

SAWS STANDARD GENERAL CONSTRUCTION NOTES

GENERAL CONSTRUCTION

- ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:
 - CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEM", TEXAS ADMINISTRATIVE CODE (TAC) TITLE 30 PART 1 CHAPTER 217 AND "PUBLIC DRINKING WATER", TAC TITLE 30 PART 1 CHAPTER 290.
 - CURRENT TxDOT "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE."
 - CURRENT "SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION."
 - CURRENT CITY OF SAN ANTONIO "STANDARD SPECIFICATIONS FOR CONSTRUCTION."
 - CURRENT CITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL" (UECM).
 - THE CONTRACTOR SHALL OBTAIN SAWS STANDARD DETAILS FROM SAWS WEBSITE, [HTTPS://APPS.SAWS.ORG/BUSINESS_CENTER/SPECS/CONSTSPECS/CONSTSPECS_2020/INDEX.CFM](https://apps.saws.org/business_center/specs/constspecs/constspecs_2020/index.cfm). UNLESS OTHERWISE NOTED WITHIN DESIGN PLANS.
 - THE CONTRACTOR IS TO NOTIFY AND MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT 210-233-3500 (DURING REGULAR SAWS WORKING HOURS), AND PROVIDE NOTIFICATION PROCEDURES THE CONTRACTOR WILL USE TO NOTIFY AFFECTED HOME RESIDENTS AND/OR PROPERTY OWNERS 72 HOURS PRIOR TO EXCAVATION. OUTSIDE OF REGULAR SAWS WORKING HOURS THE SAWS ECC SHOULD BE CONTACTED AT 210-704-7294.
 - LOCATIONS AND DEPTHS OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR AT LEAST 1 WEEK PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.
 - THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES AT LEAST 1-2 WEEKS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT. PLEASE ALLOW UP TO 7 BUSINESS DAYS FOR LOCATES REQUESTING PIPE LOCATION MARKERS ON SAWS FACILITIES. THE FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR VERIFICATION PURPOSES:

SAN ANTONIO WATER SYSTEM:
SAWS UTILITY LOCATES: [HTTPS://WWW.SAWS.ORG/SERVICE/LOCATES-SERVICE/](https://www.saws.org/service/locates-service/)

COSA DRAINAGE 210-207-8048
COSA TRAFFIC SIGNAL OPERATIONS 210-207-7720
TEXAS STATE WIDE ONE CALL LOCATOR 1-800-545-6005 OR 811
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, SIDEWALKS, LANDSCAPING AND STRUCTURES TO ITS ORIGINAL OR BETTER CONDITION AS A RESULT OF DAMAGES DONE BY THE PROJECT'S CONSTRUCTION.
 - ALL WORK IN TEXAS HIGHWAY DEPARTMENT AND BEXAR COUNTY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH RESPECTIVE CONSTRUCTION SPECIFICATIONS AND PERMIT.
 - THE CONTRACTOR SHALL COMPLY WITH CITY OF SAN ANTONIO OR OTHER GOVERNING MUNICIPALITY'S TREE ORDINANCES WHEN EXCAVATING NEAR TREES.
 - THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIALS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN PERMIT.
 - ANY WORK COMPLETED WITHOUT PRIOR WRITTEN AUTHORIZATION WHICH IS NOT INCLUDED IN THESE PLANS AND SPECIFICATIONS WILL NOT BE COMPENSATED BY THE SAN ANTONIO WATER SYSTEM.
 - HOLIDAY WORK: CONTRACTORS WILL NOT BE ALLOWED TO PERFORM SAWS WORK ON SAWS RECOGNIZED HOLIDAYS. REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG.
- WEEKEND WORK: CONTRACTORS ARE REQUIRED TO NOTIFY THE SAWS INSPECTION CONSTRUCTION DEPARTMENT 48 HOURS IN ADVANCE TO REQUEST WEEKEND WORK. REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG.
- ANY AND ALL SAWS UTILITY WORK INSTALLED WITHOUT HOLIDAY/WEEKEND APPROVAL WILL BE SUBJECT TO BE UNCOVERED FOR PROPER INSPECTION.
- PRE CON SITE VIDEO: BEFORE THE START OF ANY CONSTRUCTION. THE SITE MUST BE VIDEO RECORDED BY THE CONTRACTOR WITH ONE COPY SUBMITTED TO SAWS INSPECTIONS. A PRE-SITE VIDEO WILL PROVIDE ACCURATE DOCUMENTATION OF THE EXISTING CONDITIONS (NSPI).
- POWER POLE BRACING: CONTRACTORS SHOULD BE ADVISED THAT THERE ARE EXISTING OVERHEAD UTILITY POLES ALONG THE PROJECT CORRIDOR. CONTRACTORS SHOULD FURTHER BE ADVISED THAT IF THE DISTANCE FROM THE OUTSIDE FACE OF A UTILITY TRENCH TO THE FACE OF A UTILITY POLE IS LESS THAN 5 FEET, SAID UTILITY POLE IS SUBJECT TO BRACING, BASED ON A DETERMINATION MADE BY UTILITY POLE OWNER. COSTS INCURRED BY CONTRACTOR FOR BRACING OF THESE UTILITY POLES IS SUBSIDIARY TO THAT RESPECTIVE UTILITY COMPANY'S WORK. IT IS ADVISABLE FOR THE CONTRACTOR TO REVIEW THE CONSTRUCTION DOCUMENTS, AND VISIT THE CONSTRUCTION SITE TO DETERMINE POTENTIAL IMPACTS.
- CONSTRUCTION SEQUENCING: IT IS THE CONTRACTOR SOLE RESPONSIBILITY TO SCHEDULE SEQUENCING FOR REMOVAL AND INSTALLATION OF EXISTING AND PROPOSED SAWS UTILITIES IN CONJUNCTION WITH GENERAL PROJECT CONSTRUCTION. SEQUENCE OF CONSTRUCTION ACTIVITIES SHALL BE CONSIDERED IN ORDER TO MINIMIZE THE EXTENT AND DURATION OF DISTURBANCES.

WATER

- PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS INSPECTION AND/OR SAWS PRODUCTION GROUPS AT LEAST TWO WEEKS OR MORE IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS; THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY. SAWS PRODUCTION CONTROL CENTER 210-233-2016
- ASBESTOS CEMENT (AC) PIPE, ALSO KNOWN AS TRANSITE PIPE WHICH IS KNOWN TO CONTAIN ASBESTOS-CONTAINING MATERIAL (ACM), MAYBE LOCATED WITHIN THE PROJECT LIMITS. SPECIAL WASTE MANAGEMENT PROCEDURES AND HEALTH AND SAFETY REQUIREMENTS WILL BE APPLICABLE WHEN REMOVAL AND/OR DISTURBANCE OF THIS PIPE OCCURS. PAYMENT FOR SUCH WORK IS TO BE MADE UNDER ITEM NO. 3000, HANDLING ASBESTOS CEMENT PIPE".
- VALVE REMOVAL: WHERE THE CONTRACTOR IS TO ABANDON A WATER MAIN, THE CONTROL VALVE LOCATED ON THE ABANDONING BRANCH WILL BE REMOVED AND REPLACED WITH A CAP/PLUG. (NSPI)

EXCAVATION

- AT THE END OF EACH WORK DAY, THE CONTRACTOR SHALL CLOSE EXCAVATION/PIPELINE TRENCH EXCEPT FOR THE MINIMUM AMOUNT REQUIRED TO BEGIN THE NEXT DAY'S WORK. IF IT IS NECESSARY TO LEAVE EXCAVATIONS OPEN AFTER WORKING HOURS, CONTRACTOR SHALL EMPLOY PROPER TRAFFIC DEVICES AND BARRICADE THE EXCAVATIONS TO PREVENT UNAUTHORIZED VEHICULAR/PEDESTRIAN ACCESS.
- THE CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEM, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH OSHA STANDARDS FOR TRENCH EXCAVATION. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE OF ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.
- THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL WASTE MATERIALS PRIOR TO PROJECT COMPLETION. THE CONTRACTOR SHALL NOT PLACE ANY SOIL, FILL, OR WASTE MATERIAL IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN DEVELOPMENT PERMIT.
- WATER JETTING THE BACKFILL WITHIN A STREET WILL NOT BE PERMITTED. ALL SAWS PROJECT UTILITY TRENCHES SUBJECT TO TRAFFIC SHALL CONFORM TO THE S.A.W.S. STANDARD SPECIFICATIONS FOR CONSTRUCTION, ITEM NO. 550 & 804.
- CONTRACTOR TO USE EXTREME CAUTION WHEN WORKING IN PROXIMITY OF DISTURBED SOIL FROM PREVIOUSLY INSTALLED UTILITIES. NO SEPARATE PAY ITEM.
- EXISTING TROLLEY CAR RAILS ARE KNOWN TO EXIST WITHIN THE ALAMO STREET PROJECT SITE. CONTRACTOR SHALL STOP WORK UPON ENCOUNTERING, NOTIFY THE CITY OF SAN ANTONIO ON-SITE ARCHAEOLOGIST TO DOCUMENT, UPON NOTIFICATION THE CONTRACTOR SHALL REMOVE RAIL SECTION IMPEDING CONSTRUCTION AND DISPOSE OF AT A LOCATION DESIGNATED BY THE CITY OF SAN ANTONIO. WORK MAY THEN RE-COMMENCE. NO SPECIAL PAY ITEM, COST TO BE INCLUDED IN COST OF ITEM 101 PREPARATION OF ROW.

FENCING

- CONTRACTOR SHALL MAINTAIN EXISTING FENCES ADJACENT TO AND ACROSS THE PROJECT CORRIDOR. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF ANY TEMPORARY FENCE, GAPS, GATES, ETC. NECESSARY FOR CONSTRUCTION OF THE PROJECT (N.S.P.I.).

BACKFILL AND PAVEMENT NOTES

CONCRETE ENCASEMENT, WHERE REQUIRED, SHALL BE PLACED FOR FULL WIDTH OF THE TRENCH TO A PLANE 6-INCH ABOVE THE TOP OF THE PIPE. NO DIRECT PAYMENT WILL BE MADE FOR THE CONCRETE ENCASEMENT EXTENDING FURTHER THAN 6-INCHES IN A HORIZONTAL PLANE OR VERTICAL PLANE FROM THE PIPE, REGARDLESS OF THE AMOUNT PLACED.

BLASTING

BLASTING WILL NOT BE ALLOWED FOR THIS PROJECT.

SANITARY SEWER LINE CROSSING

WHERE THE MINIMUM 9 FOOT SEPARATION DISTANCE BETWEEN SANITARY SEWER LINES, SANITARY SEWER STRUCTURES, AND WATER LINES CANNOT BE MAINTAINED, THE INSTALLATION OF WATER LINES SHALL BE IN STRICT ACCORDANCE WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS (30 TAC 290.44 WATER DISTRIBUTION, 30 TAC 317.13 APPENDIX E. AND 217.53 (3) (A)).

PIPE JOINT RESTRAINT

ALL PIPE JOINTS WILL HAVE PIPE JOINT RESTRAINTS. PRICE TO BE INCLUDED IN PRICE OF PIPE PER LINEAR FOOT UNLESS NOTED OTHERWISE. CONCRETE JOINT RESTRAINTS MAY NOT SUBSTITUTE FOR PIPE JOINT RESTRAINTS WITHOUT THE EXPRESS WRITTEN CONSENT OF THE ENGINEER OF RECORD AND SAWS.

TRENCH EXCAVATION SAFETY PROCEDURE

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

SAN ANTONIO WATER SYSTEM NOTE

LOCATION AND DEPTH OF EXISTING WATER AND SEWER MAINS AND SERVICES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY THE CONTRACTOR 48 HOURS PRIOR TO BEGINNING CONSTRUCTION BY CALLING THE SAWS WATER LINE LOCATOR AT 704-7811. THE CONTRACTOR SHOULD EXERCISE EXTREME CAUTION WHEN WORKING NEAR EXISTING WATER FACILITIES, AND SHOULD THEY BE DAMAGED DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR WILL BE REQUIRED TO REIMBURSE THE SAN ANTONIO WATER SYSTEM FOR THE TOTAL COST TO REPAIR OR REPLACE THE DAMAGED FACILITIES.

DESIGN CONSTRAINTS

- WOULD LIKE NEW SUPPLY/RETURN ISOLATION VALVES WITH SQUARE VALVE BODY BOXES TO BE RELOCATED ON S. ALAMO ST./HILTON PALACIO HOTEL-EXISTING CHW/RETURN ISOLATION VALVES ARE INSIDE A VAULT ON THE DRIVEWAY UNDERNEATH THE CAR CANOPY-EXISTING VALVES TO BE EXCAVATED TO BE REMOVE, OS THERE NO OBSTRUCTION TO THE SERVICE LINES INSIDE OF THE VAULT. PLEASE REFER TO PICTURE OF VALVE LOCATION.
- ALL NEW ISOLATION VALVES TO BE COVERED BY SQUARE VALVE BODY COVER BOX AND COATED WITH SILVER EPOXY COATING.
- NEED A NEW ISOLATION VALVE & SQUARE VALVE BODY BOX TO BE LOCATED ON THE MAIN LINE COMING FROM HEMISFAIR PARK WAY ON TO S. ALAMO ST. PLEASE REFER TO PICTURE OF VALVE LOCATION.
- ALL TEMPORARY ISOLATION VALVES TO THE CHW SUPPLY & RETURN LINES MUST HAVE A MEANS OF NOT BEING ABLE TO BE TAMPERED BY MEANS OF A LOCK SYSTEM OR A METAL COVER BOX WITH A LOCK SYSTEM-CLOSING OR OPENING OF THE ISOLATION VALVES.
- CONTRACTOR MUST GIVE SAWS PERSONNEL THE ABILITY TO UNLOCK OR LOCK WHATEVER LOCKING SYSTEM THEY CHOOSE TO PROVIDE DURING CONSTRUCTION.
- MUST HAVE A TEMPORARY BLOW OFF VALVES PER CUSTOMER SUPPLY/RETURN LINES PER CUSTOMER DURING THE TEMPORARY CHW LINES TO CUSTOMERS.

- TEMPORARY CHILL WATER LINES SHOULD BE COVER IN AN INSTALLATION JACKET.

SHUT DOWN PROCEDURES

- AT ANY TIME NEEDING A SHUTDOWN, PLEASE CALL MINIMUM NOTIFICATION OF 3 DAYS TO THE CENTRAL COOLING PLANT MANAGER @ 210-901-4702 OR THE CENTRAL COOLING PLANT LAND LINE: 210-233-3762 TO COORDINATE A TIME, DATE AND THE AREA TO BE EFFECTED.
- IDENTIFY ON A MAP AND NARRATIVE THE LOCATION AND WHAT AREA TO BE SERVICED WITH INFORMATION TO SIZE OF SERVICE LINES TO BE WORK SERVICED.
- AT ANY TIME THERE CANNOT BE A SHUTDOWN, PURGE, OPEN OR DRAINING OF A CHW LINE UNTIL PROPER CHANNELS HAVE BEEN MADE WITH THE COOLING DEPARTMENT PERSONNEL- THERE'S MEASURES NEEDED TO BE TAKEN AT THE COOLING PLANT TO PREPARE FOR ANY KIND INTERRUPTIONS OR FLUCTUATIONS TO OUR WATER PRESSURE OR CHILL WATER TEMPERATURE.
- ALL CHW LINES MUST BE PURGED OF AIR, DEBRIS AND CONTAMINANTS TO OPENING OR CLOSING OF TEMPORARY SERVICES AND TRANSFERRING TO THE NEW CHW WATERLINES.
- ALL SHUTDOWNS, REMOVAL OR OPENING OF A NEW/EXISTING SECTIONS OF PIPING OR ISOLATION VALVES MUST BE APPROVED BY SAWS MANAGEMENT OR DIRECTOR PRIOR TO BEING PUT INTO SERVICES.
- CONTRACTOR MUST CONSULT WITH SAWS CHILL WATER DEPARTMENT BEFORE ENTERING POTABLE WATER OR FILLING CHILL WATER LOOP SYSTEM WITH CONDITIONED CHILL WATER COMING FROM THE EXISTING CHILL WATER LOOP OR A TEMPORARY SERVICE CHILL WATER LINES.
- CONTRACTOR SHALL CONSULT WITH SAWS MANAGEMENT, CENTRAL COOLING PLANT PERSONNEL OR DIRECTOR PRIOR TO CHW DISCHARGING OF LOOP OR TEMPORARY SERVICE OF CHILL WATER LINES TO CUSTOMER(S). CONTACT INFORMATION FOR SHUT DOWN PROCEDURES BELOW:
CENTRAL COOLING PLANT MANAGER:
ELROY BISHOP CELL PHONE: 210-901-4702
OFFICE: 210-233-3067
EMAIL: ELROY.BISHOP@SAWS.ORG
CENTRAL COOLING PLANT 24/7 COMMAND CENTER: 210-233-3762

TIME/SCHEDULE CONSTRAINTS

- ALL CHILL WATER SHUTDOWNS OR INTERRUPTIONS TO CHILL WATER SERVICES WILL CONSIST FROM MONDAY THRU FRIDAY FROM THE HOURS OF 12:00 AM TO 6:00 AM. OR A SCHEDULED TIME BETWEEN SAWS MANAGEMENT AND THE CUSTOMERS FOR AN APPROVED TIME/DATE.
- THERE WILL BE NO CHILLED WATER SHUTDOWNS OR TRANSFER OF CHW WATER FROM FRIDAY 3:00 PM TO MONDAY 6:00 AM.

SAWS EMERGENCY CONTACT INFORMATION

- ELROY BISHOP - COOLING PLANT MANAGER
OFFICE: 210-233-3067
CELL: 210-901-4702
- CENTRAL COOLING PLANT LAND LINE:
OFFICE: 210-233-3762
OPERATION HOURS ARE 24

SPECIAL ARCHAEOLOGICAL EXCAVATION IN AREA OF INTEREST (AOI)

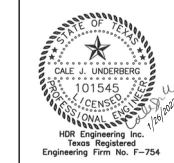
- THE BACKHOE USED FOR SPECIAL ARCHAEOLOGICAL EXCAVATION WILL BE REQUIRED TO HAVE A BUCKET WITH A FLAT BLADE FOR EXCAVATION. HOWEVER, DEMOLITION OF THE STREET PAVEMENT SIDEWALK AND MODERN BASE MAY USE A BUCKET WITH TEETH.
- BACKHOE EXCAVATION WILL OCCUR IN 4-INCH LEVELS UNDER THE DIRECTION OF AN ARCHAEOLOGIST.
- BACKHOE TRENCHES ARE ANTICIPATED TO EXTEND A MINIMUM OF 6 FEET BELOW THE GROUND SURFACE.
- IF TRENCH SHORING OR STEPPING IS REQUIRED, BACKHOE OPERATORS WILL WORK WITH ON-SITE ARCHAEOLOGISTS TO ENSURE EXCAVATION FOLLOWS ARCHAEOLOGICAL REQUIREMENTS AS WELL AS OSHA REQUIREMENTS.
- IF THE ARCHAEOLOGICAL CONSULTANT IDENTIFIES A FEATURE, CONSTRUCTION MUST STOP IN THE AREA WHILE THE CONSULTANT CONFERS WITH THE OFFICE OF HISTORICAL PRESERVATION AND TEXAS HISTORICAL COMMISSION. CERTAIN DISCOVERIES MAY REQUIRE EXCAVATIONS CEASE WITHIN 50 FEET OF THE LOCATION. IN THIS EVENT, CONTRACTORS SHOULD BE PREPARED TO STOP WORK AT THIS LOCATION AND MOVE TO AN AREA OUTSIDE OF THE 50 FEET TO CONTINUE CONSTRUCTION ACTIVITIES UNTIL APPROVAL HAS BEEN OBTAINED.
- THE CONTRACTOR MUST PROVIDE CITY OF SAN ANTONIO PUBLIC WORKS DEPARTMENT ENVIRONMENTAL MANAGEMENT DIVISION AND THE ARCHAEOLOGICAL CONSULTANT NOTICE WHEN EXCAVATION ACTIVITIES WILL BE OCCURRING.

AND
48 HOURS

HDR HDR Engineering, Inc.
613 NW Loop 410, Suite 700
San Antonio, TX 78216
TBPE FIRM REG. F-754

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DEVELOPER:	
CONT.	BUDGET PROJ.
SUBMITTED	_____
APPROVED	_____
MAP No.	_____
SECT. No.	_____
DR.	CK.

REVISIONS
HEMISFAIR PARK
CHILLED WATER RELOCATION

GENERAL NOTES

SHEET
745

CHILLED WATER JOB No. 12-7502 OF

GENERAL WATER NOTES

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COSA DRAINAGE 210-207-8048

COSA TRAFFIC SIGNAL OPERATIONS 210-207-7720

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NOTES 15-17 NOT USED.

SEWER SECTION

- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT NO SANITARY SEWER OVERFLOW (SSO) OCCURS AS A RESULT OF THEIR WORK. ALL CONTRACTOR PERSONNEL RESPONSIBLE FOR SSO PREVENTION AND CONTROL SHALL BE TRAINED ON PROPER RESPONSE. SHOULD AN SSO OCCUR, THE CONTRACTOR SHALL:
 - IDENTIFY THE SOURCE OF THE SSO AND NOTIFY SAWS EMERGENCY OPERATIONS CENTER (EOC) IMMEDIATELY AT 210-704-SAWS (210-704-7297). PROVIDE THE ADDRESS OF THE SPILL AND AN ESTIMATED VOLUME OR FLOW.
 - ATTEMPT TO ELIMINATE THE SOURCE OF THE SSO.
 - CONTAIN SEWAGE FROM THE SSO TO THE EXTENT OF PREVENTING A POSSIBLE CONTAMINATION OF WATERWAYS.
 - CLEAN UP SPILL SITE (RETURN CONTAINED SEWAGE TO THE COLLECTION SYSTEM IF POSSIBLE) AND PROPERLY DISPOSE OF CONTAMINATED SOIL/MATERIALS.
 - CLEAN THE AFFECTED SEWER MAINS AND REMOVE AND DEBRIS.
 - MEET ALL POST-SSO REQUIREMENTS AS PER THE EPA CONSENT DECREE, INCLUDING LINE CLEANING AND TELEVISIONING THE AFFECTED SEWER MAINS (AT SAWS DISCRETION) WITHIN 24 HOURS.

SHOULD THE CONTRACTOR FAIL TO ADDRESS AND SSO IMMEDIATELY AND TO SAWS SATISFACTION, THEY WILL BE RESPONSIBLE FOR ALL COSTS INCURRED BY SAWS, INCLUDING AND FINES FROM EPA. NO SEPARATE MEASUREMENT OF PAYMENT SHALL BE MADE FOR THIS WORK. ALL WORK SHALL BE DONE ACCORDING TO GUIDELINES SET BY THE TCEQ AND SAWS.
 - THE CONTRACTOR SHALL PROVIDE BYPASS PUMPING OF SEWAGE AROUND EACH SEGMENT OF PIPE TO BE REPLACED, IN ACCORDANCE WITH SAWS STANDARD SPECIFICATION ITEM NO. 865, "BYPASS PUMPING SMALL DIAMETER SANITARY SEWERS" AND ITEM NO. 864-S2, "BYPASS PUMPING LARGE DIAMETER SANITARY SEWERS". PAYMENT FOR SUCH WORK WILL BE MADE UNDER THE BID ITEM "SANITARY SEWER (BYPASS PUMPING)" (LUMP SUM) AS PER SAWS STANDARD SPECIFICATIONS 865 AND 864-S2.
 - PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING FORCE MAINS OF ANY SIZE MUST BE COORDINATED WITH SAWS CONSTRUCTION INSPECTION DIVISION AT 210-233-3500 AND/OR SAWS PRODUCTION GROUPS AT LEAST TWO WEEKS OR MORE IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS; THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.
 - ELEVATIONS POSTED FOR THE TOP OF MANHOLES ARE FOR REFERENCE ONLY: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ALLOWANCES AND ADJUSTMENTS FOR TOP OF MANHOLES TO MATCH THE FINISHED GRADE OF THE PROJECTS IMPROVEMENTS (NSPI).
 - SMART MANHOLE COVERS: THE CONTRACTOR SHALL NOTIFY SAWS EOC AT 210-704-SAWS (210-704-7297) AND EITHER AMERICA ESPINOZA AT 210-233-2934 OR JOSE A. MARTINEZ AT 210-233-3071 A MINIMUM OF 72 HOURS, NOT COUNTING WEEKENDS OR SAWS HOLIDAYS, BEFORE WORKING ON THE PIPE OR MANHOLE, IN ORDER TO HAVE SAWS REMOVE THE SMART COVER. ANY DAMAGE DONE TO THE SMART COVER WILL BE CHARGE TO THE CONTRACTOR THROUGH A CHANGE ORDER.
 - FLOW METERS IN MANHOLES: THE CONTRACTOR SHALL NOTIFY BOBBY JOHNSON AT 210-233-3493 OR ABEL BORUDA AT 210-233-3704 A MINIMUM OF 72 HOURS, NOT COUNTING WEEKEND OR SAWS HOLIDAYS, BEFORE WORKING ON A PIPE OR MANHOLE, IN ORDER TO HAVE SAWS REMOVE THE FLOW METER IN THE MANHOLE. ANY DAMAGE DONE TO THE FLOW METER WILL BE CHARGED TO THE CONTRACTOR THROUGH A CHANGE ORDER.
- EXCAVATION**
- THE CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEM, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH OSHA STANDARDS FOR TRENCH EXCAVATION. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE OF ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.
 - THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL WASTE MATERIALS PRIOR TO PROJECT COMPLETION. THE CONTRACTOR SHALL NOT PLACE ANY SOIL, FILL, OR WASTE MATERIAL IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN DEVELOPMENT PERMIT.
 - WATER JETTING THE BACKFILL WITHIN A STREET WILL NOT BE PERMITTED. ALL SAWS PROJECT UTILITY TRENCHES SUBJECT TO TRAFFIC SHALL CONFORM TO THE S.A.W.S. STANDARD SPECIFICATIONS FOR CONSTRUCTION, ITEM NO. 550 & 804.
- WATERLINE CROSSING**
- WHERE THE MINIMUM 9 FOOT SEPARATION DISTANCE BETWEEN SEWER LINES AND WATER LINES/MAINS CANNOT BE MAINTAINED, THE INSTALLATION OF SEWER LINES SHALL BE IN STRICT ACCORDANCE WITH THE TEXAS NATURAL RESOURCE CONSERVATION COMMISSION'S RULES (30 TAC 317.13 APPENDIX E).
- EROSION AND SEDIMENTATION CONTROL**
- THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY AND ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIRE EROSION AND SEDIMENTATION CONTROL FOR CONSTRUCTION OF SEWER COLLECTION SYSTEMS. DEVELOPER OR AUTHORIZED REPRESENTATIVE SHALL PROVIDE EROSION AND SEDIMENTATION CONTROL AS NOTES ON THE PROJECT'S PLAN AND PROFILE SHEETS

SUPPLEMENTARY

- NO EXTRA-PAYMENT SHALL BE ALLOWED FOR WORK CALLED FOR ON THE PLANS BUT NOT INCLUDED ON THE BID SCHEDULE. THIS INCIDENTAL WORK WILL BE REQUIRED AND SHALL BE INCLUDED UNDER THE PAY ITEM TO WHICH IT RELATES.
- ALL PVC SEWER PIPE WITH OVER 14 FEET OF COVER SHALL BE EXTRA STRENGTH PIPE, MINIMUM STIFFNESS OF 115 PSI.
- WORK COMPLETED BY THE CONTRACTOR WHICH HAS NOT RECEIVED A WORK ORDER OF THE NOTICE TO PROCEED WITH THE SAN ANTONIO WATER SYSTEM CONSTRUCTION INSPECTION DIVISION WILL BE SUBJECT TO REMOVAL AND REPLACEMENT BY AND AT THE EXPENSE OF THE CONTRACTOR.
- EXISTING TROLLEY CAR RAILS ARE KNOWN TO EXIST WITHIN THE ALAMO STREET PROJECT SITE. CONTRACTOR SHALL STOP WORK UPON ENCOUNTERING, NOTIFY THE CITY OF SAN ANTONIO ON-SITE ARCHEOLOGIST TO DOCUMENT, UPON NOTIFICATION THE CONTRACTOR SHALL REMOVE RAIL SECTION IMPEDING CONSTRUCTION AND DISPOSE OF AT A LOCATION DESIGNATED BY THE CITY OF SAN ANTONIO. WORK MAY THEN RE-COMMENCE. NO SPECIAL PAY ITEM, COST TO BE INCLUDED IN THE COST OF ITEM 101 - PREPARATION OF ROW.

FENCING

- CONTRACTOR SHALL MAINTAIN EXISTING FENCES ADJACENT TO AND ACROSS THE PROJECT CORRIDOR. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF ANY TEMPORARY FENCE, GAPS, GATES, ETC. NECESSARY FOR CONSTRUCTION OF THE PROJECT (NO SEPARATE PAY ITEM).
- AT COMPLETION OF THE PROJECT CONTRACTOR SHALL RESTORE ALL FENCING AFFECTED BY THE PROJECT TO ITS ORIGINAL OR BETTER CONDITION (NO SEPARATE PAY ITEM).

MANHOLE/STRUCTURES

- MANHOLE DESIGNATED AS: "MH" SHALL BE SAWS STANDARD SANITARY SEWER MANHOLE, WATERTIGHT, 4 FOOT DIAMETER, ITEM 852. MANHOLE DESIGNATED AS "SSS" SHALL BE SAWS SANITARY SEWER STRUCTURE, WATERTIGHT, 6 OR 8 FOOT DIAMETER, ITEM 850.
- ALL MANHOLE/STRUCTURE DESIGN AND INSTALLATION SHALL INSURE THAT FLOATATION OF THE MANHOLE/STRUCTURE WILL NOT OCCUR DURING FLOODING OR GROUNDWATER SOIL SATURATION.
- ALL MANHOLES/STRUCTURES SHALL BE CONSTRUCTED SO THAT THE TOP OF THE RING IS AT LEAST SIX (6) INCHES ABOVE THE FINISHED GRADE OF THE SURROUNDING GROUND EXCEPT WHEN LOCATED IN PAVED AREAS. IN PAVED AREAS, THE MANHOLE RING SHALL BE FLUSH WITH PAVEMENT.
- DESIGNATED MANHOLES/STRUCTURES SHALL HAVE INSIDE SURFACE SEALED WITH EPOXY COATING. SEE SPECIFIC MANHOLE/STRUCTURE.
- ALL MANHOLE/STRUCTURES SHALL HAVE VENTED WATERTIGHT RING FRAME AND COVER IN ACCORDANCE WITH THE MOST CURRENT SAN ANTONIO WATER SYSTEM'S STANDARDS AND SPECIFICATIONS FOR CONSTRUCTION.
- ON ANY MANHOLES TO BE ABANDONED, THE RINGS AND COVERS SHALL BE SALVAGED IN ACCORDANCE WITH THE MOST CURRENT SAN ANTONIO WATER SYSTEM'S STANDARD SPECIFICATION FOR CONSTRUCTION. THE HOLE SHOULD BE BACKFILLED TO THE SATISFACTION OF THE INSPECTOR. N.S.P.I.

BACKFILL AND PAVEMENT NOTES

- CONCRETE ENCASEMENT, WHERE REQUIRED, SHALL BE PLACED FOR FULL WIDTH OF THE TRENCH TO A PLANE 6-INCH ABOVE THE TOP OF THE PIPE. NO DIRECT PAYMENT WILL BE MADE FOR THE CONCRETE ENCASEMENT EXTENDING FURTHER THAN 6-INCHES IN A HORIZONTAL PLANE OR VERTICAL PLANE FROM THE PIPE, REGARDLESS OF THE AMOUNT PLACED.

TESTING

- ALL SEWER LINES MUST BE TESTED IN ACCORDANCE WITH THE FOLLOWING:
 - 30 TAC 217.57(B)(1)(2); OR THE S.A.W.S. STANDARD SPECIFICATION FOR CONSTRUCTION ITEM NO. 849.3 THROUGH ITEM NO. 894.4: DEFLECTION TEST FOR FLEXIBLE AND SEMI-RIGID PIPE CONDUCTED AFTER FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS. MAXIMUM ALLOWABLE DEFLECTION IS 5%.
 - 30 TAC 217.2(A)(1)(A)(B)&(F) OR S.A.W.S. STANDARD SPECIFICATIONS FOR CONSTRUCTION 849.3.1: INFILTRATION AND/OR EXFILTRATION AND/OR LOW PRESSURE AIR TEST.
 - 217.5(B)(1) OR THE S.A.W.S. STANDARD SPECIFICATION FOR CONSTRUCTION ITEM NO. 852.4 THROUGH 852.6: ALL MANHOLES AND WET WELLS MUST BE TESTED SEPARATELY AND INDEPENDENTLY OF THE COLLECTION LINES.
- SEWER LINES SHALL BE TESTED MANHOLE TO MANHOLE.
- SANITARY SEWER MAIN CONNECTIONS MADE DIRECTLY TO EXISTING MANHOLES WILL REQUIRE SUCCESSFUL TESTING OF THE MANHOLE IN ACCORDANCE WITH THE S.A.W.S. STANDARDS SPECIFICATIONS FOR CONSTRUCTION.
- AFTER CONSTRUCTION, TESTING WILL BE DONE BY T.V. CAMERA BY THE CONTRACTOR AND OBSERVED BY INSPECTOR, WASTEWATER ENGINEERING PERSONAL, AND CONTRACTOR AS CAMERA IS RUN THROUGH THE LINES. ANY ABNORMALITIES, SUCH AS BROKEN PIPE OR MISALIGNED JOINTS, MUST BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
- A COPY OF ALL TESTING REPORTS SHALL BE FORWARDED TO THE SAN ANTONIO WATER SYSTEM CONSTRUCTION INSPECTION DIVISION.

TRENCH EXCAVATION SAFETY PROCEDURE

- CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS

AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

SAN ANTONIO WATER SYSTEM NOTE

- LOCATION AND DEPTH OF EXISTING WATER AND SEWER MAINS AND SERVICES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY THE CONTRACTOR 48 HOURS PRIOR TO BEGINNING CONSTRUCTION BY CALLING THE SAWS WATER LINE LOCATOR AT 704-7811. THE CONTRACTOR SHOULD EXERCISE EXTREME CAUTION WHEN WORKING NEAR EXISTING WATER FACILITIES, AND SHOULD THEY BE DAMAGED DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR WILL BE REQUIRED TO REIMBURSE THE SAN ANTONIO WATER SYSTEM FOR THE TOTAL COST TO REPAIR OR REPLACE THE DAMAGED FACILITIES.

SPECIAL ARCHAEOLOGICAL EXCAVATION IN AREA OF INTEREST (AOI)

- THE BACKHOE USED FOR SPECIAL ARCHAEOLOGICAL EXCAVATION WILL BE REQUIRED TO HAVE A BUCKET WITH A FLAT BLADE FOR EXCAVATION. HOWEVER, DEMOLITION OF THE STREET PAVEMENT SIDEWALK AND MODERN BASE MAY USE A BUCKET WITH TEETH.
- BACKHOE EXCAVATION WILL OCCUR IN 4-INCH LEVELS UNDER THE DIRECTION OF AN ARCHAEOLOGIST.
- BACKHOE TRENCHES ARE ANTICIPATED TO EXTEND A MINIMUM OF 6 FEET BELOW THE GROUND SURFACE.
- IF TRENCH SHORING OR STEPPING IS REQUIRED, BACKHOE OPERATORS WILL WORK WITH ON-SITE ARCHAEOLOGISTS TO ENSURE EXCAVATION FOLLOWS ARCHAEOLOGICAL REQUIREMENTS AS WELL AS OSHA REQUIREMENTS.
- IF THE ARCHAEOLOGICAL CONSULTANT IDENTIFIES A FEATURE, CONSTRUCTION MUST STOP IN THE AREA WHILE THE CONSULTANT CONFERS WITH THE OFFICE OF HISTORICAL PRESERVATION AND TEXAS HISTORICAL COMMISSION. CERTAIN DISCOVERIES MAY REQUIRE EXCAVATIONS CEASE WITHIN 50 FEET OF THE LOCATION. IN THIS EVENT, CONTRACTORS SHOULD BE PREPARED TO STOP WORK AT THIS LOCATION AND MOVE TO AN AREA OUTSIDE OF THE 50 FEET TO CONTINUE CONSTRUCTION ACTIVITIES UNTIL APPROVAL HAS BEEN OBTAINED.
- THE CONTRACTOR MUST PROVIDE CITY OF SAN ANTONIO PUBLIC WORKS DEPARTMENT AND ENVIRONMENTAL MANAGEMENT DIVISION AND THE ARCHAEOLOGICAL CONSULTANT 48 HOURS NOTICE WHEN EXCAVATION ACTIVITIES WILL BE OCCURRING.

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No.	Revision	Drawn	Approved	Date

SAWS

REVISIONS

HEMISFAIR COMPLETE ST.:
ALAMO & C. CHAVEZ
SANITARY SEWER RELOCATION

GENERAL NOTES

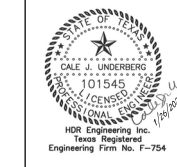
DEVELOPER:

CONT. BUDGET PROJ.

SUBMITTED

APPROVED

MAP No.	SHEET
SECT. No.	731
DR.	CK.
SEWER JOB No. 11-5575	OF
WATER JOB No.	



SAWS STANDARD GENERAL CONSTRUCTION NOTES

GENERAL CONSTRUCTION

- ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:
 - CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) DESIGN CRITERIA FOR DOMESTIC WATER SYSTEMS (SAWS) AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:
 - PART 1 CHAPTER 217 AND PUBLIC DRINKING WATER; TAC TILE 30 PART 1 CHAPTER 290.
 - CURRENT TxDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE.
 - CURRENT SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION.
 - CURRENT CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR CONSTRUCTION.
 - CURRENT CITY OF SAN ANTONIO UTILITY EXCAVATION CRITERIA MANUAL (UECM).
- THE CONTRACTOR SHALL OBTAIN SAWS STANDARD DETAILS FROM SAWS WEBSITE, [HTTPS://APPS.SAWS.ORG/BUSINESS_CENTER/SPECS/CONSTSPECS/](https://apps.saws.org/business_center/specs/constspecs/) CONSTSPECS_2020/INDEX.CFM, UNLESS OTHERWISE NOTED WITHIN DESIGN PLANS.
- THE CONTRACTOR IS TO NOTIFY AND MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT 210-233-3500 (DURING REGULAR SAWS WORKING HOURS), AND PROVIDE NOTIFICATION PROCEDURES THE CONTRACTOR WILL USE TO NOTIFY AFFECTED HOME RESIDENTS AND/OR PROPERTIES OWNERS PRIOR TO EXCAVATION, OUTSIDE OF REGULAR SAWS WORKING HOURS THE SAWS EOC SHOULD BE CONTACTED AT 210-764-7897.
- LOCATIONS AND DEPTHS OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR AT LEAST 1 WEEK PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.
- THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES AT LEAST 1-2 WEEKS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT. PLEASE ALLOW UP TO 7 BUSINESS DAYS FOR LOCATES REQUESTING PIPE LOCATION MARKERS ON SAWS FACILITIES. THE FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR VERIFICATION PURPOSES:
 SAN ANTONIO WATER SYSTEM:
 SAWS UTILITY LOCATES: [HTTPS://WWW.SAWS.ORG/SERVICE/LOCATES-SERVICE/](https://www.saws.org/service/locates-service/)
 COSA DRAINAGE 210-207-8048
 COSA TRAFFIC SIGNAL OPERATIONS 210-207-7720
 TEXAS STATE WIDE ONE CALL LOCATOR 1-800-545-6005 OR 811
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, SIDEWALKS, LANDSCAPING AND STRUCTURES TO ITS ORIGINAL OR BETTER CONDITION AS A RESULT OF DAMAGES DONE BY THE PROJECT'S CONSTRUCTION.**
- ALL WORK IN TEXAS HIGHWAY DEPARTMENT AND BEAR COUNTY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH RESPECTIVE CONSTRUCTION SPECIFICATIONS AND PERMIT.
- THE CONTRACTOR SHALL COMPLY WITH CITY OF SAN ANTONIO OR OTHER GOVERNING MUNICIPALITY'S TREE ORDINANCES WHEN EXCAVATING NEAR TREES.
- THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIALS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAN PERMIT.
- ANY WORK COMPLETED WITHOUT PRIOR WRITTEN AUTHORIZATION WHICH IS NOT INCLUDED IN THESE PLANS AND SPECIFICATIONS WILL NOT BE COMPENSATED BY THE SAN ANTONIO WATER SYSTEM.
- HOLIDAY WORK: CONTRACTORS WILL NOT BE ALLOWED TO PERFORM SAWS WORK ON SAWS RECOGNIZED HOLIDAYS. REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG. WEEKEND WORK: CONTRACTORS ARE REQUIRED TO NOTIFY THE SAWS INSPECTION CONSTRUCTION DEPARTMENT 48 HOURS IN ADVANCE TO REQUEST WEEKEND WORK. REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG. ANY AND ALL SAWS UTILITY WORK INSTALLED WITHOUT HOLIDAY/WEEKEND APPROVAL WILL BE SUBJECT TO BE UNCOVERED FOR PROPER INSPECTION.
- PRE CON SITE VIDEO: BEFORE THE START OF ANY CONSTRUCTION, THE SITE MUST BE VIDEO RECORDED BY THE CONTRACTOR WITH ONE COPY SUBMITTED TO SAWS INSPECTIONS. A PRE-SITE VIDEO WILL PROVIDE ACCURATE DOCUMENTATION OF THE EXISTING CONDITIONS (NSPI).
- POWER POLE BRACING: CONTRACTORS SHOULD BE ADVISED THAT THERE ARE EXISTING OVERHEAD UTILITY POLES ALONG THE PROJECT CORRIDOR. CONTRACTORS SHOULD FURTHER BE ADVISED THAT IF THE DISTANCE FROM THE OUTSIDE FACE OF A UTILITY TRENCH TO THE FACE OF A UTILITY POLE IS LESS THAN 5 FEET, SAID UTILITY POLE IS SUBJECT TO BRACING, BASED ON A DETERMINATION MADE BY UTILITY POLE OWNER. COSTS INCURRED BY CONTRACTOR FOR BRACING OF THESE UTILITY POLES IS SUBSIDIARY TO THAT RESPECTIVE UTILITY COMPANY'S WORK. IT IS ADVISABLE FOR THE CONTRACTOR TO REVIEW THE CONSTRUCTION DOCUMENTS, AND VISIT THE CONSTRUCTION SITE TO DETERMINE POTENTIAL IMPACTS.
- CONSTRUCTION SEQUENCING: IT IS THE CONTRACTOR SOLE RESPONSIBILITY TO SCHEDULE SEQUENCING FOR REMOVAL AND INSTALLATION OF EXISTING AND PROPOSED SAWS UTILITIES IN CONJUNCTION WITH GENERAL PROJECT CONSTRUCTION. SEQUENCE OF CONSTRUCTION ACTIVITIES SHALL BE CONSIDERED IN ORDER TO MINIMIZE THE EXTENT AND DURATION OF DISTURBANCES.

WATER

- PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS INSPECTION AND/OR SAWS PRODUCTION GROUPS AT LEAST TWO WEEKS OR MORE IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS. THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY. SAWS PRODUCTION CONTROL CENTER 210-233-2016.
- ASBESTOS CEMENT (AC) PIPE, ALSO KNOWN AS TRANSITE PIPE WHICH IS KNOWN TO CONTAIN ASBESTOS-CONTAINING MATERIAL (ACM), MAYBE LOCATED WITHIN THE PROJECT LIMITS. SPECIAL WASTE MANAGEMENT PROCEDURES AND HEALTH AND SAFETY REQUIREMENTS WILL BE APPLICABLE WHEN REMOVAL AND/OR DISTURBANCE OF THIS PIPE OCCURS, PAYMENT FOR SUCH WORK IS TO BE MADE UNDER ITEM NO. 3000, HANDLING ASBESTOS CEMENT PIPE.
- VALVE REMOVAL: WHERE THE CONTRACTOR IS TO ABANDON A WATER MAIN, THE CONTROL VALVE LOCATED ON THE ABANDONING BRANCH WILL BE REMOVED AND REPLACED WITH A CAP/PLUG (NSPI)
- NO EXTRA-PAYMENT SHALL BE ALLOWED FOR WORK CALLED FOR ON THE PLANS BUT NOT INCLUDED ON THE BID SCHEDULE. THIS INCIDENTAL WORK WILL BE REQUIRED AND SHALL BE INCLUDED UNDER THE PAY ITEM TO WHICH IT RELATES.

EXCAVATION

- AT THE END OF EACH WORK DAY, THE CONTRACTOR SHALL CLOSE EXCAVATION/PIPELINE TRENCH EXCEPT FOR THE MINIMUM AMOUNT REQUIRED TO BEGIN THE NEXT DAY'S WORK. IF IT IS NECESSARY TO LEAVE EXCAVATIONS OPEN AFTER WORKING HOURS, THE CONTRACTOR SHALL EMPLOY PROPER TRAFFIC DEVICES AND BARRICADE THE EXCAVATIONS TO PREVENT UNAUTHORIZED VEHICULAR/PEDESTRIAN ACCESS.
- THE CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEM, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION PROTECTION THAT COMPLIES WITH OSHA STANDARDS FOR TRENCH EXCAVATION. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE OF ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.
- THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL WASTE MATERIALS PRIOR TO PROJECT COMPLETION. THE CONTRACTOR SHALL NOT PLACE ANY SOIL, FILL, OR WASTE MATERIAL IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAN DEVELOPMENT PERMIT.
- WATER JETTING THE BACKFILL WITHIN A STREET WILL NOT BE PERMITTED. ALL SAWS PROJECT UTILITY TRENCHES SUBJECT TO TRAFFIC SHALL CONFORM TO THE S.A.W.S. STANDARD SPECIFICATIONS FOR CONSTRUCTION, ITEM NO. 550 & 804.
- CONTRACTOR TO USE EXTREME CAUTION WHEN WORKING IN PROXIMITY OF DISTURBED SOIL FROM PREVIOUSLY INSTALLED UTILITIES. NO SEPARATE PAY ITEM.
- EXISTING TROLLEY CAR RAILS ARE KNOWN TO EXIST WITHIN THE ALAMO STREET PROJECT SITE. CONTRACTOR SHALL STOP WORK UPON ENCOUNTERING, NOTIFY THE CITY OF SAN ANTONIO ON-SITE CHIEF ENGINEER AND NOTIFY THE CONTRACTOR SHALL REMOVE RAIL SECTION IMPEDING CONSTRUCTION AND DISPOSE OF AT A LOCATION DESIGNATED BY THE CITY OF SAN ANTONIO. WORK MAY THEN RE-COMMENCE. NO SPECIAL PAY ITEM, COST TO BE INCLUDED IN COST OF ITEM 101 PREPARATION OF ROW.

FENCING

- CONTRACTOR SHALL MAINTAIN EXISTING FENCES ADJACENT TO AND ACROSS THE PROJECT CORRIDOR. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF ANY TEMPORARY FENCE, GAPS, GATES, ETC. NECESSARY FOR CONSTRUCTION OF THE PROJECT (N.S.P.I.).

BACKFILL AND PAVEMENT NOTES

CONCRETE ENCASUREMENT, WHERE REQUIRED, SHALL BE PLACED FOR FULL WIDTH OF THE TRENCH TO A PLANE 6-INCH ABOVE THE TOP OF THE PIPE. NO DIRECT PAYMENT WILL BE MADE FOR THE CONCRETE ENCASUREMENT EXTENDING FURTHER THAN 6-INCHES IN A HORIZONTAL PLANE OR VERTICAL PLANE FROM THE PIPE, REGARDLESS OF THE AMOUNT PLACED.

BLASTING

BLASTING WILL NOT BE ALLOWED FOR THIS PROJECT.

SANITARY SEWER LINE CROSSING

WHERE THE MINIMUM 9 FOOT SEPARATION DISTANCE BETWEEN SANITARY SEWER LINES, SANITARY SEWER STRUCTURES, AND WATER LINES CANNOT BE MAINTAINED, THE INSTALLATION OF WATER LINES SHALL BE IN STRICT ACCORDANCE WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS (30 TAC 290.44 WATER DISTRIBUTION, 30 TAC 317.13 APPENDIX E. AND 217.53 (3) (A)).

PIPE JOINT RESTRAINT

ALL PIPE JOINTS WILL HAVE PIPE JOINT RESTRAINTS. PRICE TO BE INCLUDED IN PRICE OF PIPE PER LINEAR FOOT UNLESS NOTED OTHERWISE. CONCRETE JOINT RESTRAINTS MAY NOT SUBSTITUTE FOR PIPE JOINT RESTRAINTS WITHOUT THE EXPRESS WRITTEN CONSENT OF THE ENGINEER OF RECORD AND SAWS. REFER TO SAWS ITEM NO. 839 ANCHORAGE/THRUST BLOCKING AND JOINT RESTRAINT.

TRENCH EXCAVATION SAFETY PROCEDURE

- CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

SAN ANTONIO WATER SYSTEM NOTE

- LOCATION AND DEPTH OF EXISTING WATER AND SEWER MAINS AND SERVICES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY THE CONTRACTOR 48 HOURS PRIOR TO BEGINNING CONSTRUCTION BY CALLING THE SAWS WATER LINE LOCATOR (OR 704-7811). THE CONTRACTOR SHOULD EXERCISE EXTREME CAUTION WHEN WORKING NEAR EXISTING WATER FACILITIES, AND SHOULD THEY BE DAMAGED DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR WILL BE REQUIRED TO REIMBURSE THE SAN ANTONIO WATER SYSTEM FOR THE TOTAL COST TO REPAIR OR REPLACE THE DAMAGED FACILITIES.

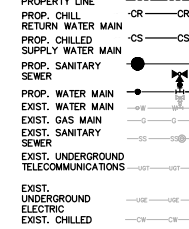
SPECIAL ARCHAEOLOGICAL EXCAVATION IN AREA OF INTEREST (AOI)

- THE BACKHOE USED FOR SPECIAL ARCHAEOLOGICAL EXCAVATION WILL BE REQUIRED TO HAVE A BUCKET WITH A FLAT BLADE FOR EXCAVATION. HOWEVER, DEMOLITION OF THE STREET PAVEMENT SIDEWALK AND MODERN BASE MAY USE A BUCKET WITH TEETH.
- BACKHOE EXCAVATION WILL OCCUR IN 4-INCH LEVELS UNDER THE DIRECTION OF AN ARCHAEOLOGIST.
- BACKHOE TRENCHES ARE ANTICIPATED TO EXTEND A MINIMUM OF 6 FEET BELOW THE GROUND SURFACE.
- IF TRENCH SHORING OR STEPPING IS REQUIRED, BACKHOE OPERATORS WILL WORK WITH ON-SITE ARCHAEOLOGISTS TO ENSURE EXCAVATION FOLLOWS ARCHAEOLOGICAL REQUIREMENTS AS WELL AS OSHA REQUIREMENTS.
- IF THE ARCHAEOLOGICAL CONSULTANT IDENTIFIES A FEATURE, CONSTRUCTION MUST STOP IN THE AREA WHILE THE CONSULTANT CONFERS WITH THE OFFICE OF HISTORICAL PRESERVATION AND TEXAS HISTORICAL COMMISSION. CERTAIN DISCOVERIES MAY REQUIRE EXCAVATIONS CEASE WITHIN 50 FEET OF THE LOCATION. IN THIS EVENT, CONTRACTORS SHOULD BE PREPARED TO STOP WORK AT THIS LOCATION AND MOVE TO AN AREA OUTSIDE OF THE 50 FEET TO CONTINUE CONSTRUCTION ACTIVITIES UNTIL APPROVAL HAS BEEN OBTAINED.
- THE CONTRACTOR MUST PROVIDE CITY OF SAN ANTONIO PUBLIC WORKS DEPARTMENT AND ENVIRONMENTAL MANAGEMENT DIVISION AND THE ARCHAEOLOGICAL CONSULTANT 48 HOURS NOTICE WHEN EXCAVATION ACTIVITIES WILL BE OCCURRING.

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LEGEND



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 TBPE FIRM REG. F-754

No.	Revision	Drawn	Approved	Date

REVISIONS

HEMISFAIR PARK WATER RELOCATION WATER PLANS

GENERAL NOTES

DEVELOPER: _____
 CONT. **BUDGET PROJ.**

SUBMITTED _____
 APPROVED _____



MAP No.	SEWER JOB No.	SHEET
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CK.		OF