(RED RIVER) (S)

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT CONSTRUCTION PLANS

ARKANSAS WELCOME CENTER RECONST.

(RED RIVER) (S)

MILLER COUNTY

ROUTE 71 SECTION 3

F.A.P. STPE-ENHN (478)

JOB: 030449



ARKANSAS HIGHWAY DISTRICT 3 NOT TO SCALE

Ray Gruver, Section Head Maintenance Division, Facilities Management Sect. ARKANSAS WELCOME CENTER 911 ADDRESS: 12555 N. State Line Avenue Texarkana, Arkansas 71854 PHYSICAL LOCATION: US Highway 71 · McKinney

LOCATION MAP

NOT TO SCALE

"I hereby certify that these plans and specifications have been prepared by me, or under my supervision. I further certify that to the best of my knowledge these plans and specifications are as required by law and in compliance with the Arkansas Fire

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PROJECT LOCATION

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ARKANSAS WELCOME CENTER

PROJECT LOCATION

RECONST.

Structural Engineer: Don Whitmire

ENGINEERING CONSULTANTS, INC. 113 Parkwood St., Suite C Lowell, AR 72745

CONTACT LIST

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Favetteville, Arkansas 72703

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ARKANSAS HIGHWAY AND TRANSPORTATION DEPARTMENT

Project Manager: Ray Gruver, Section Head

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ARKANSAS WELCOME CENTER - RED RIVER, ARKANSAS CODE INFORMATION: ARKANSAS FIRE PREVENTION CODE, 2012 EDITION AFPC SECTION 311.2 OCCUPANCY: GROUP S-1, MODERATE HAZARD STORAGE CONSTRUCTION: TYPE VB, UNSPRINKLERED. UNPROTECTED AFPC SECTION 602.5, TABLE 601, TABLE 602 STRUCTURAL FRAME 0 HOUR 0 HOUR BEARING WALLS NONBEARING WALLS AND PARTITIONS 0 HOUR FLOOR CONSTRUCTION 0 HOUR ROOF CONSTRUCTION 0 HOUR NOT APPLICABLE (NONSEPARATED USES) FIRE SEPARATION WALLS FIRE PARTITIONS STORAGE/MECHANICAL AREAS 0 HOUR AFPC TABLE 508.2 EXTACCESS CORRIDORS 0 HOUR AFPC TABLE 1017.1 SHAFT ENCLOSURES NOT APPLICABLE AREA OF EXTERIOR OPENINGS UNLIMITED AFPC TABLE 704.8 BUILDING LIMITATIONS FOR B OCCUPANCY HEIGHT AND STORIES 40 FT/1 STORY AFPC TABLE 503 ACTUAL HEIGHT AND STORIES 31 FT/1 STORY 9,000 SF/FLOOR AFPC TABLE 503 BASE AREA ACTUAL AREA (1 STORY) 3,256 SF MEANS OF EGRESS OCCUPANT LOAD, GROUP S-1 1 OCCUPANTS AFPC TABLE 1004.1.1 OCCUPANT LOAD, GROUP B 32 OCCUPANTS AFPC TABLE 1004.1.1 TOTAL OCCUPANT LOAD 33 OCCUPANTS WIDTH OF EGRESS DOORS EXITS 32" REQUIRED: AFPC SECTION 1008.1.1 36" PROVIDED MINIMUM NUMBER OF EXTS AFPC TABLE 1015.1 2 REQUIRED: 5 PROVIDED EXT ACCESS TRAVEL DISTANCE AFPC TABLE 1016.1 200 FT 44" REQUIRED AFPC SECTION 1017.2 EXT ACCESS CORRIDOR WIDTH 60" PROVIDED DEAD END CORRIDOR 20 FT AFPC SECTION 1017.3

NONE ACTUAL

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SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS LISTING

THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS FOR THIS PROJECT SUPPLEMENT THE STANDARD SPECIFICATIONS, EDITION OF 2014. IN CASE OF CONFLICT, THE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS SHALL GOVERN.

	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
	REQUIRED CONTRACT PROVISIONS FEDERAL—AID CONSTRUCTION CONTRACTS
	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273	SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES
	(23 U.S.C. 140)
FHWA-1273	SUPPLEMENT - EQUÁL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS
FHWA-1273	SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273	SUPPLEMENT - WAGE RATE DETERMINATION
FHWA-1273	SUPPLEMENT - WAGE RATE DETERMINATION - BUILDING
JOB 030449	BIDDING REQUIREMENTS AND CONDITIONS
JOB 030449	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB 030449	BUILDERS RISK INSURANCE
JOB 030449	COMPETENCY OF BIDDERS
JOB 030449	DOCUMENTATION OF PAYMENTS MADE TO DISADVANTAGED BUSINESS ENTERPRISES
JOB 030449	MANDATORY ELECTRONIC CONTRACT
JOB 030449	MEASUREMENT AND PAYMENT
JOB 030449	PARTNERING REQUIREMENTS
JOB 030449	PROJECT MANUAL
JOB 030449	STANDARD SPECIFICATIONS APPLICABILITY
JOB 030449	STORM WATER POLLUTION PREVENTION PLAN
JOB 030449	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 030449	UTILITY ADJUSTMENTS
JOB 030449	VALUE_ENGINEERING
JOB 030449	WARM MIX ASPHALT
108-1	LIQUIDATED DAMAGES
400-1	TACK_COATS
410-1	CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COUF
604-1	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES



Leidos Engineering, LLC 3608 N. Steele Blvd, Suite 105 Fayetteville, Arkansas 72703 (479) 442-3060 www.leidos.com

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_	PROPERTY LINE	PL	
_	RIGHT-OF-WAY	R/W	
	CONTROL POINT	_	

	SUMMARY OF QUANTITIES Red River, Arkansas		
ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS
201	CLEARING	0.49	ACRE
201	GRUBBING	0.49	ACRE
202	REMOVAL AND DISPOSAL OF CURB	848	LF
202	REMOVAL AND DISPOSAL OF SIDEWALKS	485	SQYD
202	REMOVAL AND DISPOSAL OF SIGN POLE	4	EACH
202	REMOVAL AND DISPOSAL OF BUILDINGS	2	EACH
202	REMOVAL AND DISPOSAL OF SIGNS	4	EACH
202	REMOVAL AND DISPOSAL OF FLAG POLE	1	EACH
210	UNCLASSIFIED EXCAVATION	540	CUYD
210	COMPACTED EMBANKMENT	1485	CUYD
303	AGGREGATE BASE COURSE (CLASS 7)	309	TON
SS & 401	TACK COAT	209	GAL
SP & 405	MINERAL AGGREGATE IN ACHM BASE COURSE (1 1/2")	373	TON
SP & 405	ASPHALT BINDER (PG 64-22) IN ACHM BASE COURSE (1 1/2")	22	TON
	MINERAL AGGREGATE IN ACHM SURFACE COURSE (3/8")	470	TON
SP, SS & 407	ASPHALT BINDER (PG 70-22) IN ACHM SURFACE COURSE (3/8")	28	TON
601	MOBILIZATION	1.00	L.S.
SS & 604	SIGNS	6	SQFT
606	12" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	34	LF
620	WATER	30.0	MGAL
621	SILT FENCE	1200	LF
621	SAND BAG DITCH CHECKS	80	BAG
624	SOLID SODDING	1444	SQYD
632	CONCRETE ISLAND	264	SQYD
633	CONCRETE WALKS	215	SQYD
SP & 633	COLORED CONCRETE WALKS	288	SQYD
634	CONCRETE CURB (TYPE D)	856	LF
634	CONCRETE COMBINATION CURB AND GUTTER (TYPE A) (1' 6")	138	LF
718	REFLECTORIZED PAINT PAVEMENT MARKING WHITE (4")	710	LF
718	REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (4")	600	LF
SP & 718	REFLECTORIZED PAINT PAVEMENT MARKING SYMBOLS (WHEELCHAIR)	4	EACH
SP	MODULAR BLOCK RETAINING WALL	36	SQFT
804	REINFORCING STEEL-ROADWAY (GRADE 60)	180	LB
SP	SITE UTILITIES	1.00	L.S.
SP	SITE FURNISHINGS	1.00	L.S.
SP	MAINTENANCE BUILDING	1.00	L.S.
SP	WELCOME CENTER FACILITY	1.00	L.S.
SP	FLAGPOLE WITH FOUNDATION	2	EACH
SP	LANDSCAPING	1.00	L.S.
SP	EXTERIOR AREA LIGHTING	1.00	L.S.
SP	DUMPSTER SCREEN AND PAD	1.00	L.S.
SP	PICNIC SHELTERS (NEW LOCATIONS)	1 1	EACH

	REVISIOI Red River, Arkar	
DATE	DESCRIPTION	SHEET NUMBER

UTILITY NOTE

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EXISTING WATER AND SEWER LINE SIZES ARE NOT KNOWN. FIELD VERIFY LINE SIZES PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

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FOR INFORMATION ONLY

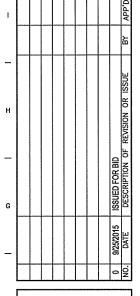
LANDSCAPING

	Red River, Arkansas		
ITEM	ITEM DESCRIPTION	QUANTITY	UNIT
1	LANDSCAPING MAINTENANCE AND WARRANTY	1.00	LS
2	IRRIGATION	1.00	LS

	SITE UTILITIES Red River, Arkansas		
ITEM	ITEM DESCRIPTION	QUANTITY	UNIT
	WATERLINE		
SP	2" PVC PIPE (C-900)	95	LF
SP	2" 90 DEGREE BEND	1	EA
SP	2" GATE VALVE	1	EA
SP	1 1/2 " PVC PIPE (C-900)	50	LF
SP	1 1/2" 90 DEGREE BEND	1	EA
SP	1 1/2" GATE VALVE	2	EA
SP	3/4 " PVC PIPE	105	LF
SP	2"TAPPING SLEEVE AND VALVE	1	EA
SP	3/4 " SOLID SLEEVE	3	EA
SP	3/4 " 90 DEGREE BEND	6	EA
SP	3/4" 45 DEGREE BEND	1	EA
SP	3/4" 22 1/2 DEGREE BEND	2	EA
SP	1/2 " X 3/4 " X 1 1/2 " TEE	1	EA
SP	1/2 " X 3/4 " X 3/4 " TEE	1	EA
SP	3/4 " X 3/4 " X 3/4 " TEE	2	EA
SP	3/4 " GATE VALVE	3	EA
	SANITARYSEWER		
SP	4" PVC PIPE (SDR-26)	90	LF
SP	4" WYE FITTING	2	EA
SP	4" CLEAN OUT	3	EA
SP	CONNECT TO EXISTING SANITARY SEWER LIFT STATION	2.00	LS



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ARKANSAS HIGHWAY & TRANSPORTATION DEPARTI ARKANSAS WELCOME CENTER RED RIVER

DESIGNED BY	JEG
DRAWN BY	PMM
CHECKED BY	RRT
APPROVED BY	RRT

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- CAUTION: UNDERGROUND UTILITIES LIE WITHIN AND ADJACENT TO THE LIMITS OF CONSTRUCTION, AN ATTEMPT HAS BEEN MADE TO LOCATE THESE UTILITIES ON THE PLANS, HOWEVER ALL EXISTING UTILITIES MAY NOT BE SHOWN AND THE ACTUAL LOCATIONS OF THE UTILITIES MAY VARY FROM LOCATIONS SHOWN. PRIOR TO BEGINNING ANY TYPE OF EXCAVATION, THE CONTRACTOR SHALL MARK THE VISIBLE UTILITIES & THE UTILITIES SHOWN ON THE PLANS IN THE FIELD. THE CONTRACTOR SHALL MAINTAIN THE UTILITY LOCATION MARKING UNTIL THEY ARE NO LONGER NECESSARY, USE EXTREME CAUTION WHEN
- 2. DIMENSIONS ARE GIVEN TO BACK OF CURB, CENTER OF STRIPE, FACE OF BUILDING, EDGE OF PAVEMENT, OR PROPERTY LINE.
- COORDINATES GIVEN FOR RADII ARE FROM THE CENTER OF THE RADIUS.
- THE CONTRACTOR IS RESPONSIBLE FOR THE APPROPRIATE BARRICADES AND SAFETY PRECAUTIONS IN ALL EXCAVATED AREAS. EXCAVATED AREAS SHALL BE ADEQUATELY FILLED OR COVERED BY THE CONTRACTOR BEFORE LEAVING THE JOB SITE EACH DAY.
- CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO EXISTING STRUCTURES, PAVEMENTS, AND UTILITIES.
- CONTRACTOR SHALL PROVIDE TEMPORARY ACCESS TO THE SITE DURING CONSTRUCTION
- THE CONTRACTOR SHALL MAINTAIN THE SITE IN AN ORDERLY AND CLEAN FASHION.
- ALL WASTE MATERIALS GENERATED FROM CONSTRUCTION BECOME THE PROPERTY OF THE CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE WASTE MATERIALS FROM THE SITE AND DISPOSE OF IN A LEGAL
- 9. PROVIDE ADA ACCESS FOR ALL SIDEWALK CROSSINGS AT TURNOUTS. SIDEWALK CROSSINGS MUST MEET CURRENT ADA STANDARDS.
- 10. SEE ARCHITECTURAL PLANS FOR BUILDING ACCESS, GAS METER, AND A/C CONDENSER DETAILS.
- 11. ALL REINFORCING STEEL SHALL BE GRADE A-60.

GENERAL UTILITY NOTES:

- PRIOR TO BEGINNING ANY TYPE OF CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE UTILITIES INVOLVED AND MAKE ARRANGEMENTS FOR THE LOCATION OF THE UTILITIES TO BE MARKED ON THE SITE. THE CONTRACTOR SHALL MAINTAIN THE UTILITY LOCATION MARKINGS UNTIL THEY ARE NO LONGER NECESSARY UNDER ARKANSAS STATE LAW THE UNDERGROUND FACILITIES DAMAGE PREVENTION ACT REQUIRES TWO WORKING DAYS ADVANCE NOTIFICATION THROUGH THE ARKANSAS ONE-CALL SYSTEM BEFORE EXCAVATING USING MECHANIZED EQUIPMENT OR EXPLOSIVES (EXCEPT IN THE CASE OF AN EMERGENCY). THE ONE-CALL SYSTEM TELEPHONE NUMBER IS 1-800-482-8998 OR 811. THE CONTRACTOR IS ADVISED THAT THERE IS A SEVERE PENALTY FOR NOT MAKING THIS CALL. NOT ALL UTILITIES ARE MEMBERS OF THE ARKANSAS ONE-CALL SYSTEM. THE CONTRACTOR IS ADVISED TO CONTACT ALL NON-MEMBER UTILITIES AS WELL AS THE ONE-CALL SYSTEM.
- CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION AND SIZE FOR ALL EXISTING STORM SEWER STRUCTURES, PIPES, AND ALL UTILITIES PRIOR TO CONSTRUCTION.
- 3. CONTRACTOR TO REMOVE OR RELOCATE WHEN APPLICABLE, ALL EXISTING BUILDINGS, FOUNDATIONS, EASEMENTS, AND CONNECTING IMPROVEMENTS, DRAIN PIPES, SANITARY SEWER PIPE, POWER POLES AND GUY WIRES, WATER METERS AND WATER LINES, WELLS, SIDEWALKS, SIGN POLES, UNDERGROUND GAS, SEPTIC TANKS, AND ASPHALT, SHOWN AND NOT SHOWN, WITHIN CONSTRUCTION LIMITS AND WHERE NEEDED, TO ALLOW FOR FILL MATERIAL, UNLESS OTHERWISE DENOTED, TO BE REMOVED AS UNCLASSIFIED EXCAVATION.
- CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, UTILITIES, PAVEMENT, STRIPING, CURBS, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRICAL, TELEPHONE, AND COMMUNICATIONS. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH BASE UTILITY REQUIREMENTS AS TO LOCATIONS AND SCHEDULING FOR TIE-INS/CONNECTIONS PRIOR TO CONNECTING EXISTING FACILITIES.
- CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARD OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING, AND OTHER MEANS OF PROTECTION. THIS TO INCLUDE, BUT NOT LIMITED TO, ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH PERFORMANCE CRITERIA FOR OSHA.
- THE MINIMUM HORIZONTAL SEPARATION BETWEEN THE CLOSEST TWO POINTS OF THE WATER AND SEWER LINE IS TEN (10) FEET, THE MINIMUM VERTICAL SEPARATION BETWEEN THE CLOSEST TWO POINTS OF THE WATER AND SEWER LINE IS EIGHTEEN (18) INCHES. WATER LINES SHALL BE INSTALLED OVER
- 8. CONTRACTOR SHALL, ON ALL UTILITIES, COORDINATE INSPECTION WITH THE APPROPRIATE AUTHORITIES PRIOR TO COVERING TRENCHES AT INSTALLATION.
- CONTRACTOR SHALL COORDINATE UTILITY INSTALLATIONS WITH LOCAL GOVERNING AUTHORITIES. PAYMENT OF FEES REGARDING THE INSTALLATION OF UTILITIES (I.E. TAPPING FEES, PERMIT FEES, INSTALLATION FEES, METER FEES, ETC.) SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

WATER NOTES:

- 1. DIG THROUGH LOCATOR TAPE SHALL BE BURIED 2 FEET ABOVE LINE.
- PIPE SIZES 4" AND LARGER SHALL BE PVC C-900 WATER PIPE, ALL FITTINGS 4" AND LARGER SHALL BE PVC CONFORMING TO ANSI AND AWWA STANDARD SPECIFICATIONS.

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- 3. PIPE SIZES 3" AND SMALLER SHALL BE PVC. FITTINGS SHALL BE BRASS. SEE SPECIFICATIONS.
- WHEN C-900 PVC IS USED, A NO. 8 BARE COPPER WIRE SHALL BE TAPED TO THE TOP SURFACE OF THE PIPE AND CONNECTED TO EACH HYDRANT BY ATTACHING TO A BOLT, JUST ABOVE GROUND LEVEL.
- 5. ALL IRON PIPE AND FITTINGS SHALL BE POLYWRAPPED.
- ALL MAIN LINES SHALL HAVE A MINIMUM OF THIRTY (30) INCHES AND A MAXIMUM OF EIGHT (8) FEET
- BEDDING, BACKFILL, AND COMPACTION OVER WATER LINES SHALL BE IN ACCORDANCE WITH THE
- ROAD CLOSURES MUST BE COORDINATED A MINIMUM OF TWENTY FOUR (24) HOURS IN ADVANCE. ROADS WILL NOT BE CLOSED FOR OVER EIGHT (8) HOURS WITHOUT WRITTEN PERMISSION FROM THE
- THRUST BLOCKS SHALL BE PROVIDED AT ALL WATER LINE HORIZONTAL BENDS, TEES, AND FIRE HYDRANTS, SEE DETAILS,
- 10. REFERENCE ARCHITECTURAL PLANS FOR ALL BUILDING FIRE SERVICE AND DOMESTIC SERVICE CONNECTION LOCATIONS.
- 11. CONTRACTOR SHALL CONSTRUCT WATER SERVICES AS SHOWN, AND CONSTRUCT METERS. PITS. AND INSTALL CHECK VALVE. SERVICE LINES GREATER THAN 3/4" SHALL REQUIRE BACKFLOW PREVENTER.
- 12. ALL VERTICAL BENDS ON WATER MAIN SHALL BE RESTRAINED WITH A MECHANICAL JOINT FITTING SUPPLIED WITH THE RETAINER GLANDS. ANY JOINTS 25 FEET OR LESS FROM EITHER SIDE OF VERTICAL BEND SHALL BE RESTRAINED WITH A RETAINER GLAND.
- 13. CONTRACTOR SHALL COORDINATE WITH TEXARKANA WATER AND SANITARY SEWER UTILITIES FOR SERVICE TO THE SITE.

SANITARY SEWER NOTES:

- DIG THROUGH LOCATOR TAPE SHALL BE BURIED 2 FEET ABOVE LINE.
- REFERENCE ARCHITECTURAL PLANS FOR ALL BUILDING SERVICE CONNECTION LOCATIONS.
- ALL STUB-OUTS AND WYE LATERALS SHALL BE PLUGGED WITH A STANDARD TYPE PLUG. TIE SKI ROPE TO A STAKE FOR TIE-IN REFERENCE.
- COORDINATES OR DIMENSIONS SHOWN ARE TO CENTERLINE OF PIPE OR TO CENTER OF MANHOLE.
- THE TOP ELEVATION OF ALL MANHOLES IN GRASSED AREAS SHALL BE 6" ABOVE FINISHED GRADE. THE TOP ELEVATION OF ALL MANHOLES IN PAVED AREAS WILL BE SET FLUSH WITH THE PROPOSED
- 6. THE SANITARY SEWER PIPE MATERIAL SHALL BE PVC, SDR-26, SEWER PIPE UNLESS NOTED ON PLAN.
- CONTRACTOR SHALL COORDINATE WITH TEXARKANA WATER AND SANITARY SEWER UTILITIES FOR SERVICE TO THE SITE
- CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING ALL APPLICABLE FEES FOR SANITARY SEWER INSTALLATION INCLUDING, BUT NOT LIMITED TO, TAPPING FEES, ETC.
- 9. TRACER WIRE SHALL BE INSTALLED WITH ALL UNDERGROUND PIPES.

TELEPHONE AND COMMUNICATIONS NOTES:

- 1. REFERENCE ARCHITECTURAL DOCUMENTS FOR ALL BUILDING SERVICE CONNECTIONS.
- 2. ALL WORK SHALL BE COMPLETED TO WINDSTREAM COMMUNICATIONS SPECIFICATIONS AND STANDARDS. CONTACT WINDSTREAM COMMUNICATORS TO DETERMINE COORDINATION & INSTALLATION REQUIREMENTS.

POWER NOTES:

- 1. REFERENCE ARCHITECTURAL DOCUMENTS FOR ALL BUILDING SERVICE CONNECTIONS.
- 2. ALL WORK SHALL BE COMPLETED TO SOUTHWEST ARKANSAS ELECTRIC CO-OP CORP. SPECIFICATIONS AND STANDARDS. CONTACT SOUTHWEST ARKANSAS ELECTRIC CO-OP CORP. (MIKE POLLARD AT 870-772-2743 EXT. 248) TO DETERMINE COORDINATION & INSTALLATION REQUIREMENTS.

UTILITY CONTACT LIST

WATER SERVICES & SANITARY SEWER ELECTRIC SERVICES TEXARKANA WATER UTILITIES SOUTHWEST ARKANSAS ELECTRIC CO-OP CORP. MIKE POLLARD J.O. PHILLIPS DIRECTOR OF ENGINEERING CONSTRUCTION MANAGER PHONE: 870-772-2743 EXT. 248 PHONE: 903-798-3800 MPOLLARD@SWREA.COM

WINDSTREAM COMMUNICATIONS CLIFF PORTERFIELD ENGINEERING SUPERVISOR

903-223-4669

GENERAL GRADING/DRAINAGE NOTES:

11

1. PAVEMENT MARKINGS SHALL COMPLY WITH THE STANDARDS SET FORTH IN THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" BY THE U. S. DEPARTMENT OF TRANSPORTATION.

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- 2. THE CONTRACTOR IS RESPONSIBLE FOR ADEQUATE EROSION CONTROL MEASURES. THESE MEASURES WILL SATISFY SECTION 110 OF THE STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND THE REQUIREMENTS OF THE ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY. EROSION CONTROL DEVICES WILL BE MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED. PERIMETER CONTROLS SHALL BE PLACED AS THE CLEARING AND GRUBBING OPERATIONS ARE STARTED.
- SEED, FERTILIZE AND MULCH AREAS DISTURBED BY CONSTRUCTION (EXCEPT AREAS TO BE PAVED). COMPLY WITH THE STANDARDS SET FORTH IN THE STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL EMPLOY A QUALIFIED MATERIALS TESTING LABORATORY, ACCEPTABLE TO THE ENGINEER, TO PROVIDE TESTING SERVICES DURING CONSTRUCTION. TEST RESULTS SHALL BE PROMPTLY SENT TO THE OWNER/ENGINEER.
- 5. CONTRACTOR SHALL MAINTAIN BENCHMARKS ON SITE UNTIL THE END OF CONSTRUCTION.
- 6. ALL CONCRETE PIPE SHALL BE CLASS III REINFORCED CONCRETE PIPE WITH TYPE 3 BEDDING UNLESS OTHERWISE NOTED

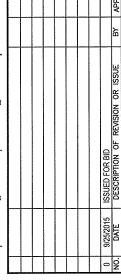
GENERAL NOTES FOR AHTD JOB NO. 030449:

- 1. LEVEL DATUM IS U.S.C. & G.S.
- 2. GRADE LINE DENOTES FINISHED GRADE WHERE SHOWN ON PLANS.
- 3. ALL PIPE LINES, POWER, TELEPHONE AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE RESPECTIVE OWNERS AS PER AGREEMENT WITH SUCH OWNERS UNDER JOB 030449.
- 4. ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAY BE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS
- 5. ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
- 6. ALL TREES THAT DO NOT DIRECTLY INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE SPARED IF AND WHERE DIRECTED BY THE ENGINEER. CARE AND DISCRETION SHALL BE USED TO ENSURE THAT ALL TREES NOT TO BE REMOVED SHALL BE HARMED AS LITTLE AS POSSIBLE DURING THE
- 7. THIS PROJECT IS COVERED UNDER A NATIONWIDE 23 SECTION 404 PERMIT. REFER TO SECTION 110 OF THE STANDARD SPECIFICATIONS, EDITION OF 2014 OR LATEST EDITION, FOR PERMIT REQUIREMENTS.
- 8. ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM UNCLASSIFIED EXCAVATION
- 9. THE EXISTING ASPHALT PAVEMENT TO BE REMOVED FROM THE REMAINING PAVEMENT SHALL SEPARATED BY SAW CUTTING ALONG A NEAT LINE. AFTER SAWING, THE PAVEMENT TO BE REMOVED SHALL BE CAREFULLY REMOVED IN A MANNER THAT WILL NOT DAMAGE THE PAVEMENT THAT IS TO REMAIN. ANY DAMAGE OF THE ASPHALT PAVEMENT THAT IS TO REMAIN IN PLACE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. ASPHALT PAVEMENT REMOVAL IS PAID AS UNCLASSIFIED EXCAVATION.

NOTE:

ALL ITEMS LABELED "PROPOSED" ARE NEW CONSTRUCTION ITEMS TO BE INSTALLED OR BUILT BY THE CONTRACTOR. CONTRACTOR SHALL INCLUDE ALL ITEMS TO BE INSTALLED AND/OR BUILT IN HIS/HER BASE **leidos**

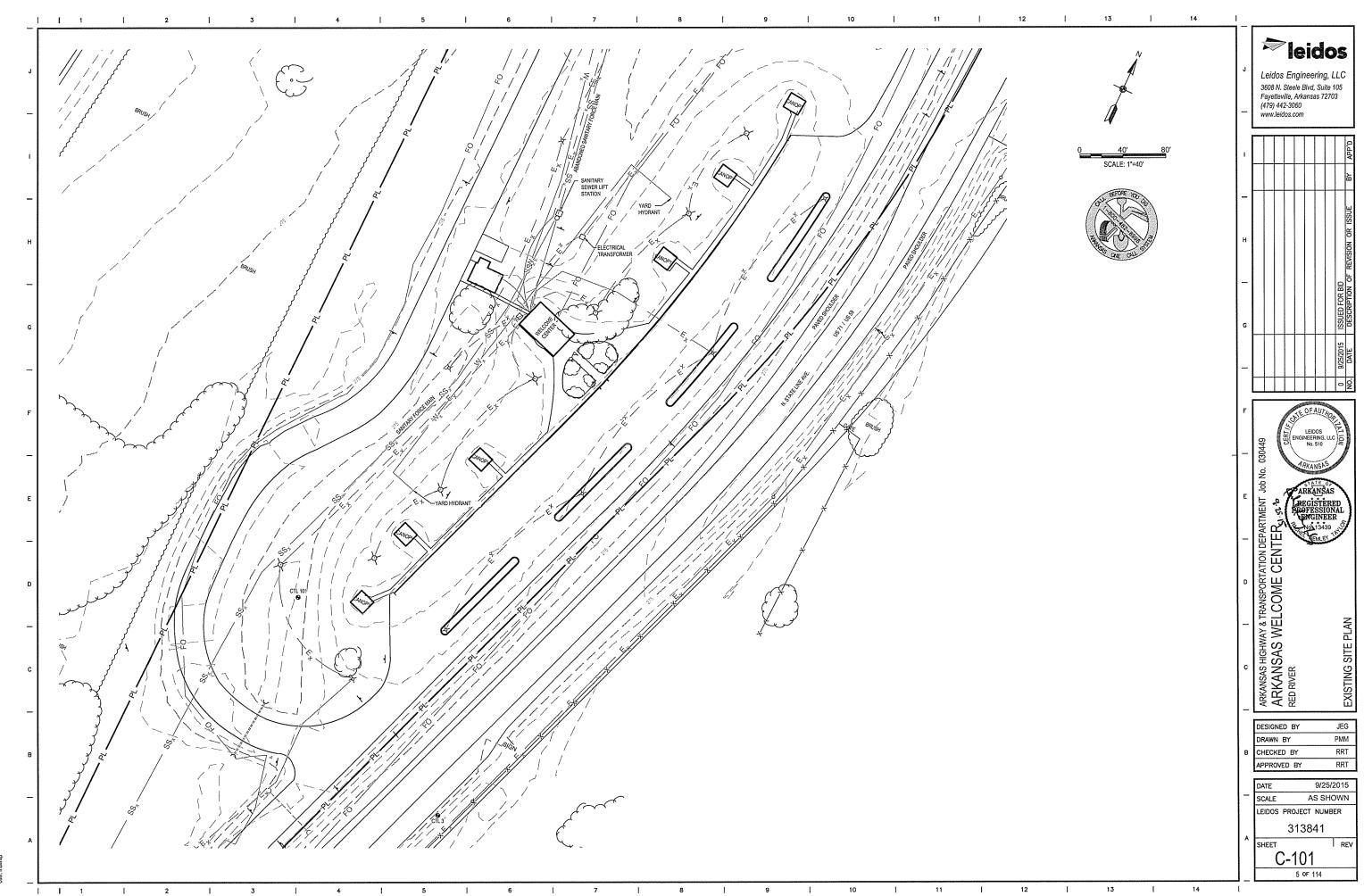
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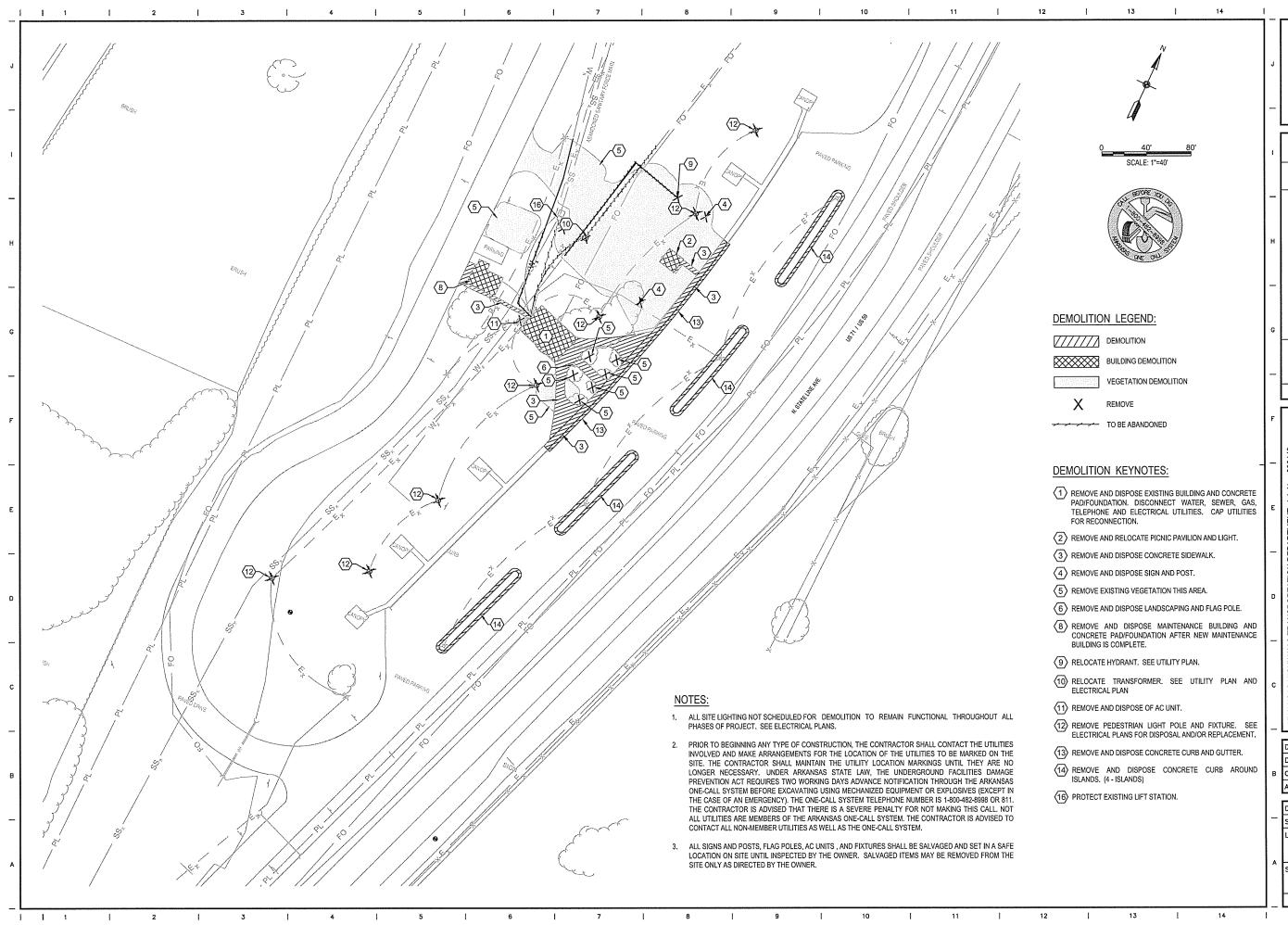


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ARKANSAS HIGHWAY & TRANSPORTATION DEPARTMENT Job No. 030449

ARKANSAS WELCOME CENTER. 5.3

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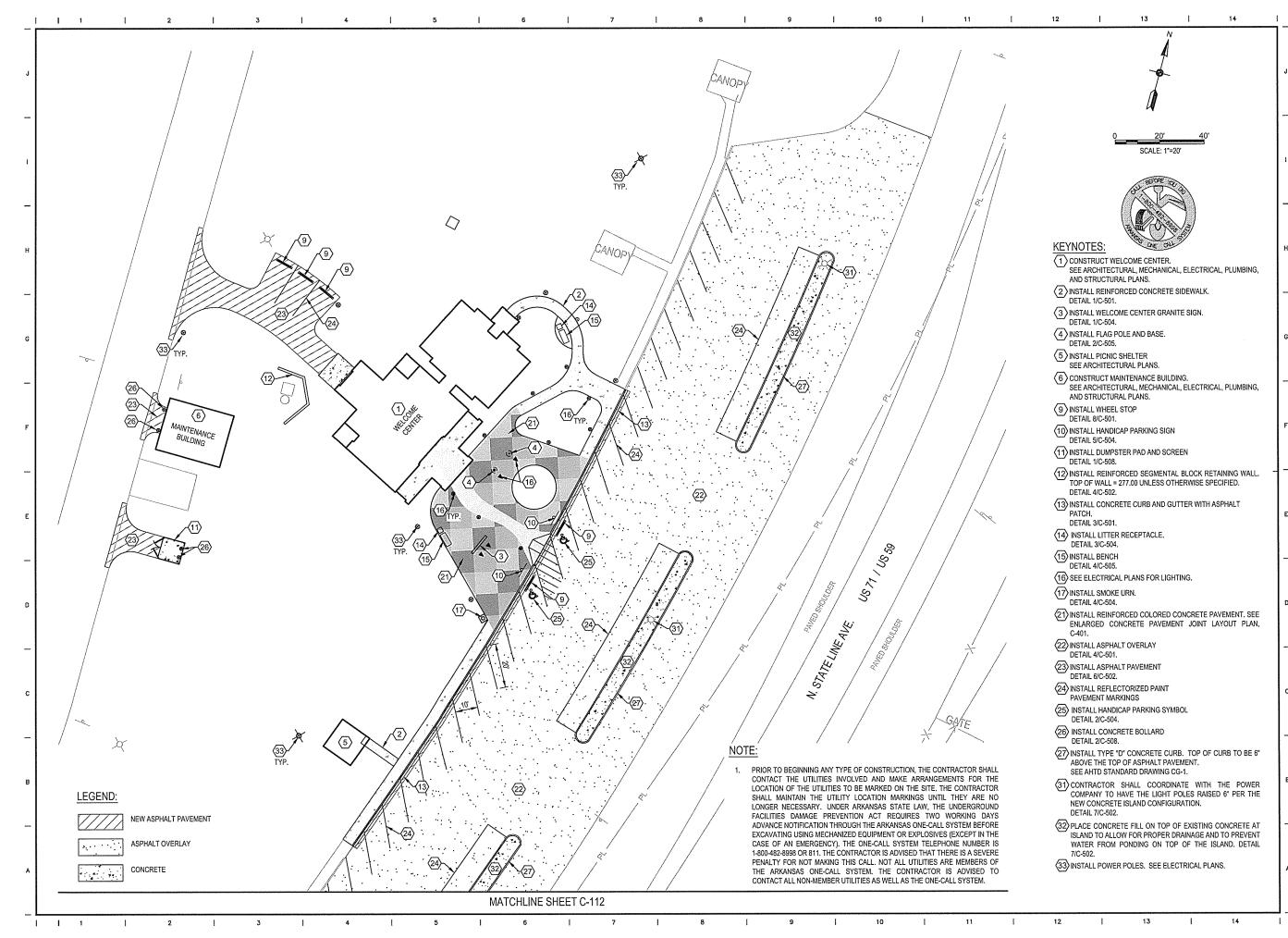
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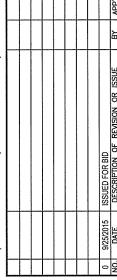
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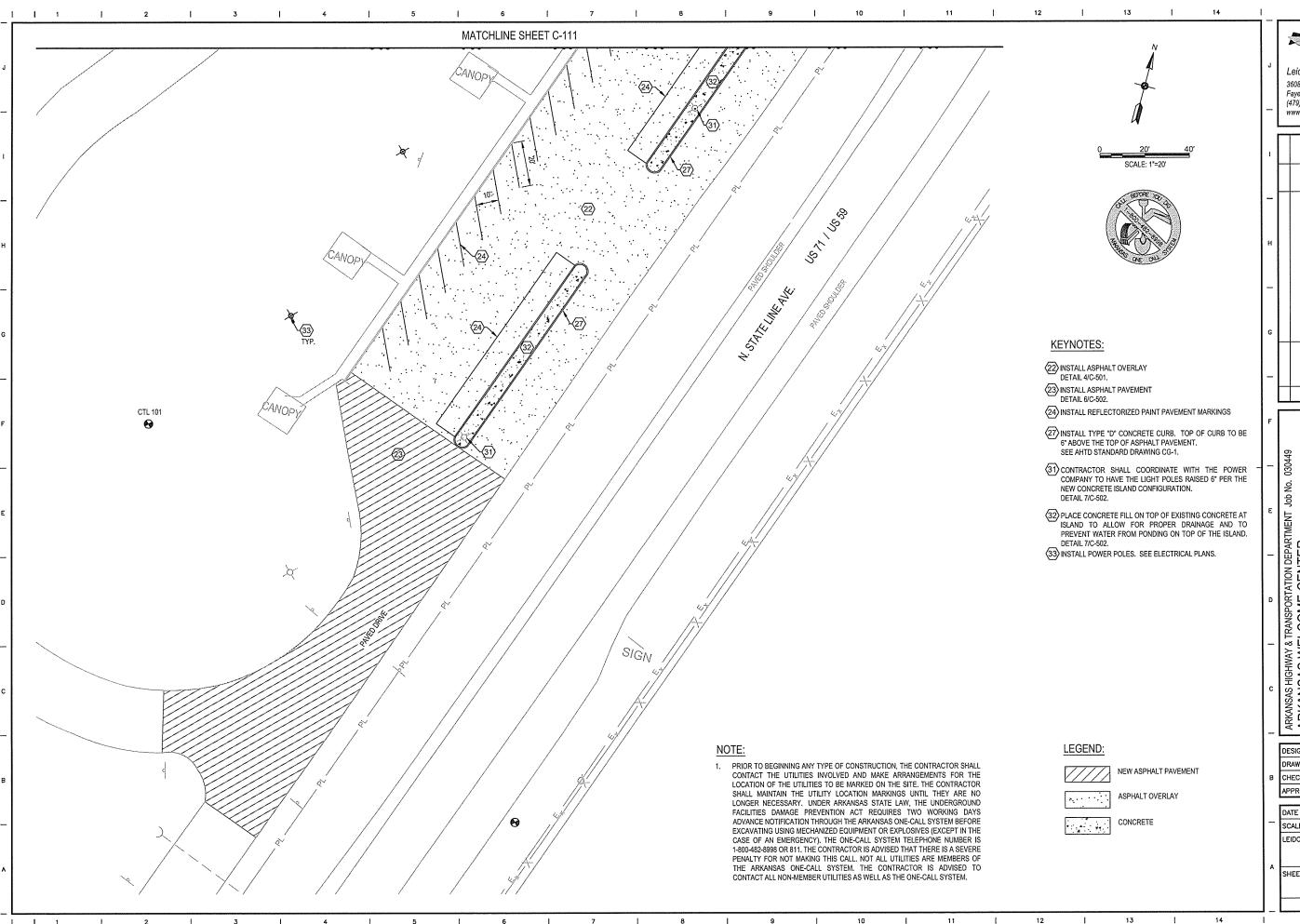
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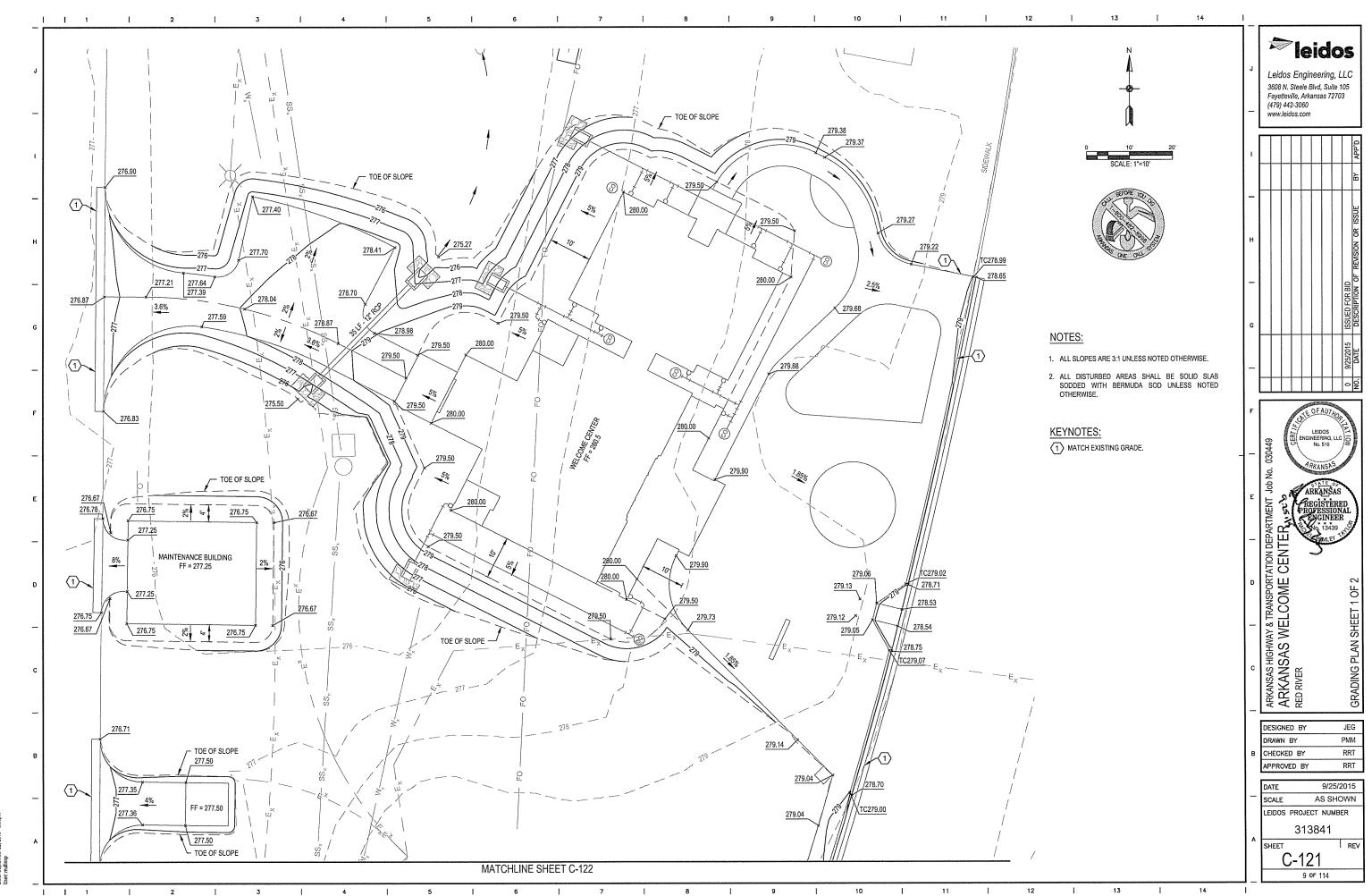
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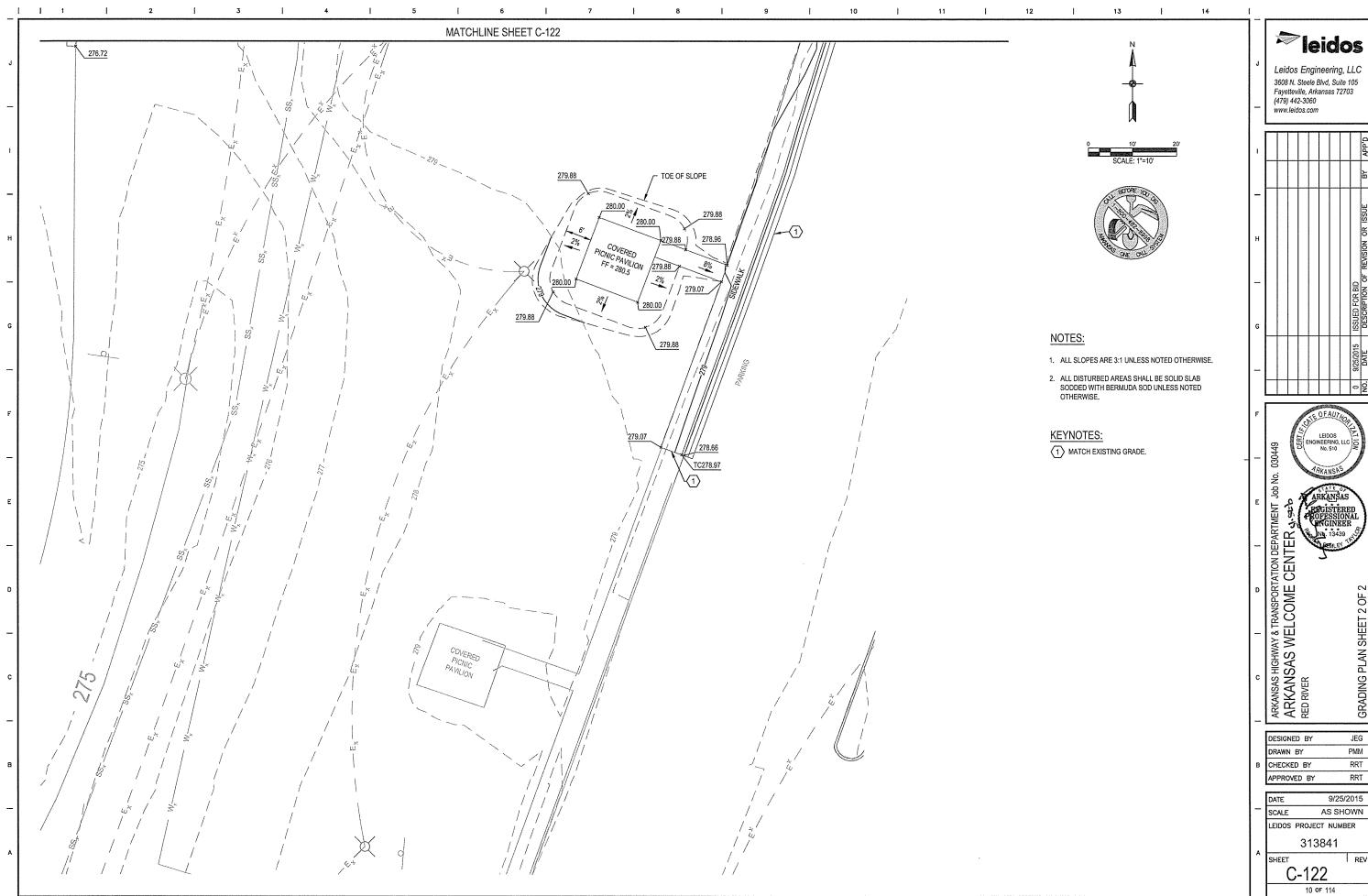




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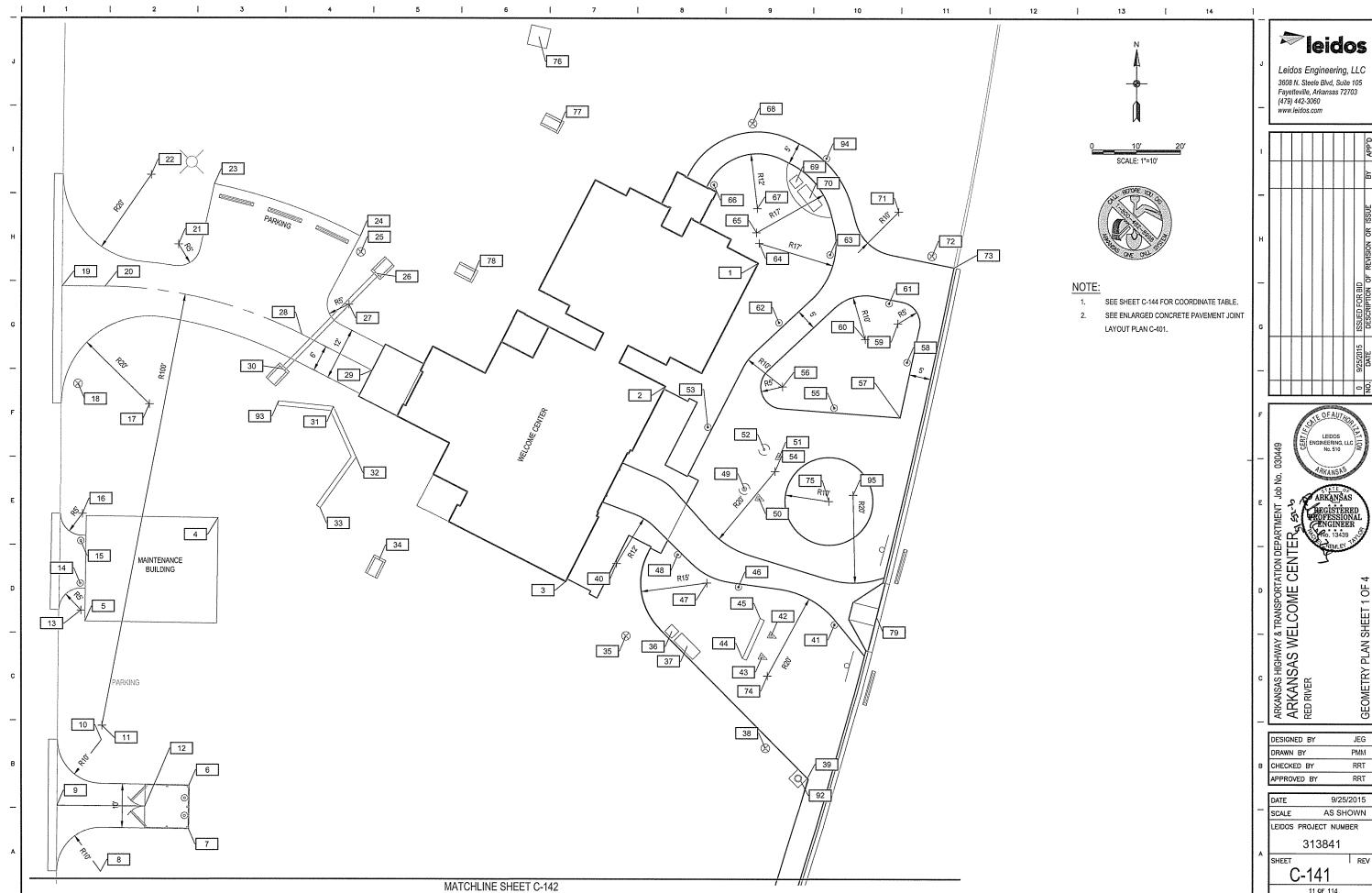


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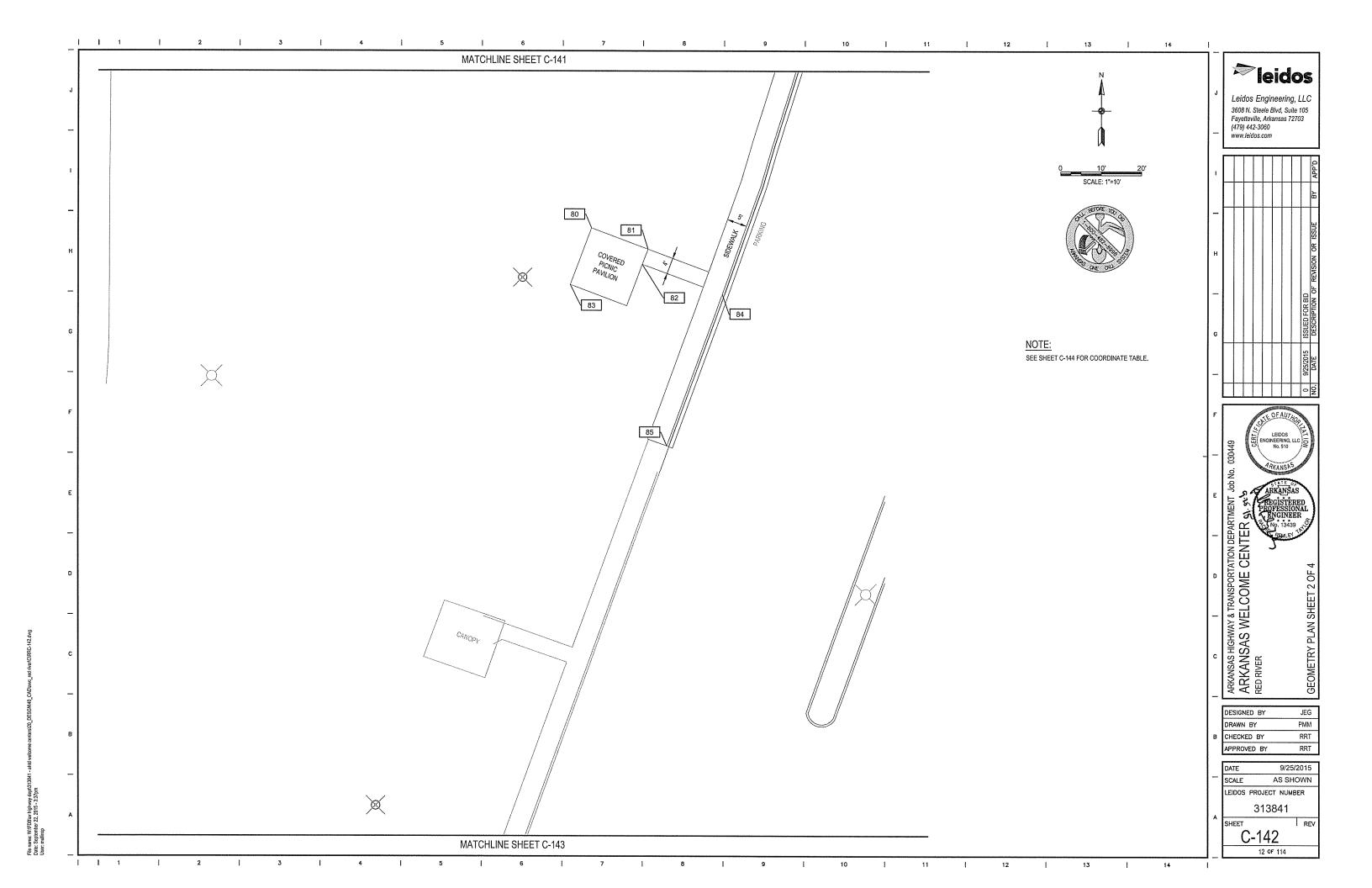
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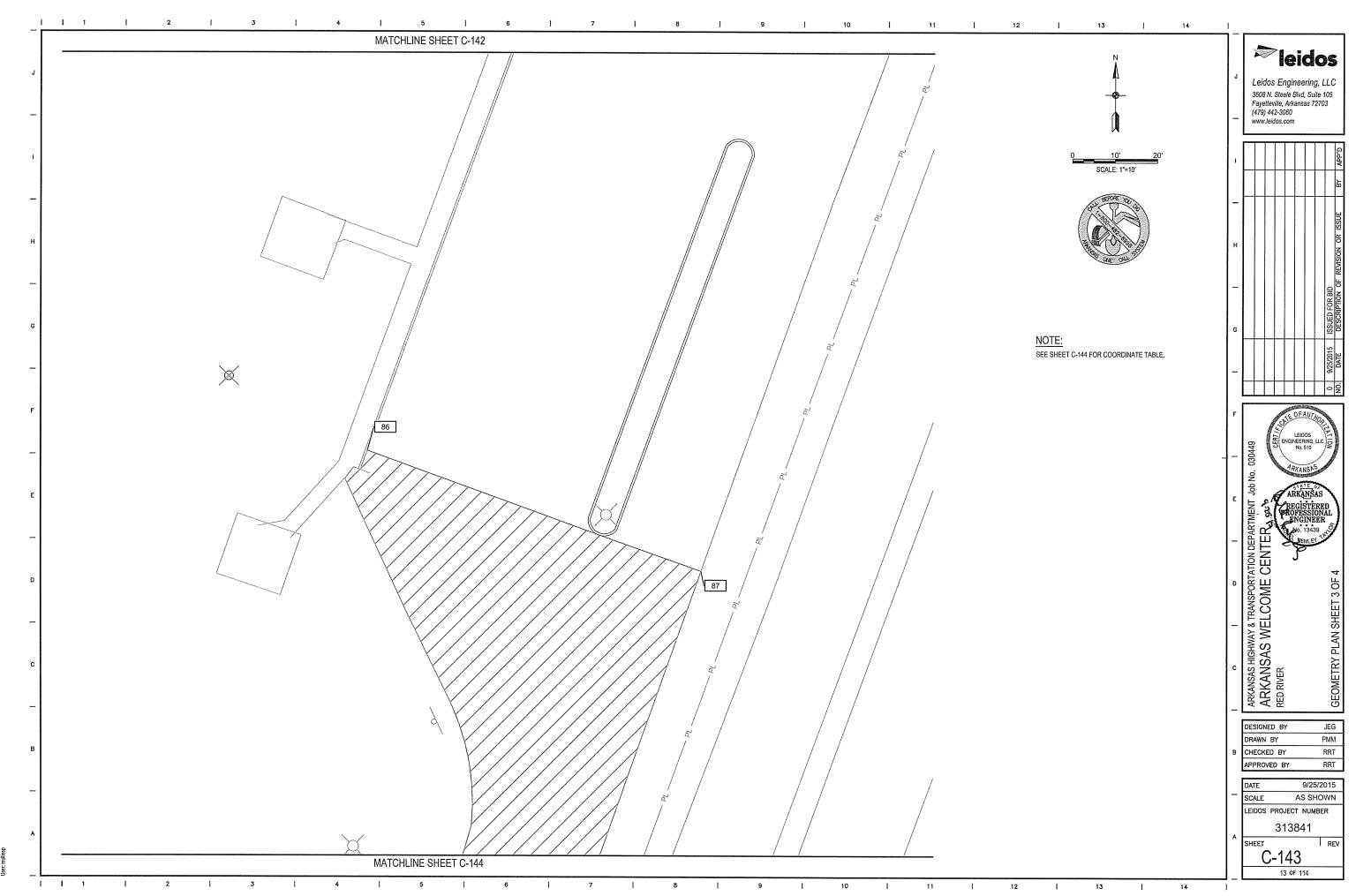
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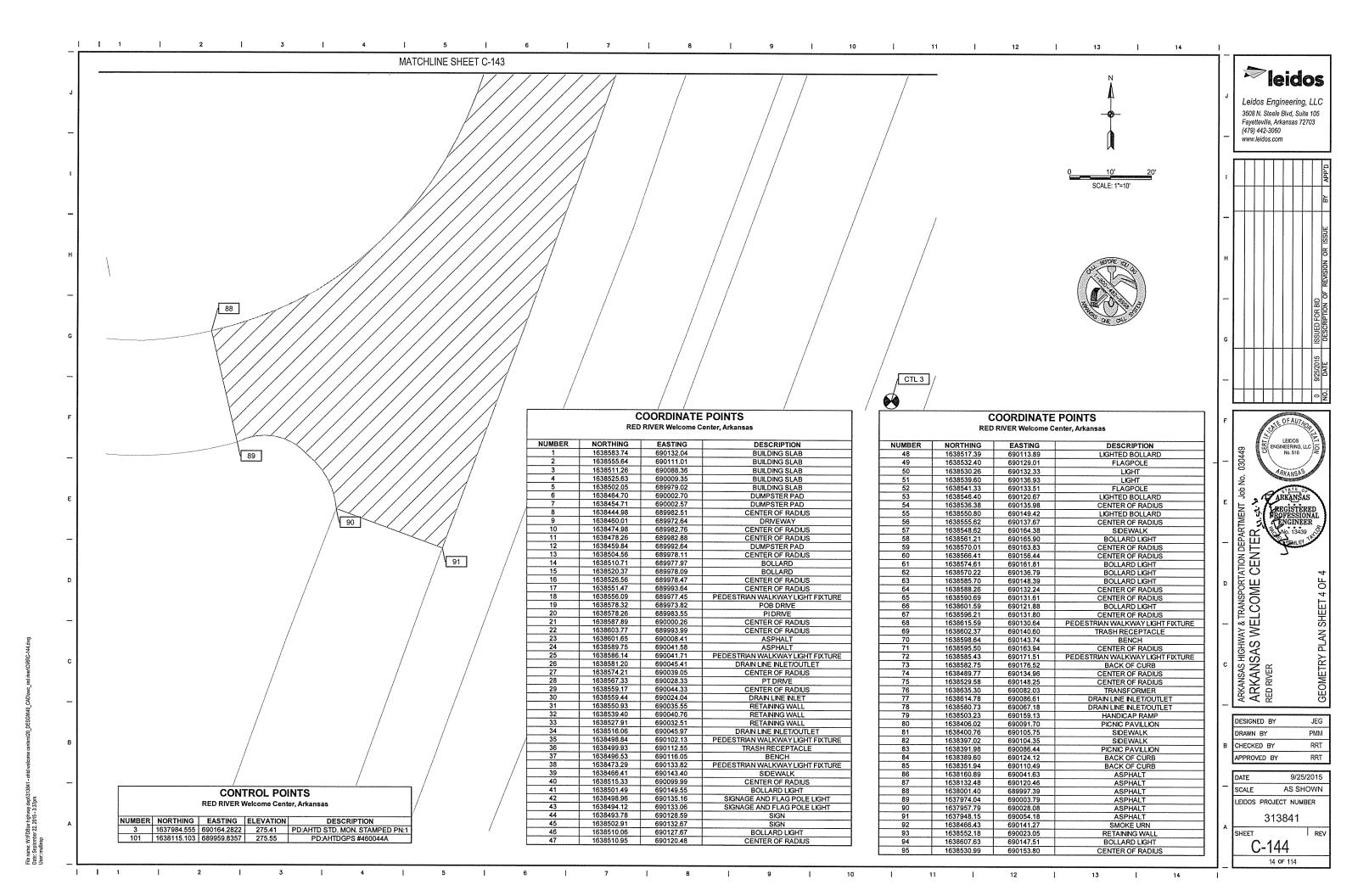
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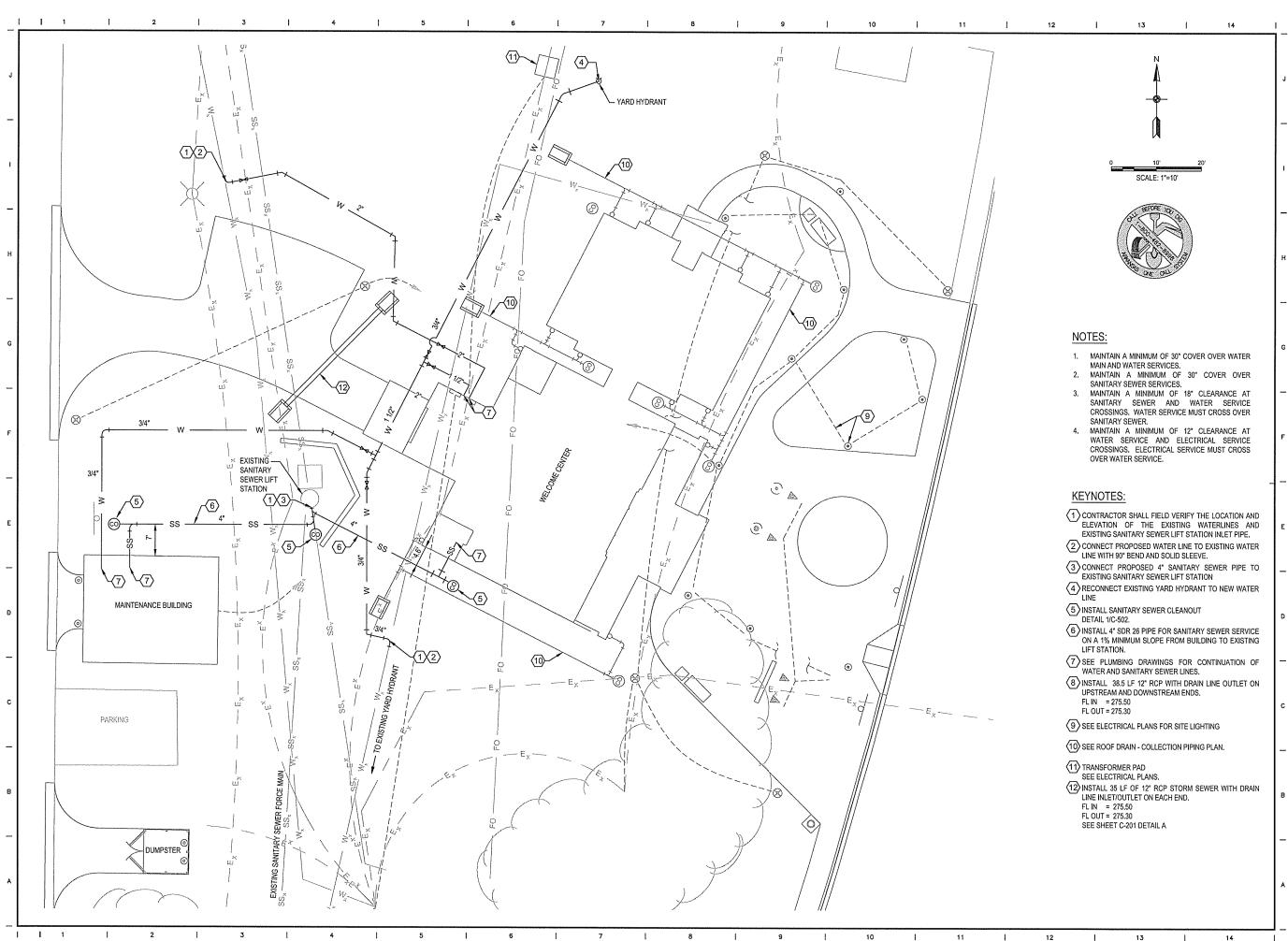
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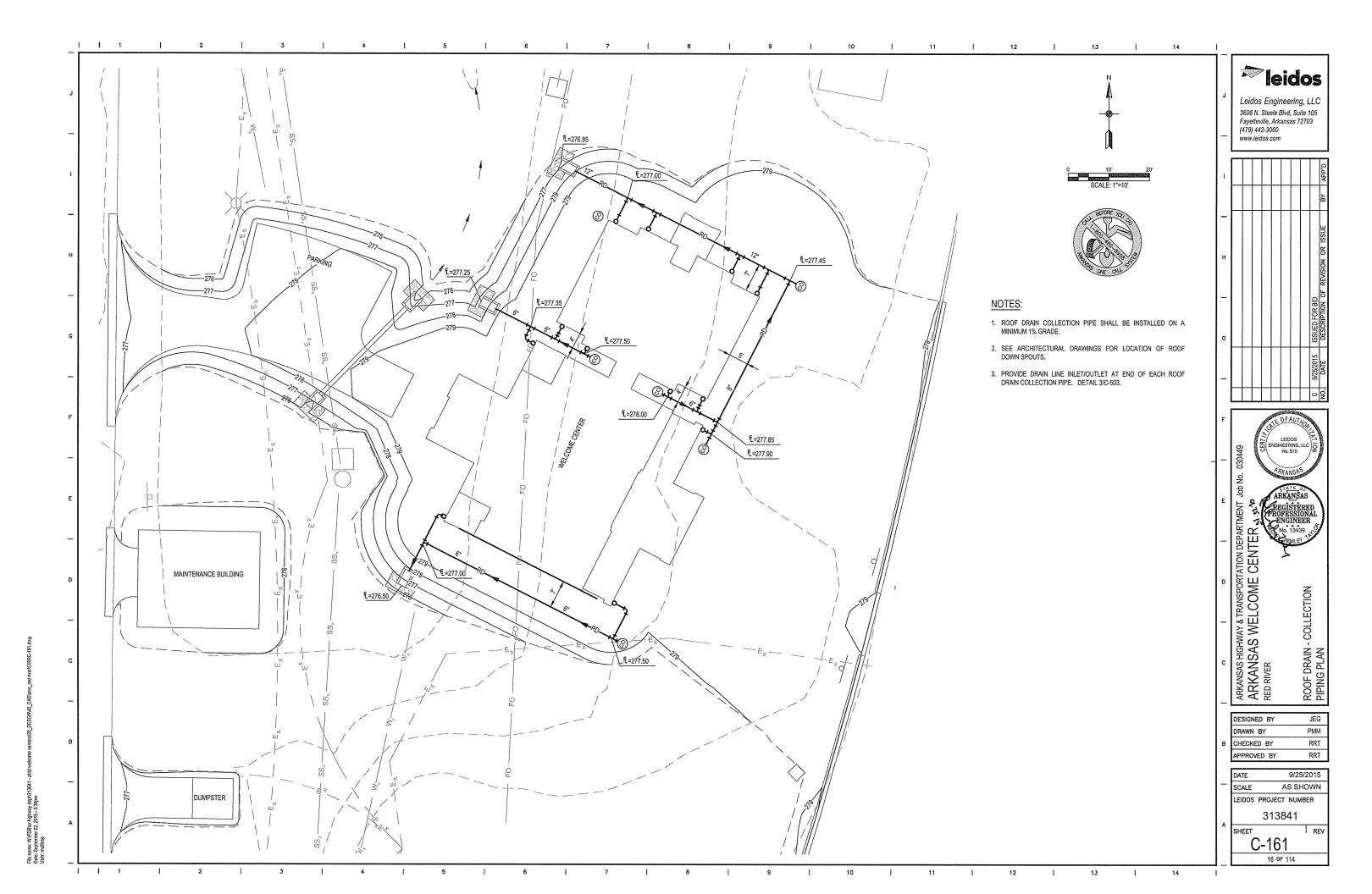


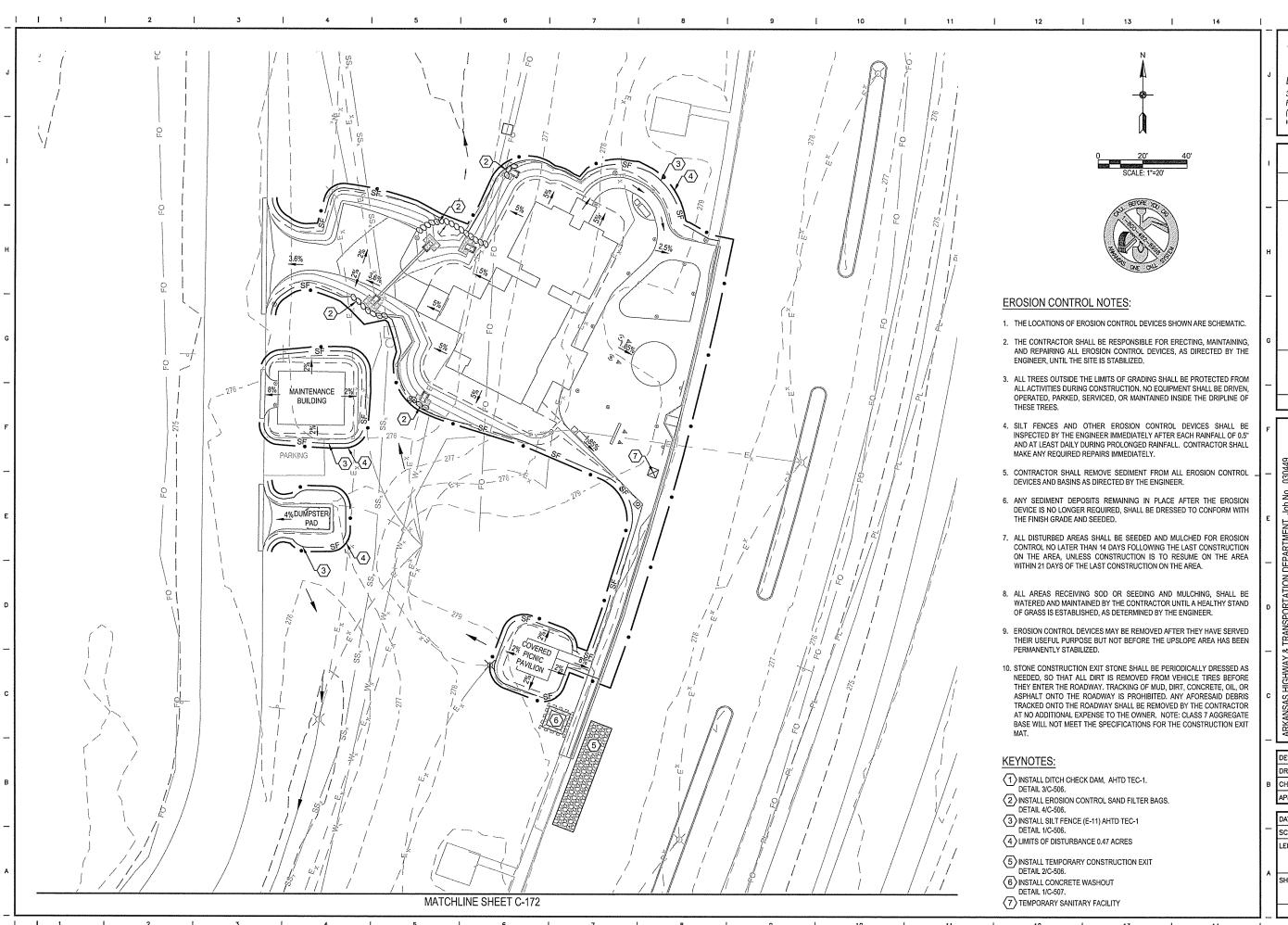


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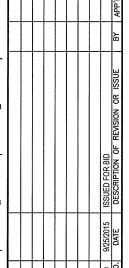
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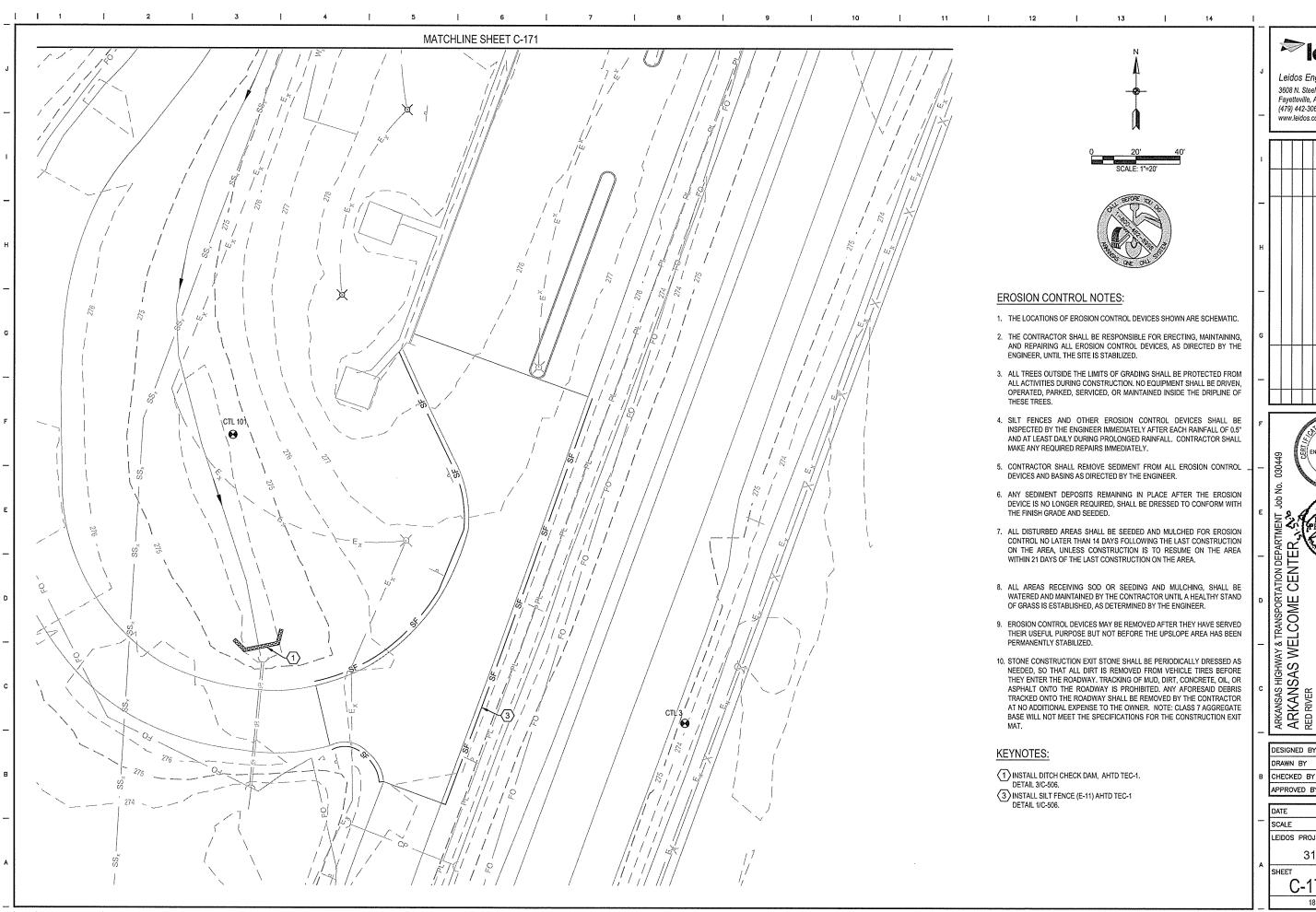
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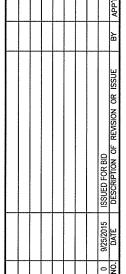
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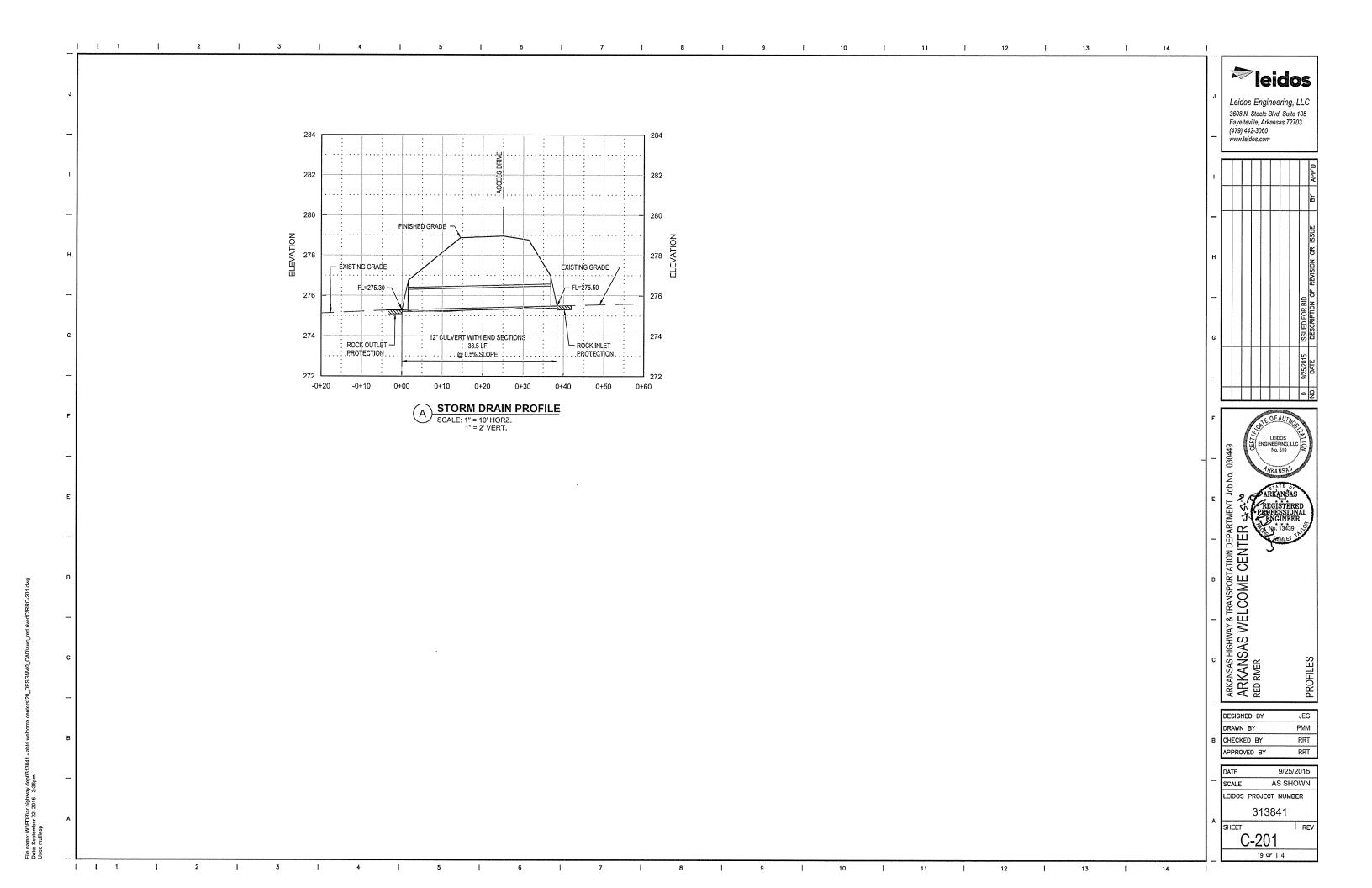
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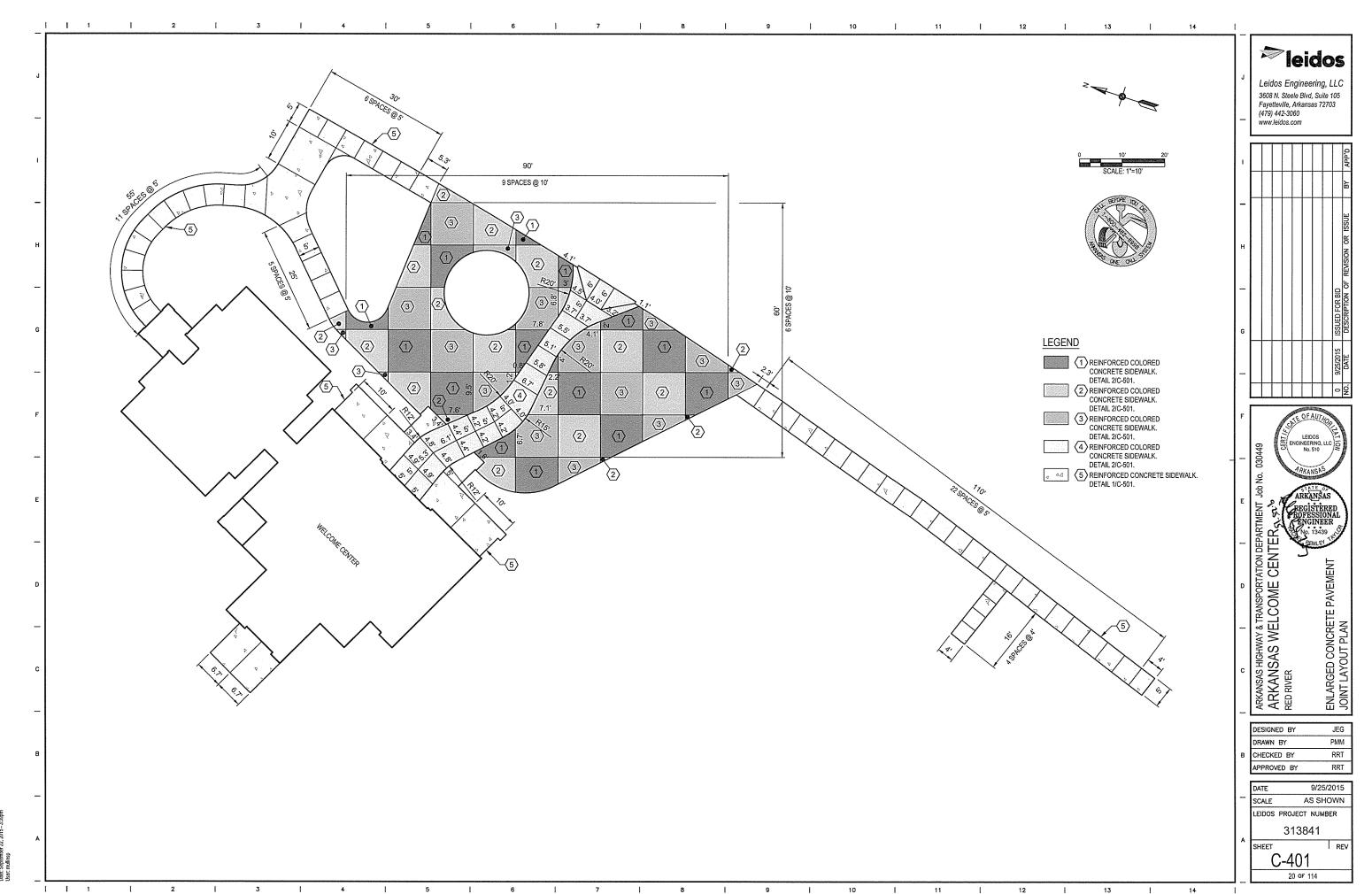
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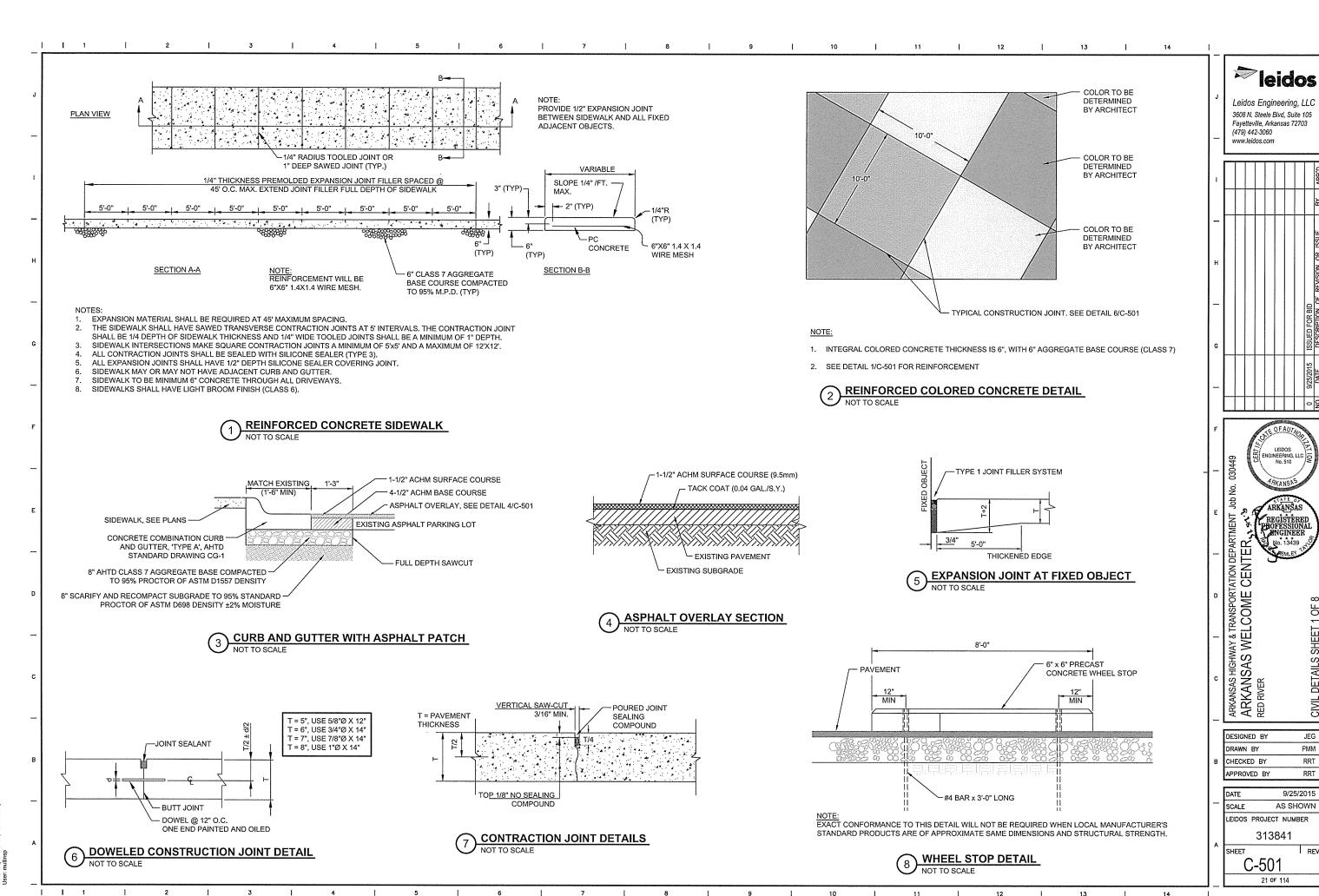
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Y.PDBIar highway dept/313841 - ahld welcome centers/20_DESGM40_CADlawc_red river/ORRC-401,dwg



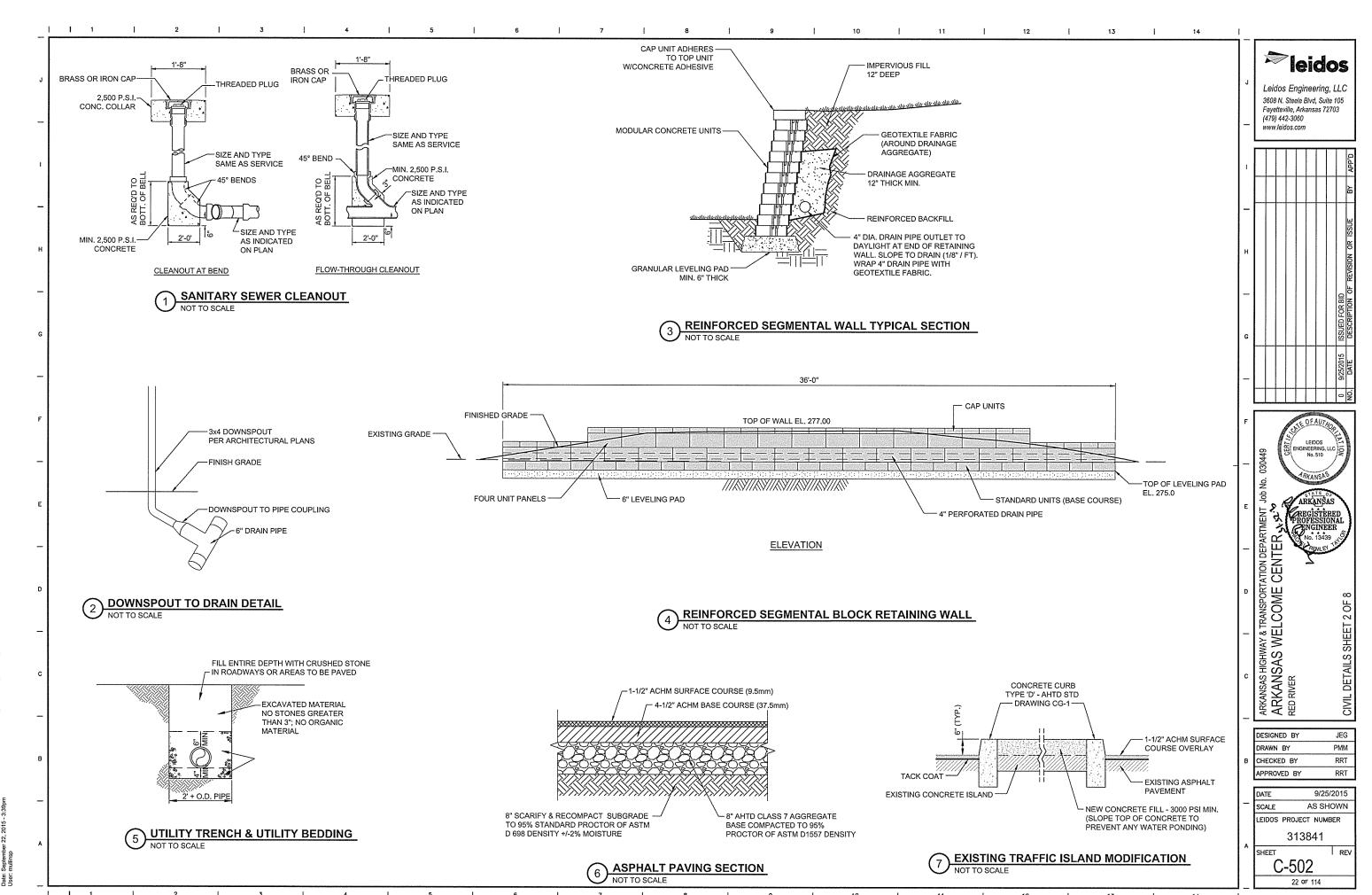
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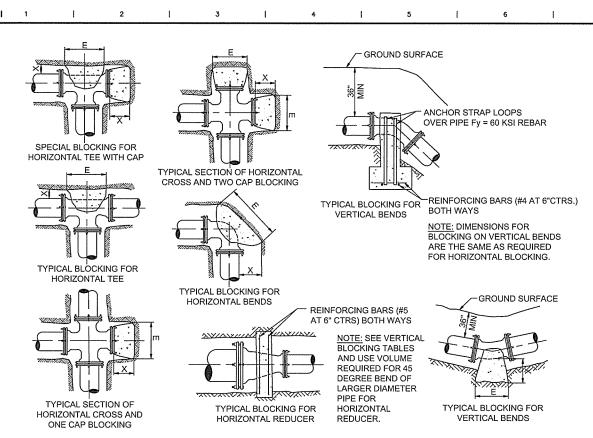
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TYPICAL HORIZONTAL AND VERTICAL THRUST BLOCK DETAILS NOT TO SCALE

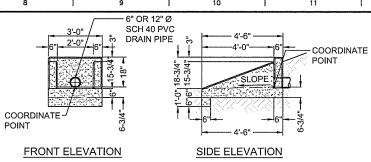
PIPE SIZE	11.25 DEGREE BEND			22.5 DEGREE BEND		45 DEGREE BEND			90 DEGREE BEND			
	ANCHOR STRAPS		CONCRETE ANCHOR STRAP		STRAPS	CONCRETE VOLUME	ANCHOR STRAPS		CONCRETE VOLUME	ANCHOR STRAPS		CONCRETE VOLUME
inches	NO.	SIZE	cu.yd.	NO.	SIZE	cu.yd.	NO.	SIZE	cu.yd.	NO.	SIZE	cu.yd.
2.0	1	#4	0.04	1	#4	0.08	1	#4	0.16	1	#4	0.30
3.0	1	#4	0.09	1	#4	0.18	1	#4	0.36	1	#4	0.67
4.0	1	#4	0.16	1	#4	0.33	1	#4	0.64	1	#4	1.19
6.0	1	#4	0.37	1	#4	0.74	1	#4	1.44	1	#4	2.67
8.0	1	#4	0.66	1	#4	1.31	1	#4	2.57	2	#4	4.74
10.0	1	#4	1.03	1	#4	2.04	2	#4	4.01	2	#4	7.40
12.0	1	#4	1.48	1	#4	2.94	2	#4	5.77	2	#5	10.65
14.0	1	#4	2.01	2	#4	4.01	2	#4	7.86	2	#6	14.52
16.0	1	#4	2.63	2	#4	5.23	2	#5	10.26	3	#5	18.95

MINIMUM VERTICAL THRUST

BLOCKING REQUIREMENTS

		11.25 DEGREE BEND		22.5 DEGREE BEND		45 DEGREE BEND		90 DEGREE BEND		BEND	TEE OR CAP					
PIPE SIZE inches	"X" ft.	"E" ft.	BEARING AREA sq.ft.	CONCRETE VOLUME cu.yd.	"E" ft.	BEARING AREA sq.ft.	CONCRETE VOLUME cu.yd.	"E" ft.	BEARING AREA sq.ft.	CONCRETE VOLUME cu.yd.	"E" ft.	BEARING AREA sq.ft.	CONCRETE VOLUME cu.yd.	"E" ft.	BEARING AREA sq.ft.	CONCRETE VOLUME cu.yd.
2"	0.5	0.26	0.07	0.01	0.36	0.13	0.01	0.50	0.26	0.01	0.69	0.48	0.01	0.58	0.34	0.01
3"	0.5	0.39	0.15	0.01	0.55	0.30	0.01	0.76	0.58	0.01	1.04	1.08	0.02	0.87	0.76	0.02
4"	1.0	0.52	0.27	0.01	0.73	0.53	0.02	1.02	1.04	0.04	1.39	1.92	0.07	1.17	1.36	0.05
6"	1.5	0.77	0.60	0.03	1.09	1.19	0.07	1.53	2.34	0.13	2.08	4.32	0.24	1.75	3.06	0.17
8"	1.5	1.03	1.06	0.06	1.46	2.12	0.12	2.04	4.15	0.23	2.77	7.68	0.43	2.33	5.43	0.30
10"	1.5	1.29	1.66	0.09	1.82	3.31	0.18	2.55	6.49	0.36	3.46	11.99	0.67	2.91	8.48	0.47
12"	1.5	1.55	2.39	0.13	2.18	4.76	0.26	3.06	9.34	0.52	4.15	17.26	0.96	3.49	12.20	0.68
14"	2.0	1.81	3.26	0.24	2.55	6.49	0.48	3.57	12.73	0.94	4.85	23.52	1.74	4.08	16.63	1.23
16"	2.0	2.06	4.26	0.32	2.91	8.47	0.63	4.08	16.61	1.23	5.54	30.70	2.27	4.66	21.71	1.61

MINIMUM HORIZONTAL THRUST BLOCKING REQUIREMENTS



SLOPE FLOOR OF

TOWARD DISCHARGE

COORDINATE POINT

6" OR 12" Ø SCH 40

PVC DRAIN PIPE OR

12" RCP

CONTRACTOR MAY ELECT TO INSTALL PRE-CAST CONCRETE

MINIMUM CONCRETE STRENGTH SHALL BE 4000 PSI @28 DAYS.

6" OR 12"

FRONT VIEW

SI OPE

PLAN VIEW

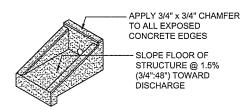
STRUCTURE RATHER THAN CAST IN PLACE.

NOTES:

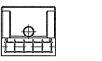
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RAF

STRUCTURE @ 1.5% (3/4":48")









SIDE VIEW



REAR VIEW

FRONT VIEW

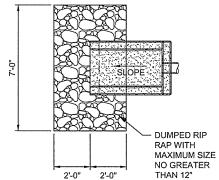


PLAN VIEW

REINFORCING STEEL PLACEMENT DIAGRAM

REINFORCING NOTES:

- MAINTAIN 2" MINIMUM CLEARANCE FROM STEEL TO CONCRETE SURFACE.
- ALL STEEL SHALL BE 1/2" Ø DEFORMED RE-BAR
- TIE ALL JOINTS
- PLACE RE-BAR 6"± O.C. BOTH WAYS



ROCK INLET/OUTLET PROTECTION

DRAIN LINE INLET/OUTLET DETAIL

NOTES:

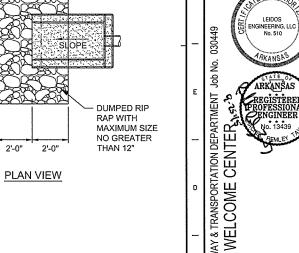
- BEARING AREA FOR HORIZONTAL THRUST BLOCKING IS BASED ON 150 PSI STATIC PRESSURE PLUS 120 PSI WATER HAMMER PRESSURE AND 2500 PSF SOIL BEARING VALUE.
- 2. CONCRETE VOLUME FOR VERTICAL THRUST BLOCKING IS BASED ON 150 PSI STATIC PRESSURE PLUS 120 PSI WATER HAMMER PRESSURE AND 150 LB.WT.PER CUBIC FOOT OF CONCRETE.
- 3. ALL CONCRETE IS 2100 PSI.
- 4. USE POLYETHYLENE WRAP OR EQUAL BETWEEN CONCRETE AND BEND.
- 5. ALL BLOCKING TO BE AGAINST UNDISTURBED HAND DUG SOIL.

SLOPE 1-1/2:1

FILTER FABRIC

OR FLATTER

- DIMENSIONS MAY BE VARIED AS REQUIRED BY FIELD CONDITIONS WHERE AND AS DIRECTED BY ENGINEER. THE VOLUME OF CONCRETE BLOCKING SHALL NOT BE LESS THAN SHOWN HERE.
- 7. ALL VALVES SHALL BE A MINIMUM OF 5' FROM BLOCKED FITTINGS
- 8. DO NOT COVER JOINTS OF FITTING WITH CONCRETE.



	DESIGNED BY	JEG
	DRAWN BY	PMM
3	CHECKED BY	RRT
	APPROVED BY	RRT

CIVIL

ARKANSAS HIGHW/ ARKANSAS V RED RIVER

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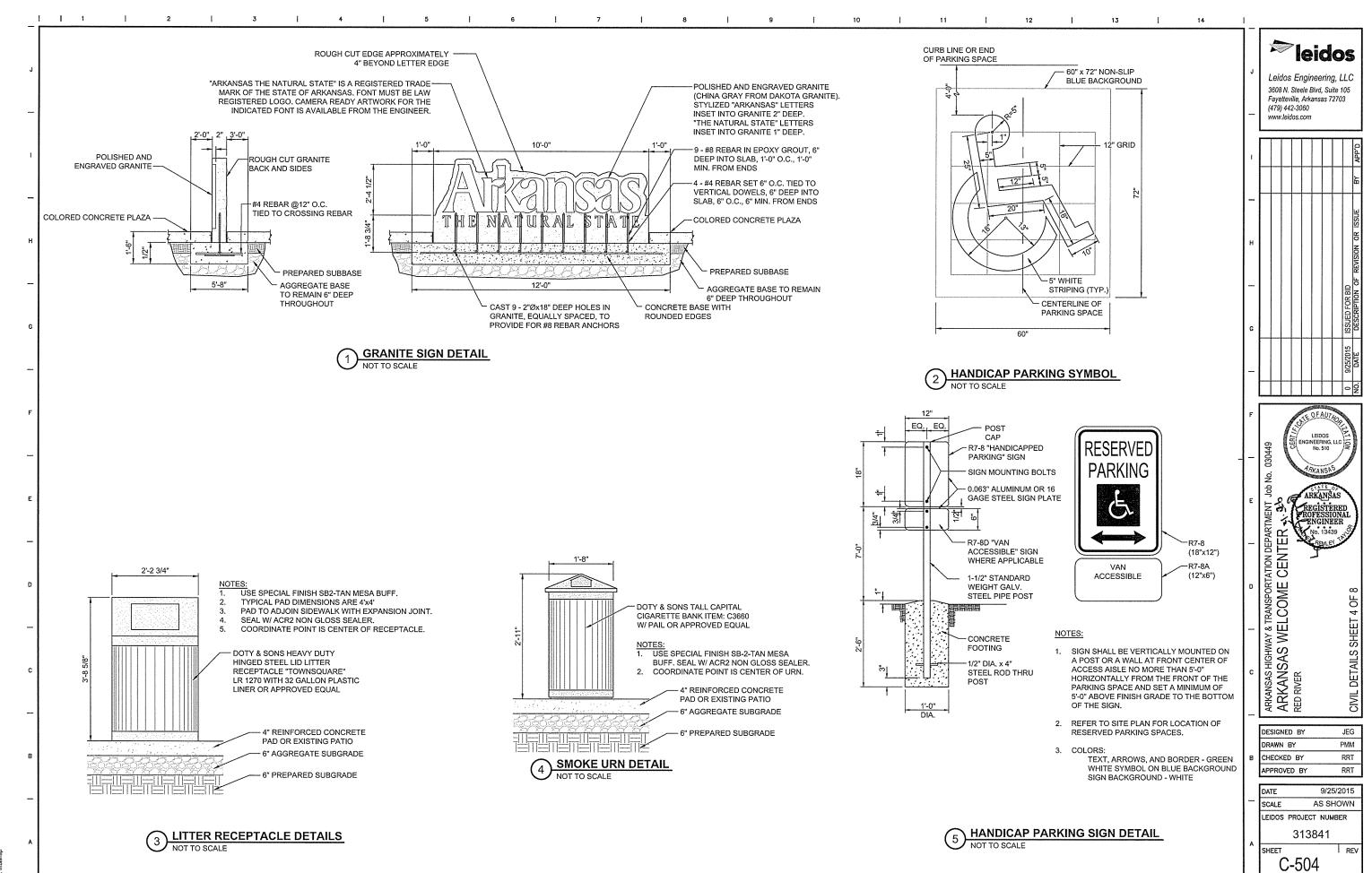
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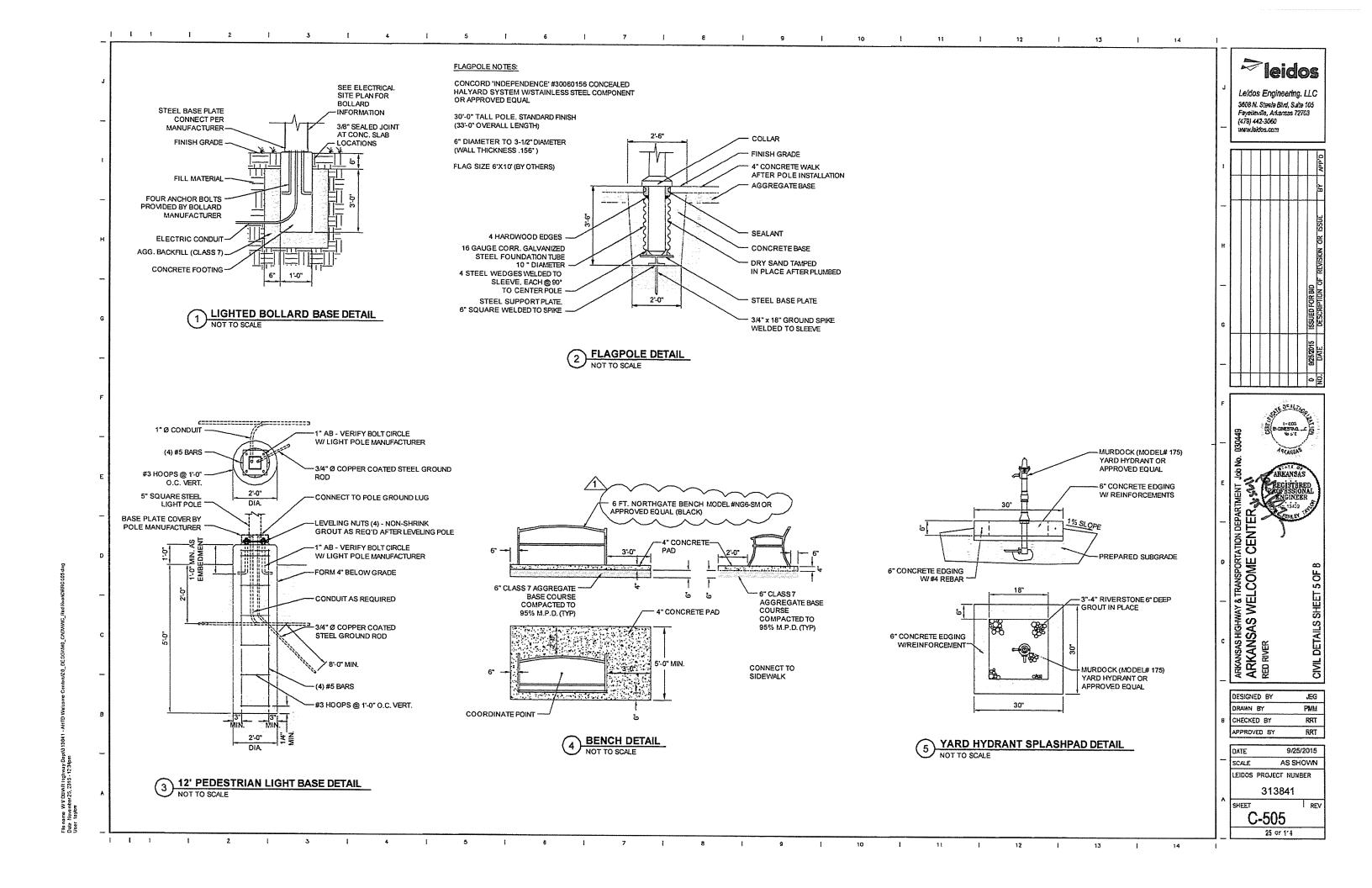
THRUST BLOCK DETAILS

23 OF 114

1 1



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BEST MANAGEMENT PRACTICES (BMP'S)

9

POLLUTION THROUGH STORM RUNOFF IS INTENSIFIED AT CONSTRUCTION SITES DUE TO THE REMOVAL OF THE NATURAL GROUND COVER OF THE SITE AS WELL AS THE INTRODUCTION OF HAZARDOUS CHEMICALS AND WASTES TO THE AREA. MEASURES ARE REQUIRED BOTH DURING CONSTRUCTION AND AFTER THE COMPLETION OF CONSTRUCTION TO STABILIZE THE SITE. STABILIZATION OF THE SITE DURING CONSTRUCTION ACTIVITIES CONSISTS OF THE INSTALLATION OF TEMPORARY OR PERMANENT MEASURES TO PREVENT EROSION OR TO INTERCEPT SEDIMENT PRIOR TO IT LEAVING THE SITE. THIS CAN BE ACCOMPLISHED THROUGH THE USE OF GROUND COVER MULCHING, PAVING, SILT FENCES, AND SEDIMENT BASINS ALONG WITH CONSTRUCTION METHODS TO REDUCE THE DISTURBED AREAS OF CONSTRUCTION.

10

CONSTRUCTION SPECIFICATIONS

- FENCE POSTS SHALL BE A MINIMUM OF 5'-0" LONG DRIVEN 24" MINIMUM INTO THE GROUND. STEEL POSTS WILL BE STANDARD T OR U SECTION WEIGHING NOT LESS THAN 1.00 POUND PER LINEAR FOOT.
- GEOTEXTILE SHALL BE FASTENED SECURELY TO EACH FENCE POST WITH WIRE TIES AT TOP AND MID-SECTION AND SHALL MEET THE DEFINED FILTER FABRIC SPECIFICATIONS.
- WHERE ENDS OF GEOTEXTILE FABRIC COME TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND WIRE TIED TO PREVENT SEDIMENT BYPASS.
- SILT FENCE SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND MAINTAINED WHEN BULGES OCCUR OR WHEN SEDIMENT ACCUMULATION REACHED 50% OF THE FABRIC HEIGHT.

MANNER OF CONSTRUCTION

- PLACE THE BOTTOM 1FT OF FABRIC IN 8-INCH DEEP TRENCH LAPPING TOWARD THE UPSLOPE SIDE.
- BACKFILL WITH COMPACTED EARTH OR GRAVEL AS SHOWN.
 TO REDUCE MAINTENANCE, EXCAVATE A SHALLOW SEDIMENT
 STORAGE AREA ON UP SLOPE SIDE OF FENCE WHERE
 SEDIMENTATION IS EXPECTED.
- PROVIDE GOOD ACCESS TO DEPOSITION AREAS FOR CLEAN-OUT AND MAINTENANCE.
- DO NOT INSTALL SEDIMENT FENCE ACROSS INTERMITTENT OR PERMANENT STREAMS, CHANNELS, OR ANY LOCATION WHERE CONCENTRATED FLOW IS ANTICIPATED.

INSPECTIONS

12

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INSPECTIONS SHALL BE PERFORMED EVERY FOURTEEN (14) DAYS OR AFTER A RAINFALL EVENT OF 0.5 INCHES OR GREATER

MAJOR ITEMS TO BE OBSERVED DURING INSPECTIONS INCLUDE:

LOCATION OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS

LOCATION OF BEST MANAGEMENT PRACTICES (BMP'S) THAT ARE IN NEED OF MAINTENANCE

LOCATION OF BMP'S WHICH ARE NOT PERFORMING, FAILED TO OPERATE, OR WERE INADEQUATE

LOCATIONS WHERE ADDITIONAL BMP'S ARE NEEDED.

FILTER FABRIC SPECIFICATIONS

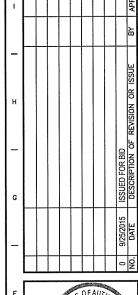
SILT FENCE SHALL BE CONSTRUCTED OF A WOVEN, POLYPROPYLENE, POLYESTER OR POLYMIDE MATERIAL THAT SHALL BE RESISTENT TO ULTRA- VIOLET DEGRADATION AND ROT. THE EDGES OF THE WOVEN FABRIC SHALL BE SEALED OR SALVAGED TO PREVENT RAVELING. THE FABRIC SHALL EXHIBIT THE FOLLOWING PHYSICAL PROPERTIES WHEN SAMPLED AND TESTED USING THE SPECIFIED METHODS.

PROPERTY TEST METHODS VALUES

GRAB TENSILE ASTM D-4632 100 LB. (MIN.) ASTM D-4632 10-40% (MAX.) ELONGATION @ YIELD TRAPEZOID TEAR ASTM D-4533 50 LB. (MIN.) UV RESISTANCE ASTM D-4355 80% (MIN.) APPARENT OPENING SIZE ASTM D-4751 **20-50 US SIEVE** PERMITIVITY 1/SEC ASTM D-4491 O.1 (MIN.)

PREFABRICATED FENCE SYSTEMS MAY BE USED PROVIDED THEY MEET ALL THE MATERIAL REQUIREMENTS.

EROSION CONTROL MEASURES SHALL REMAIN UNTIL A STAND OF VEGETATIVE GROUND COVER OF 70% OR GREATER COVERAGE IS ESTABLISHED.



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	DRAWN BY	PMM
3	CHECKED BY	RRT
	APPROVED BY	RRT

DATE 9/25/2015
SCALE AS SHOWN
LEIDOS PROJECT NUMBER
313841
SHEET REV
C-506
26 OF 114

BAG IS TO HAVE A
TIGHT CURB CONTACT
WITH NO GAPS

APPROXIMATELY 24-INCHES
LONG, 12-INCHES WIDE AND
6-INCHES (I.E. CURB HEIGHT)

LEAVE APPROXIMATELY 4 TO
6 INCHES BETWEEN SAND
FILTER BAGS AND OUTLET

PLACE SAND FILTER
BAGS SUCH THAT NO
GAPS ARE EVIDENT.

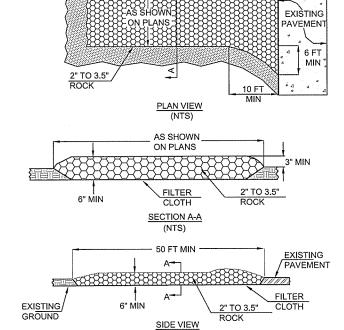
CONCRETE CURB
PAVEMENT
PLACE SAND FILTER BAGS SUCH
THAT NO GAPS ARE EVIDENT.

NOTE: SAND FILTER
CAN BE USED ON
PAVEMENT OR BARE
GROUND.

FRONT VIEW

HEIGHT OF SAND FILTER BAGS SHOULD NOT BE ABOVE THE CONCRETE CURB.

4 EROSION CONTROL SAND FILTER BAG



NUMBER OF SANDBAGS
AND ARRANGEMENT
VARY WITH ON-SITE
CONDITIONS

FLOW LINE OF DITCH

SANDBAGS

VARIABLE

18" TO 24" NORMAL

3 DITCH CHECK DAM NOT TO SCALE

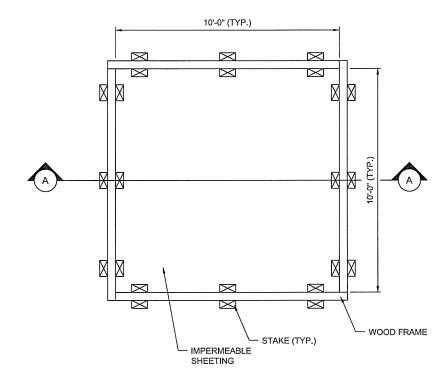
2) TEMPORARY CONSTRUCTION EXIT

(NTS)

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SHEET C-5

SECTION A-A



PLAN VIEW

CONCRETE WASHOUT STRUCTURE WITH WOOD PLANKS

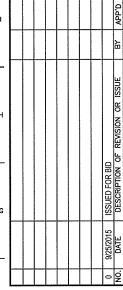
WASHOUT STRUCTURE WITH STRAW BALES

CONSTRUCTION SPECIFICATIONS:

- 1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS, AND WATER COURSES, AND AWAY FROM FROM CONSTRUCTION TRAFFIC.
- 2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS, AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
- 3. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER, FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND REARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE
- 4. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
- 5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G. RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER, WET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED, AND DISPOSE OF IN AN APPROVED MANNER, PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.



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	APPROVED BY	RRT
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27 OF 114					

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FENCE POST (8'-0" O.C.) -

ORANGE -CONSTRUCTION

RADIUS = 1 FT. PER INCH OF TRUNK DIA.

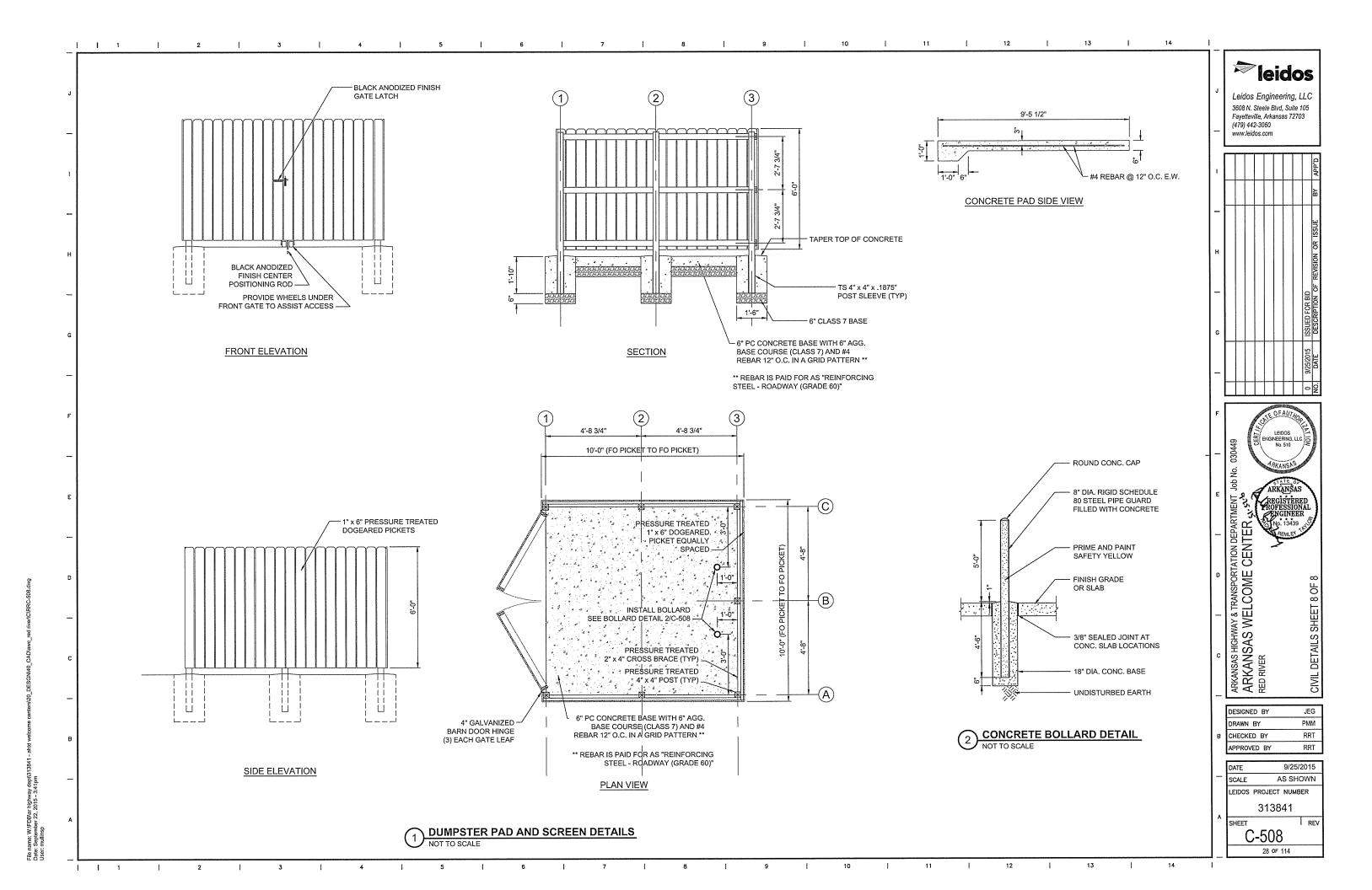
TREE PROTECTION FENCING

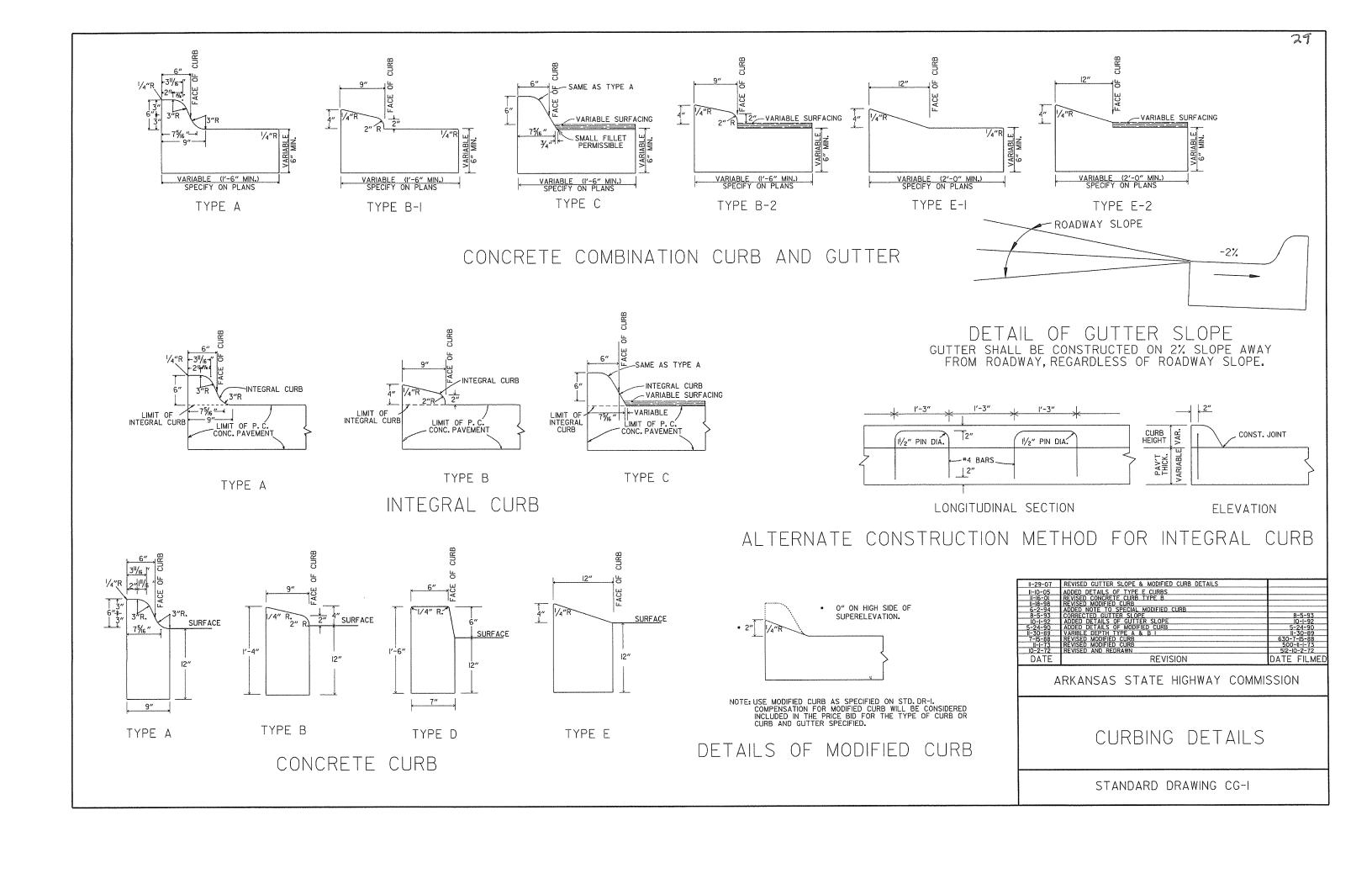
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DESIGNED BY





REINFORCED CONCRETE ARCH PIPE DIMENSIONS

EQUIV.	SP	AN	RISE		
DIA.	AASHTO M 206	AHTD NOMINAL	AASHTO M 206	AHTD NOMINAL	
INCHES		INC	HES		
15 18 21 24 30 36 42 48 54 60 72 84 90 96 108 120	18 22 26 28 28 43 36 43 51 65 73 88 102 115 122 138 154 168 34	18 22 26 29 36 44 51 59 65 73 88 002 115 122 138 154 169	11 13½/2 15½/2 18 22½/2 26%/3 31%/6 40 45 54 62 72 77½/6 96%/2	11 14 16 18 23 27 31 36 40 45 54 62 77 87 97	

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN + 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M206.

REINFORCED CONCRETE HORIZONTAL ELLIPTICAL PIPE DIMENSIONS

11 L		1010.10			
EQUIV.	AASHT(М 207			
DIA.	SPAN	RISE			
INCHES	INC	HES			
18 24	23 30	14 19			
27 30	34 38	22 24			
33	42	27			
36 39	45 49	29 32			
42	53	34			
48 54	60 68	38 43			
60 66	76 83	48 53			
72	91	58			
78 84	98 106	63 68			
THE MEASURED SPAN AND RISE					

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M207.

CONSTRUCTION SEQUENCE

I, PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. PLACE AND COMPACT THE HAUNCH AREA UP TO THE MIDDLE OF THE PIPE.
5. COMPLETE BACKFILL ACCORDING TO SUBSECTION 606.03.(f)(I).

NOTE: HAUNCH AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF CONCRETE PIPE.

- LEGEND -

D₁ = NORMAL INSIDE DIAMETER OF PIPE
D₀ = OUTSIDE DIAMETER OF PIPE
H = FILL COVER HEIGHT OVER PIPE (FEET)
MIN. = MINIMUM
WWW. = UNDISTURBED SOIL

INSTALLATION TYPE	MATERIAL REQUIREMENTS FOR HAUNCH AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 5 OR CLASS 7)
TYPE 2	SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4) OR TYPE 1 INSTALLATION MATERIAL*
TYPE 3**	AASHTO CLASSIFICATION A-1 THRU A-6 SOIL OR TYPE 1 OR 2 INSTALLATION MATERIAL

*SM-3 WILL NOT BE ALLOWED.

** MATERIALS SHALL NOT INCLUDE ORGANIC MATERIALS OR STONES LARGER THAN 3 INCHES.

MINIMUM HEIGHT OF FILL "H" OVER CIRCULAR R.C. PIPE CULVERTS

	CLASS OF PIPE				
	CLASS	III	CLASS IV	CLASS V	
INSTALLATION TYPE	TYPE 1 OR 2	TYPE 3	ALL	ALL	
PIPE ID (IN.)		FEE	Т		
12-15	2	2.5	2	1	
18-24	2.5	3	2	1	
27-33	3	4	2	1	
36-42	3.5	5	2	1	
48	4.5	5.5	2	1	
54-60	5	7	2	1	
66-78	6	8	2	1	
84-108	7.5	8	2	1	

NOTE: FOR MINIMUM COVER VALUES, "H' SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MINIMUM HEIGHT OF FILL "H" OVER R.C. ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS

	CLASS OF PIPE		
INSTALLATION TYPE	CLASS III	CLASS IV	
	FEET		
TYPE 2 OR TYPE 3	2.5	1.5	

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MAXIMUM HEIGHT OF FILL "H" OVER CIRCULAR R.C. PIPE CULVERTS

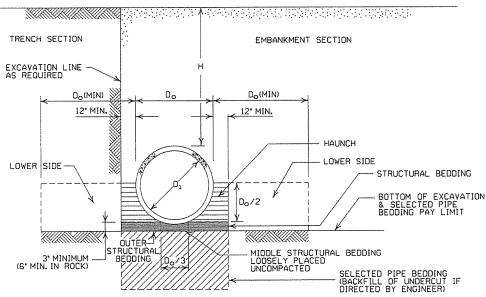
CLASS OF PIPE			
CLASS III	CLASS IV	CLASS V	
FEET			
21	32	50	
16	25	39	
12	20	30	
	CLASS III 21 16	CLASS III	

NOTE: IF FILL HEIGHT EXCEEDS 50 FEET, A SPECIAL DESIGN CONCRETE PIPE WILL BE REQUIRED USING TYPE 1 INSTALLATION.

MAXIMUM HEIGHT OF FILL "H" OVER R.C. ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS

	CLASS OF PIPE		
INSTALLATION TYPE	CLASS III	CLASS IV	
ITE	FEET		
TYPE 2	13	21	
TYPE 3	10	16	

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.



EMBANKMENT AND TRENCH INSTALLATIONS

- I. MATERIAL IN THE HAUNCH AND OUTER STRUCTURAL BEDDING SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.
- 2. FOR TRENCHES WITH WALLS OF NATURAL SOIL, THE DENSITY OF THE SOIL IN THE LOWER SIDE ZONE SHALL BE AS FIRM AS THE 95% DENSITY REQUIRED FOR THE HAUNCH. IF THE EXISTING SOIL DOES NOT MEET THIS CRITERIA, IT SHALL BE REMOVED AND RECOMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OF MATERIAL USED.
- 3. FOR EMBANKMENTS, THE MATERIAL IN THE LOWER SIDE ZONE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

GENERAL NOTES

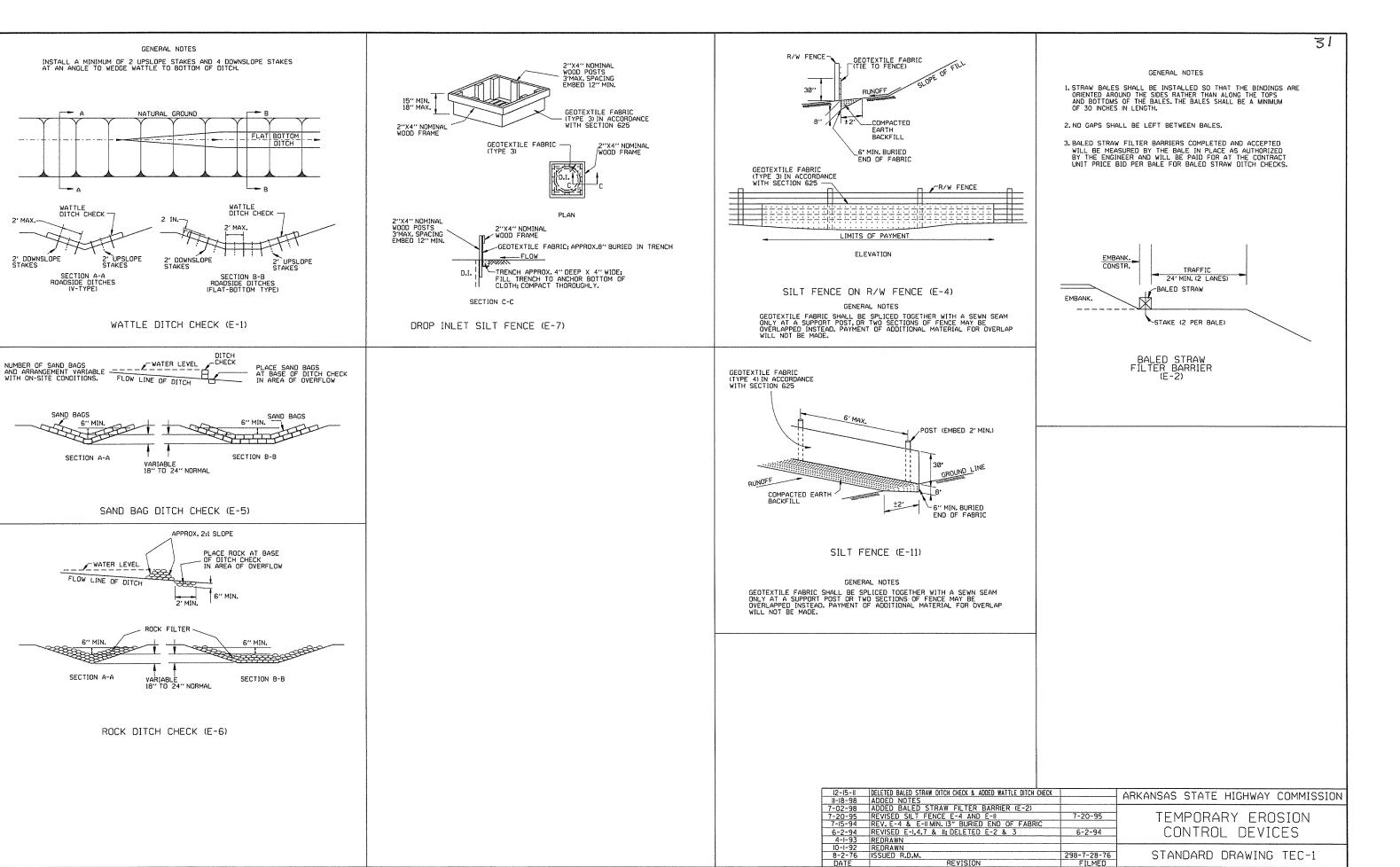
- I. CONCRETE PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION), WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.
- 2. CONCRETE PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
- 3. ALL PIPE SHALL CONFORM TO SECTION 606. CIRCULAR R.C. PIPE CULVERTS SHALL CONFORM TO AASHTO MI70, R.C. ARCH PIPE CULVERTS SHALL CONFORM TO AASHTO M206 AND HORIZONTAL ELLIPTICAL PIPE CULVERTS SHALL CONFORM TO AASHTO M207.
- 4. ALL PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY A COVER SUFFICIENT TO PREVENT DAMAGE FROM PASSAGE OF EQUIPMENT.
- 5. THE MINIMUM TRENCH WIDTH SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 24 INCHES. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR WORKING CONDITIONS.
- 6. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 24 INCHES BETWEEN STRINGS OF PIPE. REFER TO STD. DWG. FES-2 FOR MINIMUM CLEARANCE WHERE FLARED END SECTIONS ARE USED.
- 7. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
- 8. NOT MORE THAN ONE LIFTING HOLE MAY BE PROVIDED IN CONCRETE PIPE TO FACILITATE HANDLING. HOLE MAY BE CAST IN PLACE, CUT INTO THE FRESH CONCRETE AFTER FORMS ARE REMOVED, OR DRILLED, THE HOLE SHALL NOT BE MORE THAN TWO INCHES IN DIAMETER OR TWO INCHES SQUARE, CUTTING OR DISPLACEMENT OF REINFORCEMENT WILL NOT BE PERMITTED. SPILLED AREAS AROUND THE HOLE SHALL BE REPAIRED IN A WORKMANLIKE MANNER, LIFTING HOLE SHALL BE FILLED WITH MORTAR, CONCRETE, OR OTHER METHOD AS APPROVED BY THE ENGINEER.
- 9. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUIT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
- 10. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER
 TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS THE HAUNCH),
 BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE.
 IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."

2-27-14	REVISED GENERAL NOTE I.		
12-15-11	REVISED FOR LRFD DESIGN SPECIFICATIONS		
5-18-00	REVISED TYPE 3 BEDDING & ADDED NOTE		
3-30-00	REVISED INSTALLATIONS		
11-06-97	ISSUED		
DATE	REVISION	DATE	FILMED

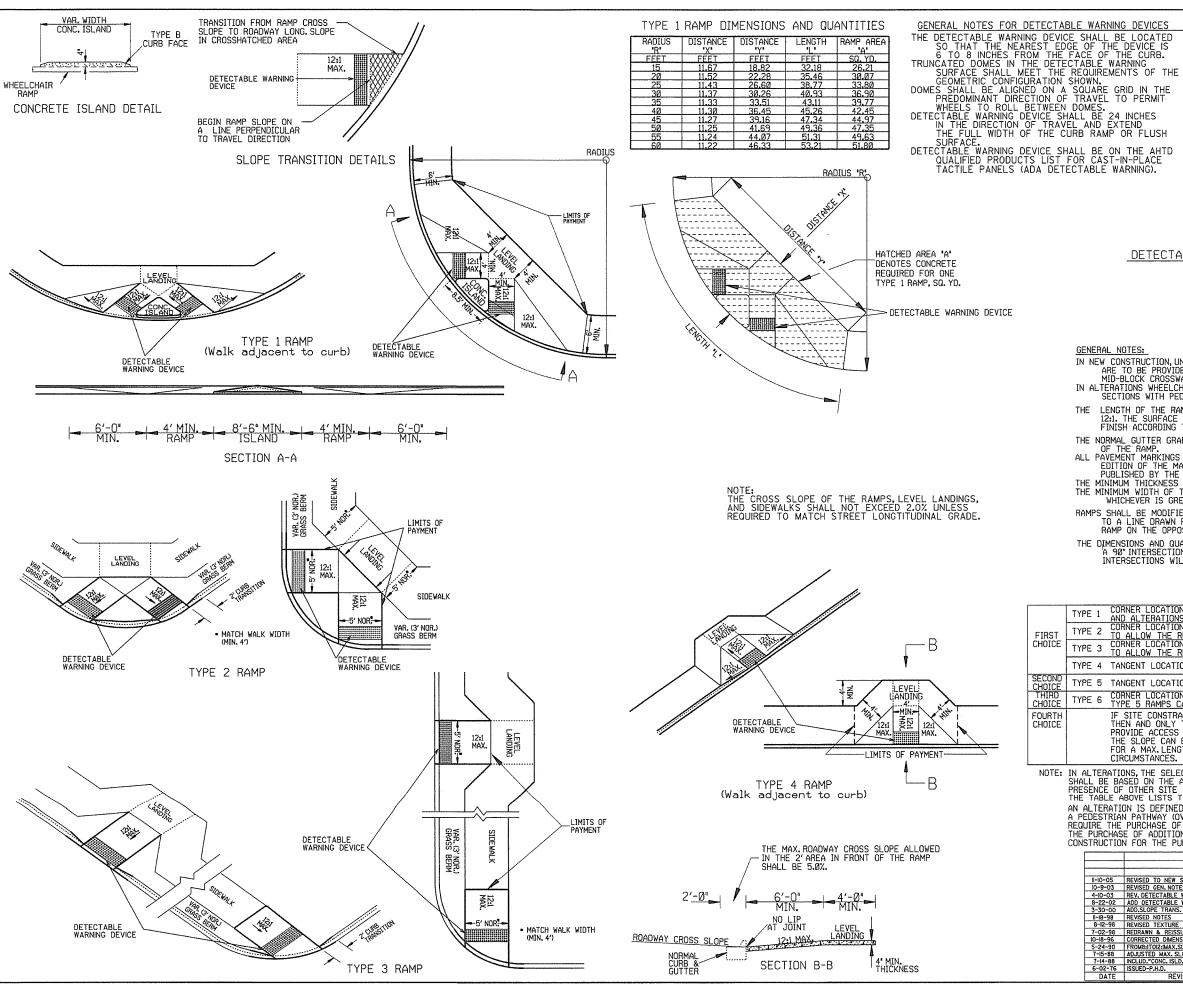
CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING

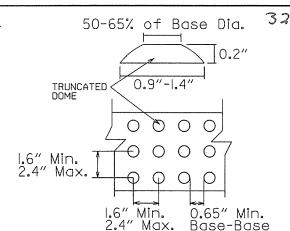
STANDARD DRAWING PCC-1





2' MAX --





DETECTABLE WARNING DEVICE DETAIL

GENERAL NOTES:

- IN NEW CONSTRUCTION, UNLESS OTHERWISE INDICATED ON THE PLANS, WHEELCHAIR RAMPS
 ARE TO BE PROVIDED AT ALL CORNERS OF CURBED STREET INTERSECTIONS AND
 MID-BLOCK CROSSWALK LOCATIONS.
 IN ALTERATIONS WHEELCHAIR RAMPS ARE TO BE PROVIDED AT CURBED STREET INTERSECTIONS WITH PEDESTRIAN TRAFFIC AND MID-BLOCK CROSSWALK LOCATIONS.
- LENGTH OF THE RAMP SHALL BE SUCH THAT THE SLOPE DOES NOT EXCEED 12:1. THE SURFACE TEXTURE OF THE RAMP SHALL CONFORM TO A CLASS 6 FINISH ACCORDING TO SECTION 802.19.
- THE NORMAL GUTTER GRADE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP.

 ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.

 THE MINIMUM THICKNESS OF THE RAMP, WALK, & LANDING SHALL BE 4.

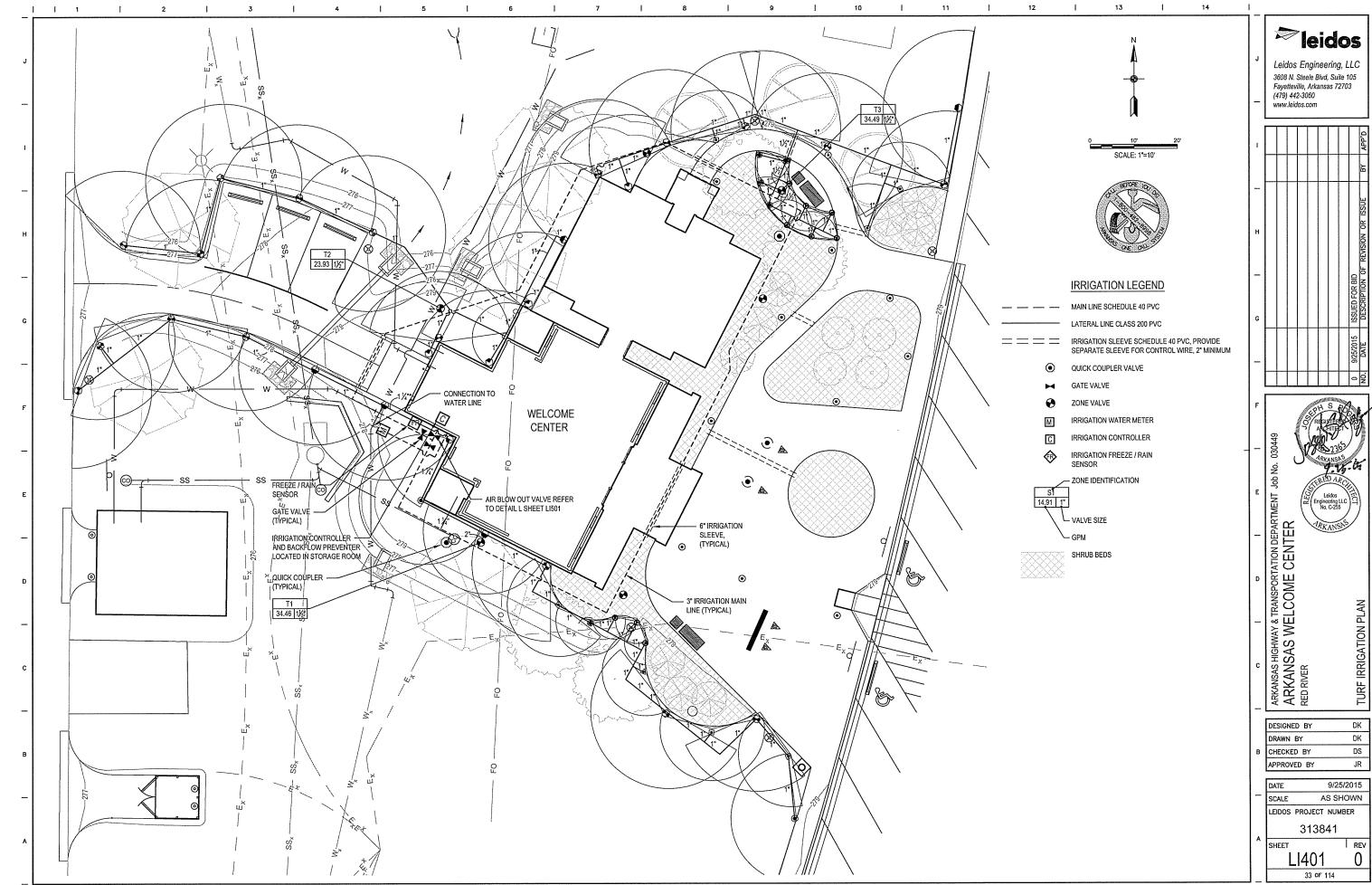
 THE MINIMUM WIDTH OF THE RAMPS SHALL BE THE WALK WIDTH OR 36, WHITCHEVER IS GREATER
- WHICHEVER IS GREATER.
- RAMPS SHALL BE MODIFIED AS NECESSARY TO INSURE THAT THEY ARE PARALLEL TO A LINE DRAWN FROM THE CENTER OF ONE RAMP TO THE CENTER OF THE RAMP ON THE OPPOSITE SIDE OF THE INTERSECTION.
- THE DIMENSIONS AND QUANTITIES SHOWN ON THIS DRAWING ARE FOR A 90° INTERSECTION ONLY. DIMENSIONS AND QUANTITIES FOR SKEWED INTERSECTIONS WILL VARY, AND ARE TO BE DETERMINED BY THE ENGINEER.

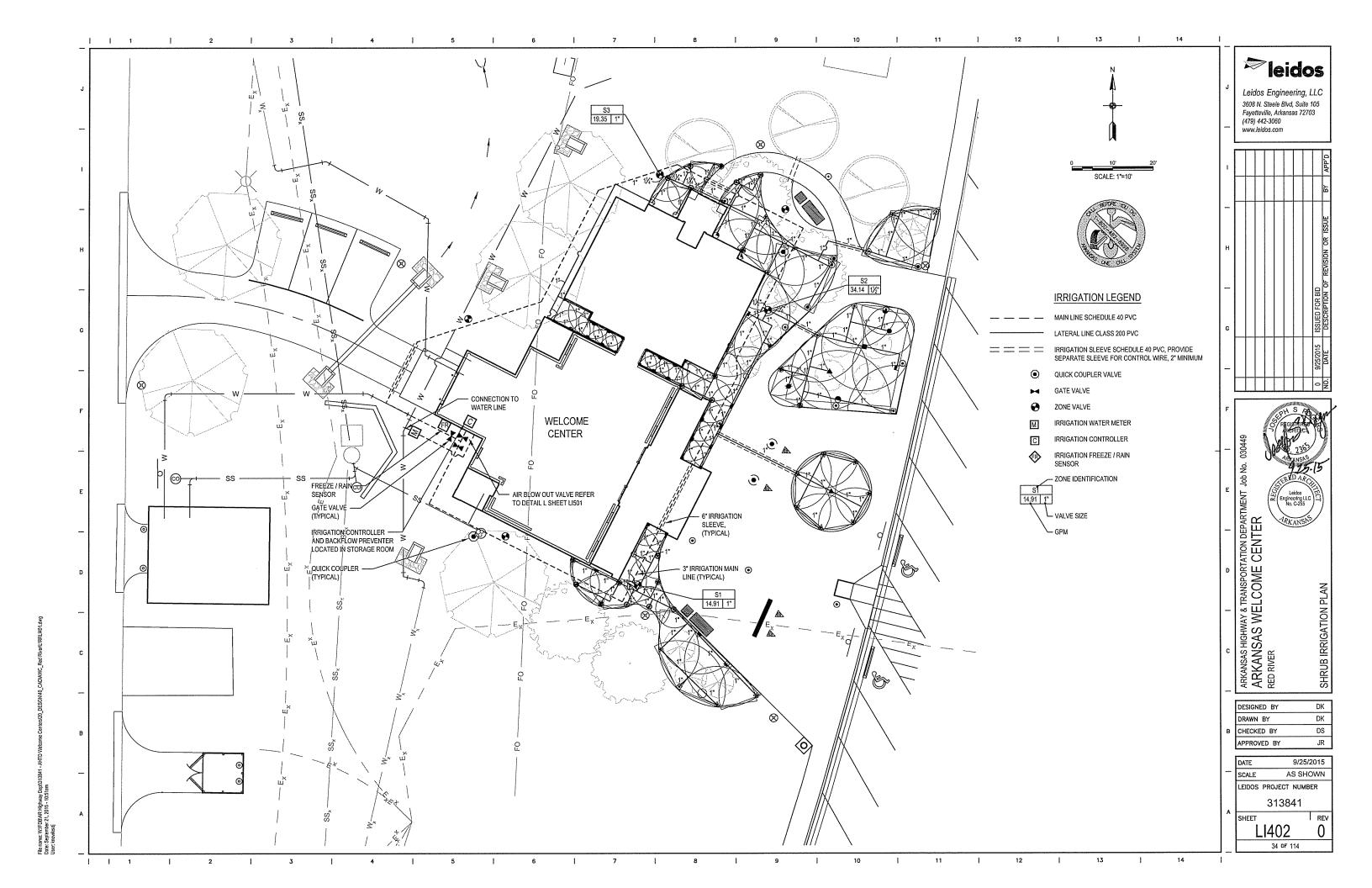
RAMP SELECTION CRITERIA

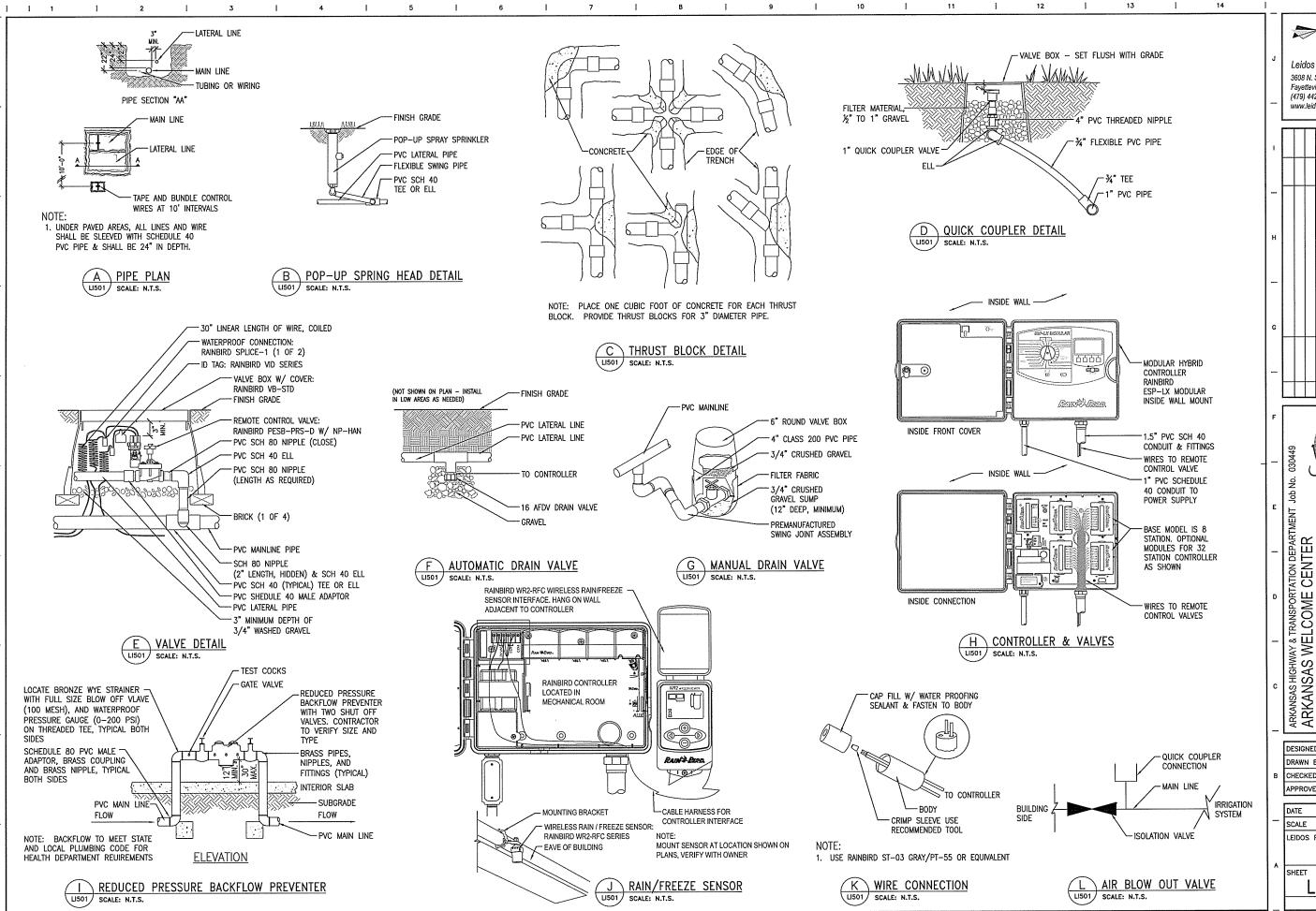
FIRST CHOICE	TYPE 1	CORNER LOCATIONS WITH THE WALK ADJACENT TO THE CURB (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 2	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE INSUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 3	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE SUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 4	TANGENT LOCATIONS (BOTH NEW CONSTRUCTION AND ALTERATIONS).
SECOND	TYPE 5	TANGENT LOCATIONS (ALTERATIONS ONLY).
THIRD CHOICE	TYPE 6	CORNER LOCATIONS (ALTERATIONS ONLY). THIS RAMP MAY BE USED ONLY IF THE TYPE 5 RAMPS CANNOT BE PLACED AT THE ENDS OF THE RADIUS.
FOURTH CHOICE		IF SITE CONSTRAINTS PREVENT THE CONSTRUCTION OF ANY OF THE TYPES LISTED, THEN AND ONLY THEN CAN THE 12:1 MAX. SLOPE ON THE RAMP BE EXCEEDED TO PROVIDE ACCESS TO THE STREET LEVEL (ALTERATIONS ONLY). THE SLOPE CAN BE STEEPENED TO A 10:1 MAX. FOR A MAX. LENGTH OF 5' OR A 8:1 MAX. FOR A MAX. LENGTH OF 5' OR A 8:1 MAX. FOR A MAX. LENGTH OF 2'. SLOPES STEEPER THAN 8:1 ARE NOT ALLOWED UNDER ANY CIRCUMSTANCES.

NOTE: IN ALTERATIONS, THE SELECTION OF THE TYPE OF WHEELCHAIR RAMP TO BE CONSTRUCTED SHALL BE BASED ON THE AMOUNT OF RIGHT-OF-WAY AVAILABLE, AND ON THE PRESENCE OF OTHER SITE CONSTRAINTS (UTILITIES, BUILDINGS, ETC.). THE TABLE ABOVE LISTS THE ORDER IN WHICH THE RAMPS ARE TO BE CONSIDERED. AN ALTERATION IS DEFINED AS A PROJECT THAT CHANGES OR AFFECTS THE USE OF A PEDESTRIAN PATHWAY (OVERLAYS, SIGNALIZATION PROJECTS, ETC.) BUT DOES NOT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY. ALL PROJECTS THAT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY WILL USUALLY BE CONSIDERED NEW CONSTRUCTION FOR THE PURPOSES OF THE CHART ABOVE.

11-10-05	REVISED TO NEW SIDEWALK POLICY		ADVANCES OF ATT HIGHWAY COLUMNS		
10-9-03	REVISED GEN. NOTES & ADDED NOTE		ARKANSAS STATE HIGHWAY COMMISSION		
4-10-03	REV. DETECTABLE WARNING DEVICES				
8-22-02	ADD DETECTABLE WARNING DEVICES		WHEEL OLLAND DAVIDG		
3-30-00	ADD.SLOPE TRANS. & REV. ISL. DIMS.		WHEELCHAIR RAMPS		
11-18-98	REVISED NOTES		NEW CONSTRUCTION		
8-12-98	REVISED TEXTURE		NEW CONSTRUCTION		
7-02-98	REDRAWN & REISSUED		AND ALTERATIONS		
10-18-96	CORRECTED DIMENSIONS	10-18-96	1 AND ALILIATIONS		
5-24-90	FROM8:ITOI2:IMAX.SLOPES	5-24-90			
7-15-88	ADJUSTED MAX. SLOPE	652-7-15-88			
7-14-88	INCLUD."CONC. ISLD."IN PAY ITEM		STANDARD DRAWING WR-L		
6-02-76		299-7-28-76	6		
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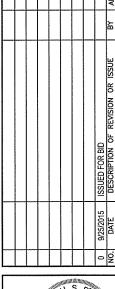






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ARKANSAS HIGHWAY & TRANSPORTATION DEPARTMENT Job No. 030449

ARKANSAS WELCOME CENTER

RED RIVER

RED RIVER

DESIGNED BY DK
DRAWN BY DK
CHECKED BY DS
APPROVED BY JR

DATE 9/25/2015

SCALE AS SHOWN

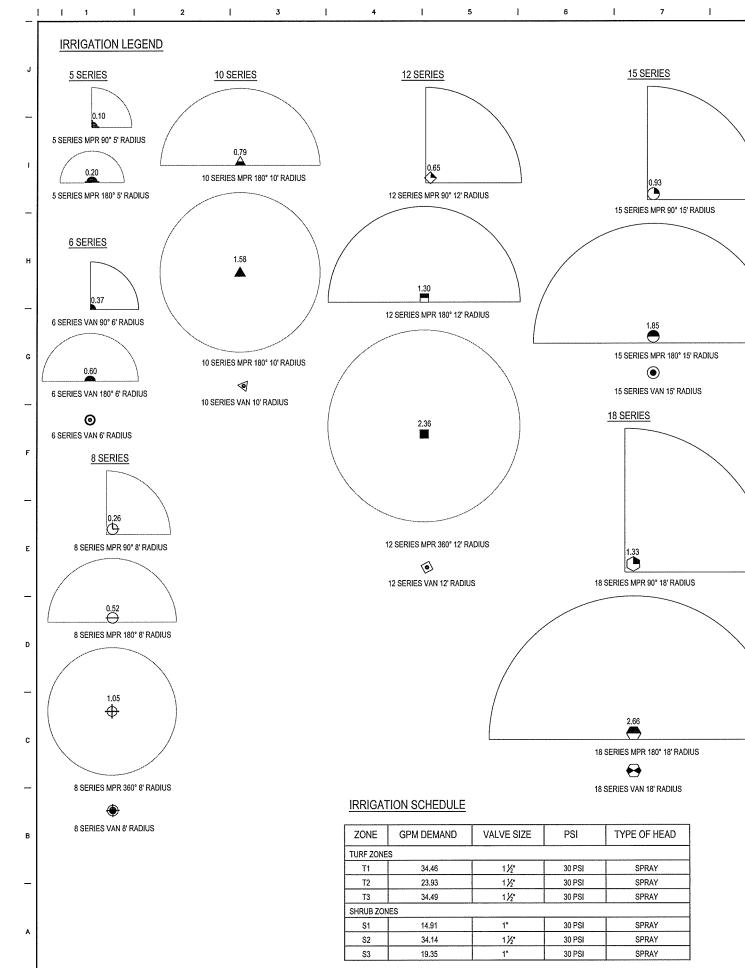
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GENERAL IRRIGATION NOTES:

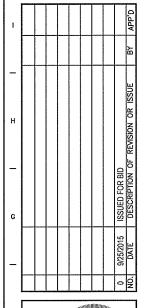
THESE NOTES ARE PRESENTED AS A "SUMMARY" OF THE WRITTEN SPECIFICATIONS ISSUED FOR THE PROJECT. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL DETAIL

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- 1. THE IRRIGATION SYSTEM IS DESIGNED USING RAINBIRD INC, COMPONENTS AS A BASIS OF DESIGN. OTHER MANUFACTURER'S ARE ACCEPTABLE AS LONG AS THE SYSTEM PROVIDES 100% COVERAGE AND WORKS PROPERLY. THE IRRIGATION SUBCONTRACTOR IS RESPONSIBLE FOR ENSURING THE PROPER FUNCTIONING OF ALL ASPECTS OF THE SYSTEM. ANY REQUIRED CHANGES ARE TO BE REPORTED TO THE CONTRACTOR AND THE IRRIGATION DESIGNER FOR APPROVAL
- 2. THE IRRIGATION SYSTEM DESIGN IS BASED ON 70 PSI STATIC PRESSURE (PSI) AND MAXIMUM FLOW OF 40 GALLONS PER MINUTE (GPM) WITH A MINIMUM OF 30 PSI AT THE LAST HEAD IN EACH ZONE. THE IRRIGATION SUBCONTRACTOR SHALL VERIFY THE PRESSURE AND FLOW PRIOR TO COMMENCEMENT OF CONSTRUCTION. REPORT TO THE CONTRACTOR ANY DIFFERENCES BETWEEN THE PRESSURE INDICATED AND THE ACTUAL PRESSURE READING AT THE POINT OF CONNECTION.
- 3. THE PIPE ROUTING SHOWN IS DIAGRAMMATIC ONLY. ALL PIPING, VALVES, HEADS, ETC SHOWN WITHIN PAVED AREAS ARE FOR DESIGN CLARIFICATION ONLY. PRESSURE LOSS CALCULATIONS ARE BASED ON THE PIPE ROUTING AS SHOWN. SIGNIFICANT DEVIATIONS FROM THE ROUTING SHOWN SHOULD BE AVOIDED.
- 4. DO NOT WILLINGLY INSTALL THE SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES, OR DIFFERENCES IN THE DIMENSIONS OF THE CONSTRUCTED AREAS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE IRRIGATION DESIGN OR CHANGES HAVE OCCURRED IN THE SITE PLAN. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE IRRIGATION DESIGNER AND THE CONTRACTOR IMMEDIATELY SHOULD THE SUBCONTRACTOR PROCEED WITH THE INSTALLATION WITHOUT NOTIFYING THE IRRIGATION DESIGNER AND GENERAL CONTRACTOR. THE IRRIGATION SUBCONTRACTOR ASSUMES FULL RESPONSIBILITY FOR ANY AND ALL REVISIONS / RECONSTRUCTION NECESSARY.
- 5. IT IS THE RESPONSIBILITY OF THE IRRIGATION SUBCONTRACTOR TO FAMILIARIZE HIMSELF / HERSELF WITH THE SITE, ALL GRADE DIFFERENCES, LOCATIONS OF WALLS, AND INSTALLED UTILITIES. COORDINATE WORK WITH THE CONTRACTOR AND OTHER SUBCONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES UNDERNEATH PAVEMENT AND THROUGH WALLS
- 6 DUE TO THE SCALE OF THE DRAWING IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, JOINTS, ETC. WHICH MAY BE REQUIRED. THE SUBCONTRACTOR SHALL CAREFULLY INVESTIGATE THE STRUCTURAL AND FINISHED CONDITIONS AFFECTING ALL OF HIS/HER WORK AND PLAN HIS/HER WORK ACCORDINGLY, FURNISHING SUCH FITTINGS, ETC. AS MAY BE REQUIRED TO MEET SUCH CONDITIONS. ALL WORK SHALL BE INSTALLED IN SUCH A MANNER AS TO AVOID CONFLICTS BETWEEN IRRIGATION SYSTEM COMPONENTS, LANDSCAPE PLANTING, AND ARCHITECTURAL FEATURES.
- 7. FLUSH ALL LINES AND HEADS PRIOR TO INSTALLING NOZZLES. ADJUST NOZZLE SPRAY ARC AND RADIUS FOR OPTIMUM PERFORMANCE TO PREVENT OVER SPRAY ONTO PAVED SURFACES OR FACE OF BUILDING AS MUCH AS POSSIBLE TO FIT THE SITE CONDITIONS. THROTTLE FLOW CONTROL AT EACH VALVE FOR OPTIMUM OPERATING PRESSURE FOR EACH ZONE.
- 8. ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISHED GRADE OF THE AREA TO BE IRRIGATED UNLESS OTHERWISE NOTED.
- 9. WHEN VERTICAL OBSTRUCTIONS (POLES, SIGNS, TREES, HYDRANTS, ETC) INTERFERE WITH THE SPRAY PATTERN OF THE HEADS SO AS TO PREVENT PROPER COVERAGE, THE SUBCONTRACTOR SHALL FIELD ADJUST THE SPRINKLER SYSTEM BY INSTALLING A HEAD OR HEADS WITH THE APPROPRIATE ARC AT THE SIDES OF THE OBSTRUCTION SO AS TO PROVIDE PROPER COVERAGE. ALL ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST.
- 10. USE TEFLON TAPE ON ALL MALE PIPE THREADS ON PVC PIPE, SWING JOINTS, AND VALVE ASSEMBLIES.
- 11. 14 GA, COPPER WIRE IS TO BE INSTALLED AS A TRACE WIRE ALONG ALL MAIN LINES THROUGHOUT THE IRRIGATION SYSTEM.
- 12. TRENCHES FOR IRRIGATION LINES SHALL BE PLACED A MINIMUM OF 2' AWAY FROM ALL BUILDINGS WHERE LATERAL LINES ARE SHOWN ADJACENT TO BUILDINGS.
- 13. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR INSTALLING MANUAL DRAIN VALVES AT LOWEST POSSIBLE ELEVATION ON IRRIGATION MAIN SO AS TO PROVIDE POSITIVE DRAINAGE OF IRRIGATION MAIN DURING WINTER MONTHS, OR PROVIDE BLOWOUT ASSEMBLY. INSTALLATION SHALL BE PER DETAIL.
- 14. ALL LATERAL LINES SHALL BE EQUIPPED WITH AUTOMATIC DRAIN VALVES AT LOW POINTS PER DETAIL
- 15. ALL ZONE VALVE AND CONTROLLER WIRES ARE TO BE PLACED IN PVC CONDUIT SLEEVES WHILE UNDER PAVING. ROUTING OF CONTROLLER WIRES TO THE ZONE VALVES IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR.
- 16. ALL BELOW GRADE LOW VOLTAGE WIRING CONNECTIONS FROM THE CONTROLLER TO THE ZONE VALVES SHALL BE INSTALLED PER DETAIL.
- 17. THRUST BLOCKING SHALL BE APPLIED WHERE NECESSARY.
- 18. INSTALL VALVE BOXES 18-INCHES FROM AND PERPENDICULAR TO WALKS, CURBS, BUILDING, OR LANDSCAPE FEATURES. AT MULTIPLE VALVE BOX GROUPS, EACH BOX SHALL BE INSTALLED A MINIMUM OF 18-INCHES APART.
- 19. SET IRRIGATION CONTROLLER TO OPERATE THE SYSTEM BETWEEN THE APPROXIMATE HOURS OF 3AM AND 7AM, AS DETERMINED BY THE OWNER
- 20. 120-VOLT ELECTRICAL POWER AT THE CONTROLLER SHALL BE PROVIDED BY OTHERS. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO MAKE THE FINAL HOOK-UP FROM THE POWER PROVIDED TO THE CONTROLLER, CIRCUIT PANEL AND CONTROLLER TO BE LOCATED IN STORAGE ROOM. EXACT PLACEMENT TO BE COORDINATED WITH OWNER'S REPRESENTATIVE. LOCATIONS ARE TO BE COORDINATED WITH THE AHTD REPRESENTATIVES.
- 21. PROVIDE AS-BUILT DRAWINGS PER THE WRITTEN SPECIFICATIONS.
- 22. REFER TO THE WRITTEN SPECIFICATIONS FOR COMPLETE SYSTEM DESCRIPTION AND ADDITIONAL INFORMATION.
- 23. MAIN LINES ARE TO BE SCHEDULE 40 PVC INSTALLED AT A MINIMUM OF 24 INCHES BELOW GRADE.
- 24. LATERAL LINES ARE TO BE CLASS 200 PVC INSTALLED AT A MINIMUM OF 12 INCHES BELOW GRADE
- 25. MINIMUM PIPE SIZE FOR LATERALS IS 1 INCH.
- 26. PROVIDE 100% COVERAGE OF ALL REQUIRED IRRIGATED AREAS SHOWN. FIELD ADJUST AND PROVIDE ADDITIONAL HEADS IF REQUIRED TO ACHIEVE 100% COVERAGE.
- 27. SLEEVE ALL LINES AND WIRING UNDER PAVING AND SIDEWALKS WITH SCHEDULE 40 PVC. PROVIDE COATED CONDUCTIVE TAPE OVER THE SLEEVE. BURIED DEPTH SHALL BE COORDINATED, PREPRINTED WARNING TAPE "CAUTION IRRIGATION LINE BURIED BELOW" OR AS OTHERWISE APPROVED WARNING, PVC SCH 40 SLEEVE CAPS SEALED WITH PIPE JOINT CEMENT ALONG WITH PULL STRING. SLEEVES FOR PIPING ARE TO BE TWO TIMES LARGER THAN THE PIPE BEING SLEEVED.
- 28. INSTALL THRUST BLOCKS AT ALL TEES AND ELBOWS ALONG THE MAIN LINE.
- 29. HAND DIG TRENCHES FOR PIPE WITHIN THE DRIP LINE OF EXISTING TREES TO AVOID DAMAGING THE TREE'S ROOT SYSTEM
- 30. DRAIN THE SYSTEM MAINLINES PRIOR TO THE BEGINNING OF THE WINTER FREEZING TEMPERATURES.



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ARKANSAS I ARKANS RED RIVER DESIGNED BY DK DRAWN BY DK DS CHECKED BY APPROVED BY JR

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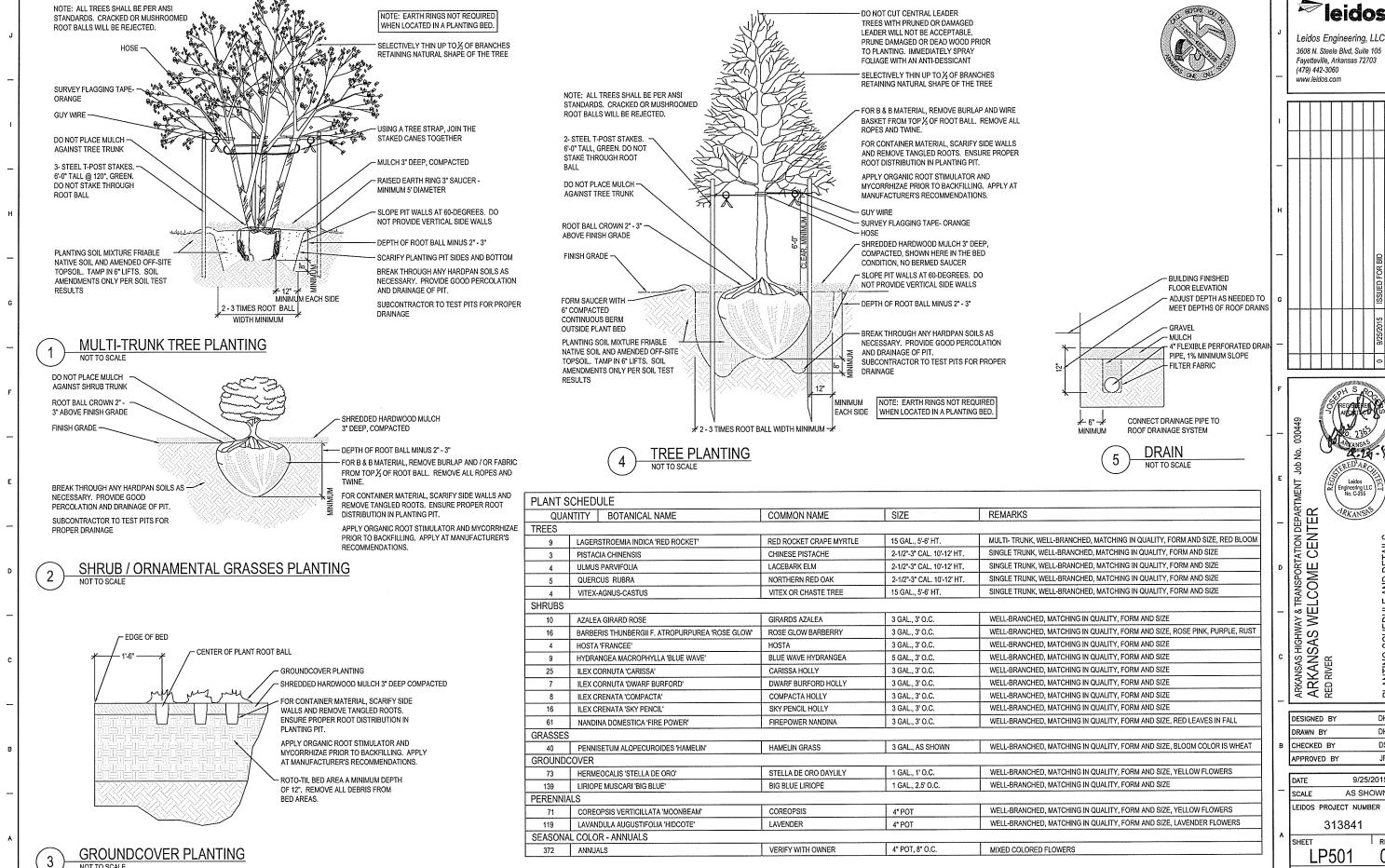
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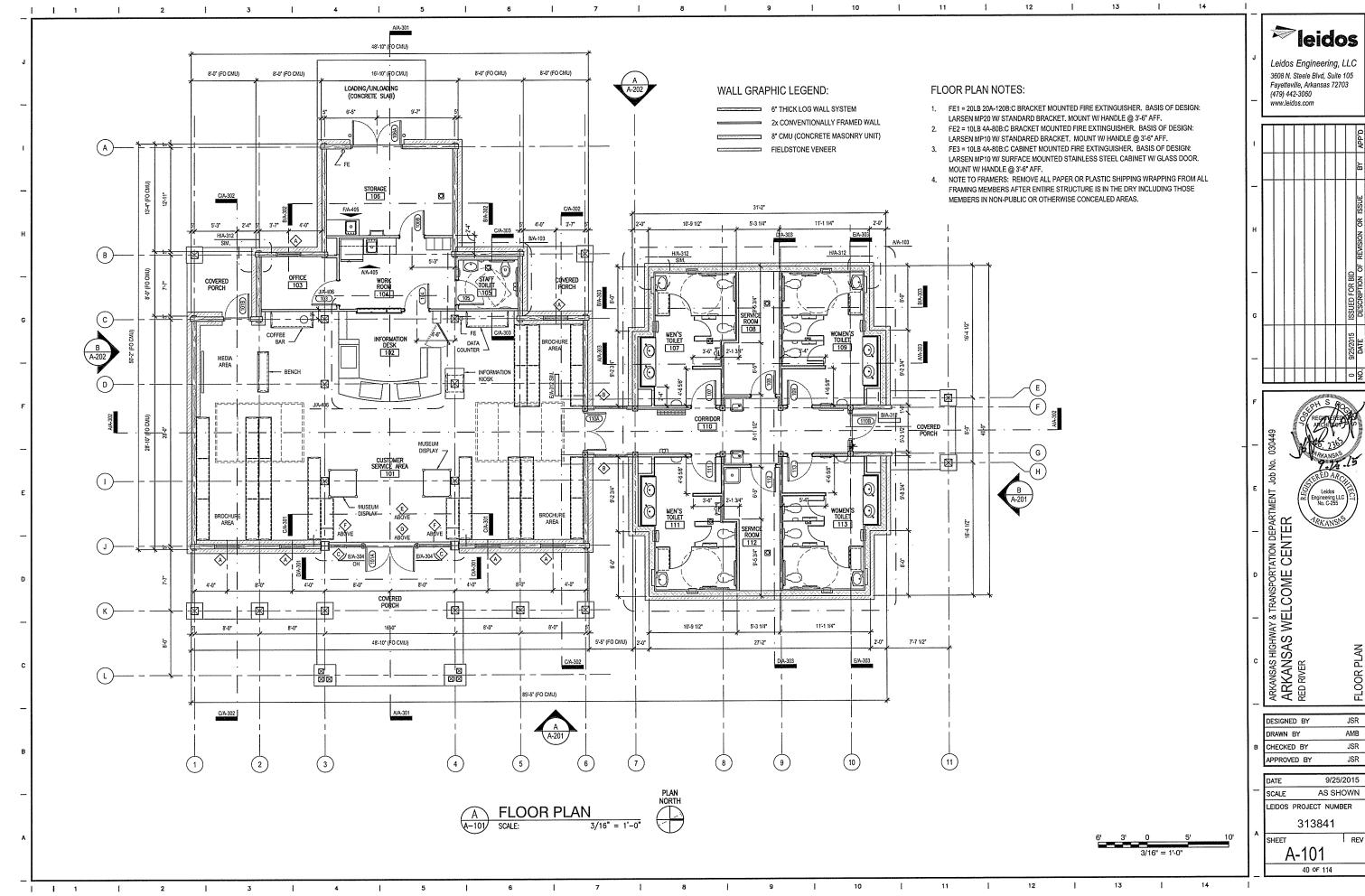
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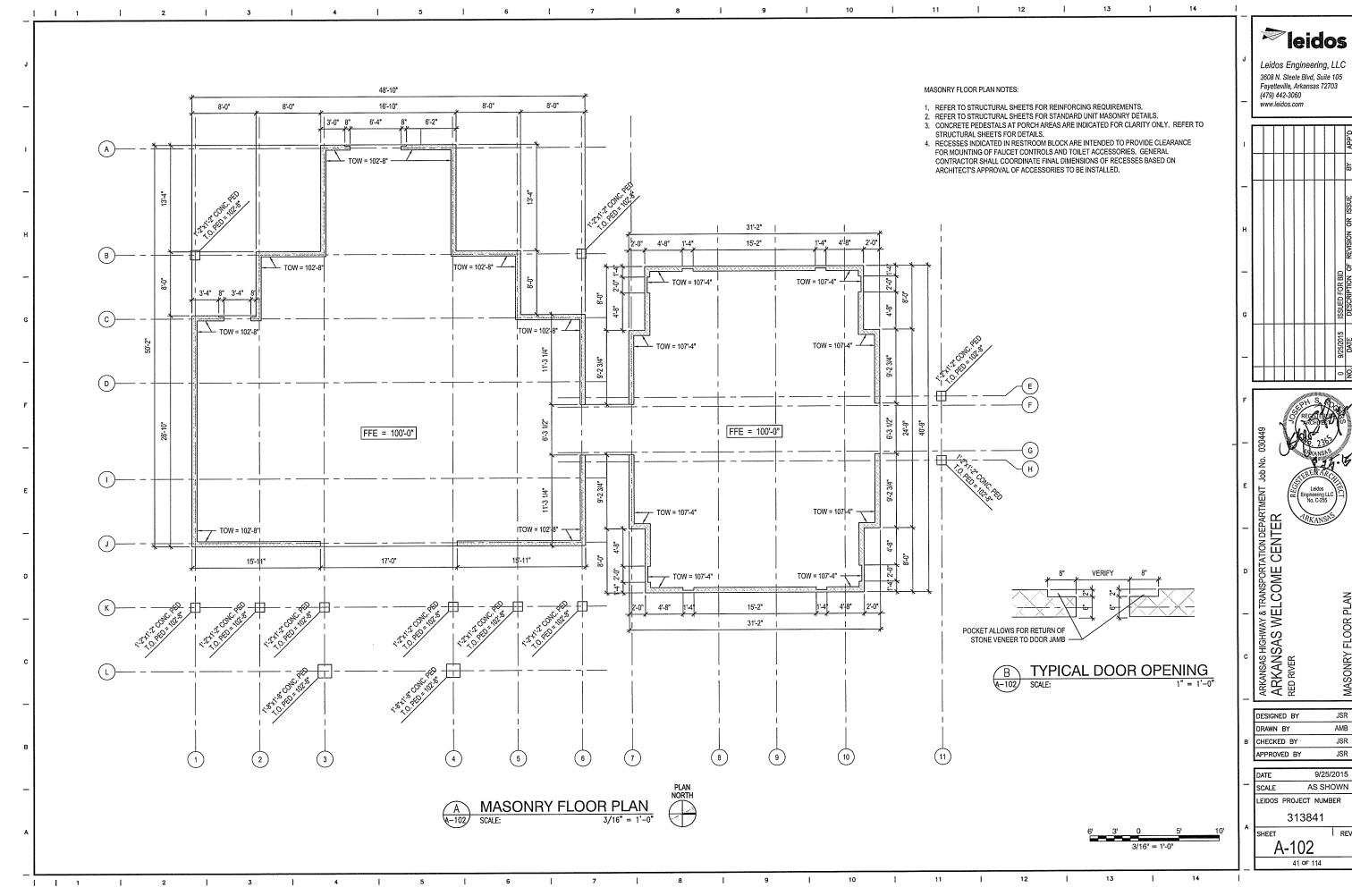
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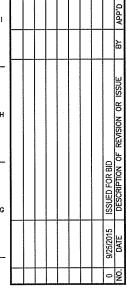
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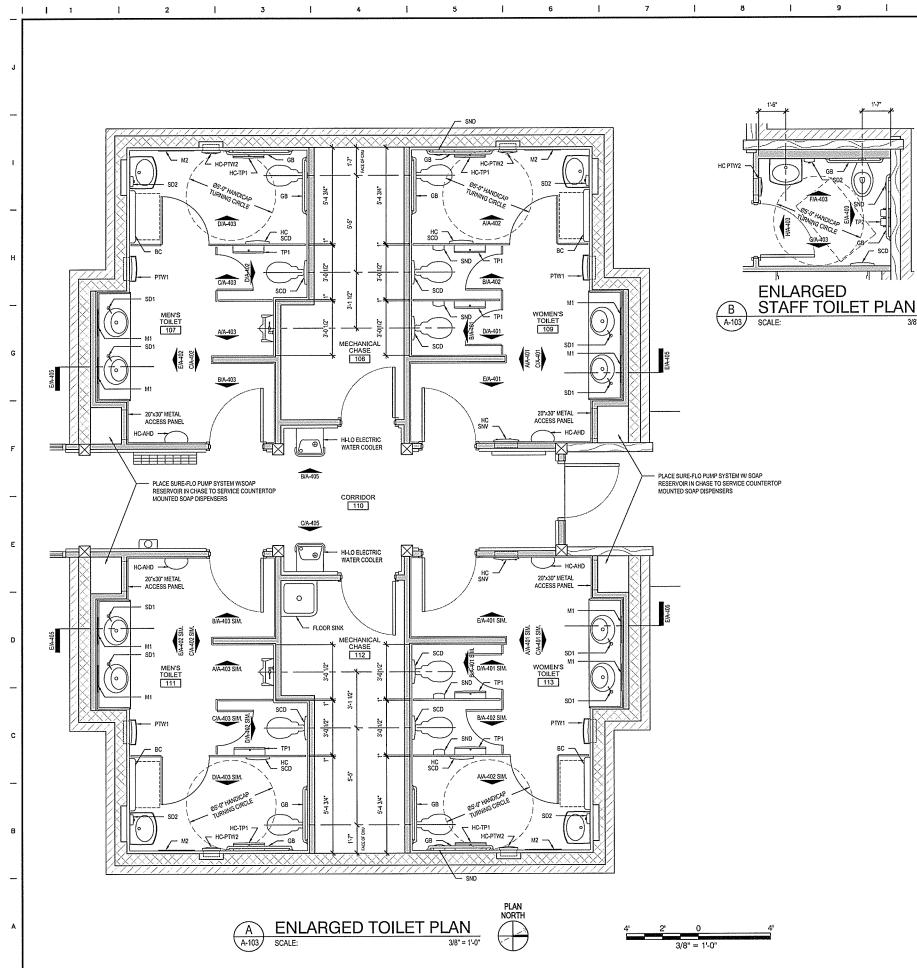
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ENLARGED TOILET PLAN NOTES:

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DIMENSIONS ON THIS SHEET ARE GIVEN TO FACE OF WALL FINISH MATERIALS, NOT FACE OF STUD (UNO). WALL FINISH MATERIALS ARE ASSUMED TO BE:
 1/2" TILE BACKER BOARD + 5/16" THICK TILE = 13/16" TOTAL.

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- NO WALL OR CEILING FINISH IS TO BE APPLIED IN MECHANICAL CHASE 108 OR IN MECHANICAL CHASE 112.
- AUTOMATIC WATER CLOSET FLUSH SENSORS ARE TO BE LOCATED ON WALL BEHIND WATER CLOSETS, CENTERED ON FIXTURES. WALL STUD LAYOUT MUST BE ADJUSTED ACCORDINGLY. COORDINATE FRAMING WITH APPROPRIATE MECHANICAL AND ELECTRICAL TRADES AS REQUIRED.
- TOILET PARTITIONS ARE TO BE FLOOR MOUNTED, OVERHEAD BRACED, STAINLESS
 STEEL UNITS. PARTITIONS ARE ASSUMED TO BE 1" THICK FOR DIMENSIONING
 PURPOSES ON THIS SHEET. PROVIDE SOLID BLOCKING FOR ATTACHMENT OF TOILET
 PARTITIONS.
- LIQUID HAND SOAP DISPENSERS (SD1's) ARE TO BE SUPPLIED BY A PUMPED SOAP SYSTEM W/ RESERVOIR TANKS LOCATED IN CHASE AT ROOMS 107, 109, 111, AND 113.
- PROVIDE SOLID BLOCKING WHERE REQUIRED FOR TOILET ACCESSORIES AND GRAB BARS.
- 7. PARTITION DOOR INTO HC STALL TO HAVE SWING LIMITER TO PROTECT BABY CHANGING STATION FROM CONTACT DAMAGE FROM DOOR.

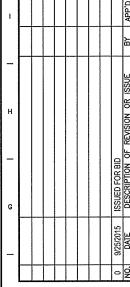
MARK	ITEM	MFGR	MODEL NUMBER	MOUNTING HEIGHT
TP1	TOILET PAPER HOLDER (PUBLIC RESTROOMS)	BOBRICK	B-2892	31° AFF TO TOP OF UNIT (ACCESSIBLE STALLS) 40° AFF TO TOP OF UNIT (ALL OTHER INSTALLATIONS)
TP2	TOILET PAPER HOLDER (STAFF TOILET ROOM)	BOBRICK	B-2740	19-3/4" AFF TO TOP OF UNIT
PTW1	PAPER TOWEL AND WASTE RECEPTACLE	BOBRICK	B-43944	72' AFF TO TOP OF RECESSED PORTION OF UNIT (STANDARD HEIGHT INSTALLATION)
PTW1 HC	PAPER TOWEL AND WASTE RECEPTACLE	BOBRICK	B-43944	69-1/4* AFF TO TOP OF RECESSED PORTION OF UNIT (ACCESSIBLE INSTALLATION)
PTW2 HC	PAPER TOWEL AND WASTE RECEPTACLE	BOBRICK	B-4369	51-3/4* AFF TO TOP OF RECESSED PORTION OF UNIT (ACCESSIBLE INSTALLATION)
AHD	AUTOMATIC HAND DRYER	BOBRICK	B-748	45-1/4" AFF TO & BOTTOM MOUNTING SCREW (MEN'S) 43-1/4" AFF TO & BOTTOM MOUNTING SCREW (WOMEN'S)
AHD HC	AUTOMATIC HAND DRYER	BOBRICK	B-748	37-14* AFF TO € BOTTOM MOUNTING SCREW (ACCESSIBLE INSTALLATION)
SNV HC	FEMININE PRODUCTS VENDOR	BOBRICK	B-43500	51" AFF TO TOP OF RECESSED PORTION OF UNIT (ACCESSIBLE INSTALLATION)
SND	SANITARY NAPKIN DISPOSAL	BOBRICK	B-270	27* AFF TO TOP OF UNIT
SCD	SEAT COVER DISPENSER	BOBRICK	B-4221	36" AFF TO TOP OF UNIT (IN ACCESSIBLE STALLS AND STAFF TOILET) BOTTOM OF UNIT 6" MIN. ABOVE WC (ALL OTHER LOCATIONS)
SD1	COUNTERTOP LIQUID SOAP DISPENSER	BOBRICK	B-830.12 W/ SURE-FLO PUMP SYSTEM	COUNTERTOP MOUNTED PUMPS CONNECTED TO SURE-FLO PUMP SYSTEM W SOAP RESERVOR MOUNTED REMOTELY IN CHASE AT ROOMS 107, 109, 111 AND 113. TO INCLUDE ALL PUMPS, TUBING & NECESSARY ATTACHMENTS.
SD2 HC	LIQUID SOAP DISPENSER	BOBRICK	B-4112	50-7/8" AFF TO TOP OF UNIT
GB	GRAB BARS	BOBRICK	B-6806-36 B-6806-42	34" AFF TO CENTER LINE
M1	MIRROR	BOBRICK	B-2909 1836	40° AFF TO BOTTOM OF REFLECTING SURFACE; LAMINATED (LEAD TIME: 33 WORKING DAYS)
M2	MIRROR	BOBRICK	B-2909 2436	40* AFF TO BOTTOM OF REFLECTING SURFACE; LAMINATED (LEAD TIME: 33 WORKING DAYS)
BC	BABY CHANGING STATION	KOALA BEAR	KB110-SSWM	48" AFF TO TOP OF UNIT

TOILET ACCESSORY NOTES:

- INDICATED TOILET ACCESSORIES ARE BASIS OF DESIGN.
- RECOMMENDED MOUNTING HEIGHTS INDICATED ARE PROVIDED AS GUIDELINES. FOLLOW
 MANUFACTURER'S PRINTED INSTRUCTIONS FOR ALL ACCESSIBLE INSTALLATIONS.
- 3. REFER TO SHEET A-501 FOR HANDICAP DOORSTOP LOCATIONS.



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DESIGNED BY	Jor
DRAWN BY	AMB
CHECKED BY	JSR
APPROVED BY	JSR
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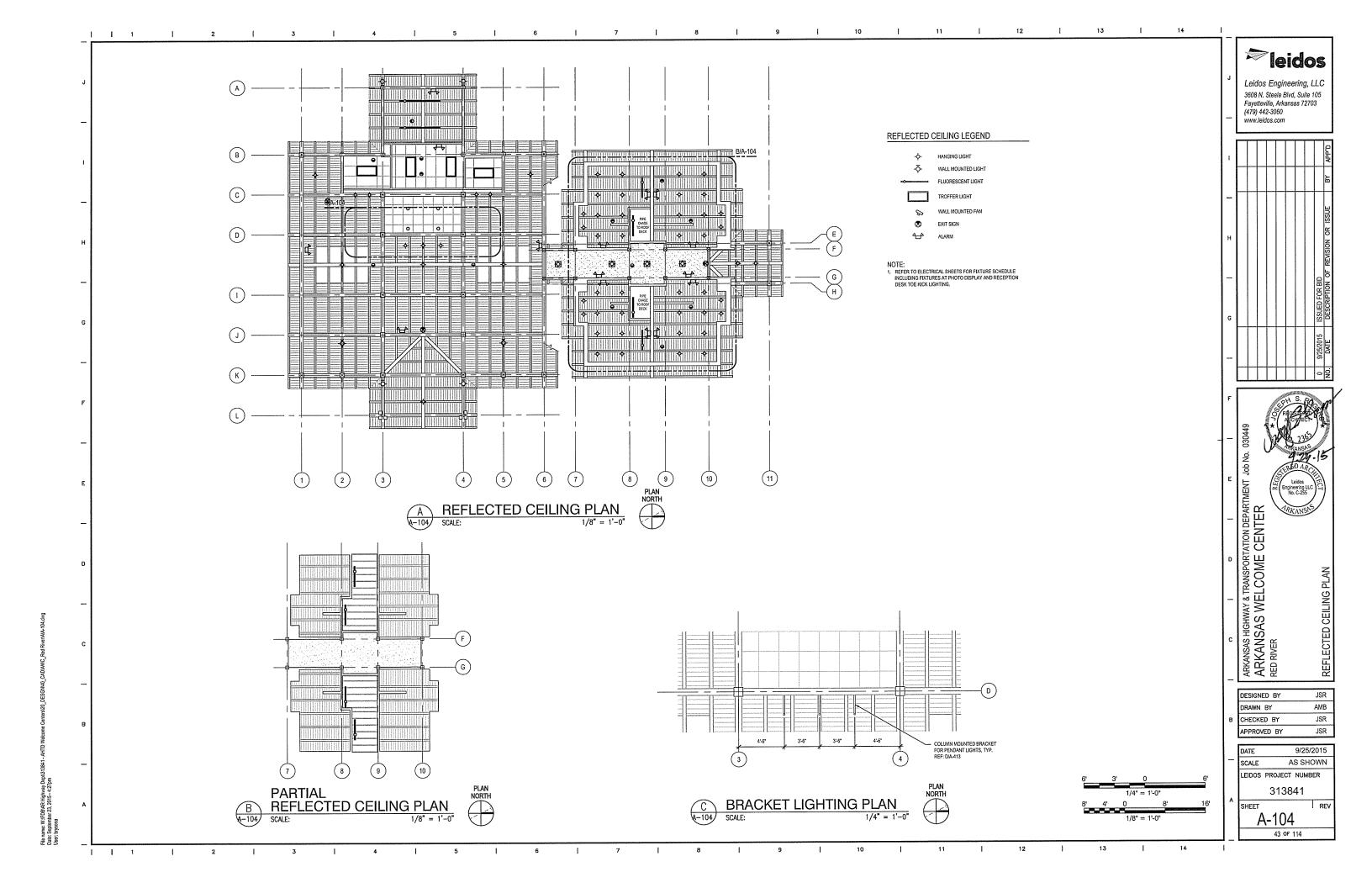
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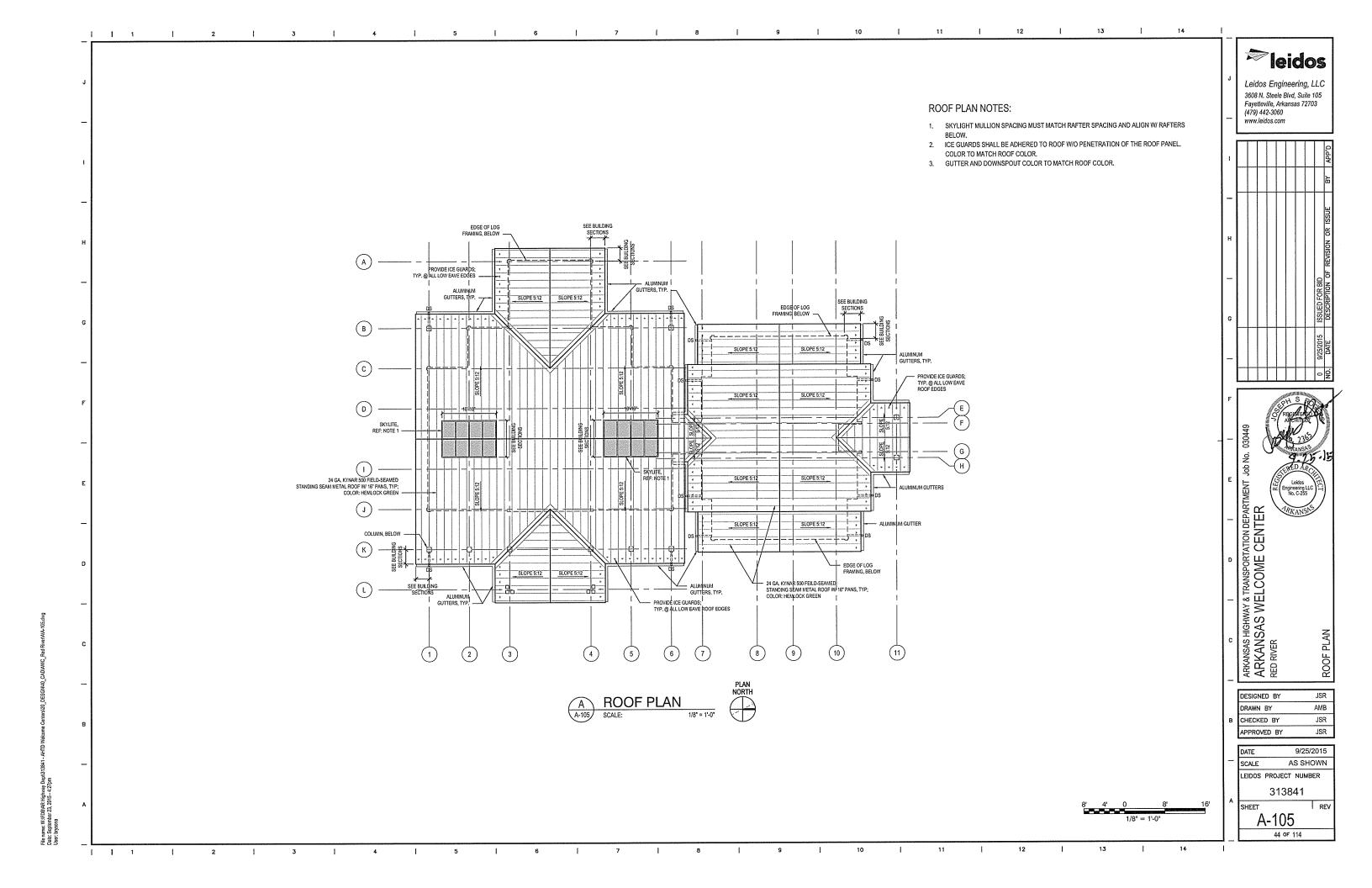
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Date: September 23, 2015 - 4.27pm

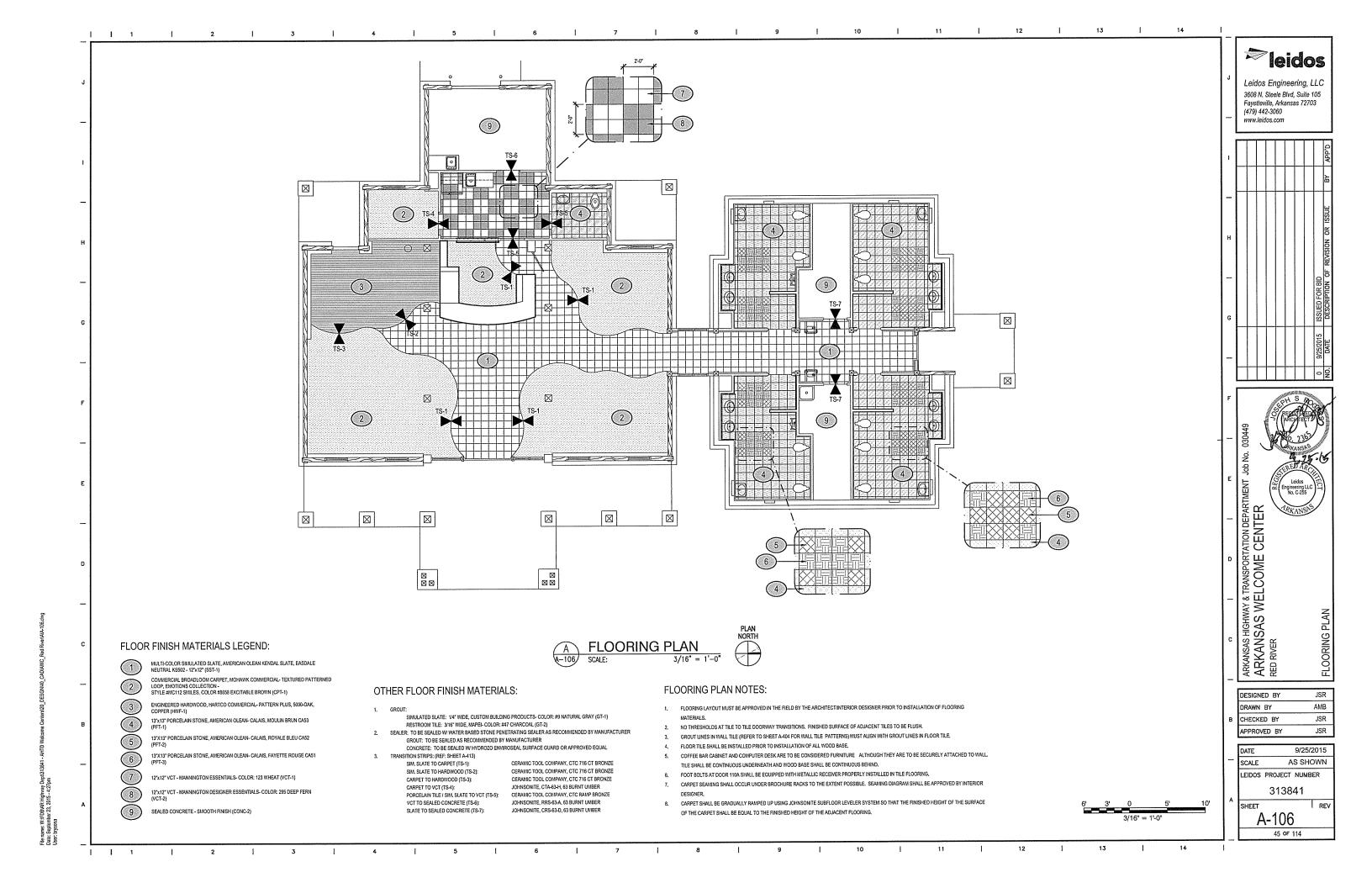
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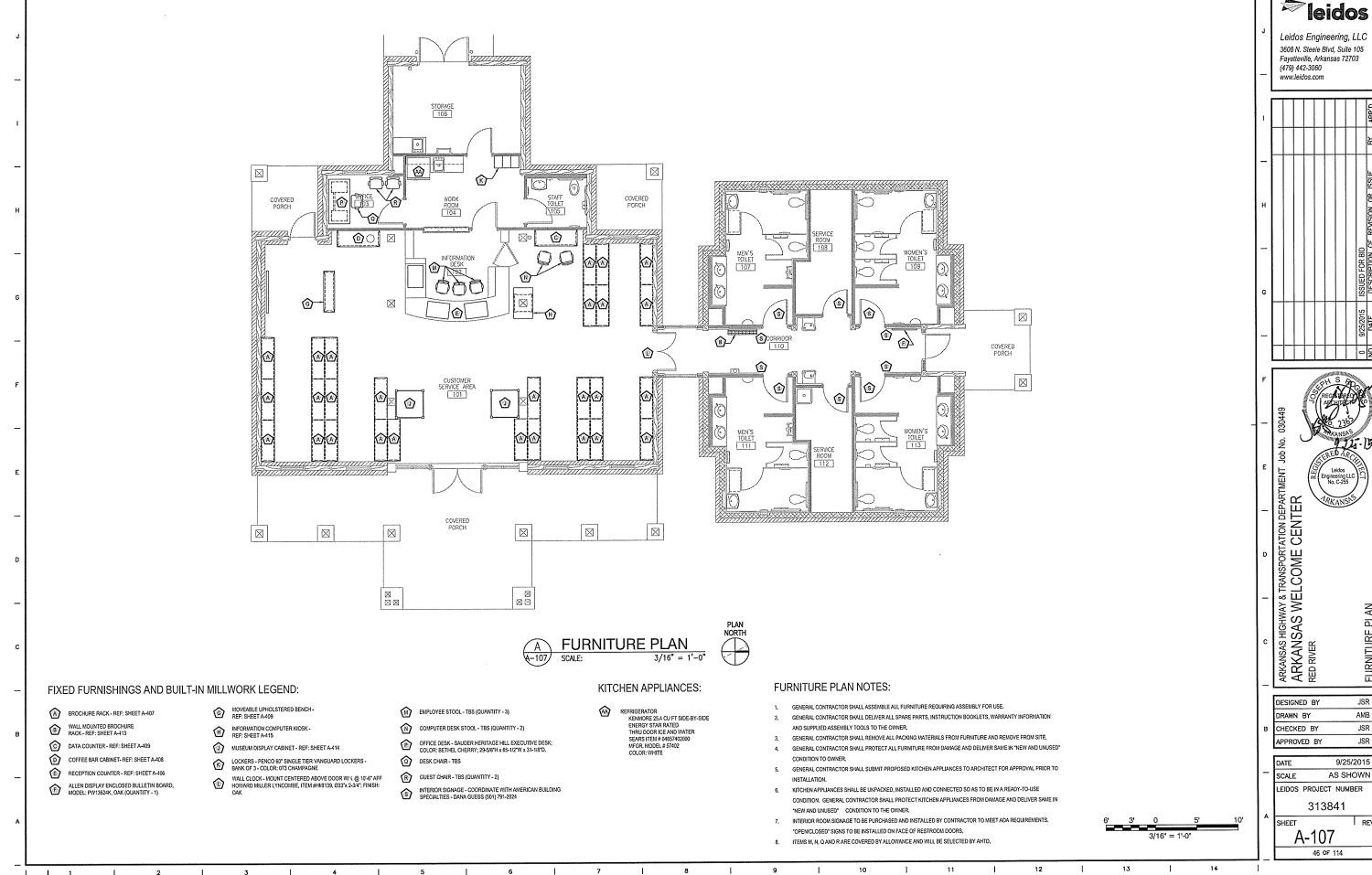
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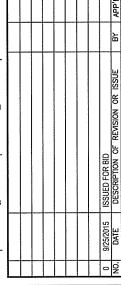
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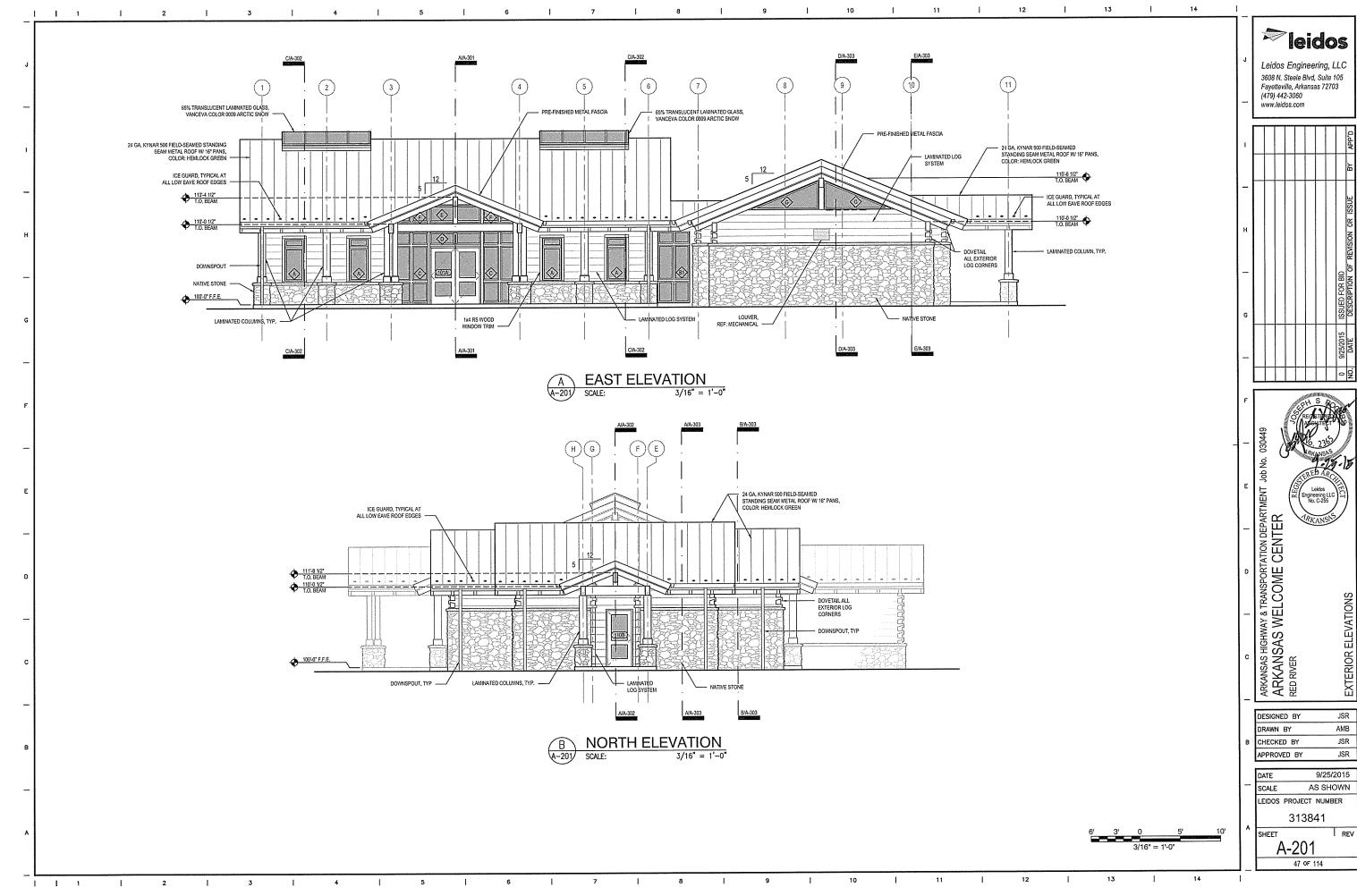
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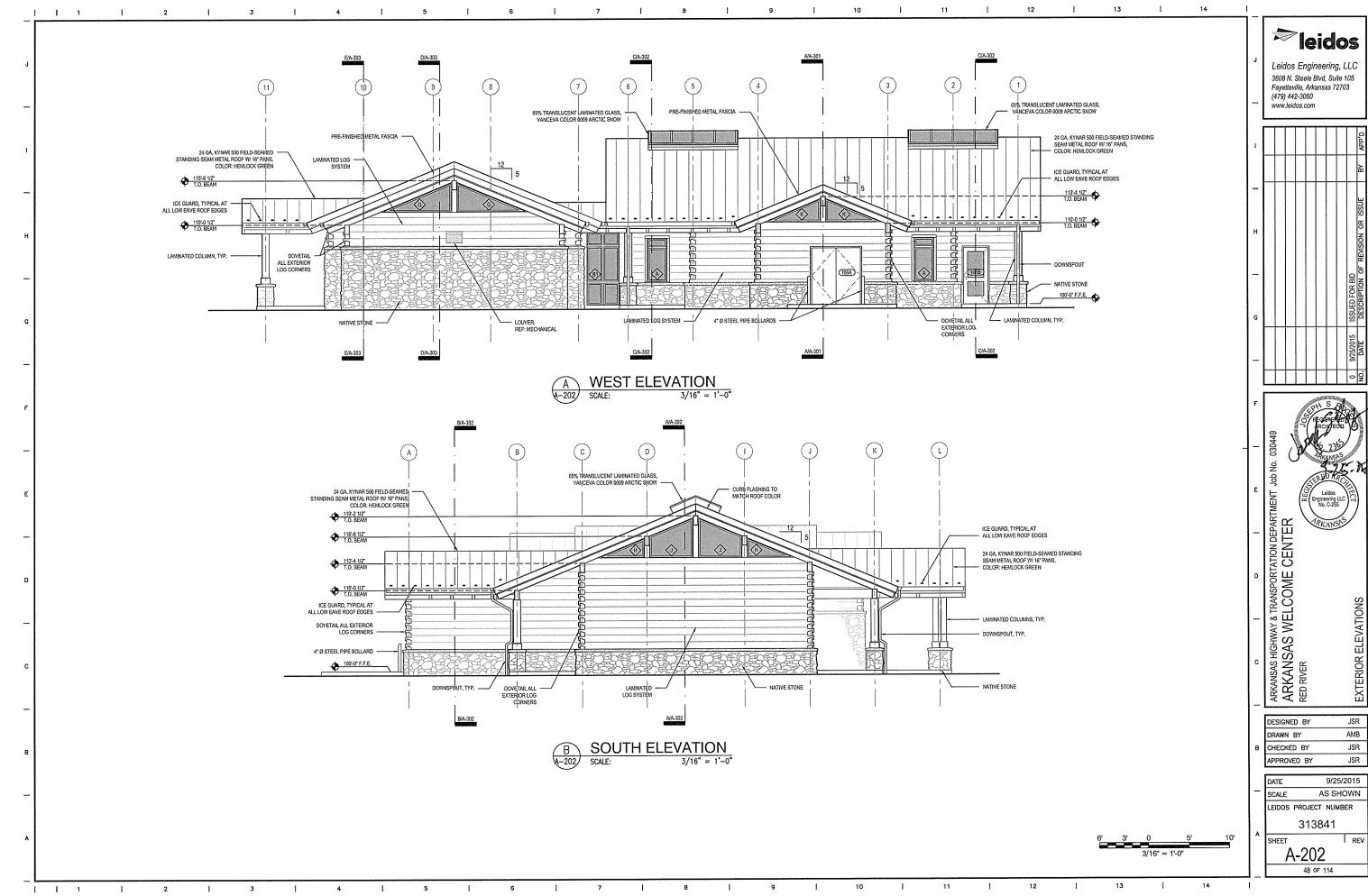


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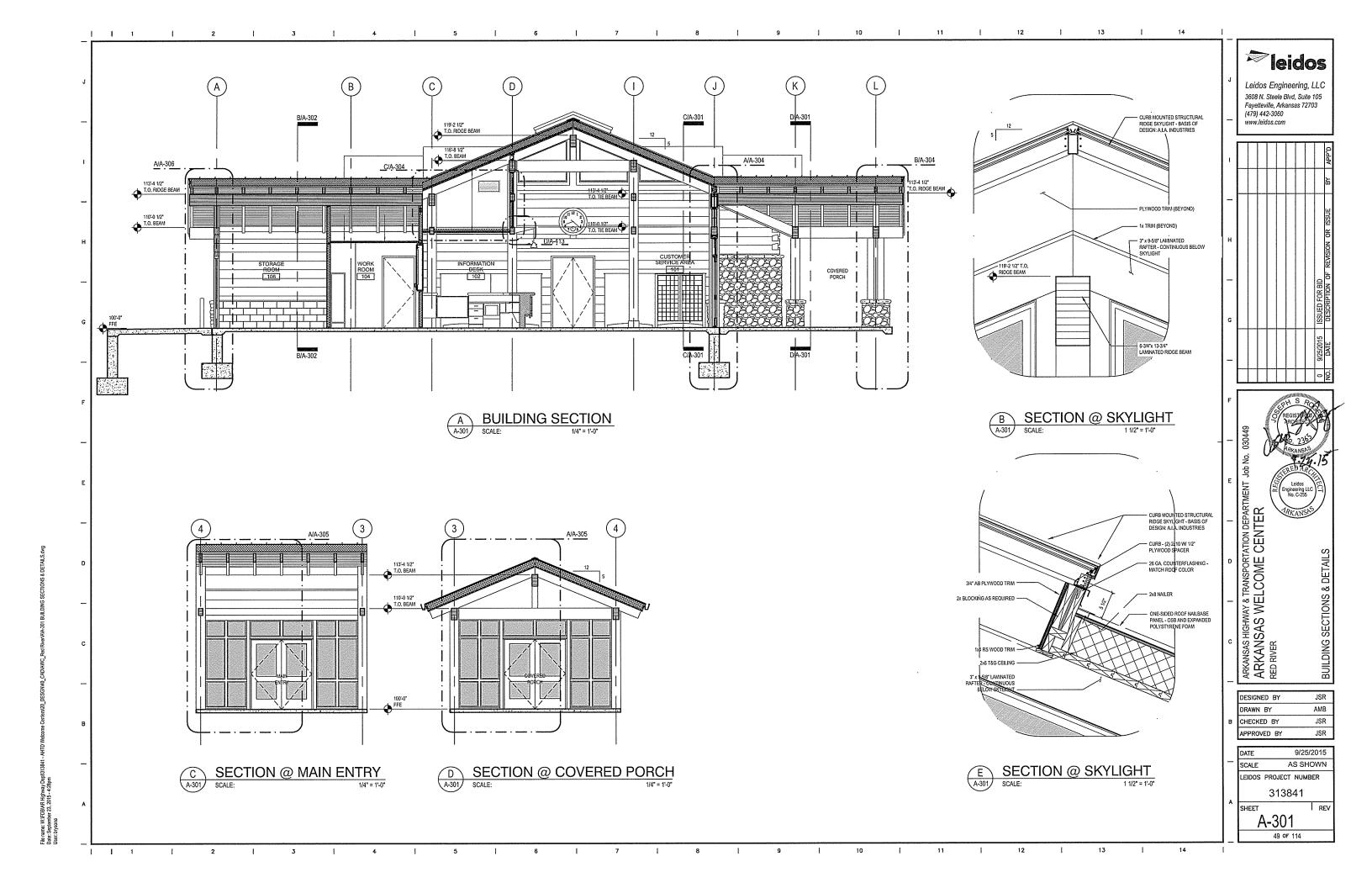
AS SHOWN LEIDOS PROJECT NUMBER 313841

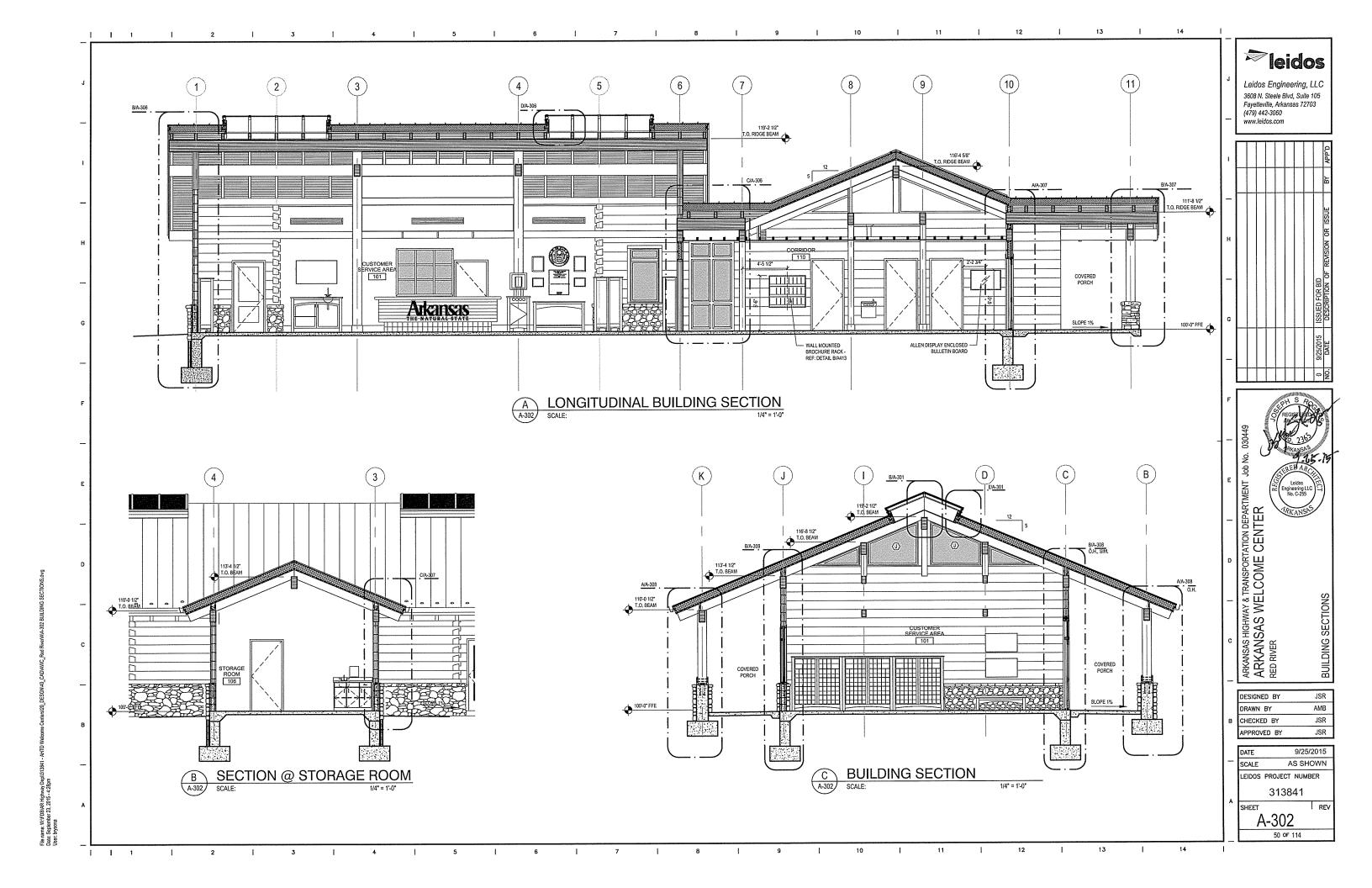


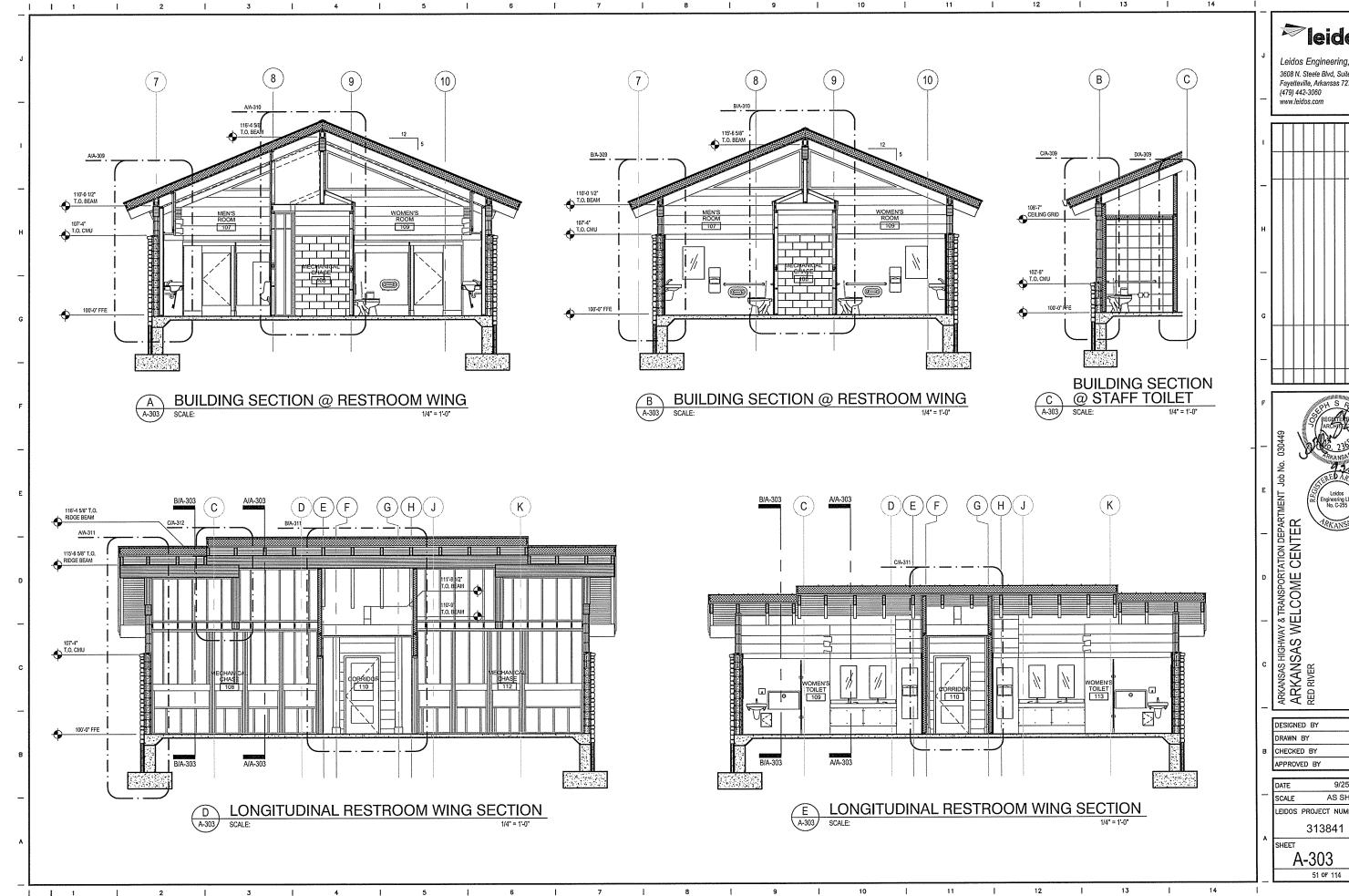
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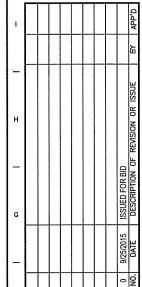






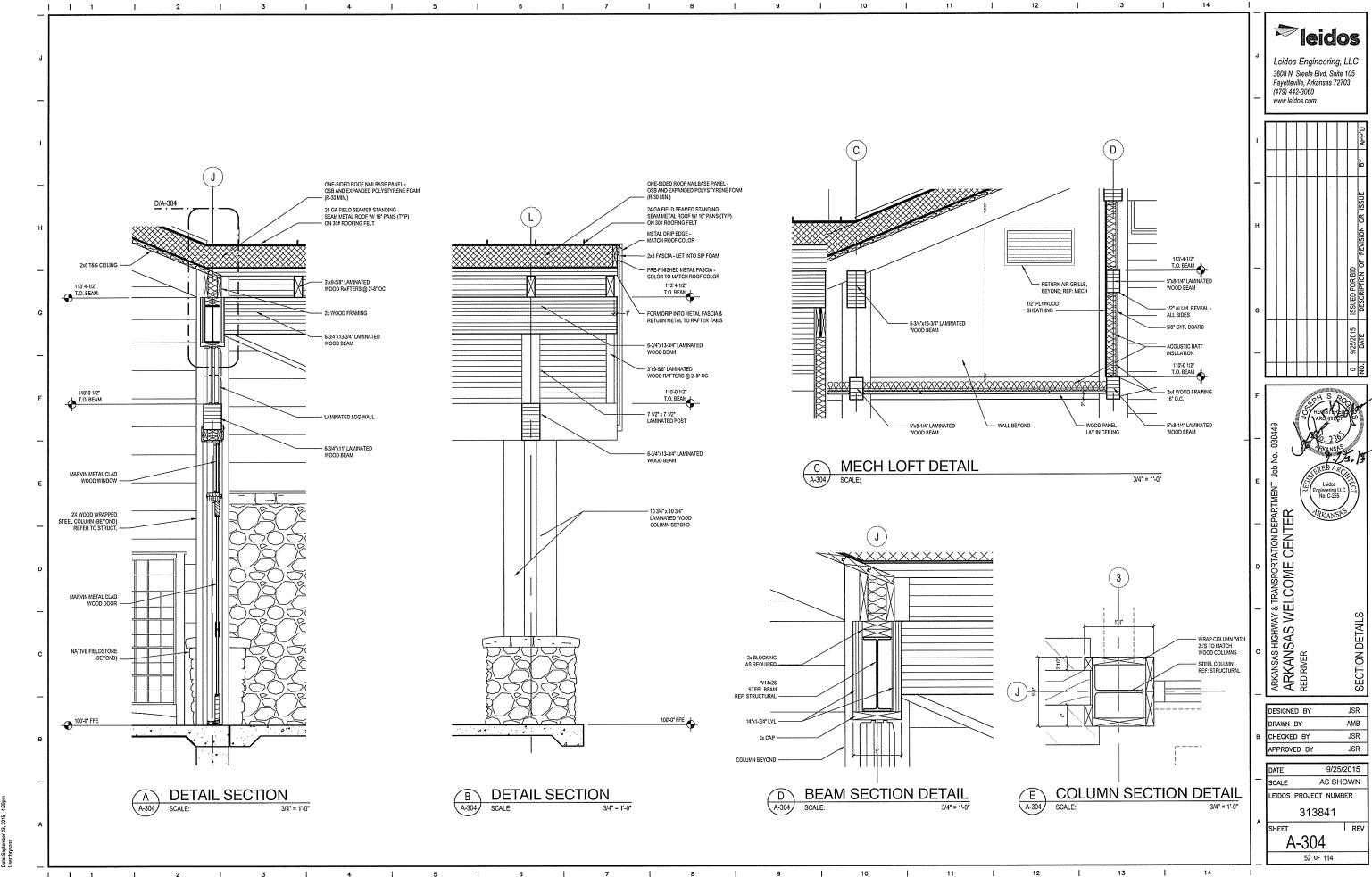
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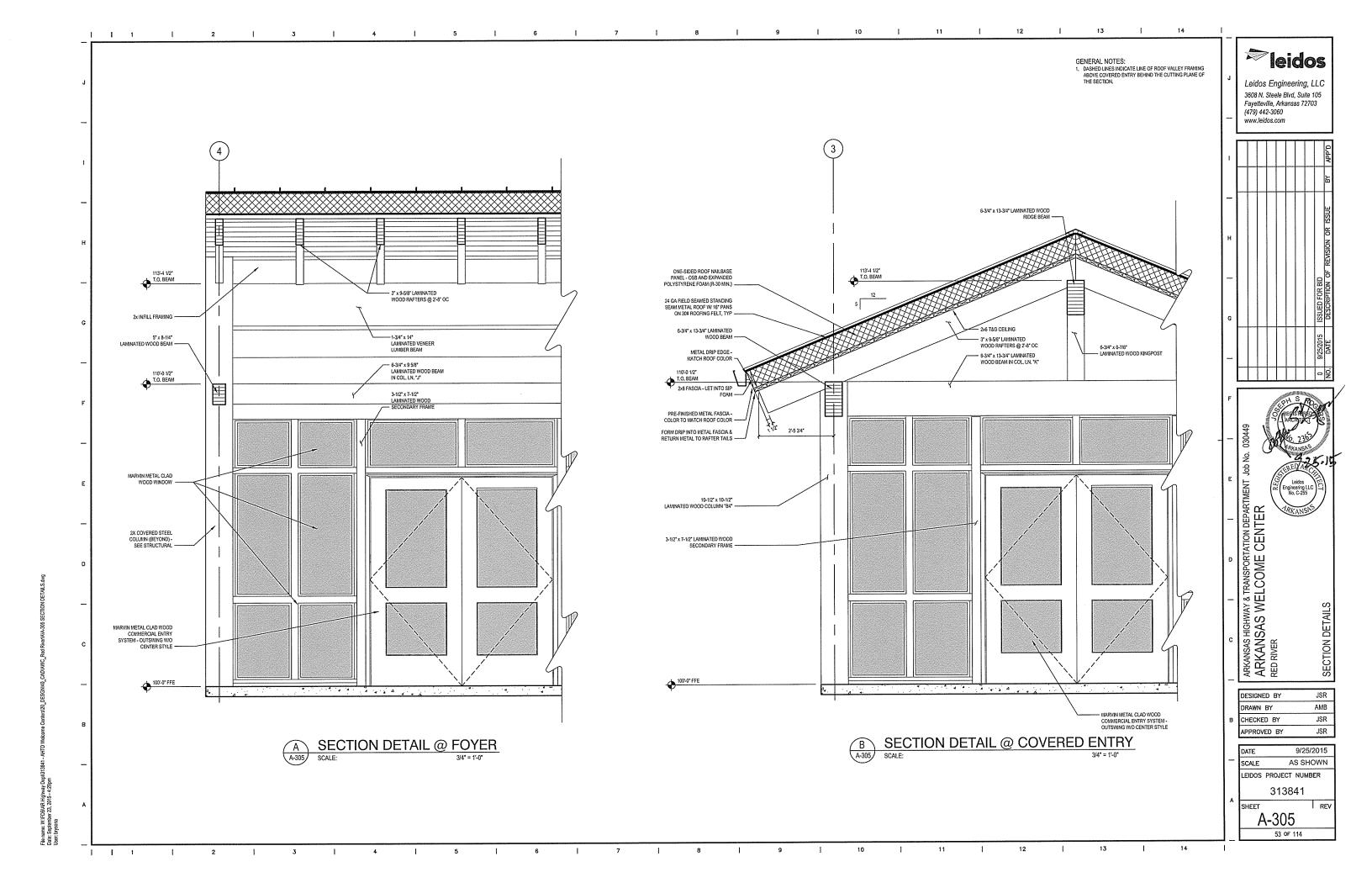


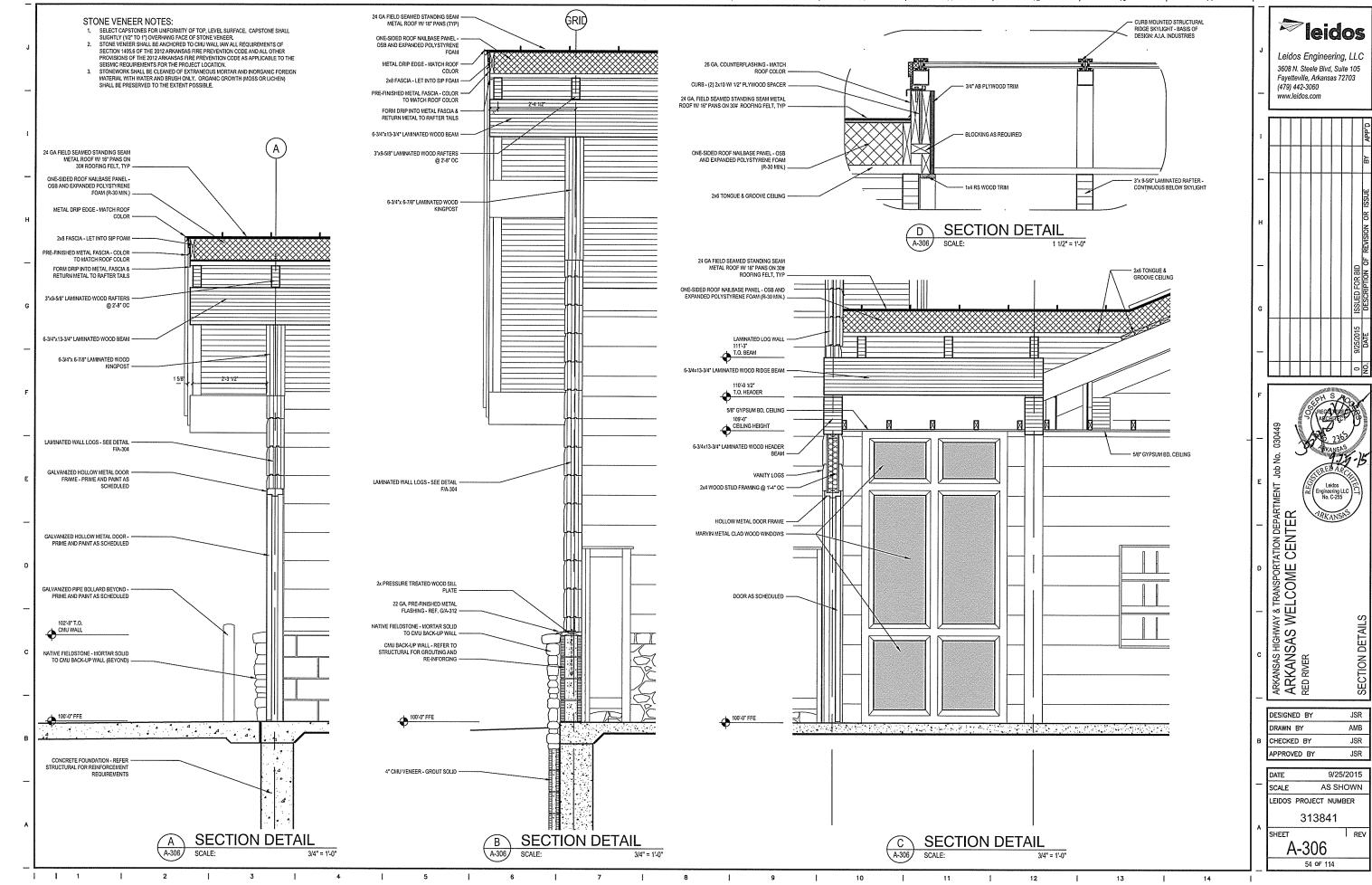
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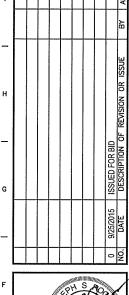
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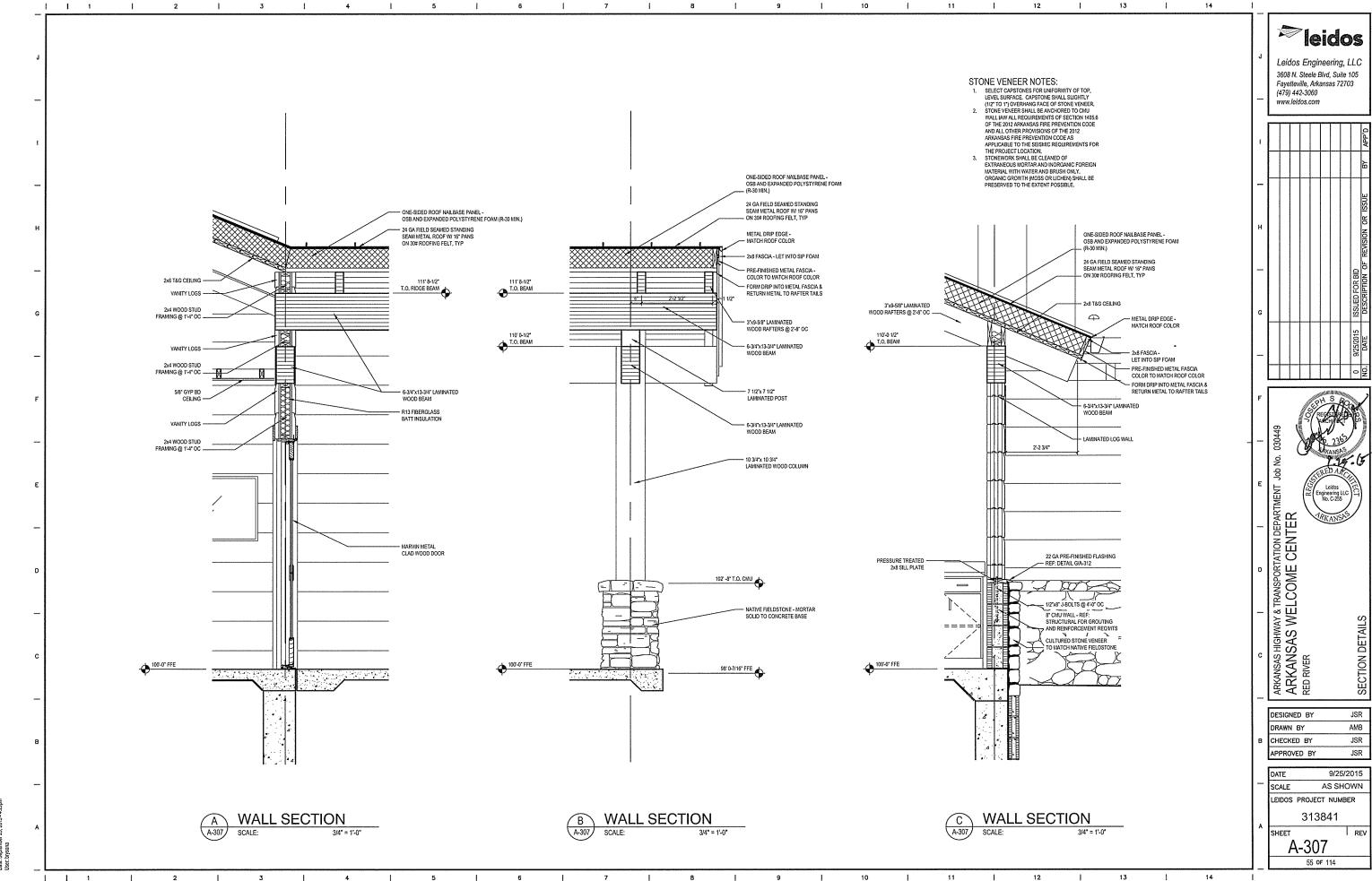


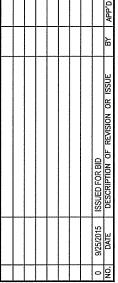
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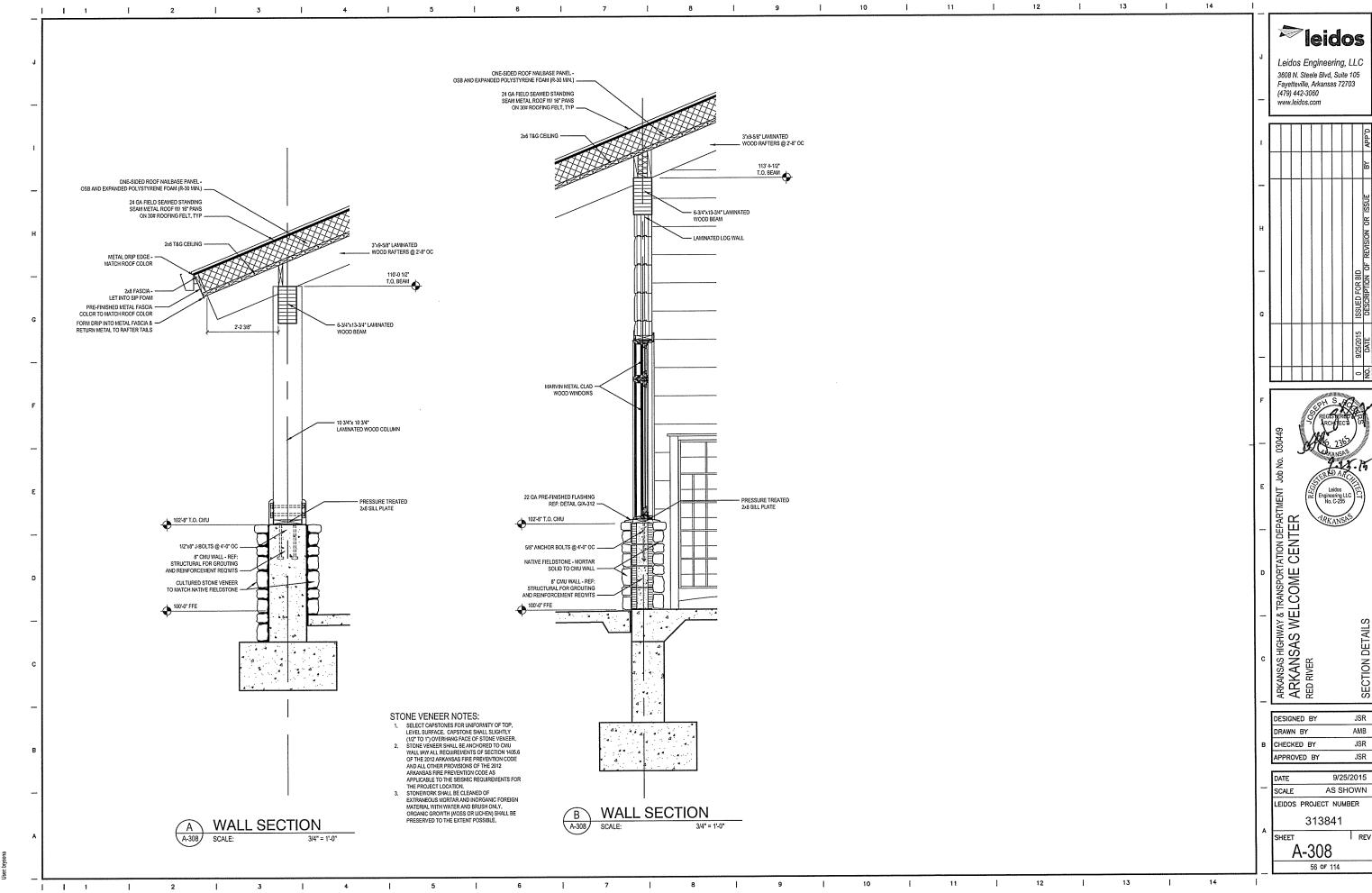






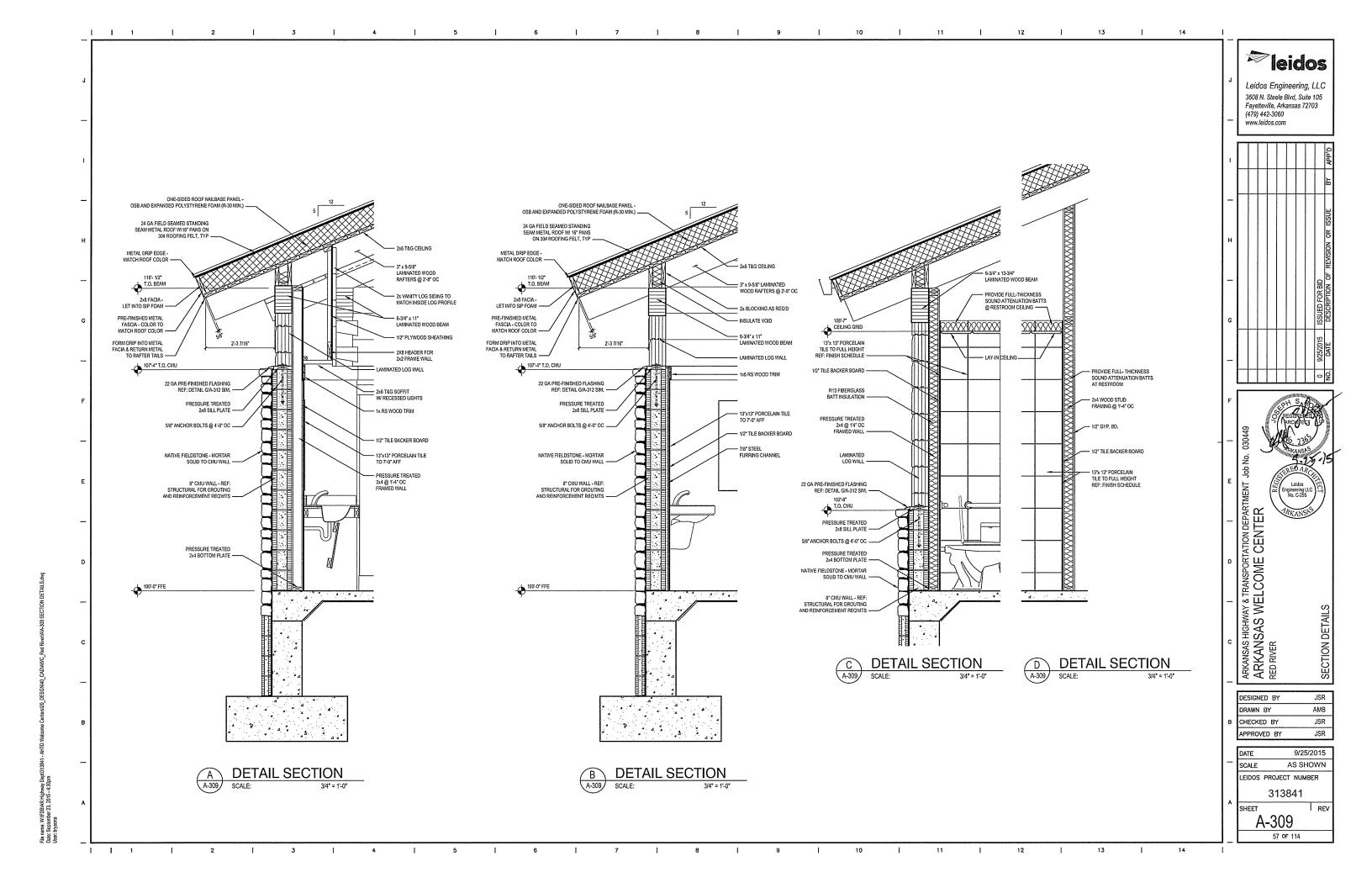


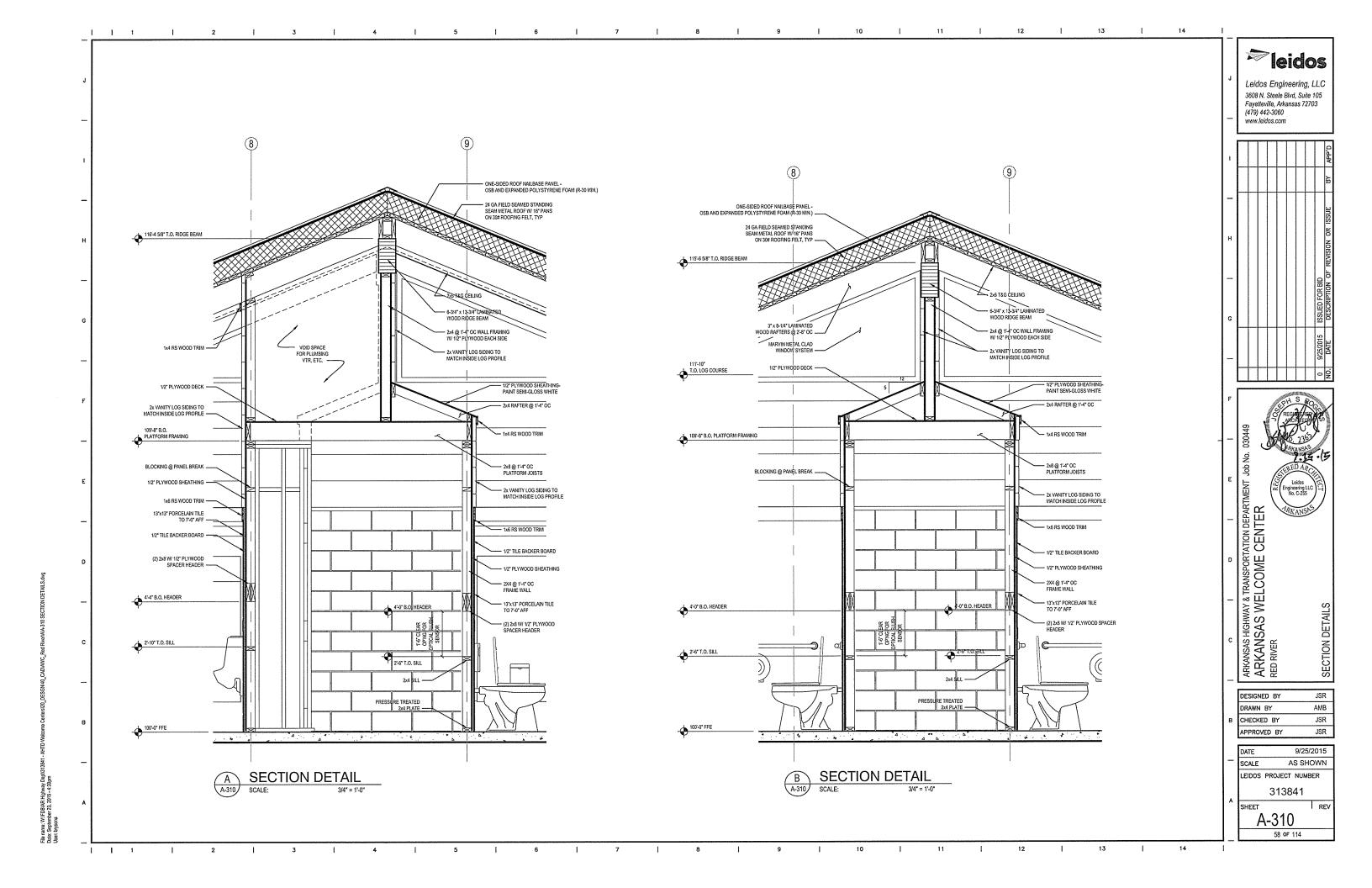
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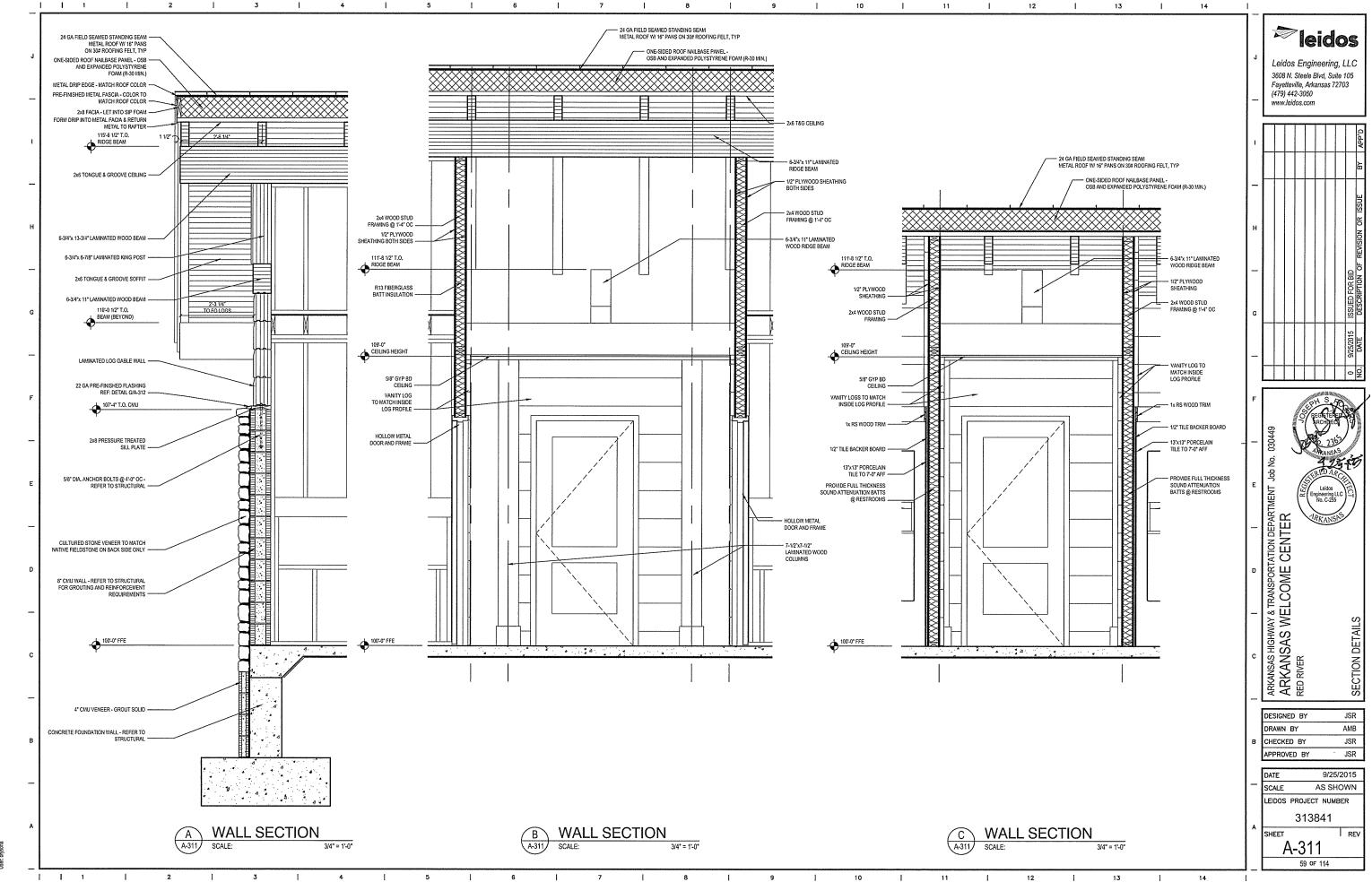




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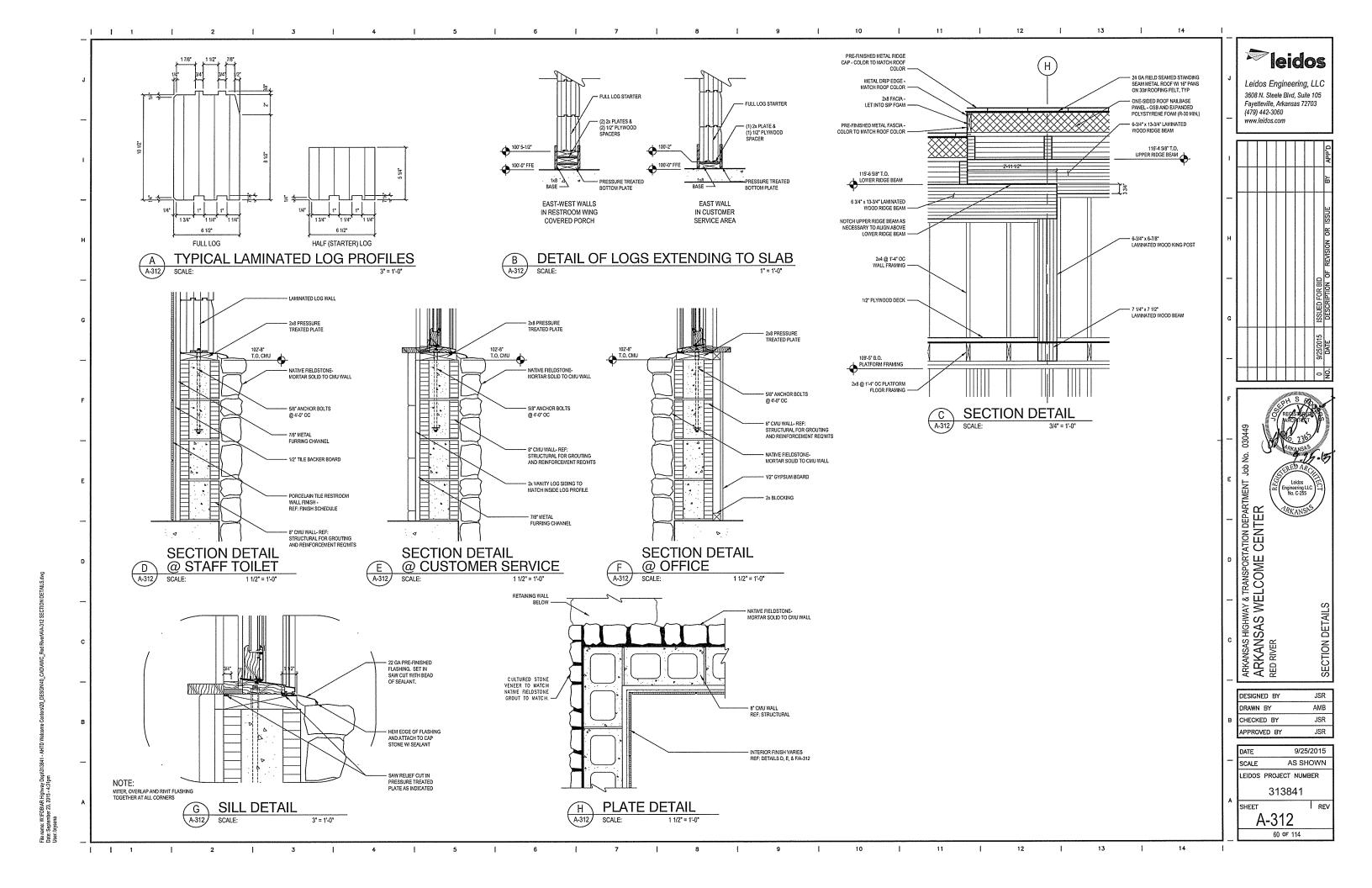


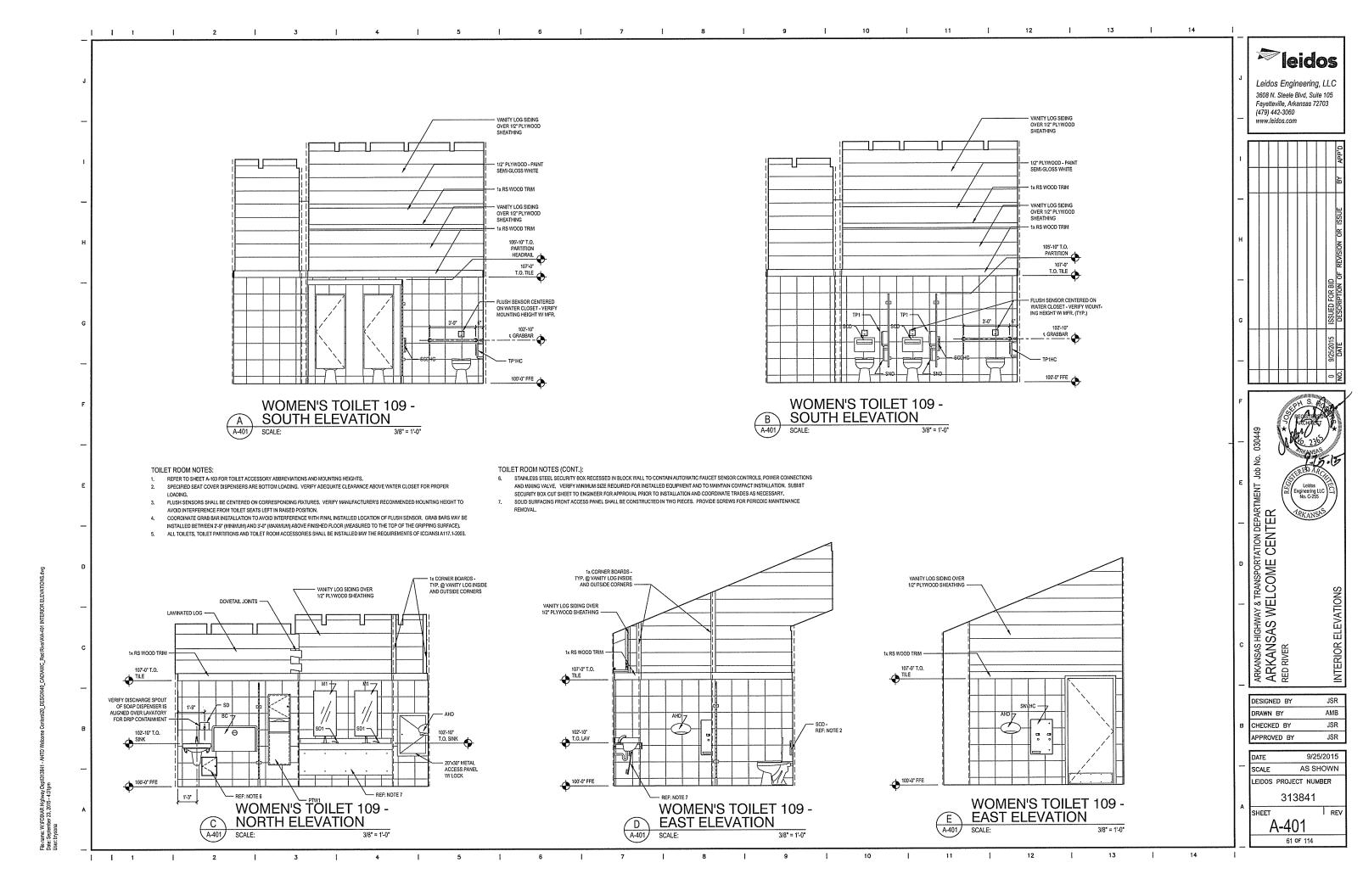


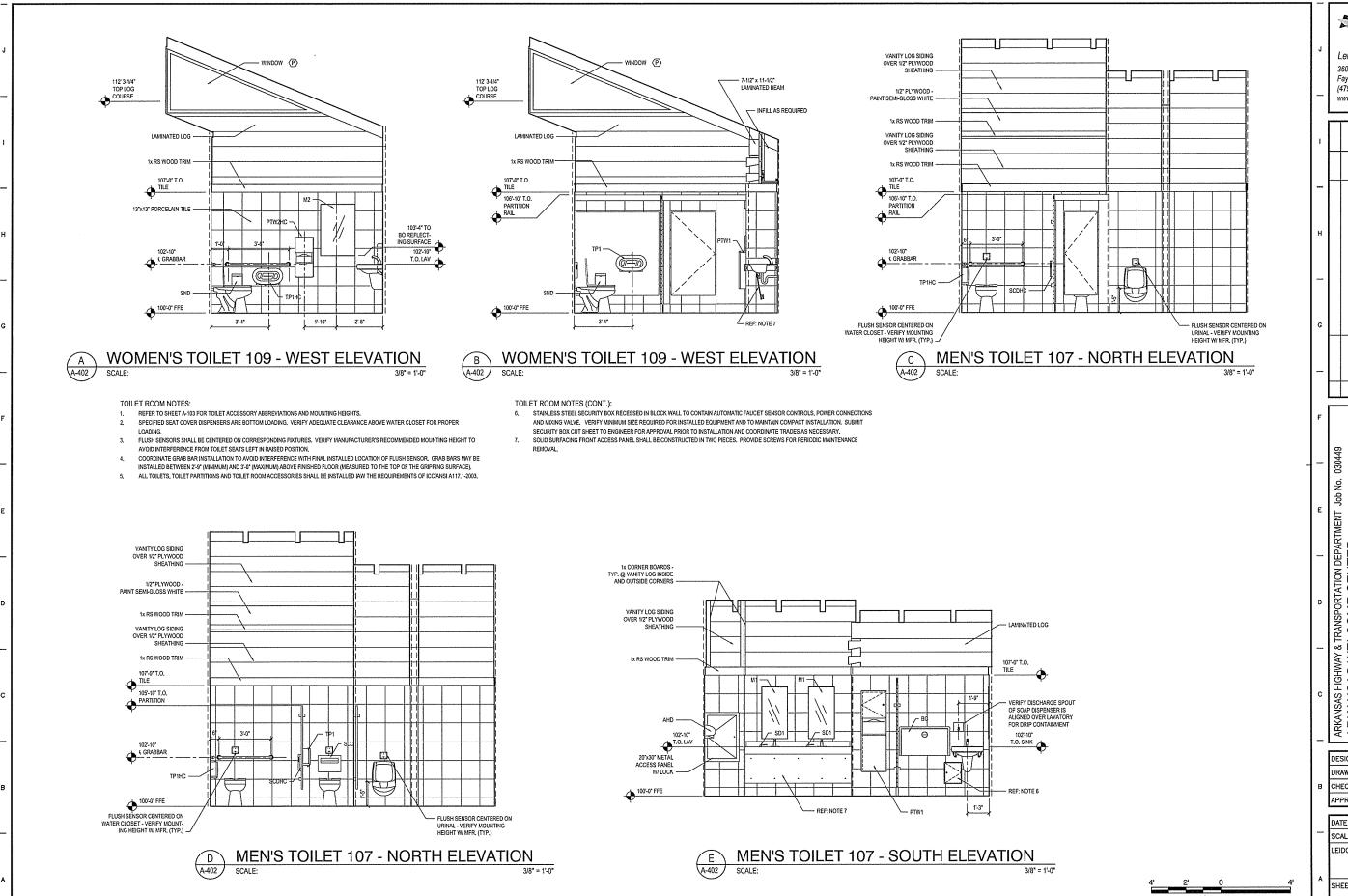
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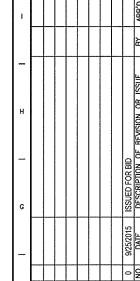
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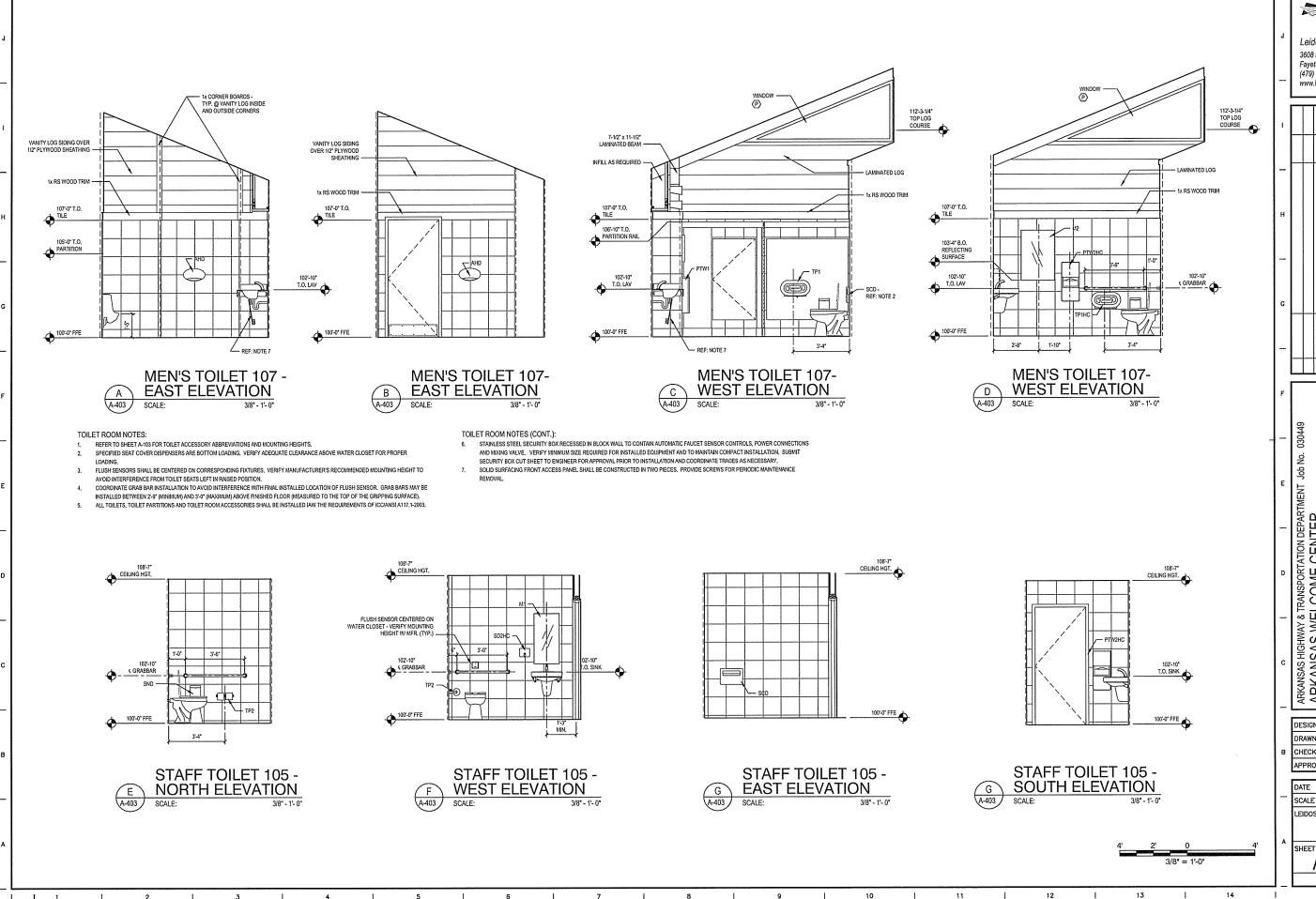
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TATION DEPARTMENT J ARKANSAS HIGHWAY & TRANSPORTATA ARKANSAS WELCOME CREE RIVER INTERIOR ELEVATIONS

JSR DESIGNED BY AMB DRAWN BY JSR CHECKED BY JSR APPROVED BY

9/25/2015 AS SHOWN SCALE LEIDOS PROJECT NUMBER 313841 A-402 62 OF 114



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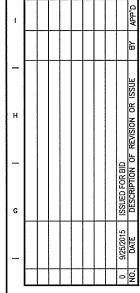
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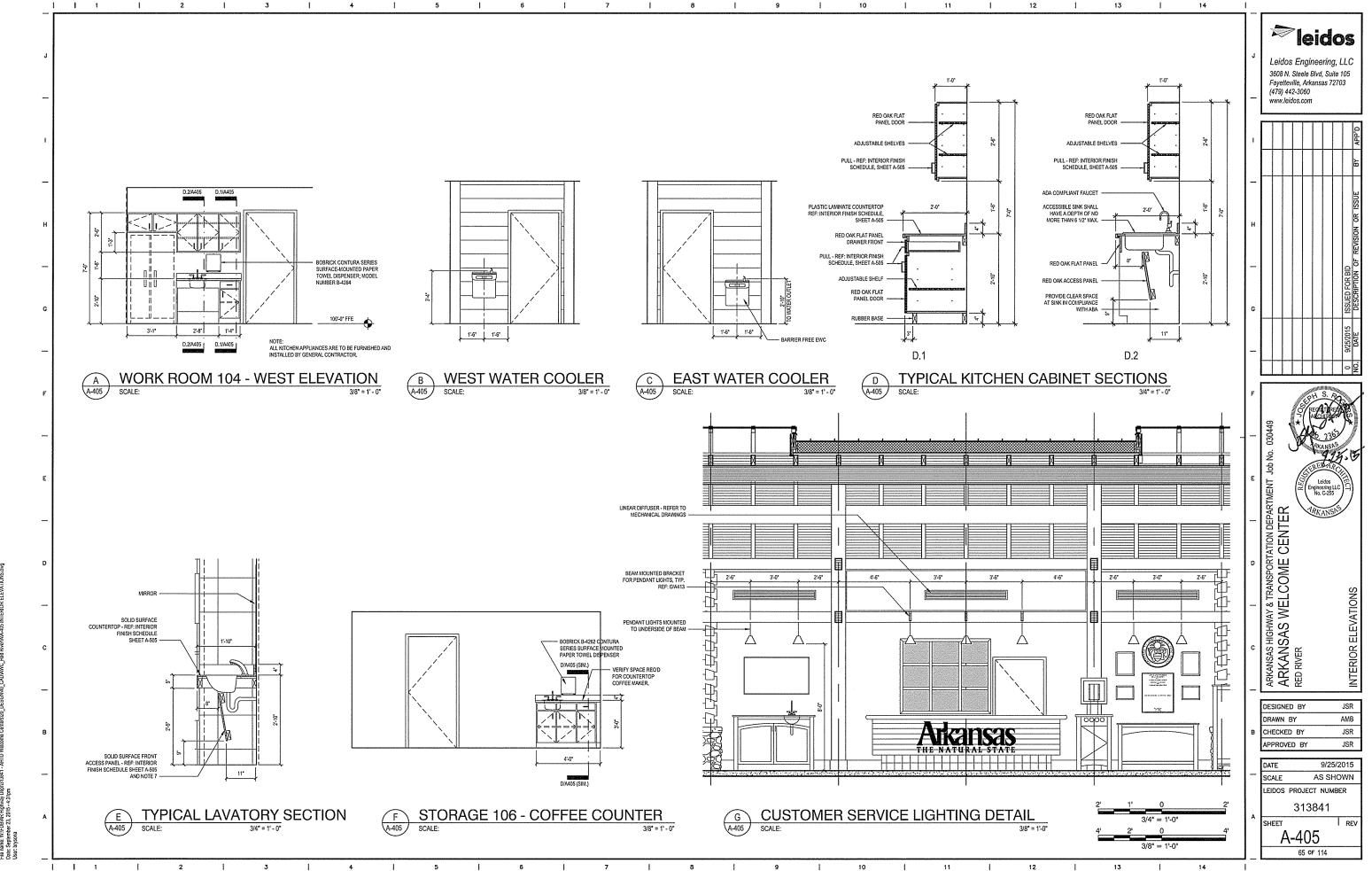
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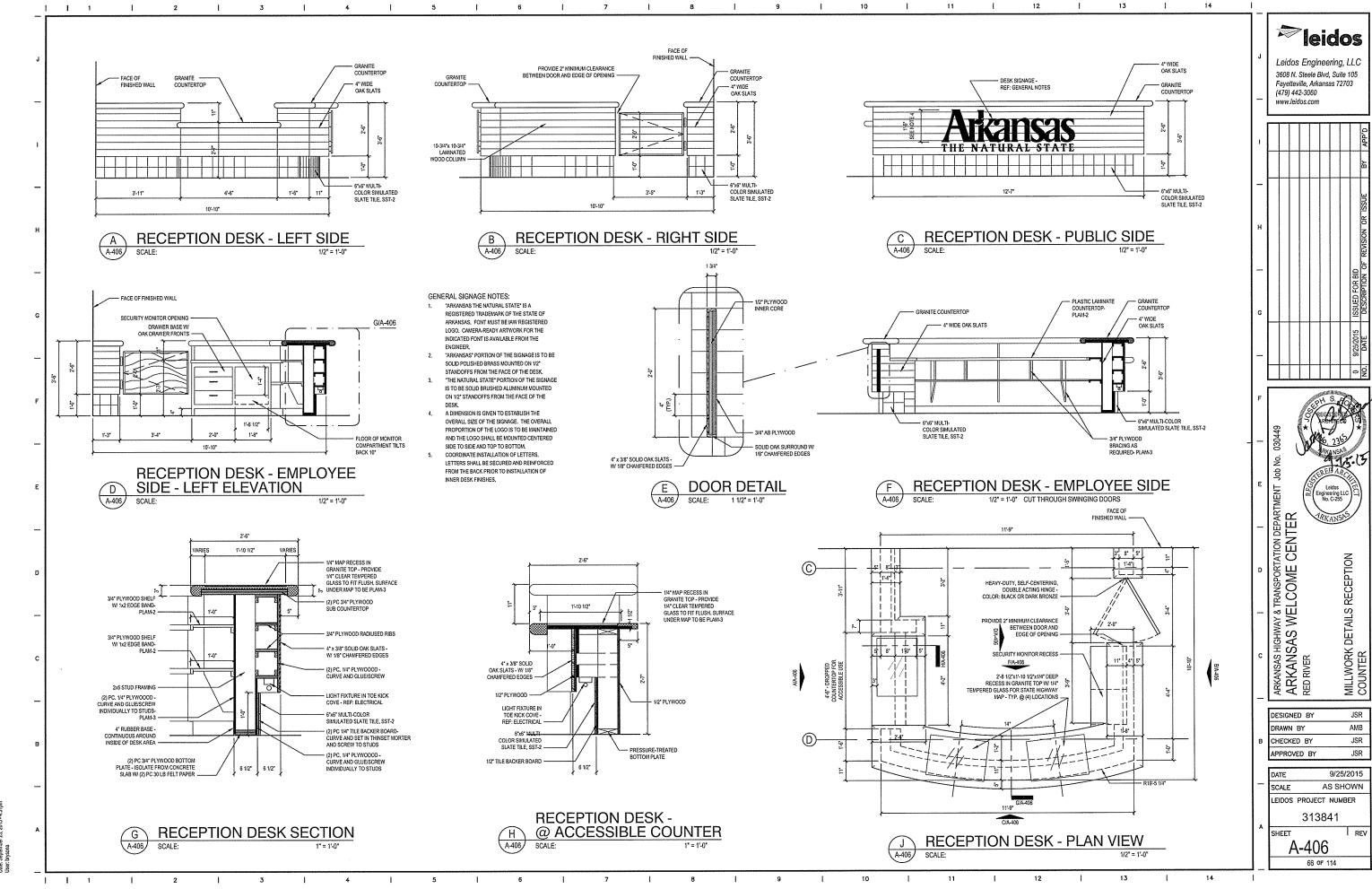
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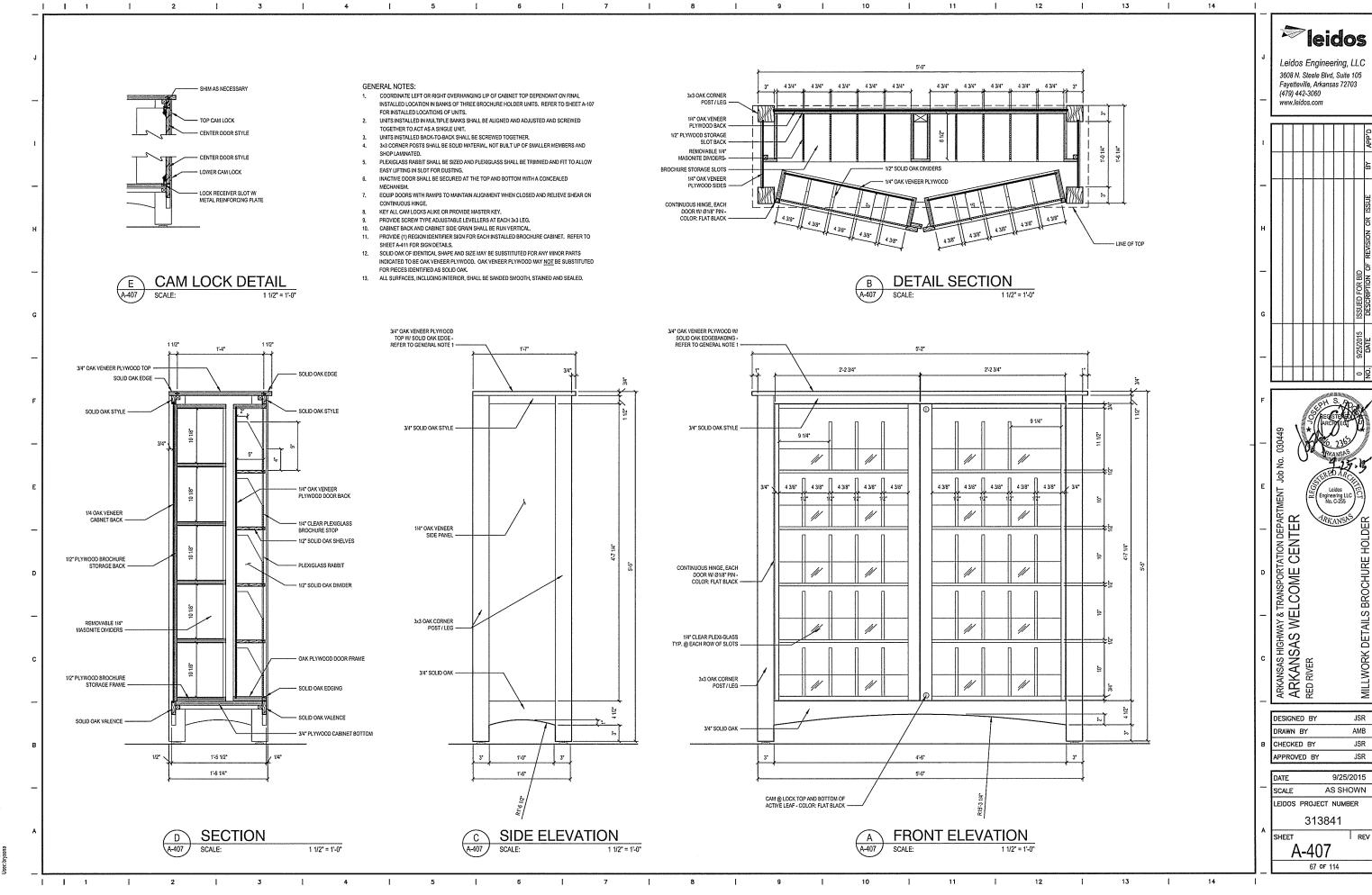
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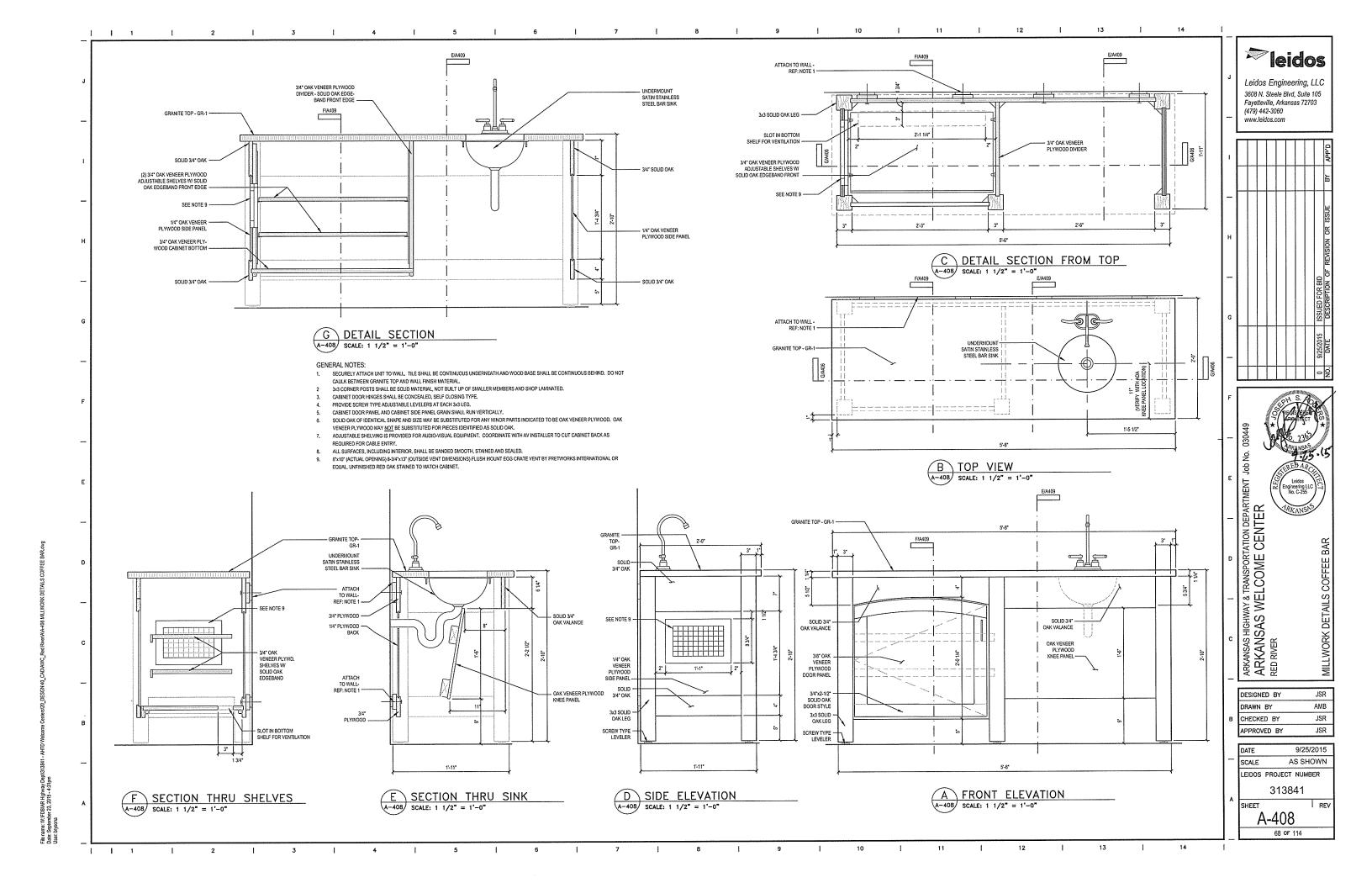
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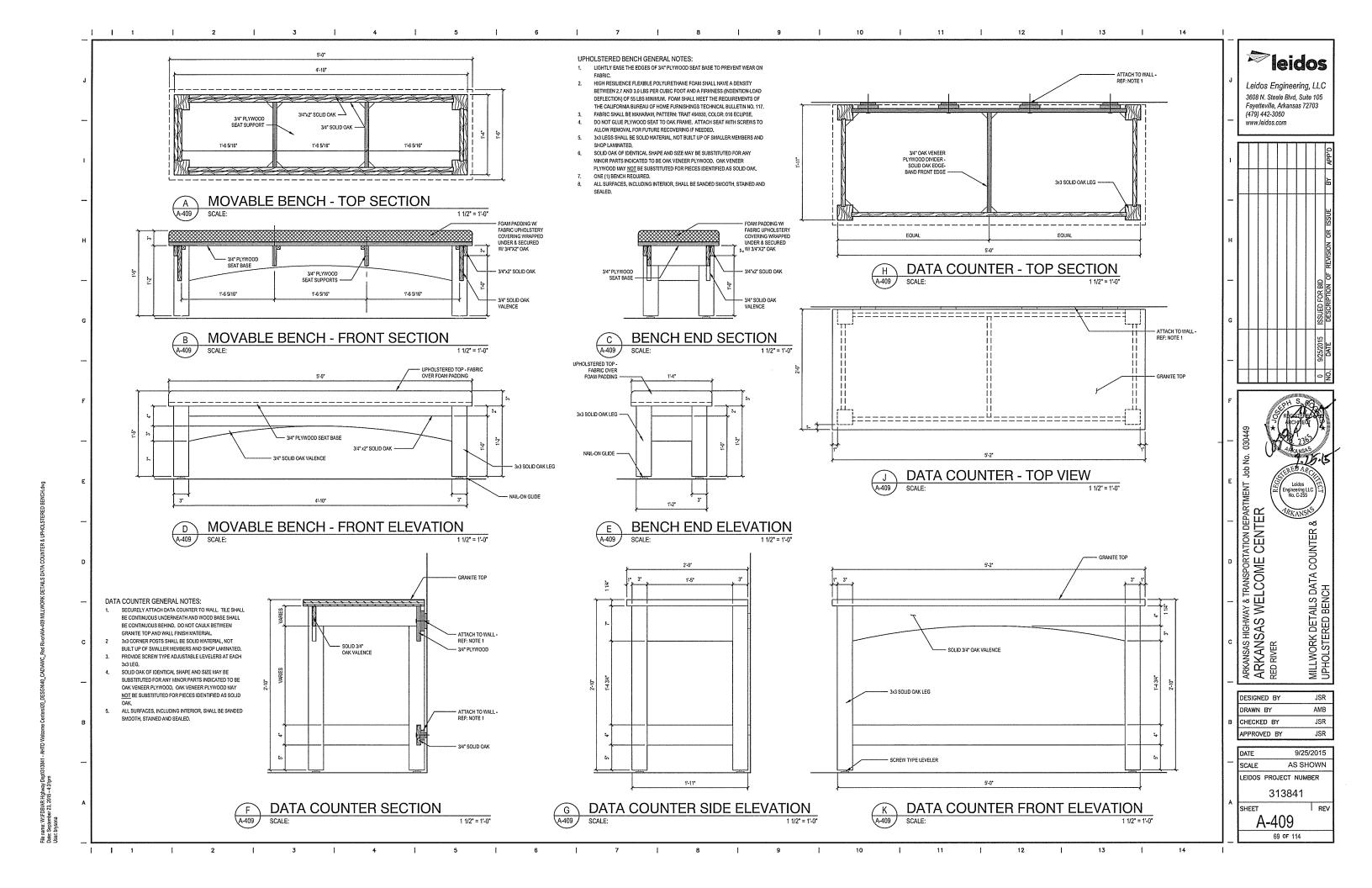


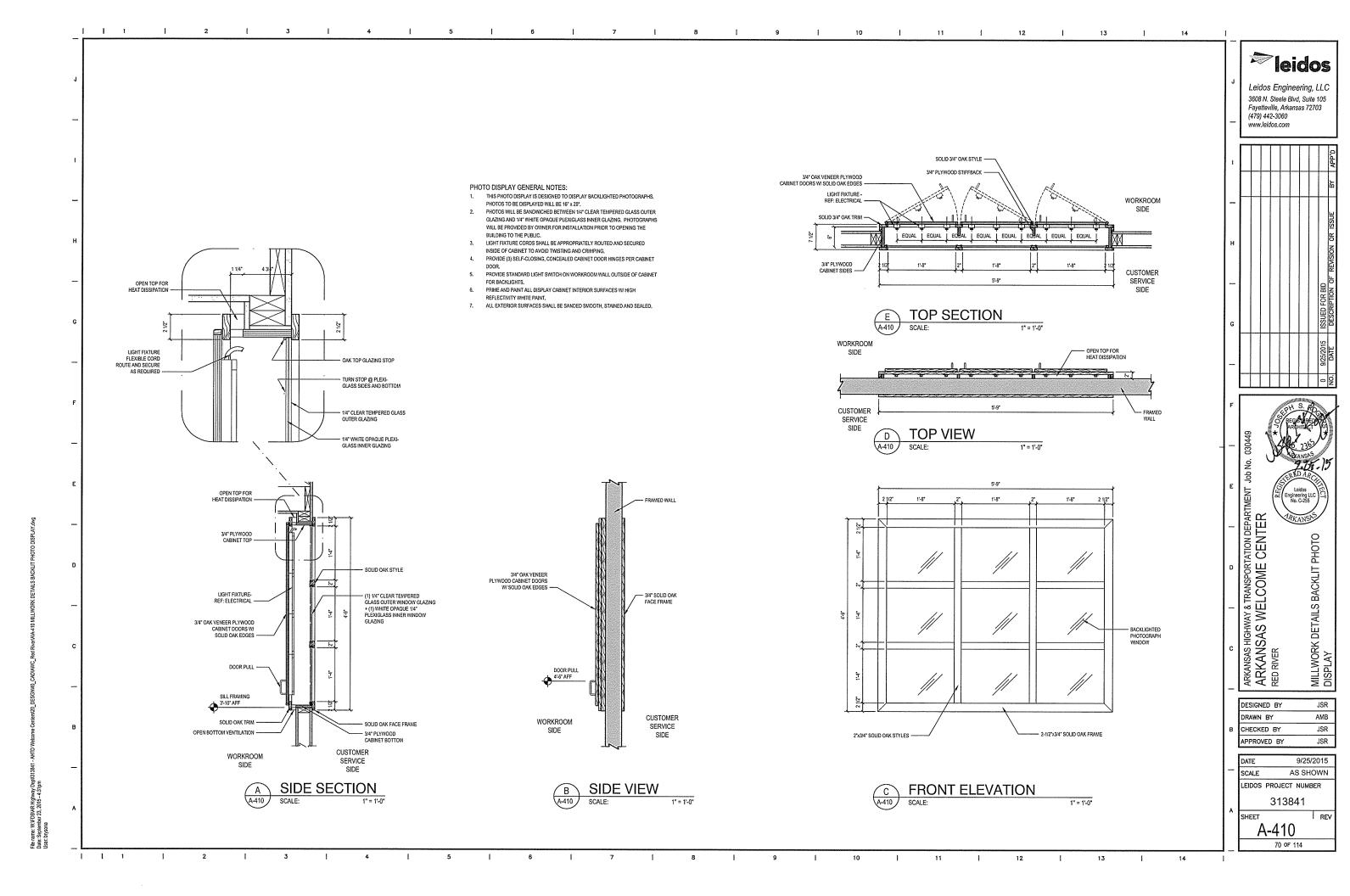
P. P. DBJAR Highway Dept/313841 - AHTD Welcome Centers/20 DESGN40 CADIAWC Red River/AIA-405 INTERIOR

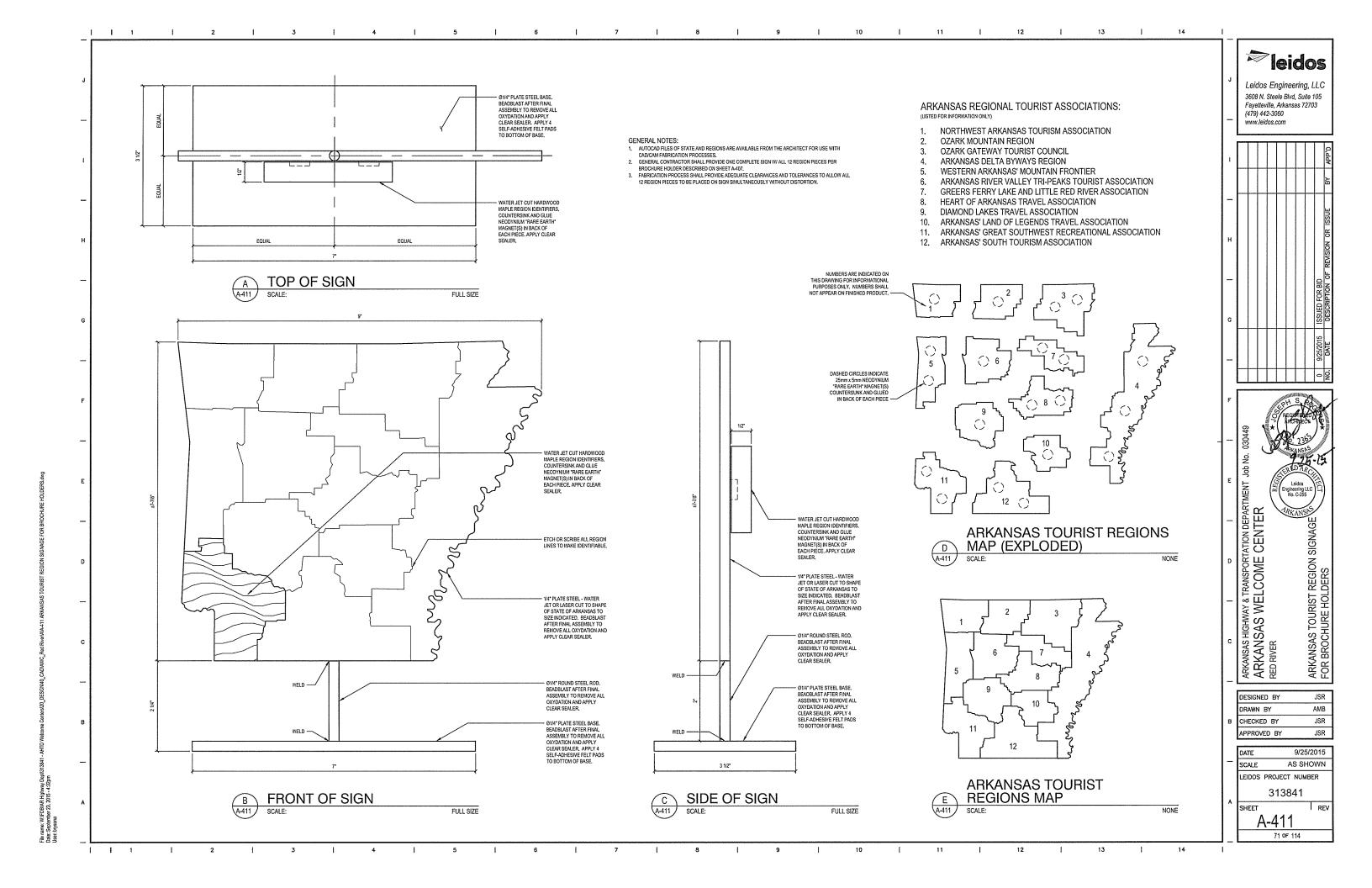


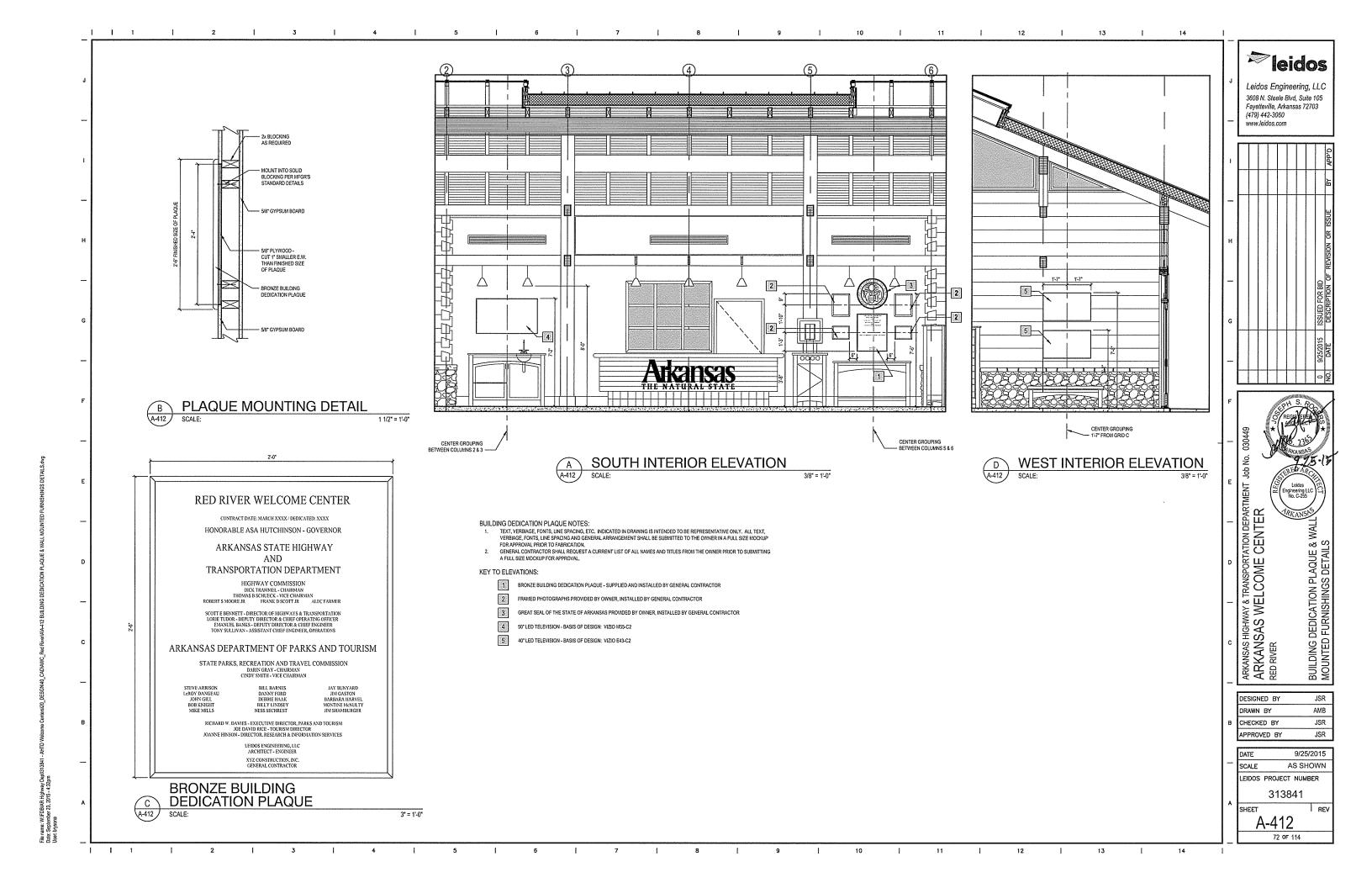


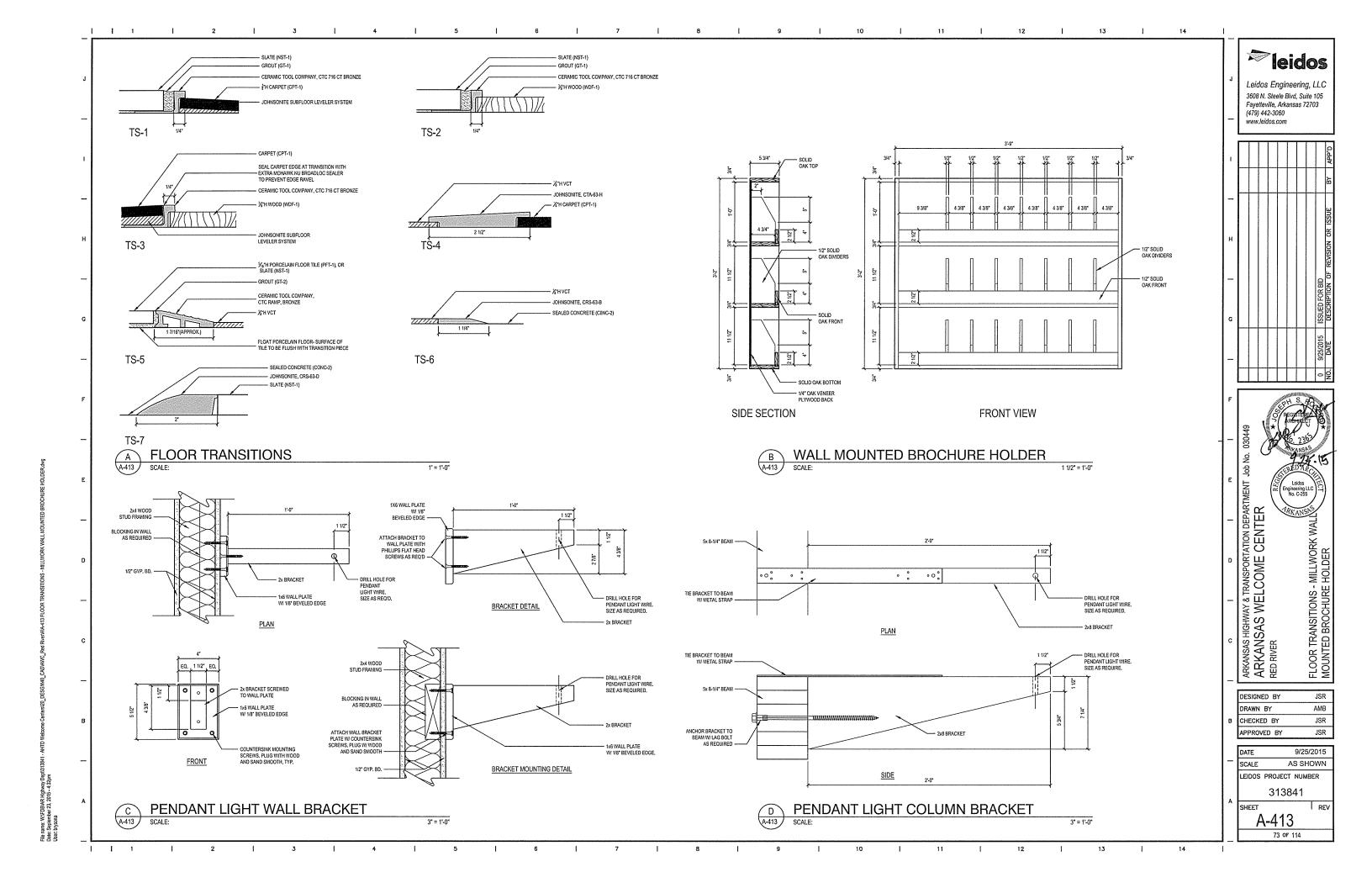


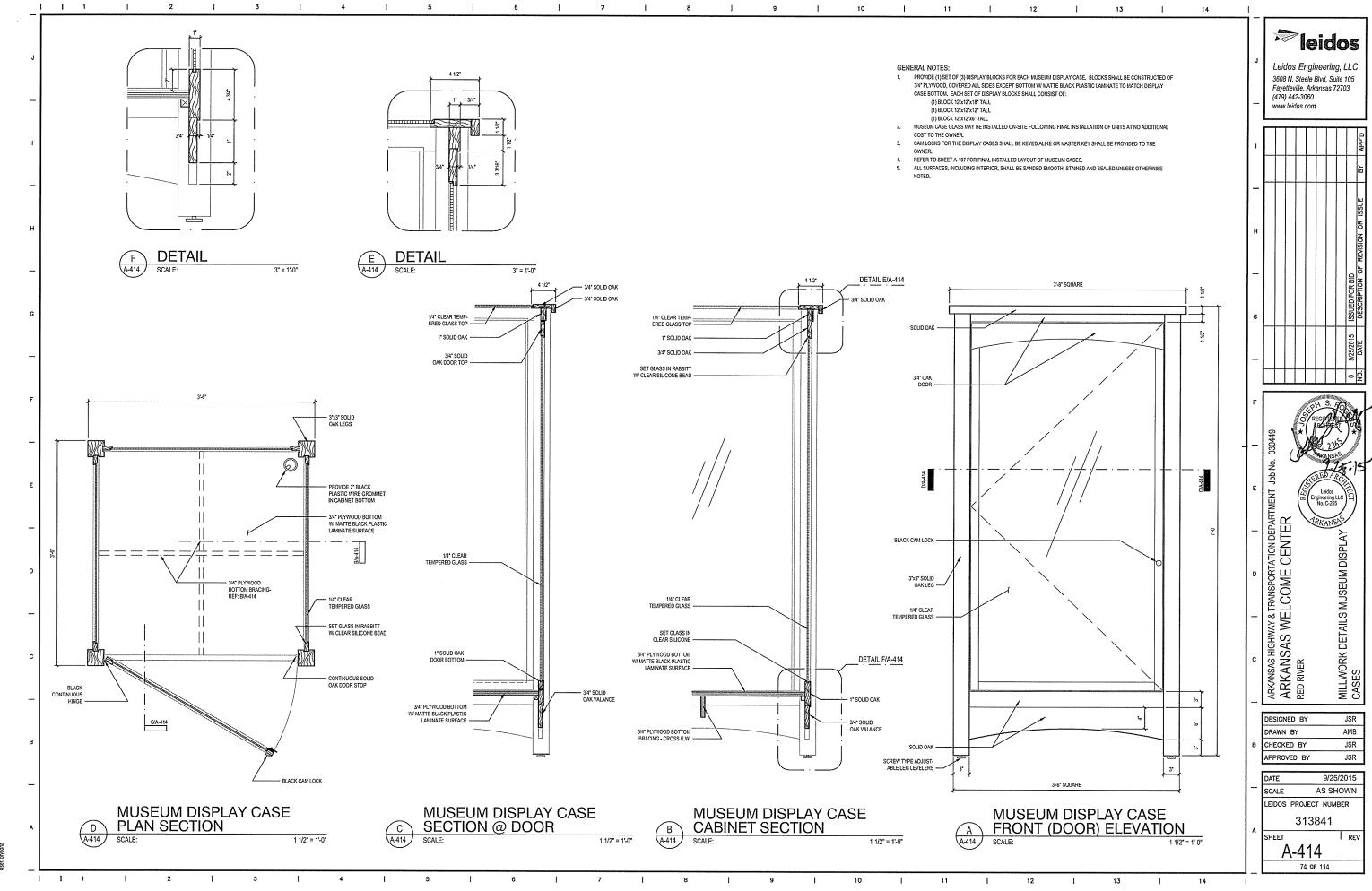




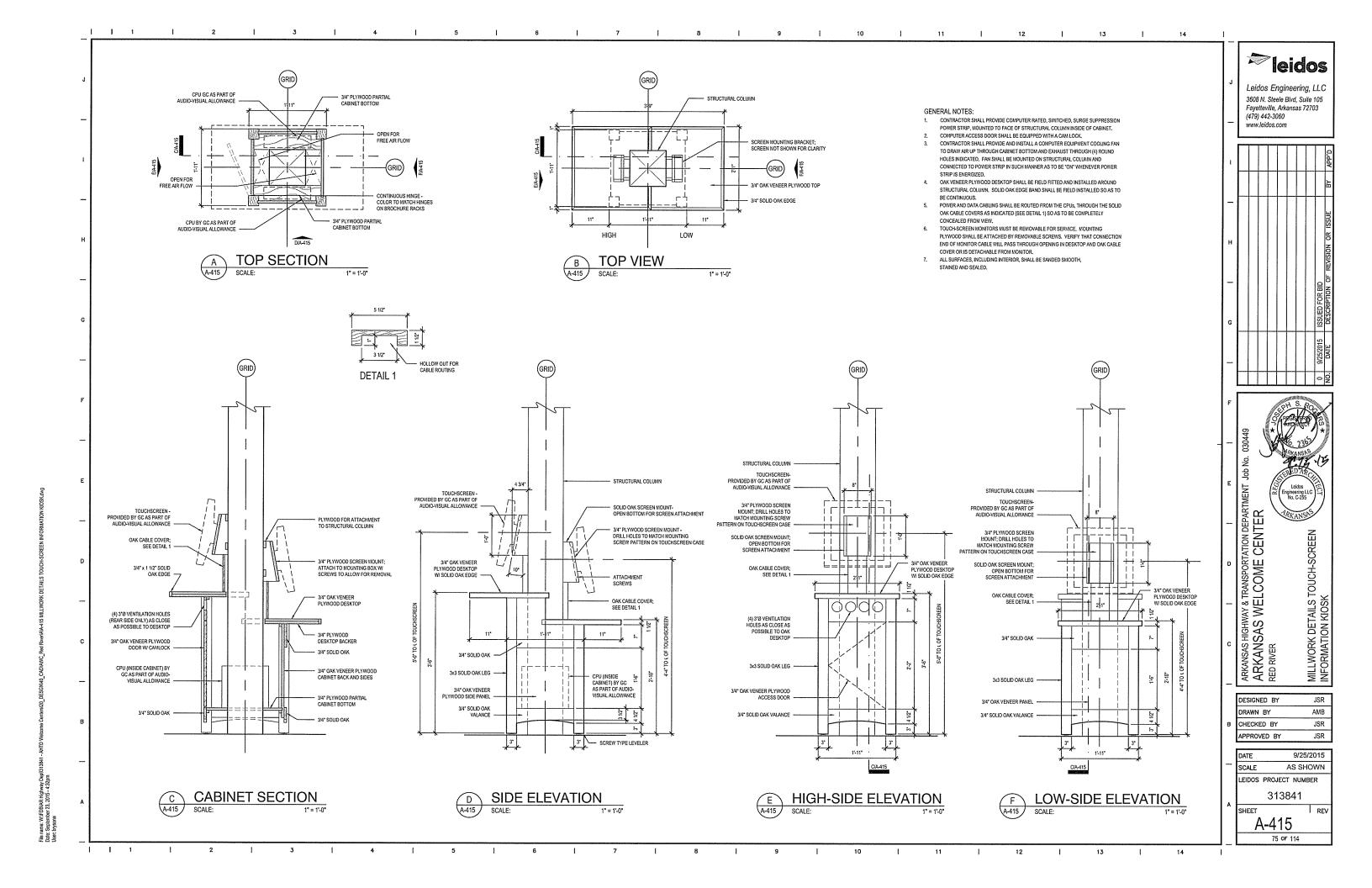


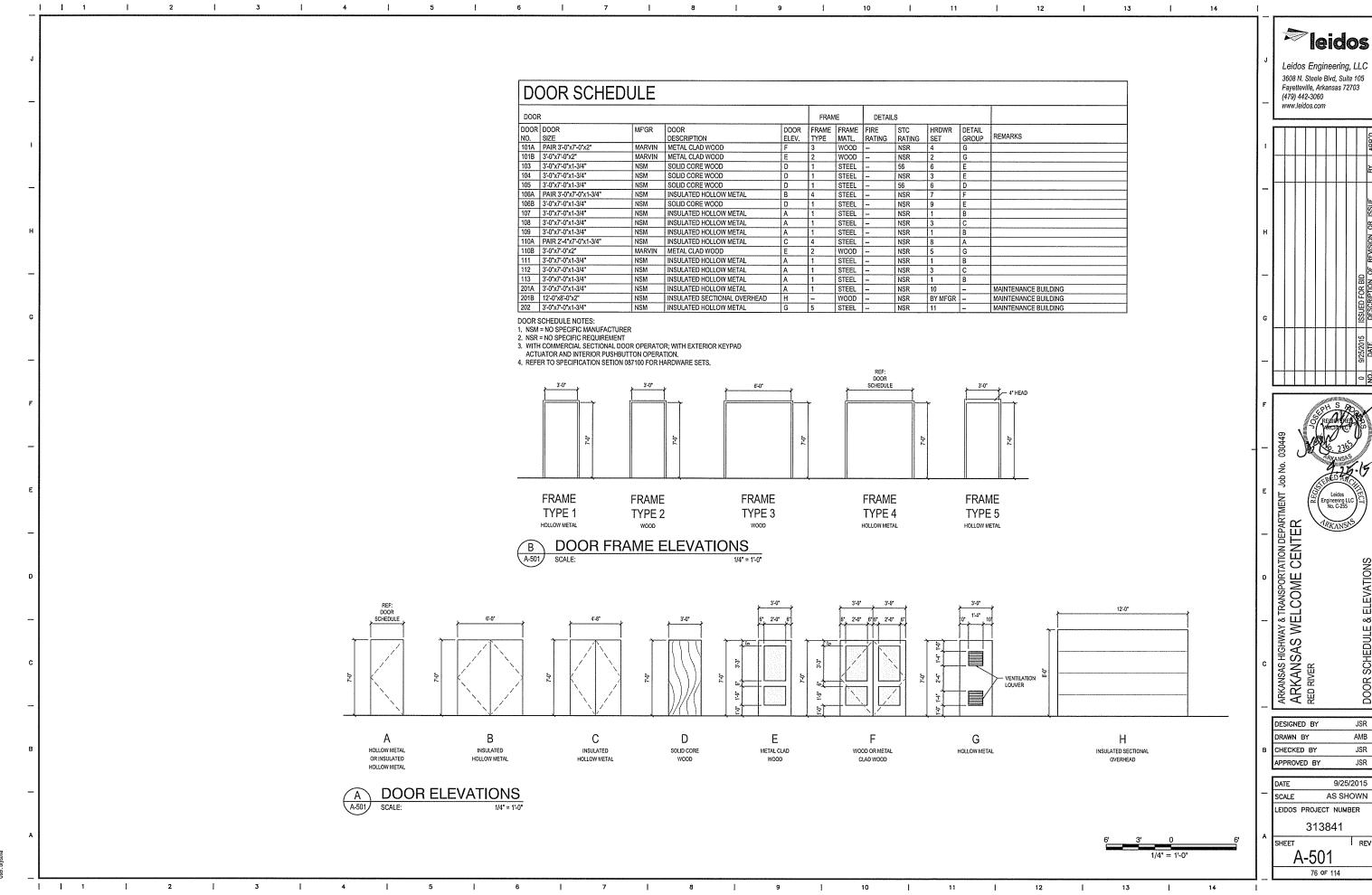


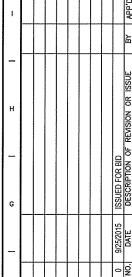




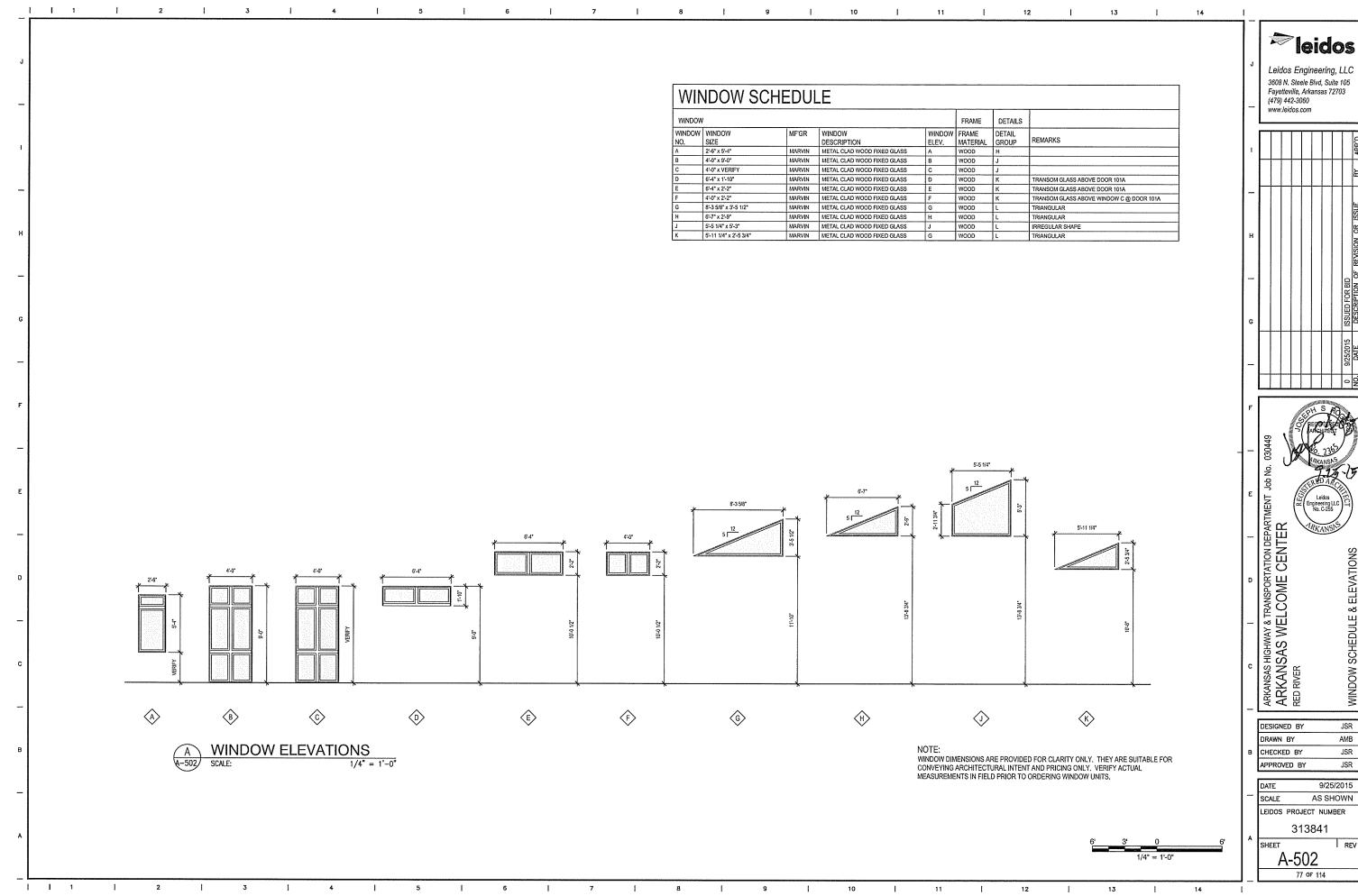
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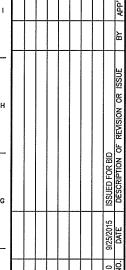




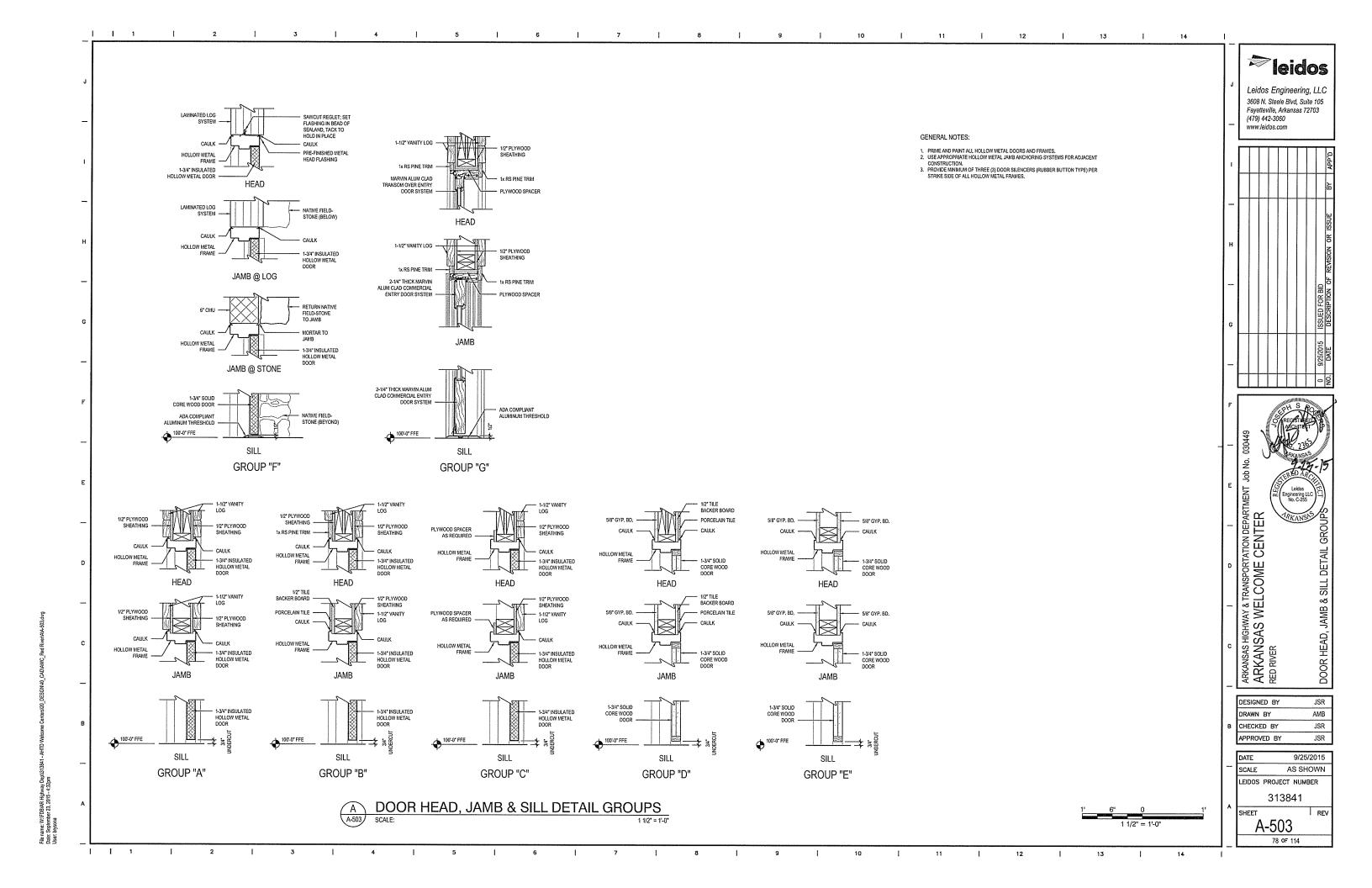


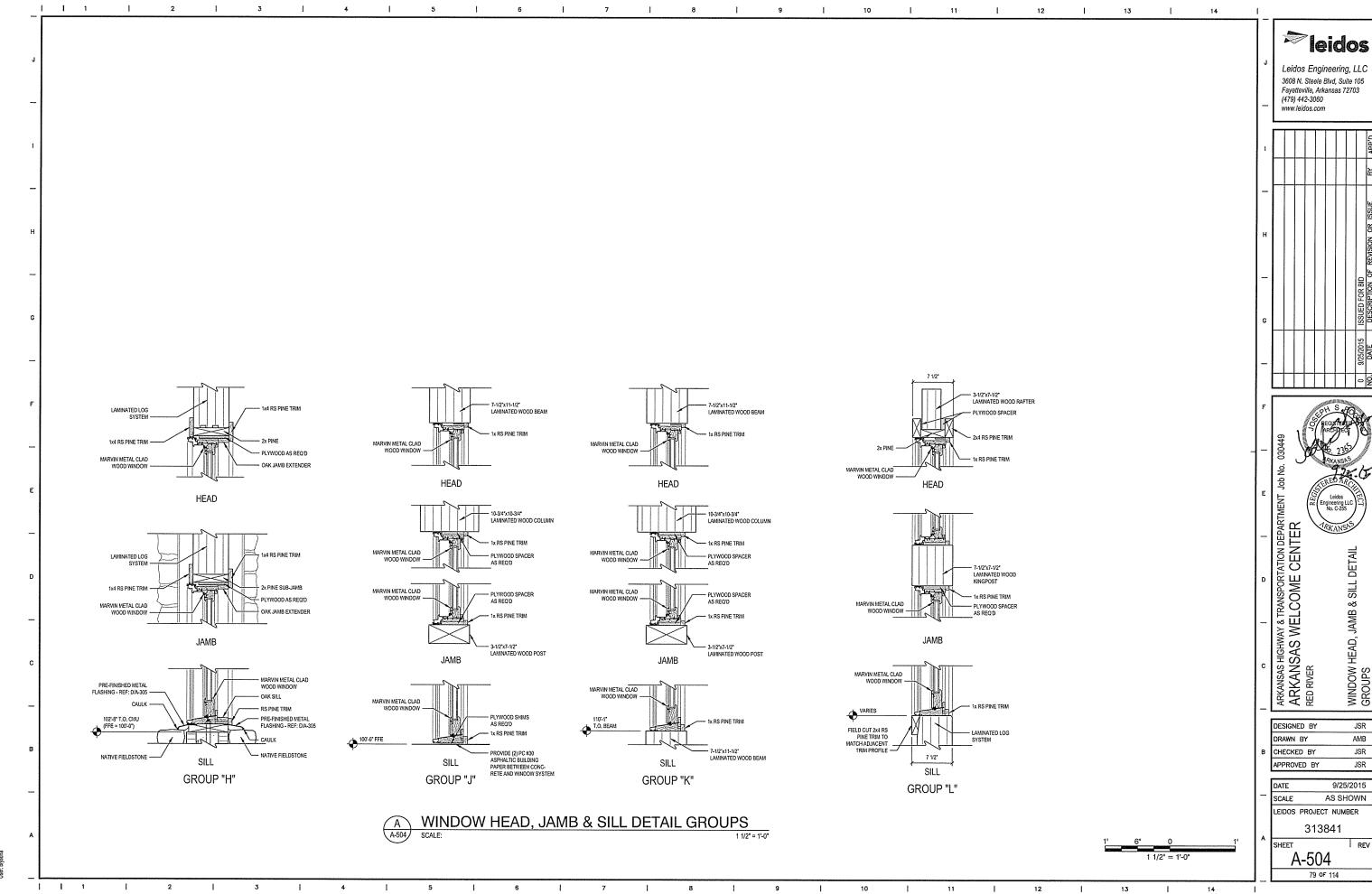
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INTERIOR FINISH LEGEND VENDOR PATTERN/FINISH/# SYMBOL COLOR REMARKS FLOORING MATERIAL CONC-1 INTEGRALLY STAINED CONCRETE SCOFIELD SYSTEMS C-27 WESTWOOD BROWN CONC-2 SEALED CONCRETE SMOOTH FINISH CONC-3 SEALED CONCRETE LIGHT BROOM FINISH CARPET - BROADLOOM MOHAWK COMMERCIAL EMOTIONS COLLECTION-SMILES-MC112; 8658 EXCITABLE BROWN BROADLOOM VCT-1 VINYL COMPOSITION TILE MANNINGTON ESSENTIALS VCT-2 VINYL COMPOSITION TILE MANNINGTON ESSENTIALS 169 OLIVIA 12" X 12" TILE, SEE NOTE 2 PORCELAIN FLOOR TILE VERANDA SOLIDS P501 GRAVEL 13" X 13": GROUT LINE TO BE 3/16" WIDE, GT-2, SEE NOTE 2 PORCELAIN FLOOR TILE VERANDA SOLIDS DALTILE DENA STEE X 13"; GROUT LINE TO BE 3/16" WIDE, GT-2, SEE NOTE 2 PORCELAIN FLOOR TILE VERANDA SOLIDS P502 RUST 13" X 13"; GROUT LINE TO BE 3/16" WIDE, GT-2, SEE NOTE 2 SIMULATED SLATE TILE AMERICAN OLEAN KENDAL SLATE K502 EASDALE NEUTRAL 2" X 12": GROUT LINE TO BE 3/8" WIDE, GT-1: SEE NOTE #2 SIMULATED SLATE TILE SST-2 AMERICAN OLEAN K502 EASDALE NEUTRAL 6" X 6": GROUT LINE TO BE 3/8" WIDE, GT-1: SEE NOTE #2 KENDAL SLATE HARDWOOD FLOORING GCH452HOLG HONEY BUTTER SEE NOTE 2 COMMERCIAL CUSTOM BUILDING PRODUCTS GROUT GROUT 47 CHARCOAL FLOOR TRANSITION MATERIAL CTC 716 CT BRONZE COMPANY CERAMIC TOOL TRANSITION STRIP CTC 716 CT BRONZE COMPANY CERAMIC TOOL TRANSITION STRIP CTC 716 CT BRONZE BRONZE COMPANY JOHNSONITE TRANSITION STRIP CTA-63-H 63 BURNT LIMBER CERAMIC TOOL COMPANY JOHNSONITE TRANSITION STRIP CTC RAMP BRONZE BRONZE TRANSITION STRIP CRS-63-D 63 BURNT UMBER BASE MATERIAL PORCELAIN TILE BASE
YELLOW PINE WOOD BASE VERANDA SOLIDS P501 GRAVEL SROUT LINE TO BE 3/16" WIDE, GT-2, SEE NOTE 2 WDB-1 RB-1 JOHNSONITE TIGHTLOCK 63 BURNT UMBER 4°H CONTINUOUS ROLL RUBBER BASE WALL MATERIAL PRATT & LAMBERT 18-17 SIERRA NIGHT 6107 NOMADIC DESERT SHERWIN WILLIAMS STONE WALL NATURAL ROCK LAMINATED LOG PORCELAIN WALL TILE DALTILE VERANDA SOLIDS P501 GRAVEL GROUT LINE TO BE 3/16" WIDE, GT-2, SEE NOTE 2 PORCELAIN WALL TILE DALTILE VERANDA SOLIDS P500 STEEL ROUT LINE TO BE 3/16" WIDE, GT-2, SEE NOTE 2 PWT-3 PORCELAIN WALL TILE DALTILE VERANDA SOLIDS P502 RUST GROUT LINE TO BE 3/16" WIDE, GT-2, SEE NOTE 2 WDP-1 WOOD PANEL YELLOW PINE STAIN: TO MATCH LAMINATED LOG PROFILE MILLWORK MATERIAL PLASTIC LAMINATE OCHRE TEMPERA TEXTURED TM200IT NEVAMAR ARMORED PROTECTION GREEN SOAPSTONE 4885-38 PLAM-2 PLASTIC LAMINATE WILSONART SEE NOTE 2 PLAM-3 PLASTIC LAMINATE SS-1 SOLID SURFACE NEVAMAR AVONITE BLACK TEXTURED \$6001T FOUNDATIONS - SATIN RED BOCK E1-7743 SOLID SURFACE GRANITE FOUNDATIONS - SATIN CLIFFSIDE F1-7931 VERDE FONTAINE SEE NOTE 1 CEILING MATERIAL ACT-1 ACOUSTICAL CEILING TILE
GYP-1 PAINTED GYP BOARD ARMSTRONG FINE FISSURED 1734 24"X48": ANGLED TEGULAR: 15/4" GRID SHERWIN WILLIAMS SATIN 6107 NOMADIC DESERT WOOD CEILING DECKING TONGUE AND GROOVE YELLOW PINE STAIN: WCT-1 WOOD CEILING TILE 24"X24"X3/4" AR PANEL; DX/DXL GRID, SEE NOTE 2 TRUE WOOD RED OAK INTERIOR DOORS AND WINDOWS WOOD DOORS METAL DOORS SEE NOTE #3 METAL FRAMES SEMI-GLOSS FINISH SEE NOTE #3 WINDOW TREATMENTS YOOD - PINE TO BE SELECTED BY INTERIOR DESIGNER UPON SUBMITTAL INTERIOR MISCELLANEOUS STAINLESS STEEL TOILET PARTITIONS T-1/OAK-STAIN: xxx/580 BEIGE MERICAN BUILDING 1300 WOOD FRAME PECIALTIES STANDARD RECEPTACLE BODIES RRUSHED RRASS CUSTOMER SERVICE AREA BRUSHED BRASS CUSTOMER SERVICE AREA ELECTRICAL COVER PLATES-FLOOR BRUSHED BRASS CUSTOMER SERVICE AREA FIRE EXTINGUISHER CABINETS STAINLESS STEEL REMARKS: WHERE COLOR IS SHOWN AS BEING SPECIFIC TO ONE MANUFACTURER, AN EQUIVALENT COLOR BY ANOTHER MANUFACTURER MAY BE SUBMITTED FOR APPROVAL. MANUFACTURERS AND INTERNALS SPECIFIED ARE NOT INTENDED TO LIMIT THE SELECTION OF EQUI 2. COLOR SELECTION TO BE REVIEWED BEFORE PURCHASE/INSTALLATION, SUBMIT FULL RANGE OF COLORS TO ARCHITECT. . METAL DOOR AND FRAMES FOR ACCESS DOORS IN ROOMS 107, 109, 111, 113 TO BE PT-2 (SEM-GLOSS FINISH), DOORS AND FRAMES 107, 109, 111, 113 RESTROOM SIDE TO BE PT-2 (SEM-GLOSS FINISH); CORRIDOR SIDE OF DOOR AND FRAMES TO BE PT-1, ALL HER METAL DOORS AND FRAMES (INTERIOR SIDE) TO BE PT-1 (SEMI-GLOSS FINISH)

ROOM	ROOM NAME	FLOOR BASE		WALL FINISHES			CEILINGS			KEYED	
NO.	TOOM TOME	LOOK	22	NORTH	EAST	SOUTH	WEST	MATERIAL,	FINISH	HEIGHT	NOTES
101	CUSTOMER SERVICE AREA	CPT-1/ HST-1/ HMF-1	WD8-1	PT-1	L0G-1	LOG-1	L0G-1	WCD-1	STAIN	VARIES	
102	Information desk	CPT-1	WD8-1	PT-1	-	-	-	WCT-1	-	9'-5"	
103	OFFICE	CPT-1	R9-1	PT-2	PT-2	PT-2	PT-2	ACT-1	WHITE	8'-6"	
104	WORK ROOM	VCT-1/ VCT-2	R9-1	PT-2	PT-2	PT-2	PT2	ACT-1	WHITE	8'-6"	
105	STAFF TOILET	PFT-1	PTB-1	PWT-1	PWT-1	PWT-1	PWT~1	ACT1	WHITE	8'-6"	
105	STORAGE ROOM	CONC-2	R8-1	L0G-1	LOG-1	PT-2	LOG-1	WCD-1	STAIN	VARIES	
107	MEN'S TOILET	PFT-1, 2,	PTB-1	PWT-1, 2, 3	PWT-1, 2, 3	PWT-1, 2,	PWT-1, 2,	WCD1	STAIN	VARIES	
108	SERVICE ROOM	COHC-2		-	-	-	-	-	-		
109	WOMEN'S TOILET	PFT-1, 2,	PTB-1	PWT-1, 2, 3	PWT-1, 2, 3	PWT-1, 2,	PWT-1, 2, 3	WCD-1	STAIN	VARIES	
110	CORRIDOR	NST-1	WD6-1	LOG-1/ WDP-1	LOG-1/ WOP-1	LOG-1/ WOP-1	LOG-1/ WOP-1	G1P-1	NOMADIC DESERT	9'0"	
111	MEN'S TOILET	PFT-1, 2,	PTB-1	PWT-1, 2,	PWT-1, 2, 3	PWT-1, 2, 3	PWT-1, 2,	WCD-1	STAIN	VARIES	
112	SERVICE ROOM	CONC-2	-	-	-	-	-	-	-		
113	women's tollet	PFT-1, 2, 3	PTB-1	PWT-1, 2,	PWT1, 2,	PWT-1, 2,	PWT-1, 2,	WCD-1	STAIN	VARIES	

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KEYED NOTES:

1. SHELVING TO BE PAINTED PT-2 SEMI-GLOSS FINISH

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STATION DEPARTMENT J Engineering LL No. C-255 ARKANSAS HIGHWAY & TRANSPORTAT ARKANSAS WELCOME C

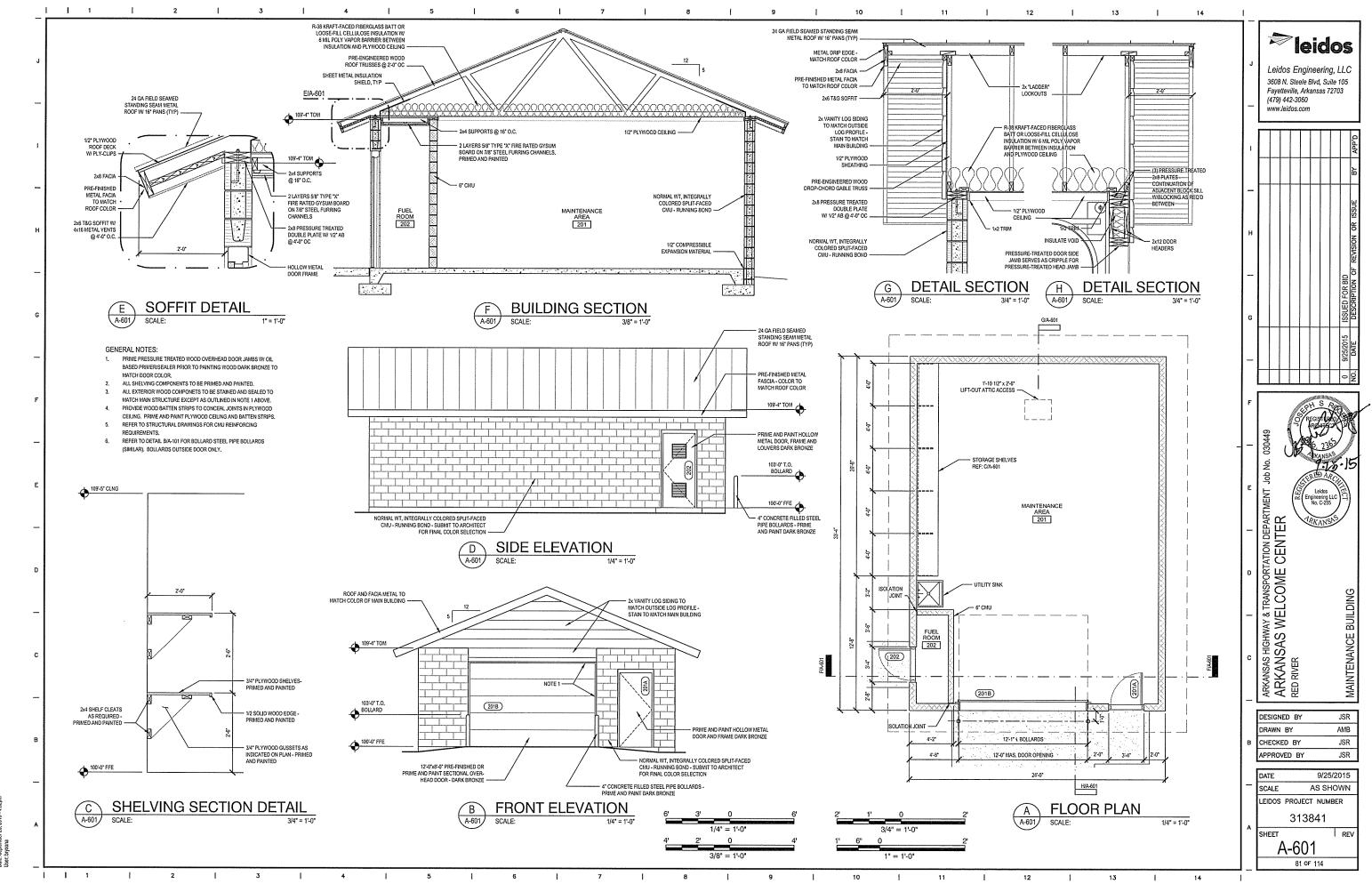
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DATE 9/25/2015 AS SHOWN SCALE. LEIDOS PROJECT NUMBER 313841

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File name: W:FDBMR Highnay Dept313841 - AHTD Welcome Centers\20_DESGN40_CAD\AWC_Red River Date: Sentember 23_31145_4-370m

B. DESIGN DATA: ROOF SNOW LOAD 3. LATERAL LOADS - WIND HEIGHT (FT) d. SITE CLASS: j. DESIGN BASE SHEAR: k. ANALYSIS PROCEDURE: 5. LATERAL LOADS - EARTH PRESSURE (2) ACTIVE CONDITION \Share\NWA Projects\15N059 หนณกะโ8รADW,4225/4335A235A235 Date: September 22, 2015-12.15pm User: Ein Scooppus D. MATERIALS: 1 1

2 "GENERAL STRUCTURAL AND CONSTRUCTION NOTES" THESE NOTES SUPPLEMENT THE SPECIFICATIONS WHICH SHALL BE REFERRED TO FOR ADDITIONAL REQUIREMENTS. A. CODES AND STANDARDS: 1. THE FOLLOWING CODES AND STANDARDS. INCLUDING ALL SPECIFICATIONS REFERENCED WITHIN, SHALL APPLY TO THE DESIGN, CONSTRUCTION, QUALITY CONTROL AND SAFETY OF ALL WORK PERFORMED ON THE PROJECT. USE THE LATEST EDITIONS UNLESS NOTED OTHERWISE. a. "2012 INTERNATIONAL BUILDING CODE", INTERNATIONAL CODE COUNCIL, INC. b. '2012 ARKANSAS FIRE PREVENTION CODE", AND A.C.A. 12-80-101 ET. SEQ. (ARKANSAS LAW). c. "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" (ANSI/ASCE 7-10), AMERICAN SOCIETY OF CMIL ENGINEERS. BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318-11*, AMERICAN CONCRETE INSTITUTE. e. "MANUAL OF STANDARD PRACTICE", CONCRETE REINFORCING STEEL INSTITUTE. f. "MANUAL OF STEEL CONSTRUCTION", FOURTEENTH EDITION, 2010, AMERICAN INSTITUTE OF STEEL g. "STRUCTURAL WELDING CODE ANSI/AWS D1.1-2010, AWS D1.3-98, AND ANSI/AWS D1.8-2009", AMERICAN WELDING SOCIETY. h. 'BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530-05/ASCE 5-11) & SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1-11/ASCE 6-11). i. "DESIGN SPECIFICATIONS", TIMBER CONSTRUCTION MANUAL, AMERICAN INSTITUTE OF TIMBER j. "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION", 2012, NATIONAL FOREST PRODUCTS "AMERICAN NATIONAL STANDARD FOR WOOD PRODUCTS -- STRUCTURAL GLUED LAMINATED TIMBER", ANSI/AITC A190.1-2002. AMERICAN INSTITUTE OF TIMBER CONSTRUCTION. "PERFORMANCE STANDARD AND POLICIES FOR STRUCTURAL-USE PANELS", PRP-108, AMERICAN 1 BUILDING RISK CATEGORY-II ALL LOADS PROVIDED IN GENERAL NOTES AND ON DRAWINGS ARE SERVICE LOADS. 2. GRAVITY - SUPERIMPOSED LIVE LOADS a. EQUIPMENT PLATFORM b. ROOF LIVE LOAD GROUND SNOW LOAD AS APPLICABLE

20 PSF MINIMUM (SNOW LOAD IS USED WHEN GREATER THAN 20 PSF) PF =0.7(PG)(CE)(I)(CT) =0.7(10)(1.0)(1.0)(1.1) =7.7 + DRIFTING SNOW a. MAIN WIND-FORCE RESISTING SYSTEM

(1) BASIC WIND SPEED: 115 MPH EXPOSURE: C (2) INTERNAL PRESSURE COEFFICIENT

EFFECTIVE PRESSURE (PSF) 15.75

b. COMPONENTS & CLADDING - TO BE DESIGNED IN ACCORDANCE WITH ANSI/ASCE 7-10.

c. NET WIND UPLIFT: 23 PSF

a. SEISMIC IMPORTANCE FACTOR (IE): b. SPECTRAL RESPONSE ACCELERATION (Ss): 0.1466 c. SPECTRAL RESPONSE ACCELERATION (S1): 0.0803 SPECTRAL RESPONSE COFFFICIENT (Sds) SPECTRAL RESPONSE COEFFICIENT (Sd1): g. SEISMIC DESIGN CATEGORY: h. BASIC SEISMIC-FORCE-RESISTING SYSTEM: STEEL

SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE, EXCLUDING CANTILEVER COLUMN SYSTEMS RESPONSE MODIFICATION FACTOR (R):

EQUIVALENT LATERAL FORCE PROCEDURE

a. LATERAL EQUIVALENT FLUID PRESSURE

(1) AT REST CONDITION (BRACED WALLS): 65 PSF/FT OF DEPTH

(CANTILEVERED RETAINING WALLS): 45 PSF/FT OF DEPTH

6. THE FOUNDATIONS AND STRUCTURE FRAMING HAVE REEN DESIGNED TO RESIST THE LOADS AND FORCES STATED ABOVE IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2012 ARKANSAS FIRE PREVENTION CODE AND A.C.A. 12-80-101 ET. SEQ.

C. FOUNDATIONS/GEOTECHNICAL REPORT:

1. FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT PREPARED BY THE ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT DATED JUNE 18, 2015, REPORT NO. 030449. SEE THAT REPORT FOR ADDITIONAL REQUIREMENTS.

FOUNDATIONS PLACED ON UNDISTURBED SOIL OR COMPACTED SELECT FILL HAVE BEEN DESIGNED FOR AN ALLOWABLE NET BEARING PRESSURE OF 1,500 PSF.

1. THE FOLLOWING ASTM STANDARDS AND DESIGN STRESSES SHALL BE USED FOR THE APPROPRIATE

MATERIALS LISED IN THE CONSTRUCTION OF THIS PROJECT.

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2. CEMENT: ASTM C150: TYPE I OR III

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ASTM C615, TYPE C (LIMIT TO 25% MAX OF CEMENTITIOUS CONTENT BY 3. FLY ASH:

4. AGGREGATES: ASTM C33 (NORMAL WEIGHT)

5. CONCRETE: ALL CONCRETE EXPOSED TO WEATHER SHALL BE AIR-ENTRAINED 5% + 1-1/2% BY VOLUME, AIR-ENTRAINING ADMIXTURE TO COMPLY WITH ASTM DO NOT EXCEED 3% AIR CONCRETE RECEIVING A STEEL TROWEL

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	F'C 0	WT	
APPLICATION	28 DAYS	(PCF)	W/C_(M
 SLABS ON GRADE 	3000	145	0.55
b. FOOTINGS	3000	145	0.55
c. PIER/PEDESTAL	3000	145	0.55
d. WALLS	4000	145	0.50

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DEFORMED REINFORCING BARS ASTM A615, GRADE 60 b. WELDED WIRE FABRIC (WWF) ASTM A185

a. LOAD BEARING CONCRETE MASONRY COMPRESSIVE STRENGTH ON STANDARD CONCRETE MASONRY UNITS ASTM C90; MINIMUM

> SOLID - ASTM C145: BRICK - ASTM C55: MINIMUM COMPRESSIVE STRENGTH ON NET AREA = 2000 PS

ASTM C270 - TYPE S (ABOVE GRADE) c. GROUT ASTM C476: MINIMUM COMPRESSIVE

STRENGTH AT 28 DAYS = 2000 PSI ASTM A951; 9 GAGE TRUSS-TYPE GALVANIZED d. HORIZONTAL JOINT REINFORCING

F'M = 1500 PSI PER ACI 530/ASCE 5 e. PRISM STRENGTH

R STEEL

D. STRUCTURAL SHAPES
D. PLATES, CHANNELS, ANGLES & MISC
C. HIGH STRENGTH BOLTS ASTM A325 d. ANCHOR BOLTS WITH HEAVY HEX HEAD ASTM F1554, GRADE 36 AND HEAVY HEX NUT . SMOOTH & THREADED ROD ASTM A36 HEADED SHEAR STUDS ASTM A108 AWS A5.1 OR A5.5, E70XX HILTI HIT HY-200 SYSTEM, SIMPSON ACRYLIC TIE SYSTEM, OR APPROVED EQUAL h. ADHESIVE ANCHORING SYSTEM

9. TIMBER (SAWN LUMBER):

IN THE FOLLOWING ALL SAWN LUMBER SHALL BE KILN DRY SOUTHERN PINE GRADES:

b. JOISTS AND RAFTERS c. BEAMS, POSTS AND TIMBERS NO. 2 OR BETTER H MISC FRAMING (BLOCKING, STANDARD AND BETTER OR STUD TONGUE AND GROOVE DECKING NO. 1 OR BETTER f. ALL NAILS SHALL BE COMMON WIRE NAILS WITH THE FOLLOWING DIAMETERS:

8d 0.131° 10d 0.148° 12d 0.148° 16d 0.162°

10.STRUCTURAL GLUED LAMINATED TIMBER SHALL BE SOUTHERN PINE GRADE:

a. COMBINATION SYMBOL: 24F-V3 FOR SIMPLE SPAN BEAMS D. COMBINATION SYMBOL: 24F-V5 FOR CONTINUOUS SPAN BEAMS

D. COMBINATION SYMBOL: 24F-Y3 FOR COMMINUOUS SPAN BEAS C. COMBINATION SYMBOL: 24F-Y3 FOR WALL LOGS E. ADHESNE: MIL—A-39F, MIL—A-5534A, OR ASTM2559-66T I. ARCHITECTURAL APPEARANCE GRADE UNLESS NOTED

11, PLYWOOD PANELS: PROVIDE APA PERFORMANCE-RATED PANELS COMPLYING WITH THE INDICATED REQUIREMENTS FOR THICKNESS, SPAN RATING AND EDGE DETAIL (WHERE APPLICABLE):

a. PLYWOOD ROOF SHEATHING 19/32" THICK, EXPOSURE 1, SPAN RATING 40/20 b. ORIENTED STRAND BOARD (OSB) WALL SHEATHING 15/32 THICK, EXPOSURE 1, SPAN RATING 32/16

E. CONSTRUCTION:

c. PLYWOOD FLOOR SHEATHING

a. REPRODUCTION OF ANY PORTION OF THE STRUCTURAL CONTRACT DRAWINGS FOR RESUBMITTAL AS SHOP DRAWINGS IS PROHIBITED. SHOP DRAWINGS PRODUCED IN SUCH A MANNER WILL BE REJECTED AND RETURNED.

23/32 THICK STURD-I-FLOOR, TONGUE AND

GROOVE EDGES. EXPOSURE 1, 24° O.C.

b. Submit shop drawings at least 15 days before date reviewed submittals will be needed. Shop drawings shall bear the contractor's stamp of approval which shall constitute certification that he has verified all field measurements, construction criteria, materials and smalar data and has checked each drawing for completeness, coordination and COMPLIANCE WITH THE CONTRACT DOCUMENTS.

SUBMIT CONCRETE MIX DESIGNS PROPORTIONED ON THE BASIS OF FIELD EXPERIENCE OR TRAL BATCHES IN ACCORDANCE WITH ACI 318 CHAPTER 5. SUBMIT LABORATORY TEST REPORTS FOR CONCRETE MATERIALS AND MIX DESIGN TESTS.

d. THESE DRAWINGS REPRESENT THE COMPLETED PROJECT WHICH HAS BEEN DESIGNED FOR THE WEIGHTS OF THE MATERIALS INDICATED ON THE DRAWINGS AND FOR THE SUPERIMPOSED LOADS INDICATED IN THE DESIGN DATA. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALLOWABLE CONSTRUCTION LOADS AND TO PROVIDE PROPER DESIGN AND CONSTRUCTION OF FALSEWORK, FORMWORK, STAGINGS, BRACING, SHEETING AND SHORING, ETC. THE STRUCTURE IS NOT STABLE UNTIL ALL STRUCTURAL MEMBERS, CONNECTIONS AND DECKING IS IN PLACE.

e. IMPLEMENTING JOB SITE SAFETY AND CONSTRUCTION PROCEDURES ARE THE SOLE RESPONSIBILITY OF

THE CONTRACTOR

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f. ALL COSTS OF INVESTIGATION AND/OR REDESIGN, DUE TO CONTRACTOR MISLOCATION OF STRUCTURAL ELEMENTS OR OTHER LACK OF CONFORMANCE WITH THE PROJECT DOCUMENTS, SHALL BE AT THE CONTRACTOR'S EXPENSE.

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CONTRACTOR SHALL REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL, LAUNDRY AND FOOD SERVICE DRAWINGS FOR SIZE AND LOCATIONS OF OPENINGS, SLEEVES, CONCRETE HOUSEKEEPING PADS, INSERTS, AND DEPRESSIONS.

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- 1

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- h. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR DETAILED INFORMATION REGARDING FINISHES,
- SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF MASONRY AND DRYWALL NON-LOAD BEARING PARTITIONS. PROVIDE SUP CONNECTIONS THAT ALLOW VERTICAL MOVEMENT AT THE HEADS OF ALL SUCH PARTITIONS. CONNECTIONS SHALL BE DESIGNED TO SUPPORT THE TOP OF THE WALLS LATERALLY FOR THE CODE-REQUIRED LATERAL LOAD. PROVIDE COMPRESSIBLE FIRESAFING AT TOP WALL AS REQUIRED BY ARCHITECTURAL DRAWINGS.
- j. THE CONTRACTOR SHALL SUBMIT, FOR REVIEW, DRAWINGS AND CALCULATIONS FOR ALL OF THE FOLLOWING ASSEMBLIES. THE DESIGN OF THESE ASSEMBLIES IS THE RESPONSIBILITY OF THE CONTRACTOR'S ENGINEER REGISTERED IN THE PROJECT'S JURISDICTION. ALL SUBMITTALS SHALL BEAR THIS ENGINEER'S SEAL AND SIGNATURE. REVIEW SHALL BE FOR GENERAL CONFORMANCE WITH THE PROJECT PARAMETERS AS INDICATED ON THE DRAWINGS AND IN THE GENERAL NOTES.
- (1) METAL RAILINGS: DESIGNS SHALL TAKE INTO ACCOUNT ALL VERTICAL AND LATERAL LOADS REQUIRED BY APPLICABLE BUILDING CODES. WHERE HEADERS OR OTHER TYPES OF STRUCTURAL MEMBERS HAVE BEEN DESIGNATED BY THE STRUCTURAL ENGINEER OF RECORD TO SUPPORT THE STAIRS, THE CONNECTIONS FROM THE STAIRS SHALL BE DESIGNED SO THAT NO ECCENTRIC OR TORSIONAL FORCES ARE INDUCED IN THESE STRUCTURAL MEMBERS.
- k. IN CASE OF CONFLICT BETWEEN THE GENERAL NOTES, DETAILS AND SPECIFICATIONS, THE MOST RIGID
- I. CONTRACTOR SHALL FURNISH DIMENSIONED COORDINATED SHOP DRAWINGS AT ALL LEVELS SHOWING THE LOCATIONS OF ALL SLEEVES AND OPENINGS REQUIRED BY ALL TRADES.

2. INSPECTION AND TESTING:

- . The contractor shall engage an inspection agency to provide special inspections as required by chapter 17 of the international building code and submit reports. Contractor shall be responsible for coordinating all inspections with the inspection
- b. The special inspector shall be a qualified person who shall demonstrate competence to perform the required inspection to the satisfaction of the building official.
- c. THE SPECIAL INSPECTOR SHALL KEEP RECORDS OF INSPECTIONS. INSPECTION REPORTS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.
- d. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND THE REGISTERED PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK.
- e. A Final report of inspections documenting required special inspections and correction of any discrepancies shall be submitted to the owner, building official, and the REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.
- f. SOIL TESTING AND INSPECTIONS:
- (1) A QUALIFIED TESTING LABORATORY SHALL TEST ALL COMPACTED SELECT FILL. A MINIMUM OF TWO SOIL COMPACTION TESTS SHALL BE MADE FOR EACH LIFT.
- (2) AFTER FOOTING EXCAVATIONS HAVE BEEN MADE TO DESIGN ELEVATIONS, THE INDEPENDENT TESTING AGENCY SHALL INSPECT AND TEST THE BEARING SOIL TO VERIFY THAT IT MEETS THE REQUIRED DESIGN CAPACITY.

a. CAST-IN-PLACE CONCRETE:

- (1) SAMPLE FRESH CONCRETE IN ACCORDANCE WITH ASTM C172. MOLD TEST CYLINDERS IN ACCORDANCE WITH ASTM C31. THE MINIMUM NUMBER OF TEST CYLINDERS SHALL BE TWO FOR TEST OF THE TOP THE TOP THE TOP TO THE TOP THE EACH 75 CUBIC YARDS OF CONCRETE, OR EACH 5000 SQUARE FEET OF SURFACE AREA FOR SLABS AND WALLS.
- (2) THE AGENCY WILL MAKE ADDITIONAL TESTS OF IN-PLACE CONCRETE AT THE CONTRACTOR'S EXPENSE WHEN TEST RESULTS INDICATE SPECIFIED CONCRETE STRENGTHS HAVE NOT BEEN ATTAINED, AS DIRECTED BY THE STRUCTURAL ENGINEER.

(1) PERFORM COMPRESSION TEST ON MASONRY UNITS, GROUT, AND MORTAR FOR EACH TYPE OF WALL CONSTRUCTION AND EACH 5000 SQUARE FEET OF WALL THEREAFTER, BUT NOT LESS THAN 2 TESTS FOR UNIT STRENGTH METHOD EVALUATION.

- (1) INSPECTIONS SHALL BE PROVIDED FOR BOTH SHOP FABRICATION AND FIELD ERECTION OF
- (2) EXCEPTION: SHOP INSPECTIONS WILL NOT BE REQUIRED FOR STEEL FABRICATORS THAT ARE AISC CERTIFIED TO "CERTIFICATION STANDARD FOR STEEL BUILDING STRUCTURES."

j. WOOD:

- (1) INSPECTIONS SHALL BE PROVIDED FOR BOTH SHOP FABRICATION AND FIELD CONSTRUCTION OF
- (2) EXCEPTION: SHOP INSPECTIONS WILL NOT BE REQUIRED FOR MANUFACTURER'S OF LAMINATED PRODUCTS BEING AN "AITC CERTIFIED FABRICATOR". SHOP INSPECTIONS WILL NOT BE REQUIRED FOR WOOD TRUSS FABRICATORS HAVING "IN-PLANT WICA QUALITY CONTROL" CERTIFICATION

F. FOUNDATIONS & STRUCTURAL FARTHWORK:

a. SEE THE SPECIFICATIONS AND GEOTECHNICAL REPORT REQUIREMENTS FOR EXCAVATION AND PREPARATION OF THE FOUNDATION AND SLAB-ON-GRADE SUBGRADE INCLUDING COMPACTION PROCEDURES. REQUIREMENTS CONTAINED IN THE GEOTECHNICAL REPORT ARE PART OF THIS WORK.

b. CONTRACTOR SHALL VERIFY ALL EXISTING FIELD CONDITIONS THAT MAY AFFECT THE INSTALLATION OF

THE FOLINDATION SYSTEM AS SHOWN PRIOR TO STARTING WORK

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- c. THE SIZE, LOCATION AND DEPTH OF THE UTILITIES ARE NOT KNOWN EXACTLY AND MAY VARY SIGNIFICANTLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES, WHICH MAY BE AFFECTED BY THE CONSTRUCTION PROCESS.
- d. ALL FOUNDATIONS SHALL BE PLACED ON UNDISTURBED SOIL OR COMPACTED SELECT FILE DETERMINATION OF FINAL BEARING ELEVATIONS AND FIELD VERIFICATION OF ALLOWABLE BEARING PRESSURE SHALL BE MADE BY AN EXPERIENCED, QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO

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- e. CONCRETE FOR FOUNDATIONS SHALL BE PLACED ON THE SAME DAY SUBGRADE APPROVAL IS GIVEN
- 1. UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT THE STRUCTURAL
- g. THE SLOPE BETWEEN THE LOWER EDGES OF ADJACENT FOOTINGS SHALL NOT EXCEED 45 DEGREES WITH THE HORIZONTAL, UNLESS INDICATED OTHERWISE IN THE GEOTECHNICAL REPORT.
- h. ALL SHORING, SHEETING, AND DEWATERING SHALL BE THE TOTAL RESPONSIBILITY OF THE CONTRACTOR. SHEETING AND SHORING SHALL BE DESIGNED BY THE CONTRACTOR'S ENGINEER REGISTERED IN THE PROJECT'S JURISDICTION. ALL SUBMITTALS SHALL BEAR HIS SEAL AND
- THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT ALL EXISTING STRUCTURES, CURBS. STREETS, ETC FROM DAMAGE BY CONSTRUE OF ANY LIQUIDS, SLURRY, SPOILS OR CHEMICALS ON THE SITE EXCEPT AS DIRECTED BY THE OWNER'S REPRESENTATIVE AND APPROVED BY THE DEPARTMENT OF ENVIRONMENTAL RESOURCES OR OTHER AGENCIES HAVING JURISDICTION.

- a. ALL BACKFILL SHALL BE ACCOMPLISHED USING MATERIAL CONSISTING OF BANK RUN GRAVEL CRUSHED STONE AND/OR MATERIAL APPROVED BY THE GEOTECHNICAL ENGINEER, WITH OPTIMUM MOISTURE CONTENT FOR COMPACTING AND SHALL BE FREE OF ANY DEBRIS.
- b. NO BACKFILL MATERIAL SHALL BE PLACED AGAINST FOUNDATION WALLS UNTIL THE UPPER BRACING FLOORS ARE IN PLACE FOR AT LEAST 7 DAYS, OR ADEQUATE BRACING IS INSTALLED.
- c. Where the final grade elevations are approximately equal on both sides of a wall, backfill in lifts to maintain level elevations within 12° on both sides at any time.

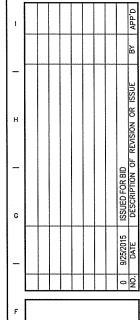
a. REFER TO SPECIFICATIONS AND GEOTECHNICAL REPORT REQUIREMENTS FOR COMPACTED SELECT FILL. REQUIREMENTS CONTAINED IN THE GEOTECHNICAL REPORT ARE PART OF THIS WORK. IN THE PLACEMENT OF COMPACTED SELECT FILL SHALL BE BY AN EXPERIENCED, QUALIFIED

255Ept 2015

GENERAL NOTES CONTINUED ON SO.01



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OF AUTHOR

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CONSULTANTS.

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GENERAL NOTES CONTINUED FROM SO.00

G. CONCRETE:

- a. REINFORCING STEEL CLEAR COVER SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE:
- (1) MILD REINFORCED CONCRETE:

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH

CONCRETE EXPOSED TO EARTH OR WEATHER 6 BARS AND LARGER

1-1/2

- b. DO NOT CUT TIES OR CONTINUOUS BARS TO PROVIDE CLEARANCE FOR EMBEDDED ITEMS OR OTHER OBSTRUCTIONS. INDIVIDUAL BARS AND TIES MAY BE MOVED VERTICALLY UP TO 1-1/2" AS REQUIRED O PROVIDE CLEARANCE FOR EMBEDS, HOOKS, ETC. DO NOT HEAT REINFORCING TO BEND IT
- c. If dowels or vertical bars are cut or severely bent, contractor may be required to remove the concrete back to the previous pour joint and replace the damaged bars AND CONCRETE AT THE CONTRACTORS EXPENSE.
- d. ALL FORWORK, SHORING AND RESHORING SHALL BE DESIGNED BY THE CONTRACTOR'S ENGINEER REGISTERED IN THE PROJECT'S JURISDICTION. ALL SUBMISSIONS SHALL BEAR HIS SEAL AND
- e. NO SLEEVE SHALL BE PLACED THROUGH ANY CONCRETE ELEMENT UNLESS SHOWN ON THE STRUCTURAL DRAWINGS, APPROVED SLEEVING SHOP DRAWINGS OR SPECIFICALLY AUTHORIZED IN WRITING BY THE STRUCTURAL ENGINEER.
- f. CORE DRILLING OF FOUNDATIONS OR SLABS SHALL NOT BE PERMITTED UNLESS AUTHORIZED IN WRITING BY THE STRUCTURAL ENGINEER.
- g. NO SPLICES OF REINFORCEMENT SHALL BE PERMITTED EXCEPT AS DETAILED OR AUTHORIZED BY THE STRUCTUPAL ENGINEER. MAKE BARS CONTINUOUS AROUND CORNERS. WHEN PERMITTED, SPLICES SHALL BE MADE BY CONTINCT TENSION LAP SPLICES, UNLESS OTHERWISE NOTED.
- h. ALL REINFORCING BARS WARKED CONTINUOUS SHALL BE SPLICED WITH A CLASS B TENSION LAP.
- ALL INSERTS AND SLEEVES SHALL BE CAST—IN—PLACE WHENEVER FEASIBLE. DRILLED OR POWDER DRIVEN FASTENERS WILL BE PERMITTED WHEN PROVEN TO THE SATISFACTION OF THE STRUCTURAL ENGINEER THAT THE FASTENERS WILL NOT SPALL THE CONCRETE AND HAVE THE SAME CAPACITY AS
- j. When installing adhesive anchors, the contractor shall take measures to avoid drilling or cutting of any existing reinforcing and destruction of concrete. Holes shall be blown clean prior to placing adhesive anchors.
- k. CHAMFER ALL EXPOSED CONCRETE CORNERS, 3/4" X 3/4" MINIMUM, UNLESS NOTED OTHERWISE ON
- I. FOUNDATIONS AND SLABS SHALL NOT HAVE JOINTS IN A HORIZONTAL PLANE UNLESS SHOWN
- m. WELDED WIRE FABRIC REINFORCEMENT SHALL BE SUPPLIED IN SHEETS. LAP TWO FULL MESH
- n. NO WELDING OF REINFORCING SHALL BE PERMITTED UNLESS SPECIFICALLY CALLED FOR OR
- o. PROVIDE PLASTIC TIPPED BOLSTERS AND CHAIRS AT ALL LOCATIONS WHERE THE CONCRETE SURFACE IS IN CONTACT WITH THE BOLSTERS OR CHAIRS ARE EXPOSED.
- p. FOR SLABS ON GRADE, USE SUPPORTS WITH SAND PLATES OR HORIZONTAL RUNNERS WHERE BASE MATERIAL WILL NOT SUPPORT CHAIR LEGS.

H. MASONRY:

1. GENERAL

- a. PROVIDE STANDARD WEIGHT GALVANIZED HORIZONTAL JOINT REINFORCEMENT IN ALL WALLS AND PARTITIONS AT 16" O.C. UNLESS OTHERWISE SHOWN OR NOTED. PROVIDE ONE PIECE PREFABRICATED UNITS AT 8" O.C. AT ALL WALL CORNERS AND INTERSECTIONS.
- b. PROVIDE MASONRY ANCHORS AT 16' O.C. SET ON COURSING AND ATTACHED TO ALL BEAMS, COLUMNS, PARTITIONS AND WALLS ABUTTING OR EMBEDDED IN MASONRY
- c. PROVIDE BOND BEAMS WITH 2 #4 HORIZONTAL REINFORCEMENT CONTINUOUS IN ALL MASONRY WALLS
- d. ALL PIERS AND PARTITIONS SHALL BE BONDED OR ANCHORED TO ADJACENT WASONRY WALLS PROVIDE TIES TO ADJACENT FLOOR AND ROOF CONSTRUCTION IN ACCORDANCE WITH DETAILS ON
- e. In grouted and/or reinforced masonry walls, use masonry units with cores that align vertically to provide continuous unobstructed cells for grouting and reinforcing steel
- f. LAP SPLICES FOR DEFORMED REINFORCING BARS USED IN MASONRY CONSTRUCTION SHALL BE 48 BAR DIAMETERS.
- g. ALL WALL SECTIONS AND PIERS LESS THAN 4 SQUARE FEET IN CROSS-SECTIONAL AREA TO BE FULLY GROUTED OR OF 100% SOLID MASONRY UNITS.
- h. SUBMIT GROUT MIX DESIGN AND MASONRY UNIT CERTIFICATIONS TO THE STRUCTURAL ENGINEER FOR
- CONTRACTOR SHALL PROVIDE ADEQUATE BRACING AND SUPPORT FOR ALL MASONRY WORK UNTIL PERMANENT CONSTRUCTION IS IN PLACE. j. SEE SPECIFICATIONS AND DETAILS FOR GENERAL CONTROL JOINT REQUIREMENTS. JOINTS ARE TO BE
- k. THE CONTRACTOR SHALL VERIFY ALL OPENINGS BELOW UNITELS INDICATED ARE ADEQUATE TO ACCEPT DOOR FRAMES, LOUVERS, ETC. AS SHOWN ON THE ARCHITECTURAL AND MECHANICAL DRAWINGS. NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER OF ANY DISCREPANCIES PRIOR TO LINTEL
- I. NO OPENINGS SHALL BE PLACED ABOVE ANY LINTEL WITHIN A HEIGHT LESS THAN OR EQUAL TO THE WIDTH OF THE CLEAR OPENING BELOW THE LINTEL, UNLESS SPECIFICALLY SHOWN OR APPROVED BY

THE STRUCTURAL ENGINEER

H. STRUCTURAL STEEL:

1 GENERAL

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- O. ALL SHOP AND FIELD CONNECTIONS SHALL BE MADE WITH HIGH STRENGTH BOLTS OR WELDS. ALL HIGH STRENGTH BOLTS AND NUTS SHALL BE CLEARLY MARKED AS REQUIRED BY AISC SPECIFICATIONS. CONNECTIONS MADE WITH UNMARKED BOLTS AND NUTS WILL BE REJECTED.
- b. PROVIDE ACCESS FOR INSPECTION OF ALL SHOP AND FIELD CONNECTIONS FOR PROPER MATERIALS
- ALTERNATE CONNECTION DESIGNS SHALL ONLY BE ALLOWED WITH PRIOR APPROVAL OF THE STRUCTURAL ENGINEER. IF SUCH APPROVAL IS GRANTED, ALL CONNECTIONS, SPICES AND ERECTION PIECES NOT IN ACCORDANCE WITH CONTRACT DRAWINGS (FABRICATOR REDESION) SHALL BE DESIGNED BY THE FABRICATOR'S ENSINEER REGISTERED IN THE PROJECT'S JURISDICTION. CALCULATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED BEARING THE ENGINEER'S SEAL AND SIGNATURE.
- d. ALL STEEL AT AND BELOW FINISHED GRADE OR FLOOR SLAB SHALL RECEIVE TWO (2) COATS OF BITUMINOUS PAINT - OR 3° MINIMUM CONCRETE COVER.
- e. THE GENERAL CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER OF ANY FABRICATION OR ERECTION ERRORS OR DEVIATIONS AND RECEIVE WRITTEN APPROVAL BEFORE ANY FIELD CORRECTIONS ARE MADE.
- f. Connections shall be selected for reactions as shown on plans and as detailed and scheduled. No connection shall consist of less than two (2) 3/4° dia a325-n bolts or welds developing less than 10,000 pounds. Minimum weld 3/16° fillet. All reactions
- o. UNLESS OTHERWISE NOTED. ALL A325 BOLTS SHALL BE TIGHTENED TO THE "SNUG TIGHT" CONDITION DEFINED AS THE TIGHTINESS ATTAINED BY A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF A MAN USING AN ORDINARY SPUD WRENCH. THE PUES SHOULD BE IN FIRM CONTACT, A CONDITION THAT MEANS THE PUES ARE SOLIDLY SEATED AGAINST EACH OTHER, BUT NOT NECESSARILY IN CONTINUOUS CONTACT.
- h, PERMANENT FRAMING AND FINAL CONNECTION DETAILS ARE SHOWN ON THE DRAWINGS. THE FABRICATOR AND ERECTOR ARE RESPONSIBLE FOR THE DESIGN OF TEMPORARY BRACING AND RECOMMENDED ERECTION PROCEDURES.
- WHEN INSTALLING ADHESME ANCHORS, THE CONTRACTOR SHALL TAKE MEASURES TO AVOID DRILLING OR CUTTING OF ANY EXISTING REINFORCING AND DESTRUCTION OF CONCRETE. HOLES SHALL BE BLOWN CLEAN PRIOR TO PLACING ADHESME ANCHORS.
- . WELDING ELECTRODES, WELDING PROCESS, MINIMUM PREHEAT AND INTERPASS TEMPERATURES SHALL BE IN ACCORDANCE WITH THE ASC AND AMS SPECIFICATIONS. AMY STRUCTURAL STEEL DAMAGED IN WELDING IS TO BE REPLACED OR REINFORRED AS ACCEPTABLE TO THE STRUCTURAL ROMINEER.
- WELDERS SHALL HAVE CURRENT EVIDENCE OF PASSING THE APPROPRIATE AWS QUALIFICATION TESTS. THE ENGINEER MAY REQUEST SUCH EVIDENCE AT ANY TIME DURING THE PROJECT.
- GAS CUTTING TORCHES SHALL NOT BE USED TO CORRECT FABRICATION ERRORS WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER.

J. WOOD:

- a. SEE INTERNATIONAL BUILDING CODE CHAPTER 23 FOR MINIMUM BRACING AND FASTENING.
- b. MEMBERS SHALL BE SET WITH CROWN UP AND HAVE A MINIMUM OF 3° BEARING.
- c. MEMBERS FRAMING TO BEAMS, HEADERS, ETC. SHALL BE SECURED WITH SIMPSON STRONG—TIE FRAMING ANCHORS OR APPROVED EQUAL, UNLESS OTHERWISE NOTED OR SHOWN.
- d. ALL JOISTS AND RAFTERS SHALL BE RIGIDLY BRIDGED AT INTERVALS NOT EXCEEDING 8'-0'.
- A LISE 16D MAILS AT 12" ON CENTER TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES TO JOIN BE SPACED A MINIMUM OF 3/4" FROM TOP AND BOTTOM EDGE.
- f. USE TWO ROWS OF 12D NAILS AT 8" ON CENTER TO JOIN MULTIPLE 2X COLUMNS SO THAT LOAD DISTRIBUTES EQUALLY. ADJACENT NAILS ARE TO BE DRIVEN FROM OPPOSITE SIDES OF THE COLUMN
- q. AND SHALL PENETRATE THE NEXT LAMINATION AT LEAST 1-1/4". NAILS SHALL BE SPACED A MINIMUM OF 3/4" FROM THE EDGES.
- h. ALL WOOD SILL PLATES SHALL BE ANCHORED TO GROUT FILLED CMU OR CONCRETE FOUNDATIONS WITH 1/2" DIA. ANCHORS AT 4"-0" O.C. OR 2 ANCHORS MINIMUM PER MEMBER. ANCHOR BOLTS SHALL BE EMBEDDED A MINIMUM OF 15" INTO MORTAR GROUT AND 8" INTO CAST-IN-PLACE
- ALL BOLTS AND LAG BOLTS SHALL BE FITTED WITH GALVANIZED, MALLEABLE IRON OR STEEL PLATE
- i. CONNECTION DETAILS SHOW ARRANGEMENT OF STRUCTURAL MEMBERS ONLY. DESIGN OF CONNECTIONS SHALL BE THE RESPONSIBILITY OF THE BUILDER/FABRICATOR.

- GLUED-LAWINATED WOOD MANUFACTURER SHALL SUBMIT SHOP DRAWINGS SEALED AND SIGNED BY A
 PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF ARKANSAS TO THE ARCHITECT FOR REVIEW
- 2. ALL GLUED-LAMINATED WOOD TRUSSES, BEAMS, COLUMNS, GIRTS, CONNECTIONS, SHOES, ETC. REQUIRED FOR THE DESIGN OF THE ROOF AND WALL SYSTEM, SHALL BE DESIGNED, FABRICATED, AND SUPPLIED BY A QUALIFIED GLUED-LAMINATED WOOD MANUFACTURER WITH AT LEAST FIVE (5) YEARS OF RELATED EXPERIENCE. ALL MATERIALS AND QUALITY CONTROLS SHALL CONFORM TO ANSI/AITC 190.1-2007.
- 3. PROVIDE CAMBER AT MIDSPAN OF ALL MEMBERS AS INDICATED ON PLANS.
- 4. FURNISH GLUED-LAMINATED WOOD MEMBERS BEARING THE QUALITY MARK OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC) FOR THE GRADE SPECIFIED.
- 5. MEMBERS SHALL BE AITC 'ARCHITECTURAL APPEARANCE GRADE."
- 6. ALL WOOD SHALL HAVE A FACTORY APPLIED COAT OF CLEAR PENETRATING SEALER USING "WOODLIFE" OR 'PENTA SEAL' OR APPROVED EQUAL.
- 7. ALL STEEL HARDWARE SHALL BE SHOP PRIME PAINTED WITH A RUST INHIBITIVE COATING.
- 8. ALL GLUED-LAMINATED WOOD MEMBERS EXPOSED TO WEATHER SHALL BE PRESERVATIVE TREATED.
- 9. ALL FABRICATED GLUED—LAMINATED MEMBERS SHALL COMPLY WITH THE "STANDARD SPECIFICATIONS FOR GLUED—LAMINATED LUMBER" AS ADOPTED BY THE SOUTHERN PINE ASSOCIATION (SPA), THE NATIONAL DESIGN SPECIFICATIONS (NDS), AND THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC)

8 STANDARDS

10. THE CONNECTIONS SHOWN ARE REPRESENTATIVE OF THE DESIRED CONFIGURATION. FINAL DESIGN OF CONNECTIONS SHALL BE THE RESPONSIBILITY OF THE GLUED-LAWINATED SUPPLIERALL CONNECTIONS SHALL BE CONCEALED FROM VIEW. ALL COUNTERSINKS SHALL BE FILLED WITH DOWEL STOCK AND KERF CLITS FILLED WITH SAME SPECIES OF WOOD.

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11. ALL GLUED-LAMINATED MEMBERS SHALL BE INDMDUALLY WRAPPED IN A MOISTURE-RESISTANT NON-STAINING FURNITURE WRAP PAPER FOR THE PROTECTION OF THE FINISH.

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- 12.IF TEMPORARILY STORED, ALL MEMBERS SHALL BE PLACED ON BLOCKS OFF THE GROUND AND SEPARATED FOR AIR CIRCULATION AROUND EACH MEMBER. COVER TOP AND SIDES WITH MOISTURE RESISTANT PAPER.
- 13. PROTECTIVE WRAPPING SHALL REMAIN ON THE MEMBERS UNTIL THE BUILDING IS ENCLOSED AND THE FINISH COATINGS ARE READY TO BE APPLIED.

L. PLYWOOD PANELS:

- 1. FACTORY-MARK EACH CONSTRUCTION PANEL WITH APA TRADEMARK EVIDENCING COMPLIANCE WITH GRADE
- 2. INSTALL PANELS WITH FACE GRAIN PERPENDICULAR TO THE SUPPORTING MEMBERS. UNLESS SHOWN
- 3. FLOOR SHEATHING IN ALL OTHER AREAS SHALL BE GLUED AND NAILED TO ALL SUPPORTS. FASTENERS SHALL BE 10D COMMON NAILS SPACED AT 6° ON CENTER AT PANEL EDGES AND 12° ON CENTER AT
- 4. UNIFSS NOTED OTHERWISE, ROOF SHEATHING SHALL BE ATTACHED WITH 10D COMMON NAILS AT 6' ON CENTER AT SUPPORTED EDGES AND 12° ON CENTER ALONG ALL INTERMEDIATE SUPPORTS.

- 1. WHERE LUMBER OR PLYWOOD IS INDICATED AS "TREATED", COMPLY WITH APPLICABLE REQUIREMENTS OF AMERICAN WOOD PRESERVERS ASSOCIATION (AWPA) STANDARDS U1. MARK EACH TREATED ITEM WITH THE AWPA QUALITY WARK REQUIREMENTS.
- 2. PRESSURE TREAT ABOVE—GROUND ITEMS WITH WATERBOUNE PERSERVATIVES IN ACCORDANCE WITH AWPA STANDARD UT TO THE FOLLOWING REQUIREMENTS:
- a. INTERIOR MEMBERS IN CONTACT WITH

b. EXTERIOR DECKS AND FRAMING

- 3. AFTER TREATMENT, KILN-DRY LUMBER AND PLYWOOD TO A MAXIMUM MOISTURE CONTENT, RESPECTIVELY,
- 4. TREAT INDICATED ITEMS AND WOOD SILLS, SLEEPERS, BLOCKING AND SIMILAR CONCEALED MEMBERS IN CONTACT WITH MASONRY OR CONCRETE

ABBREVIATIONS

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ADHESIVE ANCHORS ADDITIONAL ABOVE FINISH FLOOR ALTERNATE ARCHITECTURAL (KEYED) CONSTRUCTION JOINT CL CLR CMU COL CONT COORD DEG DIA DWLS CENTERLINE CONCRETE MASONRY UNIT COLUMN CONTINUOUS COORDINATE DEGREES DIAMETER DOWELS EA EF EJ ELEV EOS EQ EQUIP EACH EACH FACE EDGE OF SLAB EQUIPMENT EW
EWEF
EWTB
EXT
FD
FF
FFE
FS
FTG
FV
FY
GA
HORIZ
HS
INFO FLOOR DRAIN FINISHED FLOOR FINISHED FLOOR ELEVATION FAR SIDE FIELD VERIFY STEEL YIELD STRENGTH HEADED STUD INTERIOR JOIST BEARING FLEVATION KIPS (KILO-POUNDS) KIPS PER SQUARE INCH LLH LLV LSH LSV WAX MECH LONG LEG HORIZONTAL LONG LEG VERTICAL
LONG SIDE HORIZONTAL
LONG SIDE VERTICAL MANUFACTURER MINIMUM MISCELLANFOLIS NUMBER NEAR SIDE NOT TO SCALE ON CENTER ORIENTED STRAN BOARD PRE-ENGINEERED METAL BUILDING POUNDS PER CURIC FOOT POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH QUANTITY RADIUS ROOF DRAIN rd Reinf Reqd RTU

REINFORCING

(SAWN) CONTROL JOINT

TOP OF TOP AND BOTTOM TONGUE AND GROOVE TOP CHORD EXTENSION

UNLESS NOTED OTHERWISE VERTICAL

REQUIRED ROOF TOP UNIT

SCHEDUR F

STIFFENER

TEMPERATURE

WITHOUT

WORK POINT WELDED WIRE FABRIC

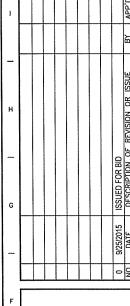
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Leidos Engineering, LLC 3608 N. Steele Blvd, Suite 105 Fayetteville, Arkansas 72703 (479) 442-3060 www.leidos.com



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GENERAL

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		SOILS SPECI	AL INSPEC	CTION				
		INSPECTION						
VERIFICATION AND INSPECTION	IBC 2012	CODE OR	FREQL	JENCY	00005			
AND INSPECTION	REFERENCE	STANDARD REFERENCE	CONTINUOUS	PERIODIC	SCOPE			
BEARING CAPACITY	1705.6; TABLE 1705.6			х	VERIFY THAT MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.			
EXCAVATION	1705.6; TABLE 1705.6			х	VERIFY THAT EXCAVATION IS EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.			
COMPACTED SELECT FILL	1705.6; TABLE 1705.6			Х	PERFORM CLASSIFICATION AND TESTING OF COMPACTED SELECT FILL MATERIALS.			
PLACEMENT AND COMPACTION OF COMPACTED SELECT FILL	1705.6; TABLE 1705.6		x		VERIFY THE USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED SELECT FILL.			
SUBGRADE PREPARATION	1705.6; TABLE 1705.6			х	VERIFY THE SUBGRADE HAS BEEN PREPARED PROPERLY PRIOR TO THE PLACEMENT OF COMPACTED SELECT FILL.			

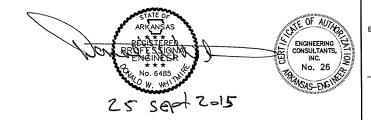
SOILS SPECIAL INSPECTION SCHEDULE

	CAST-	-IN-PLACE CONCE	ETE SPEC	IAL INSP	ECTION			
	INSPECTION							
VERIFICATION AND INSPECTION	IBC 2012	CODE OR	FREQU		SCOPE			
	REFERENCE	STANDARD REFERENCE	CONTINUOUS	PERIODIC				
REINFORCING STEEL	TABLE 1705.3	ACI 318: 1.3.2.c, 3.5, 7.1-7.7		X	INSPECT SIZE, SPACING, POSITION, AND GRADE OF REINFORCING STEEL. VERIFY THAT REINFORCING BARS ARE FREE FROM OIL OR OTHER DELETERIOUS MATERIALS. VERIFY THAT BARS ARE ADEQUATELY TIED AND SUPPORTED ON CHAIRS OR BOLSTERS. MEASURE SPACING BEFORE EVERY POST.			
ANCHOR BOLTS		ACI 318: 1.3.2.c	x		VISUALLY INSPECT SIZE, POSITIONING, AND EMBEDMENT OF ANCHORS INSTALLED PRIOR TO CONCRETE PLACEMENT. VISUALLY INSPECT CONCRETE PLACEMENT AND CONSOLIDATION AROUND ANCHORS.			
CONCRETE DESIGN MIX VERIFICATION	1904.2; TABLE 1705.3	ACI 318: CHAPTER 4, 5.2-5.4		Х	REVIEW CONCRETE BATCH TICKETS AND VERIFY COMPLANCE WITH APPROVED MIX DESIGN. VERIFY THAT WATER ADDED AT THE SITE DOES NOT EXCEED THAT ALLOWED BY THE APPROVED MIX DESIGN. OBTAIN COPY OF ALL TICKETS.			
QUALITY OF STANDARDS OF MATERIALS	1705.3.1	ACI 318: CHAPTER 3		X	WHERE SUFFICIENT DATA OR DOCUMENTATION IS NOT PROVIDED TO SHOW CONFORMANCE TO QUALITY STANDARDS FOR MATERIAL IN CHAPTER 3 OF ACI 318, VERIFY APPROPRIATE TESTING HAS BEEN DONE.			
CONCRETE SAMPLING AND TESTING	TABLE 1705.3	ACI 318: 1.3.2.a, 5.6, 5.8; ASTM C31; ASTM C172	х		TEST SLUMP, AIR CONTENT, AND TEMPERATURE AT TIME THAT SPECIMENS ARE TAKEN FOR CONCRETE STRENGTH TESTS.			
CONCRETE PLACEMENT	TABLE 1705.3	ACI 318: 5.9, 5.10	X		INSPECT PLACEMENT OF CONCRETE. VERIFY THAT CONCRETE CONVEYANCE AND DEPOSITING AVOIDS SEGREGATION AND CONTAMINATION. VERIFY THAT CONCRETE IS PROPERLY CONSOLIDATED.			
CONCRETE CURING AND TEMPERATURE PROTECTION TECHNIQUES	TABLE 1705.3	ACI 318: 5.11-5.13; ACI 305; ACI 306		Х	INSPECT CURING TECHNIQUES, COLD WEATHER PROTECTION, AND HOT WEATHER PROTECTION			
FORMWORK	TABLE 1705.3	ACI 318: 6.1		X	INSPECT FORMWORK FOR SHAPE, LOCATION, AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.			

CAST-IN-PLACE CONCRETE SPECIAL INSPECTION SCHEDULE

		MASON	RY LEVEL B	SPECIAL	INSPECTI	ON
					INSPECTION	
	RIFICATION	REFERENCE F		FREQU	JENCY	
AND INSPECTION		TMS 402/ ACI 530/ASCE 5	TMS 602/ ACI 530.1/ASCE 6	CONTINUOUS	PERIODIC	SCOPE
COMPLIANCE WITH REQUIRED INSPECTIONS AND SUBMITTALS			ARTICLE 1.5		х	VERIFY THE COMPLIANCE WITH ALL THE REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED SUBMITTALS.
	PROPORTIONS OF SITE—PREPARED MORTAR		ARTICLE 2.1, 2.6A		x	VERIFY THE PROPORTIONS OF SITE-PREPARED MORTAR FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS.
AS MASONRY CONSTRUCTION BEGINS	PLACEMENT OF MASONRY UNITS AND CONSTRUCTION OF MORTAR JOINTS		ARTICLE 3.3B		X	VERIFY THE PLACEMENT OF MASONRY UNITS AND THE CONSTRUCTION OF MORTAR JOINTS FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS.
	REINFORCEMENT, CONNECTORS, AND ANCHORAGES		ARTICLE 3.4, 3.6A		x	VERIFY THE LOCATION OF REINFORCEMENT, CONNECTORS, ANCHORS, WALL TIES, AND VENEER ANCHORS FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS.
	GROUT SPACE		ARTICLE 3.2D, 3.2F		X	VERIFY THAT THE GROUT SPACE IS FREE OF MORTAR DROPPING, DEBRIS, LOOSE AGGREGATES, AND ANY MATERIAL DELETERIOUS TO MASONRY GROUT, VERIFY CLEANOUTS ARE PROVIDE ACCORDING TO ARTICLE 3.2F.
0000 70	GRADE, TYPE, AND SIZE OF REINFORCEMENT, ANCHOR BOLTS, AND ANCHORAGE	SECTION 1.6	ARTICLE 2.4, 3.4		х	VERIFY THE GRADE, TYPE, AND SIZE OF REINFORCEMENT, JOINT REINFORCEMENT, ANCHOR BOLTS, ANCHORS, WALL TIES, AND VENEER ANCHORS FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS.
PRIOR TO GROUTING	PLACEMENT OF REINFORCEMENT, ANCHOR BOLTS, AND ANCHORAGE	SECTION 1.6	ARTICLE 3.2E, 3.4, 3.6A		X	VERIFY THAT REINFORCEMENT, JOINT REINFORCEMENT, ANCHOR BOLTS, ANCHORS, WALL TIES, AND VENEER ANCHORS HAVE BEEN PLACED ACCORDING TO THE CONSTRUCTION DOCUMENTS.
	PROPORTIONS OF SITE—PREPARED GROUT		ARTICLE 2.6B		х	VERIFY THE PROPORTIONS OF SITE-PREPARED GROUT FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS.
	CONSTRUCTION OF MORTAR JOINTS		ARTICLE 3.3B		х	VERIFY THE CONSTRUCTION OF MORTAR JOINTS FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS.
	SIZE AND LOCATION OF STRUCTURAL ELEMENTS		ARTICLE 3.3F			VERIFY THE LOCATION AND ALIGNMENT TOLERANCES OF STRUCTURAL ELEMENTS FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS.
	TYPE, SIZE, AND LOCATION OF ANCHORS	SECTION 1.16.4.3, 1.17.1			x	VERIFY THE TYPE; SIZE; AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION.
DURING	COLD WEATHER PROTECTION OF MASONRY		ARTICLE 1.8C		x	INSPECT PROCEDURES FOR PROTECTION DURING COLD WEATHER (AMBIENT AIR TEMPERATURES BELOW 40 DEGREES FAHRENHEIT).
CONSTRUCTION	HOT WEATHER PROTECTION OF MASONRY		ARTICLE 1.8D		х	INSPECT PROCEDURES FOR PROTECTION DURING HOT WEATHER (AMBIENT AIR TEMPERATURES ABOVE 90 DEGREES FAHRENHEIT).
	GROUT PLACEMENT		ARTICLE 3.5	х		VERIFY GROUT PLACEMENT TO ENSURE COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS.
	WELDING OF REINFORCEMENT	SECTION 2.1.7.7.2, 3.3.3.(c), 8.3.3.4(b)		х		VERIFY WELDING OF REINFORCEMENT FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS.
OBSERVATION O PREPARATION O GROUT SPECIME	F REQUIRED		ARTICLE 1.4B.2.b.3	х		VERIFY THE PREPARATION OF GROUT SPECIMENS ARE IN ACCORDANCE WITH ASTM C1019.
OBSERVATION O PREPARATION O MORTAR SPECIM	F REQUIRED			х		VERIFY THE PREPARATION OF MORTAR SPECIMENS ARE IN ACCORDANCE WITH ASTM C780.
OBSERVATION OF THE PREPARATION OF REQUIRED PRISM SPECIMENS			ARTICLE 1.4B.3, 1.4B.4	х		VERIFY THE PREPARATION OF PRISM SPECIMENS ARE IN ACCORDANCE WITH ASTM C1532 AND C1314.

MASONRY LEVEL B SPECIAL INSPECTION SCHEDULE





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		WOOD SPECI	AL INSPE	CTION	
			IN	SPECTION	
VERIFICATION AND INSPECTION	IBC 2012	CODE OR	FREQU	JENCY	COOPE
AND INSI CONON	REFERENCE	STANDARD REFERENCE	CONTINUOUS	PERIODIC	SCOPE
WOOD SHOP FABRICATION AND FIELD ERECTION					THE LISTED VERIFICATION AND INSPECTION ITEMS APPLY TO BOTH SHOP FABRICATION AND FIELD ERECTION.
SPECIFIED SIZE, GRADE, AND TYPE OF WOOD MEMBERS				Х	VERIFY THE CONDITION, SIZE, LOCATION, SPACING GRADE, AND TYPE OF SAWN LUMBER, GLUE LAMINATED LUMBER, LAMINATED VENEER LUMBER, AND PLYMOOD PANEL MEMBERS FOR COMPLANCE WITH CONSTRUCTION DOCUMENTS.
TYPE, SIZE, AND SPACING OF ANCHORS AND CONNECTORS				x	VERIFY THE TYPE, SIZE, SPACING, AND LOCATION OF FRAMING ANCHORS, HANGERS, NAILS, SCREWS, BOLTS, ETC FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS.
BRIDGING, BLOCKING, AND BRACING				х	VERIFY THAT STRUCTURAL BRIDGING, BLOCKING, AND BRACING IS IN COMPLIANCE WITH CONSTRUCTION DOCUMENTS.
CUTTING AND NOTCHING OF WOOD MEMBERS				х	VERIFY THAT CUTTING AND NOTCHING OF WOOD MEMBERS IS IN COMPLIANCE WITH CONSTRUCTION DOCUMENTS.
INSPECTION OF BOLTED CONNECTIONS		NDS: SECTION A.6		х	VERIFY THAT THE CONNECTED MATERIALS HAVE BEEN DRAWN TOGETHER AND PROPERLY SNUGGED. VISUALLY INSPECT THAT THE WOOD UNDER THE WASHERS HAS NOT BEEN CRUSHED.
CARE OF MATERIAL		NDS: SECTION A.1		х	VERIFY THAT MATERIALS ARE HANDLED AND COVERED AS TO PREVENT MARRING AND MOISTURE ABSORPTION FROM SNOW OR RAIN.
HIGH-LOAD DIAPHRAGMS	1705.5.1			x	VERIFICATION OF WOOD STRUCTURAL PANEL SHEATHING IS OF THE GRADE AND THICKNESS SHOWN ON THE CONSTRUCTION DRAWINGS. VERIFICATION OF THE NOMINAL SIZE OF FRAMING MEMBERS AT ADDININING PANEL EDGES, THE NAIL DIAMETER AND LENGTH, THE NUMBER OF FASTENERS LINES AND THAT THE SPACING BETWEEN FASTENERS IN EACH LINE AND AT THE EDGE OF THE MARGINS AGREES WITH THE CONSTRUCTION DRAWINGS.
FASTENING OF COMPONENTS WITHIN LATERAL-FORCE- RESISTING SYSTEM	1705.10.1; 1705.11.2			х	VERIFY NAILING, BOLTING, ANCHORING, AND OTHER FASTENING OF COMPONENTS WITHIN THE LATERAL-FORCE-RESISTING SYSTEM INCLUDING WOOD SHEAR WALLS, WOOD DIAPHRAGM, DRAG STRUTS, BRACES, SHEAR PANELS, AND HOLD DOWN ANCHORS ARE IN COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS.

WOOD SPECIAL INSPECTION SCHEDULE SCALE: NTS

POST-INSTALLED ANCHORS SPECIAL INSPECTION										
	INSPECTION									
VERIFICATION AND INSPECTION	IBC 2012	CODE OR	FREQL	JENCY	20005					
AND INSPECTION	REFERENCE	STANDARD REFERENCE	CONTINUOUS	PERIODIC	SCOPE					
ADHESIVE ANCHORS	1703.4; 1705.1.1.3	ICC EVALUATION REPORT	х		PRIOR TO INSTALLATION OF ADHESNE ANCHORS, VERIFY PROPOSED ANCHORS CONFORM TO THE CONSTRUCTION DOCUMENTS. DURING INSTALLATION OF ADHESNE ANCHORS; VERIFY ANCHOR PRODUCT NAME, TYPE, AND DIMENSIONS; HOLE DIMENSIONS; COMPLIANCE WITH DRILL BIT REQUIREMENTS; BASE MATERIAL TYPE; BASE MATERIAL COMPRESSIVE STRENGTH; BASE MATERIAL MEMBER THICKENESS; CLEANLINESS OF THE HOLE AND ANCHOR; ADHESNE EXPIRATION DATE; ANCHOR EMBEDMENT; TICHTENING TORQUE; AND ADHERNEC TO THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.					

POST-INSTALLED ANCHORS
SPECIAL INSPECTION SCHEDULE

STRUCTURAL STEEL SPECIAL INSPECTION							
VERIFICATION USB 2000 CODE OD FREQUENCY							
AND INSPECTION BC 20		IBC 2012 REFERENCE	CODE OR STANDARD REFERENCE	CONTINUOUS	PERIODIC	SCOPE	
STRUCTURAL S				CONTINUOUS	FEMODIC	THE LISTED VERIFICATION AND INSPECTION ITEMS APPLY TO BOTH SHOP FABRICATION AND FIELD	
MATERIAL VERII STRUCTURAL S	FICATION OF	1705.2; 2203.1	ASTM A6 OR ASTM A568; AISC 360: SECTION A3.1a		X	ERECTION. REVIEW IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS. REVIEW MANUFACTURER'S CERTIFIED MILL TEST REPORTS.	
MATERIAL VERI HIGH-STRENGT NUTS, AND WA	H BOLTS, SHERS		APPLICABLE ASTM MATERIAL STANDARDS; AISC 360: SECTION A3.3, N5.6		x	REVIEW IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS. REVIEW MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	
STORAGE OF E WASHERS, AND FASTENER COM	OTHER		AISC 360: SECTION N5.6		x	VERIFY PROPER STORAGE IS PROVIDED FOR BOLTS, NUTS, WASHERS, AND OTHER FASTENER COMPONENTS.	
inspection of High—strengt Bearing—type	H BOLTING: CONNECTIONS		AISC 360: SECTION M2.5, N5.6		Х	VERIFY THAT THE CONNECTED MATERIALS HAVE BEEN DRAWN TOGETHER AND PROPERLY SNUGGED. VISUALLY INSPECT ALL CONNECTIONS.	
DOCUMENTATIONS	N OF BOLTED		AISC 360: SECTION N5.6	Х		DOCUMENT ACCEPTANCE OR REJECTION OF EACH BOLTED CONNECTION.	
WELDING PROC	EDURES		AISC 360: SECTION A3.5, N5.4; AWS D1.1: SECTION 6.3		Х	VERIFY THAT ALL WELDING OPERATIONS ARE PERFORMED IN ACCORDANCE WITH THE WELDING PROCEDURE SPECIFICATION.	
WELDER QUALI	FICATIONS		AISC 360: SECTION N5.4; AWS D1.1: SECTION 6.4		Х	REVIEW WELDER QUALIFICATION CERTIFICATES.	
MATERIAL VERI WELD FILLER I			AISC 360: SECTION A3.5, N5.4;		х	REVIEW IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATIONS IN THE APPROVED CONSTRUCTION DOCUMENTS.	
THE THE STATE OF T	FIT UP OF		AWS D1.1: SECTION 6.2 AISC 360: SECTION			REVIEW MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED. VERIFY JOINT PREPARATION, DIMENSIONS,	
INSPECTIONS PRIOR TO	WELDS		N5.4; AWS D1.1: CHAPTERS		X	CLEANLINESS, TACKING, AND BACKING	
WELDING	ACCESS HOLES		5 AND 6		X	VERIFY CONFIGURATION AND FINISH OF ACCESS HOLES.	
	CRACKED TACK WELDS ENVIRONMENTAL				X	VERIFY WELDING DOES NOT OCCUR OVER CRACKED TACK WELDS. VERIFY WIND SPEED IS WITHIN LIMITS, AMBIENT	
INSPECTIONS DURING WELDING	WELDING TECHNIQUES		AISC 360: SECTION N5.4; AWS D1.1: CHAPTERS		X	TEMPERATURE, AND PRECIPITATION. VERIFY INTERPASS AND FINAL CLEANING, EACH PASS IS WITHIN PROFILE LIMITATIONS, AND EACH	
TELDING	CONTROL AND HANDLING OF WELDING CONSUMABLES		5 AND 6		х	PASS MEETS QUALITY REQUIREMENTS. VERIFY PACKAGING AND EXPOSURE CONTROL OF WELDING CONSUMABLES.	
	WELDS CLEANED				х	VERIFY THE WELDS HAVE BEEN CLEANED IN ACCORDANCE WITH AWS D1.1 SECTION 5.30.	
	SIZE, LENGTH, AND LOCATION OF WELDS			x		VERIFY THE SIZE, LENGTH, AND LOCATION OF WELDS FOR COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS.	
	VISUAL INSPECTION OF WELDS		AISC 360: SECTION	х		VISUALLY INSPECT ALL WELDS PER AWS D1.1 TABLE 6.1.	
INSPECTIONS AFTER WELDING	ARC STRIKES		N5.4; AWS D1.1: CHAPTERS 5 AND 6	х		VERIFY THAT CRACKS AND BLEMISHES CAUSED BY ARC STRIKES OUTSIDE THE AREA OF PERMANENT WELDS HAVE BEEN GROUND TO A SMOOTH CONTOUR AND CHECKED TO ENSURE SOUNDNESS.	
	k-area			Х		VISUALLY INSPECT THE WEB k-AREA FOR CRACKS WITHIN 3" OF THE WELD.	
	REMOVAL OF BACKING AND WELD TABS			Х		VERIFY THE REMOVAL OF BACKING AND WELD TABS	
	REPAIR ACTIVITIES			Х		VERIFY REPAIR ACTIVITIES TO WELDS ARE IN ACCORDANCE WITH AWS D1.1 SECTION 5.26.	
COMPLETE AN PENETRATION FOR STRUCTUI CATEGORY II	GROOVE WELDS		AISC 360: SECTION N5.5 ASTM E164; AWS D1.1: CHAPTER 6		x	USE ULTRASONIC TESTING ON 10 PERCENT OF GROOVE WELDS. INCREASE RATE OF TESTING PER AISC 360: SECTION NS.51 IF GREATER THAN 5 PERCENT OF	
SINGLE-PASS	FILLET WELDS		AND U.I. GRAPIER D			WELDS TESTED HAVE UNACCEPTABLE DEFECTS.	
LESS THAN OF 1/2 THAN OF THE	R EQUAL TO		AWS D1.1: SECTION 6.14		Х	TEST ANY WELD THAT APPEARS QUESTIONABLE. DOCUMENT ACCEPTANCE OR REJECTION OF EACH	
JOINT OR ME			AISC 360: SECTION N5.4	X		WELDED JOINT OR MEMBER.	
INSPECTION O JOINT DETAILS	F STEEL FRAME		AISC 360: SECTION N5.7		X	VERIFY DETAILS SUCH AS BRACING AND STIFFENING, MEMBER LOCATIONS, AND PROPER APPLICATION OF JOINT DETAILS AT EACH CONNECTION FOR COMPLANCE WITH THE CONSTRUCTION DOCUMENTS.	
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STRUCTURAL STEEL SPECIAL INSPECTION SCHEDULE SCALE: NTS



ENGINEERING PARTIES NO. 26 NO.

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9/25/2015 AS SHOWN SCALE LEIDOS PROJECT NUMBER 313841 SHEET S0.03 85 OF 114

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APPROVED BY	ECI

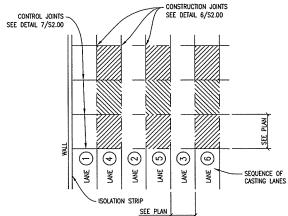
COLUMN FOOTING SCHEDULE DIMENSIONS REMARKS REINFORCEMENT MARK WIDTH LENGTH DEPTH 4'-0" F-1 4'-0" TOP & BOTTOM 2'-0" 4 #5'S EACH WAY 5 #6'S LONG #5'S 0 12" OC SHORT 4'-0" SEE PLAN 2'-0" TOP & BOTTOM F-3 5'-0" 5'-0" 2'-0" 5 #5'S EACH WAY TOP & BOTTOM F-4 3'-0" 3'-0" 4'-0" 3 #5'S EACH WAY 3 MATS

3

 $\frac{\text{NOTES:}}{1.}$ Footings with 3 mats shall have a mat top, middle, and bottom.

COLUMN FOOTING SCHEDULE

SCALE: NTS CONSTRUCTION JOINTS



NOTES:

1. LANES SHALL BE CAST IN SEQUENCE INDICATED.

1. LARES STALL BE CAST IN SECUENCE INDICATELY.
2. LARES TO BE DIMOED BY CONSTRUCTION JOINTS AND SUBDMIDED BY CONTROL JOINTS AS SHOWN ON PLAN.
3. IN AREAS WHERE COLUMNS DO NOT OCCUR PROVIDE CONSTRUCTION AND/OR CONTROL JOINTS AS SHOWN.
4. ALLOW 48 HOURS BETWEEN ADJACENT LANE PLACEMENT.

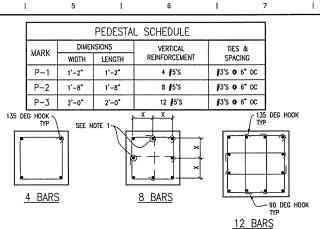
5 SEQUENCE OF PLACING SLAB ON GRADE

COLUMN BASE PLATE SCHEDULE										
MARK	BAS	SE PLATE SI	ZE	A	NCHOR BO	LT	DEMPKS			
MAKK	WIDTH	LENGTH	THICK	NO	SIZE	*LENGTH	REMARKS			
BP-1	1'-6"	1'-8"	1"	4	1"	1'-4"				

. LENGTH INDICATED IS MINIMUM EMBEDMENT

SCALE: NTS

COLUMN BASE PLATE SCHEDULE



NOTES:

1. THESE BARS MUST BE TIED AS SHOWN BY DASHED LINES WHEN X DISTANCE IS GREATER THAN 6".

2. MINIMUM CONCRETE COVER IS 15" TO TIES.

3. PROVIDE 135_DEG_HOOKS FOR SEISMIC DESIGN CATEGORIES C, D, AND E. ALTERNATE 135 DEG

2 PEDESTAL SCHEDULE

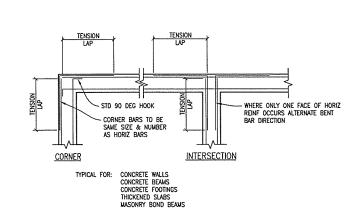
SCALE: NTS

GRADE 60 BARS		CON	CREIL	SIRE	NGTH,	PSI
		300	00	40	00	
BAR SI	CENTER TO CENTER BAR SPACING ZE	LESS Than 4db	4db OR MORE	LESS THAN 4db	4db OR MORE	4db
117	TOP BAR	3'-6"	2'-4"	3'-0"	2'-0"	1½"
#3	OTHER BAR	2'-8"	1'-9"	2'-4"	1'-6"	1/2
#4	TOP BAR	4'-8"	3'-1"	4'-0"	2'-8"	0"
	OTHER BAR	3'-7"	2'-4"	3'-1"	2'-1"	2*
#5	TOP BAR	5'-9"	3'-10"	5'-0"	3'-4"	2½"
ĦΟ	OTHER BAR	4'-5"	3,-0,	3'-10"	2'-7"	42
#6	TOP BAR	6'-11"	4'-7"	6'-0"	4'-0"	3"
#0	OTHER BAR	5'-4"	3'-7"	4'-7*	3'-1"	٥
#7	TOP BAR	10'-1"	6'-9"	8'-9"	5'-10"	3½"
	OTHER BAR	7'-9"	5'-2"	6'-9"	4'-6"	JP2
#8	TOP BAR	11'-7"	7'-9"	10'-0"	6'-8"	4"
	OTHER BAR	8'-11"	5'-11"	7'-8"	5'-2"	4

NOTES:

1. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BARS.

2. MINIMUM COVER FOR BARS SPACED 405 OR MORE IS TO BE GREATER THAN 45. OTHERWISE, USE LENGTH



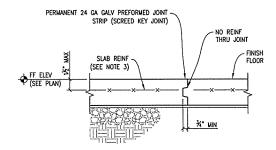
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TYPICAL CORNER BAR DETAIL SCALE: NTS

CLASS B TENSION LAP SPLICE LENGTH FOR BEAM, SLAB, WALL AND CONCRETE JOIST REINFORCING BARS

FOR LESS THAN 4db SPACING.



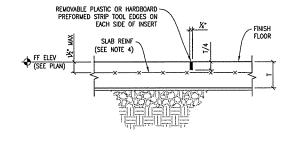
NOTES:

1. CONSTRUCTION JOINT MAY REPLACE CONTROL JOINT.

2. REFER TO ARCHITECTURAL DETAILS FOR JOINT FILLER WHERE REQUIRED.

3. PROVIDE SUPPORT CHAIRS TO HOLD SLAB REINF IN POSITION DURING CONCRETE PLACEMENT.

6 SLAB ON GRADE CONSTRUCTION JOINT



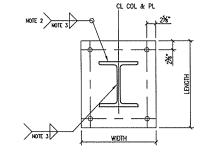
NOTES:
1. FILL JOINT WITH SEALANT AFTER SLAB HAS BEEN CURED.
2. CONSTRUCTION JOINT MAY REPLACE CONTROL JOINT.
3. SAWCUT JOINTS ARE PERMITTED WITH THE APPROVAL OF THE OWNER'S PROJECT MANAGER ONLY. IF APPROVAD, SAWCUT JOINTS USING A "SOFF-CUT" MACHINE OR EQUAL IMMEDIATELY AFTER FINISHING SLAB.
4. PROVIDE SUPPORT CHAIRS TO HOLD SLAB REINF IN POSITION DURING COMPORTE PLAFFLER'S PLAFFLER'S.

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CONCRETE PLACEMENT.

SLAB ON GRADE CONTROL JOINT FOR TYPICAL SLABS

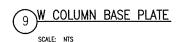


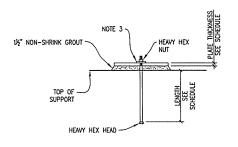
NOTES:

1. SEE SCHEDULE FOR PLATE DIMENSIONS & BOLT SIZES.

2. WELD AS REQUIRED TO DEVELOP FULL MOMENT CAPACITY OF COLUMN.

3. MINIMUM WELD TO BE %6" FILLET.





NOTES:

1. SEE SCHEDULE FOR BOLT SIZE.

2. LEVEL BASE PLATE WITH SHIM STACKS. LEVELING PLATE MAY BE USED AT CONTRACTORS OPTION WITH ENGINEERS APPROVAL. THE USE OF LEVELING NUTS ARE NOT PERMITTED.

3. PROVIDE PLATE WASHER AT ALL OVERSIZED HOLES AS SHOWN IN TABLE 2.3 OF ASIC DESIGN GUIDE 1, 2nd EDITION. PLATE WASHER TO BE BEFORED TO PLASE ONLY WITH LEVEL WITH A SHEET WELL THE PLATE WASHER TO BE WELLEN TO PLASE ONLY WITH LEVEL WITH A SHEET WELL THE PLATE OF THE PLATE WASHER TO BE WELLEN TO PLASE OF THE WITH LEVEL WITH LEVEL WELL THE PLATE OF THE PL

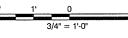
WASHER TO BE WELDED TO BASE PLATE WITH X" FILLET WELD

10 BASE PLATE SETTING DETAIL

SCALE: NTS



25 SEPT 2013



9/25/2015 SCALE AS SHOWN LEIDOS PROJECT NUMBER 313841 SHEET REV S2.00 89 OF 114

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ARKANSAS HIGHWAY & TRANSPORTATION DEPARTMENT ARKANSAS WELCOME CENTER RED RIVER

DESIGNED BY

DRAWN BY

CHECKED BY

APPROVED BY

leidos

Leidos Engineering, LLC

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Fayetteville, Arkansas 72703

(479) 442-3060 www.leidos.com

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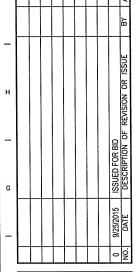
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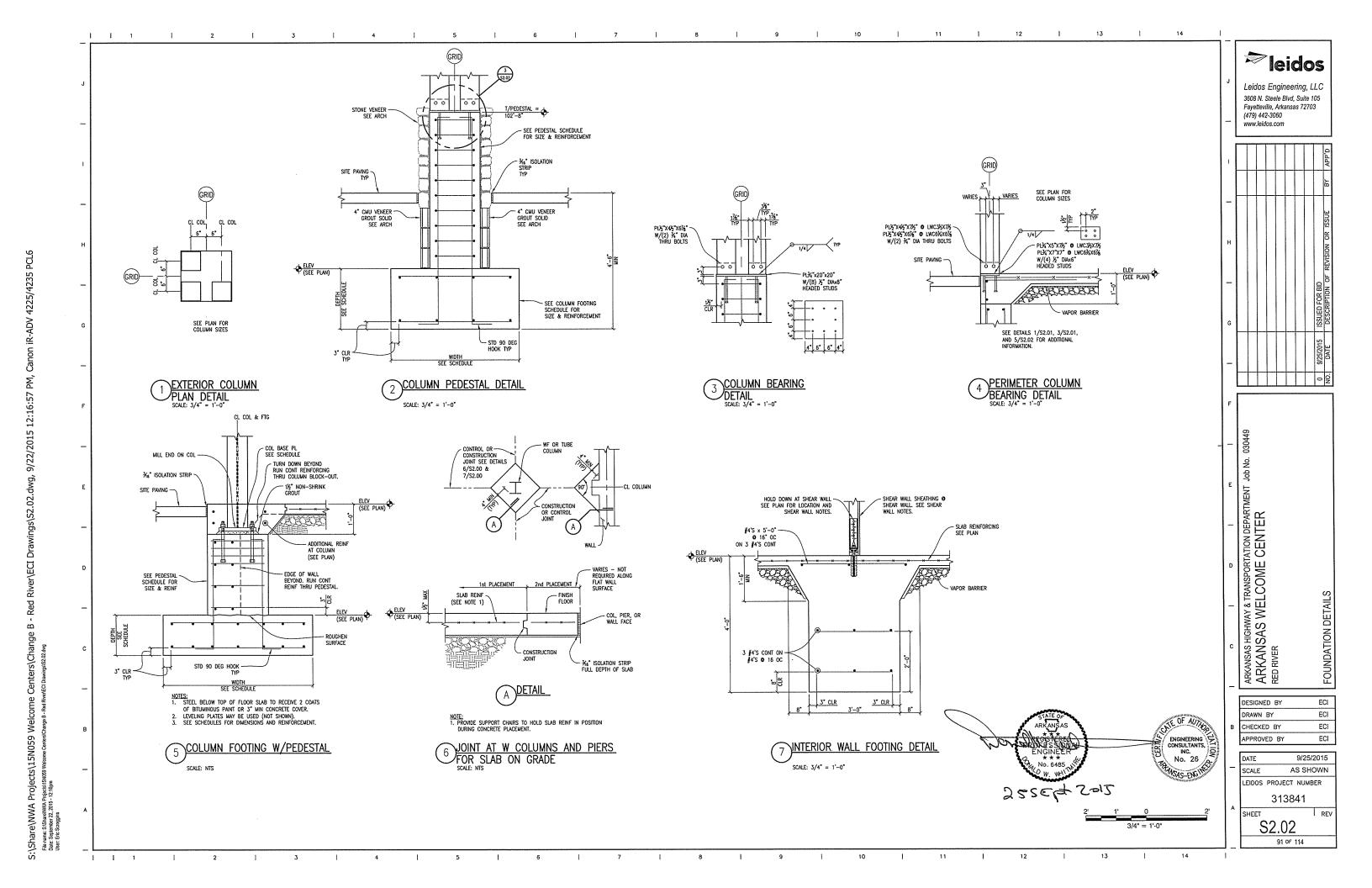
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90 OF 114			



WOOD STUDS

3

REMARKS

OSB ON WEST SIDE OF WALL

OSB ON EAST SIDE OF WALL

OSB ON EAST SIDE OF WALL

SCALE: NTS

WOOD SHEAR WALLS:

1. WOOD SHEAR WALLS DESIGNATED ON PLAN ARE PART OF THE LATERAL FORCE RESISTING

SYSTEM.
2. WOOD SHEAR WALLS ARE TO EXTEND FROM SLAB ON GRADE TO ROOF DECK UNLESS NOTED

OTHERWISE.

3. ALL OSB FOR SHEAR WALLS SHALL BE 15½ "THICK SPAN RATED 32/16. OSB TO BE ON ONE SIDE OF WOOD STUDS.

4. OSB SHEATHING SHALL BE ATTACHED TO WOOD STUDS WITH 8d NAILS PROVIDING 1½" PENETRATION INTO WOOD STUDS.

5. INDIMODIAL OSB PANEL EDGES TO BE BLOCKED.

6. FASTENER SPACING AT SHEAR WALL BOUNDARY SHALL BE 6" ON CENTER MAXIMUM UNO.

7. FASTENER SPACING AT ALL INDIMODIAL OSB PANEL EDGES SHALL BE 6" ON CENTER MAXIMUM UNO.

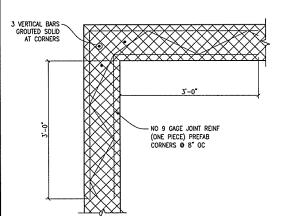
7. FASTENER SPACING AT ALL INTERMEDIATE FRAMING MEMBERS SHALL BE 12" ON CENTER MAXIMUM.

8. FASTENER SPACING FOR ALL INTERMEDIATE FRAMING MEMBERS SHALL BE 12" ON CENTER MAXIMUM.

9. PROVIDE HOLD DOWN ANCHORS AT EACH END OF EACH SHEAR WALL. ANCHOR SHALL BE HOUS-SDS2.5 BY SUMPSON STRONG-IE WITH (1) %" DIA SET EPOXY-THE BY SIMPSON STRONG-THE 9" NITO CONCRETE. NOTED AS HO ON PLAN. CENTER LINE OF ANCHOR ROD SHALL BE 3" FROM THE EDGE OF SLAB.

10. PROVIDE TWO (2) FULL HEIGHT STUDS AT EACH HOLD DOWN.

SHEAR WALL SCHEDULE



2

SHEAR WALL SCHEDULE

8'-9"

10'-9"

11'-9"

MARK

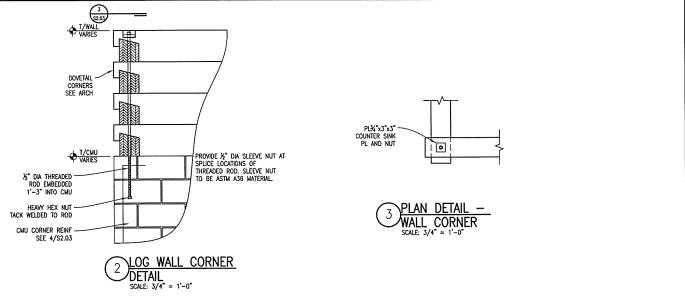
SHEAR WALL 1

SHEAR WALL 2

SHEAR WALL 3

LENGTH (FT)

MASONRY WALL CORNER REINFORCING DETAIL
SCALE: NTS



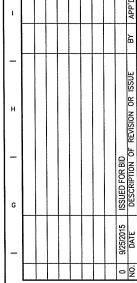
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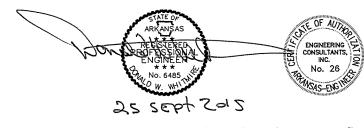
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ARKANSAS HIGHWAY & TRANSPORTATION DEPARTMENT JOB NO. USU449 ARKANSAS WELCOME CENTER RED RIVER

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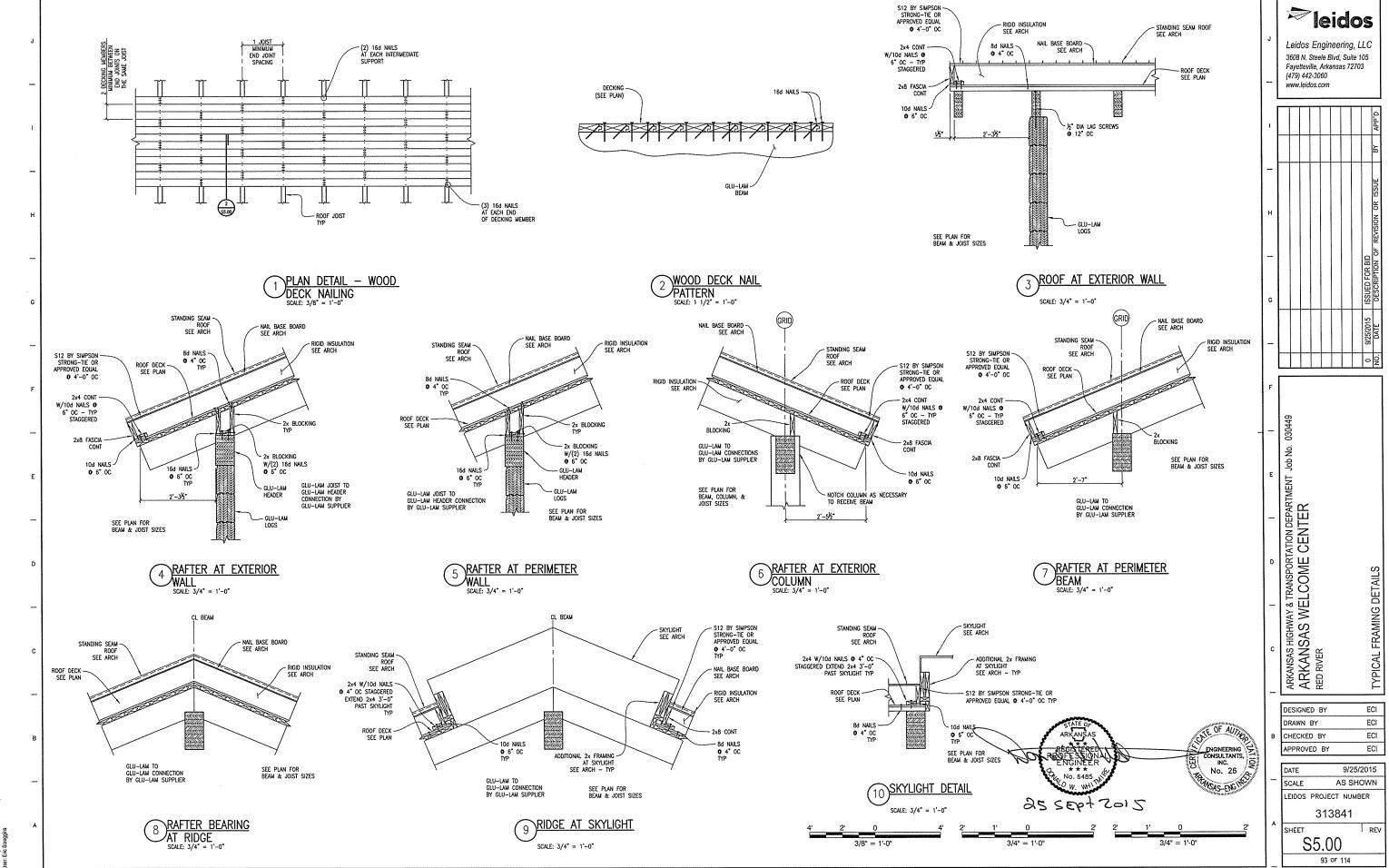
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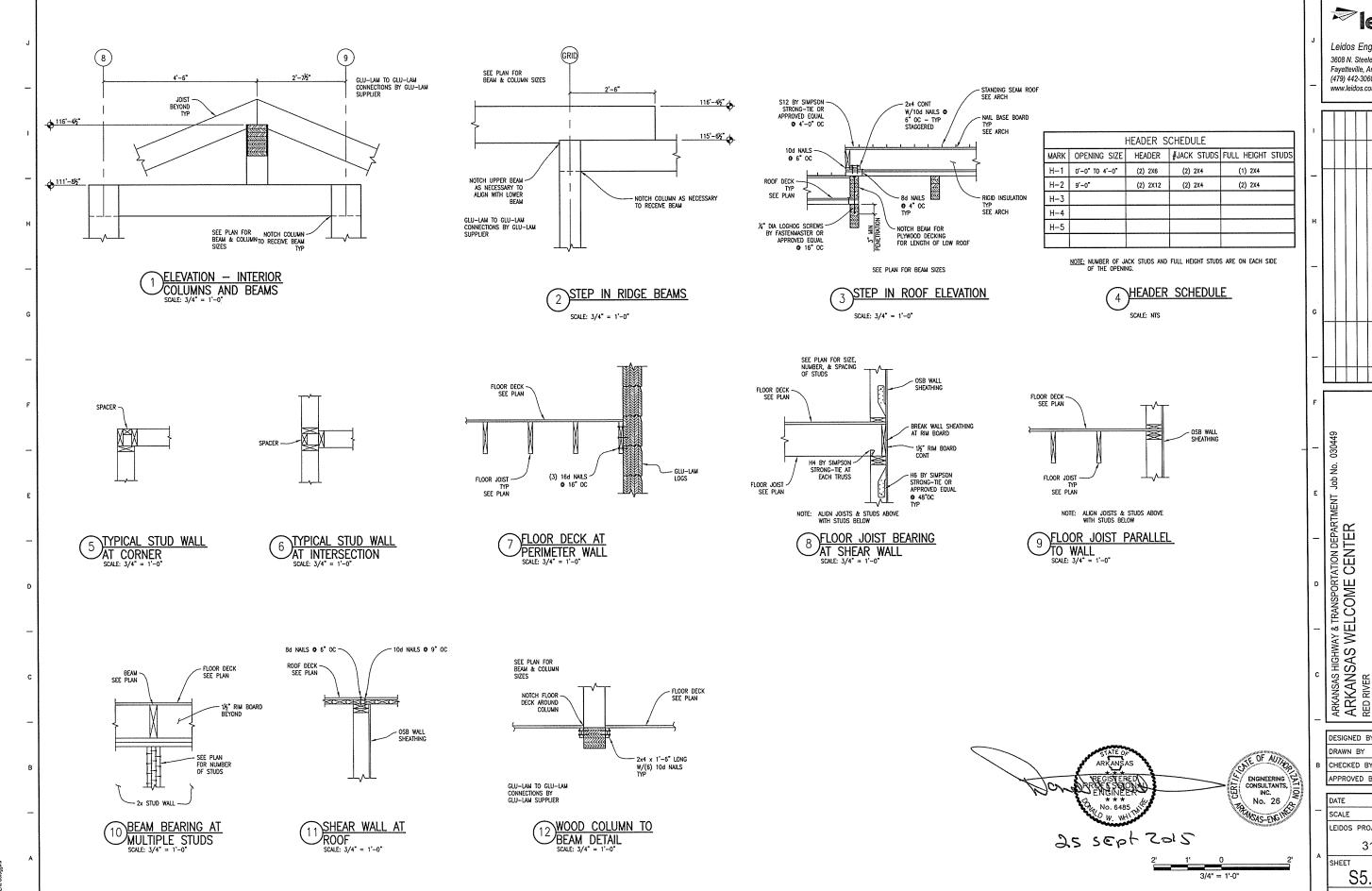
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ARKANSAS WELCOME CENTER
RED RIVER

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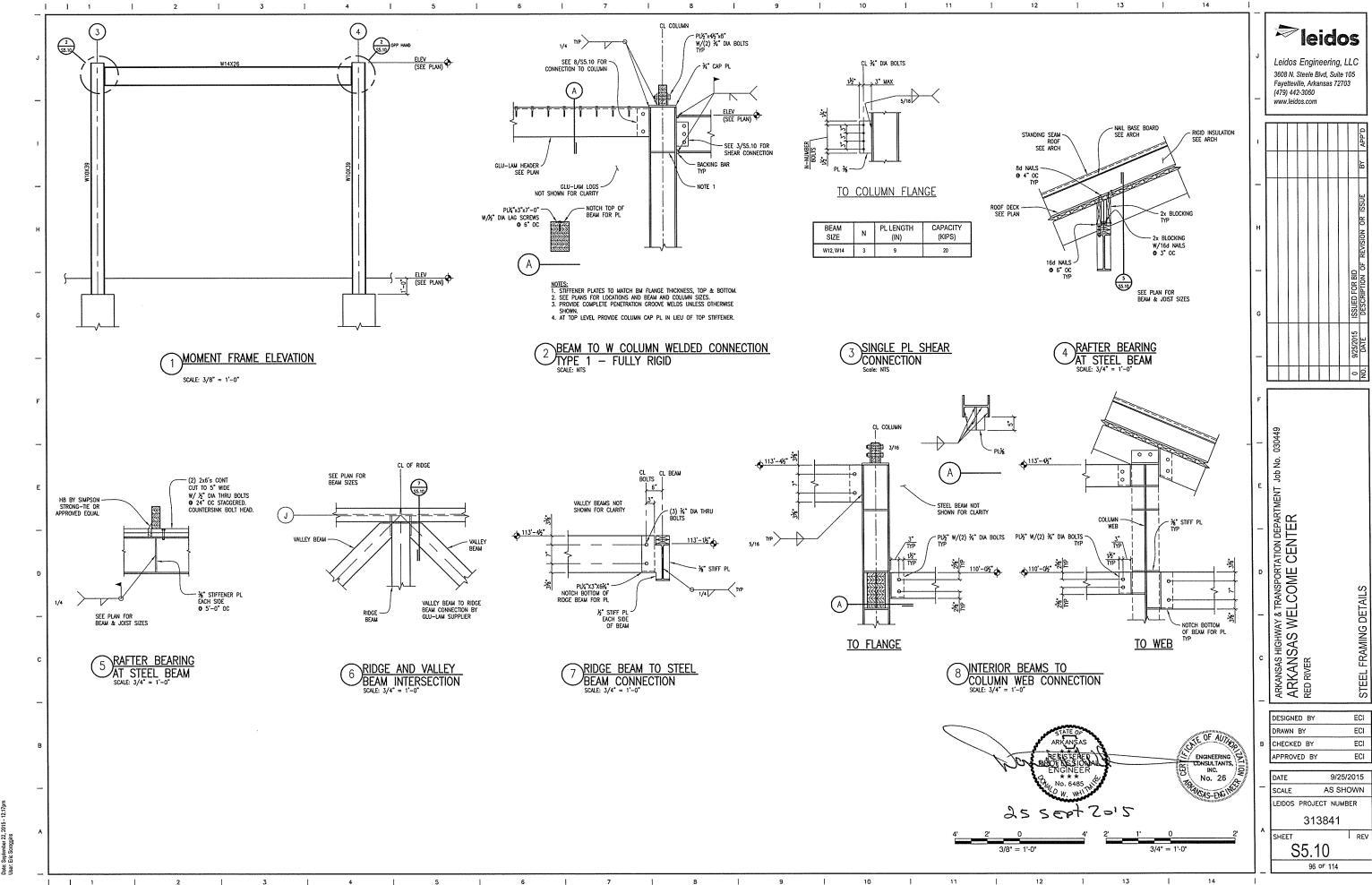
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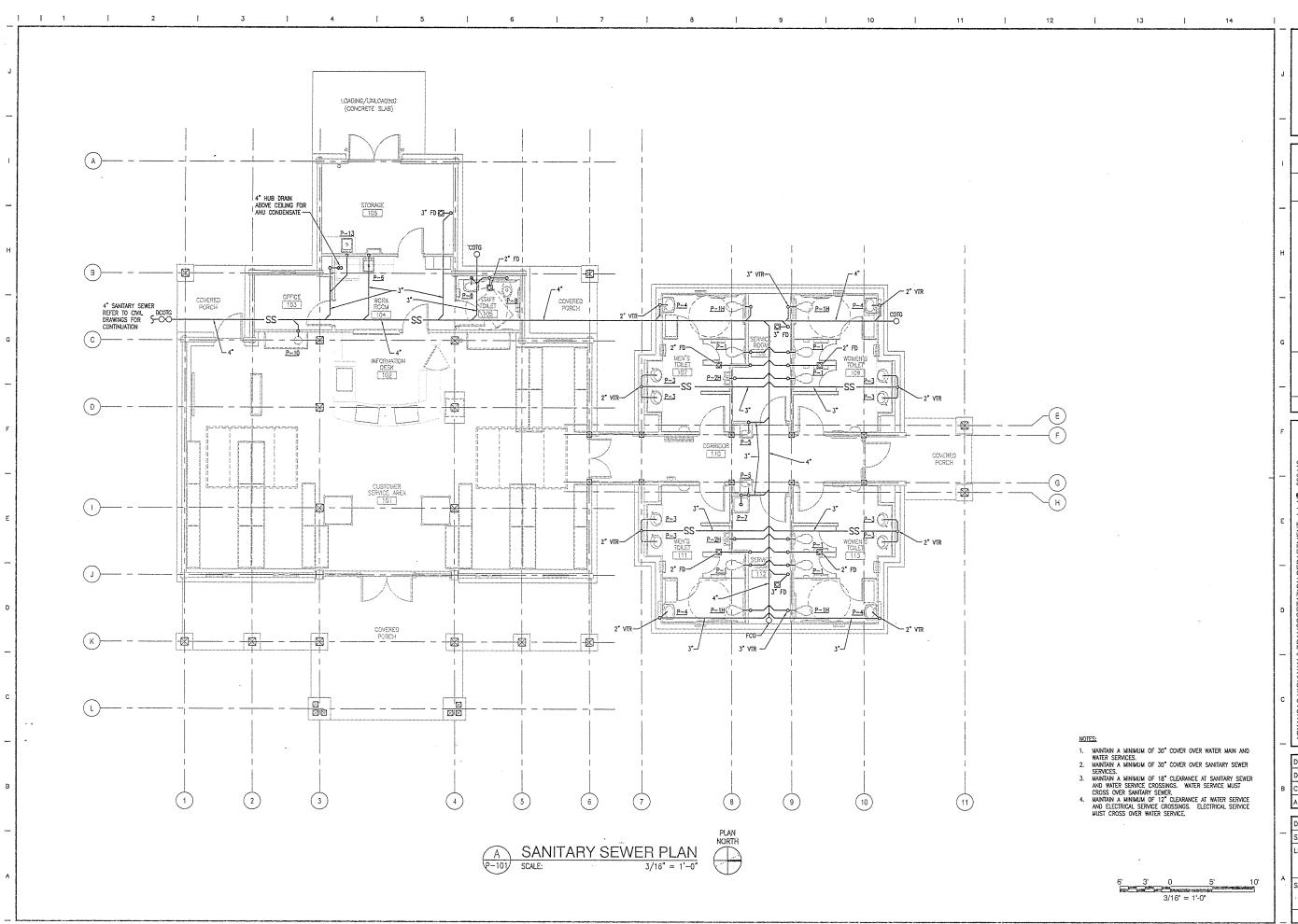
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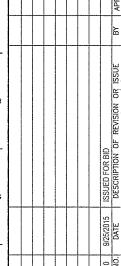
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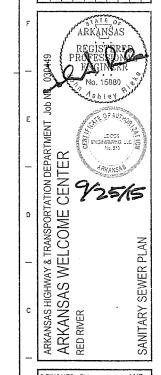


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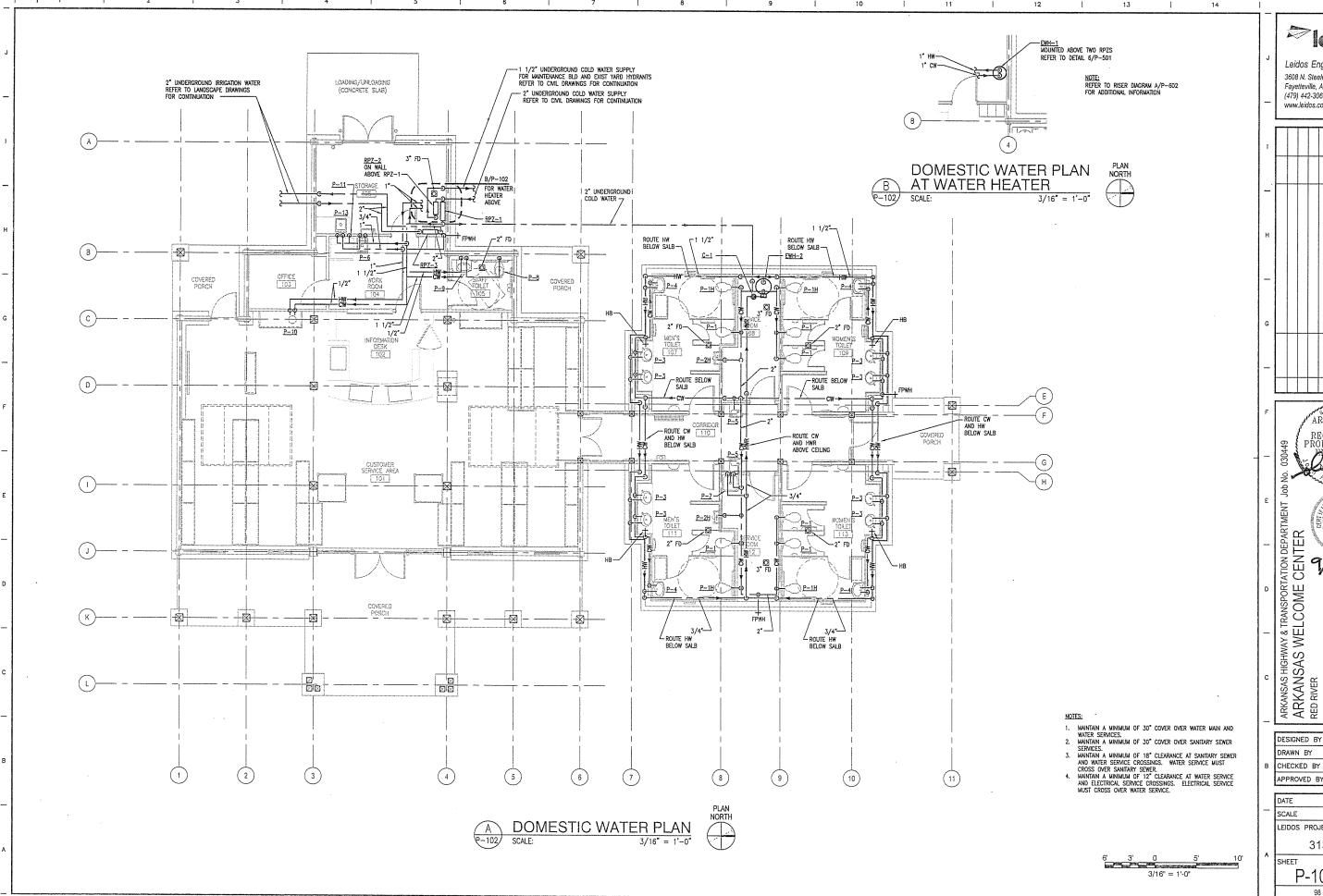
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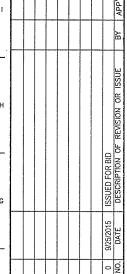
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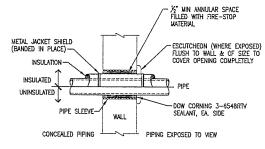




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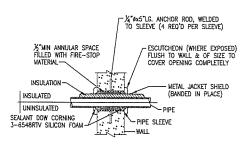
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98 OF 114

1 TYPICAL PIPE THRU FLOOR P-501 NO SCALE



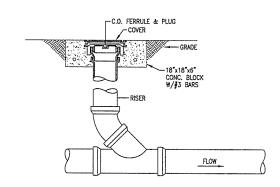
NOTE: SUPPORT PIPE INDEPENDENTLY OF SLEEVE AND WALL. CENTER PIPE AND INSULATION IN SLEEVE.

4 TYPICAL PIPE THRU WALL P-501 NO SCALE



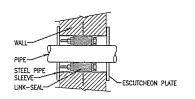
PIPE & INSULATION TO BE CENTERED IN SLEEVE. PIPE NOT TO BE SUPPORTED BY SLEEVE.

5 TYPICAL PIPE THRU INTERIOR CONCRETE WALL P-501 NO SCALE

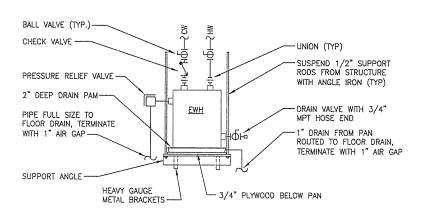


8 TYPICAL EXTERIOR CLEANOUT DETAIL P-501 NO SCALE

COPPE	R TUBING TYPE K-L-M
PIPE SIZES	SLEEVE OPENING
¾"−3"	1 LARGER THAN PIPE O.D.
4*	1½"LARGER THAN PIPE O.D.
CA	ST IRON-CLASS "A"
PIPE SIZES	SLEEVE OPENING
2*-3*	1½"LARGER THAN PIPE O.D.
4"-6"	3"LARGER THAN PIPE O.D.
	Steel Pipe
PIPE SIZES	SLEEVE OPENING
½"-1½"	1"LARGER THAN PIPE O.D.
2"-3"	1½"LARGER THAN PIPE O.D.
4"-8"	2*LARGER THAN PIPE O.D.

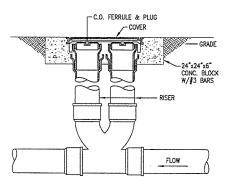


2 TYPICAL EXTERIOR WALL PIPE PENETRATION DETAIL P-501 NO SCALE

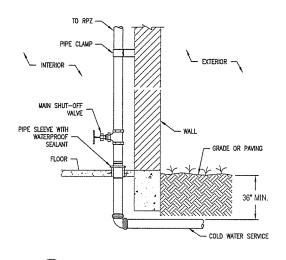


NOTE: WATER HEATER SHALL MEET "ENERGY STAR" GUIDELINES.

TYPICAL STRUCTURE SUSPENDED 6 HOT WATER HEATER DIAGRAM P-501 NO SCALE



9 TYPICAL TWO-WAY CLEANOUT DETAIL P-501 NO SCALE

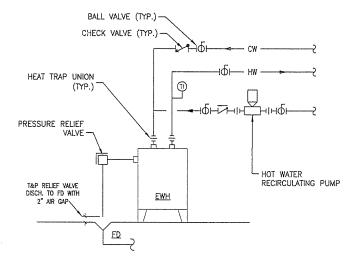


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TYPICAL COLD WATER ENTRY DETAIL P-501 NO SCALE

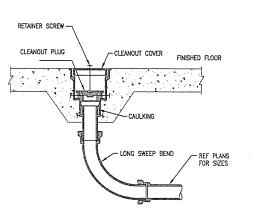
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NOTE: WATER HEATER SHALL MEET "ENERGY STAR" GUIDELINES.

TYPICAL FLOOR MOUNTED 7 HOT WATER HEATER DIAGRAM P-501 NO SCALE



10 TYPICAL INTERIOR CLEANOUT DETAIL P-501/ NO SCALE

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ARKANŜAS 125/15

ARKANSAS HIGHWAY & TRANSPORTATION DEPARARED RIVER

DESIGNED BY	MJZ
DRAWN BY	MJZ
CHECKED BY	JAR
APPROVED BY	JAR

9/25/2015 SCALE AS SHOWN LEIDOS PROJECT NUMBER 313841 SHEET REV P-501 99 OF 114

1. FRONT LIP SHALL BE 17" AFF. 2. SEAT: KOHLER K-4670-CA-0

3. HANDLES: KOHLER 15850

1. TRANSFORMER SLOAN EL-154. TRANSFORMER SERVES MULTIPLE FLUSH VALVES, COORDINATE WITH ELECTRICAL FOR QUANTITY.

5. TRANSFORMER SLOAN EL-154. TRANSFORMER SERVES MULTIPLE FAUCETS, COORIDINATE WITH ELECTRICAL FOR QUANTITY.

	Ε	LECTRIC	WATER	HEATER	SCHEDUL	E	
MARK	BASIS OF DESIGN	MODEL	CAPACITY (GALLONS)	ELECTRICAL (V/PH/HZ)	FULL LOAD AMPS	ELEMENTS	INPUT (KW)
EWH-1	A.O. SMITH	DSE-10	10	230/1/60	13.1	1	3.0
EWH-2	A.O. SMITH	DSE-50	50	230/1/60	26	1	6.0

			RECIRO	CULATING	PUMP	SCHEDULE	=		
MARK	BASIS OF DESIGN	MODEL	MAX SERVICE TEMP (*F)	FLOW RATE (GPM)	MAX HEAD (FT.)	RPM	CONNECTION (IN.)	POWER (HP)	ELECTRICAL (V/PH/HZ)
C-1	BELL AND GOSSETT	PL-30B	160	8	12	2650	1	1/12	120/1/60

	ELECT	RIC TANK	LESS W	ATER HE	ATER SC	HEDULE	
MARK	BASIS OF DESIGN	MODEL	TEMP RISE (°F)	FLOWRATE (GPM)	POWER (V/PH/HZ)	KW	AMPS
EWH-3	BOSCH	WH17	60	2.0	230/1/60	17.5	2 @ 40

MISC. PLUMBING EQUIPMENT

12

13

- 1. KITCHEN SINK (P-6) GARBAGE DISPOSAL SHALL BE IN-SINK-ERATOR BADGER 5 (OR APPROVED EQUAL). 1/2 HP WITH 120V/1ø/60HZ POWER. PROVIDE WALL SWITCH CONTROL.
- 2. REDUCED PRESSURE ZONE (RPZ) SHALL BE WATTS (OR APPROVED EQUAL) BACKFLOW PREVENTION ASSEMBLY.

RPZ	SIZE (IN.)	MODEL
1	2	LF909S
2	1 1/2	LF009
3	2	LF009

- 3. FREEZE PROOF WALL HYDRANT (FPWH) SHALL BE WOODFORD MODEL 65 (OR APPROVED EQUAL). 3/4" CONNECTION.
- 4. HOSE BIBB (HB) SHALL BE WOODFORD MODEL 24 (OR APPROVED EQUAL). 3/4" CONNECTION.
- 5. FLOOR DRAIN BY ZURN MOD. ZN-415, ADJUSTABLE COLLAR, MEMBRANE CLAMP, NICKEL BRONZE STRAINER AND "P" TRAP WITH 1/2" PRIMER LINE CONNECTION.
- 6. TRAP PRIME VALVE BY PPP (PRECISION PLUMBING PRODUCTS), MODEL PR-500 PRIME-RITE, WITH WATER DISTRIBUTION SYSTEM FOR 3 DRAINS.

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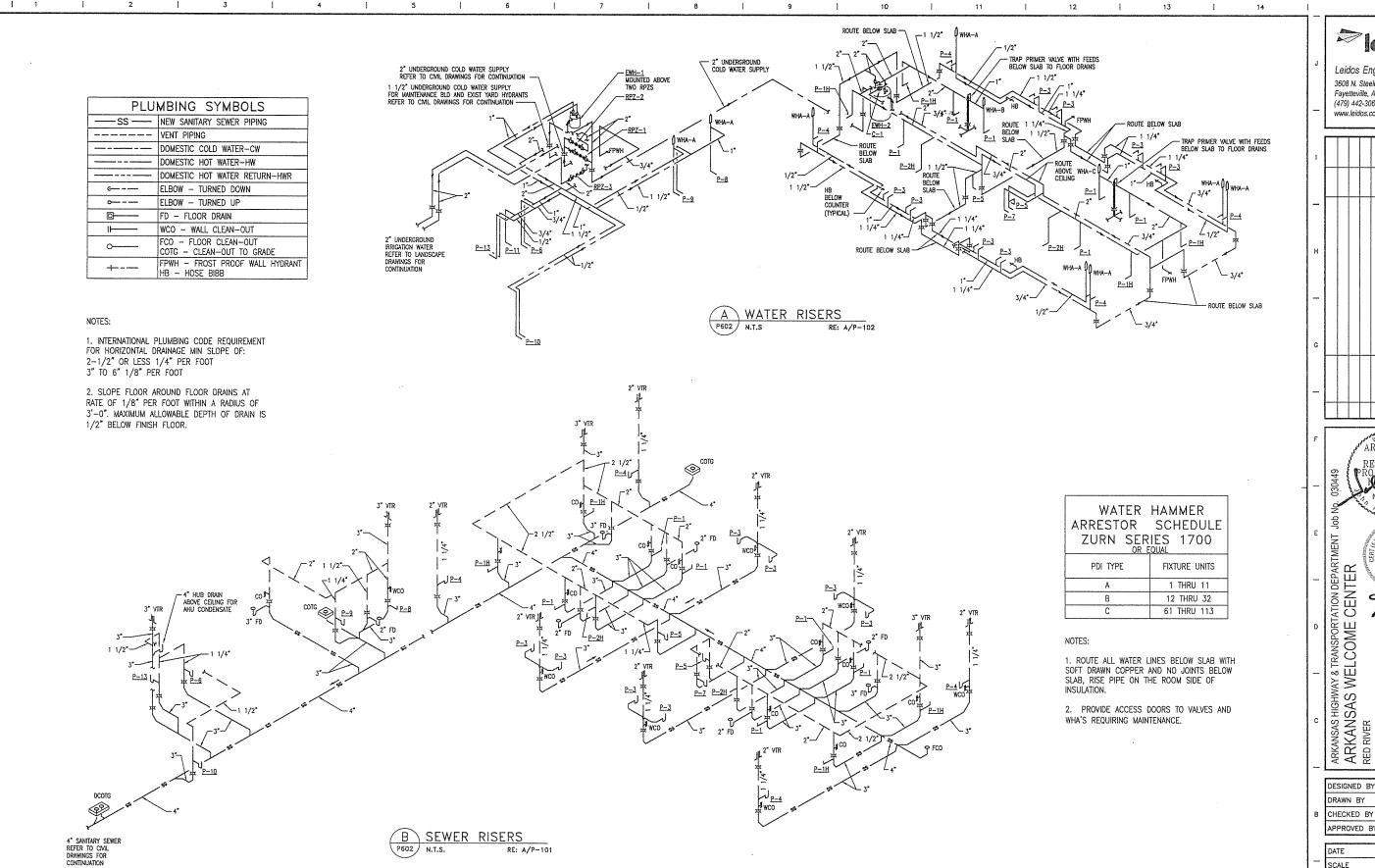
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PLUMBING RISERS

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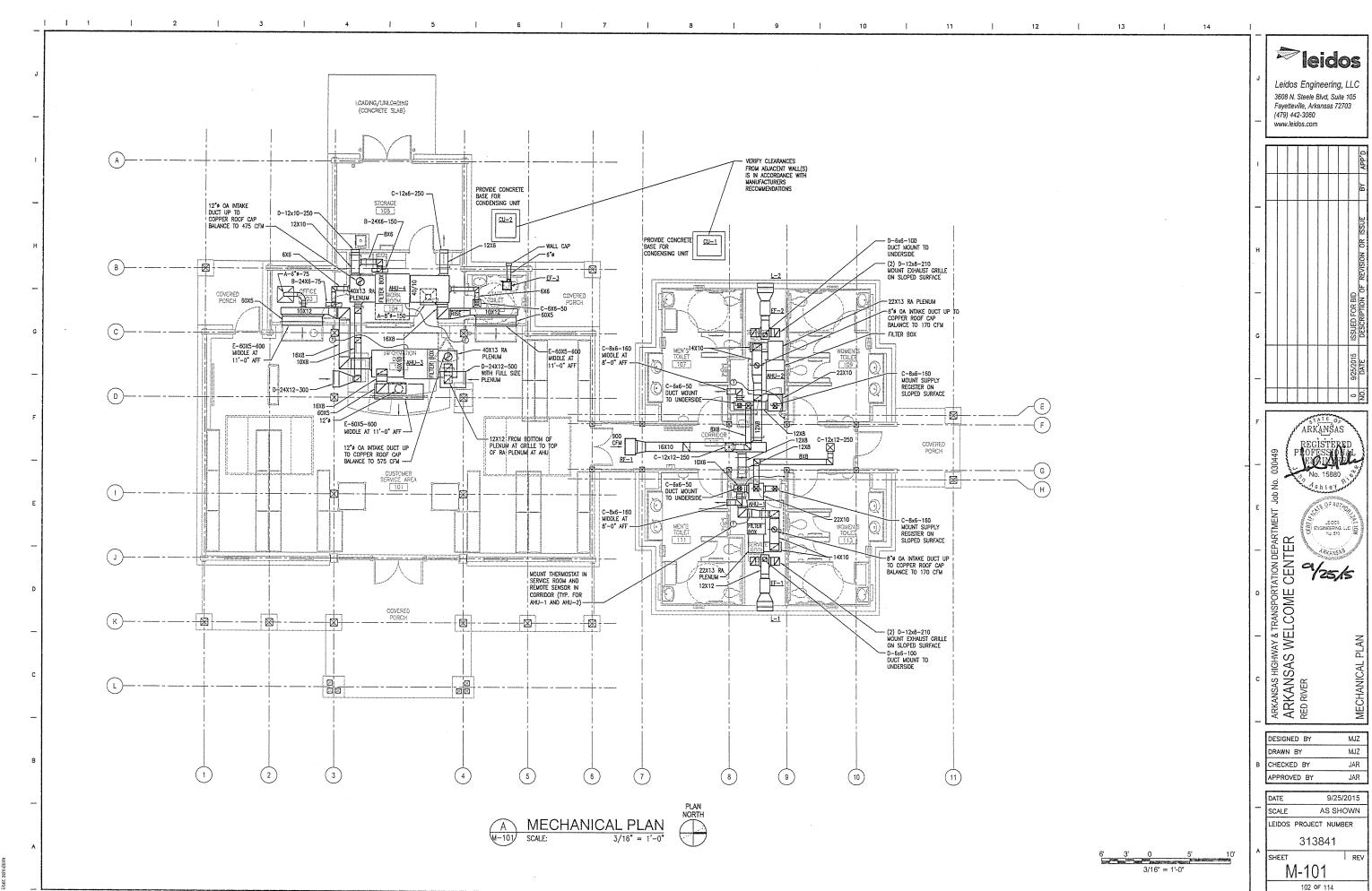
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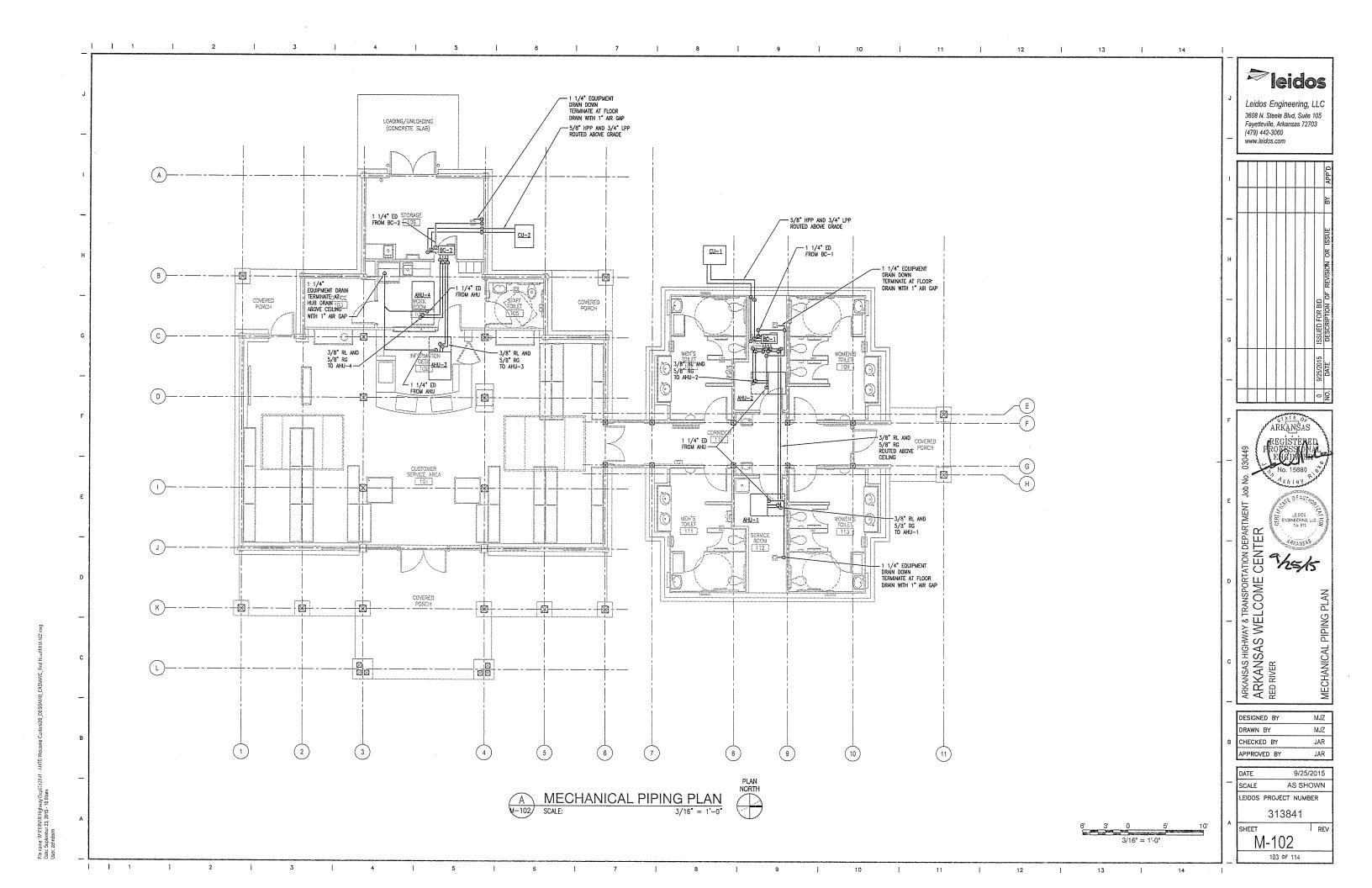
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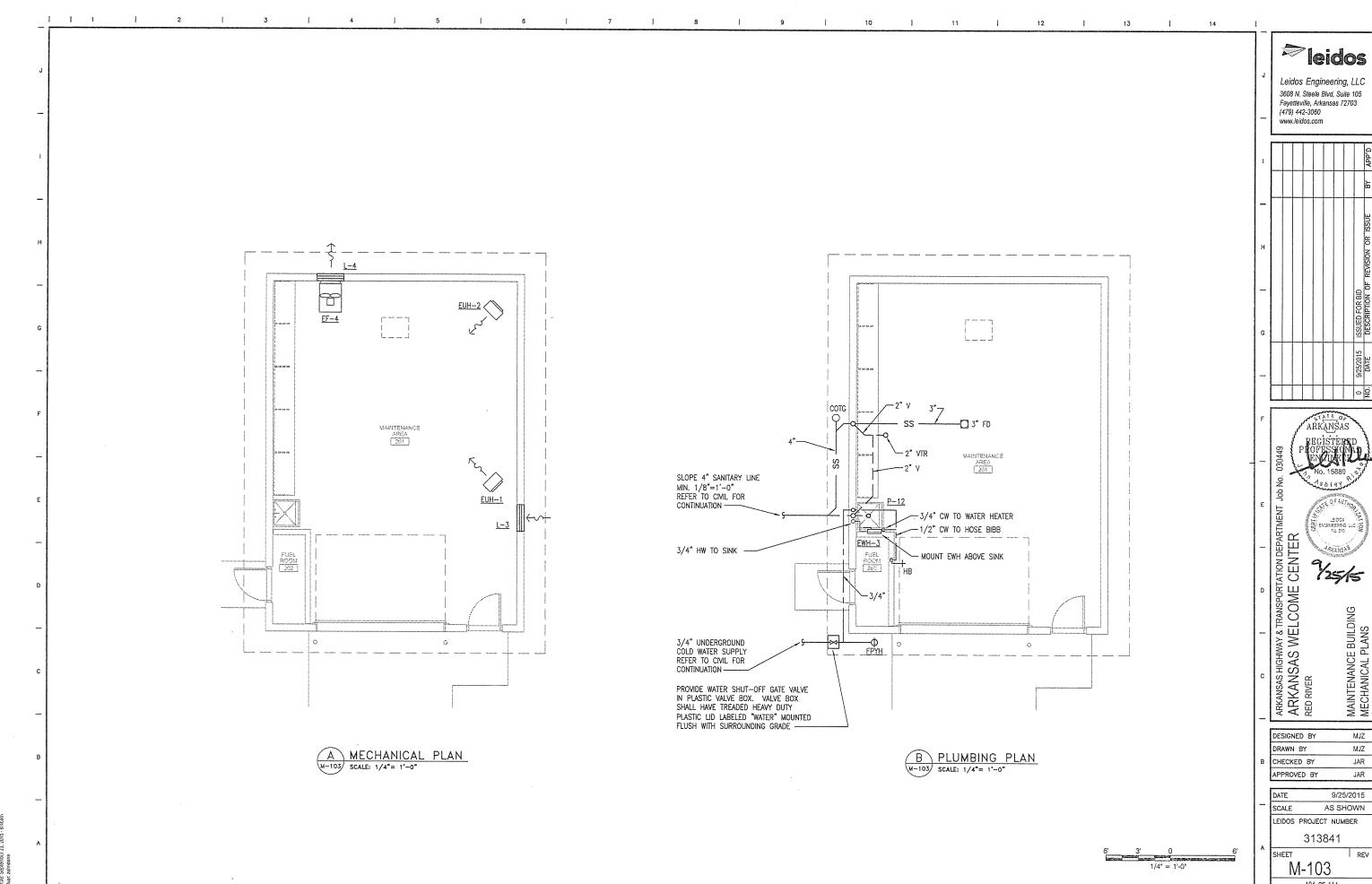
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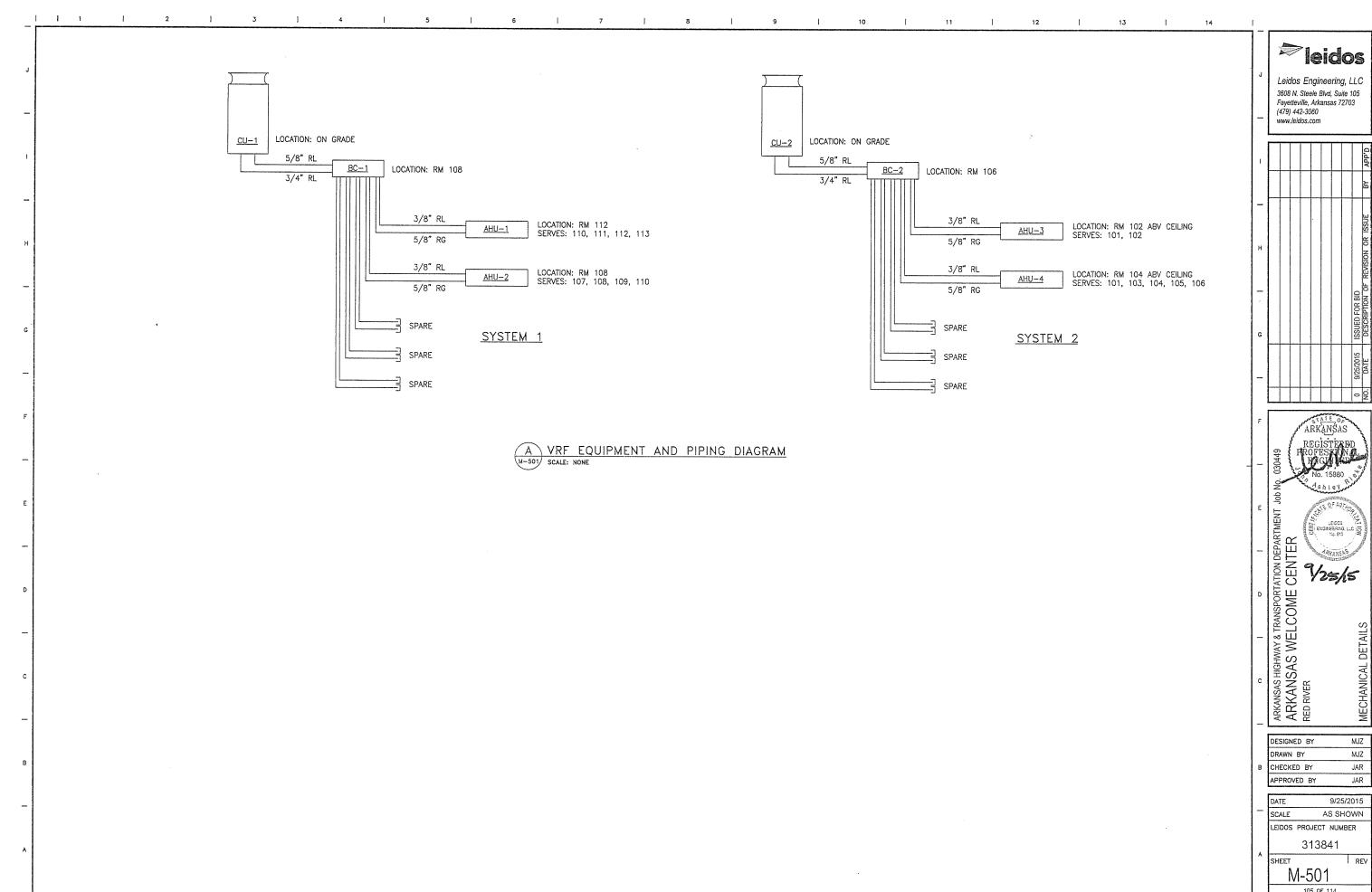






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INTEGRAL DISCONNECT.

BACK DRAFT DAMPER AND SPRING ISOLATORS.
INTERLOCK WITH TOILET LIGHT SWITCH.
INTEGRAL DISCONNECT SWITCH, ROUND OUTLET COLLAR WITH INTEGRAL BACK DRAFT DAMPER, ALUMINUM GRILLE, CEILING MOUNTED, ROUND HOODED WALL CAP.

5. WALL MOUNTED SWITCH, LONG WALL HOUSING W/ OSHA GUARD, MOTORIZED DAMPER.
6. INSULATED HOUSING, ALUMINUM GRILLE

GRILLE AND REGISTER SCHEDULE											
MARK	A	8	С	D	E						
MANUFACTURER	TITUS	TITUS	TITUS	TITUS	TITUS						
MODEL	OMNI	50F	272FS	3FL	CT-541						
APPLICATION	SUPPLY	RETURN	SUPPLY	RETURN/EXHAUST	SUPPLY						
FACE SIZE	24X24	24X12	SEE PLANS	SEE PLANS	SEE PLANS						
CONSTRUCTION	STEEL	ALUMINUM	ALUMINUM	ALUMINUM	ALUMINUM						
MOUNTING	LAY-IN	LAY-IN	SURFACE/LAY-IN	SURFACE/LAY-IN	SURFACE						
NOTES	1,2	1	3,5	3,5	4						

MANUFACTURER'S STANDARD OFF-WHITE FINISH.

DUCT RUNOUT SIZE SHALL MATCH DIFFUSER NECK SIZE. SEE PLANS FOR NECK SIZES.

AT TOILET ROOMS PAINT TO MATCH SURFACE, COORDINATE WITH ARCHITECT.

ALUMINUM FINISH, 15' DEFLECTION UP, NOMINAL 5" DUCT WIDTH.

OPPOSED BLADE DAMPER.

LOUVER SCHEDULE								
MARK	L-1	L-2	L-3	L-4				
MANUFACTURER	RUSKIN	RUSKIN	RUSKIN	RUSKIN				
MODEL	ELF375	ELF375	ELF375	ELF375				
SERVICE	TOILET EXHAUST	TOILET EXHAUST	MAINTENANCE INTAKE	MAINTENANCE EXHAUST				
SIZE (IN.)	24X18	24X18	30X24	30X24				
FLOW RATE (CFM)	965	965	1500	1500				
FREE AREA (SQ. FT.)	1.03	1.03	1.99	1.99				
PRESSURE DROP (IN. W.G.)	0.13	0.13	0.09	0.09				
DAMPER TYPE	GRAVITY	GRAVITY	GRAVITY	GRAVITY				
NOTES	1	1	1	1				

EXTRUDED ALUMINUM LOUVER, 4" DEEP WITH BIRD SCREEN. BAKED ENAMEL FINISH, COLOR SELECTION BY ARCHITECT.

ELECTRIC UN	IT HEATER SCI	HEDULE
MARK	EUH-1	EUH-2
MANUFACTURER	MARKEL	MARKEL
MODEL	H1HUH5	H1HUH5
LOCATION	MAINTENANCE AREA	MAINTENANCE AREA
HEAT OUTPUT (KW)	5	5
POWER (V/PH/HZ)	230/1/60	230/1/60
TOTAL AMP LOAD	21	21
AIRFLOW (CFM)	400	400
MOUNTING HEIGHT (FT. AFF)	8'-0"	8'-0"
NOTES	1	1
1 UNIT HOUNTED DICCOMME	OT IND THEOMOGRAT WIT	TI WILL HOUSETING

^{1.} UNIT MOUNTED DISCONNECT AND THERMOSTAT WITH WALL MOUNTING



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ARKANSAS WELCOME CENTER
RED RIVER

DESIGNED BY	MJZ
DRAWN BY	MJZ
CHECKED BY	JAR
APPROVED BY	JAR

9/25/2015 AS SHOWN SCALE LEIDOS PROJECT NUMBER

313841

M-601 106 OF 114

	MITSUBISHI CITY MULTI VRF OUTDOOR UNIT SCHEDULE																	
Tag Reference	Model Number	Nominal Cooling Capacity (BTU/h)	Nominal Heating Capacity (BTU/h)	Cooling Efficiency		Nom System Connected Capacity (% of NOM)	Design Cooling Outdoor Temp DB (°F)	Design Heating Outdoor Temp WB	Max Pipe Length from BC or 1st Joint (feet)	Refrig Pipe Dim High/Low Pressure (inch) (See Note 4)	Corrected Cooling Total Capacity (BTU/h)	Corrected Heating Capacity (BTU/h)	Sound Pressure (dBA)	Inverter Driven Compressor Type / Quantity	Voltage / Phase	Electrical-Per 1)	Notes / Options
CU-1	PURY-P72TLMU-A	72.000.0	80,000.0	004/4/0	10	00.70/			()	` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `			· ' /	<u> </u>	J	MCA 208/230	MOCP	ļi
			00,000.0	28.1 / 14.8	4.3	66.7%	99.0	13.6	0.0	5/8 / 3/4	48,000.0	51,300.0	58	SCROLL/1	208/230V / 3-phase 3-wire	24/22	35/35	1, 2, 3, 4, 5
CU-2	PURY-P72TLMU-A	72,000.0	80,000.0	28.1 / 14.8	4.3	116.7%	99.0	13.6	0.0	5/8 / 3/4	73,628.2	55,029.2	58	SCROLL/1	208/230V / 3-phase 3-wire	24/22	35/35	1, 2, 3, 4, 5
Notes 2 Onti																		

- 1 Nominal cooling capacities are based on indoor coil EAT of 80/67°F (DB/WB), outdoor of 95°F (DB)
- Nominal heating capacities are based on indoor coil EAT of 70°F (DB), outdoor of 43°F (WB)
- 3 Efficiency values for EER, IEER, COP are based on AHRI 1230 test method for mixture of ducted & non-ducted indoor units.
- 4 For systems with multiple modules, refrigerant pipe dimensions indicate total system combined piping downstream of module twinning.
- Added field charge listed is in addition to factory charge, this must be updated based upon final as-built piping layout.

			Γ		1					SHI CITY M	0211 714	1120010	THE COLLET	T				···	<u> </u>	Ι	1	1
					Cooling Design	Heating Design		Co	orrected Capa	cíty							Sound					
Tag Reference	Model	Туре	Nominal Cooling Capacity (BTU/h)	Nominal Heating Capacity (BTU/h)	Entering Temp DB/WB (°F) / [Water in temp]	Entering Temp DB/WB (°F) / [Water in temp]	Cooling Diversity Full/Partial (See Note 5, 6)	Cooling Total Capacity (BTU/h)	Cooling Sensible Capacity (BTU/h)	Heating Diversity Full/Partial (See Note 5, 6)	Heating Capacity (BTU/h)	Estimated Cooling Coil LAT (°F) / [LWT]	Estimated Heating Coil LAT (°F) / [LWT]	Refrig Pipe Dim Liquid/Suction (inch)	Peak Fan Airflow (cfm) / [Design gpm G(US)/min]	Max Fan ESP Setting 208V/230V (IN WG)	Pressure Per Fan Speed 208V/230V (dBA)	Voltage / Phase	Power Cooling 208V/230V (kW)	Power Heating 208V/230V (kW)	Electrical MCA/MFS	Notes / Option
AHU-1	PEFY-P24NMHU-E2	Ceiling concealed type (ducted)	24,000.0	27,000.0	80.0/67.0	70.0	FULL DEMAND	24,000.0	16,549.8	FULL DEMAND	25,650.0	56.7	105.4	3/8 / 5/8	671	1.0/1.0	40-46	208/230V/ 1-phase	0.330/0.320		2.11(208V)/1.83(230V)/	1, 2, 3, 4, 5, 6
AHU-2	PEFY-P24NMHU-E2	Ceiling concealed type (ducted)	24,000.0	27,000.0	80.0/67.0	70.0	FULL DEMAND	24,000.0	16,549.8	FULL DEMAND	25,650.0	56.7	105.4	3/8 / 5/8	671	1.0/1.0	40-46	208/230V/ 1-phase	0.330/0.320	0.310/0.300	2.11(208V)/1.83(230V)/	1, 2, 3, 4, 5, 6
AHU-3	PEFY-P48NMHU-E2	Ceiling concealed type (ducted)	48,000.0	54,000.0	80.0/67.0	70.0	FULL DEMAND	42,073.2	30,242.0	FULL DEMAND	31,612.5	58.7	91.8	3/8 / 5/8	1342	1.0/1.0	40-46	208/230V/ 1-phase	0.620/0.610	0.600/0.590	4.16(208V)/3.67(230V)/	1, 2, 3, 4, 5, 6
AHU-4	PEFY-P36NMHU-E2	Ceiling concealed type (ducted)	36,000.0	40,000.0	80.0/67.0	70.0	FULL DEMAND	31,554.9	26,068.7	FULL DEMAND	23,416.7	61.7	86.2	3/8 / 5/8	1342	1.0/1.0	40-46	208/230V/ 1-phase	0.620/0.610	0.600/0.590	4.16(208V)/3.67(230V)/	1, 2, 3, 4, 5, 6

Notes & Options:

- Nominal cooling capacities are based on indoor coil EAT of 80/67°F (DB/WB), outdoor of 95°F (DB)
- Nominal heating capacities are based on indoor coil EAT of 70°F (DB), outdoor of 43°F (WB)
- See outdoor unit schedule for outdoor ambient conditions, connected capacity, and other factors associated with corrected capacities
- See schematic piping/control diagram for indication of required indoor unit remote controllers, system controllers, and integration devices.
- Full demand corrected capacity includes de-rate associated with indoor vs. outdoor connected capacity indicated on outdoor unit schedule for associated system. Partial corrected capacity exists such that the connected capacity de-rate does not apply. It is the designer's responsibility to ensure "Diamond System". Builder" is set in the appropriate output capacity setting (full demand/partial demand) prior to generating this schedule.
- 6 Base heating corrected capacity on full demand.

Tag Reference	Model Number	Type (double / Main / Sub)	Number of Ports	Connected Capacity to BC	Voltage / Phase	MCA 208/230	Notes / Options
BC-1	CMB-P105NU-G	Single	5	48,000.0	208/230V/1-phase	0.44 / 0.40	1, 2
BC-2	CMB-P105NU-G	Single	5	84,000.0	208/230V/1-phase	0.44 / 0.40	1, 2

otes &	Options:
--------	----------

- 1 Include Diamondback Ball Valves BV-Series, 700PSIG working pressure, full port, 410A rated.
- Connected Capacity to BC should not exceed 189,000 BTU/h for double BCs and 126,000 BTU/h for Sub BCs.

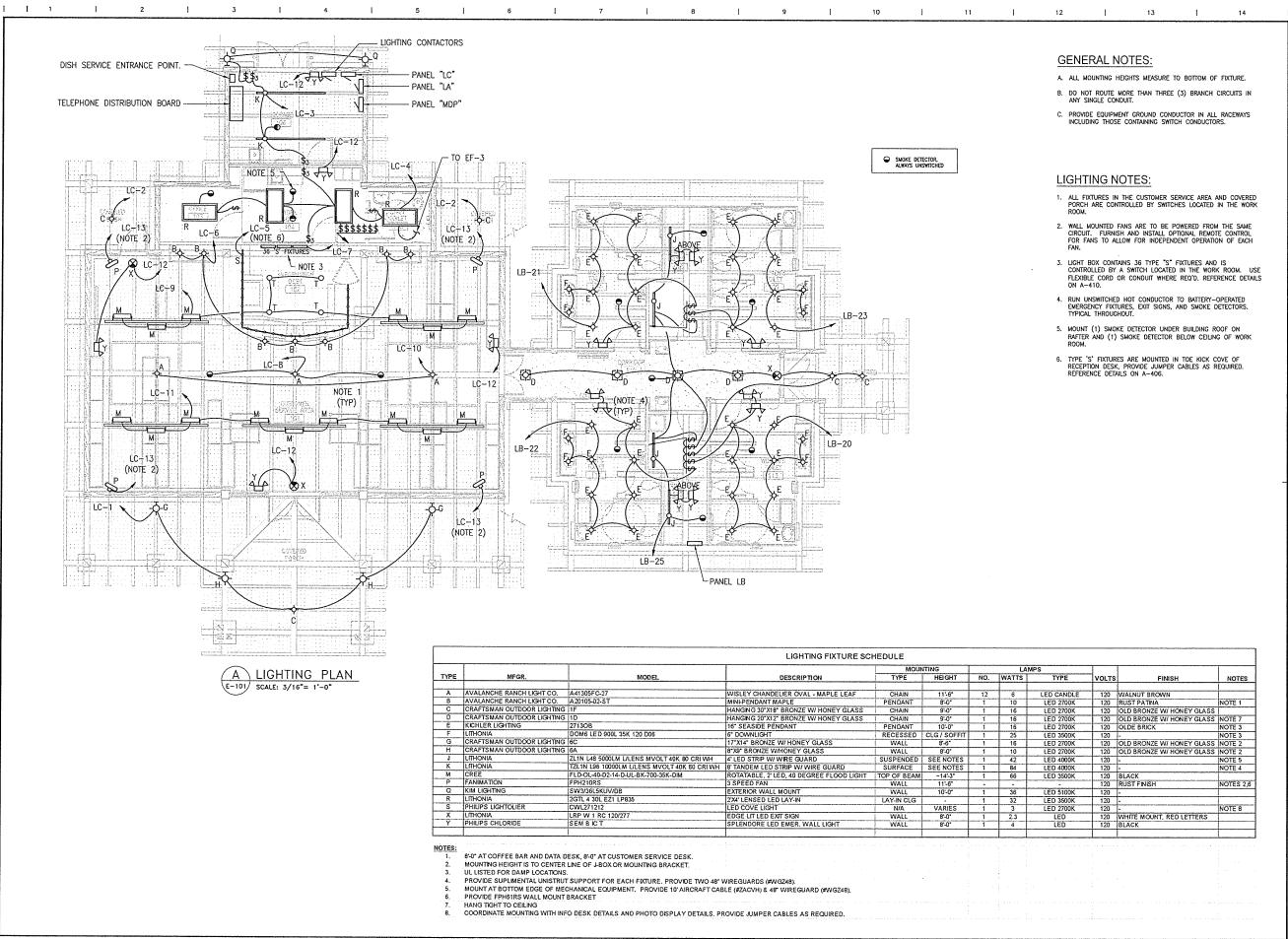
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ARKANSAS HIGHWAY & TRANSPORTATION DEPARTMENT ARKANSAS WELCOME CENTER RED RIVER

	DESIGNED BY	MJZ
	DRAWN BY	MJZ
В	CHECKED BY	JAR
	APPROVED BY	JAR

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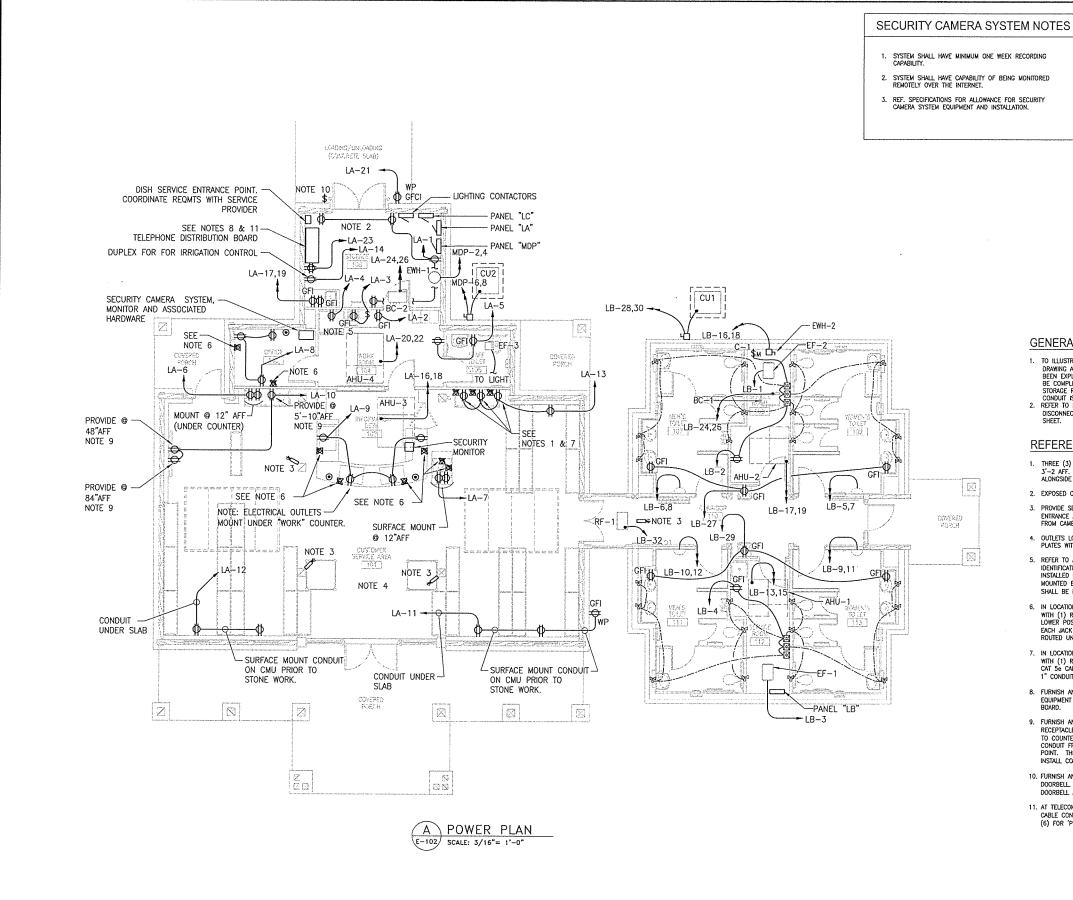
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	APPROVED BY	DBL

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POWER PLAN LEGEND

13

- WP WEATHER PROOF
- W WALL MOUNT 44" AFF EXCEPT AS NOTED.
- FM FLOOR MOUNT
- DUPLEX CONVENIENCE OUTLET (5-20R)
- GFI GROUND FAULT INTERRUPT RECEPT.
- DE QUADPLEX RECEPTACLE OUTLET JUNCTION BOX
- \$ SINGLE POLE TOGGLE SW, 20A, 120/277V
- \$ 3 WAY TOGGLE SW 20A 120/277V
- COMBINATION DATA/PHONE OUTLET
- CLOSED CIRCUIT TV (CCTV)
- THERMOSTAT
- DISCONNECT SWITCH, NON-FUSED
- SECURITY CAMERA
- TRANSFORMER FURN BY MECH.
- Solenoid Valve Furn by Mech.

GENERAL NOTES:

- 1. TO ILLUSTRATE A TYPICAL CASE, CERTAIN CONDUIT HAS BEEN IDENTIFIED ON THE DRAWING AS "CONDUIT UNDER SLAB". NOT EVERY SECTION OF SUCH CONDUIT HAS BEEN EXPLICITLY REFERENCED. THE GENERAL RULE IS, IF THE CONDUIT CANNOT BE COMPLETELY HIDDOEN FROM WER, RUIN IT UNDER SLAB. EXCEPTIONS ARE IN THE STORAGE ROOM 106 AND SERVICE ROOMS 108 AND 112, WHERE EXPOSED
- CONDUIT IS ACCEPTABLE.

 2. REFER TO EQUIPMENT SCHEDULE ON E-601 FOR SPECIFIC CIRCUIT AND DISCONNECT INFORMATION. NOT ALL DISCONNECTS / MSW'S ARE SHOWN ON THIS SHEET.

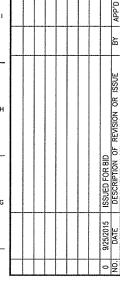
REFERENCED NOTES:

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- 1. THREE (3) CONVENIENCE OUTLETS ABOVE TABLE TOP. MOUNT BOTTOM OF OUTLET O 3'-2 AFF. THREE (3) DATA OUTLETS SHALL BE MOUNTED AT SAME ELEVATION ALONGSIDE POWER OUTLETS. SEE NOTE 7 BELOW.
- 2. EXPOSED CONDUIT PERMITTED SERVICE ROOMS AND STORAGE ROOM.
- 3. PROVIDE SECURITY CAMERA AT LOCATIONS SHOWN TO COVER MAIN BUILDING ENTRANCE AND TOILET BLOCK ENTRANCE. PROVIDE 1° CONDUIT WITH PULLWIRE FROM CAMERA BACK TO OFFICE 103 WHERE MONITORING EQUIPMENT IS LOCATED.
- 4. OUTLETS LOCATED THROUGHOUT THE CUSTOMER SERVICE AREA, SHALL HAVE COVER PLATES WITH BRUSHED BRASS FINISH.
- 5. REFER TO ARCHITECTURAL DRAWING A-405 FOR KITCHEN ELEVATION AND EQUIPMENT DEMTIFICATION. ONE (1) RECEPTACLE SHOWN MOUNTED ABOVE COUNTER SHALL BE INSTALLED IN APPROXIMATE AREA SHOWN. RECEPTACLE FOR DISPOSAL SHALL BE MOUNTED BELOW SINK. ONE (1) ADDITIONAL RECEPTACLE — FOR MICROWAVE SHALL BE INSTALLED 3" ABOVE BACKSPLASH.
- 6. IN LOCATIONS SHOWN (TYPICAL OF 8), FURNISH AND INSTALL DEVICES SPECIFIED WITH (1) RJ45 JACK (DATA) IN UPPER POSITION AND (1) RJ11 JACK (PHONE) IN LOWER POSITION OF COVER PLATE. FURNISH AND INSTALL CAT Se CABLES FROM EACH JACK BACK TO TELEPHONE DISTRIBUTION BOARD. USE $1-1/2^{**}$ CONDUIT ROUTED UNDERFLOOR. USE 568-B WIRING STANDARD.
- 7. IN LOCATIONS SHOWN (TYPICAL OF 3), FURNISH AND INSTALL DEVICES SPECIFIED WITH (1) RJ45 JACK (DATA) IN CENTER OF COVER PLATE. FURNISH AND INSTALL CAT Se CABLE FROM EACH JACK BACK TO TELEPHONE DISTRIBUTION BOARD. USE " CONDUIT ROUTED UNDERFLOOR. USE 568-B WIRING STANDARD.
- 8. FURNISH AND INSTALL AN 18" D x 48" W SHELF FOR MOUNTING OF TELECOM EQUIPMENT (DONE BY OTHERS). MOUNT SHELF ABOVE TELEPHONE DISTRIBUTION
- 9. FURNISH AND INSTALL COAX CONNECTIONS FOR TV INSTALLATIONS ALONGSIDE FORMER AND INSTALL COAR CONNECTIONS FOR 17 INSTALLATIONS ALLONGSIDE RECEPTACLES IN AREA NOTED. PROVIDE 1-1/2" CONDUIT ROUTED BELOW FLOOR TO COUNTER WHERE DISH RECEIVERS ARE MOUNTED. ALSO PROVIDE 1-1/2" CONDUIT FROM THE RECEIVER LOCATION BACK TO THE DISH SERVICE ENTRANCE POINT. THIS CONDUIT SHALL ALSO BE ROUTED BELOW FLOOR. FURNISH AND INSTALL COAX CABLE COMPATIBLE WITH SERVICE PROVIDER'S EQUIPMENT.
- 10. FURNISH AND INSTALL BROAN (OR EQUAL) RC533 PILOT LONG RANGE WIRELESS DOORBELL MOUNT PUSH-BUTTON AT 48" ABOVE FLOOR AT REAR DOOR AND DOORBELL AT 78" A.F.F. AT DOOR ACROSS FROM KITCHEN EQUIPMENT.
- 11. AT TELECOM SHELF, CONTRACTOR TO PROVIDE MINIMUM 16 PORT PATCH PANEL FOR CABLE CONNECTIONS. TEN (10) PORTS SHALL BE LABELED FOR 'STATE' AND SIX (6) FOR 'PUBLIC'.



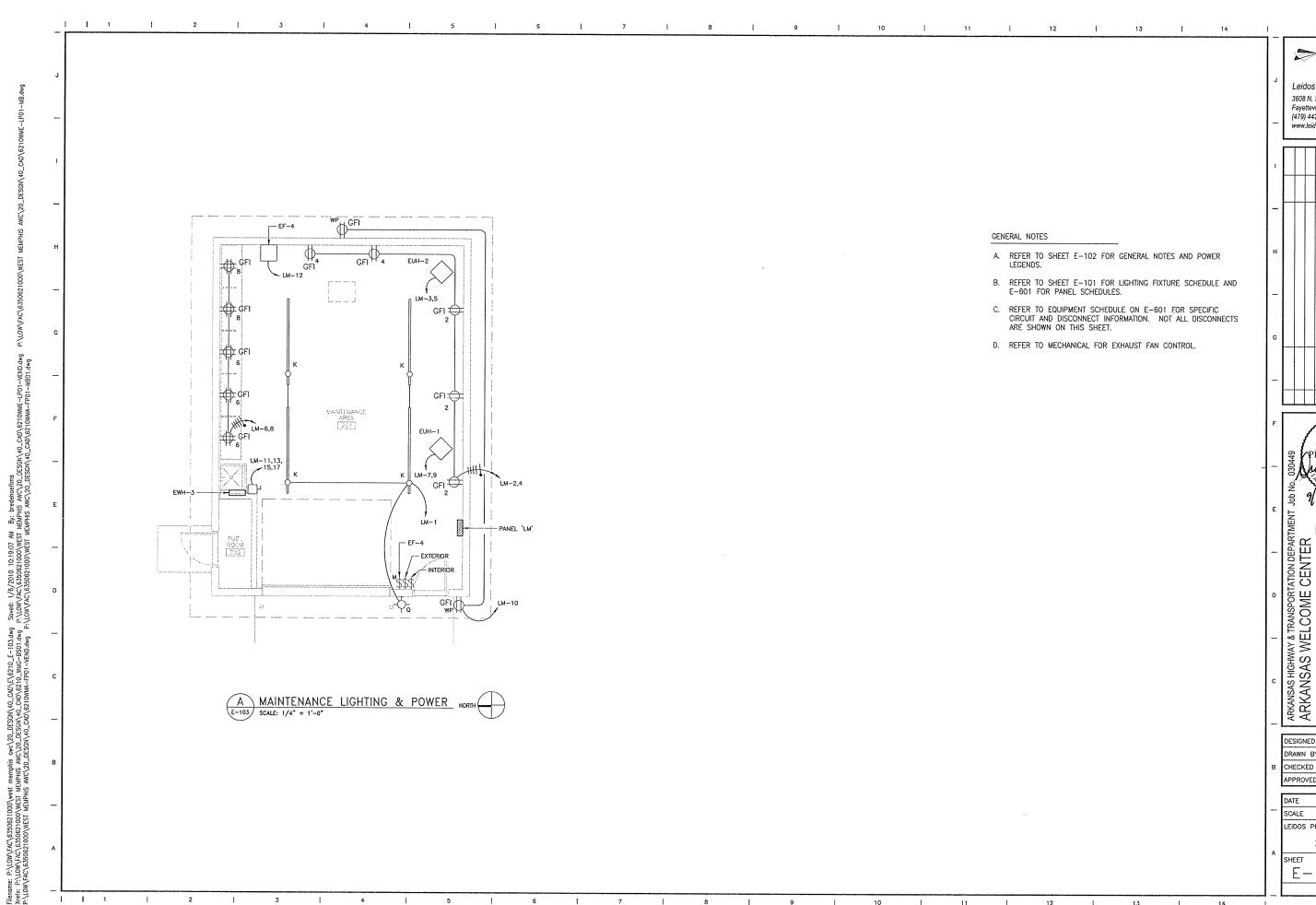
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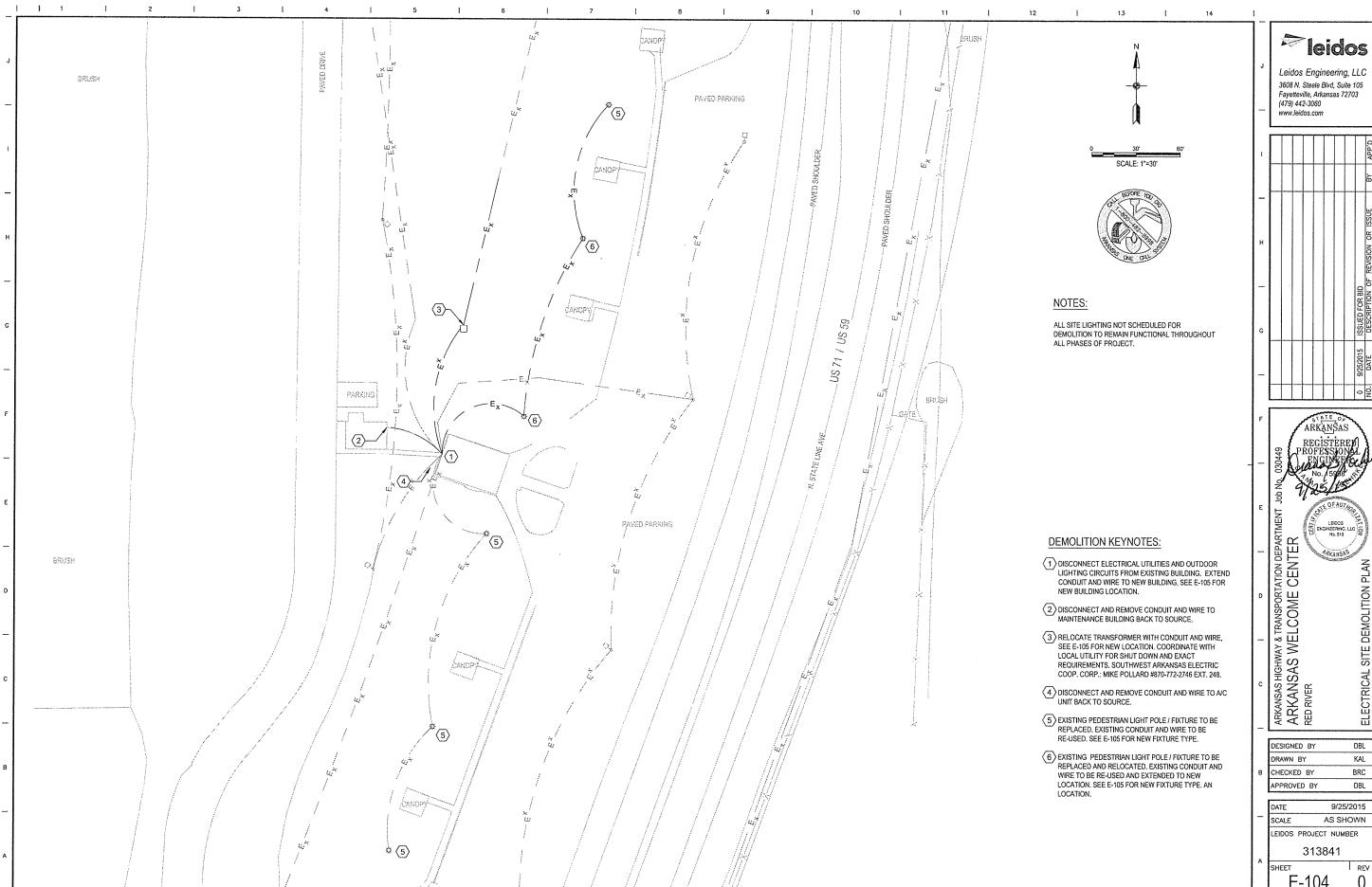
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ARKANSAS WELCOME CENTER
RED RIVER
RED RIVER
MAINTENANCE BUILDING
POWER & LIGHTING PLAN
MAINTENANCE BUILDING
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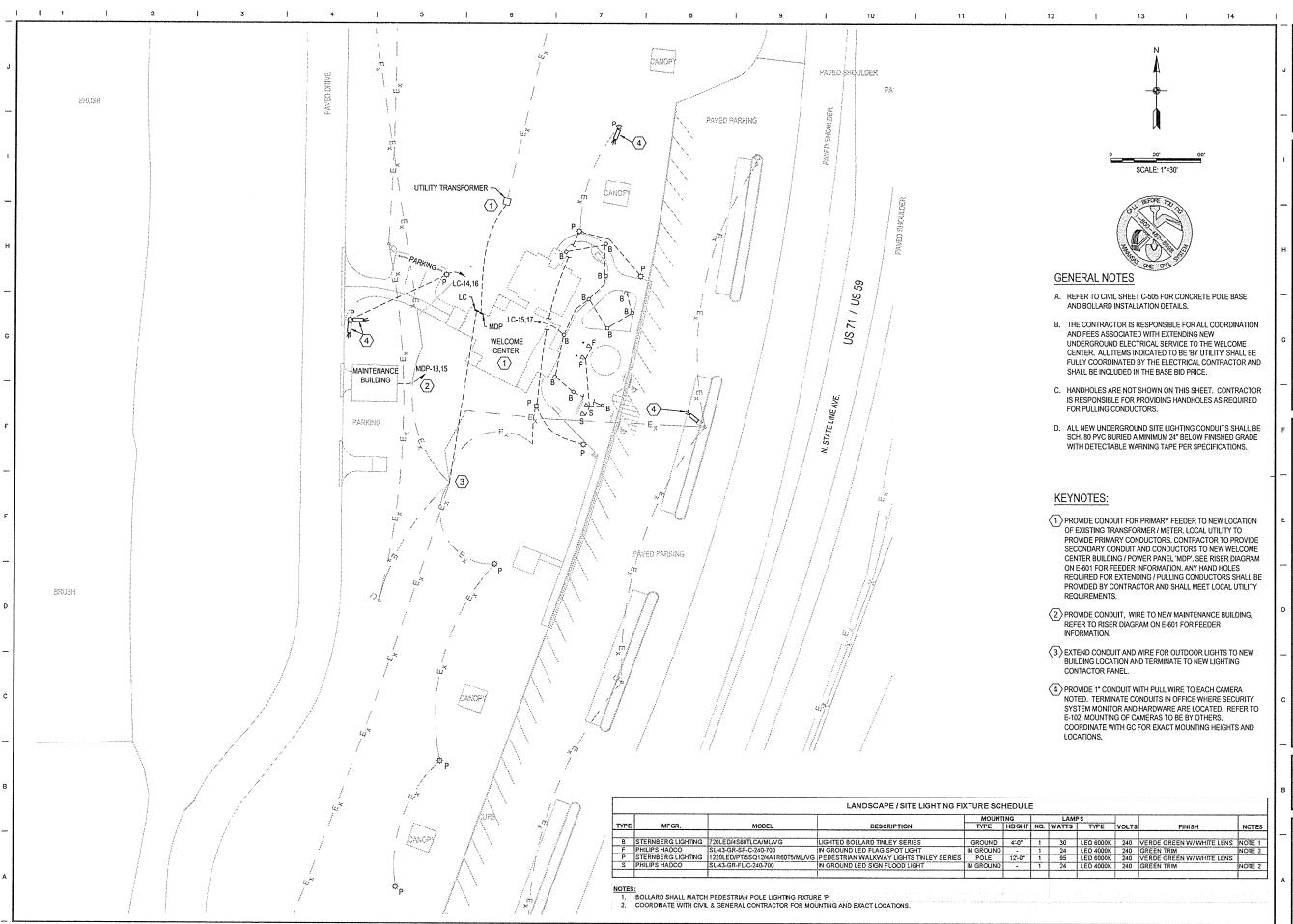
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WELCOME CENTER
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WELCOME CENTER

No. 1262 No. 030449

SITE PLAN

ARKANSAS HIGHWA ARKANSAS HIGHWA ARKANSAS HIGHWA ARKANSAS HIGHWAS AR WAND ARKANSAS HIGHWAS ARKANSAS ARKANSAS HIGHWAS ARKANSAS HIGHWAS ARKANSAS ARKANSAS ARKANSAS ARKANSAS ARKANSA

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Denelikanni	120 Volts L-N 10, 3W			:	600A, 2P MAIN BREAKER COPPER BUS			TYPE: I-LINE
Panel 'MDP'		240 Volts L-L 10,000 AIC BRANCH BRKRS				ROUNDIN	IG BAR	NEMA 1 ENCLOSURE SURFACE MOUNTED
Service	Ckt. No.	Conn. Load	Brkr.	Phase AO CO		Conn. Load	Ckt.	Service
PANEL LA'	1 3	671B 6928	100/2	30	20/2	1572 1572	2	EWH-1
PANEL 1B'	5 7	13655	225/2		30/2	2880	6 8	CU2
PANEL 1C'	9	2741 2804	100/2				10	SPACE SPACE
PANEL 'LM'	13	16018 15442	200/2	26 56			14	SPACE SPACE
SPACE	17			335			18	SPACE
SPACE SPACE	19			5 T	ļ		20	SPACE SPACE
SPACE	23			200		I	24	SPACE
4-1/2* SPA	CE MINIMUM			324 338			4-1/2° SI	PACE MINIMUM
		Totals	AØ		CØ	Totals		FIED LOAD
SERVICE ENTRANCE RATED	AMPS	43 584 363.2		43 454 362.1		089 054 \ 371.1 A	VA .	

Panel 'L A'	120 Volts L-N 10, 3W 240 Volts L-L 10,000 AIC BRANCH BRKRS							TYPE; NQOD
Paner LA								NEMA 1 ENCLOSURE SURFACE MOUNTED
Service	Ckt. No.	Conn. Load	Brkr.	Phase AØ CØ		Conn. Load	Ckt. No.	Service
RCPT - STORAGE	1	720	20/1	56	20/1	1500	2	MICROWAVE
RCPT - DISPOSAL, KITCHEN	3	1440	20/1		20/1	1240	4	REFRIGERATOR
RCPT - WORK RM & STAFF TOILET	5	360	20/1	磁管	20/1	540	6	RCPT - OFFICE
RCPT - TOUCH SCREEN INTERFACE	7	720	20/1		20/1	720	8	RCPT - PUBLIC COFFEE
RCPT - NFORMATION DESK	9	720	20/1	25	20/1	540	10	MEDIA AREA & COFFEE TV'S
RCPT - PUBLIC ROOM	11	720	20/1	學經	20/1	360	12	RCPT - PUBLIC ROOM
RCPT - PUBLIC ROOM	13	540	20/1	為	20/1	250	14	IRRIGATION CONTROL
SPARE	15	0	20/1		20/2	480	16	AHU-3
STORAGE RM COFFEE MAKER	17	360	20/1	32	2012	480	18	Anu-3
STORAGE RM COFFEE COUNTER		360	20/1	490	20/2	480	20	AHU-4
RCPT - OUTSIDE STORAGE DOOR	21	180	20/1	353	20/2	480	22	ANO-4
RCPT - TELEPHONE BOARD	23	360	20/1	強約	20/2	48	24	BC-2
SPARE	25	0	20/1	28	20/2	48	26	180-2
SPARE	27	0	20/1	(33)	20/1	0	28	SPARE
SPARE	29	0	20/1	365	20/1	0	30	SPARE
PROVIDE IDENTIFIED HANDLE TIE:	S FOR	Totals	AØ		CØ	Totals		ding at
ALL MULTIWIRE BRANCH CIRCUITS	SPER	VA	6 718		6 928	VA		
NEC 210.4		AMPS	56.0		57.7	AMPS		

D===1# PI	120 Volts L-N 10,3W 240 Volts L-L 10,000 AIC BRANCH BRKRS						IN LUGS O	NLY	TYPE: NOOD
Panel 'LB'				COPPER BUS EQUIP, GROUNDING BAR					NEMA 1 ENCLOSURE
			BKKKS			QUIP. G			SURFACE MOUNTED
Service	Ckt.	Conn.	Brkr.	Pha	1	Brkr.	Conn.	Ckt.	Service
	No.	Load		AØ	CO		Load	No.	00.1100
EXHAUST FAN EF-2	1	696	20/1	35		20/1	630	2	FLUSH VALVES / RECPT / C-1
EXHAUST FAN EF-1	3	696	20/1		22	20/1	330	4	FLUSH VALVES / RECEPTACLE
WOMAN'S HAND DRYER	5	950	20/2	2		20/2	950	6	MEN'S HAND DRYER
	7	950	20/2			2012	950	8	MENS HAND DRIEK
WOMAN'S HAND DRYER	9	950	20/2			20/2	950	10	MEN'S HAND DRYER
TOTAL TOTAL BRIDE	11	950	2012		32	2012	950	12	MENS HAND DRYER
AHU-1	13	240	20/2	400		20/1	0	14	SPARE
7470-1	15	240	2012		100	40/2	3120	16	1444 7777 11774 7777 74444
AHU-2	17	240	20/2	38	_	40/2	3120	18	WATER HEATER EWH-2
A110-2	19	240	2012		16	20/1	186	20	TOILET LIGHTING
TOILET LIGHTING	21	182	20/1	23	\neg	20/1	186	22	TOILET LIGHTING
TOILET LIGHTING	23	182	20/1		E. E.	20/2	48	24	no
CENTRAL CORE LIGHTING	25	283	20/1	1		20/2	48	26	BC-1
WATER COOLER / RR RCPT'S	27	1350	20/1			2010	2880	28	
WATER COOLER / RR RCPTS	29	1350	20/1	200	_	30/2	2880	30	-CU1
SPARE	31	0	20/1		352	20/1	756	32	RF-1
SPACE	33			84		20/1	0	34	SPARE
SPACE	35				20			36	SPACE
SPACE	37			346				38	SPACE
SPACE	39				88			40	SPACE
SPACE	41			38				42	SPACE
PROVIDE IDENTIFIED HANDLE TI	S FOR	Totals	ΑØ		(0	Totals		
ALL MULTIWIRE BRANCH CIRCUI	TS PER	. VA	13 655	5	13	828	VA		
NEC 210.4		AMPS	113.8			5.2	AMPS		

	120 Volts L-N 10, 3W 240 Volts L-L 10,000 AIC BRANCH BRKRS			100A MAIN LUGS ONLY COPPER BUS				TYPE: NQOD
Panel 'LC'								NEMA 1 ENCLOSURE
					EQUIP. 6	ROUNDING	SURFACE MOUNTED	
Service	Ckt.	Conn.	Brkr.	Phase	Brkr.	Conn.	Ckt.	Service
3011130	No.	Load	DIKI.	AØ CØ	DIKI.	Load	No.	Service
LGTS - MAIN ENTRANCE	1	80	20/1		20/1	32	2	LGTS - COVERED PORCHES
LGTS - STORAGE ROOM	3	240	20/1	134	20/1	140	4	LGTS - WORK RM, OFFICE, STAFF RR, EF-3
LGTS - INFO DESK COVE	5	78	20/1	26	20/1	70	6	LGTS - COFFEE BAR/DESK
LGTS - LIGHT BOX	7	108	20/1	100	20/1	144	8	LGTS - CHANDELIERS
LGTS - CUSTOMER SERVICE	9	496	20/1	51436. 5138	20/1	72	10	LGTS - CHANDELIER
LGTS - CUSTOMER SERVICE	11	594	20/1	355	20/1	25	12	LGTS - EMERGENCY
FANS	13	360	20/1	138	20/2	30	14	LGTS - REAR PARKING
LGTS - FLAGS, SIGN, BOLLARDS,	15	593	20/2	海 線	20/2	30	16	PEDESTRIAN POLES
PEDESTRIAN POLES	17	593	20/2	1500 P	20/2	930	18	1070 0101110107
SPARE	19	0	20/1	284	20/2	930	20	LGTS - PARKING LOT
SPARE	21	0	20/1	200	20/1	0	22	SPARE
SPARE	23	0	20/1	3.8	20/1	0	24	SPARE
SPARE	25	0	20/1	協議	20/1	0	26	SPARE
SPARE	27	0	20/1	235	20/1	0	28	SPARE
PROVIDE IDENTIFIED HANDLE TIE	S FOR	VA	2 741		2 804	VA		
ALL MULTIWIRE BRANCH CIRCUITS	SPER	AMPS	22.8		23.4	AMPS		

			EC	UIPMEN	TSCHE	DULE					
EQUIPMENT	DESCRIPTION	LOCATION	VOLTAGE	PHASE	AMPS	CONDUIT	WIRE SIZE	0	T		
	DESCRIPTION		TOLINGE				MIKE SIZE	ENCLOSURE	SIZE	FUSING	NOTES
EF-1	EXHAUST FAN	SERVICE ROOM 112	120								
EF-2	EXHAUST FAN	SERVICE ROOM 112	120		5.8	3/4*	1#12, 1#12(N), 1#12(G)		STARTER		NOTE 2
EF-3	EXHAUST FAN	STAFF TOILET 105		1	5.8	3/4"	1#12, 1#12(N), 1#12(G)		STARTER		NOTE 2
			120		0.1	3/4"	1#12, 1#12(N), 1#12(G)		STARTER		NOTE 3
		MAINTENANCE BLDG	120	1	5.8	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR	STARTER	R SWITCH	NOTE 2.
	RETURN AIR FAN	PUBLIC TOILET CORR. 110	120	1	6.3	3/4"	1#12, 1#12(N), 1#12(G)	MOTOR	STARTER	SWITCH	NOTE 2
		SERVICE ROOM 112	240	1	2	3/4"	2#12,1#12(G)	MOTOR	STARTER	SWITCH	NOTE 2
		SERVICE ROOM 108	240	1	2	3/4"	2#12,1#12(G)	MOTOR	STARTER	SWITCH	NOTE 2
AHU-3		ABOVE INFO DESK 102	240	1	4	3/4"	2#12.1#12(G)	MOTOR	STARTER	SWITCH	NOTE 2
AHU-4		ABOVE WORK RM 104	240	1	4	3/4"	2#12,1#12(G)	MOTOR	STARTER	SWITCH	NOTE 2
		OUTSIDE BY STORAGE RM	240	1	24	3/4*	2#10, 1#12(G)	NEMA 3R	30A2P	NON-FUSIBLE	
CU2		OUTSIDE BY PUBLIC TOILETS	240	1	24	3/4"	2#10, 1#12(G)	NEMA 3R	30A2P	NON-FUSIBLE	
	BRANCH CIRC, CONTOLLER	SERVICE ROOM 108	240	1	0.4	3/4"	2#12, 1#12(G)	BRANCH	CIRCUIT	BREAKER	NOTE 1
	BRANCH CIRC. CONTOLLER	STORAGE ROOM 106	240	1	0.4	3/4"	2#12, 1#12(G)			BREAKER	NOTE 1
EUH-1	UNIT HEATER	MAINTENANCE BLDG	240	1	21	3/4"	2#10, 1#10(G)	NEMA 1	30A2P	NON-FUSIBLE	110121
EUH-2	UNIT HEATER	MAINTENANCE BLDG	240	1	21	3/4"	2#10, 1#10(G)	NEMA 1	30A2P	NON-FUSIBLE	
	WATER COOLER (2 TOTAL)	PUBLIC TOILET CORR. 110	120	1	3.75	3/4"	1#12, 1#12(N), 1#12(G)		RECEPTA		
EWH-1	WATER HEATER	ABOVE WORK RM 104	240	1	13.1	3/4*	2#12, 1#12(G)	NEMA 1	30A2P	NON-FUSIBLE	
EWH-2	WATER HEATER	SERVICE ROOM 108	240	1	26	3/4"	2#8, 1#10(G)	NEMA 1	60A2P	NON-FUSIBLE	
EWH-3	WATER HEATER	MAINTENANCE BLDG	240	1	72	1.	4#8, 1#8(G)	NEMA 1	100A4P	NON-FUSIBLE	
C-1	RECIRCULATING PUMP	SERVICE ROOM 108	120	1	2.5	3/4"	1#12, 1#12(N), 1#12(G)				NOTE 1
	HAND DRYERS (4 TOTAL)	PUBLIC TOILETS	240	1	8	3/4"	2#12, 1#12(G)				NOTE 1
	PUMP STATION	SITE	240	1	59	1-1/4*	2#4, 1#8(G)		RAL TO S		THOIL I
***************************************							2,7, 1,60(3)	MICC	10 S	ISILM	

- NOTES:

 1. PROVIDE BRANCH CRICUIT BREAKER HANDLE LOCKOUT DEVICE.

 2. AT EACH LINIT, PROVIDE A WALL MOUNTED OR DEVICE MOUNTED MOTOR STARTER SWITCH EQUAL TO SQUARE 'D' #2510FG

 3. INTERLOCK WITH BATHROOM LIGHT SWITCH.

 4. INTERLOCK AND PROVIDE 120V POWER TO MOTORIZED DAMPER.

		120 Volts L-N 10, 3W 240 Volts L-L 10,000 AIC BRANCH BRKRS				MAIN BRE	TYPE: NOOD	
Panel 'LM'					COPPER	BUS	NEMA 1 ENCLOSURE	
	10,000 Al				EQUIP. G	ROUNDING	SURFACE MOUNTED	
Service	Ckt,	Conn.	Conn. Brkr.		Brkr.	Conn.	Ckt. No.	Service
	No.	Load DIKI.	AØ CØ '	DIKI.	Load	Service		
LGTS	1	372	20/1	225	20/1	540	2	RCPT
EUH-2	3	2520	30/2	10.40	20/1	360	4	RCPT
2011-2	5	2520	30/2	\$185 1	20/1	1080	6	RCPT
EUH-1	7	2520	30/2	- 50	20/1	720	8	RCPT
2011-1	9	2520	30/2	26.2 26.2	20/1	360	10	RCPT
EWH-3	11	4313	40/2	35	20/1	696	12	EF-4
27117-5	13	4313		100	20/1	0	14	SPARE
EWH-3	15	4313	40/2	3528	20/1	0	16	SPARE
-	17	4313		200	20/1	0	18	SPARE
SPARE	19	0	20/1	2013	20/1	0	20	SPARE
SPARE	21	0	20/1	200	20/1	0	22	SPARE
SPARE	23	0	20/1	200		0	24	SPACE
SPARE	25	0	20/1	200		0	26	SPACE
SPARE	27	0	20/1	CH		0	28	SPACE
SPACE	29	0		34		0	30	SPACE
PROVIDE IDENTIFIED HANDLE TIES FOR		Totals	ΑØ	CØ		Totals		
ALL MULTIWIRE BRANCH CIRC	UMS PER	VA	16 018	15 442		VA		
NEC 210.4		AMPS	133.5		128.7	AMPS		

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-					FOR BID	DESCRIPTION OF REVISION OR ISSUE
,					ISSUED FOR BID	DESCR
-					9/25/2015	DATE
				 	0	NO.



PANEL SCHEDULES & EQUIPMENT SCHEDULE

	DESIGNED BY	DBL
	DRAWN BY	KAL
3	CHECKED BY	BRC
	APPROVED BY	DBL

	DATE		9/25/2	015				
-	SCALE	Α	s sho	WΝ				
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