Notice

Basic Information

Estimated Contract Value (USD)	$1.00 (Not shown to suppliers)
Reference Number	0000416333
Issuing Organization	Dallas County
Owner Organization	
Project Type	IFB - Invitation for Bid (Formal)
Project Number	2026-017-7102
Title	Dallas County Adult Probation Center Parking Lot Reconstruction
Source ID	PU.AG.USA.2438.C21221001
Piggyback Solicitation	No

Details

Location	Dallas County, Texas
Description	Demolition and reconstruction of its parking lot located at 1300 Mockingbird Lane, Dallas, TX. The project encompasses the removal of existing pavement, removal of the security fence with certain elements to be stored and reinstalled, re-grading and preparation of the subgrade, followed by the installation of a new finished parking lot and related site improvements. To ensure uninterrupted access for staff, visitors, and deliveries, the construction will be executed in phases as per the designated phasing plan. Contractors interested in bidding on this project should have demonstrated experience with similar projects and the capacity to manage phased construction while maintaining operational access for ongoing facility needs

Dates

Publication	03/12/2026 03:00 PM CDT
Question Acceptance Deadline	04/09/2026 03:00 PM CDT
Questions are submitted online	Yes
Closing Date	04/23/2026 02:00 PM CDT
Prebid Conference	03/25/2026 09:00 AM CDT
Onsite Visit	03/25/2026 11:00 AM CDT

Contact Information

Marina Valley
214-653-7618
marina.valley@dallascounty.org

Bonding Requirements

- Bid Bond	5.00 %

Pre-Bidding Events

Event Type	Prebid Conference
Attendance	Recommended
Event date	03/25/2026 09:00 AM CDT
Location	Microsoft Teams
Event Note	**PRE-BID MEETING LINK:** https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fteams.microsoft.com%2Fmeet%2F27120289457366%3Fp%3DLJKn3FIuIl0v5CcPGX&data=05%7C02%7CMarina.Valley%40dallascounty.org%7C2f6506757a414e9fbaa708de79606259%7C51adcfad72f1479cb28f52412e04014b%7C0%7C0%7C639081652032229458%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIsIlAiOiJXaW4zMiIsIkFOIjoiTWFpbCIsIldUIjoyfQ%3D%3D%7C0%7C%7C%7C&sdata=CPhCJWa57f5ykVephgG608%2Fl3gpDI%2FNmzjzYmCPIPEo%3D&reserved=0 **MICROSOFT TEAMS:** Meeting ID: 271 202 894 573 66 OR **DIAL IN BY PHONE:** 1-469-208-1731, ID: 544 214 887#
Event Type	Onsite Visit
Attendance	Recommended

Event date 03/25/2026 11:00 AM CDT

Location Adult Probation Center Parking Lot Reconstruction 1300 W Mockingbird Lane Dallas, TX 75247

Event Note

Bid Submission Process

Bid Submission Type Electronic or Physical Bid Submission

Pricing Lump sum

Pricing Lump sum

Bid Documents List

Item Name	Description	Mandatory	Limited to 1 file
Bid Documents	Defined in the solicitation	Yes	No
W9	W-9 form must be signed in 2026	Yes	No
Reference Letters	3 Letters of Reference, 3 year minimum of continuous operation	Yes	No
SBE Forms	Attachment S - Small Business Enterprise (SBE) Forms must be submitted with bid	Yes	No
Bid Security or Bid Bond	Bid Security or Bid Bond	Yes	No

Documents

Documents

Document	Size	Uploaded Date	Language
DALLAS COUNTY STANDARD TERMS AND CONDITIONS IFB (1).pdf [pdf]	342 Kb	12/20/2024 02:00 PM CST	English
SBE_Lnguage_for_IFB_2.24.24_ATTACHMENT_S.pdf [pdf]	536 Kb	12/19/2024 11:15 AM CST	English
2026-017-7102 Dallas County Adult Probation Center Parking Lot Reconstruction.pdf [pdf]	294 Kb	03/11/2026 05:59 PM CDT	English
Exhibit A-Adult Probation Center - Project Specifications.pdf [pdf]	13 Mb	03/11/2026 06:00 PM CDT	English
Exhibit B -Dallas Co Adult Probation Parking Lot (1-23-26).pdf [pdf]	39 Mb	03/11/2026 06:00 PM CDT	English
Exhibit C-Estimate -PRELIM OPC -DC Adult Probation Parking Lot (2-17-26).pdf [pdf]	131 Kb	03/11/2026 06:00 PM CDT	English
Exhibit D-Cost Template Generic_030426.pdf [pdf]	442 Kb	03/11/2026 06:00 PM CDT	English
Exhibit E Uniformat Level II Form - Work Sheet_030926.pdf [pdf]	628 Kb	03/11/2026 06:00 PM CDT	English

Categories

Selected Categories

NIGP Categories (8)	
906	**ARCHITECTURAL SERVICES, PROFESSIONAL**
90646	**Highways; Streets; Airport Pay-Parking Lots - Architectural** Highways; Streets; Airport Pay-Parking Lots - Architectural
912	**CONSTRUCTION SERVICES, GENERAL (INCL. MAINTENANCE AND REPAIR SERVICES)**
91240	**Demolition Services** Demolition Services
765	**ROAD AND HIGHWAY EQUIPMENT (EXCEPT EQUIPMENT IN CLASSES 755 AND 760)**
76549	**Pneumatic Machines: Demolition Tools, Paving Breakers, Rock Cutters, Tampers, etc. (See 765-80 for Non-Pneumatic Tampers)** Pneumatic Machines: Demolition Tools, Paving Breakers, Rock Cutters, Tampers, etc. (See 765-80 for Non-Pneumatic Tampers)
925	**ENGINEERING SERVICES, PROFESSIONAL**
92549	**Highways; Streets; Airport Pay-Parking Lots - Engineering** Highways; Streets; Airport Pay-Parking Lots - Engineering
913	**CONSTRUCTION SERVICES, HEAVY (INCL. MAINTENANCE AND REPAIR SERVICES)**
91375	**Maintenance and Repair, Parking Lot and Alley** Maintenance and Repair, Parking Lot and Alley
91336	**Construction, Parking Lot and Alley** Construction, Parking Lot and Alley
971	**REAL PROPERTY RENTAL OR LEASE**
97155	**Parking Spaces in a Parking Lot or Garage, Rental or Lease** Parking Spaces in a Parking Lot or Garage, Rental or Lease
988	**ROADSIDE, GROUNDS, RECREATIONAL AND PARK AREA SERVICES**
98832	**Grading (Of Parking Lots, etc. - Not Road Building)** Grading (Of Parking Lots, etc. - Not Road Building)

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Courtesy Email

Sent using email addresses

69joeyvs@gmail.com;arodconstruction@att.net;axiscuttingandcoring@gmail.com;bconstgw@gmail.com;brickstonetile@gmail.com;candace@fnhconstruction.com;coneill@builderservicesco.com;craig.schleker@charter.net;dale@epcstx.com;dcmjs.llc@gmail.com;dfoster@ffconstructionllc.com;eduardo.hernandez@flowlineconstruction.com;elcala@att.net;gaby@dconcretecutters.com;hernandezucontracting@gmail.com;info@ambercrestgroup.com;info@earthhaulers.com;info@fireflyearthworks.com;jeanettefran@coverallmgmt.com;jhutchinson@hutchinsoncompanies.com;jruedastrucking@gmail.com;kquentin@axiscontracting.com;martaf@dunesdcs.com;mquinn@aoind.com;nosorio@aztecaomega.com;office@cactusabatement.net;officeatxco@gmail.com;ringram@ipmcco.com;rob@alphantx.com;rudolfo.davila@gmail.com;sahmed@ieaworld.com;sergio@jmunoztrucking.com;teal@elementenviro.com;tharris@con-real.com;wlawrence@drgmodular.com

DALLAS COUNTY STANDARD TERMS AND CONDITIONS

By returning the Bid Proposal with a price quote, vendors certify and agree that:

1. All charges – wages, salaries, taxes including payroll taxes, benefits, insurance, overhead, fees, permits, licenses, fees, labor, personnel, service, supervision, documentation, administration, training, implementation, materials, supplies, delivery, transportation, shipping , freight, fuel surcharges, mileages, parking, tolls, travel time, and all other associated cost direct and indirect including incidentals necessary to provide the goods and services outlined in this solicitation specified or implied are to be included in bid proposal cost. Services and Inside Delivery will be F.O.B.: Dallas County as indicated on each individual purchase order.

2. **TEXAS GOVERNMENT CODE CHAPTER 2271 VERIFICATION – BOYCOTT ISRAEL**

Effective September 1, 2017, the State of Texas requires all governmental entity, state agency or political subdivision (which includes counties) to obtain written verification from the Company that their Company does NOT boycott Israel and will not boycott Israel during the life of this contract, agreement or purchase order (hereafter referred to as "Contract"). By accepting this Contract, the Company (Professional or other applicable term defining the contracting party) verifies that it does not Boycott Israel, and agrees that during the term of this Contract will not Boycott Israel as that term is defined in Texas Government Code Section 808.001, as amended." The County cannot execute a contract for goods and services without this declaration. Please refer to Texas Government Code, Subtitle F, Title 10, Government Code Chapter 2270.

(a) This section applies only to a contract that:

(1) is between a governmental entity and a company with 10 or more full-time employees; and

(2) has a value of $100,000 or more that is to be paid wholly or partly from public funds of the governmental entity.

3. **CONFLICT OF INTEREST QUESTIONNAIRE (CIQ) FORM**

Effective January 1, 2006, Chapter 176 of the Texas Local Government Code requires that any vendor or person considering doing business with a local government entity disclose in the Questionnaire Form CIQ, the vendor or person's affiliation or business relationship that might cause a conflict of interest with a local government entity. By law, this questionnaire must be filed with the records administrator of Dallas County no later than the 7th business day after the date the person becomes aware of facts that require the statement to be filed. See Section 176.006, Local Government Code. A person commits an offense if the person violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor. By submitting a response to this request, the vendor represents that it is in compliance with the requirements of Chapter 176 of the Texas Local Government Code. Contractor shall complete and file the Conflict of Interest Questionnaire with the Dallas County Clerk at 1201 Elm Street, 21st Floor, Dallas, Texas 75270.

4. **CERTIFICATE OF INTERESTED PARTIES FORM 1295**

In 2015, the Texas Legislature adopted House Bill 1295, which added section 2252.908 of the Government Code. The law states that a governmental entity or state agency may not enter into certain contracts with a business entity unless the business entity submits a disclosure of interested parties form to the governmental entity or state agency at the time the business entity submits the signed contract to the governmental entity or state agency. The form discloses any interested parties who have a controlling interest (10% or more ownership) in the business entity and those who actively participate in facilitating the contract or negotiate the terms of the contract (broker, intermediary, advisor, and/or attorney), if any. The disclosure requirement applies to a contract entered into on or after January 1, 2016.

The Texas Ethics Commission was required to adopt rules necessary to implement that law, prescribe the disclosure of interested parties form, and post a copy of the form on the commission's website. The commission adopted the Certificate of Interested Parties form (Form 1295) on October 5, 2015 and new rules (Chapter 46) on November 30, 2015.

The "Certificate of Interested Parties" form must be completed on the Texas Ethics Commission website, printed, signed, and submitted to the County by the authorized agent of the Business Entity with acknowledgment that disclosure is made under oath and under penalty of perjury prior to final contract execution.

To obtain additional information on HB 1295, to learn more about Texas Ethics Commission process to create a new account or to complete an electronic version of Form1295 for submission with a signed contract, please go to the following website: https://www.ethics.state.tx.us/tec/1295-Info.htm

Instructional Videos for Business Entities on how to file online can be found at https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm

The identification number (section 3 of the form) to be used on the 1295 for this procurement is the IFB solicitation number.

5. **TITLE VI ASSURANCES/COMPLIANCE POLICY**

The County, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

Pursuant to Title VI requirements, any entity or person that enters into a contract with Dallas County including, but not limited to prime contractors, sub-contractors, and sub-recipients, may not discriminate on the basis of race, color, national origin, age, sex, disability, or religion in their selection and retention of subcontractors (including consultants), in connection with any federally funded program or activity (including any program or activity undertaken/funded by a Dallas County Division/Department that receives federal funds).

6. **TEXAS GOVERNMENT CODE CHAPTER 2252 ATTESTATION**

By entering into this Contract, Contractor attests that Contractor is not a company that is identified on a list prepared and maintained by the Texas State Comptroller under Section 2252.153, Tex. Gov't Code, as a company known to have contracts with or provide supplies or services to a foreign terrorist organization as designated by the U.S. Secretary of State.

7. **PRE-AWARD SURVEY**

After bid opening and before award, County may perform a pre-award survey of the bidder's facilities and equipment to be used in the performance of work under this solicitation. Bidder agrees to allow all reasonable requests for inspection of his or her facilities.

8. After bid opening and before award Dallas County reserves the right to request the bidder to provide, but not necessarily limited to, the following forms:

a. Texas Government Code Chapter 2270 Verification Form
b. Texas Government Code Chapter 2252 Certification Form
c. 1295 Form
d. W-9 Form

9. The bid award shall be based on, but not necessarily limited to, the following factors:

e. Unit Price
f. Total Bid Price
g. Delivery Date
h. Results of Testing Samples
i. Special Needs and Requirements of Dallas County
j. Dallas County's Experience with Products Bid
k. Vendor's Past Performance Record with Dallas County
l. Dallas County's Evaluation of Vendor's Ability
m. Estimated Costs for Supplies, Maintenance, etc.
n. Estimated Surplus Value
o. Small Business Enterprise completed forms
p. Dallas County reserves the right to award to a primary and secondary vendor(s).

Dallas County shall award this contract to the responsive bidder(s) offering the lowest and best bid in accordance to Local Government Code 262.021(5-a) who comply with all of the requirements, terms and conditions prescribed herein. Dallas County reserves the right to reject any or all bids in whole or in part, to make multiple awards, partial awards, award by item by item basis, award by types, award by sections, or lump sum total, and waive any immaterial deviations in the bid as may be considered in the best interest of the County.

10. **INVOICING/BILLING**

Invoices will be submitted to the Dallas County Auditor's Office. All billings must have appropriate supporting documentation before such billings will be approved. Billing shall cover goods and services not previously invoiced. Vendor shall reimburse the Dallas County for any monies paid to Contractor for goods or services not provided or when goods/services provided do

not meet the contract agreement or solicitation requirements. Payments made by the County shall not preclude the right of the County from thereafter disputing any items involved or billed under the contract agreement or solicitation and shall not be construed as acceptance of any part of the goods or services. Contractor understands and agrees that any funds paid under this contract are contingent upon satisfactory delivery of the Services as described in this contract and subject to routine processing. No payment, on any basis, will be made for unsatisfactory work.

Contractor agrees to submit complete, fully documented and accurate itemized statement of invoices with appropriate/applicable attachments and documentation, as required by the County for all goods, services, and work performed **following acceptance of goods, services or work by the County**.

At minimum, the original invoices submitted against the IFB, must reference all of the following information:

a. Contractor/Vendor Name
b. Contractor/Vendor Address
c. Contractor/Vendor Contact Information
d. Contractor/Vendor Telephone Number and Fax Number
e. Contractor/Vendor Remittance to Address
f. Invoice Date
g. Invoice Number (uniquely numbered, no duplicates)
h. Valid Dallas County Purchase Order Number must appear on all itemized invoices and packing slips
i. Solicitation Number
j. Date of Services or Date Purchase
k. Description of Services and Goods
l. Cost of Services and Goods

Invoices and support documentation are to be sent to:

Original Invoice:	Dallas County Auditor's Office Attn: Accounts Payable 500 Elm Street, Suite 4200 Dallas, TX 75202 214.653.6478 Accounts.Payable@dallascounty.org
Copy of invoice(s) shall be sent to:	REQUESTING USER DEPARTMENT NAME AND ADDRESS INDICATED ON THE PURCHASE ORDER

All invoices must reference a Dallas County Purchase Order Number

Payment will be made upon receipt and acceptance by the County of completed services, goods and/or products ordered and receipt of a valid invoice, in accordance with the Texas Government

Code, Chapter 2251. The County will incur no penalty for late payment if payment is made within thirty (30) or fewer days from the statement if there is an uncontested billing. Any payment not made within thirty (30) days of its due date shall bear interest in accordance with Chapter 2251 of the Texas Government Code. Invoices received without all the required supporting documentation and information will not be processed and will be returned to the Contractor unpaid for correction.

11. If applicable, a packing list or other suitable shipping documents shall accompany each shipment and shall show:

(a) Name and address of vendor
(b) Name and address of receiving department
(c) Dallas County Purchase Order number and
(d) Description of material shipped, including item numbers, quantity, number of containers, and package number, if any.

12. **ACH ELECTRONIC PAYMENTS**

ACH Electronic Payments

Dallas County offers ACH vendor and supplier payment services for all vendors and suppliers providing goods, services or products to Dallas County.

Dallas County is moving away from making payments by paper checks and we are strongly encouraging vendors and suppliers to `accept electronic payments. Below is the option that is currently available in lieu of a paper check. Dallas County has chosen the Paymode-X ACH payment service through Bank of America for this efficient form of payment.

There is no cost or fee to the vendor or supplier of any kind resulting from the acceptance of an ACH payment from Dallas County via PaymodeX. This allows Dallas County to directly deposit invoice payments into the vendor's bank account along with complete remittance information that can be accessed at any time.

For more information regarding Paymode-X, please visit our website at: http://portal.paymode.com/dallascounty/ or call customer service @ 877.443.6944 or contract the Dallas County Auditor's Office – Account Payable Division at 214.653.6473.

13. Upon request by Dallas County, bidders agree to furnish samples and/or demonstrations of products bid, as applicable. The product(s) requested will be furnished at no additional cost to Dallas County and will be of sufficient amounts and/or time frames agreed by County and bidder to ensure effective testing of the products(s). Any testing product used beyond the agreed upon amount or time frame may be considered for payment by Dallas County, if in the best interest of the County. Any product that fails testing shall be considered sufficient reason to reject the bid or product. Any product used by Dallas County, during the contract period that does not perform as specified and/or approved during testing shall be considered grounds for cancellation of the contract.

14. Whenever an article or material is defined by describing a proprietary product or by using the name of a manufacturer, the term "or equal" if not inserted shall be implied. The specified article or material shall be understood as descriptive and not restrictive. As determined by Dallas County, equal is considered as articles or materials which can effectively and economically

perform the required task; is comparative in quality and performance and, if required, is acceptably similar or matches the specified structural design.

If the amount shown in words and its equivalent in figures do not agree, the written words shall be binding. Ditto marks are not considered writing or printing and shall not be used.

15. The Contractor shall be considered an Independent Contractor and not an agent, servant, employee, or representative of the County in the performance of the work. No term or provision hereof or act of the Contractor shall be construed as changing that status.

16. The Contractor agrees that it will protect, defend, indemnify, and save whole and harmless the County and all of its officers, agents, and employees from and against all claims, demands, causes or action, damages, judgments, loss and expenses, including attorney's fees, of whatsoever nature, character, or description that any person or entity has or may have arising from or on account of any injuries or damages (including but not restricted to death) received or sustained by any person, persons, or property, on account of, arising out of, or in connection with the performance of the work, including without limiting the generality of the foregoing, any negligent act or omission of the Contractor or any agent, servant, employee or sub-contractor of the Contractor in the execution or performance of this Contract. Contractor further agrees to protect, indemnify and hold County harmless against and from any and all claims and against and from any and all loss, cost, damage, judgments or expense, including attorney's fees arising out the breach of any of the requirements and provisions of this contract of any failure of Contractor, its employees, officers, agents, contractors, invitees, or assigns in any respect to comply with and perform all the requirements and provisions hereof.

17. The Contractor agrees, during the performance of the work, to comply with all applicable codes and ordinances of the appropriate City, County or the State of Texas as they may apply, as these laws may now read or as they may hereafter be changed or amended.

18. The Contractor shall obtain from the appropriate City, Dallas County or the State of Texas the necessary permit(s), if any, required by the ordinances of the City, County or State for the performance of the Work.

19. The Contractor shall not sell, assign, transfer or convey this Contract, in whole or in part, without the prior written consent of the County.

20. Should Dallas County authorize the original awardee to subcontract (assign) any portion of this contract, the original awardee will maintain the ultimate legal responsibility for all services according to contract specifications. In the event of a subcontract, the original awardee must maintain a continuous effective business relationship with the subcontractor(s) including, but not limited to, regular payments of all monies owed to any subcontractor. Failure to comply with these requirements, in whole or part, will result in termination of this contract and/or legal ramifications, due to nonperformance.

Should Dallas County authorize the original contractor to transfer this contract, in whole or part, the secondary contractor will maintain all the legal responsibilities set forth in the context of this contract.

21. In case any one or more of the provisions contained in this Contract shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision thereof and this Contract shall be considered

as if such invalid, illegal, or unenforceable provision had never been contained herein.

22. The parties herein agree that this Contract shall be enforceable in Dallas County, Texas, and if legal action is necessary to enforce it, exclusive venue shall lie in Dallas County, Texas.

23. This Contract shall be governed by and construed in accordance with the laws of the State of Texas and all applicable Federal Laws.

24. **Scanned or Re-typed Response:**

If in its response, bidder/offeror either electronically scans, re-types, or in some way reproduces the County's published bid or proposal specifications, then in the event of any conflict between the terms and provisions of the County's published bid or proposal specifications, or any portion thereof, and the terms and provisions of the response made by bidder/offeror, the County's bid or proposal specifications as published shall control.

Furthermore, if an alteration of any kind to the County's published bid or proposal specifications is only discovered after the contract is executed and is or is not being performed; the contract is subject to immediate cancellation.

25. This Contract embodies the complete agreement of the parties hereto, superseding all oral or written previous and contemporary agreements between the parties and relating to matters herein, and except as otherwise provided herein cannot be modified without written agreement of the parties.

26. Multi-year service/lease-purchase agreements or any continuing contracts are solicited and awarded based on governmental fiscal funding. If for any reason, funds are not appropriated to continue the service/lease- purchase agreement, the said agreement/contract shall be automatically terminated on the expiration date or date in which the funds have been eliminated. Any/all services/leased equipment will be removed from the respective county department/facilities without penalty to Dallas County. Any/all charges incurred as a result of this action are the responsibility of the contractor.

27. Contractors are not officially authorized to begin work and/or deliver items covered under this agreement until formal approval and/or a signed contract is executed by the proper county authorities. Dallas County accepts no liability, of any kind, for products/services delivered/furnished without proper authorization.

28. Except for proposals received under Local Government Code 262.030 and/or 262.0295, in accordance with the aforementioned statutes, Dallas County will uphold the confidentiality of bidder trade secrets to the extent allotted by law. All confidential information must be clearly identified and separated, by the bidder and prior to submission of the proposal.

29. **OPEN RECORDS**

All responses submitted to Dallas County become the property of Dallas County and are subject to the Public Information Act (Texas Government Code Chapter 552). The interested

firms/individuals should familiarize themselves with the provisions of that Act. In no event shall Dallas County, or any of its agents, representatives, consultants, directors, officers, or employees, be liable to a firm/individual for the disclosure of all or any portion of a response submitted pursuant to the IFB.

If a firm/individual has special concerns about information that it desires to make available to Dallas County, but which it believes constitutes a trade secret, proprietary information or other information excepted from disclosure, such firm/individual should specifically and conspicuously designate ((i.e. mark confidential) each page of that information, which the Bidder believes, should not be disclosed outside Dallas County. Disclosure of requested information will be subject to the Texas Public Information Act.

30. **TERMINATION**

The County may, at its option and without prejudice to any other remedy to which it may be entitled at law or in equity, or elsewhere under this contract, terminate this Contract, in whole or part, by giving 10 days advance written notice thereof to the Contract with the understanding that all (products/services) being (delivered/performed) under this Contract shall cease upon the date specified in such notice. The County shall compensate the Contractor in accordance with the terms of this contract for the (products/services) (delivered/performed) prior to the date specified in such notice.

31. **TERMINATION FOR DEFAULT OR NON-PERFORMANCE**

Default, material breach, or non-performance of the bidder in terms of specifications or non-compliance with the terms of this contract shall be a basis for termination of the contract by the County. Termination in whole or in part, by the County may be made at its option and without prejudice to any other remedy to which it may be entitled at law or in equity, or elsewhere under this Contract, by giving ten (10) days' advance written notice setting forth the nature of the material failure or non-performance to the Contractor and/or bidder with the understanding that all work being performed under this contract shall cease upon the date specified in such notice. The termination will not be effective if the material failure is fully cured prior to the end of the stated in written notice NOT LESS THAN TEN (10) day period.

Termination under this will not relieve Contractor from liability for any default or breach under this contract agreement or any other act or omission of Contractor.

The County shall not pay for work, equipment, services or supplies which are unsatisfactory. Contractor may be given a reasonable opportunity prior to termination to correct any deficiency. This however shall in no way be construed as negating the basis for termination for non-performance. In addition and as authorized by Commissioners Court, vendors terminated for non-performance will be disbarred from award consideration on future county solicitation for a period of not less than thirteen (13) months.

32. **MONETARY RESTITUTION**

In the event the contract is prematurely terminated due to default, non-performance and/or withdrawal by the contractor, Dallas County reserves the right to seek monetary restitution (to include but not limited to; withholding of monies owed) from the contractor to cover costs for interim services and/or to cover the difference of a higher cost (difference between termination vendor's rate and new company's rate) beginning the date of vendor's termination through the contract expiration date. In the event a civil suit is filed to enforce this provision, Dallas County will seek its attorney's fees and cost of suit from the Contractor.

33. **NON-EXCLUSIVITY**

This contract and/or agreement is non-exclusive and shall not in any way preclude Dallas County from entering into similar agreements and/or arrangements with other Vendors, Contractors, or from acquiring similar, equal or like goods and/or services from other entities or sources including state contracts.

34. **NEPOTISM**

No person (1)who is an employee, agent, consultant, officer, or official of the contractor and who exercises or has exercised any functions or responsibilities with respect to assisted contract activities; or (2) who is in a position to participate in a decision-making process or gains inside information with regard to such activities, may obtain a personal or financial interest or benefit, direct or indirect, in any contract, subcontract, or agreement with respect thereto, or the proceeds thereunder, either for themselves or those with whom they have family or business ties, during their tenure.

35. **RIGHT TO PROTEST**

Vendors aggrieved in connection with a specific solicitation, evaluation, or the award of any bid, purchase order, or contract, may formally protest to the Purchasing Director only if the Vendor has reason to believe that, with respect to a specific solicitation, (a) there was a material violation of state or federal statutory requirements, County Purchasing Department rules and regulations, or this Code of Ethics (including the Restricted Contact Period), or (b) the procurement process gave an unfair advantage or unfair disadvantage to one or more Vendors.

Procurement processes that may give an unfair advantage or disadvantage to one or more Vendors include, but are not limited to, the following:

i. The specification unfairly limits competition for no legitimate purpose;

ii. The contract award is compromised by improprieties in post-award negotiations;

iii. The evaluation factors or criteria are applied in a manner that is different than disclosed in

the solicitation; and

iv. There are irregularities in the receipt or opening of solicitation responses.

Protests must be in written form and must contain the following information (if applicable):

i. The protesting Vendor's name, address, telephone number, fax number, and email address;

ii. The identifying number of the solicitation and/or contract;

iii. The date the Vendor become aware of the facts forming the basis of the protest;

iv. A detailed statement of the factual grounds for the protest, including copies of any relevant documents or evidence and the statute, rule, or regulation that was violated, if applicable; and

v. A sworn certification that the protest is brought in good faith and for good cause. If a protest is based on an ambiguity or a problem in a solicitation, and is made after the solicitation response deadline, it must also include a certification that the protesting Vendor was not aware of the ambiguity or problem (and did not have an opportunity to ask for clarification or a correction) before the solicitation response deadline.

Protests must timely raise all claims and describe the evidence supporting those claims with specificity. Any claims that are not timely raised may be deemed waived. In the event of a protest during a solicitation response period, a protesting Vendor who wishes to continue in the solicitation process during such protest must still submit a bid or proposal according to the rules set forth in the solicitation.

Protests, including any protest appeals requests, must be sent by mail or email to the Dallas County Purchasing Director at Founders Square, 900 Jackson St., 6th Floor, Suite 680 Dallas, Texas 75202 or Michael.Frosch@dallascounty.org. Mail-in requests must be postmarked and email requests must be received by the Purchasing Director no later than (a) five (5) business days after the date that the protesting Vendor knew or should have known of the facts giving rise to the protest, or (b) before the contract is awarded, if the Vendor is aware of the facts giving rise to the protest prior to the contract award, whichever is earlier.

It is the responsibility of the Vendor to ensure that solicitation protests are delivered to the Purchasing Director within the time period stated herein. Protests that are late or delivered to an incorrect address or individual, or that otherwise do not comply with these rules (including providing the sworn certification as described above), will be declared invalid.

Written Decision. All protests will be initially reviewed by the Purchasing Director, who must rule on the protest and provide a written decision, including the reasons for the decision and the decision date, to the protesting Vendor within ten (10) business days (the "Written Decision"). Any appeal of the Written Decision must be made within five (5) business days of the receipt thereof.

Appeals Process. Appeals of the Written Decision should be sent to the Purchasing Director at the address above, who shall notify the Appeals Committee, consisting of the County Administrator, the County Auditor, and the County Budget Director. The Purchasing Director shall serve as staff to the Appeals Committee and will be present at the Appeals Hearing. The protesting Vendor shall be notified of the time and place of the Appeals Hearing and will be provided an opportunity to present arguments. The documentary evidence at the Appeals Hearing is limited to the documentary evidence submitted for the original protest unless, for good cause shown, the Appeals Committee grants authority for the protesting Vendor to provide additional documentary evidence. The protesting Vendor shall seek approval to submit additional documentary evidence for good cause as soon as possible, but no later than (a) five (5) days before the hearing, or (b) within seventy-two (72) hours from when the protesting Vendor knew or should have known about the additional evidence, whichever period is shorter. The request should include copies of the additional documents that the protesting Vendor seeks authority to use at the hearing. The Appeals Committee may appoint an independent hearing examiner to conduct the hearing and provide a written recommendation, if needed. A written final decision, including the reasons for the final decision and the decision date, will be provided to the protesting Vendor within ten (10) business days of the Appeals Hearing (the "Final Decision"). Requests for an appeal of the Final Decision must be mailed or emailed to the Purchasing Director within five (5) business days of the Final Decision, who will notify the Commissioners Court of the request.

A Commissioners' Hearing may take place at the discretion of the Commissioners Court. A single vote of a Commissioner on the Commissioners Court is required for a Hearing to be granted. The Commissioners may, at any time during the process, review the written record of the previous decisions on the matter. All decisions of the Commissioners Court, including whether to allow a Commissioners' Hearing, are final.

Right to Appear before the Commissioners Court. All individuals and entities have the right to an appearance before the Commissioners Court subject to the rules of the Court, this Code of Ethics, and, during an Active Solicitation, the Restricted Contact Period provisions in Section 6 herein. However, a protesting Vendor does not have an automatic right to a Commissioners' Hearing on any protest appeal under this Code of Ethics, which will be granted only at the discretion of the Commissioners Court.

Notification. Protest hearings are open to the public. Public notification of any hearings, including Appeals Hearings and Commissioners' Hearings, shall be posted on the Dallas County Purchasing website at www.dallascounty.org/department/purchasing

Solicitations and Contracts Pending. Filing a protest under this Section will not trigger an automatic stay of any procurement process or contract award. It is in the discretion of the Purchasing Director and the Commissioners Court whether to stay any procurement process or contract award with respect to any Vendor protest. Whether a stay is granted shall not compromise any protesting Vendor's right to the protest procedures outlined herein.

Records. Records of all protests, including the protest filed, related evidence, and any Written and Final Decisions (including the outcome of any Commissioners' Hearing, if applicable) will be maintained by the Purchasing Department for a period of no less than four (4) years.

36. Contractors are required to comply with the Equal Employment Opportunity Act requiring that no person shall be discriminated against on the basis of race, color, religion, sex or national origin in all phases of employment during the performance of this Contract. The successful bidder shall take affirmative action to ensure that applicants are employed and treated during employment, without regard to their race, age, color, religion, sex or national origin. This action shall include, but not be limited to, employment, upgrading, demotion, transfer, recruitment, advertising, layoff, termination, compensation and selection for training. The successful bidder shall state to all employees and advertisements that all employees and qualified applicants will receive consideration for employment without regard to race, color, age, religion, sex, or natural origin.

37. No official or employee shall have any financial interest, direct or indirect, in any contract with the County or be financially interested, directly or indirectly, in the sale to the County of any land, materials, supplies or services, except on behalf of the County as an official or employee. Any violation of this section, with knowledge, express or implied, of the person or corporation contracting with the County shall render the contract involved voidable by the Commissioners Court of Dallas County. It is the responsibility of the contractor during all phases of the contract process to notify the County in writing of any potential conflict of interest.

38. In the best interest of the County, as determined by the Dallas County Commissioners Court, any bidder/proposer who is currently involved, either directly or indirectly, with any litigation against or involving Dallas County may be disqualified and/or not considered for an award.

39. Pursuant to Sec. 9.001 of the Texas Business Organization Code, non-Texas entities, including, but not limited to corporations, limited partnerships, and limited liability companies must have an application for registration filed with the Texas Secretary of State and shall provide to Dallas County a Certificate of Status issued by the Texas Secretary of State that serves as official evidence of the entity's existence or authority to transact business in Texas. To transact business with Dallas County, all entities must be in legal compliance pursuant to applicable laws, and shall provide to Dallas County evidence of said compliance.

40. Vendor hereby assigns to purchaser any and all claims for overcharges associated with this contract which arise under the antitrust laws of the United States, 15 USCA Section 1 et seq., and which arise under the antitrust laws of the State of Texas, Tex. Bus. & Com. Code, Section 15.01, et seq.

41. Where applicable, MSDS Forms must be provided with delivered products. In addition WITHOUT EXCEPTION, within 30 days after award, the successful bidder(s) MUST furnish Material Safety Data Sheets for all applicable awarded contract items to: Erin Spargo, Ph.D., Southwestern Institute of Forensic Sciences/Office of the Medical Examiner Facility, 2355 Stemmons Freeway, Dallas, Texas 75207. Dallas County reserves the right to withhold payments owed and/or terminate the contract due to non-performance if the aforementioned documents are not provided accordingly.

42. **INTERLOCAL AGREEMENT (City/State Participation Program)**

In accordance with Article 791.025 of the Texas Government Code, governmental agencies (local, state) may request to utilize County contract by executing an interlocal agreement with Dallas County to do so. Vendors are to indicate on the bid proposal page whether they are willing to extend pricing from this contract to other governmental agencies in accordance with the outlined specifications. Dallas County is indemnified against any and all claims that may arise from Interlocal Agreements entered into by the Contractor and governmental agencies.

43. **FEDERAL DEBARRED VENDORS**

No products and/or services utilizing Federal funds may be procured from vendors that are listed on the Federal Excluded Parties List aka System for Award Management (SAM). Government requirements for non-procurement suspension and debarment are contained in the OBM guidance 2CFR, part 180 that implements Executive Orders 12549 and 12689 Debarment and Suspension. Dallas County reserves the right to reject from award consideration and/or terminate any contract with any vendor found to be suspended, ineligible and/or debarred as outlined herein.

44. **TWELVE (12) MONTH WAITING PERIOD FOR EMPLOYMENT OF CERTAIN FORMER COUNTY EMPLOYEES**

In accordance with the County's Transparency Policy, any firm awarded a contract for the Procurement of goods or services shall be prohibited from hiring any individual who has previously worked for the County and in that capacity either evaluated, recommended, approved, monitored, or managed a contract involving that firm no sooner than twelve months after that individual has ceased to work for or be employed by the County. Failure to adhere to such a contractual requirement may result in the termination of the contract with the County.

IFB

ATTACHMENT S
SBE PROGRAM AND FORMS

SBE LANGUAGE

7.0 SMALL BUSINESS ENTERPRISE (SBE) PROGRAM

7.1. **Definitions.**

7.1.1. The term **"Commercially Useful Function"** is defined as a business that is directly responsible for providing the supplies or services to Dallas County as required by the solicitation or request quotes, bids or proposals. A firm is considered to perform a commercially useful function when responsible for the execution of a distinct element of the work of a contract and carries out its responsibilities by actually performing, managing and supervising the work involved. Example: a business that stocks sufficient quantities of supplies in direct inventory which is being held for sale or resale, to cover anticipated future demands for the suppliers is considered to be performing a commercially useful function.

7.1.2. A **"Contractor"** is defined as one who participates, through a contract or any other contractual agreement in a County funded contract opportunity for work, labor, services, supplies, equipment, materials, goods or any combination of the aforementioned. For purposes of this Section, a Contractor is any individual, company, or other entity seeking to do work for Dallas County regardless of the method used to procure the services or products, including but not limited to bid or solicitation. A Contractor includes but is not limited to a contractor, consultant, or vendor.

7.1.3. The term **"Director of Small Business Enterprise"** shall mean the Director of the County's Office of Small Business Enterprise and/or her/his designee.

7.1.4. The term **"Contract Administration"** shall mean the County Purchasing Department and/or his or her designee.

7.1.5. The **"Contract Administration Supervisor"** shall mean the Purchasing Director and/or his or her designee.

7.1.6 **Equal Employment Opportunity Requirements**. It is the policy of Dallas County to ensure non-discrimination in the award and administration of contracts. The Contractor or Subcontractor shall not discriminate on the basis of race, color, national origin, disability, veteran status, religion, or sex in the performance of any Dallas County contract.

7.1.7 **Good Faith Effort Plan.** The plan submitted with a Submittal detailing the Respondent's efforts to achieve the set aspirational goal or documenting the Good Faith Efforts to meet the goals for all elements the Solicitation. A Good Faith Effort Plan must be submitted with a Submittal for any Dallas County projects in which goals have been established.

7.1.8 **Metropolitan Statistical Area (MSA).** The Dallas County MSA includes the following counties: Dallas, Tarrant, Denton and Collin.

7.1.9 **Small Business Enterprise.** It is the policy of Dallas County to support the growth and development of Small Business Enterprise ("SBE") and ensure that SBEs have an equal opportunity to compete for and participate in Dallas County contracts. Thus, Dallas County Commissioners Court has created the

Office of Small Business Enterprise to establish and oversee a Diversity Program to ensure that SBEs have an equal opportunity to compete for and participate in Dallas County contracts. It is Dallas County's intent to:

- Ensure nondiscrimination in the award and administration of Dallas County contracts;
- Create a level playingfield on which small businesses can compete fairly for Dallas County contracts; and
- Ensure that only firms who attempt in good faith to meet the SBE good faith efforts are considered for applicable contract awards.

Consequently, the contractor shall carry out applicable requirements of the good faith effort in its proposal/bid hereunder and, if awarded the contract, the award and administration of the Contract.

7.2 **SBE Goals, Good Faith Efforts and Eligibility.**

The Director of Small Business Enterprise and the Contract Administration Supervisor sets the annual SBE participation contracting/subcontracting aspirational SBE goals for each contract. The contracting/subcontracting goals for this contract will be based on meeting or exceeding the **minimum aspirational SBE goal of 40%,** unless good cause exists for failing to meet the goal**.** The SBE aspirational goal is based on the total dollar amount of the contract.

To be recognized as an SBE, firms (contractors and/or subcontractors):

a) Must be certified as an SBE by the following County approved entities: North Texas Regional Certification Agency (NCTRCA), DFW Minority Supplier Development Council and/or the Women's Business Council of Southwest, at the time of the proposal/bid submission. Other certifications are not acceptable;

b) To be recognized by the County as a **qualified SBE firm**, as defined pursuant to Section 3 of the Small Business Act and relevant regulations, an SBE is a firm for which the gross revenues or number of employees averaged over the past three years, inclusive of any affiliates, is as defined by 13 C.F.R. Sec. 121.201; and

c) Must also perform a commercially useful function on the project and have a local presence in Dallas County Metropolitan Statistical Area (MSA) in order to be counted for SBE points. The MSA includes the following counties: Dallas, Tarrant, Denton and Collin.

7.3 **Utilization**

The aspirational SBE or certified sub-contractor goal is expressed as a percentage of the total dollar amount of the contract going to SBE or certified Sub-Contractor for those areas which the Contractor has sub-contracted or anticipates sub-contracting. The aspirational goal shall also apply to contract amendments that require work beyond the scope of services originally required to accomplish the project.

The Respondent agrees to employ good faith efforts through the award of subcontractors to eligible SBEs and certified firms to the fullest extent possible.

Dallas County's Good Faith Effort Plan (GFEP) will be used to document SBE participation. However, all subcontractors and/or suppliers, whether certified or not, must be listed in the GFEP. The information provided

in the GFEP Form will be utilized in the development of the final contract/agreement. The GFEP Form can be found in the attachments. This form is required and considered to be a part of the response to the IFB.

Should the Good Faith Effort Plan or any of the specified documents listed below be incomplete, not signed, and/or not submitted, the bid can be deemed non-responsive.

7.4 **Each Contractor must include with its proposal/bid, the following documents:**

- Completed and signed **Good Faith Effort Plan**, executed by an authorized representative;
- Completed and signed **Small Business Utilization Affidavit**, executed by an authorized representative; and
- A signed and executed **Subcontractor Intent Form,** executed by an authorized representative (prime and subcontractor).

Note: All forms must be complete in their entirety and submitted as part of a Respondent's submittal.

The County reserves the right to accept or reject any certified firm and in its sole discretion is not bound by the certifying bodies' determination, if the County has a concern regarding the eligibility of the firm to meet SBE guidelines or standards. A Contractor whose proposed certified firm is rejected may contest in writing to the Office of Small Business Enterprise, in accordance with the SBE Policy. The denial of SBE certification by the Office of Small Business Enterprise is excluded from the Dallas County Purchasing Code of Ethics Protests Procedure and is exclusively governed by the appeal process set forth in the SBE Policy.

7.5 **SBE Reporting.** The Contractor and its subcontractors are required to electronically submit subcontractor payment information using the County's Compliance Reporting System (CRS), accessed through a link on the Dallas County SBE webpage. The Contractor and all subcontractors will be provided a unique log-in credential and password to access Compliance Reporting System.

Training on the use of the system will be provided by both Dallas County's CRS Support Staff and by the Office for Small Business Enterprise. Additional information and free online training for CRS can be found at https://dallascounty.diversitycompliance.com. After the prime receives payment from the County, electronic submittals will require data entry of the amount paid to each subcontractor listed on the Contractor's Good Faith Effort Plan.

7.6 **Contracting.** If awarded the contract, the Contractor agrees to be bound by the policies and guidelines set forth in the County's SBE Policy, which may be incorporated into the contract. If a conflict exists between the SBE section of the solicitation and the County SBE Policy, the language in the solicitation governs.

MANDATORY
SBE SOLICITATION ATTACHMENTS

SMALL BUSINESS UTILIZATION AFFIDAVIT

It is the policy of Dallas County to encourage the inclusion of qualified Small Business Enterprises (SBEs) to the greatest extent feasible on the County's construction, procurement and professional services contracts. Neither the County, nor its Contractors and their subcontractors shall discriminate on the basis of race, age, color, religion, national origin, or sex in the award and performance of contracts. In consideration of this policy, Dallas County has adopted the Small Business Enterprise Policy for all County contracts.

Small Business Enterprise Participation Goals

The solicitation bidding plan establishes subcontracting goals and requirements for all prospective bidders to ensure reasonable degree of SBE meaningful business utilization and participation in County contracts. It is the goal of Dallas County that a certain percentage of work under each contract be executed by one or more SBEs. For the purposes of participation percentages, Dallas County does not include amounts paid to the prime by the sub-contractor.

The apparent proposer shall agree to meet the established goals or must demonstrate and document a "good faith effort" to include SBEs in subcontracting opportunities. The apparent proposer who fails to adequately document good faith efforts to subcontract or purchase significant material supplies from SBEs may be denied award of the contract by Dallas County based on the contractor's failure to be a "responsive" or "responsible" bidder.

By signing below, I agree to provide Dallas County, Small Business Enterprise Department a completed copy of all required forms. I understand that, for the purpose of SBE subcontracting participation, any amounts paid to the prime from the sub-contractor should not be included in the above listed participation amount. Finally, I understand that if I fail to provide all of the required documents within five (5) business days after notification, my bid may be deemed "non-responsive" and I may be denied award of the contract.

Solicitation Number: _____ Company Name: _____

_____ _____

Typed or Printed Name of Certifying Official of Company Date

_____ _____

Signature of Certifying Official of Company Title

Small Business Enterprise Program Utilization Form

Solicitation/Project Name: _____ Solicitation #: _____

Firm Name: _____ Firm Phone # _____

Firm Address: _____ City: _____ State: _____ Zip: _____

Compliance Contact: _____ Phone #: _____ Email Address: _____

Is Your Firm Certified: _____ Certifying Agency: DFWMSDC _____ NCTRCA _____ WBC-Southwest _____ Other: _____

Total Bid Amount: _____ Amount self-performed: _____ Percentage self-performed: _____

Utilization Plan

List the firms that will be utilized on the project. Provide copies of correspondence.

SBE certified subcontractors/suppliers

Firm Name & SBE Certification #	Tier	Person Contacted & Date	Address	Phone & Email Address	Type of Work	NAICS Code	Local or Non-Local	Dollar Amount	% of contract
							Total	**$**	**%**

Non SBE certified subcontractors/suppliers									
Firm Name	**Tier**	**Person Contacted & Date**	**Address**	**Phone & Email Address**	**Type of Work**	**NAICS Code**	**Local or Non-Local**	**Dollar Amount**	**% of Total Contract**
							Total	**$**	**%**

Prime Printed Name: _____ Title: _____ Signature: _____ Date: _____

For Use by SBE Office Only

SBE Compliance Officer: _____ Date: _____

SBE Notes:

Small Business Enterprise
Records Building - 500 Elm Street, Suite 0300, Dallas, TX 75202
Telephone: (214) 653-6021 | E-Mail: sbe@dallascounty.org

Good Faith Efforts Form

The Good Faith Efforts Form must be fully completed if the aspirational goal is ***not*** met.

1. Did you speak with or receive assistance from a staff member in the Small Business Enterprise

   Department?_____ (Y/N) Name of staff member _____

2. Did you utilize a Dallas County SBE vendor list? If not, please explain?

Vendor List Accessed	Date of Access

3. Did you provide written notice to potential SBE subcontractors, suppliers, and vendors? Written notice should include plans, specifications, subcontractor/supplier opportunities, and deadline for submission to respondent no less than 7 days before bid submission. Please provide copies of all correspondence, including accepted and rejected SBE bids or proposals, i.e. letters, memos, emails and phone calls.

Firm Name & Address	Phone #	Person Contacted & Date	Type of Work	NAICS Code	SBE Certification No.	Response to Solicitation	Bid/Quote Amount	Company Selected (Y or N)

4. If applicable, did you participate in the pre-bid meeting? _____

5. Did you identify and select specific work items to be performed and/or procurement to be fulfilled by SBEs? Please subdivide total contract work into smaller portions or quantities to permit maximum active participation by SBEs.

1.	2.	3.
4.	5.	6.

6. Did you advertise in trade publications or with local advocacy organizations? The advertisement must identify and describe subcontracting opportunities in detail, including a contact person and deadlines. Please provide a copy.

Publication Name	Date of Publication

Prime Printed Name: _____ Title: _____ Signature: _____ Date: _____

DALLAS COUNTY
SUBCONTRACTOR INTENT FORM

To: Dallas County - Small Business Enterprise Department Date: _____

Project Name: _____ Solicitation #: _____

_____ will provide the following good(s)/service(s):
Subcontractor on the project

_____

to _____
Prime Contractor on the project

SBE subcontractor is certified by the following agency: ☐ DFW Minority Supplier Development Council ☐ NCTRCA ☐ Women's Business Council SW

SBE Certification #: _____ (Certification must be kept current/valid for the entire duration of this contract. Failure to comply with this provision could be subject to removal from contract.)

For the purposes of SBE subcontracting participation, Dallas County does not include amounts paid to the prime by the sub-contractor.

Total Contract Amount for prime: $_____ Estimated Work Start Date: _____

Sub Participation Amount: $_____ _____% Estimated Work End Date: _____

The undersigned intends to enter into a formal agreement with the subcontractor listed, conditioned upon being awarded the Dallas County contract. The undersigned understands that, for the purpose of SBE subcontracting participation, any amounts paid to the prime from the sub-contractor should not be included in the above listed participation amount. **Before any subcontractor/supplier substitutions are made, the prime contractor must submit an SBE Substitution Request Form to The SBE Department for approval.** Failure to comply with these provisions could result in termination of the contract, sanctions against the prime contractor, and/or ineligibility for future Dallas County contracts. The subcontractor's participation will be entered in B2GNow, Dallas County's compliance system, based upon this intent form.

_____	_____
Officer's Signature (Prime Contractor)	Officer's Signature (Subcontractor)
_____	_____
Printed Name (Prime Contractor)	Printed Name (Subcontractor)
_____	_____
Title (Prime Contractor)	Title (Subcontractor)
_____	_____
Date	Date

Please select or list all Chambers or Advocacy groups you are a member of:

	Prime	Sub
Greater Dallas Asian American Chamber of Commerce	☐	☐
Greater Dallas Black Chamber of Commerce	☐	☐
Greater Dallas Hispanic Chamber of Commerce	☐	☐
U.S. Pan Asian American Chamber of Commerce	☐	☐
Asian Contractors Association	☐	☐
Regional Black Contractors Association	☐	☐
Regional Hispanic Contractors Association	☐	☐

INVITATION FOR BID

Scope of Work/Specifications

I. Introduction, Purpose and Intent

The Dallas County Adult Probation Center is seeking qualified contractors for the demolition and reconstruction of its parking lot located at 1300 Mockingbird Lane. The project encompasses the removal of existing pavement, removal of the security fence with certain elements to be stored and reinstalled, re-grading and preparation of the subgrade, followed by the installation of a new finished parking lot and related site improvements. To ensure uninterrupted access for staff, visitors, and deliveries, the construction will be executed in phases as per the designated phasing plan. Contractors interested in bidding on this project should have demonstrated experience with similar projects and the capacity to manage phased construction while maintaining operational access for ongoing facility needs.

II. Specification

All construction work for this project shall be performed in accordance with the Texas Department of Transportation, 2024 Standard Specifications for Construction of Highways, Streets, and Bridges, Construction Details; County of Dallas Special Provisions to the Standard Specifications; and Special Specifications. See Exhibits A, B, C, & D

1. **Demolition and Site Preparation:**
   a. Removal of approximately 11,150 square yards of asphalt pavement and base layers (approx. 10" depth).
   b. Removal of 42 square yards of concrete pavement.
   c. Temporary removal and storage of 18 concrete curb stops.
   d. Removal of 12 six-inch pipe bollards.
   e. Removal of 975 linear feet of concrete curb and gutter.
   f. Temporary removal and storage of 491 linear feet of wrought iron fence, including two key pads, a solar panel, and gate operator and motor for reinstallation.

2. **Parking Lot Pavement and Drainage:**
   a. Subgrade preparation to an 8-inch depth across 11,351 square yards, including lime treatment.
   b. Installation of 8.5-inch-thick TxDOT Type A flex base compacted pavement with 2.5-inch HMAC surface.
   c. Construction of 1,013 linear feet of 6-inch concrete curb and gutter.
   d. Reinstallation of 18 concrete curb stops and 12 six-inch pipe bollards.
   e. Installation of 821 linear feet of UB 24-2 Universal Tree Root Barrier along back of curb.
   f. Reinstallation of 491 linear feet of wrought iron fence with new posts, reusing existing fence panels, along with two key pads, solar panel, and gate operator and motor.

III. References & Minimum Qualifications

Dallas County requires bidders to submit reference letters from at least three (3) sources or customers for whom the bidder has provided services of similar size and scope. This requirement applies to all solicitations resulting in a service contract.

- **Letters of Reference:** Bidders must provide three (3) formal letters of reference from previous clients. Each letter must include documentation verifying satisfactory performance and a description of the services rendered.

- **Business Longevity:** Bidders must provide evidence that the firm has been in continuous operation for a minimum of three (3) years.

- **Minimum Qualifications:** Start-up companies and newly formed entities do not meet the minimum experience requirements for this solicitation. All bidders must be established entities with the requisite operational history.

IV. Pre-Bid Meeting Schedule, Questions, and Inquiries

During the solicitation process bidders are required to limit their communication regarding this project to the Buyer referenced herein. A pre-bid meeting will be held by the County whereby the bidders will have an opportunity to ask the requesting department(s) questions and/or obtain clarification. The pre-bid meeting will be the only time when bidder and requesting department(s) will communicate directly, thereafter, all communication associated with this project shall be address through the County's purchasing platform, (https://www.bidnetdirect.com/texas/dallas-county), to the assigned Buyer. The County will respond to all questions by way of addendum which will be posted as part of the solicitation. The County, its agents, and employees shall not be responsible for any information given by way of verbal communication.

Pre-bid conference **March 25, 2026** at **9:00 a.m. (CST)**, the pre-bid meeting will be conducted through a conference call.

PRE-BID MEETING LINK:
https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fteams.microsoft.com%2Fmeet%2F27120289457366%3Fp%3DLJKn3FIuIl0v5CcPGX&data=05%7C02%7CMarina.Valley%40dallascounty.org%7C2f6506757a414e9fbaa708de79606259%7C51adcfad72f1479cb28f52412e04014b%7C0%7C0%7C639081652032229458%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIsIlAiOiJXaW4zMiIsIkFOIjoiTWFpbCIsIldUIjoyfQ%3D%3D%7C0%7C%7C%7C&sdata=CPhCJWa57f5ykVephgG608%2Fl3gpDI%2FNmzjzYmCPIPEo%3D&reserved=0

MICROSOFT TEAMS:
Meeting ID: 271 202 894 573 66

OR

DIAL IN BY PHONE: 1-469-208-1731, ID: 544 214 887#

The deadline for the submission of questions is on **April 09, 2026** at **3:00 p.m. (CST)** through BidNet.

V. Term and Commencement Date

This will be a one-time contract with **no renewal options** commencing upon award by Commissioners Court, upon meeting any insurance and/or bonding requirements (if applicable) and/or fully executing the contract (if applicable).

VI. Award Method

The County's intent is to award this solicitation in its ***entirety,*** but the County reserves the right to award in the method that is most advantageous to the County.

The County reserves the sole discretion to determine whether a solicitation response is responsive. County reserves the right to reject any or all bids and to waive minor irregularities or discrepancies in any solicitation response as may be in the best interest of County. Late bids will not be considered for award.

For this solicitation the bidder must bid on all lines to be considered responsive.

Upon expiration of the Contract, the Contractor agrees to hold over under the terms and conditions of this contract for such a period of time as is reasonably necessary to re-solicit (not to exceed 90 calendar days unless mutually agreed on in writing).

VII. Bid Submittal and Exception Requirements

To be considered for award, the bid response must be submitted by **April 23, 2026** at 2:00 p.m. (CST). Bid responses shall be submitted electronically through BidNet, the County's online public solicitation platform (https://www.bidnetdirect.com/texas/dallas-county). Although the County prefers submissions in electronic form, a bidder may elect to submit their bid in hard copy. To submit in hard copy, the vendor may deliver or ship to: Dallas County Purchasing Department, Records Building 500 Elm Street, Suite 5500, Dallas, Texas 75202. When submitting a bid in hard copy, the County requires **two (2)** duplicate hardcopies (one original and one copy) to be submitted.

Any exceptions to the specifications/scope of work and/or terms and conditions shall be included in the solicitation response and shall appear in its own tab. Exception shall reference the page number, section and language for which exception is taken. The County reserves the right to reject any exception not in the best interest to the County or may lead the bid to be considered nonresponsive and not considered for award.

Note: On December 19, 2024, Dallas County implemented a new public solicitation platform and will be posting all solicitations for goods, services, and construction through BidNet. Vendors seeking to do business with Dallas County will be required to register, use this link to begin your registration. (https://www.bidnetdirect.com/texas/dallas-county). By registering, vendors will be able to receive, at no cost, solicitation notices, view open solicitations, and submit their response online to desired business opportunities.

VIII. Communication

Upon release of the solicitation and during the process, vendors /firms and their employees of related companies as well as paid or unpaid personnel acting on their behalf shall not contact or participate in any type of contact in relation to this solicitation with Dallas County employees, department heads and/or elected officials. Such contact may result in the vendor being disqualified. All questions and request for information related to this solicitation must be coordinated through Marina Valley.

All questions regarding this solicitation are to be submitted in writing to **Marina Valley**, Dallas County Purchasing Department via BidNet (https://www.bidnetdirect.com/texas/dallas-county), the County's procurement platform. If the bidder does not have access to the County's solicitation platform, the bidder may submit their questions in writing via email to marina.valley@dallascounty.org. Please reference the IFB Solicitation number in the subject of the email.

All questions, comments and requests for clarification must reference the IFB solicitation number on all correspondence to Dallas County. Any oral communications shall be considered unofficial and non-binding.

Only written responses to written communication shall be considered official and binding upon the County. The County reserves the right, at its sole discretion, to determine appropriate and adequate responses to the written comments, questions, and requests for clarification.

NOTE: All addenda and/or any other correspondence (general information, question and responses) to this IFB will be made available exclusively through the Dallas County website for retrieval. Bidders are solely responsible for frequently checking this website for updates to this IFB. Addenda can be located at the following web address: http://www.dallascounty.org/department/purchasing/currentbids.php (go to the appropriate IFB number, click on the appropriate hyperlink to view and/or download solicitation.)

IX. Location and Invoicing

The County shall pay invoices in 30 days. In order for the County to pay invoices in 30 days, the vendor's invoice must be correct, and reflect the work or goods delivered to the County. The 30 days begin when the County has received a correct invoice reflecting the work or goods delivered. If the County receives an invoice that is not correct and/or reflective of work or goods that have been delivered, the County will request a corrected invoice and the 30-day period will begin once the correct invoice has been received. All work described in the vendor invoice must have been delivered in compliance with the terms of the contract.

Invoices shall be submitted monthly to the County for payment, unless both parties agree to alternative arrangement based on project milestones. Each invoice submitted for payment shall include, at a minimum, the following information:

- Name and address of the department for which services were provided
- Purchase order number
- Contact information of County staff who placed order (name, phone number, department)
- Date of order or Service
- Detailed description of each service

- Price of good or services (charges for all services covered by PO/contract are to be separately stated and explained
- Unit pricing
- Total cost of goods/services

Submitting invoices without the above information may cause delays in payment processing. Incorrect invoices or invoices sent to the wrong address will delay payment. Vendors who fail to follow these instructions risk having the contract with the County cancelled. Invoices must be submitted via email to: DC-Invoices@dallascounty.org

X. Documents Submitted with Bid

1. Attachment S - Small Business Enterprise (SBE) Forms must be submitted with bid.

XI. Opening of Bids

Bid reading shall be conducted at 2:30pm (CST) on the day the bids are due. The reading will be conducted via a live meeting online at (insert bid opening link here). Bids will be publicly opened in compliance with public bid opening statutory requirements.

XII. Review of Bids

1. The County will review bids complying with the due date and time to determine whether bids are responsive and responsible and whether the bid meets minimum requirements.
2. The County may conduct all necessary inquiries or investigations, including but not limited to, contacting references to verify the statements, documents, and information submitted in connection with the bid.
3. Please be aware that Dallas County may use sources of information not supplied by the bidder concerning the abilities to perform this work or meet the minimum requirements. Such sources may include current or past customers of the organization; current or past suppliers; articles from industry newsletters or other publications or from non-published sources made available to Dallas County.

XIII. Bid Pricing

1. Bid pricing shall be **firm** for the entire contract unless otherwise stated herein. Costs not included or calculated in the applicable unit prices as bid will not be paid by the County, regardless of the intentions of the bidder when the bid was submitted and regardless that those costs were actually incurred.

XIV. Insurance Requirements

Any Contractor or Vendor that conducts business with Dallas County, whether it is for goods and/or services, must maintain lawful worker's compensation/self-insured employee coverage requirements and adequate liability limitations

Within ten (10) days after contract award or prior to the commencement of any work or delivery, the Purchasing Agent requires the successful Contractor(s)/Vendor(s) to submit verification of the

following coverage. The insurance coverages, except Workers Compensation and Professional Liability, required by this Contract, shall name Dallas County and its elected and appointed boards, officers, officials, agents, representatives, directors, employees and volunteers, as additional insured(s) (as the interest of each insured may appear).

Contractor at its own expense, consistent with its status as an independent contractor will carry, purchase and maintain insurance coverage, the minimum insurance coverage set forth immediately below, with companies authorized to do insurance business in the State of Texas or eligible surplus lines insurers operating in accordance with the *Texas Insurance Code*, having an A.M. Best Rating of "A" or better, and in amounts not less than the following minimum limits of coverage:

The policies may provide coverage, which contains deductibles or self-insured retention. Such deductibles and/or self-insured retention shall not be applicable with respect to the coverage provided to Dallas County under such policies. The Contractor shall be solely responsible for all deductibles and/or self-insured retention.

All insurance required herein shall be maintained in full force and effect throughout the term of this contract, including all extensions or renewals.

1.1. Workers Compensations and Employer's Liability Insurance or self-insured employee in the amount and in compliance with the provisions as provided for by Texas Law as established by the Texas Workers Compensation Act, Title 5, Subtitle A, Texas Labor Code for all his employees assigned to operate or work under this Contract. In the event the Contractor elects to sublet any work, Contractor shall require Sub-Contractors to provide Workers' Compensation Insurance for all of the latter's employees unless the Contractor affords such employees protection. Contractors shall be responsible for workers' compensation insurance for subcontractors or sub-lessees who directly or indirectly provide service under Dallas County contract.

Workers' Compensation Insurance with statutory limits, and Employer's Liability Insurance with limits of not less than $500,000:

Employers Liability - Each Accident	$500,000
Employers Liability - Each Employee	$500,000
Employers Liability - Policy Limit	$500,000

Policies under this Section shall apply to State of Texas and include the following endorsements in favor of Dallas County:

a. Waiver of Subrogation
b. Thirty (30) day Notice of Cancellation

1.2. Commercial General Liability: Contract shall maintain Commercial General Liability Insurance coverage must include the following: (a) Premises; (b) Operations; (c) Independent Contractor's Protective Liability; (d) Products and Completed Operations; (e) Medical Expense; (f) Personal and Advertising Injury; (g) Contractual Liability; (h) Broad form property damage, to include fire legal liability. Such insurance shall carry in an amount not less than One Million and 00/100 ($1,000,000.00) for bodily injury (including death), property damage, and blanket contractual

coverage per occurrence with a general aggregate of Two Million and 00/100 ($2,000,000.00) and products and completed operations aggregate of Two Million and 00/100 ($2,000,000.00).

Policies under this Section shall apply to State of Texas and include the following endorsements in favor of Dallas County:

a. Waiver of Subrogation
b. Thirty (30) day Notice of Cancellation
c. Additional Insureds: Dallas County and its elected and appointed boards, officers, officials, agents, representatives, directors, employees and volunteers.

1.3. Automobile Liability Insurance: Contractor shall maintain Automobile Liability Insurance covering all owned, hired and non-owned automobiles used in connection with work with limits not less than Five Hundred Thousand 00/100 ($500,000.00) Combined Single Limit of Liability for Bodily Injury and Property Damage. Such insurance is to include coverage for loading and unloading hazards.

Policies under this Section shall apply to State of Texas and include the following endorsements in favor of Dallas County:

a. Waiver of Subrogation
b. Thirty (30) day Notice of Cancellation
c. Additional Insureds: Dallas County and its elected and appointed boards, officers, officials, agents, representatives, directors, employees and volunteers.

1.4. Builders Risk Insurance: Contractor shall maintain during the term of this contract, at its own expense, All Builders Risk Insurance in the amount equal to one hundred percent (100%) of the initial contract amount plus values of subsequent modifications and change orders. Covered perils shall include but not be limited to: Contractor's labor and workmanship, materials, fixtures, equipment, defects, fire, wind, lightning, and other weather-related hazards, damage, extended coverage, vandalism, and malicious mischief, and theft.

Policies under this Section are subject to the laws of the State of Texas and include the following endorsements in favor of Dallas County

a. Name Dallas County as loss payee as its interest may appear
b. Thirty (30) day Notice of Cancellation

1.5. Bid Security or Bid Bond (for contracts in excess of $100,000): All bids shall be accompanied by a cashier's check, certified check, or a bid bond in an amount of not less than five percent (5%) of the total bid. All cashier's check or certified check shall made payable without conditions to Dallas County and must reference the IFB number on the check or bond. Bid bond executed by a solvent corporate surety or corporate sureties which are on the approved list of the United States Department of Treasury (Federal register Circular 570 - "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and Acceptable Reinsuring Companies", Sections 9304 through 9308 of Title 31 of the United States Code. Surety Companies Acceptable on Federal Bonds. The Surety must also be duly authorized to do business in the State of Texas.

1.6. Performance Bond (for contracts in excess of $50,000): Contractor within ten (10) days after contract award or prior to the commencement of any work or delivery services under this contract Contractor shall furnish to the County a Performance Bond in the amount equal to one hundred percent (100%) of the contract amount, executed by a solvent corporate surety or corporate sureties which are on the approved list of the United States Department of Treasury (Federal register Circular 570 - "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and Acceptable Reinsuring Companies", Sections 9304 through 9308 of Title 31 of the United States Code. Surety Companies Acceptable on Federal Bonds. The Surety must also be duly authorized to do business in the State of Texas.

1.7. Payment or Material and Labor Bond (for contracts in excess of $25,000): Contractor within ten (10) days after contract award or prior to the commencement of any work or delivery services under this contract Contractor shall furnish to the County a Payment or Material and Labor Bond in the amount equal to one hundred percent (100%) of the contract amount, executed by a solvent corporate surety or corporate sureties which are on the approved list of the United States Department of Treasury (Federal register Circular 570 - "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and Acceptable Reinsuring Companies", Sections 9304 through 9308 of Title 31 of the United States Code. Surety Companies Acceptable on Federal Bonds. The Surety must also be duly authorized to do business in the State of Texas.

The bonds must clearly and prominently display on the bond or on an attachment to the bond the name, mailing address, physical address, and telephone number, including the area code, of the surety company to which any notice of claim should be sent, or the toll-free telephone number maintained by the Texas Department of Insurance under Chapter 521.051 of the Texas Insurance Code, and a statement that the address of the surety company to which any notice of claim should be sent may be obtained from the Texas Department of Insurance by calling the toll free telephone number.

In the event the contract is prematurely terminated due to Contractor's breach and/or nonperformance of the contract, the County reserves the right to act on the performance bond and/or seek monetary restitution. In the event civil suit is filed to enforce this provision, County will seek its attorney's fees and costs of suit from Contractor which amount Contractor shall pay in the event that County prevails in such action.

All bonds shall be delivered to the Dallas County Purchasing Agent located at 500 Elm Street, 5th Floor, Suite 5500, Dallas, Texas 75202. No work shall be authorized until the bond has been submitted to Dallas County Purchasing Agent.

Contractor agrees that, with respect to the above-referenced insurance, all insurance contracts/policies will contain the following required provisions:

a. Endorsement: Except Workers Compensation and Professional Liability, name Dallas County and its elected and appointed boards, officers, officials, agents, representatives, directors, employees and volunteers as additional insured(s) (as the interest of each insured may appear) as to all applicable coverage;
b. Endorsement: Provide for thirty (30) days prior written notice will be given to the County for cancellation, non-renewal or material reduction/change in coverage provided under all

policies, except in cases of cancellation for non-payment, in the event of which notice shall be provided as required by state law to Dallas County;

c. Endorsement: Contractor agrees to waive subrogation against Dallas County, its officers and employees for injuries, including death, property damage or any other loss;
d. Provide for endorsement that the "other insurance" clause shall not apply to County where County is the additional insured on the policy;
e. All insurance required herein shall be maintained in full force and effect until all work or services required to be performed under the terms of the contract is satisfactorily completed and formally accepted;
f. All insurance coverage shall be on a per occurrence basis, if coverage is written on a claims-made basis, the retroactive date shall be prior to or coincide with the date of the Contract and the certificate of insurance shall state that the coverage is claims-made and indicate the retroactive date. The coverage shall be continuous for the duration of the contract agreement and for not less than two (2) years following the end of the contract agreement. Coverage, including renewals, shall have the same retroactive date as the original policy applicable to the contract agreement;
g. Contractor shall be solely responsible for the deductible and/or self-insured retention for any loss;
h. Contractor insurance policies coverage shall be written on a primary basis and non-contributory with any other insurance coverages and/or self-insurance carried by Dallas County;
i. Default/Cumulative Rights/Mitigation. It is not a waiver of default if the non-defaulting party fails to immediately declare a default or delays in taking any action. The rights and remedies provided by this contract agreement are cumulative, and either Party's use of any right or remedy will not preclude or waive its right to use any other remedy. These rights and remedies are in addition to any other rights the Parties may have by law, statute, ordinance or otherwise. Contractor has a duty to mitigate damages.
j. Approval and acceptance of Contractor's services and work by County shall not constitute nor be deemed a release of the responsibility and liability of Contractor for the accuracy and competency of Contractor's services or work; nor shall such approval and acceptance be deemed to be an assumption of such responsibility by the County for any defect, error or omission in the services performed by Contractor in this regard;
k. Contractor shall provide that all provisions of this contract agreement concerning liability, duty and standard of care, shall be underwritten by contractual liability coverage sufficient to include obligation within applicable policies;
l. Contractor and their freight contractors must be prepared to show coverage verification prior to entering upon County premises;
m. Failure to comply with lawful requirements or adequate liability requirements may result in delay of payments, subject to the orders of the Commissioners Court, not to exceed a period of up to two years from the termination of this contract agreement, or cancellation of this contract agreement or both (Dallas County Commissioners Court Order 2003-1792, September 30, 2003);
n. Insurance Certificates: The certificates of insurance shall list County as the certificate holder. Any and all copies of Certificates of Insurance shall reference any applicable (Bid Number, Commissioners Court Order Number, or contract number for which the insurance

is being supplied). All insurance policies or duly executed certificates for the same required to be carried by Contractor under this contract agreement, together with satisfactory evidence of the payment of the premium thereof, shall be delivered to the: Dallas County Purchasing Agent located at 500 Elm Street, Suite 5500, Dallas, Texas 75202; and

o. All insurance required to be carried by Contractor or subcontractors under this contract agreement shall be acceptable to the County in form and content, in its sole discretion. All policies shall be issued by an insurance company acceptable and satisfactory to County and authorized to do business in the State of Texas. Acceptance of or the verification of insurance by County shall not relieve or decrease the liability of Contractor.

2. Insurance Lapse

In the event successful firm fails to maintain insurance as required by this contract, successful firm shall immediately cure such lapse in insurance coverage at successful firm's sole expense and pay County in full for all costs and expenses incurred by County under this contract as a result of such failure to maintain insurance by successful firm, including costs and reasonable attorney's fees relating to County's attempt to cure such lapse in insurance coverage. Such costs and attorney's fees, not to exceed fifteen hundred and 00/100 dollars ($1,500.00), shall be automatically deducted from monies or payments owed to successful firm by County. Moreover, the County shall retain five percent (5%) of the value of the Contract that shall be placed into an account from monies or payments owed to Contractor by County to cover County's potential exposure to liability during the period of such lapse. The five percent (5%) retainage shall be held by County until six (6) months after the date lapse in coverage is cured or Term of the Contract has ended or has otherwise been terminated, canceled or expired and shall be released if no claims are received or lawsuits filed against County for any matter that should have been covered by the required insurance. The County shall retain the funds if a claim is received or lawsuit and use the funds to defend, pay costs of defense or settle the claim.

XV. Rejection or Acceptance of Bids

The County reserves the right to accept or reject in part or in whole any bids submitted. The Purchasing Agent will recommend to Commissioners Court award to the lowest responsive and responsible bidder as determined by the Purchasing Agent.

XVI. Late and Withdrawn Bids

All bids must be submitted no later than the bid due date and time established by this solicitation. Bid arriving after the due date and time will not be accepted. Late bids delivered by carrier will be return to the bidder unopened.

A bidder has the right to withdraw their bid prior to the bid due date and time, thereafter, the bidder shall submit a formal request to the Dallas County Purchasing Agent requesting to withdraw their bid.

XVII. Confidentiality

Any information deemed confidential, shall be clearly noted as such on each page of the solicitation response by the bidder. County cannot guarantee it will not be compelled to disclose all or part of any public record under the Texas Open Record Act. Respondents who include information in a bid that is legally protected as trade secret or confidential shall clearly indicate the information which constitutes a trade secret or confidential information by marking that part of the bid "trade secret" or "confidential" at the appropriate place. If a request is made under the Texas Open Records Act to inspect information designated as trade secret or confidential in a bid, the bidder shall, upon request, immediately furnish sufficient written reasons and information as to why the information designated as a trade secret or confidential should be protected from disclosure to Attorney General of Texas for final determination.

XVIII. Disqualification of Bidders

Bidders may be disqualified for, but not limited to, the following reasons:

- Reason to believe collusion exists among the bidders
- The bidder is involved in any litigation against Dallas County
- The bidder is in arrears on an existing contract or has failed to perform on a previous contract with Dallas County

XIX. Permits Required by Law

Contractor shall comply with all requirements of federal, state, and local statutory requirements and regulations pertinent to or affecting any phase of this contract.

XX. Records and Audit

The Contractor shall keep accurate records of all components of invoices to the County as they relate to this contract. These records shall be retained for a minimum of two years after the conclusion of the Contract. The County reserves the right to audit any records it deems necessary for the execution of this Contract.

XXI. Assignment of Contract

The Contractor shall not assign, transfer, sublet, convey or otherwise dispose of the Contract of any part therein or its right, title or interest therein or its power to execute the same to any other persons, firm, partnership, company or corporation without the prior written consent of the County. Should the Contractor assign, transfer, sublet, convey or otherwise dispose of its right, title or interest or any part thereof in violation of this section, the County may, at its discretion, cancel the Contract and all rights, title and interest of the Contractor shall therein cease and terminate, and the Contractor shall be declared in default.

XXII. Default by Contractor

The following events shall be deemed to be events of default by Contractor under the Contract:

- Contractor shall become insolvent, or shall make a transfer in fraud of creditors, or shall make an assignment for the benefit of creditors;
- Contractor attempts to assign the Contract without the prior written consent of the County;
- Contractor shall fail to perform, keep or observe any term, provision or covenant of the Contract; or

- Contractor fails to properly and timely pay Contractor personnel, suppliers or other contractors and the failure impacts the County in any manner.

In the event a default occurs, the Director shall give the Contractor written notice of the default. If the default is not corrected to the satisfaction and approval of the Director within the time specified in such notice, the County may immediately cancel the Contract. At the direction of the Director, the Contractor shall vacate the facility, if applicable, and shall have no right to further operate under the Contract.

The Contractor, in accepting the Contract, agrees that the County shall not be liable to prosecution for damages or lost anticipated profits if the County cancels or terminates the Contract.

No Waiver: No waiver by the County of any default or breach of any covenant, condition, or stipulation shall be treated as a waiver of any subsequent default or breach of the same or any other covenant, condition, or stipulation.

XXIII. Termination

The County may terminate this agreement in whole or in part by giving thirty days written notice thereof to Contractor. The County will compensate Contractor in accordance with the terms of the agreement for all goods and services delivered and accepted prior to the effective date of such termination notice.

XXIV. Miscellaneous

1. After executing the contract or issuance of a purchase order, no consideration will be given to any claim of misunderstanding.

2. Bidders shall submit with their bid, the required Contractor's qualification statement with supporting information as stated herein along with all other supporting documentation requested.

3. Bidders shall thoroughly familiarize themselves with the provisions of these specifications/scope of work.

4. A bid may be disqualified if the corporation or individual bidder is in arrears or in default to the County for delinquent taxes or assessments or on any debt or contract, whether as defaulter or bondsman; or who has defaulted upon any obligation to the County by failing to perform satisfactorily any previous agreement or Contract within the past seven years. Also, bidders may be disqualified for poor prior performance on similar Contracts with other entities.

5. The Contractor agrees to abide by the rules and regulations as prescribed herein. The Contractor will, in all solicitations or advertisements for personnel to perform services under the Contract, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, gender, or national origin.

6. If either party hereto is prevented from completing its obligations under the Contract by act of God, strike, lockout, material or labor restrictions by any governmental authority, civil riot, flood, or any other cause beyond the control of the parties hereto, then such party shall be excused from such performance for such period of time as is reasonably necessary after such occurrence to remedy the effects thereof.

7. The section headings in these Specifications are for convenience in reference and are not intended to define or limit the scope of any of the conditions, terms or provisions of these specifications.

8. Should any question arise as to the proper interpretation of the terms and conditions of these specifications, the decision of the department director and/or Purchasing Agent or his authorized representative shall be final.

XXV. Indemnity

The selected bidder agrees to defend, indemnify and hold the County, its officers, agents and employees, harmless against any and all claims, lawsuits, judgments, costs, and expenses for personal injury (including death), property damage or other harm for which recovery of damages is sought, suffered by any person or persons, that may arise out of or be occasioned by the selected bidder's breach of any of the terms or provisions of the contract, or by any other negligent or strictly liable act or omission of the selected bidder, its officers, agents, employees, or subcontractors, in the performance of the contract; except that the indemnity provided for in this paragraph shall not apply to any liability resulting from the sole negligence or fault of the County, its officers, agents, or employees and in the event of joint and concurrent negligence or fault of the selected bidder(s) and County, responsibility, and indemnity, if any, shall be apportioned comparatively in accordance with the laws of the State of Texas, without waiving any governmental immunity available to the County under Texas law and without waiving any defenses of the parties under Texas law. The provisions of this paragraph are solely for the benefit of the parties hereto and are not intended to create or grant any rights, contractual or otherwise, to any other person or entity**.**

XXVI. Development Costs

Neither Dallas County nor its representatives shall be liable for any expenses incurred in connection with preparing a response to this IFB. Respondents are encouraged to prepare their bids simply and economically, providing a straightforward and concise description of your firm's ability to meet the requirements of the IFB.

XXVII. Certificate of Interested Parties (Form 1295)

Section 2252.908 of the Texas Government Code: An Act Addressing Disclosure of Interested Parties.

Effective January 1, 2016, Dallas County, must comply with the "Disclosure of Interest Parties, requirements established under Section 2252.908 of the Texas Government Code as implemented by the Texas Ethics Commission. Briefly stated, all contracts requiring an action or vote by the governing body of the entity or agency before the contract may be signed (regardless of the dollar amount) or that has a value of at least $1 million will require the on-line completion of Form 1295 "Certificate of Interested Parties", in accordance with Texas Government Code Statute §2252.908. Form 1295 is also required for any and all contract amendments, extensions or renewals. All business entities are required to complete and file electronically with the Texas Ethics Commission using the online filing application.

Step 1: Business Entity completes Form 1295 in electronic format on the Texas Ethics Commission website: (https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm)

Step 2: Upon receipt of a completed Interested Parties Disclosure Form, Texas Ethics Commission issues a Certification of Filing to the Business Entity and the Business Entity download(s), print, sign(s) and notarize(s) Form 1295. An authorized agent of the business entity will need to sign the printed copy of the form and have the form notarized.

Step 3: At the time of submission of the solicitation to Dallas County the Business Entity must submit the completed notarized Form 1295 with the Certification of Filing with their contract (i.e.: bid, rfp, rfq, soq, etc.) to Dallas County. Upon receipt, Dallas County may proceed with the award and/or execution of the contract.

Step 4: Not later than the 30th day after the date the contract has been signed by all parties, Dallas County must notify the Texas Ethics Commission (in electronic format) of the receipt of (1) Form 1295, and (2) the Certification of Filing.

Step 5: Not later than the 7th business day after receipt of the above notice, Texas Ethics Commission makes the disclosure available to the public by posting the disclosure on its website.

County Offices and Departments submitting contracts to Commissioners Court for award/execution are responsible for acknowledging and filing the Form 1295.

Definitions:

(a) "Contract" includes an amended, extended, or renewed contract.

(b)"Business entity" includes an entity through which business is conducted with a governmental entity or state agency, regardless of whether the entity is a for-profit or nonprofit entity. The term does not include a governmental entity or state agency.

(c)"Controlling interest" In accordance with the Texas Ethics Commission, Chapter 46.3(c) and applicable to Texas Government Code §2252.908 - (1) an ownership interest or participating interest in a business entity by virtue of units, percentage, shares, stock, or otherwise that exceeds 10 percent; (2) membership on the board of directors or other governing body of a business entity of which the board or other governing body is composed of not more than 10 members; or (3) service as an officer of a business entity that has four or fewer officers, or service as one of the four officers most highly compensated by a business entity that has more than four officers.
(d)"Interested party" (1) a person who has a controlling interest in a business entity with whom a governmental entity or state agency contracts; or (2) a person who actively participates in facilitating a contract or negotiating the terms of a contract with a governmental entity or state agency, including a broker, intermediary, adviser, or attorney for the business entity.

(e)"Intermediary" for purposes of this rule, means, a person who actively participates in the facilitation of the contract or negotiating the contract, including a broker, adviser, attorney, or representative of or agent for the business entity who:

(1) receives compensation from the business entity for the person's participation;

(2) communicates directly with the governmental entity or state agency on behalf of the business entity regarding the contract; and

(3) is not an employee of the business entity.

To obtain additional information on Section 2252 and to learn more about the Texas Ethics Commission process to create a new account or to complete an electronic version of Form 1295 for submission with a signed contract, please go to the following website:
https://www.ethics.state.tx.us/tec/1295-Info.htm

Instructional Videos for Business Entities on how to file online can be found at:

https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm

XXVIII. Conflict of Interest

No County elected or appointed official or representative, or any employees shall have any financial interest, direct or indirect, in any contract with the County or be financially interested, directly or indirectly, in the sale to the County of any land, materials, supplies, goods or services, except on behalf of the County as an official or employee. Any violation of this Section, with knowledge, expresses or implied, of the person or corporation contracting with the County shall render this Agreement involved voidable by the Commissioners Court of Dallas County. It is the responsibility of Contractor during all phases of this Agreement to notify the County in writing of any potential conflict of interest. Contractor covenants that neither it nor any member of its corporation presently has any interest or shall acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of this Agreement. Contractor further covenants that in the performance of this Agreement no person having such interest shall be employed or appointed by Contractor.

XXIX. Small Business Enterprise (SBE) Program

See Attachment S – Small Business Enterprise Program (SBE) and SBE forms

Questions & Answers

Buyer Organization	Dallas County
Question Acceptance Deadline	04/09/2026 03:00 PM CDT
Closing Date	04/23/2026 02:00 PM CDT

No	Vendor Name	Question/Answer	Question Date Answer Date
Q1	Hearn Company	**Question: Estimated Cost** (by *Kris Hearn*) Is there an estimated cost or cost range for this project? **No answer has been provided for this question yet.**	03/17/2026 01:48 PM CDT

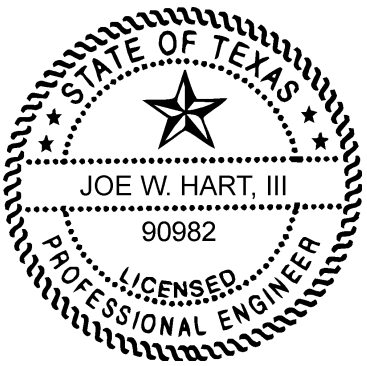
Dallas County
Adult Probation Center
Parking Lot Reconstruction

Dallas, Texas

February 2026

SITE WORK SPECIFICATIONS

Prepared By:



02-23-26

JOHNSON & PACE INCORPORATED
Innovation is in the Details.

Johnson & Pace Incorporated
1201 NW Loop 281, Suite 100
Longview, TX 75604
Office: 903.753.0663
Fax: 903.753.8803
TBPE Firm No. F-4691
www.johnsonpace.com

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SECTION 31 1000 - SITE CLEARING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Provide all labor, materials and equipment as necessary to complete all work as indicated on the Drawings and specified herein.

1.3 DEFINITIONS

A. Subsoil: All soil beneath the topsoil layer of the soil profile, and typified by the lack of organic matter and soil organisms.

B. Surface Soil: Soil that is present at the top layer of the existing soil profile at the Project site. In undisturbed areas, the surface soil is typically topsoil; but in disturbed areas such as urban environments, the surface soil can be subsoil.

C. Topsoil: Top layer of the soil profile consisting of existing native surface topsoil or existing in-place surface soil and is the zone where plant roots grow.

D. Topsoil: Top layer of the soil profile consisting of existing native surface topsoil or existing in-place surface soil and is the zone where plant roots grow. Its appearance is generally friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches in diameter; and free of subsoil and weeds, roots, toxic materials, or other nonsoil materials.

E. Plant-Protection Zone: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction, and indicated on Drawings.

F. Tree-Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction, and indicated on Drawings defined by a circle concentric with each tree with a radius 1.5 times the diameter of the drip line unless otherwise indicated on the Drawings.

G. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

1.4 MATERIAL OWNERSHIP

A. Except for stripped topsoil and other materials indicated to be stockpiled or otherwise remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

1.5 PROJECT CONDITIONS

A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.

1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
2. Provide alternate routes around closed or obstructed traffic ways if required by Owner or authorities having jurisdiction.

B. Utility Locator Service: Notify the utility locator service, (Texas One Call System, Digg Tess, etc.) for area where Project is located before site clearing.

C. Do not commence site clearing operations until temporary erosion- and sedimentation-control and plant-protection measures are in place.

D. The following practices are prohibited within protection zones:

1. Storage of construction materials, debris, or excavated material.
2. Parking vehicles or equipment.
3. Foot traffic.
4. Erection of sheds or structures.
5. Impoundment of water.
6. Excavation or other digging unless otherwise indicated.
7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.

E. Do not direct vehicle or equipment exhaust towards protection zones.

F. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones.

G. Soil Stripping, Handling, and Stockpiling: Perform only when the topsoil is dry or slightly moist.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Satisfactory Soil Material: Requirements for satisfactory soil material are specified in Division 31 Section "Earth Moving."

1. Obtain approved borrow soil material off-site when satisfactory soil material is not available on-site.

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect and maintain benchmarks and survey control points from disturbance during construction.

B. Locate and clearly identify trees, shrubs, and other vegetation to remain or to be relocated. Flag and Wrap a 1-inch blue vinyl tie tape flag around each tree trunk at 54 inches above the ground.

C. Protect existing site improvements to remain from damage during construction.

1. Restore damaged improvements to their original condition, as acceptable to Owner.

3.2 TREE AND PLANT PROTECTION

A. General: Protect trees and plants remaining on-site as indicated on the Drawings.

B. Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations, in a manner approved by Architect.

3.3 SITE IMPROVEMENTS

A. Remove existing above- and below-grade improvements as indicated and necessary to facilitate new construction.

B. Remove slabs, paving, curbs, gutters, and aggregate base as indicated.

1. Unless existing full-depth joints coincide with line of demolition, neatly saw-cut along line of existing pavement to remain before removing adjacent existing pavement. Saw-cut faces vertically.

3.4 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.

END OF SECTION 31 1000

SECTION 31 2000 - EARTH MOVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Preparing subgrades for walks, pavements, turf and grasses, and plants.
2. Excavating and backfilling for buildings and structures.
3. Drainage course for concrete slabs-on-grade.
4. Subbase course for concrete walks and pavements.
5. Subbase course and base course for asphalt paving.
6. Subsurface drainage backfill for walls and trenches.
7. Excavating and backfilling trenches for utilities and pits for buried utility structures.

B. Related Sections:

1. Division 01 Section "Construction Progress Documentation" and "Photographic Documentation" for recording pre-excavation and earth moving progress.
2. Division 03 Section "Cast-in-Place Concrete" for granular course if placed over vapor retarder and beneath the slab-on-grade.
3. Division 31 Section "Site Clearing" for site stripping, grubbing, stripping and stockpiling topsoil, and removal of above- and below-grade improvements and utilities.

1.3 UNIT PRICES

A. Work of this Section is affected by unit prices for earth moving specified in Division 01 Section "Unit Prices."

B. Quantity allowances for earth moving are included in Division 01 Section "Allowances."

1.4 DEFINITIONS

A. Backfill: Soil material or controlled low-strength material used to fill an excavation.

1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
2. Final Backfill: Backfill placed over initial backfill to fill a trench.

B. Base Course: Aggregate layer placed between the subbase course and hot-mix asphalt paving.

C. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.

D. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.

E. Drainage Course: Aggregate layer supporting the slab-on-grade that also minimizes upward capillary flow of pore water.

F. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.

1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Architect. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
2. Bulk Excavation: Excavation more than 10 feet in width and more than 30 feet in length.
3. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Architect. Unauthorized excavation, as well as remedial work directed by Architect, shall be without additional compensation.

G. Fill: Soil materials used to raise existing grades.

H. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.

I. Subbase Course: Aggregate layer placed between the subgrade and base course for hot-mix asphalt pavement, or aggregate layer placed between the subgrade and a cement concrete pavement or a cement concrete or hot-mix asphalt walk.

J. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.

K. Utilities: On-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.

1.5 SUBMITTALS

A. Product Data: For each type of the following manufactured products required:

1. Geotextiles.
2. Geofoam.
3. Warning tapes.

B. Samples for Verification: For the following products, in sizes indicated below:

1. Geotextile: 12 by 12 inches .
2. Warning Tape: 12 inches long; of each color.

C. Qualification Data: For qualified testing agency.

D. Material Test Reports: For each on-site and borrow soil material proposed for fill and backfill as follows:

1. Classification according to ASTM D 2487.
2. Laboratory compaction curve according to ASTM D 698 or ASTM D 1557. Refer to Drawings or Geotechnical Report for compaction specification.

E. Seismic survey report from seismic survey agency.

1.6 QUALITY ASSURANCE

A. Geotechnical Testing Agency Qualifications: Qualified according to ASTM E 329 and ASTM D 3740 for testing indicated.

1.7 PROJECT CONDITIONS

A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during earth moving operations.

1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
2. Provide alternate routes around closed or obstructed traffic ways if required by Owner or authorities having jurisdiction.

B. Improvements on Adjoining Property: Authority for performing earth moving indicated on property adjoining Owner's property will be obtained by Owner before award of Contract.

1. Do not proceed with work on adjoining property until directed by Architect.

C. Utility Locator Service: Notify the utility locator service, (Texas One Call System, Digg Tess, etc.) for area where Project is located before beginning earth moving operations.

D. Do not commence earth moving operations until temporary erosion- and sedimentation-control measures, specified in Division 01 Section "Temporary Facilities and Controls," Division 31 Section "Site Clearing," the Storm Water Pollution Prevention Plan (SWPPP), and the drawings are in place.

E. Do not commence earth moving operations until plant-protection measures specified in Division 01 Section "Temporary Tree and Plant Protection" and the Drawings are in place.

F. The following practices are prohibited within protection zones:

1. Storage of construction materials, debris, or excavated material.
2. Parking vehicles or equipment.
3. Foot traffic.
4. Erection of sheds or structures.
5. Impoundment of water.
6. Excavation or other digging unless otherwise indicated.
7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.

G. Do not direct vehicle or equipment exhaust towards protection zones.

H. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.

B. Satisfactory Soils: Soil Classification Groups GW, GP, GM, SW, SP, SM, and some CL soils according to ASTM D 2487, or a combination of these groups; free of rock or gravel larger than 4 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.

1. Liquid Limit: 40 or Less.
2. Plasticity Index: Between 8 and 18.

C. Unsatisfactory Soils: Materials which do not comply with the requirements for Satisfactory Material are unsatisfactory.

1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.

2. Unsatisfactory materials also include man-made fills; trash; refuse; backfills from previous construction; and material classified as satisfactory materials which contains root and other organic matter or frozen material.

D. Subbase Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.

E. Base Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 95 percent passing a 1-1/2-inch sieve and not more than 8 percent passing a No. 200 sieve.

F. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.

G. Bedding Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; except with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve.

H. Drainage Course: Narrowly graded mixture of crushed stone, or crushed or uncrushed gravel; ASTM D 448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch sieve and 0 to 5 percent passing a No. 8 sieve.

I. Filter Material: Narrowly graded mixture of natural or crushed gravel, or crushed stone and natural sand; ASTM D 448; coarse-aggregate grading Size 67; with 100 percent passing a 1-inch sieve and 0 to 5 percent passing a No. 4 sieve.

J. Sand: ASTM C 33; fine aggregate.

K. Impervious Fill: Clayey gravel and sand mixture capable of compacting to a dense state.

2.2 GEOTEXTILES

A. Subsurface Drainage Geotextile: Nonwoven needle-punched geotextile, manufactured for subsurface drainage applications, made from polyolefins or polyesters; with elongation greater than 50 percent; complying with AASHTO M 288 and the following, measured per test methods referenced:

1. Survivability: Class 2; AASHTO M 288.
2. Grab Tensile Strength: 157 lbf ; ASTM D 4632.
3. Sewn Seam Strength: 142 lbf ; ASTM D 4632.
4. Tear Strength: 56 lbf ; ASTM D 4533.
5. Puncture Strength: 56 lbf ; ASTM D 4833.
6. Apparent Opening Size: No. 60 sieve, maximum; ASTM D 4751.
7. Permittivity: 0.2 per second, minimum; ASTM D 4491.
8. UV Stability: 50 percent after 500 hours' exposure; ASTM D 4355.

B. Separation Geotextile: Woven geotextile fabric, manufactured for separation applications, made from polyolefins or polyesters; with elongation less than 50 percent; complying with AASHTO M 288 and the following, measured per test methods referenced:

1. Survivability: Class 2; AASHTO M 288.
2. Grab Tensile Strength: 247 lbf ; ASTM D 4632.
3. Sewn Seam Strength: 222 lbf ; ASTM D 4632.
4. Tear Strength: 90 lbf ; ASTM D 4533.
5. Puncture Strength: 90 lbf ; ASTM D 4833.
6. Apparent Opening Size: No. 60 sieve, maximum; ASTM D 4751.
7. Permittivity: 0.02 per second, minimum; ASTM D 4491.
8. UV Stability: 50 percent after 500 hours' exposure; ASTM D 4355.

2.3 ACCESSORIES

A. Warning Tape: Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, 6 inches wide and 4 mils thick, continuously inscribed with a description of the utility; colored as follows:

1. Red: Electric.
2. Yellow: Gas, oil, steam, and dangerous materials.
3. Orange: Telephone and other communications.
4. Blue: Water systems.
5. Green: Sewer systems.

B. Detectable Warning Tape: Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, a minimum of 6 inches wide and 4 mils thick, continuously inscribed with a description of the utility, with metallic core encased in a protective jacket for corrosion protection, detectable by metal detector when tape is buried up to 30 inches deep; colored as follows:

1. Red: Electric.
2. Yellow: Gas, oil, steam, and dangerous materials.
3. Orange: Telephone and other communications.
4. Blue: Water systems.
5. Green: Sewer systems.

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth moving operations.

B. Protect and maintain erosion and sedimentation controls during earth moving operations.

C. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

3.2 DEWATERING

A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.

B. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.

1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.

3.3 EXCAVATION, GENERAL

A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.

1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.
2. Remove rock to lines and grades indicated to permit installation of permanent construction without exceeding the following dimensions:

a. 24 inches outside of concrete forms other than at footings.
b. 12 inches outside of concrete forms at footings.
c. 6 inches outside of minimum required dimensions of concrete cast against grade.
d. Outside dimensions of concrete walls indicated to be cast against rock without forms or exterior waterproofing treatments.
e. 6 inches beneath bottom of concrete slabs-on-grade.
f. 6 inches beneath pipe in trenches, and the greater of 24 inches wider than pipe or 42 inches wide.

3.4 EXCAVATION FOR STRUCTURES

A. Excavate to indicated elevations and dimensions within a tolerance of plus or minus 1 inch. If applicable, extend excavations a sufficient distance from structures for placing and removing concrete formwork, for installing services and other construction, and for inspections.

1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.
2. Pile Foundations: Stop excavations 6 to 12 inches above bottom of pile cap before piles are placed. After piles have been driven, remove loose and displaced material. Excavate to final grade, leaving solid base to receive concrete pile caps.
3. Excavation for Underground Tanks, Basins, and Mechanical or Electrical Utility Structures: Excavate to elevations and dimensions indicated within a tolerance of plus or minus 1 inch. Do not disturb bottom of excavations intended as bearing surfaces.

B. Excavations at Edges of Tree- and Plant-Protection Zones:

1. Excavate by hand to indicated lines, cross sections, elevations, and subgrades. Use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.
2. Cut and protect roots according to requirements in Division 01 Section "Temporary Tree and Plant Protection."

3.5 EXCAVATION FOR WALKS AND PAVEMENTS

A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

3.6 EXCAVATION FOR UTILITY TRENCHES

A. Excavate trenches to indicated gradients, lines, depths, and elevations.

1. Beyond building perimeter, excavate trenches to allow installation of top of pipe below frost line.

B. Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches higher than top of pipe or conduit unless otherwise indicated.

1. Clearance: 12 inches each side of pipe or conduit or as indicated on Drawings.

C. Trench Bottoms: Excavate and shape trench bottoms to provide uniform bearing and support of pipes and conduit. Shape subgrade to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits. Remove projecting stones and sharp objects along trench subgrade.

1. For pipes and conduit less than 6 inches in nominal diameter, hand-excavate trench bottoms and support pipe and conduit on an undisturbed subgrade.
2. For pipes and conduit 6 inches or larger in nominal diameter, shape bottom of trench to support bottom 90 degrees of pipe or conduit circumference. Fill depressions with tamped sand backfill.
3. For flat-bottomed, multiple-duct conduit units, hand-excavate trench bottoms and support conduit on an undisturbed subgrade.
4. Excavate trenches 6 inches deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.

D. Trench Bottoms: Excavate trenches 4 inches deeper than bottom of pipe and conduit elevations to allow for bedding course. Hand-excavate deeper for bells of pipe.

1. Excavate trenches 6 inches deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.

E. Trenches in Tree- and Plant-Protection Zones:

1. Hand-excavate to indicated lines, cross sections, elevations, and subgrades. Use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.
2. Do not cut main lateral roots or taproots; cut only smaller roots that interfere with installation of utilities.
3. Cut and protect roots according to requirements in Division 01 Section "Temporary Tree and Plant Protection."

3.7 SUBGRADE INSPECTION

A. Notify Architect when excavations have reached required subgrade.

B. If Architect determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.

C. Proof-roll subgrade below the building slabs and pavements with a pneumatic-tired and loaded 10-wheel, tandem-axle dump truck weighing not less than 25 tons to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.

1. Completely proof-roll subgrade in one direction, repeating proof-rolling in direction perpendicular to first direction. Limit vehicle speed to 3 mph.
2. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by Architect, and replace with compacted backfill or fill as directed.

D. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.

E. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Architect, without additional compensation.

3.8 UNAUTHORIZED EXCAVATION

A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill, with 28-day compressive strength of 2500 psi, may be used when approved by Architect.

1. Fill unauthorized excavations under other construction, pipe, or conduit as directed by Architect.

3.9 STORAGE OF SOIL MATERIALS

A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.

1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

3.10 BACKFILL

A. Place and compact backfill in excavations promptly, but not before completing the following:

1. Construction below finish grade including, where applicable, subdrainage, dampproofing, waterproofing, and perimeter insulation.
2. Surveying locations of underground utilities for Record Documents.
3. Testing and inspecting underground utilities.
4. Removing concrete formwork.
5. Removing trash and debris.
6. Removing temporary shoring and bracing, and sheeting.
7. Installing permanent or temporary horizontal bracing on horizontally supported walls.

B. Place backfill on subgrades free of mud, frost, snow, or ice.

3.11 UTILITY TRENCH BACKFILL

A. Place backfill on subgrades free of mud, frost, snow, or ice.

B. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.

C. Trenches under Footings: Backfill trenches excavated under footings and within 18 inches of bottom of footings with satisfactory soil; fill with concrete to elevation of bottom of footings. Concrete is specified in Division 03 Section "Cast-in-Place Concrete."

D. Trenches under Roadways: Provide 4-inch-thick, concrete-base slab support for piping or conduit less than 30 inches below surface of roadways. After installing and testing, completely encase piping or conduit in a minimum of 4 inches of concrete before backfilling or placing roadway subbase course. Concrete is specified in Division 03 Section "Cast-in-Place Concrete."

E. Backfill voids with satisfactory soil while removing shoring and bracing.

F. Place and compact initial backfill of satisfactory soil, free of particles larger than 1 inch in any dimension, to a height of 12 inches over the pipe or conduit.

1. Carefully compact initial backfill under pipe haunches and compact evenly up on both sides and along the full length of piping or conduit to avoid damage or displacement of piping or conduit. Coordinate backfilling with utilities testing.

G. Place and compact final backfill of satisfactory soil to final subgrade elevation.

H. Install warning tape directly above utilities, 12 inches below finished grade, except 6 inches below subgrade under pavements and slabs.

3.12 SOIL FILL

A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.

B. Place and compact fill material in layers to required elevations as follows:

1. Under grass and planted areas, use satisfactory soil material.
2. Under walks and pavements, use satisfactory soil material.
3. Under steps and ramps, use engineered fill.
4. Under building slabs, use engineered fill.
5. Under footings and foundations, use engineered fill.

C. Place soil fill on subgrades free of mud, frost, snow, or ice.

3.13 GEOFOAM FILL

A. Place a leveling course of sand, 2 inches thick, over subgrade. Finish leveling course to a tolerance of 1/2 inch when tested with a 10-foot straightedge.

1. Place leveling course on subgrades free of mud, frost, snow, or ice.

B. Install geofoam blocks in layers with abutting edges and ends and with the long dimension of each block at right angles to blocks in each subsequent layer. Offset joints of blocks in successive layers.

C. Install geofoam connectors at each layer of geofoam to resist horizontal displacement according to geofoam manufacturer's written instructions.

D. Cover geofoam with subdrainage geotextile before placing overlying soil materials.

3.14 SOIL MOISTURE CONTROL

A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.

1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
2. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

3.15 COMPACTION OF SOIL BACKFILLS AND FILLS

A. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.

B. Place backfill and fill soil materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure.

C. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D 698:

1. Under structures, building slabs, steps, and pavements, scarify and recompact top 8 inches of existing subgrade at 98 percent. For structures, building slabs, and steps, recompact each layer of backfill or fill soil material at 98 percent. For pavements, recompact each layer of backfill or fill soil material at 95 percent.
2. Under walkways, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 95 percent.
3. Under turf or unpaved areas, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 85 percent.
4. For utility trenches, compact each layer of initial and final backfill soil material at 95 percent.

3.16 GRADING

A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.

1. Provide a smooth transition between adjacent existing grades and new grades.

2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.

B. Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:

1. Turf or Unpaved Areas: Plus or minus 1 inch.
2. Walks: Plus or minus 1 inch.
3. Pavements: Plus or minus 1/2 inch.

C. Grading inside Building Lines: Finish subgrade to a tolerance of 1/2 inch when tested with a 10-foot straightedge.

3.17 SUBSURFACE DRAINAGE

A. Subdrainage Pipe: Specified in Division 33 Section "Subdrainage."

B. Subsurface Drain: Place subsurface drainage geotextile around perimeter of subdrainage trench. Place a 6-inch course of filter material on subsurface drainage geotextile to support subdrainage pipe. Encase subdrainage pipe in a minimum of 12 inches of filter material, placed in compacted layers 6 inches thick, and wrap in subsurface drainage geotextile, overlapping sides and ends at least 6 inches.

1. Compact each filter material layer to 85 percent of maximum dry unit weight according to ASTM D 698.

C. Drainage Backfill: Place and compact filter material over subsurface drain, in width indicated, to within 12 inches of final subgrade, in compacted layers 6 inches thick. Overlay drainage backfill with one layer of subsurface drainage geotextile, overlapping sides and ends at least 6 inches.

1. Compact each filter material layer to 85 percent of maximum dry unit weight according to ASTM D 698.
2. Place and compact impervious fill over drainage backfill in 6-inch- thick compacted layers to final subgrade.

3.18 SUBBASE AND BASE COURSES UNDER PAVEMENTS AND WALKS

A. Place subbase course and base course on subgrades free of mud, frost, snow, or ice.

B. On prepared subgrade, place subbase course and base course under pavements and walks as follows:

1. Install separation geotextile on prepared subgrade according to manufacturer's written instructions, overlapping sides and ends.
2. Place base course material over subbase course under hot-mix asphalt pavement.
3. Shape subbase course and base course to required crown elevations and cross-slope grades.

4. Place subbase course and base course 6 inches or less in compacted thickness in a single layer.
5. Place subbase course and base course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.
6. Compact subbase course at optimum to +/- 3% optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 698.
7. Compact base course at optimum to +/- 3% optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 1557.

C. Pavement Shoulders: Place shoulders along edges of subbase course and base course to prevent lateral movement. Construct shoulders, at least 12 inches wide, of satisfactory soil materials and compact simultaneously with each subbase and base layer to not less than 95 percent of maximum dry unit weight according to ASTM D 698.

3.19 DRAINAGE COURSE UNDER CONCRETE SLABS-ON-GRADE

A. Place drainage course on subgrades free of mud, frost, snow, or ice.

B. On prepared subgrade, place and compact drainage course under cast-in-place concrete slabs-on-grade as follows:

1. Install subdrainage geotextile on prepared subgrade according to manufacturer's written instructions, overlapping sides and ends.
2. Place drainage course 6 inches or less in compacted thickness in a single layer.
3. Place drainage course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.
4. Compact each layer of drainage course to required cross sections and thicknesses to not less than 95 percent of maximum dry unit weight according to ASTM D 698.

3.20 FIELD QUALITY CONTROL

A. Special Inspections: Owner will engage a qualified special inspector to perform the following special inspections:

1. Determine prior to placement of fill that site has been prepared in compliance with requirements.
2. Determine that fill material and maximum lift thickness comply with requirements.
3. Determine, at the required frequency, that in-place density of compacted fill complies with requirements.

B. Testing Agency: Owner will engage a qualified geotechnical engineering testing agency to perform tests and inspections.

C. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test results for previously completed work comply with requirements.

D. Footing Subgrade: At footing subgrades, at least one test of each soil stratum will be performed to verify design bearing capacities. Subsequent verification and approval of other footing subgrades may be based on a visual comparison of subgrade with tested subgrade when approved by Architect.

E. Testing agency will test compaction of soils in place according to ASTM D 1556, ASTM D 2167, ASTM D 2922, and ASTM D 2937, as applicable. Tests will be performed at the following locations and frequencies:

1. Paved and Building Slab Areas: At subgrade and at each compacted fill and backfill layer, at least one test for every 3000 sq. ft. or less of building slab and at least one test for every 5000 sq. ft., but in no case fewer than two tests per lift.
2. Foundation Wall Backfill: At each compacted backfill layer, at least one test for every 100 feet or less of wall length, but no fewer than two tests.
3. Trench Backfill: At each compacted initial and final backfill layer, at least one test for every 150 feet or less of trench length, but no fewer than two tests.

F. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.

3.21 PROTECTION

A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.

B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.

1. Scarify or remove and replace soil material to depth as directed by Architect; reshape and recompact.

C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.

1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

3.22 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.

END OF SECTION 31 2000

SECTION 31 2500 - EROSION AND SEDIMENTATION CONTROL

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes
   1. Installation of temporary and permanent erosion and sedimentation control systems.
   2. Installation of temporary and permanent slope protection systems.

B. Related Sections
   1. Section 31 1000 - Site Clearing
   2. Section 31 2000 – Earthwork Moving
   3. Section 32 9200 – Turf and Grasses
   4. Construction Drawings (“Site Maps”)

1.2 ENVIRONMENTAL REQUIREMENTS

A. Protect adjacent properties, any identified endangered or threatened species or critical habitat, any identified cultural or historic resources, and receiving water resources from erosion and sediment damage until final stabilization.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Seed, sod, and ground covers for the establishment of vegetation in accordance with Section 32 9200.

B. Sediment control devices as specified on the Construction Drawings.

C. Rolled erosion control products according to Erosion Control Technology Council (ECTC) standard specifications.

D. Temporary mulches such as loose straw, wood cellulose, or agricultural silage.

E. Rip-Rap as specified on the Drawings.

F. Temporary and permanent outfall structures as specified on the Drawings.

PART 3 - EXECUTION

3.1 PREPARATION

A. Review the construction drawings and the Erosion and Sedimentation Control Plan.

3.2 EROSION AND SEDIMENTATION CONTROL AND SLOPE PROTECTION IMPLEMENTATION

A. Place erosion and sediment control systems in accordance with the drawings and Storm Water Pollution Prevention Plan or as may be dictated by site conditions in order to maintain the intent of the specifications and permits.

B. Deficiencies or changes on the drawings or Storm Water Pollution Prevention Plan shall be corrected or implemented as site conditions change. Changes during construction shall be noted in the Storm Water Pollution Prevention Plan and posted on the drawings (Site Map).

C. Owner has authority to limit surface area of erodible earth material exposed by clearing and grubbing, excavation, borrow and embankment operations and to direct Contractor to provide immediate permanent or temporary pollution control measures.

D. Maintain temporary erosion and sedimentation control systems as dictated by site conditions, indicated in the construction documents, or as directed by governing authorities or Owner to control sediment until final stabilization. Contractor shall respond to maintenance or additional work ordered by Owner or governing authorities immediately, but in no case, within not more than 48 hours if required at no additional cost to the Owner.

E. Contractor shall incorporate permanent erosion control features, paving, permanent slope stabilization, and vegetation into project at earliest practical time to minimize need for temporary controls.

F. Permanently seed and mulch cut slopes as excavation proceeds to extent considered desirable and practical.

G. Unless required within a shorter timeframe by the applicable General Permit for Storm Water Discharges Associated with Construction Activity, slopes that erode easily or that will not be graded for a period of 14 days or more shall be temporarily stabilized as work progresses with vegetation or other acceptable means in accordance with Section 32 9300 unless otherwise specified in the Contract Documents. In the event it is not practical to seed areas, slopes must be stabilized with mulch and tackifier, bonded fiber matrix, netting, blankets or other means to reduce the erosive potential of the area.

END OF SECTION

SECTION 32 1216 - ASPHALT PAVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Cold milling of existing hot-mix asphalt pavement.
2. Hot-mix asphalt patching.
3. Hot-mix asphalt paving.
4. Hot-mix asphalt paving overlay.
5. Asphalt surface treatments.
6. Pavement-marking paint.
7. Traffic-calming devices.

B. Related Sections:

1. Division 02 Section "Structure Demolition" for demolition, removal, and recycling of existing asphalt pavements, and for geotextiles that are not embedded within courses of asphalt paving.
2. Division 31 Section "Earth Moving" for aggregate subbase and base courses and for aggregate pavement shoulders.
3. Division 32 Sections for other paving installed as part of crosswalks in asphalt pavement areas.
4. Division 32 Section "Concrete Paving Joint Sealants" for joint sealants and fillers at paving terminations.
5. Division 32 Section "Unit Paving" for bituminous setting bed for pavers.

1.3 DEFINITION

A. Hot-Mix Asphalt Paving Terminology: Refer to ASTM D 8 for definitions of terms.

1.4 SUBMITTALS

A. Product Data: For each type of product indicated. Include technical data and tested physical and performance properties.

1. Job-Mix Designs: Certification, by authorities having jurisdiction, of approval of each job mix proposed for the Work.
2. Job-Mix Designs: For each job mix proposed for the Work.

B. Qualification Data: For qualified manufacturer and Installer.

C. Material Certificates: For each paving material, from manufacturer.

D. Material Test Reports: For each paving material.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: A paving-mix manufacturer registered with and approved by authorities having jurisdiction or TxDOT of state in which Project is located.

B. Regulatory Requirements: Comply with materials, workmanship, and other applicable requirements of the 2004 Edition TxDOT Standard Specifications for asphalt paving work.

1. Measurement and payment provisions and safety program submittals included in standard specifications do not apply to this Section.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver pavement-marking materials to Project site in original packages with seals unbroken and bearing manufacturer's labels containing brand name and type of material, date of manufacture, and directions for storage.

B. Store pavement-marking materials in a clean, dry, protected location within temperature range required by manufacturer. Protect stored materials from direct sunlight.

1.7 PROJECT CONDITIONS

A. Environmental Limitations: Do not apply asphalt materials if subgrade is wet or excessively damp, if rain is imminent or expected before time required for adequate cure, or if the following conditions are not met:

1. Prime Coat: Minimum surface temperature of 60 deg F.
2. Tack Coat: Minimum surface temperature of 60 deg F.
3. Slurry Coat: Comply with weather limitations in ASTM D 3910.
4. Asphalt Base Course: Minimum surface temperature of 40 deg F and rising at time of placement.
5. Asphalt Surface Course: Minimum surface temperature of 60 deg F at time of placement.

B. Pavement-Marking Paint: Proceed with pavement marking only on clean, dry surfaces and at a minimum ambient or surface temperature of 40 deg F for oil-based materials, and not exceeding 95 deg F.

PART 2 - PRODUCTS

2.1 AGGREGATES

A. General: Use materials and gradations that have performed satisfactorily in previous installations.

B. Coarse Aggregate: ASTM D 692, sound; angular crushed stone, crushed gravel, or cured, crushed blast-furnace slag.

C. Fine Aggregate: ASTM D 1073, sharp-edged natural sand or sand prepared from stone, gravel, cured blast-furnace slag, or combinations thereof.

1. For hot-mix asphalt, limit natural sand to a maximum of 20 percent by weight of the total aggregate mass.

D. Mineral Filler: ASTM D 242, rock or slag dust, hydraulic cement, or other inert material.

2.2 ASPHALT MATERIALS

A. Asphalt Binder: AASHTO M 320 or AASHTO MP 1a**,** PG 64-22.

B. Asphalt Cement: ASTM D 3381 for viscosity-graded material.

C. Prime Coat: ASTM D 2027, medium-curing cutback asphalt, MC-30 or MC-70.

D. Prime Coat: Asphalt emulsion prime coat complying with TxDOT requirements.

E. Tack Coat: ASTM D 977 emulsified asphalt, or ASTM D 2397 cationic emulsified asphalt, slow setting, diluted in water, of suitable grade and consistency for application.

F. Fog Seal: ASTM D 977 emulsified asphalt, or ASTM D 2397 cationic emulsified asphalt, slow setting, factory diluted in water, of suitable grade and consistency for application.

G. Water: Potable.

2.3 AUXILIARY MATERIALS

A. Herbicide: Commercial chemical for weed control, registered by the EPA. Provide in granular, liquid, or wettable powder form.

B. Sand: ASTM D 1073, Grade Nos. 2 or 3.

C. Paving Geotextile: AASHTO M 288, nonwoven polypropylene; resistant to chemical attack, rot, and mildew; and specifically designed for paving applications.

D. Joint Sealant: ASTM D 6690, hot-applied, single-component, polymer-modified bituminous sealant.

E. Pavement-Marking Paint: Alkyd-resin type, lead and chromate free, ready mixed, complying with AASHTO M 248; colors complying with FS TT-P-1952.

1. Color: As indicated on drawings.

F. Wheel Stops: Precast, air-entrained concrete, 2500-psi minimum compressive strength, 4-1/2 inches high by 9 inches wide by 72 inches long. Provide chamfered corners, drainage slots on underside, and holes for anchoring to substrate.

1. Dowels: Galvanized steel, 3/4-inch diameter, 10-inch minimum length.

2.4 MIXES

A. Hot-Mix Asphalt: Dense, hot-laid, hot-mix asphalt plant mixes approved by authorities having jurisdiction and designed according to procedures in AI MS-2, "Mix Design Methods for Asphalt Concrete and Other Hot-Mix Types."

1. Provide mixes with a history of satisfactory performance in geographical area where Project is located.
2. Provide mixes complying with composition, grading, and tolerance requirements in ASTM D 3515 for the following nominal, maximum aggregate sizes:

a. Base Course: 1 inch.
b. Surface Course: 1/2 inch.

B. Emulsified-Asphalt Slurry: ASTM D 3910.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that subgrade is dry and in suitable condition to begin paving.

B. Proof-roll subgrade below pavements with heavy pneumatic-tired equipment to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.

1. Completely proof-roll subgrade in one direction, repeating proof-rolling in direction perpendicular to first direction. Limit vehicle speed to 3 mph .
2. Proof roll with a loaded 10-wheel, tandem-axle dump truck weighing not less than 15 tons .
3. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by Architect, and replace with compacted backfill or fill as directed.

C. Proceed with paving only after unsatisfactory conditions have been corrected.

3.2 COLD MILLING

A. Clean existing pavement surface of loose and deleterious material immediately before cold milling. Remove existing asphalt pavement by cold milling to grades and cross sections indicated.

1. Mill to a depth of 2 inches.
2. Mill to a uniform finished surface free of excessive gouges, grooves, and ridges.

3. Control rate of milling to prevent tearing of existing asphalt course.
4. Repair or replace curbs, manholes, and other construction damaged during cold milling.
5. Excavate and trim unbound-aggregate base course, if encountered, and keep material separate from milled hot-mix asphalt.
6. Transport milled hot-mix asphalt to asphalt recycling facility.
7. Keep milled pavement surface free of loose material and dust.

3.3 PATCHING

A. Hot-Mix Asphalt Pavement: Saw cut perimeter of patch and excavate existing pavement section to sound base. Excavate rectangular or trapezoidal patches, extending 12 inches into adjacent sound pavement, unless otherwise indicated. Cut excavation faces vertically. Remove excavated material. Recompact existing unbound-aggregate base course to form new subgrade.

B. Tack Coat: Apply uniformly to vertical surfaces abutting or projecting into new, hot-mix asphalt paving at a rate of 0.05 to 0.15 gal./sq. yd. .

1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.

C. Patching: Fill excavated pavements with hot-mix asphalt base mix for full thickness of patch and, while still hot, compact flush with adjacent surface.

D. Patching: Partially fill excavated pavements with hot-mix asphalt base mix and, while still hot, compact. Cover asphalt base course with compacted, hot-mix surface layer finished flush with adjacent surfaces.

3.4 REPAIRS

A. Leveling Course: Install and compact leveling course consisting of hot-mix asphalt surface course to level sags and fill depressions deeper than 1 inch in existing pavements.

1. Install leveling wedges in compacted lifts not exceeding 3 inches thick.

B. Crack and Joint Filling: Remove existing joint filler material from cracks or joints to a depth of 1/4 inch.

1. Clean cracks and joints in existing hot-mix asphalt pavement.
2. Use emulsified-asphalt slurry to seal cracks and joints less than 1/4 inch wide. Fill flush with surface of existing pavement and remove excess.
3. Use hot-applied joint sealant to seal cracks and joints more than 1/4 inch wide. Fill flush with surface of existing pavement and remove excess.

3.5 SURFACE PREPARATION

A. General: Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces. Ensure that prepared subgrade is ready to receive paving.

B. Herbicide Treatment: Apply herbicide according to manufacturer's recommended rates and written application instructions. Apply to dry, prepared subgrade or surface of compacted-aggregate base before applying paving materials.

1. Mix herbicide with prime coat if formulated by manufacturer for that purpose.

C. Prime Coat: Apply uniformly over surface of compacted unbound-aggregate base course at a rate of 0.15 to 0.50 gal./sq. yd. . Apply enough material to penetrate and seal but not flood surface. Allow prime coat to cure.

1. If prime coat is not entirely absorbed within 24 hours after application, spread sand over surface to blot excess asphalt. Use enough sand to prevent pickup under traffic. Remove loose sand by sweeping before pavement is placed and after volatiles have evaporated.
2. Protect primed substrate from damage until ready to receive paving.

D. Tack Coat: Apply uniformly to surfaces of existing pavement at a rate of 0.05 to 0.15 gal./sq. yd. .

1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.

3.6 PAVING GEOTEXTILE INSTALLATION

A. Apply tack coat uniformly to existing pavement surfaces at a rate of 0.20 to 0.30 gal./sq. yd. .

B. Place paving geotextile promptly according to manufacturer's written instructions. Broom or roll geotextile smooth and free of wrinkles and folds. Overlap longitudinal joints 4 inches and transverse joints 6 inches.

1. Protect paving geotextile from traffic and other damage and place hot-mix asphalt paving overlay the same day.

3.7 HOT-MIX ASPHALT PLACING

A. Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand to areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted.

1. Place hot-mix asphalt base course in number of lifts and thicknesses indicated.
2. Place hot-mix asphalt surface course in single lift.
3. Spread mix at minimum temperature of 250 deg F.
4. Begin applying mix along centerline of crown for crowned sections and on high side of one-way slopes unless otherwise indicated.

5. Regulate paver machine speed to obtain smooth, continuous surface free of pulls and tears in asphalt-paving mat.

B. Place paving in consecutive strips not less than 10 feet wide unless infill edge strips of a lesser width are required.

1. After first strip has been placed and rolled, place succeeding strips and extend rolling to overlap previous strips. Complete a section of asphalt base course before placing asphalt surface course.

C. Promptly correct surface irregularities in paving course behind paver. Use suitable hand tools to remove excess material forming high spots. Fill depressions with hot-mix asphalt to prevent segregation of mix; use suitable hand tools to smooth surface.

3.8 JOINTS

A. Construct joints to ensure a continuous bond between adjoining paving sections. Construct joints free of depressions, with same texture and smoothness as other sections of hot-mix asphalt course.

1. Clean contact surfaces and apply tack coat to joints.
2. Offset longitudinal joints, in successive courses, a minimum of 6 inches.
3. Offset transverse joints, in successive courses, a minimum of 24 inches.
4. Construct transverse joints at each point where paver ends a day's work and resumes work at a subsequent time. Construct these joints [using either "bulkhead" or "papered" method according to AI MS-22, for both "Ending a Lane" and "Resumption of Paving Operations," Or as shown on Drawings.
5. Compact joints as soon as hot-mix asphalt will bear roller weight without excessive displacement.
6. Compact asphalt at joints to a density within 2 percent of specified course density.

3.9 COMPACTION

A. General: Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement. Compact hot-mix paving with hot, hand tampers or with vibratory-plate compactors in areas inaccessible to rollers.

1. Complete compaction before mix temperature cools to 185 deg F.

B. Breakdown Rolling: Complete breakdown or initial rolling immediately after rolling joints and outside edge. Examine surface immediately after breakdown rolling for indicated crown, grade, and smoothness. Correct laydown and rolling operations to comply with requirements.

C. Intermediate Rolling: Begin intermediate rolling immediately after breakdown rolling while hot-mix asphalt is still hot enough to achieve specified density. Continue rolling until hot-mix asphalt course has been uniformly compacted to the following density:

1. Average Density: 96 percent of reference laboratory density according to ASTM D 6927, but not less than 94 percent nor greater than 100 percent.

2. Average Density: 92 percent of reference maximum theoretical density according to ASTM D 2041, but not less than 90 percent nor greater than 96 percent.

D. Finish Rolling: Finish roll paved surfaces to remove roller marks while hot-mix asphalt is still warm.

E. Edge Shaping: While surface is being compacted and finished, trim edges of pavement to proper alignment. Bevel edges while asphalt is still hot; compact thoroughly.

F. Repairs: Remove paved areas that are defective or contaminated with foreign materials and replace with fresh, hot-mix asphalt. Compact by rolling to specified density and surface smoothness.

G. Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.

H. Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

3.10 ASPHALT TRAFFIC-CALMING DEVICES

A. Construct hot-mix asphalt speed bumps, humps, cushions, and tables over compacted pavement surfaces. Apply a tack coat unless pavement surface is still tacky and free from dust. Spread mix at minimum temperature of 250 deg F.

1. Tack Coat Application: Apply uniformly to surfaces of existing pavement at a rate of 0.05 to 0.15 gal./sq. yd.
2. Asphalt Mix: Same as pavement surface-course mix.
3. Before installation, mill pavement that will be in contact with bottom of traffic-calming device. Mill to a depth of 1 inch from top of pavement to a clean, rough profile.

B. Place hot-mix asphalt to cross section indicated, by machine or by hand in wood or metal forms. Tamp hand-placed materials and screed to smooth finish. Remove forms after hot-mix asphalt has cooled.

3.11 INSTALLATION TOLERANCES

A. Pavement Thickness: Compact each course to produce the thickness indicated within the following tolerances:

1. Base Course: Plus or minus 1/2 inch.
2. Surface Course: Plus 1/4 inch, no minus.

B. Pavement Surface Smoothness: Compact each course to produce a surface smoothness within the following tolerances as determined by using a 10-foot straightedge applied transversely or longitudinally to paved areas:

1. Base Course: 1/4 inch.
2. Surface Course: 1/8 inch.

3. Crowned Surfaces: Test with crowned template centered and at right angle to crown. Maximum allowable variance from template is 1/4 inch.

C. Traffic-Calming Devices: Compact and form asphalt to produce the contour indicated and within a tolerance of plus or minus 1/8 inch of height indicated above pavement surface.

3.12 SURFACE TREATMENTS

A. Fog Seals: Apply fog seal at a rate of 0.10 to 0.15 gal./sq. yd. to existing asphalt pavement and allow to cure. With fine sand, lightly dust areas receiving excess fog seal.

B. Slurry Seals: Apply slurry coat in a uniform thickness according to ASTM D 3910 and allow to cure.

1. Roll slurry seal to remove ridges and provide a uniform, smooth surface.

3.13 PAVEMENT MARKING

A. Do not apply pavement-marking paint until layout, colors, and placement have been verified with Architect.

B. Allow paving to age for 30 days before starting pavement marking.

C. Sweep and clean surface to eliminate loose material and dust.

3.14 WHEEL STOPS

A. Install wheel stops in bed of adhesive as recommended by manufacturer.

B. Securely attach wheel stops to pavement with not less than two galvanized-steel dowels embedded at one-quarter to one-third points. Securely install dowels into pavement and bond to wheel stop. Recess head of dowel beneath top of wheel stop.

3.15 FIELD QUALITY CONTROL

A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.

B. Thickness: In-place compacted thickness of hot-mix asphalt courses will be determined according to ASTM D 3549.

C. Surface Smoothness: Finished surface of each hot-mix asphalt course will be tested for compliance with smoothness tolerances.

D. Traffic-Calming Devices: Finished height of asphalt speed tables above pavement will be measured for compliance with tolerances.

E. In-Place Density: Testing agency will take samples of uncompacted paving mixtures and compacted pavement according to ASTM D 979.

1. Reference maximum theoretical density will be determined by averaging results from four samples of hot-mix asphalt-paving mixture delivered daily to site, prepared according to ASTM D 2041, and compacted according to job-mix specifications.
2. In-place density of compacted pavement will be determined by testing core samples according to ASTM D 1188 or ASTM D 2726.

    a. One core sample will be taken for every 1000 sq. yd. or less of installed pavement, with no fewer than 3 cores taken.
    b. Field density of in-place compacted pavement may also be determined by nuclear method according to ASTM D 2950 and correlated with ASTM D 1188 or ASTM D 2726.

F. Replace and compact hot-mix asphalt where core tests were taken.

G. Remove and replace or install additional hot-mix asphalt where test results or measurements indicate that it does not comply with specified requirements.

3.16 DISPOSAL

A. Except for material indicated to be recycled, remove excavated materials from Project site and legally dispose of them in an EPA-approved landfill.

1. Do not allow milled materials to accumulate on-site.

END OF SECTION 32 1216

SECTION 32 1313 - CONCRETE PAVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Driveways.
2. Roadways.
3. Parking lots.
4. Curbs and gutters.
5. Walks.

B. Related Sections:

1. Division 03 Section "Cast-in-Place Concrete" for general building applications of concrete.
2. Division 32 Section "Concrete Paving Joint Sealants" for joint sealants in expansion and contraction joints within concrete paving and in joints between concrete paving and asphalt paving or adjacent construction.

1.3 DEFINITIONS

A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, fly ash and other pozzolans, and ground granulated blast-furnace slag.

1.4 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Shop Drawings: Indicate pavement markings, lane separations, and defined parking spaces. Indicate, with international symbol of accessibility, spaces allocated for people with disabilities.

C. Samples for Initial Selection: For each type of product, ingredient, or admixture requiring color selection.

D. Samples for Verification: For each type of product or exposed finish, prepared as Samples of size indicated below:

1. Exposed Aggregate: 10-lb Sample of each mix.

2. Preformed Traffic-Calming Devices: 6 inches long showing cross section; with fasteners.

E. Other Action Submittals:

1. Design Mixtures: For each concrete paving mixture. Include alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.

F. Qualification Data: For qualified ready-mix concrete manufacturer and testing agency.

G. Material Certificates: For the following, from manufacturer:

1. Cementitious materials.
2. Steel reinforcement and reinforcement accessories.
3. Fiber reinforcement.
4. Admixtures.
5. Curing compounds.
6. Applied finish materials.
7. Bonding agent or epoxy adhesive.
8. Joint fillers.

H. Material Test Reports: For each of the following:

1. Aggregates. Include service-record data indicating absence of deleterious expansion of concrete due to alkali-aggregate reactivity.

I. Field quality-control reports.

1.5 QUALITY ASSURANCE

A. Detectable Warning Installer Qualifications: An employer of workers trained and approved by manufacturer of stamped concrete paving systems.

B. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.

1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities" (Quality Control Manual - Section 3, "Plant Certification Checklist").

C. Testing Agency Qualifications: Qualified according to ASTM C 1077 and ASTM E 329 for testing indicated.

1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-1 or an equivalent certification program.

D. Concrete Testing Service: Engage a qualified testing agency to perform material evaluation tests and to design concrete mixtures.

E. ACI Publications: Comply with ACI 301 unless otherwise indicated.

1.6 PROJECT CONDITIONS

A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.

B. Pavement-Marking Paint: Proceed with pavement marking only on clean, dry surfaces and at a minimum ambient or surface temperature of 40 deg F for oil-based materials and 55 deg F for water-based materials, and not exceeding 95 deg F.

PART 2 - PRODUCTS

2.1 FORMS

A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, and smooth exposed surfaces.

1. Use flexible or uniformly curved forms for curves with a radius of 100 feet or less. Do not use notched and bent forms.

B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and that will not impair subsequent treatments of concrete surfaces.

2.2 STEEL REINFORCEMENT

A. Plain-Steel Welded Wire Reinforcement: ASTM A 185/A 185M, fabricated from steel wire into flat sheets.

B. Deformed-Steel Welded Wire Reinforcement: ASTM A 497/A 497M, flat sheet.

C. Epoxy-Coated Welded Wire Reinforcement: ASTM A 884/A 884M, Class A, plain steel.

D. Reinforcing Bars: ASTM A 615/A 615M, Grade 60; deformed.

E. Galvanized Reinforcing Bars: ASTM A 767/A 767M, Class II zinc coated, hot-dip galvanized after fabrication and bending; with ASTM A 615/A 615M, Grade 60 deformed bars.

F. Epoxy-Coated Reinforcing Bars: ASTM A 775/A 775M or ASTM A 934/A 934M; with ASTM A 615/A 615M, Grade 60 deformed bars.

G. Steel Bar Mats: ASTM A 184/A 184M; with ASTM A 615/A 615M, Grade 60, deformed bars; assembled with clips.

H. Plain-Steel Wire: ASTM A 82/A 82M.

I. Deformed-Steel Wire: ASTM A 496/A 496M.

J. Epoxy-Coated-Steel Wire: ASTM A 884/A 884M, Class A coated, plain.

K. Joint Dowel Bars: ASTM A 615/A 615M, Grade 60 plain-steel bars. Cut bars true to length with ends square and free of burrs.

L. Epoxy-Coated, Joint Dowel Bars: ASTM A 775/A 775M; with ASTM A 615/A 615M, Grade 60, plain-steel bars.

M. Tie Bars: ASTM A 615/A 615M, Grade 60, deformed.

N. Hook Bolts: ASTM A 307, Grade A, internally and externally threaded. Design hook-bolt joint assembly to hold coupling against paving form and in position during concreting operations, and to permit removal without damage to concrete or hook bolt.

O. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars, welded wire reinforcement, and dowels in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire, plastic, or precast concrete of greater compressive strength than concrete specified, and as follows:

1. Equip wire bar supports with sand plates or horizontal runners where base material will not support chair legs.
2. For epoxy-coated reinforcement, use epoxy-coated or other dielectric-polymer-coated wire bar supports.

P. Epoxy Repair Coating: Liquid, two-part, epoxy repair coating, compatible with epoxy coating on reinforcement.

Q. Zinc Repair Material: ASTM A 780.

2.3 CONCRETE MATERIALS

A. Cementitious Material: Use the following cementitious materials, of same type, brand, and source throughout Project:

1. Portland Cement: ASTM C 150, portland cement Type I. Supplement with the following:

   a. Fly Ash: ASTM C 618, Class C or Class F.
   b. Ground Granulated Blast-Furnace Slag: ASTM C 989, Grade 100 or 120.

B. Normal-Weight Aggregates: ASTM C 33, uniformly graded. Provide aggregates from a single source with documented service-record data of at least 10 years' satisfactory service in similar paving applications and service conditions using similar aggregates and cementitious materials.

1. Maximum Coarse-Aggregate Size: 1 inch nominal.
2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.

C. Exposed Aggregate: Selected, hard, and durable; washed; free of materials with deleterious reactivity to cement or that cause staining; from a single source, with gap-graded coarse aggregate as follows:

1. Aggregate Sizes: 1/2 to 3/4 inch nominal.

D. Water: Potable and complying with ASTM C 94/C 94M.

E. Air-Entraining Admixture: ASTM C 260.

F. Chemical Admixtures: Admixtures certified by manufacturer to be compatible with other admixtures and to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material.

1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
2. Retarding Admixture: ASTM C 494/C 494M, Type B.
3. Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.
4. High-Range, Water-Reducing Admixture: ASTM C 494/C 494M, Type F.
5. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type G.
6. Plasticizing and Retarding Admixture: ASTM C 1017/C 1017M, Type II.

G. Color Pigment: ASTM C 979, synthetic mineral-oxide pigments or colored water-reducing admixtures; color stable, nonfading, and resistant to lime and other alkalis.

1. Color: As selected by Architect from manufacturer's full range.

2.4 FIBER REINFORCEMENT

A. Synthetic Fiber: Monofilament or fibrillated polypropylene fibers engineered and designed for use in concrete paving, complying with ASTM C 1116/C 1116M, Type III, 1/2 to 1-1/2 inches long.

2.5 CURING MATERIALS

A. Absorptive Cover: AASHTO M 182, Class 3, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. dry or cotton mats.

B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.

C. Water: Potable.

D. Evaporation Retarder: Waterborne, monomolecular, film forming, manufactured for application to fresh concrete.

E. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, dissipating.

F. White, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 2, Class B, dissipating.

2.6 RELATED MATERIALS

A. Joint Fillers: ASTM D 1751, asphalt-saturated cellulosic fiber or ASTM D 1752, cork or self-expanding cork in preformed strips.

B. Slip-Resistive Aggregate Finish: Factory-graded, packaged, rustproof, nonglazing, abrasive aggregate of fused aluminum-oxide granules or crushed emery aggregate containing not less than 50 percent aluminum oxide and not less than 20 percent ferric oxide; unaffected by freezing, moisture, and cleaning materials.

C. Bonding Agent: ASTM C 1059, Type II, non-redispersible, acrylic emulsion or styrene butadiene.

D. Epoxy Bonding Adhesive: ASTM C 881/C 881M, two-component epoxy resin capable of humid curing and bonding to damp surfaces; of class suitable for application temperature, of grade complying with requirements, and of the following types:

1. Types IV and V, load bearing, for bonding hardened or freshly mixed concrete to hardened concrete.

E. Chemical Surface Retarder: Water-soluble, liquid, set retarder with color dye, for horizontal concrete surface application, capable of temporarily delaying final hardening of concrete to a depth of 1/8 to 1/4 inch .

F. Pigmented Mineral Dry-Shake Hardener: Factory-packaged, dry combination of portland cement, graded quartz aggregate, color pigments, and plasticizing admixture. Use color pigments that are finely ground, nonfading mineral oxides interground with cement.

1. Color: As selected by Architect from manufacturer's full range.

G. Rock Salt: Sodium chloride crystals, kiln dried, coarse gradation with 100 percent passing 3/8-inch sieve and 85 percent retained on a No. 8 sieve.

2.7 PAVEMENT MARKINGS

A. Pavement-Marking Paint: Alkyd-resin type, lead and chromate free, ready mixed, complying with AASHTO M 248; colors complying with FS TT-P-1952.

1. Color: As indicated on Drawings.

B. Pavement-Marking Paint: MPI #32 Alkyd Traffic Marking Paint.

1. Color: As indicated on Drawings.

C. Pavement-Marking Paint: Latex, waterborne emulsion, lead and chromate free, ready mixed, complying with FS TT-P-1952, Type II, with drying time of less than [three] [45] minutes.

1. Color: As indicated on Drawings.

D. Pavement-Marking Paint: MPI #97 Latex Traffic Marking Paint.

1. Color: As indicated on Drawings.

E. Glass Beads: AASHTO M 247, Type 1 or FS TT-B-1325, Type 1A.

2.8 CONCRETE MIXTURES

A. Prepare design mixtures, proportioned according to ACI 301, for each type and strength of normal-weight concrete, and as determined by either laboratory trial mixtures or field experience.

1. Use a qualified independent testing agency for preparing and reporting proposed concrete design mixtures for the trial batch method.
2. When automatic machine placement is used, determine design mixtures and obtain laboratory test results that meet or exceed requirements.

B. Proportion mixtures to provide normal-weight concrete with the following properties:

1. Compressive Strength (28 Days): 4000 psi or as indicated on the Drawings.
2. Maximum Water-Cementitious Materials Ratio at Point of Placement: 0.45.
3. Slump Limit: Maximum of 5 inches for hand placed concrete, 1-1/4 to 3 inches for machine placed (slipform) concrete.

C. Add air-entraining admixture at manufacturer's prescribed rate to result in normal-weight concrete at point of placement having an air content of 4 to 6 percent.

D. Limit water-soluble, chloride-ion content in hardened concrete to 0.15 percent by weight of cement.

E. Chemical Admixtures: Use admixtures according to manufacturer's written instructions.

1. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.

F. Cementitious Materials: Limit percentage by weight of cementitious materials other than portland cement according to ACI 301 requirements for concrete exposed to deicing chemicals.

G. Synthetic Fiber: Uniformly disperse in concrete mixture at manufacturer's recommended rate.

H. Color Pigment: Add color pigment to concrete mixture according to manufacturer's written instructions and to result in hardened concrete color consistent with approved mockup.

2.9 CONCRETE MIXING

A. Ready-Mixed Concrete: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M and ASTM C 1116/C 1116M. Furnish batch certificates for each batch discharged and used in the Work.

1. When air temperature is between 85 and 90 deg F , reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F , reduce mixing and delivery time to 60 minutes.

B. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M. Mix concrete materials in appropriate drum-type batch machine mixer.

1. For concrete batches of 1 cu. yd. or smaller, continue mixing at least 1-1/2 minutes, but not more than 5 minutes after ingredients are in mixer, before any part of batch is released.
2. For concrete batches larger than 1 cu. yd. , increase mixing time by 15 seconds for each additional 1 cu. yd. .
3. Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mixture type, mixing time, quantity, and amount of water added.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine exposed subgrades and subbase surfaces for compliance with requirements for dimensional, grading, and elevation tolerances.

B. Proof-roll prepared subbase surface below concrete paving to identify soft pockets and areas of excess yielding.

1. Completely proof-roll subbase in one direction and repeat in perpendicular direction. Limit vehicle speed to 3 mph .
2. Proof-roll with a pneumatic-tired and loaded, 10-wheel, tandem-axle dump truck weighing not less than 15 tons .
3. Correct subbase with soft spots and areas of pumping or rutting exceeding depth of 1/2 inch according to requirements in Division 31 Section "Earth Moving."

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Remove loose material from compacted subbase surface immediately before placing concrete.

3.3 EDGE FORMS AND SCREED CONSTRUCTION

A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.

B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

3.4 STEEL REINFORCEMENT

A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.

B. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.

C. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.

D. Install welded wire reinforcement in lengths as long as practicable. Lap adjoining pieces at least one full mesh, and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.

E. Zinc-Coated Reinforcement: Use galvanized-steel wire ties to fasten zinc-coated reinforcement. Repair cut and damaged zinc coatings with zinc repair material.

F. Epoxy-Coated Reinforcement: Use epoxy-coated steel wire ties to fasten epoxy-coated reinforcement. Repair cut and damaged epoxy coatings with epoxy repair coating according to ASTM D 3963/D 3963M.

G. Install fabricated bar mats in lengths as long as practicable. Handle units to keep them flat and free of distortions. Straighten bends, kinks, and other irregularities, or replace units as required before placement. Set mats for a minimum 2-inch overlap of adjacent mats.

3.5 JOINTS

A. General: Form construction, isolation, and contraction joints and tool edges true to line, with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline unless otherwise indicated. The maximum joint spacing shall be twice the concrete thickness (measured in inches) in feet. For example, on a 4-inch thick concrete slab, the maximum joint spacing shall be 8-feet, on a 5-inch thick slab, the maximum joint spacing shall be 10-feet, on a 6-inch thick slab, the maximum joint spacing shall be 12-feet, and so on up to a maximum spacing of 15-feet, unless otherwise indicated on the jointing plan.

1. When joining existing paving, place transverse joints to align with previously placed joints unless otherwise indicated.

B. Construction Joints: Set construction joints at side and end terminations of paving and at locations where paving operations are stopped for more than one-half hour unless paving terminates at isolation joints.

1. Continue steel reinforcement across construction joints unless otherwise indicated. Do not continue reinforcement through sides of paving strips unless otherwise indicated.
2. Provide tie bars at sides of paving strips where indicated.
3. Butt Joints: Use bonding agent at joint locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
4. Keyed Joints: Keyed joints or keyway-section type forms are strictly prohibited on this project.
5. Doweled Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or coat with asphalt one-half of dowel length to prevent concrete bonding to one side of joint.

C. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, other fixed objects, and where indicated.

1. Extend joint fillers full width and depth of joint.
2. Terminate joint filler not less than 1/2 inch or more than 1 inch below finished surface if joint sealant is indicated.
3. Place top of joint filler 1/8" below finished concrete surface if joint sealant is not indicated.
4. Furnish joint fillers in one-piece lengths. Where more than one length is required, lace or clip joint-filler sections together.
5. During concrete placement, protect top edge of joint filler with metal, plastic, or other temporary preformed cap. Remove protective cap after concrete has been placed on both sides of joint.

D. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness, as follows:

1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint with grooving tool to a 1/4-inch radius. Repeat grooving of contraction joints after applying surface finishes. Eliminate grooving-tool marks on concrete surfaces.

    a. Tolerance: Ensure that grooved joints are within 2 inches either way from centers of dowels.

2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/4-inch- wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before developing random contraction cracks.

    a. Tolerance: Ensure that sawed joints are within 2 inches either way from centers of dowels.

3. Doweled Contraction Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or coat with asphalt one-half of dowel length to prevent concrete bonding to one side of joint.

E. Edging: After initial floating, tool edges of paving, gutters, curbs, and joints in concrete with an edging tool to a 3/8-inch radius. Repeat tooling of edges after applying surface finishes. Eliminate edging-tool marks on concrete surfaces.

3.6 CONCRETE PLACEMENT

A. Before placing concrete, inspect and complete formwork installation**,** steel reinforcement**,** and items to be embedded or cast-in.

B. Remove snow, ice, or frost from subbase surface and steel reinforcement before placing concrete. Do not place concrete on frozen surfaces.

C. Moisten subbase to provide a uniform dampened condition at time concrete is placed. Do not place concrete around manholes or other structures until they are at required finish elevation and alignment.

D. Comply with ACI 301 requirements for measuring, mixing, transporting, and placing concrete.

E. Do not add water to concrete during delivery or at Project site. Do not add water to fresh concrete after testing.

F. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.

G. Consolidate concrete according to ACI 301 by mechanical vibrating equipment supplemented by hand spading, rodding, or tamping.

1. Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Use only square-faced shovels for hand spreading and consolidation. Consolidate with care to prevent dislocating reinforcement, dowels and joint devices.

H. Screed paving surface with a straightedge and strike off.

I. Commence initial floating using bull floats or darbies to impart an open-textured and uniform surface plane before excess moisture or bleed water appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.

J. Curbs and Gutters: Use design mixture for automatic machine placement. Produce curbs and gutters to required cross section, lines, grades, finish, and jointing.

K. Slip-Form Paving: Use design mixture for automatic machine placement. Produce paving to required thickness, lines, grades, finish, and jointing.

1. Compact subbase and prepare subgrade of sufficient width to prevent displacement of slip-form paving machine during operations.

L. Cold-Weather Placement: Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing, or low temperatures. Comply with ACI 306.1 and the following:

1. When air temperature has fallen to or is expected to fall below 40 deg F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F and not more than 80 deg F at point of placement.
2. Do not use frozen materials or materials containing ice or snow.
3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in design mixtures.

M. Hot-Weather Placement: Comply with ACI 301 and as follows when hot-weather conditions exist:

1. Cool ingredients before mixing to maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature,

provided water equivalent of ice is calculated in total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.

2. Cover steel reinforcement with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
3. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

3.7 FLOAT FINISHING

A. General: Do not add water to concrete surfaces during finishing operations.

B. Float Finish: Begin the second floating operation when bleed-water sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots and fill low spots. Refloat surface immediately to uniform granular texture.

1. Burlap Finish: Drag a seamless strip of damp burlap across float-finished concrete, perpendicular to line of traffic, to provide a uniform, gritty texture.
2. Medium-to-Fine-Textured Broom Finish: Draw a soft-bristle broom across float-finished concrete surface perpendicular to line of traffic to provide a uniform, fine-line texture.
3. Medium-to-Coarse-Textured Broom Finish: Provide a coarse finish by striating float-finished concrete surface 1/16 to 1/8 inch deep with a stiff-bristled broom, perpendicular to line of traffic.

3.8 SPECIAL FINISHES

A. Monolithic Exposed-Aggregate Finish: Expose coarse aggregate in paving surface as follows:

1. Immediately after float finishing, spray-apply chemical surface retarder to paving according to manufacturer's written instructions.
2. Cover paving surface with plastic sheeting, sealing laps with tape, and remove when ready to continue finishing operations.
3. Without dislodging aggregate, remove mortar concealing the aggregate by lightly brushing surface with a stiff, nylon-bristle broom. Do not expose more than one-third of the average diameter of the aggregate and not more than one-half of the diameter of the smallest aggregate.
4. Fine-spray surface with water and brush. Repeat cycle of water flushing and brushing until cement film is removed from aggregate surfaces to depth required.

B. Seeded Exposed-Aggregate Finish: Immediately after initial floating, spread a single layer of aggregate uniformly on paving surface. Tamp aggregate into plastic concrete and float finish to entirely embed aggregate with mortar cover of 1/16 inch.

1. Spray-apply chemical surface retarder to paving according to manufacturer's written instructions.
2. Cover paving surface with plastic sheeting, sealing laps with tape, and remove sheeting when ready to continue finishing operations.

3. Without dislodging aggregate, remove mortar concealing the aggregate by lightly brushing surface with a stiff, nylon-bristle broom. Do not expose more than one-third of the average diameter of the aggregate and not more than one-half of the diameter of the smallest aggregate.
4. Fine-spray surface with water and brush. Repeat cycle of water flushing and brushing until cement film is removed from aggregate surfaces to depth required.

C. Slip-Resistive Aggregate Finish: Before final floating, spread slip-resistive aggregate finish on paving surface according to manufacturer's written instructions and as follows:

1. Uniformly spread 40 lb/100 sq. ft. of dampened, slip-resistive aggregate over paving surface in two applications. Tamp aggregate flush with surface using a steel trowel, but do not force below surface.
2. Uniformly distribute approximately two-thirds of slip-resistive aggregate over paving surface with mechanical spreader, allow to absorb moisture, and embed by power floating. Follow power floating with a second slip-resistive aggregate application, uniformly distributing remainder of material at right angles to first application to ensure uniform coverage, and embed by power floating.
3. Cure concrete with curing compound recommended by slip-resistive aggregate manufacturer. Apply curing compound immediately after final finishing.
4. After curing, lightly work surface with a steel wire brush or abrasive stone and water to expose nonslip aggregate.

D. Pigmented Mineral Dry-Shake Hardener Finish: After initial floating, apply dry-shake materials to paving surface according to manufacturer's written instructions and as follows:

1. Uniformly spread dry-shake hardener at a rate of 100 lb/100 sq. ft., unless greater amount is recommended by manufacturer to match paving color required.
2. Uniformly distribute approximately two-thirds of dry-shake hardener over the concrete surface with mechanical spreader; allow hardener to absorb moisture and embed it by power floating. Follow power floating with a second application of pigmented mineral dry-shake hardener, uniformly distributing remainder of material at right angles to first application to ensure uniform color, and embed hardener by final power floating.
3. After final power floating, apply a hand-trowel finish followed by a broom finish.
4. Cure concrete with curing compound recommended by dry-shake hardener manufacturer. Apply curing compound immediately after final finishing.

3.9 CONCRETE PROTECTION AND CURING

A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.

B. Comply with ACI 306.1 for cold-weather protection.

C. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete but before float finishing.

D. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.

E. Curing Methods: Cure concrete by moisture curing, moisture-retaining-cover curing, curing compound, or a combination of these as follows:

1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:

   a. Water.
   b. Continuous water-fog spray.
   c. Absorptive cover, water saturated and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.

2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover, placed in widest practicable width, with sides and ends lapped at least 12 inches and sealed by waterproof tape or adhesive. Immediately repair any holes or tears occurring during installation or curing period using cover material and waterproof tape.
3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas that have been subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating, and repair damage during curing period.

3.10 PAVING TOLERANCES

A. Comply with tolerances in ACI 117 and as follows:

1. Elevation: 3/4 inch.
2. Thickness: Plus 3/8 inch, minus 1/4 inch.
3. Surface: Gap below 10-foot- long, unleveled straightedge not to exceed 1/2 inch.
4. Alignment of Tie-Bar End Relative to Line Perpendicular to Paving Edge: 1/2 inch per 12 inches of tie bar.
5. Lateral Alignment and Spacing of Dowels: 1 inch.
6. Vertical Alignment of Dowels: 1/4 inch.
7. Alignment of Dowel-Bar End Relative to Line Perpendicular to Paving Edge: 1/4 inch per 12 inches of dowel.
8. Joint Spacing: 2 inches.
9. Contraction Joint Depth: Plus 1/4 inch, no minus.
10. Joint Width: Plus 1/8 inch, no minus.

3.11 PAVEMENT MARKING

A. Do not apply pavement-marking paint until layout, colors, and placement have been verified with Architect.

B. Allow concrete paving to cure for a minimum of 28 days and be dry before starting pavement marking.

C. Sweep and clean surface to eliminate loose material and dust.

D. Apply paint with mechanical equipment to produce markings of dimensions indicated with uniform, straight edges. Apply at manufacturer's recommended rates to provide a minimum wet film thickness of 15 mils.

1. Apply graphic symbols and lettering with paint-resistant, die-cut stencils, firmly secured to concrete surface. Mask an extended area beyond edges of each stencil to prevent paint application beyond stencil. Apply paint so that it cannot run beneath stencil.
2. Broadcast glass beads uniformly into wet markings at a rate of 6 lb/gal.

3.12 FIELD QUALITY CONTROL

A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.

B. Testing Services: Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:

1. Testing Frequency: Obtain at least one composite sample for each 100 cu. yd. or fraction thereof of each concrete mixture placed each day.

    a. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.

2. Slump: ASTM C 143/C 143M; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
3. Air Content: ASTM C 231, pressure method; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
4. Concrete Temperature: ASTM C 1064/C 1064M; one test hourly when air temperature is 40 deg F and below and when it is 80 deg F and above, and one test for each composite sample.
5. Compression Test Specimens: ASTM C 31/C 31M; cast and laboratory cure one set of three standard cylinder specimens for each composite sample.
6. Compressive-Strength Tests: ASTM C 39/C 39M; test one specimen at seven days and two specimens at 28 days.

    a. A compressive-strength test shall be the average compressive strength from two specimens obtained from same composite sample and tested at 28 days.

C. Strength of each concrete mixture will be satisfactory if average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.

D. Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.

E. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as sole basis for approval or rejection of concrete.

F. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect.

G. Concrete paving will be considered defective if it does not pass tests and inspections.

H. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

I. Prepare test and inspection reports.

3.13 REPAIRS AND PROTECTION

A. Remove and replace concrete paving that is broken, damaged, or defective or that does not comply with requirements in this Section. Remove work in complete sections from joint to joint unless otherwise approved by Architect.

B. Drill test cores, where directed by Architect, when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory paving areas with portland cement concrete bonded to paving with epoxy adhesive.

C. Protect concrete paving from damage. Exclude traffic from paving for at least 14 days after placement. When construction traffic is permitted, maintain paving as clean as possible by removing surface stains and spillage of materials as they occur.

D. Maintain concrete paving free of stains, discoloration, dirt, and other foreign material. Sweep paving not more than two days before date scheduled for Substantial Completion inspections.

END OF SECTION 32 1313

SECTION 32 1373 - CONCRETE PAVING JOINT SEALANTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

B. Related Sections:

1. Division 07 Section "Joint Sealants" for sealing nontraffic and traffic joints in locations not specified in this Section.
2. Division 32 Section "Asphalt Paving" for constructing joints between concrete and asphalt pavement.
3. Division 32 Section "Concrete Paving" for constructing joints in concrete pavement.

1.3 PRECONSTRUCTION TESTING

A. Preconstruction Compatibility and Adhesion Testing: Submit to joint-sealant manufacturers, for testing indicated below, Samples of materials that will contact or affect joint sealants.

1. Use ASTM C 1087 or the manufacturer's standard test method to determine whether priming and other specific joint-preparation techniques are required to obtain rapid, optimum adhesion of joint sealants to joint substrates.
2. Submit no fewer than eight pieces of each type of material, including joint substrates, shims, joint-sealant backings, secondary seals, and miscellaneous materials.
3. Schedule sufficient time for testing and analyzing results to prevent delaying the Work.
4. For materials failing tests, obtain joint-sealant manufacturer's written instructions for corrective measures including use of specially formulated primers.
5. Testing will not be required if joint-sealant manufacturers submit joint-preparation data that are based on previous testing, not older than 24 months, of sealant products for compatibility with and adhesion to joint substrates and other materials matching those submitted.

1.4 SUBMITTALS

A. Product Data: For each joint-sealant product indicated.

B. Samples for Verification: For each kind and color of joint sealant required, provide Samples with joint sealants in 1/2-inch- wide joints formed between two 6-inch- long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.

C. Qualification Data: For qualified Installer and testing agency.

D. Product Certificates: For each type of joint sealant and accessory, from manufacturer.

E. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for joint sealants.

F. Preconstruction Compatibility and Adhesion Test Reports: From joint-sealant manufacturer, indicating the following:

1. Materials forming joint substrates and joint-sealant backings have been tested for compatibility with and adhesion to joint sealants.
2. Interpretation of test results and written recommendations for primers and substrate preparation needed for adhesion.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.

B. Source Limitations: Obtain each type of joint sealant from single source from single manufacturer.

C. Product Testing: Test joint sealants using a qualified testing agency.

1. Testing Agency Qualifications: An independent testing agency qualified according to ASTM C 1021 to conduct the testing indicated.

1.6 PROJECT CONDITIONS

A. Do not proceed with installation of joint sealants under the following conditions:

1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F.
2. When joint substrates are wet.
3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
4. Where contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Compatibility: Provide joint sealants, backing materials, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer based on testing and field experience.

B. Colors of Exposed Joint Sealants: As indicated by manufacturer's designations.

2.2 JOINT-SEALANT BACKER MATERIALS

A. General: Provide joint-sealant backer materials that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by joint-sealant manufacturer based on field experience and laboratory testing.

B. Round Backer Rods for Cold- and Hot-Applied Joint Sealants: ASTM D 5249, Type 1, of diameter and density required to control sealant depth and prevent bottom-side adhesion of sealant.

C. Backer Strips for Cold- and Hot-Applied Joint Sealants: ASTM D 5249; Type 2; of thickness and width required to control joint-sealant depth, prevent bottom-side adhesion of sealant, and fill remainder of joint opening under sealant.

2.3 PRIMERS

A. Primers: Product recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions.

B. Joint Priming: Prime joint substrates where indicated or where recommended in writing by joint-sealant manufacturer, based on preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.

3.3 INSTALLATION OF JOINT SEALANTS

A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated unless more stringent requirements apply.

B. Joint-Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.

C. Install joint-sealant backings of kind indicated to support joint sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.

1. Do not leave gaps between ends of joint-sealant backings.
2. Do not stretch, twist, puncture, or tear joint-sealant backings.
3. Remove absorbent joint-sealant backings that have become wet before sealant application and replace them with dry materials.

D. Install joint sealants using proven techniques that comply with the following and at the same time backings are installed:

1. Place joint sealants so they directly contact and fully wet joint substrates.
2. Completely fill recesses in each joint configuration.
3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.

E. Provide joint configuration to comply with joint-sealant manufacturer's written instructions unless otherwise indicated.

3.4 CLEANING

A. Clean off excess joint sealant or sealant smears adjacent to joints as the Work progresses, by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

3.5 PROTECTION

A. Protect joint sealants, during and after curing period, from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately and replace with joint sealant so installations in repaired areas are indistinguishable from the original work.

END OF SECTION 32 1373

SECTION 32 1713 - PARKING BUMPERS

PART 1 – GENERAL

1.1 DESCRIPTION

A. Work included: Provide pre-cast concrete wheel stop parking bumpers where shown on the Drawings, as specified herein, and as needed for a complete and proper installation.

B. Related work:

1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.

1.2 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

1.3 PRODUCT HANDLING

A. Comply with pertinent provisions of Section 01 6600 – Product Storage and Handling Requirements.

PART 2 – PRODUCTS

2.1 WHEEL STOPS

A. Provide pre-cast concrete wheel stops, 3500 psi grade, fully reinforced, manufactured by Plan-It Company, Saf-T-Park Company, or equal approved in advance by the Architect, complete with suitable anchorage devices as required for positive and permanent attachment to the parking surfaces.

PART 3 – EXECUTION

3.1 SURFACE CONDITIONS

A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.2 INSTALLATION

A. Carefully coordinate the arrangement of wheel stops with the layout of parking stalls and traffic aisles, providing proper angle to engage wheels and proper location to prevent over travel of vehicles.

B. Fix the bumpers into final position by means of anchorage devices approved in advance by the Architect.

C. Upon completion of the installation, visually inspect each installed wheel stop and verify that it is in perfect condition and properly set.

D. Promptly remove units which are cracked, chipped, spalled, or otherwise damaged, and replace with new units meeting the specified requirements.

END OF SECTION 32 1713

SECTION 32 1723 - PAVEMENT MARKINGS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Painting and marking of pavements, curbs, guard posts, and light pole bases.

1.2 REFERENCES

A. The publications listed below form a part of this specification to the extent referenced. Publications are referenced within the text by the basic designation only.

B. American Association of State Highway and Transportation (AASHTO):
   1. AASHTO M247 - Glass Beads Used in Traffic Paints
   2. AASHTO M248 - Ready-Mixed White and Yellow Traffic Paints

C. ASTM International (ASTM):
   1. ASTM D4414 - Standard Practice for Measurement of Wet Film Thickness by Notched Gauges.

D. Federal Specifications (FS):
   1. FS A-A-2886 - Paint, Traffic, Solvent Based (supersedes FS TT-P-85 and FS TT-P-115, Type I)
   2. FS TT-B-1325 - Beads (Glass Spheres) Retro-Reflective
   3. FS TT-P-1952 - Paint, Traffic And Airfield Marking, Waterborne

1.3 PROJECT CONDITIONS

A. Maintain access for vehicular and pedestrian traffic as required for other construction activities. Utilize flagmen, barricades, warning signs, and warning lights as required.

1.4 QUALITY ASSURANCE

A. Use trained and experienced personnel in applying the products and operating the equipment required for properly performed work.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Paint shall be waterborne or solvent borne, colors as shown or specified herein. Pavement marking paints shall comply with applicable state and local laws enacted to ensure compliance with Federal Clean Air Standards. Paint materials shall conform to the restrictions of the local Air Pollution Control District.

B. Waterborne Paint: Paints shall conform to FS TT-P-1952.

C. Solvent Borne Paint: Paint shall conform to FS A-A-2886 or AASHTO M248. Paint shall be non-bleeding, quick-drying, and alkyd petroleum base paint suitable for traffic-bearing surface

and be mixed in accordance with manufacture's instructions before application for colors White, Yellow, Blue, and Red.

D. Glass Beads: AASHTO M 247, Type 1 or FS TT-B-1325, Type 1, Gradation A.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine the work area and correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.

3.2 PREPARATION

A. Sweep and clean surface to eliminate loose material and dust.

B. Where existing pavement markings are indicated on Construction Drawings to be removed or would interfere with adhesion of new paint, a motorized abrasive device shall be used to remove the markings. Equipment employed shall not damage existing paving or create surfaces hazardous to vehicle or pedestrian traffic. Within public rights-of-way, appropriate governing authority shall approve method of marking removal.

C. New pavement surfaces shall be allowed to cure for not less than 30 days before application of marking materials.

3.3 APPLICATION

A. Apply two coats of same color of paint as specified below, at manufacturer's recommended rate, without addition of thinner, with maximum of 100 square feet per gallon or as required to provide a minimum wet film thickness of 15 mils and dry film thickness of 7 ½ mils per coat. Paint shall be applied for a total dry film thickness of 15 mils. Apply with mechanical equipment to produce uniform straight edges. At sidewalk curbs and crosswalks, use straightedge to ensure uniform, clean, and straight stripe.

B. Install pavement markings according to manufacturer's recommended procedures for the specified material.

C. Following items shall be painted with colors noted below:
1. Pedestrian Crosswalks: White
2. Exterior Sidewalk Curbs, Light Pole Bases, and Guard posts: Yellow
3. Fire Lanes: Red or per local code
4. Lane Striping where separating traffic moving in opposite directions: Yellow
5. Lane Striping where separating traffic moving in the same direction: White
6. ADA Symbols: Blue or per local code
7. ADA parking space markings as shown on the drawings.
8. Parking Stall Striping: Yellow, unless otherwise noted on Construction Drawings
9. Associate Parking Area: White, unless otherwise noted on Construction Drawings

D. Apply glass beads at pedestrian crosswalk striping and at lane striping and arrows at driveways connecting to public streets. Broadcast glass beads uniformly into wet markings at a rate of 6 lb/gal.

3.4 FIELD QUALITY CONTROL

A. Responsibilities: Unless otherwise specified, the quality control tests and inspections specified below will be conducted by the Owner's Construction Testing Laboratory (CTL) at no cost to the Contractor in accordance with Section 01458. The Contractor shall perform additional testing or inspection as considered necessary by the Contractor for assurance of quality control. Field testing, frequency, and methods may vary as determined by and between the Owner and CTL.

B. Inspection: After the paint has thoroughly dried, visually inspect the entire application and touch up as required to provide clean, straight lines and surfaces throughout.

C. Testing: Testing of wet film thickness shall be performed a minimum of two times on each parking row (including striped islands) and pedestrian cross walks, and a minimum of one test on each lane/alignment striping. At least one test shall be performed after refilling paint striping machine, changing operators of striping machine, and changing paint types, brands, etc. This shall be performed in addition to the testing stated above. These tests shall be performed on each coat applied. Testing shall be performed in accordance with ASTM D4414.

3.5 CLEANING

A. Waste materials shall be removed at the end of each workday. Upon completion of the work, all containers and debris shall be removed from the site. Paint spots upon adjacent surfaces shall be carefully removed by approved procedures that will not damage the surfaces and the entire job left clean and acceptable.

END OF SECTION

SECTION 323113 – ORNAMENTAL METAL FENCES AND GATES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Removal and storage of existing wrought iron fence panels.
2. Installation of new fence posts.
3. Reinstallation of stored fence panels.
4. Temporary removal and reinstallation of rolling gate, solar-powered gate motor, and entry/exit keypads.

1.2 REFERENCES

A. ASTM Standards:

1. ASTM A36/A36M – Standard Specification for Carbon Structural Steel.
2. ASTM A123/A123M – Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
3. ASTM F1043 – Standard Specification for Strength and Protective Coatings on Steel Industrial Fence Framework.

1.3 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Shop Drawings: Show layout and details of fence and gate installation, including plans, elevations, and details of post anchorage.

C. Samples: For each type of finish required.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who has completed ornamental metal fence installations similar in material, design, and extent to that indicated for this project.
- B. Field Measurements: Verify layout information for fences and gates shown on Drawings in relation to property survey and existing structures.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Steel Fence Posts: ASTM A36/A36M, hot-dip galvanized after fabrication, minimum yield strength of 36,000 psi.

B. Concrete: Comply with requirements of ASTM C94/C94M for ready-mixed concrete.

C. Fence Panels: Existing wrought iron fence panels to be reused, stored and protected from damage during construction.

D. Gate Motor and Keypads: Existing solar-powered gate motor and entry/exit keypads to be removed, stored, and reinstalled.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and conditions, with Installer present, for compliance with requirements for site clearing, earthwork, pavement work, and other conditions affecting performance.

B. Verify that field measurements are as indicated on Shop Drawings.

3.2 PREPARATION

A. Protect existing utilities, paving, and other facilities from damage caused by fence and gate installation.

B. Temporarily remove and store existing fence panels, rolling gate, solar-powered gate motor, and entry/exit keypads to prevent damage during the construction process.

3.3 FENCE AND GATE REMOVAL

A. Carefully cut fence panels from existing posts at locations indicated on Drawings. Store fence panels in a secure location to prevent damage or loss.

B. Remove existing fence posts and footings. Dispose of removed posts and footings off-site in accordance with local regulations.

C. Disconnect and remove rolling gate, solar-powered gate motor, and entry/exit keypads. Store equipment in a secure, weather-protected location.

3.4 NEW POST INSTALLATION

A. Layout and Alignment: Verify layout and alignment of fence posts. Adjust post spacing as necessary to accommodate existing fence panels and gate.

B. Excavation: Excavate holes for fence post footings to depth indicated on Drawings.

C. Concrete Footings: Set fence posts in concrete footings. Ensure posts are plumb and aligned. Allow concrete to cure for a minimum of 48 hours before installing fence panels and gate.

3.5 FENCE PANEL AND GATE REINSTALLATION

A. Reinstall stored fence panels onto new posts. Ensure panels are level and aligned.

B. Welding: Weld fence panels to new posts using AWS D1.1/D1.1M procedures. Clean welds and touch up with matching paint to prevent corrosion.

C. Bolting (Optional): If bolting is preferred, use corrosion-resistant bolts and hardware. Ensure a secure attachment.

D. Reinstall rolling gate, solar-powered gate motor, and entry/exit keypads. Ensure all components are functioning correctly and securely fastened.

3.6 FIELD QUALITY CONTROL

A. Inspection: Inspect completed fence and gate installation, including post alignment, panel attachment, and overall appearance.

B. Adjustments: Make necessary adjustments to ensure fence and gate are plumb, level, and secure.

3.7 CLEANING AND PROTECTION

A. Clean fence panels and gate components to remove any construction debris, dirt, or stains.

B. Protect installed fence and gate from damage during the remaining construction process.

PART 4 - MEASUREMENT AND PAYMENT

A. Measurement: Measure the length of the fence and gate removed and reinstalled.

B. Payment: Payment will be made based on the unit price per linear foot of fence and gate removed, stored, and reinstalled.

END OF SECTION 323113

SECTION 32 9200 – TURF AND GRASSES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Seeding.
2. Hydroseeding.
3. Sodding.
4. Turf renovation.
5. Erosion-control material(s).
6. Grass paving.

B. Related Sections:

1. Division 31 Section "Site Clearing" for topsoil stripping and stockpiling.
2. Division 31 Section "Earth Moving" for excavation, filling and backfilling, and rough grading.

1.3 DEFINITIONS

A. Duff Layer: The surface layer of native topsoil that is composed of mostly decayed leaves, twigs, and detritus.

B. Finish Grade: Elevation of finished surface of planting soil.

C. Manufactured Topsoil: Soil produced off-site by homogeneously blending mineral soils or sand with stabilized organic soil amendments to produce topsoil or planting soil.

D. Pests: Living organisms that occur where they are not desired or that cause damage to plants, animals, or people. These include insects, mites, grubs, mollusks (snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.

E. Planting Soil: Standardized topsoil; existing, native surface topsoil; existing, in-place surface soil; imported topsoil; or manufactured topsoil that is modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth.

F. Subgrade: Surface or elevation of subsoil remaining after excavation is complete, or top surface of a fill or backfill before planting soil is placed.

G. Subsoil: All soil beneath the topsoil layer of the soil profile, and typified by the lack of organic matter and soil organisms.

H. Surface Soil: Soil that is present at the top layer of the existing soil profile at the Project site. In undisturbed areas, the surface soil is typically topsoil, but in disturbed areas such as urban environments, the surface soil can be subsoil.

1.4 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Certification of Grass Seed: From seed vendor for each grass-seed monostand or mixture stating the botanical and common name, percentage by weight of each species and variety, and percentage of purity, germination, and weed seed. Include the year of production and date of packaging.

1. Certification of each seed mixture for turfgrass sod. Include identification of source and name and telephone number of supplier.

C. Product Certificates: For fertilizers, from manufacturer.

D. Material Test Reports: For standardized ASTM D 5268 topsoil, existing native surface topsoil, existing in-place surface soil, and imported or manufactured topsoil.

1.5 QUALITY ASSURANCE

A. Soil-Testing Laboratory Qualifications: An independent laboratory or university laboratory, recognized by the State Department of Agriculture, with the experience and capability to conduct the testing indicated and that specializes in types of tests to be performed.

B. Soil Analysis: For each unamended soil type, furnish soil analysis and a written report by a qualified soil-testing laboratory stating percentages of organic matter; gradation of sand, silt, and clay content; cation exchange capacity; sodium absorption ratio; deleterious material; pH; and mineral and plant-nutrient content of the soil.

1. Testing methods and written recommendations shall comply with USDA's Handbook No. 60.
2. The soil-testing laboratory shall oversee soil sampling, with depth, location, and number of samples to be taken per instructions from Architect. A minimum of three representative samples shall be taken from varied locations for each soil to be used or amended for planting purposes.
3. Report suitability of tested soil for turf growth.

    a. Based on the test results, state recommendations for soil treatments and soil amendments to be incorporated. State recommendations in weight per 1000 sq. ft. or volume per cu. yd. for nitrogen, phosphorus, and potash nutrients and soil

amendments to be added to produce satisfactory planting soil suitable for healthy, viable plants.

b. Report presence of problem salts, minerals, or heavy metals, including aluminum, arsenic, barium, cadmium, chromium, cobalt, lead, lithium, and vanadium. If such problem materials are present, provide additional recommendations for corrective action.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Seed and Other Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of conformance with state and federal laws, as applicable.

B. Sod: Harvest, deliver, store, and handle sod according to requirements in "Specifications for Turfgrass Sod Materials" and "Specifications for Turfgrass Sod Transplanting and Installation" in TPI's "Guideline Specifications to Turfgrass Sodding." Deliver sod in time for planting within 24 hours of harvesting. Protect sod from breakage and drying.

C. Bulk Materials:

1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.
2. Provide erosion-control measures to prevent erosion or displacement of bulk materials, discharge of soil-bearing water runoff, and airborne dust reaching adjacent properties, water conveyance systems, or walkways.

1.7 PROJECT CONDITIONS

A. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions.

1.8 MAINTENANCE SERVICE

A. Initial Turf Maintenance Service: Provide full maintenance by skilled employees of landscape Installer. Maintain as required in Part 3. Begin maintenance immediately after each area is planted and continue until acceptable turf is established but for not less than the following periods:

1. Seeded Turf: 60 days from date of Substantial Completion.

    a. When initial maintenance period has not elapsed before end of planting season, or if turf is not fully established, continue maintenance during next planting season.

2. Sodded Turf: 30 days from date of Substantial Completion.

B. Continuing Maintenance Proposal: From Installer to Owner, in the form of a standard yearly (or other period) maintenance agreement, starting on date initial maintenance service is concluded. State services, obligations, conditions, and terms for agreement period and for future renewal options.

PART 2 - PRODUCTS

2.1 SEED

A. Grass Seed: Fresh, clean, dry, new-crop seed complying with AOSA's "Journal of Seed Technology; Rules for Testing Seeds" for purity and germination tolerances.

B. Seed Species: State-certified seed of grass species as follows:

1. Full and Partial Shade: Bermudagrass (Cynodon dactylon).

2.2 TURFGRASS SOD

A. Turfgrass Sod: Certified, Approved, and Number 1 Quality/Premium, including limitations on thatch, weeds, diseases, nematodes, and insects, complying with "Specifications for Turfgrass Sod Materials" in TPI's "Guideline Specifications to Turfgrass Sodding." Furnish viable sod of uniform density, color, and texture, strongly rooted, and capable of vigorous growth and development when planted.

B. Turfgrass Species: Bermudagrass (Cynodon dactylon)

C. Turfgrass Species: Sod of grass species as follows, with not less than 95 percent germination, not less than 85 percent pure seed, and not more than 0.5 percent weed seed:

2.3 FERTILIZERS

A. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:

1. Composition: 1 lb/1000 sq. ft. of actual nitrogen, 4 percent phosphorous, and 2 percent potassium, by weight.
2. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing laboratory.

2.4 PLANTING SOILS

A. Planting Soil: ASTM D 5268 topsoil, with pH range of 5.5 to 7, a minimum of 6 percent organic material content; free of stones 1 inch or larger in any dimension and other extraneous materials harmful to plant growth. Mix ASTM D 5268 topsoil with the following soil amendments and fertilizer in the following quantities to produce planting soil:

1. Ratio of Loose Compost to Topsoil by Volume: 1:3.

2.5 MULCHES

A. Straw Mulch: Provide air-dry, clean, mildew- and seed-free, salt hay or threshed straw of wheat, rye, oats, or barley.

B. Sphagnum Peat Mulch: Partially decomposed sphagnum peat moss, finely divided or of granular texture, and with a pH range of 3.4 to 4.8.

C. Compost Mulch: Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 1-inch sieve; soluble salt content of 2 to 5 decisiemens/m; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings; and as follows:

1. Organic Matter Content: 50 to 60 percent of dry weight.
2. Feedstock: Agricultural, food, or industrial residuals; biosolids; yard trimmings; or source-separated or compostable mixed solid waste.

2.6 EROSION-CONTROL MATERIALS

A. Erosion-Control Blankets: Biodegradable wood excelsior, straw, or coconut-fiber mat enclosed in a photodegradable plastic mesh. Include manufacturer's recommended steel wire staples, 6 inches long.

B. Erosion-Control Fiber Mesh: Biodegradable burlap or spun-coir mesh, a minimum of 0.92 lb/sq. yd, with 50 to 65 percent open area. Include manufacturer's recommended steel wire staples, 6 inches long.

C. Erosion-Control Mats: Cellular, non-biodegradable slope-stabilization mats designed to isolate and contain small areas of soil over steeply sloped surface, of 4-inch nominal mat thickness. Include manufacturer's recommended anchorage system for slope conditions.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas to be planted for compliance with requirements and other conditions affecting performance.

1. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in soil within a planting area.
2. Do not mix or place soils and soil amendments in frozen, wet, or muddy conditions.
3. Suspend soil spreading, grading, and tilling operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.
4. Uniformly moisten excessively dry soil that is not workable and which is too dusty.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

C. If contamination by foreign or deleterious material or liquid is present in soil within a planting area, remove the soil and contamination as directed by Architect and replace with new planting soil.

3.2 PREPARATION

A. Protect structures, utilities, sidewalks, pavements, and other facilities, trees, shrubs, and plantings from damage caused by planting operations.

1. Protect adjacent and adjoining areas from hydroseeding and hydromulching overspray.
2. Protect grade stakes set by others until directed to remove them.

B. Install erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

3.3 TURF AREA PREPARATION

A. Limit turf subgrade preparation to areas to be planted.

B. Newly Graded Subgrades: Loosen subgrade to a minimum depth of 4 inches. Remove stones larger than 2 inches in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.

1. Apply slow-release fertilizer directly to subgrade before loosening.
2. Spread topsoil, apply soil amendments and fertilizer on surface, and thoroughly blend planting soil.

    a. Delay mixing fertilizer with planting soil if planting will not proceed within a few days.

3. Spread planting soil to a depth of 4 inches but not less than required to meet finish grades after light rolling and natural settlement. Do not spread if planting soil or subgrade is frozen, muddy, or excessively wet.

    a. Spread approximately 1/2 the thickness of planting soil over loosened subgrade. Mix thoroughly into top 2 inches of subgrade. Spread remainder of planting soil.
    b. Reduce elevation of planting soil to allow for soil thickness of sod.

C. Unchanged Subgrades: If turf is to be planted in areas unaltered or undisturbed by excavating, grading, or surface-soil stripping operations, prepare surface soil as follows:

1. Remove existing grass, vegetation, and turf. Do not mix into surface soil.
2. Loosen surface soil to a depth of at least 6 inches. Apply soil amendments and fertilizers according to planting soil mix proportions and mix thoroughly into top 4 inches of soil. Till soil to a homogeneous mixture of fine texture.

    a. Apply slow-release fertilizer directly to surface soil before loosening.

3. Remove stones larger than 2 inches in any dimension and sticks, roots, trash, and other extraneous matter.
4. Legally dispose of waste material, including grass, vegetation, and turf, off Owner's property.

D. Finish Grading: Grade planting areas to a smooth, uniform surface plane with loose, uniformly fine texture. Grade to within plus or minus 1/2 inch of finish elevation. Roll and rake, remove ridges, and fill depressions to meet finish grades. Limit finish grading to areas that can be planted in the immediate future.

E. Moisten prepared area before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.

F. Before planting, obtain Architect's acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish grading.

3.4 PREPARATION FOR EROSION-CONTROL MATERIALS

A. Prepare area as specified in "Turf Area Preparation" Article.

B. For erosion-control mats, install planting soil in two lifts, with second lift equal to thickness of erosion-control mats. Install erosion-control mat and fasten as recommended by material manufacturer.

C. Fill cells of erosion-control mat with planting soil and compact before planting.

D. For erosion-control blanket or mesh, install from top of slope, working downward, and as recommended by material manufacturer for site conditions. Fasten as recommended by material manufacturer.

E. Moisten prepared area before planting if surface is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.

3.5 SEEDING

A. Sow seed with spreader or seeding machine. Do not broadcast or drop seed when wind velocity exceeds 5 mph. Evenly distribute seed by sowing equal quantities in two directions at right angles to each other.

1. Do not use wet seed or seed that is moldy or otherwise damaged.
2. Do not seed against existing trees. Limit extent of seed to outside edge of planting saucer.

B. Sow seed at a total rate of 5 to 8 lb/1000 sq. ft.

C. Rake seed lightly into top 1/8 inch of soil, roll lightly, and water with fine spray.

D. Protect seeded areas with slopes exceeding 1:4 with erosion-control blankets and 1:6 with erosion-control fiber mesh installed and stapled according to manufacturer's written instructions.

E. Protect seeded areas with erosion-control mats where shown on Drawings; install and anchor according to manufacturer's written instructions.

F. Protect seeded areas with slopes not exceeding 1:6 by spreading straw mulch. Spread uniformly at a minimum rate of 2 tons/acre to form a continuous blanket 1-1/2 inches in loose thickness over seeded areas. Spread by hand, blower, or other suitable equipment.

1. Anchor straw mulch by crimping into soil with suitable mechanical equipment.

G. Protect seeded areas from hot, dry weather or drying winds by applying compost mulch within 24 hours after completing seeding operations. Soak areas, scatter mulch uniformly to a thickness of 3/16 inch, and roll surface smooth.

3.6 HYDROSEEDING

A. Hydroseeding: Mix specified seed, fertilizer, and fiber mulch in water, using equipment specifically designed for hydroseed application. Continue mixing until uniformly blended into homogeneous slurry suitable for hydraulic application.

1. Mix slurry with fiber-mulch manufacturer's recommended tackifier.
2. Apply slurry uniformly to all areas to be seeded in a one-step process. Apply slurry at a rate so that mulch component is deposited at not less than 1500-lb/acre dry weight, and seed component is deposited at not less than the specified seed-sowing rate.

3.7 SODDING

A. Lay sod within 24 hours of harvesting. Do not lay sod if dormant or if ground is frozen or muddy.

B. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod; do not stretch or overlap. Stagger sod strips or pads to offset joints in adjacent courses. Avoid damage to subgrade or sod during installation. Tamp and roll lightly to ensure contact with subgrade, eliminate air pockets, and form a smooth surface. Work sifted soil or fine sand into minor cracks between pieces of sod; remove excess to avoid smothering sod and adjacent grass.

1. Lay sod across angle of slopes exceeding 1:3.

C. Saturate sod with fine water spray within two hours of planting. During first week after planting, water daily or more frequently as necessary to maintain moist soil to a minimum depth of 1-1/2 inches below sod.

3.8 TURF RENOVATION

A. Renovate existing turf damaged by Contractor's operations, such as storage of materials or equipment and movement of vehicles.

1. Reestablish turf where settlement or washouts occur or where minor regrading is required.
2. Install new planting soil as required.

B. Remove sod and vegetation from diseased or unsatisfactory turf areas; do not bury in soil.

C. Remove topsoil containing foreign materials such as oil drippings, fuel spills, stones, gravel, and other construction materials resulting from Contractor's operations, and replace with new planting soil.

D. Mow, dethatch, core aerate, and rake existing turf.

E. Remove weeds before seeding. Where weeds are extensive, apply selective herbicides as required. Do not use pre-emergence herbicides.

F. Remove waste and foreign materials, including weeds, soil cores, grass, vegetation, and turf, and legally dispose of them off Owner's property.

G. Till stripped, bare, and compacted areas thoroughly to a soil depth of 6 inches .

H. Apply soil amendments and initial fertilizers required for establishing new turf and mix thoroughly into top 4 inches of existing soil. Install new planting soil to fill low spots and meet finish grades.

I. Apply sod as required for new turf.

J. Water newly planted areas and keep moist until new turf is established.

3.9 TURF MAINTENANCE

A. Maintain and establish turf by watering, fertilizing, weeding, mowing, trimming, replanting, and performing other operations as required to establish healthy, viable turf. Roll, regrade, and replant bare or eroded areas and remulch to produce a uniformly smooth turf. Provide materials and installation the same as those used in the original installation.

1. Fill in as necessary soil subsidence that may occur because of settling or other processes. Replace materials and turf damaged or lost in areas of subsidence.
2. In areas where mulch has been disturbed by wind or maintenance operations, add new mulch and anchor as required to prevent displacement.

B. Watering: Install and maintain temporary piping, hoses, and turf-watering equipment to convey water from sources and to keep turf uniformly moist to a depth of 4 inches.

1. Schedule watering to prevent wilting, puddling, erosion, and displacement of seed or mulch. Lay out temporary watering system to avoid walking over muddy or newly planted areas.
2. Water turf with fine spray at a minimum rate of 1 inch per week unless rainfall precipitation is adequate.

C. Mow turf as soon as top growth is tall enough to cut. Repeat mowing to maintain specified height without cutting more than 1/3 of grass height. Remove no more than 1/3 of grass-leaf growth in initial or subsequent mowings. Do not delay mowing until grass blades bend over and become matted. Do not mow when grass is wet. Schedule initial and subsequent mowings to maintain the following grass height:

1. Mow bermudagrass to a height of 1/2 to 1 inch.

D. Turf Postfertilization: Apply fertilizer after initial mowing and when grass is dry.

1. Use fertilizer that will provide actual nitrogen of at least 1 lb/1000 sq. ft. to turf area.

3.10 SATISFACTORY TURF

A. Turf installations shall meet the following criteria as determined by Architect:

1. Satisfactory Seeded Turf: At end of maintenance period, a healthy, uniform, close stand of grass has been established, free of weeds and surface irregularities, with coverage exceeding 90 percent over any 10 sq. ft. and bare spots not exceeding 5 by 5 inches.
2. Satisfactory Sodded Turf: At end of maintenance period, a healthy, well-rooted, even-colored, viable turf has been established, free of weeds, open joints, bare areas, and surface irregularities.

B. Use specified materials to reestablish turf that does not comply with requirements and continue maintenance until turf is satisfactory.

3.11 CLEANUP AND PROTECTION

A. Promptly remove soil and debris created by turf work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.

B. Erect temporary fencing or barricades and warning signs as required to protect newly planted areas from traffic. Maintain fencing and barricades throughout initial maintenance period and remove after plantings are established.

C. Remove nondegradable erosion-control measures after grass establishment period.

END OF SECTION 32 9200

SECTION 33 0500 - COMMON WORK RESULTS FOR UTILITIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Piping joining materials.
2. Transition fittings.
3. Sleeves.
4. Identification devices.
5. Grout.
6. Flowable fill.
7. Piped utility demolition.
8. Piping system common requirements.
9. Equipment installation common requirements.
10. Painting.
11. Concrete bases.
12. Metal supports and anchorages.

1.3 DEFINITIONS

A. Exposed Installations: Exposed to view outdoors or subject to outdoor ambient temperatures and weather conditions.

B. Concealed Installations: Concealed from view and protected from weather conditions and physical contact by building occupants but subject to outdoor ambient temperatures. Examples include installations within unheated shelters.

C. CPVC: Chlorinated polyvinyl chloride plastic.

D. PVC: Polyvinyl chloride plastic.

1.4 SUBMITTALS

A. Product Data: For the following:

1. Identification devices.

B. Welding certificates.

1.5 QUALITY ASSURANCE

A. Steel Support Welding: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."

B. Comply with ASME A13.1 for lettering size, length of color field, colors, and viewing angles of identification devices.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver pipes and tubes with factory-applied end caps. Maintain end caps through shipping, storage, and handling to prevent pipe end damage and to prevent entrance of dirt, debris, and moisture.

B. Store plastic pipes protected from direct sunlight. Support to prevent sagging and bending.

1.7 COORDINATION

A. Coordinate installation of required supporting devices and set sleeves in poured-in-place concrete and other structural components as they are constructed.

B. Coordinate installation of identifying devices after completing covering and painting if devices are applied to surfaces.

C. Coordinate size and location of concrete bases. Formwork, reinforcement, and concrete requirements are specified in Division 03.

PART 2 - PRODUCTS

2.1 PIPING JOINING MATERIALS

A. Pipe-Flange Gasket Materials: Suitable for chemical and thermal conditions of piping system contents.

1. ASME B16.21, nonmetallic, flat, asbestos free, 1/8-inch maximum thickness, unless otherwise indicated.

    a. Full-Face Type: For flat-face, Class 125, cast-iron and cast-bronze flanges.
    b. Narrow-Face Type: For raised-face, Class 250, cast-iron and steel flanges.

2. AWWA C110, rubber, flat face, 1/8 inch thick, unless otherwise indicated; and full-face or ring type, unless otherwise indicated.

B. Flange Bolts and Nuts: ASME B18.2.1, carbon steel, unless otherwise indicated.

C. Plastic, Pipe-Flange Gasket, Bolts, and Nuts: Type and material recommended by piping system manufacturer, unless otherwise indicated.

2.2 TRANSITION FITTINGS

A. Transition Fittings, General: Same size as, and with pressure rating at least equal to and with ends compatible with, piping to be joined.

B. Transition Couplings NPS 1-1/2 and Smaller:

1. Underground Piping: Manufactured piping coupling or specified piping system fitting.
2. Aboveground Piping: Specified piping system fitting.

C. AWWA Transition Couplings NPS 2 and Larger:

1. Description: AWWA C219, metal sleeve-type coupling for underground pressure piping.

D. Plastic-to-Metal Transition Fittings:

1. Description: CPVC and PVC one-piece fitting with manufacturer's Schedule 80 equivalent dimensions; one end with threaded brass insert, and one solvent-cement-joint or threaded end.

E. Plastic-to-Metal Transition Unions:

1. Description: MSS SP-107, CPVC and PVC four-part union. Include brass or stainless-steel threaded end, solvent-cement-joint or threaded plastic end, rubber O-ring, and union nut.

F. Flexible Transition Couplings for Underground Nonpressure Drainage Piping:

1. Description: ASTM C 1173 with elastomeric sleeve, ends same size as piping to be joined, and corrosion-resistant metal band on each end.

2.3 SLEEVES

A. Mechanical sleeve seals for pipe penetrations are specified in Division 22 Section "Common Work Results for Plumbing."

B. Cast-Iron Sleeves: Cast or fabricated "wall pipe" equivalent to ductile-iron pressure pipe, with plain ends and integral waterstop, unless otherwise indicated.

C. Molded PVC Sleeves: Permanent, with nailing flange for attaching to wooden forms.

D. PVC Pipe Sleeves: ASTM D 1785, Schedule 40.

2.4 IDENTIFICATION DEVICES

A. General: Products specified are for applications referenced in other Division 33 Sections. If more than single type is specified for listed applications, selection is Installer's option.

B. Equipment Nameplates: Metal permanently fastened to equipment with data engraved or stamped.

1. Data: Manufacturer, product name, model number, serial number, capacity, operating and power characteristics, labels of tested compliances, and essential data.
2. Location: Accessible and visible.

C. Stencils: Standard stencils prepared with letter sizes complying with recommendations in ASME A13.1. Minimum letter height is 1-1/4 inches for ducts, and 3/4 inch for access door signs and similar operational instructions.

1. Material: Fiberboard or Brass.
2. Stencil Paint: Exterior, oil-based, alkyd-gloss black enamel, unless otherwise indicated. Paint may be in pressurized spray-can form.
3. Identification Paint: Exterior, oil-based, alkyd enamel in colors according to ASME A13.1, unless otherwise indicated.

D. Snap-on Plastic Pipe Markers: Manufacturer's standard preprinted, semirigid, snap-on type. Include color-coding according to ASME A13.1, unless otherwise indicated.

E. Plastic Tape: Manufacturer's standard color-coded, pressure-sensitive, self-adhesive vinyl tape, at least 3 mils thick.

1. Width: 1-1/2 inches on pipes with OD, including insulation, less than 6 inches ; 2-1/2 inches for larger pipes.
2. Color: Comply with ASME A13.1, unless otherwise indicated.

F. Lettering and Graphics: Coordinate names, abbreviations, and other designations used in piped utility identification with corresponding designations indicated. Use numbers, letters, and terms indicated for proper identification, operation, and maintenance of piped utility systems and equipment.

1. Multiple Systems: Identify individual system number and service if multiple systems of same name are indicated.

2.5 GROUT

A. Description: ASTM C 1107, Grade B, nonshrink and nonmetallic, dry hydraulic-cement grout.

1. Characteristics: Post hardening, volume adjusting, nonstaining, noncorrosive, nongaseous, and recommended for interior and exterior applications.
2. Design Mix: 5000-psi, 28-day compressive strength.
3. Packaging: Premixed and factory packaged.

2.6 FLOWABLE FILL

A. Description: Low-strength-concrete, flowable-slurry mix.

1. Cement: ASTM C 150, Type I, portland.
2. Density: 115- to 145-lb/cu. ft.
3. Aggregates: ASTM C 33, natural sand, fine and crushed gravel or stone, coarse.
4. Aggregates: ASTM C 33, natural sand, fine.

5. Admixture: ASTM C 618, fly-ash mineral.
6. Water: Comply with ASTM C 94/C 94M.
7. Strength: 100 to 200 psig at 28 days.

PART 3 - EXECUTION

3.1 PIPED UTILITY DEMOLITION

A. Refer to Division 01 Section "Cutting and Patching" and Division 02 Section "Selective Structure Demolition" for general demolition requirements and procedures.

B. Disconnect, demolish, and remove piped utility systems, equipment, and components indicated to be removed.

1. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
2. Piping to Be Abandoned in Place: Drain piping. Fill abandoned piping with flowable fill, and cap or plug piping with same or compatible piping material.

C. If pipe, insulation, or equipment to remain is damaged in appearance or is unserviceable, remove damaged or unserviceable portions and replace with new products of equal capacity and quality.

3.2 PIPING INSTALLATION

A. Install piping according to the following requirements and Division 33 Sections specifying piping systems.

B. Drawing plans, schematics, and diagrams indicate general location and arrangement of piping systems. Indicated locations and arrangements were used to size pipe and calculate friction loss, expansion, pump sizing, and other design considerations. Install piping as indicated unless deviations to layout are approved on the Coordination Drawings.

C. Install piping indicated to be exposed and piping in equipment rooms and service areas at right angles or parallel to building walls. Diagonal runs are prohibited unless specifically indicated otherwise.

D. Install piping to permit valve servicing.

E. Install piping at indicated slopes.

F. Install piping free of sags and bends.

G. Install fittings for changes in direction and branch connections.

H. Select system components with pressure rating equal to or greater than system operating pressure.

I. Install sleeves for pipes passing through concrete and masonry walls and concrete floor and roof slabs.

1. Cut sleeves to length for mounting flush with both surfaces.

a. Exception: Extend sleeves installed in floors of equipment areas or other wet areas 2 inches above finished floor level.

2. Install sleeves in new walls and slabs as new walls and slabs are constructed.

a. PVC Pipe Sleeves: For pipes smaller than NPS 6 .

J. Verify final equipment locations for roughing-in.

K. Refer to equipment specifications in other Sections for roughing-in requirements.

3.3 PIPING JOINT CONSTRUCTION

A. Join pipe and fittings according to the following requirements and Division 33 Sections specifying piping systems.

B. Ream ends of pipes and tubes and remove burrs. Bevel plain ends of steel pipe.

C. Remove scale, slag, dirt, and debris from inside and outside of pipe and fittings before assembly.

D. Threaded Joints: Thread pipe with tapered pipe threads according to ASME B1.20.1. Cut threads full and clean using sharp dies. Ream threaded pipe ends to remove burrs and restore full ID. Join pipe fittings and valves as follows:

1. Apply appropriate tape or thread compound to external pipe threads unless dry seal threading is specified.
2. Damaged Threads: Do not use pipe or pipe fittings with threads that are corroded or damaged. Do not use pipe sections that have cracked or open welds.

E. Flanged Joints: Select appropriate gasket material, size, type, and thickness for service application. Install gasket concentrically positioned. Use suitable lubricants on bolt threads.

F. Pressure-Sealed Joints: Assemble joints for plain-end copper tube and mechanical pressure seal fitting with proprietary crimping tool to according to fitting manufacturer's written instructions.

G. Plastic Pressure Piping Gasketed Joints: Join according to ASTM D 3139.

H. Plastic Nonpressure Piping Gasketed Joints: Join according to ASTM D 3212.

3.4 PIPING CONNECTIONS

A. Make connections according to the following, unless otherwise indicated:

1. Install unions, in piping NPS 2 and smaller, adjacent to each valve and at final connection to each piece of equipment.
2. Install flanges, in piping NPS 2-1/2 and larger, adjacent to flanged valves and at final connection to each piece of equipment.

3.5 EQUIPMENT INSTALLATION

A. Install equipment level and plumb, unless otherwise indicated.

B. Install equipment to facilitate service, maintenance, and repair or replacement of components. Connect equipment for ease of disconnecting, with minimum interference with other installations. Extend grease fittings to an accessible location.

C. Install equipment to allow right of way to piping systems installed at required slope.

3.6 PAINTING

A. Painting of piped utility systems, equipment, and components is specified in Division 09 painting Sections.

B. Damage and Touchup: Repair marred and damaged factory-painted finishes with materials and procedures to match original factory finish.

3.7 IDENTIFICATION

A. Piping Systems: Install pipe markers on each system. Include arrows showing normal direction of flow.

1. Stenciled Markers: According to ASME A13.1.
2. Plastic markers, with application systems. Install on insulation segment if required for hot noninsulated piping.
3. Locate pipe markers on exposed piping according to the following:

    a. Near each valve and control device.
    b. Near each branch, excluding short takeoffs for equipment and terminal units. Mark each pipe at branch if flow pattern is not obvious.
    c. Near locations where pipes pass through walls or floors or enter inaccessible enclosures.
    d. At manholes and similar access points that permit view of concealed piping.
    e. Near major equipment items and other points of origination and termination.

B. Adjusting: Relocate identifying devices that become visually blocked by work of this or other Divisions.

3.8 CONCRETE BASES

A. Concrete Bases: Anchor equipment to concrete base according to equipment manufacturer's written instructions and according to seismic codes at Project.

1. Construct concrete bases of dimensions indicated, but not less than 4 inches larger in both directions than supported unit.
2. Install dowel rods to connect concrete base to concrete floor. Unless otherwise indicated, install dowel rods on 18-inch centers around the full perimeter of base.
3. Install epoxy-coated anchor bolts for supported equipment that extend through concrete base, and anchor into structural concrete floor.
4. Place and secure anchorage devices. Use supported equipment manufacturer's setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
5. Install anchor bolts to elevations required for proper attachment to supported equipment.
6. Install anchor bolts according to anchor-bolt manufacturer's written instructions.
7. Use 3000-psi, 28-day compressive-strength concrete and reinforcement as specified in Division 03 Section "Cast-in-Place Concrete."

3.9 ERECTION OF METAL SUPPORTS AND ANCHORAGES

A. Refer to Division 05 Section "Metal Fabrications" for structural steel.

B. Cut, fit, and place miscellaneous metal supports accurately in location, alignment, and elevation to support and anchor piped utility materials and equipment.

C. Field Welding: Comply with AWS D1.1/D1.1M.

3.10 GROUTING

A. Mix and install grout for equipment base bearing surfaces, pump and other equipment base plates, and anchors.

B. Clean surfaces that will come into contact with grout.

C. Provide forms as required for placement of grout.

D. Avoid air entrapment during placement of grout.

E. Place grout, completely filling equipment bases.

F. Place grout on concrete bases and provide smooth bearing surface for equipment.

G. Place grout around anchors.

H. Cure placed grout.

END OF SECTION 33 0500

April 09, 2024

Brad Phelps
Johnson & Pace
1201 NW Loop 281, Suite 100
Longview, Texas 75604

SUBJECT: Dallas County Adult Probation Facility - Parking Re-construction
1300 W. Mockingbird Lane, Dallas, Texas
Geotechnical Investigation
ETTL Job No. G 6259-2312

Mr. Hart:

Submitted herein is the report summarizing the results of a geotechnical investigation conducted at the site of the above-referenced project.

Please contact us if you have any questions concerning this report or if we can be of further assistance during construction. We are available to perform any construction materials testing and inspection services that you may require. Thank you for the opportunity to be of service.

Sincerely,
ETTL Engineers & Consultants Inc.
Texas Registered Engineering Firm #F3208

James Werbiski

James Werbiski, E.I.T.
Project Manager

Owen Sanderson

Owen B. Sanderson, P.E.
Senior Engineer



04/09/2024

Distribution: (pdf) Johnson & Pace

Geotechnical Investigation

Dallas County Adult Probation Facility
Parking Re-construction

1300 W. Mockingbird Lane
Dallas, Texas

Submitted to

Brad Phelps
Johnson & Pace
Longview, Texas

Prepared by

ETTL Engineers & Consultants Inc.
Tyler, Texas

April 2024

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APPENDIX A

Plate I: Plan of Borings
Log of Borings with Laboratory Test Data
Key to Soil Classification & Symbols

APPENDIX B

Laboratory Test Reports

1.0 INTRODUCTION

This study was performed at the request and authorization granted by Brad Phelps with Johnson & Pace, in accordance with our proposal dated August 18, 2023. Field sampling operations as well as DCP testing were conducted on April 1, 2024.

The purpose of this investigation was to define and evaluate the general subsurface of the Dallas County Adult Probation facility parking lot located at 1300 W. Mockingbird Lane Dallas, Texas. A site map depicting the location is included in **APPENDIX A**. Specifically, the study was planned to investigate the following:

- Subsurface stratigraphy within the limits of exploratory borings.
- Classification, strength, and expansive properties of the subgrade.
- Pavement design recommendations for flexible & rigid pavement; and
- Construction-related problems that may be anticipated by the investigation.

This investigation was carried out in three phases: 1) field exploration, sampling, and testing; 2) laboratory testing; and 3) engineering evaluation of data and reporting. The details of which are outlined in the following sections.

A variety of tests was performed on selected soil samples to provide the data used to form the basis for the conclusions and recommendations of this study. The following conclusions and recommendations are based on limited information regarding site grading. Using a handheld GPS unit, ETTL located the borings on the ground based on the client's general site plan and work description. ETTL did not confirm by a survey that the locations indicated on the Plan of Borings or the elevations stated herein, accurately reflect the locations on the ground.

2.0 PROJECT DESCRIPTION

The project will consist of reconstructing the existing 15,000 SF parking lot and drive lanes consisting of approximately 550 spaces. Minimal cuts/fills are anticipated to bring the new pavement lot to final grade.

3.0 SITE DESCRIPTION

The site is currently a mix consisting primarily of asphalt with intermittent rigid concrete patchwork throughout the parking area. The general topography is relatively flat in the vicinity of the current parking lot. The general path of drainage will be to the north of the site towards Mockingbird Lane. The parking lot has experienced significant cracking/damage.

4.0 FIELD OPERATIONS

Subsurface conditions were defined by 9 sample core borings to a depth of 5 feet. The final boring logs are included in **APPENDIX A**. Descriptive terms and symbols used on the logs are in

accordance with the Unified Soil Classification System (ASTM D 2487). A reference key is provided on the final page of this report.

Soils were sampled by means of a 3-inch O.D. by 24-inch-long thick-walled Shelby Tube sampler (thin-walled samplers cannot be used to sample the stiff to hard clays encountered). Using the drilling rig's hydraulic pressure, the sampler was pushed smoothly into the bottom of the borehole. Where possible, the consistency of these samples was measured in the field by a calibrated pocket penetrometer. These values, recorded in tons per square foot, are shown on the boring logs. Such samples were sealed to maintain *in situ* conditions and packaged for transport to the laboratory where they were extruded and logged.

During the field sampling, the Dynamic Cone Penetrometer (DCP) tests (ASTM D 6951) were performed. This test consists of an 8 kg (17.6 lb) weight dropping a distance of 575 mm (22.6 in) and striking an anvil assembly attached to a cone tip. For softer soils, a 4.6 kg (10.1 lb) weight can be used. The penetration, in millimeters, of the cone tip is recorded along with the number of blows of the weight and converted to a DCP index measured in millimeters per blow. This data is then used to determine an in-situ CBR value for the subgrade soils based on published correlations between in-situ CBR and the DCP index.

4.1 GROUNDWATER OBSERVATIONS

No seepage was noted during field operations and all borings were dry upon completion. The phreatic surface is predicted to be at some depth greater than 5 feet below the existing grade.

Data regarding groundwater level was obtained by observations in open boreholes. At best this provides only an approximation of the phreatic surface at the time of drilling. *The phreatic surface that should be considered for the design of this project may vary significantly from that which was observed in the borings due to the following factors*:

- The characteristics of the soil profile may have prevented the water level in the boring from rising to the phreatic level during the period of observation
- A given boring may not intercept groundwater-bearing zones (i.e., the groundwater is perched or travels in seams or fissures that are not continuous over the entire site)
- Groundwater may only be perched in pockets above local aquicludes, but the distribution of borings is not generally adequate to confirm this with a high level of certainty
- Groundwater level varies seasonally and with rainfall
- Rotary wash drilling methods introduce fluid into the boring that often makes it impossible to distinguish between groundwater and drilling fluid

If the designer believes that the level of groundwater could significantly impact the project, then ETTL should be contacted to develop a plan for piezometer installation and monitoring to assess the groundwater levels more accurately at the site.

5.0 LABORATORY TESTING

Upon return to the laboratory, a geotechnical engineer visually examined all samples and multiple specimens were selected for representative identification of the substrata. By determining the Atterberg liquid and plastic limits (ASTM D 4318) and the percentage of fines passing the No. 200 sieve (ASTM D 1140), field classifications of the various strata were verified.

Laboratory tests were conducted on samples recovered from the borings to evaluate the physical and engineering properties of the different materials encountered. The number and type of tests performed for this study are listed in the table below. Summaries of the results are presented on the individual log of boring in **APPENDIX A**. Lab reports detailing the test results are also included in **APPENDIX B**.

Table 5.0 – Soil Laboratory Testing Procedures

Laboratory Test	Test Method	Number of Tests
Dry Sieve Analysis (% Passing No. 4)	ASTM D 6913	6
Dry Sieve Analysis (% Passing No. 40)	ASTM D 6913	6
Washed Sieve Analysis (% Passing No. 200)	ASTM D 1140	6
Atterberg Limits (Liquid & Plastic Limits)	ASTM D 4318	6
Moisture Content by Dry Weight	ASTM D 2216	6
Dynamic Cone Penetrometer (DCP) Test	ASTM 6951-03	5
Soluble Sulfate	Tex- 145E	4

The above laboratory tests were performed in general accordance with applicable ASTM, U.S. Army Corps of Engineers procedures, and/or generally accepted practice. It should be noted that reference to ASTM or other standard procedures does not imply that all cross-referenced procedures in ASTM or other standards have been used, or that all ASTM or other procedures used have been followed exactly. Only those ASTM or other standard procedures and/or portions of procedures, which, in the professional judgment of the geotechnical engineer of record for this report, are applicable, appropriate, and necessary for this particular project, have been used or followed. Details regarding these tests are included on the logs (**APPENDIX A**) and in the Laboratory Test Reports of **APPENDIX B**.

5.1 Sulfate Testing

Soluble Sulfate Contents were measured by the ASTM method ASTM C1580 to help identify the sulfate-induced heaving potential of the soils. Sulfate-induced heaving can cause detrimental volumetric changes to a subgrade modified by calcium-based stabilizers (lime treatment). Air-dried soil was prepared through the No. 40 sieve and then diluted with distilled water. After 16 hours the soil particles were filtered out and the sulfate concentration was measured by the colorimetric method.

TABLE 5.1 – Sulfate Test Results (ASTM C1580)		
Boring	**Depth (ft)**	**Sulfate Content (PPM)**
P - 1	1-3	208
P – 3	1-3	708
P-7	1-3	250
P-9	3-5	229

6.0 SOIL STRATIGRAPHY AND PROPERTIES

6.1 Site Geology

According to the Bureau of Economic Geology at the University of Texas at Austin, Geologic Atlas of Texas, Dallas Sheet, the proposed site is located in the Alluvium deposits (Qal) of the Trinity floodplain overlying the Eagle Ford Group (Kef).

The Alluvium deposits are flood-plain deposits that include indistinct low Terrance deposits: gravel, sand, silt clay, and organic matter.

The Eagle Ford Formation is comprised of shale that is medium to dark gray, selenitic, and bituminous with calcareous concretions, and septaria common. Some thin platy beds of sandstone and sandy limestone are present in the middle and upper parts along with marine mega-fossils. In Oklahoma, only the lower 25 feet of the formation is exposed and is composed of bluish-gray limestone that weathers to yellow and is silty, thin-bedded, and flaggy with thin beds of blue calcareous siltstone and blue silty shale. The thickness of the formation is approximately 300 to 400 feet.

For more information, please refer to the National Geologic Map Database and the Geologic Atlas of Texas: https://txpub.usgs.gov/txgeology/

6.2 Site Stratigraphy

The soils encountered during the field investigation generally consist of soft to medium stiff fat clay (CH). Atterberg Plasticity Indices (PI) of the tested soils ranged from 45 to 55.

The classifications are based on weathering, depositional environment, mineralogy, color change, lithology, and structure. Detailed on the boring logs and geologic profiles in **APPENDIX A** are the specific types and depths of the various soil strata encountered. The logs show defined boundaries between various soil types, but in reality, the transition between types is generally gradual.

7.0 PAVEMENT RECOMMENDATIONS

General recommendations for the design of *minimal* pavement structures are provided herein for your information. A more detailed pavement analysis would require additional laboratory tests on

bulk samples of the materials to be used in pavement construction and traffic volumes. Both flexible and rigid pavement sections are presented. A summary of the proposed designs is provided in **TABLE 7.1** below.

7.1 Pavement Subgrade Preparation

As a minimum cut to the proposed subgrade elevation as required. The exposed subgrade should be proof rolled before compaction or treatment in accordance with TxDOT Item 216 with the exception of roller size. The use of a fully-loaded dump truck is recommended. Areas, which prove unstable should be cut out and reworked. In areas that are below finished subgrade elevation, or which are to be lime treated, scarify the exposed subgrade to a depth of 8 inches, adjust the moisture content to within a range of optimum to optimum +3%, and recompact to a minimum of 98% of the density as defined by ASTM D 698 (Standard Proctor). For HMAC pavement sections, lime treatment of subgrade that consists of native clay, or native clay fill is recommended as set forth below. Positive surface drainage should be maintained during all phases of construction (especially in low areas) to help keep pavement subgrade in a dry and stable condition.

7.1.1 Fill Construction

Fill material to be used beneath areas to be paved may consist of any native soil and should be compacted to a minimum density of 98% ASTM D698 (standard proctor) at a moisture content within the range of optimum ±2% except for fat clay soils which should be placed at above optimum moisture contents. Lime treatment of the finished subgrade can be omitted where the top 18" of finished subgrade consist of select fill with the following properties: a PI ranging from 8 to 18, a liquid limit $\leq$40, and a percentage passing the #200 sieve <40% (this specification is slightly different than the building fill specification). TxDOT Flex base as noted below can be used as a select fill.

7.1.2 Special Requirements

Islands and irrigated areas adjacent to pavement edges can be a source of pavement problems. Overwatering can lead to infiltration (and consequent destabilization) of flexible base material adjacent to the area. Where a flexible pavement option is chosen, areas subject to overwatering (especially sprinklered islands) should be designed to contain all irrigation water (i.e., prevent leakage out the bottom into adjacent stone base material). An alternate, but less desirable, solution is to replace the flex base in the immediate vicinity of the potential infiltration with full depth Asphalt.

Where trees or shrubbery will be planted or will remain in close proximity to the pavement edge, or where the pavement edge is subject to extreme drying action, deep drying of the subgrade beneath the pavement edge (within root zones of vegetation where present) can lead to cracking of the subgrade and pavement in the vicinity. The only effective way to prevent this sort of distress is to undercut the active clay subgrade and replace it with select fill or prevent drying of the subgrade through the use of moisture/root barriers. The use of a geogrid (Tensar TX7) between the crushed stone base and the subgrade can limit the propagation of cracks from the subgrade up into the base. Additional details regarding these measures will be provided upon request.

7.1.3 Lime Treated Subgrade

Lime treatment of subgrade should be in accordance with Item 260, "Lime Treatment for Materials Used as Subgrade (Road Mixed)," Texas Department of Transportation *Standard Specifications for Construction of Highways, Streets, and Bridges*, 2014 Edition with the following exceptions:

- Under Article 260.4 (4), "Application," the rate of lime to be applied can be estimated as 35 pounds per square yard worked into the top 6 inches, or 40 pounds per square yard worked into the top 8 inches of finished subgrade. Quicklime, if used, must be hydrated before mixing into the soil.

- The modified subgrade should be compacted under article 260.4 (6) (b), "Density Control," except that it shall be compacted to 95% of Standard Proctor Density (ASTM D698) *at a moisture content well above optimum* to allow for the drying action of the lime.

- Curing procedures should be strictly followed. Traffic on the treated subgrade should be kept to a minimum during curing.

- Prior to use by significant traffic, the treated subgrade should be covered with base, concrete, or some temporary wearing surface to avoid degradation.

7.1.3.1 Guidelines for the Treatment of Sulfate-Rich Soils

Test results indicate sulfate concentration is less than 3,000 ppm and lime stabilization is possible. However, sulfates generally occur in veins that may or may not be intercepted by the procedures used to obtain samples for this study. Testing for soluble sulfates was on a limited basis for this project. Soils that contain a sufficient quantity of soluble sulfates can cause an adverse reaction when stabilized with lime or cement. This would lead to sulfate-induced heave if lime (or cement) stabilization were to be used. Typically, the possibility of sulfate-induced heave occurs when sulfate contents are above 3,000 ppm (kg/mg). However, at sulfate contents, of less than 8,000 ppm, lime stabilization is still feasible as long as the moisture content is mixed above optimum, and the lime is allowed to mellow. If lime stabilization is used TxDOT recommendations should be strictly followed. Once the site is cut to grade and prior to placing fill, the exposed subgrade should be inspected by a qualified technician, and samples obtained for sulfate testing per Tex 145E.

7.1.3.2 Alternatives to Lime Treatment

For the flexible pavement option placing a geogrid (Tensar NX750 or equivalent) on the native subgrade prior to placing base material will serve as a substitute for lime-treated subgrade.

For the rigid pavement option (concrete) the recommended pavement thickness recommends a lime treated prepared native subgrade. Treating the native clay subgrade with 6% lime to a depth of 8 inches below the ridged pavement is recommended to extend the life of the pavement section. If the subgrade is untreated the recommended pavement thickness can be increased by 0.5 inch. Without a treated subgrade pavement maintenance is vital so the pavement functions as designed.

Property sealing (and resealing over) joints and saw cuts to prevent water from saturating the untreated subgrade is required. Alternatively, the lime treatment can be replaced with 5 inches of compacted flex base.

7.1.4 Stability of Finished Subgrade

The stability of the finished subgrade should be verified by proof rolling (as specified above) prior to placing base material or surfacing. Based on the conditions found at the site the subgrade is expected to be soft and pumping once the existing pavement section is removed. The recommended sections listed in **TABLE 7.2.1** are based on a CBR≈2 for a stable firm subgrade. Unstable areas will need to be cut out, reworked, and/or replaced until a sable subgrade is achieved. Alternatively, a deeper mixing ≈12" of lime, or additional geogrid and flex base may be required to stabilize the subgrade. Contact ETTL for further evaluation of the subgrade conditions in the event the subgrade cannot pass a proof roll.

7.2 Light-Duty Pavements

7.2.1 Flexible Pavement

The minimum pavement section for light-duty driveways and parking areas consists of 8 inches of crushed stone base with 2 inches of hot mix asphaltic concrete (HMAC). The crushed stone base should comply with Type A, Grade 1/2, Item 247 of the *Texas Department of Transportation (TxDOT) 2014 Standard Specifications for Construction of Highways, Streets, and Bridges*. Compaction of the stone base should be to a minimum of 95 percent of ASTM D 1557 (modified proctor) maximum density at optimum moisture ±3 percent. Asphaltic concrete surfacing should comply with the requirements of Type D, Item 340 of the TxDOT Specifications, and should be compacted to a density of 92 to 94 percent of the maximum theoretical density.

7.2.2 Rigid Pavement

The performance of concrete pavement is dependent on many factors including weight and frequency of traffic, subgrade conditions, concrete quality (which itself is dependent on a host of factors), joint type and layout, jointing procedures, and numerous construction practices. A detailed discussion of all of these items is beyond the scope of this report. The designer is referred to the American Concrete Institute Publication No. ACI 330R, *Guide for Design and Construction of Concrete Parking Lots*, for more details. By way of general guidance, the following recommendations are offered:

- The minimum concrete moment of rupture (MOR) = 540 psi at 28 days (approximately 3,600 psi) placed with a maximum slump of 4 inches. The mix should contain 4.5% - 6% entrained air for durability. The maximum aggerate size should be no greater than 1/3 the thickness of the slab. Allow a minimum of 7 days (in warm weather, longer in cold weather) curing time before permitting light traffic on the pavement.

- Minimum pavement thickness of 5.0 inches for an estimated CBR (Compacted to 95% ASTM D 698) of the subgrade equal to 2 and a traffic category of A (Average Daily Truck

Traffic (ADTT=10)). All edges of pavement should be thickened to 7 inches (transitioning back to 5.5 inches over a minimum distance of 4 feet), see ACI 330R, Table 3.4.

ACI 330R, Table 3.3 – Traffic Categories		
Truck Type	**Parking Areas and Interior Lanes**	**Entrances and Exterior Lanes**
Cars (light Vehicles)	Category A	Category B
Busses and Panel Trucks	Category B	Category C
Single Units (bobtailed trucks)	Category B	Category C
Multiple Units (tractor-trailer units with one or more trailers	Category C	Category D

- *Sand cushions should not be used as a construction expedient, instead of proper subgrade preparation. Granular aggregate subbases are not normally used for concrete parking lots. If a subbase is specified for some special reason, it should be placed on the prepared subgrade, compacted, and trimmed to the elevation called for in project plans.*

- Maximum joint spacing 10 feet, for information regarding the amount and type of reinforcement (if any), load transfer across the joints (Dowels), joint spacing, saw cutting, curing, and placement of the concrete, the reader is referred to ACI 330R, specifically Section 3.7 & 3.8.

- As an alternative, you may elect to determine joint spacing based on the ACPA formulas:
  - RL = T * CS
  - where:
    - RL = Recommended length between joints (See Notes 1 and 2)
    - T = Slab thickness (Either metric or English units)
    - CS = Support constant:
      - Use 24, for subgrades or granular bases.
      - Use 21; for stabilized (lime, cement, or asphalt) bases
  - Notes:
    1. The spacing of transverse joints in plain (unreinforced) concrete pavement should not exceed 20 ft (6 m) for slabs less than 10 in. (250 mm) thick.
    2. A general rule of thumb requires that the transverse joint spacing should not exceed 150% of the longitudinal joint spacing.
    3. You should always apply engineering judgment in selecting a joint spacing. This may include equally dividing your facility or lane geometry or require matching an existing or adjacent joint pattern. Longer joint spacings than are recommended may be acceptable if local experience indicates good performance will result. Shorter lengths may further reduce the risk of transverse cracking slightly but may also increase construction and joint

maintenance costs. Be aware that in some countries slab dimensions may also be patented.

TABLE 7.1 – Pavement Options – Light Duty ≈48,000 ESAL's / 20 Years			
Type	**Base/Surface Thickness**		**Subgrade Preparation[1]**
Flexible HMAC	2.5" Surface (Type D)	8.5" TxDOT Base	8" Lime Treated
	2" Surface (Type D)	8" TxDOT Base	NX750 Geogrid
Concrete	5.0"	No Base Required	6" Lime Treated
	5.0"	5" TxDOT Base	Compacted Native Clay

Notes:

1) See Section 7.1.4, untreated subgrade must pass a proof roll, or additional modifications to the subgrade are required.
2) For Entrances, dumpster pads, or delivered vehicles, increase concrete thickness by 1.5 inches.

8.0 LIMITATIONS

Geotechnical design work is characterized by the presence of a calculated risk that soil and groundwater conditions may not have been fully revealed by the exploratory borings. This risk derives from the practical necessity of basing interpretations and design conclusions on a limited sampling of the subsoil stratigraphy at the project site. The number of borings and spacing is chosen in such a manner as to decrease the possibility of undiscovered anomalies while considering the nature of loading, size, and cost of the project. The recommendations given in this report are based on the conditions that existed at the boring locations at the time they were drilled. The term "existing groundline" or "existing subgrade" refers to the ground elevations and soil conditions at the time of our field operations.

It is conceivable that soil conditions throughout the site may vary from those observed in the exploratory borings. If such discontinuities do exist, they may not become evident until construction begins or possibly much later. Consequently, careful observations by the geotechnical engineer must be made of the construction as it progresses to help detect significant and obvious deviations of actual conditions throughout the project area from those inferred from the exploratory borings. Should any conditions at variance with those noted in this report be encountered during construction, this office should be notified immediately so that further investigations and supplemental recommendations can be made.

Construction plans and specifications should be submitted to ETTL for review prior to issuance for construction to help verify that the recommendations of this report have been correctly understood and implemented.

This company is not responsible for the conclusions, opinions, or recommendations made by others based on the contents of this report. The recommendations made in this report are applicable only to the proposed scope of work as defined in **SECTION 1.0 PROJECT DESCRIPTION** and may not be used for any other work without the express written consent of ETTL Engineers. The purpose of this study is only as stated elsewhere herein and is not intended to comply with the requirements of 30 TAC 330 Subchapter T regarding testing to determine the presence of a landfill. Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. No warranties are either expressed or implied.

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, you can benefit from a lowered exposure to problems associated with subsurface conditions at project sites and development of them that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed herein, contact your GBA-member geotechnical engineer. Active engagement in GBA exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Understand the Geotechnical-Engineering Services Provided for this Report

Geotechnical-engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical-engineering services is typically a geotechnical-engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical-engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

Geotechnical-Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client.

Likewise, geotechnical-engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical-engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If you are the least bit uncertain* about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. *Read and refer to the report in full.*

You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept*

responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface using various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are not final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals' plans and specifications; and
- be available whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for information purposes only.* To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer's services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, ***proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration. Confront the risk of moisture infiltration*** by including building-envelope or mold specialists on the design team. ***Geotechnical engineers are not building-envelope or mold specialists.***

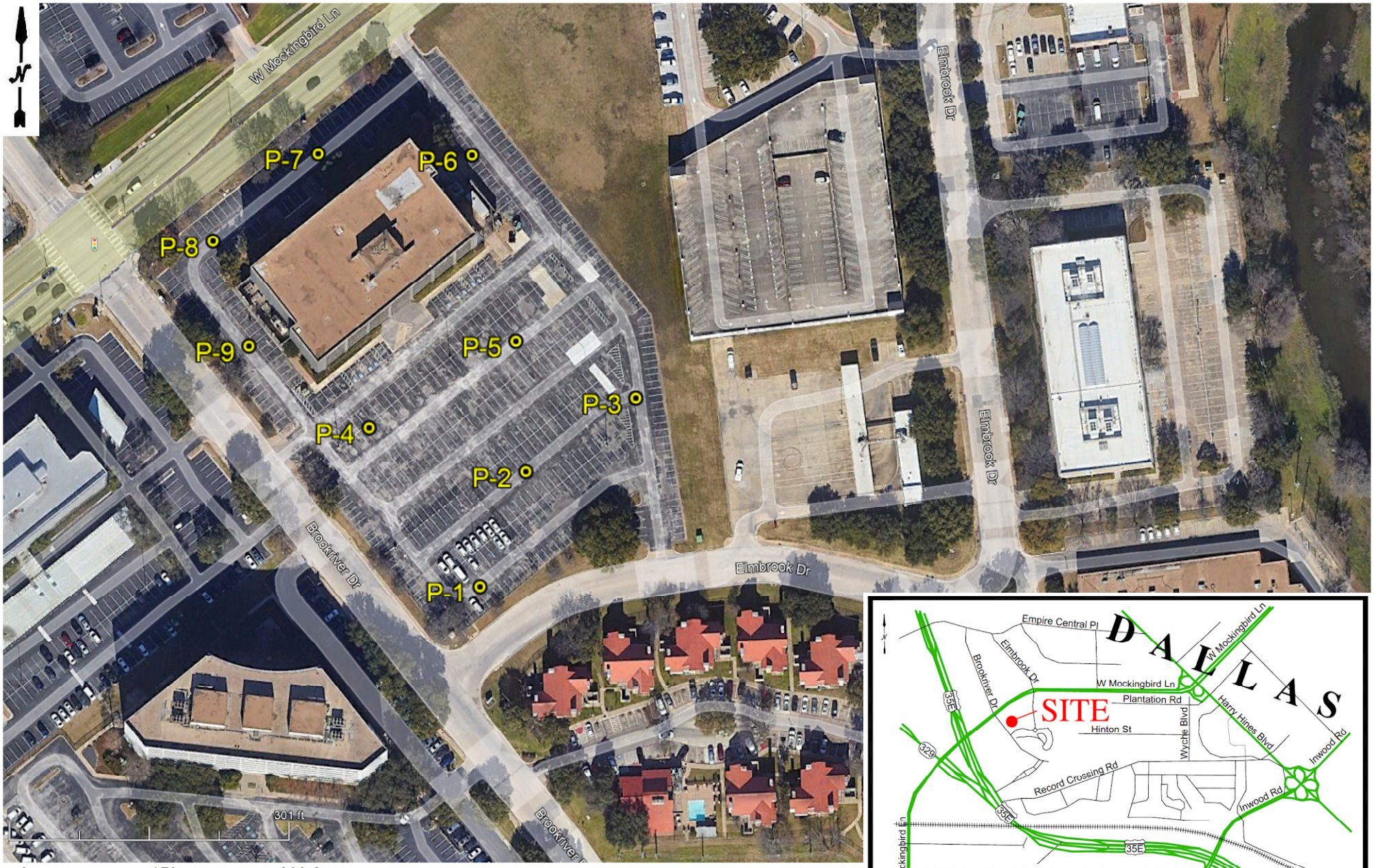
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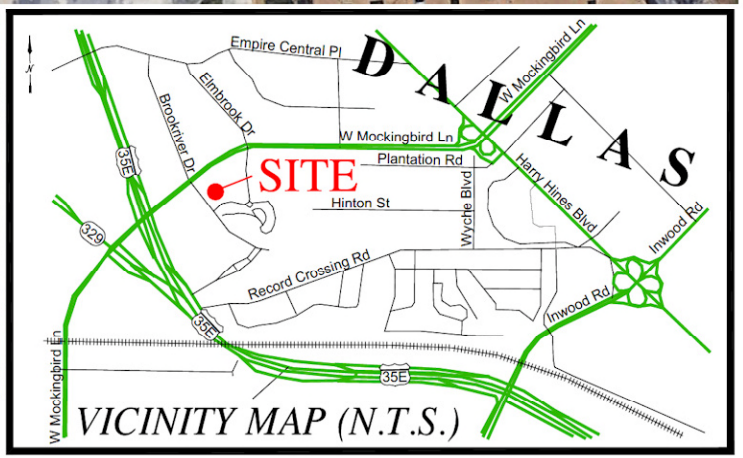
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APPENDIX A

Plan of Borings
Boring Logs
Boring Log Key





ETTL Engineers & Consultants

DALLAS COUNTY PROBATION CENTER DALLAS, TEXAS

PLATE I - PLAN OF BORINGS

JOB NO.: G6259-2312

DATE: APRIL 2024 | **SCALE: AS SHOWN**

Boring Log Descriptive Terminology

Key to Soil Symbols and Terms

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	Well-graded gravels, gravel sand mixtures, little or no fines.
				GP	Poorly graded gravels, gravel-sand mixtures, little or no fines.
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	Silty gravels, gravel-sand-silt mixtures.
				GC	Clayey gravels, gravel-sand-clay mixtures.
MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	SAND AND SANDY SOILS	CLEAN SANDS (LITTLE OR NO FINES)		SW	Well-graded sands, gravelly sands, little or no fines.
				SP	Poorly graded sands, gravelly sands, little or no fines.
	MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	Silty sands, sand-silt mixtures.
				SC	Clayey sands, sand-clay mixures.
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
				CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
				OL	Organic silts and organic silty clays of low plasticity.
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
				CH	Inorganic clays of high plasticity, fat clays.
				OH	Organic clays of medium to high plasticity, organic silts.
HIGHLY ORGANIC SOILS				PT	Peat and other highly organic soils.

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

Order of Descriptors

- Group Name
- Consistency or Relative Density
- Moisture Condition
- Color
- Particle size descriptor(s) (coarse grained soils only)
- Angularity of coarse grained soils
- Other relevant notes

Criteria For Descriptors

Consistency of Fine Grained Soils

Consistency	N-Value (uncorrected)
Very Soft	< 2
Soft	2 - 4
Medium Stiff	5 - 8
Stiff	9 - 15
Very Stiff	16 - 30
Hard	> 30

Apparent Density of Coarse Grained Soils

Relative Density	N-Value (uncorrected)
Very Loose	< 4
Loose	4 - 10
Medium Dense	11 - 30
Dense	31 - 50
Very Dense	> 50

Moisture Condition

Dry	-Absence of moisture, dusty, dry to the touch.
Moist	-Damp, but no visible water.
Wet	-Visible free water.

Definition of Particle Size Ranges

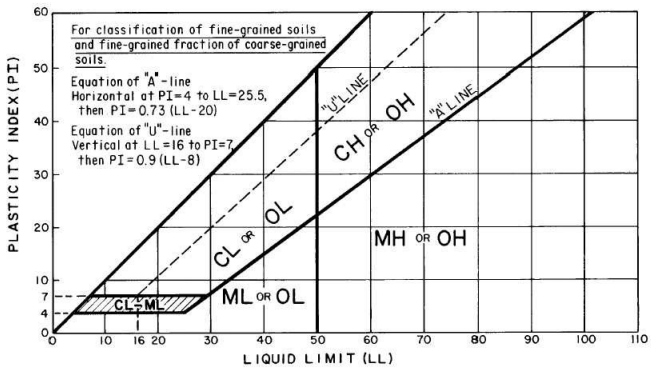
Soil Component	Size Range
Boulder	> 12 in (300 mm)
Cobble	3 in (75 mm) - 12 in (300 mm)
Gravel	No. 4 Sieve (4.75 mm) to 3 in (75 mm)
Sand	No. 200 (0.075 mm) to No. 4 Sieves (4.75 mm)
Silt	< No. 200 Sieve (0.075 mm)*
Clay	< No. 200 Sieve (0.075 mm)*

*Use Atterberg limits and chart below to differentiate between silt and clay.

Notes

SPT (Standard Penetration Test-ASTM D1586):
The number of blows of a 140 lb (63.6 kg) hammer falling 2.5 ft (750 mm) used to drive a 2 in (50 mm) O.D. Split Spoon sampler for a total of 1.5 ft (0.45 m) of penetration.
Written as follows:
first 0.5 ft (0.15 m) - second 0.5 ft (0.15 m) - third 0.5 ft (0.15 m) (ex: 1-3-9)
Note: if the number of blows exceeds 50 before 0.5 ft (0.15 m) of penetration is achieved, the actual penetration follows the number of blows in parentheses (ex: 12-24-50 (0.09 m), 34-50 (0.4 ft), or 100 (0.3 ft)).
WR denotes a zero blow count with the weight of the rods only.
WH denotes a zero blow count with the weight of the rods plus the weight of the hammer.

Soil Classifications are Based on the Unified Soil Classification System, ASTM D2487 and D2488. Also included are the AASHTO group classifications (M145). Descriptions are based on visual observation, except where they have been modified to reflect results of laboratory tests as deemed appropriate.



Angularity of Coarse-Grained Particles

Angular	-Particles have sharp edges and relative plane sides with unpolished surfaces.
Subangular	-Particles are similar to angular description, but have rounded edges.
Subrounded	-Particles have nearly plane sides, but have no edges.
Rounded	-Particles have smoothly curved sides and well-rounded corners and edges.

ETTL Engineers & Consultants

LOG OF BORING P-1

PROJECT: Dallas County Probation Center
Dallas, Texas

BORING TYPE: Flight Auger

PROJECT NO.: G6259-2312

DRILL RIG:

DATE 4/1/24

SURFACE ELEVATION Not Measured

MAIN OFFICE
1717 East Erwin Street
Tyler, Texas 75702
903-595-4421

MATERIAL DESCRIPTION

DEPTH (ft)	USC	GEOLOGIC UNIT	MATERIAL DESCRIPTION	FIELD STRENGTH DATA	MOISTURE CONTENT (%)	ATTERBERG LIMITS(%) LL	PL	PI	SIEVE ANALYSIS MINUS #200 SIEVE (%)	PLUS #40 SIEVE (%)	PLUS #4 SIEVE (%)	SWELL TEST DRY DENSITY (pcf)	FREE SWELL (%)	ZERO SWELL PRESSURE (ksf)	MOISTURE CONTENT (%)
0			5" Asphalt / 5" Base												
1	CH	Qal	FAT CLAY WITH SAND(CH) dark gray	P=3.5	24	69	24	45	80	10	2				
3	CH		FAT CLAY(CH) dark gray	P=3.25											
5			Bottom of Boring @ 5'												

BLOW COUNT: 20 40 60 80
Qu (tsf): 1 2 3 4
PPR (tsf): 1.0 2.0 3.0 4.0
Torvane (tsf): 1.0 2.0 3.0 4.0

COMPRESSIVE STRENGTH: DRY DENSITY (pcf); COMPRESSIVE STRENGTH (tsf); MOISTURE CONTENT (%)

Natural Moisture Content and Atterberg Limits: Plastic Limit | Moisture Content | Liquid Limit; 20 40 60 80

Water Level Est.: ▽ Measured: ▼ Perched: ▼

Water Observations: Dry and open upon completion.

Key to Abbrevations:
N - SPT Data (Blows/Ft)
P - Pocket Penetrometer (tsf)
T - Torvane (tsf)
L - Lab Vane Shear (tsf)

Notes:

GPS Coordinates: N32.819584°, W96.865392°

Drilled By: Lewis Drilling, LIC

Logger: Jimmy Werbiki

ETTL Engineers & Consultants

LOG OF BORING P-2

PROJECT: Dallas County Probation Center
Dallas, Texas

BORING TYPE: Flight Auger

PROJECT NO.: G6259-2312

DRILL RIG:

DATE 4/1/24

SURFACE ELEVATION Not Measured

MAIN OFFICE
1717 East Erwin Street
Tyler, Texas 75702
903-595-4421

DEPTH (ft)	SAMPLES	USC	GEOLOGIC UNIT	WATER LEVEL	MATERIAL DESCRIPTION	FIELD STRENGTH DATA	BLOW COUNT / Qu (tsf) / PPR (tsf) / Torvane (tsf)	DRY DENSITY (pcf)	COMPRESSIVE STRENGTH (tsf)	MOISTURE CONTENT (%)	Natural Moisture Content and Atterberg Limits	MOISTURE CONTENT (%)	ATTERBERG LIMITS(%) LL	PL	PI	SIEVE ANALYSIS MINUS #200 SIEVE (%)	PLUS #40 SIEVE (%)	PLUS #4 SIEVE (%)	SWELL TEST DRY DENSITY (pcf)	FREE SWELL (%)	ZERO SWELL PRESSURE (ksf)	MOISTURE CONTENT (%)
0					2" Asphalt / 4" Base		BLOW COUNT 20 40 60 80; Qu (tsf) 1 2 3 4; PPR (tsf) 1.0 2.0 3.0 4.0; Torvane (tsf) 1.0 2.0 3.0 4.0				Plastic Limit / Moisture Content / Liquid Limit 20 40 60 80											
		CH	Qal		FAT CLAY(CH) dark gray																	
1						P=3.5																
2																						
3						P=3.5																
4																						
5					Bottom of Boring @ 5'																	

Water Level Est.: ▽ Measured: ▼ Perched: ▼

Water Observations: Dry and open upon completion.

Key to Abbrevations:
N - SPT Data (Blows/Ft)
P - Pocket Penetrometer (tsf)
T - Torvane (tsf)
L - Lab Vane Shear (tsf)

Notes:

GPS Coordinates: N32.819923°, W96.865231°

Drilled By: Lewis Drilling, LIC

Logger: Jimmy Werbiki

ETTL Engineers & Consultants

LOG OF BORING P-3

PROJECT: Dallas County Probation Center
Dallas, Texas

BORING TYPE: Flight Auger

PROJECT NO.: G6259-2312

DRILL RIG:

DATE 4/1/24

SURFACE ELEVATION Not Measured

MAIN OFFICE
1717 East Erwin Street
Tyler, Texas 75702
903-595-4421

DEPTH (ft)	USC	MATERIAL DESCRIPTION	FIELD STRENGTH DATA	BLOW COUNT / Qu (tsf) / PPR (tsf) / Torvane (tsf)	DRY DENSITY (pcf)	COMPRESSIVE STRENGTH (tsf)	MOISTURE CONTENT (%)	Natural Moisture Content and Atterberg Limits	MOISTURE CONTENT (%)	ATTERBERG LIMITS(%) LL	PL	PI	SIEVE ANALYSIS MINUS #200 SIEVE (%)	PLUS #40 SIEVE (%)	PLUS #4 SIEVE (%)	SWELL TEST DRY DENSITY (pcf)	FREE SWELL (%)	ZERO SWELL PRESSURE (ksf)	MOISTURE CONTENT (%)
0		8" Base																	
1	CH	FAT CLAY(CH) dark gray	P=3.5						30	78	24	54	93	5	1				
2		Qt																	
3	CH	FAT CLAY WITH SAND(CH) dark gray	P=3.75						19	78	25	53	84	14	9				
4																			
5		Bottom of Boring @ 5'																	

BLOW COUNT 20 40 60 80
Qu (tsf) 1 2 3 4
PPR (tsf) 1.0 2.0 3.0 4.0
Torvane (tsf) 1.0 2.0 3.0 4.0

Natural Moisture Content and Atterberg Limits: Plastic Limit | Moisture Content | Liquid Limit; 20 40 60 80

Water Level Est.: ▽ Measured: ▼ Perched: ▼

Water Observations: Dry and open upon completion.

Key to Abbrevations:
N - SPT Data (Blows/Ft)
P - Pocket Penetrometer (tsf)
T - Torvane (tsf)
L - Lab Vane Shear (tsf)

Notes:

GPS Coordinates: N32.820139°, W96.864845°

Drilled By: Lewis Drilling, LIC

Logger: Jimmy Werbiki

ETTL Engineers & Consultants

LOG OF BORING P-4

PROJECT: Dallas County Probation Center
Dallas, Texas

BORING TYPE: Flight Auger

PROJECT NO.: G6259-2312

DRILL RIG:

DATE 4/1/24

SURFACE ELEVATION Not Measured

MAIN OFFICE
1717 East Erwin Street
Tyler, Texas 75702
903-595-4421

MATERIAL DESCRIPTION

DEPTH (ft)	USC	GEOLOGIC UNIT	MATERIAL DESCRIPTION	FIELD STRENGTH DATA
0			3" Asphalt / 6" Base	
1	CH	Qal	FAT CLAY(CH) dark gray	P=3.5
3				P=3.5
5			Bottom of Boring @ 5'	

BLOW COUNT 20 40 60 80
Qu (tsf) 1 2 3 4
PPR (tsf) 1.0 2.0 3.0 4.0
Torvane (tsf) 1.0 2.0 3.0 4.0

Natural Moisture Content and Atterberg Limits: Plastic Limit | Moisture Content | Liquid Limit; 20 40 60 80

COMPRESSIVE STRENGTH			ATTERBERG LIMITS(%)			SIEVE ANALYSIS			SWELL TEST			
DRY DENSITY (pcf)	COMPRESSIVE STRENGTH (tsf)	MOISTURE CONTENT (%)	MOISTURE CONTENT (%)	LIQUID LIMIT LL	PLASTIC LIMIT PL	PLASTICITY INDEX PI	MINUS #200 SIEVE (%)	PLUS #40 SIEVE (%)	PLUS #4 SIEVE (%)	DRY DENSITY (pcf)	FREE SWELL (%)	ZERO SWELL PRESSURE (ksf)	MOISTURE CONTENT (%)

Water Level Est.: ▽ Measured: ▼ Perched: ⧩
Water Observations: Dry and open upon completion.

Key to Abbrevations:
N - SPT Data (Blows/Ft)
P - Pocket Penetrometer (tsf)
T - Torvane (tsf)
L - Lab Vane Shear (tsf)

Notes:

GPS Coordinates: N32.820051°, W96.865781°

Drilled By: Lewis Drilling, LIC

Logger: Jimmy Werbiki

ETTL Engineers & Consultants

LOG OF BORING P-5

PROJECT: Dallas County Probation Center
Dallas, Texas

BORING TYPE: Flight Auger

PROJECT NO.: G6259-2312

DRILL RIG:

DATE 4/1/24

SURFACE ELEVATION Not Measured

MAIN OFFICE
1717 East Erwin Street
Tyler, Texas 75702
903-595-4421

DEPTH (ft)	SAMPLES	USC	GEOLOGIC UNIT	WATER LEVEL	MATERIAL DESCRIPTION	FIELD STRENGTH DATA	BLOW COUNT / Qu (tsf) / PPR (tsf) / Torvane (tsf)	DRY DENSITY (pcf)	COMPRESSIVE STRENGTH (tsf)	MOISTURE CONTENT (%)	Natural Moisture Content and Atterberg Limits	MOISTURE CONTENT (%)	ATTERBERG LIMITS(%) LL	PL	PI	SIEVE ANALYSIS MINUS #200 SIEVE (%)	PLUS #40 SIEVE (%)	PLUS #4 SIEVE (%)	SWELL TEST DRY DENSITY (pcf)	FREE SWELL (%)	ZERO SWELL PRESSURE (ksf)	MOISTURE CONTENT (%)
0					3" Asphalt / 7" Base																	
1		CH	Qt		FAT CLAY(CH) dark gray	P=3.5						27	80	25	55	85	13	5				
2																						
3						P=3.75																
4																						
5					Bottom of Boring @ 5'																	

BLOW COUNT: 20 40 60 80
Qu (tsf): 1 2 3 4
PPR (tsf): 1.0 2.0 3.0 4.0
Torvane (tsf): 1.0 2.0 3.0 4.0

Natural Moisture Content and Atterberg Limits: Plastic Limit — Moisture Content — Liquid Limit; 20 40 60 80

Water Level Est.: ▽ Measured: ▼ Perched: ⧩

Water Observations: Dry and open upon completion.

Key to Abbrevations:
N - SPT Data (Blows/Ft)
P - Pocket Penetrometer (tsf)
T - Torvane (tsf)
L - Lab Vane Shear (tsf)

Notes:

GPS Coordinates: N32.820307°, W96.865266°

Drilled By: Lewis Drilling, LIC

Logger: Jimmy Werbiki

ETTL Engineers & Consultants

LOG OF BORING P-6

PROJECT: Dallas County Probation Center
Dallas, Texas

BORING TYPE: Flight Auger

PROJECT NO.: G6259-2312

DRILL RIG:

DATE 4/1/24

SURFACE ELEVATION Not Measured

MAIN OFFICE
1717 East Erwin Street
Tyler, Texas 75702
903-595-4421

DEPTH (ft)	SAMPLES	USC	GEOLOGIC UNIT	WATER LEVEL	MATERIAL DESCRIPTION	FIELD STRENGTH DATA	BLOW COUNT / Qu (tsf) / PPR (tsf) / Torvane (tsf)	DRY DENSITY (pcf)	COMPRESSIVE STRENGTH (tsf)	MOISTURE CONTENT (%)	Natural Moisture Content and Atterberg Limits	MOISTURE CONTENT (%)	ATTERBERG LIMITS(%) LL	PL	PI	SIEVE ANALYSIS MINUS #200 SIEVE (%)	PLUS #40 SIEVE (%)	PLUS #4 SIEVE (%)	SWELL TEST DRY DENSITY (pcf)	FREE SWELL (%)	ZERO SWELL PRESSURE (ksf)	MOISTURE CONTENT (%)
0					3" Asphalt / 8" Base																	
1		CH	Qt		FAT CLAY(CH) dark gray	P=3.5																
2																						
3						P=3.75																
4																						
5					Bottom of Boring @ 5'																	

BLOW COUNT: 20 40 60 80
Qu (tsf): 1 2 3 4
PPR (tsf): 1.0 2.0 3.0 4.0
Torvane (tsf): 1.0 2.0 3.0 4.0

Natural Moisture Content and Atterberg Limits: Plastic Limit | Moisture Content | Liquid Limit; 20 40 60 80

Water Level Est.: ▽ Measured: ▼ Perched: ▼

Water Observations: Dry and open upon completion.

Key to Abbrevations:
N - SPT Data (Blows/Ft)
P - Pocket Penetrometer (tsf)
T - Torvane (tsf)
L - Lab Vane Shear (tsf)

Notes:

GPS Coordinates: N32.820856°, W96.865420°

Drilled By: Lewis Drilling, LIC

Logger: Jimmy Werbiki

ETTL Engineers & Consultants

LOG OF BORING P-7

PROJECT: Dallas County Probation Center
Dallas, Texas

BORING TYPE: Flight Auger

PROJECT NO.: G6259-2312

DRILL RIG:

DATE 4/1/24

SURFACE ELEVATION Not Measured

MAIN OFFICE
1717 East Erwin Street
Tyler, Texas 75702
903-595-4421

MATERIAL DESCRIPTION

DEPTH (ft)	USC	GEOLOGIC UNIT	MATERIAL DESCRIPTION
0			3" Asphalt / 6" Base
1	CH	Qt	FAT CLAY(CH) dark gray
5			Bottom of Boring @ 5'

FIELD STRENGTH DATA: P=3.5 (at 1 ft); P=3.5 (at 3 ft)

BLOW COUNT 20 40 60 80
Qu (tsf) 1 2 3 4
PPR (tsf) 1.0 2.0 3.0 4.0
Torvane (tsf) 1.0 2.0 3.0 4.0

Natural Moisture Content and Atterberg Limits: Plastic Limit | Moisture Content | Liquid Limit (20 40 60 80)

ATTERBERG LIMITS(%)			SIEVE ANALYSIS			SWELL TEST			
MOISTURE CONTENT (%)	LIQUID LIMIT LL	PLASTIC LIMIT PL	PLASTICITY INDEX PI	MINUS #200 SIEVE (%)	PLUS #40 SIEVE (%)	PLUS #4 SIEVE (%)	DRY DENSITY (pcf)	FREE SWELL (%)	ZERO SWELL PRESSURE (ksf)	MOISTURE CONTENT (%)

COMPRESSIVE STRENGTH: DRY DENSITY (pcf); COMPRESSIVE STRENGTH (tsf); MOISTURE CONTENT (%)

Water Level Est.: Measured: Perched:
Water Observations: Dry and open upon completion.

Key to Abbrevations:
N - SPT Data (Blows/Ft)
P - Pocket Penetrometer (tsf)
T - Torvane (tsf)
L - Lab Vane Shear (tsf)

Notes:

GPS Coordinates: N32.820860°, W96.865960°
Drilled By: Lewis Drilling, LIC
Logger: Jimmy Werbiki

ETTL Engineers & Consultants

LOG OF BORING P-8

PROJECT: Dallas County Probation Center
Dallas, Texas

BORING TYPE: Flight Auger

PROJECT NO.: G6259-2312

DRILL RIG:

DATE 4/1/24

SURFACE ELEVATION Not Measured

MAIN OFFICE
1717 East Erwin Street
Tyler, Texas 75702
903-595-4421

DEPTH (ft)	SAMPLES	USC	GEOLOGIC UNIT	WATER LEVEL	MATERIAL DESCRIPTION	FIELD STRENGTH DATA	BLOW COUNT / Qu (tsf) / PPR (tsf) / Torvane (tsf)	DRY DENSITY (pcf)	COMPRESSIVE STRENGTH (tsf)	MOISTURE CONTENT (%)	Natural Moisture Content and Atterberg Limits (Plastic Limit / Moisture Content / Liquid Limit)	MOISTURE CONTENT (%)	ATTERBERG LIMITS(%) LIQUID LIMIT (LL)	PLASTIC LIMIT (PL)	PLASTICITY INDEX (PI)	SIEVE ANALYSIS MINUS #200 SIEVE (%)	PLUS #40 SIEVE (%)	PLUS #4 SIEVE (%)	SWELL TEST DRY DENSITY (pcf)	FREE SWELL (%)	ZERO SWELL PRESSURE (ksf)	MOISTURE CONTENT (%)
0					3" Asphalt / 7" Base																	
1		CH	Qal		FAT CLAY(CH) dark gray	P=3.5																
2																						
3						P=3.5																
4																						
5					Bottom of Boring @ 5'																	

Water Level Est.: ▽ Measured: ▼ Perched: ▼

Water Observations: Dry and open upon completion.

Key to Abbrevations:
N - SPT Data (Blows/Ft)
P - Pocket Penetrometer (tsf)
T - Torvane (tsf)
L - Lab Vane Shear (tsf)

Notes:

GPS Coordinates: N32.820602°, W96.866329°

Drilled By: Lewis Drilling, LIC

Logger: Jimmy Werbiki

ETTL Engineers & Consultants

LOG OF BORING P-9

PROJECT: Dallas County Probation Center
Dallas, Texas

BORING TYPE: Flight Auger

PROJECT NO.: G6259-2312

DRILL RIG:

DATE 4/1/24

SURFACE ELEVATION Not Measured

MAIN OFFICE
1717 East Erwin Street
Tyler, Texas 75702
903-595-4421

DEPTH (ft)	SAMPLES	USC	GEOLOGIC UNIT	WATER LEVEL	MATERIAL DESCRIPTION	FIELD STRENGTH DATA	BLOW COUNT / Qu (tsf) / PPR (tsf) / Torvane (tsf)	DRY DENSITY (pcf)	COMPRESSIVE STRENGTH (tsf)	MOISTURE CONTENT (%)	Natural Moisture Content and Atterberg Limits	MOISTURE CONTENT (%)	ATTERBERG LIMITS(%) LL	PL	PI	SIEVE ANALYSIS MINUS #200 SIEVE (%)	PLUS #40 SIEVE (%)	PLUS #4 SIEVE (%)	SWELL TEST DRY DENSITY (pcf)	FREE SWELL (%)	ZERO SWELL PRESSURE (ksf)	MOISTURE CONTENT (%)
0					4" Asphalt / 7" Base																	
1		CH	Qal		FAT CLAY(CH) dark gray	P=3.25						27	75	25	50	86	11	1				
2																						
3						P=3.5						30	72	25	47	93	4	0				
4																						
5					Bottom of Boring @ 5'																	

BLOW COUNT: 20 40 60 80
Qu (tsf): 1 2 3 4
PPR (tsf): 1.0 2.0 3.0 4.0
Torvane (tsf): 1.0 2.0 3.0 4.0

Natural Moisture Content and Atterberg Limits: Plastic Limit | Moisture Content | Liquid Limit; 20 40 60 80

Water Level Est.: ▽ Measured: ▼ Perched: ⧩

Water Observations: Dry and open upon completion.

Key to Abbrevations:
N - SPT Data (Blows/Ft)
P - Pocket Penetrometer (tsf)
T - Torvane (tsf)
L - Lab Vane Shear (tsf)

Notes:

GPS Coordinates: N32.820293°, W96.866203°

Drilled By: Lewis Drilling, LIC

Logger: Jimmy Werbiki

APPENDIX B

Laboratory Test Reports
DCP Field Reports

LABORATORY TEST DATA SUMMARY SHEET

PROJECT: Dallas County Probation Center
ETTL JOB NUMBER: G 6259-2312
PROJECT LOCATION: Dallas, Texas
CLIENT: Johnson & Pace
PROJECT MANAGER.: Jimmy Werbiski

START DATE: 4/3/2024
FINISH DATE: 4/5/2024
TECHNICIAN(S): HF, JC
DATE SAMPLED: 4/1/2024

Boring No.	Depth (ft.) Top	Depth (ft.) Bott	Sample No.	Description of Sample	USCS Classification	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Moisture Content (%)	(%) Passing No. 200 Sieve	(%) Retained No. 40 Sieve	(%) Retained No. 4 Sieve	Unit Weight / Compression Tests: Dry Unit Weight (pcf)	Unit Weight / Compression Tests: Moisture Content (%)	Unit Weight / Compression Tests: Compressive Strength (tsf)	Unit Weight / Compression Tests: Failure Strain (%)	Unit Weight / Compression Tests: Confining Pressure (psi)	Consol. / Swell Tests Results: Dry Unit Weight (pcf)	Consol. / Swell Tests Results: Moisture Content (%)	Consol. / Swell Tests Results: Free Swell (%)	Consol. / Swell Tests Results: Restraining Pressure (ksf)
P-1	1.0	3.0		Dk. Gray	CH Fat Clay with Sand	69	24	45	24	80	10	2									
P-9	1.0	3.0		Dk. Gray	CH Fat Clay	75	25	50	27	86	11	1									
P-9	3.0	5.0		Dk. Gray	CH Fat Clay	72	25	47	30	93	4	0									
P-7	1.0	3.0		Dk. Gray	CH Fat Clay	74	25	49	31	87	10	0									
P-5	1.0	3.0		Dk. Gray	CH Fat Clay	80	25	55	27	85	13	5									
P-3	1.0	3.0		Dk. Gray	CH Fat Clay	78	24	54	30	93	5	1									
P-3	3.0	5.0		Dk. Gray	CH Fat Clay with Sand	78	25	53	19	84	14	9									

NT = Not Tested, Visual Classification

NP = Non Plastic, LL Attempted

Tyler, TX - Main Office 1717 East Erwin Street Tyler, Texas 75702 Phone: 903-595-4421

Longview, TX 903-758-0402 ✶ **Arlington, TX** 817-962-0048 ✶ **Austin, TX** 512-519-9312 ✶ **Texarkana, AR** 870-772-0013

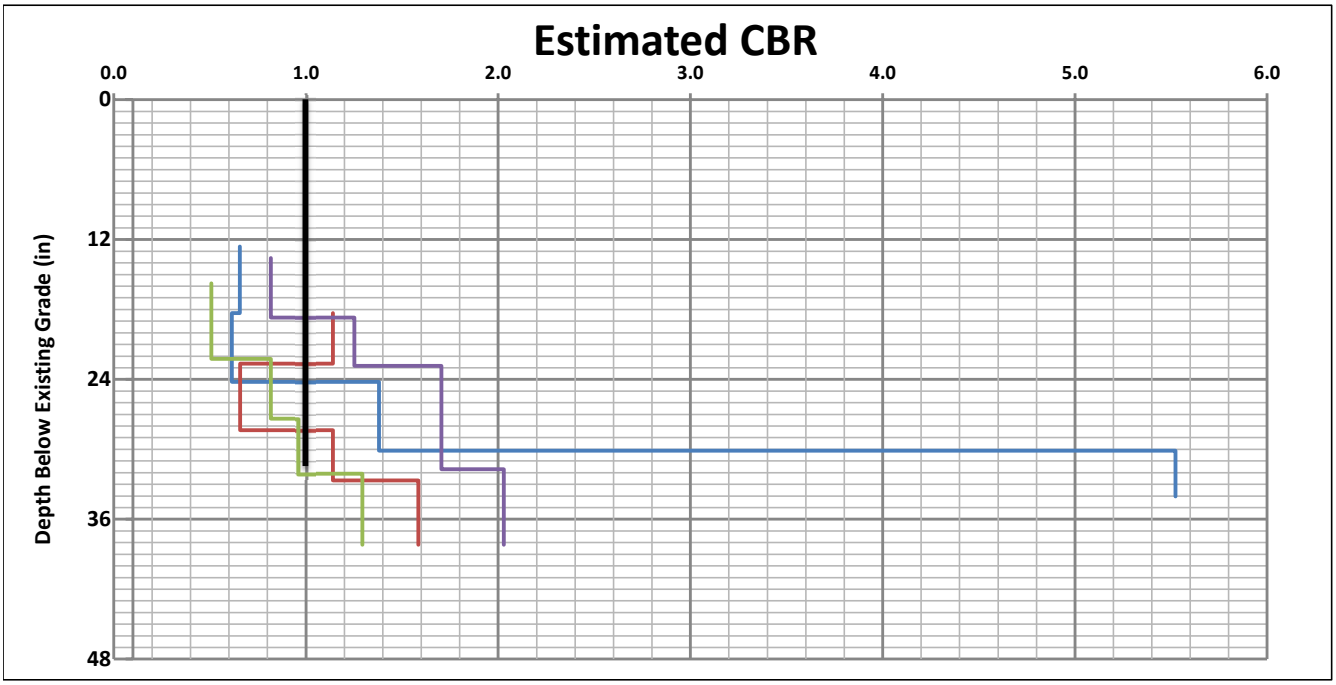
WWW.ETTLINC.COM

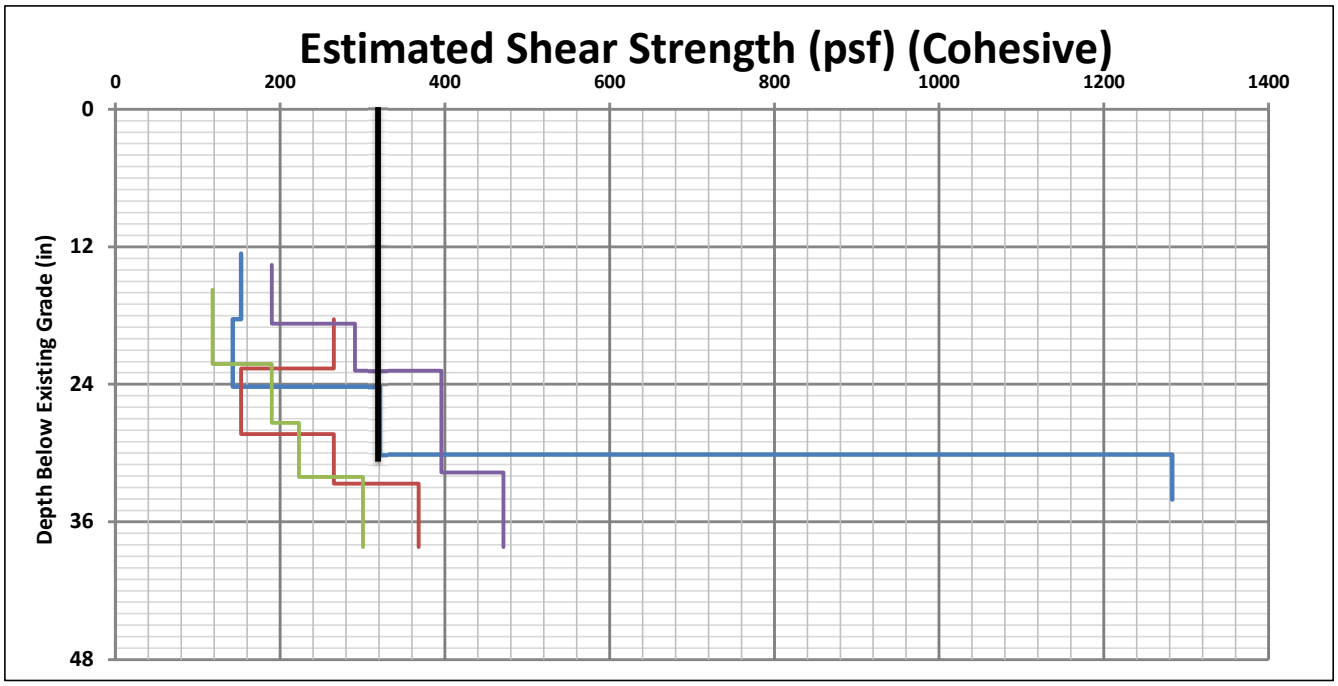
ETTL Engineers & Consultants Inc.

GEOTECHNICAL ✶ MATERIALS ✶ ENVIRONMENTAL ✶ DRILLING ✶ LANDFILLS

Dynamic Cone Penetration Field Report, ASTM 6951-03

Project: Dallas County Adult Probation Center
Client/Arch./Engr.: Johnson & Pace
ETTL Job No.: G 6259-2312
Technician: James Werbiski **Test Date:** 4/1/2024





Estimated P25 CBR: 1.0
Estimated P25 Shear Strength (psf) (Cohesive): 320

SUBSURFACE UTILITY ENGINEERING (SUE) UTILITY REPORT

PROJECT NAME HERE

THE RIOS GROUP

Prepared for:

Johnson & Pace Inc.

TRG Project Number:

JPAC2301.00

Prepared by:

The Rios Group, Inc.

Eric Webb
1890 Crown Dr., Suite 1310
Dallas, TX, 75234



INTRODUCTION

The Rios Group, Inc. (TRG) was contracted to perform Subsurface Utility Engineering (SUE).

TRG performed SUE services for this project in general accordance with the American Society of Civil Engineers Standard ASCE/UESI/CI 38-22 “Standard Guideline for Investigating and Documenting Existing Utilities.” As described in the publication, four levels have been established to describe and depict the quality of subsurface utility information. The four quality levels are defined in **Attachment A** in this report.

The purpose of this Utility Report is to provide supplemental information regarding the SUE investigation, and a more comprehensive understanding of the utility landscape and potential risks. This Report is intended to be used in conjunction with the SUE Plan Sheets (**Attachment B**).

PROJECT INFORMATION

Owner: Dallas County

County: Dallas

Location/Limits: Dallas County Adult Probation Center

Contract Identifier: N/A

Client Project Identifier: N/A

Client's Project Scope:

Enter brief description of client's project scope, and overall project objective:

Reconstructing the parking lot of the Dallas County Adult Probation Center.

Client provided TRG with the following project files on: 1/11/23

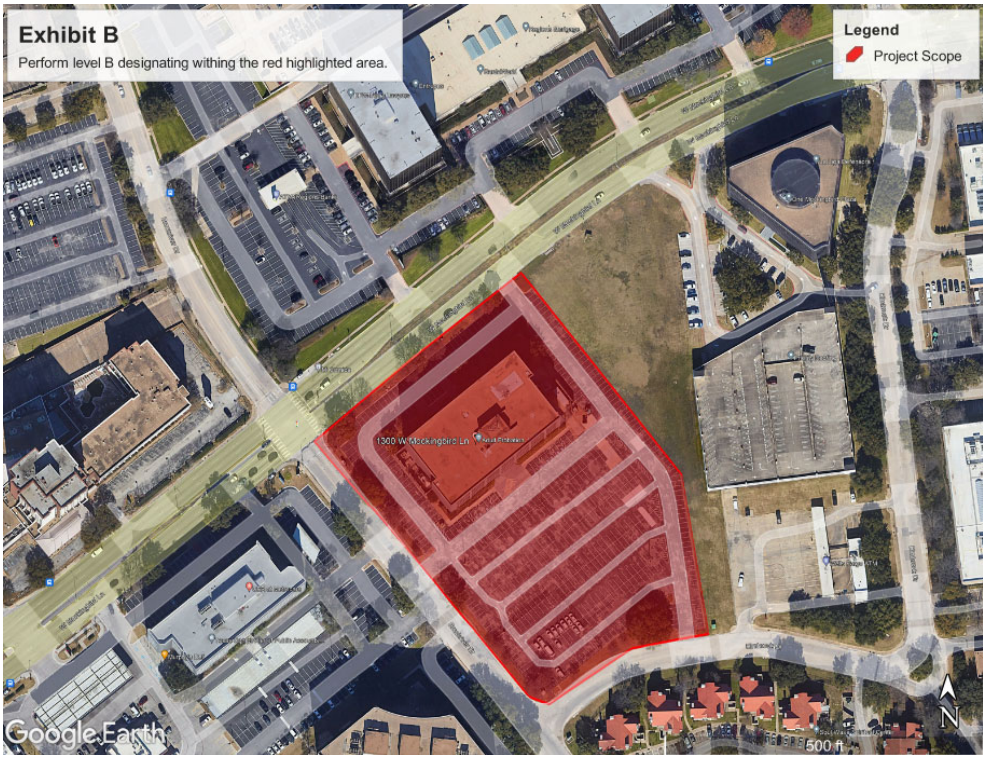
Please complete a brief listing of files provided below:

5281-002 DALLAS TOPO SURVEY
5281-002 DALLAS TOPO-CONTROL POINTS EXHIBIT 2023-12-20

Project Survey Control - See Attachment C

Project Specific Scope of Work

Enter specific details on SUE project Scope of Work, if needed expand in Attachment



Project Team

Briefly List the Project Team's Key Personnel, including credentials:

Eric Webb, PE - Professional Engineer
Tom Johnson - Lead Technician
Javon Worthy - Field Technician

TRG Contracted with a Survey Provider: **Yes** ☑ **No** ☐

If Yes, list survey firm and scope below:

Geoterra

Key Dates:

QL B Field Work Initiated: 2/15/24 QL B Field Work Completed: 2/23/24

QL A Field Work Initiated: 3/25/24 QL A Field Work Completed: 3/27/24

Supplemental Field Work Initiated: Supplemental Field Work Completed:

Description of Field Procedures:

Designating - The primary piece of equipment used to designate utilities was the RD 8100 multi-frequency pipe and cable locator (PCL). A Vivax vLoc 3 Pro was used a a secondary piece of equipment to trouble shoot/check designating marks in congested areas. Designating equipment was connected directly to to the target utility whenever possible. Induction (coupling or TRG attempted to designate storm drains and sanitary sewer lines using a metallic insertion device (plastic rod with embedded conductor wire) into the drain/sewer lines. Designated utilities were marked using a combination of pin flags and water based paint. Survey points were typically spaced 40 to 50 feet apart. Each utility was labeled with a unique ID code.
TRG produced detailed sketches depicting each utility as well as relevant surface features such as manholes, fire hydrants, utility pedestals, valves, meters, etc. Each utility will be labeled with a unique ID code. For example, if two different water lines exist on the project, one will be labeled W1 and the other W2.

Project Specific Data Limitations: ☐ **No** ☑ **Yes,** See attachment D

Utility Owner Contact List Attached: ☑ **No** ☐ **Yes,** See attachment

SUMMARY OF FINDINGS

The project scope area contained water waste water and storm along the perimeter of the site. These facilities are all owned by a single utility owner the City of Dallas or DWU. There was also telecommunication facilities both telephone and fiber optic through the project corridor. Telecommunication facilities were encountered along the perimeter of the project and a total of 11 separate owner were encountered through this investigation. was owned by AT&T but some Spectrum facilities we encountered as well. There is a single Atmos gas line on the northern western limit of the project. Underground electric facilities were also encountered throughout the project scope of the project. These facilities were a mixture of Oncor and private owners.

UTILITY SPECIFIC FINDINGS, PAGE 1

Utility Number: C1

Utility Owner: Adelphia

Utility Type: Telecommunication

Records Received: ☑ No ☐ Yes

Description of Records

No record gathered for this utility owner.

Summary of Findings

Where possible utilities were toned through electromagnetic induction. Where facilities could not be tones they were drawn per available record date.

Issues Encountered: ☐ No ☐ Yes, See attachment

Utility Number: C2,C3

Utility Owner: ATT

Utility Type: Telecommunication

Records Received: ☐ No ☑ Yes

Description of Records

PDF of GIS style records with no size or material information.

Summary of Findings

Where possible utilities were toned through electromagnetic induction. Where facilities could not be tones they were drawn per available record date. No size or material information was provided but the utility owner to be included in the SUE base map.

Issues Encountered: ☐ No ☐ Yes, See attachment

UTILITY SPECIFIC FINDINGS, PAGE 2

Utility Number: C4

Utility Owner: CenturyLink

Utility Type: Telecommunication

Records Received: ☐ No ☑ Yes

Description of Records

CenturyLink was purchased by Lumen and are included in the Lumen records. These facilities were idetified on Lumen records.

Summary of Findings

Where possible utilities were toned through electromagnetic induction. Where facilities could not be tones they were drawn per available record date. No size or material information was provided but the utility owner to be included in the SUE base map.

Issues Encountered: ☐ No ☐ Yes, See attachment

Utility Number: C5

Utility Owner: Lumen

Utility Type: Telecommunication

Records Received: ☐ No ☑ Yes

Description of Records

PDF of GIS style records with no size or material information.

Summary of Findings

Where possible utilities were toned through electromagnetic induction. Where facilities could not be tones they were drawn per available record date. No size or material information was provided but the utility owner to be included in the SUE base map.

Issues Encountered: ☑ No ☐ Yes, See attachment

UTILITY SPECIFIC FINDINGS, PAGE 3

Utility Number: C6

Utility Owner: MCI

Utility Type: Telecommunication

Records Received: ☐ No ☑ Yes

Description of Records

PDF of GIS style records with no size or material information.

Summary of Findings

Where possible utilities were toned through electromagnetic induction. Where facilities could not be tones they were drawn per available record date. No size or material information was provided but the utility owner to be included in the SUE base map.

Issues Encountered: ☑ No ☐ Yes, See attachment

Utility Number: C7

Utility Owner: Nexlink

Utility Type: Telecommunication

Records Received: ☑ No ☐ Yes

Description of Records

No record gathered for this utility owner.

Summary of Findings

Where possible utilities were toned through electromagnetic induction. Where facilities could not be tones they were drawn per available record date. No size or material information was provided but the utility owner to be included in the SUE base map.

Issues Encountered: ☑ No ☐ Yes, See attachment

UTILITY SPECIFIC FINDINGS, PAGE 4

Utility Number: C8

Utility Owner: Spectrum

Utility Type: Telecommunication

Records Received: ☐ No ☑ Yes

Description of Records

KMZ of GIS style records with no size or material information.

Summary of Findings

Where possible utilities were toned through electromagnetic induction. Where facilities could not be tones they were drawn per available record date. No size or material information was provided but the utility owner to be included in the SUE base map.

Issues Encountered: ☑ No ☐ Yes, See attachment

Utility Number: C9

Utility Owner: UPN

Utility Type: Telecommunication

Records Received: ☐ No ☑ Yes

Description of Records

PDF of GIS style records with no size or material information.

Summary of Findings

Where possible utilities were toned through electromagnetic induction. Where facilities could not be tones they were drawn per available record date. No size or material information was provided but the utility owner to be included in the SUE base map.

Issues Encountered: ☑ No ☐ Yes, See attachment

UTILITY SPECIFIC FINDINGS, PAGE 5

Utility Number: C10

Utility Owner: X0 Communication

Utility Type: Telecommunication

Records Received: ☑ No ☐ Yes

Description of Records

No record gathered for this utility owner.

Summary of Findings

Where possible utilities were toned through electromagnetic induction.

Issues Encountered: ☑ No ☐ Yes, See attachment

Utility Number: C11

Utility Owner: Zayo

Utility Type: Telecommunication

Records Received: ☐ No ☑ Yes

Description of Records

Image file of GIS style records with no size or material information.

Summary of Findings

Where possible utilities were toned through electromagnetic induction. Where facilities could not be tones they were drawn per available record date. No size or material information was provided but the utility owner to be included in the SUE base map.

Issues Encountered: ☑ No ☐ Yes, See attachment

UTILITY SPECIFIC FINDINGS, PAGE 6

Utility Number: G1

Utility Owner: Atmos

Utility Type: Gas

Records Received: ☐ No ☑ Yes

Description of Records

GIS style PDF records provided of both aerial and underground facilities.

Summary of Findings

Where possible utilities were toned through electromagnetic induction. Where facilities could not be tones they were drawn per available record date. No size or material information was provided but the utility owner to be included in the SUE base map.

Issues Encountered: ☑ No ☐ Yes, See attachment

Utility Number: E1

Utility Owner: Oncor

Utility Type: Electric

Records Received: No ✔ Yes

Description of Records

PDF file of GIS style records with no size or material information.

Summary of Findings

Where possible utilities were toned through electromagnetic induction. Where facilities could not be tones they were drawn per available record date. No size or material information was provided but the utility owner to be included in the SUE base map.

Issues Encountered: ☑ No ☐ Yes, See attachment

UTILITY SPECIFIC FINDINGS, PAGE 6

Utility Number: TS1, SD1

Utility Owner: City of Dallas

Utility Type: Traffic Signal

Records Received: ☑ No ☐ Yes

Description of Records

Records received for storm drain facilities but no record were provided for traffic signals.

Summary of Findings

Where possible utilities were toned through electromagnetic induction. Where facilities could not be tones they were drawn per available record date. Size or material information was was included in SUE base map where available.

Issues Encountered: ☐ No ☑ Yes, See attachment

Utility Number: W1, WW1

Utility Owner: Dallas Water Utilities

Utility Type: Water,Waste Water

Records Received: No ✔ Yes

Description of Records

Records received for water and waste water facilities.

Summary of Findings

Where possible utilities were toned through electromagnetic induction. Where facilities could not be tones they were drawn per available record date. Size or material information was was included in SUE base map where available.

Issues Encountered: ☑ No ☐ Yes, See attachment

RECOMMENDED ADDTIONAL FUTURE WORK:

None at this time.

ATTACHMENT LISTING

A Definitions and Data Limitations

B SUE Plan Sheets

C Project Survey Control

D Project Specific Data Limitations

E

Subsurface Utility Engineering (SUE) Quality Level Definitions

The Rios Group (TRG) performs SUE services in general accordance with the recommended practices and procedures described in ASCE publication ASCE/UESI/CI 38-22 "Standard Guideline for Investigating and Documenting Existing Utilities". The core aspect of this standard is affixing a professionally judged value (a Utility Quality Level) to buried and hidden Utility Segments and Utility Features that identify the reliability and nonquantifiable locational uncertainty of documented Utility infrastructure data. The four quality levels, as defined in the standard, are:

- **Utility Quality Level D (QLD)** – A value assigned to a Utility Segment or Utility Feature not visible at the ground surface whose estimated position is judged through Utility records, information from others, or from visual clues such as pavement cuts, obvious trenches, or existence of service.

  A QLD data attribute is assigned to a Utility Segment or Utility Feature after review and compilation of existing records, oral recollections, One-Call or "private-locate" markings, managed data repositories, context with other achieved Utility Quality Levels, and/or other evidence of existence. QLD data is more uncertain than QLC, QLB, and QLA. QLD data is less uncertain than utilities documented without any Utility Quality Level barring a Professional's statement of fact to the contrary.

- **Utility Quality Level C (QLC)** – A value assigned to a Utility Segment not visible at the ground surface whose estimated position is judged through correlating Utility records or similar evidence to Utility Features, visible aboveground and/or underground. The Utility Anchor Point on the Utility Features shall be tied to the Project Survey Datum with an accuracy of 0.2 ft (60 mm) horizontal.

  A QLC value judgement is assigned to a Utility Segment by using visible Utility Features to approximate the position of a Utility Segment between or in proximity to the visible Utility Features and in context with other achieved Utility Quality Levels. QLC only pertains to the underground Utility Segment(s), not the Utility Feature(s). QLC data is more certain than QLD and is more uncertain than QLB and QLA

- **Utility Quality Level B (QLB)** – A value assigned to a Utility Segment or Subsurface Utility Feature whose existence and horizontal position is based on Geophysical Methods combined with professional judgement and whose location is tied to the Project Survey Datum.

  A QLB value is assigned to a Utility Segment when the following conditions are met: (1) the Utility Segment was detected through the application of appropriate Geophysical Methods; (2) the geophysical signal was judged to be reliable. (3) the interpreted position was judged based on knowledge and use of geophysical science, Utility design and installation practices, available records, visual features, and influence of site conditions; and (4) the source Designation has been tied to the Project Survey Datum with an accuracy of 0.2 ft (60mm) horizontally. QLB is more uncertain than QLA and more certain than QLC or QLD.

- **Utility Quality Level A (QLA)** – A value assigned to that portion (x-, y-, and z-geometry) of a Utility Segment or subsurface Utility Feature that is directly exposed and measured and whose location and dimensions are tied to the Project Survey Datum. The Utility Segment or subsurface Utility Feature shall be tied to Project Survey Datum with an accuracy of 0.1 ft (30 mm) vertical and to 0.2 ft (60 mm) horizontal for measurements of the outside limits of the Utility Feature or Utility Segment that is exposed.

  Other measurable, observable, and judged Utility Attributes are also recorded. If obtained by means of a Test Hole observation, a verification effort is made, and professional judgement is used to assert that the exposed infrastructure is indeed the sought target. The assignment of QLA conveys the lowest level of relative (nonquantifiable) uncertainty of measurable and judged Attributes and locations. QLA is more certain than QLB, QLC, or QLD.

Acronyms and Special Definitions

3D three-dimensional
CAD Computer-Aided Design
EOI End of Information
GIS geographic information system
GPR ground penetrating radar
ROE Right of Entry
ROW Right of Way
SAF Surface Adjustment Factor

Anchor Point: A defined point on a Utility Feature or a Utility Segment. (ASCE 38-22)

Attribute: A defined characteristic of a Utility Feature, Utility Segment, or of a singular point on a Utility Feature or Utility Segment. (ASCE 38-22)

Deliverable: The sealed results from a Subsurface Utility Engineering investigation that typically includes a Utility Report, Utility Drawings, and other relevant Utility data for inclusion in digital or paper formats, and/or within databases and/or three-dimensional models. (ASCE 38-22)

Designating: The application and interpretation of shallow earth Geophysical Methods to infer (with or without surface markings) the existence and the approximate horizontal position and, when possible and part of the Scope of Work, Depth of a subsurface Utility Segment and/or Utility Feature. (ASCE 38-22)

Electronic Depth (ED): Depth obtained by electromagnetic receiver that has a varying level of accuracy based on many factors including soil conditions, connection type, overhead interference, etc. ED reports to the center of the induced magnetic field.

Encasement: A structure that encloses and protects utility facilities and surrounding infrastructure, environment, and the public. E.G. Concrete cap, casing pipe, tile, ducts, tunnel.

Geophysical Method: Application of an established shallow-earth Geophysical Method (such as seismic, acoustic, gravitational, magnetic, electrical, and electromagnetic) to observe the physical response of the subsurface Utility infrastructure and cultural features, as well as anomalies within those responses. (ASCE 38-22)

Locating: The process of exposing and verifying a Utility for purposes of determining its function, type, position, outside dimensions, and other observable Attributes at its exposed points. (ASCE 38-22)

Low Wire Sag: Lowest elevation on the lowest wire at a crossing overhead utility.

Overhead attachment point: Elevation where overhead line is attached to above ground structure such as a pole.

Subsurface Utility Engineering (SUE): The specialty practice of civil engineering's Utility Engineering branch that includes the investigation, analysis, judgment, and documentation of existing Utility networks. (ASCE 38-22)

Test Hole: A small, limited excavation, made to determine, measure, and record data about a buried Utility Segment or Utility Feature. (ASCE 38-22)

Utility: A privately, publicly, or cooperatively owned pipeline, cable(s), and/or conduits, facility, or system for producing, transmitting, or distributing communications, traffic control cables and structures, cable television, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, stormwater, or any other similar commodity, including any fire or police signal system or street lighting system. The term Utility shall also mean the Utility owner/operator inclusive of any wholly owned or controlled subsidiary. (ASCE 38-22)

Utility Feature: A physical component of a Utility. Examples include valves, hydrants, reducers, switches, thrust blocks, vaults, and transformers. (ASCE 38-22)

Utility Investigation: Any or all of a variety of office and field activities undertaken to understand and document the existence of, location, and Attributes of existing Utility facilities within the project limits. (ASCE 38-22)

Utility Quality Level: The value, assigned by the Professional, of a Utility Segment or subsurface Utility Feature that identifies the relative (nonquantifiable) uncertainty of a Utility Segment's or subsurface Utility Feature's existence and actual location to that of its documented location. (ASCE 38-22)

Utility Report: A report or sufficient notes contained within a Utility Drawing, sealed by a Professional, that (1) contains information about the Utility Investigation that might otherwise not be conveyed, (2) assists the end user in understanding the subsurface Utility landscape and risks, (3) provides recommendations to address data deficiencies, and (4) complements the Utility Drawing Deliverables. (ASCE 38-22)

Utility Segment: A continuous portion of a Utility for which the Utility Quality Level is constant, and the Attributes, other than Depth, are substantially identical. (ASCE 38-22)

Vault: A concrete box underground that is used for utility purpose.

General Data Limitations

SUE services are performed in accordance with ASCE/UESI/CI 38-22 guideline, generally accepted engineering principles and practices at the time of service. However, a possibility exists that abandoned, forgotten, non-detectable, undocumented, or newly installed utilities may not get mapped using standard records research and surface geophysical survey procedures. While the ASCE 38-22 standard guidelines mitigate these issues, utilities possessing characteristics mentioned below can be missed while following standard Utility Designating and Locating procedures:

1. Utilities lacking apparent available records and without apparent surface features.
2. Utilities with record information which is illegible, misleading, or incomplete.
3. Utilities which are inaccurately reported or inaccurately represented by the utility owner as being a significant distance from the true position.
4. Abandoned utilities without apparent surface features.
5. Utilities buried excessively deep, beyond detection limits of standard utility designating equipment.
6. Non-conductive utilities buried in clay soil without apparent surface features.
7. Non-conductive lines buried away from the tracer wire (e.g., HDPE Gas)
8. Facilities installed after the SUE effort has been completed.

A common problem occurs when the project involves facility owners and operators with insufficient records and non-conductive buried facilities (a situation often encountered with public works installations), infrastructure for oil and natural gas wells installed prior to 1960, and irrigation systems that utilize non-conductive water mains. Facilities mapped under these circumstances are often depicted as QLD during the utility designating field effort to keep operations and budgets at a practical level. As the design project progresses, some depicted facilities may have to be upgraded to a higher quality level through more advanced geophysical prospecting and utility locating methods to properly identify and assess utility conflicts for design and construction.

Designers, utility coordinators, and contractors must realize the CI/ASCE 38-22 utility mapping effort is an iterative acquisition and interpretation process. Unless subsequent endeavors are made to upgrade designated quality levels, facilities depicted at lower quality levels, such as QLD, may be completely in error. In addition, depicted facilities and corresponding data are pertinent at the time in which field investigation operations are completed and are subject to change.

Final utility plans and data are for design purposes only and reflect utility conditions at the time surveyed. The SUE consultant cannot be held responsible for utility scenario changing after completion of field operations.

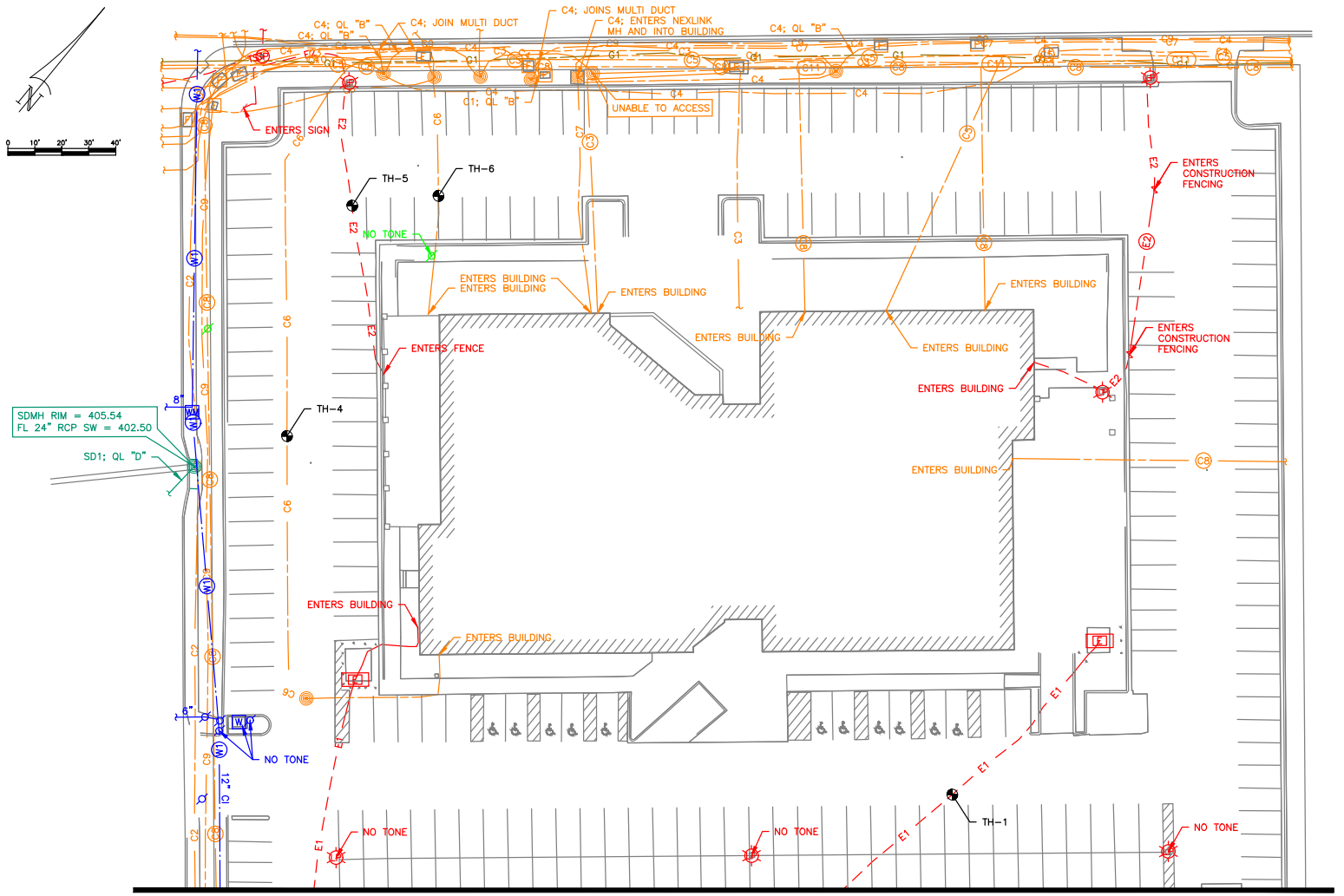
Users of this data set must understand and adhere to the limitations associated with the designated quality levels assigned to the depicted facilities. QLC and QLD depictions are based on interpolations, extrapolations, and available record data; this data can be erroneous and should not be used alone for design development and bidding purposes. Additional utility designating and locating field efforts to upgrade data to QLB and QLA are strongly recommended for areas where accurate final design and construction planning and bidding is required.

It is strongly recommended that users of this data, especially project engineers-of-record, become familiar with the ASCE 38-22 standard guidelines and the corresponding data limitations inferred by the designated quality levels prior to employing the data set for design purposes. In addition, a utility report should always accompany the existing utility CADD file to ensure proper interpretation and usage of the data set. Any questions regarding the SUE data or utility report should be directed to the SUE professional engineer-of-record.

SUE Plan Sheets

ATTACHMENT B

See following pages:



SEE SHEET 2

LEGEND OF U.G. UTILITY TYPES

COMMUNICATIONS — QL"B"
- ADELPHIA (FO/DUCT) — C1
- AT&T (TELE) — C2
- AT&T (FO/DUCT) — C3
- CENTURY LINK (FO/DUCT) — C4
- LUMEN (FO/DUCT) — C5
- MCI (FO/DUCT) — C6
- NEXLINK (FO/DUCT) — C7
- SPECTRUM (FO/DUCT) — C8
- UPN (FO/DUCT) — C9
- XO (FO/DUCT) — C10
- ZAYO (FO/DUCT) — C11

QL"C"/"D"
- ADELPHIA (FO/DUCT) — C1
- AT&T (TELE) — C2
- AT&T (FO/DUCT) — C3
- CENTURY LINK (FO/DUCT) — C4
- LUMEN (FO/DUCT) — C5
- MCI (FO/DUCT) — C6
- NEXLINK (FO/DUCT) — C7
- SPECTRUM (FO/DUCT) — C8
- UPN (FO/DUCT) — C9
- XO (FO/DUCT) — C10
- ZAYO (FO/DUCT) — C11

GAS / PETROLEUM — QL"B"
- ATMOS — G1

QL"C"/"D"
- ATMOS — G1

ELECTRIC / POWER — QL"B"
- ONCOR — E1
- PRIVATE — E2

QL"C"/"D"
- ONCOR — E1
- PRIVATE — E2

TRAFFIC SIGNAL — QL"B"
- CITY OF DALLAS — TS1

QL"C"/"D"
- CITY OF DALLAS — TS1

POTABLE WATER — QL"B"
- DWU — W1

QL"C"/"D"
- DWU — W1

SANITARY SEWER — QL"B"
- DWU — WW1

QL"C"/"D"
- DWU — WW1

STORM DRAIN — QL"B"
- CITY OF DALLAS — SD1

QL"C"/"D"
- CITY OF DALLAS — SD1

ABANDONED UTILITY
UNKNOWN UTILITY

LEGEND OF UTILITY SYMBOLS

END CAP
QUALITY LEVEL CHANGE
TEST HOLE
UTILITY CONTINUATION

CATV CABINET
CATV HANDHOLE
CATV PEDESTAL

FIBER CABINET
FIBER HANDHOLE
TELEPHONE CABINET
TELEPHONE HANDHOLE (VAULT)
TELEPHONE MANHOLE
TELEPHONE PEDESTAL
TELEPHONE POLE
TELEPHONE POLE W/RISER

ELECTRIC GROUND LIGHT
ELECTRIC HANDHOLE
ELECTRIC JUNCTION BOX (CABINET)
ELECTRIC MANHOLE
ELECTRIC METER
ELECTRIC POLE (POWER)
ELECTRIC POLE W/RISER
LIGHT POLE
TRANSMISSION POLE

SIGNAL HANDHOLE/BOX
SIGNAL POLE

GAS MANHOLE
GAS METER
GAS TEST STATION
GAS VALVE
GAS VENT PIPE (GAS RISER)

STORM SEWER INLET
STORM SEWER MANHOLE
STORM SEWER OUTFALL

WASTE WATER CLEANOUT
WASTE WATER MANHOLE

FIRE HYDRANT
WATER MANHOLE
WATER METER
WATER VALVE
WATER VALVE

REV	DATE	BY	DESCRIPTION

Subsurface Utility Engineering (SUE) Certification

The engineer's seal hereon is to certify that the utilities shown have been investigated in accordance with standard SUE industry practices. Where indicated utility sizes and materials taken from best available records. All other information hereon has been provided by others and is not a part of this certification.

STATE OF TEXAS
ERIC WEBB
121522
LICENSED
PROFESSIONAL ENGINEER

The Rios Group
TBPE Firm #F-14595

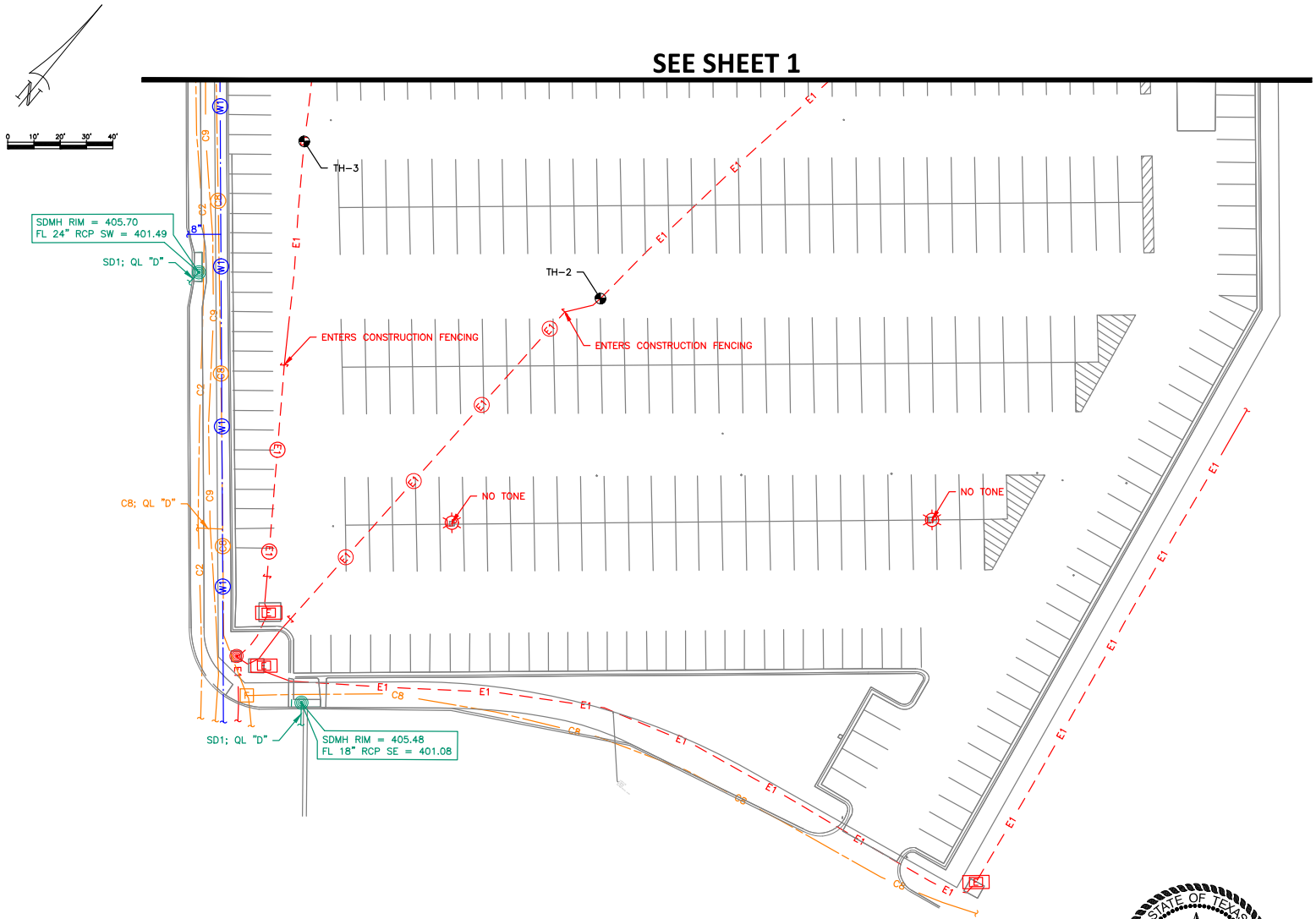
07-26-2024

THE RIOS GROUP
SUBSURFACE UTILITY ENGINEERING
UTILITY COORDINATION

1890 Crown Street
Suite 1310
Dallas, TX 75234
214.333.0922

DALLAS COUNTY PROBATION CENTER
S.U.E. PLAN SHEET

DESIGNED BY: EIZ	CHECKED BY: EJW	DATE: 7/26/2024
TRG # JPAC_2301.00		1 OF 2



LEGEND OF U.G. UTILITY TYPES

COMMUNICATIONS — QL"B"
- ADELPHIA (FO/DUCT) — C1
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- ATMOS — G1

QL"C"/"D"
- ATMOS — G1

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- ONCOR — E1
- PRIVATE — E2

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- CITY OF DALLAS — TS1

QL"C"/"D"
- CITY OF DALLAS — TS1

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- DWU — W1

QL"C"/"D"
- DWU — W1

SANITARY SEWER — QL"B"
- DWU — WW1

QL"C"/"D"
- DWU — WW1

STORM DRAIN — QL"B"
- CITY OF DALLAS — SD1

QL"C"/"D"
- CITY OF DALLAS — SD1

- ABANDONED UTILITY
- UNKNOWN UTILITY

LEGEND OF UTILITY SYMBOLS

- END CAP
- QUALITY LEVEL CHANGE
- TEST HOLE
- UTILITY CONTINUATION
- CATV CABINET — CC
- CATV HANDHOLE — C
- CATV PEDESTAL — C
- FIBER CABINET — FC
- FIBER HANDHOLE — F
- TELEPHONE CABINET — TC
- TELEPHONE HANDHOLE (VAULT) — T
- TELEPHONE MANHOLE — TM
- TELEPHONE PEDESTAL — TP
- TELEPHONE POLE — TP
- TELEPHONE POLE W/RISER
- ELECTRIC GROUND LIGHT
- ELECTRIC HANDHOLE — E
- ELECTRIC JUNCTION BOX (CABINET) — EC
- ELECTRIC MANHOLE — EM
- ELECTRIC METER — EM
- ELECTRIC POLE (POWER) — EP
- ELECTRIC POLE W/RISER — EP
- LIGHT POLE
- TRANSMISSION POLE
- SIGNAL HANDHOLE/BOX — SB
- SIGNAL POLE — SP
- GAS MANHOLE
- GAS METER — GM
- GAS TEST STATION — TS
- GAS VALVE
- GAS VENT PIPE (GAS RISER)
- STORM SEWER INLET — INL
- STORM SEWER MANHOLE
- STORM SEWER OUTFALL
- WASTE WATER CLEANOUT
- WASTE WATER MANHOLE
- FIRE HYDRANT
- WATER MANHOLE
- WATER METER — WM
- WATER VALVE — W
- WATER VAULT

REV	DATE	BY	DESCRIPTION

Subsurface Utility Engineering (SUE) Certification

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ERIC WEBB
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LICENSED
PROFESSIONAL ENGINEER

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TBPE Firm #F-14595

07-26-2024

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UTILITY COORDINATION
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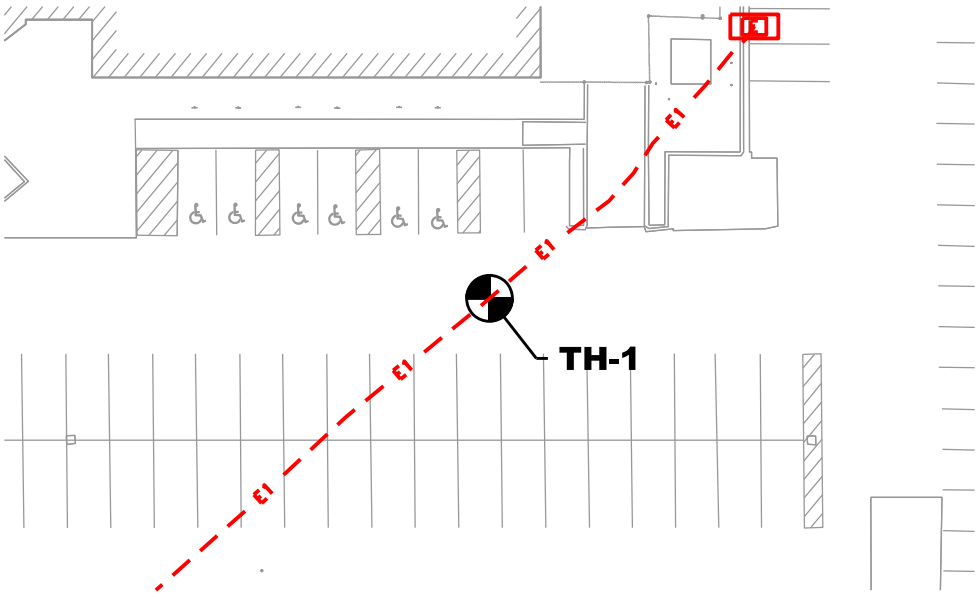
DALLAS COUNTY PROBATION CENTER

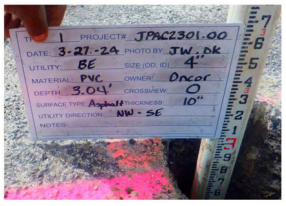
S.U.E. PLAN SHEET

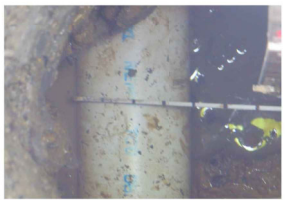
DESIGNED BY: EIZ	CHECKED BY: EJW	DATE: 7/26/2024
TRG # JPAC_2301.00		2 OF 2

SURVEY INFORMATION

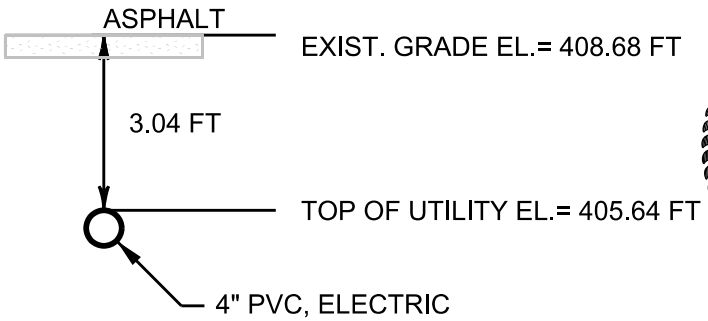
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CP	4	6985365.30	2470247.07	405.77	CP SET "X IN CONC.
CP	5	6985645.74	2470582.97	404.44	CP SET "X IN CONC.







PLAN VIEW
Not to Scale



The Rios Group
TBPE Firm #F-14595



07-26-2024

SECTION VIEW
NOT TO SCALE

PROJECT NAME: DALLAS COUNTY ADULT PROBATION
CLIENT: JOHNSON & PACE
TRG PROJ. No.: JPAC2301.00
LOCATION: PARKING LOT OF DALLAS COUNTY ADULT PROBATION CENTER
CITY / STATE: DALLAS / TX
TRG PROJ. MGR.: ERIC WEBB
TRG FIELD MGR.: J. TEMPLE
SURVEYED BY: GEOTERRA

TEST HOLE DATA FORM

UTILITY OWNER: ONCOR
EXCAVATED: 2024-03-27 ISSUED: 06-05-2024

THE RIOS GROUP
SUBSURFACE UTILITY ENGINEERING
UTILITY COORDINATION
PUBLIC RELATIONS

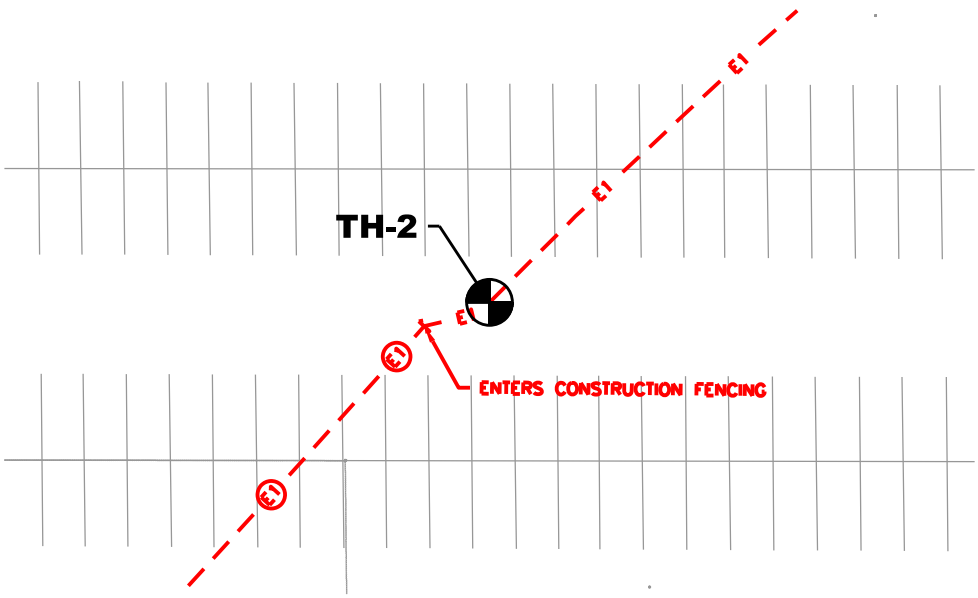
7400 Sand St.
Fort Worth, Texas 76118
817.345.7500

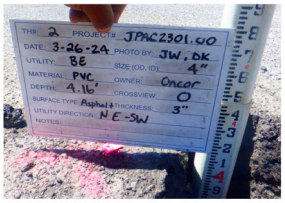
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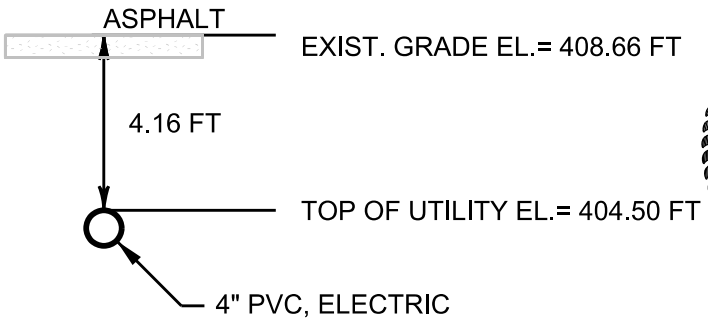
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2	2004	6985152.16	2470601.74	408.66	NAIL/DISK
CP	4	6985365.30	2470247.07	405.77	CP SET "X IN CONC.
CP	5	6985645.74	2470582.97	404.44	CP SET "X IN CONC.







PLAN VIEW
Not to Scale



The Rios Group
TBPE Firm #F-14595



07-26-2024

SECTION VIEW
NOT TO SCALE

PROJECT NAME: DALLAS COUNTY ADULT PROBATION
CLIENT: JOHNSON & PACE
TRG PROJ. No.: JPAC2301.00
LOCATION: PARKING LOT OF DALLAS COUNTY ADULT PROBATION CENTER
CITY / STATE: DALLAS / TX
TRG PROJ. MGR.: ERIC WEBB
TRG FIELD MGR.: J. TEMPLE
SURVEYED BY: GEOTERRA

TEST HOLE DATA FORM

UTILITY OWNER: ONCOR
EXCAVATED: 2024-03-26 ISSUED: 06-05-2024

THE RIOS GROUP
SUBSURFACE UTILITY ENGINEERING
UTILITY COORDINATION
PUBLIC RELATIONS

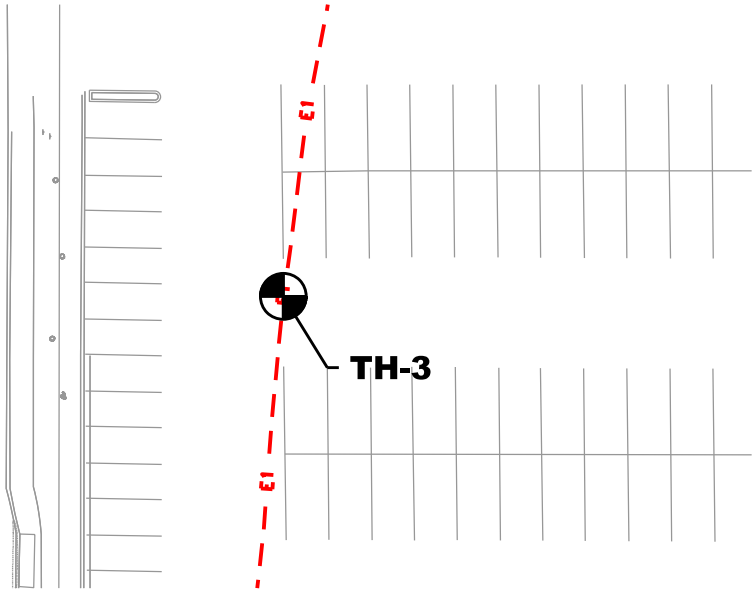
7400 Sand St.
Fort Worth, Texas 76118
817.345.7500

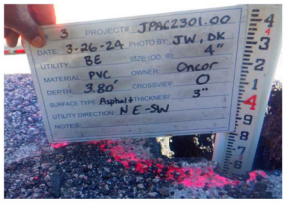
TEST HOLE No:

02

SURVEY INFORMATION

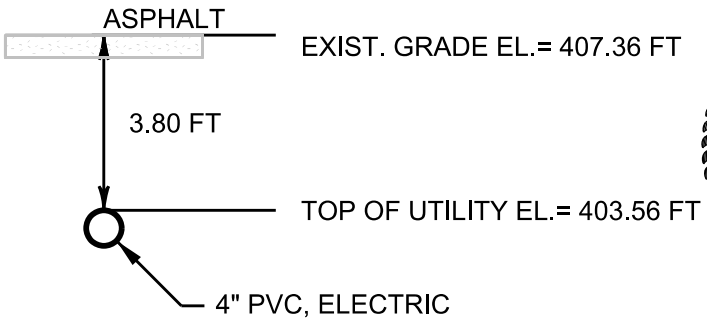
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3	2005	6985127.07	2470476.57	407.36	NAIL/DISK
CP	4	6985365.30	2470247.07	405.77	CP SET "X IN CONC.
CP	5	6985645.74	2470582.97	404.44	CP SET "X IN CONC.







PLAN VIEW
Not to Scale



The Rios Group
TBPE Firm #F-14595



07-26-2024

SECTION VIEW
NOT TO SCALE

PROJECT NAME: DALLAS COUNTY ADULT PROBATION
CLIENT: JOHNSON & PACE
TRG PROJ. No.: JPAC2301.00
LOCATION: PARKING LOT OF DALLAS COUNTY ADULT PROBATION CENTER
CITY / STATE: DALLAS / TX
TRG PROJ. MGR.: ERIC WEBB
TRG FIELD MGR.: J. TEMPLE
SURVEYED BY: GEOTERRA

TEST HOLE DATA FORM

UTILITY OWNER: ONCOR
EXCAVATED: 2024-03-26 ISSUED: 06-05-2024

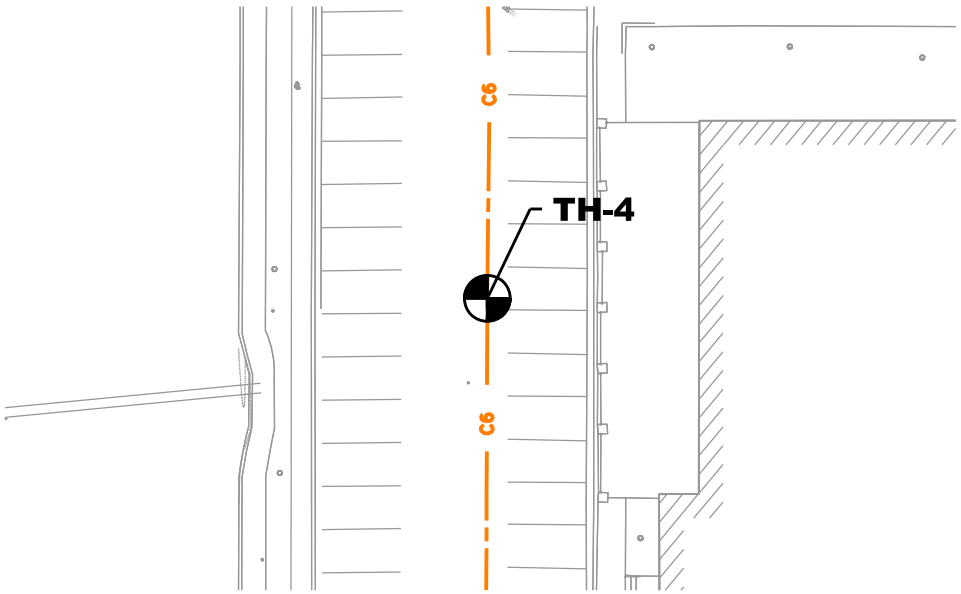
THE RIOS GROUP
SUBSURFACE UTILITY ENGINEERING
UTILITY COORDINATION
PUBLIC RELATIONS
7400 Sand St.
Fort Worth, Texas 76118
817.345.7500

TEST HOLE No:

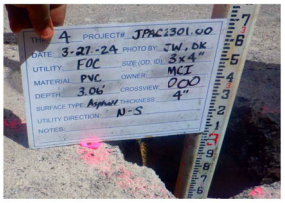
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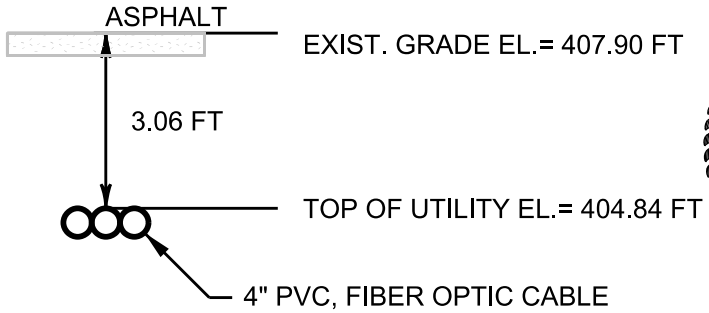
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4	2006	6985270.19	2470350.17	407.90	NAIL/DISK
CP	4	6985365.30	2470247.07	405.77	CP SET "X IN CONC.
CP	5	6985645.74	2470582.97	404.44	CP SET "X IN CONC.



PLAN VIEW
Not to Scale







The Rios Group
TBPE Firm #F-14595

STATE OF TEXAS
ERIC WEBB
121522
LICENSED
PROFESSIONAL ENGINEER

07-26-2024

SECTION VIEW
NOT TO SCALE

PROJECT NAME: DALLAS COUNTY ADULT PROBATION
CLIENT: JOHNSON & PACE
TRG PROJ. No.: JPAC2301.00
LOCATION: PARKING LOT OF DALLAS COUNTY ADULT PROBATION CENTER
CITY / STATE: DALLAS / TX
TRG PROJ. MGR.: ERIC WEBB
TRG FIELD MGR.: J. TEMPLE
SURVEYED BY: GEOTERRA

TEST HOLE DATA FORM

UTILITY OWNER: MCI
EXCAVATED: 2024-03-27 ISSUED: 06-05-2024

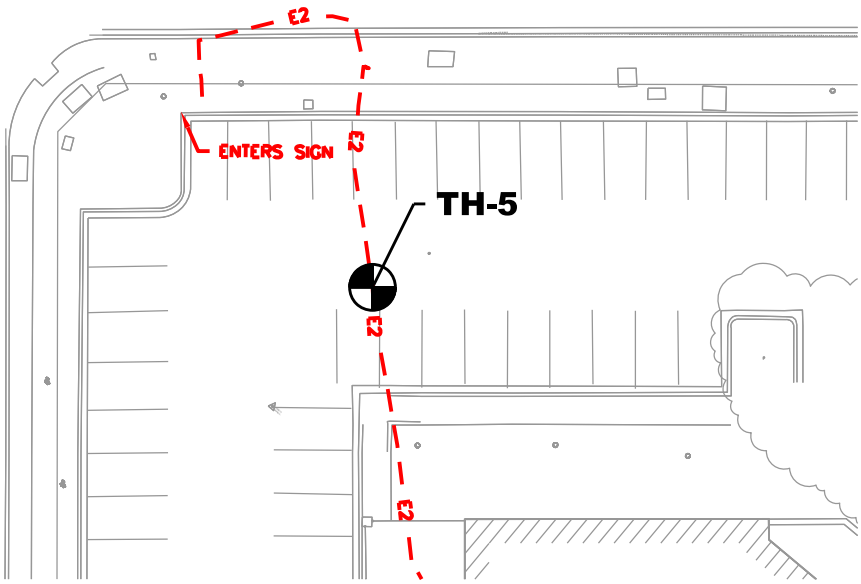
THE RIOS GROUP
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UTILITY COORDINATION
PUBLIC RELATIONS

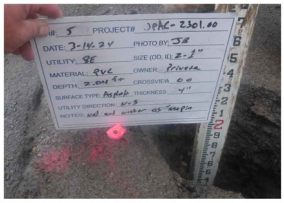
7400 Sand St.
Fort Worth, Texas 76118
817.345.7500

TEST HOLE No:
04

SURVEY INFORMATION

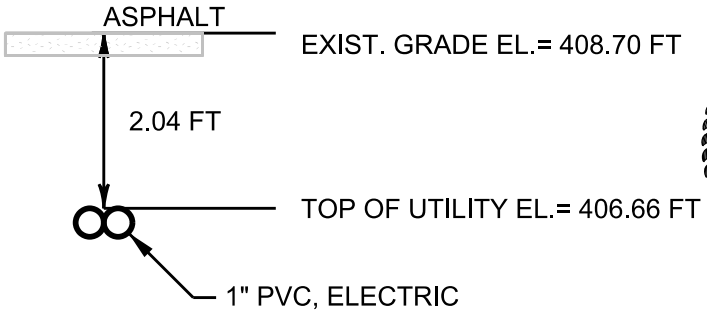
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5	2007	6985351.71	2470314.76	408.70	NAIL/DISK
CP	4	6985365.30	2470247.07	405.77	CP SET "X IN CONC.
CP	5	6985645.74	2470582.97	404.44	CP SET "X IN CONC.







PLAN VIEW
Not to Scale



The Rios Group
TBPE Firm #F-14595



07-26-2024

SECTION VIEW
NOT TO SCALE

PROJECT NAME: DALLAS COUNTY ADULT PROBATION
CLIENT: JOHNSON & PACE
TRG PROJ. No.: JPAC2301.00
LOCATION: PARKING LOT OF DALLAS COUNTY ADULT PROBATION CENTER
CITY / STATE: DALLAS / TX
TRG PROJ. MGR.: ERIC WEBB
TRG FIELD MGR.: J. TEMPLE
SURVEYED BY: GEOTERRA

TEST HOLE DATA FORM

UTILITY OWNER: PRIVATE
EXCAVATED: 2024-03-14 ISSUED: 06-05-2024

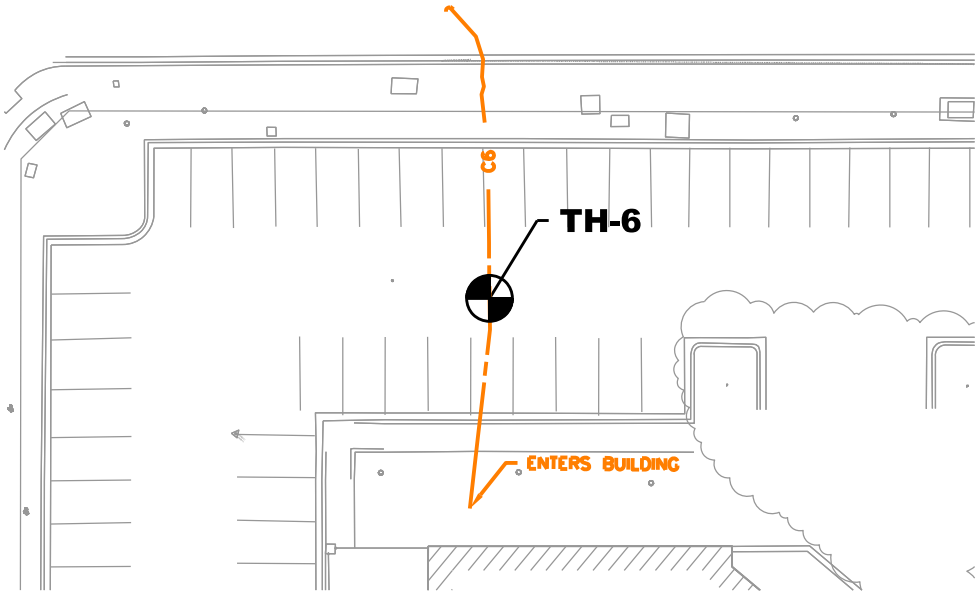
THE RIOS GROUP
SUBSURFACE UTILITY ENGINEERING
UTILITY COORDINATION
PUBLIC RELATIONS
7400 Sand St.
Fort Worth, Texas 76118
817.345.7500

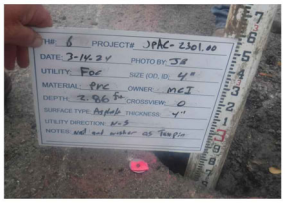
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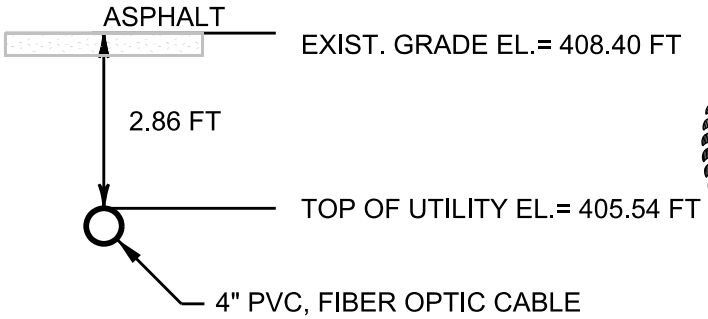
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6	2008	6985374.80	2470337.23	408.40	NAIL/DISK
CP	4	6985365.30	2470247.07	405.77	CP SET "X IN CONC.
CP	5	6985645.74	2470582.97	404.44	CP SET "X IN CONC.







PLAN VIEW
Not to Scale



The Rios Group
TBPE Firm #F-14595



07-26-2024

SECTION VIEW
NOT TO SCALE

PROJECT NAME: DALLAS COUNTY ADULT PROBATION
CLIENT: JOHNSON & PACE
TRG PROJ. No.: JPAC2301.00
LOCATION: PARKING LOT OF DALLAS COUNTY ADULT PROBATION CENTER
CITY / STATE: DALLAS / TX
TRG PROJ. MGR.: ERIC WEBB
TRG FIELD MGR.: J. TEMPLE
SURVEYED BY: GEOTERRA

TEST HOLE DATA FORM

UTILITY OWNER: MCI
EXCAVATED: 2024-03-14 ISSUED: 06-05-2024

THE RIOS GROUP
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UTILITY COORDINATION
PUBLIC RELATIONS
7400 Sand St.
Fort Worth, Texas 76118
817.345.7500

TEST HOLE No:

06

Project Survey Control

ATTACHMENT C

See following page:

NOTES

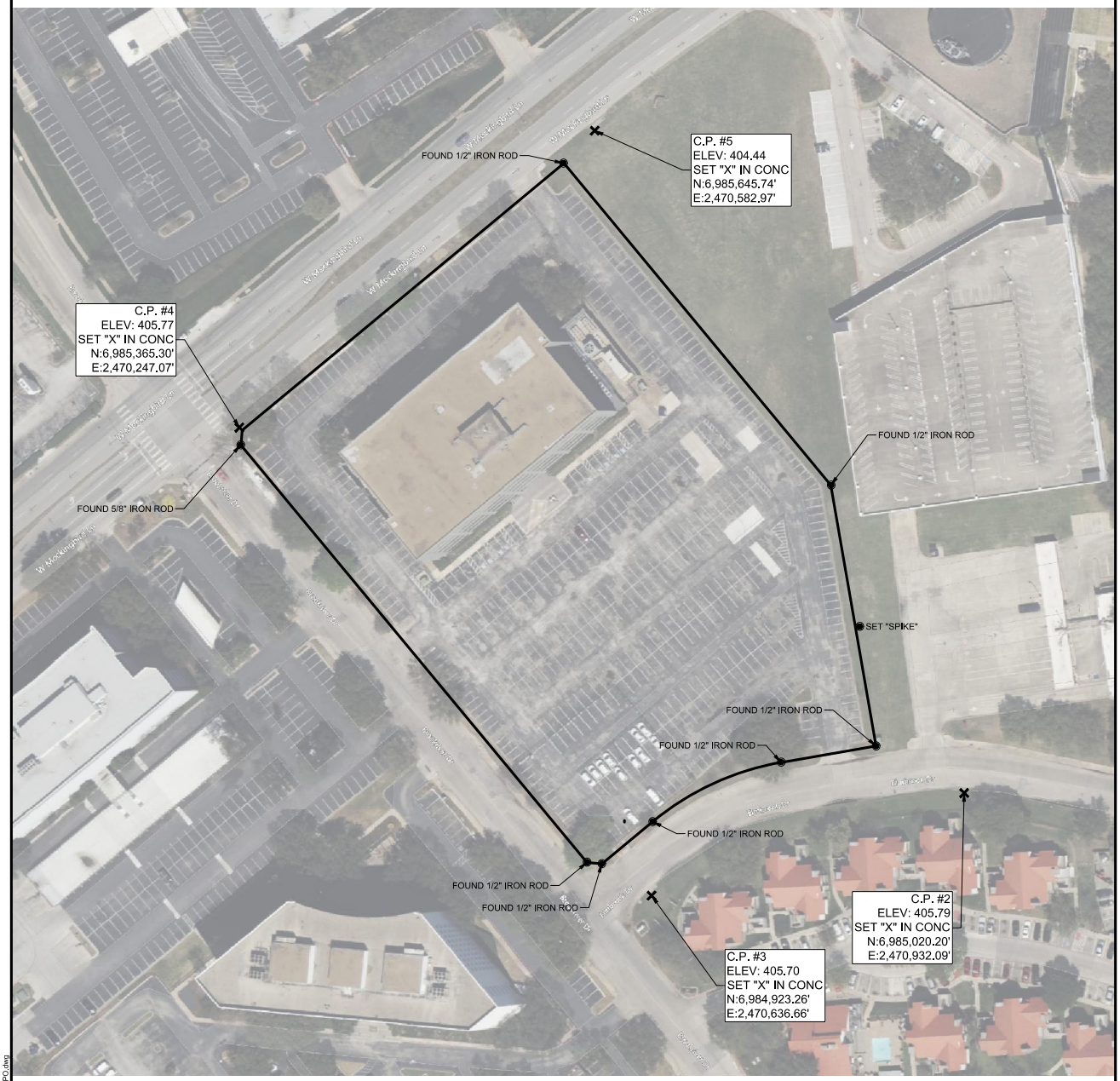
1. COORDINATES ARE BASED UPON THE TEXAS COORDINATE SYSTEM OF 1983 (NAD83), NORTH CENTRAL ZONE.
2. ELEVATIONS BASED UPON NAVD 88.
3. THIS IS AN EXHIBIT PLAT ONLY, AND SHOULD NOT BE CONSIDERED A BOUNDARY SURVEY.

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)

1 inch = 100 ft.



CONTROL EXHIBIT PLAT OF

1300 W. MOCKINGBIRD LANE,
DALLAS, TEXAS
ADULT PROBATION LOT

JOHNSON & PACE INCORPORATED
1201 NW LOOP 281, SUITE 100, LONGVIEW, TEXAS 75604
(903)753-0663 FAX (903)753-8803
WWW.JOHNSONPACE.COM
TBPELS 10025400
TBPE F-4691

DEC. 20, 2023	BOOK XXX, PG XXX	DRAWN BY: MOL	JOB #5281-002

Filename: F:\Land Development\5281 Dallas County\5281-002 Adult Probation Lot\CAD\SURVEY\DRAWINGS\5281-002 DALLAS TOPO.dwg

SITE DEVELOPMENT PLANS FOR

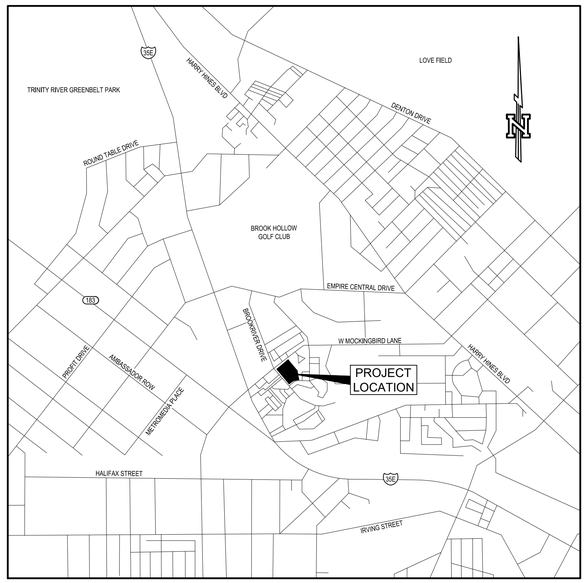
DALLAS COUNTY ADULT PROBATION CENTER PARKING LOT RECONSTRUCTION

1300 W. MOCKINGBIRD LANE
DALLAS, TEXAS

JOHNSON & PACE INCORPORATED
ENGINEERING • ARCHITECTURE • SURVEYING
1201 NW LOOP 281, SUITE 100,
LONGVIEW, TEXAS 75604
(903)753-0063 FAX (903)753-8803
website: www.johnsonpace.com
TBPE F-4691

STATE OF TEXAS
JOE W. HART, III
90982
LICENSED
PROFESSIONAL ENGINEER

JOE W. HART, III, P.E. — 1/23/2026 DATE



VICINITY MAP
N.T.S.

TABLE OF CONTENTS

C1.0	COVER SHEET
C2.0	TOPOGRAPHIC AND BOUNDARY SURVEY
C2.1	SUE SURVEY
C2.2	SUE SURVEY
C3.0	EROSION & SEDIMENTATION CONTROL PLAN
C3.1	EROSION & SEDIMENTATION CONTROL DETAILS
C4.0	DEMOLITION PLAN
C5.0	SITE PLAN
C6.0	GRADING PLAN
C6.1	ENLARGED GRADING PLAN NORTH
C6.2	ENLARGED GRADING PLAN SOUTH
C7.0	DRAINAGE AREA PLAN
C8.0	DETAILS

APPROVED BY:
DALLAS COUNTY

COUNTY JUDGE:
CLAY JENKINS

COUNCIL MEMBERS:
DISTRICT 1 Dr. THERESA DANIEL
DISTRICT 2 ANDY SOMMERMAN
DISTRICT 3 JOHN WILEY PRICE
DISTRICT 4 Dr. ELBA GARCIA

PROJECT MANAGER:
BENJAMIN HAMMOND

ISSUED FOR 100% CD

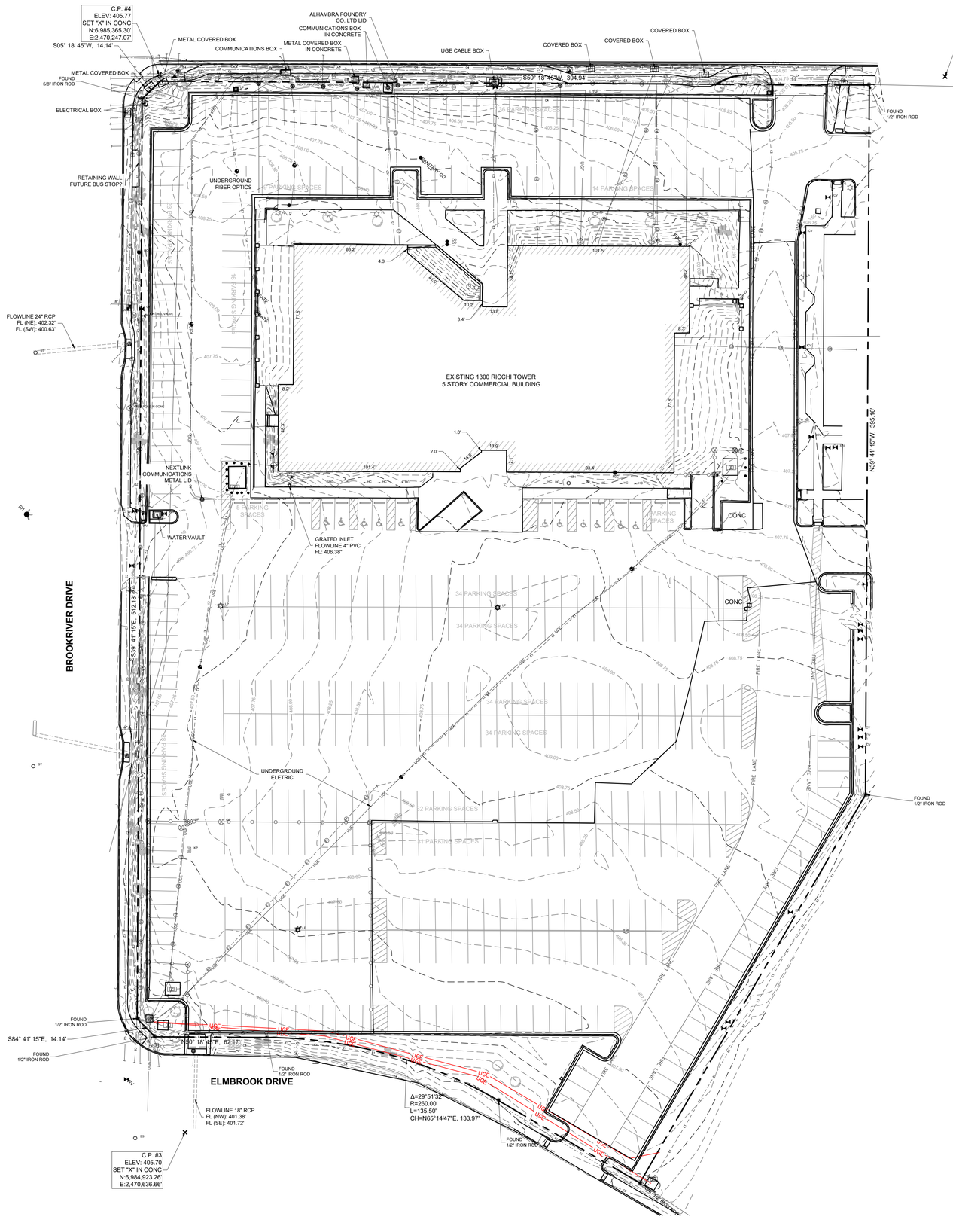
DALLAS COUNTY ADULT PROBATION
CENTER PARKING LOT RECONSTRUCTION
JPI PROJECT NO. 5281-002
ISSUED FOR 100% CD

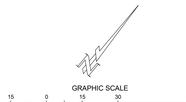
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LEGEND

- LIGHT POLE
- FLOOD LIGHT
- ELECTRIC TRANSFORMER PAD
- UTILITY JUNCTION BOX
- ELECTRIC PEDESTAL
- ELECTRIC OUTLET
- WATER METER
- WATER VALVE
- IRRIGATION CONTROL VALVE
- TELEPHONE PEDESTAL
- GATE POST
- FENCE POST
- SANITARY SEWER MANHOLE
- CLEANOUT
- STORM SEWER MANHOLE
- FLAG POLE
- STOP SIGN
- PRIVATE PARKING
- HANDICAP SIGN
- PIPE BOLLARD (USO)
- KEY PAD
- FIRE DEPARTMENT CONNECTION
- USO UNLESS STATED OTHERWISE
- UGE UNDER GROUND ELECTRIC
- UGF UNDER GROUND FIBER OPTIC
- CONC CONCRETE
- METAL FENCE

TREE LEGEND

- CRAPE MYRTLE TREES (12)
- MISC TREES (27)

LEGEND OF U.G. UTILITY TYPES

	QL"B"	QL"C"/"D"
COMMUNICATIONS		
ADELPHIA (FO/DUCT)	C1	C1
AT&T (TELE)	C2	C2
AT&T (FO/DUCT)	C3	C3
CENTURY LINK (FO/DUCT)	C4	C4
LUMEN (FO/DUCT)	C5	C5
MCI (FO/DUCT)	C6	C6
NEXLINK (FO/DUCT)	C7	C7
SPECTRUM (FO/DUCT)	C8	C8
UPN (FO/DUCT)	C9	C9
XO (FO/DUCT)	C10	C10
ZAYO (FO/DUCT)	C11	C11
GAS / PETROLEUM		
ATMOS	G1	G1
ATMOS	G	G
ELECTRIC / POWER		
ONCOR	E1	E1
PRIVATE	E2	E2
ONCOR	E	E
PRIVATE	E	E
TRAFFIC SIGNAL		
CITY OF DALLAS	TS1	TS1
CITY OF DALLAS	TS2	TS2
POTABLE WATER		
DWU	W1	W1
DWU	W	W
SANITARY SEWER		
DWU	WW1	WW1
DWU	WW	WW
STORM DRAIN		
CITY OF DALLAS	SD1	SD1
CITY OF DALLAS	SD2	SD2
ABANDONED UTILITY		
UNKNOWN UTILITY		

LEGEND OF UTILITY SYMBOLS

- END CAP
- QUALITY LEVEL CHANGE
- TEST HOLE
- UTILITY CONTINUATION
- CATV CABINET
- CATV HANDHOLE
- CATV PEDESTAL
- FIBER CABINET
- FIBER HANDHOLE
- TELEPHONE CABINET
- TELEPHONE HANDHOLE (VAULT)
- TELEPHONE MANHOLE
- TELEPHONE PEDESTAL
- TELEPHONE POLE
- TELEPHONE POLE W/RISER
- ELECTRIC GROUND LIGHT
- ELECTRIC HANDHOLE
- ELECTRIC JUNCTION BOX (CABINET)
- ELECTRIC MANHOLE
- ELECTRIC METER
- ELECTRIC POLE (POWER)
- ELECTRIC POLE W/RISER
- LIGHT POLE
- TRANSMISSION POLE
- SIGNAL HANDHOLE/BOX
- SIGNAL POLE
- GAS MANHOLE
- GAS METER
- GAS TEST STATION
- GAS VALVE
- GAS VENT PIPE (GAS RISER)
- STORM SEWER INLET
- STORM SEWER MANHOLE
- STORM SEWER OUTFALL
- WASTE WATER CLEANOUT
- WASTE WATER MANHOLE
- FIRE HYDRANT
- WATER MANHOLE
- WATER METER
- WATER VALVE
- WATER VAULT

THE RIOS GROUP

SUBSURFACE UTILITY ENGINEERING
UTILITY COORDINATION

1890 Crown St.
Suite 1310
Dallas, TX 75234
214.333.0922

NOTES

1. BEARINGS ARE BASED UPON THE TEXAS COORDINATE SYSTEM OF 1983 (NAD83), NORTH CENTRAL ZONE.
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LONGVIEW, TEXAS 75604
(903) 753-7424 (903) 753-7483
website: www.johnsonpace.com
TBPE F-4951

STATE OF TEXAS
JOE W. HART, III
80082
LICENSED
PROFESSIONAL
SURVEYOR
12/23/2026

DALLAS COUNTY ADULT PROBATION CENTER PARKING LOT RECONSTRUCTION DALLAS, TEXAS

NO.	DESCRIPTION	BY	DATE
	REVISIONS		

TOPOGRAPHIC AND BOUNDARY SURVEY

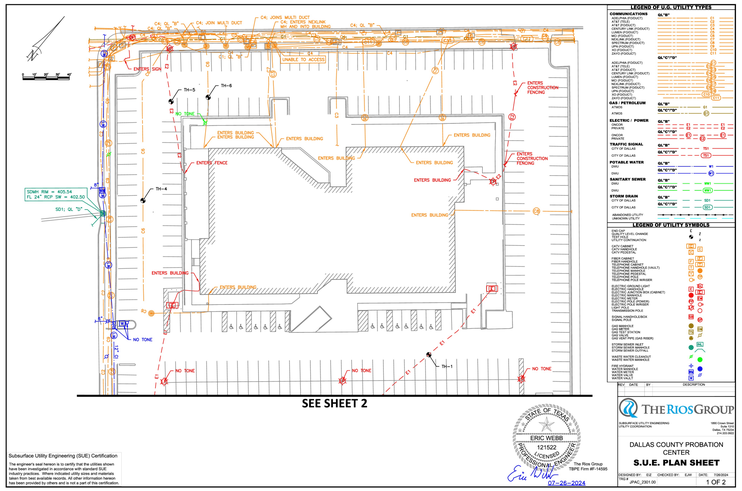
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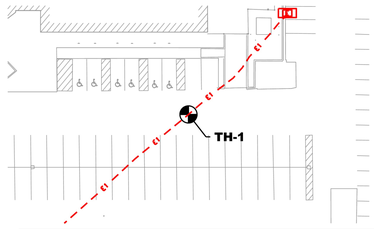
JOB NO.	5281-002	ISSUE DATE	1/23/2026
DRAWN BY	MWA	CHECKED BY	JWH
SHEET NO.	C2.0	APPROVED BY	JWH
		SCALE	1" = 30'
		REVISION NO.	

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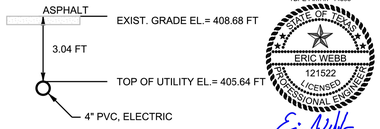


SURVEY INFORMATION

TEST HOLE	POINT NUMBER	NORTHING (Y) SEE NOTE 2	EASTING (X) SEE NOTE 2	EXIST. GROUND ELEV. (Z)	DESCRIPTION
1	2003	6985323.52	2470625.54	408.68	NAIL/DISK
CP	4	6985365.30	2470247.07	405.77	CP SET "X IN CONC.
CP	5	6985645.74	2470582.97	404.44	CP SET "X IN CONC.



PLAN VIEW
Not to Scale



The Rios Group
TBPE Firm #F-14595
STATE OF TEXAS
ERIC WEBB
121522
LICENSED
PROFESSIONAL ENGINEER
07-26-2024

SECTION VIEW
NOT TO SCALE

PROJECT NAME: DALLAS COUNTY ADULT PROBATION
CLIENT: JOHNSON & PACE
TRG PROJ. No.: JPAC2301.00
LOCATION: PARKING LOT OF DALLAS COUNTY ADULT PROBATION CENTER
CITY / STATE: DALLAS / TX
TRG PROJ. MGR.: ERIC WEBB
TRG FIELD MGR.: J. TEMPLE
SURVEYED BY: GEOTERRA

TEST HOLE DATA FORM

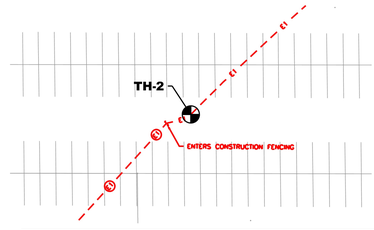
UTILITY OWNER: ONCOR
EXCAVATED: 2024-03-27 ISSUED: 06-05-2024

THE RIOS GROUP
SUBSURFACE UTILITY ENGINEERING
UTILITY COORDINATION
PUBLIC RELATIONS
7400 Sand St.
Fort Worth, Texas 76118
817.345.7500

TEST HOLE No: **01**

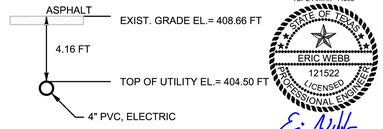
SURVEY INFORMATION

TEST HOLE	POINT NUMBER	NORTHING (Y) SEE NOTE 2	EASTING (X) SEE NOTE 2	EXIST. GROUND ELEV. (Z)	DESCRIPTION
2	2004	6985152.16	2470601.74	408.66	NAIL/DISK
CP	4	6985365.30	2470247.07	405.77	CP SET "X IN CONC.
CP	5	6985645.74	2470582.97	404.44	CP SET "X IN CONC.





PLAN VIEW
Not to Scale



The Rios Group
TBPE Firm #F-14595
STATE OF TEXAS
ERIC WEBB
121522
LICENSED
PROFESSIONAL ENGINEER
07-26-2024

SECTION VIEW
NOT TO SCALE

PROJECT NAME: DALLAS COUNTY ADULT PROBATION
CLIENT: JOHNSON & PACE
TRG PROJ. No.: JPAC2301.00
LOCATION: PARKING LOT OF DALLAS COUNTY ADULT PROBATION CENTER
CITY / STATE: DALLAS / TX
TRG PROJ. MGR.: ERIC WEBB
TRG FIELD MGR.: J. TEMPLE
SURVEYED BY: GEOTERRA

TEST HOLE DATA FORM

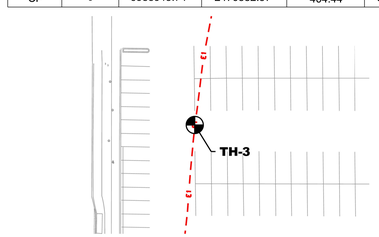
UTILITY OWNER: ONCOR
EXCAVATED: 2024-03-26 ISSUED: 06-05-2024

THE RIOS GROUP
SUBSURFACE UTILITY ENGINEERING
UTILITY COORDINATION
PUBLIC RELATIONS
7400 Sand St.
Fort Worth, Texas 76118
817.345.7500

TEST HOLE No: **02**

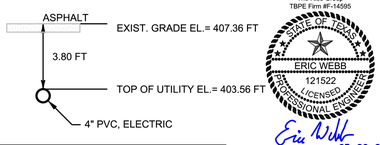
SURVEY INFORMATION

TEST HOLE	POINT NUMBER	NORTHING (Y) SEE NOTE 2	EASTING (X) SEE NOTE 2	EXIST. GROUND ELEV. (Z)	DESCRIPTION
3	2005	6985127.07	2470476.57	407.36	NAIL/DISK
CP	4	6985365.30	2470247.07	405.77	CP SET "X IN CONC.
CP	5	6985645.74	2470582.97	404.44	CP SET "X IN CONC.





PLAN VIEW
Not to Scale



The Rios Group
TBPE Firm #F-14595
STATE OF TEXAS
ERIC WEBB
121522
LICENSED
PROFESSIONAL ENGINEER
07-26-2024

SECTION VIEW
NOT TO SCALE

PROJECT NAME: DALLAS COUNTY ADULT PROBATION
CLIENT: JOHNSON & PACE
TRG PROJ. No.: JPAC2301.00
LOCATION: PARKING LOT OF DALLAS COUNTY ADULT PROBATION CENTER
CITY / STATE: DALLAS / TX
TRG PROJ. MGR.: ERIC WEBB
TRG FIELD MGR.: J. TEMPLE
SURVEYED BY: GEOTERRA

TEST HOLE DATA FORM

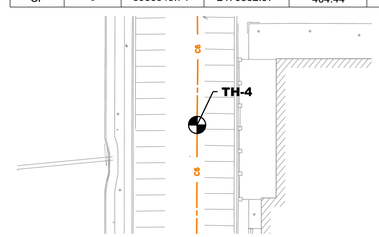
UTILITY OWNER: ONCOR
EXCAVATED: 2024-03-26 ISSUED: 06-05-2024

THE RIOS GROUP
SUBSURFACE UTILITY ENGINEERING
UTILITY COORDINATION
PUBLIC RELATIONS
7400 Sand St.
Fort Worth, Texas 76118
817.345.7500

TEST HOLE No: **03**

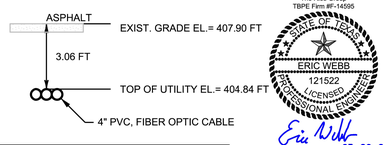
SURVEY INFORMATION

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4	2006	6985270.19	2470350.17	407.90	NAIL/DISK
CP	4	6985365.30	2470247.07	405.77	CP SET "X IN CONC.
CP	5	6985645.74	2470582.97	404.44	CP SET "X IN CONC.





PLAN VIEW
Not to Scale



The Rios Group
TBPE Firm #F-14595
STATE OF TEXAS
ERIC WEBB
121522
LICENSED
PROFESSIONAL ENGINEER
07-26-2024

SECTION VIEW
NOT TO SCALE

PROJECT NAME: DALLAS COUNTY ADULT PROBATION
CLIENT: JOHNSON & PACE
TRG PROJ. No.: JPAC2301.00
LOCATION: PARKING LOT OF DALLAS COUNTY ADULT PROBATION CENTER
CITY / STATE: DALLAS / TX
TRG PROJ. MGR.: ERIC WEBB
TRG FIELD MGR.: J. TEMPLE
SURVEYED BY: GEOTERRA

TEST HOLE DATA FORM

UTILITY OWNER: MCI
EXCAVATED: 2024-03-27 ISSUED: 06-05-2024

THE RIOS GROUP
SUBSURFACE UTILITY ENGINEERING
UTILITY COORDINATION
PUBLIC RELATIONS
7400 Sand St.
Fort Worth, Texas 76118
817.345.7500

TEST HOLE No: **04**

LEGEND OF U.G. UTILITY TYPES

COMMUNICATIONS
AT&T (FIBER)
AT&T (PRODUCTS)
CENTURY LINK (FIBER)
CENTURY LINK (PRODUCTS)
MCI (FIBER)
MCI (PRODUCTS)
WINDSTREAM (FIBER)
WINDSTREAM (PRODUCTS)
XO (PRODUCTS)
ZAYO (PRODUCTS)
GAS / PETROLEUM
ATMOS
ATMOS
ELECTRIC / POWER
ONCOR
ONCOR
ONCOR
TRAFFIC SIGNAL
CITY OF DALLAS
CITY OF DALLAS
POTABLE WATER
DWU
DWU
SANITARY SEWER
DWU
DWU
STORM DRAIN
CITY OF DALLAS
CITY OF DALLAS
ABANDONED UTILITY
UNKNOWN UTILITY

LEGEND OF UTILITY SYMBOLS

SURVEY CONTROL POINT
SURVEY LINE
SURVEY LEVEL CHANGE
SURVEY STATION/OFFSET
LOCATION
CATV CABINET
CATV PEDESTAL
CATV RISER/POLE
FIBER CABINET
FIBER HANDHOLE
TELEPHONE CABINET
TELEPHONE HANDHOLE (VAULT)
TELEPHONE MANHOLE
TELEPHONE PEDESTAL
TELEPHONE RISER/POLE
TELEPHONE POLE MARKER
ELECTRIC GROUND LAMP
ELECTRIC JUNCTION BOX (CABINET)
ELECTRIC MANHOLE
ELECTRIC METER
ELECTRIC POLE MARKER
ELECTRIC RISER/POLE
TRANSFORMER/PAD
TRANSFORMER POLE
SIGNAL HANDHOLE/BLOCK
SIGNAL POLE
GAS MANHOLE
GAS METER
GAS VALVE/VENT
GAS VENT PIPE (GAS RISER)
STORM SEWER INLET
STORM SEWER MANHOLE
STORM SEWER OUTFALL
WASTE WATER CLEANOUT
WASTE WATER MANHOLE
WATER METER
WATER VALVE
WATER VAULT

Subsurface Utility Engineering (SUE) Certification

The engineer's seal hereon is to certify that the utilities shown have been investigated in accordance with standard SUE industry practices. Where indicated utility sizes and materials have been determined by test hole data, such information has been provided by others and is not a part of this certification.

THE RIOS GROUP
SUBSURFACE UTILITY ENGINEERING
UTILITY COORDINATION
PUBLIC RELATIONS
1999 Cross Timber Suite 175A
Flower Mound, TX 75028
972.355.9900

DALLAS COUNTY PROBATION CENTER

S.U.E. PLAN SHEET

DESIGNED BY: EJE CHECKED BY: EJW DATE: 7/26/2024
FILE: JPAC_2301.00

The Rios Group
TBPE Firm #F-14595

1 OF 2

2 OF 2

JOHNSON & PACE INCORPORATED
ENGINEERING • ARCHITECTURE • SURVEYING
1201 NW LOOP 281, SUITE 100,
LONGVIEW, TEXAS 75604
(903) 663-0377 FAX (903) 663-0383
website: www.johnsonpace.com
TBPE F-4051

STATE OF TEXAS
JOE W. HART, III
80082
LICENSED
PROFESSIONAL ENGINEER
1/23/2026

DALLAS COUNTY ADULT PROBATION CENTER PARKING LOT RECONSTRUCTION
DALLAS, TEXAS

REVISIONS

NO.	DESCRIPTION	BY	DATE

SUE SURVEY

ISSUED FOR 100% CD

JOB NO.	5281-002
DRAWN BY	MWA
CHECKED BY	JWH
ISSUE DATE	1/23/2026
SCALE	AS SHOWN
APPROVED BY	JWH
SHEET NO.	C2.1
REVISION NO.	

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File name: W:\5281 Dallas County\5281-002 Adult Probation Lot\CAD\CIVIL\C2.1 TOPO SURVEY.dwg Plotted: 1/23/2026 12:15:48 PM By/Device: None Page Setup: — Plotted by: Justin Collins

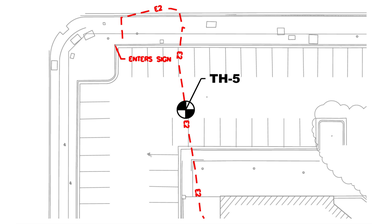
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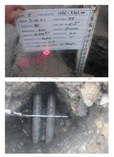
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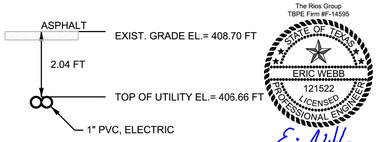
SURVEY INFORMATION

TEST HOLE	POINT NUMBER	NORTHING (Y) SEE NOTE 2	EASTING (X) SEE NOTE 2	EXIST. GROUND ELEV. (Z)	DESCRIPTION
5	2007	6985351.71	2470314.76	408.70	NAIL/DISK
CP	4	6985365.30	2470247.07	405.77	CP SET "X IN CONC.
CP	5	6985645.74	2470582.97	404.44	CP SET "X IN CONC.



PLAN VIEW
Not to Scale





The Rios Group
TBPE Firm #F-14595
STATE OF TEXAS
ERIC WEBB
121522
LICENSED
PROFESSIONAL ENGINEER
07-26-2024

SECTION VIEW
NOT TO SCALE

PROJECT NAME: DALLAS COUNTY ADULT PROBATION
CLIENT: JOHNSON & PACE
TRG PROJ. No.: JPAC2301.00
LOCATION: PARKING LOT OF DALLAS COUNTY ADULT PROBATION CENTER
CITY / STATE: DALLAS / TX
TRG PROJ. MGR.: ERIC WEBB
TRG FIELD MGR.: J. TEMPLE
SURVEYED BY: GEOTERRA

TEST HOLE DATA FORM

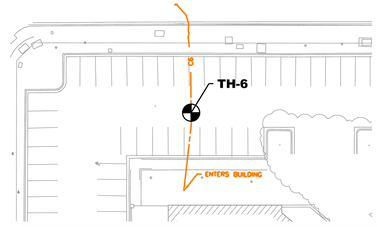
UTILITY OWNER: PRIVATE
EXCAVATED: 2024-03-14 ISSUED: 06-05-2024

THE RIOS GROUP
SUBSURFACE UTILITY ENGINEERING
UTILITY COORDINATION
PUBLIC RELATIONS
7400 Sand St.
Fort Worth, Texas 76118
817.345.7500

TEST HOLE No: **05**

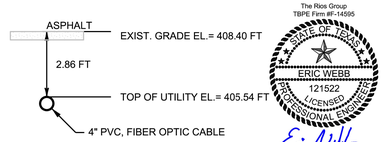
SURVEY INFORMATION

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6	2008	6985374.80	2470337.23	408.40	NAIL/DISK
CP	4	6985365.30	2470247.07	405.77	CP SET "X IN CONC.
CP	5	6985645.74	2470582.97	404.44	CP SET "X IN CONC.



PLAN VIEW
Not to Scale





The Rios Group
TBPE Firm #F-14595
STATE OF TEXAS
ERIC WEBB
121522
LICENSED
PROFESSIONAL ENGINEER
07-26-2024

SECTION VIEW
NOT TO SCALE

PROJECT NAME: DALLAS COUNTY ADULT PROBATION
CLIENT: JOHNSON & PACE
TRG PROJ. No.: JPAC2301.00
LOCATION: PARKING LOT OF DALLAS COUNTY ADULT PROBATION CENTER
CITY / STATE: DALLAS / TX
TRG PROJ. MGR.: ERIC WEBB
TRG FIELD MGR.: J. TEMPLE
SURVEYED BY: GEOTERRA

TEST HOLE DATA FORM

UTILITY OWNER: MCI
EXCAVATED: 2024-03-14 ISSUED: 06-05-2024

THE RIOS GROUP
SUBSURFACE UTILITY ENGINEERING
UTILITY COORDINATION
PUBLIC RELATIONS
7400 Sand St.
Fort Worth, Texas 76118
817.345.7500

TEST HOLE No: **06**

JOHNSON & PACE INCORPORATED
ENGINEERING • ARCHITECTURE • SURVEYING
1201 NW LOOP 281, SUITE 110,
LONGVIEW, TEXAS 75604
(903) 753-6764 FAX (903) 753-6763
website: www.johnsonpace.com
TBPE F-4091

STATE OF TEXAS
JOE W. HART, III
80982
LICENSED
PROFESSIONAL ENGINEER
1/23/2026

DALLAS COUNTY ADULT PROBATION CENTER PARKING LOT RECONSTRUCTION
DALLAS, TEXAS

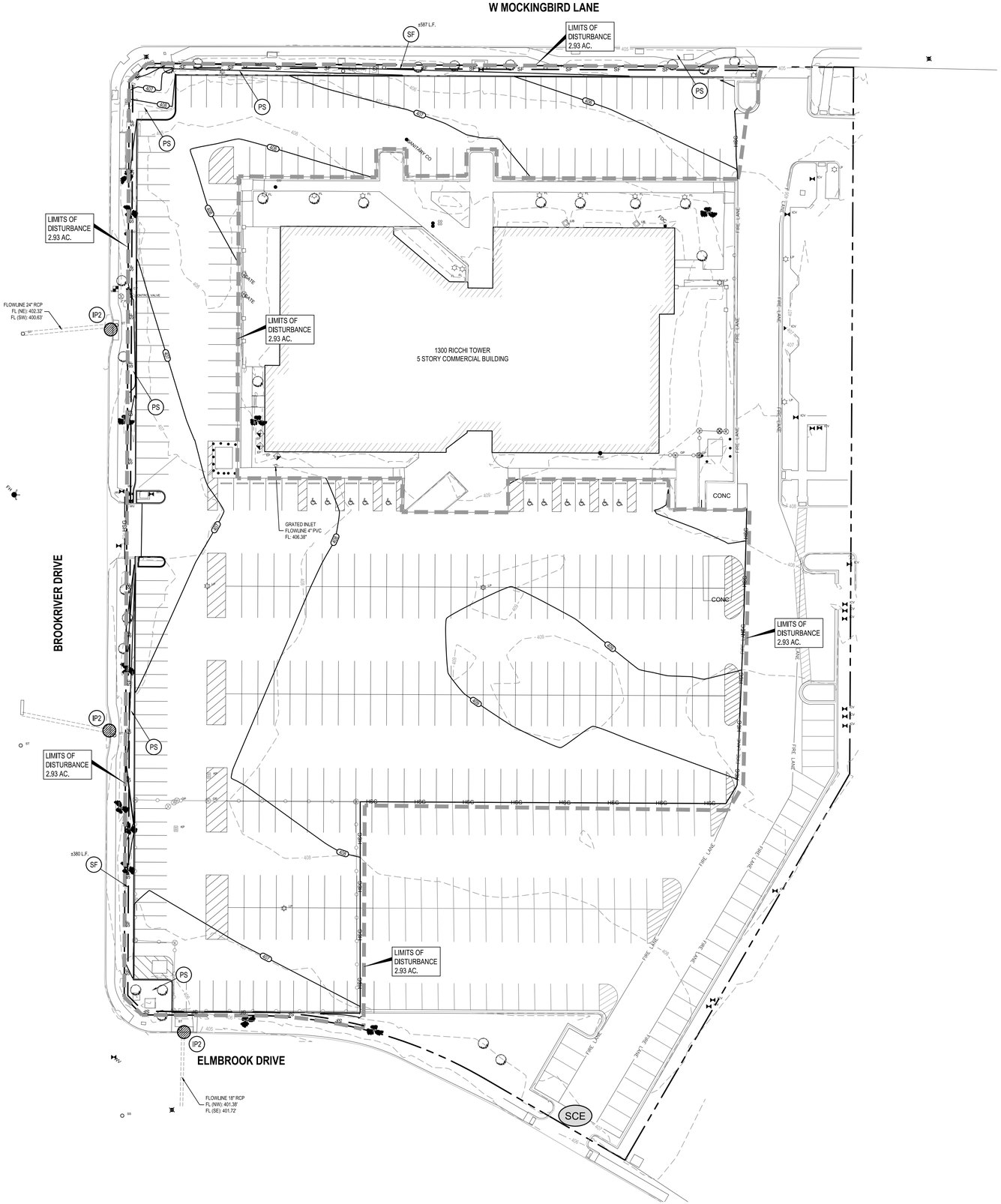
NO.	DESCRIPTION	BY	DATE

REVISIONS

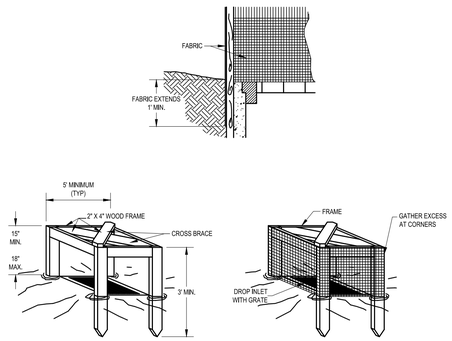
JOB NO.	5281-002	ISSUE DATE	1/23/2026
DRAWN BY	MWA	CHECKED BY	JWH
APPROVED BY	JWH	SCALE	AS SHOWN
SHEET NO.	C2.2	REVISION NO.	

SUE SURVEY

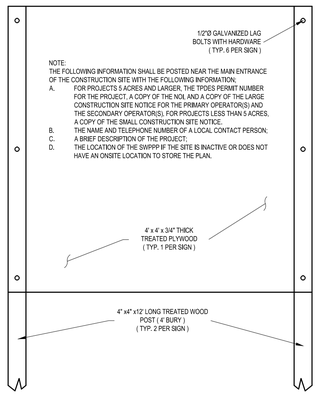
ISSUED FOR 100% CD


W MOCKINGBIRD LANE
±587 L.F.
SF
LIMITS OF DISTURBANCE 2.93 AC.
PS
SDW
SGW
SAN
SAN
SAN

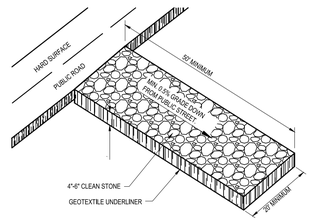
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SILT FENCE INLET PROTECTION (IP1)
N.T.S.



PROJECT SIGN DETAIL
N.T.S.



CONSTRUCTION NOTES:

1. GRADATION OF ROCK.

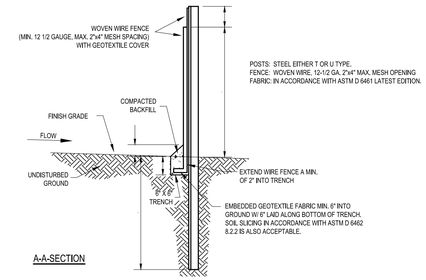
SIZE OF ROCK LBS.	% SMALLER BY WEIGHT
200	100
50	35 - 65
3	0

2. THE ENTRANCE SHALL BE MAINTAINED TO PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE DRESSING WITH ADDITIONAL STONE AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
3. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE INTO PUBLIC RIGHT-OF-WAY. WASHING SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT CONTROLLING STRUCTURE. USE SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS TO PREVENT SEDIMENT FROM ENTERING ANY STORM DRAIN, DITCH, OR WATER COURSE.
4. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

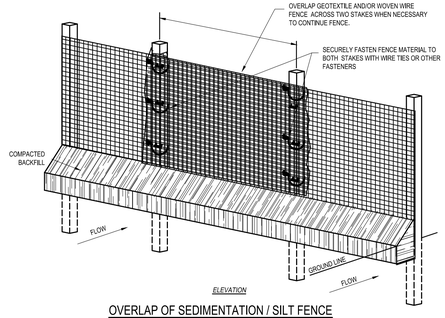
STABILIZED CONSTRUCTION EXIT (SCE)
N.T.S.

GENERAL EROSION CONTROL NOTES

1. THE STORM WATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING (SITE MAP), THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN THE SWPPP, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OF TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (TPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
3. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
4. BEST MANAGEMENT PRACTICES (BMPS) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
5. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS, PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS, AND MUST BE MAINTAINED ON SITE AT ALL TIMES.
6. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
7. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEANUP FUEL OR CHEMICAL SPILLS OR LEAKS.
10. DUST ON THE SITE SHALL BE CONTROLLED BY SPRAYING WATER ON DRY AREAS OF THE SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
12. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
13. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED FOR AT LEAST 21 DAYS, SHALL BE TEMPORARILY SEEDED, THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
14. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED, THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.
15. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
16. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
17. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
18. ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
19. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
20. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, STRAW BALES, ETC.) TO PREVENT EROSION.
21. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.



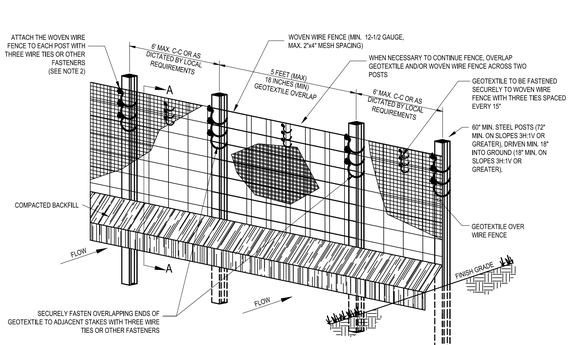
A-A-SECTION



ELEVATION

OVERLAP OF SEDIMENTATION / SILT FENCE
N.T.S.

1. INSTALLATION SHALL COMPLY WITH ASTM D 6462 LATEST EDITION.
2. ATTACH THE WOVEN WIRE FENCE TO EACH POST AND THE GEOTEXTILE TO THE WOVEN WIRE FENCE (SPACED EVERY 15') WITH THREE WIRE TIES OR OTHER FASTENERS, ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1" VERTICALLY APART. ALSO, EACH TIE PLACED ON A POST SHOULD BE POSITIONED TO HANG ON A POST NIPPLE WHEN TIGHTENED TO PREVENT SAGGING.
3. WHEN TWO SECTIONS OF GEOTEXTILE ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED ACROSS TWO POSTS, 60" MAX. AS SHOWN.
4. MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE SWPPP. DEPTH OF ACCUMULATED SEDIMENTS MAY NOT EXCEED 1/2 THE HEIGHT OF THE FENCE. MAINTENANCE CLEANOUT MUST BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS FROM REACHING 1/2 THE HEIGHT OF THE FENCE FABRIC ABOVE GRADE.
5. ALL SILT FENCE SHALL INCLUDE WIRE SUPPORT UNLESS INDICATED OTHERWISE.
6. WRAP APPROXIMATELY 6" OF FABRIC AROUND THE END POSTS AND SECURE WITH 3 TIES.
7. COMPACTING IS VITALLY IMPORTANT FOR EFFECTIVE RESULTS. COMPACT THE SOIL IMMEDIATELY NEXT TO THE SILT FENCE FABRIC WITH THE FRONT WHEEL OF THE TRACTOR, SKID STEER, OR ROLLER EXERTING AT LEAST 60 POUNDS PER SQ. INCH. COMPACT THE UPSTREAM SIDE FIRST, AND THEN EACH SIDE TWICE FOR A TOTAL OF FOUR TRIPS.
8. ADD POST CAPS AS NEEDED BASED ON SITE CONDITIONS AND APPLICABLE AGENCY REQUIREMENTS.



ELEVATION

SEDIMENTATION / SILT FENCE WITH WIRE SUPPORT (SF)
N.T.S.

STORM WATER POLLUTION PREVENTION SYSTEM INSPECTIONS AND MAINTENANCE

BETWEEN THE TIME THIS SWPPP IS IMPLEMENTED AND FINAL SITE STABILIZATION IS ACHIEVED, ALL DISTURBED AREAS AND POLLUTANT CONTROLS MUST BE INSPECTED AT LEAST ONCE EVERY FOURTEEN CALENDAR DAYS AND WITHIN 24 HOURS FOLLOWING A RAINFALL OF 0.5 INCHES OR GREATER. THE PURPOSE OF SITE INSPECTIONS IS TO ASSESS PERFORMANCE OF POLLUTANT CONTROLS. THE INSPECTIONS WILL BE CONDUCTED BY THE GENERAL CONTRACTOR'S DESIGNATED REPRESENTATIVE. BASED ON THESE INSPECTIONS, THE GENERAL CONTRACTOR WILL DECIDE WHETHER IT IS NECESSARY TO MODIFY THIS SWPPP, ADD OR RELOCATE SEDIMENT BARRIERS, OR WHATEVER ELSE MAY BE NEEDED IN ORDER TO PREVENT POLLUTANTS FROM LEAVING THE SITE VIA STORM WATER RUNOFF. THE GENERAL CONTRACTOR HAS THE DUTY TO CAUSE POLLUTANT CONTROL MEASURES TO BE REPAIRED, MODIFIED, MAINTAINED, SUPPLEMENTED, OR WHATEVER ELSE IS NECESSARY IN ORDER TO ACHIEVE EFFECTIVE POLLUTANT CONTROL.

EXAMPLES OF PARTICULAR ITEMS TO EVALUATE DURING SITE INSPECTIONS ARE LISTED BELOW. THIS LIST IS NOT INTENDED TO BE COMPREHENSIVE. DURING EACH INSPECTION THE INSPECTOR MUST EVALUATE OVERALL POLLUTANT CONTROL SYSTEM PERFORMANCE AS WELL AS PARTICULAR DETAILS OF INDIVIDUAL SYSTEM COMPONENTS. ADDITIONAL FACTORS SHOULD BE CONSIDERED AS APPROPRIATE TO THE CIRCUMSTANCES.

LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE MUST BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. A STABILIZED CONSTRUCTION ENTRANCE WILL BE CONSTRUCTED WHERE VEHICLES ENTER AND EXIT. THIS ENTRANCE WILL BE MAINTAINED OR SUPPLEMENTED AS NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE SITE ON VEHICLES.

SEDIMENT BARRIERS MUST BE INSPECTED AND, IF NECESSARY, THEY MUST BE ENLARGED OR CLEANED IN ORDER TO PROVIDE ADDITIONAL CAPACITY. ALL MATERIAL EXCAVATED FROM BEHIND SEDIMENT BARRIERS WILL BE STOCKPILED ON THE UP SLOPE SIDE. ADDITIONAL SEDIMENT BARRIERS MUST BE CONSTRUCTED AS NEEDED.

INSPECTIONS WILL EVALUATE DISTURBED AREAS AND AREAS USED FOR STORING MATERIALS THAT ARE EXPOSED TO RAINFALL FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. IF NECESSARY, THE MATERIALS MUST BE COVERED OR ORIGINAL COVER MUST BE REPAIRED OR SUPPLEMENTED. ALSO, PROTECTIVE BERMS MUST BE CONSTRUCTED, IF NEEDED, IN ORDER TO CONTAIN RUNOFF FROM MATERIAL STORAGE AREAS.

GRASSED AREAS WILL BE INSPECTED TO CONFIRM THAT A HEALTHY STAND OF GRASS IS MAINTAINED. THE SITE HAS ACHIEVED FINAL STABILIZATION ONCE ALL AREAS ARE COVERED WITH BUILDING FOUNDATION OR PAVEMENT, OR HAVE A STAND OF GRASS WITH AT LEAST 70 PERCENT DENSITY. THE DENSITY OF 70 PERCENT OR GREATER MUST BE MAINTAINED TO BE CONSIDERED AS STABILIZED. AREAS MUST BE WATERED, FERTILIZED, AND RESEEDED AS NEEDED TO ACHIEVE THIS GOAL. ALL DISCHARGE POINTS MUST BE INSPECTED TO DETERMINE WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS.

EXAMPLES FOR MAINTENANCE ITEMS ARE LISTED BELOW. THIS LIST IS NOT INTENDED TO BE COMPREHENSIVE. ADDITIONAL PROCEDURES SHOULD BE CONSIDERED AS APPROPRIATE TO EACH INDIVIDUAL CIRCUMSTANCE.

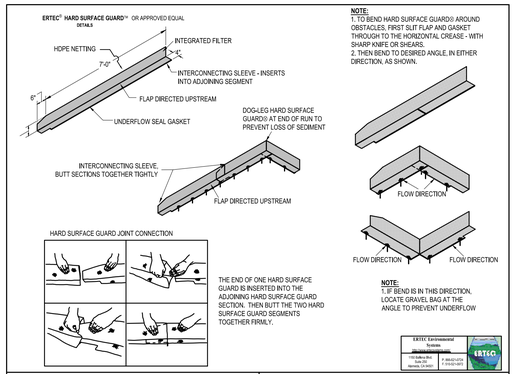
A. EROSION AND SEDIMENT CONTROL MEASURES THAT HAVE BEEN IMPROPERLY INSTALLED OR HAVE BEEN DISABLED, RUN-OVER, REMOVED OR OTHERWISE RENDERED INEFFECTIVE MUST BE REPLACED OR CORRECTED IMMEDIATELY. MAINTENANCE AND REPAIRS WILL BE CONDUCTED WITHIN 24 HOURS OF INSPECTION REPORT.
B. SEDIMENT WILL BE REMOVED FROM BEHIND THE FILTER FABRIC FENCE WHEN IT REACHES ABOUT 1/3 THE HEIGHT OF THE FENCE. SEDIMENT WILL BE REMOVED FROM AROUND THE INLET BARRIERS AND DIKES WHEN THE STORAGE CAPACITY HAS BEEN APPROXIMATELY 50% FILLED.
C. BASED ON INSPECTION RESULTS, ANY MODIFICATION NECESSARY TO INCREASE THE EFFECTIVENESS OF THIS SWPPP TO AN ACCEPTABLE LEVEL MUST BE MADE WITHIN SEVEN CALENDAR DAYS OF THE INSPECTION. THE INSPECTION REPORTS MUST BE COMPLETED ENTIRELY AND ADDITIONAL REMARKS SHOULD BE INCLUDED IF NEEDED TO FULLY DESCRIBE A SITUATION. AN IMPORTANT ASPECT OF THE INSPECTION REPORT IS THE DESCRIPTION OF ADDITIONAL MEASURES THAT NEED TO BE TAKEN TO ENHANCE PLAN EFFECTIVENESS. THE INSPECTION REPORT MUST IDENTIFY WHETHER THE SITE WAS IN COMPLIANCE WITH THE SWPPP AT THE TIME OF INSPECTION AND SPECIFICALLY IDENTIFY ALL INCIDENTS OF NON-COMPLIANCE.
D. INSPECTION REPORTS MUST BE KEPT ON FILE BY THE GENERAL CONTRACTOR AS AN INTEGRAL PART OF THIS SWPPP FOR AT LEAST THREE YEARS FROM THE DATE OF COMPLETION OF THE PROJECT.

ULTIMATELY, IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ASSURE THE ADEQUACY OF SITE POLLUTANT DISCHARGE CONTROLS. ACTUAL PHYSICAL SITE CONDITIONS OR CONTRACTOR PRACTICES COULD MAKE IT NECESSARY TO INSTALL MORE STRUCTURAL CONTROLS THAN ARE SHOWN ON THE PLANS. (FOR EXAMPLE, LOCALIZED CONCENTRATIONS OF RUNOFF COULD MAKE IT NECESSARY TO INSTALL ADDITIONAL SEDIMENT BARRIERS). ASSESSING THE NEED FOR ADDITIONAL CONTROLS AND IMPLEMENTING THEM OR ADJUSTING EXISTING CONTROLS WILL BE A CONTINUING ASPECT OF THIS SWPPP UNTIL THE SITE ACHIEVES FINAL STABILIZATION.

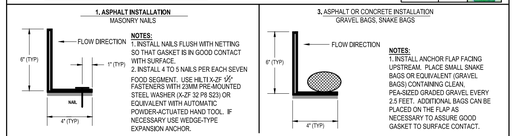
EROSION CONTROL MAINTENANCE

ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY FOURTEEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.
2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-THIRD THE HEIGHT OF THE SILT FENCE.
4. THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
6. OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50% OR AS REQUIRED BY THE CITY ENGINEER.



HARD SURFACE GUARD (HSG)
N.T.S.



HARD SURFACE GUARD
N.T.S.

Inlet Size	# of CIG Segments
5'	1
10'	2
15'	3
20'	4
25'	5
30'	6

CURB INLET GUARD (IP2)
N.T.S.

JOHNSON & PACE INCORPORATED
ENGINEERING • ARCHITECTURE • SURVEYING
1201 NW LOOP 281, SUITE 100,
LONGVIEW, TEXAS 75604
(903)663-0283 FAX (903)663-0283
website: www.johnsonpace.com
TBPE F-4051

STATE OF TEXAS
JOE W. HART, III
80082
LICENSED PROFESSIONAL ENGINEER
12/23/2026

DALLAS COUNTY ADULT PROBATION CENTER PARKING LOT RECONSTRUCTION
DALLAS, TEXAS

REVISIONS

NO.	DESCRIPTION	BY	DATE

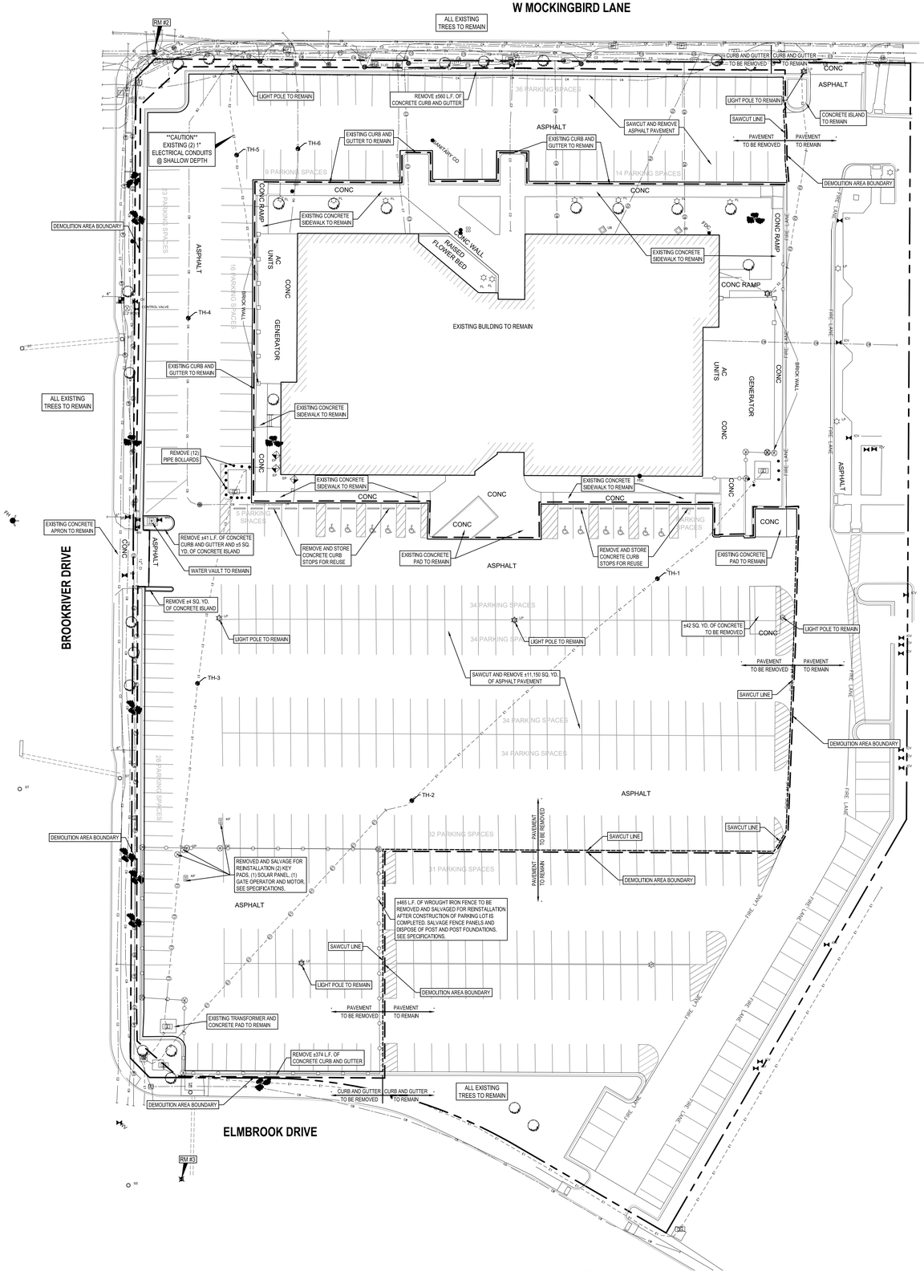
EROSION & SEDIMENTATION CONTROL DETAILS

ISSUED FOR 100% CD

JOB NO.	5281-002
ISSUE DATE	1/23/2026
DRAWN BY	MWA
CHECKED BY	JWH
APPROVED BY	JWH
SCALE	AS SHOWN
SHEET NO.	C3.1

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Filename: W:\5281 Dallas County\5281-002 Adult Probation Lot\CIVIL\EROSION CONTROL.dwg Plotted: 1/23/2026 12:15:28 PM Plot Device: None Page Setup: — XRefs(s): Justin Collins



NOTE
CONTRACTOR SHALL COORDINATE WITH OWNER PRIOR TO COMMENCING WITH ANY DEMOLITION.

LEGEND OF U.G. UTILITY TYPES

	QL"B"	QL"C"/"D"
COMMUNICATIONS		
ADELPHIA (FO/DUCT)	C1	C1
AT&T (TELE)	C2	C2
AT&T (FO/DUCT)	C3	C3
CENTURY LINK (FO/DUCT)	C4	C4
LUMEN (FO/DUCT)	C5	C5
MCI (FO/DUCT)	C6	C6
NEXLINK (FO/DUCT)	C7	C7
SPECTRUM (FO/DUCT)	C8	C8
UPN (FO/DUCT)	C9	C9
XO (FO/DUCT)	C10	C10
ZAYO (FO/DUCT)	C11	C11
ADELPHIA (FO/DUCT)		D
AT&T (TELE)	D	D
AT&T (FO/DUCT)	D	D
CENTURY LINK (FO/DUCT)	D	D
LUMEN (FO/DUCT)	D	D
MCI (FO/DUCT)	D	D
NEXLINK (FO/DUCT)	D	D
SPECTRUM (FO/DUCT)	D	D
UPN (FO/DUCT)	D	D
XO (FO/DUCT)	D10	D10
ZAYO (FO/DUCT)	D11	D11
GAS / PETROLEUM		
ATMOS	G1	G1
ATMOS	G	G
ELECTRIC / POWER		
ONCOR	E1	E1
PRIVATE	E2	E2
ONCOR	E	E
PRIVATE	E	E
TRAFFIC SIGNAL		
CITY OF DALLAS	TS1	TS1
CITY OF DALLAS	TS2	TS2
POTABLE WATER		
DWU	W1	W1
DWU	W	W
SANITARY SEWER		
DWU	WW1	WW1
DWU	WW	WW
STORM DRAIN		
CITY OF DALLAS	SD1	SD1
CITY OF DALLAS	SD2	SD2
ABANDONED UTILITY		
UNKNOWN UTILITY		

LEGEND OF UTILITY SYMBOLS

END CAP	C	
QUALITY LEVEL CHANGE		
TEST HOLE		
UTILITY CONTINUATION		
CATV CABINET	CC	C
CATV HANDHOLE	C	
CATV PEDESTAL	C	
FIBER CABINET	F	F1
FIBER HANDHOLE	F	F1
TELEPHONE CABINET	T	T1
TELEPHONE HANDHOLE (VAULT)	T	
TELEPHONE MANHOLE	T	
TELEPHONE PEDESTAL	T	TP
TELEPHONE POLE		
TELEPHONE POLE W/RISER		
ELECTRIC GROUND LIGHT		EL
ELECTRIC HANDHOLE	E	E1
ELECTRIC JUNCTION BOX (CABINET)		
ELECTRIC MANHOLE		EM
ELECTRIC METER		EM
ELECTRIC POLE (POWER)	EP	
ELECTRIC POLE W/RISER	EP	
LIGHT POLE	LP	
TRANSMISSION POLE		
SIGNAL HANDHOLE/BOX	SHB	
SIGNAL POLE	SP	
GAS MANHOLE		
GAS METER		GM
GAS TEST STATION	TS	
GAS VALVE		
GAS VENT PIPE (GAS RISER)		
STORM SEWER INLET		INL
STORM SEWER MANHOLE		
STORM SEWER OUTFALL		
WASTE WATER CLEANOUT		
WASTE WATER MANHOLE		
FIRE HYDRANT		
WATER MANHOLE		
WATER METER	WM	
WATER VALVE		
WATER VAULT	W	

THE RIOS GROUP

SUBSURFACE UTILITY ENGINEERING
UTILITY COORDINATION

1890 Crown St.
Suite 1310
Dallas, TX 75234
214.333.0922

TEST HOLE (TH) INFORMATION

TEST HOLE # (TH#)	UTILITY SIZE O.D. (INCHES)	UTILITY MATERIAL	UTILITY TYPE	DEPTH OF UTILITY (FEET)	GROUND ELEVATION	TOP OF UTILITY (TOU)	UTILITY OWNER
1	4	PVC	ELEC.	3.04	408.68	405.64	ONCOR
2	4	PVC	ELEC.	4.16	408.66	404.50	ONCOR
3	4	PVC	ELEC.	3.80	407.36	403.56	ONCR
4	(3)4	PVC	FOC	3.06	407.90	404.84	MCI
5	(2)1	PVC	ELEC.	2.04	408.70	406.66	PRIVATE
6	4	PVC	FOC	2.86	408.40	405.54	MCI
7	(4)4	PVC	FOC	3.26			NEXLINK
8	(3)4	PVC	FOC	2.50			AT&T
9							
10							
11							

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

GRAPHIC SCALE
15 0 15 30 60
(IN FEET)
1 inch = 30 ft.

DEMOLITION NOTES

1. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.
2. ALL EXISTING SERVICE UTILITIES WITHIN THE DEMOLITION BOUNDARY, UNLESS OTHERWISE NOTED ON THIS SHEET TO REMAIN.
3. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL IN A LOCATION APPROVED BY THE OWNER AND ALL GOVERNING AUTHORITIES OF ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE STRUCTURES, UTILITIES, FENCES, TREES, BUSHES, SHRUBS, ETC., LOCATED WITHIN THE "PROJECT DEMOLITION AREA BOUNDARY" SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED (UNLESS OTHERWISE NOTED). ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.
4. 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.
5. CONTRACTOR SHALL CONFORM WITH ALL APPLICABLE CODES (LOCAL, STATE & FEDERAL) FOR DEMOLITION OF STRUCTURES, DUST CONTROL, SOIL EROSION CONTROL AND DISPOSAL OF DEMOLITION MATERIAL, DEBRIS, ETC.
6. CONTRACTOR SHALL EMPLOY A CERTIFIED LICENSED EXTERMINATOR TO TREAT THE BUILDING(S) AND TO CONTROL RODENTS AND VERMIN BEFORE AND DURING DEMOLITION OPERATIONS, IF APPLICABLE.
7. 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 CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
8. NOTES SHOWN HEREON REGARDING SPECIFIC ITEMS OF DEMOLITION ARE GENERAL IN NATURE, AND ARE NOT INTENDED TO BE WHOLLY INCLUSIVE. THE CONTRACTOR SHALL DEMOLISH AND REMOVE ALL EXISTING IMPROVEMENTS TO THE EXTENT AS NOTED IN THE PLANS AND SPECIFICATIONS, TO SATISFACTION OF THE OWNER.
9. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY, PRIVACY, PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ONSITE LOCATIONS OF EXISTING UTILITIES.
10. ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK. UTILITIES DETERMINED TO BE ABANDONED AND LEFT IN PLACE SHALL BE PRESSURE GROUTED IF UNDER BUILDING.
11. CONTRACTOR SHALL COMPLY WITH CHAPTER 14 OF THE INTERNATIONAL FIRE CODE DURING THE DEMOLITION PROCESS.
12. UNLESS SPECIFICALLY NOTED OTHERWISE, NO MATERIAL SCHEDULED FOR DEMOLITION SHALL BE REUSED IN NEW CONSTRUCTION.
13. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC., TO THE BEST PRACTICES AND APPROVED BY PROJECT OWNER & ENGINEER.
14. SHOULD REMOVAL AND/OR RELOCATION ACTIVITIES DAMAGE FENCING, LIGHTING AND/OR STORM INLET STRUCTURES, ETC., THEN THE CONTRACTOR SHALL PROVIDE NEW MATERIALS/ STRUCTURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. EXCEPT FOR MATERIALS DESIGNED TO BE RELOCATED ON THIS PLAN, ALL OTHER CONSTRUCTION MATERIALS SHALL BE NEW.
15. DAMAGE TO ALL EXISTING CONDITIONS TO REMAIN WILL BE REPLACED AT CONTRACTOR'S EXPENSE.
16. GRASS AREAS SHALL BE CLEARED AND GRUBBED AS NECESSARY TO COMPLETE CONSTRUCTION ACTIVITIES.
17. CONTRACTOR SHALL PROVIDE TEMPORARY CHAINLINK CONSTRUCTION FENCING ALONG PERIMETER OF PROJECT BOUNDARY TO ENSURE SAFETY AND SECURITY OF THE CONSTRUCTION SITE.

EMERGENCY ACCESS NOTE

HARD SURFACE FOR EMERGENCY ACCESS SHALL BE CONSTRUCTED ALONG "FIRE LANE" ROUTE PRIOR TO ERECTING BUILDING STRUCTURE. FIRE LANES WILL REMAIN CLEAR DURING CONSTRUCTION.

REFERENCE MARKERS

IF THE CONTRACTOR RELOCATES REFERENCE MARKERS WITH A NEW REFERENCE MARKER, IT SHALL BE LOCATED WITHIN A HORIZONTAL AND VERTICAL TOLERANCE OF 0.10'

RM #1 SET "X" IN CONC
N: 6985945.74
E: 2470582.97
EL = 404.44

RM #2 SET "X" IN CONC
N: 6985365.30
E: 2470247.07
EL = 405.77

RM #3 SET "X" IN CONC
N: 6984923.26
E: 2470636.66
EL = 405.70

RM #4 SET "X" IN CONC
N: 6985020.20
E: 2470932.09
EL = 405.79

JOHNSON & PACE INCORPORATED
ENGINEERING • ARCHITECTURE • SURVEYING
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LONGVIEW, TEXAS 75604
(903) 663-0377 FAX (903) 663-0383
website: www.johnsonpace.com
TBPE F-4351

STATE OF TEXAS
JOE W. HART, III
80982
LICENSED PROFESSIONAL ENGINEER
01/23/2026

DALLAS COUNTY ADULT PROBATION CENTER PARKING LOT RECONSTRUCTION DALLAS, TEXAS

REVISIONS

NO.	DESCRIPTION	BY	DATE

DEMOLITION PLAN

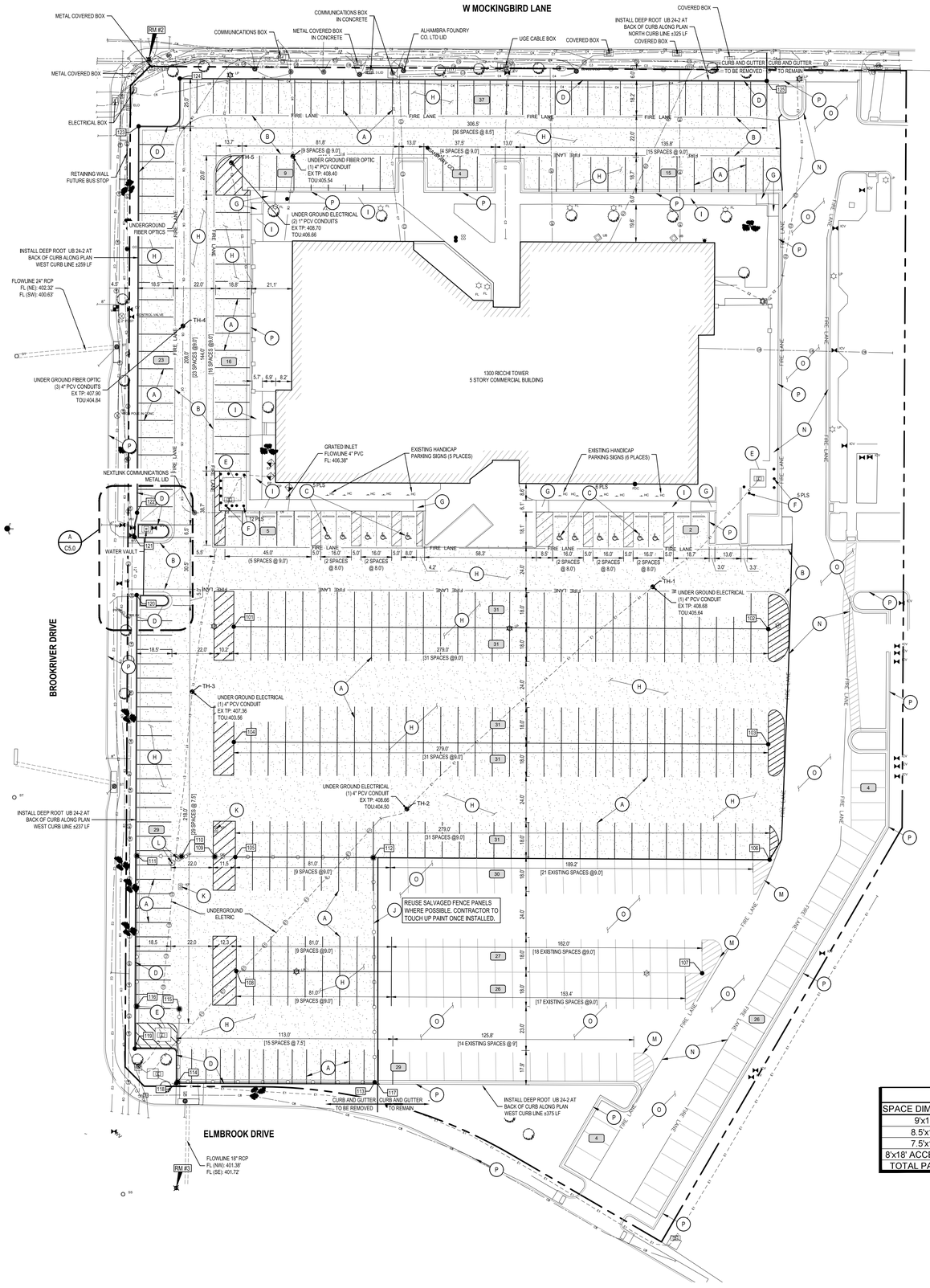
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JOB NO.	5281-002	ISSUE DATE:	1/23/2026
DRAWN BY:	MWA	CHECKED BY:	JWH
APPROVED BY:	JWH	SCALE:	1" = 30'
SHEET NO.	C4.0	REVISION NO.	

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COORDINATE TABLE

POINT #	NORTHING	EASTING	DESCRIPTION
101	6985166.97	2470471.36	PRK
102	6985345.44	2470685.81	PRK
103	6985299.34	2470724.52	PRK
104	6985120.87	2470510.07	PRK
105	6985075.39	2470549.26	PRK
106	6985253.61	2470763.80	PRK
107	6985185.61	2470774.90	PRK
108	6985030.13	2470587.90	PRK
109	6985068.69	2470540.95	GATE POST
110	6985057.59	2470527.55	GATE POST
111	6985042.93	2470509.49	CRN POST
112	6985121.54	2470604.67	CRN POST
113	6985032.13	2470680.57	CRN POST
114	6984966.28	2470601.69	CRN POST
115	6984995.90	2470577.84	CRN POST
116	6984982.68	2470559.85	CRN POST
117	6985032.37	2470682.32	TC
118	6984965.13	2470601.52	TC
119	6984965.11	2470573.35	TC
120	6985147.07	2470421.93	TC
121	6985169.52	2470401.68	TC
122	6985180.08	2470394.45	TC
123	6985335.12	2470265.43	TC
124	6985368.03	2470265.89	TC
125	6985564.02	2470501.40	TC

PARKING INFORMATION

SPACE DIMINSIONS	EXISTING	EXISTING TO REMAIN	PROPOSED	DIFFERENCE	% OF PROPOSED
9'x18'	364 SPACES	95 SPACES	256 SPACES	-13.00	73.78%
8.5'x18'	35 SPACES		36 SPACES	1.00	10.37%
7.5'x18'	42 SPACES		44 SPACES	2.00	12.68%
8'x18' ACCESSIBLE	11 SPACES		11 SPACES	0.00	3.17%
TOTAL PARKING	452 SPACES	95 SPACES	347 SPACES	-10	

LEGEND OF U.G. UTILITY TYPES

COMMUNICATIONS	**QL"B"**
ADELPHIA (FO/DUCT)	C1
AT&T (TELE)	C2
AT&T (FO/DUCT)	C3
CENTURY LINK (FO/DUCT)	C4
LUMEN (FO/DUCT)	C5
MCI (FO/DUCT)	C6
NEXLINK (FO/DUCT)	C7
SPECTRUM (FO/DUCT)	C8
UPN (FO/DUCT)	C9
XO (FO/DUCT)	C10
ZAYO (FO/DUCT)	C11
	QL"C"/"D"
ADELPHIA (FO/DUCT)	C1 C1
AT&T (TELE)	C2 C2
AT&T (FO/DUCT)	C3 C3
CENTURY LINK (FO/DUCT)	C4 C4
LUMEN (FO/DUCT)	C5 C5
MCI (FO/DUCT)	C6 C6
NEXLINK (FO/DUCT)	C7 C7
SPECTRUM (FO/DUCT)	C8 C8
UPN (FO/DUCT)	C9 C9
XO (FO/DUCT)	C10 C10
ZAYO (FO/DUCT)	C11 C11
GAS / PETROLEUM	**QL"B"**
ATMOS	G1
ATMOS	**QL"C"/"D"** G1 G1
ELECTRIC / POWER	**QL"B"**
ONCOR	E1
PRIVATE	**QL"C"/"D"** E2 E2
ONCOR	E3 E3
PRIVATE	E4 E4
TRAFFIC SIGNAL	**QL"B"**
CITY OF DALLAS	TS1
CITY OF DALLAS	**QL"C"/"D"** TS1 TS1
POTABLE WATER	**QL"B"**
DWU	W1
DWU	**QL"C"/"D"** W1 W1
SANITARY SEWER	**QL"B"**
DWU	WW1
DWU	**QL"C"/"D"** WW1 WW1
STORM DRAIN	**QL"B"**
CITY OF DALLAS	SD1
CITY OF DALLAS	**QL"C"/"D"** SD1 SD1
ABANDONED UTILITY	
UNKNOWN UTILITY	

LEGEND OF UTILITY SYMBOLS

END CAP	C
QUALITY LEVEL CHANGE	
TEST HOLE	
UTILITY CONTINUATION	
CATV CABINET	CC C
CATV HANDHOLE	C
CATV PEDESTAL	
FIBER CABINET	FC F
FIBER HANDHOLE	F
TELEPHONE CABINET	TC
TELEPHONE HANDHOLE (VAULT)	T
TELEPHONE MANHOLE	
TELEPHONE PEDESTAL	T
TELEPHONE POLE	TP
TELEPHONE POLE W/RISER	
ELECTRIC GROUND LIGHT	EG
ELECTRIC HANDHOLE	E
ELECTRIC JUNCTION BOX (CABINET)	EC E
ELECTRIC MANHOLE	
ELECTRIC METER	EM
ELECTRIC POLE (POWER)	EP
ELECTRIC POLE W/RISER	
LIGHT POLE	LP
TRANSMISSION POLE	
SIGNAL HANDHOLE/BOX	SH
SIGNAL POLE	SP
GAS MANHOLE	
GAS METER	GM
GAS TEST STATION	TS
GAS VALVE	
GAS VENT PIPE (GAS RISER)	
STORM SEWER INLET	INL
STORM SEWER MANHOLE	
STORM SEWER OUTFALL	
WASTE WATER CLEANOUT	
WASTE WATER MANHOLE	
FIRE HYDRANT	
WATER MANHOLE	
WATER METER	WM
WATER VALVE	
WATER VAULT	W

THE RIOS GROUP
SUBSURFACE UTILITY ENGINEERING
UTILITY COORDINATION
1890 Crown St.
Suite 1310
Dallas, TX 75234
214.333.0922

TEST HOLE (TH) INFORMATION

TEST HOLE # (TH#)	UTILITY SIZE O.D. (INCHES)	UTILITY MATERIAL	UTILITY TYPE	DEPTH OF UTILITY (FEET)	GROUND ELEVATION	TOP OF UTILITY (TOU)	UTILITY OWNER
1	4	PVC	ELEC.	3.04	408.68	405.64	ONCOR
2	4	PVC	ELEC.	4.16	408.66	404.50	ONCOR
3	4	PVC	ELEC.	3.80	407.36	403.56	ONCR
4	(3)4	PVC	FOC	3.06	407.90	404.84	MCI
5	(2)1	PVC	ELEC.	2.04	408.70	406.66	PRIVATE
6	4	PVC	FOC	2.86	408.40	405.54	MCI
7	(4)4	PVC	FOC	3.26			NEXLINK
8	(3)4	PVC	FOC	2.50			AT&T
9							
10							
11							

LEGEND

ALL UTILITIES ARE EXISTING UNLESS NOTED OTHERWISE

INDICATES PROPOSED P-6"W (INDICATES TYPE OF LINE; INDICATES SIZE OF LINE)

FDC	FIRE DEPARTMENT CONNECTION
WM	WATER METER
WV	WATER VALVE
DM	DETECTOR METER
FH	FIRE HYDRANT
ICV	IRRIGATION CONTROL VALVE
BV	BLOWOFF VALVE
GM	GAS METER
GV	GAS VALVE
CO	SEWER CLEANOUT
MH	SEWER MANHOLE
PB	ELECTRIC PULL BOX
EM	ELECTRIC METER
ELEC PED	ELECTRIC PEDESTAL
PP	POWER POLE
PPM	POWER POLE WITH METER
PPT	POWER POLE WITH TRANSFORMER
PPSL	POWER POLE WITH SIGNAL LIGHT
LP	LIGHT POLE
GW	GUY WIRE
T	ELECTRIC TRANSFORMER PAD
JB	JUNCTION BOX
CI	CURB INLET
GI	GRATE INLET
HW	HEADWALL
PB	PIPE BOLLARD
BP	BOUNDARY MARKER IRON PIPE
XX	NUMBER OF PARKING SPACES PER ROW
TYPE 'A' C&G / TYPE 'B' C&G / NO C&G	INDICATES TYPE OF CURB AND GUTTER TO BE INSTALLED (SEE DETAIL SHEET C-5.1)
	CURB AND GUTTER
	STORM SEWER
FIRE LANE	FIRE LANE
O	SIGN

TRAFFIC CONTROL NOTE

GUIDELINES SET FORTH IN PART VI "STANDARDS AND GUIDES FOR TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE, UTILITY, AND INCIDENT MANAGEMENT OPERATIONS" OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MOST RECENT EDITION AS REVISED) SHALL BE OBSERVED.

TOPOGRAPHIC SURVEY NOTE

EXISTING TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS PREPARED BY JOHNSON & PACE INCORPORATED. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW. THE ENGINEER'S SEAL ON THESE PLANS DOES NOT APPLY TO THE PROPERTY BOUNDARY INFORMATION SHOWN HEREON.

FIRE LANE STRIPING NOTE

LOCATION OF FIRE LANE STRIPING SHALL BE APPROVED BY THE LOCAL FIRE MARSHAL PRIOR TO APPLICATION. UNLESS OTHERWISE DIRECTED BY THE FIRE MARSHAL, FIRE LANE STRIPING SHALL BE 6" RED PAINTED STRIPE ALONG TOP AND FACE OF CURB, FACE OF SIDEWALK, OR DIRECTLY ADJACENT TO PROPOSED PARKING LOT STRIPING, WITH 4" WHITE STENCILED LETTERS "FIRE LANE - NO PARKING" PAINTED ON RED STRIPE AT 25' CENTER TO CENTER.

KEY NOTES AND SYMBOLS LEGEND

A	PARKING AREA STRIPING - 4" WIDE SOLID WHITE LINE.
B	6" WIDE FIRE LANE STRIPING PAINTED TRAFFIC RED WITH "NO PARKING - FIRE LANE" 4' HIGH WITH LETTERING AT 25' O.C. SEE DETAIL SHEET C8.0. NOTE - STRIPING SHOWN OFFSET FOR CLARITY.
C	ACCESSIBLE PARKING SPACE (AS SHOWN BELOW)
	ACCESSIBLE PARKING SPACE WITH BOLLARD, SIGN, STRIPING, AND SYMBOL. SEE DETAIL SHEET C8.0.
D	PROPOSED 6" TALL CURB & GUTTER. SEE DETAIL SHEET C8.0.
E	EXISTING ELECTRICAL TRANSFORMER.
F	EXISTING PIPE BALLARD. SEE DETAIL SHEET ####.
G	EXISTING ADA CURB RAMP/SIDEWALK.
H	HMAC PAVEMENT. SEE DETAIL SHEET C8.0.
I	SIDEWALK TO REMAIN
J	WROUGHT IRON FENCE (REINSTALL SALVAGED PANELS)
K	KEY PAD (REINSTALL SALVAGED)
L	SOLAR PANEL AND GATE CONTROLER AND MOTOR (REINSTALL SALVAGED)
M	EXISTING STRIPED ISLAND TO REMAIN
N	EXISTING FIRE LANE TO REMAIN
O	EXISTING PAVEMENT TO REMAIN
P	EXISTING CURB AND GUTTER TO REMAIN

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

GRAPHIC SCALE
15 0 15 30 60
(IN FEET)
1 inch = 30 ft.

GENERAL NOTES

1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY, COUNTY, STATE, FEDERAL, AND OSHA REGULATION.
2. ALL DIMENSIONS AND RADII ARE TO THE BACK OF CURB, CENTER OR END OF STRIPE, FACE OF BUILDING, OR EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED.
3. CONTRACTOR IS REQUIRED TO REMOVE OR RELOCATE, IN A PROPER MANNER, EXISTING IMPROVEMENTS/NATURAL FEATURES TO ALLOW FOR CONSTRUCTION OF PROPOSED IMPROVEMENTS INDICATED ON THE PLANS. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. NO SEPARATE PAY FOR THIS WORK.
4. CONTRACTOR IS RESPONSIBLE FOR PROTECTION AND REPLACEMENT OF ALL PROPERTY CORNERS. PROPERTY CORNERS DAMAGED BY CONTRACTOR SHALL BE REPLACED BY A REGISTERED PROFESSIONAL LAND SURVEYOR AT CONTRACTOR'S EXPENSE.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING ALL EXISTING DAMAGE AND NOTIFY OWNER AND/OR ENGINEER PRIOR TO STARTING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING EXISTING ITEMS DAMAGED DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. DAMAGES SHALL BE REPORTED TO OWNER OR RECORD PRIOR TO REPAIR. REPAIRS SHALL BE EQUAL TO, OR BETTER THAN, EXISTING CONDITIONS.
6. PROPOSED CONSTRUCTION ON THIS SITE SHALL COMPLY WITH THE LATEST REVISION OF THE ADA REGULATIONS AND THE TEXAS ACCESSIBILITY STANDARDS (TAS).
7. EROSION AND SEDIMENTATION CONTROL DURING CONSTRUCTION SHALL BE IN COMPLIANCE WITH LOCAL AND STATE REQUIREMENTS.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PROPER DRAINAGE THROUGHOUT THE SITE DURING CONSTRUCTION. CARE SHALL BE TAKEN TO PREVENT ANY NEGATIVE IMPACTS TO ADJACENT PROPERTIES.
9. CONTRACTOR SHALL CAREFULLY MONITOR WEATHER PATTERNS AND PREPARE FOR EXPECTED EVENTS. SPECIAL CARE SHALL BE TAKEN TO EXAMINE SITE PRIOR TO WEEKENDS OR ABSENCES FORM THE WORKSITE.
10. NO HAZARDOUS MATERIALS WERE IDENTIFIED DURING PRELIMINARY SITE INVESTIGATIONS. ANY ITEMS FOUND SUSPECT DURING CONSTRUCTION SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

REFERENCE MARKERS

IF THE CONTRACTOR RELOCATES REFERENCE MARKERS WITH A NEW REFERENCE MARKER, IT SHALL BE LOCATED WITHIN A HORIZONTAL AND VERTICAL TOLERANCE OF 0.10'

RM #1	SET "X" IN CONC N: 6985645.74 E: 2470582.87 EL = 404.44
RM #2	SET "X" IN CONC N: 6985365.30 E: 2470347.07 EL = 405.77
RM #3	SET "X" IN CONC N: 6984923.26 E: 2470636.66 EL = 405.70
RM #4	SET "X" IN CONC N: 6985020.20 E: 2470932.09 EL = 405.79

ACCESSIBILITY NOTES

1. PROPOSED CONSTRUCTION ON THIS SITE SHALL COMPLY WITH THE LATEST REVISION OF THE ADA REGULATIONS AND THE TEXAS ACCESSIBILITY STANDARDS (TAS).
2. ACCESSIBLE ROUTES SHALL NOT HAVE A CROSS SLOPE GREATER THAN 2.0% (1:48). ACCESSIBLE ROUTE SURFACE SHALL BE SLIP RESISTANT AND CONSTRUCTED IN A MANNER THAT WILL NOT RETAIN WATER AND BE A MINIMUM OF 3 FEET WIDE.
3. ACCESSIBLE ROUTES WITH A RUNNING SLOPE GREATER THAN 5.0% (1:20) IS A RAMP AND SHALL BE CONSTRUCTED WITH HANDRAILS AND 5' X 5' LANDINGS. RAMP SLOPE SHALL NOT EXCEED 8.33% (1:12).
4. SURFACE OF CURB RAMPS SHALL BE CONSTRUCTED WITH ADA COMPLIANT SURFACE TEXTURE AND CONTRASTING COLOR. RAMP SLOPE SHALL NOT EXCEED 8.33% (1:12). CURB RAMPS SHALL NOT EXCEED 6" IN LENGTH.
5. ACCESSIBLE PARKING SPACE SLOPES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS. ADA COMPLIANT SIGNAGE SHALL BE PROVIDED FOR EACH ACCESSIBLE SPACE.

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS PUT ON NOTICE THAT THERE MAY BE NUMEROUS UNDERGROUND UTILITIES IN THE LINE OF WORK, SUCH AS WATER, SEWER, GAS, PIPELINE, TELEPHONE AND ELECTRIC, SOME MAY BE ABANDONED WHILE MANY ARE ACTIVE. EXISTING UTILITIES SHOWN ON THE PLANS REPRESENT A DILIGENT EFFORT TO SHOW THEIR APPROXIMATE LOCATION.

THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN CONDUCTING EXCAVATION OPERATIONS. DAMAGES SHALL BE REPAIRED IMMEDIATELY AT CONTRACTOR'S EXPENSE.

THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST FIELD LOCATION OF UTILITIES.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENT SHOWN ON THE PLANS.

TEXAS ONE CALL SYSTEM

AS REQUIRED BY "THE TEXAS UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT" TEXAS ONE CALL SYSTEM MUST BE CONTACTED (800-245-4545) AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION OPERATIONS PERFORMED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT TEXAS ONE CALL SYSTEM.

INSPECTIONS/CERTIFICATIONS NOTE

ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY LOCAL CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO SUBSTANTIAL PROJECT COMPLETION.

PERMITS NOTE

CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED BY FEDERAL, STATE, OR LOCAL CODES AND/OR UTILITY SERVICE COMPANIES PRIOR TO START OF CONSTRUCTION.

JOHNSON & PACE INCORPORATED
ENGINEERING • ARCHITECTURE • SURVEYING
1201 NW LOOP 281, SUITE 100,
LONGVIEW, TEXAS 75604
(903) 663-7566 FAX (903) 663-7583
website: www.johnsonpace.com
TBPE F-4281

STATE OF TEXAS
JOE W. HART, III
80382
LICENSED PROFESSIONAL ENGINEER
1/23/2026

NO.	DESCRIPTION	BY	DATE

REVISIONS

DALLAS COUNTY ADULT PROBATION CENTER PARKING LOT RECONSTRUCTION DALLAS, TEXAS

SITE PLAN

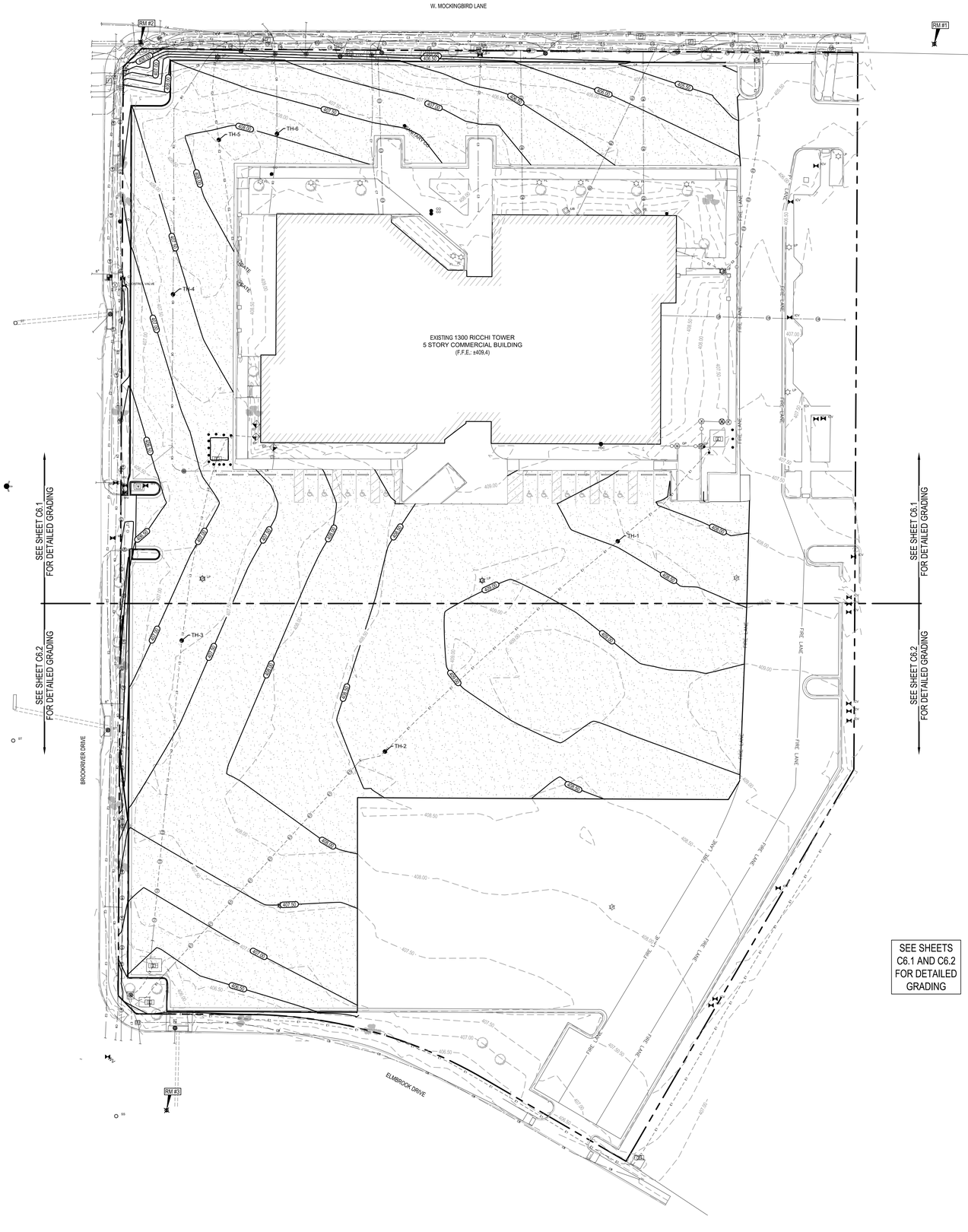
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5	(2)1	PVC	ELEC.	2.04	408.70	406.66	PRIVATE
6	4	PVC	FOC	2.86	408.40	405.54	MCI
7	(4)4	PVC	FOC	3.26			NEXLINK
8	(3)4	PVC	FOC	2.50			AT&T
9							
10							
11							

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

GRAPHIC SCALE
15 0 15 30 60
(IN FEET)
1 inch = 30 ft.

LEGEND

TC	TOP OF CURB
TP	TOP OF PAVEMENT
TW	TOP OF WALL
TI	TOP OF INLET
TG	TOP OF GRATE
SW	SIDEWALK
FG	FINISHED GRADE
TC=340.38	PROPOSED SPOT ELEVATION
335	EXISTING CONTOUR
335	PROPOSED CONTOUR

REFERENCE MARKERS

IF THE CONTRACTOR RELOCATES REFERENCE MARKERS WITH A NEW REFERENCE MARKER, IT SHALL BE LOCATED WITHIN A HORIZONTAL AND VERTICAL TOLERANCE OF 0.10'

RM #1 SET "X" IN CONC
N: 6985645.74
E: 2470582.97
EL = 404.44

RM #2 SET "X" IN CONC
N: 6985365.30
E: 2470247.07
EL = 405.77

RM #3 SET "X" IN CONC
N: 6984923.26
E: 2470636.66
EL = 405.70

RM #4 SET "X" IN CONC
N: 6985020.20
E: 2470932.09
EL = 405.79

CAUTION - NOTICE TO CONTRACTOR

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THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST FIELD LOCATION OF UTILITIES.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENT SHOWN ON THE PLANS.

TEXAS ONE CALL SYSTEM

AS REQUIRED BY "THE TEXAS UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT" TEXAS ONE CALL SYSTEM MUST BE CONTACTED (800-245-4545) AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION OPERATIONS PERFORMED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT TEXAS ONE CALL SYSTEM.

INSPECTIONS/CERTIFICATIONS NOTE

ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY LOCAL CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO SUBSTANTIAL PROJECT COMPLETION.

PERMITS NOTE

CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED BY FEDERAL, STATE, OR LOCAL CODES AND/OR UTILITY SERVICE COMPANIES PRIOR TO START OF CONSTRUCTION.

GENERAL GRADING NOTES

1. 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 PROTECTION.
2. ALL CUT OR FILL SLOPES SHALL BE 4:1 MAXIMUM UNLESS OTHERWISE NOTED.
3. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH AND 4 INCHES OF TOPSOIL APPLIED. IF ADEQUATE TOPSOIL IS NOT AVAILABLE ON SITE, THE CONTRACTOR SHALL PROVIDE TOPSOIL, APPROVED BY THE OWNER, AS NEEDED. THE AREAS SHALL THEN BE SODDED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES, 3:1 OR STEEPER. 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.
4. EXISTING GRADE CONTOUR INTERVAL SHOWN AT 1 FOOT
5. PROPOSED GRADE CONTOUR INTERVAL SHOWN AT 1 FOOT.
6. CONTRACTOR SHALL ADJUST GRADES ADJACENT TO EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.

SELECT FILL PREPARATION

AFTER THE SUBGRADE HAS BEEN PREPARED AND INSPECTED, FILL PLACEMENT MAY BEGIN. SELECT FILL MATERIAL SHOULD HAVE THE FOLLOWING CHARACTERISTICS:

1. FREE OF ORGANIC OR OTHER DELETERIOUS MATERIALS,
2. HOMOGENEOUS MIXTURE,
3. MAXIMUM PARTICLE SIZE OF THREE (3) INCHES,
4. LIQUID LIMIT LESS THAN 35,
5. PLASTICITY INDEX BETWEEN SEVEN (7) AND TWENTY (20), AND
6. CONSIST OF SILTY-CLAYEY SANDS (SC-SM); LOW PLASTICITY SANDY CLAYS (CL); OR CLAYEY SANDS (SC) AS DEFINED BY THE UNIFIED SOIL CLASSIFICATION SYSTEM.

IF A FINE-GRAINED MATERIAL IS USED FOR FILL, VERY CLOSE MOISTURE CONTENT CONTROL WILL BE REQUIRED TO ACHIEVE THE RECOMMENDED DEGREE OF COMPACTION.

BASED ON THE GEOTECHNICAL REPORT, THE MAJORITY OF THE ONSITE SURFICIAL MATERIAL DOES NOT COMPLY WITH THE SELECT FILL CRITERIA AND SHOULD NOT BE USED IN SELECT FILL APPLICATIONS. ALL SELECT FILL SHOULD COME FROM AN OFF-SITE SOURCE THAT MEETS THE SELECT FILL CRITERIA AND SHOULD BE APPROVED PRIOR TO USE.

FILL SHOULD BE PLACED IN MAXIMUM LIFTS OF EIGHT (8) INCHES OF LOOSE MATERIALS. SELECT FILL THICKNESSES LESS THAN FOUR (4) FEET SHOULD BE COMPACTED WITHIN THE RANGE OF TWO PERCENTAGE POINTS BELOW (-2%) TO TWO PERCENTAGE POINTS ABOVE (+2%) THE OPTIMUM MOISTURE CONTENT VALUE AND A MINIMUM OF 98% OF THE MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR (ASTM D 698) TEST. IF WATER MUST BE ADDED, IT SHOULD BE UNIFORMLY APPLIED AND THOROUGHLY MIXED INTO THE SOIL BY DISKING OR SCARIFYING.

SELECT FILL THICKNESS GREATER THAN FOUR (4) FEET SHOULD BE COMPACTED AT A MINIMUM OF 98% OF THE MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR (ASTM D 698) TEST, UNDER SIMILAR MOISTURE CONDITIONS AS LISTED IN THE PRECEDING PARAGRAPH. IT IS NOT RECOMMENDED THAT PORTIONS OF THE SITE WITH FILL THICKNESSES LESS THAN FOUR (4) FEET BE COMPACTED TO A LESSER COMPACTION LEVEL THAN OTHER PORTIONS OF THE SITE WITH THICKNESSES GREATER THAN FOUR (4) FEET WHICH ARE COMPACTED TO A GREATER COMPACTION LEVEL. IF ANY PORTION OF THE FILL BENEATH THE BUILDING EXCEEDS FOUR (4) FEET THEN THE ENTIRE SELECT FILL PAD SHOULD BE COMPACTED TO THE 98% COMPACTION LEVEL.

EACH LIFT OF COMPACTED SOIL SHOULD BE TESTED AND INSPECTED BY THE SOILS ENGINEER OR HIS REPRESENTATIVE PRIOR TO PLACEMENT OF SUBSEQUENT LIFTS. AS A GUIDELINE, IT IS RECOMMENDED THAT FIELD DENSITY TEST BE TAKEN AT A FREQUENCY OF NOT LESS THAN ONE (1) TEST PER 2,500 SQUARE FEET OF SURFACE AREA PER LIFT OR A MINIMUM OF FOUR (4) TEST PER LIFT FOR EACH TESTED AREA FOR THE BUILDING AREA.

PAVEMENT SUBGRADE PREPARATION

PLEASE REFER TO THE BUILDING PAD PREPARATION SECTION FOR INITIAL SUBGRADE REQUIREMENT. IN ADDITION, THE FINAL EIGHT (8) INCHES OF SUBGRADE UNDER PORTLAND CEMENT CONCRETE AND ASPHALTIC AND FLEXIBLE PAVEMENTS SHALL BE STABILIZED AS OUTLINED BELOW.

PORTIONS OF THE EXPOSED SUBGRADE COULD CONSIST OF FAT CLAY MATERIALS WITH PLASTIC INDICES GREATER THAN 20 AND SHOULD THEREFORE BE REMOVED TO A DEPTH OF EIGHT (8) INCHES AND REPLACED WITH DENSITY APPROVED SELECT FILL. ALL PAVEMENT SUBGRADE SHOULD MEET DENSITY REQUIREMENTS AND PASS A PROOF ROLLING TEST AND INSPECTION TO CONFIRM SUBGRADE STABILITY) IN ACCORDANCE WITH ITEM 216 (PROOF ROLLING) OF THE 2004 EDITION OF THE TEXAS DEPARTMENT OF TRANSPORTATIONS (TxDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS AND BRIDGES, A MINIMUM 25-TON ROLLER SHOULD BE USED FOR THIS APPLICATION.

COHESIVE (CLAY) SUBGRADE SOILS SHOULD BE COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY DEFINED BY THE STANDARD PROCTOR (ASTM D 698). NON-COHESIVE (SILTS AND SANDS) SUBGRADE SOILS SHOULD BE COMPACTED TO 100% OF MAXIMUM DRY DENSITY DEFINED BY THE STANDARD PROCTOR (ASTAM D 698).

SEEDING AND MULCHING NOTE

CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS WITHIN THE SUBJECT BOUNDARY NOT PAVED OR OTHERWISE COVERED. PER THE SPECIFICATIONS. ALL AREAS DISTURBED OUTSIDE THE PROPERTY BOUNDARY SHALL ALSO BE SEEDED AND MULCHED AND COVER SHALL BE ESTABLISHED TO PREVENT EROSION. CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY WATERING UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.

TRAFFIC CONTROL NOTE

GUIDELINES SET FORTH IN PART VI "STANDARDS AND GUIDES FOR TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE, UTILITY, AND INCIDENT MANAGEMENT OPERATIONS" OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MOST RECENT EDITION AS REVISED) SHALL BE OBSERVED.

TOPOGRAPHIC SURVEY NOTE

EXISTING TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS WAS PREPARED BY JOHNSON & PACE INCORPORATED. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW. THE ENGINEER'S SEAL ON THESE PLANS DOES NOT APPLY TO THE PROPERTY BOUNDARY INFORMATION SHOWN HEREON.

JOHNSON & PACE INCORPORATED
ENGINEERING • ARCHITECTURE • SURVEYING
1201 NW LOOP 281, SUITE 100,
LONGVIEW, TEXAS 75604
(903) 753-2626 (903) 753-2663
website: www.johnsonpace.com
TBPE F-4281

STATE OF TEXAS
JOE W. HART, III
80082
LICENSED
PROFESSIONAL ENGINEER
01/23/2026

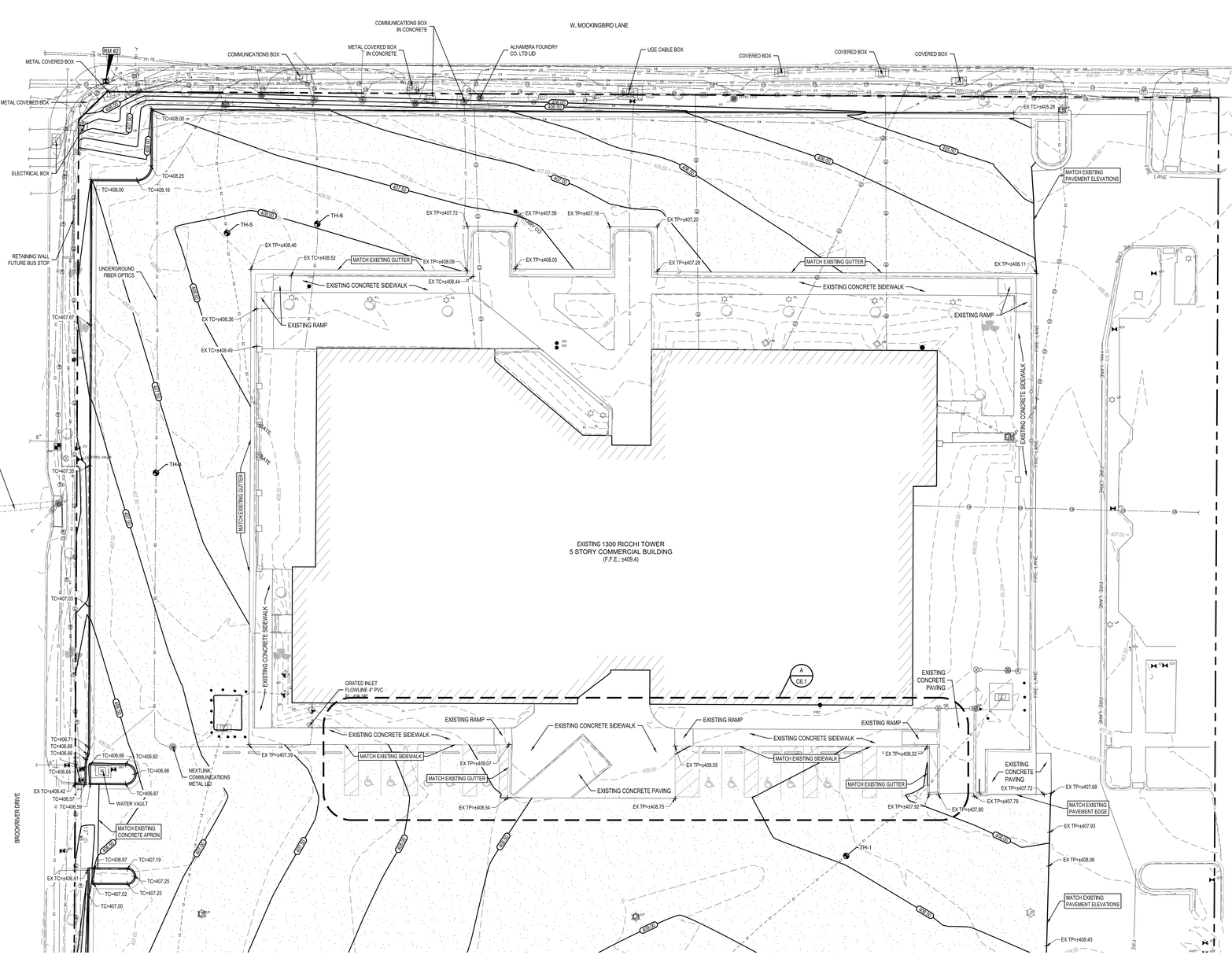
DALLAS COUNTY ADULT PROBATION CENTER PARKING LOT RECONSTRUCTION DALLAS, TEXAS

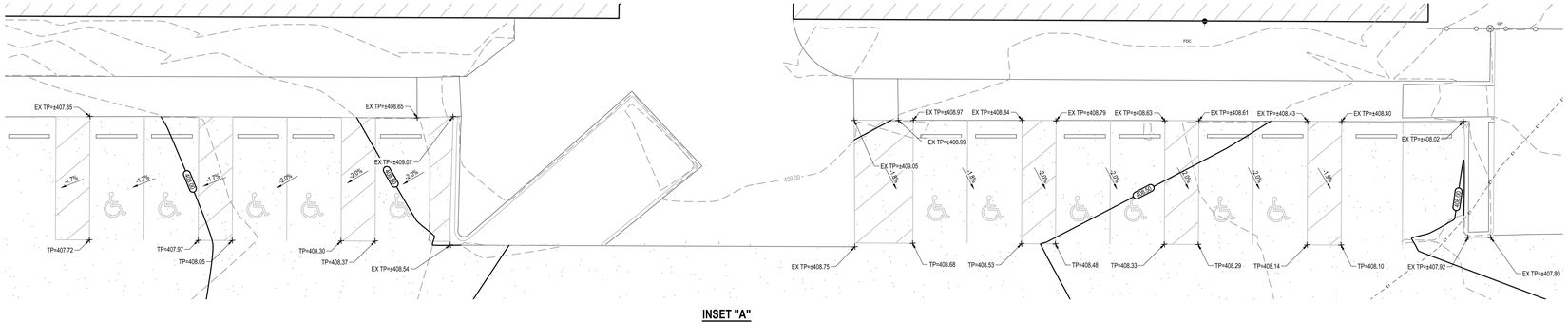
NO.	DESCRIPTION	BY	DATE
	REVISIONS		

GRADING PLAN

ISSUED FOR 100% CD

JOB NO.	5281-002	ISSUE DATE	1/23/2026
DRAWN BY	MWA	CHECKED BY	JWH
APPROVED BY	JWH	SCALE	1" = 30'
SHEET NO.	C6.0	REVISION NO.	





INSET "A"
SCALE: 1" = 10'

LEGEND OF U.G. UTILITY TYPES

COMMUNICATIONS	**QL"B"**
ADELPHIA (FO/DUCT)	C1
AT&T (TELE)	C2
AT&T (FO/DUCT)	C3
CENTURY LINK (FO/DUCT)	C4
LUMEN (FO/DUCT)	C5
MCI (FO/DUCT)	C6
NEXLINK (FO/DUCT)	C7
SPECTRUM (FO/DUCT)	C8
UPN (FO/DUCT)	C9
XO (FO/DUCT)	C10
ZAYO (FO/DUCT)	C11
	QL"C"/"D"
ADELPHIA (FO/DUCT)	
AT&T (TELE)	
AT&T (FO/DUCT)	
CENTURY LINK (FO/DUCT)	
LUMEN (FO/DUCT)	
MCI (FO/DUCT)	
NEXLINK (FO/DUCT)	
SPECTRUM (FO/DUCT)	
UPN (FO/DUCT)	
XO (FO/DUCT)	
ZAYO (FO/DUCT)	
GAS / PETROLEUM	**QL"B"**
ATMOS	G1
ATMOS	**QL"C"/"D"** G2
ELECTRIC / POWER	**QL"B"**
ONCOR	E1
PRIVATE	E2
ONCOR	**QL"C"/"D"** E3
PRIVATE	E4
TRAFFIC SIGNAL	**QL"B"**
CITY OF DALLAS	TS1
CITY OF DALLAS	**QL"C"/"D"** TS2
POTABLE WATER	**QL"B"**
DWU	W1
DWU	**QL"C"/"D"** W2
SANITARY SEWER	**QL"B"**
DWU	WW1
DWU	**QL"C"/"D"** WW2
STORM DRAIN	**QL"B"**
CITY OF DALLAS	SD1
CITY OF DALLAS	**QL"C"/"D"** SD2
ABANDONED UTILITY	
UNKNOWN UTILITY	

LEGEND OF UTILITY SYMBOLS

END CAP	E
QUALITY LEVEL CHANGE	
TEST HOLE	
UTILITY CONTINUATION	
CATV CABINET	CC
CATV HANDHOLE	C
CATV PEDESTAL	C
FIBER CABINET	F
FIBER HANDHOLE	F
TELEPHONE CABINET	T
TELEPHONE HANDHOLE (VAULT)	T
TELEPHONE MANHOLE	
TELEPHONE PEDESTAL	T
TELEPHONE POLE	TP
TELEPHONE POLE W/RISER	
ELECTRIC GROUND LIGHT	EGL
ELECTRIC HANDHOLE	E
ELECTRIC JUNCTION BOX (CABINET)	E
ELECTRIC MANHOLE	
ELECTRIC METER	EM
ELECTRIC POLE (POWER)	EP
ELECTRIC POLE W/RISER	
LIGHT POLE	LP
TRANSMISSION POLE	
SIGNAL HANDHOLE/BOX	SHB
SIGNAL POLE	SP
GAS MANHOLE	
GAS METER	GM
GAS TEST STATION	TS
GAS VALVE	
GAS VENT PIPE (GAS RISER)	
STORM SEWER INLET	INL
STORM SEWER MANHOLE	
STORM SEWER OUTFALL	
WASTE WATER CLEANOUT	
WASTE WATER MANHOLE	
FIRE HYDRANT	
WATER MANHOLE	
WATER METER	WM
WATER VALVE	
WATER VAULT	W

THE RIOS GROUP
SUBSURFACE UTILITY ENGINEERING
UTILITY COORDINATION
1890 Crown St.
Suite 1310
Dallas, TX 75234
214.333.0922

TEST HOLE (TH) INFORMATION

TEST HOLE # (TH#)	UTILITY SIZE O.D. (INCHES)	UTILITY MATERIAL	UTILITY TYPE	DEPTH OF UTILITY (FEET)	GROUND ELEVATION	TOP OF UTILITY (TOU)	UTILITY OWNER
1	4	PVC	ELEC.	3.04	408.68	405.64	ONCOR
2	4	PVC	ELEC.	4.16	408.66	404.50	ONCOR
3	4	PVC	ELEC.	3.80	407.36	403.56	ONCR
4	(3)4	PVC	FOC	3.06	407.90	404.84	MCI
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9							
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LONGVIEW, TEXAS 75604
(903) 663-0377 FAX (903) 663-0383
website: www.johnsonpace.com
TBPE F-4581

STATE OF TEXAS
JOE W. HART, III
80982
LICENSED
PROFESSIONAL ENGINEER
12/23/2026

DALLAS COUNTY ADULT PROBATION CENTER PARKING LOT RECONSTRUCTION DALLAS, TEXAS

NO.	DESCRIPTION	BY	DATE
	REVISIONS		

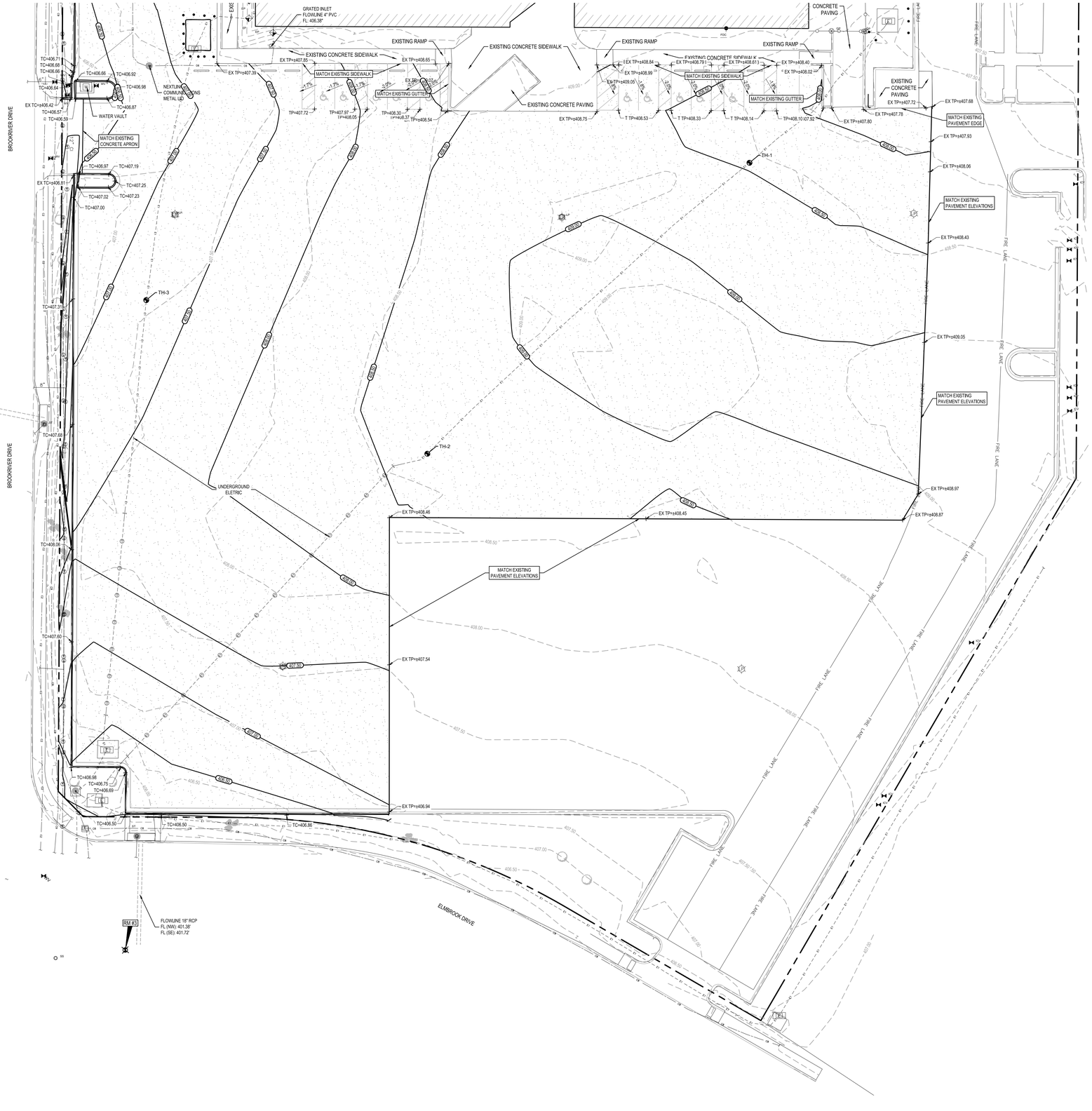
ENLARGED GRADING PLAN NORTH

ISSUED FOR 100% CD

JOB NO.	5281-002	ISSUE DATE	1/23/2026
DRAWN BY	MWA	CHECKED BY	JWH
APPROVED BY	JWH	SCALE	1" = 30'
SHEET NO.	C6.1	REVISION NO.	

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Filename: R:\5281 Dallas County\5281-002 Adult Probation Lot\CAD\C6.0 GRADING PLAN.dwg Plotted: 1/23/2026 12:13:28 PM By: Device None Page Setup: — Plotted by: Justin Gilks



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LEGEND OF U.G. UTILITY TYPES

COMMUNICATIONS	**QL"B"**
ADELPHIA (FO/DUCT)	C1
AT&T (TELE)	C2
AT&T (FO/DUCT)	C3
CENTURY LINK (FO/DUCT)	C4
LUMEN (FO/DUCT)	C5
MCI (FO/DUCT)	C6
NEXLINK (FO/DUCT)	C7
SPECTRUM (FO/DUCT)	C8
UPN (FO/DUCT)	C9
XO (FO/DUCT)	C10
ZAYO (FO/DUCT)	C11
	QL"C"/"D"
ADELPHIA (FO/DUCT)	C
AT&T (TELE)	C
AT&T (FO/DUCT)	C
CENTURY LINK (FO/DUCT)	C
LUMEN (FO/DUCT)	C
MCI (FO/DUCT)	C
NEXLINK (FO/DUCT)	C
SPECTRUM (FO/DUCT)	C
UPN (FO/DUCT)	C
XO (FO/DUCT)	C10 C10
ZAYO (FO/DUCT)	C11 C11
GAS / PETROLEUM	**QL"B"**
ATMOS	G1 G1
ATMOS	**QL"C"/"D"**
	G G G
ELECTRIC / POWER	**QL"B"**
ONCOR	E1 E1 E1 E1
PRIVATE	E2 E2 E2 E2
	QL"C"/"D"
ONCOR	E E E E
PRIVATE	E E E E
TRAFFIC SIGNAL	**QL"B"**
CITY OF DALLAS	TS1 TS1 TS1 TS1
	QL"C"/"D"
CITY OF DALLAS	TS TS TS
POTABLE WATER	**QL"B"**
DWU	W1 W1
	QL"C"/"D"
DWU	W W
SANITARY SEWER	**QL"B"**
DWU	WW1 WW1
	QL"C"/"D"
DWU	WW WW WW
STORM DRAIN	**QL"B"**
CITY OF DALLAS	SD1 SD1 SD1
	QL"C"/"D"
CITY OF DALLAS	SD SD SD
ABANDONED UTILITY	
UNKNOWN UTILITY	

LEGEND OF UTILITY SYMBOLS

END CAP	E
QUALITY LEVEL CHANGE	
TEST HOLE	
UTILITY CONTINUATION	
CATV CABINET	CC
CATV HANDHOLE	C
CATV PEDESTAL	C
FIBER CABINET	F
FIBER HANDHOLE	F
TELEPHONE CABINET	TF
TELEPHONE HANDHOLE (VAULT)	T
TELEPHONE MANHOLE	T
TELEPHONE PEDESTAL	TP
TELEPHONE POLE	
TELEPHONE POLE W/RISER	
ELECTRIC GROUND LIGHT	EGL
ELECTRIC HANDHOLE	E
ELECTRIC JUNCTION BOX (CABINET)	EJ
ELECTRIC MANHOLE	EM
ELECTRIC METER	EM
ELECTRIC POLE (POWER)	EP
ELECTRIC POLE W/RISER	
LIGHT POLE	LP
TRANSMISSION POLE	
SIGNAL HANDHOLE/BOX	SB
SIGNAL POLE	SP
GAS MANHOLE	
GAS METER	GM
GAS TEST STATION	TS
GAS VALVE	
GAS VENT PIPE (GAS RISER)	
STORM SEWER INLET	INL
STORM SEWER MANHOLE	
STORM SEWER OUTFALL	
WASTE WATER CLEANOUT	
WASTE WATER MANHOLE	
FIRE HYDRANT	
WATER MANHOLE	
WATER METER	WM
WATER VALVE	
WATER VAULT	W

THE RIOS GROUP

SUBSURFACE UTILITY ENGINEERING
UTILITY COORDINATION

1890 Crown St.
Suite 1310
Dallas, TX 75234
214.333.0922

TEST HOLE (TH) INFORMATION

TEST HOLE # (TH#)	UTILITY SIZE O.D. (INCHES)	UTILITY MATERIAL	UTILITY TYPE	DEPTH OF UTILITY (FEET)	GROUND ELEVATION	TOP OF UTILITY (TOU)	UTILITY OWNER
1	4	PVC	ELEC.	3.04	408.68	405.64	ONCOR
2	4	PVC	ELEC.	4.16	408.66	404.50	ONCOR
3	4	PVC	ELEC.	3.80	407.36	403.56	ONCR
4	(3)4	PVC	FOC	3.06	407.90	404.84	MCI
5	(2)1	PVC	ELEC.	2.04	408.70	406.66	PRIVATE
6	4	PVC	FOC	2.86	408.40	405.54	MCI
7	(4)4	PVC	FOC	3.26			NEXLINK
8	(3)4	PVC	FOC	2.50			AT&T
9							
10							
11							

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

GRAPHIC SCALE
15 0 15 30 60
(IN FEET)
1 inch = 30 ft

LEGEND

TC	TOP OF CURB
TP	TOP OF PAVEMENT
TW	TOP OF WALL
TI	TOP OF INLET
TG	TOP OF GRATE
SW	SIDEWALK
FG	FINISHED GRADE
TC=340.38	PROPOSED SPOT ELEVATION
335	EXISTING CONTOUR
335	PROPOSED CONTOUR

REFERENCE MARKERS

IF THE CONTRACTOR RELOCATES REFERENCE MARKERS WITH A NEW REFERENCE MARKER, IT SHALL BE LOCATED WITHIN A HORIZONTAL AND VERTICAL TOLERANCE OF 0.10'

RM #1	SET "X" IN CONC N: 6985645.74 E: 2470582.97 EL = 404.44
RM #2	SET "X" IN CONC N: 6985365.30 E: 2470247.07 EL = 405.77
RM #3	SET "X" IN CONC N: 6984923.26 E: 2470536.66 EL = 405.70
RM #4	SET "X" IN CONC N: 6985020.20 E: 2470932.09 EL = 405.79

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS PUT ON NOTICE THAT THERE MAY BE NUMEROUS UNDERGROUND UTILITIES IN THE LINE OF WORK, SUCH AS WATER, SEWER, GAS, PIPELINE, TELEPHONE AND ELECTRIC. SOME MAY BE ABANDONED WHILE MANY ARE ACTIVE. EXISTING UTILITIES SHOWN ON THE PLANS REPRESENT A DILIGENT EFFORT TO SHOW THEIR APPROXIMATE LOCATION.

THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN CONDUCTING EXCAVATION OPERATIONS. DAMAGES SHALL BE REPAIRED IMMEDIATELY AT CONTRACTOR'S EXPENSE.

THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST FIELD LOCATION OF UTILITIES.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENT SHOWN ON THE PLANS.

TEXAS ONE CALL SYSTEM

AS REQUIRED BY "THE TEXAS UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT" TEXAS ONE CALL SYSTEM MUST BE CONTACTED (800-245-4545) AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION OPERATIONS PERFORMED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT TEXAS ONE CALL SYSTEM.

JOHNSON & PACE INCORPORATED
ENGINEERING • ARCHITECTURE • SURVEYING
1201 NW LOOP 281, SUITE 100.
LONGVIEW, TEXAS 75604
(903) 663-0377 FAX (903) 663-0383
website: www.johnsonpace.com
TBPE F-4051

STATE OF TEXAS
JOE W. HART, III
80982
LICENSED
PROFESSIONAL ENGINEER
1/23/2026

DALLAS COUNTY ADULT PROBATION CENTER PARKING LOT RECONSTRUCTION DALLAS, TEXAS

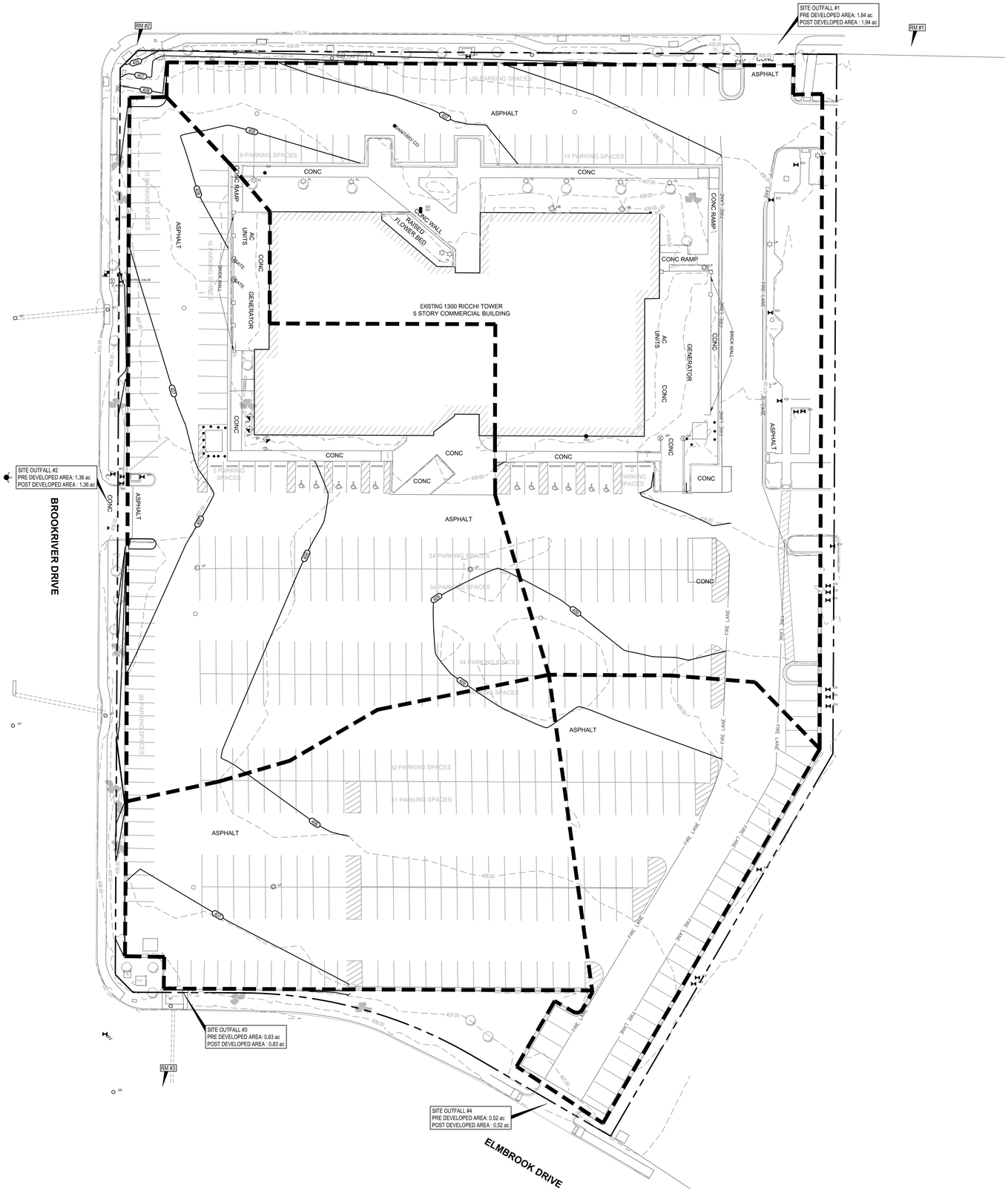
NO.	DESCRIPTION	BY	DATE

REVISIONS

ENLARGED GRADING PLAN SOUTH

ISSUED FOR 100% CD

JOB NO.	5281-002	ISSUE DATE	1/23/2026
DRAWN BY	MWA	CHECKED BY	JWH
APPROVED BY	JWH	SCALE	1" = 30'
SHEET NO.	C6.2	REVISION NO.	



RUNOFF COEFFICIENT "C" VALUE CALCULATIONS

EXISTING CONDITIONS

AREA DESIGNATION	TOTAL AREA	AREA			RUNOFF COEFFICIENT			COMPOSITE RUNOFF COEFFICIENT
		COMMERCIAL	WOODS	GRASS	COMMERCIAL	WOODS	GRASS	
	(acres)	(sq. ft.)	(sq. ft.)	(sq. ft.)	C	C	C	C
E-1	1.94	84,403	0	0	0.90	0.40	0.39	**0.90**
E-2	1.36	59,377	0	0	0.90	0.40	0.39	**0.90**
E-3	0.83	36,006	0	0	0.90	0.40	0.39	**0.90**
E-4	0.52	22,554	0	0	0.90	0.40	0.39	**0.90**

PROPOSED CONDITIONS

AREA DESIGNATION	TOTAL AREA	AREA			RUNOFF COEFFICIENT			COMPOSITE RUNOFF COEFFICIENT
		COMMERCIAL	WOODS	GRASS	COMMERCIAL	WOODS	GRASS	
	(acres)	(sq. ft.)	(sq. ft.)	(sq. ft.)	C	C	C	C
P-1	1.94	84,403	0	0	0.90	0.40	0.39	**0.90**
P-2	1.36	59,377	0	0	0.90	0.40	0.39	**0.90**
P-3	0.83	36,006	0	0	0.90	0.40	0.39	**0.90**
P-4	0.52	22,554	0	0	0.90	0.40	0.39	**0.90**

RATIONAL METHOD DRAINAGE CALCULATIONS

EXISTING CONDITIONS

AREA DESIGNATION	TOTAL AREA	TIME OF CONCENTRATION	COMPOSITE RUNOFF COEFFICIENT	RAINFALL INTENSITY				PEAK RUNOFF			
				2-Year	10-Year	50-Year	100-Year	2-Year	10-Year	50-Year	100-Year
	(acres)	(min)	C	(in/hr)	(in/hr)	(in/hr)	(in/hr)	(cfs)	(cfs)	(cfs)	(cfs)
E-1	1.94	10	0.90	5.42	8.01	10.56	11.57	**9.45**	**13.98**	**18.42**	**20.18**
E-2	1.36	10	0.90	5.42	8.01	10.56	11.57	**6.65**	**9.83**	**12.96**	**14.19**
E-3	0.83	10	0.90	5.42	8.01	10.56	11.57	**4.03**	**5.96**	**7.86**	**8.61**
E-4	0.52	10	0.90	5.42	8.01	10.56	11.57	**2.52**	**3.73**	**4.92**	**5.39**

PROPOSED CONDITIONS

AREA DESIGNATION	TOTAL AREA	TIME OF CONCENTRATION	COMPOSITE RUNOFF COEFFICIENT	RAINFALL INTENSITY				PEAK RUNOFF			
				2-Year	10-Year	50-Year	100-Year	2-Year	10-Year	50-Year	100-Year
	(acres)	(min)	C	(in/hr)	(in/hr)	(in/hr)	(in/hr)	(cfs)	(cfs)	(cfs)	(cfs)
P-1	1.94	10	0.90	5.42	8.01	10.56	11.57	**9.45**	**13.98**	**18.42**	**20.18**
P-2	1.36	10	0.90	5.42	8.01	10.56	11.57	**6.65**	**9.83**	**12.96**	**14.19**
P-3	0.83	10	0.90	5.42	8.01	10.56	11.57	**4.03**	**5.96**	**7.86**	**8.61**
P-4	0.52	10	0.90	5.42	8.01	10.56	11.57	**2.52**	**3.73**	**4.92**	**5.39**

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

GRAPHIC SCALE
15 0 15 30 60
(IN FEET)
1 inch = 30 ft.

LEGEND

- DRAINAGE AREA BOUNDARY
- 336 — EXISTING CONTOUR (2.0' INTERVALS SHOWN)
- 336 — PROPOSED CONTOUR (2.0' INTERVALS SHOWN)
- HYDRAULIC LENGTH FLOW LINE
- FLOW DIRECTION ARROW
- STORM SEWER

REFERENCE MARKERS

IF THE CONTRACTOR RELOCATES REFERENCE MARKERS WITH A NEW REFERENCE MARKER, IT SHALL BE LOCATED WITHIN A HORIZONTAL AND VERTICAL TOLERANCE OF 0.10'

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EL = 405.79

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STATE OF TEXAS
JOE W. HART, III
80082
LICENSED
PROFESSIONAL ENGINEER
1/23/2026

DALLAS COUNTY ADULT PROBATION CENTER PARKING LOT RECONSTRUCTION DALLAS, TEXAS

REVISIONS

NO.	DESCRIPTION	BY	DATE

DRAINAGE AREA PLAN

ISSUED FOR 100% CD

JOB NO.	5281-002	ISSUE DATE	1/23/2026
DRAWN BY	MWA	CHECKED BY	JWH
APPROVED BY	JWH	SCALE	1" = 30'
SHEET NO.	C7.0	REVIEWED	

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Filename: W:\5281 Dallas County\5281-002 Adult Probation Lot\CAD\C3.0_GRP.dwg Plotted: 1/23/2026 12:12:47 PM By/Device: None Page Setup: — By/Name by: Justin Collins

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UB 24-2
24" Universal Barrier

Specified tree root guides are mechanical barriers and root deflectors to prevent tree roots from damaging hardscapes and landscapes. UB 24-2 is assembled in 2' (61cm) long modules to create varying sizes of cylinders for surrounding root balls (surround planting style) or for linear applications directly beside a hardscape adjacent to one side of the trees (linear planting style).

A. MATERIALS

1. **The contractor shall furnish and install tree root guides as specified.** The tree root guides shall be UB 24-2 as manufactured by Deep Root Partners, L.P., 530 Washington Street, San Francisco, CA 94111 (800/458.7668), or approved equal. The guide shall be black, injection molded panels, of 0.085" (2.16mm) wall thickness in modules 24" (61cm) long by 24" (61cm) deep; manufactured with a minimum 50% post consumer recycled polypropylene plastic with added ultraviolet inhibitors; recyclable. Each panel shall have:

   Not less than 4 molded integral vertical root directing ribs of a minimum 0.085" (2.16mm) thickness protruding 1/2" (12.7mm) at 90° from interior of the guide panel, spaced 6"(152.4mm) apart (see panel drawing).

   A double top edge consisting of two parallel, integral, horizontal ribs at the top of the panel of a minimum 0.085" (2.16mm) thickness, 3/8" (9.53mm) wide and 1/4" (6.35mm) apart with the lower rib attached to the vertical root deflecting ribs (see Detail A).

   A minimum of 9 anti-lift ground lock tabs consisting of integral horizontal ridges of a minimum 0.085" (2.16mm) thickness in the shape of a segment of a circle, the 2" (50.8mm) chord of the segment joining the panel wall and the segment, protruding 3/8" (9.53mm) from the panel. The nine ground locks on each panel shall be about equally spaced between each of the vertical root directing ribs (3 between each set of ribs; see Detail B).

   An integrated zipper joining system providing for instant assembly by sliding one panel onto another (see Detail C).

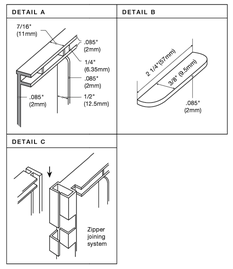
2. **The basic properties of the material shall be:**

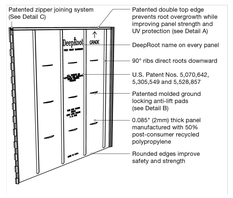
Test	ASTM Test Method	Value Copolymer Polypropylene
Tensile strength @ yield Wall	D638	2,354 PSI
Tensile strength @ yield Hinge	D638	2,846 PSI
Yield Elongation—Wall	D638	7.44%
Yield Elongation—Hinge	D638	7.01%
Flexural Modulus	D790B	119,625 PSI
Notched Izod Impact—Wall	D256A	3.84 (ft-lbs.)
Rockwell Hardness r. scale—Wall	D785A	84.4

U.S. Patents: 5,070,642, 5,305,549 and 5,526,857. Other Patents Pending

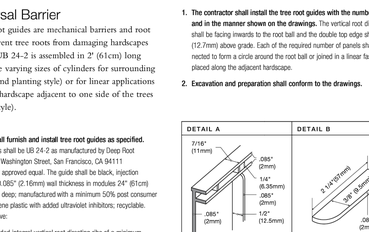
B. CONSTRUCTION AND INSTALLATION

1. **The contractor shall install the tree root guides with the number of panels and in the manner shown on the drawings.** The vertical root directing ribs shall be facing inwards to the root ball and the double top edge shall be 1/2" (12.7mm) above grade. Each of the required number of panels shall be connected to form a circle around the root ball or joined in a linear fashion and placed along the adjacent hardscape.
2. **Excavation and preparation shall conform to the drawings.**



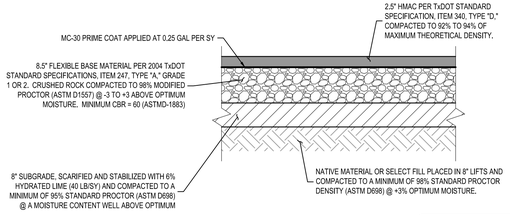


TREE ROOT BARRIER DETAILS
N.T.S.



FIRE LANE STRIPING SHALL BE 6" RED STRIPES WITH 4" INCH WHITE LETTERS READING "NO PARKING FIRE LANE" STRIPING SHALL BE PLACED ON THE TOP EDGE OF THE SIDEWALK ABUTTING THE PAVED DRIVE OR AS SPECIFIED BY LOCAL REQUIREMENTS.

FIRE LANE MARKING
N.T.S.

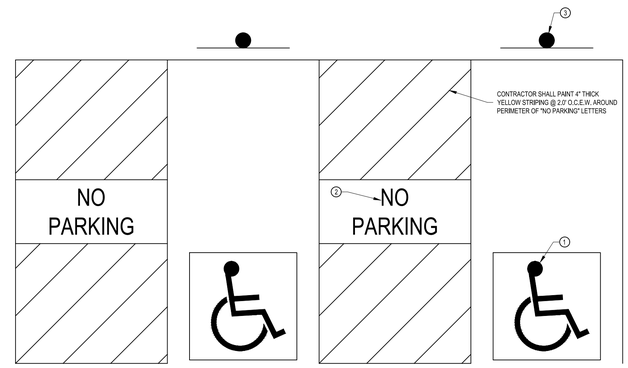


REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION

ASPHALT PAVEMENT SECTION
N.T.S.

PAVEMENT MARKING NOTES

1. ARROWS, WORDS, STOP BARS, AND PAVEMENT STRIPING SHALL BE APPLIED ACCORDING TO REQUIREMENTS AS OUTLINED IN SECTION 3B OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. ALL ARROWS, WORDS AND STOP BARS SHALL BE THERMOPLASTIC.
3. ALL PAVEMENT STRIPES SHALL HAVE GLASS BEADS FOR RETLECTIVITY.

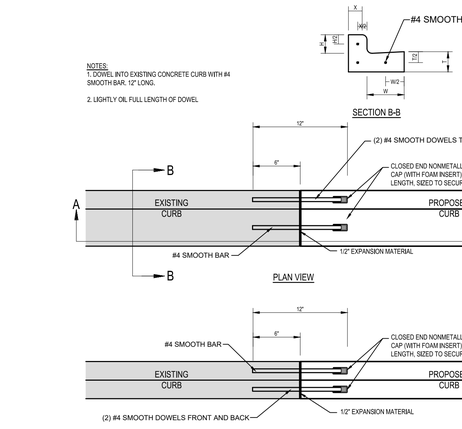


NOTES:

PER TEXAS ACCESSIBILITY STANDARDS §68.104, A PAVED ACCESSIBLE PARKING SPACE MUST INCLUDE THE FOLLOWING:

1. THE INTERNATIONAL SYMBOL OF ACCESSIBILITY PAINTED TRAFFIC BLUE;
2. THE WORDS "NO PARKING" SHALL BE PAINTED ON ANY ACCESS AISLE ADJACENT TO THE ADA ACCESSIBLE PARKING SPACE. THE WORDS MUST BE PAINTED TO MEET THE FOLLOWING CRITERIA:
   (A) ALL CAPITAL LETTERS
   (B) LETTER HEIGHT MUST EQUAL AT LEAST 12"
   (C) THE WORDS SHALL BE CENTERED WITHIN EACH ACCESS AISLE ADJACENT TO THE PARKING SPACE.
3. A SIGN IDENTIFYING THE CONSEQUENCES OF PARKING ILLEGALLY IN A PAVED ACCESSIBLE PARKING SPACE. THE SIGN MUST INCLUDE THE FOLLOWING:
   (A) AT A MINIMUM STATE "VIOLATORS SUBJECT TO FINE AND TOWING" IN A LETTER HEIGHT OF AT LEAST ONE INCH.
   (B) BE MOUNTED ON A POLE, POST, WALL OR FREESTANDING BOARD.
   (C) BE NO MORE THAN EIGHT INCHES BELOW A SIGN REQUIRED BY TEXAS ACCESSIBILITY STANDARDS, 502.6.
   (D) BE INSTALLED SO THAT THE BOTTOM EDGE OF THE SIGN IS NO LOWER THAN 48 INCHES AND NO HIGHER THAN 80 INCHES ABOVE GROUND LEVEL.

ACCESSIBLE PARKING DETAIL
N.T.S.

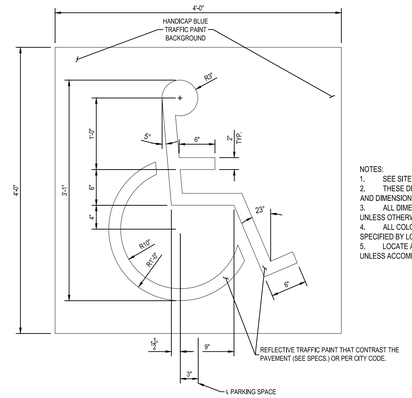


NOTES:
1. DOWEL INTO EXISTING CONCRETE CURB WITH #4 SMOOTH BAR, 12" LONG.
2. LIGHTLY OIL FULL LENGTH OF DOWEL

TIE-IN TO EXISTING CURB DETAIL
N.T.S.

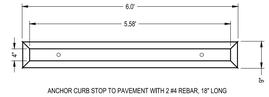
ACCESSIBLE PARKING SIGN
N.T.S.

NOTE (R7-8 SIGN):
THIS IS A STANDARD SIGN AND MAY BE ORDERED FROM ANY TRAFFIC SIGN SUPPLIER BY NUMBER. THE ARROW SHOULD BE OMITTED WHERE THERE IS ONLY ONE SPACE. THE ARROW MAY ALSO BE MADE TO POINT IN ONLY ONE DIRECTION. THE ARROW MAY ALSO BE REPLACED BY "TIME" SUCH AS 9 AM - 5 PM WHERE A PART-TIME RESTRICTION EXISTS. THE SIGN MUST BE SUPPLEMENTED WITH A "VAN ACCESSIBLE" SIGN AS APPLICABLE AND/OR AMOUNT OF THE FINE FOR ILLEGALLY PARKING IN THE RESERVED SPACE(S) A MUNICIPALITY MAY IMPOSE. CONFIRM WITH LOCAL REGULATIONS.



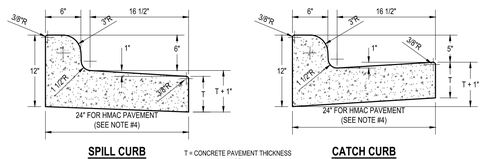
NOTES:
1. SEE SITE PLAN FOR TOTAL LAYOUT
2. THESE DETAILS ARE FOR REFERENCE AND DIMENSION CONTROL ONLY
3. ALL DIMENSIONS ARE TO \ OF STRIPE UNLESS OTHERWISE INDICATED
4. ALL COLORS ARE SHOWN OR AS SPECIFIED BY LOCAL CODES
5. LOCATE AT EDGE OF PARKING SPACE UNLESS ACCOMPANIED BY "VAN" LETTERING

ACCESSIBLE PARKING SPACE SYMBOL
N.T.S.

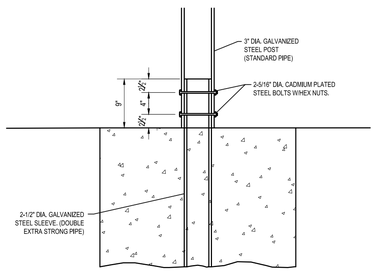


CONCRETE CURB STOP
N.T.S.

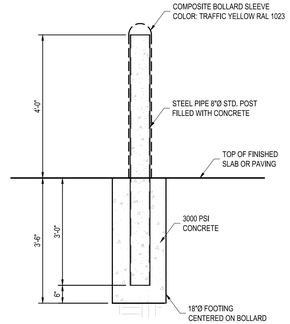
NOTES:
1. EXPANSION JOINTS IN CURB & GUTTER SHALL BE SPACED AT A MAXIMUM DISTANCE OF 40' APART AND AT ALL RADIUS POINTS, P.T.'S AND P.C.'S.
2. CONTROL JOINTS SHALL BE SPACED AT A MAXIMUM DISTANCE OF 10' CENTER TO CENTER.
3. REFER TO GRADES ON THE GRADING PLAN FOR EXACT LOCATIONS OF SPILL CURBS AND CATCH CURBS. GUTTER SLOPE TO MATCH ADJACENT PAVEMENT GRADES, TRAVERSE AND LONGITUDINAL.
4. CURB TO BE SET ON FINISHED SUBGRADE. GUTTER PAN THICKNESS "T" = THICKNESS OF HMAC LAYER AND BASE THICKNESS.
5. CURB SHALL BE POURED MONOLITHIC WITH CONCRETE PAVEMENT SECTION. PAVEMENT JOINTS SHALL EXTEND CONTINUOUSLY THROUGH THE CURB.



CONCRETE CURB & GUTTER
N.T.S.



BASE DETAIL IN LAWN OR LANDSCAPED AREAS (TYP. FOR ANY SIGN APPLICATION)
N.T.S.



PIPE BOLLARD DETAIL
N.T.S.

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website: www.johnsonpace.com
TBPE F-4051
STATE OF TEXAS
JOE W. HART, III
80082
LICENSED PROFESSIONAL ENGINEER
01/23/2026

DALLAS COUNTY ADULT PROBATION CENTER PARKING LOT RECONSTRUCTION DALLAS, TEXAS

NO.	DESCRIPTION	BY	DATE
	REVISIONS		

DETAILS

ISSUED FOR 100% CD

JOB NO.	5281-002
DRAWN BY	MWA
CHECKED BY	JWH
SHEET NO.	C8.0
APPROVED BY	JWH
SCALE:	1" = ##
REVISION NO.	
ISSUE DATE:	1/23/2026

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Filename: W:\5281 Dallas County\5281-002 Adult Probation Lot\ACAD\CB_CS3.1.DWT Last Saved By: Plotted: 1/23/2026 12:14:19 PM By: Device: None Page Setup: — Plotted by: Justin Collins

JOHNSON & PACE INCORPORATED

ENGINEER'S OPINION OF PROBABLE COST
DALLAS COUNTY
ADULT PROBATION PARKING LOT
DALLAS, TEXAS

February 2026

Item	Description	Quantity	Unit Measure	Unit Cost	Total Cost
	OVERHEAD				
1	Mobilization, Bonds, Insurance	1	LS	$ 75,000.00	$ 75,000.00
2	Construction Staking	1	LS	$ 10,000.00	$ 10,000.00
3	Traffic Control (Cones, Barrels, Fencing, Etc.)	1	LS	$ 5,000.00	$ 5,000.00
4	Erosion Control BMP Installation, Implementation and Management	1	LS	$ 9,500.00	$ 9,500.00
	Overhead Subtotal				**$ 99,500.00**
	DEMOLITION				
5	Removal of asphalt pavement and base layers (approx 10" depth)	11,150	SY	$ 4.00	$ 44,600.00
6	Removal of concrete pavement	42	SY	$ 20.00	$ 840.00
7	Removal and storage of concrete curb stops	18	EA	$ 100.00	$ 1,800.00
8	Removal of 6" pipe bollards	12	EA	$ 250.00	$ 3,000.00
9	Removal of concrete curb and gutter	975	LF	$ 10.00	$ 9,750.00
10	Removal of concrete island	9	SY	$ 20.00	$ 180.00
11	Temporarily Removal of wrought iron fence (store materials for reuse)	491	LF	$ 15.00	$ 7,365.00
12	Temporarily Removal (2) Key pads, a solar panel, and gate operator and motor. (sl	1	LS	$ 2,000.00	$ 2,000.00
	Demolition, Site Preparation and Earthwork Subtotal				**$ 69,535.00**
	PARKING LOT PAVEMENT AND DRAINAGE				
12	8" subgrade preparation for lime treatment (Excludes Lime Material)	11,351	SY	$ 5.00	$ 56,755.00
13	F&I Hydrated Lime (40-lbs/SY)	227	Tons	$ 600.00	$ 136,212.00
14	F&I 8.5" Thick of TxDOT Type A, Grd 1 or 2 Flex Base & Compact	11,351	SY	$ 30.00	$ 340,530.00
15	F&I MC-30 Prime Coat (0.25-gal/SY)	11,074	SY	$ 2.50	$ 27,685.00
16	F&I 2.5" Thick HMAC	11,074	SY	$ 35.00	$ 387,590.00
17	F&I 6" Concrete Curb and Gutter	1,013	LF	$ 30.00	$ 30,390.00
18	Re-Install Concrete Curb Stops	18	EA	$ 100.00	$ 1,800.00
19	F&I 6" Pipe Ballard's	12	EA	$ 1,250.00	$ 15,000.00
20	F&I 4" Wide Yellow Striping	8,600	LF	$ 4.00	$ 34,400.00
21	F&I Fire lane Striping	1,703	LF	$ 5.00	$ 8,515.00
22	F&I ADA Parking space Painted Symbol	11	EA	$ 250.00	$ 2,750.00
23	F&I UB 24-2 Universal Tree Root Barrier along back of curb	821	LF	$ 90.00	$ 73,890.00
24	Reinstall Wrought Iron Fence with new posts and reuse fence panels	491	LF	$ 75.00	$ 36,825.00
25	Reinstall (2) Key pads, a solar panel, and gate operator and motor.	1	LS	$ 2,000.00	$ 2,000.00
	Parking Lot Pavements Subtotal				**$ 1,154,342.00**
	Sub-total Construction Cost				**$ 1,323,377.00**
	10% Contingency				**$ 132,337.70**
	TOTAL CONSTRUCTION COST				**$ 1,455,714.70**

DALLAS COUNTY - RENOVATION PROJECTS			
COST BREAKDOWN			
Project Name:			
Date:			
ITEM	**COST CATEGORY DESCRIPTION**	**PERCENTAGE** (%)	**TOTAL AMOUNT** ($)
1	**General Requirements:**		
2	**General Conditions:**		
3	**Cost of Work:**		
4	**Contractor Contingency:**		
5	**Total Construction Costs: (Line Items 1 thru 4)**		0
6	**Payment & Performance Bonds:**		
7	**Insurance:**		
8	**Permit Fee:**		
9	**Contractor Fee/Profit:**		
10	**Total Markups (Line Items 6 thru 9)**		0
11	**Owner Contingency:**	5%	0
12	**TOTAL SUBMITTED COSTS: (Line Items 5+10+11)**		0
13	**Alternates:**		

* General Requirements should cover ALL related costs to complete the project with the exception of Cost of Work
* General Conditions should take into account all Personnel required to complete the project
* Cost of Work needs to be broken down by ASTM E1557 Uniformat Level II Classification.
* Cost of Work should include any Allowances if identified in the Bid Documents
* Owner approval required for use of ALL contingencies. Contractor shall be responsible for procurement and coordination
* Owner Contingencies are to be a Percentage of Line 5 and subject to relative markups
* Alternates should be all inclusive of General Conitions, General Requirements and relevant markups.
* Total costs under Line 12 should be entered in BidSync
* All Cost Categories need to be separated and filled-in as listed in the Cost Sheet

DALLAS COUNTY - RENOVATION PROJECTS		
UNIFORMAT LEVEL II CLASSIFICATION FORM		
Project Name:		
Solicitation No:		
Vendor Name:		
Date:		
Division	**Uniformat Level II Description**	**Estimated Cost ($)**
Division 01	**General Requirements**	$ -
Division 02	**Existing Conditions**	$ -
Division 03	**Concrete**	$ -
Division 04	**Masonry**	$ -
Division 05	**Metals**	$ -
Division 06	**Wood, Plastics, and Composites**	$ -
Division 07	**Thermal and Moisture Protection**	$ -
Division 08	**Openings**	$ -
Division 09	**Finishes**	$ -
Division 10	**Specialties**	$ -
Division 11	**Equipment**	$ -
Division 12	**Furnishings**	$ -
Division 13	**Special Construction**	$ -
Division 14	**Conveying Equipment**	$ -
Division 21	**Fire Suppression**	$ -
Division 22	**Plumbing**	$ -
Division 23	**HVAC**	$ -
Division 25	**Integrated Automated Systems**	$ -
Division 26	**Electrical**	$ -
Division 27	**Communications**	$ -
Division 28	**Electronic Safety and Security**	$ -
Division 31	**Earthwork**	$ -
Division 32	**Exterior Improvements**	$ -
Division 33	**Utilities**	$ -
Division 34	**Transportation**	$ -
Division 35	**Waterway and Marine Construction**	$ -
Division 40	**Process Integration Manufacturers**	$ -
Division 41	**Material Processing and Handling Equipment**	$ -
Division 42	**Process Heating, Cooling and Drying Equipment**	$ -
Division 43	**Process Gas and Liquid Handling, Purification, and Storage Equipment Manufacturers**	$ -
Division 44	**Pollution Control Equipment**	$ -
Division 45	**Industry-Specific Manufacturing Equipment**	$ -
Division 46	**Water and Wastewater Equipment**	$ -
Division 48	**Electrical Power Generation**	$ -
	TOTAL (Cost of Work)* **	**$** -

*** *Enter under line item 2 on* ***Bid Cost Sheet***