CITY of BENTONVILLE, ARKANSAS

DRAINAGE IMPROVEMENTS

(LEGEND (EXISTING)

TRIBUTARY 2 of LITTLE OSAGE CREEK

IFB-23-11

ARK. HWY. 102

(VICINITY MAP

WASTEWATER RECOVERY

ATTN: CHRIS EARL

ELECTRIC

CITY OF BENTONVILLE

3200 SW MUNICIPAL DR

BENTONVILLE, AR 72712

PHONE: (479) 271-3140

CITY OF BENTONVILLE

BENTONVILLE, AR 72712

PHONE: (479) 271-3135

3200 SW MUNICIPAL DRIVE

SE 10th ST.

SE 12th ST.

SE 14th STREET

SE 13th ST.

	<u>SYMBOLS</u>	LINEWORK	
0	FOUND IRON PIN	EASEMENT	
*	LIGHT POLE	==========	:======:
Ø	POWER POLE	CURB	
	TELEPHONE PEDESTAL		—1206—— ——
	TV PEDESTAL	INTERMEDIATE CONTOUR	
\bigcirc	MANHOLE	INDEX CONTOUR	<u> </u>
0	SANITARY SEWER CLEANOUT		
\triangle	GAS METER	SANITARY SEWER LINE	
\bowtie	GAS VALVE	GAS LINE	G ———
	STORM SEWER PIPE		W
C	DOWN GUY	WATER LINE (SPECIFY SIZE & TYPE)	
\triangleright	WATER VALVE		— — UGT — —
	FIRE HYDRANT ASSEMBLY	UNDERGROUND TELEPHONE	A).
\bowtie	AIR RELEASE VALVE	UNDERGROUND ELECTRIC	Vγ
Æ,	FIRE DEPARTMENT CONNECTION		
\bigcirc	WATER METER	OVERHEAD ELECTRIC	,,
\otimes	SPRINKLER HEAD		—— UGTV ———
E	ELECTRIC PEDESTAL	UNDERGROUND TELEVISION	-
	GRATED INLET	OVERHEAD TELEVISION	OHTV
` <u>□</u>		CHAIN LINK FENCE	,,
	DROP INLET	WOOD FENCE	
	TREE	BARBED WIRE FENCE FIBER OPTIC	x
→ (?) - →			
	TREE TO BE REMOVED	RIGHT OF WAY	

SYMBOLS SET IRON PIN LIGHT POLE POWER POLE TELEPHONE PEDESTAL TV PEDESTAL MANHOLE SANITARY SEWER CLEANOUT GAS METER GAS VALVE STORM SEWER PIPE STRUCTURE NUMBER (X-X)WATER VALVE FIRE HYDRANT ASSEMBLY AIR RELEASE VALVE FIRE DEPARTMENT CONNECTION WATER METER BACK FLOW PREVENTER REDUCER PLUG VALVE RECTANGULAR DROP INLET. GRATED INLET OR JUNCTION BOX (SPECIFY ON PLAN

ROAD CENTERLINE

EASEMENT 			
CURB			
INTERMEDIATE CONTOUR			
INDEX CONTOUR		-1205—	
SANITARY SEWER LINE			
GAS LINE	— G —		
WATER LINE	•••		
UNDERGROUND TELEPHONE UGE			4
UNDERGROUND ELECTRIC OHE			-1V -A
OVERHEAD ELECTRIC			••
FIBER OPTIC			
UNDERGROUND TELEVISION	-UGTV -		
OVERHEAD TELEVISION			
CHAIN LINK FENCE			
WOOD FENCE			//
BARBED WIRE FENCE	X		X
BUILDING SET BACK			
RIGHT OF WAY			
PROPERTY LINE			

🚱 COVER SHEET; GENERAL NOTES

SW 14th STREET

- SHOWN OR REFERENCED HEREIN, INCLUDING BUT NOT LIMITED TO, SEGMENTAL RETAINING WALLS, MASS GRAVITY WALLS, GABION WALLS, ETC., GREATER THAN FORTY-EIGHT INCHES IN HEIGHT, SHALL BE BY OTHERS. ANY RETAINING WALL DATA SHOWN OR REFERENCED HEREIN SHALL BE ONLY FOR COORDINATION OF THE WALL LOCATION AND ELEVATIONS.
- THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE DRAWINGS IS BASED ON A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE DRAWINGS. CRAFTON TULL ASSUMES NO RESPONSIBILITY REGARDING THE ACCURACY OF THE DEPICTED LOCATION(S) OF THE UNDERGROUND FACILITIES ON THESE DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ANY OTHER FACILITIES NOT SHOWN ON THESE DRAWINGS. CONTRACTOR SHALL VERIFY LOCATION OF ALL FACILITIES BEFORE BEGINNING WORK.
- 3. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE DUTY OF THE ENGINEER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN OR NEAR THE CONSTRUCTION SITE.
- 4. THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICES, IS THE PROPERTY OF CRAFTON, TULL & ASSOCIATES, INC. AND IS NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CRAFTON, TULL & ASSOCIATES, INC.
- 5. CONTRACTOR SHALL NOT CAUSE ANY LONG-TERM INCONVENIENCE TO THE PUBLIC, ADJACENT PROPERTY OWNERS, PEDESTRIANS, ETC. DURING CONSTRUCTION OF THIS PROJECT. CONTRACTOR SHALL PROVIDE ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES DURING CONSTRUCTION.

SITE ENGINEER

CRAFTON TULL

BILL BURNETT, P.E.

ROGERS, AR 72756

901 N 47th ST, SUITE 400

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305 SW "A" STREET

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STREET DEPARTMENT

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BENTONVILLE, AR 72712

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DISCREPANCY OR INCONSISTENCY IS IDENTIFIED IN THE PLANS OR

SE 12th ST.

- SPECIFICATIONS. 7. CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF ALL SHEETING, SHORING, AND SPECIAL EXCAVATION MEASURES REQUIRED ON THE PROJECT WHICH ARE NECESSARY TO CONFORM TO OSHA, FEDERAL, STATE AND LOCAL REGULATIONS.
- 8. CRAFTON TULL & ASSOCIATES, INC. (CTA) HAS BEEN RETAINED BY THE OWNER FOR CONSTRUCTION ADMINISTRATION & OBSERVATION SERVICES FOR THE WORK INDICATED ON THESE DRAWINGS. HOWEVER, CTA HEREBY NOTIFIES ALL PARTIES INVOLVED THAT CRAFTON, TULL & ASSOCIATES, INC. ASSUMES NO RESPONSIBILITY FOR THE INTERPRETATION, COORDINATION. OR ADMINISTRATION OF THESE DOCUMENTS AND/OR DEVIATIONS THEREOF. FURTHERMORE, CRAFTON, TULL & ASSOCIATES, INC. WILL NOT BE RESPONSIBLE FOR ANY EFFECTS THAT ANY CHANGES TO THESE DOCUMENTS MAY HAVE ON ANY RELATED TRADES, CONSTRUCTION SEQUENCES, OR OPERATION OF THE COMPLETED PROJECT EXCEPT AS SPECIFICALLY NOTED IN THE AGREEMENT BETWEEN CRAFTON, TULL & ASSOCIATES AND THE OWNER.
- 9. <u>ENERGIZED ELECTRICAL LINE SAFETY, WARNINGS, AND ADVANCED</u> NOTICES: ALL OWNERS, GENERAL CONTRACTORS, AND SUBCONTRACTORS ASSOCIATED WITH THIS PROJECT SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH, COMPLYING WITH, AND THE ENFORCEMENT OF ARKANSAS CODES AR ST § 11-5-307 AND § AR ST 11-5-308 AND ANY OTHER CURRENT STATE CODES PERTAINING TO ADVANCE NOTICE REQUIREMENTS AND FOR SAFETY OF ALL PERSONNEL INCLUDING THE GENERAL PUBLIC, PERTAINING TO ANY WORK, MOVEMENT, AND ACTIVITY IN CLOSE PROXIMITY TO ANY ENERGIZED ELECTRICAL

WATER AND SEWER

CITY OF BENTONVILLE

3200 SW MUNICIPAL DR.

BENTONVILLE, AR 72712

PHONE: (479) 271-3140

Sheet List Table

SHEET NUMBER

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C-202	CHANNEL PLAN & PROFILE
C-203	CHANNEL PLAN & PROFILE
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C-206	SANITARY SEWERS P&P - SW A STREET
C-207	SANITARY SEWER P&P - SW MAIN STREET
C-208	WATERLINE P&P - SW A STREET
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BASIS OF BEARING: ARKANSAS STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD 83 HORIZONTAL DATUM AND NAVD 88 VERTICAL DATUM DETERMINED BY GPS OBSERVATION ON THE CITY OF BENTONVILLE CONTROL MONUMENTS USING THEIR PUBLISHED VALUES.

FLOOD NOTE:

Arkansas One Call

Call before you dig.

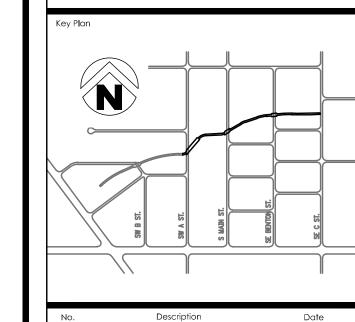
THIS PROPERTY IS IN FLOOD ZONE "A" OR "AE", AND IS INSIDE THE 100-YEAR FLOOD PLAIN AS SHOWN ON THE NATIONAL FLOOD INSURANCE PROGRAM'S FIRM PANEL NUMBER 05007C0255K, EFFECTIVE DATE JUNE 5, 2012.

THE ABOVE STATEMENT IS FOR INFORMATION ONLY AND THIS SURVEYOR ASSUMES NO LIABILITY FOR THE CORRECTNESS OF THE CITED MAP(S). IN ADDITION, NO INDEPENDENT STUDY OF THE LIKELIHOOD OF FLOODING OF THE SURVEYED PROPERTY HAS BEEN DONE BY THE SURVEYOR AND NO OPINION OF FLOOD HAZARDS IS INCLUDED IN THIS SURVEY. THE FLOOD HAZARD ZONE BOUNDARIES SHOWN HEREON WERE SCALED FROM THE MAPS CITED AND ARE NOT THE RESULT OF INDEPENDENT COMPUTATION OR ANALYSIS.

ATLAS PAGE 403

CITY of BENTONVILLE, AR DRAINAGE IMPROVEMENTS TRIBUTARY 2 of LITTLE OSAGE CREEI

IFB-23-11



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ISSUE DATE: 06/10/2022 $\star\star\star$ REGISTERED **PROFESSIONAL ISSUED FOR CONSTRUCTION** Miam K* 10" , No. 10208

COVER SHEET

DEMOLITION NOTES

- 1. CONTRACTOR SHALL ABIDE BY ALL FEDERAL, STATE, AND LOCAL CODES FOR THE DEMOLITION AND DISPOSAL OF ALL MATERIALS.
- 2. CRAFTON, TULL AND ASSOCIATES, INC. SHALL NOT BE LIABLE FOR ANY DEMOLITION PROCEDURES, SCHEDULING, AND DISPOSAL OF ANY
- 3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE SURE THAT ADJACENT PROPERTY IS NOT DAMAGED AND IS ACCESSIBLE AT ALL TIMES, AND THAT CONSTRUCTION DOES NOT CREATE ANY HARDSHIP TO LAND OWNERS ADJACENT TO THE CONSTRUCTION SITE.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSING IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES. OF ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE, STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.
- THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE DISCONNECTION, REMOVAL AND RELOCATION OF ALL UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
- THE CONTRACTOR IS RESPONSIBLE FOR REMOVING EXISTING IRRIGATION SYSTEM IN THE AREAS OF SITE IMPROVEMENTS. THE CONTRACTOR SHALL CAP THE EXISTING IRRIGATION SYSTEM TO REMAIN SUCH THAT THE REMAINING SYSTEM SHALL CONTINUE TO FUNCTION PROPERLY.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR THE DISCONNECTION OF UTILITY SERVICES TO THE EXISTING BUILDINGS PRIOR TO DEMOLITION OF THE BUILDINGS.

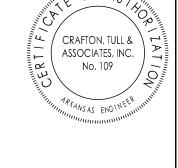
- 8. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ONSITE LOCATIONS OF EXISTING
- 9. ALL EXISTING SEWERS. PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION. OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH WORK. UTILITIES DETERMINED TO BE ABANDONED AND LEFT IN PLACE SHALL BE GROUTED IF UNDER BUILDINGS.
- 10. ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE.
- 11. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC.
- 12. ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED PRIOR TO DEMOLITION.
- 13. CONTRACTOR MAY LIMIT SAW-CUT AND PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE CONSTRUCTION PLANS BUT IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR.
- 14. CONTRACTOR SHALL MAINTAIN ALL EXISTING PARKING, SIDEWALKS,

SITE NOTES

- THE DESIGN, INSPECTION, AND CERTIFICATION OF ANY RETAINING WALL SHOWN OR REFERENCED HEREIN, INCLUDING BUT NOT LIMITED TO. SEGMENTAL RETAINING WALLS, MASS GRAVITY WALLS, GABION WALLS, ETC., GREATER THAN FORTY-EIGHT INCHES IN HEIGHT, SHALL BE BY OTHERS. ANY RETAINING WALL DATA SHOWN OR REFERENCED HEREIN SHALL BE FOR COORDINATION OF THE WALL LOCATION AND ELEVATIONS
- 2. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY/STATE/FEDERAL REGULATIONS AND CODES AND OSHA STANDARDS
- 3. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES. SLOPE PAVING. SIDEWALKS, EXIT PORCHES, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE LOCATIONS.
- 4. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- 5. CONTRACTOR SHALL ENSURE ALL NECESSARY PERMITS ARE OBTAINED PRIOR TO CONSTRUCTION START.
- 6. CONTRACTOR SHALL MAINTAIN ALL EXISTING PARKING, SIDEWALKS, DRIVES, ETC. CLEAR AND FREE FROM ANY CONSTRUCTION ACTIVITY AND/OR MATERIAL TO ENSURE EASY AND SAFE PEDESTRIAN AND VEHICULAR TRAFFIC TO AND FROM THE SITE.

IRRIGATION NOTES

- 1. 4" SCHEDULE 40 PVC TO BE PLACED UNDER SIDEWALKS, DRIVEWAYS, ETC. FOR IRRIGATION SLEEVING.
- INSTALL CONTROLLER INSIDE BUILDING AS DIRECTED BY THE GENERAL
- CONTRACTOR. FIBERGLASS ENCLOSURE TO BE INSTALLED OVER RPZ ASSEMBLY.
- VALVE BOXES TO BE INSTALLED AT ALL VALVE LOCATIONS. ALL SPRAY HEADS IN PLANTING BEDS TO BE 12" POP-UPS. ALL SPRAY HEADS
- IN LAWN AREAS TO BE 4" POP-UPS.
- 6. ALL FEES, METER, AND INSPECTIONS ASSOCIATED WITH THE IRRIGATION SYSTEM TO BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR.
- CONTRACTOR SHALL CONFIRM THE LOCATION OF THE UTILITIES PRIOR TO STARTING ANY WORK. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE ONE-CALL SYSTEM. ALL UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND ARE BASED ON SURVEY INFORMATION, SITE DEVELOPMENT PLANS, UTILITY RECORDS,



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479.636.4838 † 479.631.6224 f

ERTIFICATE OF AUTHORIZATION

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- THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF EXISTING UTILITIES WITHIN THE WORK ZONE.
- CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES' INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING FACILITIES. CONTRACTOR SHALL COORDINATE AND SCHEDULE TIE-INS/CONNECTIONS WITH ALL UTILITY COMPANIES.
- ALL UNDERGROUND LINES SHALL BE INSTALLED, INSPECTED, AND APPROVED PRIOR TO BACKFILLING
- ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF
- GENERAL CONTRACTOR IS TO COORDINATE WITH APPROPRIATE UTILITY COMPANIES PRIOR TO CONSTRUCTION, ADJUSTMENT, OR RELOCATION OF EXISTING UTILITIES.
- THRUST BLOCKING SHALL BE PROVIDED AT ALL BENDS, TEES, AND FIRE
- HYDRANTS. DIMENSIONS SHOWN ARE TO CENTERLINE OF PIPE OR FITTING.
- MINIMUM HORIZONTAL SEPARATION BETWEEN THE OUTSIDE WALL OF THE

 THE CONTRACTOR SHALL INCLUDE IN BID PRICE THE DAILY RECORD

 THE CONTRACTOR SHALL INCLUDE IN BID PRICE THE DAILY RECORD WATERLINE AND THE OUTSIDE WALL OF THE SANITARY SEWER LINE OR SANITARY SEWER MANHOLE SHALL BE AT LEAST TEN FEET. WHERE WATERLINES CROSS SANITARY SEWERS THE WATERLINE SHALL BE PLACED ABOVE THE SEWER WITH A MINIMUM VERTICAL SEPARATION, OUTSIDE-TO-OUTSIDE, OF 18". IF IT IS NOT POSSIBLE TO CONFORM TO THESE DIMENSIONS OR DEFINED PLACEMENT, THE WATERLINE SHALL BE ENCASED IN WATERTIGHT PIPE WITH SEALED WATERTIGHT ENDS EXTENDING AT LEAST TEN FEET EITHER SIDE OF THE CROSSING.
- THE CONTRACTOR SHALL INCLUDE IN THE BID PRICE ALL MATERIAL AND LABOR ASSOCIATED WITH THE TESTING OF THE WATER AND SEWER LINES REQUIRED BY THE LOCAL AND/OR STATE AGENCIES.
- 10. TOPS OF EXISTING MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH FINISHED PAVEMENT ELEVATIONS, AND MANHOLES IN UNPAVED AREAS TO BE EITHER 4" OR 12" ABOVE FINISHED GROUND ELEVATIONS WITH WATER TIGHT LIDS PER THE SPECIFICATIONS.
- ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL REGULATIONS.

- 12. REFER TO BUILDING PLANS FOR SITE LIGHTING AND ELECTRICAL PLAN. 13. ALL MATERIALS, CONSTRUCTION, AND INSPECTION FOR WATER AND SANITARY SEWER LINES SHALL BE PER THE SPECIFICATIONS OF THE APPROPRIATE AGENCY.
- 14. THE CONTRACTOR SHALL COORDINATE WITH THE FIRE DEPARTMENT AND THE WATER COMPANY TO PLAN THE IMPROVEMENTS TO THE WATER MAINS AND TO ENSURE ADEQUATE FIRE PROTECTION IS CONSTANTLY AVAILABLE TO THE SITE THROUGHOUT THE PROJECT. CONTRACTOR WILL BE RESPONSIBLE FOR ARRANGING ANY REQUIRED WATER MAIN SHUT-OFFS WITH THE WATER COMPANY DURING CONSTRUCTION. ALL COSTS ASSOCIATED WITH WATERMAIN SHUT-OFFS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR; NO ADDITIONAL COMPENSATION WILL BE PROVIDED.
- 15. DAMAGE TO ALL EXISTING FACILITIES DESIGNATED TO REMAIN WILL BE REPLACED AT CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, SLOPE PAVING, SIDEWALKS. EXIT PORCHES. TRUCK DOCKS. PRECISE BUILDING DIMENSIONS, AND EXACT UTILITY ENTRANCE LOCATIONS.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TAP AND TIE ON FEES REQUIRED AS WELL AS COSTS OF UNDERGROUND SERVICE CONNECTIONS TO THE BUILDING.
- GENERAL CONTRACTOR SHALL PROVIDE ALL CONDUITS AS SHOWN ON THE PLANS, VERIFY LOCATION OF UTILITY TIE-INS, AND PROVIDE
- KEEPING OF THE RECORD CONDITION OF ALL OF THE UNDERGROUND UTILITIES, CONSTRUCTION STAKE-OUT, PREPARATION OF THE NECESSARY/REQUIRED WATER AND SEWER RECORD DRAWINGS TO BE SUBMITTED, AND ALL OTHER INFORMATION REQUIRED FOR OBTAINING PERMITS AND RELEASE OF BONDS.
- ENERGIZED ELECTRICAL LINE SAFETY, WARNINGS, AND ADVANCED NOTICES: ALL OWNERS, GENERAL CONTRACTORS, AND SUBCONTRACTORS ASSOCIATED WITH THIS PROJECT SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH, COMPLYING WITH, AND THE ENFORCEMENT OF ARKANSAS CODES AR ST § 11-5-307 AND § AR ST 11-5-308 AND ANY OTHER CURRENT STATE CODES PERTAINING TO ADVANCE NOTICE REQUIREMENTS AND FOR SAFETY OF ALL PERSONNEL, INCLUDING THE GENERAL PUBLIC, PERTAINING TO ANY WORK, MOVEMENT, AND ACTIVITY IN CLOSE PROXIMITY TO ANY ENERGIZED
- ELECTRICAL LINE. 21. ALL WATER AND SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2021 BWU SPECIFICATIONS.

GRADING AND DRAINAGE NOTES

1. THE DESIGN, INSPECTION, AND CERTIFICATION OF ANY RETAINING WALL SHOWN OR REFERENCED HEREIN, INCLUDING BUT NOT LIMITED TO, SEGMENTAL RETAINING WALLS, MASS GRAVITY WALLS, GABION WALLS, ETC., GREATER THAN FORTY-EIGHT INCHES IN HEIGHT, SHALL BE BY OTHERS. ANY RETAINING WALL DATA SHOWN OR REFERENCED HEREIN SHALL BE FOR COORDINATION OF THE WALL LOCATION AND ELEVATIONS 12. TOPOGRAPHIC INFORMATION TAKEN FROM A TOPOGRAPHIC SURVEY BY

DRIVES, ETC. CLEAR AND FREE FROM ANY CONSTRUCTION ACTIVITY

15. THE CONTRACTOR SHALL COORDINATE WATERMAIN WORK WITH THE FIRE

DEPARTMENT AND THE CITY/COUNTY UTILITY DEPARTMENT TO PLAN

CONTRACTOR WILL BE RESPONSIBLE FOR ARRANGING/PROVIDING ANY

CONSTRUCTION. ANY COSTS ASSOCIATED WITH WATERMAIN SHUT-OFFS

AT CONTRACTOR'S EXPENSE. REPAIRS SHALL RESTORE DAMAGED ITEMS

RESPONSIBLE FOR DOCUMENTING ALL EXISTING DAMAGE AND NOTIFYING

TO EQUAL OR BETTER THAN, EXISTING CONDITIONS. CONTRACTOR IS

17. ALL TRENCHES AND/OR EXCAVATED AREAS SHALL BE FILLED/TESTED IN

DISTURBANCE THEY SHALL BE DISPOSED OF IN ACCORDANCE WITH

19. IF THE CONTRACTOR FINDS ANY UNDERGROUND TANKS ON SITE THEY

20. ALL WELLS SHALL BE CAPPED AND CLOSED IN ACCORDANCE WITH

REQUIRED WATERMAIN SHUT-OFFS WITH THE CITY/COUNTY DURING

WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA

16. DAMAGE TO ALL EXISTING CONDITIONS TO REMAIN WILL BE REPLACED

CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION START.

18. IF SEPTIC TANKS ARE FOUND PRESENT WITHIN THE LIMITS OF

ACCORDANCE WITH THE GEOTECHNICAL ENGINEERING REPORT.

PROTECTION IS CONSTANTLY AVAILABLE TO THE SITE THROUGHOUT THIS

WATERMAIN IMPROVEMENTS AND TO ENSURE ADEQUATE FIRE

SPECIFIC WORK AND THROUGH ALL PHASES OF CONSTRUCTION.

AND/OR MATERIAL TO ENSURE EASY AND SAFE PEDESTRIAN AND

VEHICULAR TRAFFIC TO AND FROM THE SITE.

COMPENSATION WILL BE PROVIDED.

LOCAL, STATE, AND FEDERAL LAWS.

APPLICABLE STATE AND FEDERAL LAW.

SHALL CONTACT THE ENGINEER IMMEDIATELY.

- 2. THE OWNER/CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR OBTAINING AND PROVIDING SEPARATE AND INDEPENDENT RETAINING WALL DESIGNS, INSPECTIONS, AND CERTIFICATIONS BY A REGISTERED PROFESSIONAL ENGINEER OTHER THAN CRAFTON TULL. THIS SHALL ALSO APPLY TO ANY ASSOCIATED AND NECESSARY PUBLIC SAFETY DEVICES INCLUDING, BUT NOT LIMITED TO, PEDESTRIAN SAFETY RAILS.
- 3. THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES. AND WHERE POSSIBLE. MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF EXISTING UTILITIES ON SITE OR IN RIGHT-OF-WAY. ALL UTILITIES MUST BE LOCATED PRIOR TO GRADING
- 4. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- 5. ALL CUT OR FILL SLOPES SHALL BE A MAX 3:1 SLOPE OR FLATTER UNLESS OTHERWISE NOTED.
- 6. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITION OR BETTER. 7. ALL STORM SEWER PIPE CONNECTIONS TO STRUCTURES SHALL BE
- GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT. ALL STORM SEWER STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT 8. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET
- HEAVY DUTY TRAFFIC (H20) LOADING AND BE INSTALLED ACCORDINGLY WHEN IN PAVED AND TRAFFIC AREAS. 9. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH
- THE PAVEMENT AND SHALL HAVE TRAFFIC BEARING RINGS AND COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 1" ABOVE FINISH GRADE. LIDS SHALL BE LABELED PER JURISDICTIONAL SPECIFICATIONS.
- 10. SITE GRADING SHALL NOT PROCEED UNTIL APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED. THE CONTRACTOR SHALL ADHERE TO ALL TERMS AND CONDITIONS AS

- OUTLINED IN THE GENERAL NPDES PERMIT AND THE SWPPP FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES. 11. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL TO FINAL GRADE. REFER TO THE LANDSCAPE PLAN.
- LAND SURVEYORS. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON PLANS, CONTACT ENGINEER IMMEDIATELY. 13. THE CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS THROUGHOUT ALL
- PHASES OF CONSTRUCTION 14. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, SLOPE PAVING, SIDEWALKS, EXIT PORCHES, TRUCK DOCKS, PRECISE BUILDING
- DIMENSIONS AND EXACT UTILITY ENTRANCE LOCATIONS. 15. THE EARTHWORK FOR ALL BUILDING FOUNDATIONS AND SLABS SHALL BE IN ACCORDANCE WITH ARCHITECTURAL BUILDING PLANS AND SPECIFICATIONS.
- 16. EXISTING DRAINAGE STRUCTURES TO BE INSPECTED AND REPAIRED AS NEEDED, AND EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
- 17. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE
- 18. CONTRACTOR SHALL MAINTAIN ALL EXISTING PARKING, SIDEWALKS, DRIVES, ETC. CLEAR AND FREE FROM ANY CONSTRUCTION ACTIVITY AND/OR MATERIAL TO ENSURE EASY AND SAFE PEDESTRIAN AND VEHICULAR TRAFFIC TO AND FROM THE SITE.
- 19. IF WET AREAS ARE ENCOUNTERED ON-SITE THE CONTRACTOR SHALL COORDINATE WITH THE GEOTECHNICAL ENGINEER FOR THE DESIGN AND REPLACEMENT OF A FRENCH DRAIN SYSTEM.
- 20. CRAFTON, TULL & ASSOCIATES, INC. (CTA) HAS NOT NECESSARILY ESTABLISHED MINIMUM FINISH FLOOR ELEVATIONS FOR EACH INDIVIDUAL BUILDING OR LOT IN THIS SUBDIVISION. WHEN A MINIMUM BUILDING FLOOR ELEVATION IS NOT ESTABLISHED AND NOTED, THE ULTIMATE RESPONSIBILITY FOR THE PROPER GRADING OF EACH INDIVIDUAL LOT OR PARCEL SHALL REST WITH THE LOT'S OWNER. TYPICALLY, THE MINIMUM FINISH FIRST FLOOR ELEVATIONS SHOULD BE AT LEAST TWELVE INCHES (12") ABOVE THE FINISHED TOP OF STREET CURB ELEVATION ASSOCIATED WITH EACH INDIVIDUAL LOT OR PARCEL OR AS REQUIRED BY LOCAL AND STATE CODES.

LANDSCAPE NOTES

- 1. CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL UTILITIES PRIOR TO STARTING ANY WORK. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE ONE-CALL SYSTEM. ALL UTILITY LOCATIONS SHOWN ON THIS PLAN ARE APPROXIMATE AND ARE BASED ON SURVEY INFORMATION, SITE DEVELOPMENT PLANS, UTILITY RECORDS, ETC.
- 2. ALL PLANT MATERIAL SHALL BE NURSERY GROWN. THE SIZE AND GRADING SHALL MEET OR EXCEED THE LATEST EDITION OF AMERICAN STANDARDS FOR NURSERY STOCK PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
- 3. ALL ENTRANCE/EXIT PLANTINGS SHALL BE INSTALLED AND MAINTAINED TO PROVIDE CLEAR SIGHT DISTANCE FROM THE STREETS AND THE ENTRANCE/EXIT LOCATIONS.
- 4. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING REQUIRED SHRUBS AND TREES PER CITY LANDSCAPE ORDINANCE OR UNTIL PROJECT IS TURNED OVER AND ACCEPTED BY OWNER. 5. NO CHANGES TO THE PLANT SCHEDULE ARE ALLOWED WITHOUT
- APPROVAL OF THE OWNER, LANDSCAPE ARCHITECT AND CITY. SUBSTITUTED PLANTS SHALL MEET THE SAME CRITERIA REGARDING TYPE, SIZE AND FUNCTION AS THOSE PLANTS SHOWN ON THE PLAN. 6. ALL LAWN AREAS ARE TO RECEIVE 4" OF TOPSOIL TO FINAL GRADE.
- ALL SHRUB AREAS SHALL RECEIVE 6" OF TOPSOIL. SOIL SHALL BE AMENDED TO ENHANCE FAVORABLE GROWING CONDITIONS. ALL EXISTING SOD/WEEDS SHALL BE REMOVED FROM PLANTING BED AREAS. 7. ALL PLANT BEDS SHALL BE TREATED WITH A WEED BARRIER AND A
- MINIMUM OF 3" SHREDDED HARDWOOD MULCH. TREES NOT LOCATED IN PLANT BEDS SHALL RECEIVE A MULCH SAUCER PER DETAIL. 8. ALL TREES AND SHRUBS SHALL BE INSTALLED IN ACCORDANCE WITH
- THE DETAILS PROVIDED. 9. ALL SHRUBS AND TREES SHALL BE TREATED WITH 13-13-13 TIME RELEASE FERTILIZER UPON COMPLETION OF THEIR INSTALLATION.
- 10. ALL DISTURBED AREAS NOT TO RECEIVE PLANTINGS SHALL BE SEEDED WITH 60% BERMUDA GRASS AND 40% ANNUAL RYEGRASS AT 5 LBS PER 1,000 SF DURING THE APPROPRIATE TIME OF YEAR FOR THE SEED TO GERMINATE; IF THIS CANNOT BE ACCOMPLISHED, THE CONTRACTOR SHALL CALL THE LANDSCAPE ARCHITECT FOR A GRASS SEED SUBSTITUTION.
- 11. AT A MINIMUM, SOD SHALL BE INSTALLED ON 3:1 SLOPES AND GREATER AND AN EIGHTEEN INCH (18") STRIP OF SOD SHALL BE INSTALLED BEHIND ALL CURBS AND ADJACENT TO ALL SIDEWALKS AND ENTRY
- 12. IF A LANDSCAPE IRRIGATION SYSTEM IS TO BE CONSTRUCTED. LANDSCAPE CONTRACTOR TO CONFIRM LOCATION OF PLANNED IRRIGATION LINES WITH THE IRRIGATION CONTRACTOR PRIOR TO PLANT BED AND PLANT INSTALLATION.

CITY of BENTONVILLE, AR DRAINAGE IMPROVEMENTS TRIBUTARY 2 of LITTLE OSAGE CREEK

Key Plan					
0					
	SW B ST.	SW A ST.	MAIN ST.	BENTO ST.	ST.
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STATE OF
PROJECT NO: 05118701 ARKANSAS

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TACT: B. BURNETT REGISTERED PROFESSIONAL ISSUED FOR CONSTRUCTION Miam tex to No. 10208 2022 Crafton, Tull & Associa

NOTES

C-002

RETAINING WALL DESIGN, INSPECTION, AND CERTIFICATION BY OTHERS

THE DESIGN, INSPECTION, AND CERTIFICATION OF ANY RETAINING WALL SHOWN OR REFERENCED HEREIN, INCLUDING BUT NOT LIMITED TO, SEGMENTAL RETAINING WALLS, MASS GRAVITY WALLS, GABION WALLS, ETC., GREATER THAN FORTY-EIGHT INCHES IN HEIGHT, SHALL BE BY OTHERS. ANY RETAINING WALL DATA SHOWN OR REFERENCED

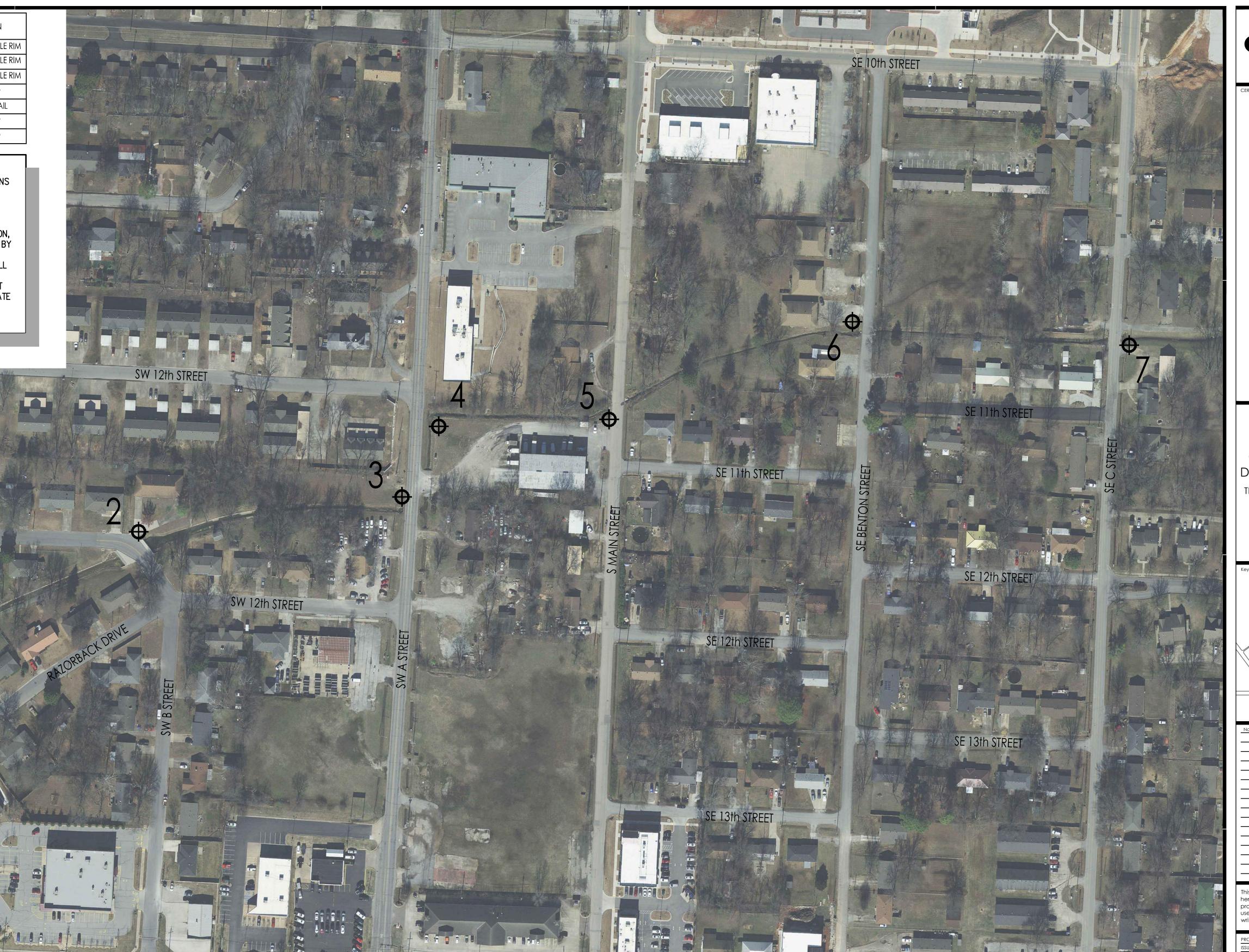
THE OWNER/CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR OBTAINING AND PROVIDING SEPARATE AND INDEPENDENT RETAINING WALL DESIGNS, INSPECTIONS, AND CERTIFICATIONS BY A REGISTERED PROFESSIONAL ENGINEER OTHER THAN CRAFTON TULL. THIS SHALL ALSO APPLY TO ANY ASSOCIATED AND NECESSARY PUBLIC SAFETY DEVICES INCLUDING, BUT NOT LIMITED TO, PEDESTRIAN SAFETY RAILS.

HEREIN SHALL BE FOR COORDINATION OF THE WALL LOCATION AND ELEVATIONS ONLY.

CONTROL POINT NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	744431.4	660390.6	1276.674	"X" ON MANHOLE RIM
2	744775.1	660955.2	1277.141	"X" ON MANHOLE RIM
3	744841.7	661459.4	1280.617	"X" ON MANHOLE RIM
4	744976.7	661529.7	1281.038	CTA CAP
5	744990.0	661855.8	1281.759	SET MAGNAIL
6	745176.8	662321.5	1283.297	CTA CAP
7	745132.1	662851.2	1285.148	CTA CAP

NOTE:
ONLY THE CONTROL POINTS, COORDINATE VALUES, AND ELEVATIONS SHOWN ON THIS SHEET SHALL BE USED ON THIS PROJECT.
CRAFTON, TULL & ASSOCIATES SHALL NOT BE RESPONSIBLE FOR ANY CONSEQUENCES OF USING CONTROL POINTS, COORDINATE VALUES OR ELEVATIONS ESTABLISHED OR DERIVED FROM OTHER SOURCES. CRAFTON, TULL & ASSOCIATES, AT ITS SOLE DISCRETION, MAY ALLOW THE USE OF ALTERNATIVE OR ADDITIONAL CONTROL, BY A WRITTEN AMENDMENT TO THIS SHEET SEALED BY THE RESPONSIBLE SURVEYOR. USERS OF THESE CONTROL POINTS SHALL EXERCISE DUE CARE AND GOOD SURVEYING PRACTICE AND IMMEDIATELY NOTIFY THE CRAFTON, TULL & ASSOCIATES PROJECT ENGINEER OF ANY INCONSISTENCIES IN THE OBSERVED COORDINATE VALUES, ELEVATIONS AND DESCRIPTIONS FOR CONTROL POINTS SHOWN ON THIS SHEET.

SW 12th STREET



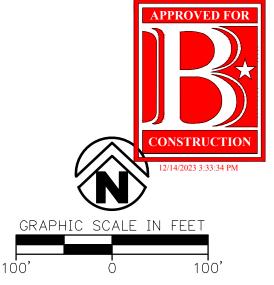
ARK. HWY. 102

SE 14th STREET

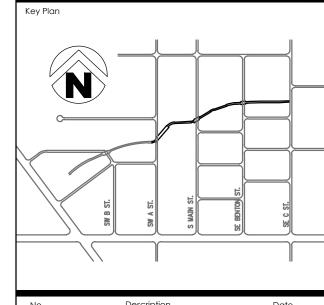


CERTIFICATE OF AUTHOR





CITY OF BENTONVILLE, AR DRAINAGE IMPROVEMENTS
TRIBUTARY 2 OF LITTLE OSAGE CREEK



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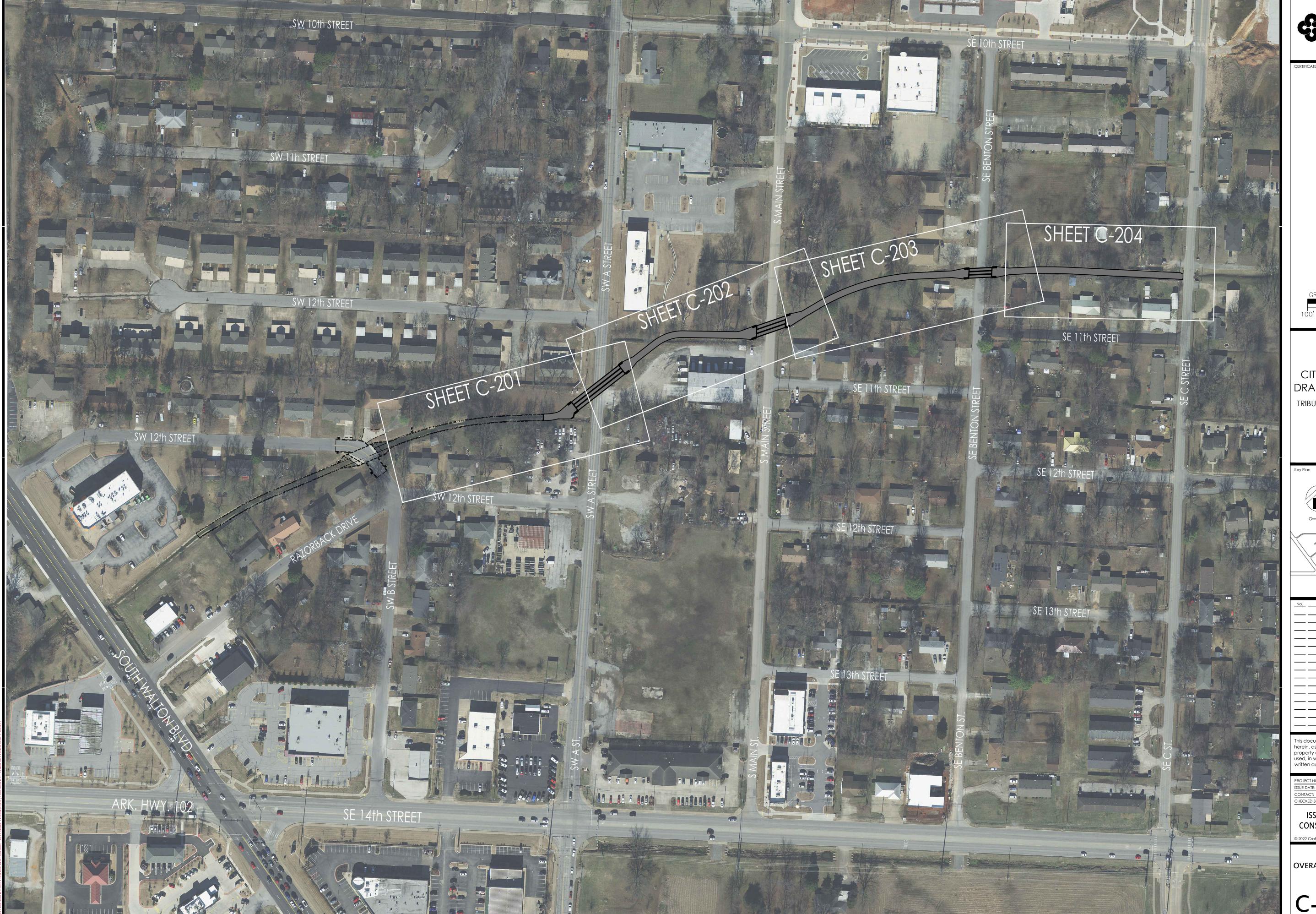
PROJECT NO: 05118701
ISSUE DATE: 03/02/2022
CONTACT: B. BURNETT
CHECKED BY:

ISSUED FOR
CONSTRUCTION

CONSTRUCTION

2022 Crafton, Tull & Associates,

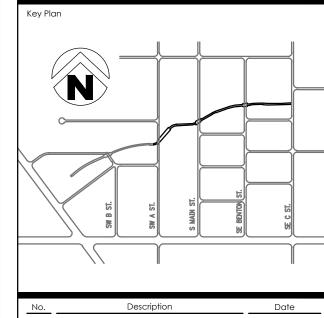
PROJECT CONTROL SHEET



901 N. 47th St., Suite 400 Rogers, Arkansas 72756 Crafton Tull

architecture | engineering | surveying 479.636.4838 t 479.631.6224 f www.craftontull.com CRAFTON, TULL & ASSOCIATES, INC. No. 109

CITY of BENTONVILLE, AR DRAINAGE IMPROVEMENTS TRIBUTARY 2 of LITTLE OSAGE CREEK



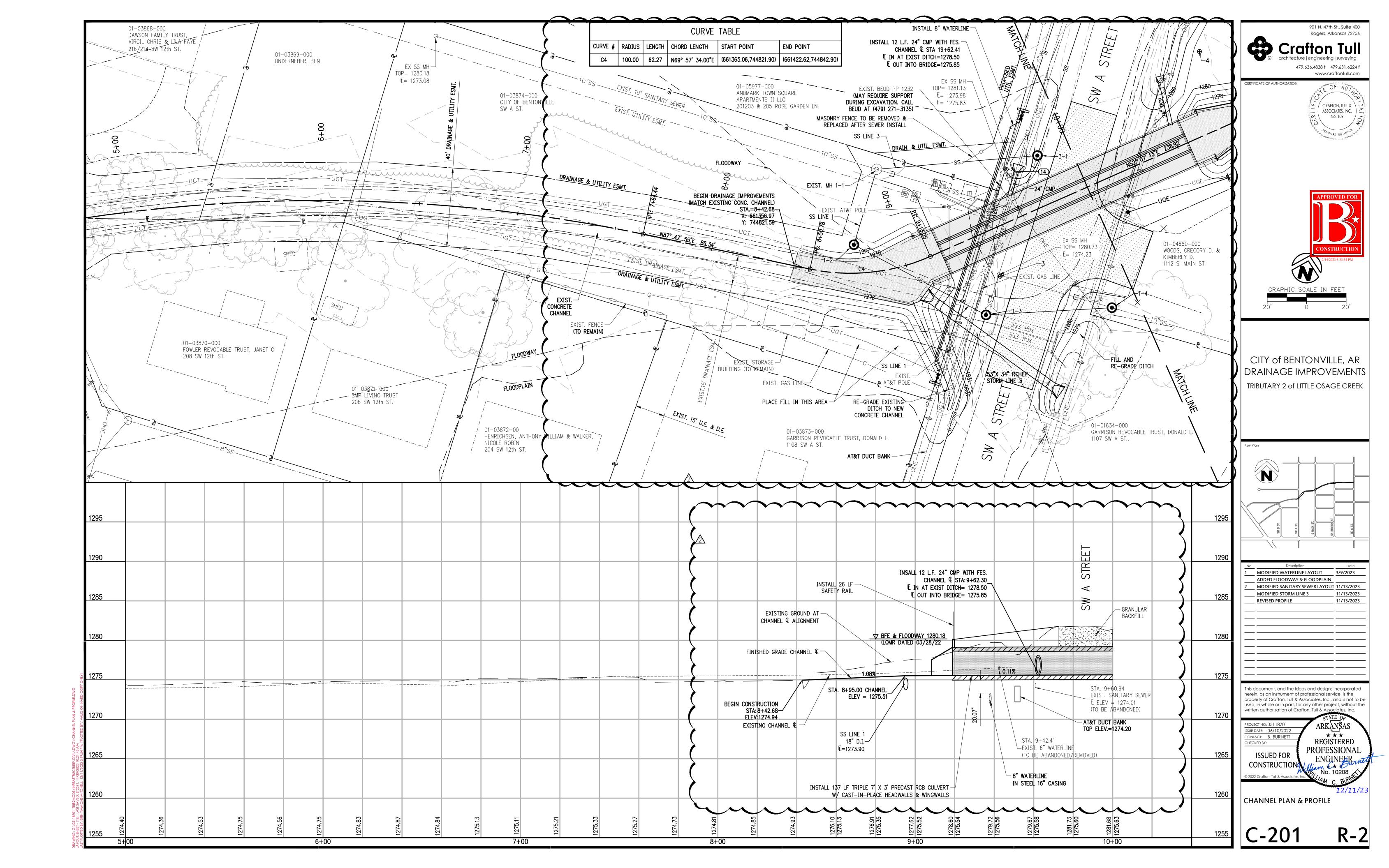
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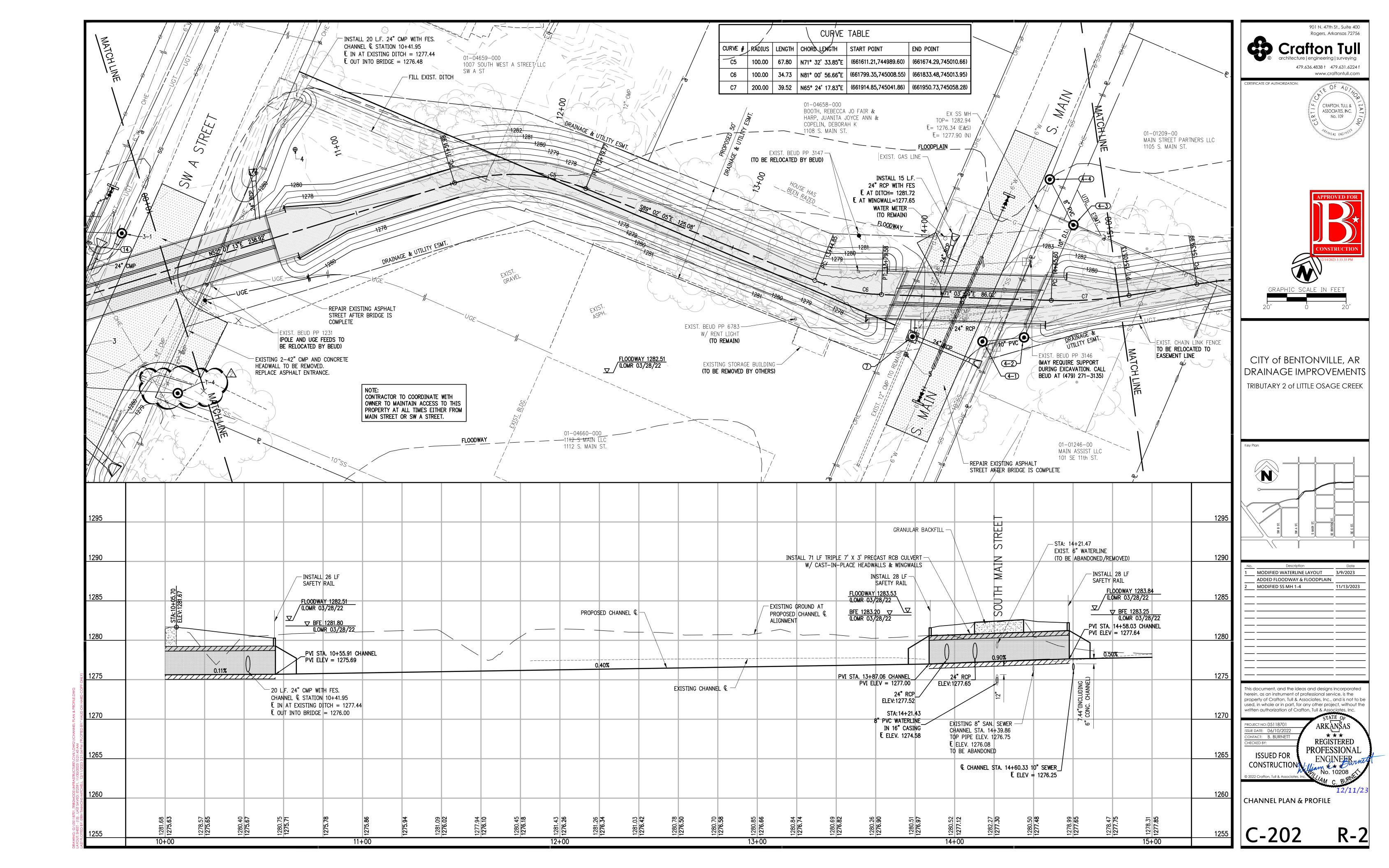
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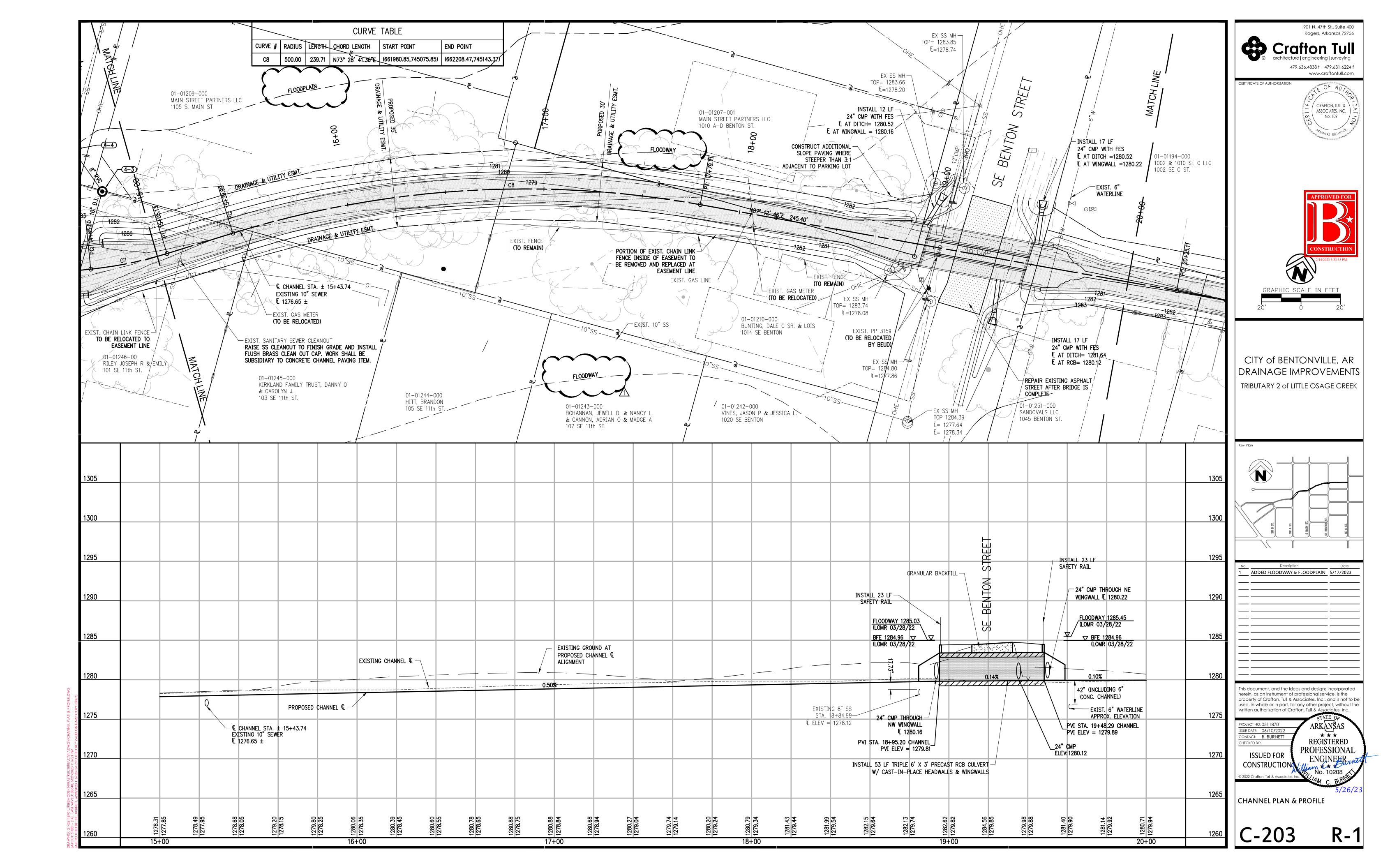
PROJECT NO: 05118701
ISSUE DATE: 06/10/2022
CONTACT: B. BURNETT **ISSUED FOR**

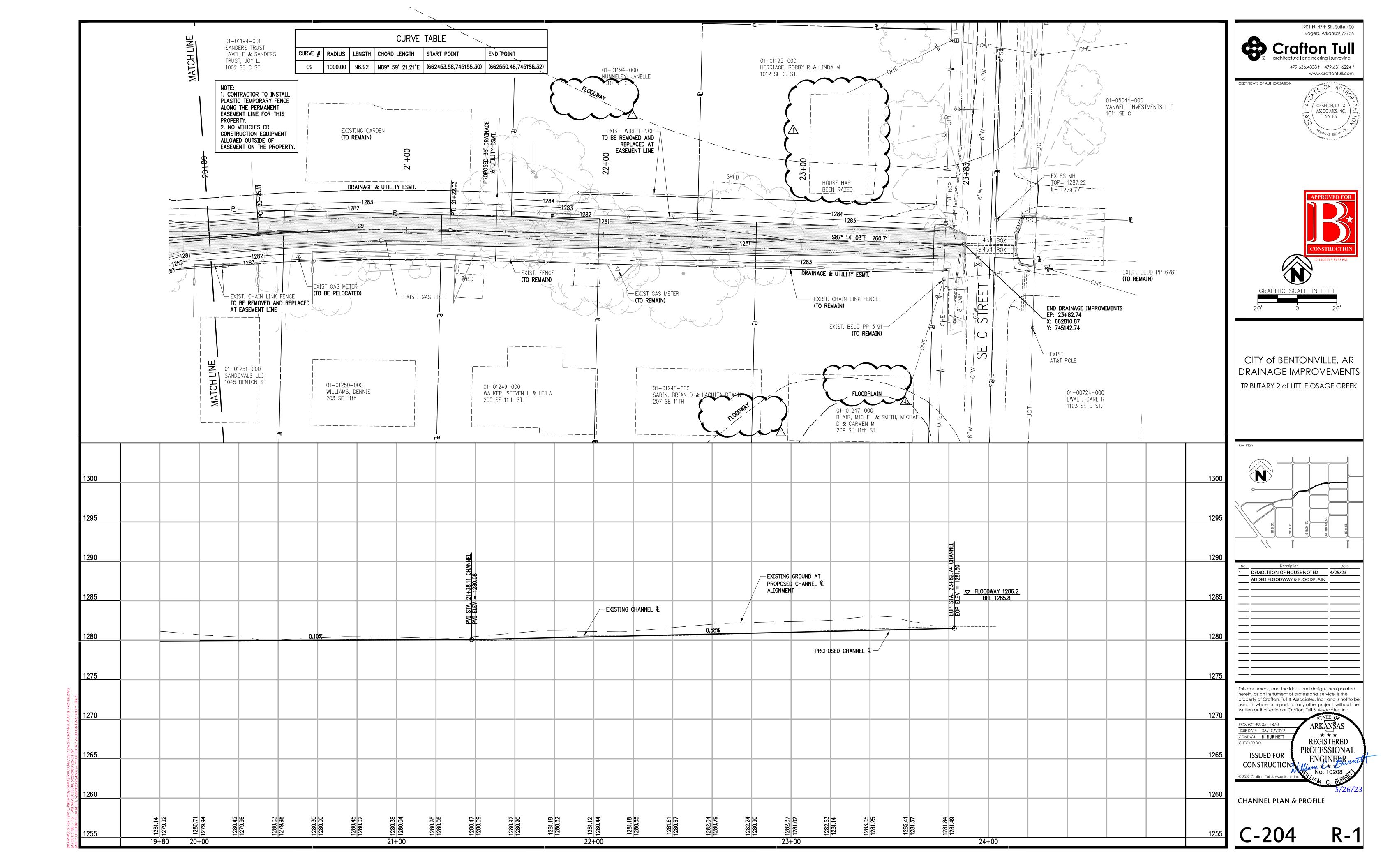
* * * REGISTERED **PROFESSIONAL** CONSTRUCTION

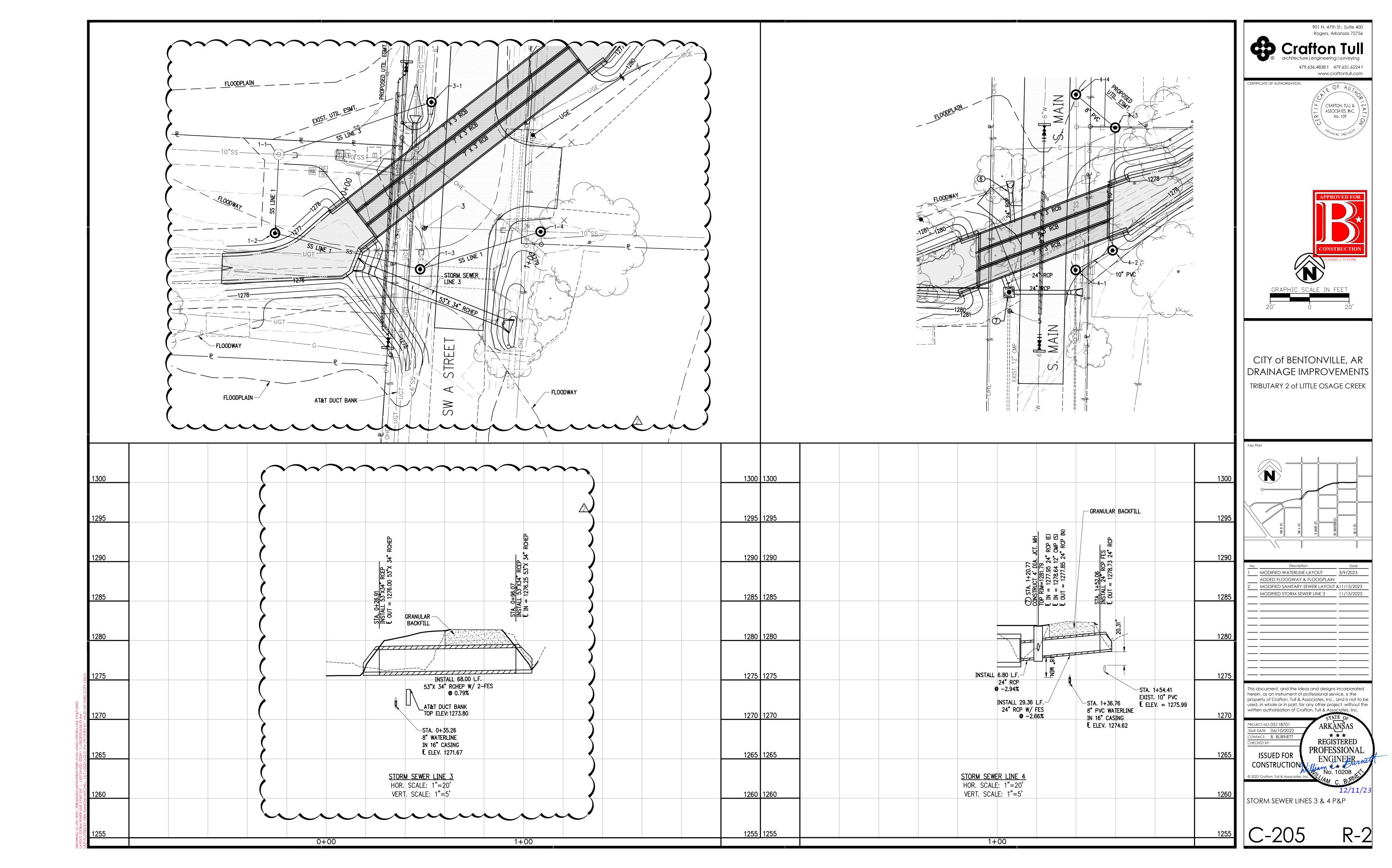
OVERALL SITE PLAN

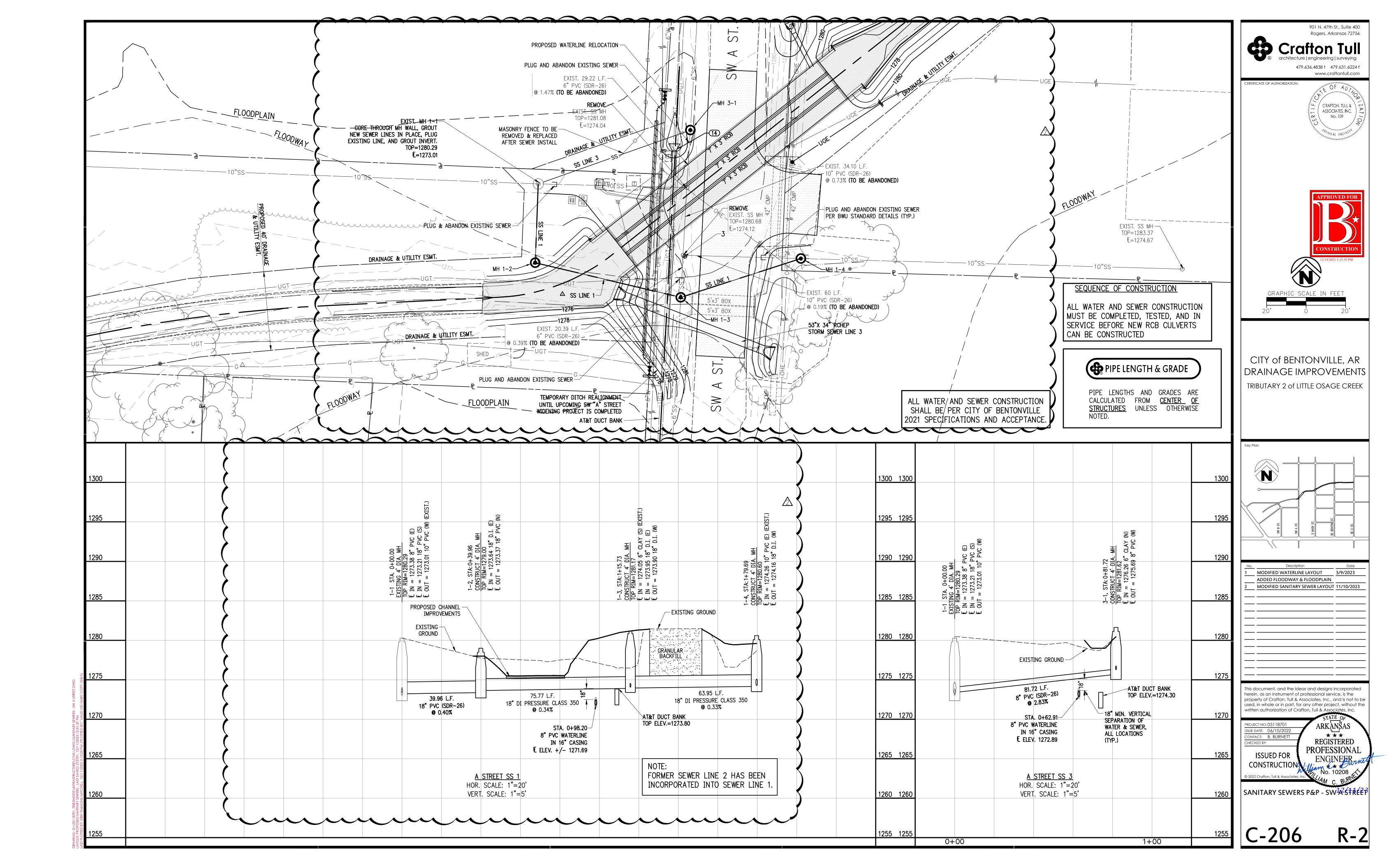


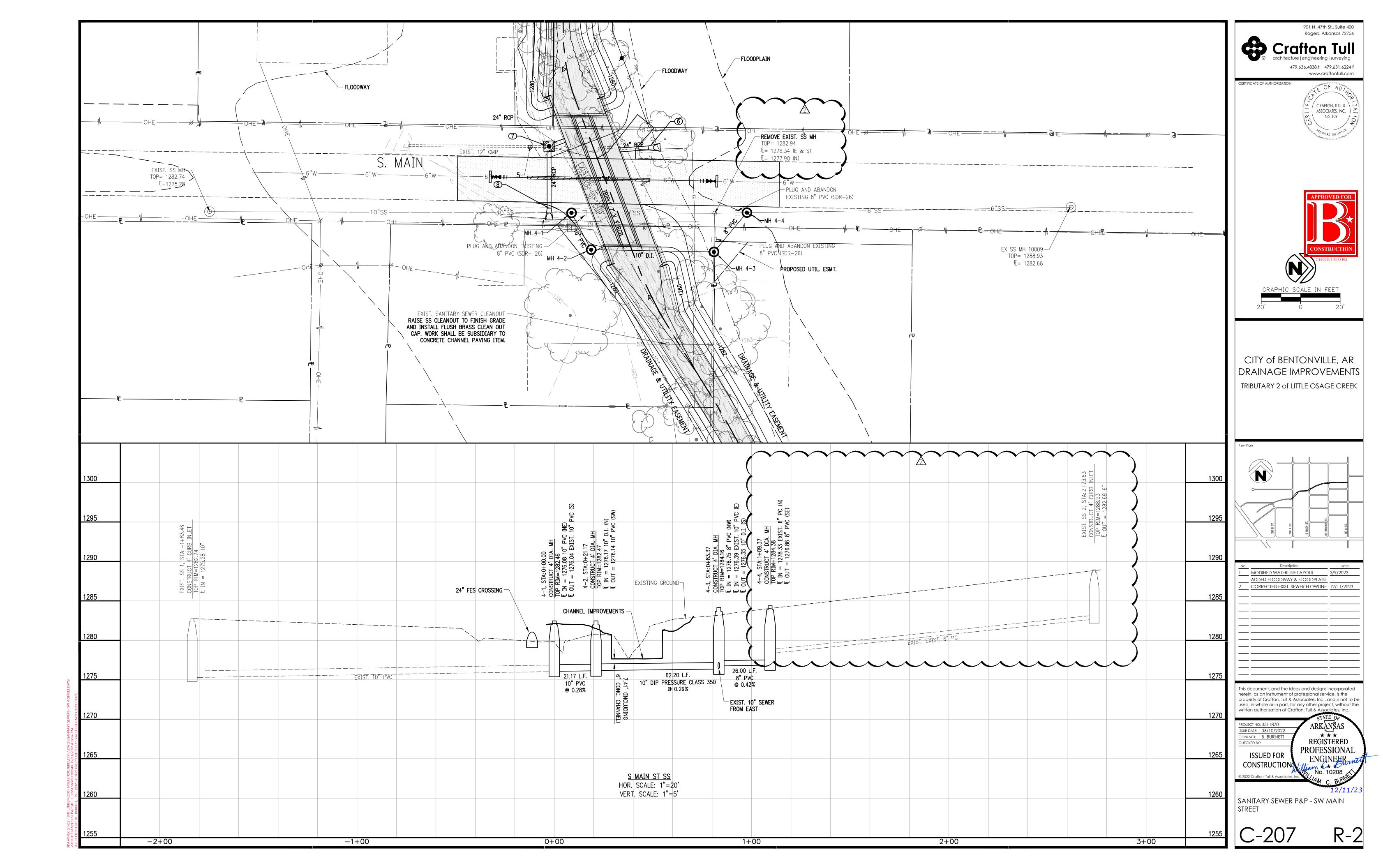


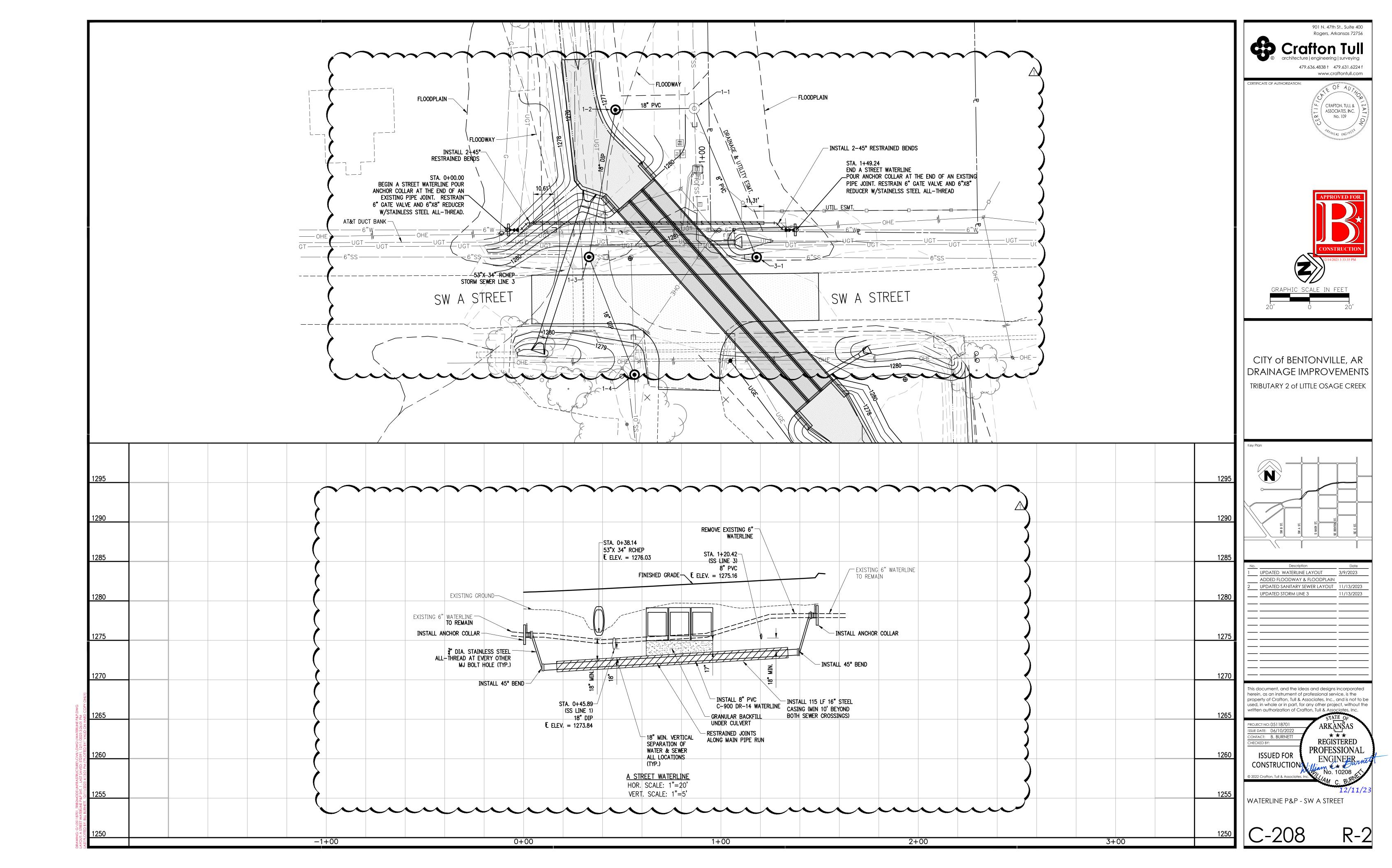


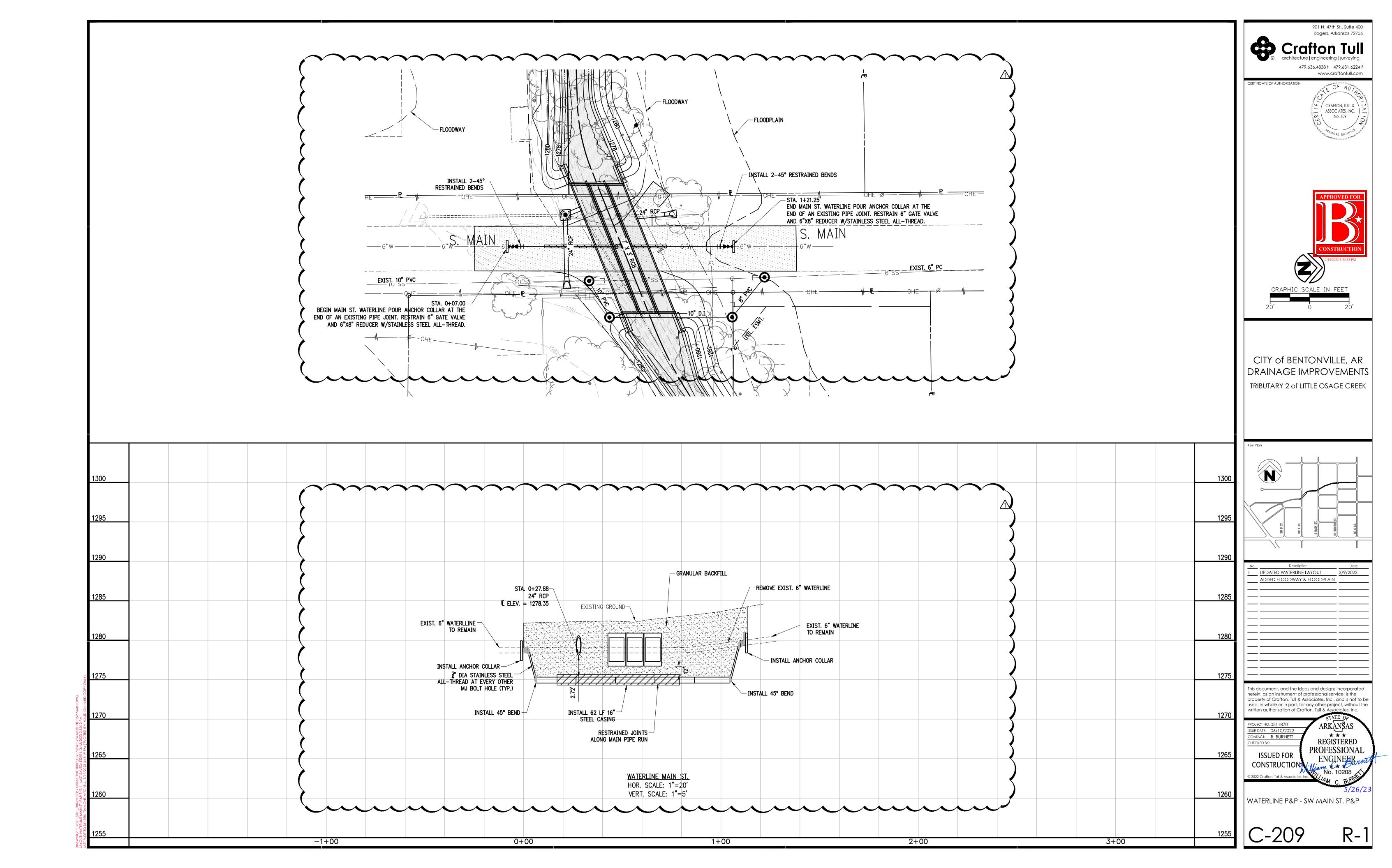


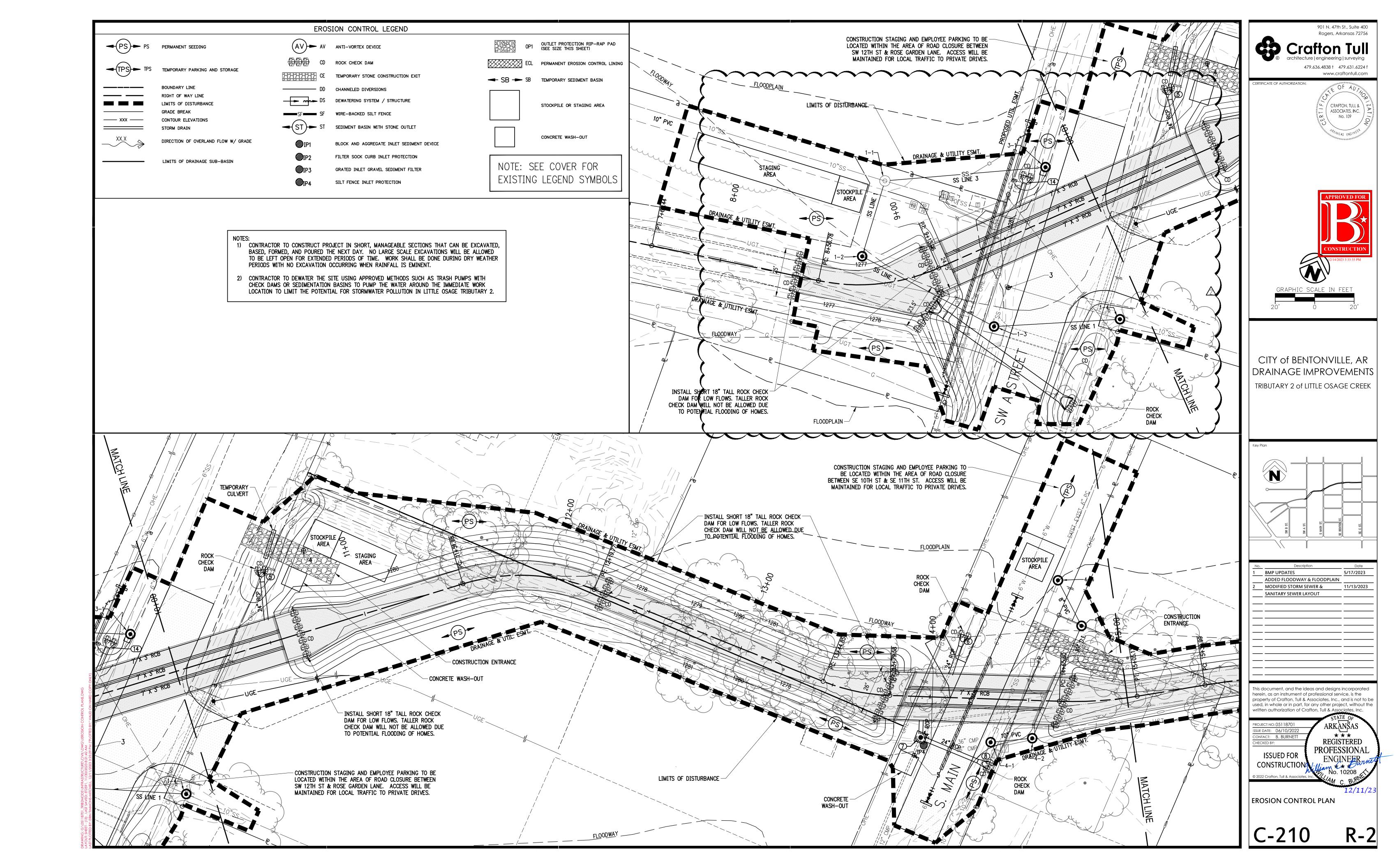


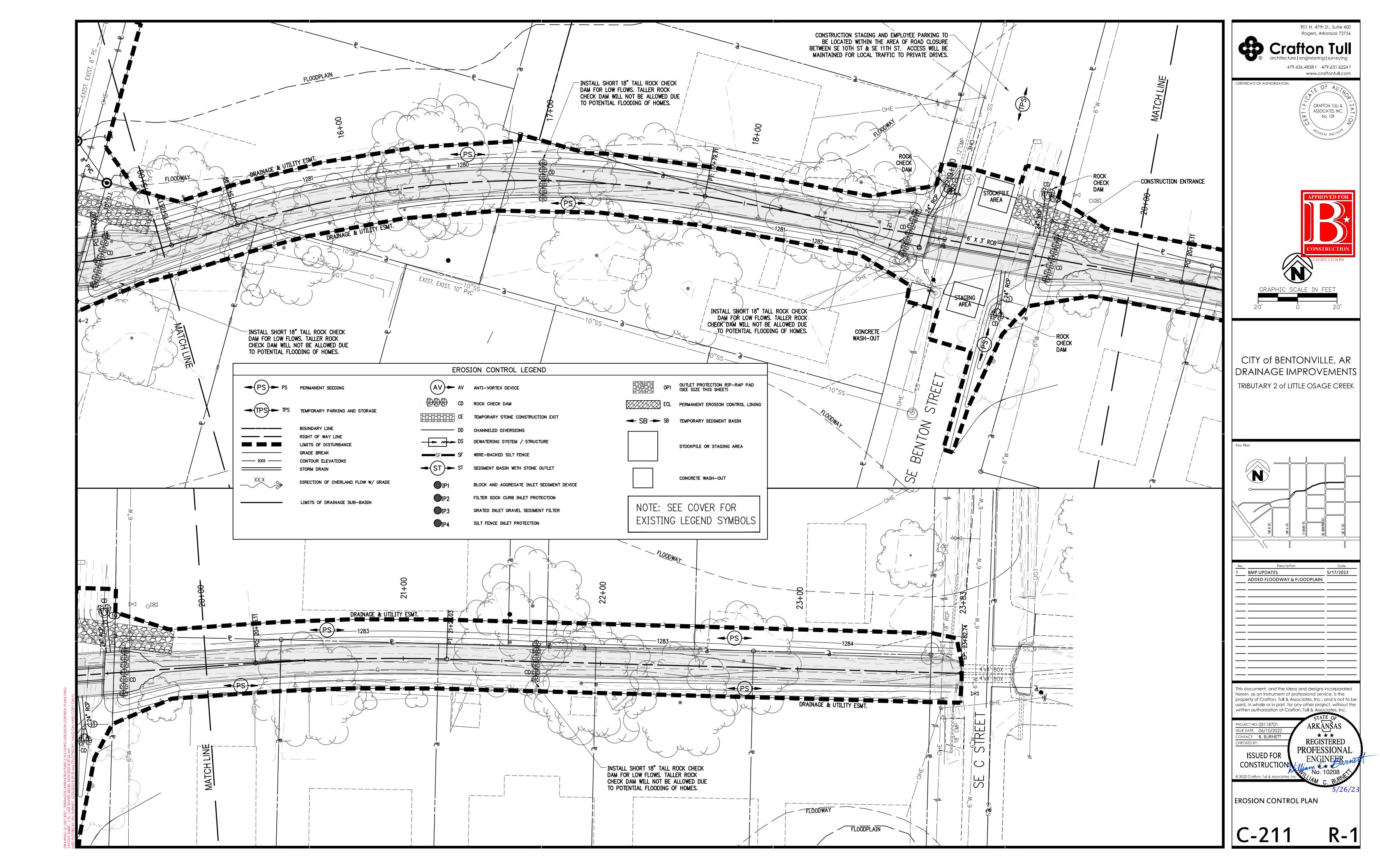


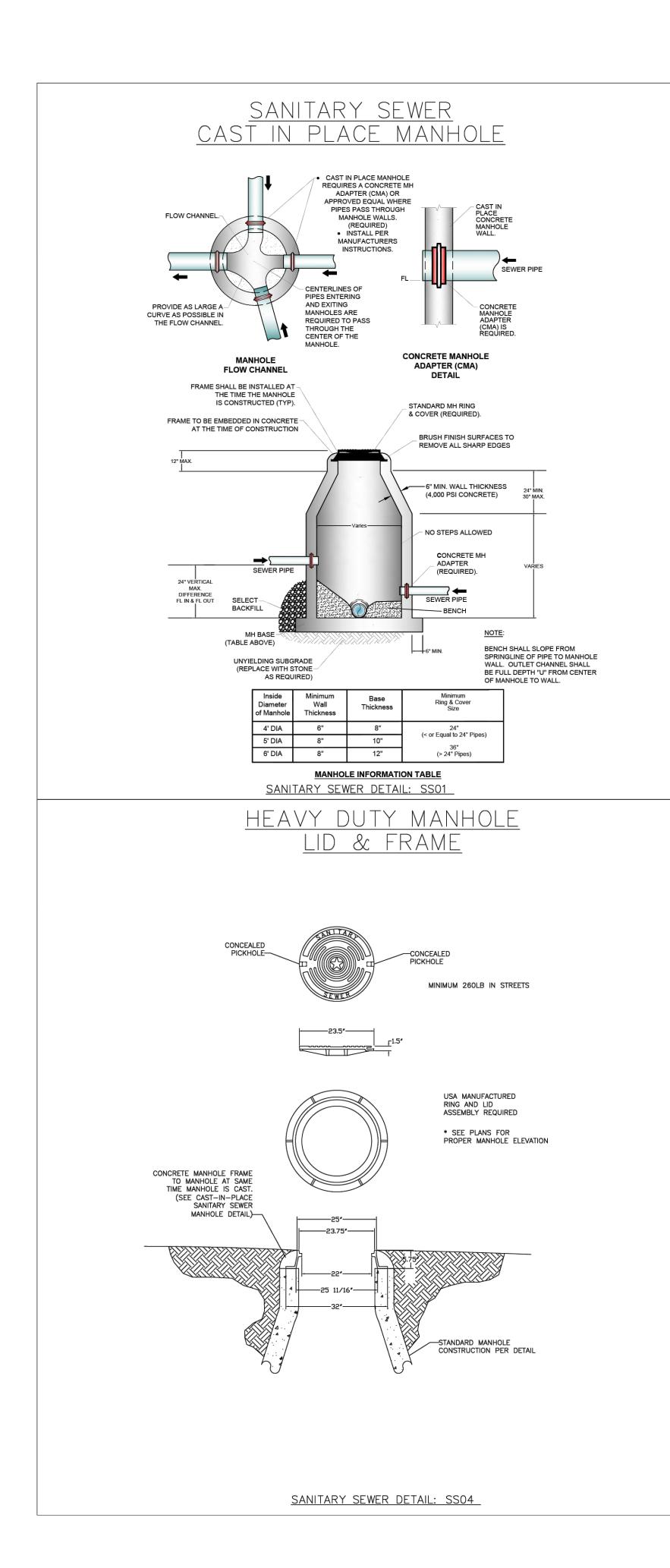




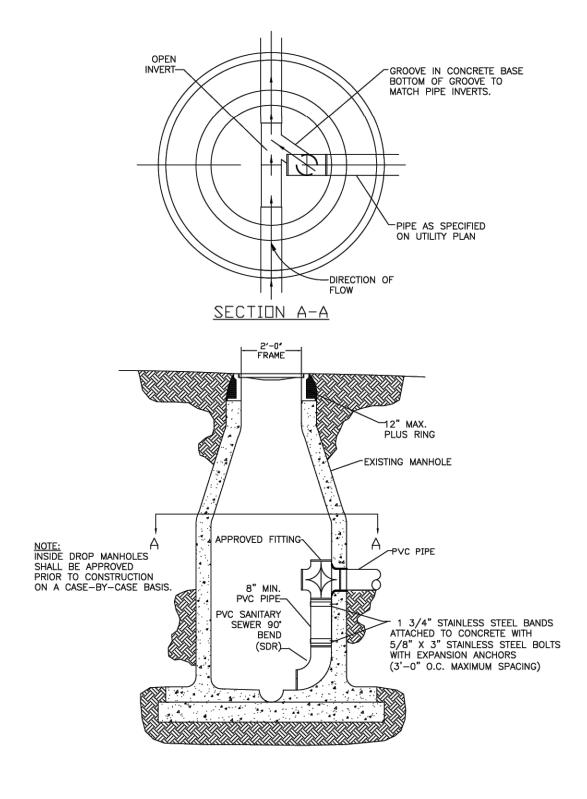






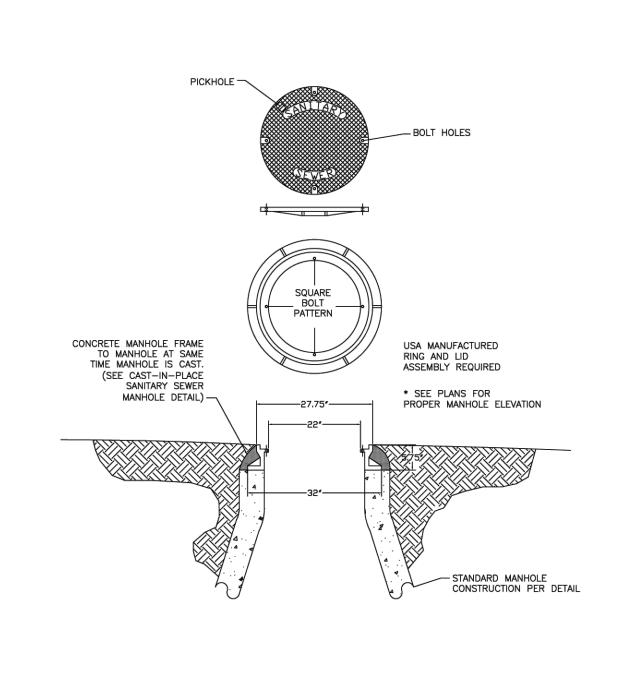


SANITARY SEWER INTERIOR DROP MANHOLE



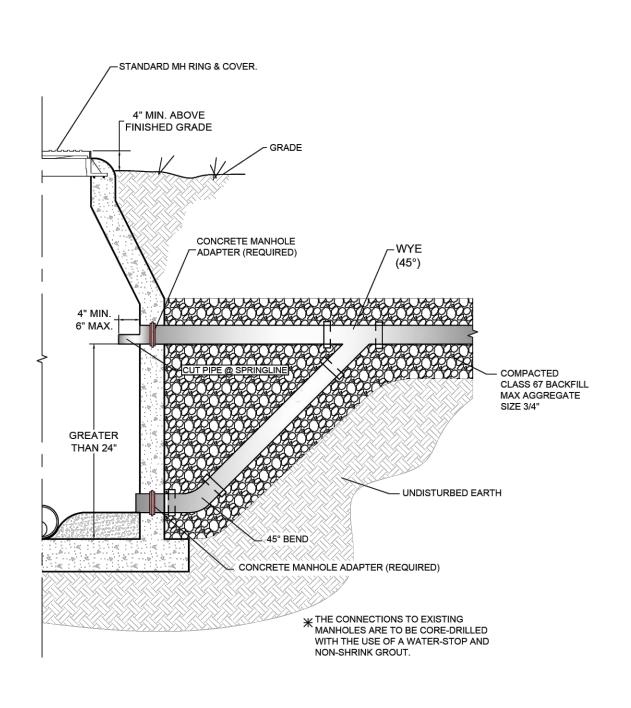
SANITARY SEWER DETAIL: SS02

WATER TIGHT BOLTED MANHOLE LID & FRAME



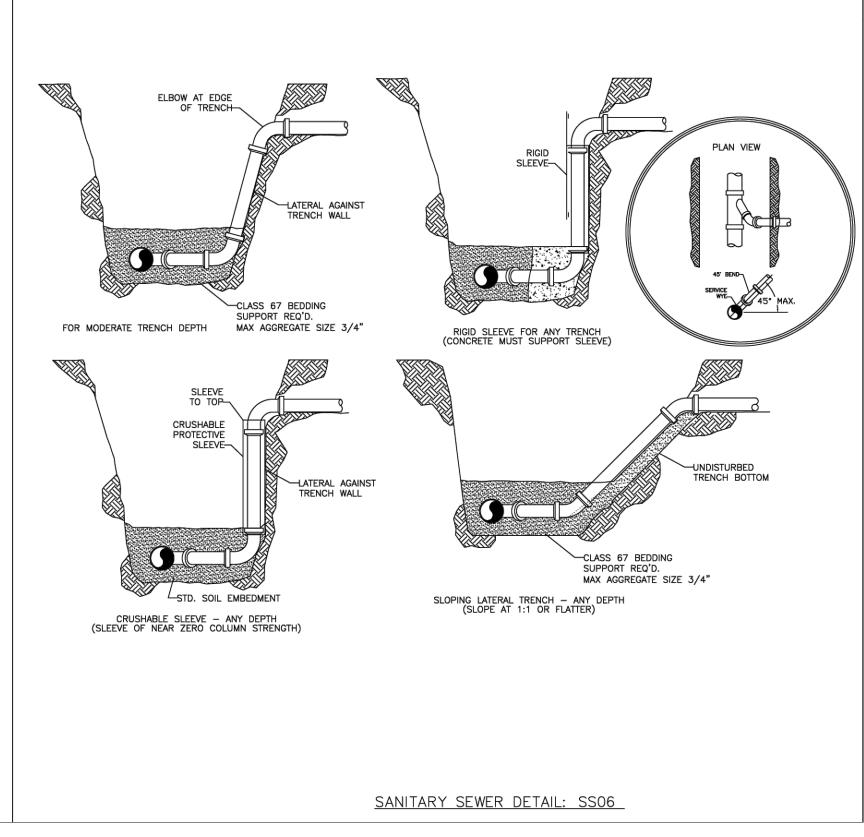
SANITARY SEWER DETAIL: SS05

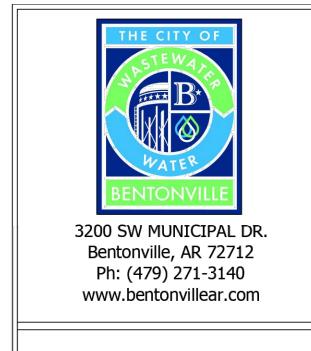
<u>SANITARY SEWER</u> EXTERIOR DROP MANHOLE



SANITARY SEWER DETAIL: SS03

SANITARY SEWER SERVICE WYE









Know what's below.

Call before you dig.

Adopted by City Council 06/22/20 Ordinance Number: 2021-135
Ordinance Number: 2021-135

Approved by Dept. of Health 04/01/2021

NOTES:

REVISIONS:

DRAWN BY: JI DATE: 03/16/2021

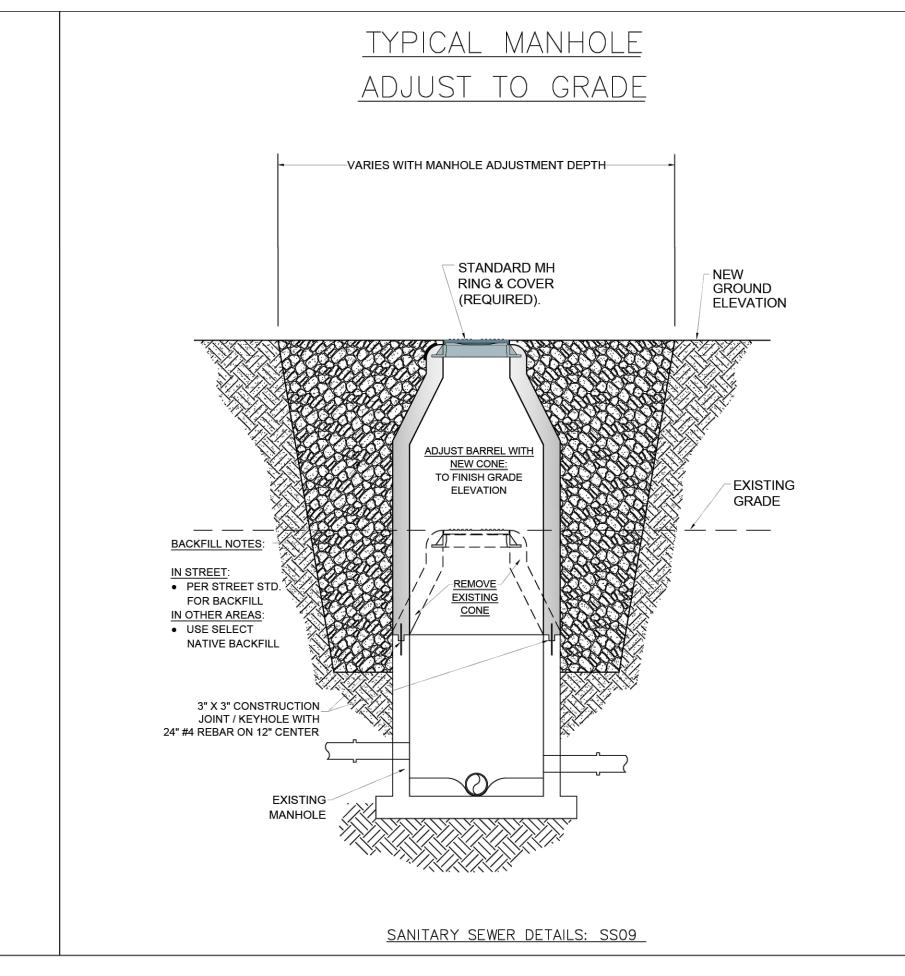
APPROVED BY: PN DATE: 03/16/2021

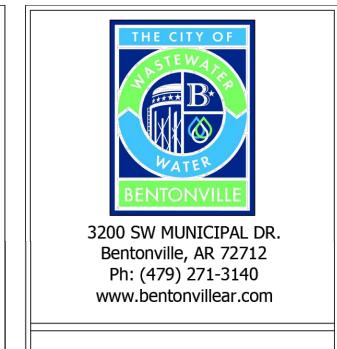
SHEET NUMBER: 1

REMOVE MY RING & COVER COME AND ON MENT OF 20 SELOW EXISTING GRADE LEGISLATION AND OF 20 SELOW EXISTING GRADE LEGISLATION AND ON THE CHANNEL AND O

PRIVATE MANHOLE RING AND LID 1/4" LETTERING (RECESSED FLUSH) (RECESSED FLUSH) (2) CLOSED PICKHOLES BOTTOM VIEW 1 3/6" — 2 1/4" COVER SECTION PICKHOLE DETAIL

SANITARY SEWER DETAILS: SS08





SAN.SEWER DETAILS



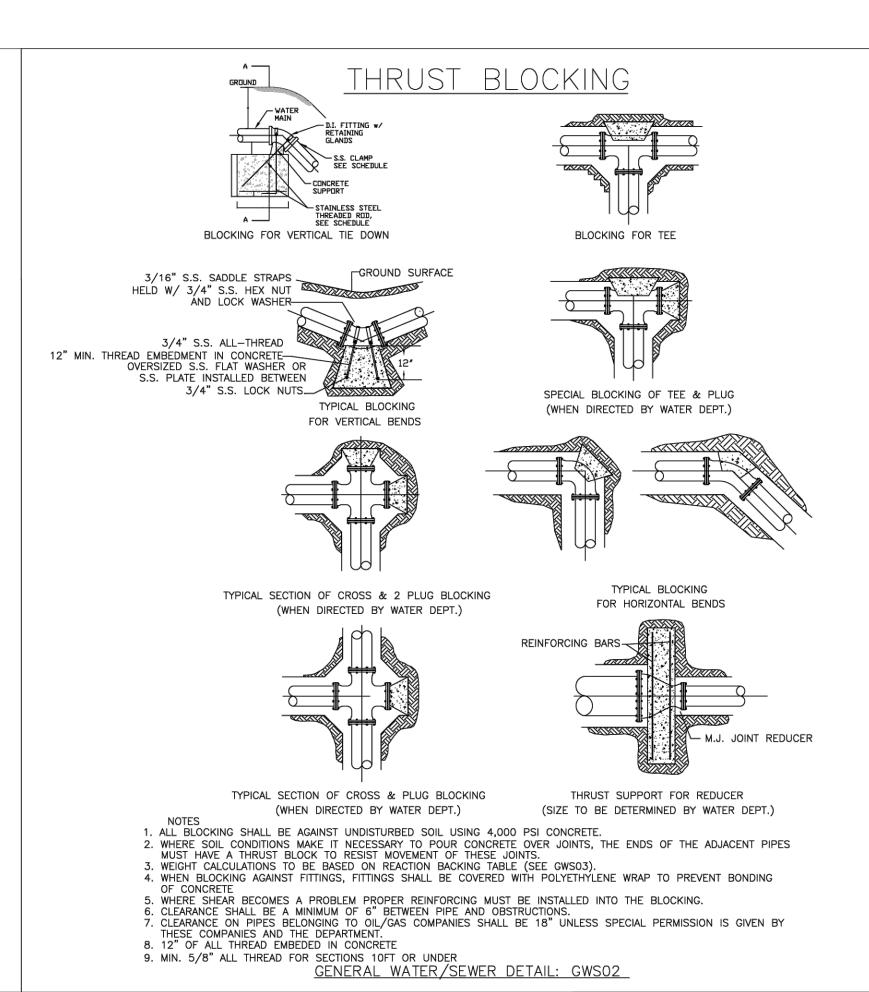


Know what's below. Call before you dig.

Call be	,1010 y	ou dig.
REVISIONS:		
Adopted by Cit Ordinance Num	y Counci iber: 202	06/22/20 1-135
Approved by D	ent of H	ealth
Approved by D 04/01/2021	ора от н	Carcii
NOTES:		
DRAWN BY:	I DATE:	
DRAWN BY: JI	DATE:	03/16/20
DRAWN BY: JI APPROVED BY: PN	DATE:	03/16/20

TO BE SPECIFIED PLACE INSULATOR/SPACER-AT CENTER OF PIPE JOINT CASING PIPE-- PLACE INSULATOR/SPACER CLAMPS/BANDS AT ENDS OF CASING PIPE NOTE: SPACERS ARE TO BE NO GREATER THAN 8' APART OR AS SPECIFIED BY MANUFACTURER. SYNTHETIC RUBBER END SEAL TWO PIECE STAINLESS STEEL BAND CASING INSULATORS/SPACERS -SYNTHETIC RUBBER POLYMER PLASTIC RUNNERS-STAINLESS STEEL BAND->STAINLESS STEEL STAINLESS STEEL JACK -SECTION A-A SECTION B-B CARRIER & CASING SIZES CARRIER 4" 6" 8" 10" 12" 14" 16" 18" 20" CASING 16" 16" 16" 18" 20" 24" 30" 30" 36" CASING/WALL THICKNESS .219 .219 .219 .250 .281 .344 .406 .406 .500 NOTE: DUCTILE IRON, OR PVC PIPE REQUIRED FOR WATER, OR SEWER. *ALL BELLS SHALL BE RESTRAINED INSIDE ENCASEMENT BY APPROVED METHOD.

ENCASEMENT DETAIL



REACTION BACKING TABLE

PIPE BENDS						
SIZE		45°	22 1/2*	11 1/4	ROD DIA.	
VOLUM	E REQ'D (CU. FT.)	98.5	50.2	25.2		
	A (FT.)	5.00'	4.00'	3.00'	1	
8"	B (FT.)	4.00'	3.20'	2.80'	3/4 IN.	
8	C (FT.)	5.00'	4.00'	3.00']	
	MIN. CLAMP (2 EA.)	3/8	3 IN. x 2	IN.		
VOLUM	IE REQ'D (CU. FT.)	209.5	106.8	53.7		
	A (FT.)	6.00'	5.00'	4.00'	3/4 IN.	
12"	B (FT.)	6.00'	4.25'	3.50'		
12	C (FT.)	6.00'	5.00'	4.00'		
	MIN. CLAMP (2 EA.)	1/2	2 IN. x 2	IN.		
VOLUM	IE REQ'D (CU. FT.)	457.2	233.1	117.1		
	A (FT.)	8.00'	6.50'	5.00'		
18"	B (FT.)	7.25	5.50'	4.75'	1 IN.	
18	C (FT.)	8.00'	6.50'	5.00'		
MIN. CLAMP (2 EA.)		5/8	3 IN. x 3	IN.		
VOLUM	IE REQ'D (CU. FT.)	800.3	408.0	205.0		
	A (FT.)	9.50'	7.50'	6.00']	
24"	B (FT.)	9.00'	7.25'	5.75'	1 1/4 IN	
	C (FT.)	9.50'	7.50'	6.00']	
	MIN. CLAMP (2 EA.)	5/8	3 IN. x 3	IN.		

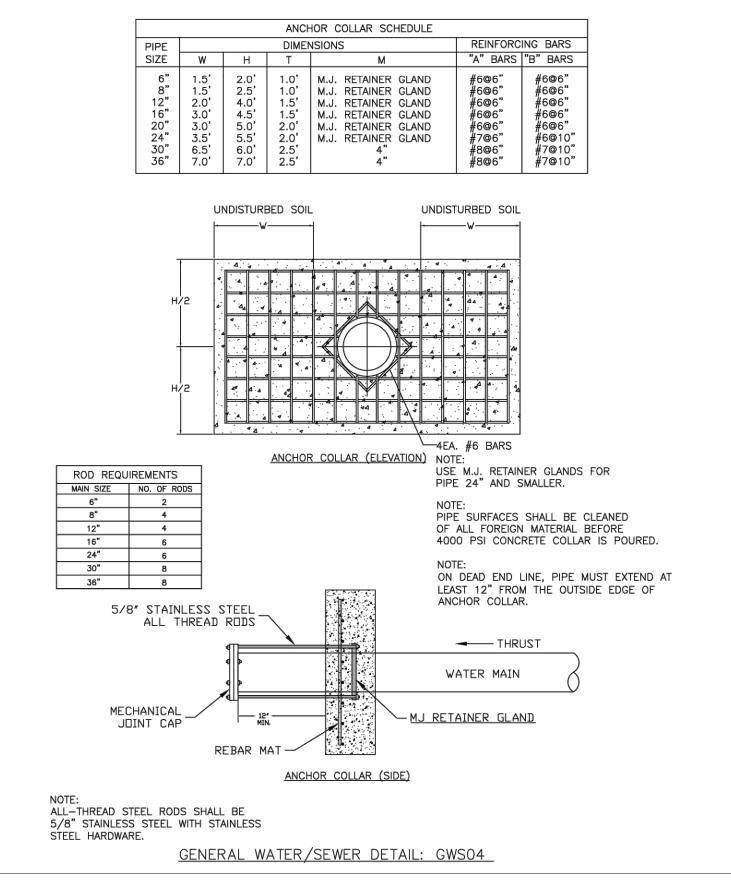
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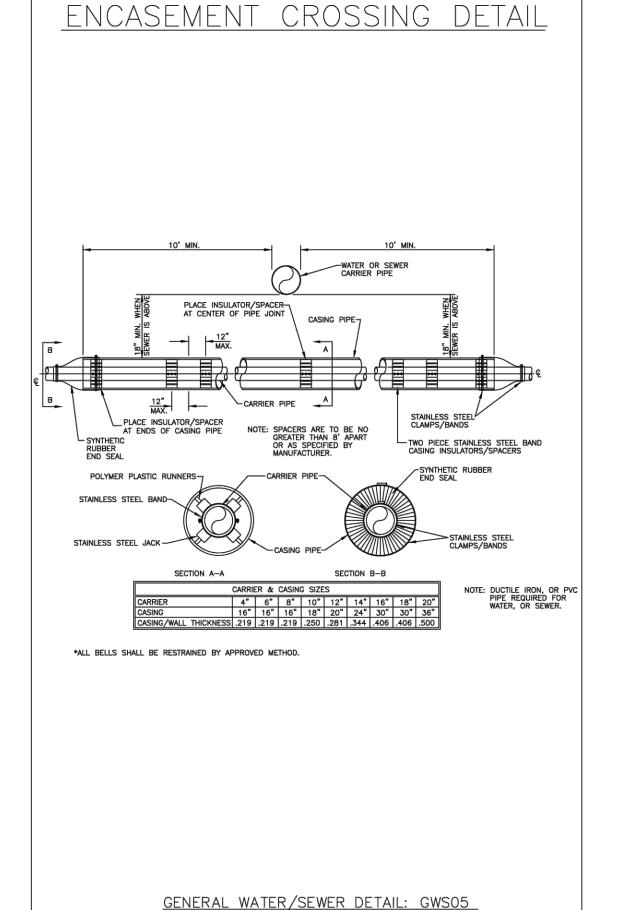
- . ALL FITTINGS SHALL BE MECHANICAL JOINTS.
- DO NOT COVER BELLS OR FLANGES WITH CONCRETE.
 WRAP ALL FITTINGS WITH POLY WRAP.
- 4. BACK ALL TEES ACCORDING TO SIZE OF BRANCH.5. BACKING FUTURE LINE EXTENSIONS SHALL BE SUCH
- THAT LATER REMOVAL IS POSSIBLE.
 6. ALL BENDS WHERE FITTINGS ARE USED, BOTH
- HORIZONTAL OR VERTICAL, SHALL BE BACKED WITH CONCRETE.
- REACTION BACKING TABLE IS BASED ON 150 PSI AND SOIL BEARING PRESSURE OF 2,000 LB/SQ. FT.
 ADDITIONAL BACKING MAY BE REQUIRED IN SOME AREAS AS REQUIRED BY CITY WATER DEPARTMENT.

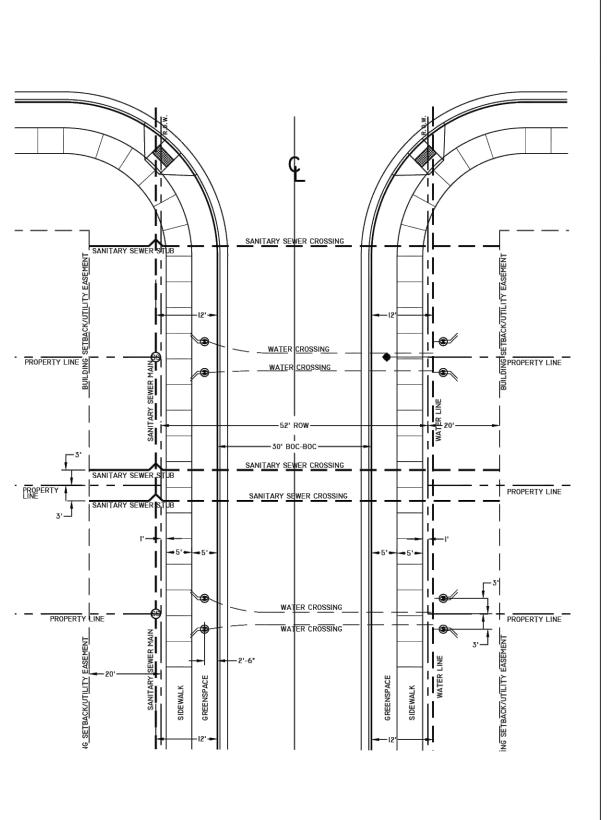
GENERAL WATER/SEWER DETAIL: GWS03

ANCHOR COLLAR SPECIFICATIONS

GENERAL WATER/SEWER DETAIL: GWS01

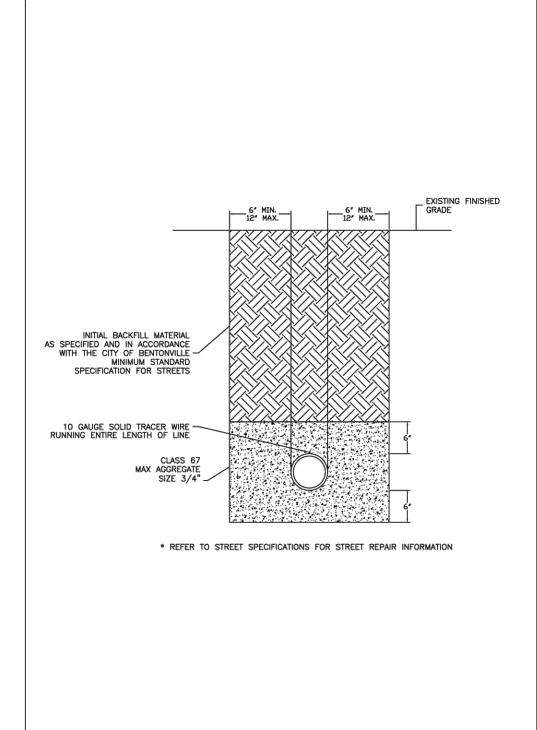






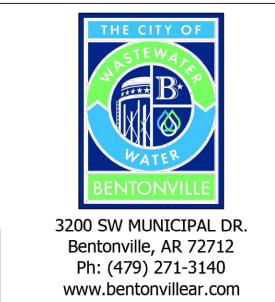
GENERAL WATER/SEWER DETAIL: GWS06

SUBDIVISION UTILITY



GENERAL WATER/SEWER DETAIL: GWS07

TYPICAL BEDDING DETAIL



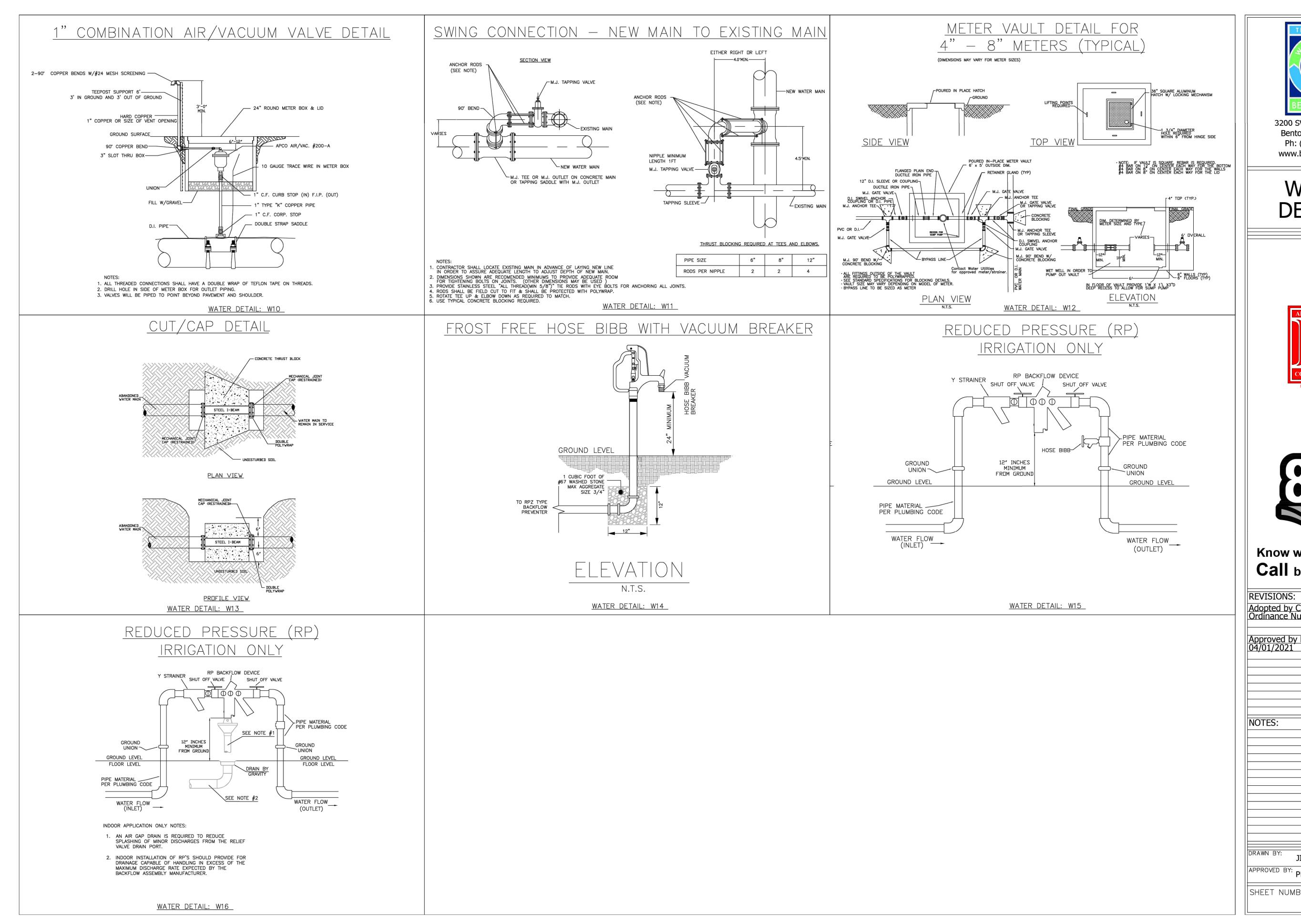
WATER/SEWER DETAILS





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

				_
REVISIONS	<u> </u>			
Adopted by Ordinance		Council er: 202	06/2 1-13	2/202 5
				7
DRAWN BY:	JI	DATE:	03/	16/20
APPROVED BY	: PN	DATE:	03/	16/20
SHEET NUI	MBER:	1	OF	7





3200 SW MUNICIPAL DR. Bentonville, AR 72712 Ph: (479) 271-3140 www.bentonvillear.com

WATER **DETAILS**





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

REV	1510NS

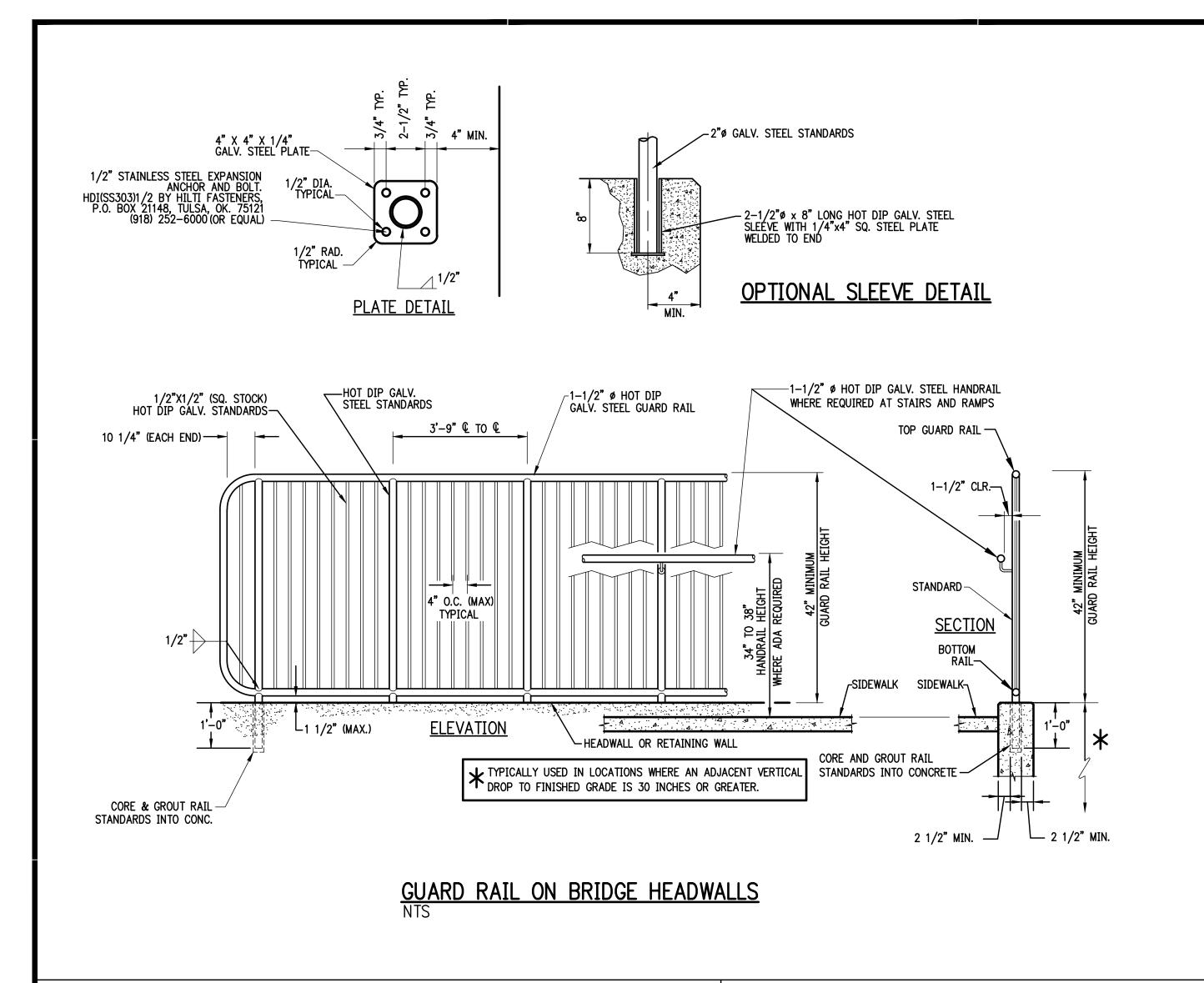
Adopted by City Council 06/22/2021 Ordinance Number: 2021-135

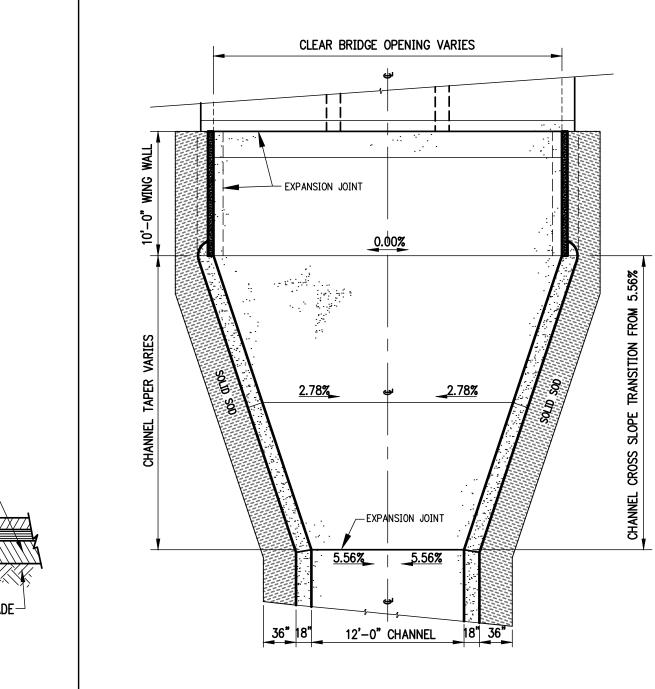
Approved by Dept. of Health 04/01/2021

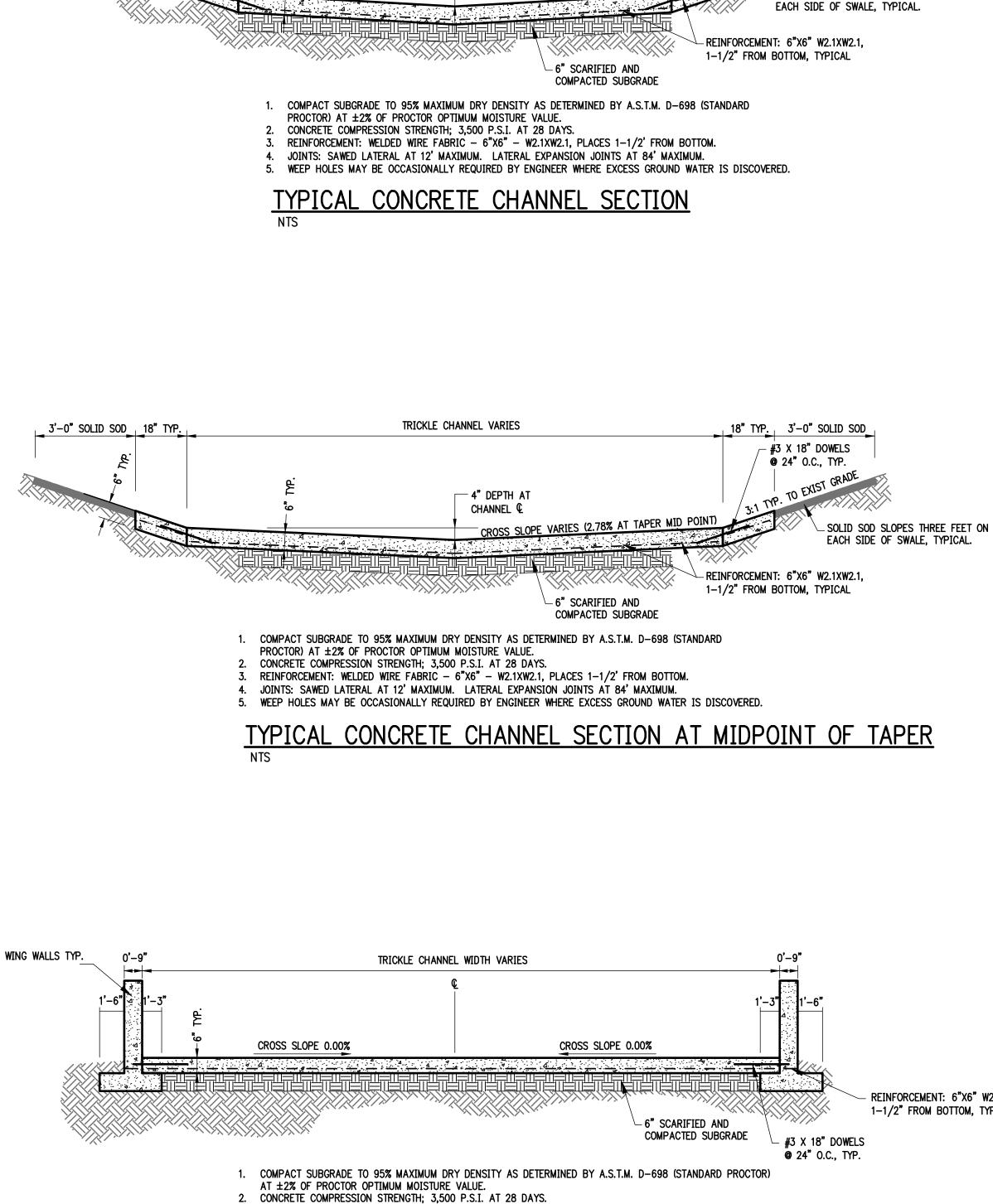
NOTES:

03/16/2021 APPROVED BY: PN

SHEET NUMBER:







3. REINFORCEMENT: WELDED WIRE FABRIC - 6"X6" - W2.1XW2.1, PLACES 1-1/2' FROM BOTTOM.

5. WEEP HOLES MAY BE OCCASIONALLY REQUIRED BY ENGINEER WHERE EXCESS GROUND WATER IS DISCOVERED.

TYPICAL CONCRETE CHANNEL SECTION AT WING WALLS

4. JOINTS: SAWED LATERAL AT 12' MAXIMUM. LATERAL EXPANSION JOINTS AT 84' MAXIMUM.

12'-0" TRICKLE CHANNEL

— 4" DEPTH AT

CHANNEL &

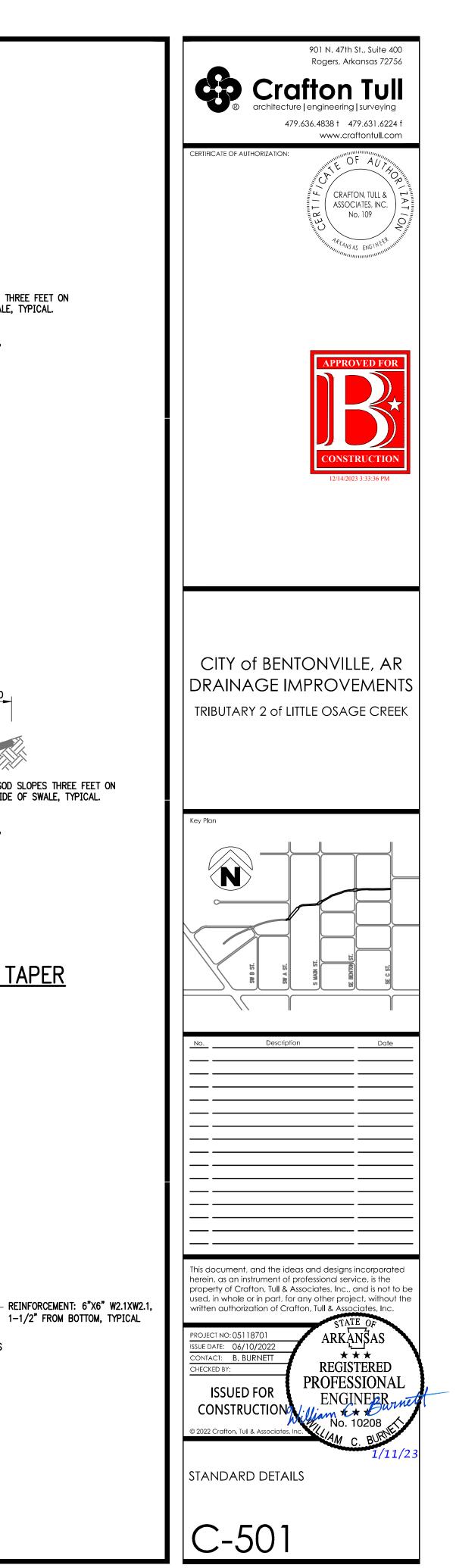
18" TYP. 3'-0" SOLID SOD

#3 X 18" DOWELS

_ SOLID SOD SLOPES THREE FEET ON

@ 24" O.C., TYP

3'-0" SOLID SOD 18" TYP.



THE CONTRACTOR SHALL APPLY A TACK COAT TO THE FACE OF THE CONCRETE GUTTER WHERE THE 6" CLASS 7 BASE COURSE 2" ACHM SURFACE COURSE -COMPACTED SUBGRADE-

ASPHALT REPAIR SECTIONS
NTS

THE SUBGRADE UNDER PAVEMENTS SHALL BE PREPARED IN ACCORDANCE WITH THE CONTRACT

REQUIREMENTS SHOWN IN THE CONTRACT SPECIFICATIONS OR WITH THE LOCAL STANDARD

COMPACTED TO AT LEAST 95% OF MODIFIED PROCTOR.

SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

COMPACTED SUBGRADE-

GUTTER CONTACTS ASPHALT.

6" CLASS 7 BASE COURSE -

2" ACHM SURFACE COURSE -

AFTER PROOF ROLLING WITH A LOADED TANDEM AXLE DUMP TRUCK AND PREPARING DEEP SUBGRADE

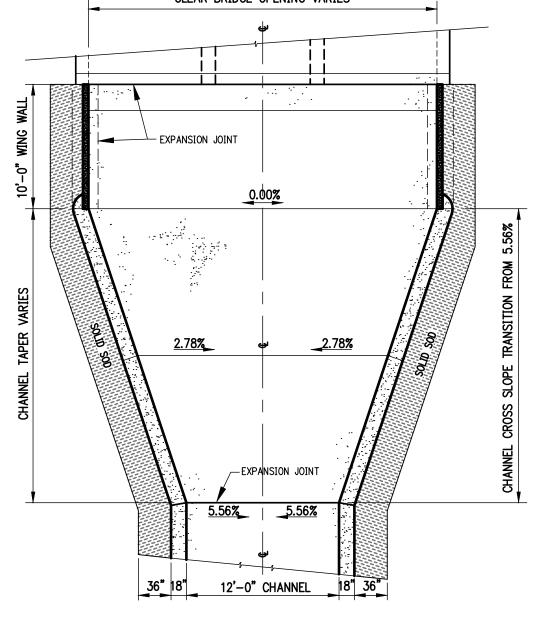
AGGREGATE BASE COURSE MIXTURES SHALL CONFORM WITH THE GRADATION, COMPACTION AND OTHER

ASPHALTIC SURFACE AND BINDER COURSES SHALL CONFORM WITH THE GRADATION, COMPACTION AND OTHER REQUIREMENTS SHOWN IN THE CONTRACT SPECIFICATIONS OR WITH THE LOCAL STANDARD

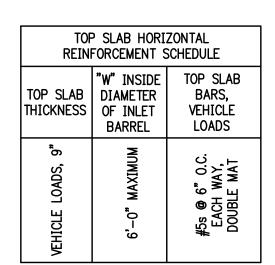
PORTLAND CEMENT CONCRETE PAVEMENT SHALL CONFORM WITH THE REQUIREMENTS SHOWN IN THE

CONTRACT SPECIFICATIONS OR WITH THE LOCAL STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE

DEFICIENCIES, THE ENTIRE SUBGRADE SHOULD BE SCARIFIED TO A DEPTH OF 8" AND UNIFORMLY



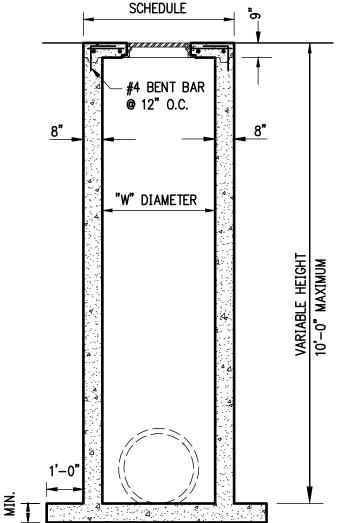
CHANNEL PLAN AT CULVERTS



		"W" INLET	
	AMETER TO BE INSIDERING DEPTH SIZES AND PIPE REQUIREMENTS.	DIAMETER OF LARGEST PIPE ENTERING INLET	"W" MINIMUM INLET DIAMETER
	DIAMETER TO CONSIDERING : SIZES AND F REQUIREMEN	12" TO 27"	4'-0" DIA
		30" TO 42"	5'-0" DIA
	"W" BARREL DETERMINED BY OF BURY, PIPR ARRANGEMEN	48" TO 54"	6'-0" DIA
		PIPES ARE LI DEGREES. I USE LARGER-DIAI BAR	IF GREATER, NEXT METER INLET

CONCRETE CHARACTERISTICS	CLASS A	CLASS B
MIN. COMPRESSION STRENGTH (PSI AT 28 DAYS)	3000	3500
MIN. CEMENT CONTENT (BAGS PER CUBIC YARD)	5.5	6.0
MAX. NET WATER / 94LB. BAG (GALLONS)	6.5	5.5
SLUMP RANGE (INCHES)	1-4*	1-4*
AIR CONTENT RANGE (%)	4–7	4-7
MAX. FLY ASH CONTENT (%)	20	20

* MAX. SLUMP SHALL BE 2" WHEN SLIP FORM PAVEMENT METHODS ARE USED.



SEE TOP SLAB

HORIZONTAL BAR

BENT BAR ADDITIONAL DIAGONAL BARS, SAME SIZE AND SPACING AS HORIZONTAL BARS, 2 PER SIDE. ROUND UNLESS TOP SLAB BARS. SEE SCHEDULE. - UNLESS OTHERWISE SPECIFIED

ADJACENT TO SIDEWALKS OR OTHER CONCRETE SURFACES. BASE AND INLET WALLS TO BE POURED MONOLITHICALLY. 3. PIPES MAY ENTER BOX FROM ANY ANGLE OR ELEVATION APPROVED BY THE ENGINEER.

1. PROVIDE 3/4" CHAMFER ON ALL EXPOSED EDGES UNLESS

- 4. ALL #4 & #5 REINFORCING BARS TO BE GRADE 60 AND HAVE 1-1/2" MINIMUM COVER. >#5, 2" COVER. PROVIDE DOUBLE MAT FOR SQUARE-TOP SLAB.

6. TOP SLAB, CLASS B, 3500#, 4%-7% A.E.

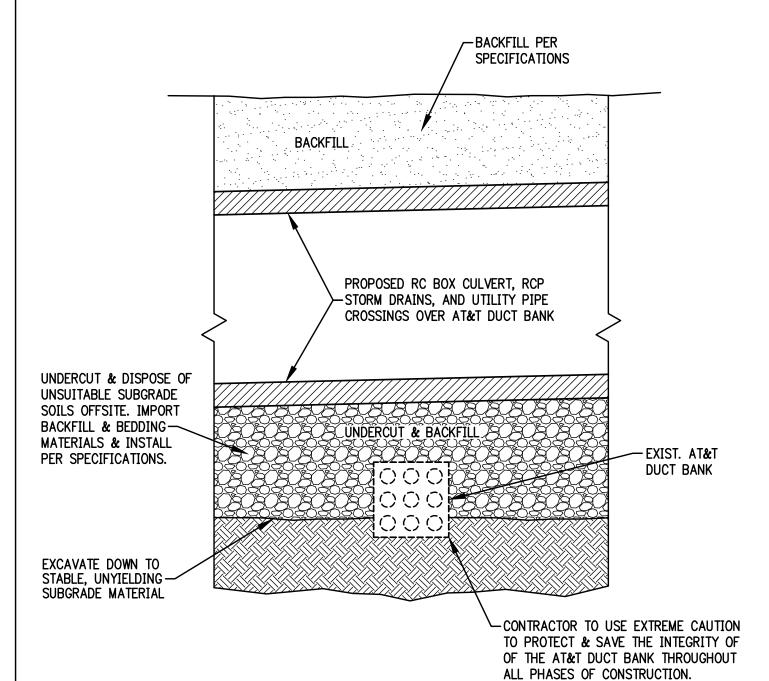
TRAFFIC-RATED

TYPICAL TRAFFIC-RATED CIRCULAR-BARREL JUNCTION BOX

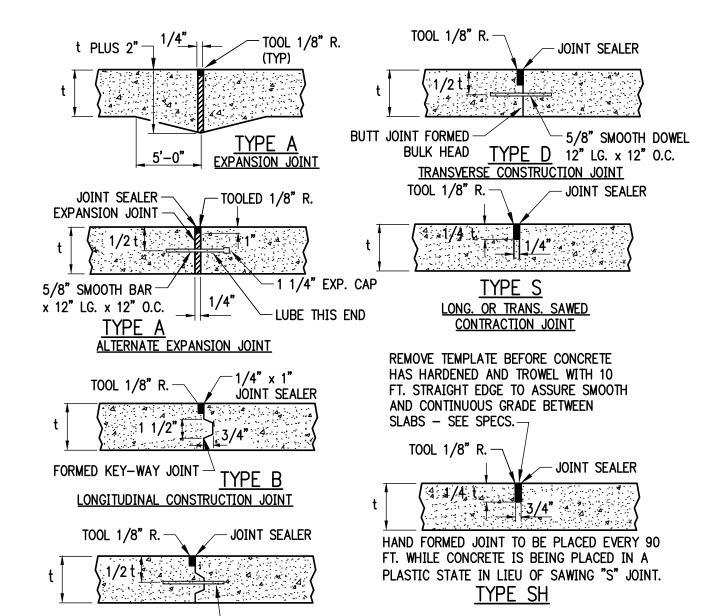
NOTE: THIS DETAIL IS GENERIC, NOT JURISDICTION OR SITE-SPECIFIC. REVISED 04/16/15 USE JURISDICTION-SPECIFIC DETAILS WHEN AND WHERE REQUIRED.

NOTES:

- CONTRACTOR TO PROTECT AT&T DUCT BANK THROUGHOUT ALL PHASES OF CONSTRUCTION. POTHOLE EXISTING DUCT BANK AND OTHER UTILITIES PRIOR TO MAJOR EXCAVATION.
- REFER TO THE GEOTECHNICAL REPORT RECOMMENDATIONS. UNDERCUT & DISPOSE OF POOR SUBGRADE MATERIALS DOWN TO UNYIELDING SUBGRADE AS DIRECTED BY THE ENGINEER, GEOTECHNICAL ENGINEER, AND CITY OF BENTONVILLE.
- INSTALL REPLACEMENT BACKFILL & BEDDING MATERIALS FROM OFFSITE SOURCES PER THE PIPE MANUFACTURER'S SPECIFICATIONS & THE CITY'S STANDARD SPECIFICATIONS. INSTALL NEW PIPES TO THE DESIGNED LINES & GRADES SHOWN IN THE PLANS.
- BACKFILL PIPES IN LIFTS ACCORDING TO THE CITY'S STANDARD SPECIFICATIONS & THE PIPE MANUFACTURER'S SPECIFICATIONS.
- PAYMENT SHALL BE MADE UNDER THE VARIOUS LINE ITEMS FOR UNDERCUT & BACKFILL, PIPE MATERIALS, ETC. NO SEPARATE PAYMENT SHALL BE MADE FOR THE SAFEGUARDING OF THE AT&T DUCT BANK WHICH SHALL BE INCIDENTAL TO THE OTHER ITEMS.



UNDERCUT, BACKFILL & SAFEGUARDING OF THE EXISTING AT&T DUCT BANK



-3/8" DEFORMED BARS 18" LG. x 24" O.C. TIED TRANSVERSE CONSTRUCTION JOINT

- ALL JOINTS SPACING NOT TO EXCEED 15'-0" INTERVALS.
- SAWED JOINTS SHALL BE CUT AS SOON AS POSSIBLE AFTER FINISH WORK IS COMPLETE & CONCRETE HAS CURED TO ACCEPT TYPE OF SAW EQUIPMENT.
- 3. ASSURE SAW JOINTS ARE CLEAN AND DRY PRIOR TO THE APPLICATION OF THE JOINT SEALANT.
- 4. SPECIFIED JOINT SEALANT APPLIED IN ACCORDANCE WITH SEALANT MANUFACTURER'S
- REQUIREMENTS SEALANT TOOLED 1/8" BELOW PAVEMENT SURFACE. DRILLING BY HAND OR PUSHING DOWEL BARS INTO GREEN CONCRETE IS NOT ACCEPTABLE.
- COMPLETELY FILL HOLE WITH EPOXY GROUT AND INSERT DOWEL WITH EXPANSION CAPS.

7. DOWELS SHALL BE ALIGNED PERPENDICULAR TO THE JOINT.

CONCRETE PAVEMENT JOINTING DETAIL

CITY of BENTONVILLE, AR

DRAINAGE IMPROVEMENTS

TRIBUTARY 2 of LITTLE OSAGE CREEK

901 N. 47th St., Suite 400 Rogers, Arkansas 72756

479.636.4838 † 479.631.6224 f

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CRAFTON, TULL & ASSOCIATES, INC.

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REGISTERED

liam tex to

No. 10208

SSUE DATE: 06/10/202 NTACT: B. BURNETT **PROFESSIONAL ISSUED FOR** CONSTRUCTION

STANDARD DETAILS

C-502

DBL. RODS REQ'D. WHEN GATE & CORNER POSTS ARE ADJACENT. LOCKABLE ─ 2 7/8" O.D. GALV. POST LATCH REQ'D. © DBL. SWING GATE — (TYP. FOR ALL END, CORNER AND PULL POSTS.) TYP. FOR GATE OR COR. POST/ 10'-0" MAX. 500'-0" MAX. MIN. 7 GAUGE TENSION WIRE TYP. FOR GATE POSTS 12" -LINE POST 2 3/8" O.D. GALV. POST (TYP. FOR ALL LINE POSTS)

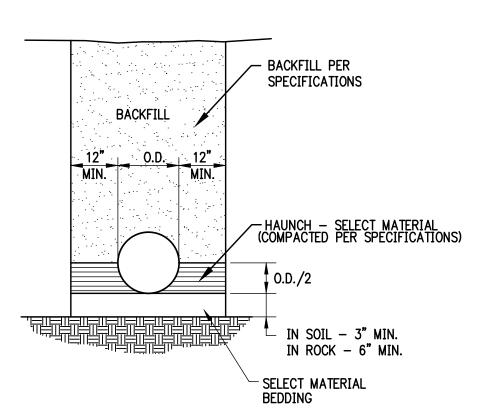
CHAIN LINK FENCE

* AS SHOWN ON SITE PLAN

1. UNDER PAVEMENT, BACKFILL ENTIRE EXCAVATION WITH CLASS 7 AGGREGATE BASE MATERIAL COMPACTED IN 8" LIFTS TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY.

CONSTRUCTION SEQUENCE

- 1. PLACE SELECT BEDDING MATERIAL TO GRADE. COMPACT SELECT BEDDING BELOW THE PIPE.
- INSTALL PIPE TO GRADE.
- 4. PLACE AND COMPACT THE HAUNCH AREA UP TO THE MIDDLE OF THE PIPE.
- 5. COMPLETE BACKFILL ACCORDING TO SPECIFICATIONS.



CONCRETE PIPE INSTALLATION

1. UNDER PAVEMENT, BACKFILL ENTIRE EXCAVATION WITH CLASS 7 AGGREGATE BASE MATERIAL COMPACTED IN 8" LIFTS TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY.

TOP SLAB TO BE

SQUARE SHAPE

BETTER SUITS

ADJACENT SITE CONDITIONS

BY LOCAL JURISDICTION'S

STANDARDS OR CUSTOMIZED

REQUIREMENTS, LID AND RING

SHALL BE HEAVY DUTY EAST

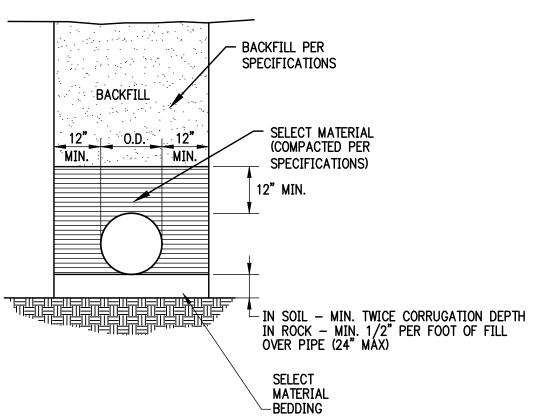
JORDAN #1606 OR APPROVED

CONSTRUCTION SEQUENCE

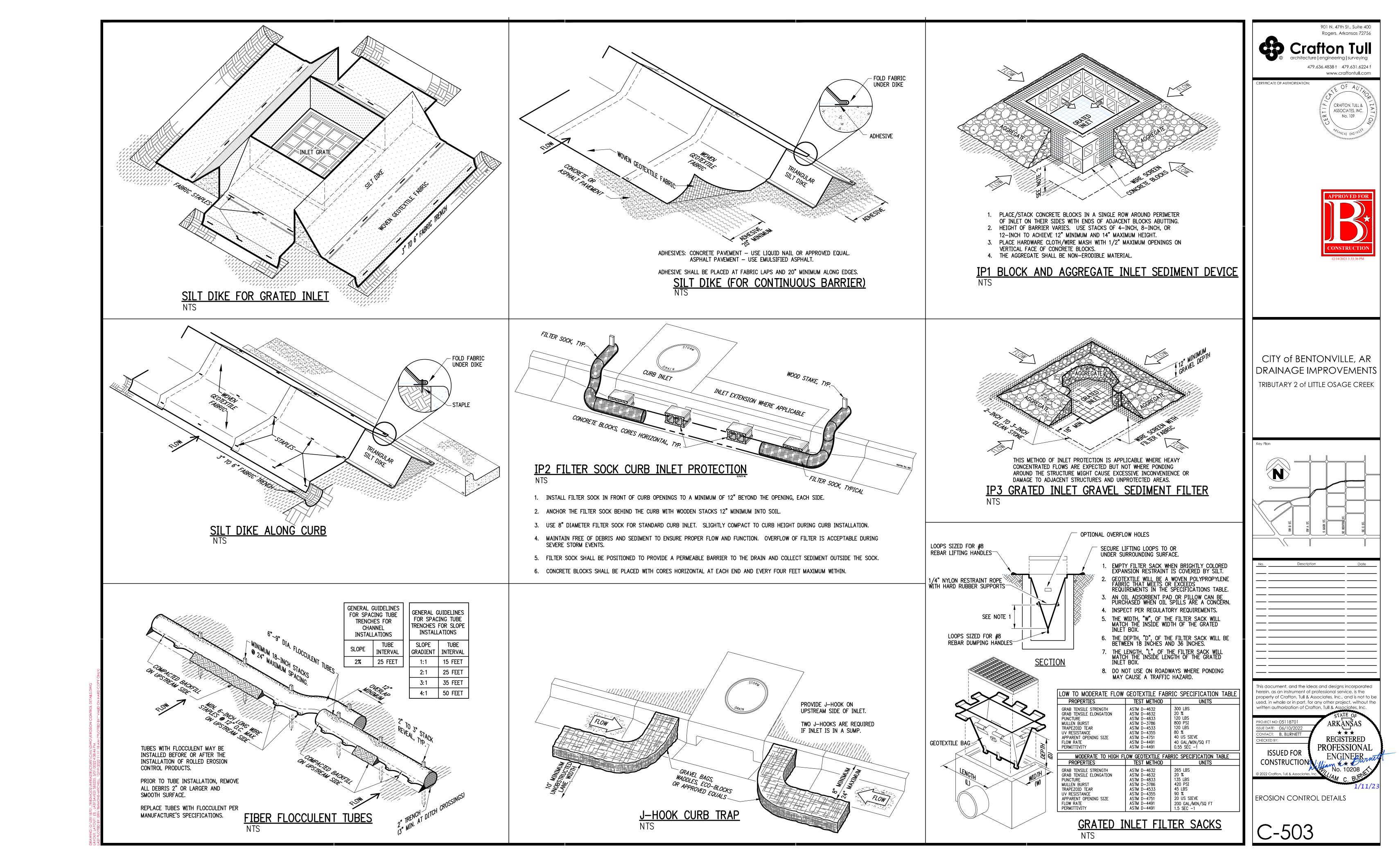
WHICHEVER IS LESS.

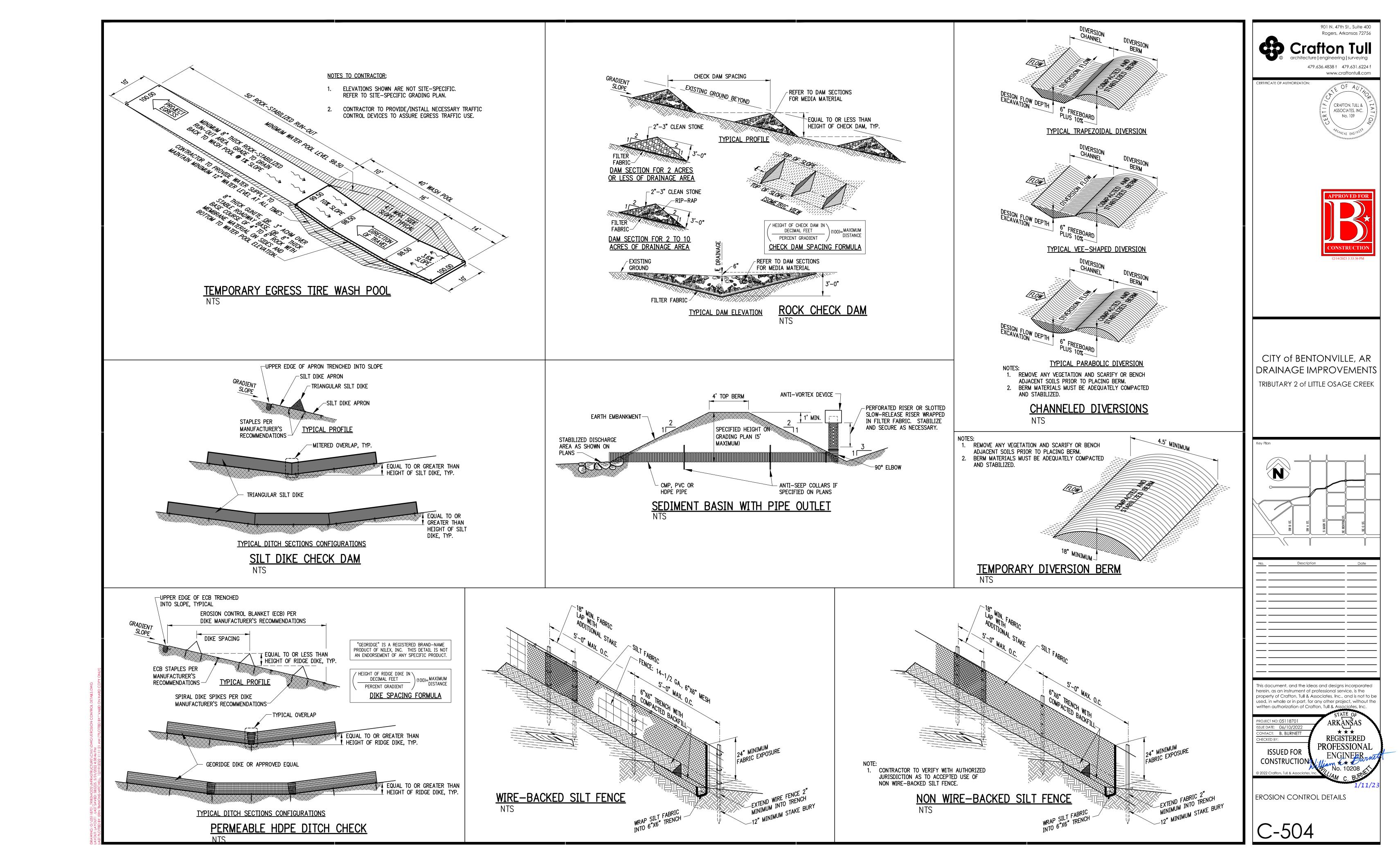
- 1. PLACE SELECT BEDDING MATERIAL TO GRADE.
- COMPACT SELECT BEDDING BELOW THE PIPE.
- INSTALL PIPE TO GRADE. COMPLETE STRUCTURAL BACKFILL OPERATION BY WORKING FROM SIDE TO SIDE OF THE PIPE, THE SIDE TO STRUCTURAL BACKFILL DIFFERENTIAL

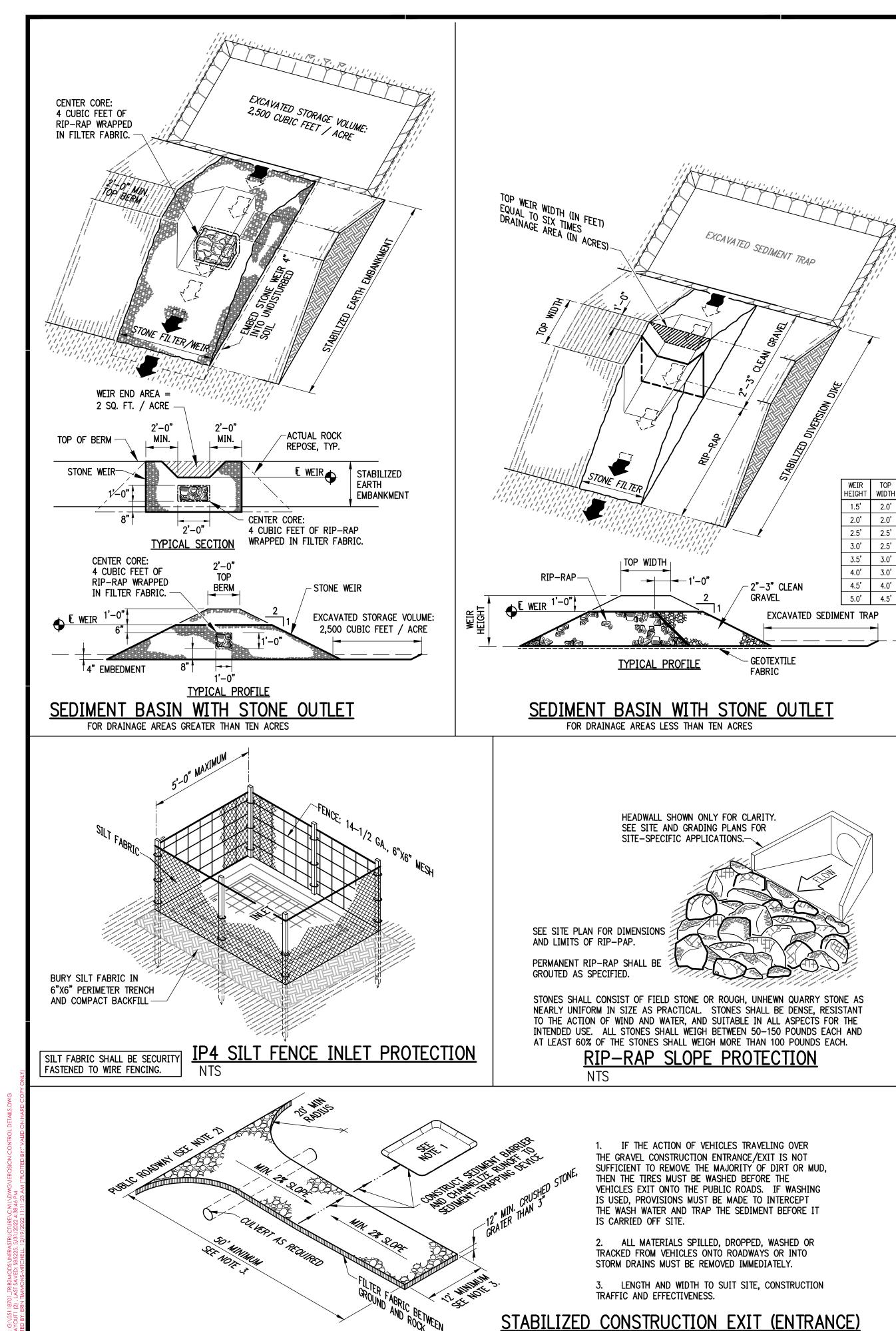
SHALL NOT TO EXCEED 24 INCHES OR 1/3 THE SIZE OF THE PIPE

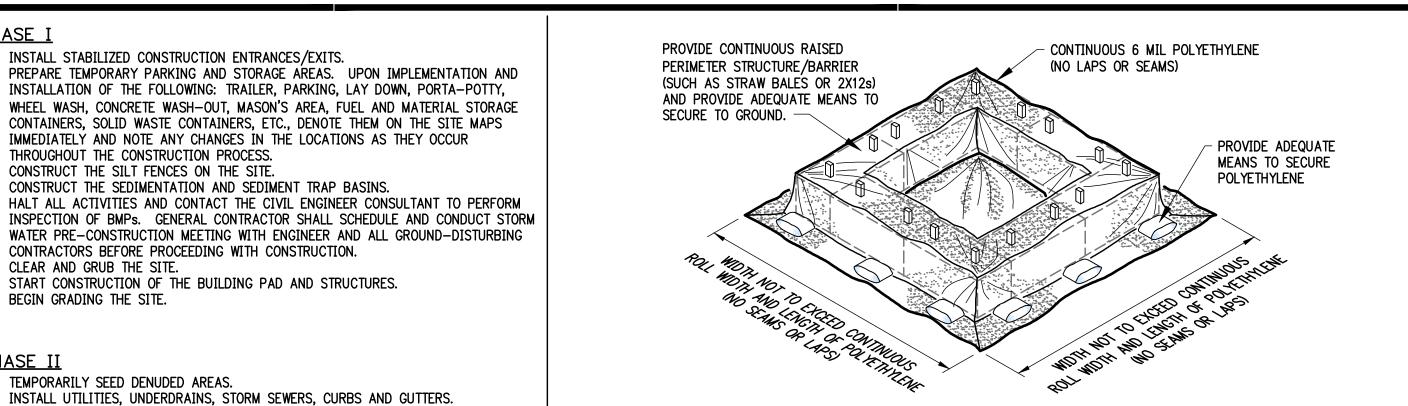


METAL PIPE INSTALLATION









PHASE :

CLEAR AND GRUB THE SITE.

PREPARE SITE FOR PAVING.

GENERAL EROSION NOTES:

FAMILIAR WITH THEIR CONTENTS.

MAINTAINED ON THE SITE AT ALL TIMES.

AS REQUIRED BY THE GENERAL PERMIT.

CHEMICAL SPILLS AND LEAKS.

BLOWN OR WASHED OFF-SITE.

SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.

AND SWPPP SHALL BE INITIATED AS SOON AS POSSIBLE.

FOR AT LEAST 14 DAYS SHALL BE TEMPORARY SEEDED.

TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF-SITE.

ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

MAP AND PERMITTED IN ACCORDANCE WITH THE GENERAL PERMIT.

TO REDUCE RUNOFF VELOCITIES AND EROSION.

(SILT FENCES, STRAW BALES, ETC.) TO PREVENT EROSION.

OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.

GRADING PLAN AND/OR LANDSCAPE PLAN.

AGENCY OR OWNER.

PAVE SITE.

STABILIZED.

TEMPORARILY SEED DENUDED AREAS.

INSTALL INLET PROTECTION DEVICES.

INSTALL RIP-RAP AROUND OUT STRUCTURES.

INSTALL INLET PROTECTION AROUND ALL STORM SEWER STRUCTURES.

COMPLETE GRADING AND INSTALL PERMANENT SEEDING AND PLANTING.

REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES IF SITE IS

THE SPECIFICATIONS SECTION 312800 (EROSION AND SEDIMENTATION CONTROL), PLUS

ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION

CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY

THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS

SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY

GENERAL CONTRACTOR SHALL DENOTE THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING

ALL WASH WATER (CONCRETE TRUCKS, VEHICLE AND EQUIPMENT CLEANING, ETC.)

SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN UP FUEL OR

DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER

ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN

DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED

DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS

THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE

O. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION

ENTRANCE/EXIT IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN

THE TIRES MUST BE WASHED BEFORE THE VEHICLES EXIT ONTO THE PUBLIC ROADS. IF

ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO

WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND

CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING

SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN

ON-SITE AND OFF-SITE STOCKPILE AND BORROW AREAS SHALL BE PROTECTED

FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT

PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE

DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE

ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT

CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES

THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF

PETROLEUM-BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS

K. RUBBISH, TRASH, GARBAGE, LITTER OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM BEING

AREA, AND AREA FOR PORTABLE FACILITIES, OFFICE TRAILERS AND TOILET FACILITIES.

PREVENTION PLAN (SWPPP) AND THE STATE OF ARKANSAS NATIONAL POLLUTANT

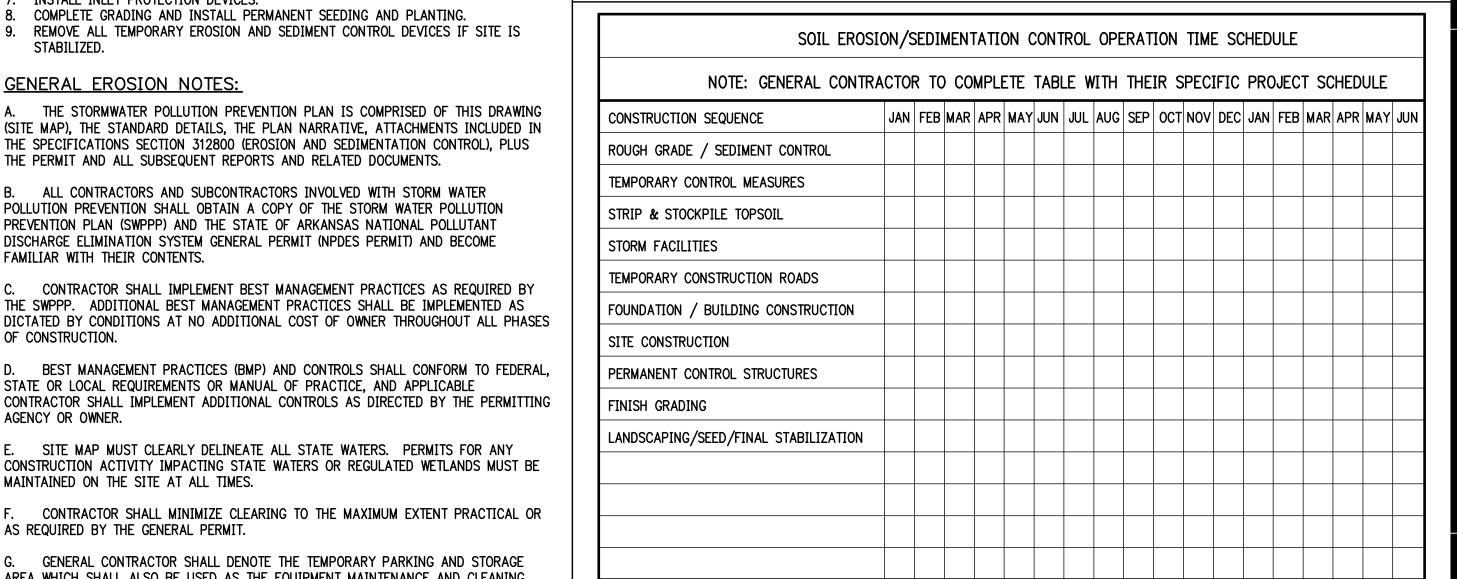
DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME

STATE OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AND APPLICABLE

THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.

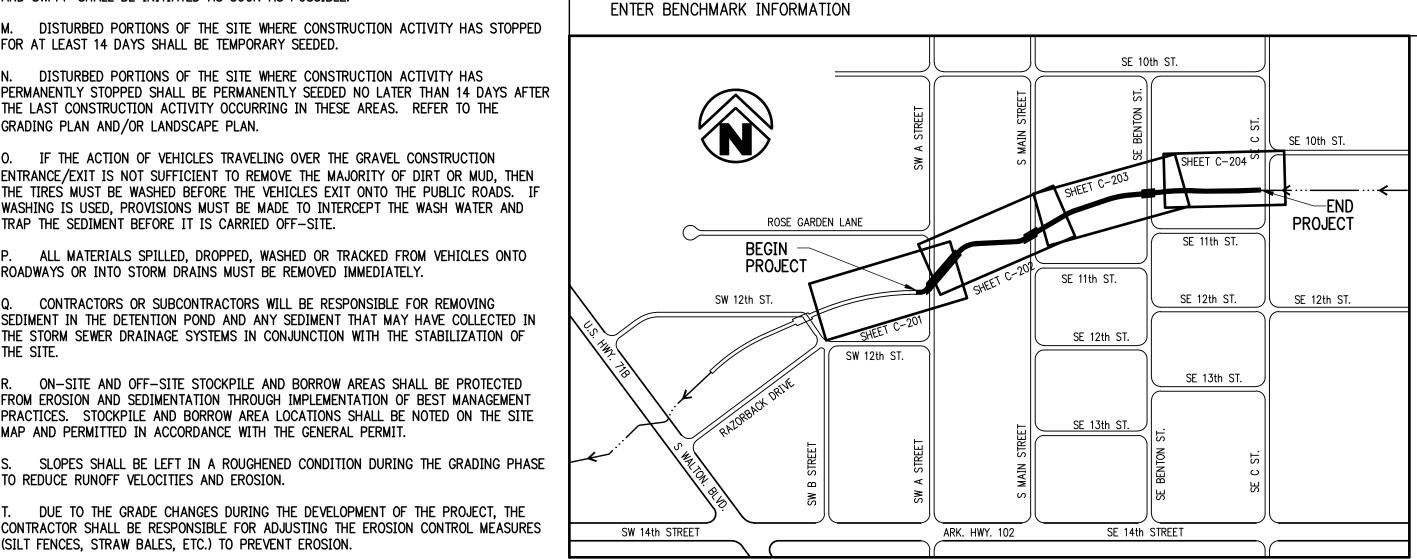
BEGIN GRADING THE SITE.

CONCRETE WASH-OUT BASIN



DEVELOPER / OWNER: ENTER DEVELOPER INFORMATION ACREAGE SUMMARY IMPERVIOUS AREA ENTER ACREAGE SEEDED AREA ENTER ACREAGE SITE OPERATOR/GENERAL CONTRACTOR: ENTER ACREAGE TOTAL DISTURBED SUPERINTENDENT:

T.B.M.



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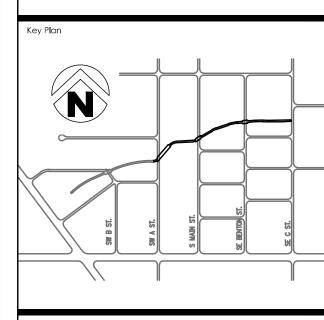
ASSOCIATES, INC. No. 109

901 N. 47th St., Suite 400

Roaers, Arkansas 72756



CITY of BENTONVILLE, AR DRAINAGE IMPROVEMENTS TRIBUTARY 2 of LITTLE OSAGE CREEK



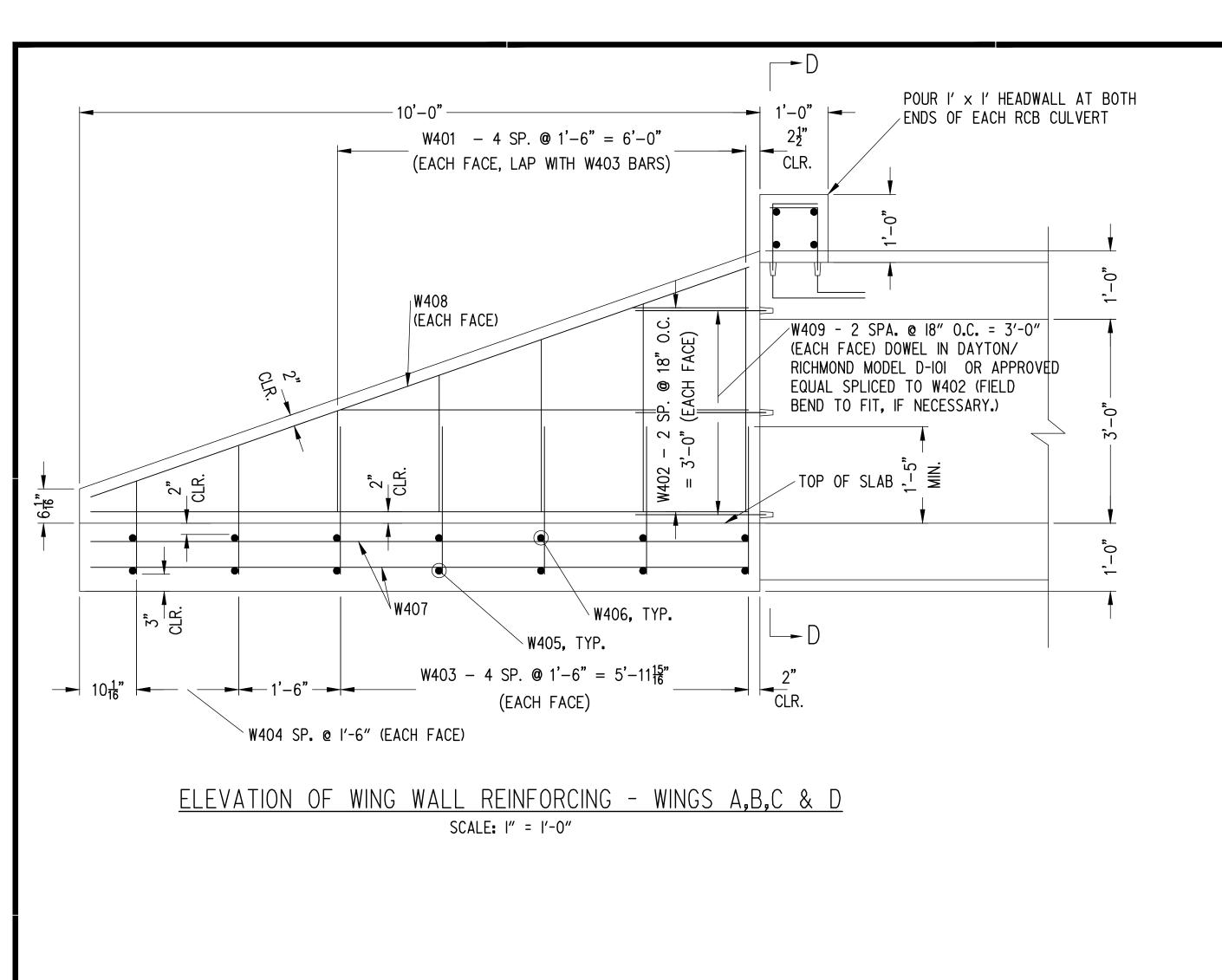
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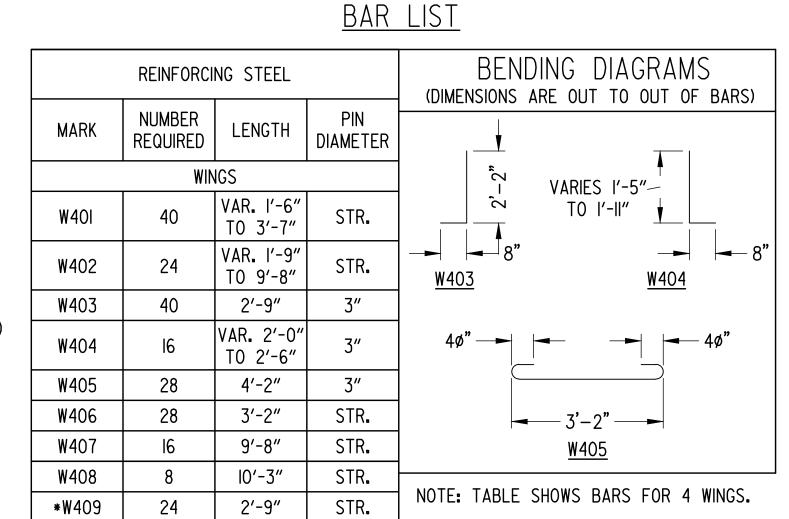
EROSION CONTROL DETAILS

CONSTRUCTION

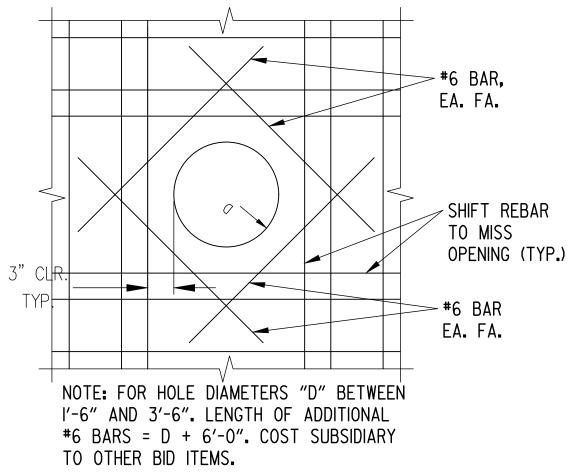


GENERAL NOTES CONCRETE SHALL BE CLASS 'S' WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF F'C = 3,500 P.S.I. CONCRETE SHALL BE POURED IN THE DRY. ALL EXPOSED CORNERS SHALL BE CHAMFERED I" UNLESS OTHERWISE NOTED.

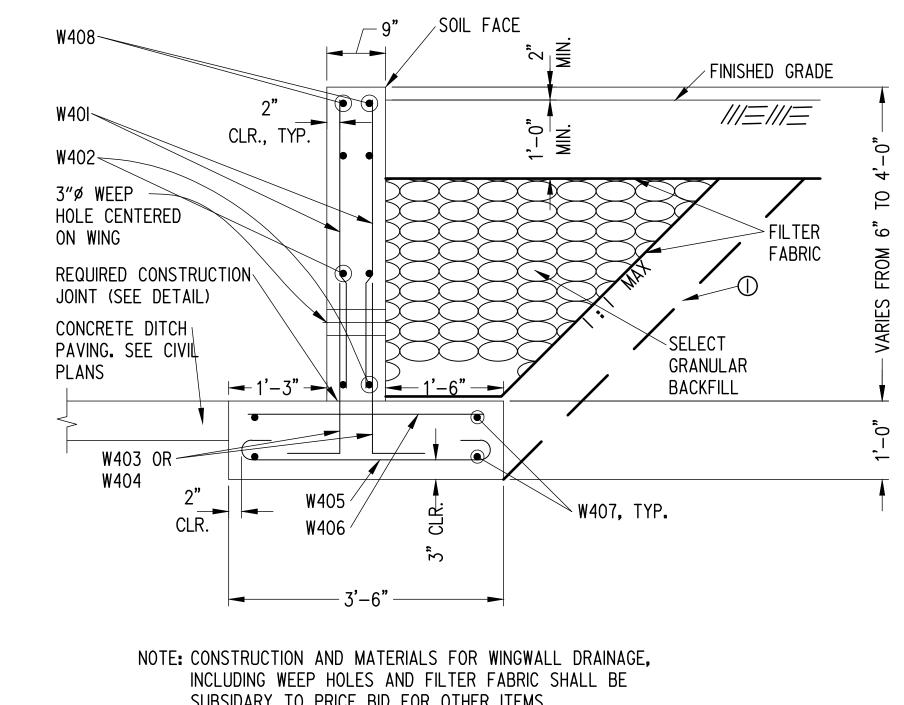
ALL REINFORCING STEEL SHALL BE GRADE 60 (FY = 60,000 PSI) AASHTO M 31 OR M 322, TYPE A WITH MILL TEST REPORTS.



*DAYTON/RICHMOND MODEL D-IOI. FIELD BEND TO FIT, IF NECESSARY.

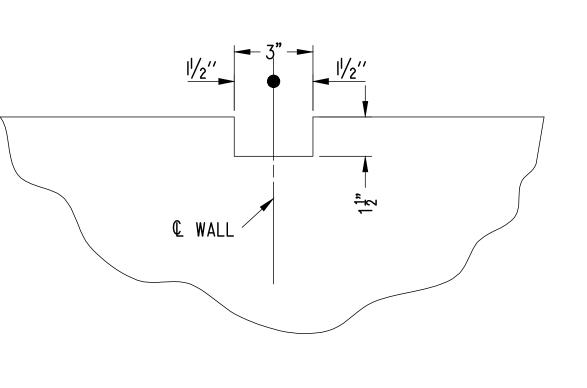


PIPE PENETRATION DETAIL



SUBSIDARY TO PRICE BID FOR OTHER ITEMS.

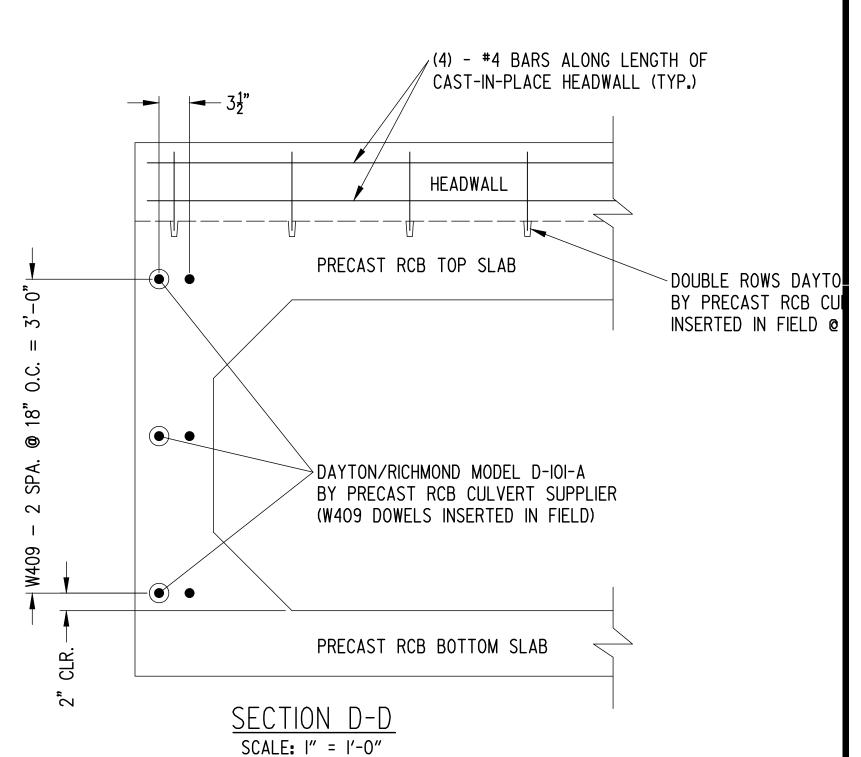
TYPICAL SECTION THRU WING SCALE: I" = I'-0"

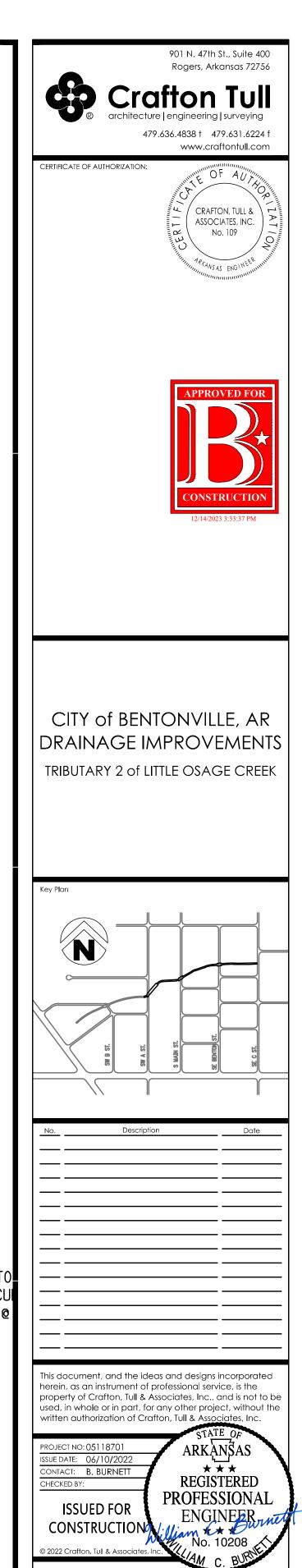


SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

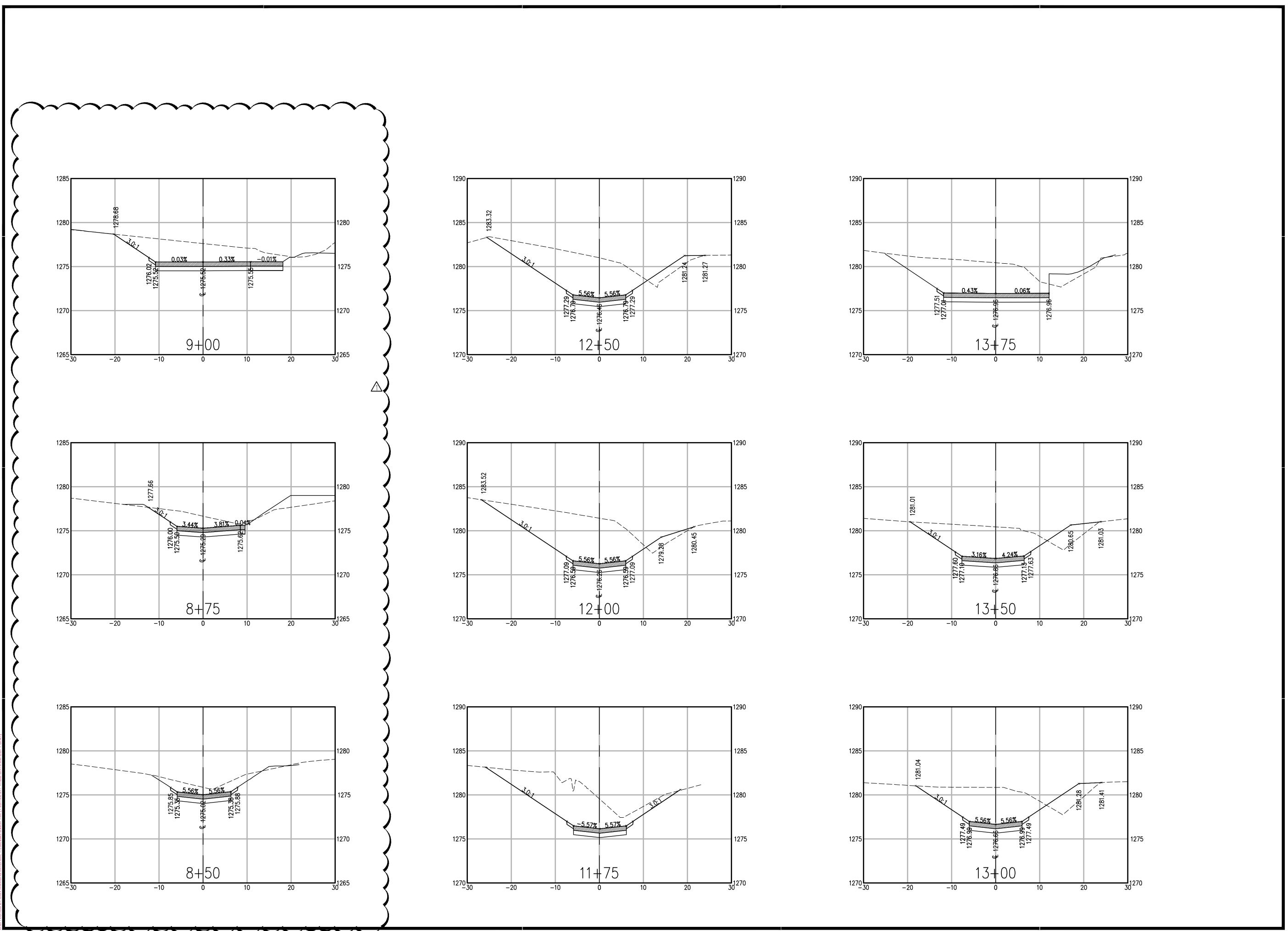
PAYMENT SHALL BE SUBSIDIARY TO OTHER BID ITEMS.

KEY DETAIL SCALE: 3" = 1'-0"

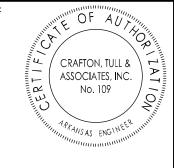




WINGWALL DETAIL

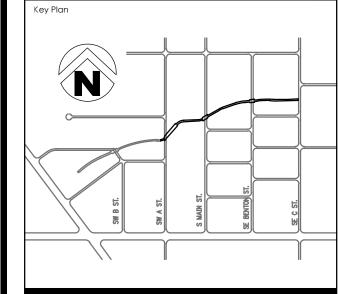








CITY of BENTONVILLE, AR DRAINAGE IMPROVEMENTS TRIBUTARY 2 of LITTLE OSAGE CREEK



140.	Description	Date
1	CHANNEL WIDTH MODIFIED	11/13/2023
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ISSUE DATE: 06/10/2022
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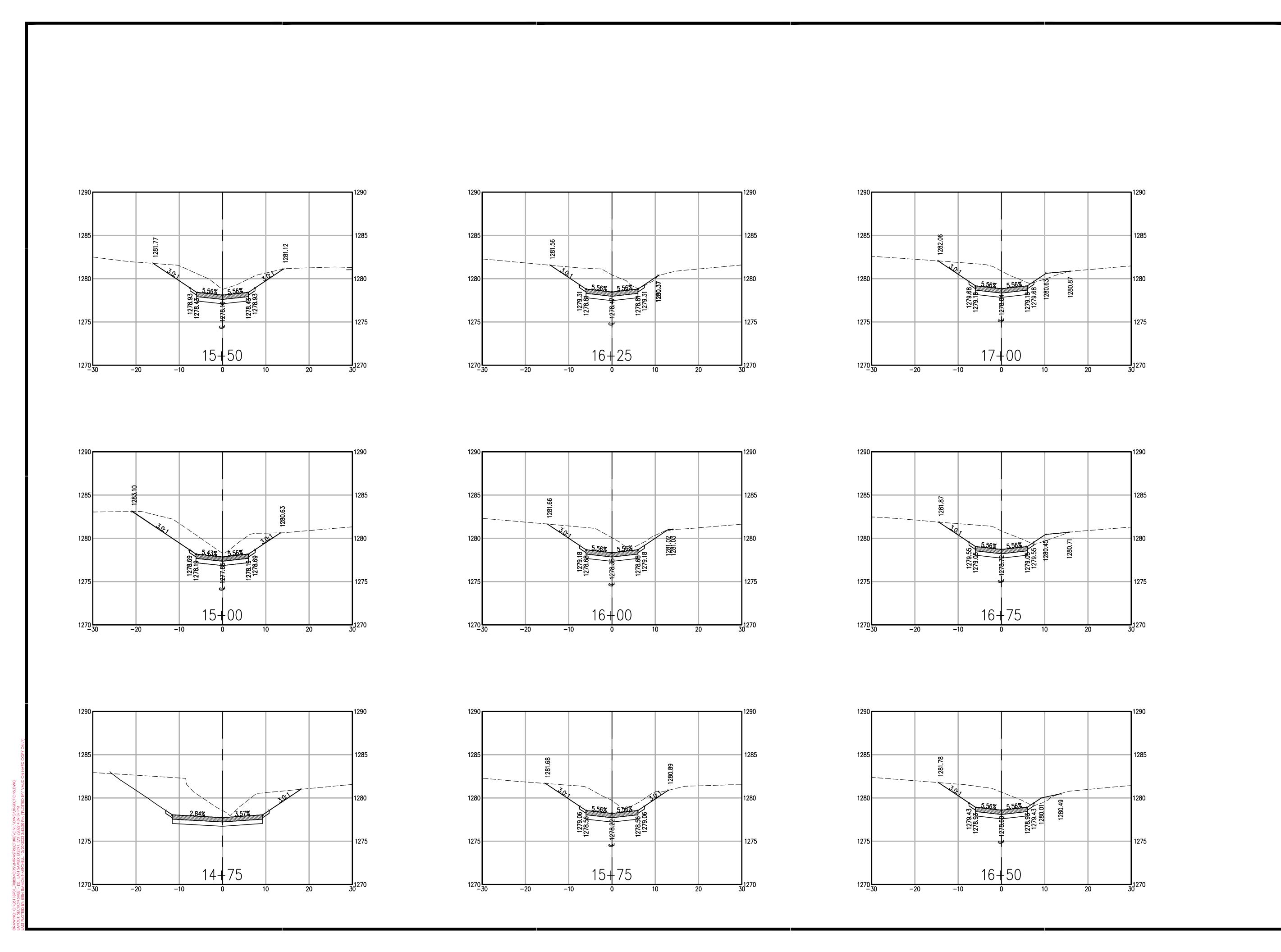
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CROSS SECTIONS

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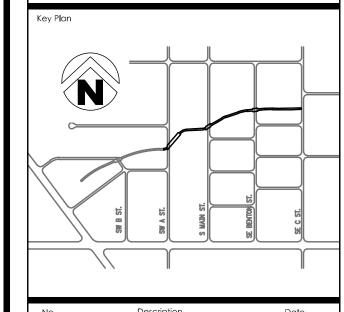


CERTIFICATE OF AUTHORI





CITY OF BENTONVILLE, AR DRAINAGE IMPROVEMENTS
TRIBUTARY 2 OF LITTLE OSAGE CREEK



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ISSUE DATE: 06/10/2022

CONTACT: B. BLIRNETT

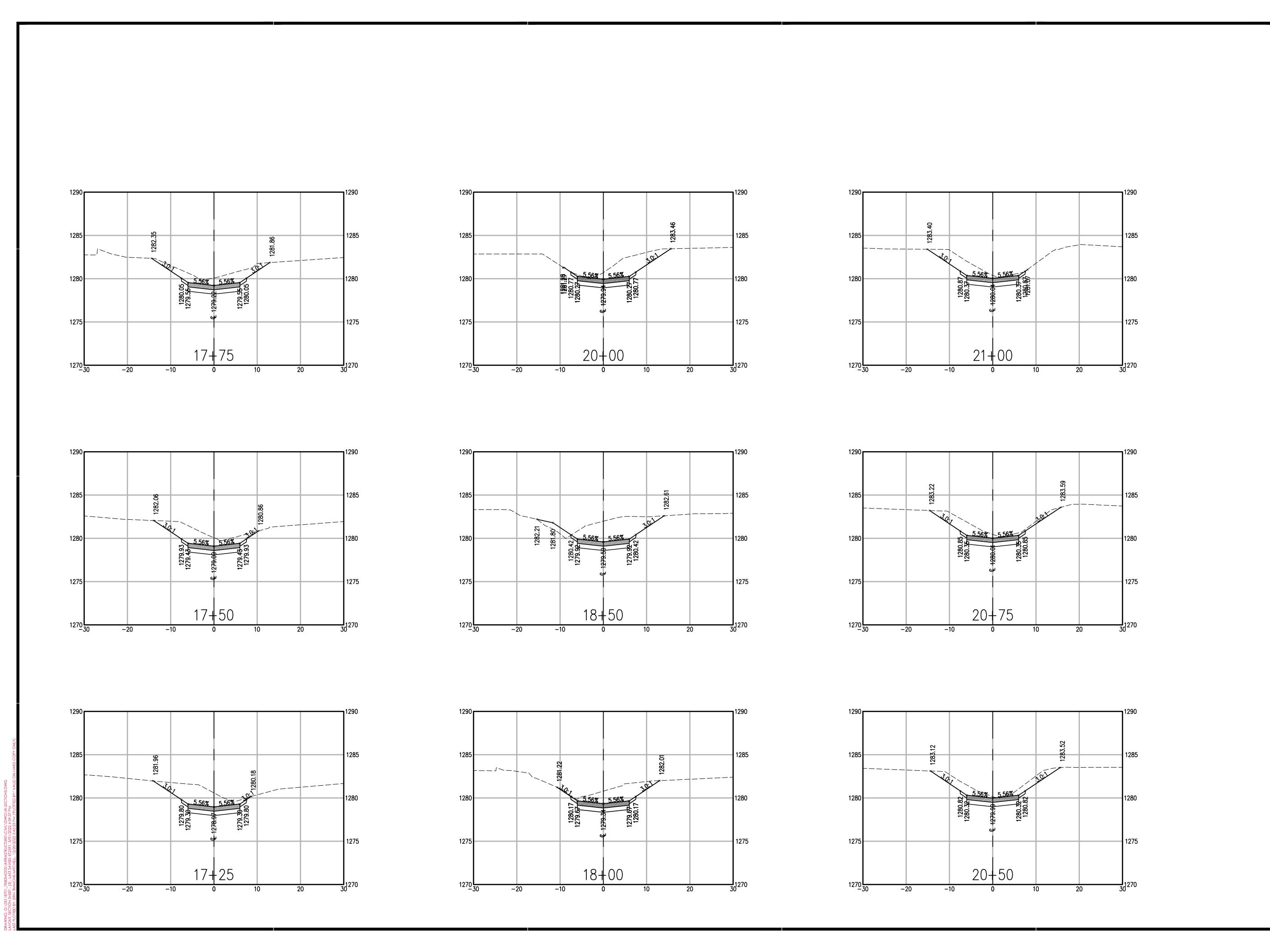
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ISSUE DATE: 06/10/2022
CONTACT: B. BURNETT
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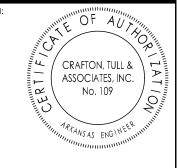
ISSUED FOR

ISSUED FOR ENGINEER CONSTRUCTION No. 10208
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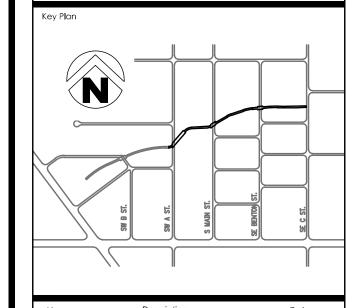








CITY of BENTONVILLE, AR DRAINAGE IMPROVEMENTS TRIBUTARY 2 of LITTLE OSAGE CREEK



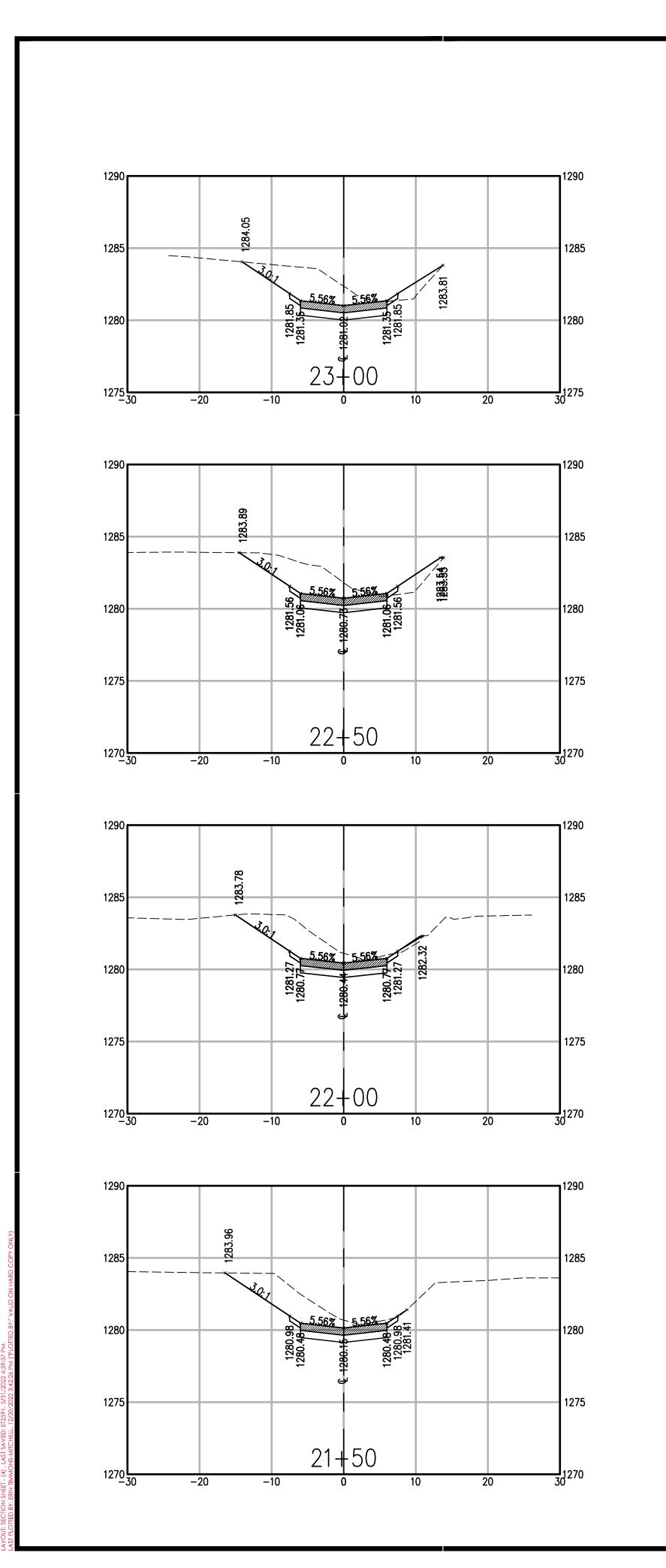
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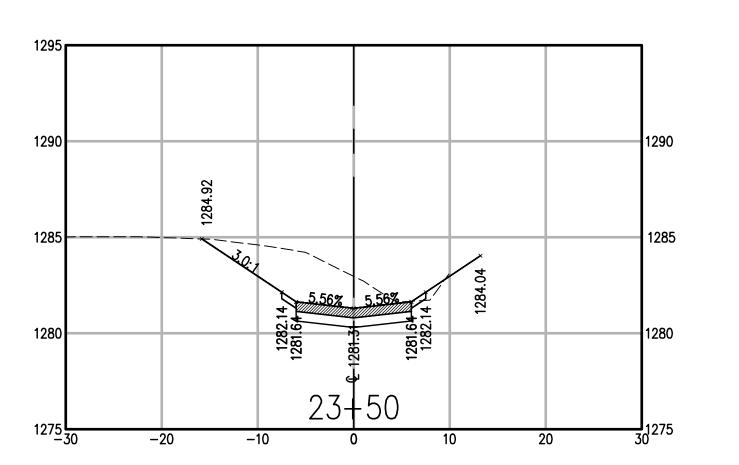
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REGÎSTÊRED

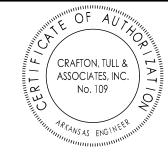
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CROSS SECTIONS











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PROFESSIONAL ENGINEER No. 10208 CONSTRUCTION

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