

E-19: Seguin Road to Nacogdoches Road-Segment 2

Pre-Proposal Meeting

April 16, 2018

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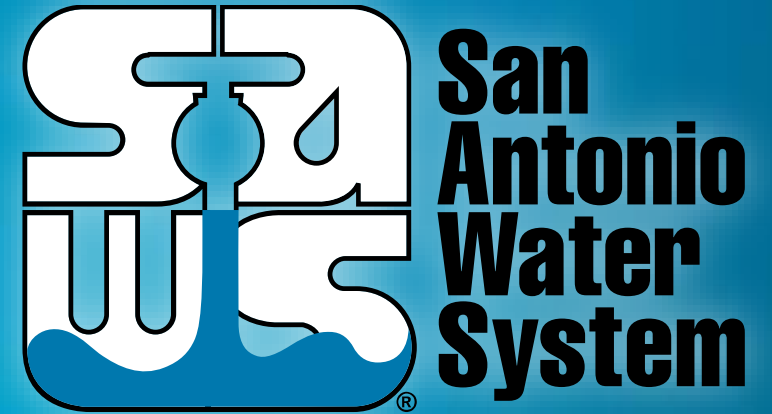
Manager - Contract Administration, SAWS

Marisol V. Robles

SMWVB Program Manager, SAWS

Jeff Farnsworth, P.E.

Design Engineer, Kimley-Horn



MAKING SAN ANTONIO
WATERFUL

Meeting Agenda

- Project Overview
- Oral Statements
- Miscellaneous Items
- Contract Requirements
- Required Experience
- RFCSP Evaluation Process
- Evaluation Criteria
- SMWB
- Submittal Preparation
- Additional Reminders
- Communication
- Key Dates
- Additional Project Information
- Work within CoSA Parks
- TXDOT Crossings
- Special Conditions
- Unique Project Challenges
- Coordination with Stakeholders and Property Owners

Project Overview

E-19: Seguin Road to Nacogdoches Road – Segment 2

- Replacement of 16,500 LF of existing 48” and 42” gravity sewer main with approximately 15,500 LF of 78” and 60” gravity sewer.
- Project limits extend at the upstream end of E-19 Segment 1 approximately 1,300 feet north of Rittiman Rd., north along Holbrook Rd, across Austin Highway, along Ira Lee, across Loop 410 and ends approximately 400 feet north of Marymont Park.

Oral Statements

Oral statements or discussion during the pre-proposal meeting will not be binding, nor will it change or affect the terms or conditions within the Plans and Specifications for this Project. Changes, if any, will be addressed only via an Addendum.

Pre-Proposal Meeting

- Non-mandatory pre-proposal meeting
- Attendees should sign-in
- Sign-in sheet will be posted on SAWS website
- Key project information:
 - 731 calendar days
 - Construction estimate is \$38,900,000
 - Construction services being procured through RFCSP

Contract Requirements

- Weekly submission of Certified Payroll using LCP Tracker software
- Maintain insurance coverage during the construction of this Project
- Weekly reporting of subcontractor payments using the Subcontractor Payment Utilization Reporting (SPUR) system
- Submittals and invoicing will be handled through CPMS
- EPA Consent Decree project (found in the Special Conditions)
- Geotechnical report for view on SAWWS website

Required Experience

- Installation of large diameter ($\geq 60''$) sanitary sewer pipelines with depths $> 20'$ via open cut and trenchless (jacking, boring, tunneling or hand mining with liner plate)
 - In narrow corridors with potential conflicts with existing utilities
- Coordination with multiple stakeholders
- Complex sequencing of construction activities with multiple sites
- On-time project completion with accelerated project schedule
- Coordination with governmental agencies influencing project schedules
- Managing bypass pumping of large flows (≥ 20 mgd)
- Experience constructing project, which require archaeological observation during construction and working with local Office of Historic Preservation

RFCSP Evaluation Process

- Selection Committee will score the proposals based on the evaluation criteria published in the SIR
- Price will be calculated (lowest price receives the highest points) and added to final scores
- SMWVB will be added to final scores
- Negotiations, if any
- Board award

Evaluation Criteria

CRITERIA	MAX POINTS	SIR PAGES
Team Qualifications and Experience	20	SIR-2 to SIR-4
Quality, Reputation, and Ability to Deliver Projects on Schedule and within Budget	25	SIR-4 to SIR-5
Project Approach including Delivery Schedule	15	SIR-5 to SIR-6
Price	30	SIR-6
Small, Minority, and Woman-Owned Business Participation (SMWB)	10	SIR-6 to SIR-7 and GFEP
TOTAL	100	

Evaluation Criteria

Team Qualifications and Experience (20 points)

- Current business structure, type, and stability of organization
- Debarment history, if any
- Litigation, arbitration and claims (length of time varies); reference Supplementary Instructions to Respondents (SIR)
- Years performing construction; legal business name
- Equipment and facilities available for this Project
- Safety History to include TRIR, EMR, and fatalities

Evaluation Criteria

Team Qualifications and Experience *(cont.)*

- Definitions of Personnel, Subcontractor, Key Subcontractors on page SIR-3
- 1 page Organizational Chart with Key Personnel (KP) for Prime and Key Subcontractors (KS) with availability and percentage of work for duration of Contract
- Clear description of roles for both KP and KS
- 8 1/2" x 11" Resumes for all staff on Org Chart with PM's first
 - Not to exceed one page
 - See pages SIR-3 to SIR-4 for required information
 - Capabilities and experience relative to this Project
 - List of current projects assigned to during of this Project

Evaluation Criteria

Quality, Reputation and Ability to Deliver Projects on Schedule and within Budget (25 points)

- **Company On-Time Completion on Similar Projects in Past 10 years**
 - List and describe 5 completed projects within past 10 years of similar size, scope and complexity
 - Provide valid, previously verified contact information
 - Address a.-i. on page SIR-4, which outlines all of the required project information needed for the evaluation of this criteria
 - A minimum of 2 of the 5 projects must have been performed by the Construction Manager, PM, and/or Project Superintendent

Evaluation Criteria

Quality, Reputation and Ability to Deliver Projects on Schedule and within Budget (*cont.*)

- **Company On-Time Completion on Similar Projects in Past 10 years (*cont.*)**
 - Identify if projects were on-time and within budget.
 - If not on time, describe recovery/plan schedule and whether project brought back on schedule
 - If SAWS experience:
 - 1 of 5 projects listed should be a SAWS project
 - Also, include a complete list of all completed SAWS projects within the last 5 years

Evaluation Criteria

Quality, Reputation and Ability to Deliver Projects on Schedule and within Budget (*cont.*)

- Key Subcontractors Performance on Similar Projects within last 10 years
 - Provide 2 projects that the identified Key Subcontractor Project Superintendent participated in that were of similar size, scope and complexity within the last 10 years
 - Provide valid, previously verified contact information
 - Address a.-i. on page SIR-5, which outlines all of the required project information needed for the evaluation of this criteria
 - Identify if projects were on-time and within budget.
 - If not on time, describe recovery schedule and whether project brought back on schedule

Evaluation Criteria

Project Approach including Delivery Schedule (15 points)

- Project Approach narrative indicating:
 - Milestones
 - Specific critical processes and critical path items
 - Phases
 - Permits
 - Approvals
 - Coordination with stakeholders
 - Procurements
- Include corresponding Primavera or MS Project (CPMS milestone) schedule

Evaluation Criteria

Project Approach including Delivery Schedule (*cont.*)

- Project approach for procuring long-lead items, ensuring critical path items
- Coordination with key stakeholders
- Innovative ideas for cost savings
- Quality management plan (steps, safeguards, subcontractor oversight, QA/QC process, document control)
- List and describe instances unforeseen circumstances conditions were encountered and recovery plan, if any
- Approach to mitigate and manage unforeseen conditions, if encountered on this Project

SMWB Goal

Industry	SMWB Goal
Construction	20%

Accepted SMWVB Certification Agency

- **South Central Texas Regional Certification Agency**
(Includes the Texas Historically Underutilized Business “HUB” Program)

Minimum Qualifications for SMWVB recognition:

- SBE-Certified (even MBEs and WBEs)
- **Local office or local equipment yard**

Accepted SMWVB Certifications

- Minority Business Enterprise (MBE) (Includes AABE)
- Small Business Enterprise (SBE)
- Woman-owned Business Enterprise (WBE)
- Veteran-owned Business Enterprise (Tracked, but not eligible for points)

SMWB Scoring – To be updated in Addendum

Proposed SAWS Construction Alternative Delivery Method SMWB Scoring:

The maximum number of SMWB points to be earned is 10 points. Firms may use any combination of points below when attempting to meet the SMWB goals. Self-performance and subcontracting may be used to achieve the aspirational goals and earn points. SMWB prime contractors and/or subcontractors must be certified by the South Central Texas Regional Certification Agency, and must have a local presence in the San Antonio Metropolitan Statistical Area in order to be counted for SMWB points. All prime contractors firms, whether SMWB or not, are eligible to earn the maximum number of SMWB points (10).

1. M/WBE Scoring Method: 10 Points (By percentage) 20.00% M/WBE Goal

- MBE Participation Percentage between 1% and 4.99%: 1 Point
- MBE Participation Percentage between 5% and 9.99%: 2 Points
- MBE Participation Percentage between 10% and 14.99%: 4 Points
- MBE Participation Percentage between 15% and 16.99%: 5 Points
- MBE Participation Percentage between 17% and 19.99%: 8 Points
- MBE Participation Percentage meeting or exceeding 20.00%: 10 Points

2. SBE (Non-M/WBE) Scoring Method: 5 Points (By percentage) 5% SBE Goal

- SBE Participation Percentage between 1% and 1.99%: 1 Point
- SBE Participation Percentage between 2% and 2.99%: 2 Points
- SBE Participation Percentage between 3% and 3.99%: 3 Points
- SBE Participation Percentage between 4% and 4.99%: 4 Points
- SBE Participation Percentage meeting or exceeding 5.00%: 5 Points

Good Faith Effort Plan (GFEP) FAQs

- **Q: Is the 20% SMWB goal mandatory?**

A: No, but we ask prime consultants to do their best with good faith outreach efforts. If the goal is not met, proof of outreach efforts is required with the submittal.

- **Q: What if I am having trouble finding SMWB subconsultants?**

A: Please email the SMWVB Program Manager with the scopes of work you are seeking. You will receive lists of local SMWVB-certified firms to contact.

- **Q: What if my business is SMWB-certified? Do I need to find SMWB subs?**

A: If your firm is SMWVB-certified, you will most likely meet the goal. However, the GFEP is a required document, and a good faith outreach effort is still necessary.

- **Q: What if I have questions about the GFEP?**

A: Please contact the SMWVB Program Manager at 210-233-3420, or at marisol.robles@saws.org. GFEP questions can be asked at any time before the submittal is due.

Post Award: Subcontractor Payment & Utilization Reporting (S.P.U.R.) System & Subcontractor Changes

San Antonio Water System: SMWB at SAWS - Windows Internet Explorer

https://saws.smwbe.com/Default.asp?

File Edit View Favorites Tools Help

SAWS EZlink Employee Portal San Antonio Water System

Who We Are Our Water Conservation Service Infrastructure Education Environment Jobs Business Center

What makes an idea Refreshing? Find out at RefreshingIdeas.com

HOME BUSINESS CENTER SAWS CONTRACT COMPLIANCE SYSTEM

IN THIS SECTION:

Main

SAWS SMWB Contract Compliance System

System Access Login

Username:

Password:

Remember username

Login

[Home](#)

- [Contact Us & Support](#)
- [Forgot Password](#)
- [Account Lookup](#)
- [Help/First Time Visitors](#)

San Antonio Water System is pleased to offer our Contract Compliance System tracking SMWBE participation!

The Contract Compliance System is designed to streamline and automate your reporting requirements. The system is accessible to all firms doing business with SAWS and includes the following key features:


- Automated communication with contractors via email regarding compliance issues
- Submission of contractors' utilization reports online with automated tracking of contract goals and participation
- Automatic verification of subcontractor payments
- Immediate feedback on accuracy of certified payrolls
- Elimination of paper-based reporting and lengthy payroll validation delays

Subcontractor Change Request

Any changes in subcontractors or suppliers requires prior approval from SAWS:

http://www.saws.org/business_center/contractsol/forms.cfm or

http://www.saws.org/business_center/contractsol/forms/SMWBChangeForm.pdf



Name of Contractor: _____
 Project Name & Number: _____

Submits the following approval request of the following addition(s) and/or deletion(s) on the Affirmed List of Subcontractors, as originally submitted as part of the BID/PROPOSAL/CONTRACT.

CHANGES

ADD	DELETE	NAME OF SUBCONTRACTOR	SBE, MBE, VBE, WBE	DESCRIPTION OF WORK TO BE PERFORMED	PERCENT & DOLLAR AMOUNT OF CONTRACT
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		

JUSTIFICATION

AFFIRMATION

THE ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF, I FUTHER UNDERSTAND AND AGREE THAT THIS DOCUMENT SHALL BE ATTACHED THERETO AND BECOME A BINDING PART OF THE CONTRACT.

Name & Title of Authorized Requestor: _____
 Signature of Authorized Requestor: _____ Date: _____

SMWVB PROGRAM MANAGER: _____	DATE APPROVED: _____
CONTRACTING DIRECTOR: _____	DATE APPROVED: _____

Office Use Only: _____ S.P.U.R. System _____ CPMS _____ Project Hand File _____



Submittal Packet Preparation

- Utilize the Proposal Response Checklist
 - Original proposal (1) with required information differs from copies (7)
- Thoroughly review scope and ensure project examples and key personnel resumes clearly show similar experience
- Review Instructions to Respondents
- Thoroughly review evaluation criteria and respond with all required information to maximize points
 - Do so using proposal packet forms*
- Avoid “boilerplate” responses
- Verify contact information for all project references, if SAWWS is not able to contact reference, points may be deducted or proposal deemed non-responsive

*To be provided via Addendum and posted on SAWWS website in Word

Submittal Packet Preparation *(cont.)*

- Ensure required documents are submitted and signed, (i.e. Respondent Questionnaire, CIQ, etc.)
- Entire proposal should create a clear picture of Project Team experience and capabilities (Org chart, projects, and resumes for KP and KS)
- Ensure both Price Proposal A and Price Proposal B are submitted
 - Double check extensions for both proposals
 - Acknowledge Addendums on Proposal Signature Page
- Responses are limited to 75 pages*
 - Required forms and dividers tabs do not count towards limit

Additional Reminders

- Ask questions clarification questions re: project, RFCSP and evaluation criteria early to ensure they are captured in an Addendum
- Register through the SAWS website to ensure access to the most current information (addendums, supplemental information, etc.)
- Obtain Geotechnical Report from SAWS website and review

* Subject to change with release of proposal packet forms

Communication Reminders

- There should not be any communication with the following:
 - ✓ Design Engineer (Kimley-Horn)
 - ✓ SAWS Project Manager or Project Engineer
 - ✓ Any other SAWS staff
 - ✓ City Council member or staff
 - ✓ SAWS Board of Trustees
- This includes phone calls, emails, letters, or any direct or indirect discussion of the RFCSP
- Release of RFCSP - Board Award
- If under contract with SAWS for another project, indicate this to SAWS staff that your company intends to submit for this RFCSP and do not discuss

Key Dates

- April 23, 2018 by 4:00 PM
- April 26, 2018 by 10:00 AM
- May 4, 2018 by 10:00 AM
- May 2018
- May 2018
- June 5, 2018
- June 2018

Questions Due

Addendum Posted to SAWS Website

Proposals Due

Proposals Evaluated

Selected Contractor Notified

SAWS Board Approval and Award

NTP Issued

Submission Due Date

- Proposals due no later than **10:00 AM CDT Friday, May 4, 2018**
- Follow specific delivery instructions:
 - Deliver to 2800 U.S. Highway 281 North, Suite 171, Customer Service Building, Counter Services
 - Make arrangements if mailing a response to this RFCSP
 - Late responses will not be accepted and will be returned unopened

Construction Contract Background

- Traffic Control Plans, Bypass Pumping Plan will be responsibility of contractor and at no cost to SAWWS
- Contractor's Proposal Packet Checklist
- Detailed Construction schedule must be part of the Proposal
- Submittals can be submitted as soon as receiving notification of contract award after CPMS training (if necessary) has been completed

Contract Background (SAWS Inspector)

- Prior to commencing work, contractor must submit and receive approval of the following:
 - Bypass plan
 - Traffic control plan
 - Construction Schedule
 - Pre-site video
 - Lease agreement
- There will be one pre-construction meeting
 - Remaining submittals will be required
- Contractor must submit a Work Progress Schedule within 10 days of NTP and monthly thereafter

Contract Background

External Agency Permit Requirements (TXDOT, UPRR, etc.)

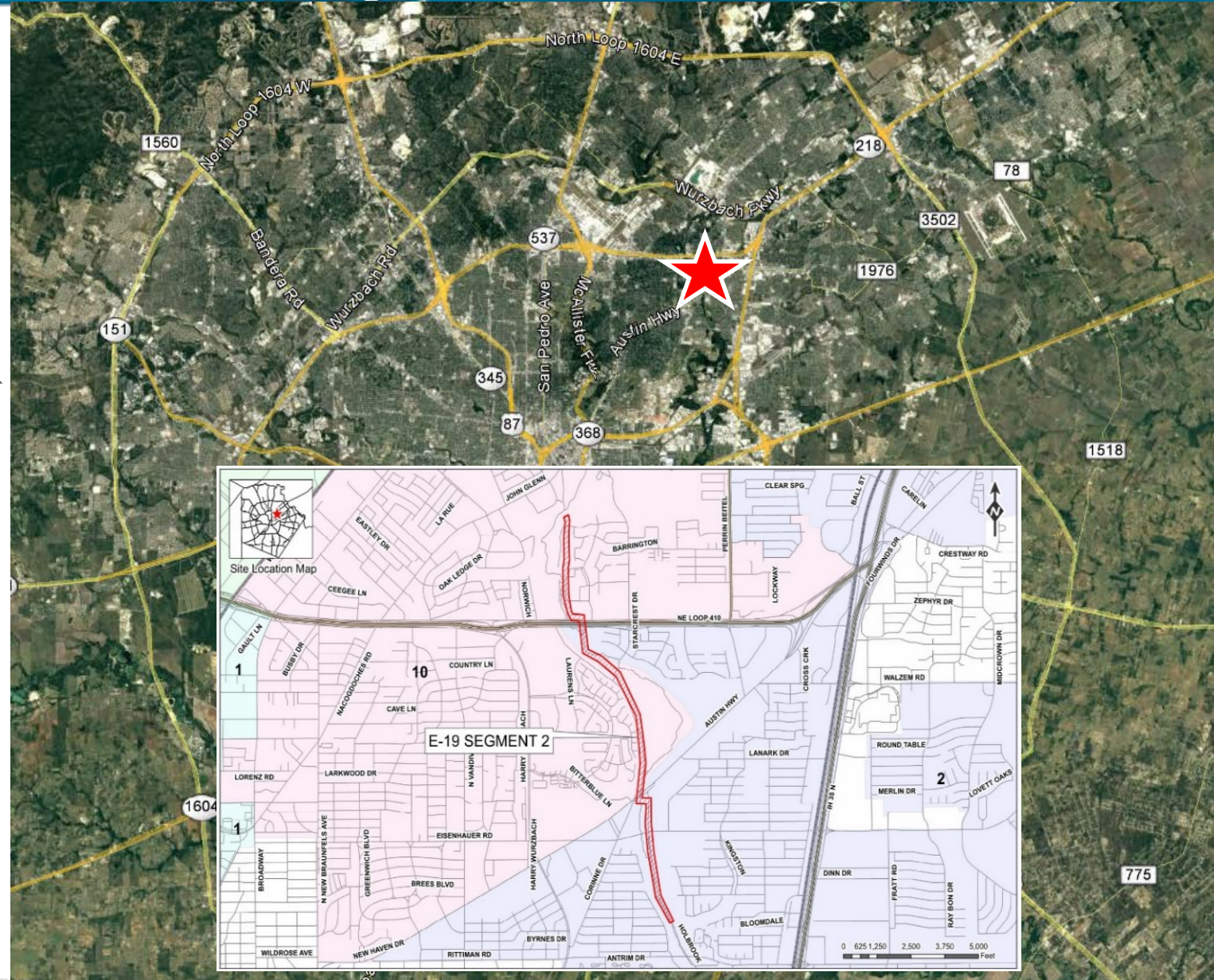
- Contractor to follow requirements identified in corresponding permits
- Changes in field that are cited by the Agency's Inspector will require concurrence and approval from the SAWS Inspector first.
- If contractor wants to work weekends, notification is required 48 hours in advance to SAWS Construction Inspections. Requests should be send to constworkreq@saws.org.

Contract Background

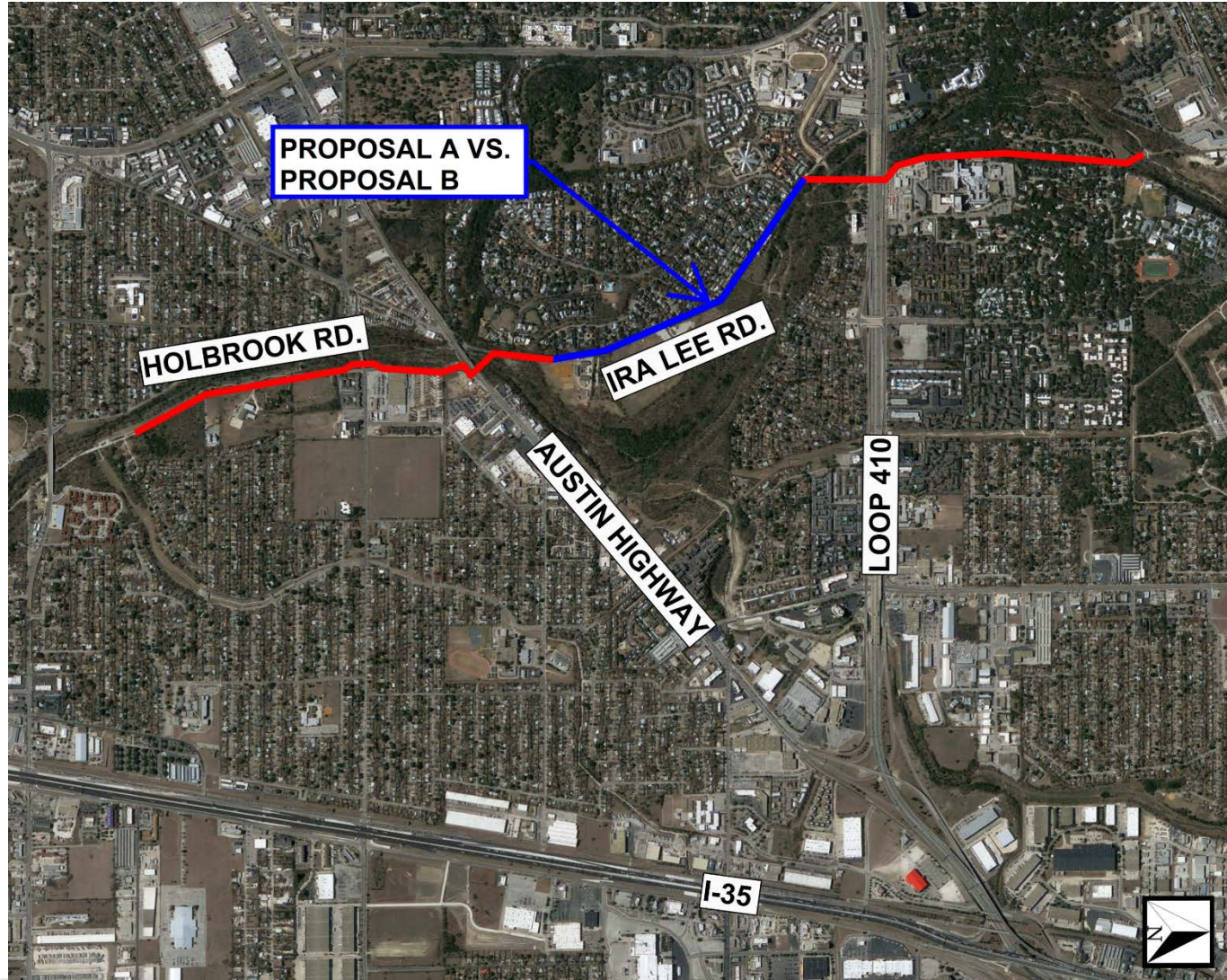
- All RFIs, RFPs, submittals, and any other items related to construction must be uploaded and processed via CPMS.
- No work can be performed by the Contractor unless the cost for that line item is on the contract.
- All traffic control plans must be submitted and approved by CoSA.
- Change orders, if any, will be based on negotiated prices not in the bid proposal.
 - Negotiated using RS Means

Project Location

- Along Salado Creek
- North of Rittiman Rd
- North of Marymont Park
- Narrow corridor



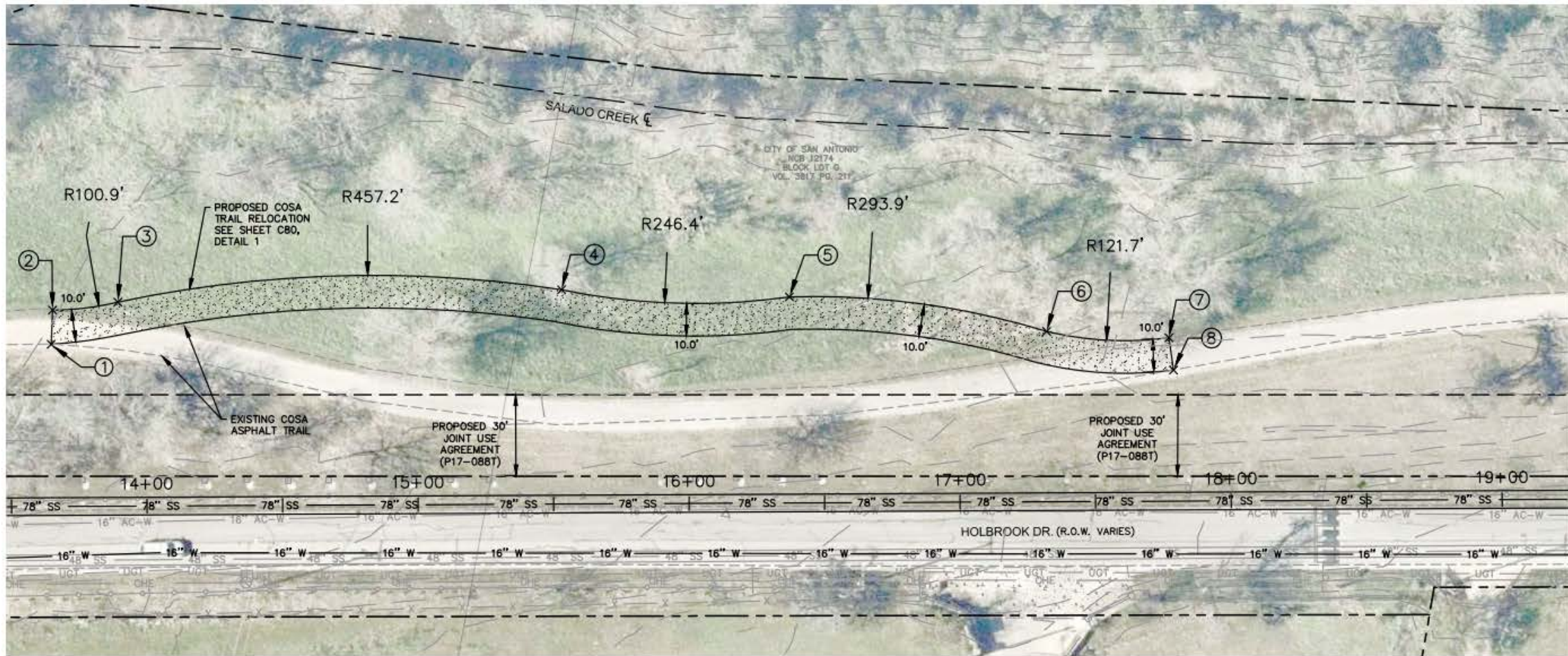
Proposal A vs Proposal B



Work within CoSA Parks

- Coordination
- Advanced notice prior to construction
- Stay within the limits of the Joint Use Agreement
- Signage and notices to park users
- Temporary fencing and screen mesh fabric
- Closure of trails and temporary relocation
- Restoration
- Work outside “normal” working hours
- Access for shaft at Station 113+05 – 4 weeks

Work within CoSA Parks



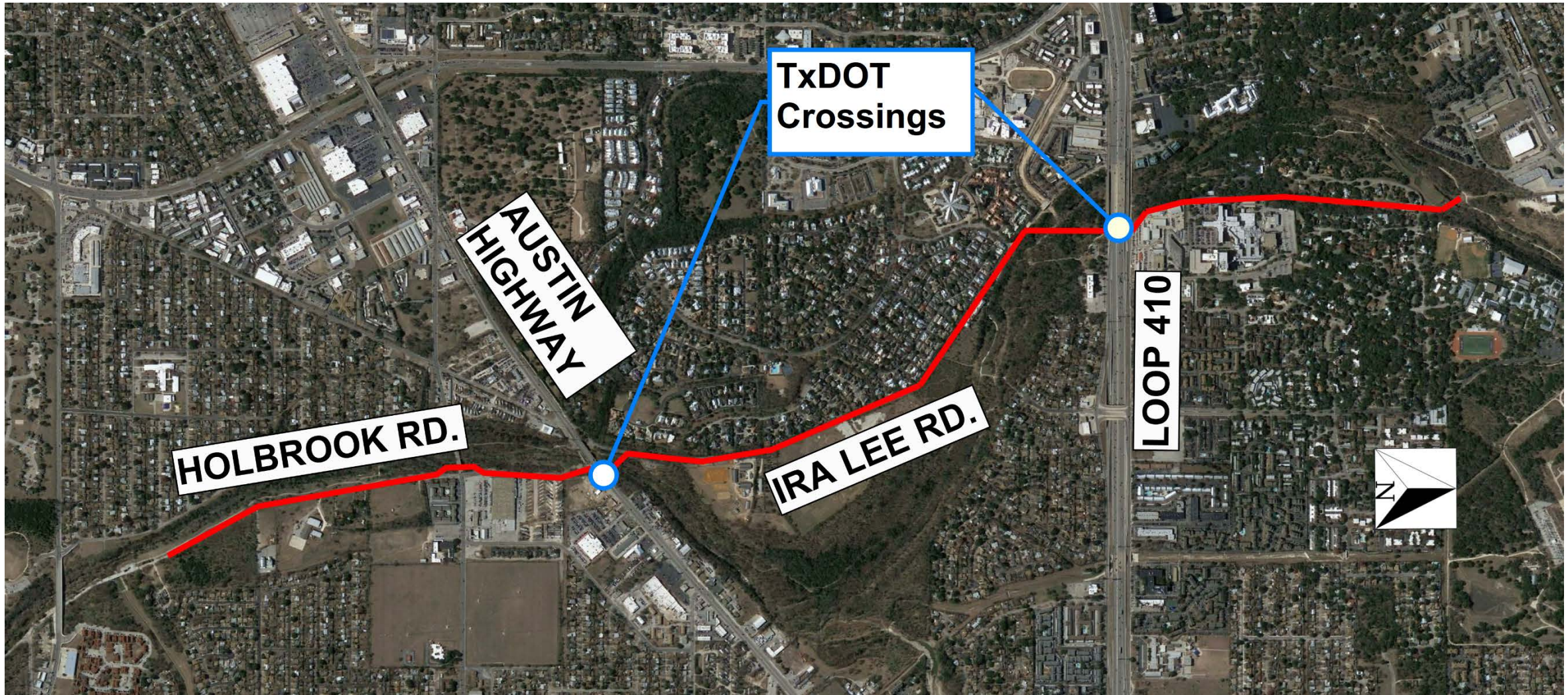
MATCHLINE SHEET G33

Special Conditions

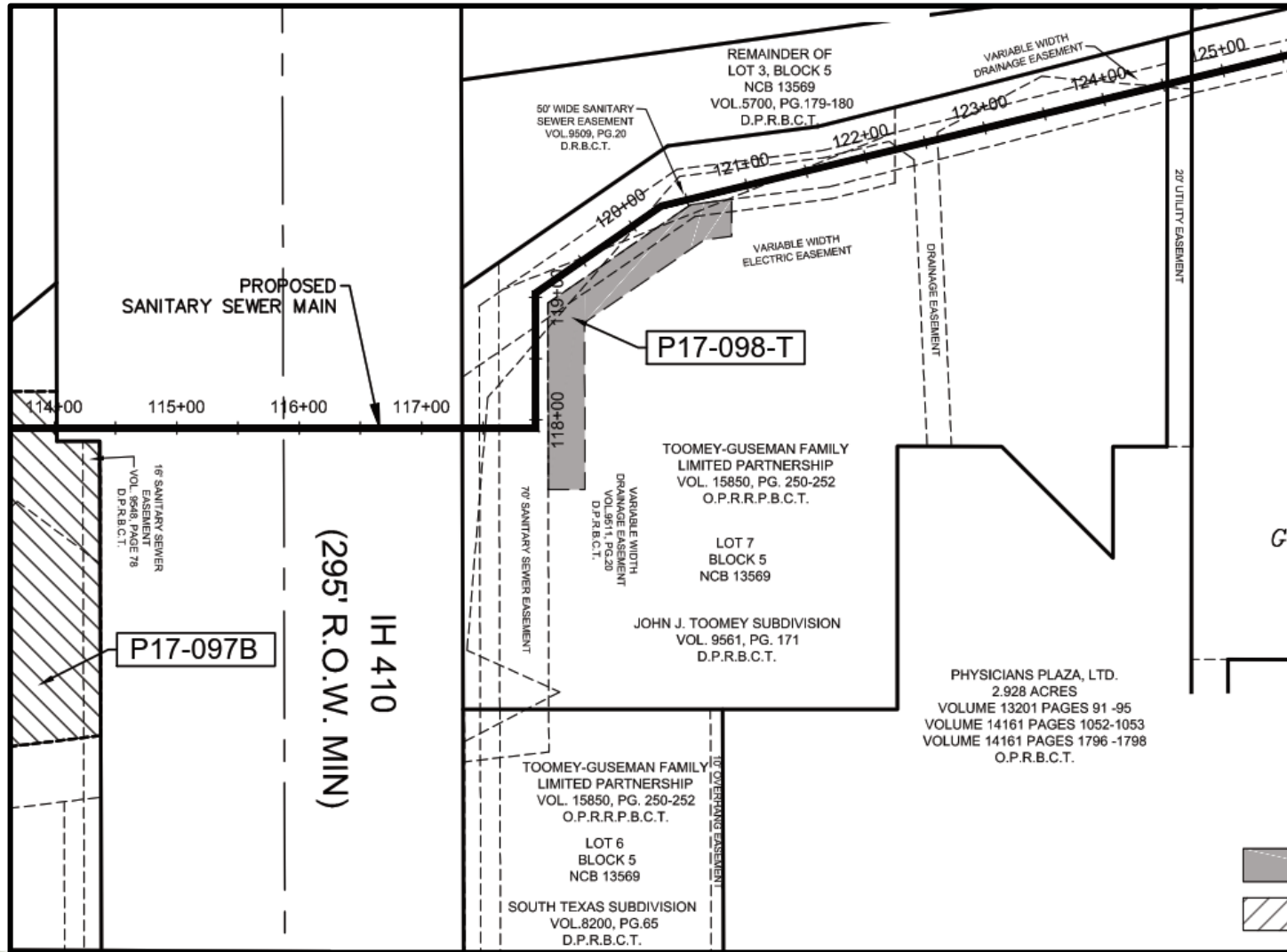
Coordination with Property Owners and Stakeholders

- TXDOT Crossings
- CoSA Greenway Trail System Relocation/Protection
- Toomey Property
- NE Baptist Hospital
- Marymont Properties
- Temporary Fencing and Separation of Construction Activities
- CPS pole Bracing

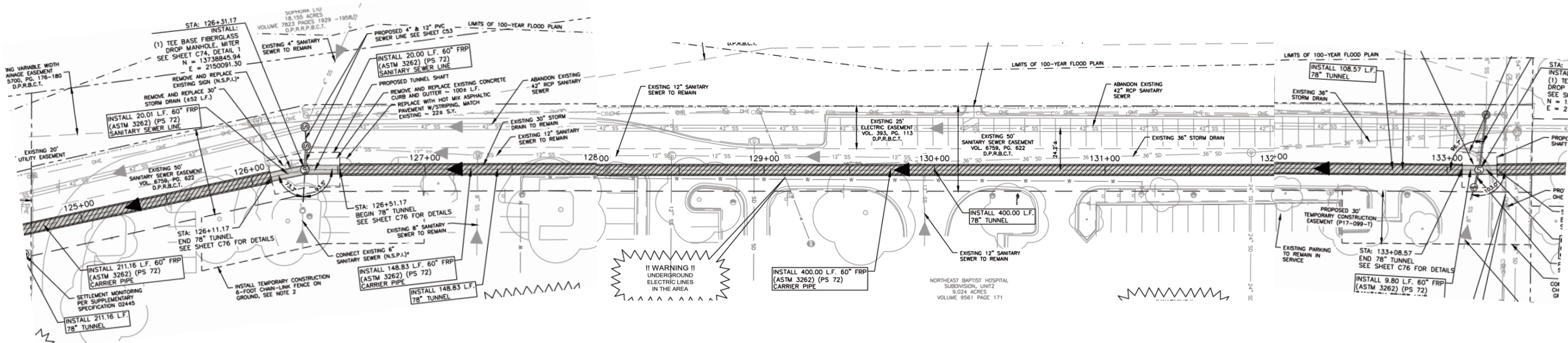
TXDOT Crossings



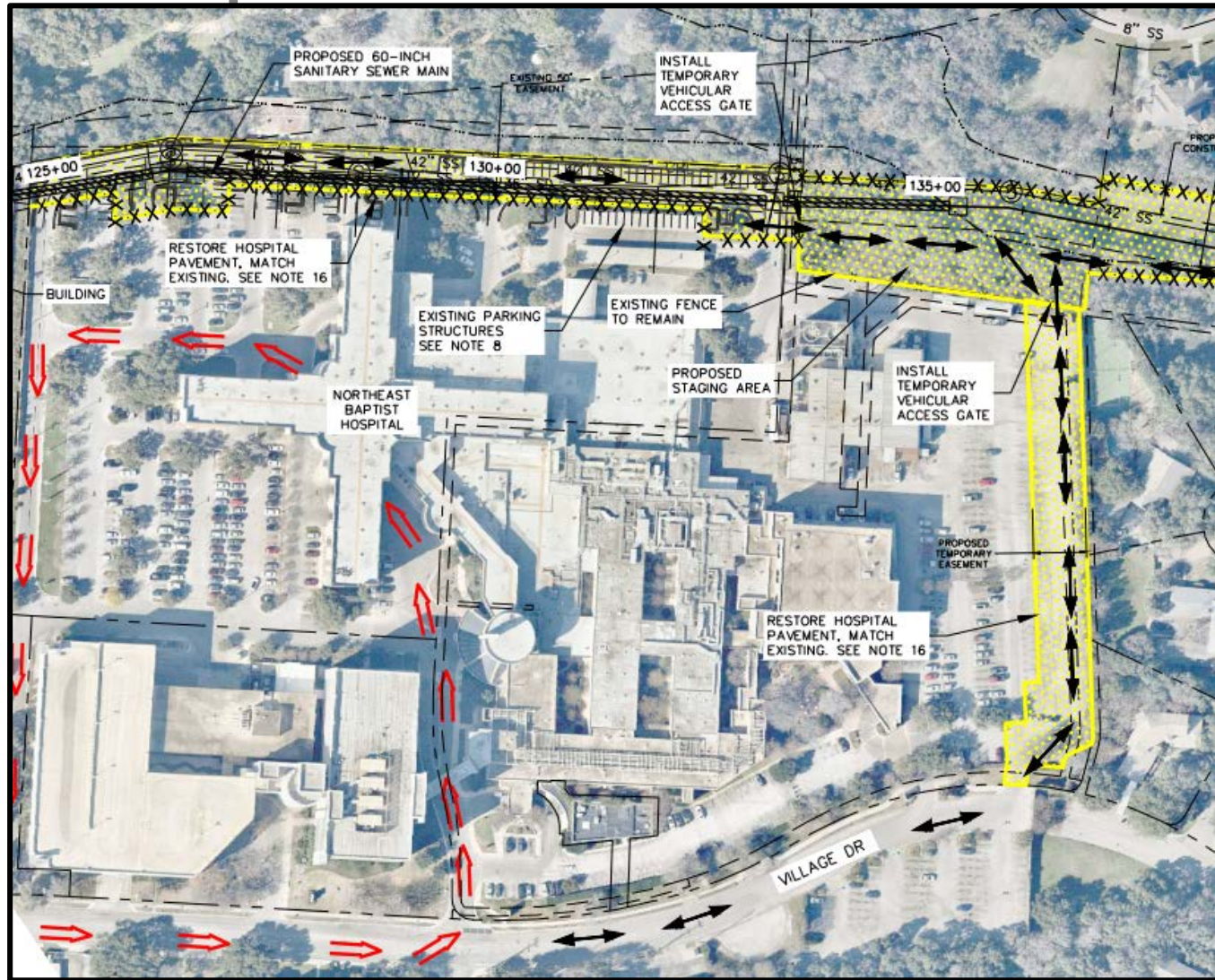
Toomey Property



NE Baptist Hospital

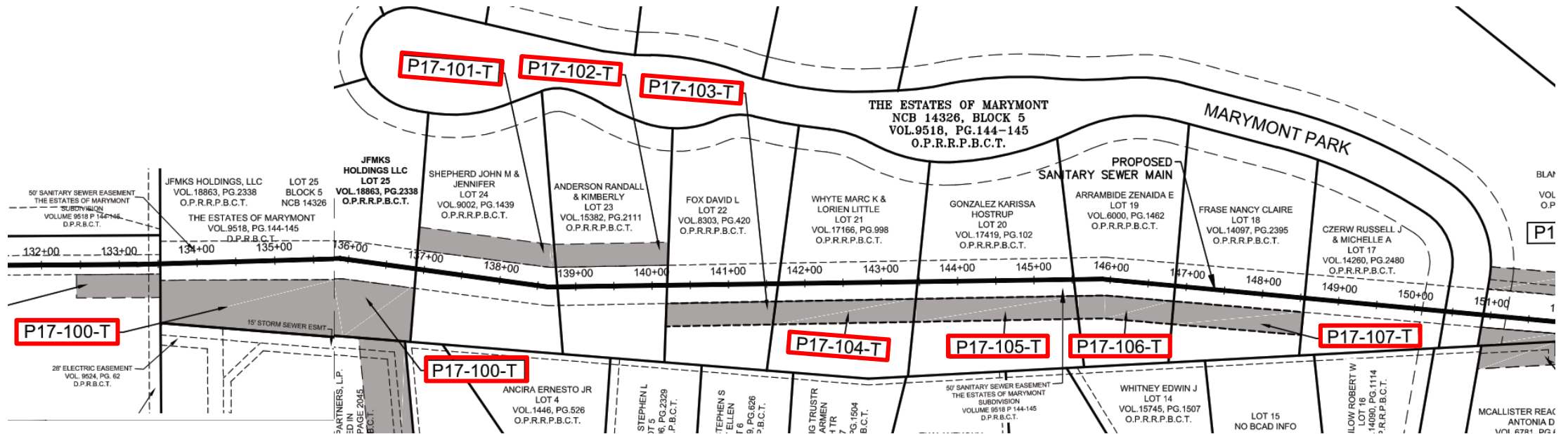


NE Baptist Hospital

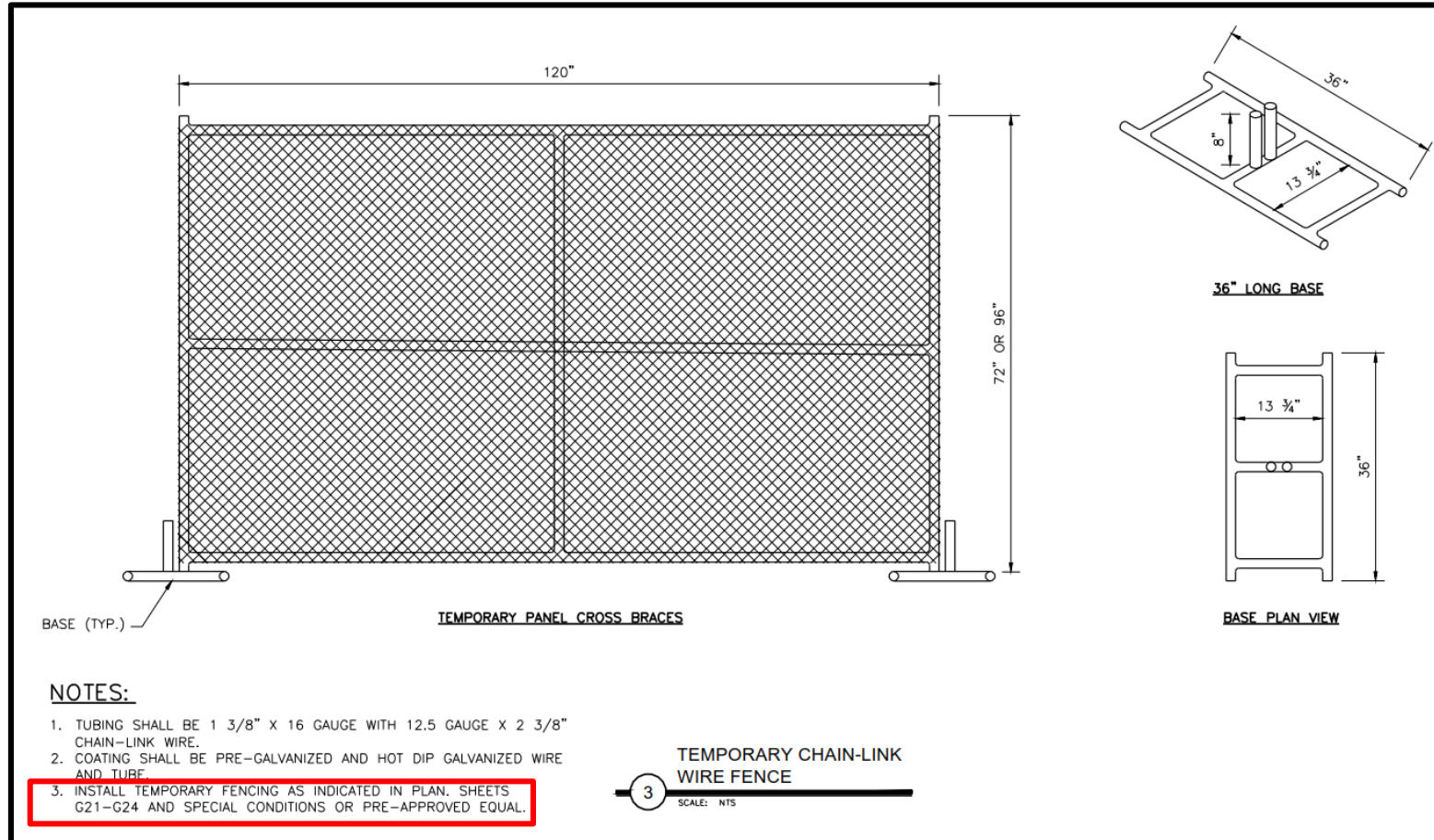


Marymont Easements

Temporary easements not guaranteed.



Temporary Fencing



Sequencing and Coordination

- Ira Lee Open Cut and Trenchless
- Oncology Building Construction
- Toomey
- E19 Segment I Tie in
- E20 Segment I Tie in
- CPS pole relocation
- Resident Access
- Temporary Water Line

CONSTRUCTION SEQUENCING LEGEND

PHASE 1: START SEGMENT 2 TO AUSTIN HWY.

- 1A: TUNNEL SEGMENTS OF 78-INCH MAIN BEGINNING FROM STA. 5+62 TO AUSTIN HIGHWAY AS INDICATED IN PLANS, SHEET C1-C39.
 1B: RELOCATE POWER POLES BY OTHERS (CPS ENERGY).
 1C: INSTALL, TEST, AND PUT IN SERVICE PROPOSED 16-INCH WATERLINE FROM EISENHOWER INTERSECTION NORTH TO AUSTIN HIGHWAY PRIOR TO SEWER LINE CONSTRUCTION (STA. 32+00 TO END), PROVIDE TEMPORARY CAP AT STATION 32+00 (N.S.P.)***
 1D: SET UP TEMPORARY 12-INCH WATERLINE, SEE SHEETS C81-C84.
 1E: SHUTDOWN 16-INCH WATERLINE SOUTH OF EISENHOWER (CLOSE SOUTH VALVE AT HOLBROOK AND EISENHOWER INTERSECTION). CONTRACTOR SHALL COORDINATE WITH SAWS.
 1F: RELOCATE CITY OF SAN ANTONIO PARKS ASPHALT TRAIL. CONTRACTOR SHALL COORDINATE WITH COSA PARKS.
 1G: INSTALL 78-INCH MAIN FROM STA. 5+62 TO AUSTIN HWY.
 1H: INSTALL 78-INCH MAIN AND TUNNEL SEGMENTS FROM SEG 1/ SEG 2 TIE-IN TO STA. 5+62 ***
 1I: INSTALL AND TEST SEWER LATERAL LINES A, B, C AND D ***.

*PHASE 1 CONSTRUCTION ACTIVITIES CANNOT BEGIN UNLESS ONE OF THE FOLLOWING IS SATISFIED:
 A. CONSTRUCTION ACTIVITIES BY E19 SEGMENT 1 CONTRACTOR MUST BE COMPLETE, LOCAL ACCESS TO RITTIMAN ROAD MUST BE AVAILABLE, OR
 B. CONTRACTOR MUST PROVIDE LOCAL ACCESS TO EISENHOWER ROAD, THROUGH SEGMENT 2 PHASE 1 CONSTRUCTION ZONE

PHASE 2: AUSTIN HWY TO IRA LEE

- 2A: TUNNEL SEGMENTS OF 78-INCH MAIN AS INDICATED IN PLANS, SHEET C1 - C39. TUNNEL CROSSING SALADO CREEK SHALL BE CONSTRUCTED DURING DAY TIMES WHEN SURFACE WATER IN CREEK IS MINIMAL.

PHASE 3: IRA LEE TO E-7 & E-19 TIE-IN

- 3A: INSTALL 78-INCH MAIN FROM IRA LEE TO MANHOLE STA. 53+42 ***
 3B: INSTALL AND TEST SEWER LATERAL LINES E AND F***
 3C: TEST SANITARY SEWER LINE FROM SEG 1 TIE-IN TO MANHOLE STA. 53+42 AND TIE-IN TO SEGMENT 1 ***
 3D: TIE-IN E-7 AT MANHOLE AT STA. 54+25 ***
 *** SEGMENT 1 SHALL BE COMPLETE AND IN SERVICE PRIOR TO TIE-IN. CONTRACTOR SHALL COORDINATE WITH SAWS

PHASE 4: E-7 & E-19 TIE-IN ALONG IRA LEE RD

- 4A: TUNNEL SEGMENTS OF 60-INCH MAIN AS INDICATED IN PLANS, SHEETS C1-C39.
 4B: INSTALL, TEST, AND PUT IN SERVICE PROPOSED 16-INCH WATER LINE PRIOR TO SEWER LINE CONSTRUCTION.
 4C: INSTALL 60-INCH MAIN FROM E-7 / E-19 TIE-IN TO ALIGNMENT DEPARTURE FROM IRA LEE RD AT STATION 106+00
 4D: INSTALL 8-INCH SEWER LATERAL NEAR STATION 88+60 BUT LEAVE EXISTING MANHOLE (TO LATER BE REMOVED) ON 15-INCH SEWER IN SERVICE UNTIL PHASE B.

- 4E: INSTALL MANHOLE NEAR STATION 98+00 ON EXISTING 15-INCH SEWER AND ABANDON 15-INCH SEWER NORTH OF MANHOLE DURING PHASE B. LEAVE 15-INCH SEWER IN SERVICE SOUTH OF MANHOLE NEAR STATION 98+00 TO CONNECTION AT MANHOLE NEAR STATION 92+15. 15-INCH SANITARY SEWER SOUTH OF MANHOLE AT STATION 92+15 SHALL BE ABANDONED TO MANHOLE NEAR STATION 67+10.

PHASE 5: IRA LEE RD TO NORTHEAST BAPTIST HOSPITAL

- 5A: TUNNEL SEGMENTS OF 60-INCH MAIN AS INDICATED IN PLANS, SHEET C1-C39. TUNNEL CROSSING SALADO CREEK SHALL BE CONSTRUCTED DURING DAY TIMES WHEN SURFACE WATER IN CREEK IS MINIMAL.
 5B: INSTALL 60-INCH MAIN FROM IRA LEE RD TO SOUTH END OF NE BAPTIST HOSPITAL PROPERTY.
 5C: INSTALL SANITARY SEWER SERVICE AND LIFT STATION AT ONCOLOGY BUILDING.

PHASE 6: NORTHEAST BAPTIST HOSPITAL

- 6A: TUNNEL SEGMENTS OF 60-INCH MAIN AS INDICATED IN PLANS, SHEETS C1-C39.
 6B: NOTIFY HOSPITAL 6 WEEKS PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES ON PROPERTY.
 6C: COORDINATE WITH HOSPITAL TO INSTALL TEMPORARY PARKING LOT TRAFFIC SIGNS TO DETOUR TRAFFIC IN PARKING LOT AWAY FROM CONSTRUCTION AREA

- 6D: INSTALL TEMPORARY CONSTRUCTION FENCING TO ISOLATE CONSTRUCTION AREA FROM HOSPITAL PARKING LOT.

- 6E: INSTALL 12-INCH AND 8-INCH SEWER LATERALS TO MANHOLES AT STATIONS 126+31 AND 133+18.

PHASE 7: NORTHEAST BAPTIST HOSPITAL TO E-20 TIE-IN

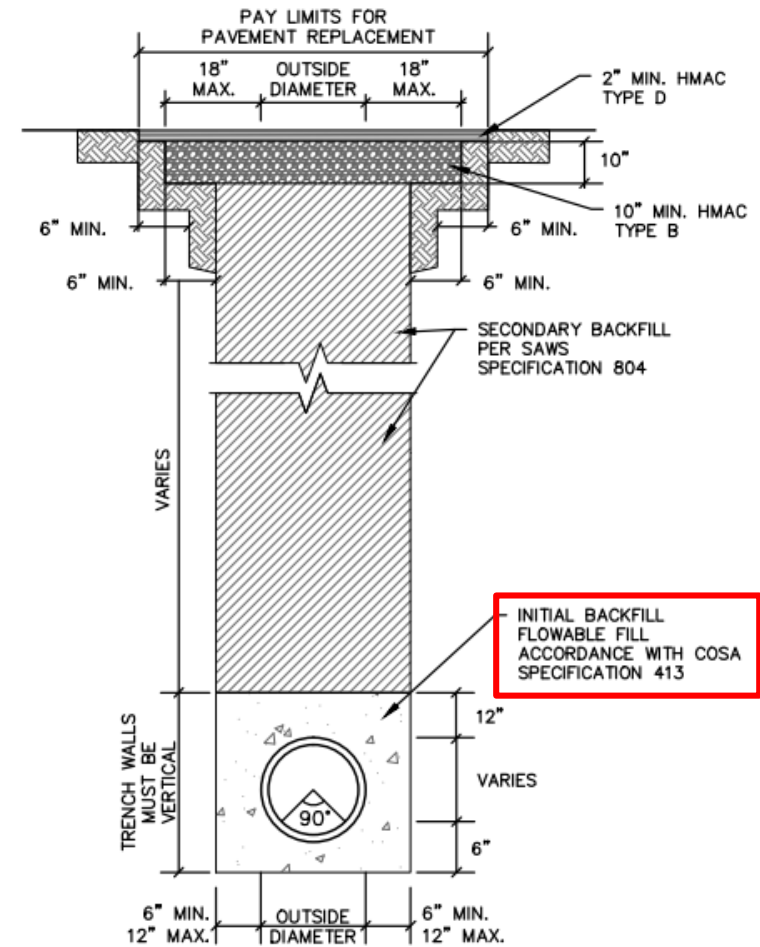
- 7A: TUNNEL SEGMENTS OF 60-INCH MAIN AS INDICATED IN PLANS, SHEETS C1-C39. TUNNEL CROSSING SALADO CREEK SHALL BE CONSTRUCTED DURING DAY TIMES WHEN SURFACE WATER IN CREEK IS MINIMAL.
 7B: INSTALL 60-INCH SEWER FROM NE BAPTIST HOSPITAL TO E-20 TIE-IN.

PHASE 8: COMPLETE 60-INCH SEWER AND MAKE ASSOCIATED TIE-INS

- 8A: COMPLETE INSTALLING 60-INCH AND SMALL DIAMETER SEWER LINES AND TEST.
 8B: COMPLETE SMALL DIAMETER SEWER CONNECTIONS TO 60-INCH SEWER AND ASSOCIATED MANHOLES AND TRANSFER FLOWS INTO 60-INCH SEWER, FROM DOWNSTREAM TO UPSTREAM NORTH OF MANHOLE AT E-7 TIE-IN.
 8C: TRANSFER FLOW INTO 60-INCH SEWER FROM EXISTING 42-INCH SEWER NORTH OF E-7 TIE-IN.
 8D: ABANDON EXISTING 48-INCH AND 42-INCH SEWER THROUGHOUT PROJECT.
 8E: INSTALL PROPOSED 16-INCH WATERLINE FROM START OF SEGMENT 2 TO EISENHOWER ROAD **
 **EXISTING 48-INCH SANITARY SEWER MUST BE ABANDONED PRIOR TO WATERLINE INSTALLATION

Unique Features

Flowable fill within the initial backfill

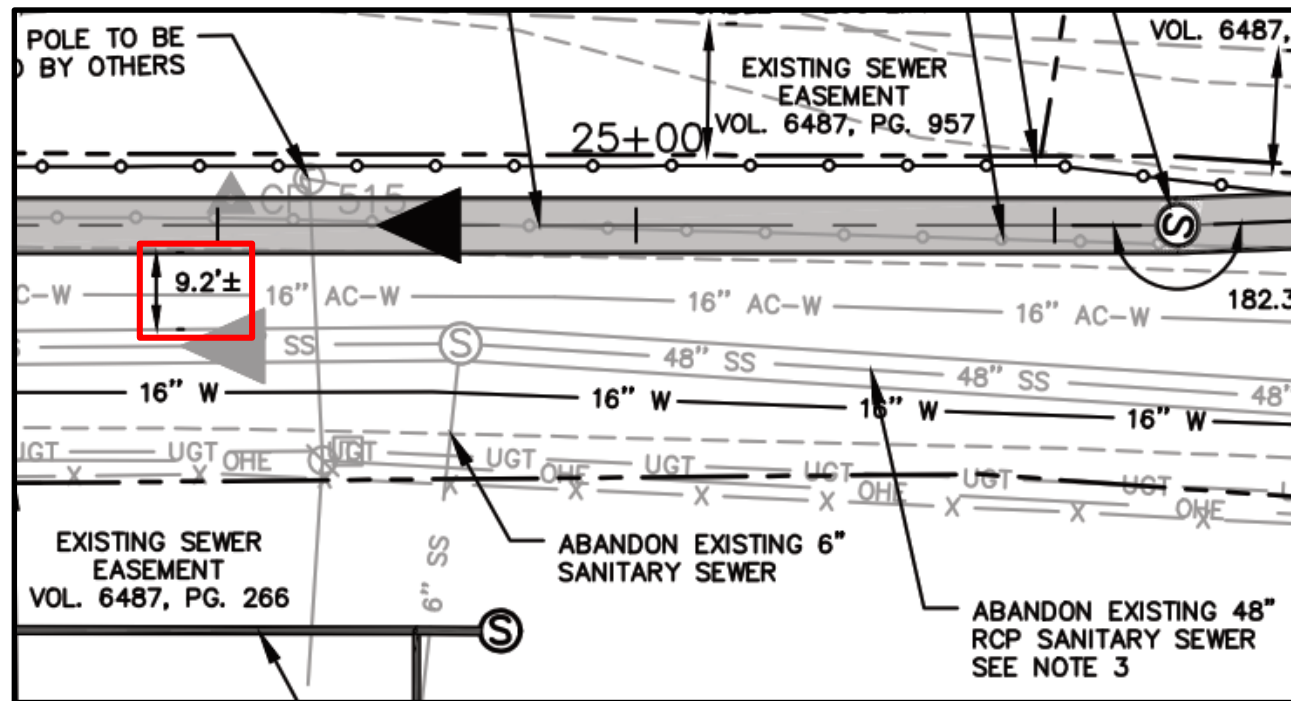


NOTE:

1. THE SURFACE OF THE BACKFILLED TRENCH SHALL BE RESTORED TO MATCH THE PREVIOUS EXISTING CONDITIONS. THIS SHALL INCLUDE FINAL GRADING, PLACEMENT OF TOPSOIL AND SEEDING, PLACEMENT OF SOD (SUCH AS AT HOMES OR BUSINESSES THAT HAD MAINTAINED GRASS), OR OTHER UNPREPARED AND PREPARED SURFACES.
2. BACKFILL METHODS SHOWN IN THIS DETAIL SHALL BE USED FOR ALL OPEN CUT SEWER MAINS LARGER THAN 30-INCH DIAMETER.

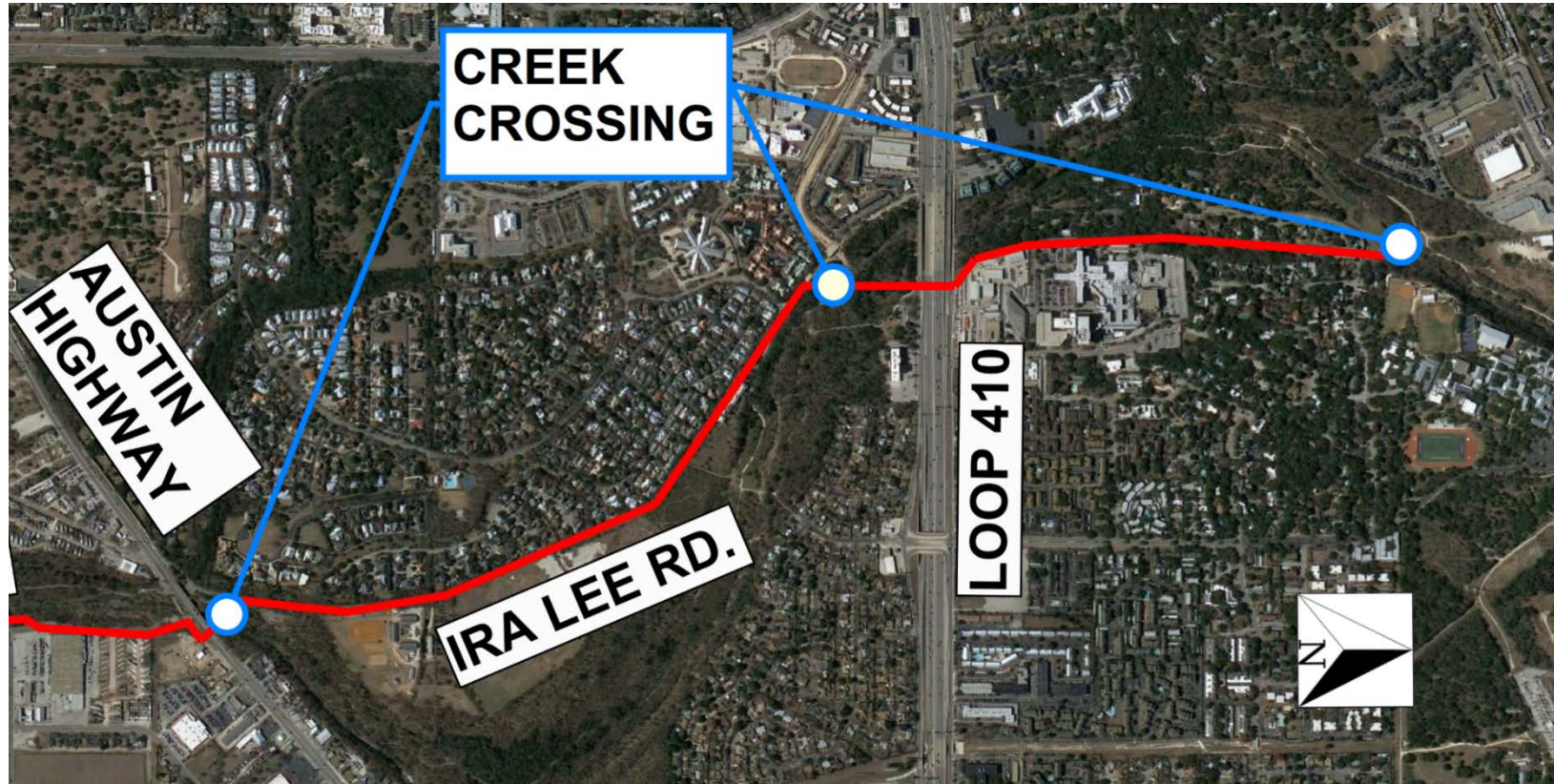
Unique Features

Proximity of existing sewer main to proposed sewer main



Unique Features

Tunnel Creek Crossings (3)



Unique Features Trenchless Construction Schedule Table (Sheet C76)

NOTES:

- PROVIDE THREE (3) CASING SPACERS PER JOINT OF PIPE (MIN.).
- GENERALLY SEWER CARRIER PIPE SHALL BE CENTERED IN CASING PIPE, BUT VARIATIONS WILL BE ALLOWED AND MAY BE REQUIRED TO ACHIEVE PROPOSED GRADE ON PLANS.

1. IN LIEU OF CASING SPACERS, CONTRACTOR MAY INSTALL CARRIER PIPE WITHIN CASING, SUBJECT TO FULL COMPLIANCE WITH THE REQUIREMENTS OF SECTION 02349, AND WRITTEN APPROVAL FROM THE ENGINEER.

TRENCHLESS CONSTRUCTION SCHEDULE

CROSSING NAME	SHAFT APPROX. STATION	SHAFT APPROX. DEPTH	ALLOWABLE SHAFT CONSTRUCTION METHODS	APPROX. DRIVE LENGTH	ALLOWABLE TUNNELING METHODS	TUNNEL SHIELD REQUIREMENT	CARRIER PIPE DIAMETER	MINIMUM CASING / LINER PLATE DIAMETER
Heritage Tree	15+25	23'	Solder Pipe & Lagging, Slide Rail, Liner Plate	60'	Open-Should Pipejacking, Liner Plate Tunneling	No	78" ID	96" / 102"
Overhauer Road	22+20	30'	Solder Pipe & Lagging, Slide Rail, Liner Plate	630'	Open-Should Pipejacking, Liner Plate Tunneling	Yes	78" ID	96" / 102"
Austin Highway Frontage Road	40+13	27'	Solder Pipe & Lagging, Slide Rail, Liner Plate	184'	Open-Should Pipejacking, Liner Plate Tunneling	No	78" ID	96" / 102"
Austin Highway / Gadsden Creek - South	52+45	29'	Solder Pipe & Lagging, Slide Rail, Liner Plate	448'	Open-Should Pipejacking, Liner Plate Tunneling	Yes	78" ID	96" / 102"
Exitting 42 E 130 St	85+25	38'	Solder Pipe & Lagging, Slide Rail, Liner Plate	140'	Open-Should Pipejacking, Liner Plate Tunneling	Yes	60" ID	78" / 84"
Va Lee Townhomes	85+23	38'	Solder Pipe & Lagging, Slide Rail, Liner Plate	53'	Open-Should Pipejacking, Liner Plate Tunneling	No	60" ID	78" / 84"
Soldado Creek - Central	85+113+06	25'	Solder Pipe & Lagging, Slide Rail, Liner Plate, Dewatering Required	680'	Non-Rotary Open-Should Pipejacking, Non-Rotary Liner Plate Tunneling	Yes	60" ID	78" / 84"
Heartdale Loop #10	85+113+16	23'	Solder Pipe & Lagging, Slide Rail, Liner Plate, Dewatering Required	43'	Non-Rotary Open-Should Pipejacking	Yes	60" ID	78" / 84"
Alamo 410 Automobile	85+119+16	37'	Solder Pipe & Lagging, Slide Rail, Liner Plate	112'	Liner Plate Tunneling	No	60" ID	78" / 84"
Sanitized Cellulose Center	85+126+12	30'	Solder Pipe & Lagging, Slide Rail, Liner Plate	543'	Liner Plate Tunneling	No	60" ID	78" / 84"
Mc Knight Hospital	85+130+20	30'	Solder Pipe & Lagging, Slide Rail, Liner Plate	657'	Open-Should Pipejacking, Liner Plate Tunneling	No	60" ID	78" / 84"
Heritage Tree	85+131+17	24'	Solder Pipe & Lagging, Slide Rail, Liner Plate	82'	Open-Should Pipejacking, Liner Plate Tunneling	No	60" ID	78" / 84"
Heritage Tree	85+140+13	29'	Solder Pipe & Lagging, Slide Rail, Liner Plate	62'	Open-Should Pipejacking, Liner Plate Tunneling	No	60" ID	78" / 84"
Drainage Channel / Tennis Court	85+148+26	27'	Solder Pipe & Lagging, Slide Rail, Liner Plate	264'	Open-Should Pipejacking, Liner Plate Tunneling	No	60" ID	78" / 84"
Soldado Creek - North	85+153+07	33'	Solder Pipe & Lagging, Slide Rail, Liner Plate	173'	Open-Should Pipejacking, Liner Plate Tunneling	Yes	60" ID	78" / 84"

TRENCHLESS CONSTRUCTION SCHEDULE - ALTERNATE TUNNELING

CROSSING NAME	SHAFT APPROX. STATION	SHAFT APPROX. DEPTH	ALLOWABLE SHAFT CONSTRUCTION METHODS	APPROX. DRIVE LENGTH	ALLOWABLE TUNNELING METHODS	TUNNEL SHIELD REQUIREMENT	CARRIER PIPE DIAMETER	MINIMUM CASING / LINER PLATE DIAMETER
Va Lee Rd	85+83	31'	Solder Pipe & Lagging, Slide Rail, Liner Plate	216'	Open-Should Pipejacking, Liner Plate Tunneling	No	60" ID	78" / 84"
Va Lee Rd	85+85	33'	Solder Pipe & Lagging, Slide Rail, Liner Plate	702'	Open-Should Pipejacking, Liner Plate Tunneling	No	60" ID	78" / 84"
Va Lee Rd	85+87	30'	Solder Pipe & Lagging, Slide Rail, Liner Plate	156'	Open-Should Pipejacking, Liner Plate Tunneling	No	60" ID	78" / 84"
Va Lee Rd	85+89	30'	Solder Pipe & Lagging, Slide Rail, Liner Plate	767'	Open-Should Pipejacking, Liner Plate Tunneling	No	60" ID	78" / 84"
Va Lee Rd	85+91	37'	Solder Pipe & Lagging, Slide Rail, Liner Plate	625'	Open-Should Pipejacking, Liner Plate Tunneling	No	60" ID	78" / 84"
Va Lee Rd	85+93	37'	Solder Pipe & Lagging, Slide Rail, Liner Plate	188'	Open-Should Pipejacking, Liner Plate Tunneling	No	60" ID	78" / 84"
Va Lee Rd	85+95	37'	Solder Pipe & Lagging, Slide Rail, Liner Plate	214'	Open-Should Pipejacking, Liner Plate Tunneling	No	60" ID	78" / 84"
Va Lee Rd	85+97	37'	Solder Pipe & Lagging, Slide Rail, Liner Plate	249'	Open-Should Pipejacking, Liner Plate Tunneling	No	60" ID	78" / 84"
Va Lee Rd	85+99	35'	Solder Pipe & Lagging, Slide Rail, Liner Plate	335'	Open-Should Pipejacking, Liner Plate Tunneling	No	60" ID	78" / 84"
Va Lee Rd	85+101	35'	Solder Pipe & Lagging, Slide Rail, Liner Plate	557'	Open-Should Pipejacking, Liner Plate Tunneling	No	60" ID	78" / 84"
Va Lee Rd	85+103	39'	Solder Pipe & Lagging, Slide Rail, Liner Plate	444'	Open-Should Pipejacking, Liner Plate Tunneling	No	60" ID	78" / 84"
Va Lee Rd	85+105	39'	Solder Pipe & Lagging, Slide Rail, Liner Plate	290'	Open-Should Pipejacking, Liner Plate Tunneling	No	60" ID	78" / 84"

REVISIONS:

No.	Revision	By	Date

PROJECT INFORMATION:

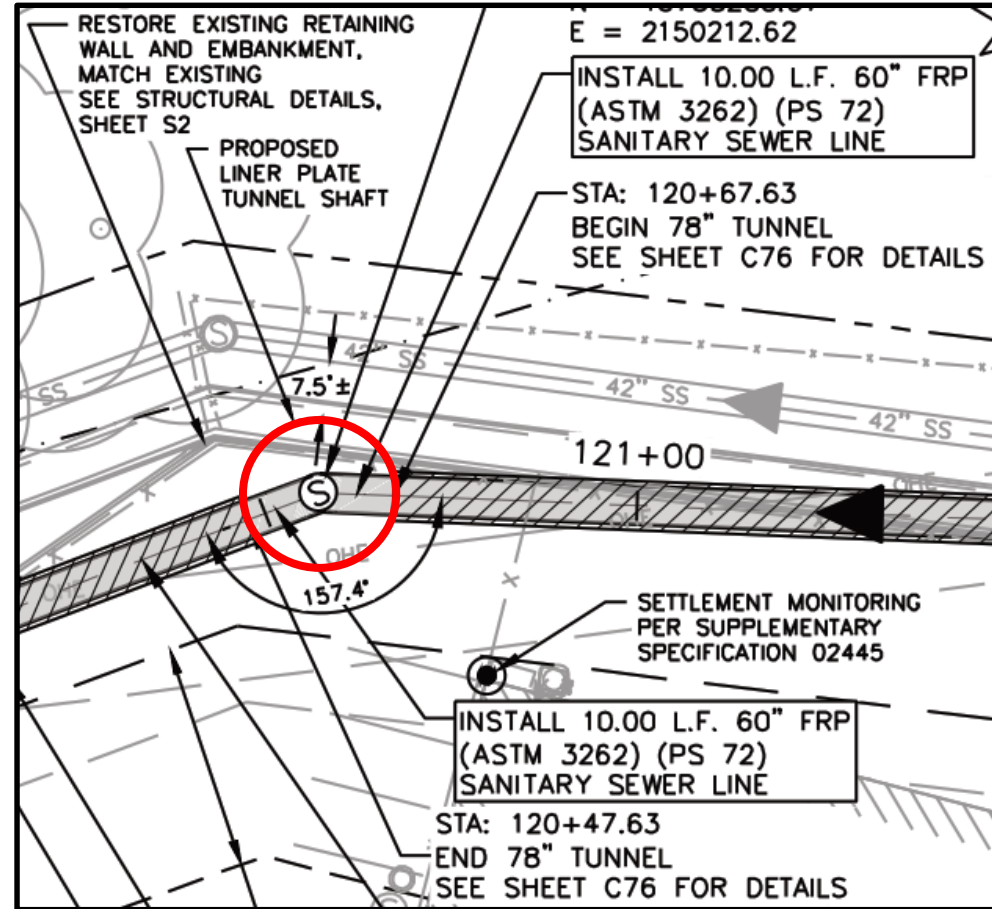
E19: SEGUIN TO NACOGDOCHES ROAD - SEGMENT 2
SHEET
GENERAL DETAILS (SHEET 1 OF 5)

DATE: MARCH 2018 SAWS PROJECT NO. SHEET NO. 18-4502
 DESIGN: RWR DRAWN: DDH CHECKED: DTB
 SAN ANTONIO WATER SYSTEM KWA PROJECT NO. 08665018 C76



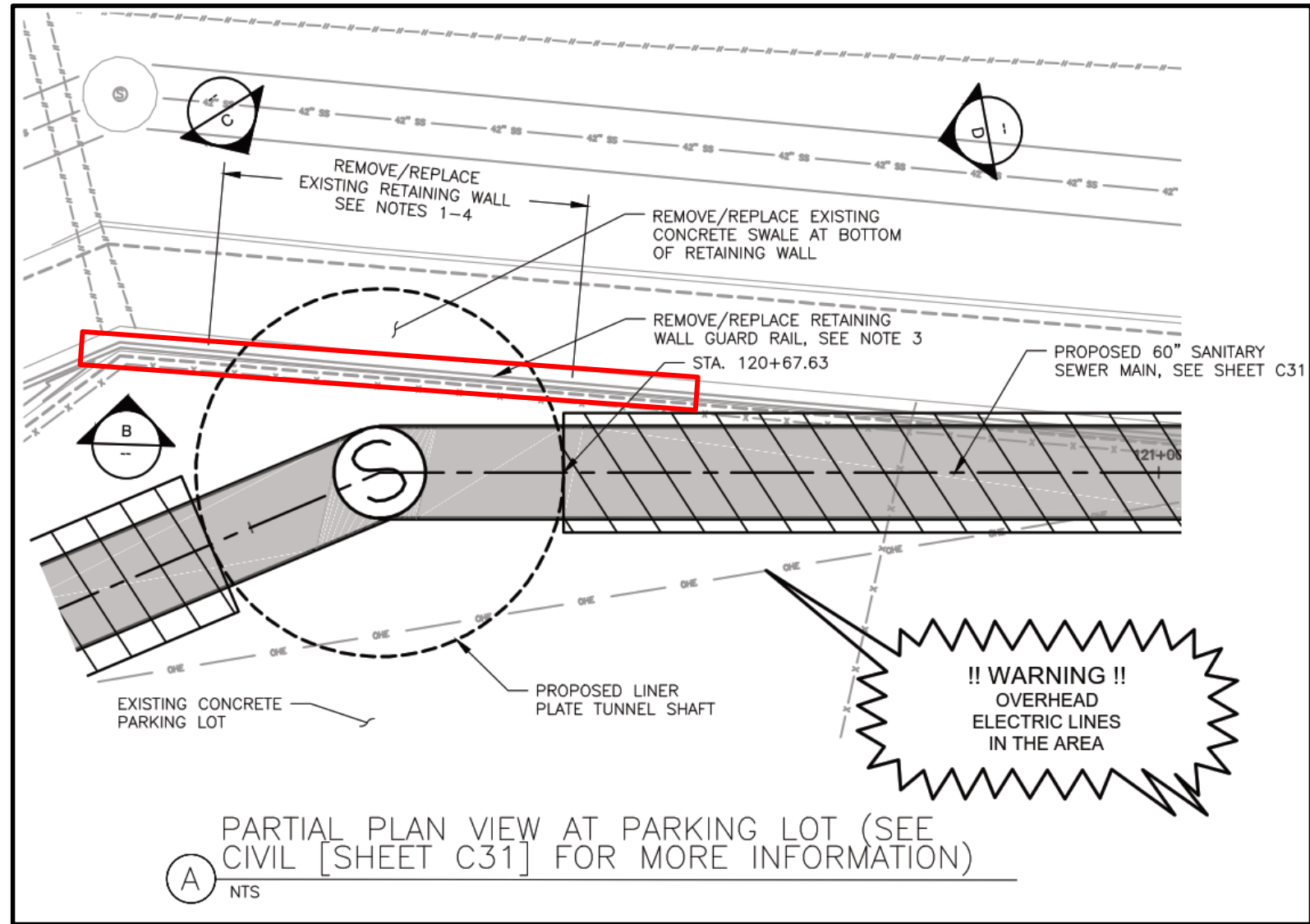
Unique Features

Circular tunnel shafts are intended to be receiving shafts with liner plate shoring



Unique Features

Toomey Retaining Wall (Sheet S2)



Unique Features

Toomey Retaining Wall (Sheet S2)

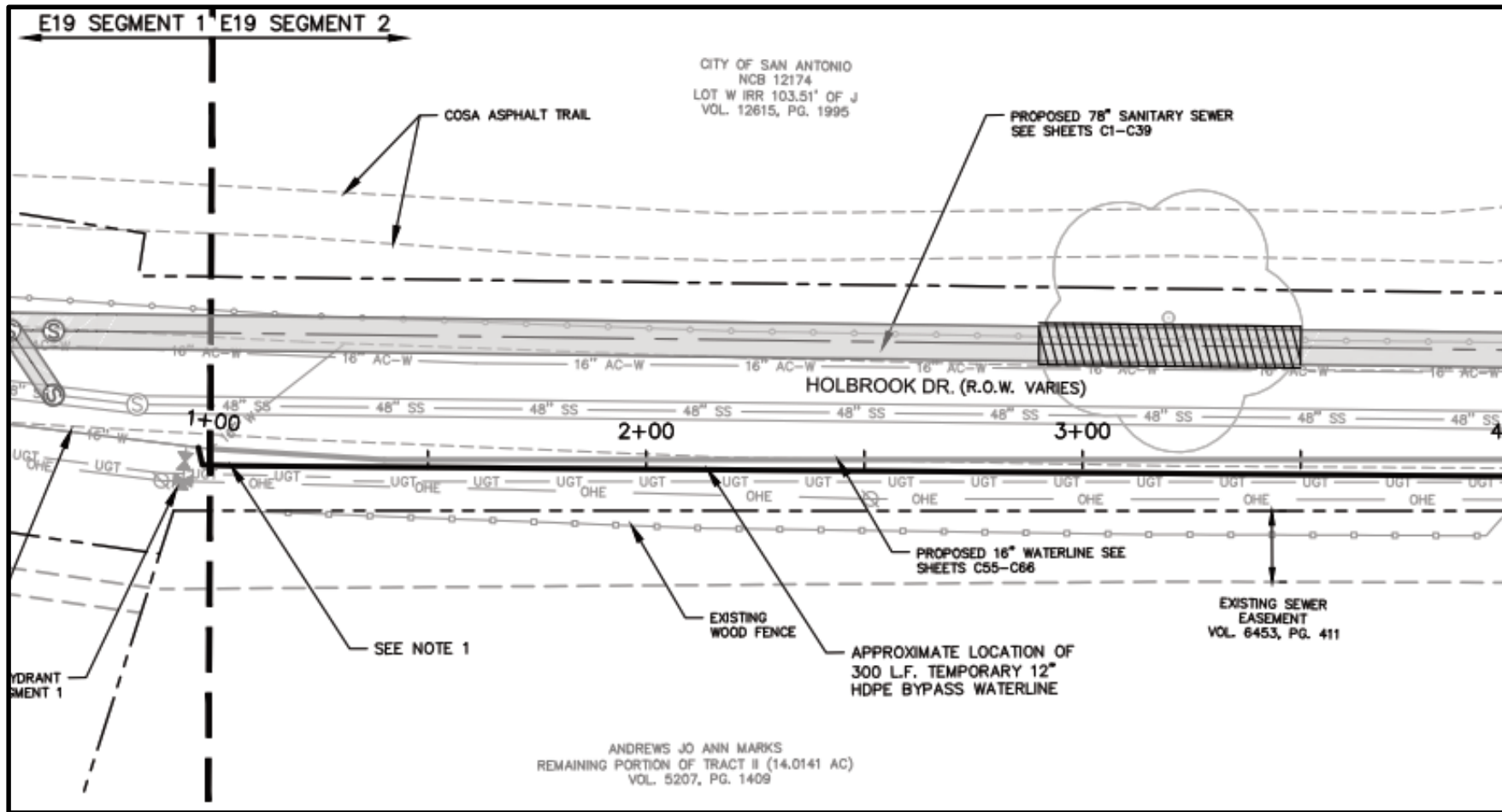


Unique Features

Toomey Retaining Wall (Sheet S2)



Temporary Water Main



SMWVB Questions

Questions related to SMWVB may be directed to SAWS' SMWVB Program Manager until the RFCSP deadline. Her contact information is as follows:

Marisol V. Robles

Contract Administration Department

San Antonio Water System

Email Address: Marisol.Robles@saws.org

Telephone No.: 210-233-3420

Questions

- Should be submitted no later than April 23, 2018 at 4:00 PM CDT
- Must be submitted in writing:

Jessica Goforth

Contract Administrator

Contract Administration Department

San Antonio Water System

Jessica.Goforth@saws.org

E-19: Seguin Road to Nacogdoches Road-Segment 2

Pre-Proposal Meeting

April 16, 2018

Juan Gomez, Ph.D., P.E.

Manager - Pipelines Engineering, SAWS

Diana L. Woltersdorf

Manager - Contract Administration, SAWS

Marisol V. Robles

SMWVB Program Manager, SAWS

Jeff Farnsworth, P.E.

Design Engineer, Kimley-Horn



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