPROXIMATE BASED ON LIMITED SURVEY DATA OBTAINED. CONTRACTOR TO FIELD VERIFY PRIOR TO STARTING CONSTRUCTION AND NOTIFY THE OWNER AND ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

ALL CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 4500 psi. REINFORCING STEEL SHALL COMPLY WITH
ASTM A615 GRADE 60, A706 GRADE 60 OR A497 GRADE 70.
BAR BENDING ADD PLACEMENT SHALL COMPLY WITH THE LATEST ACI STANDARDS STANDARD STRUCTURAL DESIGN IS BASED ON AASHTO HS 20 WHEEL LOADING WATER TABLE IS AT 3'-0" BELOW GRADE FOR STANDARD STRUCTURAL DESIGN THE STANDARD DESIGN IS BASED ON THE TOP AT GRADE AND THE BASE AT 8'-0" MAX. BELOW GRADE. THE STRUCTURE SHALL BE PLACED ON A COMPACTED GRANULAR BASE TO INSURE UNIFORM DISTRIBUTION OF SOIL PRESSURES. SPECIAL DESIGNS BASED ON OTHER LOADINGS OR DEEPER INSTALLATION DEPTHS ARE AVAILABLE ON REQUEST. KNOCKOUTS OR PIPE OPENINGS OR CAN BE PROVIDED IN THE SIZE AND LOCATIONS REQUIRED.

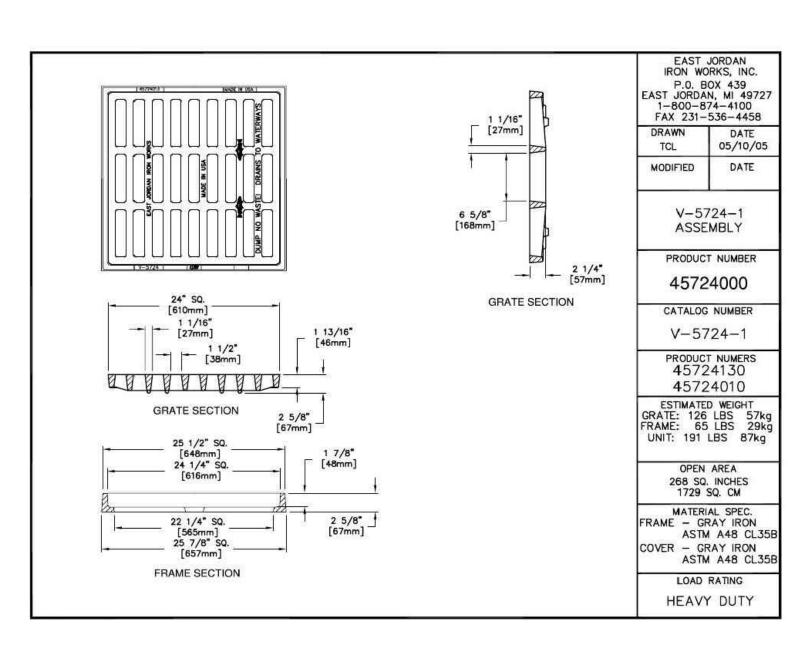


ISSUE DATE: March, 2005

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1900 Rilling Road San Antonio, TX 78214 Phone: (210) 923-4523 Fax: (210) 921-0473





CAUTION!! EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO
EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

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PROJECT NO. 2018009

21 September 2018

SHEET C501

CONTRACTOR TO EXTEND EXISTING 2" DRAIN LINE AND TIE INTO PROPOSED 4'X4' JUNCTION BOX

CONTRACTOR TO EXTEND EXISTING 2" DRAIN LINE

CONTRACTOR TO EXTEND EXISTING 4" DRAIN LINE

CONTRACTOR TO EXTEND EXISTING 4" DRAIN LINE

CONTRACTOR TO EXTEND EXISTING 6" DRAIN LINE AND TIE INTO PROPOSED 18" HDPE

STA. 0+78.08 STORM LINE A 18" 45° BEND

13 LF OF 18" HDPE @ 0.50%—

STA. 0+91.58 STORM LINE A

STA. 1+20.15 STORM LINE A 4'X4' JUNCTION BOX WITH

2'X2' GRATE ASSEMBLY

(REF. DETAIL THIS SHEET)

FL 18" OUT (NE) 695.78

RIM: 700.41

18" 45° BEND ₩ FL 18" 695.64

AND TIE INTO PROPOSED 18" HDPE ⊢

AND TIE INTO PROPOSED 4'X4' JUNCTION BOX

AND TIE INTO PROPOSED 18" HDPE

→ EXISTING 18" STORM SEWER

4'X4' JUNCTION BOX WITH

2'X2' GRATE ASSEMBLY (REF. DETAIL THIS SHEET)

CONTRACTOR TO EXTEND EXISTING 4" DRAIN LINE AND TIE INTO PROPOSED 4'X4' JUNCTION BOX

STA. 0+65.70 STORM LINE A

4'X4' JUNCTION BOX WITH 2'X2' GRATE ASSEMBLY (REF. DETAIL THIS SHEET)

FL 18" OUT (NE) 695.53

─9 LF OF 18" HDPE @ 0.50%

CONTRACTOR TO EXTEND EXISTING 4" DRAIN LINE

AND TIE INTO PROPOSED 4'X4' JUNCTION BOX

RIM: 698.25 FL 18" IN (NW) 695.53 FL 18" IN (SW) 695.20

RIM: 698.00

FL:695.20 (OUT)

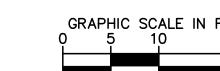
EXISTING 18" STORM PIPE

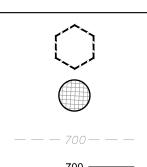
CONTRACTOR TO VERIFY

EXISTING GRATE INLET

DEPTH AND LOCATION.

AT UNKNOWN SLOPE.





EXISTING CONTOURS

PROPOSED CONTOURS LIMITS OF DISTURBED AREA

(TP) TREE PROTECTION (SEE DETAIL, SHEET C601)

GIP GRATE INLET PROTECTION (SEE DETAIL, SHEET C601)

FLOW DIRECTION

EXISTING WALL (TRIANGLE DENOTES FACE OF WALL)

### EROSION CONTROL SCHEDULE AND SEQUENCING

ROUGH GRADING

II. UTILITY INSTALLATION

INSTALLED PRIOR TO THE INITIATION OF ROUGH GRADING, AS NEEDED. ALL PRIOR EROSION CONTROL MEASURES INSTALLED ABOVE TO BE MAINTAINED AS NECESSARY DURING UTILITY INSTALLATION. ADDITIONAL INLET PROTECTION SHALL BE INSTALLED AS STORM DRAINAGE SYSTEM IS CONSTRUCTED.

TREE PROTECTION AND GRATE INLET PROTECTION SHALL BE

III. PAVING

ALL PRIOR EROSION CONTROL MEASURES INSTALLED ABOVE TO BE MAINTAINED AS NECESSARY DURING PAVING AND THROUGHOUT THE REMAINDER OF THE PROJECT.

IV. FINAL GRADING/SOIL STABILIZATION/LANDSCAPING

ALL TEMPORARY EROSION CONTROL MEASURES TO BE REMOVED AT THE CONCLUSION OF THE PROJECT AS DIRECTED BY THE CITY OR

### SITE MAP-GENERAL NOTES

IMPLEMENTATION, MAINTENANCE, AND EFFECTIVENESS OF ALL SWPPP CONTROLS - CONTROLS SHOWN ON THIS SITE MAP ARE SUGGESTED CONTROLS ONLY.

CONTRACTOR SHALL RECORD INSTALLATION, MAINTENANCE OR MODIFICATION, AND REMOVAL DATES FOR EACH BMP EMPLOYED (WHETHER CALLED OUT ON ORIGINAL SWPPP OR NOT) DIRECTLY ON THE SITE MAP.

DRAINAGE PATTERNS ARE SHOWN ON THIS PLAN BY PROPOSED AND EXISTING CONTOURS.

. TEMPORARY AND PERMANENT STABILIZATION PRACTICES AND BMP'S SHALL BE INSTALLED AT THE EARLIEST POSSIBLE TIME DURING THE CONSTRUCTION SEQUENCE. AS AN EXAMPLE. PERIMETER SILT FENCE SHALL BE INSTALLED BEFORE COMMENCEMENT OF ANY GRADING ACTIVITIES. OTHER BMP'S SHALL BE INSTALLED AS SOON AS PRACTICABLE AND SHALL BE MAINTAINED UNTIL FINAL SITE STABILIZATION IS ATTAINED. CONTRACTOR SHALL ALSO REFERENCE CIVIL AND LANDSCAPE PLANS SINCE PERMANENT STABILIZATION IS PROVIDED BY

5. BMP'S HAVE BEEN LOCATED AS INDICATED ON THIS PLAN IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES IN ORDER TO MINIMIZE SEDIMENT TRANSFER. FOR EXAMPLE: SILT FENCES LOCATED AT TOE OF SLOPE AND INLET PROTECTION FOR INLETS RECEIVING SEDIMENT FROM SITE

LANDSCAPING, THE BUILDING(S), AND SITE PAVING.

SITE MAP-SITE SPECIFIC NOTES

CONSTRUCTION ENTRANCE SHALL BE LOCATED SO AS TO PROVIDE THE LEAST AMOUNT OF DISTURBANCE TO THE FLOW OF TRAFFIC IN AND OUT OF THE SITE. ADDITIONALLY, CONSTRUCTION ENTRANCE SHALL BE LOCATED TO COINCIDE WITH THE PHASING OF THE PAVEMENT REPLACEMENT.

THE NATURE OF THIS SITE'S CONSTRUCTION CONSISTS OF: A. CLEARING AND GRUBBING B. MASS GRADING

C. UTILITY INSTALLATION D. PAVEMENT CONSTRUCTION

E. FINAL GRADING AND STABILIZATION

THE SUBSURFACE CONDITIONS ON-SITE CONSIST OFGRAVELLY LEAN CLAY, CLAYEY GRAVEL, AND MARL PER THE GEOTECHNICAL REPORT PROVIDED BY TTL, INC, DATED AUGUST 1, 2018, REPORT NO. 00180901561.

. STORM WATER ON-SITE WILL LEAVE THE SITE VIA SHEET FLOW AND PROPOSED UNDERGROUND STORM. POST CONSTRUCTION STORM WATER POLLUTION CONTROL MEASURES INCLUDE STABILIZATION BY PERMANENT PAVING, OR

DISTURBED PORTIONS OF SITE MUST BE STABILIZED. STABILIZATION PRACTICES MUST BE INITIATED WITHIN 14 DAYS IN PORTIONS OF THE SITE WHERE CONSTRUCTION HAS BEEN EITHER TEMPORARILY OR PERMANENTLY CEASED, UNLESS EXCEPTED WITHIN THE TPDES PERMIT. CONTRACTOR SHALL REMOVE TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF STABILIZATION OR PERMANENT DRAINAGE

PER FIRM MAPS 48029C0405G, DATED SEPTEMBER 29, 2010, THE SITE IS NOT LOCATED WITHIN A FEMA DESIGNATED FLOODPLAIN. . CONTRACTOR IS RESPONSIBLE FOR MODIFYING THE SWPPP/SITE MAP TO INCLUDE BMP'S FOR ANY OFF-SITE MATERIAL WASTE, BORROW OR EQUIPMENT STORAGE AREAS.

CONTRACTOR SHALL INSPECT DISTURBED AREAS, MATERIAL STORAGE AREAS EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES. AND VEHICLE ENTRY AND EXIT AREAS AT LEAST ONCE EVERY 14 CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT OF 0.5 INCHES OR GREATER.

Know what's **below.**Call before you dig.

EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

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REVISIONS

PROJECT NO. 2018009

21 September 2018

Figure 3.10 Schematics of Filter Fabric Area Inlet Protection (Source: City of Plano BMP SP-4)

DISTANCE IS GREATER THAN 6' BETWEEN CORNER POSTS.

1. ALL THE TREES WITH A DIAMETER GREATER THAN 3 INCHES AFFECTED BY CONSTRUCTION SHALL HAVE THE LIMBS AND ROOTS TRIMMED AND PRUNED ACCORDING TO ITEM No. 802. TREE PRUNING, SOIL AMENDING AND FERTILIZATION, UNLESS SPECIFIED TREES SHALL RECEIVE LEVEL 2 PROTECTION AS PER ITEM No. 802. TREES TO RECEIVE LEVEL 1 PROTECTION AS PER ITEM No.

Inlet Protection April 2010, Revised 9/2014

BOZ ARE SHOWN ON TREE PROTECTION TABLE ON THIS SHEET.

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S 28 28 Z REVISIONS

PROJECT NO. 2018009

8 OF 9 SHEETS

21 September 2018

SHEET C601

CAUTION!! EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR  $^{\perp}$ 

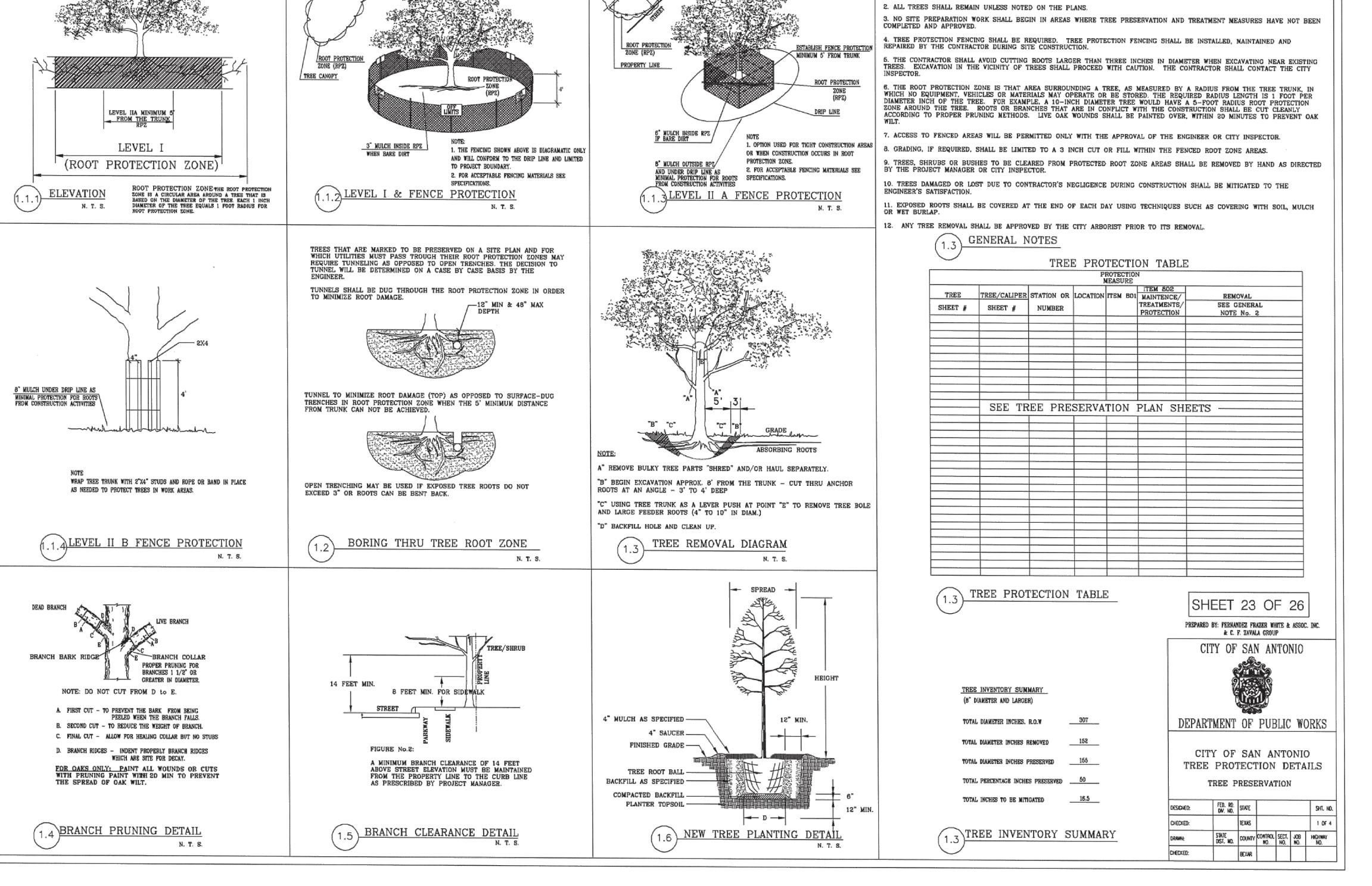
IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND

VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING

CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

Know what's below.

Call before you dig.





### 1.00 DOCUMENTS AND LIMITATIONS

- 1.01 THE DRAWINGS, CALCULATIONS, SPECIFICATIONS, AND REPRODUCTIONS, RELATING TO THE STRUCTURAL PART OF THE PROJECT, ARE INSTRUMENTS OF SERVICE TO BE USED ONLY FOR THIS PROJECT.
- 1.02 IT IS UNDERSTOOD THAT THE STRUCTURAL ENGINEER OF RECORD MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, AS TO FINDINGS, DESIGNS, RECOMMENDATIONS, SPECIFICATIONS, OPINION, OR PROFESSIONAL ADVICE, EXCEPT THAT THESE INSTRUMENTS OF SERVICE HAVE BEEN PREPARED IN ACCORDANCE WITH THE CURRENT GENERALLY ACCEPTED PROFESSIONAL ENGINEER PRACTICES.
- 1.03 ALL NON-STRUCTURAL ELEMENTS INDICATED ON THE STRUCTURAL DRAWINGS HAVE BEEN SHOWN IN GENERAL TO THE RELATIONSHIP TO THE STRUCTURAL ELEMENTS. ACCORDINGLY, THEY SHALL NOT BE ASSUMED TO BE ACCURATE AND REFERENCE MUST BE MADE TO THE APPROPRIATE CONSULTANT(S) PLANS AND SPECIFICATIONS.

### 2.00 CONSTRUCTION SAFETY

- 2.01 IT IS UNDERSTOOD THAT THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK ON THE PROJECT. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF THE PERSONS AND PROTECT THEM AGAINST INJURY: LIKEWISE, THE CONTRACTOR SHALL PROTECT ALL PROPERTY AGAINST DAMAGE OR LOSS.
- 2.02 THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS, AND ORDERS OF ANY PUBLIC BODY HAVING JURISDICTION FOR THE SAFETY OF PERSONS OR PROPERTY.
- 2.03 THE CONTRACTOR'S DUTIES AND RESPONSIBILITIES FOR THE SAFETY AND PROTECTION OF THE WORK SHALL CONTINUE UNTIL SUCH TIME AS THE WORK IS SATISFACTORILY COMPLETED, AND THE ENGINEER HAS ISSUED A NOTICE TO THAT EFFECT TO THE OWNER AND THE CONTRACTOR.

### 3.00 FORMWORK, SHORING, AND RESHORING

- 3.01 THE CONTRACTOR SHALL EMPLOY, AT HIS EXPENSE, A FORMWORK/SHORING ENGINEER REGISTERED IN TEXAS TO CONTROL ALL OPERATIONS RELATING TO DESIGN, INSTALLATION AND REMOVAL OF ALL FORMWORK, SHORING AND RESHORING.
- 3.02 CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR FABRICATION, ERECTION, SUPPORT, AND BRACING OF FORMWORK, AND SHORING AND RESHORING PROCEDURES FOR THE ENGINEER'S RECORDS.

## 4.00 DIMENSIONS

- 4.01 BEFORE STARTING WORK, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON THE SITE, AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER.
- 4.02 THE CONTRACTOR, BEFORE STARTING ANY WORK, SHALL CHECK ALL DIMENSIONS GIVEN ON THE STRUCTURAL DRAWINGS, RELATING TO GRID LINES, COLUMN AND WALL LOCATIONS, STRUCTURAL AND FINISHED FLOOR ELEVATIONS, MEMBER SIZES, ETC., WITH THE ARCHITECTURAL, AND CIVIL DRAWINGS. IF ANY DISCREPANCY IS NOTICED, IT SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT, AND THE ENGINEER, AND WORK SHALL NOT COMMENCE UNTIL INSTRUCTIONS ARE RECEIVED FROM THE ENGINEER.
- 4.03 THE CONTRACTOR SHALL REFER TO THE ENGINEER FOR HIS INSTRUCTIONS FOR ANY DIMENSION NOT GIVEN ON OR OBTAINABLE FROM THE DRAWINGS. THE CONTRACTOR SHALL NOT USE SCALE TO OBTAIN OR VERIFY ANY DIMENSION SHOWN ON THESE DRAWINGS.

## 5.00 SHOP DRAWINGS

- 5.01 REVIEW OF SHOP DRAWINGS BY THE ENGINEER IS LIMITED TO COMPLIANCE OF THE COMPLETED STRUCTURE WITH THE DESIGN CONCEPT AND INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DIMENSIONS, QUANTITIES, PERFORMANCE, SAFETY, COORDINATION WITH OTHER WORKS, AND ALL OTHER REQUIREMENTS OF THE CONTRACT DOCUMENTS. REVIEW DOES NOT AUTHORIZE CHANGES TO CONTRACT.
- 5.02 THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR HIS REVIEW IN ACCORDANCE WITH A SCHEDULE OF SUBMITTALS ACCEPTABLE TO THE ENGINEER. THESE SHOP DRAWINGS SHALL HAVE BEEN CHECKED BY, AND STAMPED WITH THE APPROVAL OF THE CONTRACTOR, AND IDENTIFIED AS THE ENGINEER MAY REQUIRE. THE DATA SHOWN ON THE SHOP DRAWINGS SHALL BE COMPLETE WITH RESPECT TO DIMENSIONS, DESIGN CRITERIA, AND DULY SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN TEXAS (WHERE APPLICABLE).

### 6.00 STRUCTURAL STEEL

THE ENGINEER.

- 6.01 ALL STRUCTURAL STEEL SHOWN ON PLANS SHALL CONFORM TO ASTM A36 WITH THE EXCEPTION OF WIDE FLANGE SECTIONS, WHICH SHALL CONFORM TO ASTM A992 (50 KSI); STRUCTURAL TUBING, WHICH SHALL CONFORM TO ASTM A500, GRADE B (46 KSI); AND ROUND TUBING, WHICH SHALL CONFORM TO ASTM A53, GRADE B (35 KSI).
- 6.02 COMPLY WITH PROVISIONS OF AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN, INCLUDING SUPPLEMENT NO.1, 2001" FOR DESIGN, FABRICATION, AND ERECTION.
- 6.03 SHEAR CONNECTIONS NOT DETAILED SHALL BE DESIGNED FOR ONE HALF OF THE ALLOWABLE UNIFORM LOAD AS SPECIFIED IN THE 9th EDITION, AISC, "MANUAL OF STEEL CONSTRUCTION". MOMENT CONNECTIONS NOT DETAILED SHALL BE DESIGNED FOR THE ALLOWABLE MOMENT CAPACITY OF THE SMALLER MEMBER ATTACHED AS SPECIFIED IN THE 9th EDITION, AISC, "MANUAL OF STEEL CONSTRUCTION". SHOP CONNECTIONS SHALL BE WELDED. FIELD CONNECTIONS SHALL USE 3/4 INCH BOLTS, A325 UNO DISFIGURE THREADS TO PREVENT LOOSENING OF NUT.
- 6.04 ALL STRUCTURAL STEEL TO BE GALVANIZED AND PAINTED (COLOR TO BE SELECTED BY OWNER).
- 6.05 ALL CONNECTIONS NOT DETAILED ON THE DRAWINGS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN TEXAS AND SHOP DRAWINGS SUBMITTED FOR APPROVAL.
- 6.06 WELDS SHALL BE MADE ONLY BY OPERATORS CERTIFIED BY THE STANDARD QUALIFICATION PROCEDURE OF THE AMERICAN WELDING SOCIETY FOR TYPE OF WELD REQUIRED. RETURN ALL WELDS AT CORNERS A MINIMUM OF TWICE THE NORMAL SIZE OF THE WELD.
- 6.07 THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STRUCTURAL STEEL WORK, SHOWN IN CONTRACT DRAWINGS, TO THE ENGINEER FOR HIS REVIEW.
- 6.08 OMIT PAINT ON CONTACT SURFACES WHERE BOLTS AND WELDS ARE USED TOGETHER IN A CONNECTION. BOLTS TO BE BEARING TYPE.

### 7.00 OPENINGS IN SLABS, BEAMS, AND WALLS

- 7.01 OPENING LESS THAN 10 INCHES ROUND OR SQUARE SHALL BE LOCATED AND FIELD DRILLED OR SAW CUT BY THE TRADE REQUIRING OPENING AFTER MEMBER IS ERECTED. SUCH OPENINGS SHALL BE COORDINATED BY THE CONTRACTOR AND RECEIVE PRIOR APPROVAL BY THE P/C MANUFACTURER AND THE ENGINEER.
- 7.02 OPENINGS IN CONCRETE WALLS MAY BE PERMITTED SUBJECT TO THE APPROVAL OF
- 7.03 OPENINGS THROUGH WEBS OF BEAMS ARE PROHIBITED EXCEPT AS SPECIFICALLY SHOWN ON THE PLANS.
- 7.04 NO DRILLING THROUGH SLABS, BEAMS, COLUMNS, OR WALLS SHALL BE CARRIED OUT EXCEPT WITH THE SPECIFIC APPROVAL OF THE ENGINEER. SUCH APPROVAL, IF GRANTED, SHALL BE ON A CASE BY CASE BASIS.

## 8.00 REINFORCED CONCRETE (CAST-IN-PLACE)

- 8.01 THE GENERAL CONTRACTOR SHALL ASSIST AND COOPERATE WITH AN INDEPENDENT TESTING LABORATORY (TO BE RETAINED BY THE OWNER) WHICH SHALL CONDUCT ALL THE SPECIFIED TESTS REQUIRED FOR THE CONCRETE WORK AND REPORT THE RESULTS OF THESE TESTS DIRECTLY AND PROMPTLY TO THE ENGINEER FOR HIS REVIEW.
- 8.02 DETAILING OF REBAR SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF THE ACI DETAILING MANUAL, AND CONCRETE REINFORCING INSTITUTE'S LATEST EDITION OF "MANUAL OF STANDARD PRACTICE". ALL SHOP DRAWINGS PERTAINING TO REBAR DETAILS SHALL BE SUBMITTED TO THE ENGINEER FOR HIS REVIEW.
- 8.03 CONCRETE MIX DESIGN FOR ALL CONCRETE WORK IS REQUIRED TO BE SUBMITTED TO THE ENGINEER FOR HIS REVIEW. IT IS TO BE NOTED THAT THE CONCRETE SUPPLIER SHALL HAVE A QUALITY CONTROL PROCEDURE FOR THE PRODUCTION OF ALL CONCRETE, WHICH MUST BE ACCEPTABLE TO THE ENGINEER AND MEETS CURRENT ACI STANDARDS.
- 8.04 CONSTRUCTION JOINTS, SHALL BE AS APPROVED
  BY THE STRUCTURAL ENGINEER, AND THE ARCHITECT. ENGINEER SHALL BE INFORMED
  AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONCRETE WORK.
- 8.05 A COPY OF ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" AND ACI SP 15 "FIELD REFERENCE MANUAL" SHALL BE KEPT IN THE PROJECT FIELD OFFICE AT ALL TIMES.
- 8.06 CAST-IN-PLACE CONCRETE PROPERTIES ACI 362.1R-97 TABLE 3.1:

| DESCRIPTION                | Fc MIX (PSI) | MAXIMUM<br>CHLORIDE ION | MAXIMUM<br>W/C RATIO | AVERAGE<br>ENTRAINED AIR |  |  |
|----------------------------|--------------|-------------------------|----------------------|--------------------------|--|--|
|                            |              |                         |                      |                          |  |  |
| FOUNDATIONS                | 4000 STD     | 0.30                    | 0.45                 | N/A                      |  |  |
| SLAB ON GRADE              | 4000 STD     | 0.15                    | 0.40                 | 6½%                      |  |  |
| WALLS                      | 4000 STD     | 0.15                    | 0.40                 | 6½%                      |  |  |
| ISLANDS, HOUSEKEEPING PADS | 4000 STD     | 0.15                    | 0.40                 | 6½%                      |  |  |
| ALL OTHERS                 | 4000 STD     | 0.30                    | 0.40                 | 6½%                      |  |  |

## NOTES:

- 1. STD DESIGNATES A CONCRETE MIX DESIGN IN ACCORDANCE WITH SPECIFICATION SECTION 03300, WHICH DOES NOT REQUIRE A GGBS/FLY ASH OR CALCIUM NITRITE ADMIXTURE.
- 2. AVERAGE AIR-ENTRAINED VALUES ARE FOR IN-PLACE CONCRETE. TOLERANCE ON TOTAL AIR CONTENT IS
- 3. ALL NORMAL WEIGHT CONCRETE TO HAVE A DENSITY OF APPROXIMATELY 145 PCF UNLESS NOTED.
- 4. ALL AIR-ENTRAINED CONCRETE SHALL INCLUDE 564 LBS OF CEMENTITIOUS MATERIAL MINIMUM PER CUBIC YARD OF CONCRETE. THE WEIGHT OF FLY ASH AND GGBS ADMIXTURES MAY BE INCLUDED WITH THE WEIGHT OF CEMENTITIOUS MATERIAL.
- 8.07 REINFORCING: ASTM A615, GRADE 60, FOR SLABS, WALLS, AND FOUNDATIONS IS ACCEPTABLE. ALSO, ALL REINFORCING TO BE OF WELDABLE GRADE WHERE WELDING SHOWN ON THE DRAWINGS.
- 8.08 BAR DETAILS AND SUPPORTS: ACI DETAILING MANUAL AND BUILDING CODE. LAP ALL SPLICES AS SHOWN ON THE STRUCTURAL DRAWINGS.
- 8.09 CLEAR DISTANCE FROM FACE OF CONCRETE TO MAIN STEEL SHALL BE AS SHOWN ON THE STRUCTURAL DRAWINGS. WHERE CLEAR DISTANCE IS NOT SHOWN, ACI 362 "GUIDE FOR THE DESIGN OF DURABLE PARKING STRUCTURES" SHALL CONTROL.
- 8.10 PROVIDE 3/4 INCH CHAMFERS AT ALL EXPOSED EDGES UNO.
- 8.11 CONSTRUCTION PLANS HAVE BEEN DETAILED TO ACCOUNT FOR AN EQUIVALENT TEMPERATURE CHANGE EQUAL TO 50 DEGREES FAHRENHEIT TO ACCOUNT FOR VOLUMETRIC CHANGES DUE TO TEMPERATURE.

### 9.00 REINFORCING

9.01 BAR SUPPORTS, DESIGN, DETAILING, FABRICATION, AND PLACING OF REINFORCING BARS SHALL BE IN ACCORDANCE WITH ACI 318—02 (BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE) AND ACI 315—94 (DETAILING MANUAL).

### 10.00 DESIGN LOADS

10.01 2016 INTERNATIONAL BUILDING CODE

10.02 DEAD: SELF WEIGHT

10.03 LIVE: DECK LIVE LOAD = 100 PSF

### 11.00 STRUCTURAL WOOD

- 11.01 ALL STRUCTURAL LUMBER SHALL BE AS SPECIFIED AND CONFORM TO THE AITC CODE OF STANDARD PRACTICE, LATEST EDITION. SPECIFICATIONS BY AITC SHALL GOVERN THOSE PPRTIONS OF WORK, FABRICATION AND ERECTION, OF ALL STRUCTURAL WOOD.
- 11.02 DIMENSIONAL LUMBER PROPERTIES: SOUTHERN YELLOW PINE, SELECT STRUCTURAL OR BETTER.

  11.03 COMPOSITE MEMBERS SHALL HAVE A MINIMUM MODULUS OF ELASTICITY OF
  1,800,000 PSI. FLEXURAL BENDING ALLOWABLE STRESS 2800 PSI.
- 11.04 HARDWARE SHALL BE AS SPECIFIED ON DRAWINGS AND BY "SIMPSON" OR AN APPROVED
- 11.05 WOOD IN DIRECT CONTACT WITH CONCRETE OR CMU, OR EXPOSED TO WEATHER, SHALL BE SEALED TO PROTECT FROM MOISTURE.

### **FOUNDATION NOTES**

- 1.00 COMPLY WITH SPECIFICATIONS AND STRUCTURAL GENERAL NOTES ON THIS SHEET. UNLESS OTHERWISE SPECIFIED THE FOLLOWING NOTES RELATING TO THE FOUNDATION PLAN SHALL GOVERN.
- 2.00 ALL FOUNDATIONS SHALL BE CENTERED ON COLUMN GRID LINES, E.G. COLUMNS,
- WALLS, ETC., UNLESS NOTED OTHERWISE.

  3.00 ALL FOUNDATION WORK RELATING TO THE INSTALLATION OF REBARS, SHALL BE
- INSPECTED AND APPROVED BY THE TESTING LABORATORY.
- 4.00 MINIMUM COMPRESSIVE STRENGTH OF CONCRETE (f'c) FOR THE FOUNDATION AND RETAINING WALL WORK SHALL BE f'c=4,000 PSI AT 28 DAYS.
- 5.00 FOUNDATION DESIGN IS BASED ON THE FOLLOWING:
  - 5.01 REFER TO GEOTECHNICAL ENGINEERING REPORT PROJECT NUMBER 00180901561.00 DATED 08-01-2018 BY TTL. CONTRACTOR SHALL REVIEW ALL RECOMMENDATIONS INCLUDED IN THIS REPORT AND FOLLOW STATED RECOMMENDATIONS UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
- 6.00 FILL ALL CMU BELOW GRADE WITH 3,000 PSI STRENGTH GROUT.
- 7.00 REINFORCING STEEL SHALL BE DEFORMED BARS, CONFORMING TO ASTM A706, GRADE 60.
- 8.00 REFER TO PLUMBING, MECHANICAL, FIRE PROTECTION, CIVIL AND ELECTRICAL DRAWINGS FOR LOCATION AND SIZES OF OPENINGS THROUGH CIP CONCRETE, AND ALL NECESSARY EMBEDDED ITEMS AS REQUIRED.
- 9.00 WHERE SHOWN, BUT NOT SPECIFICALLY NOTED, PROVIDE STANDARD ACI 90 DEGREE OR 180 DEGREE HOOK, AS APPLICABLE, TO REBAR.
- 10.00 PROVIDE CLASS B LAPS FOR ALL REBAR SPLICES RELATING TO FOUNDATION WORK UNLESS NOTED OTHERWISE. REFER TO OTHER STRUCTURAL SHEETS FOR SPLICES RELATING TO OTHER STRUCTURAL DRAWINGS.
- 11.00 REFER TO CIVIL (C) DRAWINGS FOR PROPERTY LINES AND LOCATION OF STRUCTURE.
- 12.00 WALLS ACTING AS RETAINING WALLS SHALL NOT BE BACKFILLED WITHOUT ADEQUATE BRACING UNTIL WALLS HAVE REACHED 75% OF SPECIFIED STRENGTH AND SUPPORTING SOIL AND SLABS ARE IN PLACE AND AT 75% OF SPECIFIED STRENGTH.
- 13.00 COMPACT FILL LAYERS UNDER BUILDING TO 95% MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 (STANDARD PROCTOR). PLACE FILL IN LAYERS 8 TO 10 INCH MAXIMUM LOOSE THICKNESS. COMPACT UPPER 18 INCHES OF FILL TO AT LEAST 98% MAXIMUM DRY DENSITY AT A MINIMUM. FOLLOW REQUIREMENTS OF GEOTECH REPORT.
- 14.00 SELECT AND PLACE POROUS BACKFILL AT RETAINING WALLS CAREFULLY BY HAND OPERATED EQUIPMENT ONLY, WITHIN A DISTANCE EQUAL TO HALF THE HEIGHT OF THE WALL.



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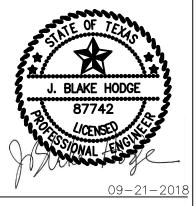
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SAN ANTONIO

SAN ANTONIO ZOO RHINO RENOVATIONS 3903 N St Mary's St San Antonio, Texas 78212

REVISIONS

No. Description Date

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PROJECT NO. 2018009
21 September 2018

STRUCTURAL GENERAL NOTES

SHEET

S001

1 OF 5 SHEETS

|  | # 2 0 6 7 1   |
|--|---|
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|  |   |
|  |   |
|  |   |
|  | SOL STUDIO<br>ARCHITECTS  |
| DEINEODOINO CTEL DADO                  | 824 BROADWAY ST. #110<br>SAN ANTONIO, TEXAS                                   |
| REINFORCING STEEL BARS REFERENCE       | 7 8 2 1 5 2 10 . 240 . 8864   |
| REINFORCEMENT                          | www.solstudioarchitects.us  |
| REPAIR                                 | ©These documents can not be copied or reproduced without written consent from |
| REPLACE                                | Sol Studio Architects, LLC.   |
| REQUIRED                               | Kimley » Horn   |
| RETAINING WALL                         | © 2018 KIMLEY-HORN<br>AND ASSOCIATES, INC.<br>601 NW LOOP 410, SUITE 350,     |
| REVISION                               | SAN ANTONIO, TX 78216<br>PHONE: 210-541-9166<br>FAX: 210-541-8699             |
| REQUEST FOR INFORMATION                | WWW.KIMLEY-HORN.COM<br>TBPE FIRM NO. 928                                      |
| REQUEST FOR PROPOSAL                   | TE OF TEXT  |
|  |   |
| SOUTH                                  | J. BLAKE HODGE  |
| SECTION                                | 87742<br>L/CENS Q   |
| SCHEDULE                               | SOSIDIVAL FING  |
|  | 09-21-2018  |
| SHOP DRAWINGS; SCHEMATIC DESIGN        |   |
| SIMILAR SNOW LOAD                      |   |
| SNOW LOAD SPECIFICATION                |   |
| SQUARE                                 |   |
| STEEL                                  |   |
| SLAB-ON-GRADE                          |   |
| SPACES                                 |   |
| SPOT ELEVATION                         |   |
| STANDARD                               |   |
| STEEL JOIST                            |   |
| STORAGE                                |   |
| STRUCTURAL                             | ZAS   |
| TOP AND BOTTOM                         |   |
| THROUGH BOLT                           |   |
| TRENCH DRAIN                           |   |
| TOP ELEVATION                          |   |
| TEMPERATURE; TEMPORARY                 |   |
| THROUGH                                |   |
| TOP OF                                 |   |
| TYPICAL                                |   |
| TOP OF FINISH FLOOR                    |   |
| THICKNESS                              |   |
| TOP OF FOUNDATION                      |   |
| TOP OF CONCRETE (CURR)                 |   |
| TOP OF CONCRETE COOTING                |   |
| TOP OF CONCRETE FOOTING                |   |
| TOP OF CONCRETE WALL                   |   |
| TOP OF FLOOR (FOOTING)  TOP OF MASONRY |   |
| TOP OF MASONRY  TOP OF SLAB            |   |
| TOP OF SLAB                            |   |
| . 5. 6. 11/100                         |   |
| UNIFORM                                | ∥ ດŽ  |
| UNLESS NOTED OTHERWISE                 | 2007<br>ATIO  |
| SHEAR                                  |   |
| VARIES                                 | NO N                                      |
| VEHICLE                                |   |



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REVISIONS No. Description Date

PROJECT NO. 2018009 21 September 2018

STRUCTURAL

**ABBREVIATIONS** 

SHEET

S002



REBAR

REF

REINF

REP

REPL

REQD

RT/W

REV

RFI

RFP

SEC

SIM

SPEC

STL

SOG

SP EL

STL JST

STRUCT

STD

STOR

T&B

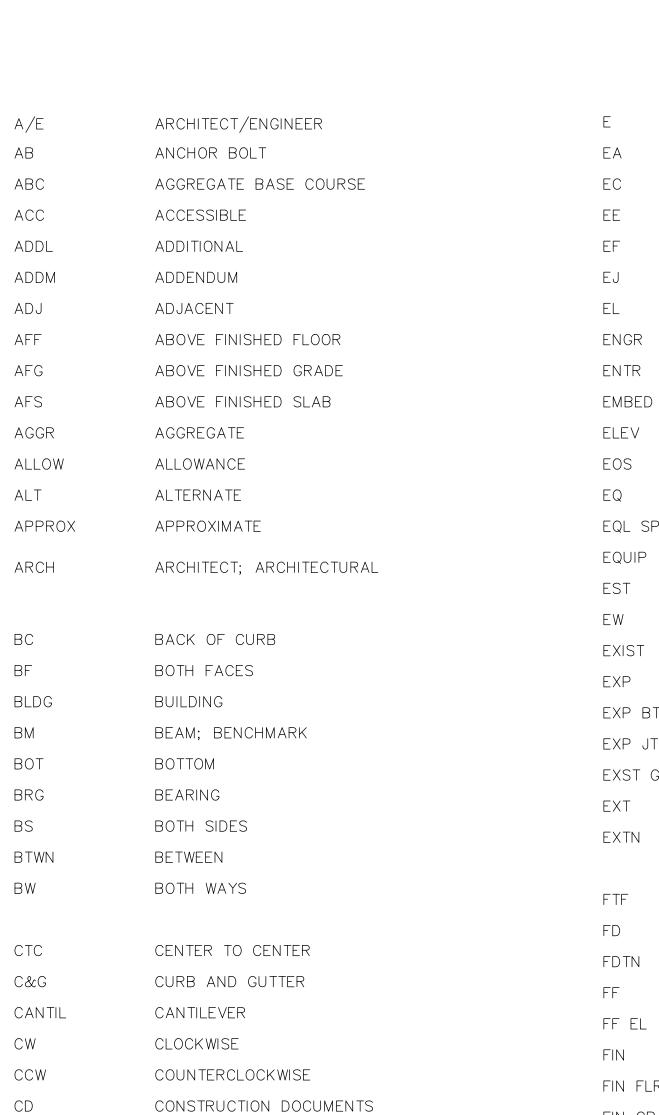
SCHED

EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR

IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND

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EXIST EXP BT EXP JT EXST GR EXTN FDTN

EAST

EACH

EDGE OF CURB

EXPANSION JOINT

EACH LAYER; ELEVATION

EACH END

EACH FACE

ENGINEER

ENTRANCE

ELEVATOR

EQUIPMENT

EACH WAY

ESTIMATE

EXISTING

EXTERIOR

EXTENSION

FACE TO FACE

FLOOR DRAIN

FOUNDATION

FINISH FACE

FINISH FLOOR

FINISH GRADE

FACE OF CONCRETE

FACE OF MASONRY

FACE OF WALL

FINISH

FLOOR

FRAME

FRAMING

FOOTING

GAGE

FORMWORK

GALVANIZED

GENERAL

HEIGHT

HOOK

HORIZONTAL

HEADED STUD

INSIDE FACE

INFORMATION

INCH

INSIDE DIAMETER (DIMENSION)

GROUND LEVEL

GROUND FLOOR

GRADE BEAM

GIRDER; GROUND

GENERAL CONTRACTOR

FEET; FOOT

FINISH FLOOR ELEVATION

EQUAL

EMBEDDMENT

EDGE OF SLAB

EQUALLY SPACED

EXPANSION; EXPOSED

EXPANSION BOLT

EXPANSION JOINT

EXISTING GRADE

KIP

KSI

KLF

KSF

KWY

LBS

LLH

LLV

LN

LPC

LTL

LTW

MFR

MECH

MATL

MAS

MAX

MBR

MEAS

MISC

MIN

MULT

NΑ

THOUSAND POUNDS

KIPS PER SQUARE INCH

KIPS PER LINEAL FOOT

KIPS PER SQUARE FOOT

LINEAR FEET (FOOT)

LONG LEG HORIZONTAL

LIGHT POLE COLUMN (9/S503)

LONG LEG VERTICAL

KEYWAY

ANGLE

POUNDS

LIVE LOAD

LANE

LINTEL

MOMENT

LIGHT WEIGHT

MANUFACTURER

MECHANICAL

MATERIAL

MASONRY

MAXIMUM

MEMBER

MEASURE

MINIMUM

MULTIPLE

NORTH

MISCELLANEOUS

NOT APPLICABLE

FF EL FIN FLR CONSTRUCTION DOCUMENTS FIN GR CEM CEMENT FLR CGS CENTER OF GRAVITY OF STRAND FOC FOM CLG CEILING FOW CIP CAST-IN-PLACE FR CONSTRUCTION JOINT CJ FRMG CENTER LINE FT CLL COLUMN LINE FTG CLR CLEAR CMU

CONCRETE MASONRY UNIT COLUMN COL CONC CONCRETE GΑ CONN CONNECTION GALV CONSTR CONSTRUCTION GC CONT CONTINUE; CONTINUOUS GEN COORD COORDINATE COV COVER GR BM CTR CENTER

CTRL JT CONTROL JOINT ΗT DEPTH HORIZ  $\mathsf{D-B}$ DESIGN-BUILD HK DELETE DEFL DEFLECTION DEMO DEMOLITION DETAIL

DEL

DET

DIAG

DEG

DIA

DIST

DWG

DWL

DOWEL(S)

DIAGONAL DEGREE DIAMETER DIMENSION INSTL DIRECTION

DISTANCE DEAD LOAD DRAIN; DRIVE DESIGN DRAWING

JOINT JOIST

GR FL

ISO JT ISOLATION JOINT

INSTALL INTERIOR

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REVISIONS

Description Date
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PROJECT NO. 2018009 21 September 2018

21 September 2018

STRUCTURAL

STRUCTURAL FRAMING PLAN

SHEET
S101

Permit Drawin

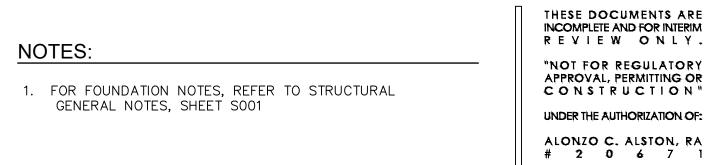
EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR  $^{\perp}$ 

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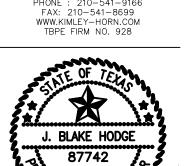


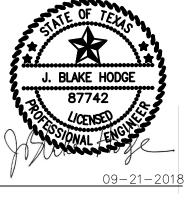


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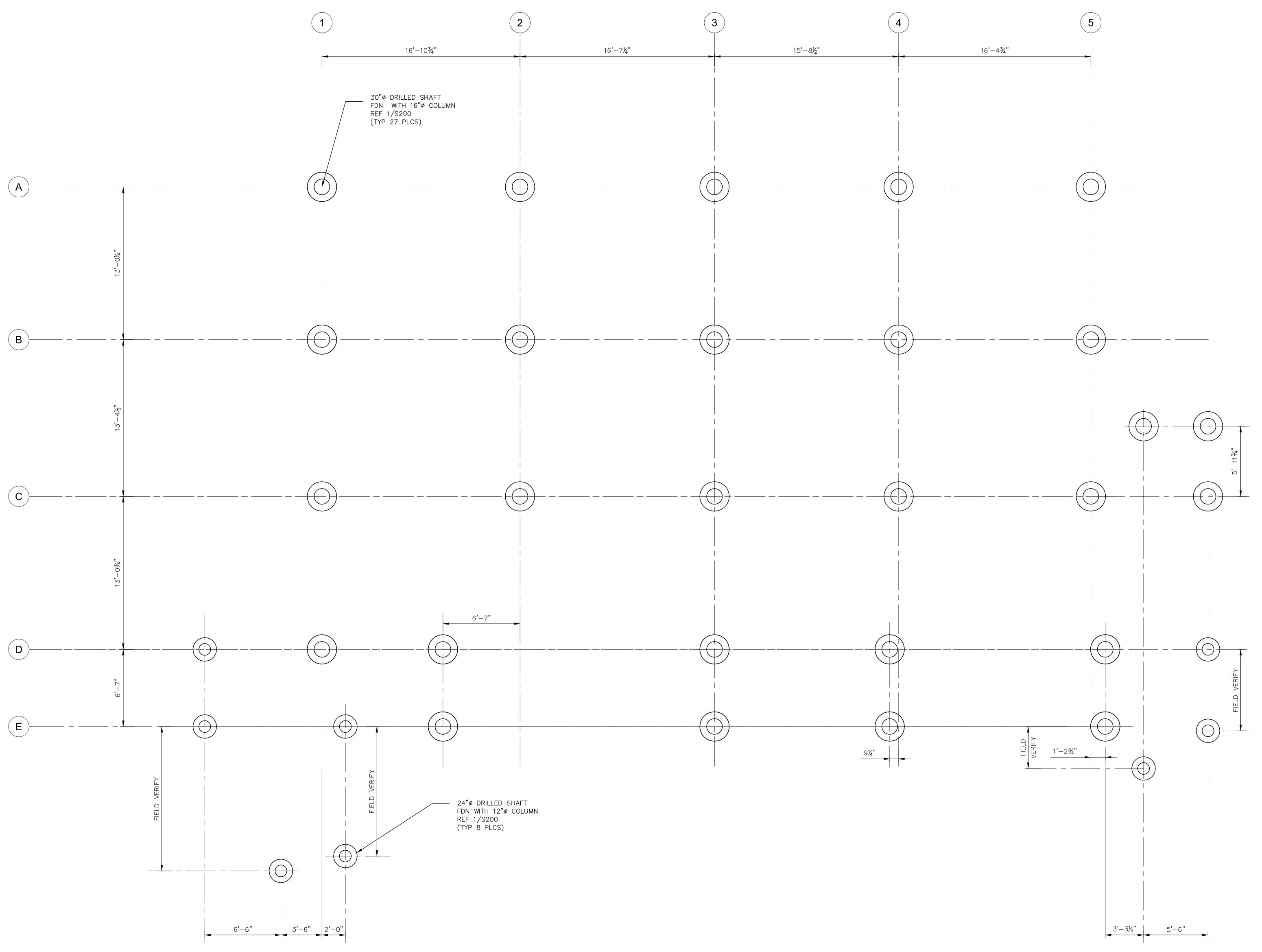
21 September 2018 STRUCTURAL

FOUNDATION PLAN

> SHEET S102

4 OF 5 SHEETS

CAUTION!! EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS. 



FOR STRUCTURAL NOTES, REFER TO STRUCTURAL GENERAL NOTES, SHEET S001

PIER AND COLUMN CENTER LINE

DECK COLUMN

\_ HEAVY DUTY ROPE BY OTHERS

- ¾" CHAMFER (TYP)

— 24"/30"ø DRILLED PIER

9-#8 WITH 3-#3 @ 3" OC - TIES, 12" OC REM

3" CLR (TYP)

30" DRILLED PIER REINFORCING

2'-0"/2'-6"

TYPICAL DRILLED PIER DETAIL

ALONZO C. ALSTON, RA # 2 0 6 7 1

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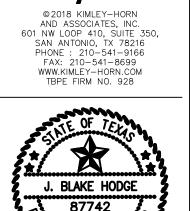
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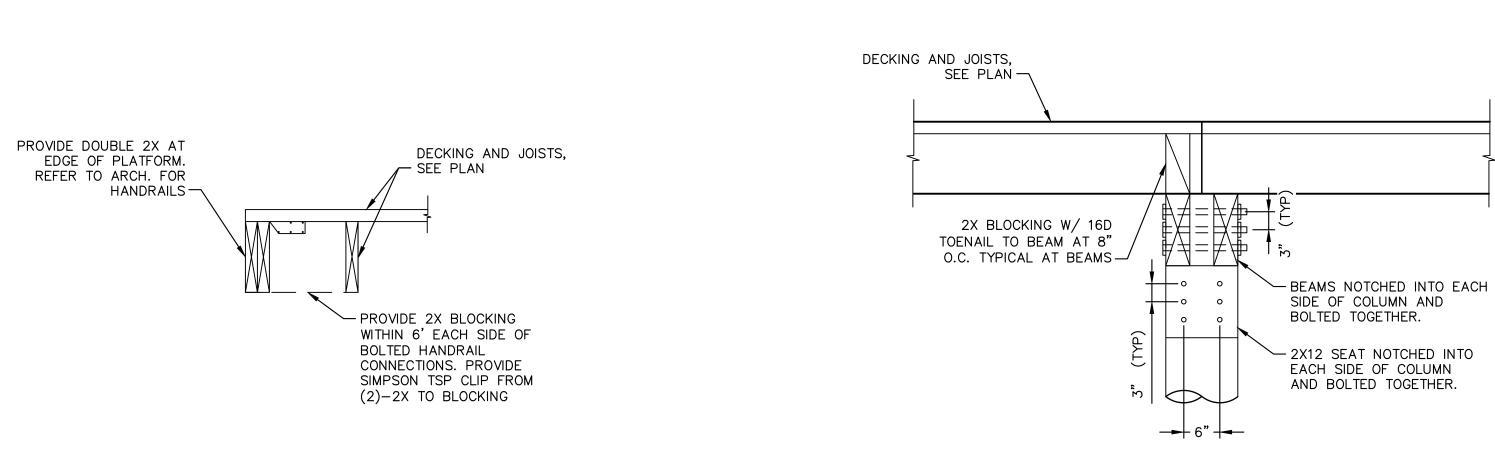
STRUCTURAL

**DETAILS** 

SHEET

5 OF 5 SHEETS

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DECKING AND JOISTS,

l BELOW BEAMS, PROVIDE 2X12X1'-0" EACH SIDE OF COLUMN. NOTCH INTO COLUMN AND BOLT TOGETHER W/ (6)-¾"øBOLTS —∕

SCALE: NTS

PLAN VIEW

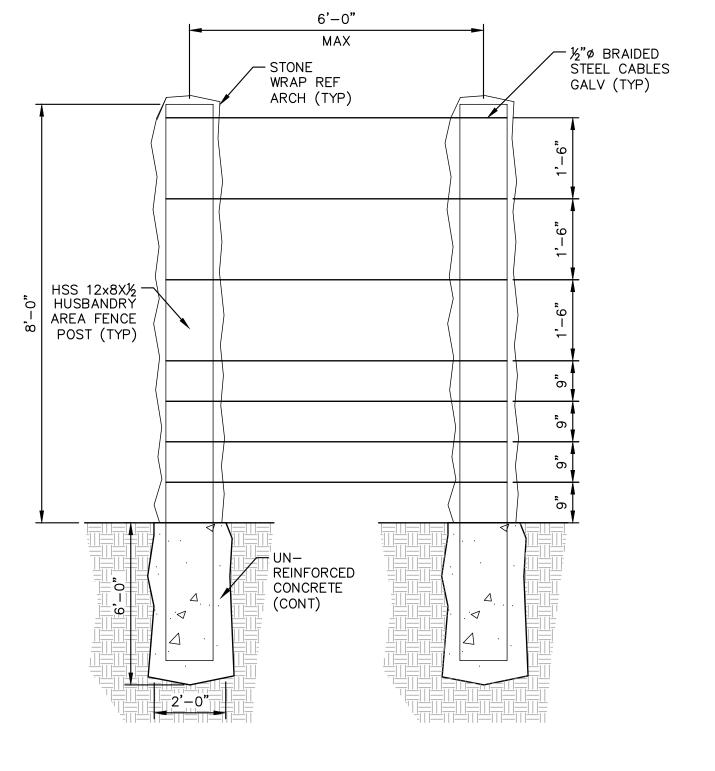
S200

BEAM\_ BOLTED TO COLUMN

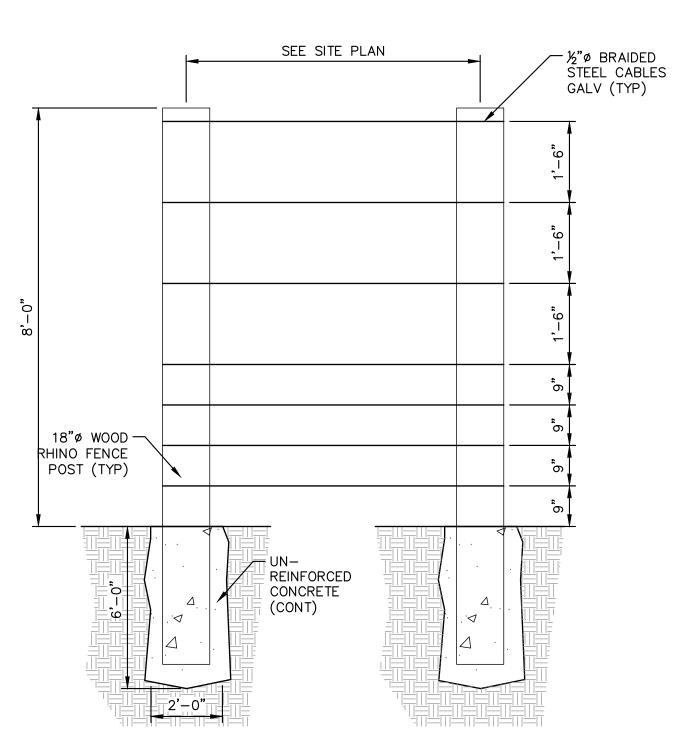
WOOD COLUMN, SEE PLAN —

─ 2X BĖLOW BEAMS, BOLTED TO COLUMN

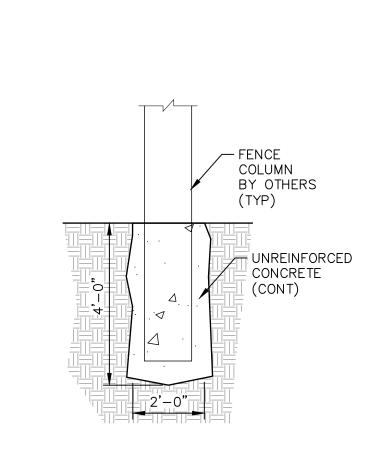
SEE PLAN -



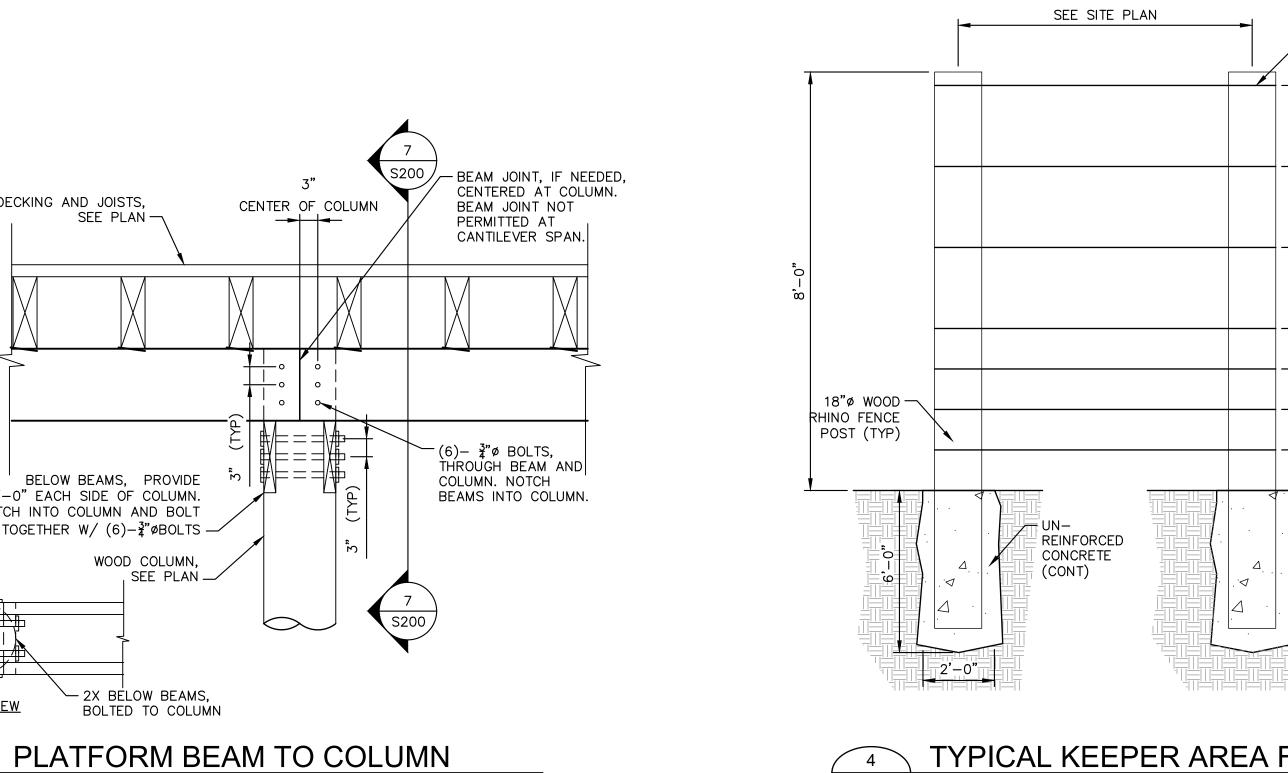
TYPICAL HUSBANDRY AREA FENCE S200 SCALE: NTS



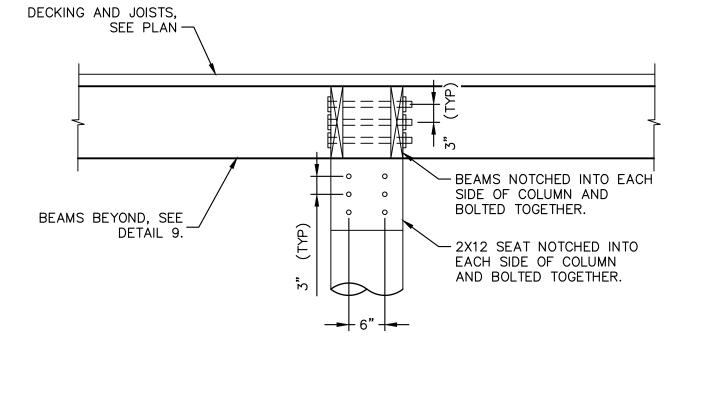
TYPICAL KEEPER AREA FENCE S200 SCALE: NTS











PLATFORM FRAMING AT RAMPS

S200 SCALE: NTS

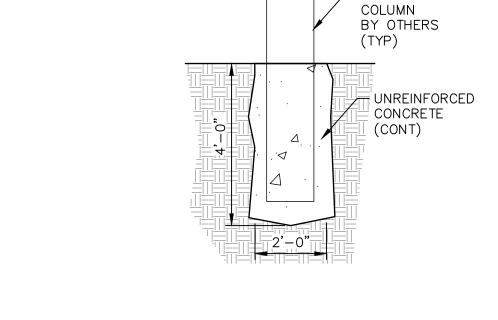
EDGE OF PLATFORM FRAMING

WOOD BEAM, —SEE PLAN

SIMPSON LUS210
— HANGERS

SCALE: NTS









TOP OF ROPE EL: 708.50

TOP OF CONC EL: 704.50

TOP OF GRADE EL: REF CIVIL

INCREASE SCHEDULED
DIAMETER AS REQD
FOR CASING

8-#7 WITH 3-#3 @ 3" OC TIES, 12" OC REM -

S200 SCALE: 3/4" = 1'-0"

24" DRILLED PIER REINFORCING

