JOHNSON ISLAND WATER MAIN EXTENSION

VILLAGE OF MARBLEHEAD, OTTAWA COUNTY, OHIO

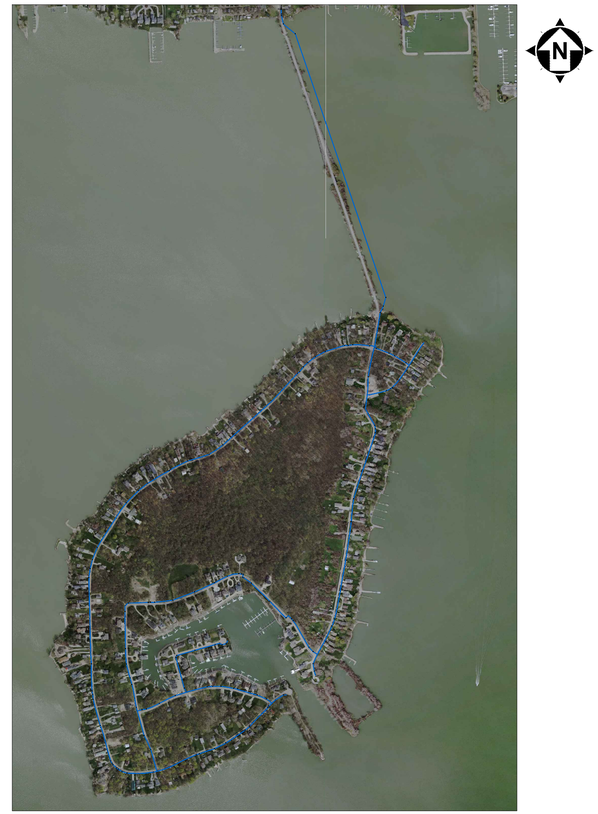
NOVEMBER 2025

WATER SUPPLY
APPROVED
OHIO ENVIRONMENTAL PROTECTION AGENCY
AS EVIDENCED BY COPY OF
LETTER OF APPROVAL
HERETO ATTACHED

BID SET

VILLAGE OF MARBLEHEAD:

JOHN STARCHER	MAYOR
TONY JOYCE	CHIEF OPERATING ENGINEER
JEFFREY L. WHITE	VILLAGE ADMINISTRATOR
RHONDA I. SOWERS	FISCAL OFFICER
JAMES C. BARNEY	SOLICITOR
DEAN DORKO	VILLAGE COUNCIL PRESIDENT
DENNIS KENNEDY	VILLAGE COUNCIL MEMBER
MATT KOVACH	VILLAGE COUNCIL MEMBER
ANGIE KUKAY	VILLAGE COUNCIL MEMBER
LEE WALKER	VILLAGE COUNCIL MEMBER
MARYANN SUAVEY	VILLAGE COUNCIL MEMBER



INDEX MAP

800" 0' 800"
SCALE: 1" = 800"

OWNER / DEVELOPER

VILLAGE OF MARBLEHEAD WATER
106 WATER STREET
MARBLEHEAD, OH 43440
PHONE: 419-798-5836

CONTACT: TONY JOYCE

ENGINEER

CT CONSULTANTS
7965 NORTH HIGH STREET, SUITE 340
COLUMBUS, OH 43235
PHONE: 614-885-1700

CONTACT: DAN BARR

CONSTRUCTION PLAN APPROVALS:

JEFFREY WHITE - VILLAGE ADMINISTRATOR, VILLAGE OF MARBLEHEAD — DATE 11/26/2025

APPROVAL OF THESE PLANS DOES NOT CONSTITUTE ASSURANCE TO OPERATE AS INTENDED. THE REVIEWER DOES NOT ACCEPT RESPONSIBILITY FOR THE INTEGRITY OF THE PLANS.

DESIGN ENGINEER:

THIS IS TO CERTIFY THAT GOOD ENGINEERING PRACTICES HAVE BEEN UTILIZED IN THE DESIGN OF THIS PROJECT AND THAT ALL MINIMUM STANDARDS FOR MARION COUNTY, INCLUDING THOSE STANDARDS GREATER THAN MINIMUM WHERE, IN OUR OPINION, THEY ARE NEEDED TO PROTECT THE SAFETY OF THE PUBLIC. ANY VARIANCES TO THE ABOVE STANDARDS ARE CONSISTENT WITH SOUND ENGINEERING PRACTICES AND ARE NOT DETRIMENTAL TO THE PUBLIC SAFETY AND CONVENIENCE.

STATE OF OHIO
DANIEL E. BARR
E-84584
REGISTERED
PROFESSIONAL ENGINEER

DANIEL E. BARR, P.E. NO. PE84584

11/26/2025
DATE

OHIO Utilities Protection SERVICE
Call Before You Dig
1-800-362-2764
CALL TWO WORKING DAYS BEFORE YOU DIG
(NON MEMBERS MUST BE CALLED DIRECTLY)

NOTE:

1. UNDERGROUND BUILDING SERVICE UTILITY LINES ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, MAINTAINING AND REPLACING AS NECESSARY TO ENSURE CONTINUAL SERVICE TO BUILDINGS.
2. THE CONTRACTOR IS RESPONSIBLE TO CALL OHIO UTILITIES PROTECTION SERVICE @ 1-800-362-2764, THREE WORKING DAYS PRIOR TO CONSTRUCTION.

your trusted advisor — engineers architects planners
consultants

NO	REVISION	DATE

ISSUED FOR:	BID
ISSUE DATE:	11/24/2025
SCALE:	AS SHOWN
DESIGNED BY:	QDB
DRAWN BY:	QDB
CHECKED BY:	DEB

JOHNSON ISLAND WATER MAIN EXTENSION

Cover Sheet

PROJECT NO.	
210900	
DISCIPLINE	
CIVIL	
SHEET NAME	
COVR-SHT	
SHEET	OF
01	51

EXISTING PLAN LINE SYMBOLOGY:

- FENCE, GENERAL
- FENCE, BARBED WIRE
- FENCE, CHAIN LINK
- FENCE, DECORATIVE
- FENCE, ELECTRIC
- FENCE, VINYL
- FENCE, WOOD
- FENCE, WOVEN WIRE
- CABLE RAIL
- GUARDRAIL
- HANDRAIL
- TELEPHONE, ABANDONED
- TELEPHONE
- TELEPHONE, OH
- TELEPHONE, UG
- TELEPHONE, SERVICE
- TELEPHONE, SERVICE OH
- TELEPHONE, SERVICE, UG
- ELECTRIC, ABANDONED
- ELECTRIC, DUCT BANK
- ELECTRIC
- ELECTRIC, OH
- ELECTRIC, UG
- ELECTRIC, SERVICE
- ELECTRIC, SERVICE OH
- ELECTRIC, SERVICE, UG
- GAS, ABANDONED
- GAS
- GAS, SERVICE
- SANITARY, ABANDONED
- SANITARY FORCE MAIN
- SANITARY SEWER
- SANITARY LEACH LINE
- SANITARY SEWER, DOUBLE
- SANITARY SEWER, SERVICE
- STORM SEWER, ABANDONED
- STORM CULVERT
- STORM SEWER
- STORM SEWER, DOUBLE
- STORM, ROOF DRAIN
- STORM, UNDERDRAIN
- TELEPHONE, ABANDONED
- TELEPHONE
- TELEPHONE, OH
- TELEPHONE, UG
- TELEPHONE, SERVICE
- TELEPHONE, SERVICE OH
- TELEPHONE, SERVICE, UG
- WATER LINE, ABANDONED
- WATER LINE
- WATER LINE, DOUBLE
- WATER LINE, SERVICE
- NON-POTABLE WATER LINE
- ALUM SOLUTION LINE
- CHLORINE SOLUTION LINE
- SULFUR DIOXIDE SOLUTION LINE
- BRUSH LINE
- BUSH LINE
- TREE LINE
- MAJOR CONTOUR
- MINOR CONTOUR
- TOP OF BANK
- TOP OF DITCH
- BOTTOM OF DITCH
- WATER EDGE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- RIGHT-OF-WAY C/L
- SURVEY STATIONING
- PAVED ROADWAY
- GRAVEL DRIVEWAY
- CURB FACE
- CURB BACK

EXISTING PLAN SYMBOLOGY:

- SANITARY MANHOLE
- SANITARY CLEANOUT
- SANITARY LINE CAP
- SANITARY LINE PAINT MARKING
- SANITARY STRUCTURE NUMBER
- SANITARY VENT PIPE
- STORM MANHOLE (SOLID LID)
- STORM MANHOLE (OPEN GRATE)
- CURB INLET
- CURB INLET (DOUBLE)
- CATCH BASIN
- CATCH BASIN (ROUND LID)
- CATCH BASIN (DOME)
- CATCH BASIN (SIDE INLET)
- DRAIN
- DOWNSPOUT
- STORM CLEANOUT
- STORM LINE CAP
- STORM ENDWALL
- STORM HEADWALL
- STORM LINE PAINT MARKING
- STORM STRUCTURE NUMBER
- ROCK CHANNEL PROTECTION
- SURFACE DRAINAGE FLOW
- STORM FLOOD ROUTING ARROW
- FIRE HYDRANT
- WATER SIAMESE CONNECTION
- WATER VALVE
- WATER VALVE BOX
- WATER METER
- WATER METER PIT
- WATER LINE REDUCER
- WATER LINE CAP
- WATER LINE PLUG
- WATER LINE PAINT MARKING
- POST INDICATOR VALVE
- WATER MANHOLE
- WATER FLUSHING ASSEMBLY
- WATER FIXTURE
- WATER FITTING (TEE)
- WATER FITTING (CROSS)
- WATER FITTING (45° WYE)
- WATER FITTING (11.25°)
- WATER FITTING (22.50°)
- WATER FITTING (45°)
- WATER FITTING (90°)
- IRRIGATION SPRINKLER HEAD
- IRRIGATION CONTROL BOX
- IRRIGATION BOX
- STEAM MANHOLE
- STEAM VENT
- COMBINED SEWER MANHOLE
- GAS LIGHT POST (YARD)
- GAS MANHOLE
- GAS VALVE
- GAS VALVE BOX
- GAS METER
- GAS REGULATOR
- GAS VENT PIPE
- GAS LINE PAINT MARKING
- GAS LINE FIXTURE
- ELECTRIC LIGHT POST (YARD)
- ELECTRIC MANHOLE
- ELECTRIC PULL BOX
- ELECTRIC CONTROL BOX
- ELECTRIC JUNCTION BOX
- ELECTRIC VAULT BOX
- ELECTRIC METER
- ELECTRIC PEDESTAL
- ELECTRIC RISER BOX
- ELECTRIC TRANSFORMER
- ELECTRIC HVAC UNIT
- ELECTRIC GROUND LIGHT
- ELECTRIC LINE PAINT MARKING
- CABLE TV MANHOLE
- CABLE TV PEDESTAL
- CABLE TV PAINT MARKING
- TELEPHONE MANHOLE
- TELEPHONE PULL BOX
- TELEPHONE PEDESTAL
- TELEPHONE RISER BOX
- TELEPHONE LINE PAINT MARKING
- TELEPHONE PAY PHONE
- FIBER OPTIC CABLE MANHOLE
- FIBER OPTIC CABLE PAINT MARKING
- TRAFFIC CONTROL MANHOLE
- TRAFFIC CONTROL BOX
- TRAFFIC CONTROL PAINT MARKING
- TRAFFIC PULL BOX
- TRAFFIC SIGNAL PEDESTAL
- UNKNOWN, PULL BOX
- UNKNOWN, CLEANOUT
- UNKNOWN, MANHOLE
- UNKNOWN, VALVE
- MONITORING WELL
- TEST WELL
- WATER WELL
- SOIL BORING
- SWAMP
- POLE, ELECTRIC
- POLE, TELEPHONE
- POLE, LIGHT
- POLE, LIGHT, DECORATIVE
- POLE, LIGHT-OVERHEAD
- POLE, CABLE TV
- POLE, UTILITY
- POLE, GENERAL
- POLE, TRAFFIC CONTROL
- POLE, GUY
- POLE, BRACE
- POLE, ELECTRIC/TELEPHONE
- POLE, ELECTRIC W/LIGHT
- POLE, ELECTRIC/CABLE TV
- POLE, ELECTRIC/TELEPHONE/LIGHT
- POLE, ELECTRIC/TELEPHONE/CABLE TV
- POLE, ELEC./TELE./LIGHT/CABLE TV
- POLE, TELEPHONE/LIGHT
- POLE, TELEPHONE/CABLE TV
- POLE, TELEPHONE/LIGHT/CABLE TV
- POLE, CABLE TV W/LIGHT
- POLE, GUY WIRE
- SIGN
- SIGN, DOUBLE SIDED
- SIGN, DUAL POST
- SIGN, RAILROAD
- POST
- BOLLARD
- DELINEATOR POST
- PARKING BUMPER BLOCK
- HANDICAP PARKING SYMBOL
- HANDICAP PARKING SYMBOL
- HANDICAP DETECTABLE WARNING
- MAILBOX
- PAPERBOX
- PARKING METER
- GRAVE HEADSTONE
- EX. BARBEQUE GRILL
- FUEL PUMP
- FLAG POLE
- RAISED PAVEMENT MARKER
- GUARDRAIL, CENTER POST
- GUARDRAIL, TERMINAL POST
- GUARDRAIL, BOTTOM POST
- GUARDRAIL, TOP POST
- FENCE POST
- PICNIC TABLE
- BENCH
- DECIDUOUS TREE
- EVERGREEN TREE
- STUMP
- BUSH
- IRON PIN FOUND
- SOLID IRON PIN FOUND
- IRON PIPE FOUND
- DRILL HOLE FOUND
- CHISELED "X" FOUND
- MONUMENT BOX FOUND
- MONUMENT CONCRETE FOUND
- MONUMENT RIGHT-OF-WAY FOUND
- PK NAIL FOUND
- MAG NAIL FOUND
- SPIKE FOUND
- HUB FOUND
- AXLE FOUND
- WOOD POST FOUND
- CORNER STONE FOUND
- AERIAL TARGET FOUND
- GPS CONTROL FOUND
- BENCHMARK FOUND

GENERAL SYMBOLOGY NOTES:

1. THIS IS A STANDARD SHEET SHOWING COMMONLY USED SYMBOLOGY.
2. ALL SYMBOLS ARE NOT NECESSARILY USED ON THIS PROJECT.
3. SCREENING OR SHADING OF WORK IS USED TO INDICATE EXISTING COMPONENTS OR TO DE-EMPHASIZE NEW IMPROVEMENTS SO AS TO HIGHLIGHT SPECIFIC TRADE WORK. REFER TO CONTEXT OF EACH SHEET FOR USAGE.
4. SYMBOLOGY OR DIAGRAMMATICAL LEGENDS MAY BE SHOWN ON INDIVIDUAL SHEETS FOR SCHEDULES, DIAGRAMS, DETAILS, SCHEMATICS OR EQUIPMENT.

NEW SITE PLAN LINE SYMBOLOGY:

- WATER SERVICE LINE (POTABLE)
- NON-POTABLE WATER LINE
- GAS SERVICE LINE
- STORM SEWER LINE
- GRAVITY SANITARY SEWER LINE
- SANITARY SEWER FORCE MAIN LINE
- MAJOR CONTOUR
- MINOR CONTOUR
- STATIONING
- CONSTRUCTION FENCE
- SILT FENCE
- FILTER FENCE
- FILTER SOCK

NEW PLAN HATCHING:

- NEW SIDEWALK
- NEW PAVEMENT AREA

DEMOLITION:

- UTILITY LINE OR OBJECT TO BE REMOVED OR ABANDONED AS SHOWN ON THE DRAWINGS
- TREE REMOVAL

NEW SITE SYMBOLOGY:

- SANITARY MANHOLE
- SANITARY MANHOLE, ADJUST
- SANITARY CLEANOUT
- SANITARY LINE CAP
- SANITARY STRUCTURE NUMBER
- SANITARY VENT PIPE
- STORM MANHOLE (SOLID GRATE)
- STORM MANHOLE (OPEN GRATE)
- STORM MANHOLE, ADJUST
- CURB INLET
- CURB INLET (DOUBLE)
- CURB INLET, ADJUST
- CURB INLET (DOUBLE), ADJUST
- CATCH BASIN
- CATCH BASIN (SOLID)
- CATCH BASIN, ADJUST
- CATCH BASIN (SIDE INLET)
- DRAIN
- DOWNSPOUT
- STORM CLEANOUT
- STORM LINE CAP
- STORM HEADWALL
- STORM STRUCTURE NUMBER
- ROCK CHANNEL PROTECTION
- SURFACE DRAINAGE FLOW
- SURFACE DRAINAGE FLOW
- STORM FLOOD ROUTING ARROW
- FIRE HYDRANT
- FIRE HYDRANT, ADJUST
- WATER SIAMESE CONNECTION
- WATER VALVE
- WATER VALVE BOX
- WATER METER
- WATER LINE REDUCER
- WATER LINE CAP
- WATER LINE PLUG
- POST INDICATOR VALVE
- WATER MANHOLE
- WATER CORPORATION STOP
- WATER FLUSHING ASSEMBLY
- WATER METER
- WATER CURB STOP

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BID SET

your trusted advisor — engineers architects planners consultants

NO	REVISION	DATE

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JOHNSON ISLAND WATER MAIN EXTENSION

SITE LEGEND AND SHEET INDEX

PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME LEGEND
SHEET 02 OF 51

CONTRACTOR:
THE TERM CONTRACTOR IN THESE DOCUMENTS REFERS TO THE GENERAL CONTRACTOR, ALL SUB-CONTRACTORS, SUPPLIERS AND SERVICE SUPPLIERS PROVIDING SERVICES, MATERIAL OR LABOR DIRECTLY OR INDIRECTLY TO THIS PROJECT.

CERTIFICATION:
BY SUBMITTING A BID OR STARTING CONSTRUCTION THE CONTRACTOR CERTIFIES THAT:

THE CONTRACTOR HAS VISITED THE SITE AND IS SATISFIED THAT HE UNDERSTANDS ALL SITE CONDITIONS THAT MAY HAVE AN EFFECT ON THE BID PRICE AND CONSTRUCTION SCHEDULE.

THE CONTRACTOR FULLY UNDERSTANDS THE MAKE-UP, CONSTRUCTION, AND OPERATION OF ALL SYSTEMS AND EQUIPMENT HE IS CONSTRUCTING AND THAT HE HAS INCLUDED IN HIS PRICE ALL MATERIALS, SUPPLIES, ACCESSORIES, AND SERVICES NECESSARY TO MAKE THESE SYSTEMS COMPLETE AND OPERATIONAL WHETHER SUCH MATERIALS, SUPPLIES, AND SERVICES ARE EXPLICITLY SHOWN ON THE DRAWINGS OR INCLUDED IN THESE SPECIFICATIONS OR ONLY IMPLIED BY THE CLEAR INTENT OF THESE DOCUMENTS FOR THE CONTRACTORS TO PROVIDE A COMPLETE AND FULLY OPERATIONAL SYSTEM AS PART OF THE SCOPE OF WORK UNDERTAKEN BY THIS CONTRACTOR.

RESPONSIBILITY:
THE OWNER DOES NOT SUPERVISE, NOR ARE THEY ENGAGED IN CONSTRUCTION. THE OWNER HAS NO CONTROL OVER OR CHARGE OF, AND THEREFORE IS NOT RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THESE ARE SOLELY THE CONTRACTOR'S RESPONSIBILITY UNDER THE CONTRACT FOR CONSTRUCTION.

PERMITS:
UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE PERMITS EXCEPT RIGHT OF WAY PERMITS FOR THE AREAS DESIGNATED ON THE DRAWINGS.

MSDS SHEETS:
MATERIAL SAFETY DATA SHEETS (MSDS'S) FOR ALL PRODUCTS AND/OR BUILDING MATERIALS THAT MAY CONTAIN HAZARDOUS OR TOXIC CHEMICALS SHALL BE MADE READILY AVAILABLE TO CONTRACTOR, EMPLOYEES AND OWNER'S PERSONNEL DURING CONSTRUCTION.

MAINTAINING TRAFFIC:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND CONTROLLING TRAFFIC ON ALL STREETS AND ROADS AFFECTED BY CONSTRUCTION AND SHALL, PRIOR TO ANY CONSTRUCTION, SUBMIT A CONSTRUCTION SCHEDULE TO THE OWNER FOR APPROVAL INDICATING DATES AND DURATION OF EACH PHASE OF CONSTRUCTION.

ALL CONSTRUCTION SIGNS AND TEMPORARY TRAFFIC CONTROL AND PROTECTION DEVICES SHALL BE ERECTED AND MAINTAINED IN ACCORDANCE WITH "OHIO DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND O.D.O.T. ITEM 614 - MAINTAINING TRAFFIC.

MAINTENANCE OF TRAFFIC OPERATIONS MUST ADHERE TO ALL REGULATIONS AND/OR MANDATES BY THE APPROPRIATE MAINTAINING AUTHORITY OF THE ROADWAY.

COSTS FOR MAINTENANCE OF TRAFFIC SHALL BE INCLUDED IN THE PAY ITEM FOR ROADWAY REPAIRS.

ROAD CLOSURES:
WHEN IT IS REQUIRED THAT THE STREET OR ROAD BE CLOSED TO THROUGH TRAFFIC, THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN, AND REMOVE SIGNS, BARRICADES, ETC., AS PER THE OMUTCD REQUIREMENTS. THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN ADVANCE WARNING SIGNS, DETOUR SIGNS AND BARRICADES, ETC. ON ALL STREETS INCLUDING SIDE STREETS THAT ARE AFFECTED BY THE WORK.

CONTRACTOR SHALL SCHEDULE HIS WORK TO INSURE THAT EACH ROAD CLOSING IS NO LONGER THE SIX (6) HOURS AND OCCURS BETWEEN THE HOURS OF 9:00 A.M. TO 4:00 P.M. MONDAY THROUGH FRIDAY. THE CONTRACTOR SHALL MAKE SUITABLE PROVISIONS FOR ACCESS BY LOCAL RESIDENTS, SCHOOL BUSES, MAIL DELIVERY VEHICLES, POLICE, FIRE, AND EMERGENCY VEHICLES AT ALL TIMES. CONTRACTOR IS RESPONSIBLE TO NOTIFY SCHOOL SYSTEM, POLICE AND FIRE DEPARTMENT TWO DAYS PRIOR TO CLOSURE OR PARTIAL CLOSURE OF ANY STREET.

THE CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN DETOUR MARKING SIGNS ON TEMPORARY ROUTES.

IF IN THE OPINION OF THE ENGINEER, PROPER MAINTENANCE OF TRAFFIC FACILITIES AND PROPER PROVISION FOR TRAFFIC CONTROL ARE NOT BEING PROVIDED AND THE SAFETY OF THE PUBLIC IS THUS ENDANGERED, THE OWNER MAY TAKE THE NECESSARY STEPS TO PLACE THEM IN PROPER CONDITION AND THE COST OF SUCH SERVICES WILL BE BORNE BY THE CONTRACTOR.

NO DRIVEWAY IS TO BE CLOSED FOR MORE THAN FIVE (5) HOURS WITH THE TIME STARTING WHEN THE ENTRANCE IS CLOSED TO TRAFFIC. THE CONTRACTOR WILL BE RESPONSIBLE FOR NOTIFYING PROPERTY OWNERS, RESIDENTS, OR BUSINESS OPERATORS IN WRITING AT LEAST 24 HOURS BUT NOT MORE THAN 72 HOURS PRIOR TO CLOSURE. THE ENGINEER SHALL BE GIVEN A LIST OF THE BUSINESSES THAT WERE GIVEN NOTICES WITH THE DATE OF NOTICE INCLUDED. IF FOR ANY REASON THE FIVE (5) HOUR MAXIMUM LIMIT IS EXCEEDED ON ANY DRIVEWAY, THE CONTRACTOR WILL NOT BE PERMITTED TO CLOSE ANY FURTHER DRIVEWAYS UNTIL ALL CLOSED DRIVEWAYS ARE REOPENED. DRIVEWAYS SHALL NOT BE CLOSED DURING THE EVENING OR ON WEEKENDS.

CLOSURE OF STATE AND/OR COUNTY HIGHWAYS IS PROHIBITED WITHOUT PERMIT FROM THE GOVERNING HIGHWAY AUTHORITY.

MAINTENANCE OF TRAVELED SURFACES:
PUBLIC RIGHTS OF WAY SHALL BE MAINTAINED THROUGHOUT THE PERFORMANCE OF THIS PROJECT. ANY MUD TRACKED, OR DEPOSITION OF BUILDING MATERIALS UPON PUBLIC RIGHT OF WAY SHALL BE CLEANED OFF IMMEDIATELY. EVERY PRECAUTION SHALL BE TAKEN BY CONTRACTORS IN THEIR PERFORMANCE OF THE WORK TO PREVENT THIS FROM OCCURRING.

TEMPORARY SURFACES:
TEMPORARY SURFACES WHERE EXCAVATIONS ARE LOCATED IN STREETS, DRIVES AND PARKING AREAS SHALL BE FURNISHED AND PLACED BY THE CONTRACTOR AND SHALL BE FULLY MAINTAINED TO MINIMIZE INCONVENIENCE TO THE PUBLIC.

SAFETY TRENCH PROTECTION AND BACKFILLING:
THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS, INCLUDING THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENT, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR SHALL ALSO ABIDE BY ALL ORDINANCES OF THE MUNICIPALITY.

BACKFILLING SHALL FOLLOW IMMEDIATELY BEHIND CONSTRUCTION. ONLY THE MINIMUM LENGTH OF TRENCH REQUIRED FOR CONSTRUCTIONS SHALL BE OPEN AT ANY GIVEN TIME, AND NO EXCAVATIONS SHALL REMAIN OPEN OVERNIGHT OR BEYOND THE COMPLETION OF THE DAYS WORK.

DEWATERING:
THE CONTRACTOR SHALL, AT ALL TIMES DURING CONSTRUCTION, PROVIDE PROPER AND SATISFACTORY MEANS AND DEVICES FOR THE REMOVAL OF ALL WATER ENTERING THE EXCAVATIONS AND SHALL REMOVE ALL SUCH WATER AS FAST AS IT MAY COLLECT IN SUCH A MANNER AS SHALL NOT INTERFERE WITH THE EXECUTION OF THE WORK.

DISPOSAL OF WASTE CONSTRUCTION MATERIALS:
THE CONTRACTOR SHALL MAKE HIS OWN ARRANGEMENTS FOR THE DISPOSAL OF SURPLUS EXCAVATED MATERIAL AND WASTE CONSTRUCTION MATERIALS. TREES, LIMBS, BRUSH AND STUMPS REMOVED BY THE CONTRACTOR'S OPERATION SHALL BE REMOVED FROM THE CONSTRUCTION SITE AND DISPOSED OF BY THE CONTRACTOR FOLLOWING OEPA REGULATIONS.

CHANGES TO WORK:
ANY MODIFICATIONS AND CHANGES TO THE WORK AS SHOWN ON THE DRAWINGS MUST HAVE THE PRIOR WRITTEN APPROVAL OF THE OWNER AND ENGINEER.

SITE INVESTIGATION:
THE CONTRACTOR SHALL INVESTIGATE THE SITE PRIOR TO BIDDING. THE CONTRACTOR SHALL EXAMINE IN THE FIELD THE ACCESS PROBLEMS, AVAILABLE WORK AREAS, WATER CONDITIONS, NEARBY STRUCTURES, TREES, GROUND CONDITIONS AND FILL MATERIALS. FIELD VISITS SHALL BE COORDINATED WITH THE OWNER.

ITEMS TO BE INCLUDED:
THE CONTRACTOR SHALL FURNISH ALL TOOLS, MATERIAL, LABOR AND INCIDENTALS AND APPURTENANCES TO COMPLETE IN EVERY DETAIL AND LEAVE IN WORKING ORDER ALL ITEMS OF WORK CALLED FOR AND/OR SHOWN IN THE DRAWINGS. MATERIAL OR WORK NOT SPECIFICALLY MENTIONED OR SHOWN IN THE DRAWINGS, BUT NECESSARY TO COMPLETE THE WORK SHALL BE FURNISHED,

DRAINAGE TILE:
FIELD DRAINAGE TILE, STORM DRAINS, UNDER DRAINS, DRIVE CULVERTS AND FIELD TILE MAY BE ENCOUNTERED DURING THE COURSE OF EXCAVATION UNDER THIS CONTRACT. THE CONTRACTOR SHALL REPAIR, REPLACE OR REROUTE THE AFFECTED TILE SO AS TO LEAVE THE DRAINAGE SYSTEM IN ORIGINAL CONDITION OR BETTER AND THE SYSTEM IN GOOD WORKING ORDER. THE COST OF WORK THIS SHALL BE INCLUDED IN THE RELATED BID ITEMS.

WORK LIMITS:
THE CONTRACTOR SHALL CONFINE HIS ACTIVITIES TO THE PROJECT SITE UNDER DEVELOPMENT, THE EXISTING RIGHTS-OF-WAY, OR CONSTRUCTION AND PERMANENT EASEMENTS AND SHALL NOT TRESPASS UPON OTHER PRIVATE PROPERTY WITHOUT WRITTEN CONSENT OF THE OWNER. EXISTING PROPERTY LINES AND RIGHTS OF WAY SHOWN ON THE DRAWINGS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY EXACT LOCATION IN ADVANCE OF CONSTRUCTION OPERATIONS.

EROSION CONTROL DEVICES AND MEASURES:
THE CONTRACTOR SHALL PROVIDE EROSION AND SEDIMENT CONTROL DEVICES AND MEASURES SO THAT THE SITE COMPLIES WITH THE REQUIREMENTS AND RECOMMENDATIONS OF THE OHIO DEPARTMENT OF NATURAL RESOURCES; RAINWATER AND LAND DEVELOPMENT MANUAL; OHIO STANDARDS FOR STORM WATER MANAGEMENT AND LAND DEVELOPMENT AND URBAN STREAM PROTECTION.

DUST CONTROL:
THE CONTRACTOR SHALL RESTRICT THE EMISSION OF ALL FUGITIVE DUST AND PARTICULATE, AIRBORNE OR OTHERWISE, THAT ARISES FROM HIS OPERATION AND ACTIVITIES RELATIVE TO THIS PROJECT. DUST CONTROL MEASURES SHALL BE IMPLEMENTED AND MAINTAINED PURSUANT TO THE APPLICABLE REQUIREMENTS OF THE OHIO ADMINISTRATIVE CODE (OAC) SECTION 3745-17-08 IN EFFECT AT THE TIME OF THE CONTRACT. SUCH MEASURES SHALL APPLY TO ACTIVITIES ON-SITE AS WELL AS OFF-SITE.

ROCK EXCAVATION AND DISPOSAL:
THE COST OF ALL ROCK REMOVAL AND DISPOSAL SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE VARIOUS PIPELINE ITEMS. BLASTING WILL NOT BE PERMITTED.

GRANULAR BACKFILL:
EXCAVATION AT ALL STREETS, DRIVES, WALKS, PARKING AREAS AND OTHER ROADWAYS SHALL BE BACKFILLED AND COMPACTED WITH GRANULAR MATERIAL CONFORMING TO THESE DRAWINGS. ADDITIONAL GRANULAR MATERIAL SHALL BE STOCKPILED AT SELECT LOCATION (APPROVED BY OWNER) FOR USE WHEN SETTLEMENT OCCURS. ALL GRANULAR MATERIAL SHALL BE MECHANICALLY COMPACTED IN 8" LAYERS. THE COST OF ALL GRANULAR BACKFILL AND PLACEMENT SHALL BE INCLUDED IN THE BID PRICE OF THE RESPECTIVE WATERLINE ITEMS.

REMOVAL AND STORAGE OF TOPSOIL:
THE CONTRACTOR SHALL SCHEDULE WORK ON THE PROJECT TO REMOVE AND STORE EXISTING TOP SOIL FROM THE PROPOSED WATERLINE TRENCH PRIOR TO INSTALLATION OF THE WATERLINE. FOLLOWING INSTALLATION OF THE WATERLINE THE TOPSOIL SHALL BE RETURNED TO THE TRENCH ALIGNMENT AS A PART OF RESTORATION ACTIVITIES. SETTLEMENT WITHIN THE TRENCH SHALL BE REPAIRED WITH TOPSOIL MATERIALS ACCEPTABLE TO THE OWNER.

SHEETING AND SHORING:
ALL SHEETING AND SHORING REQUIRED TO SUPPORT ALL TRENCHES AND EXCAVATIONS SHALL BE PROVIDED BY THE CONTRACTOR AND PAID FOR UNDER THE VARIOUS ITEMS BID FOR THE RELATED BID ITEMS. SEPARATE PAYMENT WILL NOT BE MADE.

ESTIMATED QUANTITIES:
ALL ITEMS OF WORK CALLED FOR ON THE PLAN FOR WHICH NO SPECIFIC METHOD OF PAYMENT IS PROVIDED, SHALL BE PERFORMED BY THE CONTRACTOR AND THE COST OF THE SAME SHALL BE INCLUDED IN THE RELATED VARIOUS BID ITEMS FOR PAYMENT.

EXISTING WATER DISTRIBUTION SYSTEM:
UNLESS OTHERWISE INDICATED, THE EXISTING WATERLINES SHOWN ON THESE DRAWINGS ARE OWNED AND OPERATED BY THE VILLAGE OF MARBLEHEAD.

WATERLINE STANDARDS:
ALL WATER LINES SHALL COMPLY WITH OTTAWA COUNTY STANDARD NOTES AND DETAILS.

COVER:
WATER MAINS SHALL BE LAID WITH A MINIMUM OF 4'-0" COVER FROM FINISHED GRADE TO THE TOP OF THE WATER MAIN.

REQUIRED SEPARATION:
MINIMUM CLEARANCE BETWEEN SANITARY SEWERS AND WATER LINES SHALL BE 10' HORIZONTAL OR 1'-6" VERTICAL TO THE OUTSIDE OF EACH PIPE.

GRADE CONFLICT:
IN CASE OF CONFLICT IN GRADE BETWEEN WATER MAINS AND SEWERS, THE WATER MAINS SHALL BE LOWERED AT THE TIME OF CONSTRUCTION.

DEFLECTION:
UNLESS OTHERWISE APPROVED BY THE ENGINEER, WATER MAINS SHALL BE DEFLECTED AROUND STRUCTURES WITHOUT THE USE OF SPECIAL FITTINGS AND WITHOUT EXCEEDING THE MANUFACTURER'S ALLOWABLE DEFLECTION.

BACKING:
ALL BENDS, JOINT DEFLECTIONS AND FITTINGS SHALL BE BACKED WITH CONCRETE IN ACCORDANCE WITH THE SPECIFICATIONS AND BACKING DETAILS.

MINIMUM PRESSURE:
THE NORMAL WORKING PRESSURE MAINTAINED AT SERVICE CONNECTIONS SHALL NOT BE LESS THAN 35 P.S.I.. SYSTEM OPERATION SHALL MAINTAIN A MINIMUM PRESSURE OF 20 P.S.I. AT GROUND LEVEL AT ALL POINTS IN THE DISTRIBUTION SYSTEM UNDER ALL CONDITIONS OF FLOW.

VALVES:
OPERATION OF EXISTING VALVES SHALL ONLY BE DONE BY THE OWNER OR OWNER'S REPRESENTATIVE.

ALL BELOW GRADE VALVES SHALL HAVE VALVE BOXES AND NUT OPERATORS. OWNER SHALL TEST OPERATION OF ALL BELOW GRADE VALVES FOR ALIGNMENT OPERABILITY. CONTRACTOR SHALL MAKE ALL ADJUSTMENTS NECESSARY TO ASSURE OPERABILITY OF VALVES.

IF THE TOP OF THE OPERATING NUT FOR ANY VALVE IS MORE THAN 36" BELOW THE FINISHED GRADE, AN EXTENSION STEM SHALL BE PROVIDED TO PLACE THE OPERATING NUT BETWEEN 24" AND 36" OF THE FINISHED GRADE.

FITTINGS REQUIRED FOR CONSTRUCTION:
THE CONTRACTOR SHALL FURNISH ALL FITTINGS REQUIRED, WHETHER SHOWN ON THE DRAWINGS OR NOT, NECESSARY TO ACHIEVE THE DESIRED HORIZONTAL/VERTICAL ALIGNMENT AND COMPLETE CONSTRUCTION. COST FOR THE REQUIRED FITTINGS SHALL BE INCLUDED IN THE VARIOUS WATERLINE ITEMS BID.

WATERLINE BREAKS:
IN THE EVENT THAT THE CONTRACTOR'S OPERATIONS CAUSE A BREAK IN THE EXISTING WATER MAINS OR SERVICE LINE, THE CONTRACTOR SHALL CEASE CONSTRUCTION OPERATIONS AND REPAIR THE BREAK AT HIS OWN COST. ONCE THE BREAK HAS BEEN REPAIRED TO SATISFACTION OF THE OWNER OR ENGINEER, CONSTRUCTION OPERATIONS MAY RESUME.

LEAKS:
ALL LEAKS ENCOUNTERED DURING TESTING AND CONSTRUCTION SHALL BE LOCATED AND REPAIRED AT THE CONTRACTOR'S EXPENSE.

MATERIAL STANDARDS:
ALL MATERIALS UTILIZED IN THE CONSTRUCTION OF THIS PROJECT THAT WILL COME IN CONTACT WITH POTABLE WATER SHALL BE AWWA AND/OR NSF 60/61 APPROVED. PIPE AND MATERIALS INCORPORATED INTO THIS PROJECT SHALL ALSO CONFORM TO THE LATEST REVISION OF THE APPROPRIATE STANDARDS AS FOLLOWS:

PIPE:	AWWA C-909 PRESSURE CLASS 150 HDPE DR 11
FITTINGS:	AWWA C-110, ANSI A21.10
VALVES:	AWWA C-509
SERVICE LINE:	TYPE "K" COPPER WITH FLARED OR COMPRESSION FITTINGS, OR POLYETHYLENE TUBING AWWA C-901 SDR9 WITH MECHANICAL COMPRESSION FITTINGS AND STIFFENING INSERTS.
HYDRANTS (6"):	KENNEDY MODEL K-81-D
APPURTENANCES:	AWWA/NSF STANDARDS AS APPLICABLE

VALVE MATERIALS:
ALL WATER LINES 12" AND SMALLER SHALL INCORPORATE AWWA C515 RESILIENT WEDGE GATE VALVES FOR MAIN LINE VALVES. ALL WATER LINES LARGER THAN 12" SHALL UTILIZE AWWA C515 GATE VALVES WITH MECHANICAL JOINTS AND A MINIMUM 175 PSI OPERATING PRESSURE. OPERATORS SHALL BE PLACED AWAY FROM ROAD UNLESS OTHERWISE NOTED.

WATERLINE TESTING:
THE CONTRACTOR SHALL THOROUGHLY CLEAN, FLUSH, AND TEST THE WATER MAINS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS PRIOR TO ACCEPTANCE AND PLACEMENT INTO SERVICE. ALL COSTS ASSOCIATED WITH THE PRESSURE AND DISINFECTION TESTING SHALL BE BORNE BY THE CONTRACTOR. TESTING LAB MUST BE ON OHIO EPA APPROVED LIST.

THE CONTRACTOR SHALL SUPPLY ALL EQUIPMENT, MATERIALS, TAPS, AND LABOR NECESSARY FOR CONDUCTING TESTING.

PRESSURE TESTING SHALL BE IN ACCORDANCE WITH AWWA C-600 FOR DUCTILE IRON MAINS. THE TEST PRESSURE SHALL BE MAINTAINED AT 150 PSI OR ONE AND A HALF TIMES THE WORKING PRESSURE (WHICHEVER IS GREATER), IN ANY SECTION BEING TESTED. THE DURATION OF EACH PRESSURE TEST SHALL BE AT LEAST 2 HOURS.

DISINFECTION
DISINFECTION OF THE PROPOSED WATERLINE SHALL BE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF AWWA C651 FOR WATER LINES.

INDIVIDUAL BOOSTER PUMPS:
CONNECTION OF INDIVIDUAL BOOSTER PUMPS TO THE PROPOSED WATERLINE IS PROHIBITED.

WATER FOR CONSTRUCTION:
WATER USED FOR FILLING, FLUSHING, AND TESTING WILL BE COORDINATED WITH AND SUPPLIED BY THE OWNER. IF THE CONTRACTOR REQUESTS WATER FROM A HYDRANT, THE CONTRACTOR MUST COORDINATE THAT WITH THE OWNER AND PROVIDE THE REQUIRED BACKFLOW PREVENTION DEVICE. THE OWNER SHALL PROVIDE A QUANTITY OF WATER THAT IS DEEMED REASONABLE FOR COMPLETION OF THE WORK AND MAY ADJUST THE POINT WHERE WATER IS MADE AVAILABLE AT THEIR DISCRETION.

SUBSURFACE CONDITIONS:
IT IS THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO MAKE HIS OWN INVESTIGATIONS OF SUBSURFACE CONDITIONS PRIOR TO SUBMITTING HIS BID PROPOSAL.

THE CONTRACTOR SHALL, AT ALL TIMES DURING CONSTRUCTION, PROVIDE PROPER AND SATISFACTORY MEANS AND DEVICES FOR THE REMOVAL OF ALL WATER ENTERING THE EXCAVATIONS AND SHALL REMOVE ALL SUCH WATER AS FAST AS IT MAY COLLECT IN SUCH A MANNER AS SHALL NOT INTERFERE WITH THE PROSECUTION OF THE WORK.

EXCESS EXCAVATION MATERIAL:
THE REMOVAL AND DISPOSAL OF ALL EXCAVATED MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL FURNISH THE OWNER A COPY OF WRITTEN PERMISSION FROM THE PROPERTY OWNER PRIOR TO DISPOSING OF ANY WASTE MATERIAL.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE RESTORATION FOR ALL WASTE AREAS USED IN THE COURSE OF THIS CONTRACT. THE RESTORATION WORK SHALL INCLUDE CLEANUP, SHAPING AND GRADING AND ESTABLISHMENT OF VEGETATIVE COVER BY SEEDING AND MULCHING IN ACCORDANCE WITH O.D.O.T. ITEM 659. THE FINAL GRADING OF WASTE AREAS SHALL BE PROPERLY SLOPED TO PROVIDE DRAINAGE RUNOFF. ALL ROCKS, BOULDERS, CONCRETE CHUNKS, BROKEN PIPES, ETC. SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF IN A LICENSED FACILITY.

FINAL GRADING AND RESTORATION:
ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AND ELEVATION. ALL UNPAVED AREAS SHALL BE SEEDED AND MULCHED.

ALL SIGNS, MAILBOXES, FENCES, GUARDRAILS, ROADSIDE DITCHES, OR OTHER PHYSICAL FEATURES DISTURBED OR DAMAGED DURING WORK UNDER THIS CONTRACT SHALL BE RESTORED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR. THE COST OF ALL SUCH WORK SHALL BE INCLUDED IN BID FOR VARIOUS ITEMS.

TREES, SHRUBS AND THE OTHER PLANTINGS DISTURBED OR DESTROYED IN EASEMENT AREAS OR WORK AREAS WHICH ARE OUTSIDE ROAD RIGHT-OF-WAY SHALL BE REPLACED AS NECESSARY IN LIKE KIND. THE OWNER SHALL BE GIVEN NOTICE OF INTENT TO REMOVE TREES IN THE RIGHT-OF-WAY A MINIMUM OF 48 HOURS BEFORE REMOVAL. NO TREES SHALL BE REMOVED OR DISTURBED WITHOUT PRIOR CONSENT OF THE ENGINEER AND OWNER,

ALL DISTURBED AREAS NOT SUBJECT TO TRAFFIC SHALL BE ROUGH GRADED WITHIN SEVEN DAYS OF PIPE INSTALLATION AND FINISH GRADED, SEEDED AND MULCHED WITHIN ONE MONTH OF PIPE INSTALLATION. TRENCH IN THESE AREAS MAY BE MOUNDED TO 12" HIGH OVER EXCAVATED AREAS AFTER ROUGH GRADING TO ACCOUNT FOR SETTLEMENT, FINISH GRADING SHALL BE BROUGHT TO ORIGINAL GRADE.

EQUIPMENT MOVEMENT:
NO NON RUBBER-TIRED VEHICLES SHALL BE MOVED ON ANY STREETS. EXCEPTIONS MAY BE GRANTED BY THE OWNER WHERE SHORT DISTANCES AND SPECIAL CIRCUMSTANCES ARE INVOLVED AND PROTECTION IS PROVIDED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY PAVEMENT DAMAGED AS A RESULT OF THE CONTRACTOR'S ACTIVITIES, WITH NO EXCEPTIONS.

EXPOSURE OF UTILITY CROSSINGS:
CONTRACTOR SHALL CAREFULLY REVIEW DRAWINGS FOR LOCATIONS WHERE THE PROPOSED WATERLINE CROSSES EXISTING UNDERGROUND FACILITIES. CROSSING LOCATIONS SHALL BE EXPOSED BY CONTRACTOR IN ADVANCE OF PIPE INSTALLATION ACTIVITIES TO AVOID GRADE CONFLICT AND POTENTIAL DELAY.

SURVEY MONUMENTS:
ALL PROPERTY LINE MARKERS (IRON PINS, SPIKES, CONCRETE MONUMENTS, ETC.) THAT ARE LIABLE TO BE DISTURBED BY THE CONSTRUCTION OPERATIONS SHALL BE REFERENCED AND PROPERLY RESET AT THE CONTRACTOR'S EXPENSE FOLLOWING CONSTRUCTION UNDER THE SUPERVISION OF A PROFESSIONAL SURVEYOR REGISTERED IN THE STATE OF OHIO.

SURVEYS:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING ALL DETAIL SURVEYS NEEDED FOR CONSTRUCTION.

ELEVATION DATUM:
NORTH AMERICAN DATUM (NAD83)
PROJECTION: STATE PLANE COORDINATE SYSTEM OF 1983 (SPC83) OHIO - NORTH
GEOID: GEOID03

NOTIFICATION OF UTILITIES:
THE CONTRACTOR SHALL CAUSE NOTICE TO BE GIVEN TO THE OHIO UTILITIES PROTECTION SERVICE (TELEPHONE 800-362-2764), TO THE OIL AND GAS PRODUCERS UNDERGROUND PROTECTION SERVICE (TELEPHONE 1-800-925-0988) AND TO THE OWNERS OF UNDERGROUND UTILITY FACILITIES SHOWN ON THE DRAWINGS WHO ARE NOT MEMBERS OF A REGISTERED PROTECTION SERVICE IN ACCORDANCE WITH SECTION 153.64 OF THE OHIO REVISED CODE. THE ABOVE MENTIONED NOTICE SHALL BE GIVEN AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION.

UNDERGROUND UTILITIES:
THE INFORMATION SHOWN CONCERNING EXISTING UTILITIES IS NOT REPRESENTED, WARRANTED OR GUARANTEED TO BE COMPLETE OR ACCURATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PHYSICALLY LOCATE AND VERIFY, IN THE FIELD, ALL UTILITY LOCATIONS AND ELEVATIONS, PRIOR TO THE BEGINNING OF HIS CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL SUPPORT, PROTECT, AND RESTORE ALL EXISTING UTILITIES AND THEIR ASSOCIATED ITEMS.

THE IDENTITY AND LOCATION OF THE EXISTING UNDERGROUND UTILITY FACILITIES KNOWN TO BE LOCATED IN THE CONSTRUCTION AREA HAVE BEEN SHOWN ON THE DRAWINGS AS ACCURATELY AS PROVIDED BY THE OWNER OF THE UTILITY. THE OWNER AND/OR ENGINEER ASSUME NO RESPONSIBILITY AS TO THE ACCURACY OR THE DEPTHS OF THE UNDERGROUND FACILITIES SHOWN ON THESE DRAWINGS.

THE CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS, IN ACCORDANCE WITH SECTION 153.64, OHIO REVISED CODE, AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO THE BEGINNING OF ANY WORK, COORDINATE HIS WORK WITH THEM, AND KEEP THE UTILITY OWNERS APPRAISED OF HIS SCHEDULE AND REQUIREMENTS UNTIL ALL WORK IS COMPLETED. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH EVIDENCE OF HAVING NOTIFIED THE UTILITIES AND PROVIDING THEM WITH HIS WORK SCHEDULE PRIOR TO BEGINNING ANY WORK. NOTICE SHALL BE GIVEN TO THE OHIO UTILITIES PROTECTION SERVICE AND TO THE OIL AND GAS PRODUCERS UNDERGROUND PROTECTION SERVICE.

THE FOLLOWING IS A PARTIAL LIST OF UTILITY REGISTRATION SERVICES AND UTILITY OWNERS WHO MUST BE NOTIFIED. THE CONTRACTOR SHALL COMPLY WITH THE REGULATIONS SET FORTH BY THE RESPECTIVE PUBLIC SERVICE CORPORATIONS AS LISTED:

OHIO UTILITIES PROTECTION SERVICE:
(800) 362-2764

OHIO OIL & GAS PRODUCERS
UNDERGROUND PROTECTION SERVICE:
(614) 715-2984

COUNTY ENGINEER:
OTTAWA COUNTY ENGINEER
ATTN: RONALD P. LAJTI
8247 W STATE ROUTE 163
OAK HARBOR, OH 43449
(419) 734-6777

WATER & SEWER:
MARBLEHEAD WATER AND SEWER
COMMISSION
106 WATER STREET
MARBLEHEAD, OH 43440
(419) 798-5836

HIGHWAYS:
ODOT-DISTRICT 2
ATTN: PATRICK MCCOLLEY
317 E. POE ROAD
BOWLING GREEN, OH 43402
(419) 373-4412

GAS COMPANY:
COLUMBIA GAS
1800 BROAD AVE
FINDLAY, OH 45840
ATTN: JONATHAN AMSTUTZ
(614) 301-3875

ELECTRIC COMPANY:
FIRST ENERGY ELECTRIC
1900 DRYDEN RD.
DAYTON, OH 45439
ATTN: BILL GOURLEY
(937) 331-4521

TELEPHONE COMPANY:
FRONTIER COMMUNICATIONS
5800 PARK CENTER COURT
TOLEDO, OH 43615
ATTN: AMY ROTH
(419) 631-2823

CHARTER COMMUNICATIONS
578 TERNES AVE
ELYRIA, OHIO 44035
ATTN: HEATHER SORG
(440) 653-7369

INTERFACE WITH EXISTING UTILITIES:
THE CONTRACTOR SHALL MAINTAIN AND PROTECT ALL PUBLIC OR PRIVATE UTILITY FACILITIES DURING CONSTRUCTION. SHOULD IT BECOME NECESSARY TO MOVE, ADJUST, OR TEMPORARILY RELOCATE ANY SUCH FACILITY, THE WORK SHALL BE DONE BY THE OWNER OF THE UTILITY FACILITY. ANY DAMAGE TO UTILITY FACILITIES BY THE CONTRACTOR OR HIS SUBCONTRACTORS WILL BE REPAIRED BY THE OWNER OF SAID UTILITY, AND THE COST OF SAID REPAIRS WILL BE PAID BY THE CONTRACTOR, THE CONTRACTOR SHALL SEND PROOF OF PAYMENT TO THE UTILITY FOR THE REPAIR TO THE OWNER, PRIOR TO FINAL PAYMENT.

IT IS UNDERSTOOD AND AGREED THAT THE CONTRACTOR HAS CONSIDERED IN HIS BID ALL OF THE PERMANENT AND TEMPORARY UTILITY APPURTENANCES IN THEIR PRESENT OR RELOCATED POSITIONS AND THAT NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ANY DELAYS. INCONVENIENCE, OR DAMAGE SUSTAINED BY HIM DUE TO ANY INTERFERENCE FROM THE SAID UTILITY APPURTENANCES OR THE OPERATION OF MOVING THEM.

CONTRACTOR SHALL ENSURE ALL POWER POLES, ELECTRICAL SERVICES AND ANY OTHER UTILITIES ARE SUPPORTED AS NECESSARY WHILE CONSTRUCTION THE PROPOSED IMPROVEMENTS. COST FOR THIS WORK SHALL BE INCLUDED IN THE VARIOUS BID ITEMS FOR PAYMENT.

PROHIBITED CONSTRUCTION ACTIVITIES:
THE FOLLOWING ACTIVITIES ARE PROHIBITED IN THE PERFORMANCE OF THIS PROJECT:
- USING ANY SUBSTANCE OTHER THAN WATER TO CONTROL DUST
- OPEN BURNING OF PROJECT DEBRIS
- PUMPING SEDIMENT LADEN WATER FROM TRENCHES OR OTHER EXCAVATIONS INTO ANY SURFACE WATERS, ANY STREAM CORRIDORS, ANY WETLANDS, OR STORM SEWERS
- DISCHARGE OF POLLUTANTS (SUCH AS CHEMICALS, FUELS, LUBRICANTS, BITUMINOUS MATERIALS, RAW SEWAGE OR OTHER HARMFUL WASTE) INTO OR ALONG SIDE OF RIVERS, STREAMS, IMPOUNDMENTS, OR INTO NATURAL OR MAN MADE CHANNELS THAT ARE TRIBUTARY
- STORING OF CONSTRUCTION EQUIPMENT AND VEHICLES AND/OR STOCKPILING CONSTRUCTION MATERIALS ON PROPERTY, PUBLIC OR PRIVATE, NOT PREVIOUSLY SPECIFIED BY THE ENGINEER FOR SUCH A PURPOSE
- ROCK BLASTING IS NOT PERMITTED AS A MEANS OF EXCAVATION.

ENVIRONMENTAL PROTECTION:
PER US FISH AND WILDLIFE SERVICE, ANY REQUIRED TREE CLEARING SHOULD BE COMPLETED BETWEEN THE MONTHS OF OCTOBER THROUGH MARCH FOR THE PROTECTION OF THE HABITATS OF ENDANGERED SPECIES.

ARCHAEOLOGICAL:
JOHNSON'S ISLAND IS A NATIONAL HISTORIC MONUMENT. DURING CONSTRUCTION IN SELECTED AREAS AS SHOWN FIGURE 1 OF THE ARCHAEOLOGICAL RISK MANAGEMENT PLAN A REGISTERED ARCHAEOLOGICAL MONITOR MUST BE ON SITE TO MONITOR EXCAVATION. IF ANY ARCHAEOLOGICAL DISCOVERIES ARE MADE, STEPS OUTLINED IN APPENDIX A OF THE ARCHAEOLOGICAL RISK MANAGEMENT PLAN SHALL BE FOLLOWED.

ITEM 253 - ASPHALT PAVEMENT REPLACEMENT
ITEM 441 - 1 $\frac{1}{4}$ " ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
ITEM 441 - 3 $\frac{3}{4}$" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (449), IN TWO LIFTS
ITEM 304 - 8" OF ODOT ITEM 304

ITEM 253 - ASPHALT PAVEMENT REPAIR, TYPE 2 (3")
ITEM 441 - 1 $\frac{1}{4}$ " ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
ITEM 441 - 1 $\frac{3}{4}$ " ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (449)

BID SET

your trusted advisor
consultants → engineers
architects
planners

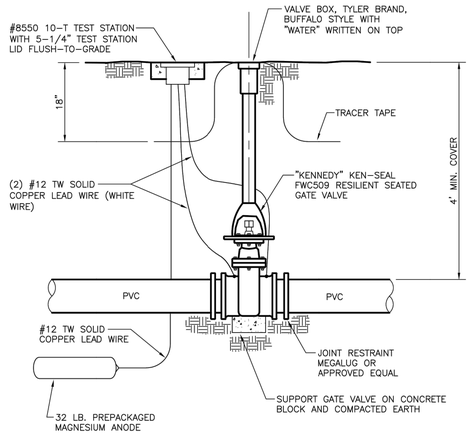
NO	REVISION	DATE

ISSUED FOR: BID
ISSUE DATE: 11/24/2025
SCALE: AS SHOWN
DESIGNED BY: QDB
DRAWN BY: QDB
CHECKED BY: DEB

JOHNSON ISLAND WATER MAIN EXTENSION

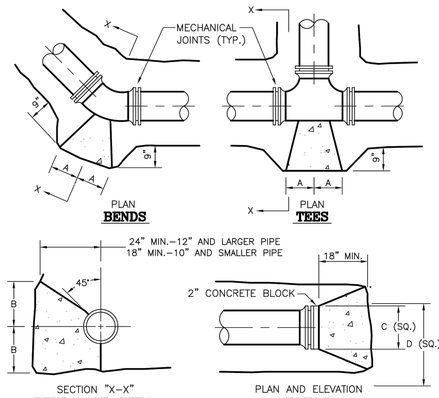
GENERAL NOTES

PROJECT NO.
210900
DISCIPLINE
CIVIL
SHEET NAME
GEN NOTES
SHEET 03 OF 51



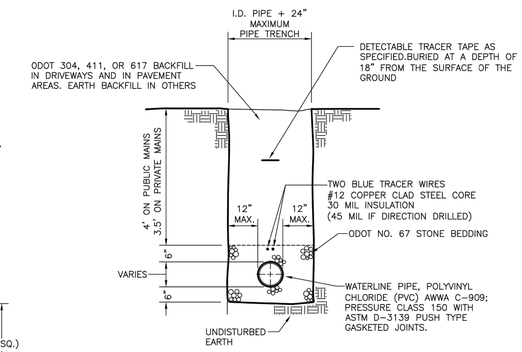
GATE VALVE AND BOX (FOR 3" to 12" MAINS)

NO SCALE



TYPE	SIZE	1/4 BENDS		1/8 BENDS		1/16 BENDS		TEES		PLUGS	
		A	B	A	B	A	B	A	B	C	D
2000 PSF SOIL	3"-6"	16"	10"	9"	10"	6"	8"	10"	12"	10"	21"
	8"	22"	13"	12"	13"	8"	10"	13"	16"	12"	29"
	10"	26"	17"	14"	17"	10"	13"	16"	20"	14"	36"
	12"	29"	21"	16"	21"	11"	16"	18"	24"	16"	41"
	14"	35"	24"	19"	24"	12"	20"	22"	27"	18"	48"
	16"	38"	27"	21"	27"	12"	24"	24"	30"	20"	54"
	20"	46"	36"	25"	36"	15"	30"	30"	39"	24"	68"

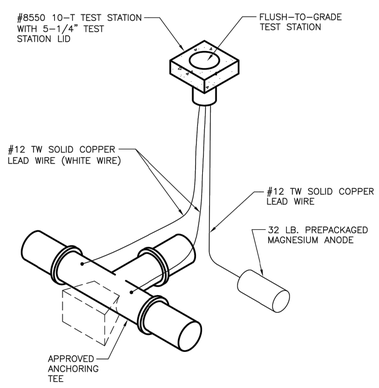
NOTE:
BASED ON 100 P.S.I. STATIC PRESSURE PLUS A.W.W.A. WATER HAMMER.
ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED SOIL.



NOTE:
WATERLINE BEDDING MAY BE WAIVED IF A TRENCHER IS USED AND WRITTEN APPROVAL IS GRANTED BY THE SANITARY ENGINEER.

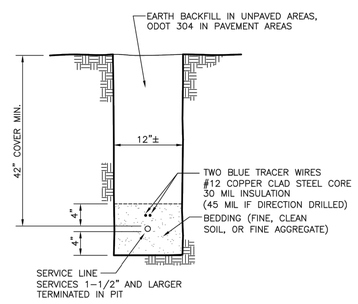
WATERLINE TRENCH DETAIL

NO SCALE



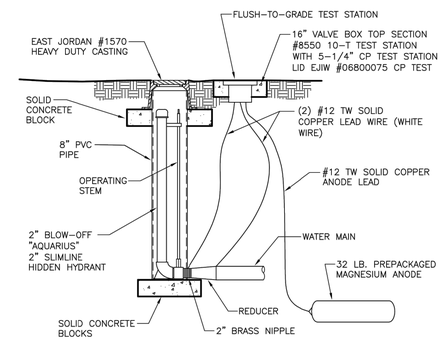
TYPICAL PIPE TEE

NO SCALE



SERVICE WATERLINE TRENCH DETAIL

NO SCALE

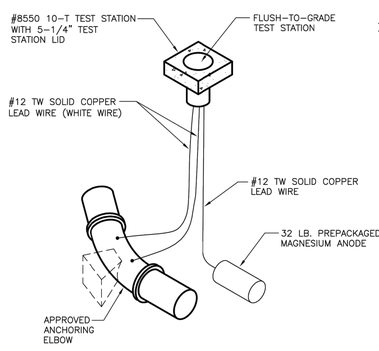


2ND OPTION: (THIS ELIMINATES THE 3"X2" FIPF DUCTILE IRON FITTING.

USE HARCO TEE #151-308, 3"G X 3"G X 2" FIPT.
HARCO PLUG #144-030 INSTALLED IN THE END OF THE TEE AND BLOCKED.
BLOCK THE THREE SIDES OF THE HARCO TEE. NOTCH 8" PVC PIPE AROUND BLOCKING AND 2" BRASS NIPPLE, ENSURING THAT THE BOTTOM OF THE PVC PIPE SITS ON THE SOLID CONCRETE BLOCK.

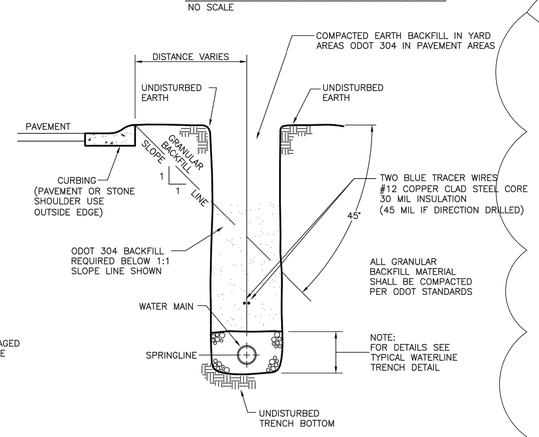
WATER MAIN BLOW-OFF DETAIL

NO SCALE



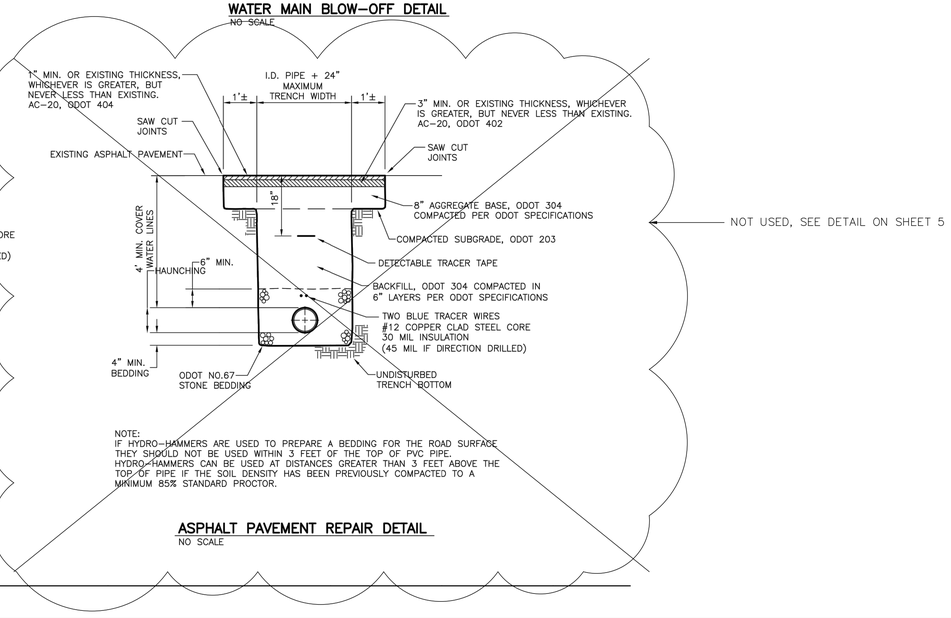
TYPICAL PIPE BEND

NO SCALE



GRANULAR BACKFILL OF WATERLINE TRENCH ALONG PUBLIC STREET OR ROAD

NO SCALE



NOT USED, SEE DETAIL ON SHEET 5

NOTE:
IF HYDRO-HAMMERS ARE USED TO PREPARE A BEDDING FOR THE ROAD SURFACE THEY SHOULD NOT BE USED WITHIN 3 FEET OF THE TOP OF PVC PIPE. HYDRO-HAMMERS CAN BE USED AT DISTANCES GREATER THAN 3 FEET ABOVE THE TOP OF PIPE IF THE SOIL DENSITY HAS BEEN PREVIOUSLY COMPACTED TO A MINIMUM 85% STANDARD PROCTOR.

ASPHALT PAVEMENT REPAIR DETAIL

NO SCALE

BID SET

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consultants

NO	REVISION	DATE

ISSUED FOR: BID
ISSUE DATE: 11/24/2025
SCALE: AS SHOWN
DESIGNED BY: QDB
DRAWN BY: QDB
CHECKED BY: DEB

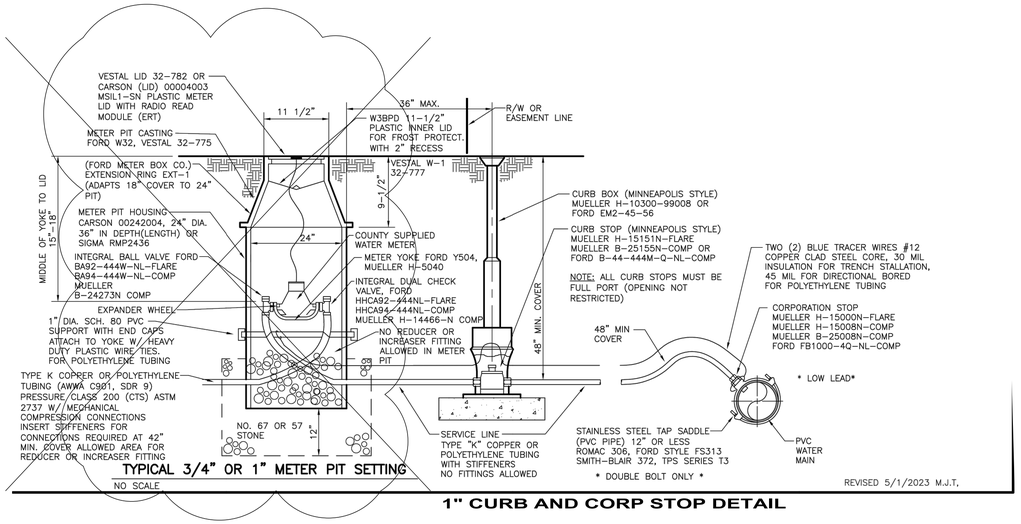
JOHNSON ISLAND WATER MAIN EXTENSION

CONSTRUCTION DETAILS 1

PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME STD DETAILS
SHEET 04 OF 51

OTTAWA COUNTY SEWER DISTRICT STANDARD WATERLINE DETAILS AND SPECIFICATIONS

1/4

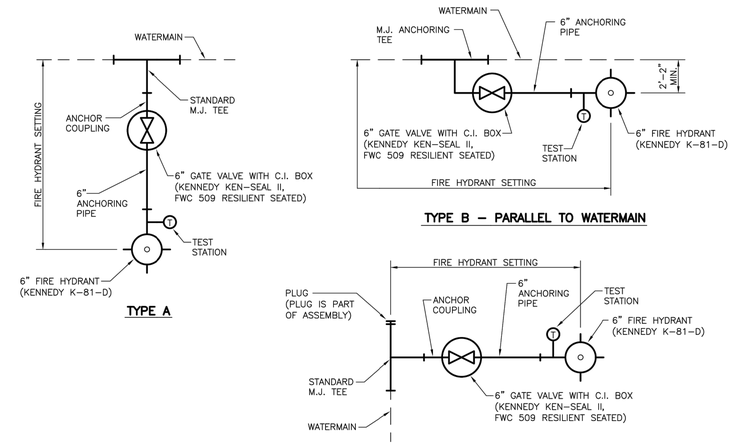


TYPICAL 3/4" OR 1" METER PIT SETTING

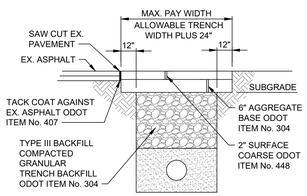
NO SCALE

REVISED 5/1/2023 M.J.T.

1" CURB AND CORP STOP DETAIL

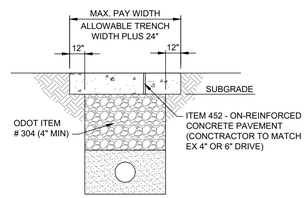


FIRE HYDRANT SETTING TYPES



ASPHALT DRIVEWAY PAVEMENT REPLACEMENT

N.T.S.

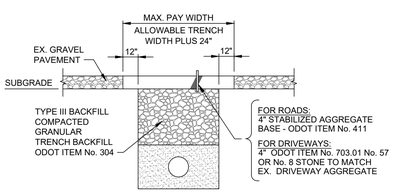


CONCRETE DRIVEWAY REPLACEMENT

N.T.S.

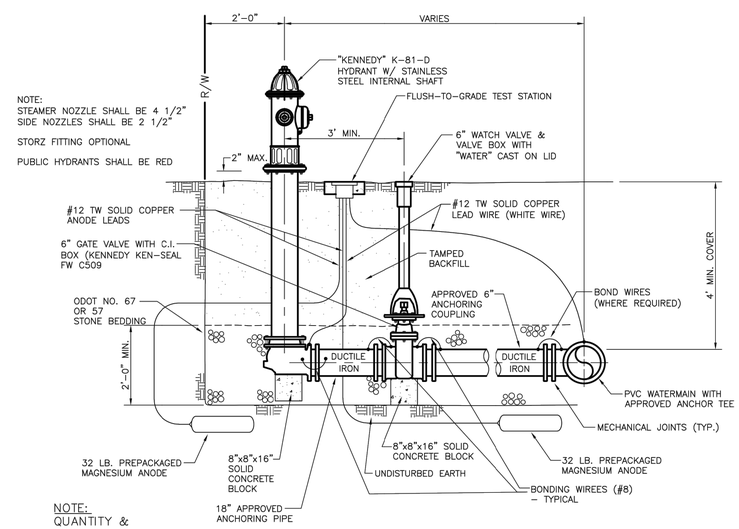
NOTES:

1. CONCRETE DRIVES TO BE REPLACED TO THE NEAREST PAVEMENT JOINT OR AS DIRECTED BY THE ENGINEER
2. THE SURFACE OF ALL DRIVE APRONS, DRIVEWAYS AND SIDEWALKS SHALL HAVE A MEDIUM BROOM FINISH AND WINDOW PANE DOUBLE STRUCK EDGING.



GRAVEL ROADWAY & DRIVEWAY REPLACEMENT

N.T.S.



NOTE:
STEAMER NOZZLE SHALL BE 4 1/2"
SIDE NOZZLES SHALL BE 2 1/2"

STORZ FITTING OPTIONAL

PUBLIC HYDRANTS SHALL BE RED

NOTE:
QUANTITY & LOCATION SHALL BE CONFIRMED W/ LOCAL FIRE AUTHORITY

HYDRANT ASSEMBLY-TYPE A

NO SCALE

REVISED 5/02/2023 M.J.T.

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JOHNSON ISLAND WATER MAIN EXTENSION

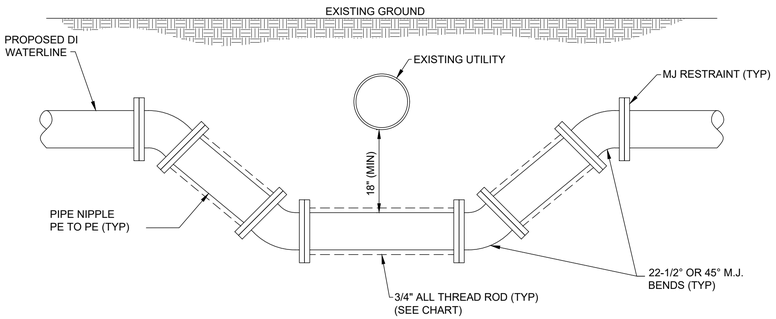
CONSTRUCTION DETAILS 2

PROJECT NO. 210900

DISCIPLINE CIVIL

SHEET NAME STD DETAILS

SHEET 05 OF 51

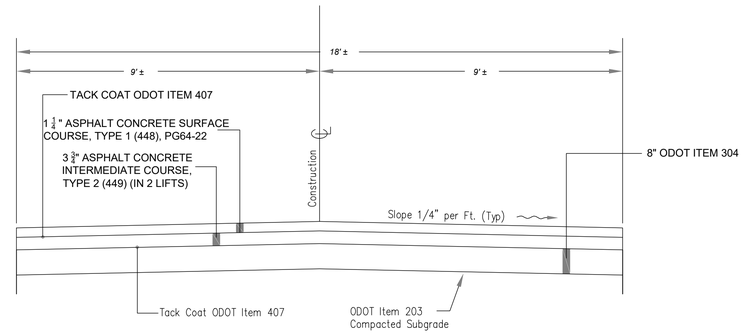


NOTES:

1. WHERE EXISTING UTILITY GRADE CONFLICTS WITH GRADE OF PROPOSED WATERLINE, PROPOSED WATERLINE SHALL BE ADJUSTED IN GRADE TO PROVIDE A MINIMUM SEPARATION DISTANCE OF 18" BETWEEN UTILITIES.
2. ALL JOINTS INVOLVED IN GRADE ADJUSTMENT SHALL INCORPORATE MECHANICAL JOINTS AND SHALL BE RESTRAINED.

TYPICAL WATERLINE GRADE ADJUSTMENT

N.T.S.

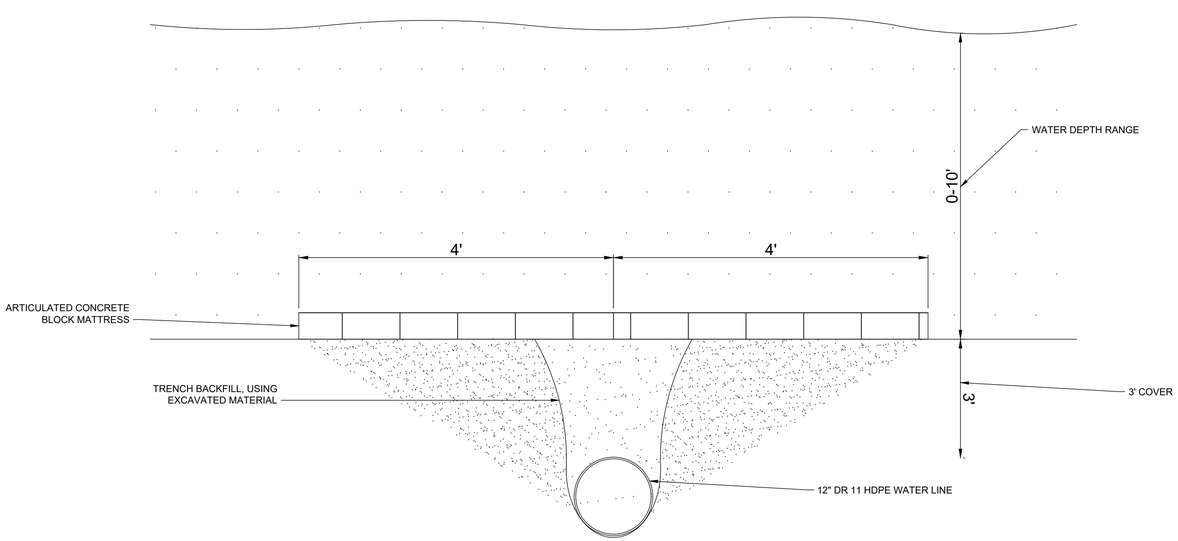


TYPICAL ASPHALT PAVEMENT SECTION

SCALE 1" = 2'

NOTE:

- Contractor is responsible for removal and disposal offsite of existing pavement, base and other materials as required to prepare subgrade per ODOT Item 203. Any material removed can be recycled into the new pavement section if an approved testing company certifies the recycled material meets specifications.



MARINE PIPELINE CROSSING

N.T.S.

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JOHNSON ISLAND WATER MAIN EXTENSION

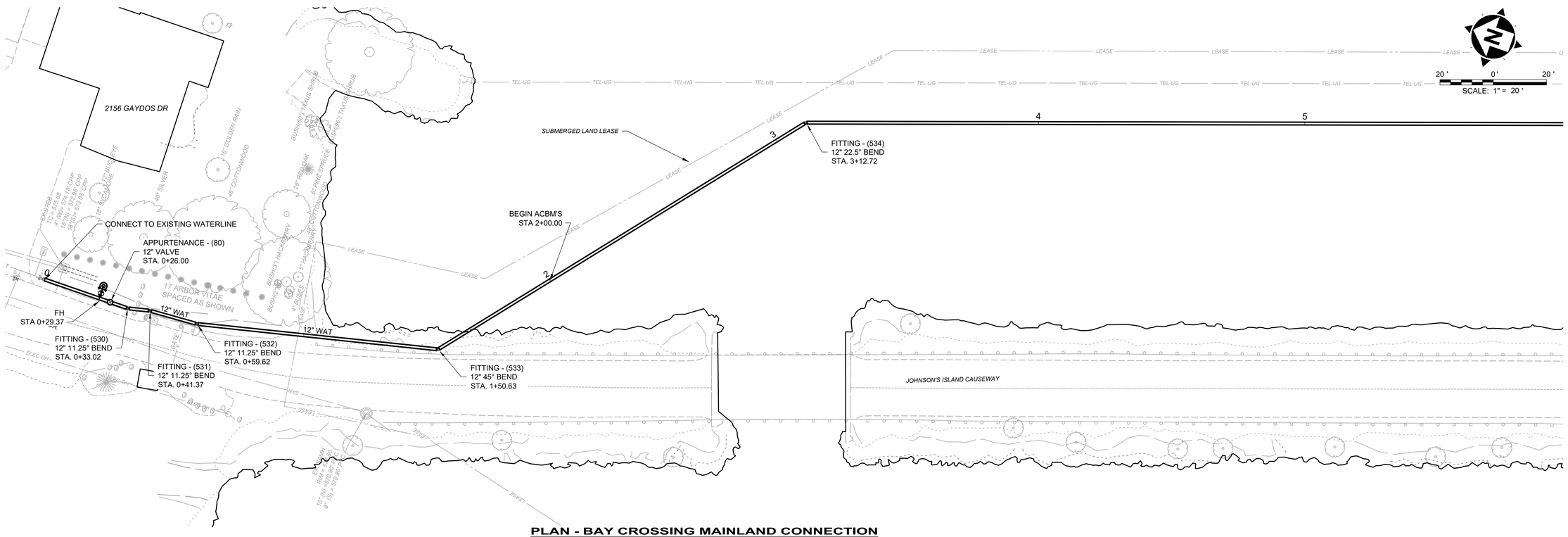
CONSTRUCTION DETAILS 3

PROJECT NO. 210900

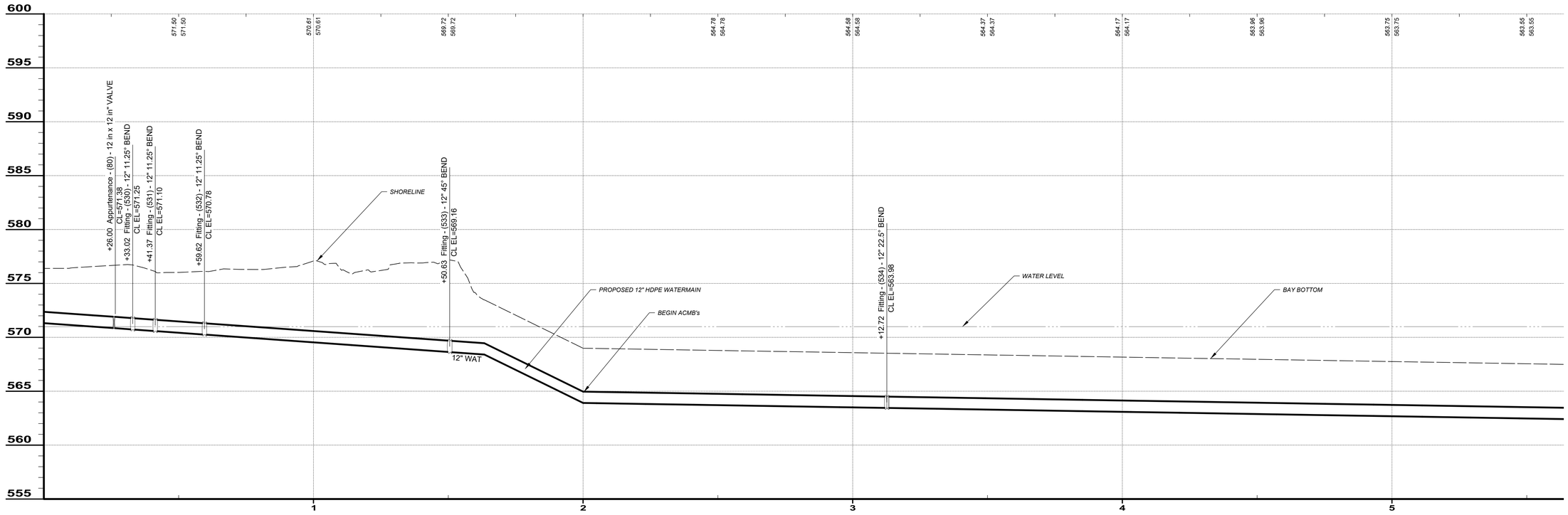
DISCIPLINE CIVIL

SHEET NAME STD DETAILS

SHEET 06 OF 51



PLAN - BAY CROSSING MAINLAND CONNECTION



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JOHNSON ISLAND WATER MAIN EXTENSION

BAY CROSSING ENTRY

PROJECT NO. 210900

DISCIPLINE: CIVIL

SHEET NAME: BC ENTRY

SHEET 07 OF 51

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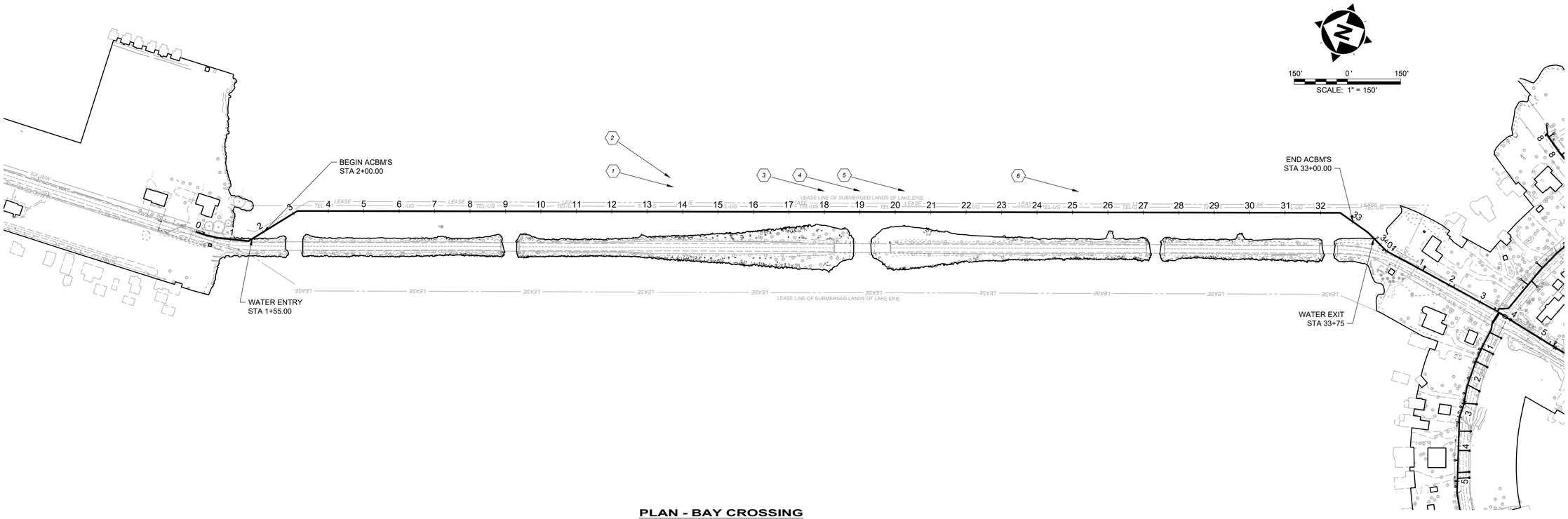
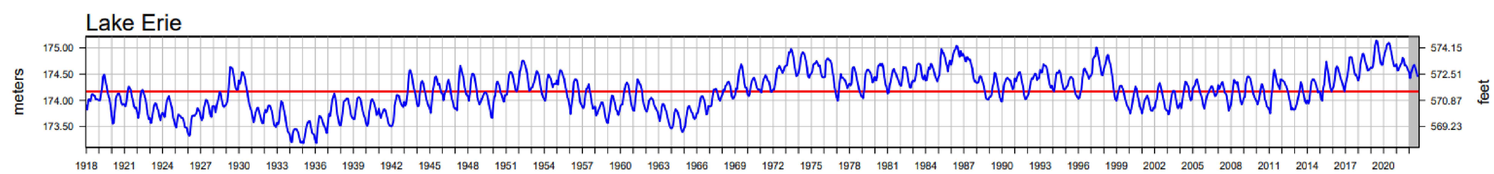
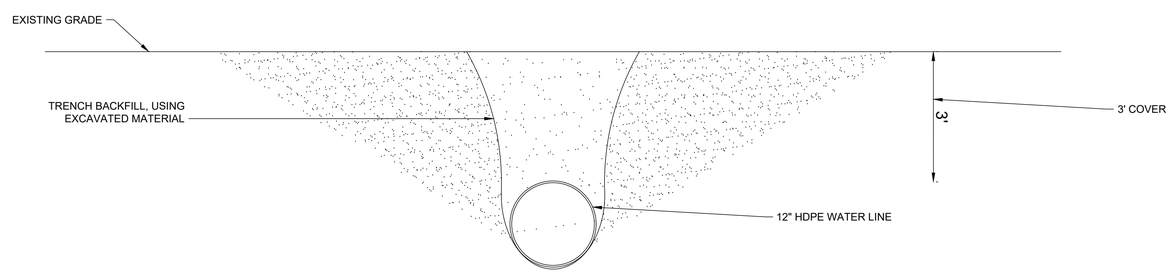


PLAN - BAY CROSSING

PROBED BOTTOM OF BAY				
POINT #	LATTITUDE	LONGITUDE	WATER DEPTH (FT)	BOTTOM THICKNESS AT REFUSAL (FT)
1	42.50896	-82.73137	2	5
2	41.50919	-82.73108	2	5
3	41.50771	-82.7364	9.5	2
4	41.50742	-82.73055	9	2
5	41.50704	-82.73035	3.5	4
6	41.50607	-82.72988	3	3.5



LAKE ERIE WATER DEPTH CHART



WATERLINE SHORELINE CONNECTION

N.T.S.

SHORELINE CONNECTION GENERAL NOTES:

1. BACKFILL IS TO BE DONE USING EXCAVATED MATERIALS.
2. SHORELINE SHALL BE RESTORED TO INITIAL CONDITIONS. NO NEW STRUCTURES THAT WILL ACT TO CONTROL EROSION, WAVE ACTION, OR FLOODING IS PERMITTED.

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JOHNSON ISLAND WATER MAIN EXTENSION

BAY CROSSING

PROJECT NO. 210900

DISCIPLINE CIVIL

SHEET NAME BAY CROSSING

SHEET 08 OF 51

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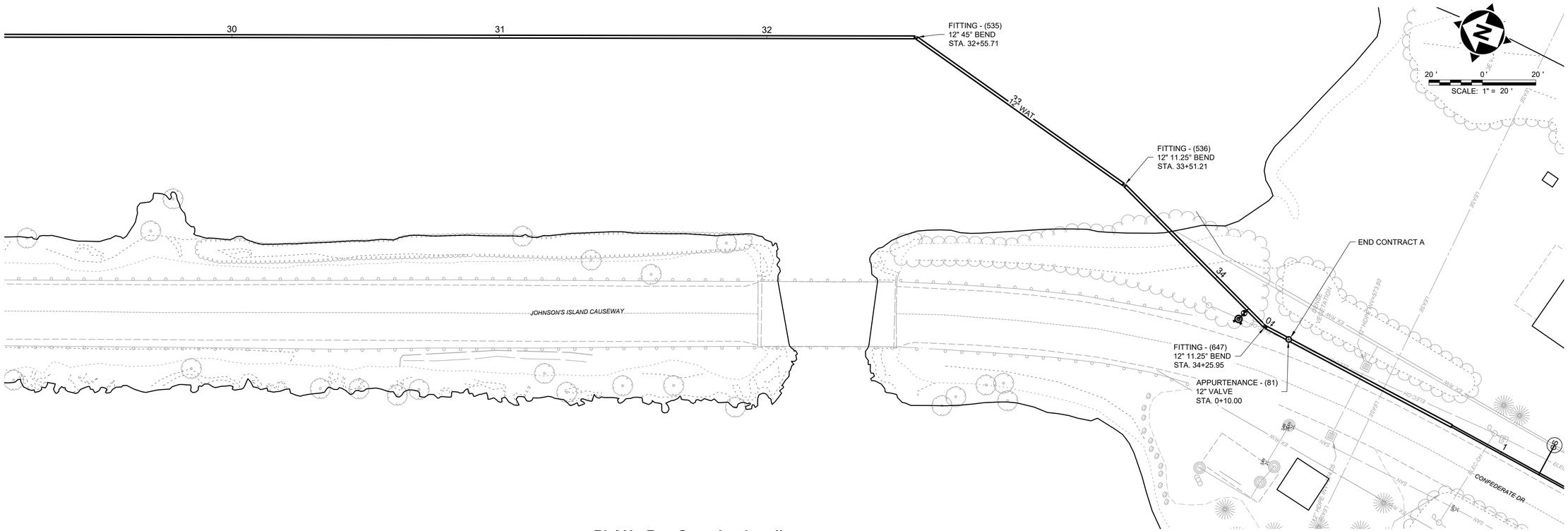
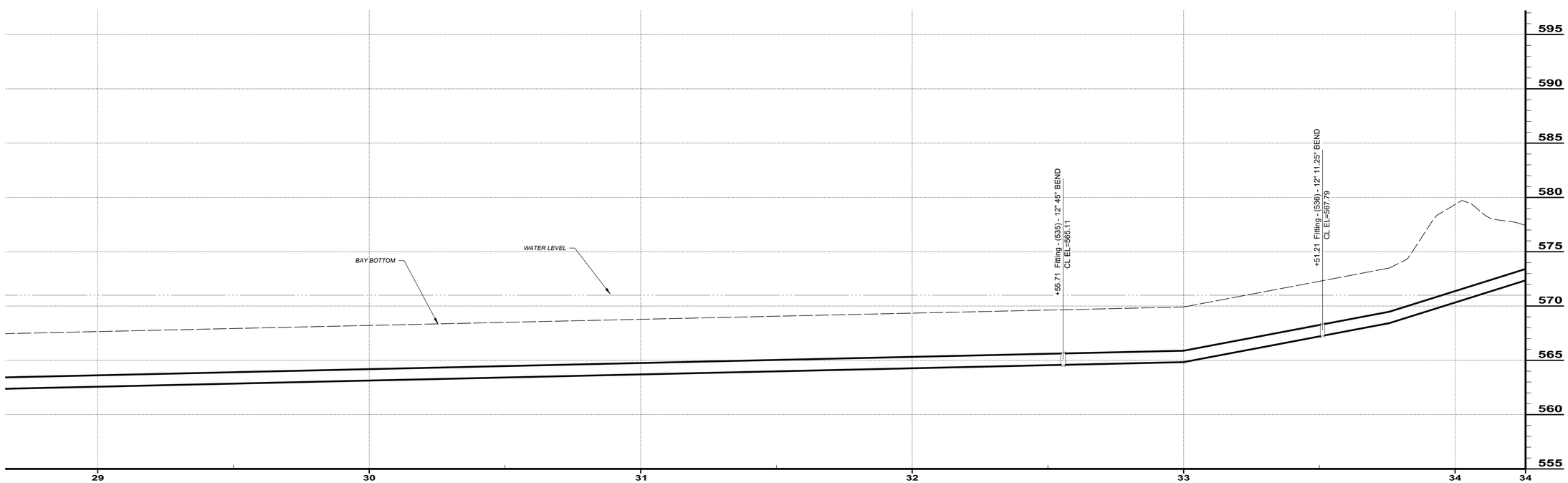


PLAN - Bay Crossing Landing



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ISSUE DATE:	11/24/2025
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JOHNSON ISLAND WATER MAIN EXTENSION

BAY CROSSING EXIT

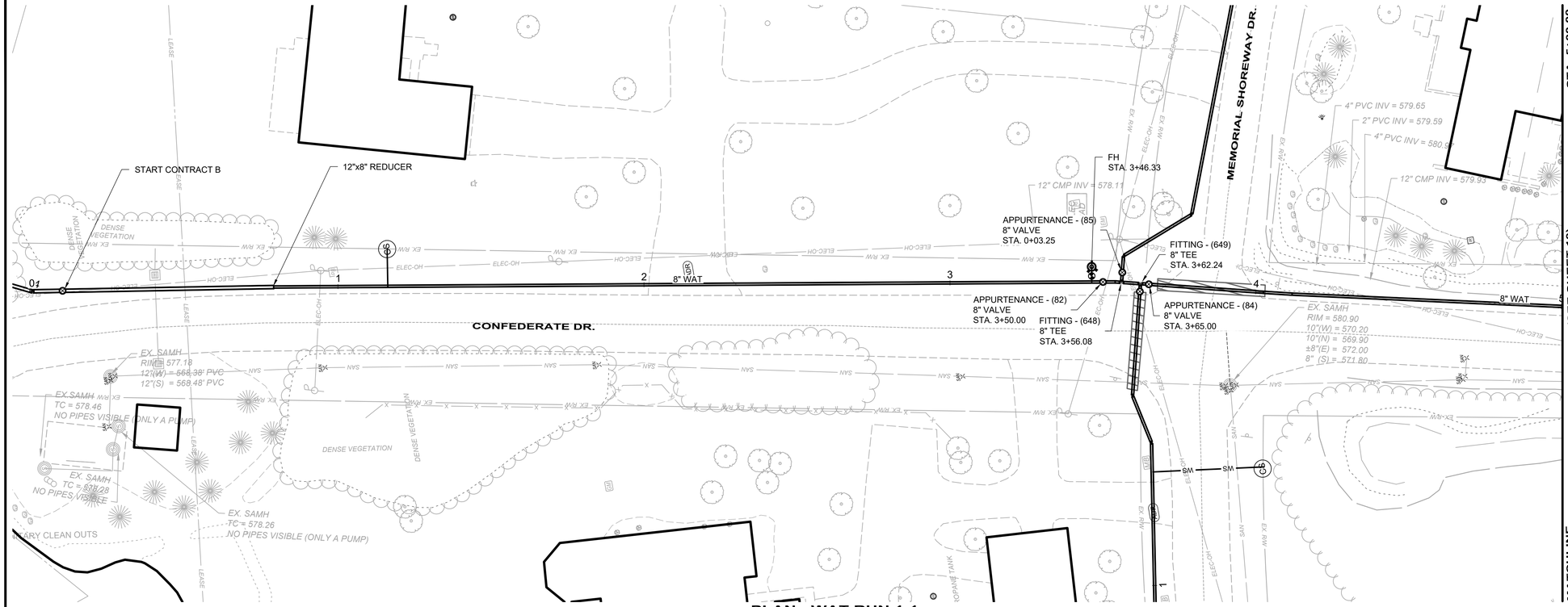
PROJECT NO.
210900

DISCIPLINE
CIVIL

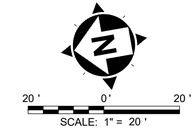
SHEET NAME
BC EXIT

SHEET 09 OF 51

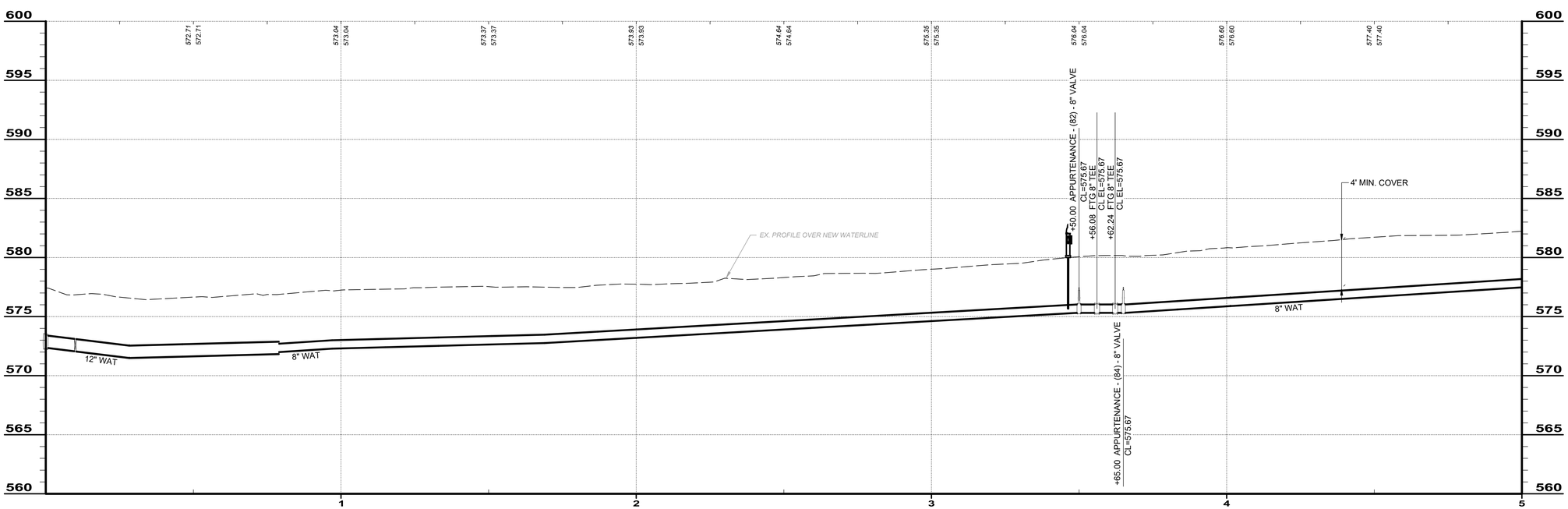
H:\2021\210900\DWG\SHEETS\C_210900 - 00 RUN_BC.DWG - JI LANDING - 12/19/2025 12:10:36 PM - QUINN BAKER



PLAN - WAT RUN 1-1



RUN 1-1		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	16	SY
8" DI WM	421	LF
12" DI WM	79	LF
12" HDPE WM	0	LF
8" VALVE	4	EA
6" FH	1	EA
CURB STOPS	1	EA
3/4" COPPER SERVICE LINES	9	LF
ADR	3	SY
CDR	0	SY
GDR	0	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	517	SY



PIPE RUN 1-1

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ISSUE DATE:	11/24/2025
SCALE:	AS SHOWN
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CHECKED BY:	DEB

JOHNSON ISLAND WATER MAIN EXTENSION

RUN 1-1

PROJECT NO. 210900

DISCIPLINE: CIVIL

SHEET NAME: RUN 1-1

SHEET 10 OF 51

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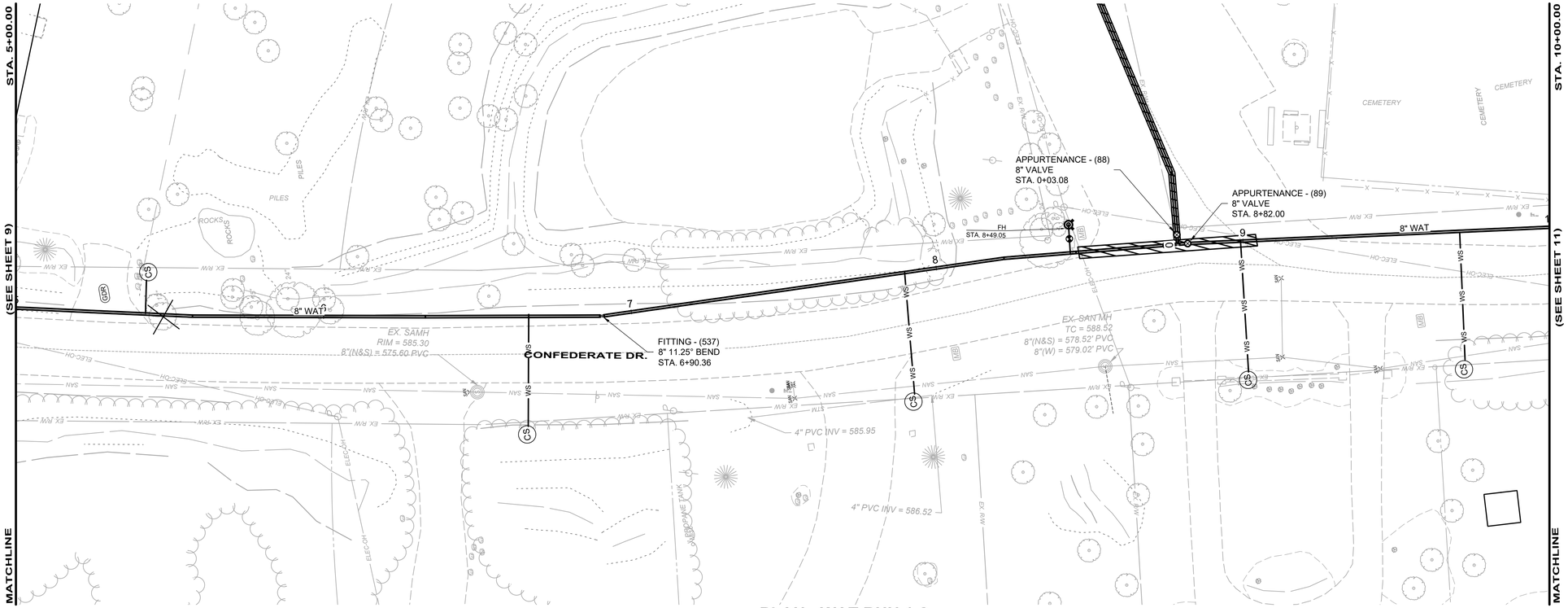
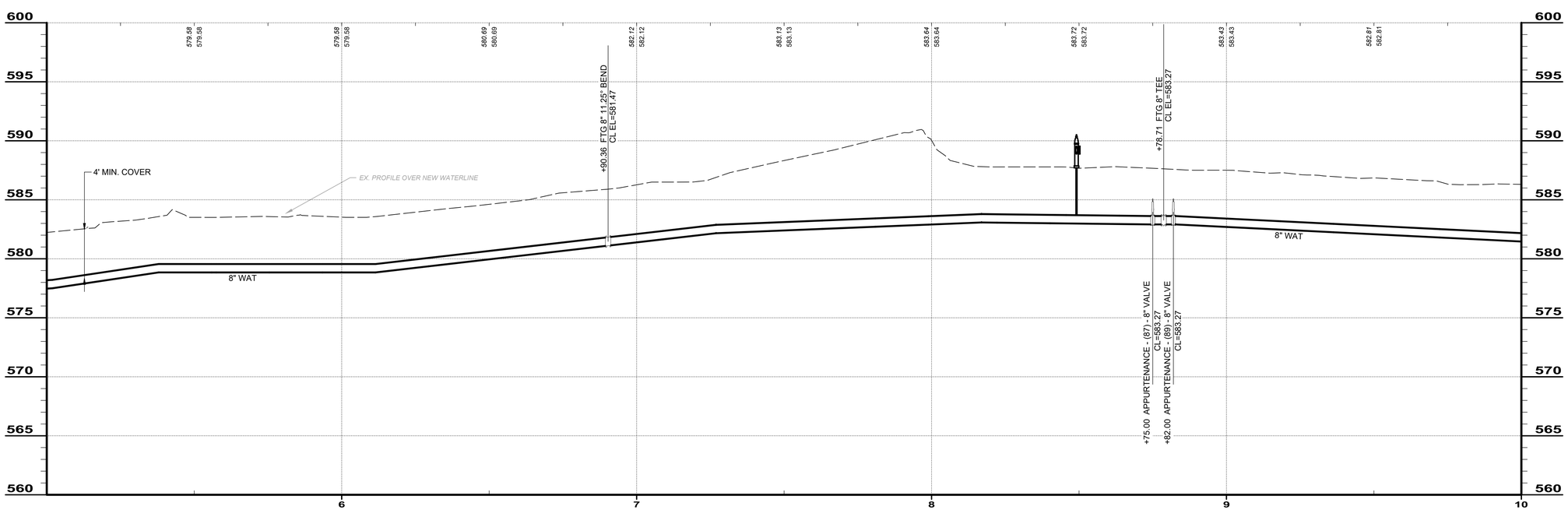


PLAN - WAT RUN 1-2



PIPE RUN 1-2

SCALE: 1" = 20 '

RUN 1-2		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	25	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	3	EA
6" FH	1	EA
CURB STOPS	5	EA
3/4" COPPER SERVICE LINES	197	LF
ADR	0	SY
CDR	0	SY
GDR	3	SY
TREE REMOVAL	1	EA
SEEDING AND MULCHING	491	SY

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JOHNSON ISLAND WATER MAIN EXTENSION

RUN 1-2

PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 1-2
SHEET 11 OF 51

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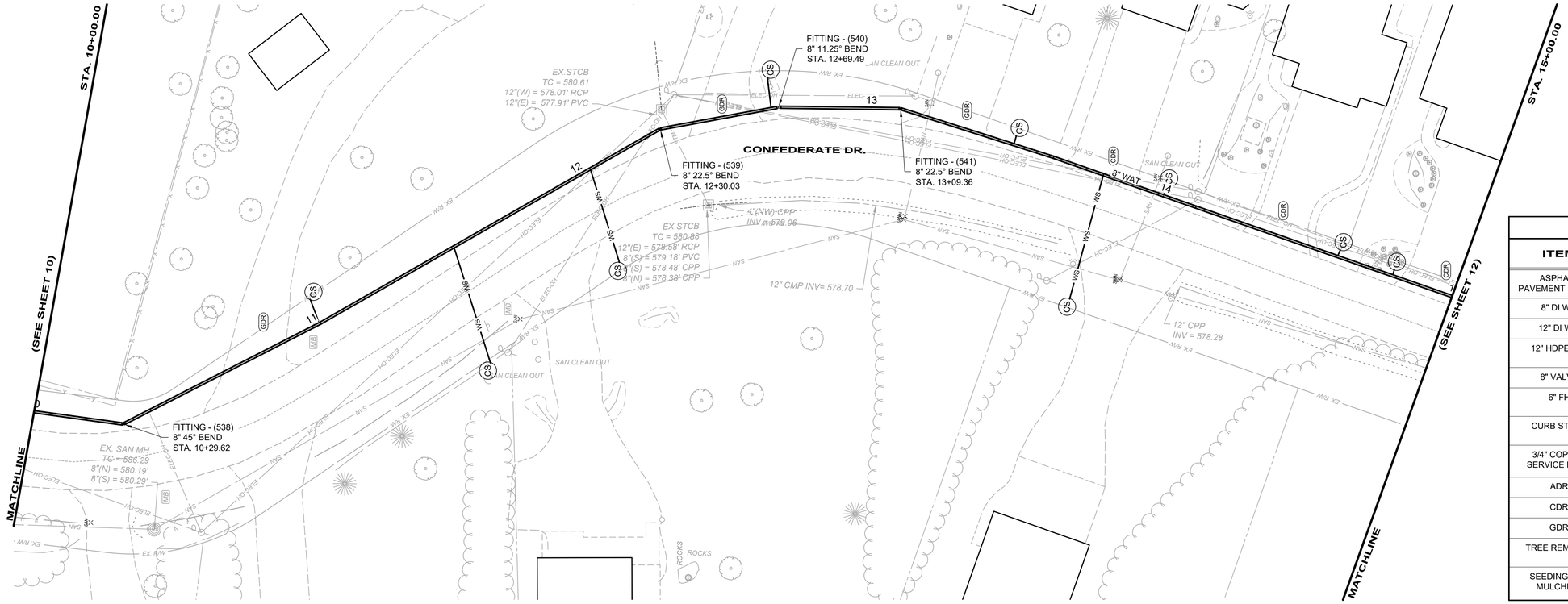
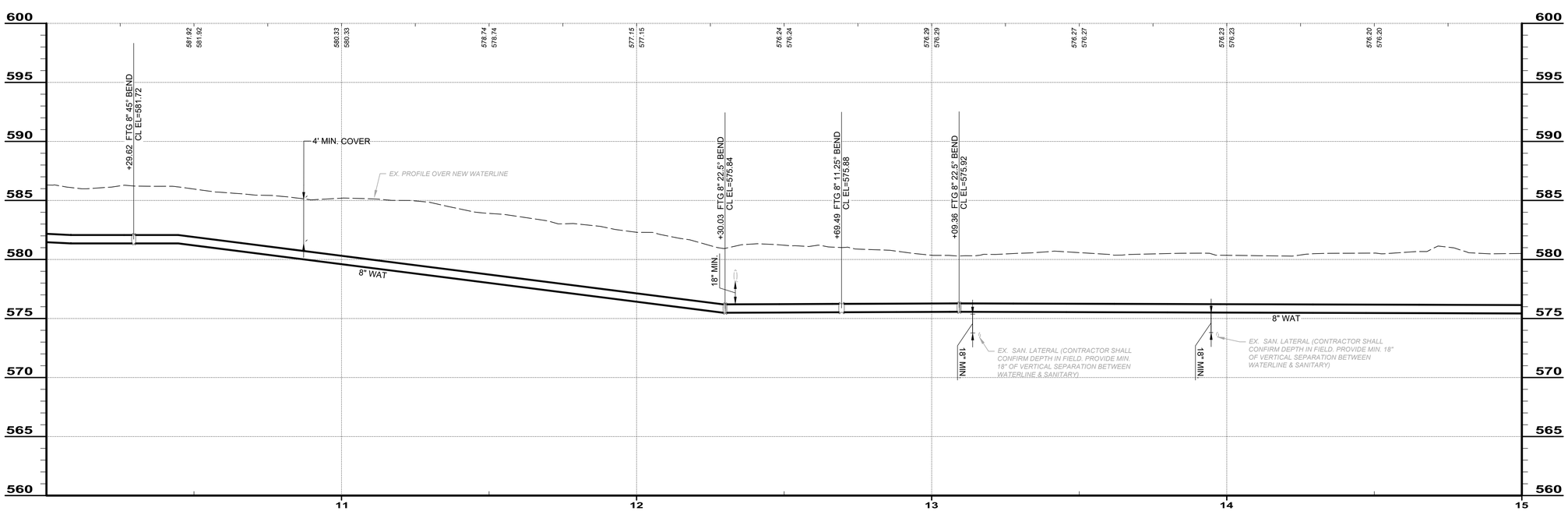


PLAN - WAT RUN 1-3

SCALE: 1" = 20 '

RUN 1-3		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	0	EA
6" FH	0	EA
CURB STOPS	10	EA
3/4" COPPER SERVICE LINES	178	LF
ADR	0	SY
CDR	7	SY
GDR	7	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	556	SY



PIPE RUN 1-3

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JOHNSON ISLAND WATER MAIN EXTENSION

RUN 1-3

PROJECT NO. 210900

DISCIPLINE: CIVIL

SHEET NAME: RUN 1-3

SHEET 12 OF 51

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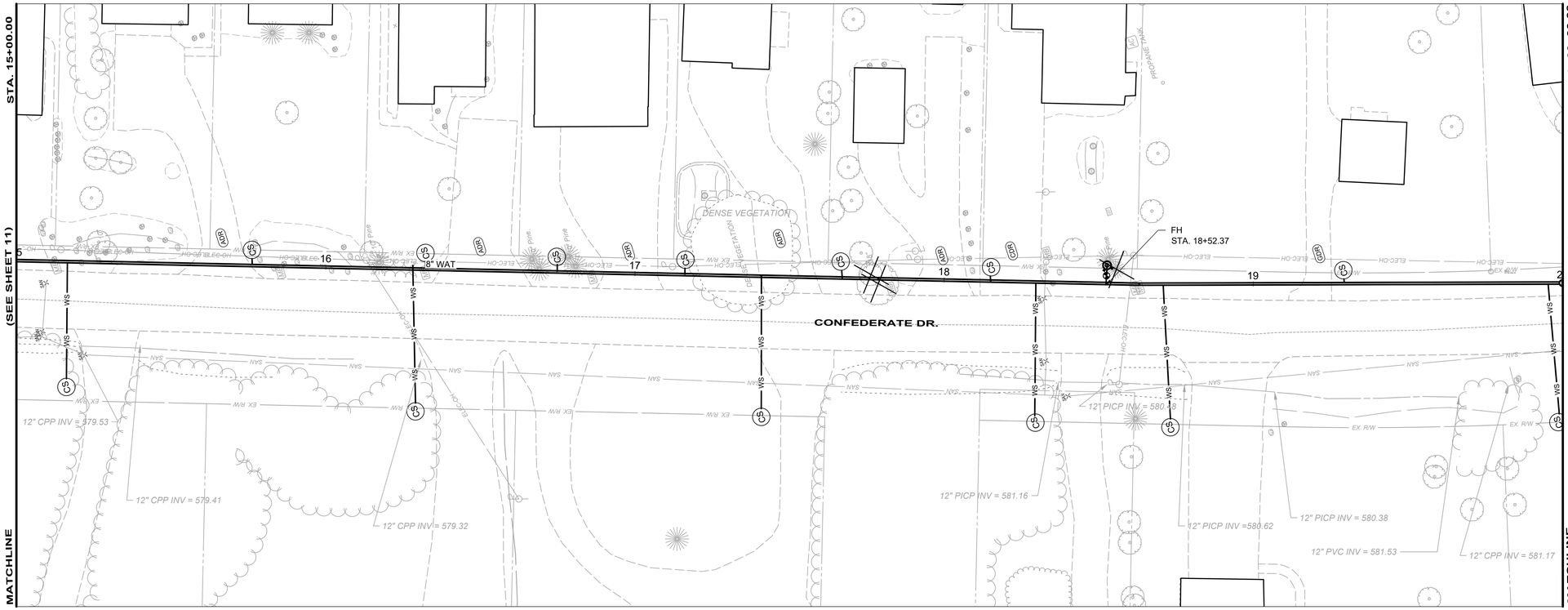
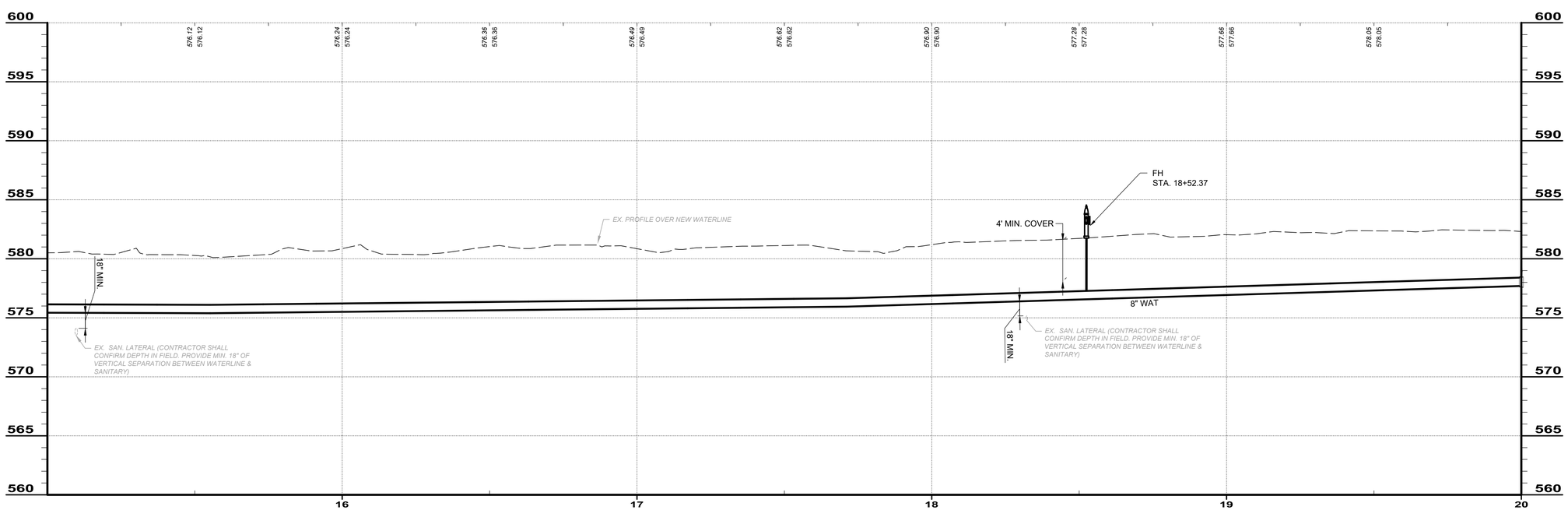


PLAN - WAT RUN 1-4

RUN 1-4		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	0	EA
6" FH	1	EA
CURB STOPS	15	EA
3/4" COPPER SERVICE LINES	269	LF
ADR	11	SY
CDR	3	SY
GDR	1	SY
TREE REMOVAL	3	EA
SEEDING AND MULCHING	556	SY



PIPE RUN 1-4

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JOHNSON ISLAND WATER MAIN EXTENSION

RUN 1-4

PROJECT NO. 210900

DISCIPLINE CIVIL

SHEET NAME RUN 1-4

SHEET 13 OF 51

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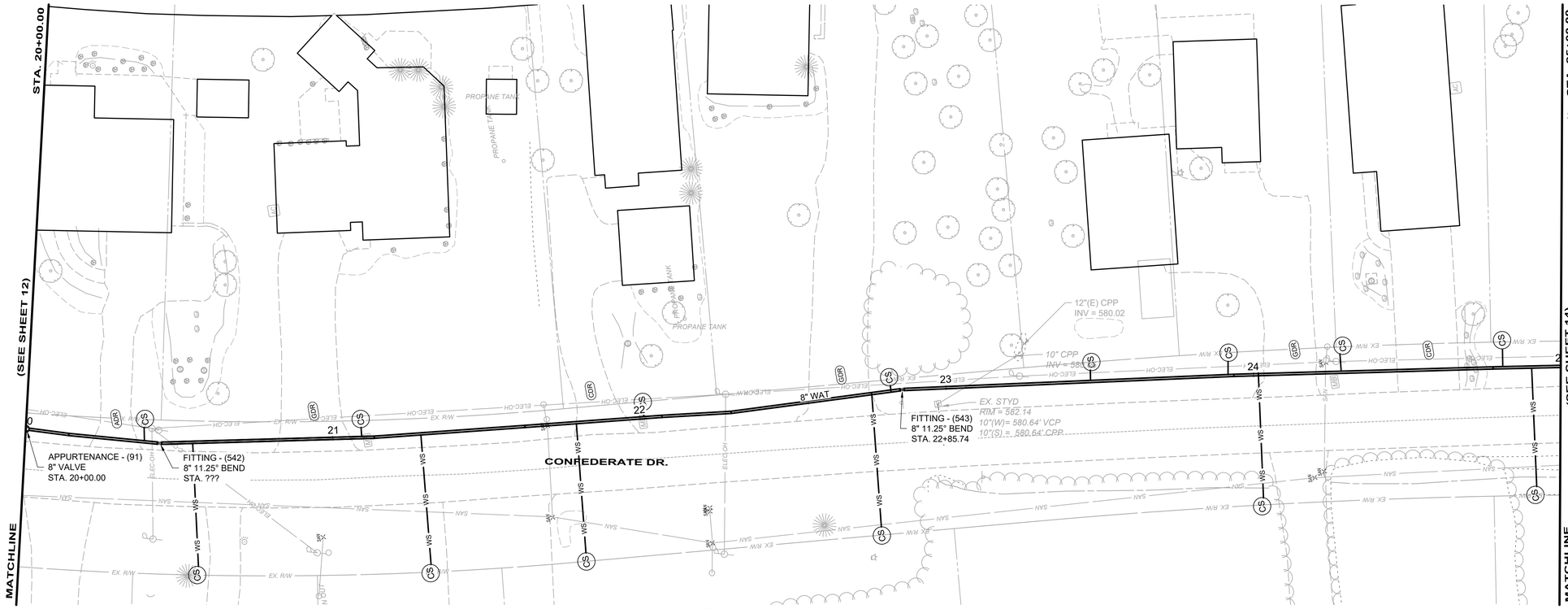
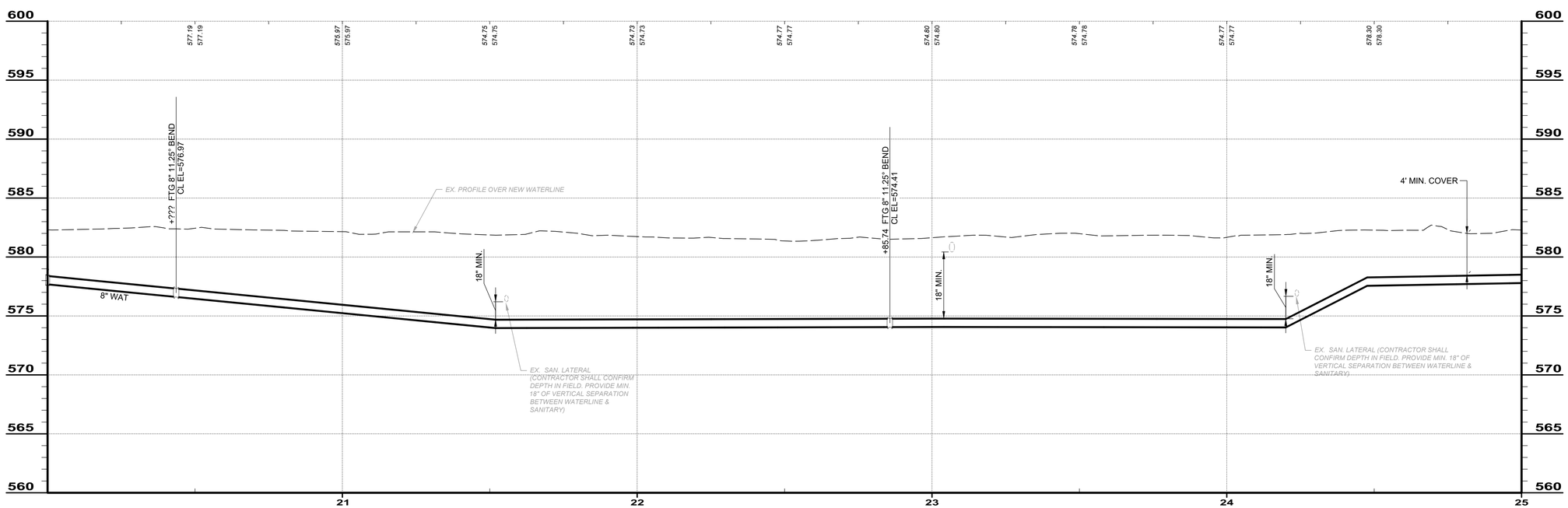


PLAN - WAT RUN 1-5

RUN 1-5		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	0	EA
6" FH	0	EA
CURB STOPS	13	EA
3/4" COPPER SERVICE LINES	232	LF
ADR	2	SY
CDR	4	SY
GDR	6	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	556	SY



PIPE RUN 1-5

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JOHNSON ISLAND WATER MAIN EXTENSION

RUN 1-5

PROJECT NO.	
210900	
DISCIPLINE	
CIVIL	
SHEET NAME	
RUN 1-5	
SHEET	OF
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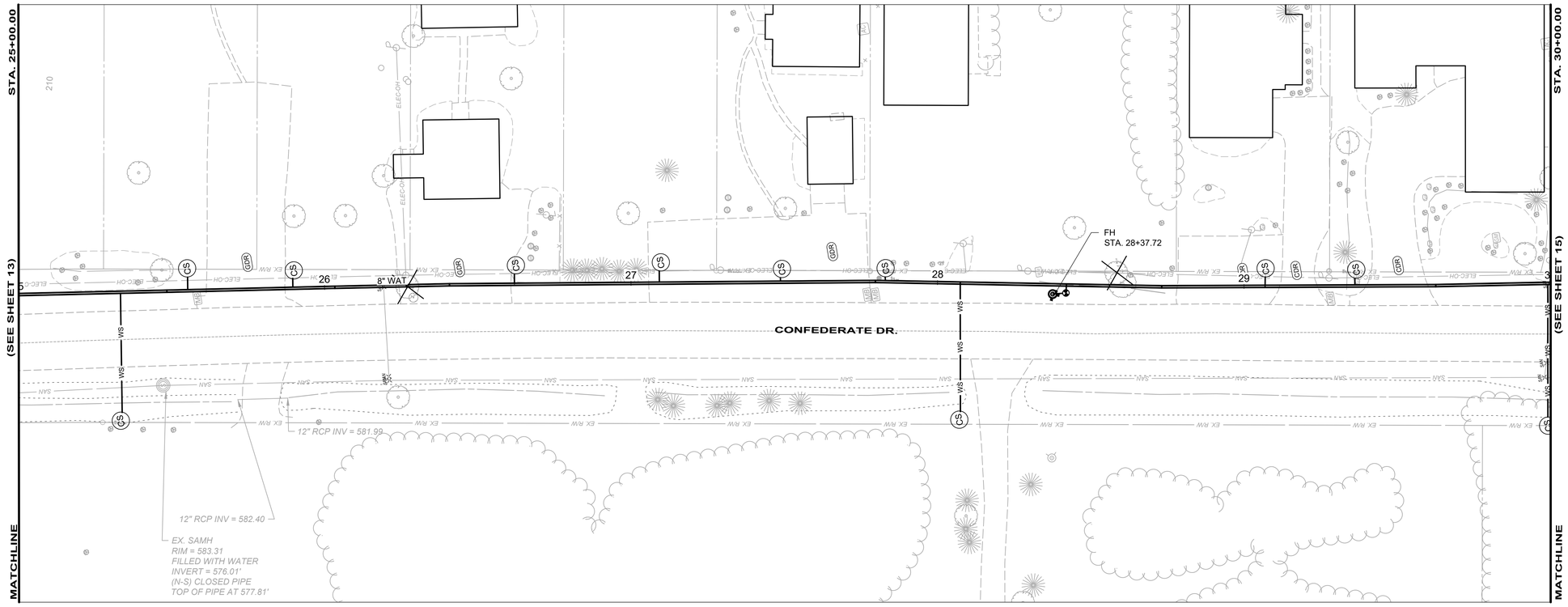
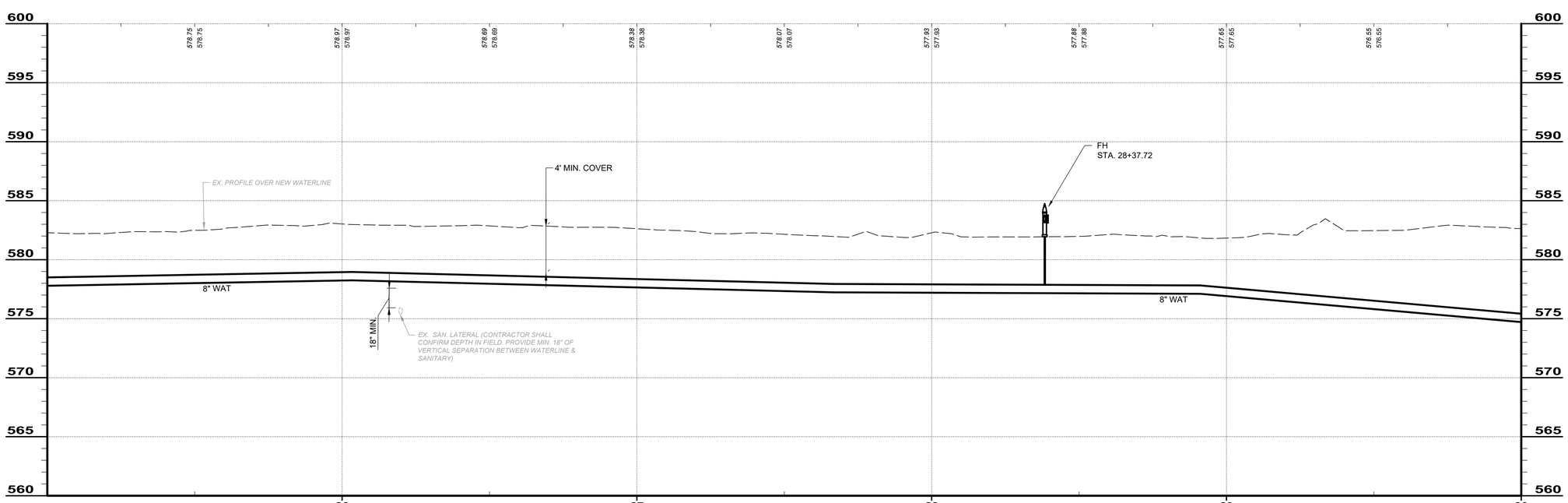


PLAN - WAT RUN 1-6



PIPE RUN 1-6

SCALE: 1" = 20 '

RUN 1-6		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	0	EA
6" FH	1	EA
CURB STOPS	11	EA
3/4" COPPER SERVICE LINES	145	LF
ADR	0	SY
CDR	4	SY
GDR	14	SY
TREE REMOVAL	2	EA
SEEDING AND MULCHING	556	SY

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DRAWN BY: QDB
CHECKED BY: DEB

JOHNSON ISLAND WATER MAIN EXTENSION

RUN 1-6

PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 1-6
SHEET 15 OF 51

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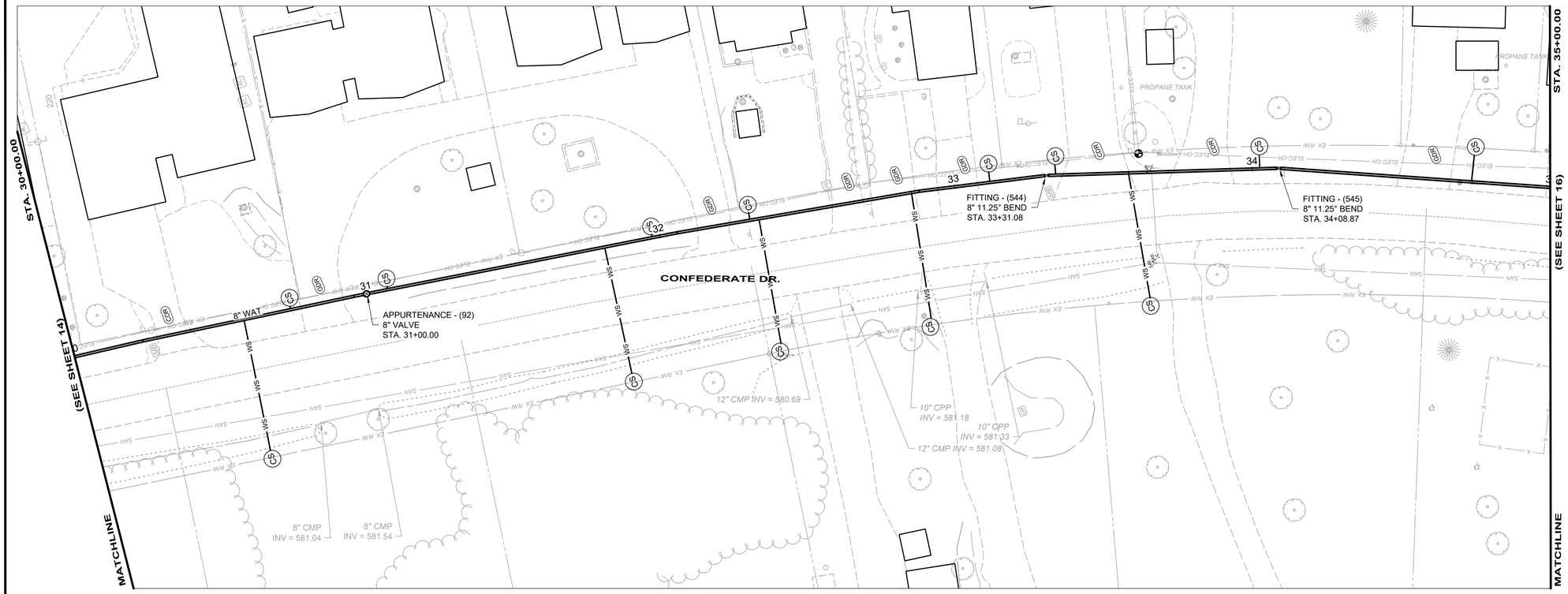
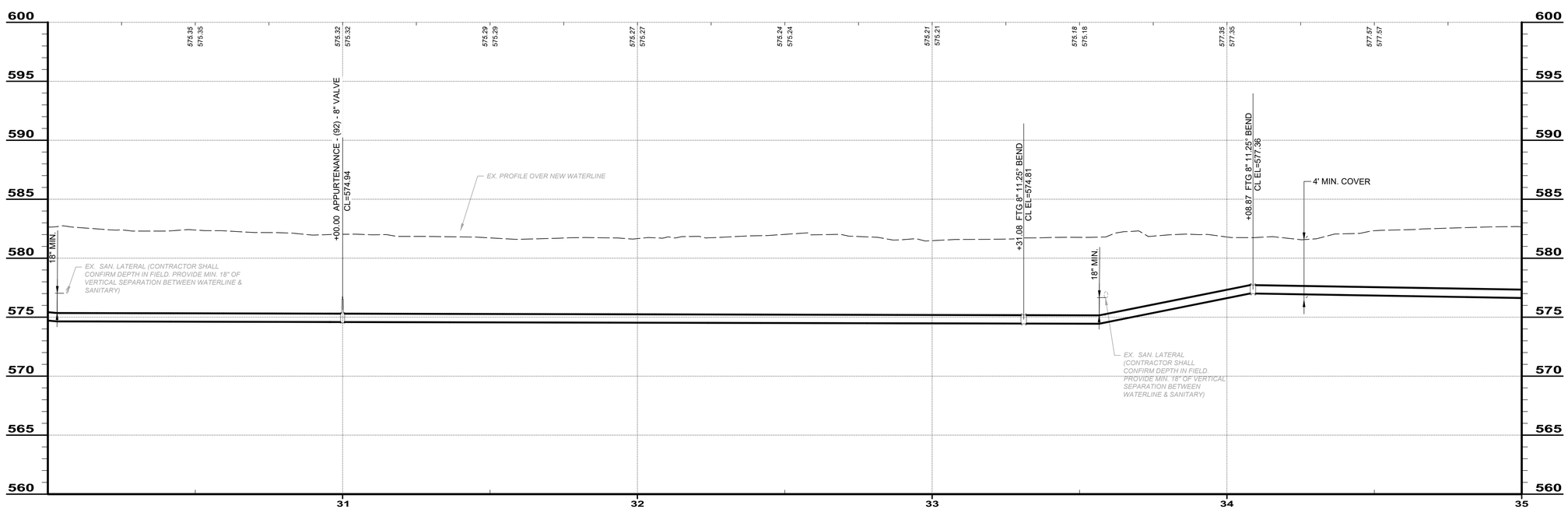


PLAN - WAT RUN 1-7



PIPE RUN 1-7

SCALE: 1" = 20 '

RUN 1-7		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	0	EA
6" FH	0	EA
CURB STOPS	13	EA
3/4" COPPER SERVICE LINES	237	LF
ADR	0	SY
CDR	7	SY
GDR	9	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	556	SY

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JOHNSON ISLAND WATER MAIN EXTENSION

RUN 1-7

PROJECT NO. 210900

DISCIPLINE CIVIL

SHEET NAME RUN 1-7

SHEET 16 OF 51

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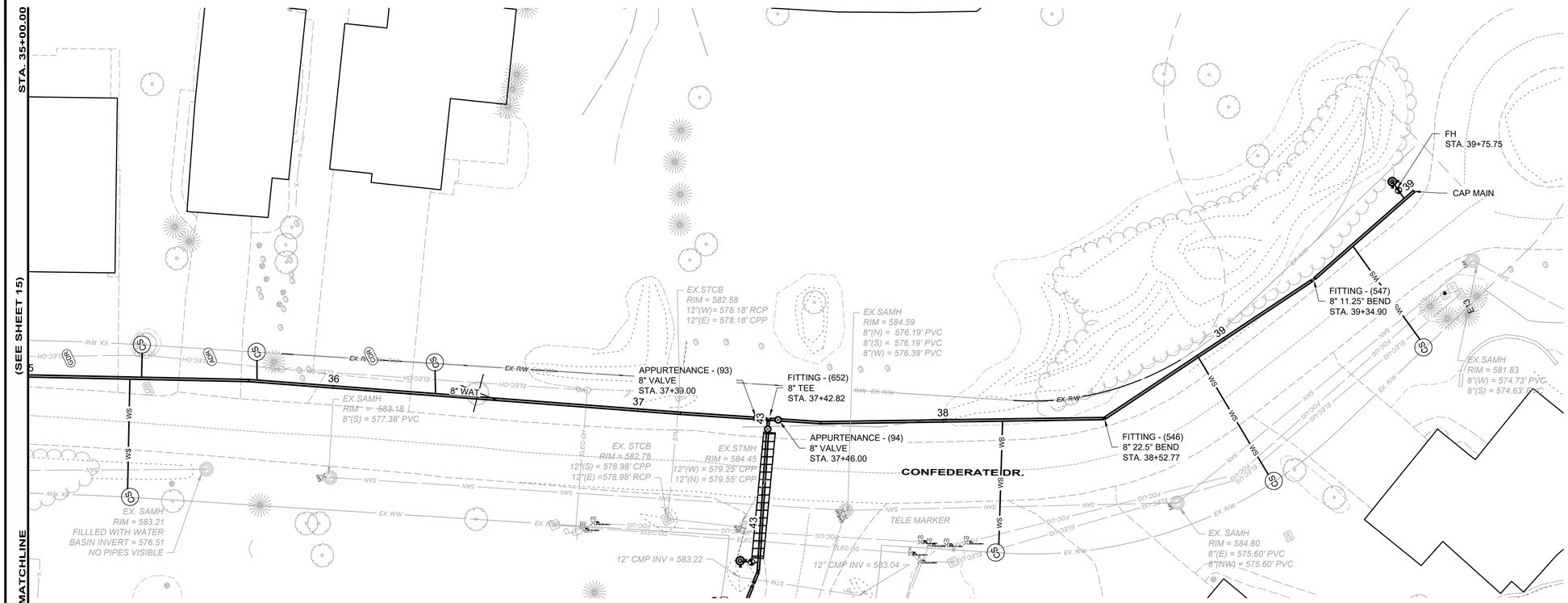
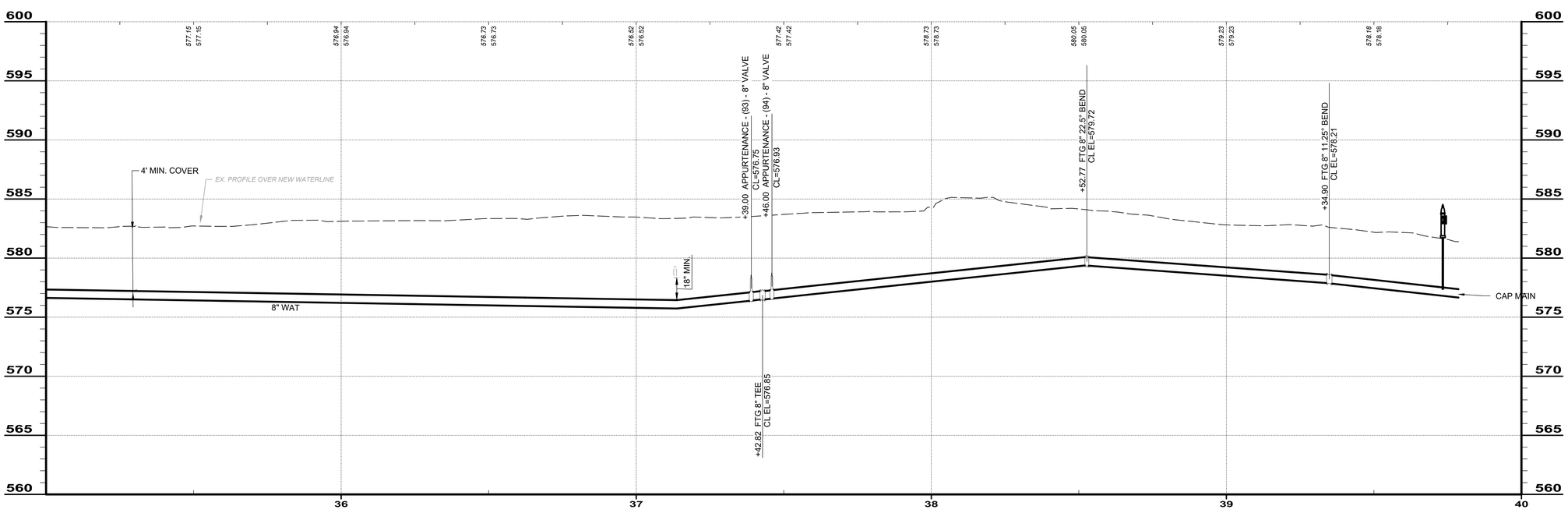


PLAN - WAT RUN 1-8

RUN 1-8		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	479	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	2	EA
6" FH	1	EA
CURB STOPS	6	EA
3/4" COPPER SERVICE LINES	145	LF
ADR	2	SY
CDR	3	SY
GDR	3	SY
TREE REMOVAL	1	EA
SEEDING AND MULCHING	532	SY



PIPE RUN 1-8

BID SET

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NO	REVISION	DATE

BID	
ISSUED FOR:	
ISSUE DATE:	11/24/2025
SCALE:	AS SHOWN
DESIGNED BY:	QDB
DRAWN BY:	QDB
CHECKED BY:	DEB

JOHNSON ISLAND WATER MAIN EXTENSION

RUN 1-8

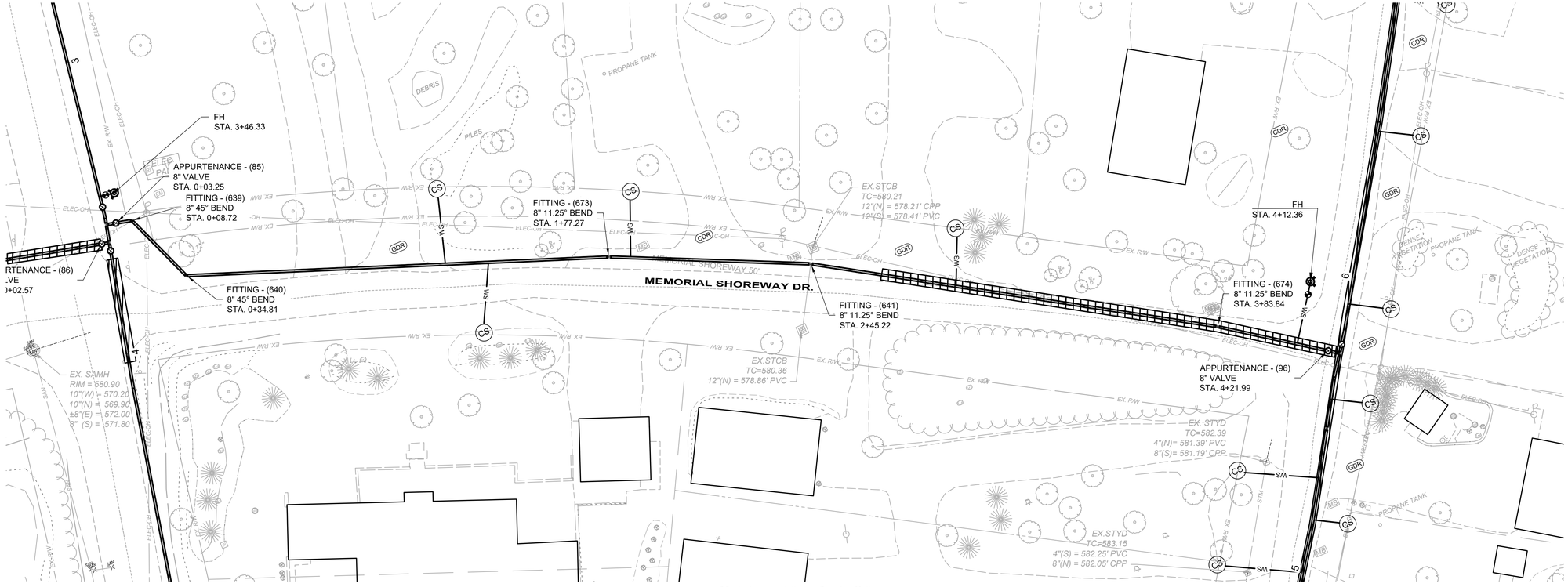
PROJECT NO. 210900

DISCIPLINE CIVIL

SHEET NAME RUN 1-8

SHEET 17 OF 51

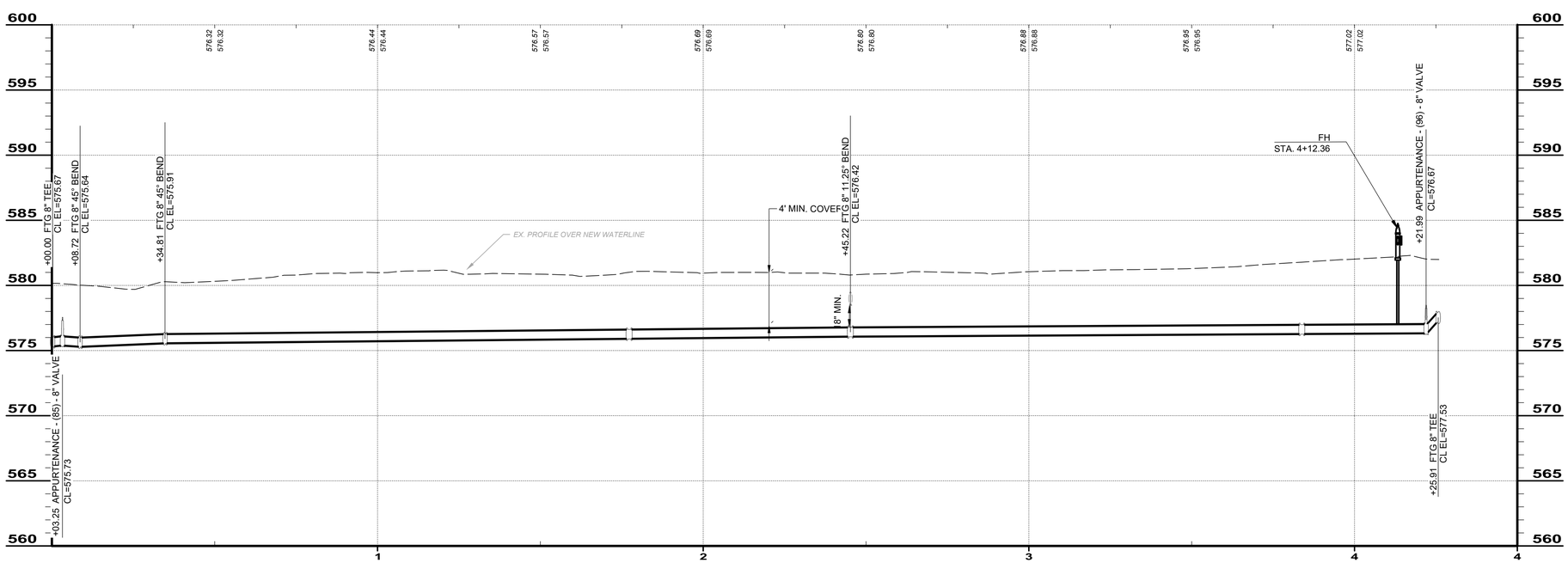
H:\2021\210900\DWG\SHEETS\C_210900 - 01 RUN_01-08.DWG - RUN 1-8 - 12/19/2025 12:10:28 PM - QUINN BAKER



PLAN - WAT RUN 2A

20 ' 0 ' 20 '
SCALE: 1" = 20 '

RUN 2A		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	68	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	2	EA
6" FH	1	EA
CURB STOPS	4	EA
3/4" COPPER SERVICE LINES	78	LF
ADR	0	SY
CDR	9	SY
GDR	6	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	384	SY



PIPE RUN 2A

BID SET

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NO	REVISION	DATE
BID		

ISSUED FOR: BID
ISSUE DATE: 11/24/2025
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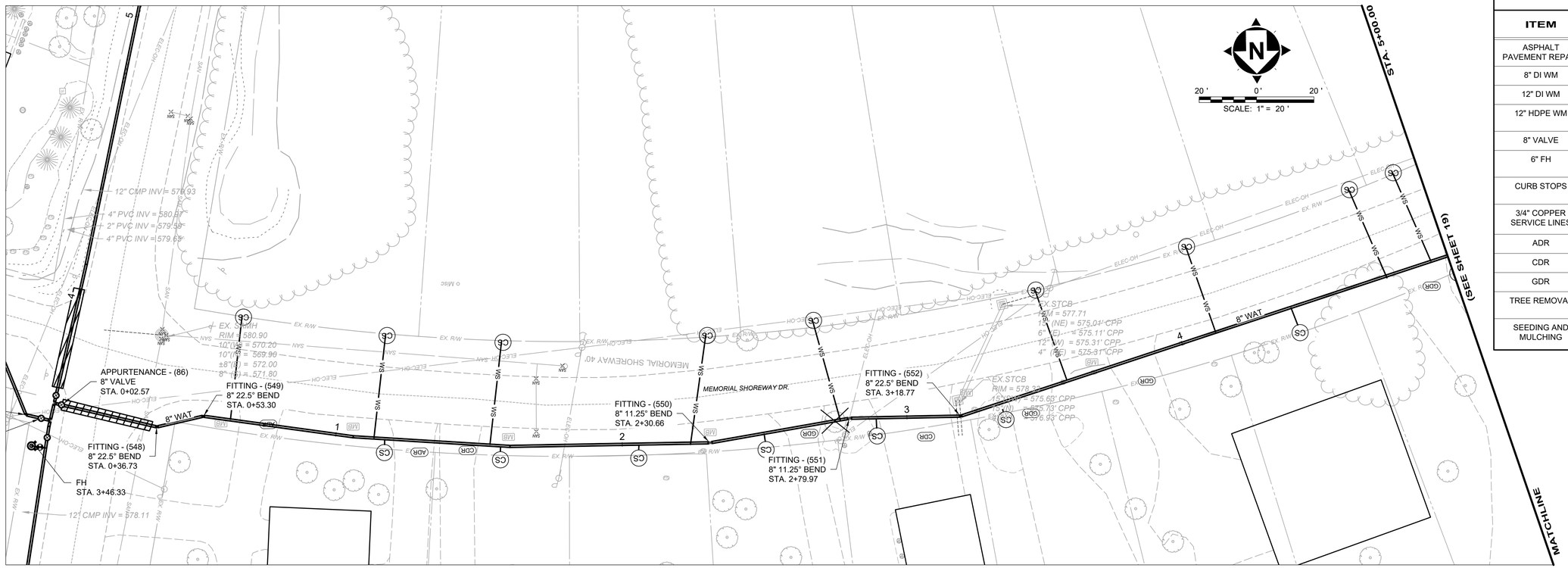
JOHNSON ISLAND WATER MAIN EXTENSION

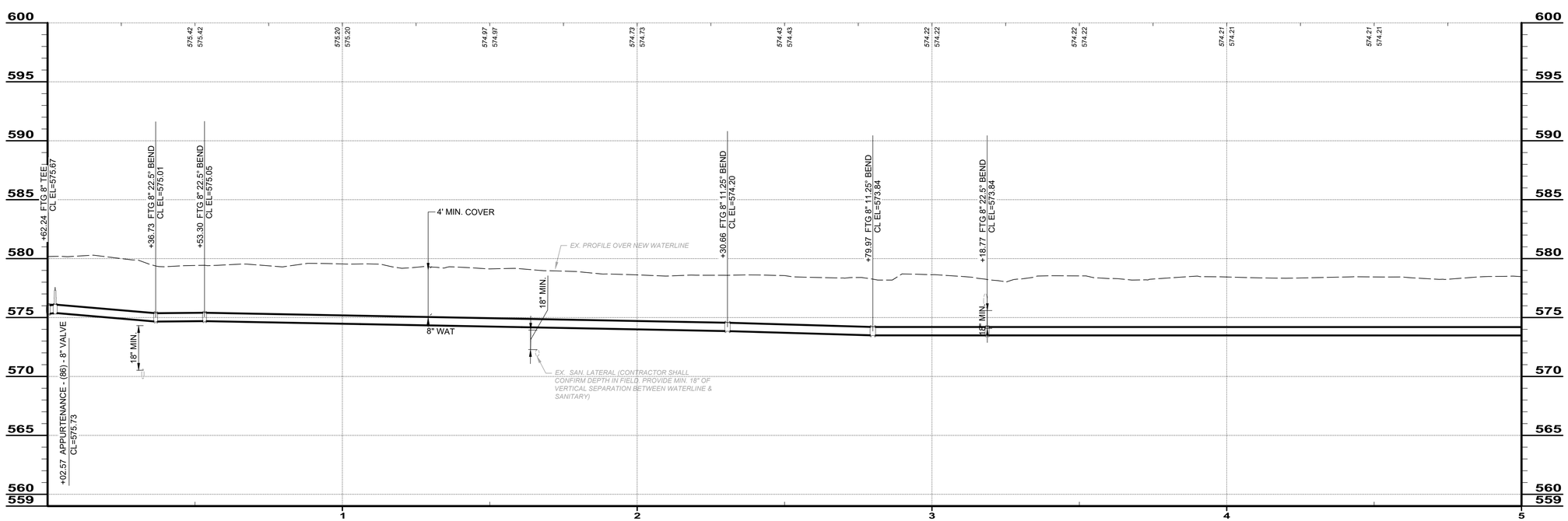
RUN 2A

PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 2A
SHEET 18 OF 51

H:\2021\210900\DWG\SHEETS\C_210900 - 02 RUN_51-07.DWG - RUN 2A - 11/25/2025 4:42:17 PM - QUINN BAKER



PLAN - WAT RUN 2-1



PIPE RUN 2-1

RUN 2-1		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	13	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	1	EA
6" FH	0	EA
CURB STOPS	9	EA
3/4" COPPER SERVICE LINES	21	LF
ADR	3	SY
CDR	5	SY
GDR	7	SY
TREE REMOVAL	1	EA
SEEDING AND MULCHING	520	SY

BID SET

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ISSUE DATE:	11/24/2025
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JOHNSON ISLAND WATER MAIN EXTENSION

RUN 2-1

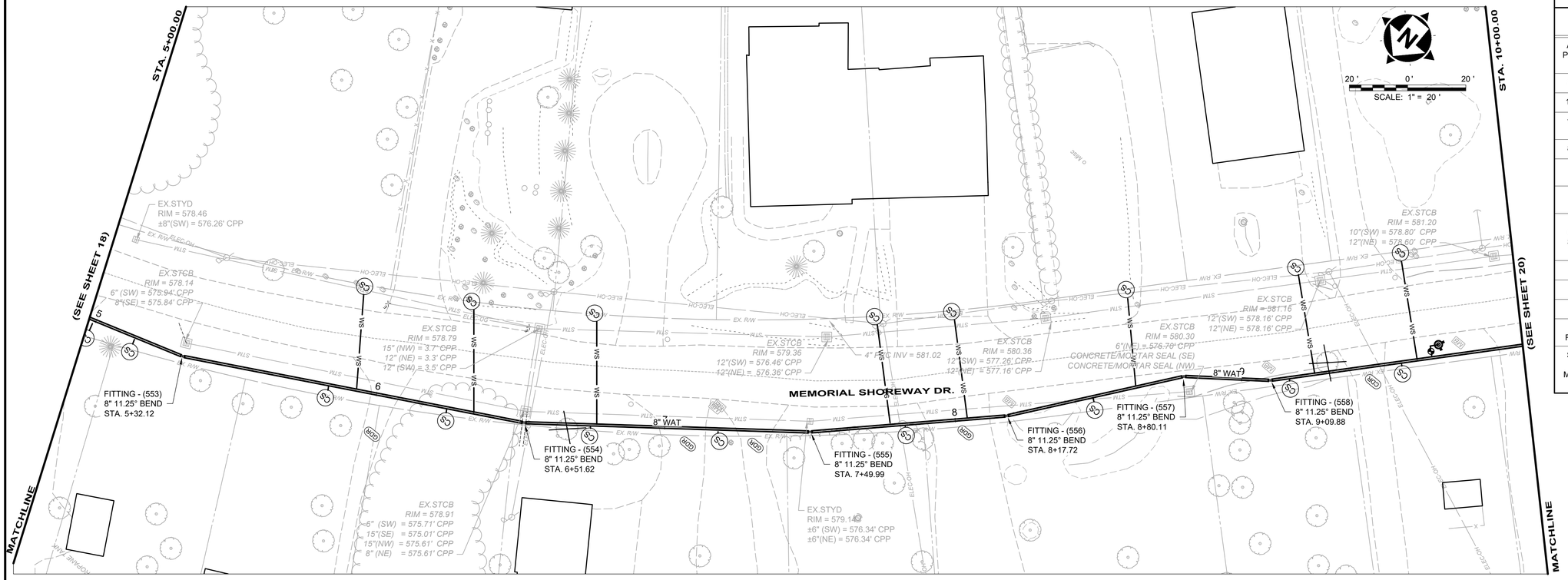
PROJECT NO. 210900

DISCIPLINE CIVIL

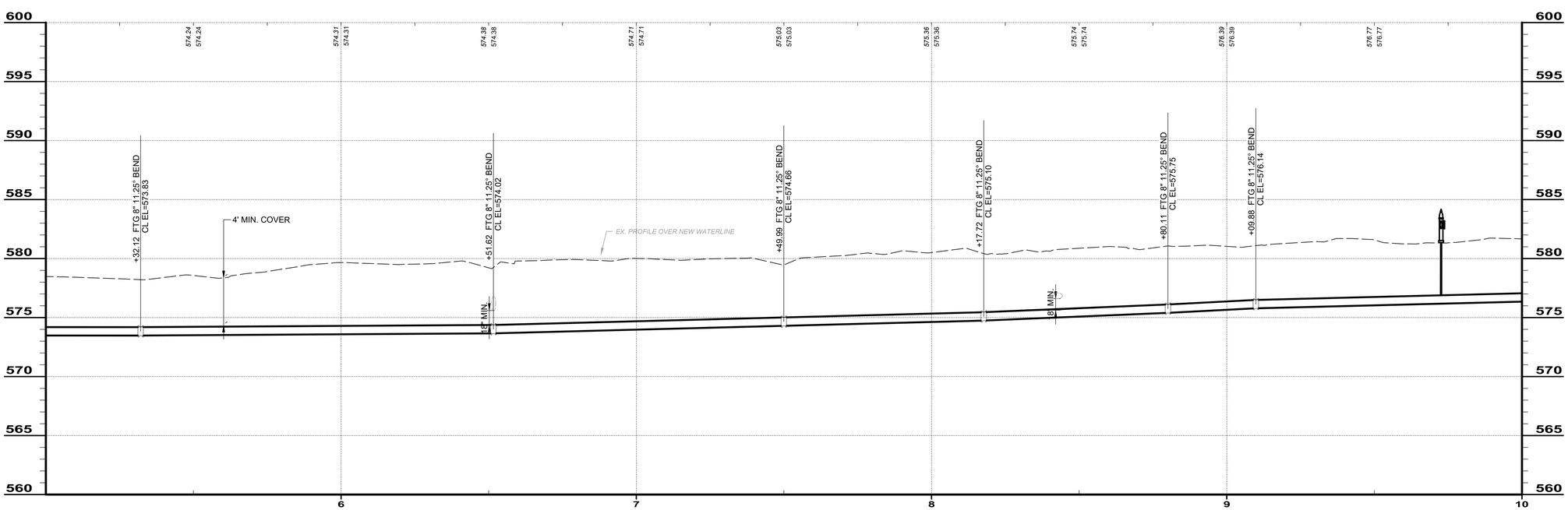
SHEET NAME RUN 2-1

SHEET 19 OF 51

H:\2021\210900\DWG\SHEETS\C_210900 - 02 RUN_01-07.DWG - RUN 2-1 - 11/25/2025 4:42:17 PM - QUINN BAKER



PLAN - WAT RUN 2-2



PIPE RUN 2-2

RUN 2-2		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	EA
8" VALVE	0	EA
6" FH	1	EA
CURB STOPS	17	EA
3/4" COPPER SERVICE LINES	215	LF
ADR	0	SY
CDR	4	SY
GDR	7	SY
TREE REMOVAL	2	EA
SEEDING AND MULCHING	556	SY

BID SET

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ISSUED FOR:	BID
ISSUE DATE:	11/24/2025
SCALE:	AS SHOWN
DESIGNED BY:	QDB
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CHECKED BY:	DEB

JOHNSON ISLAND WATER MAIN EXTENSION

RUN 2-2

PROJECT NO. 210900

DISCIPLINE CIVIL

SHEET NAME RUN 2-2

SHEET 20 OF 51

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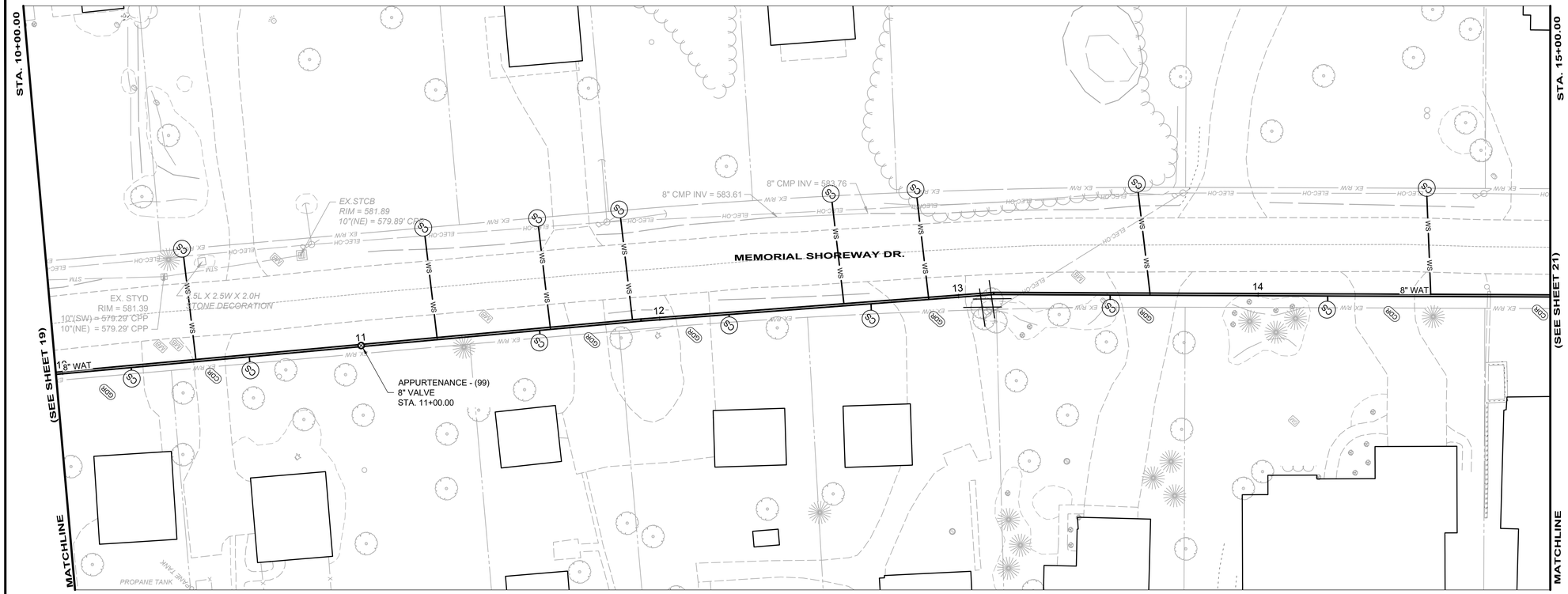
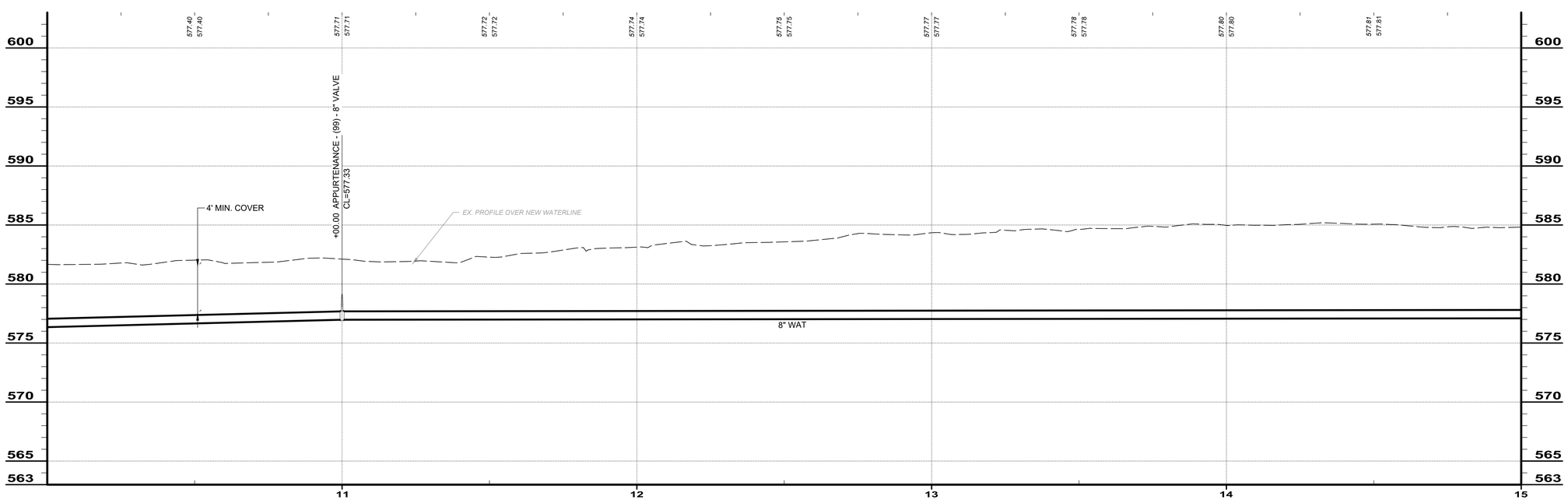


PLAN - WAT RUN 2-3

RUN 2-3		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	1	EA
6" FH	0	EA
CURB STOPS	11	EA
3/4" COPPER SERVICE LINES	114	LF
ADR	0	SY
CDR	6	SY
GDR	10	SY
TREE REMOVAL	2	EA
SEEDING AND MULCHING	556	SY



PIPE RUN 2-3

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ISSUED FOR:	BID
ISSUE DATE:	11/24/2025
SCALE:	AS SHOWN
DESIGNED BY:	QDB
DRAWN BY:	QDB
CHECKED BY:	DEB

JOHNSON ISLAND WATER MAIN EXTENSION

RUN 2-3

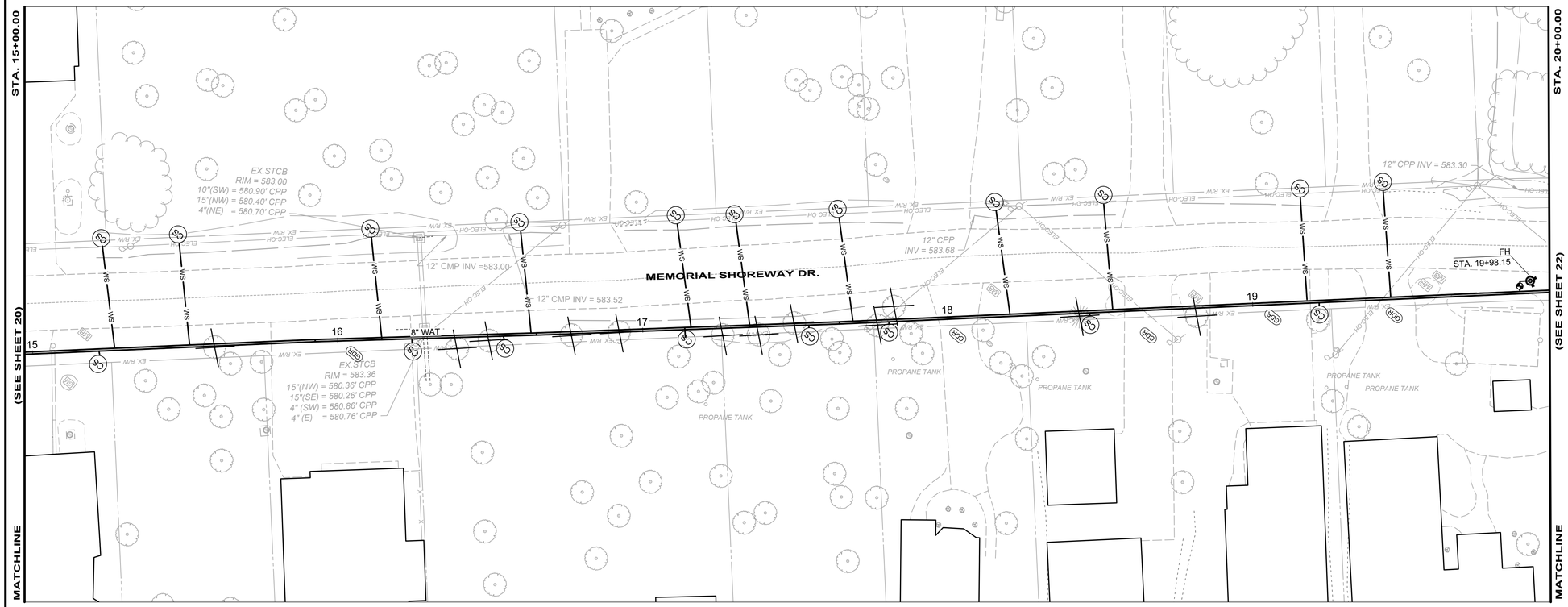
PROJECT NO. 210900

DISCIPLINE: CIVIL

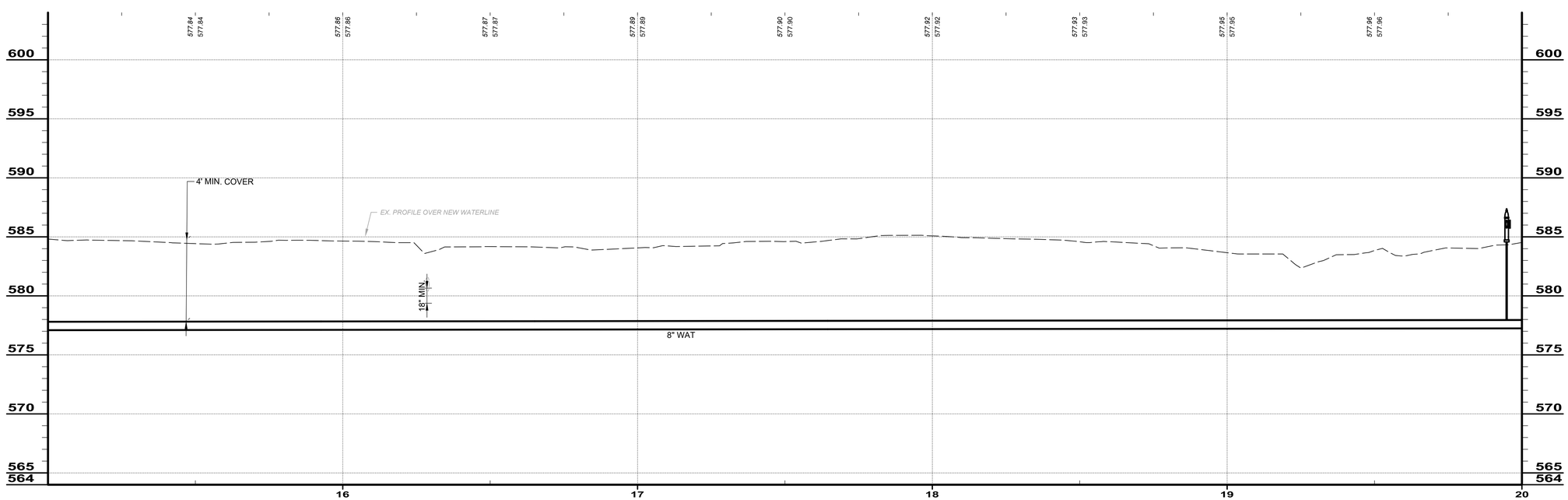
SHEET NAME: RUN 2-3

SHEET 21 OF 51

H:\2021\210900\DWG\SHEETS\C_210900 - 02 RUN_01-07.DWG - RUN 2-3 - 11/25/2025 4:42:17 PM - QUINN BAKER



PLAN - WAT RUN 2-4



PIPE RUN 2-4

SCALE: 1" = 20 '

RUN 2-4		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	0	EA
6" FH	1	EA
CURB STOPS	14	EA
3/4" COPPER SERVICE LINES	214	LF
ADR	0	SY
CDR	3	SY
GDR	6	SY
TREE REMOVAL	12	EA
SEEDING AND MULCHING	556	SY

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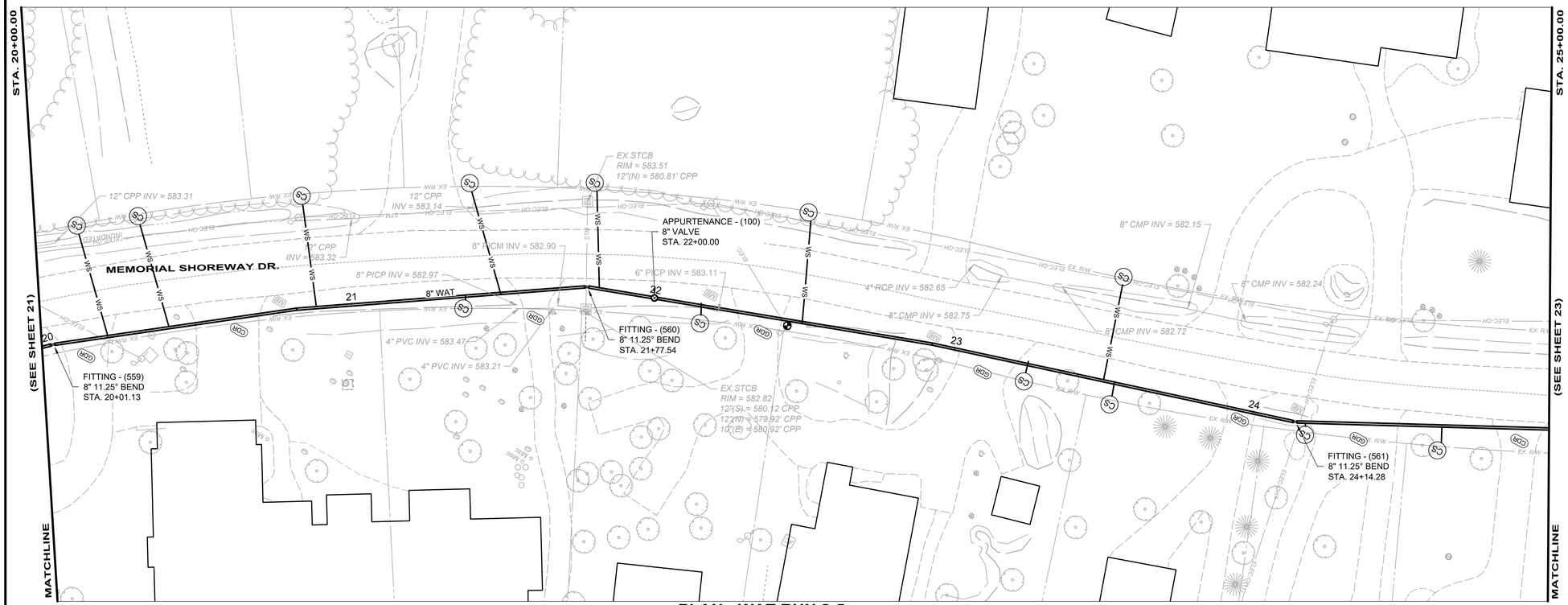
JOHNSON ISLAND WATER MAIN EXTENSION

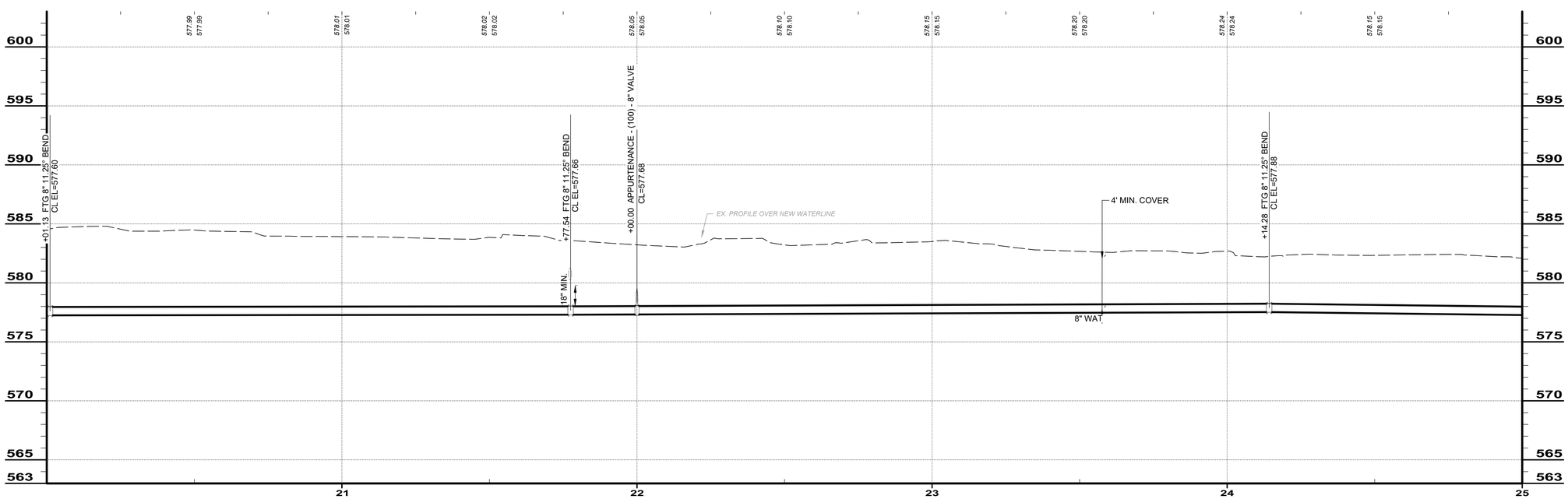
RUN 2-4

PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 2-4
SHEET 22 OF 51

H:\2021\210900\DWG\SHEETS\C_210900 - 02 RUN_01-07.DWG - RUN 2-4 - 11/25/2025 4:42:17 PM - QUINN BAKER



PLAN - WAT RUN 2-5



PIPE RUN 2-5

SCALE: 1" = 20 '

RUN 2-5		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	1	EA
6" FH	0	EA
CURB STOPS	11	EA
3/4" COPPER SERVICE LINES	121	LF
ADR	0	SY
CDR	4	SY
GDR	11	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	556	SY

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NO	REVISION	DATE

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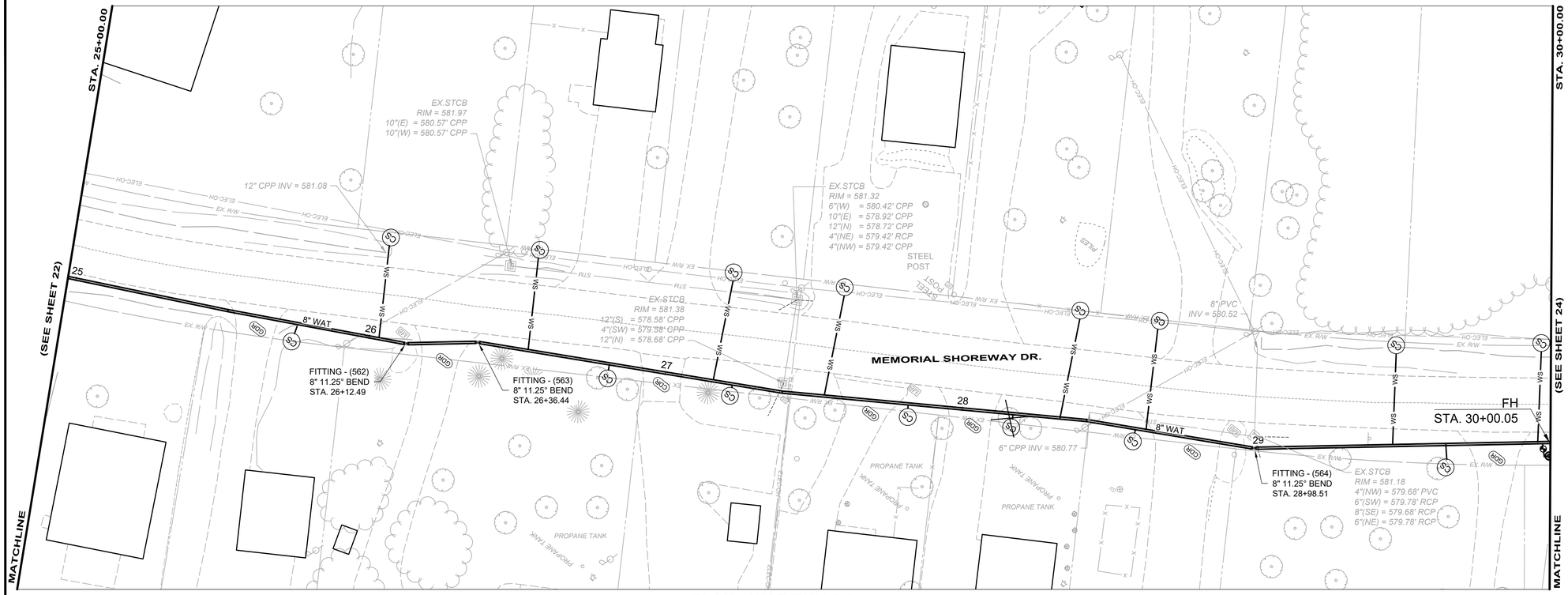
JOHNSON ISLAND WATER MAIN EXTENSION

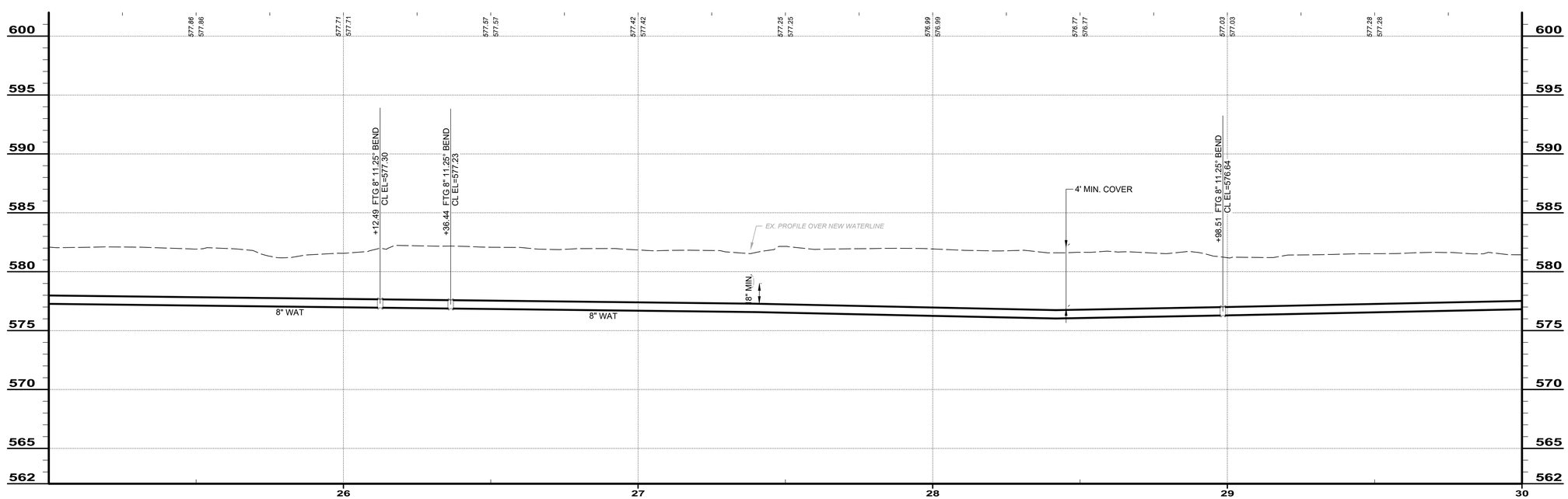
RUN 2-5

PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 2-5
SHEET 23 OF 51

H:\2021\210900\DWG\SHEETS\C_210900 - 02 RUN_01-07.DWG - RUN 2-5 - 11/25/2025 4:42:17 PM - QUINN BAKER



PLAN - WAT RUN 2-6



PIPE RUN 2-6

20 ' 0 ' 20 '
SCALE: 1" = 20 '

RUN 2-6		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	0	EA
6" FH	0	EA
CURB STOPS	13	EA
3/4" COPPER SERVICE LINES	152	LF
ADR	0	SY
CDR	4	SY
GDR	9	SY
TREE REMOVAL	1	EA
SEEDING AND MULCHING	556	SY

BID SET

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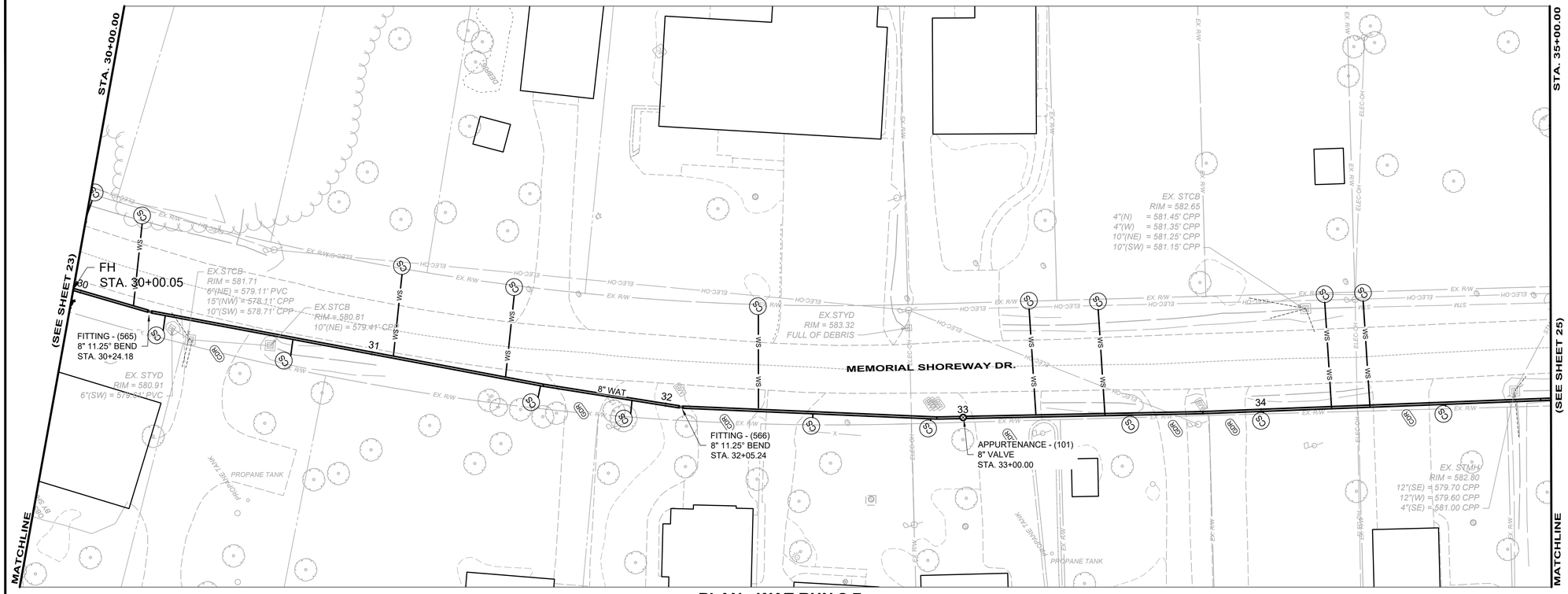
ISSUE DATE:	11/24/2025
SCALE:	AS SHOWN
DESIGNED BY:	QDB
DRAWN BY:	QDB
CHECKED BY:	DEB

JOHNSON ISLAND WATER MAIN EXTENSION

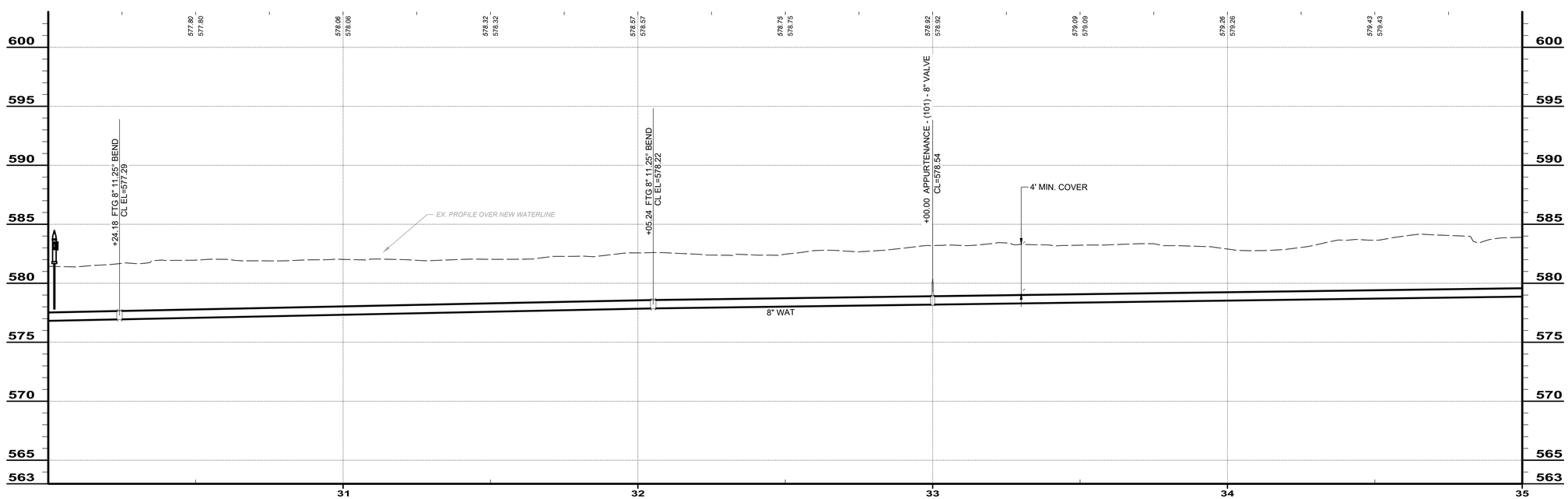
RUN 2-6

PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 2-6
SHEET 24 OF 51

H:\2021\210900\DWG\SHEETS\C_210900 - 02 RUN_01-07.DWG - RUN 2-6 - 11/25/2025 4:42:17 PM - QUINN BAKER



PLAN - WAT RUN 2-7



PIPE RUN 2-7

SCALE: 1" = 20 '

RUN 2-7		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	1	EA
6" FH	1	EA
CURB STOPS	12	EA
3/4" COPPER SERVICE LINES	117	LF
ADR	0	SY
CDR	10	SY
GDR	5	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	556	SY

BID SET

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SCALE: AS SHOWN
DESIGNED BY: QDB
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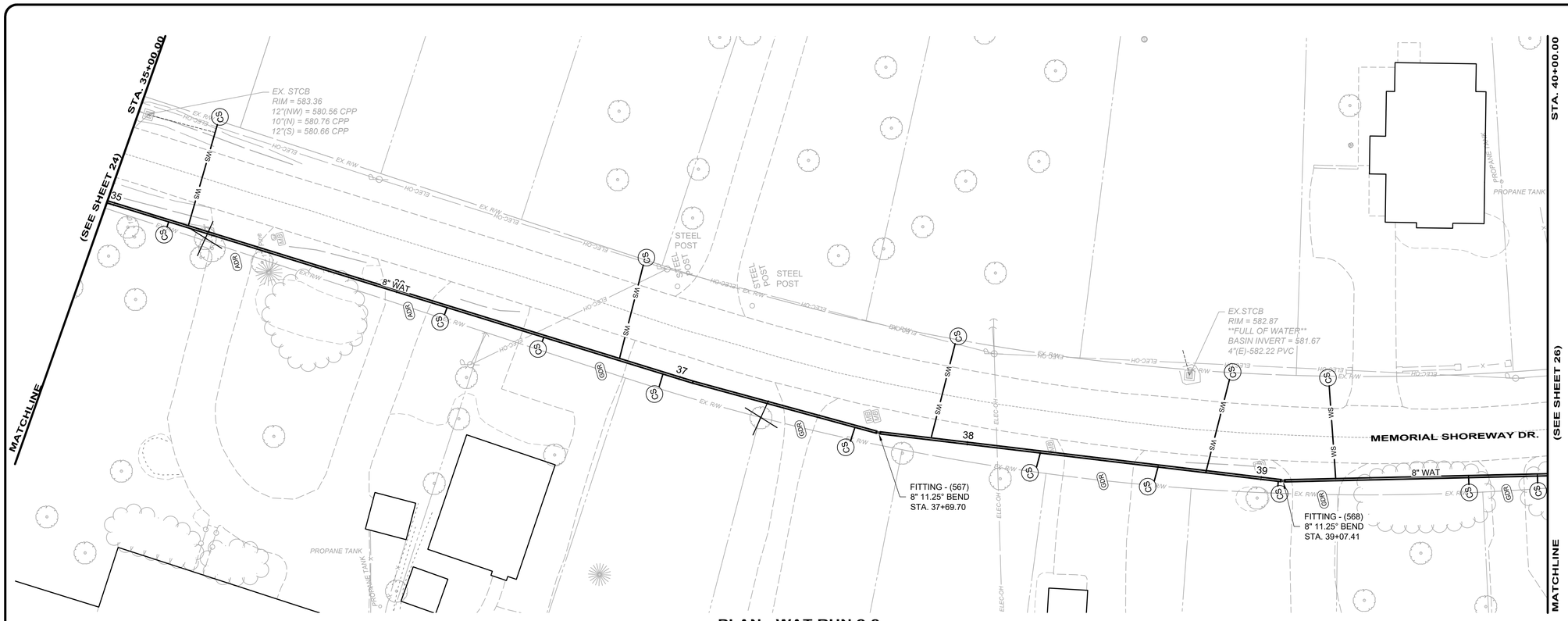
JOHNSON ISLAND WATER MAIN EXTENSION

RUN 2-7

PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 2-7
SHEET 25 OF 51

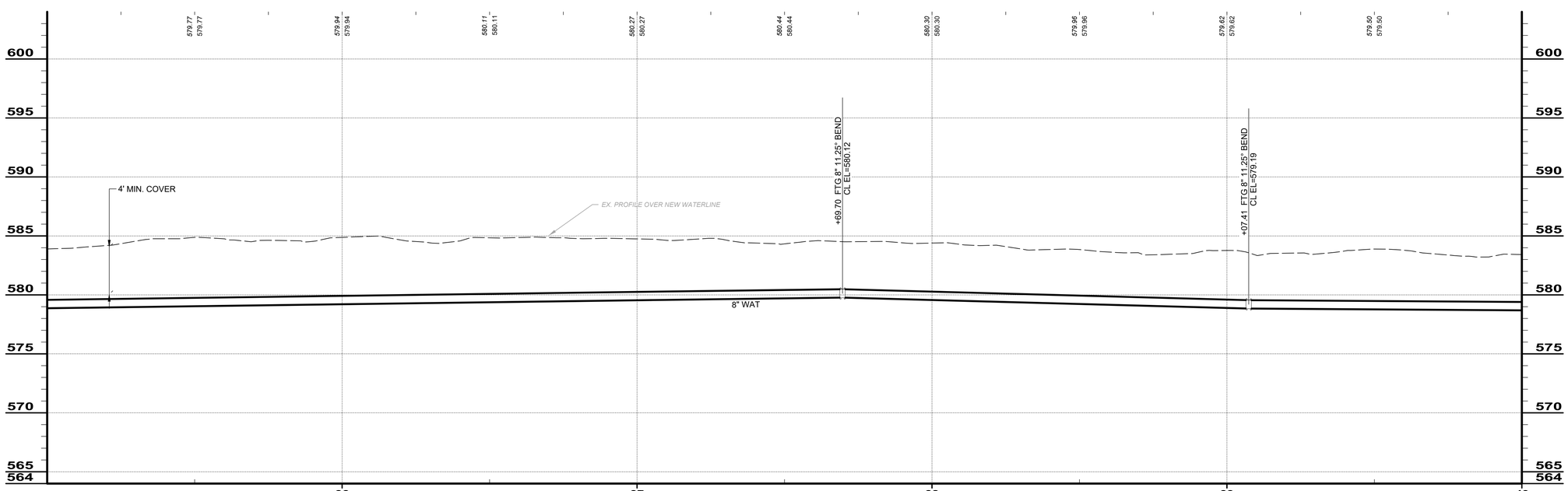
H:\2021\210900\DWG\SHEETS\C_210900 - 02 RUN_51-07.DWG - RUN 2-7 - 11/25/2025 4:42:17 PM - QUINN BAKER



PLAN - WAT RUN 2-8

20 ' 0 ' 20 '
SCALE: 1" = 20 '

RUN 2-8		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	0	EA
6" FH	0	EA
CURB STOPS	10	EA
3/4" COPPER SERVICE LINES	88	LF
ADR	4	SY
CDR	0	SY
GDR	11	SY
TREE REMOVAL	2	EA
SEEDING AND MULCHING	556	SY



PIPE RUN 2-8

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ISSUED FOR:	BID
ISSUE DATE:	11/24/2025
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DESIGNED BY:	QDB
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JOHNSON ISLAND WATER MAIN EXTENSION

RUN 2-8

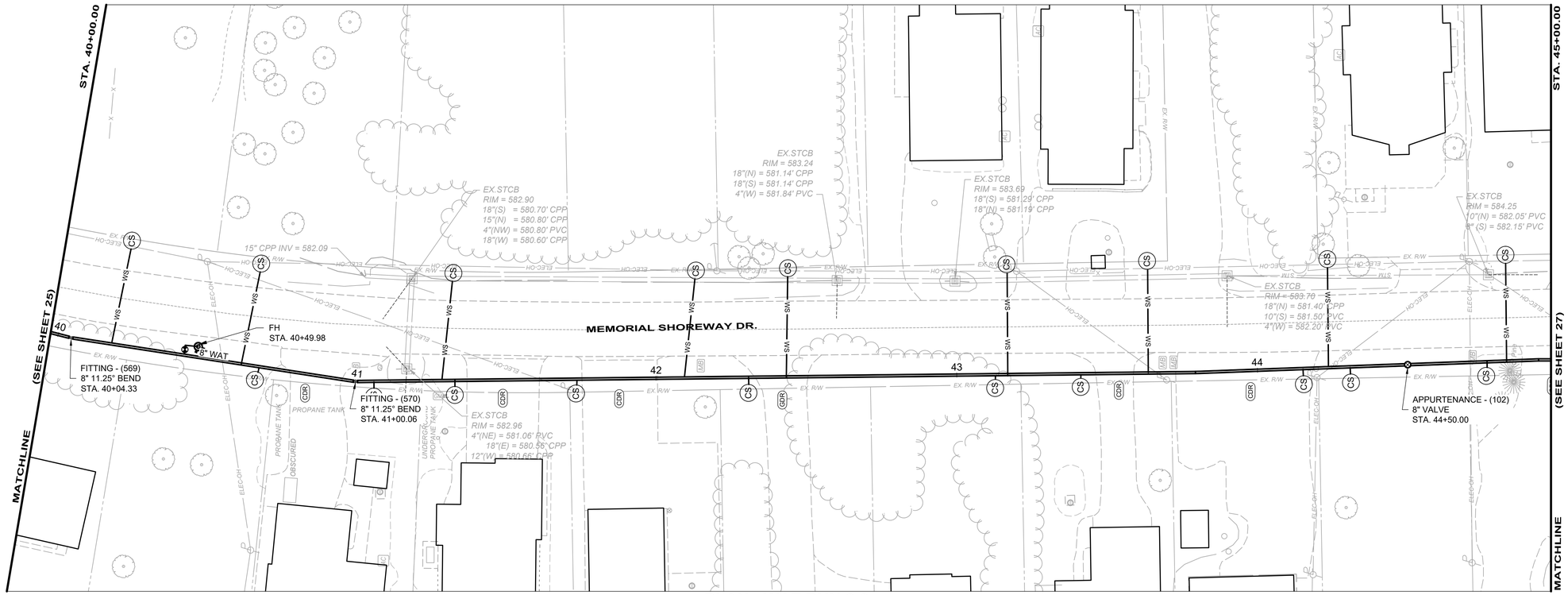
PROJECT NO.
210900

DISCIPLINE
CIVIL

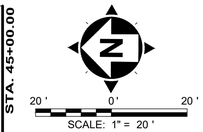
SHEET NAME
RUN 2-8

SHEET 26 OF 51

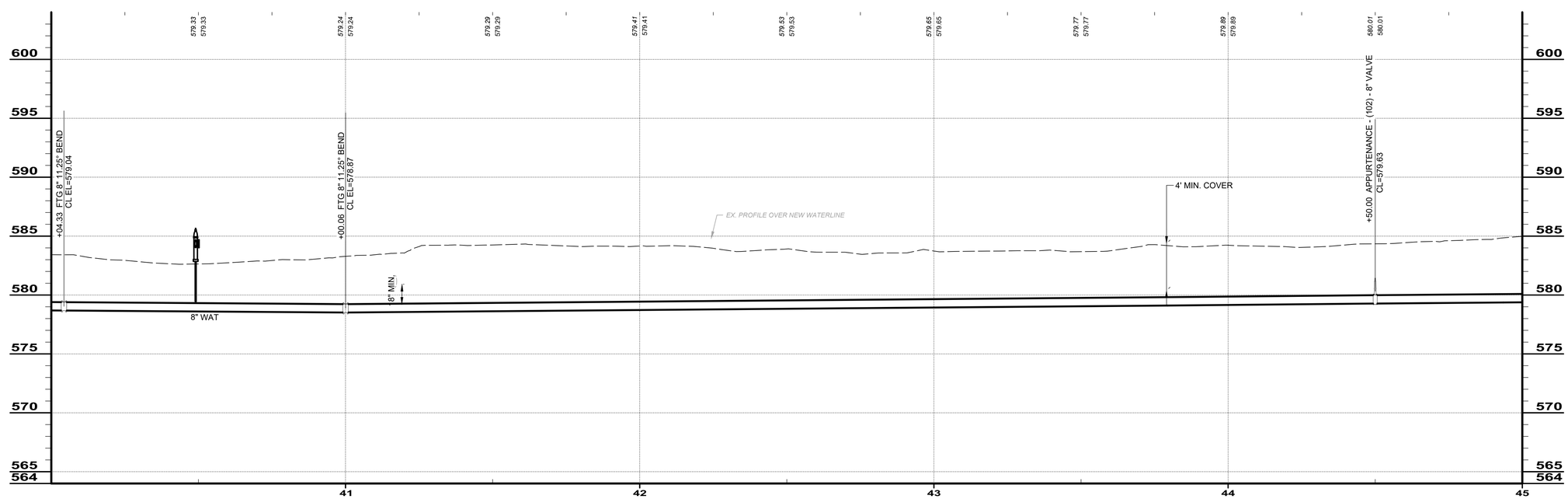
H:\2021\210900\DWG\SHEETS\C_210900 - 02 RUN_08-14.DWG - RUN 2-8 - 11/25/2025 4:50:57 PM - QUINN BAKER



PLAN - WAT RUN 2-9



RUN 2-9		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	1	EA
6" FH	1	EA
CURB STOPS	10	EA
3/4" COPPER SERVICE LINES	111	LF
ADR	0	SY
CDR	14	SY
GDR	2	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	556	SY



PIPE RUN 2-9

BID SET

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NO	REVISION	DATE

ISSUED FOR:	BID
ISSUE DATE:	11/24/2025
SCALE:	AS SHOWN
DESIGNED BY:	QDB
DRAWN BY:	QDB
CHECKED BY:	DEB

JOHNSON ISLAND WATER MAIN EXTENSION

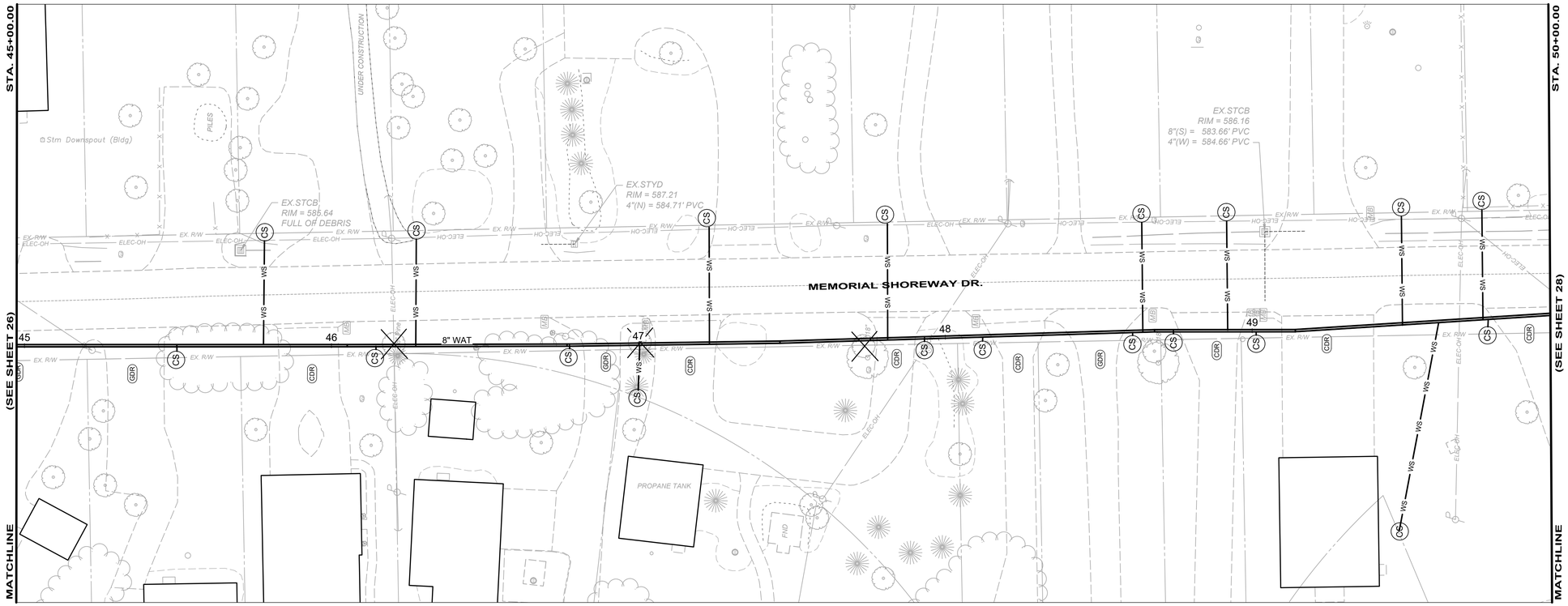
RUN 2-9

PROJECT NO. 210900

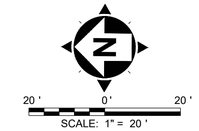
DISCIPLINE: CIVIL

SHEET NAME: RUN 2-9

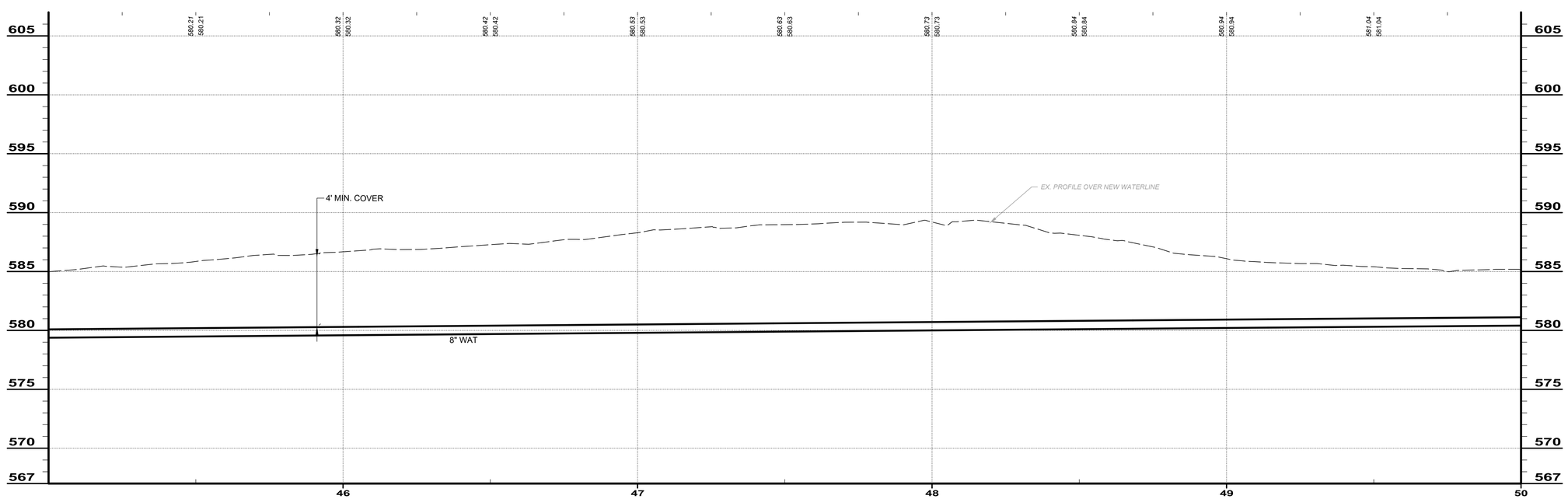
SHEET 27 OF 51



PLAN - WAT RUN 2-10



RUN 2-10		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	0	EA
6" FH	0	EA
CURB STOPS	10	EA
3/4" COPPER SERVICE LINES	115	LF
ADR	0	SY
CDR	23	SY
GDR	8	SY
TREE REMOVAL	3	EA
SEEDING AND MULCHING	556	SY



PIPE RUN 2-10

BID SET

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ISSUE DATE:	11/24/2025
SCALE:	AS SHOWN
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JOHNSON ISLAND WATER MAIN EXTENSION

RUN 2-10

PROJECT NO. 210900

DISCIPLINE CIVIL

SHEET NAME RUN 2-10

SHEET 28 OF 51

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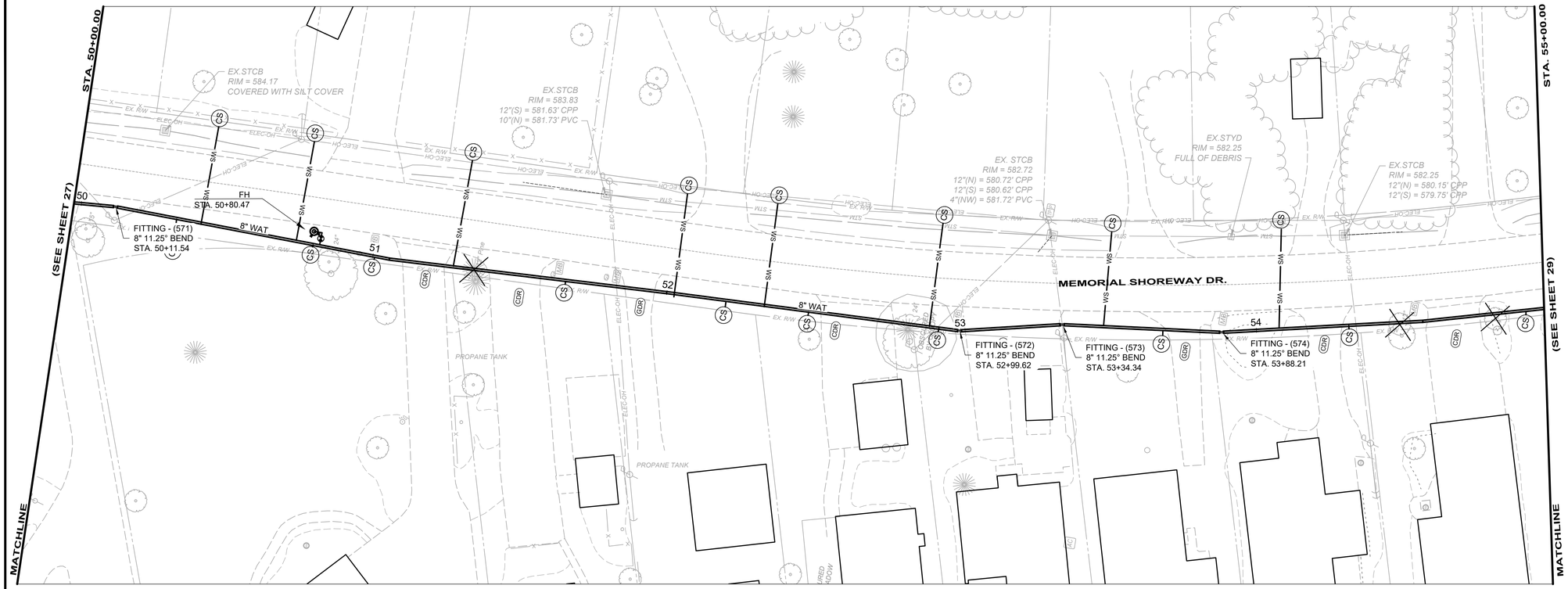
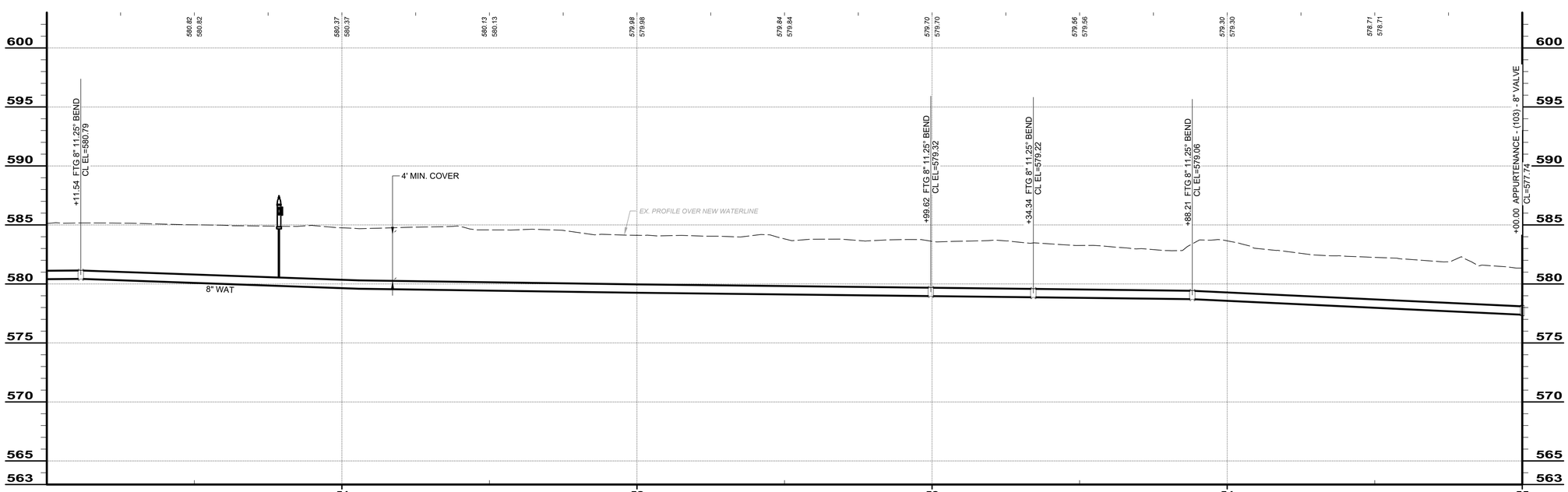


PLAN - WAT RUN 2-11



PIPE RUN 2-11

20 ' 0 ' 20 '
SCALE: 1" = 20 '

RUN 2-11		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	0	EA
6" FH	1	EA
CURB STOPS	12	EA
3/4" COPPER SERVICE LINES	144	LF
ADR	0	SY
CDR	10	SY
GDR	6	SY
TREE REMOVAL	3	EA
SEEDING AND MULCHING	556	SY

BID SET

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NO	REVISION	DATE

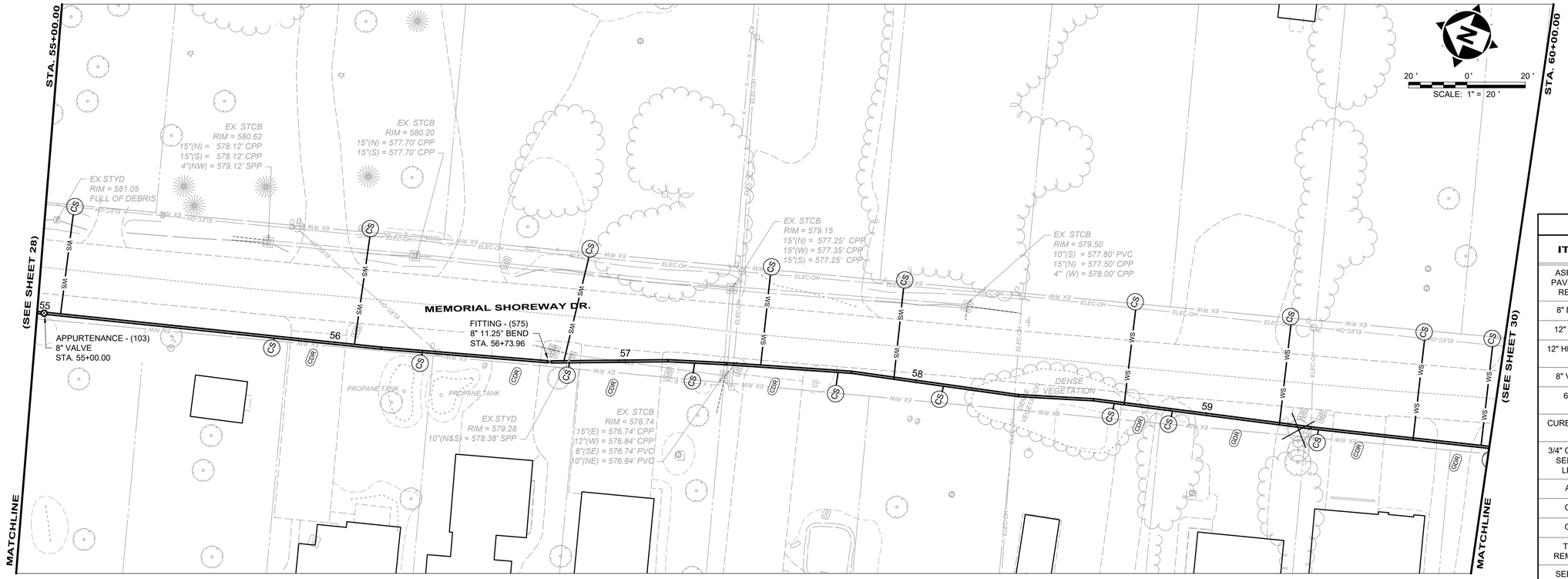
ISSUED FOR: BID
ISSUE DATE: 11/24/2025
SCALE: AS SHOWN
DESIGNED BY: QDB
DRAWN BY: QDB
CHECKED BY: DEB

JOHNSON ISLAND WATER MAIN EXTENSION

RUN 2-11

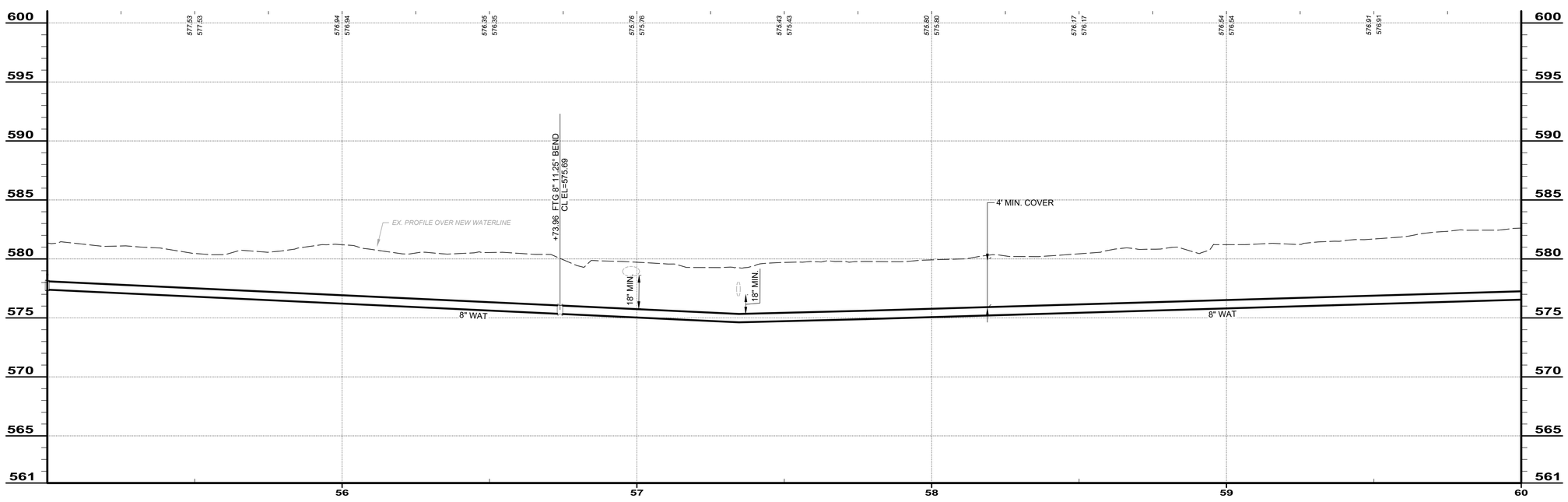
PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 2-11
SHEET 29 OF 51

H:\2021\210900\DWG\SHEETS\C_210900 - 02 RUN_08-14.DWG - RUN 2-11 - 11/25/2025 4:50:57 PM - QUINN BAKER



PLAN - WAT RUN 2-12

RUN 2-12		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	1	EA
6" FH	0	EA
CURB STOPS	10	EA
3/4" COPPER SERVICE LINES	151	LF
ADR	0	SY
CDR	12	SY
GDR	5	SY
TREE REMOVAL	1	EA
SEEDING AND MULCHING	556	SY



PIPE RUN 2-12

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ISSUE DATE:	11/24/2025
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JOHNSON ISLAND WATER MAIN EXTENSION

RUN 2-12

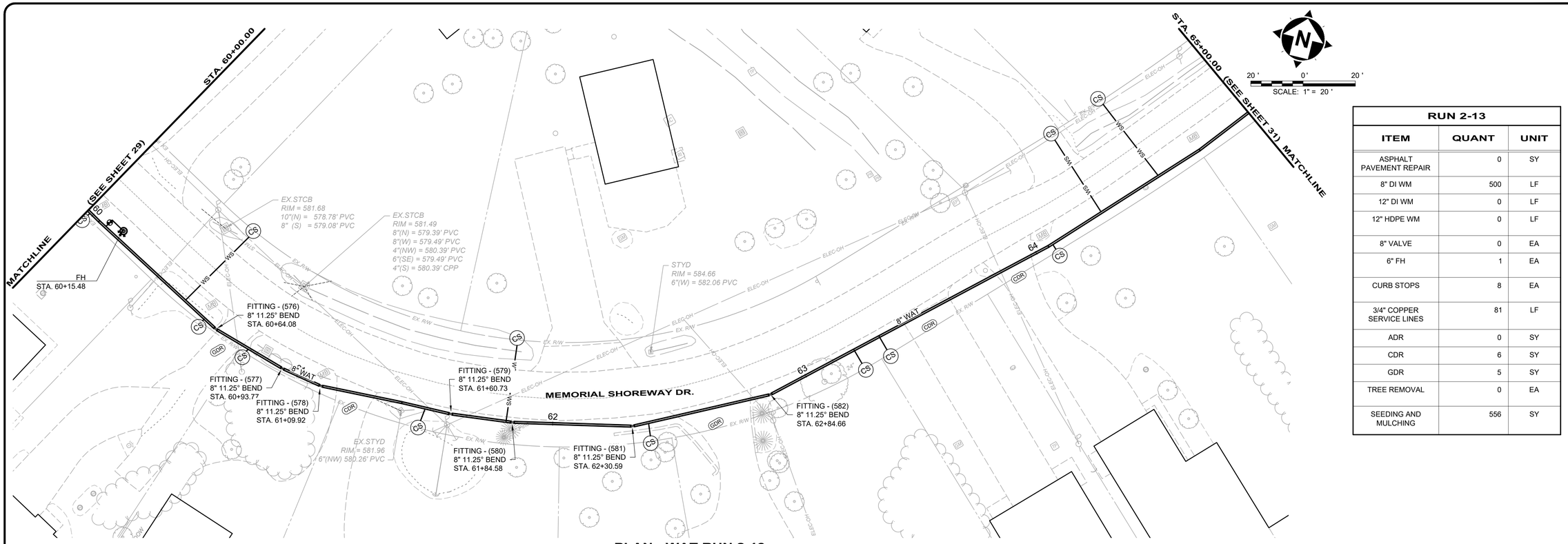
PROJECT NO. 210900

DISCIPLINE CIVIL

SHEET NAME RUN 2-12

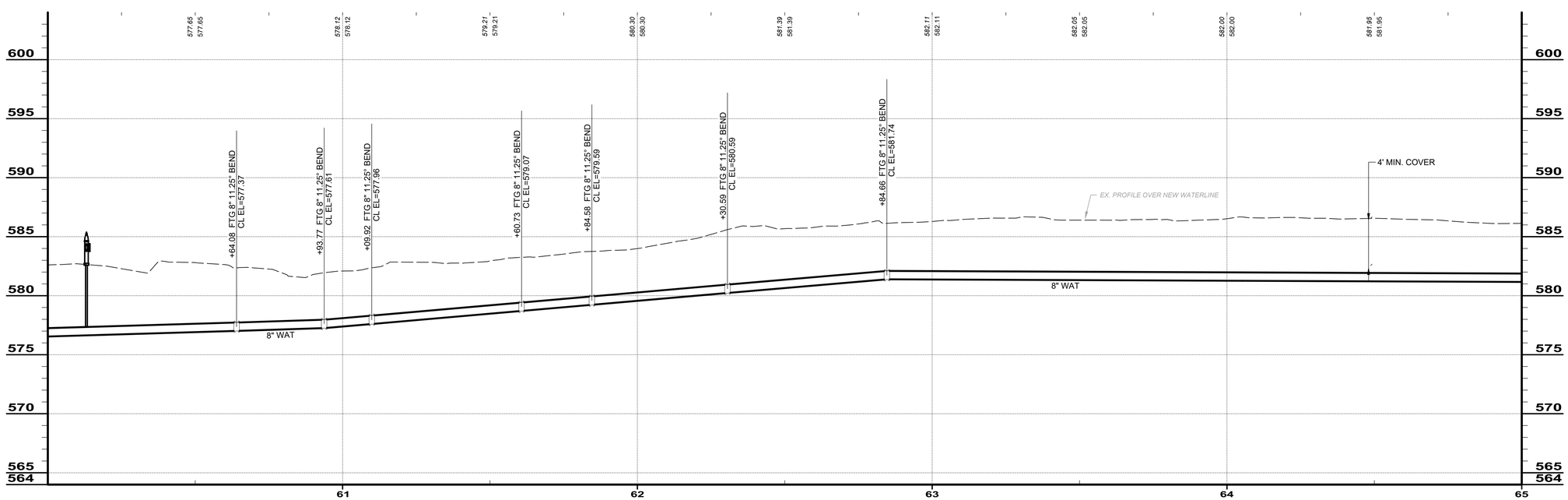
SHEET 30 OF 51

H:\2021\210900\DWG\SHEETS\C_210900 - 02 RUN_08-14.DWG - RUN 2-12 - 11/25/2025 4:50:57 PM - QUINN BAKER



PLAN - WAT RUN 2-13

RUN 2-13		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	0	EA
6" FH	1	EA
CURB STOPS	8	EA
3/4" COPPER SERVICE LINES	81	LF
ADR	0	SY
CDR	6	SY
GDR	5	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	556	SY



PIPE RUN 2-13

BID SET

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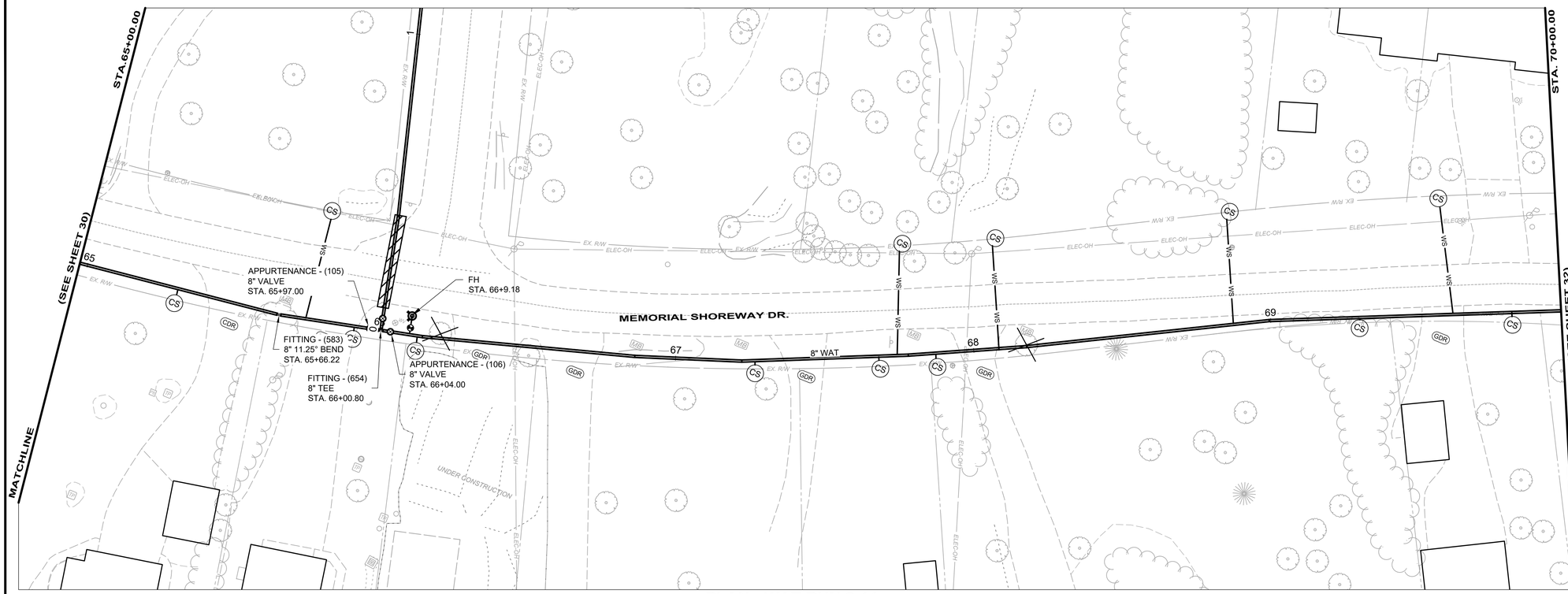
JOHNSON ISLAND WATER MAIN EXTENSION

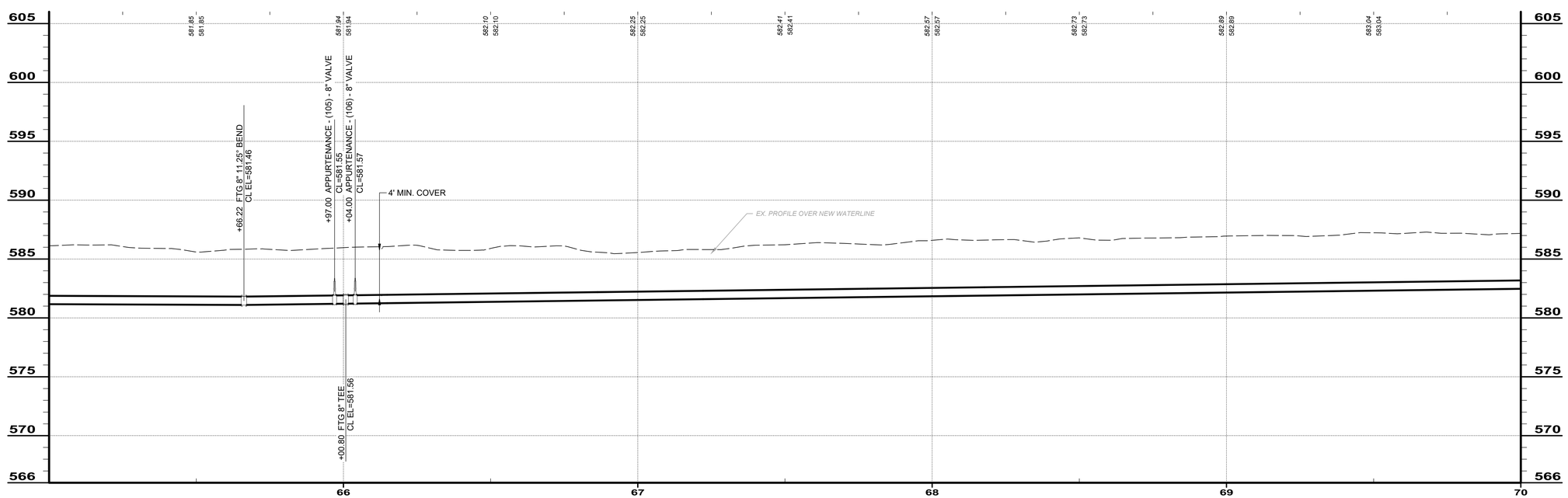
RUN 2-13

PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 2-13
SHEET 31 OF 51

H:\2021\210900\DWG\SHEETS\C_210900 - 02 RUN_08-14.DWG - RUN 2-13 - 11/25/2025 4:50:57 PM - QUINN BAKER



PLAN - WAT RUN 2-14



PIPE RUN 2-14

20 ' 0 ' 20 '
SCALE: 1" = 20 '

RUN 2-14		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	2	EA
6" FH	1	EA
CURB STOPS	12	EA
3/4" COPPER SERVICE LINES	151	LF
ADR	0	SY
CDR	2	SY
GDR	11	SY
TREE REMOVAL	2	EA
SEEDING AND MULCHING	556	SY

BID SET

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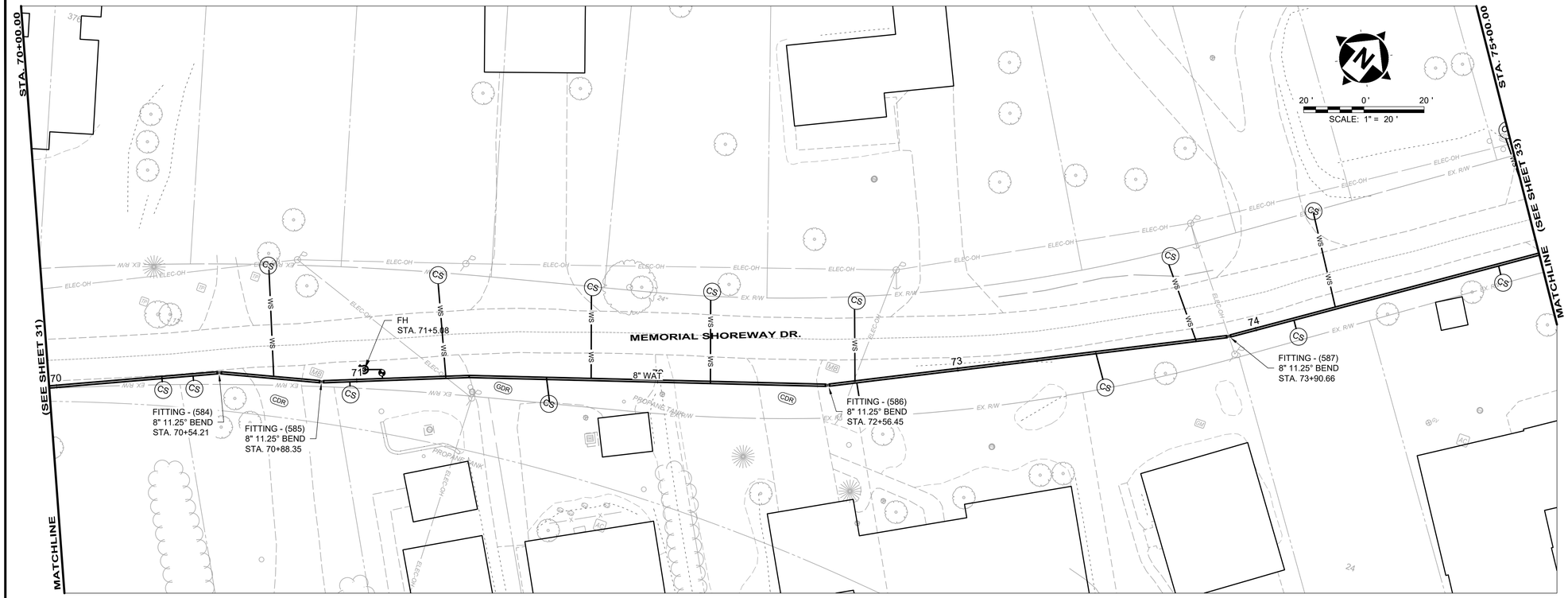
JOHNSON ISLAND WATER MAIN EXTENSION

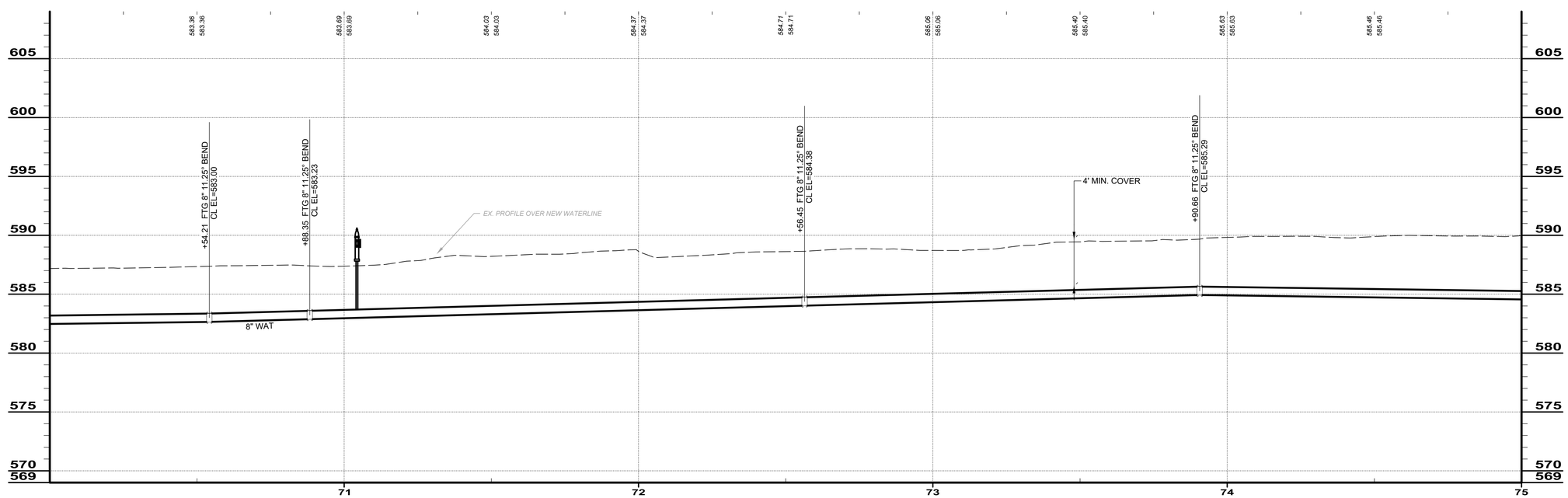
RUN 2-14

PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 2-14
SHEET 32 OF 51

H:\2021\210900\DWG\SHEETS\C_210900 - 02 RUN_08-14.DWG - RUN 2-14 - 11/25/2025 4:50:57 PM - QUINN BAKER



PLAN - WAT RUN 2-15



PIPE RUN 2-15

RUN 2-15		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	0	EA
6" FH	1	EA
CURB STOPS	9	EA
3/4" COPPER SERVICE LINES	131	LF
ADR	0	SY
CDR	5	SY
GDR	7	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	556	SY

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JOHNSON ISLAND WATER MAIN EXTENSION

RUN 2-15

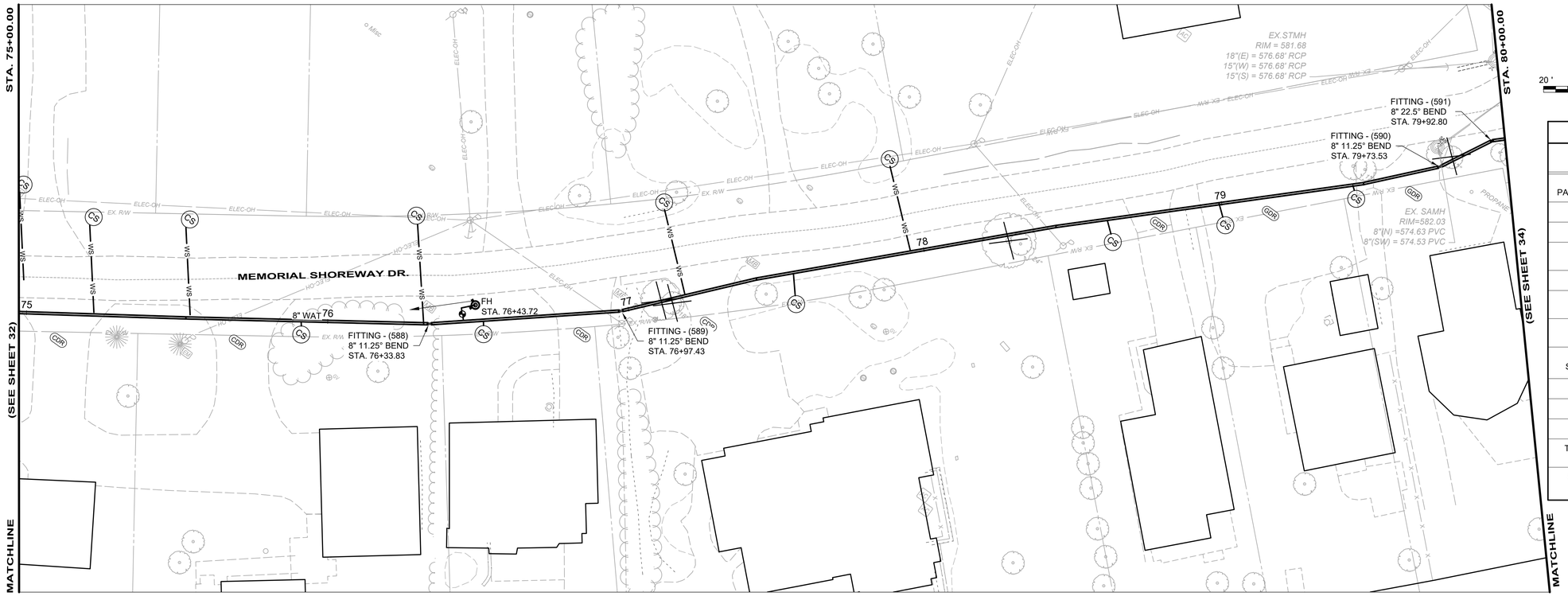
PROJECT NO. 210900

DISCIPLINE CIVIL

SHEET NAME RUN 2-15

SHEET 33 OF 51

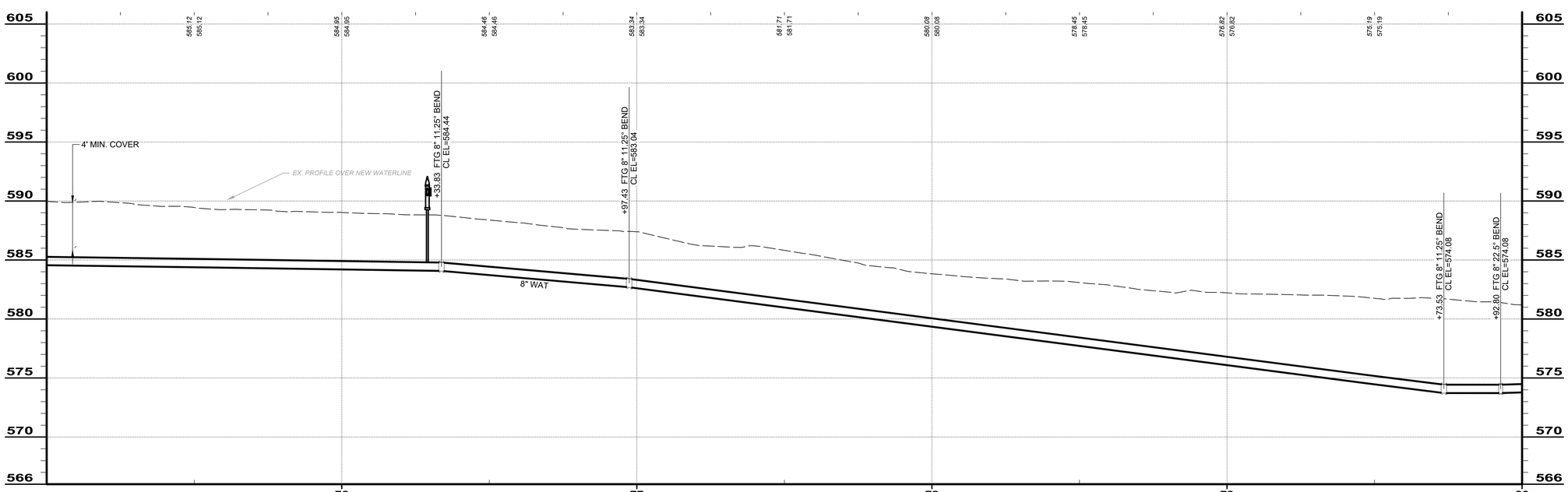
H:\2021\210900\DWG\SHEETS\C_210900 - 02 RUN_15-17.DWG - RUN 2-15 - 11/25/2025 4:57:09 PM - QUINN BAKER



PLAN - WAT RUN 2-16

20 ' 0 ' 20 '
SCALE: 1" = 20 '

RUN 2-16		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	0	EA
6" FH	1	EA
CURB STOPS	8	EA
3/4" COPPER SERVICE LINES	87	LF
ADR	0	SY
CDR	10	SY
GDR	9	SY
TREE REMOVAL	4	EA
SEEDING AND MULCHING	556	SY



PIPE RUN 2-16

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BID		

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ISSUE DATE: 11/24/2025
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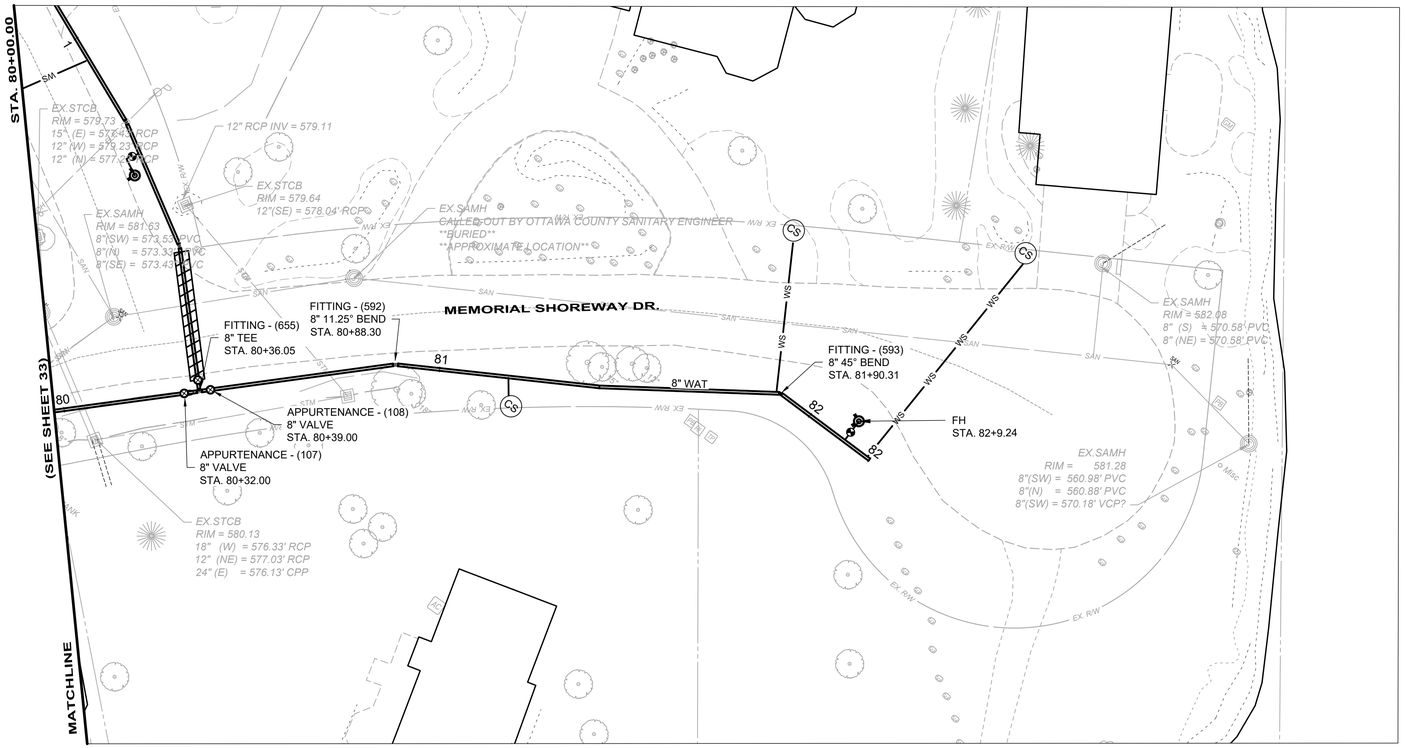
CHECKED BY: DEB

JOHNSON ISLAND WATER MAIN EXTENSION

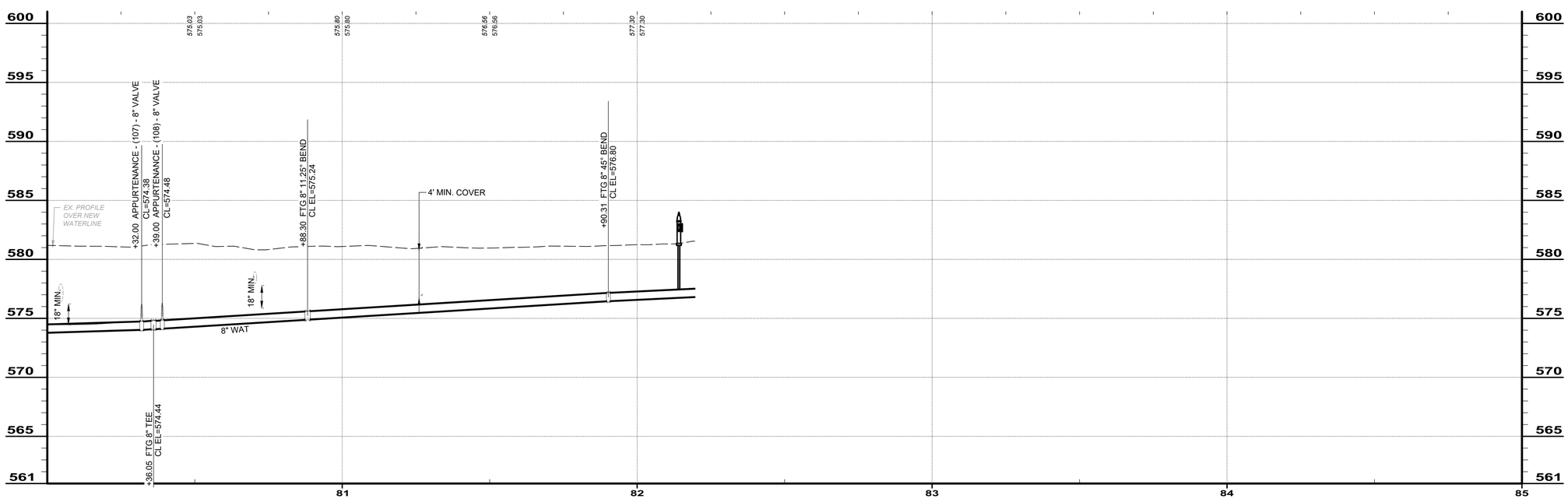
RUN 2-16

PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 2-16
SHEET 34 OF 51

H:\2021\210900\DWG\SHEETS\C_210900 - 02 RUN_15-17.DWG - RUN 2-16 - 11/25/2025 4:57:09 PM - QUINN BAKER



PLAN - WAT RUN 2-17



PIPE RUN 2-17

20 ' 0 ' 20 '
SCALE: 1" = 20 '

RUN 2-17		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	218	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	2	EA
6" FH	1	EA
CURB STOPS	3	EA
3/4" COPPER SERVICE LINES	140	LF
ADR	0	SY
CDR	0	SY
GDR	0	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	242	SY

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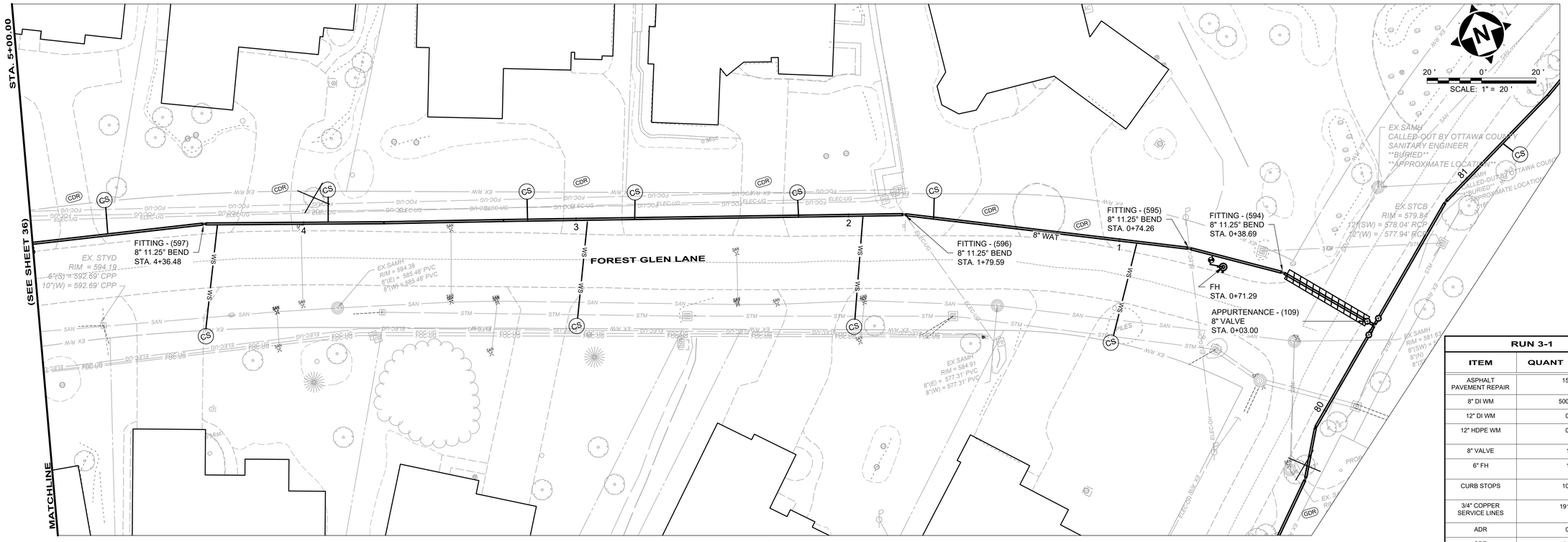
JOHNSON ISLAND WATER MAIN EXTENSION

RUN 2-17

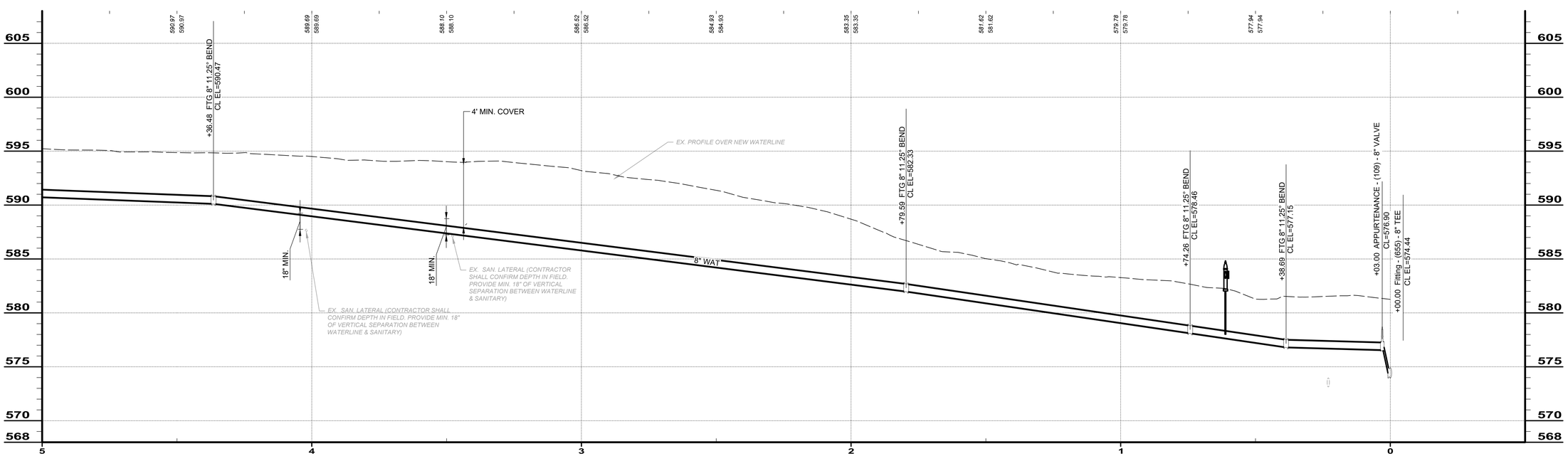
PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 2-17
SHEET 35 OF 51

H:\2021\210900\DWG\SHEETS\C_210900 - 02 RUN_15-17.DWG - RUN 2-17 - 11/25/2025 4:57:09 PM - QUINN BAKER



PLAN - WAT RUN 3-1

RUN 3-1		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	15	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	1	EA
6" FH	1	EA
CURB STOPS	10	EA
3/4" COPPER SERVICE LINES	191	LF
ADR	0	SY
CDR	11	SY
GDR	0	SY
TREE REMOVAL	1	EA
SEEDING AND MULCHING	518	SY



PIPE RUN 3-1

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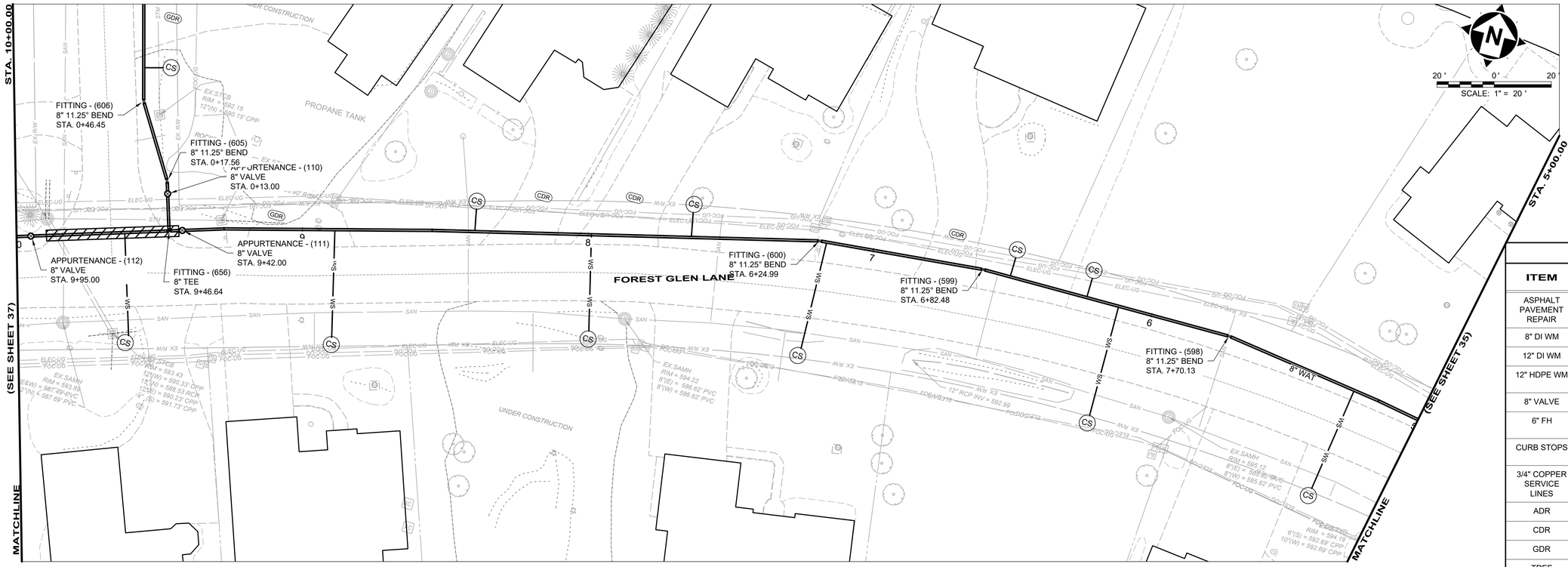
JOHNSON ISLAND WATER MAIN EXTENSION

RUN 3-1

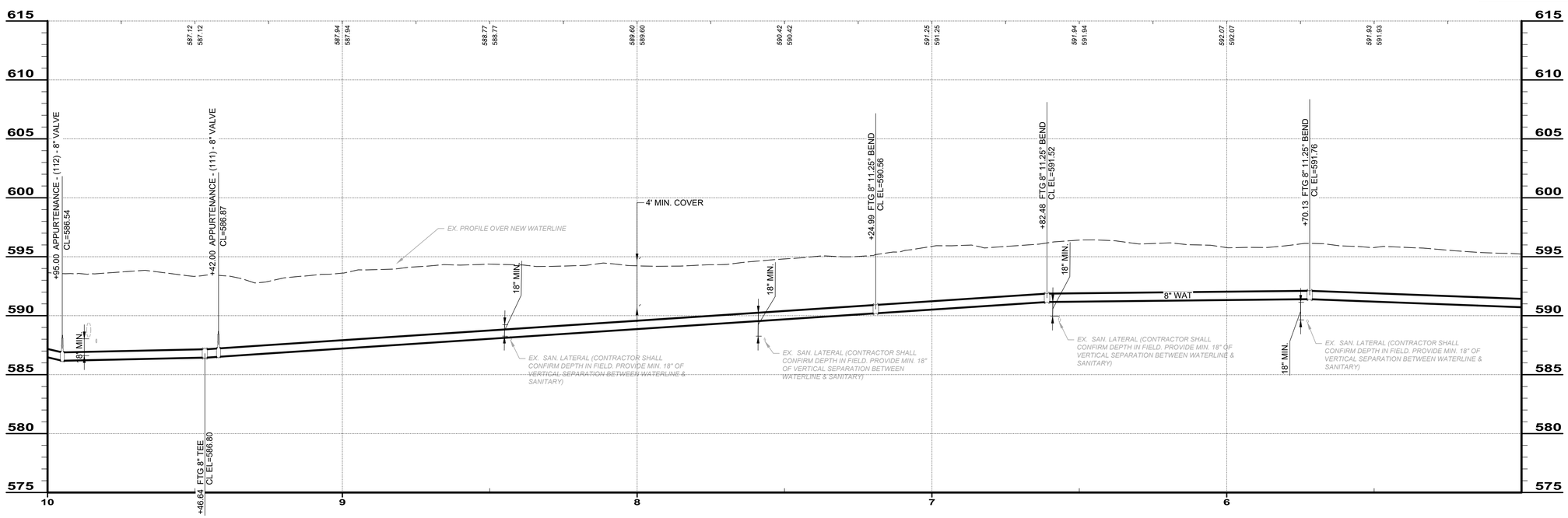
PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 3-1
SHEET 36 OF 51

H:\2021\210900\DWG\SHEETS\C_210900 - 03 RUN_01-3A2.DWG - RUN 3-1 - 11/25/2025 4:59:24 PM - QUINN BAKER



PLAN - WAT RUN 3-2

RUN 3-2		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	21	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	2	EA
6" FH	0	EA
CURB STOPS	10	EA
3/4" COPPER SERVICE LINES	249	LF
ADR	0	SY
CDR	8	SY
GDR	4	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	504	SY



PIPE RUN 3-2

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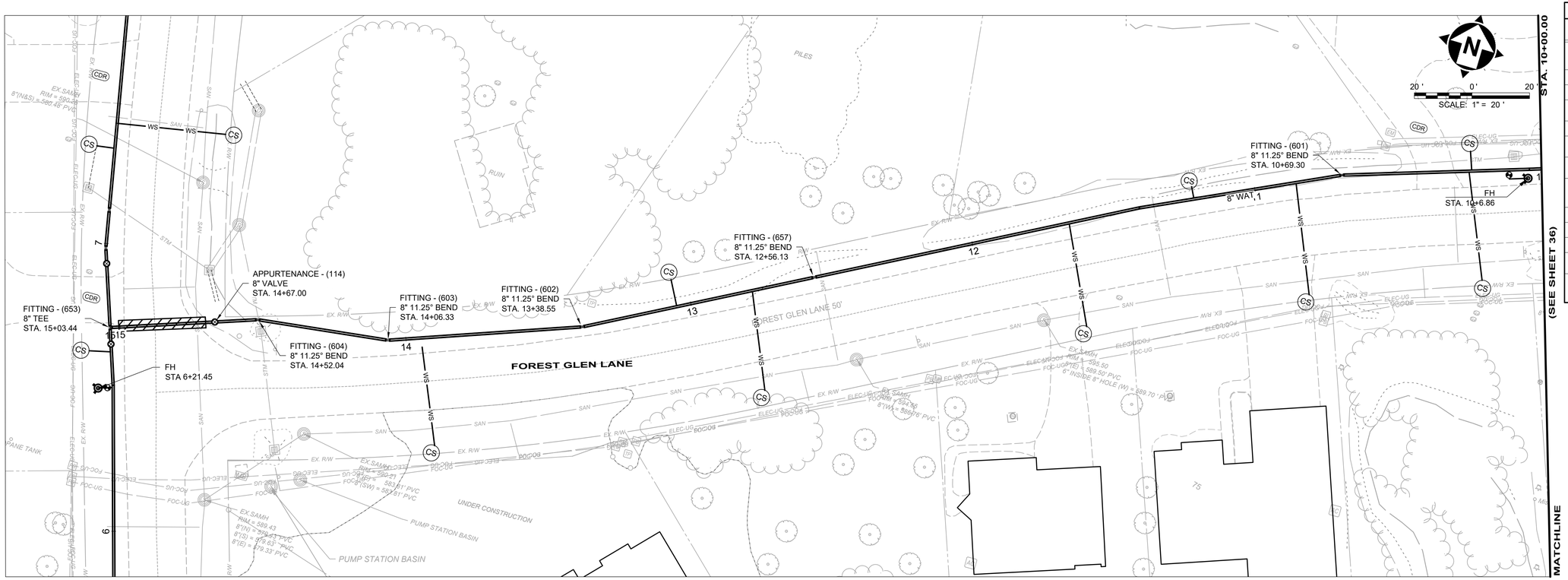
JOHNSON ISLAND WATER MAIN EXTENSION

RUN 3-2

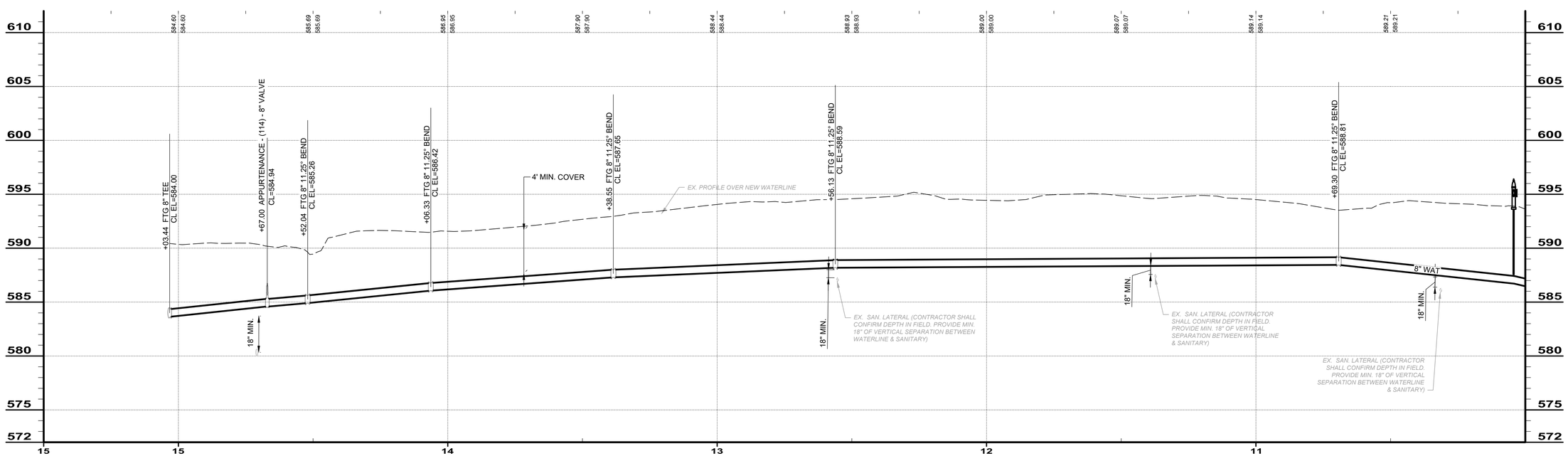
PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 3-2
SHEET 37 OF 51

H:\2021\210900\DWG\SHEETS\C_210900 - 03 RUN_01-3A2.DWG - RUN 3-2 - 11/25/2025 4:59:24 PM - QUINN BAKER



PLAN - WAT RUN 3-3

RUN 3-3		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	14	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	1	EA
6" FH	1	EA
CURB STOPS	8	EA
3/4" COPPER SERVICE LINES	204	LF
ADR	0	SY
CDR	2	SY
GDR	0	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	522	SY



PIPE RUN 3-3

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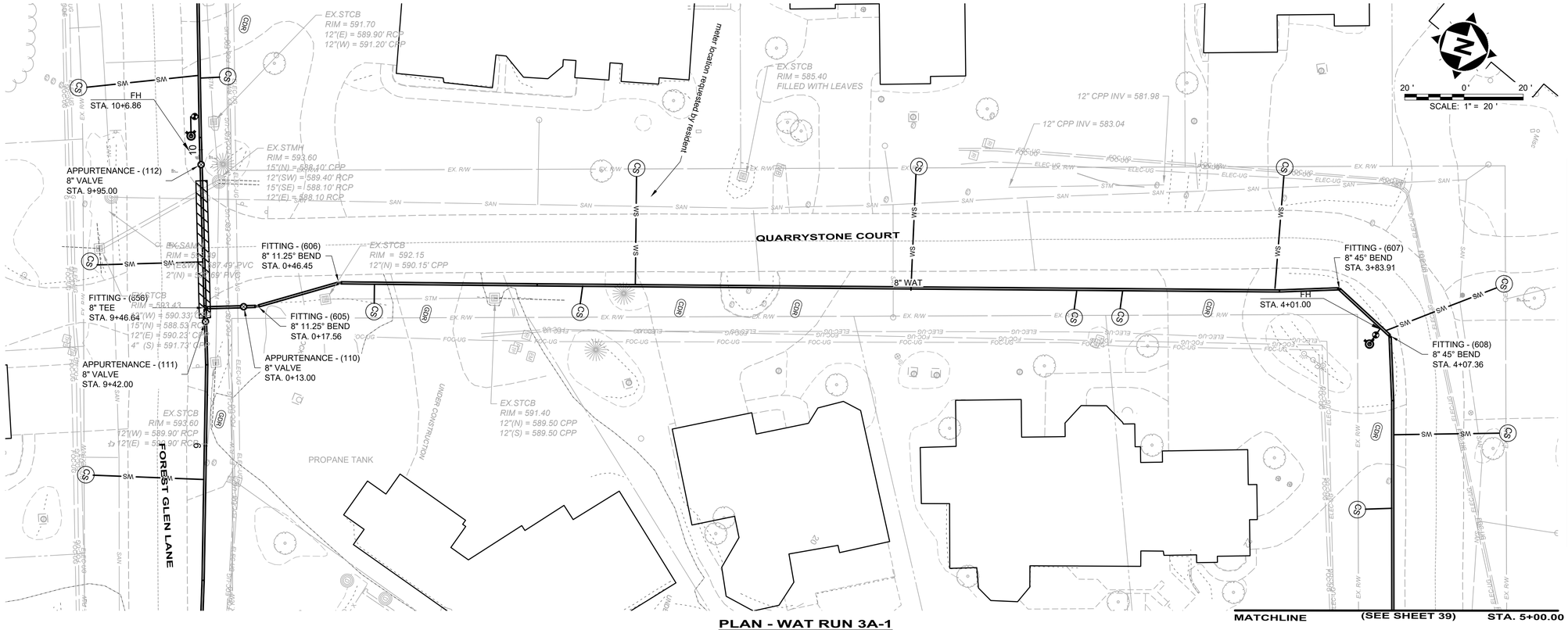
JOHNSON ISLAND WATER MAIN EXTENSION

RUN 3-3

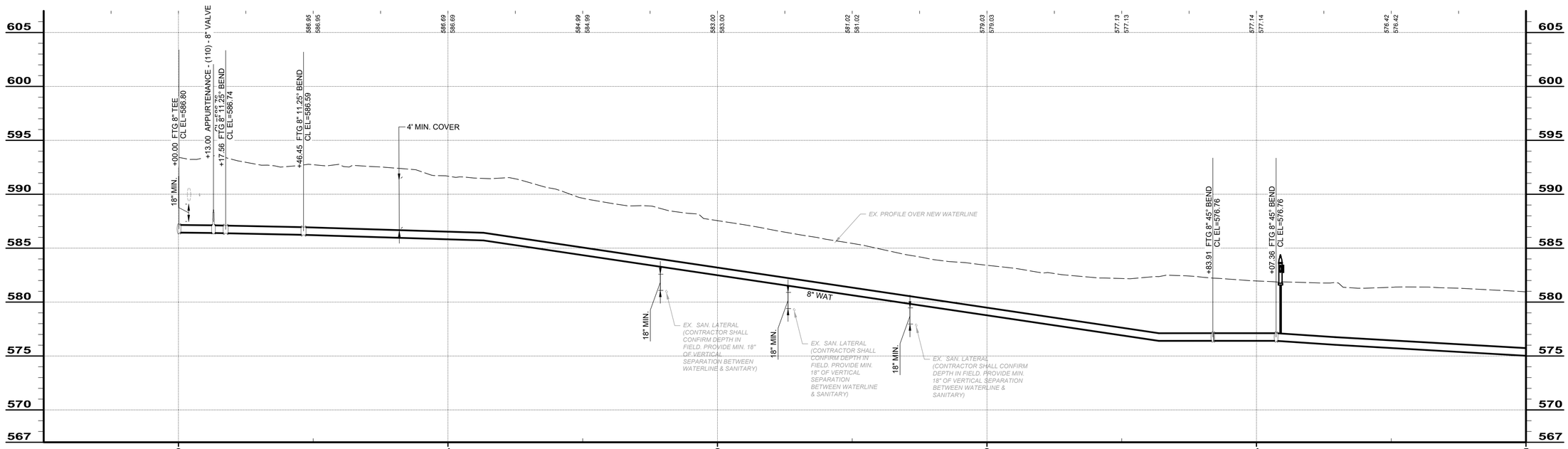
PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 3-3
SHEET 38 OF 51

H:\2021\210900\DWG\SHEETS\C_210900 - 03 RUN_51-3A2.DWG - RUN 3-3 - 11/25/2025 4:59:24 PM - QUINN BAKER



PLAN - WAT RUN 3A-1

RUN 3A-1		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	1	EA
6" FH	1	EA
CURB STOPS	10	EA
3/4" COPPER SERVICE LINES	222	LF
ADR	0	SY
CDR	10	SY
GDR	3	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	556	SY



PIPE RUN 3A-1

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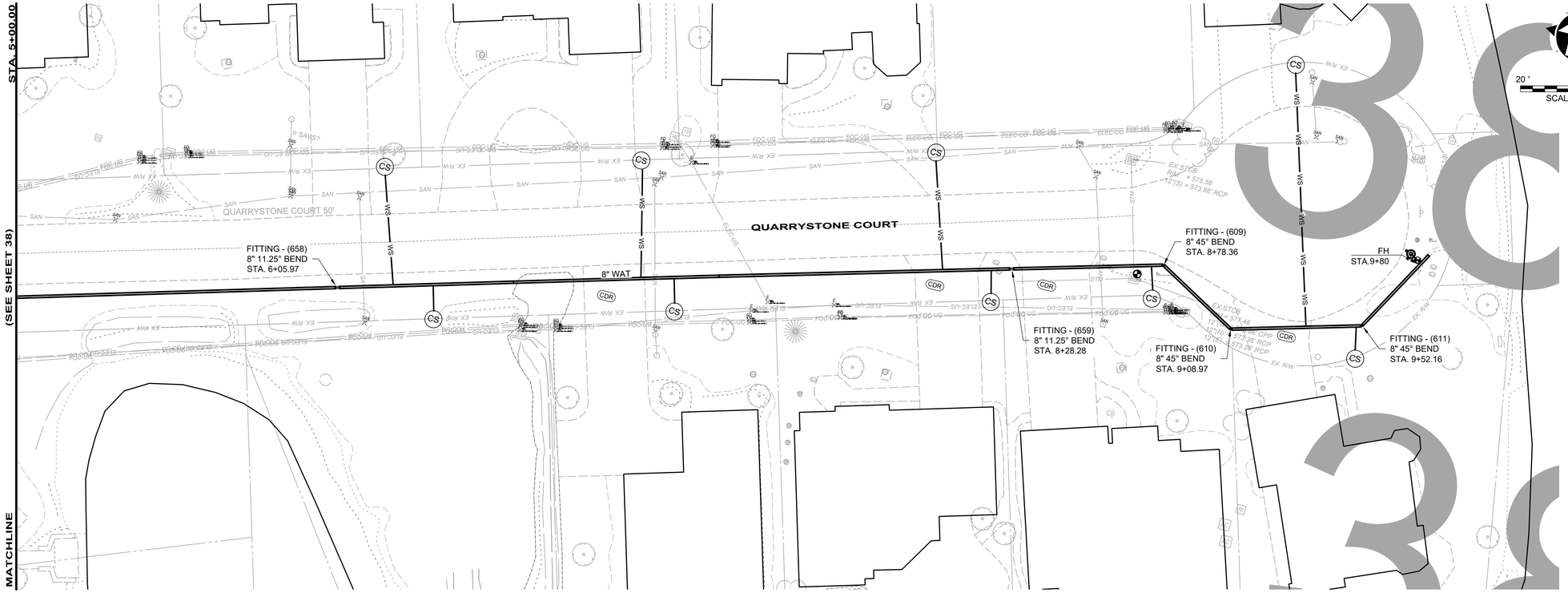
JOHNSON ISLAND WATER MAIN EXTENSION

RUN 3A-1

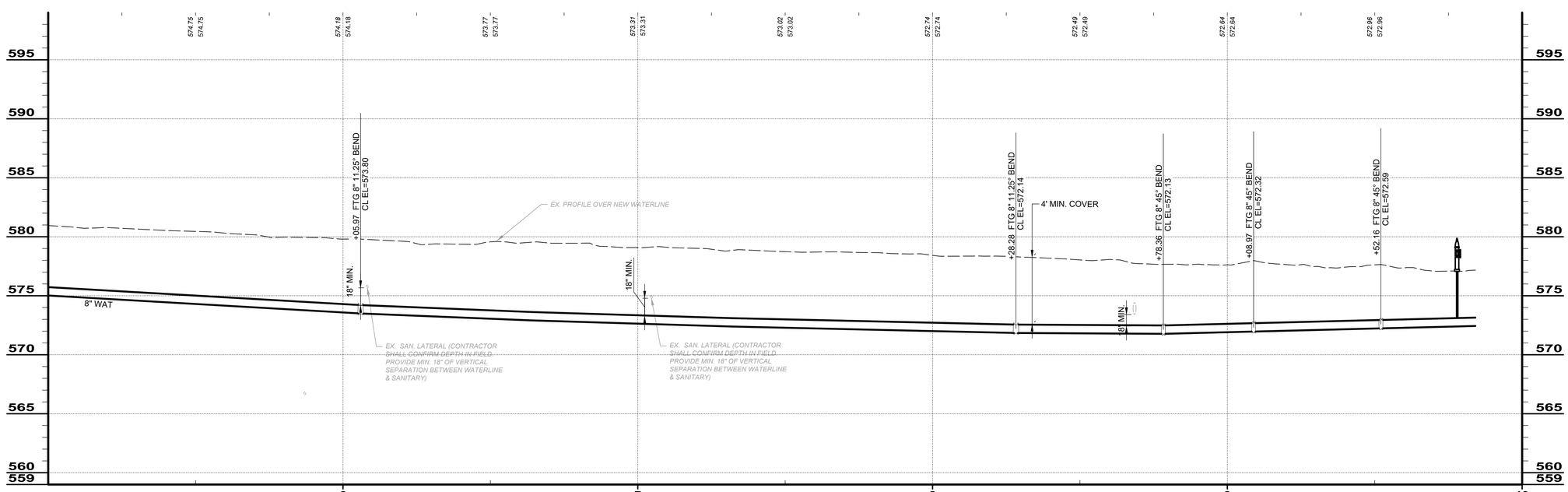
PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 3A-1
SHEET 39 OF 51

H:\2021\210900\DWG\SHEETS\C_210900 - 03 RUN_01-3A2.DWG - RUN 3A-1 - 11/25/2025 4:59:24 PM - QUINN BAKER



PLAN - WAT RUN 3A-2

RUN 3A-2		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	485	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	0	EA
6" FH	1	EA
CURB STOPS	9	EA
3/4" COPPER SERVICE LINES	231	LF
ADR	0	SY
CDR	9	SY
GDR	0	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	539	SY



PIPE RUN 3A-2

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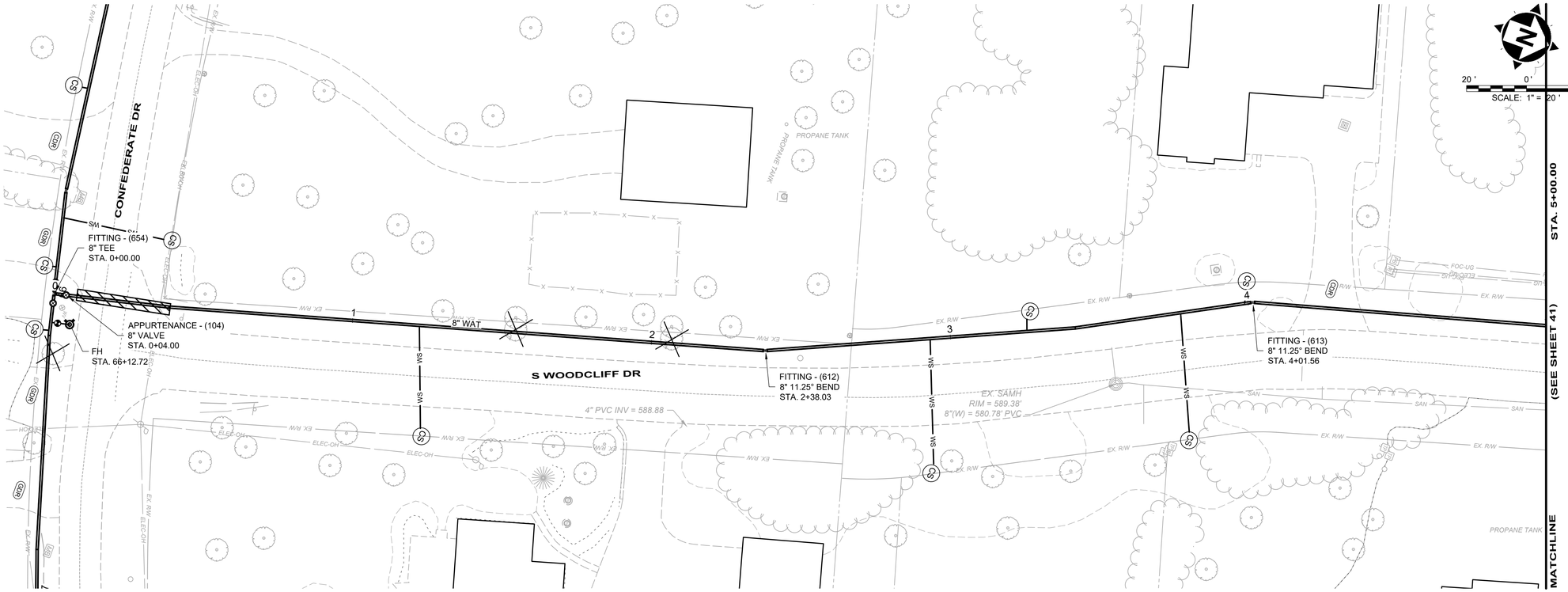
JOHNSON ISLAND WATER MAIN EXTENSION

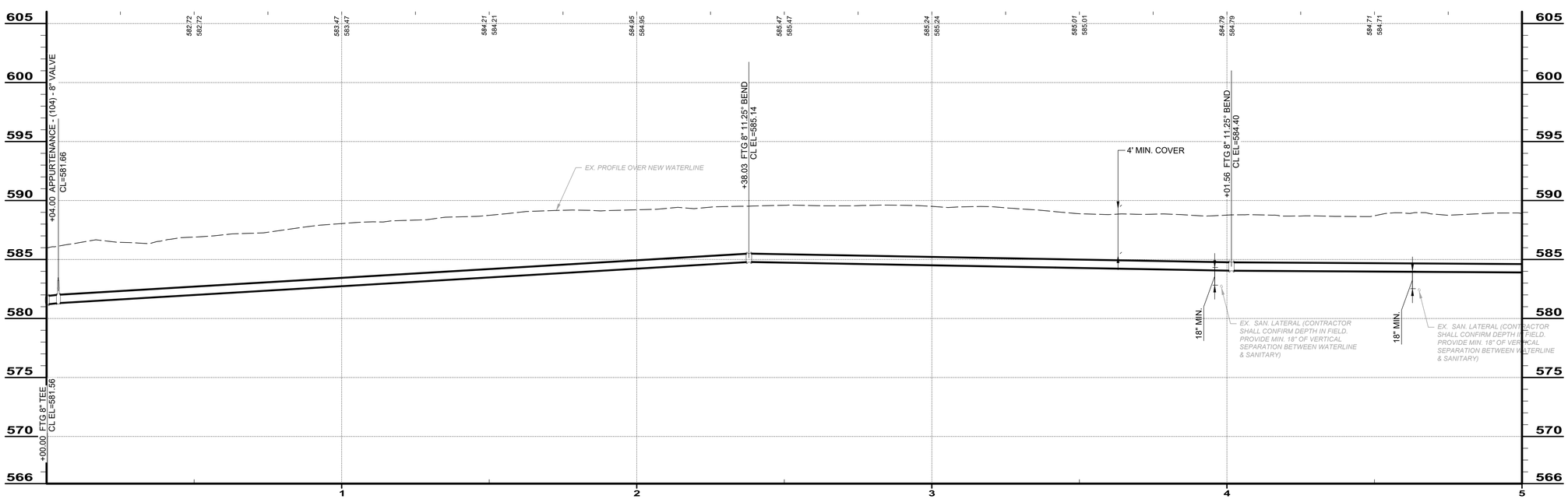
RUN 3A-2

PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 3A-2
SHEET 40 OF 51

H:\2021\210900\DWG\SHEETS\C_210900 - 03 RUN_01-3A2.DWG - RUN 3A-2 - 11/25/2025 4:59:24 PM - QUINN BAKER



PLAN - WAT RUN 4-1



PIPE RUN 4-1

RUN 4-1		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	14	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	0	EA
6" FH	0	EA
CURB STOPS	5	EA
3/4" COPPER SERVICE LINES	124	LF
ADR	0	SY
CDR	3	SY
GDR	0	SY
TREE REMOVAL	2	EA
SEEDING AND MULCHING	521	SY

BID SET

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DESIGNED BY:	QDB
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CHECKED BY:	DEB

JOHNSON ISLAND WATER MAIN EXTENSION

RUN 4-1

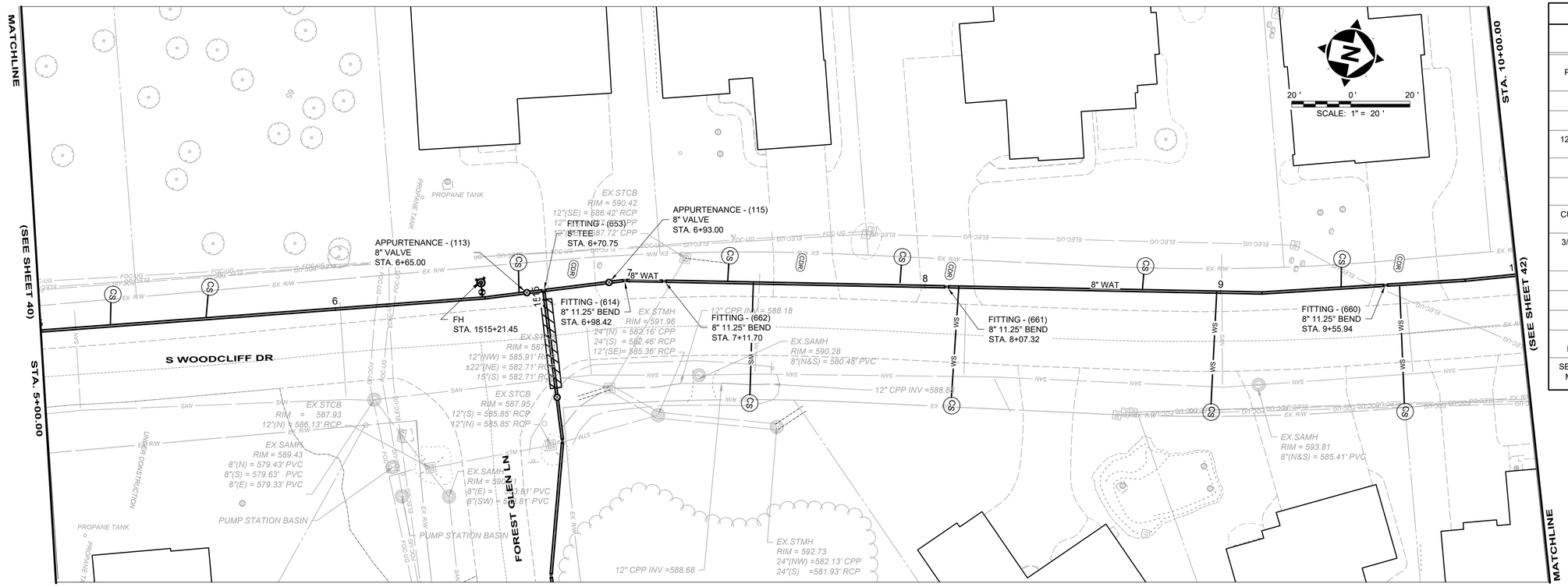
PROJECT NO. 210900

DISCIPLINE: CIVIL

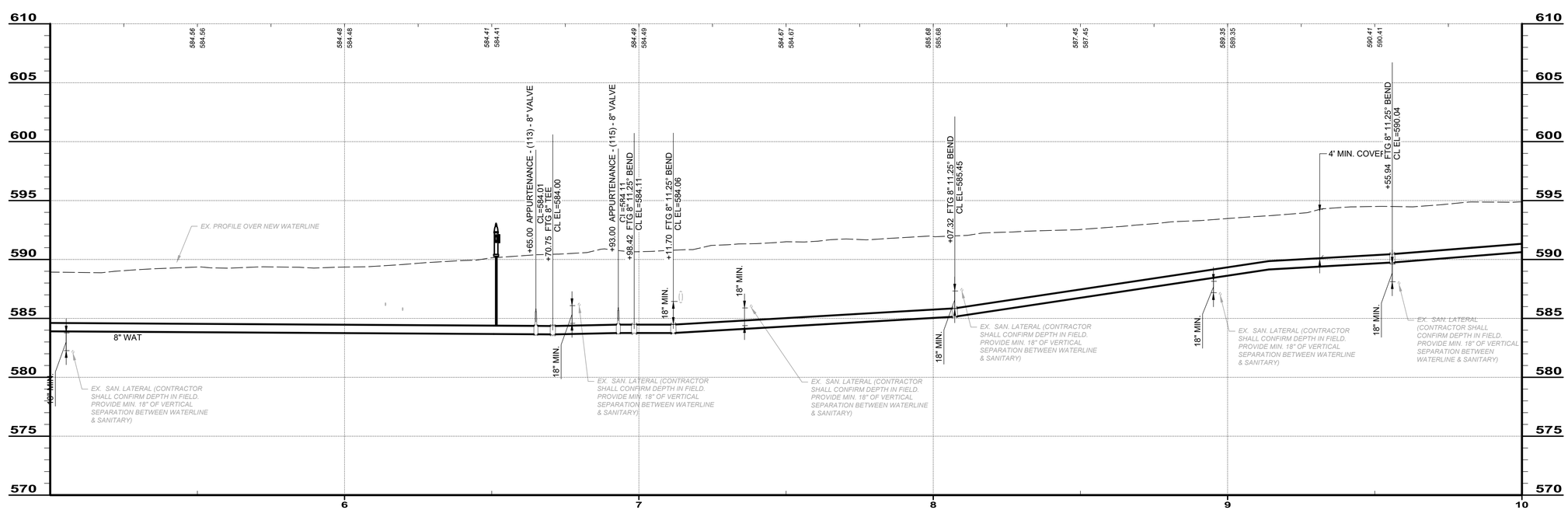
SHEET NAME: RUN 4-1

SHEET 41 OF 51

H:\2021\210900\DWG\SHEETS\C_210900 - 04 RUN_01-09.DWG - RUN 4-1 - 11/25/2025 4:58:18 PM - QUINN BAKER



PLAN - WAT RUN 4-2



PIPE RUN 4-2

RUN 4-2		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	0	EA
6" FH	0	EA
CURB STOPS	11	EA
3/4" COPPER SERVICE LINES	199	LF
ADR	0	SY
CDR	8	SY
GDR	0	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	470	SY

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ISSUED FOR:	BID
ISSUE DATE:	11/24/2025
SCALE:	AS SHOWN
DESIGNED BY:	QDB
DRAWN BY:	QDB
CHECKED BY:	DEB

JOHNSON ISLAND WATER MAIN EXTENSION

RUN 4-2

PROJECT NO. 210900

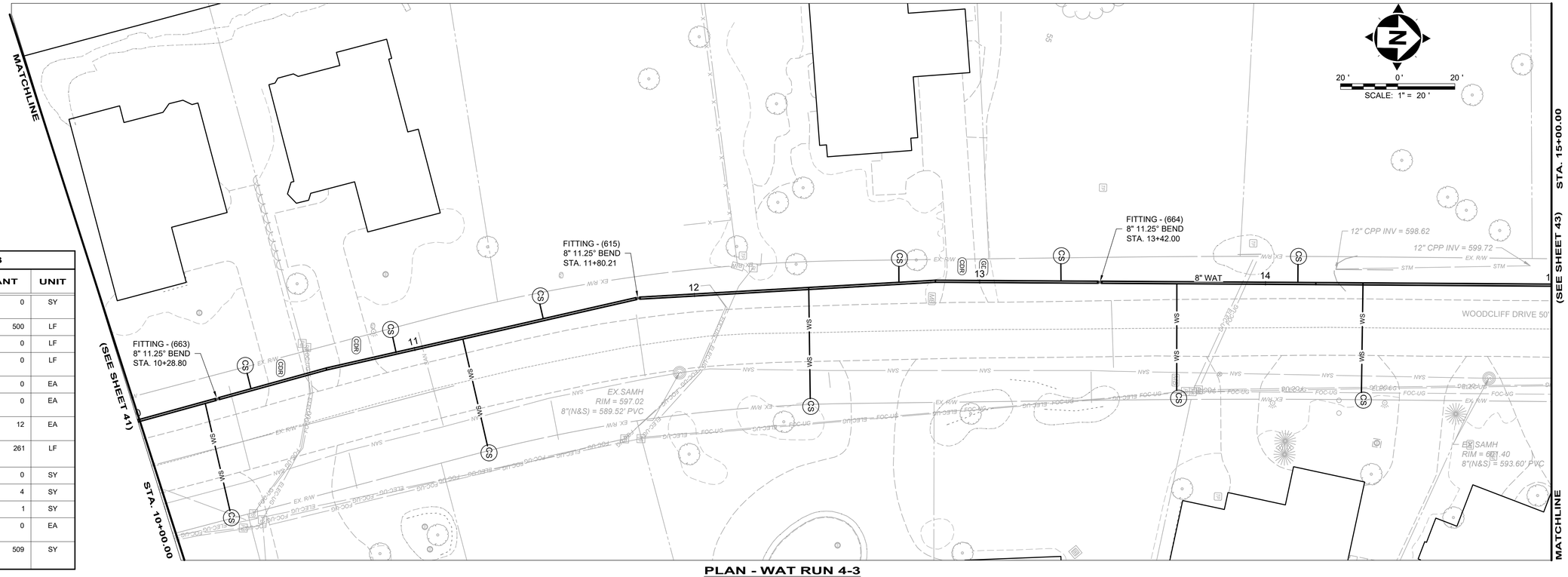
DISCIPLINE CIVIL

SHEET NAME RUN 4-2

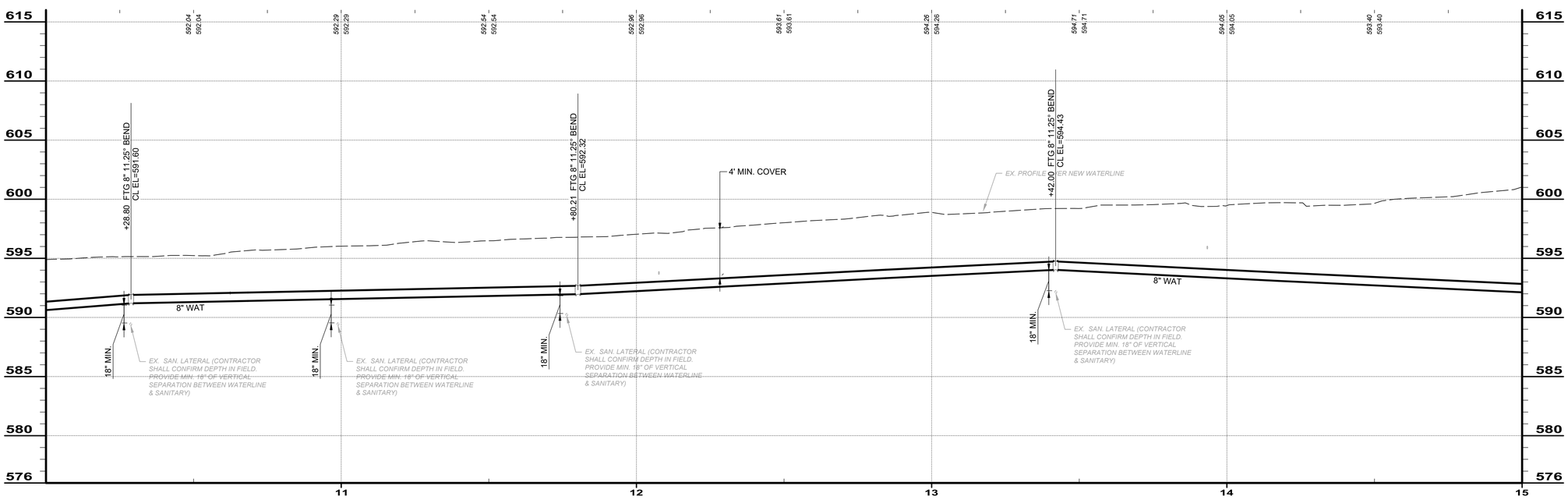
SHEET 42 OF 51

H:\2021\210900\DWG\SHEETS\C_210900 - 04 RUN_01-09.DWG - RUN 4-2 - 11/25/2025 4:58:18 PM - QUINN BAKER

RUN 4-3		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	0	EA
6" FH	0	EA
CURB STOPS	12	EA
3/4" COPPER SERVICE LINES	261	LF
ADR	0	SY
CDR	4	SY
GDR	1	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	509	SY



PLAN - WAT RUN 4-3



PIPE RUN 4-3

BID SET

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NO	REVISION	DATE

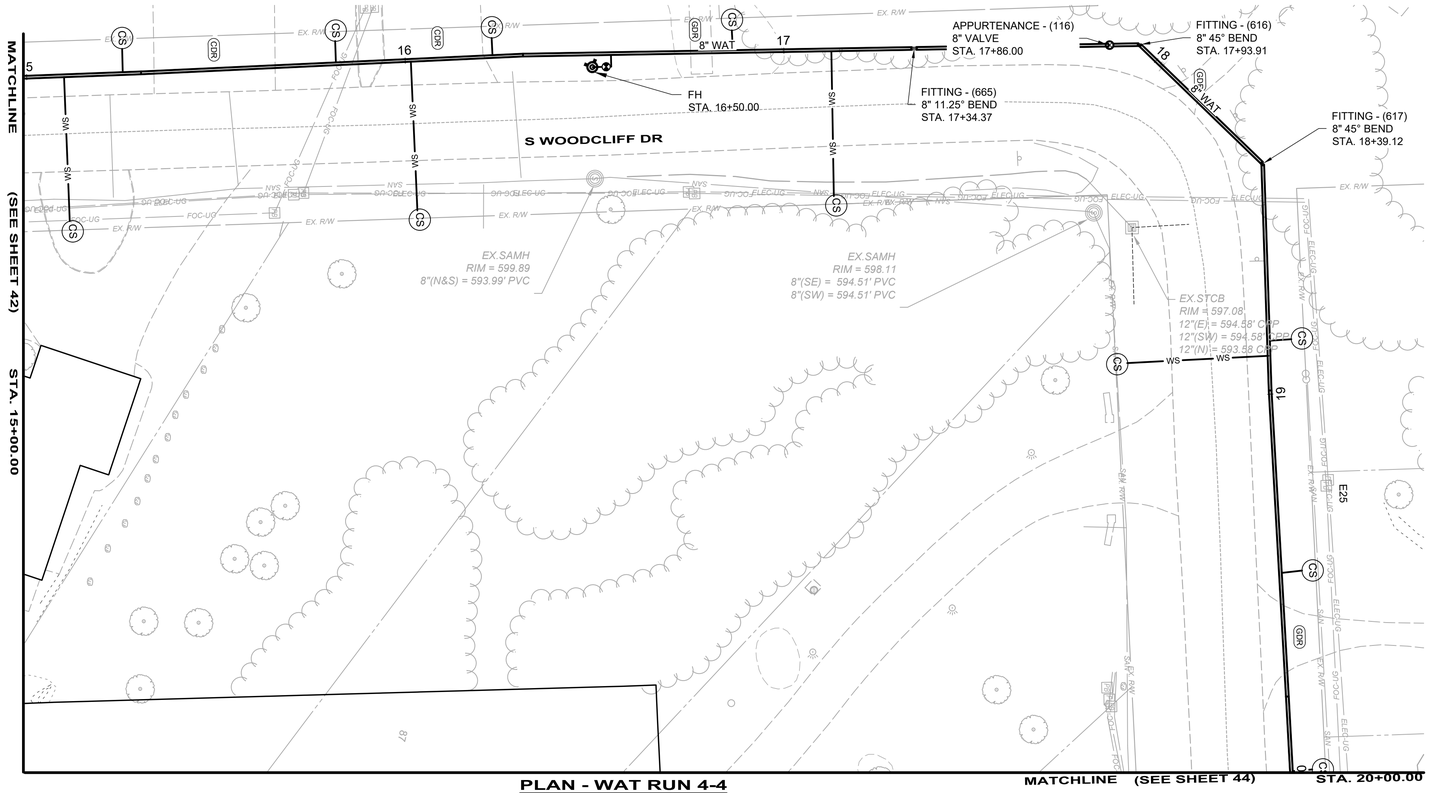
ISSUED FOR:	BID
ISSUE DATE:	11/24/2025
SCALE:	AS SHOWN
DESIGNED BY:	QDB
DRAWN BY:	QDB
CHECKED BY:	DEB

JOHNSON ISLAND WATER MAIN EXTENSION

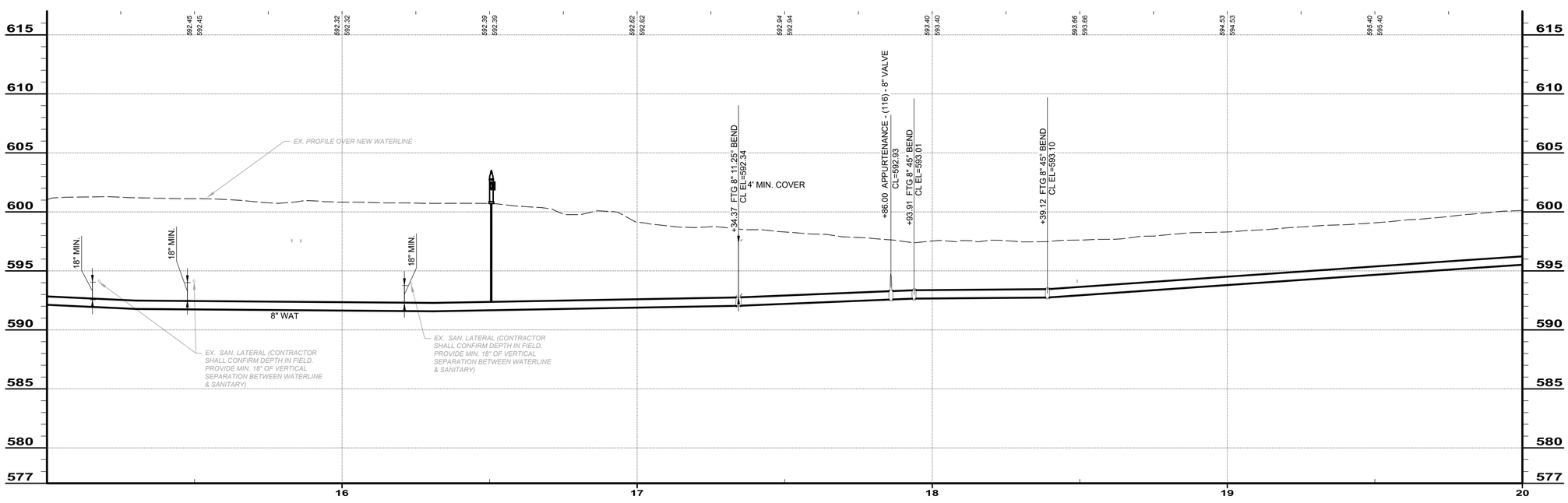
RUN 4-3

PROJECT NO.	
210900	
DISCIPLINE	
CIVIL	
SHEET NAME	
RUN 4-3	
SHEET	OF
43	51

H:\2021\210900\DWG\SHEETS\C_210900 - 04 RUN_01-09.DWG - RUN 4-3 - 11/25/2025 4:58:18 PM - QUINN BAKER



PLAN - WAT RUN 4-4



PIPE RUN 4-4

SCALE: 1" = 20 '

RUN 4-4		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	1	EA
6" FH	1	EA
CURB STOPS	9	EA
3/4" COPPER SERVICE LINES	147	LF
ADR	0	SY
CDR	54	SY
GDR	29	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	457	SY

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NO	REVISION	DATE

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ISSUE DATE:	11/24/2025
SCALE:	AS SHOWN
DESIGNED BY:	QDB
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CHECKED BY:	DEB

JOHNSON ISLAND WATER MAIN EXTENSION

RUN 4-4

PROJECT NO. 210900

DISCIPLINE CIVIL

SHEET NAME RUN 4-4

SHEET 44 OF 51

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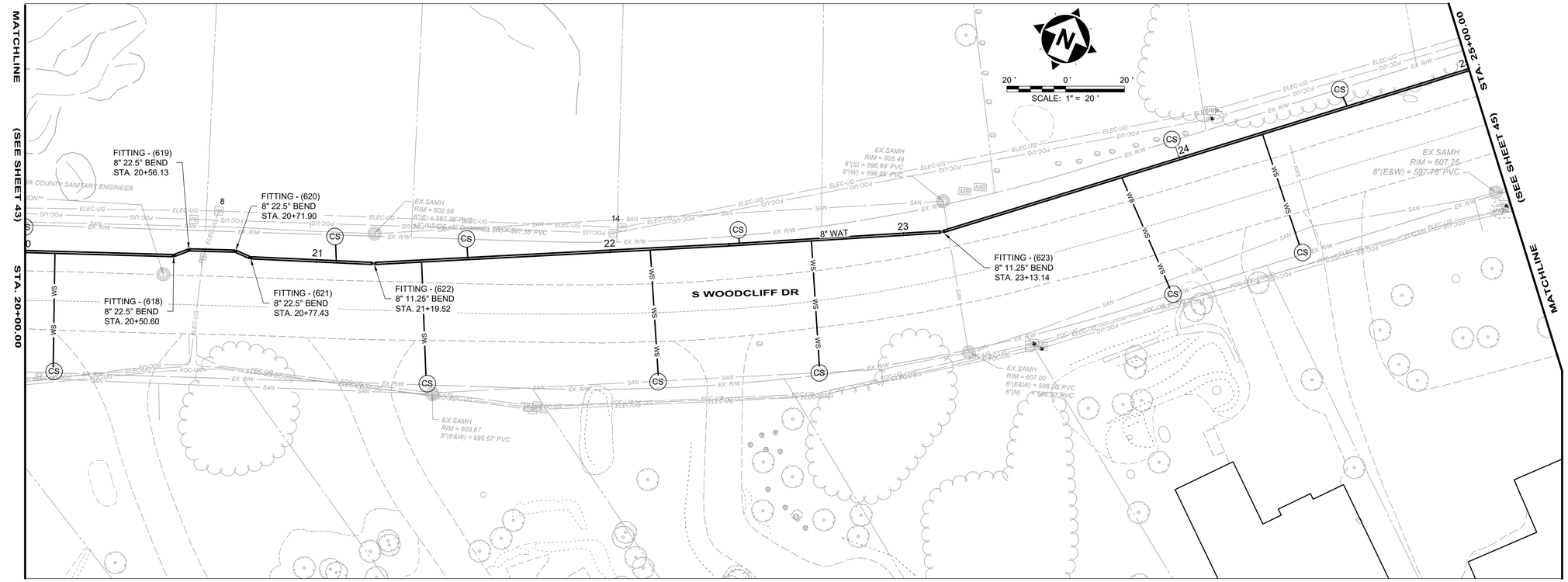
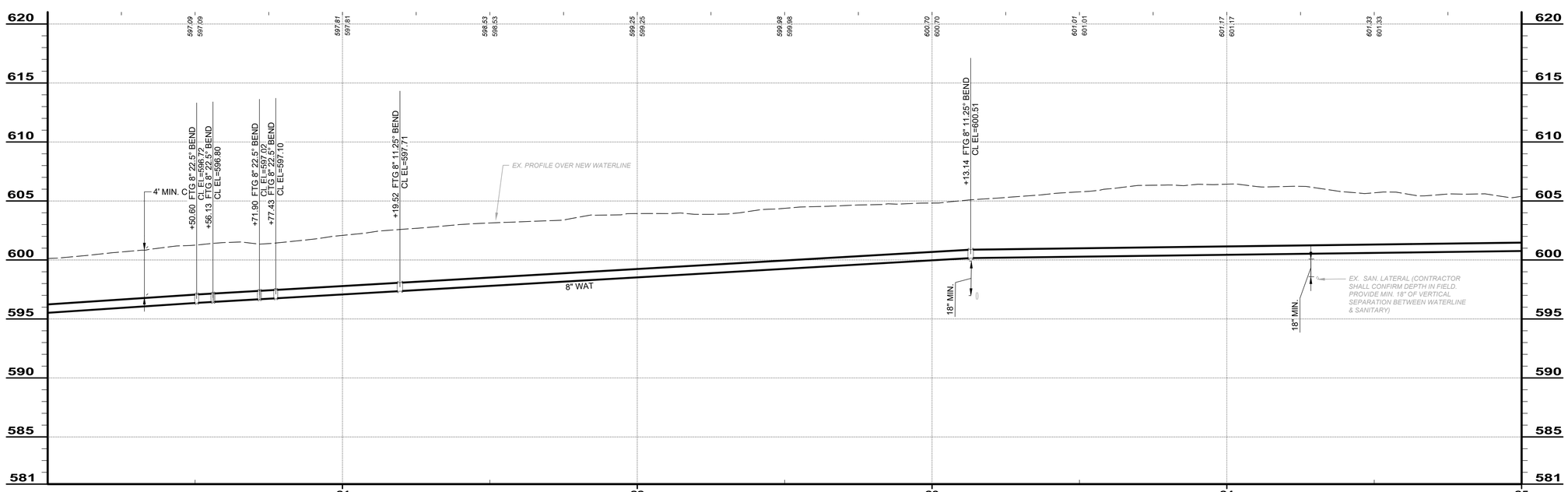


PLAN - WAT RUN 4-5



PIPE RUN 4-5

RUN 4-5		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	0	EA
6" FH	0	EA
CURB STOPS	10	EA
3/4" COPPER SERVICE LINES	250	LF
ADR	0	SY
CDR	0	SY
GDR	0	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	556	SY
2" COPPER SERVICE LINES	6	LF

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ISSUE DATE: 11/24/2025
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JOHNSON ISLAND WATER MAIN EXTENSION

RUN 4-5

PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 4-5
SHEET 45 OF 51

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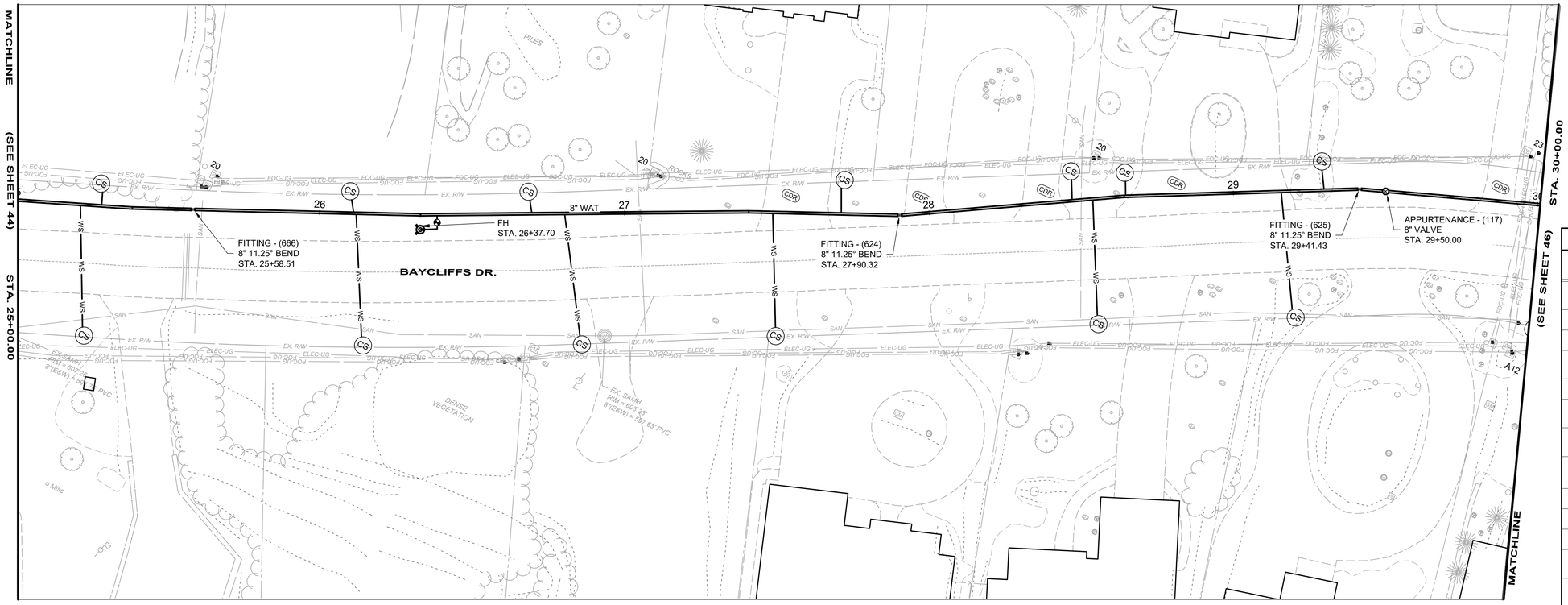
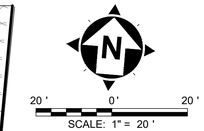
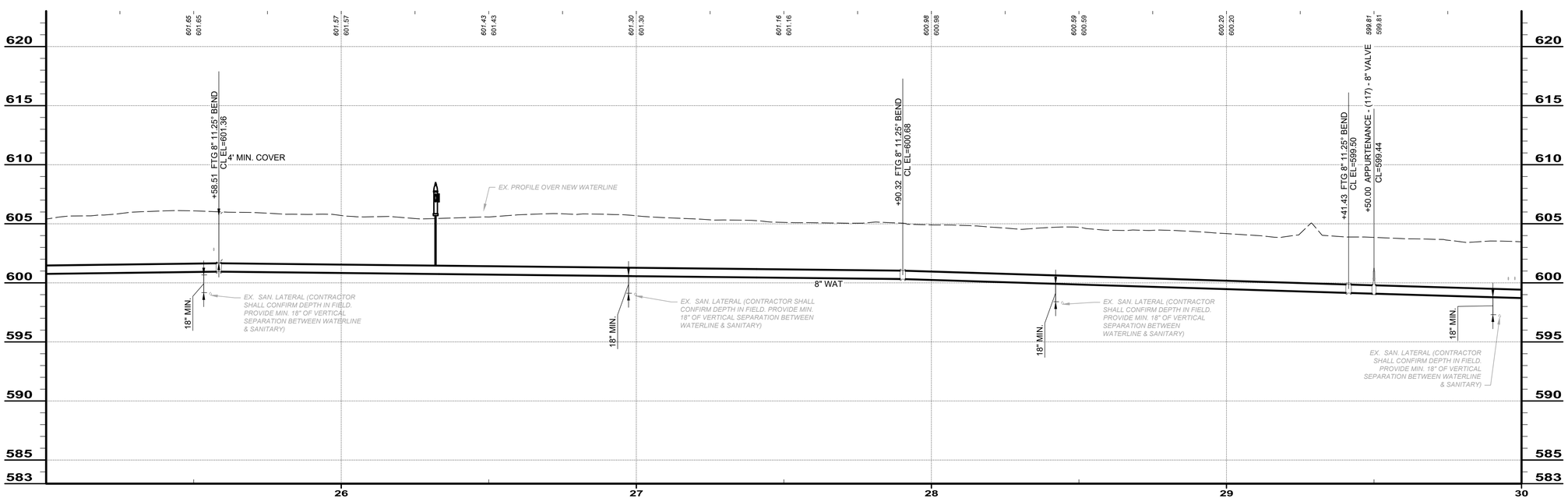


PLAN - WAT RUN 4-6



RUN 4-6		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	0	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	1	EA
6" FH	1	EA
CURB STOPS	13	EA
3/4" COPPER SERVICE LINES	272	LF
ADR	0	SY
CDR	12	SY
GDR	0	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	428	SY



PIPE RUN 4-6

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ISSUED FOR:	BID
ISSUE DATE:	11/24/2025
SCALE:	AS SHOWN
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CHECKED BY:	DEB

JOHNSON ISLAND WATER MAIN EXTENSION

RUN 4-6

PROJECT NO. 210900

DISCIPLINE CIVIL

SHEET NAME RUN 4-6

SHEET 46 OF 51

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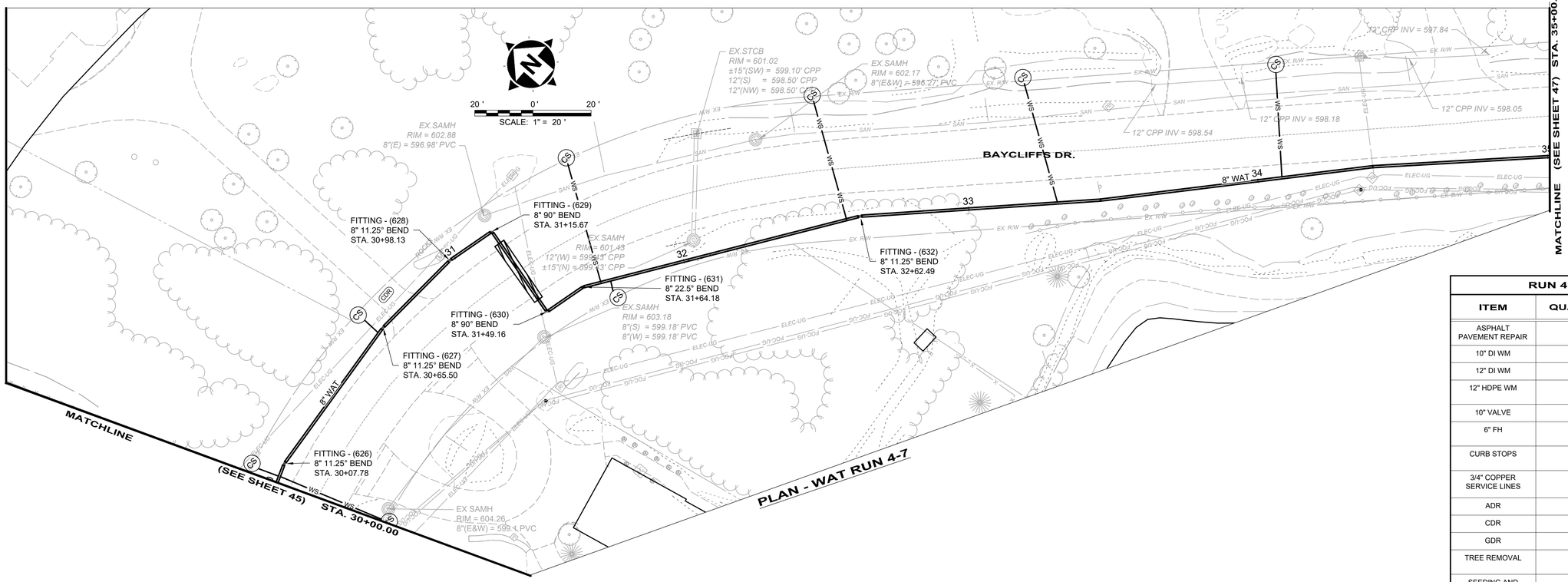
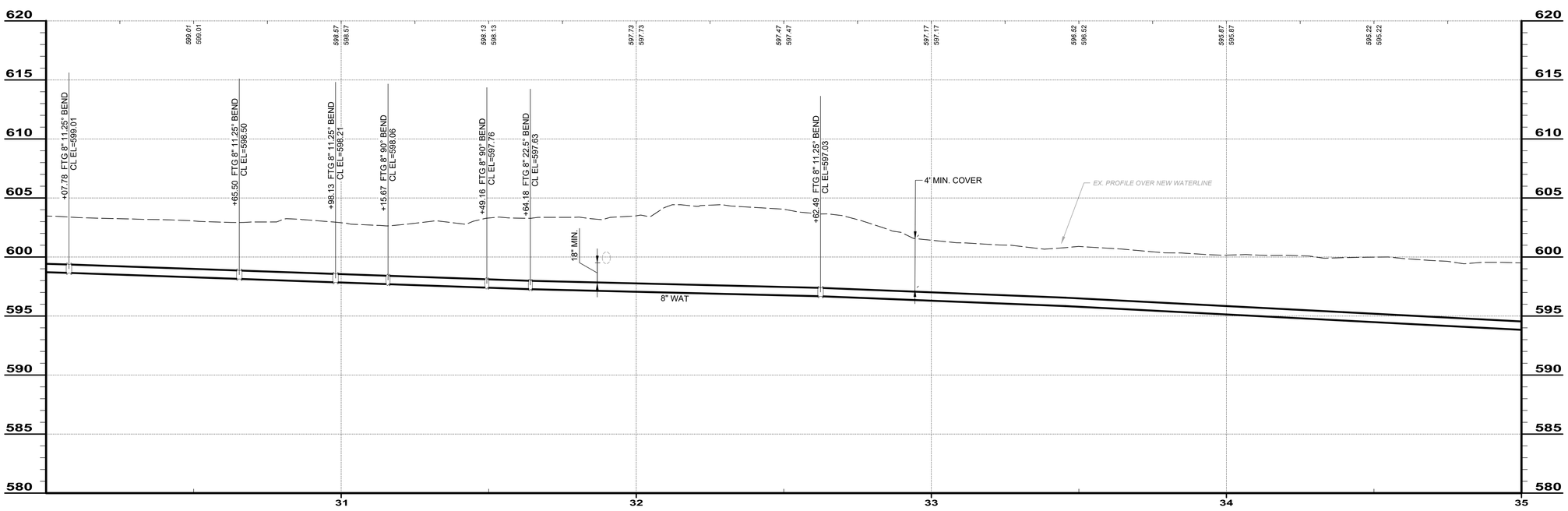


RUN 4-7		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	10	SY
10" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
10" VALVE	0	EA
6" FH	0	EA
CURB STOPS	5	EA
3/4" COPPER SERVICE LINES	91	LF
ADR	0	SY
CDR	2	SY
GDR	0	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	517	SY



PIPE RUN 4-7

BID SET

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ISSUED FOR:	BID
ISSUE DATE:	11/24/2025
SCALE:	AS SHOWN
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CHECKED BY:	DEB

JOHNSON ISLAND WATER MAIN EXTENSION

47RUN 4-7

PROJECT NO. 210900

DISCIPLINE CIVIL

SHEET NAME RUN 4-7

SHEET 47 OF 51

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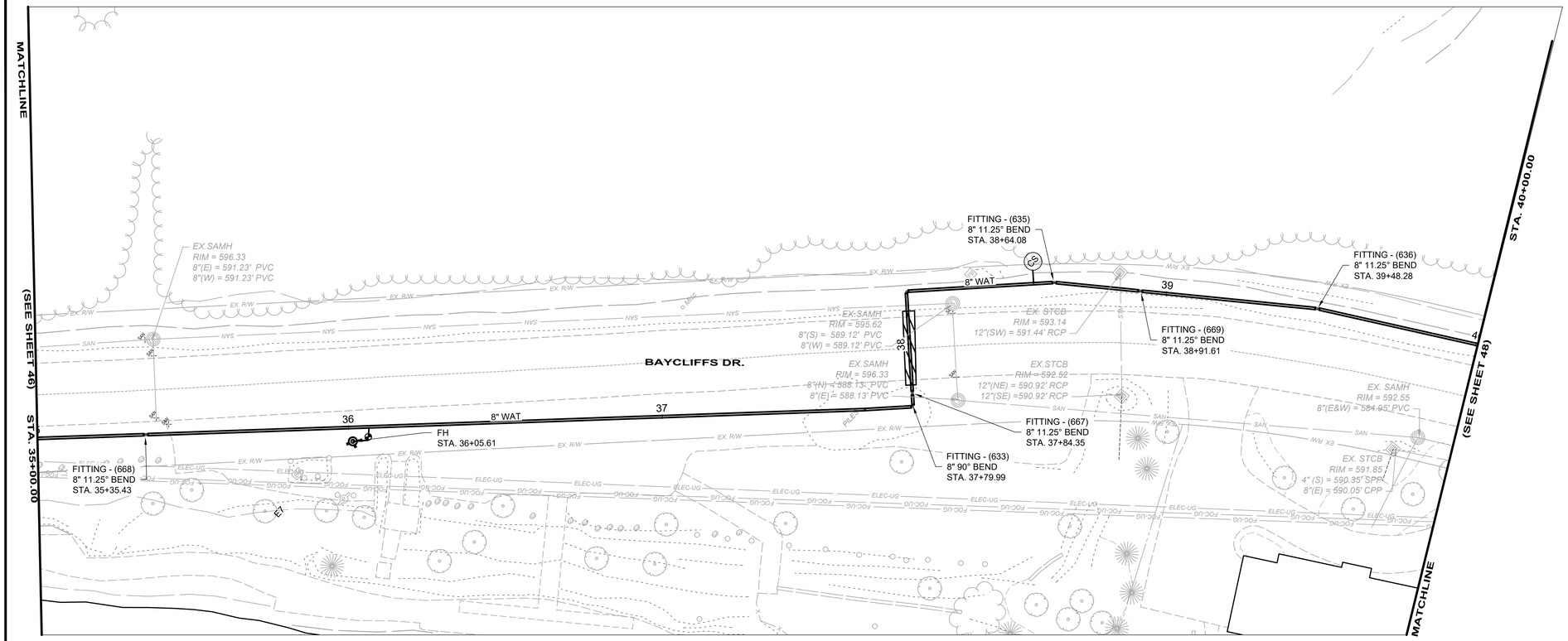
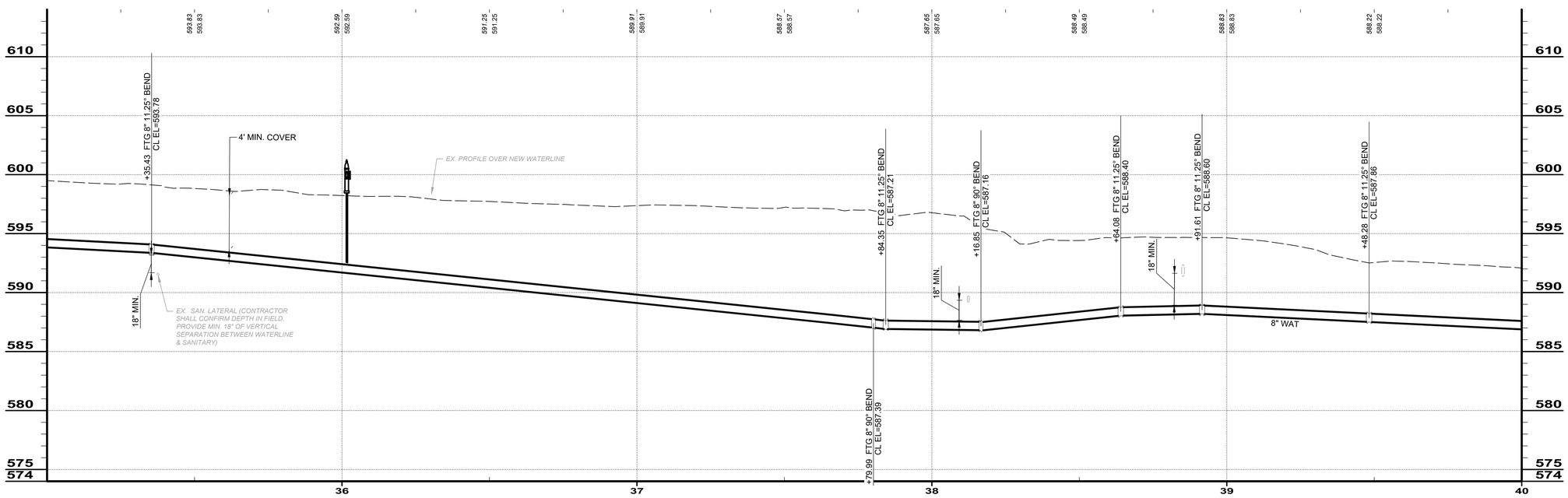


PLAN - WAT RUN 4-8



PIPE RUN 4-8

20 ' 0 ' 20 '
SCALE: 1" = 20 '

RUN 4-8		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	10	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	0	EA
6" FH	1	EA
CURB STOPS	0	EA
3/4" COPPER SERVICE LINES	0	LF
ADR	0	SY
CDR	0	SY
GDR	0	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	530	SY

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JOHNSON ISLAND WATER MAIN EXTENSION

RUN 4-8

PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 4-8
SHEET 48 OF 51

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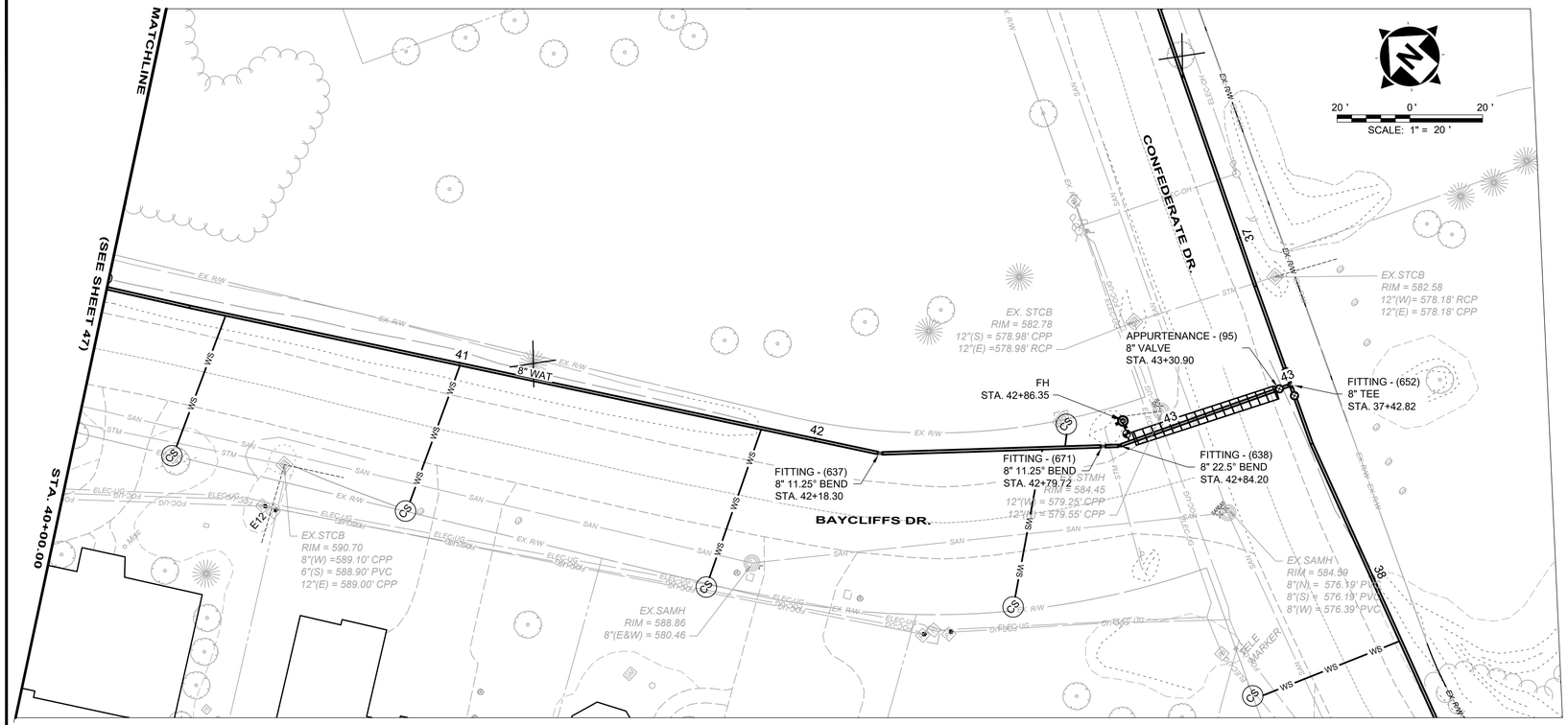
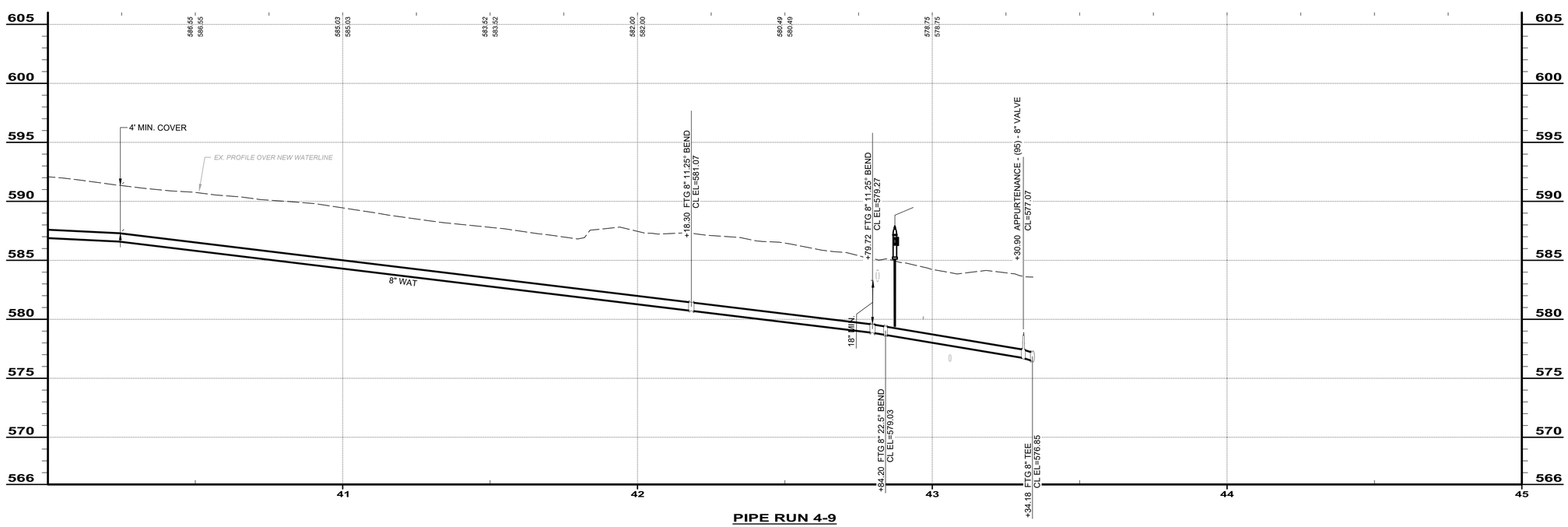


PLAN - WAT RUN 4-9

RUN 4-9		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	18	SY
8" DI WM	334	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	0	EA
6" FH	1	EA
CURB STOPS	5	EA
3/4" COPPER SERVICE LINES	166	LF
ADR	0	SY
CDR	0	SY
GDR	0	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	325	SY



PIPE RUN 4-9

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ISSUE DATE:	11/24/2025
SCALE:	AS SHOWN
DESIGNED BY:	QDB
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CHECKED BY:	DEB

JOHNSON ISLAND WATER MAIN EXTENSION

RUN 4-9

PROJECT NO. 210900

DISCIPLINE CIVIL

SHEET NAME RUN 4-9

SHEET 49 OF 51

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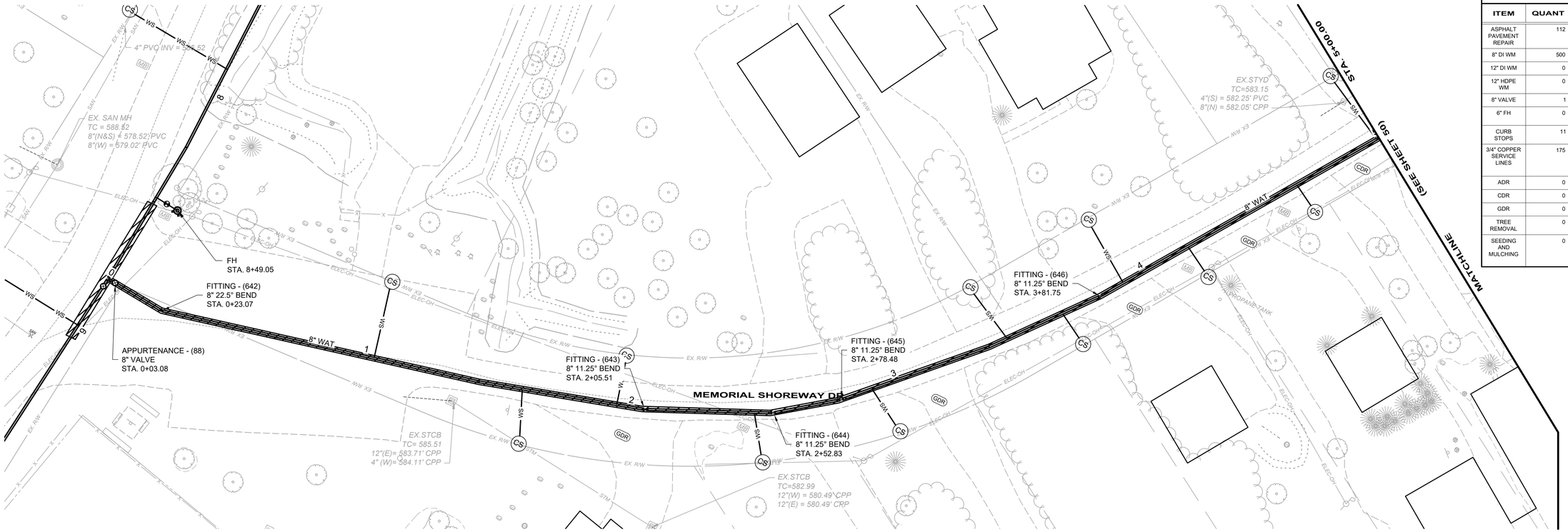
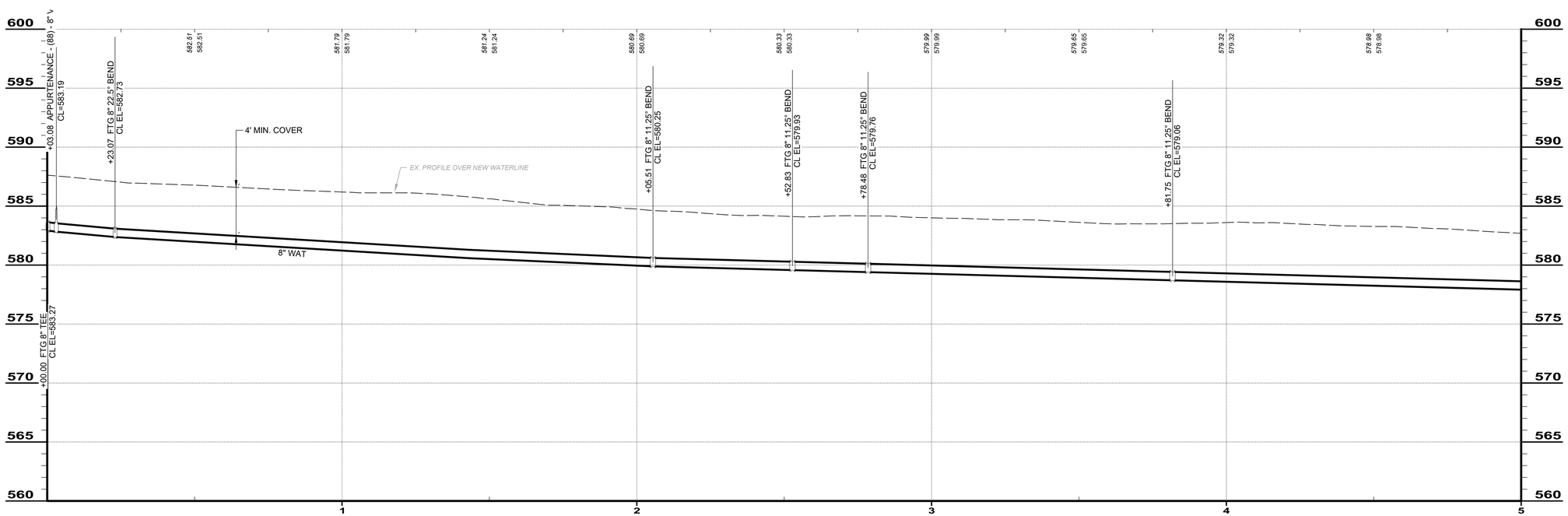


PLAN - WAT RUN 5-1



PIPE RUN 5-1

RUN 5-1		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	112	SY
8" DI WM	500	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	1	EA
6" FH	0	EA
CURB STOPS	11	EA
3/4" COPPER SERVICE LINES	175	LF
ADR	0	SY
CDR	0	SY
GDR	0	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	0	SY

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NO	REVISION	DATE

ISSUED FOR: BID
ISSUE DATE: 11/24/2025
SCALE: AS SHOWN
DESIGNED BY: QDB
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JOHNSON ISLAND WATER MAIN EXTENSION

RUN 5-1

PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 5-1
SHEET 50 OF 51

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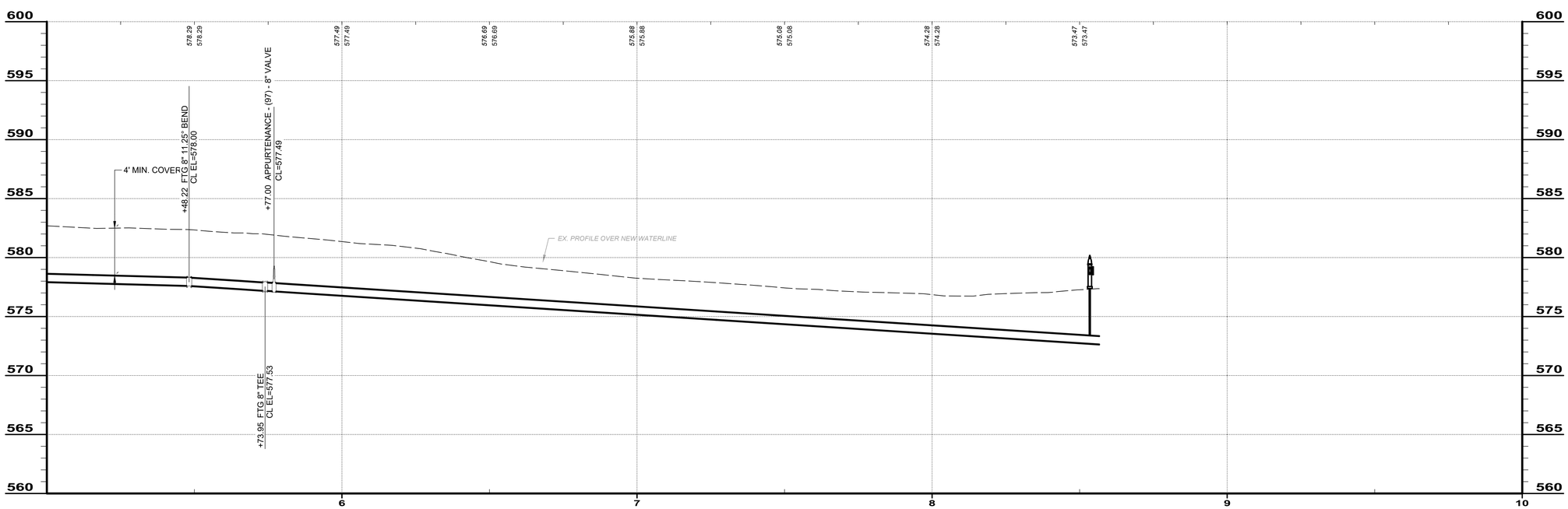
PLAN - WAT RUN 5-2



PIPE RUN 5-2

RUN 5-2		
ITEM	QUANT	UNIT
ASPHALT PAVEMENT REPAIR	80	SY
8" DI WM	357	LF
12" DI WM	0	LF
12" HDPE WM	0	LF
8" VALVE	1	EA
6" FH	1	EA
CURB STOPS	10	EA
3/4" COPPER SERVICE LINES	156	LF
ADR	0	SY
CDR	0	SY
GDR	0	SY
TREE REMOVAL	0	EA
SEEDING AND MULCHING	0	SY

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NO	REVISION	DATE

ISSUED FOR: BID
ISSUE DATE: 11/24/2025
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DESIGNED BY: QDB
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JOHNSON ISLAND WATER MAIN EXTENSION

RUN 5-2

PROJECT NO. 210900
DISCIPLINE CIVIL
SHEET NAME RUN 5-2
SHEET 51 OF 51

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