CHEROKEE NATION
REPLACEMENT HOSPITAL

BID PACKAGE 01

(NORTH PARKING & ACCESS)

VOLUME 01 OF 11

(CIVIL)

PARKHILL
4101 WIRELESS WAY, SUITE 350
OKLAHOMA CITY, OK 73134
(405) 832-9900

CIVIL ENGINEERING

PALMERTON & PARRISH, INC.
4168 W. KEARNY ST.
SPRINGFIELD, MO 65803
(417) 864-6000

GEOTECHNICAL ENGINEERING

FEC HELIPORTS
5228 RIVER ROAD
CINCINNATI, OH 45233
(877) HELIPAD

HELIPAD DESIGN

HOWARD-FAIRBAIRN SITE DESIGN
3100 NW 149TH ST
OKLAHOMA CITY, OK 73134
(405) 752-8018

LANDSCAPE ARCHITECTURE

HKS
999 18th St, #2255N
DENVER, CO 80202
(303) 293-2903

INTERIOR ARCHITECTURE | INTERIOR DESIGN

FOY CONSULTING & ENGINEERING, LLC
6900 COLLEGE BLVD #600
OVERLAND, KS 66211
(913) 312-0075

STRUCTURAL ENGINEER

HP ENGINEERING, INC.
5504 PINNACLE POINTE DRIVE, SUITE 200
ROGERS, AR 72758
(479) 899-6370

MECHANICAL | ELECTRICAL | PLUMBING

INTERIOR LOGISTICS
1316 E 35TH PLACE, SUITE 100
TULSA, OK 74105
(918) 382-9120

EQUIPMENT | FURNITURE PLANING

MOBLEY FIRE PROTECTION
6242 LLANO AVE.
DALLAS, TX 75214
(817) 614-2361

FIRE PROTECTION | LIFE SAFETY

FDP
2655 VILLA CREEK DR. #233
DALLAS, TX 75234
(972) 245-5300

FOOD SERVICE

ECOWORKS STUDIO
659 AUBURN AVE. NE, SUITE 135
ATLANTA, GA 30312
(404) 480-4499

LEED CONSULTING

CRUX TECHNOLOGY + SECURITY SOLUTIONS
401 SOUTH BOSTON AVE, SUITE 500-15
TULSA, OK 74103
(800) 685-6440

LOW-VOLTAGE | IT | SECURITY

DIRECT 2 COMPLETION
7134 S. YALE AVE #400
TULSA, OK 74136
(918) 457-6905

OWNERS REPRESENTATIVE

FOREMAN MANHATTAN CONSTRUCTION TEAM
5601 S 122nd E AVE
TULSA, OK 74146
(918) 878-3492

CONSTRUCTION MANAGER

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

STATE OF OKLAHOMA
J. BRECK CHILDERS
5120
REGISTERED ARCHITECT
7/29/2022

CONSULTANT LOGO:

CLIENT:

SEAL OF THE CHEROKEE NATION
ESTABLISHED
Sept. 6, 1839

CHEROKEE NATION
REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING & ACCESS)

REVISIONS		
#	DATE	DESCRIPTION

JOB NUMBER: 21-08.21
DATE: 07-29-2022
SHEET NUMBER: **VOL 01**
SHEET TITLE: COVER SHEET

INDEX OF DRAWINGS - VOLUME 01 - CIVIL

SHEET NUMBER	SHEET NAME	BID PACKAGE 01 - 07-29-2022
GENERAL		
VOL 01	COVER SHEET	
G0.01	DRAWING INDEX	
CIVIL		
C0-102	GENERAL CIVIL NOTES - BP1	
C1-103	EXISTING CONDITIONS	
C1-104	EXISTING CONDITIONS	
C1-105	EXISTING CONDITIONS	
C2-108	NP DEMOLITION OVERVIEW	
C2-109	NP 1 DEMOLITION PLAN	
C2-110	NP2 DEMOLITION PLAN	
C2-111	NP3 DEMOLITION PLAN	
C2-112	NP4 DEMOLITION PLAN	
C2-113	NP5 DEMOLITION PLAN	
C2-702	NP EROSION CONTROL PLAN	
C2-750	EROSION CONTROL DETAILS	
C3-108	NP SITE PLAN OVERVIEW	
C3-109	NP1 SITE PLAN	
C3-110	NP2 SITE PLAN	
C3-111	NP3 SITE PLAN	
C3-112	NP4 SITE PLAN	
C3-113	NP5 SITE PLAN	
C3-501	SITE DETAILS	
C3-502	SITE DETAILS	
C3-503	CONCRETE PAVING JOINT DETAILS	
C5-113	NP GRADING OVERVIEW	
C5-114	NP1 GRADING PLAN	
C5-115	NP2 GRADING PLAN	
C5-116	NP3 GRADING PLAN	
C5-117	NP4 GRADING PLAN	
C5-118	NP5 GRADING PLAN	
C5-210	NP COORDINATES AND ELEVATIONS TABLE	
C6-201	NP STORM PLAN & PROFILE	
C6-202	NP STORM PLAN & PROFILE	
C6-501	STORM DRAIN DETAILS	
C6-502	STORM DRAIN DETAILS	
C6-503	STORM DRAIN DETAILS	
C6-504	STORM DRAIN DETAILS	
C6-505	STORM DRAIN DETAILS	
C6-802	NP EXISTING HYDROLOGY	
C6-803	NP DEVELOPMENT HYDROLOGY	
C8-201	FORCE MAIN PLAN & PROFILE	
C8-501	FORCE MAIN DETAILS	
C9-201	DOWNING DRIVEWAY PLAN AND PROFILE	
C9-501	DOWNING DRIVEWAY DETAILS	

Grand total: 43

INDEX OF DRAWINGS - VOLUME 07 - ELECTRICAL

SHEET NUMBER	SHEET NAME	BID PACKAGE 01 - 07-29-2022
GENERAL		
VOL 07	COVER SHEET	
G0.01	DRAWING INDEX	
ELECTRICAL		
ENL-00	ELECTRICAL LEGEND	
ENL-01	ELECTRICAL SITE PLAN - NORTH LOT	

Grand total: 4

INDEX OF DRAWINGS - VOLUME 09 - LVIT/SECURITY/DAS

SHEET NUMBER	SHEET NAME	BID PACKAGE 01 - 07-29-2022
GENERAL		
VOL 09	COVER SHEET	
G0.01	DRAWING INDEX	
SECURITY		
TNS1.02	NETWORK SITE PLAN - NORTH PARKING & ACCESS	

Grand total: 3

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

CONSULTANT LOGO:

CLIENT:

CHEROKEE NATION REPLACEMENT HOSPITAL

TAHLEQUAH, OKLAHOMA

KEY PLAN:

PROJECT PHASE:

BID PACKAGE 01

(NORTH PARKING & ACCESS)

REVISIONS

#	DATE	DESCRIPTION

JOB NUMBER: 21-08.21

DATE: 07-29-2022

SHEET NUMBER:

G0.01

SHEET TITLE:

DRAWING INDEX

SITE WORK CONSTRUCTION DOCUMENTS FOR

CHEROKEE NATION - W.W. HASTINGS REPLACEMENT HOSPITAL

BID PACKAGE 1 - NORTH PARKING AND ACCESS

SUMMARY OF WORK

1. The Work to be performed consists of providing all labor, materials, equipment and services necessary for the complete construction and start up of BID PACKAGE 1 – NORTH PARKING AND ACCESS of the CHEROKEE NATION – W.W. HASTINGS REPLACEMENT HOSPITAL as shown on the Drawings and herein specified in accordance with the Contract Documents.

CONTRACT COSTS

1. All costs for labor, materials, equipment, and services necessary for complete construction and start–up of the Work as shown on the Drawings and specified herein shall be included in the contract price unless otherwise indicated in the Contract Documents.
2. Work shown on the Drawings or required by the Specifications but not specifically listed in the Summary of Quantities shall be considered incidental construction, and the cost of such work shall be included in the Unit Prices Bid.
3. CONSTRUCTION MANAGER shall make their own estimate of the labor, materials, equipment, and services necessary to complete the work and shall visit the site and fully acquaint himself of the existing conditions prior to commencing construction. CONSTRUCTION MANAGER shall notify ENGINEER of any errors in the ENGINEER's construction quantities; or any condition at the site that may affect the construction of the work as shown on the Drawings.

GENERAL REQUIREMENTS

1. Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of PARKHILL, including electronic media editions, shall not be reused on extensions of the Project or any other project without written consent of OWNER and PARKHILL and specific written verification or adaptation by PARKHILL.
2. Survey information shown on the drawings were provided by Lemke Land Surveying, 3226 Bart Conner Drive, Norman, OK, 73072 Phone (405) 366–8541, CA #2054.

APPLICABLE CODES AND SPECIFICATIONS

1. All references to codes, specifications, and standards referred to in the Specification and on the Drawings shall mean, and are intended to be, the latest edition, amendment, and/or revision of such reference standard in effect as of the date of these Contract Documents.

PROCEDURAL REQUIREMENTS

1. CONSTRUCTION MANAGER shall make the coordination of the operations of all trades, subcontractors, and material suppliers engaged upon or in connection with the Work. Every effort shall be made to assure a harmonious, cooperative attitude on the part of all concerned. CONSTRUCTION MANAGER shall guarantee to each of his foremen and subcontractors the proper dimensions they may require for the fitting of their work to adjoining work. All fitting and adjusting necessary to make all the parts of the work join together properly shall be made.
2. Cooperation with utility and government officials and inspectors shall occur at all times. If any official or inspector deems special inspection is necessary, assistance and facilities that will expedite his inspection shall be provided.

TEMPORARY FACILITIES AND CONTROLS

1. Arrange for and provide temporary facilities and controls as specified herein and as required for the proper and expeditious prosecution of the work. Pay all costs, except as otherwise specified, until final acceptance of the work unless the OWNER makes arrangements for the use of completed portions of the work after substantial completion in accordance with the provisions of the General Conditions.
2. Make all temporary connections to utilities and services in locations acceptable to the OWNER, ENGINEER, and local authorities having jurisdiction thereof; furnish all necessary labor and materials, and make all installations in a manner subject to the acceptance of such authorities and the ENGINEER; maintain such connections; remove the temporary installation and connections when no longer required; restore the services and sources of supply to proper operating condition.
3. OWNER will coordinate and pay all costs for temporary electrical power and temporary water.
4. Water necessary for construction purposes shall be provided. All temporary connections shall be made to existing mains. A temporary meter shall be provided. Arrangements and payment for the temporary water service, including cost of installation, maintenance thereof, and water used shall be made. At the completion of the construction work, all temporary water service equipment and piping shall be removed.
5. Chemical toilets for the use of all construction personnel shall be provided at a location within the limits of the Site. Chemical toilets shall be maintained in a sanitary condition.
6. From the commencement to the completion of the work, keep all parts of the site and the project free from accumulation of water, and supply, maintain, and operate all necessary pumping and bailing equipment.
7. Remove snow and ice as necessary for the protection and prosecution of the work, and protect the work against weather damage.

PRODUCT REQUIREMENTS

1. Materials, products, and equipment shall be properly containerized, packaged, boxed, and protected to prevent damage during transportation and handling.
2. Provide suitable temporary weather tight storage facilities as may be required for materials that will be damaged by storage in the open. Any off–site storage space used is the responsibility of the CONSTRUCTION MANAGER. Store and protect materials delivered at the site from damage. Do not use damaged material on the work.
3. Manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned as directed by the respective manufacturers, unless otherwise specified.
4. References to approved equal or similar terms mean that approval of the ENGINEER is required.
5. Whenever the Contract Documents require that a product be in accordance with Federal specification, ASTM designation, ANSI specification, AWWA specification, or other association standard, the CONSTRUCTION MANAGER shall present an affidavit from the manufacturer certifying that the product complies therewith. Where requested or specified, submit supporting test data to substantiate compliance.

EXECUTION REQUIREMENTS

1. CONSTRUCTION MANAGER shall be responsible for properly laying out the work, and for lines and measurements for the work executed under the Contract Documents. Verify the figures shown on the Drawings before ordering any materials and laying out the work, and report errors or inaccuracies in writing to the ENGINEER before commencing work. The ENGINEER or his representative will in no case assume the responsibility for laying out the work.
2. OWNER has or will perform a survey of the site, stake the property limits, and provide a reference benchmark elevation. CONSTRUCTION MANAGER shall be responsible for any additional offset staking or layout survey required to locate improvements and control grade of improvements. Be responsible for the proper location and level of the work and for the maintenance of reference lines and benchmarks. Any re–staking requested by the CONSTRUCTION MANAGER shall be done at his expense.
3. Existing survey points other than those specifically mentioned herein shall not be considered as acceptable control points unless approved by the ENGINEER. If approval is secured, CONSTRUCTION MANAGER remains responsible for maintaining them and for their accuracy. Be responsible for preserving all existing iron or metal, and all concrete survey points or monuments for the construction period.

STORM WATER POLLUTION PREVENTION PLAN

1. Construction activities that result in land disturbance of equal to or greater than one (1) acre, or less than one (1) acre, if they are part of a larger common plan of development or sale that totals at least one (1) acre must also obtain a permit for Storm Water Discharges from Construction Activities. This means that land disturbing of one (1) acre or more must permit with ODEQ/EPA. A NOI will be submitted to both EPA and ODEQ. This project is located on both Trust land and non–trust land, and applications will be submitted to both EPA and ODEQ. OWNER will apply for these permits and pay permit fees.
2. A copy of the erosion control site plan must be on site at all times and made available to the inspector upon request.
3. The CONSTRUCTION MANAGER shall be responsible for the repair or replacement of all erosion control devices damaged due to construction.
4. A Storm water Pollution Prevention Plan (SWPPP) has been prepared for the WORK and a Notice of Intent (NOI) has been submitted by OWNER. CONSTRUCTION MANAGER shall implement the SWPPP, and construct, inspect, and maintain the erosion controls to prevent runoff of silt and sediment from the site. A copy of the SWPPP shall be kept at the site at all times and be made available to inspectors upon request. Inspections reports shall be maintained in the SWPPP and the SWPPP shall be updated when necessary.
5. The erosion control plan, Notice of Intent (NOI), and the Storm Water Pollution Prevention Plan (SWPPP), as well as any other applicable state or municipal permits shall be kept on site by the construction superintendent at all times. Said items shall be made available to state and municipal authorities upon request.
6. Inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, structural control measures, and locations where vehicles enter or exit the site, at least once every fourteen (14) calendar days and within 24 hours of the end of a storm event of 0.25 inches or greater.
7. All erosion and sediment control measures and other protective measures identified in this SWPPP must be maintained in effective operating condition. If site inspections identify erosion controls that are not operating effectively, maintenance shall be performed before the next anticipated storm event, or as necessary to maintain the continued effectiveness of storm water controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable.
8. If sediment escapes the construction site, off–site accumulations of sediment shall be removed at a frequency sufficient to minimize offsite impacts (e.g., fugitive sediment in street could be washed into storm sewers by the next rain and/or pose a safety hazard to users of public streets).
9. Sediment shall be removed from sediment traps or sedimentation ponds when the design capacity has been reduced by 50%.
10. Litter, construction debris, and construction chemicals exposed to storm water shall be prevented from becoming a pollutant source for storm water discharges (e.g., screening outfalls, picked up daily).

EXISTING UTILITIES AND STRUCTURES

1. CONSTRUCTION MANAGER shall contact OKIE (1–800–522–6543) prior to construction for locating existing utilities.
2. The underground utilities shown have been located from field survey surface information and existing drawings. ENGINEER and Surveyor make no guarantee that the underground utilities shown comprise all such utilities in the area, either in service or abandoned. The underground utilities are located as accurately as possible from information available; however, ENGINEER and Surveyor further do not guarantee that the underground utilities shown are in the exact location indicated either vertically or horizontally. ENGINEER and Surveyor have not physically located the underground utilities by probing, excavating, hydro–vac, or by any other means.
3. Prior to construction, CONSTRUCTION MANAGER shall notify all utility companies and governmental agencies who may have utility lines on or about the premises or who may be affected by the construction. Notice shall be given no less than twenty–four hours prior to any work that may interfere with a utility. CONSTRUCTION MANAGER shall also coordinate the construction activities with the utility companies to ensure compliance with the project schedule.
4. All existing structures, improvement and utilities designated to remain shall be adequately protected from damage that might otherwise occur due to construction operations. Where construction comes in close proximity to existing structures, utilities or appurtenances, or if it becomes necessary to move services, poles, guy wires, pipe lines or other obstructions, CONSTRUCTION MANAGER shall notify and cooperate with the owner of the utility, structure, or appurtenance. The utility lines and other existing structures shown on the plans are for information only and are not guaranteed to be complete or accurate as to location and/or depth. CONSTRUCTION MANAGER shall be liable for damage to any utilities resulting from the CONSTRUCTION MANAGER's operations. During construction, all fire hydrants, valve boxes, fire or police call boxes and other existing utility controls shall be left intact, unobstructed and accessible unless noted on the plan.
5. Any existing valve boxes, meters, fire hydrants, manholes, and other public utilities shall be rebuilt to finished grades according to specifications. All valves, manhole lids, and sewer clean–outs located in paved areas, shall be rated for H–20 traffic loading. Coordinate the work with the Tahlequah Public Works Authority.

PROTECTION AND MAINTENANCE

1. Perform all special construction operations and take all precautions necessary to adequately protect the materials and work performed, the property and landscape of OWNER and others, existing buildings and improvements, existing utilities, workers and employees, and the public in general.
2. Where trees, plants, shrubbery, and other vegetation are adjacent to the line of the work and are designated not to be destroyed or removed and replaced, CONSTRUCTION MANAGER shall protect these items by substantial wooden boxes and guards and shall not permit machinery or employees to scrape, tear the limbs from or damage, or attach guy cables to them. Hand excavation may be required if machinery could damage trees, plants, shrubbery, and other vegetation designated to be left undisturbed. CONSTRUCTION MANAGER shall be responsible for all damages to such trees, plants, shrubbery, and other vegetation unless specific provisions are made for their removal or abandonment on the Drawings.
3. Existing fences that require cutting for gates or other reasons shall be adequately braced to prevent slacking of the fence before it is cut. Livestock may be present in all fenced areas; therefore, points of entrance shall be kept closed at all times and the CONSTRUCTION MANAGER shall be responsible for the containment of livestock, their safety, and the safety of the public. All fencing shall be done in a workmanlike manner with standard construction practices as per the standard details provided. Gates installed shall be chained and locked closed. Locks shall be keyed alike. Provide a set of keys to the OWNER.
4. The sides of all excavations shall be sufficiently sheeted and shored to prevent slides, cave–ins, settlement or movement of the banks and to maintain the excavation clear of all obstructions that will, in any way, hinder or delay the progress of the work. All sheeting, shoring and bracing shall have sufficient strength and rigidity to withstand the pressure exerted and maintain the sides of the excavation properly in place and protect all persons, including workmen, and all property from injury or damage. The removal of sheeting, shoring and bracing shall be done in such manner as to not endanger new or existing structures, public or private property, and to avoid cave–ins or slides of the banks. Sheeting, shoring, or bracing shall not be left in place.
5. Shore up and protect any building or other structure which may be endangered during the work and restore all buildings, culverts, fences, walls, or other properties disturbed during the work to a condition equal to that existing before operation. CONSTRUCTION MANAGER shall be responsible for any injuries to persons and for damages to existing buildings or other structures affected by the work, and OWNER shall not be liable therefore.
6. Immediately remove all surface or seepage water from sewers, drains, ditches, and other sources that may accumulate water during the excavation and construction work by pumping, bailing, or draining. CONSTRUCTION MANAGER shall have available at all times sufficient equipment in proper working order for doing the work herein required. All water removed from excavations shall be disposed of in an approved manner, so as to not create unsanitary conditions, nor to cause injury to persons or property or damage to the work in progress, nor to interfere unduly with the use of streets, private driveways or entrances.
7. When existing storm sewers, drains, or ditches are blocked, cut, opened, or removed in the course of the work, CONSTRUCTION MANAGER shall provide and maintain temporary outlets and connections until permanent facilities have been restored. Provide and maintain any pumps, diversions, piping, containers, and other facilities required for this purpose.
8. During construction and until such time as vegetation is reestablished, keep exposed dirt areas within the limits of construction and in stockpiles areas damp to prevent blowing. CONSTRUCTION MANAGER shall be responsible for providing and maintaining adequate erosion protection during construction and following construction until such time as proper vegetation is reestablished.
9. The premises and the job site shall be maintained in a reasonably neat and orderly condition and kept free from accumulations of waste materials and rubbish during the entire construction period. Remove crates, cartons, and flammable waste materials or trash from the work areas at the end of each working day.
10. Upon completion of the work and before final acceptance and final payment shall be made, the CONSTRUCTION MANAGER shall completely clean and remove from the site of the work all equipment, construction materials, surplus and discarded materials, temporary structures and debris of every kind. CONSTRUCTION MANAGER shall leave the site of the work in a neat and orderly condition equal to that which originally existed, or as called for in the Contract documents. Surplus and waste materials removed from the site of the work shall be disposed of at locations satisfactory to the Engineer, and at the CONSTRUCTION MANAGER'S sole cost.
11. All terraces, levees, and watercourses shall be restored to former condition to the satisfaction of OWNER so that they shall function as originally intended.
12. Fences disturbed by construction shall be restored to original condition and to the satisfaction of OWNER.
13. Public and private streets, drives, and parking lots shall be restored to their original condition.
14. When and where any damage or injury is done to public or private property on the part of the CONSTRUCTION MANAGER, it shall restore or have restored at its own cost and expense such property to a condition equal (or improved) to that existing before such damage was done by repairing, rebuilding or otherwise restoring as may be directed, or it shall make good such damage or injury in a manner acceptable to the property owner or the Engineer. Replacement of previously constructed items, such as curb, gutter, sidewalks, driveways, paving, etc., shall conform to the specifications for new construction, unless directed otherwise by the OWNER.

EXCAVATION AND TRENCH SAFETY SYSTEMS

1. CONSTRUCTION MANAGER shall be responsible for complying with State laws and Federal regulations relating to excavation and trench safety, including those which may be enacted during the performance under this Contract. CONSTRUCTION MANAGER is advised that Federal Regulations 29 C.F.R. 1926.650–1926.652 have been, in their most recent version as amended, in effect since January 2, 1990. CONSTRUCTION MANAGER shall fully comply with the U.S. Department of Labor Occupational Safety and Health Administration (OSHA) regulations pertaining to excavations, trenching, and shoring and shall provide and familiarize its employees involved in excavation and trenching with the provisions in OSHA Pamphlet Number 2226, Excavating and Trenching Operations.

TRAFFIC CONTROL

1. A Work Zone Permit must be obtained from the CITY at least two (2) working days prior to the start of work and/or placing or removing any barricades or modifying existing traffic control devices.
2. CONSTRUCTION MANAGER shall be responsible for erecting and maintaining barricades and other traffic warning devices as necessary around the perimeter of construction and adjacent to any open trenches. Provide and maintain adequate detours around the work under construction. Provide sufficient lights, warning signs, and watchmen for the safety of the public.
3. Any temporary street closure shall be coordinated with and approved by OWNER. CONSTRUCTION MANAGER shall establish all detour routes while streets are closed during construction. CONSTRUCTION MANAGER shall notify Fire, Police, and EMSA headquarters when any street is temporarily closed.
4. CONSTRUCTION MANAGER is responsible for the prompt replacement and/or repair of all traffic control devices, signs, and appurtenances damaged or disturbed due to construction. Any existing traffic signals, signal loops, conduits, cables, signs, and other traffic control devices affected by the work shall be reset or replaced according to specifications. Coordinate the work with the traffic department.

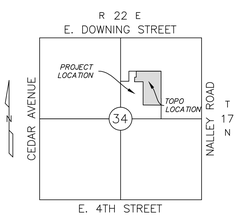
ADA COMPLIANCE

1. CONSTRUCTION MANAGER is responsible for ensuring all sidewalks, curb ramps, ramps, stairs, accessible parking spaces, and building access routes comply with the current Americans with Disability Act (ADA) Standards prior to construction. Any errors found shall be brought the ENGINEER'S attention for resolution.

DEFECTIVE AND UNAUTHORIZED WORK

1. All work that has been rejected or condemned shall be repaired or if it can not be satisfactorily repaired, it shall be removed and replaced at the CONSTRUCTION MANAGER's expense. Defective materials shall be removed immediately from the site of the work.
2. Work done without lines and grades having been given, work done beyond the lines or not in conformity with grades shown on the plans or as given, work done with out proper inspection, or any extra or unclassified work done without written authority and prior written agreement as to prices, will be done at the CONSTRUCTION MANAGER's risk and will be considered unauthorized, and at the option of the ENGINEER, may not be measured an paid for and may be ordered to be removed at the CONSTRUCTION MANAGER's expense.
3. Upon failure of the CONSTRUCTION MANAGER to satisfactorily repair or to remove and replace, if so directed, and rejected, unauthorized, or condemned work or materials immediately after receiving notice from the ENGINEER, the ENGINEER shall, after giving written notice to the CONSTRUCTION MANAGER, have the authority to cause defective work to be remedied or removed and replaced, or to cause unauthorized work to be removed and replace, and to deduct the cost thereof from any compensation due or to become due the CONSTRUCTION MANAGER. If the ENGINEER and OWNER deem it not expedient to correct the work damaged or done not in accordance with the Contract, and equable deduction from the Contract Price shall be made thereof.

LEGAL DESCRIPTION AND LOCATION MAP



LOCATION MAP

HARDSCAPE / LANDSCAPE PATTERNS

- CONCRETE SIDEWALKS
- LIGHT DUTY ASPHALT PAVING
- HEAVY DUTY ASPHALT PAVING
- LIGHT DUTY CONCRETE PAVING
- HEAVY DUTY CONCRETE PAVING
- REINFORCED HEAVY DUTY CONCRETE PAVING
- SODDING / SEEDING / VEGETATIVE COVER

SYMBOL LEGEND

- AC — AIR CONDITIONER UNIT
- FIRE HYDRANT
- G — GAS METER
- GAS VALVE
- GAS VENT
- TRA — GROUND TRANSFORMER
- GUARD POST
- LIGHT POLE
- D — STORM DRAIN MANHOLE
- S — SANITARY SEWER MANHOLE
- PROPERTY CORNER FOUND
- PROPERTY CORNER SET
- CO — SANITARY SEWER CLEANOUT
- COMMERCIAL SIGN
- SIGN
- SPRINKLER HEAD
- SPRINKLER VALVE
- T — TELEPHONE RISER
- TRAFFIC/ELECTRIC PULL BOX
- WATER METER
- WV — WATER VALVE BOX
- TC=1121.63 — TOP OF CURB SPOT ELEVATION
- G=1121.13 — GUTTER SPOT ELEVATION
- X 1123.5 — SPOT ELEVATION

LINE LEGEND

- BARBED WIRE FENCE
- CHAINLINK FENCE
- PIPERAIL FENCE
- STOCKADE FENCE
- SECURITY FENCE
- E — ELECTRIC UNDERGROUND
- E — OVERHEAD ELECTRIC
- G — GAS LINE
- SS — SANITARY SEWER
- STORM DRAIN PIPE (SURVEYED)
- SD — STORM DRAIN CENTERLINE
- W — WATER
- NW — NONPOTABLE WATER
- CURB AND GUTTER
- SURFACE DRAINAGE FLOWLINE
- FO — FIBER OPTIC
- T — TELEPHONE (AERIAL)
- T — TELEPHONE (BURIED)
- TV — TELEVISION (AERIAL)
- TV — TELEVISION (BURIED)
- CENTERLINE
- EASEMENTS
- PROPERTY LINE
- RIGHT OF WAY
- EXISTING BUILDINGS
- BUILDING SETBACK
- 1232 — EX 1 FT CONTOUR
- 1235 — EX 5 FT CONTOUR
- 1232 — FG 1 FT CONTOUR
- 1235 — FG 5 FT CONTOUR
- PROJECT BOUNDARY
- DEMOLITION LINE

ABBREVIATIONS

@	AT		
AFF	ABOVE FINISHED FLOOR	N/A	NOT APPLICABLE
AGRD	ADJACENT GRADE		
AHJ	AUTHORITY HAVING JURISDICTION		
APPROX	APPROXIMATE	OD	OUTSIDE DIAMETER
ARCH	ARCHITECTURAL		
ASS'Y	ASSEMBLY	MTCH	MATCH
		MEP	MECHANICAL / ELECTRICAL / PLUMBING
BFF	BELOW FINISHED FLOOR		
BLDG	BUILDING		
		N	NORTH
CIP	CAST IN PLACE	N	NORTHING
CL	CENTERLINE	NO.	NUMBER
CM	CONSTRUCTION MANAGER		
CNTR	CENTER	OC	ON CENTER
CONC	CONCRETE	ODEQ	OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
CONST	CONSTRUCT		
CONT	CONTINUOUS	ODOT	OKLAHOMA DEPARTMENT OF TRANSPORTATION
CONTR	CONTRACTOR		
COORD	COORDINATE	OWRB	OKLAHOMA WATER RESOURCES BOARD
DIA	DIAMETER	OZ	OUNCE
DS	DOWN SPOUT		
DTL	DETAIL	PC	PORTLAND CEMENT
DWG(S)	DRAWINGS	PC	PRE–CAST
		PC	POINT OF CURVATURE
E	EAST	PLBG	PLUMBING
E	EASTING	POC	POINT OF CONNECTION
EG	EXISTING GRADE	PRC	POINT OF REVERSE CURVATURE
EGCL	EXISTING GRADE CENTER LINE	PT	POINT OF TANGENCY
ELEC	ELECTRICAL	PVI	POINT OF VERTICAL INTERSECTION
ELEV	ELEVATION		
EJ	EXPANSION JOINT	QTY	QUANTITY
EQ	EQUAL		
ETR	EXISTING TO REMAIN	R	RADIUS
EX	EXISTING	RE:	REFERENCE
EXHD	EXTRA HEAVY DUTY	REINF	REINFORCED
		REQ'D	REQUIRED
FD	FLOOR DRAIN	REV	REVISION
FF	FINISHED FLOOR		
FG	FINISHED GRADE	S	SOUTH
FGCL	FINISHED GRADE CENTER LINE	SAN	SANITARY
FL	FLOWLINE	SCHED	SCHEDULE
FOC	FACE OF CONCRETE	SECT	SECTION
FT	FOOT/FEET	SF	SQUARE FEET
FTNG	FOOTING	SHT	SHEET
FV	FIELD VERIFY	SPEC	SPECIFICATION
		SQ	SQUARE
GA	GAUGE	STRUC	STRUCTURAL
GALV	GALVANIZED	STD	STANDARD
GC	GENERAL CONTRACTOR	SW	SIDEWALK
GU	GUTTER	SY	SQUARE YARD
HD	HEAVY DUTY	TC	TOP OF CURB
HORIZ	HORIZONTAL	TEMP	TEMPORARY
HT	HEIGHT	TOC	TOP OF CONCRETE
		TOE	TOE OF SLOPE
IN	INCH	TOP	TOP OF SLOPE
INFO	INFORMATION	TOW	TOE OF WALL
ID	INSIDE DIAMETER	TPW	TOP OF WALL
IFGC	INTERNATIONAL FUEL GAS CODE	TYP	TYPICAL
IPC	INTERNATIONAL PLUMBING CODE		
		UNO	UNLESS NOTED OTHERWISE
JT	JOINT		
		VERT	VERTICAL
LD	LIGHT DUTY		
LF	LINEAL FEET	W	WEST
		W/	WITH
MH	MANHOLE	WT	WEIGHT
MAX	MAXIMUM		
MECH	MECHANICAL		
MIN	MINIMUM		
MISC	MISCELLANEOUS		

BP1 SHEET LIST

Sheet Number	Sheet Title
C0–102	General Civil Notes – BP1
C1–103	Existing Conditions
C1–104	Existing Conditions
C1–105	Existing Conditions
C2–108	NP Demolition Overview
C2–109	NP1 Demolition Plan
C2–110	NP2 Demolition Plan
C2–111	NP3 Demolition Plan
C2–112	NP4 Demolition Plan
C2–113	NP5 Demolition Plan
C2–702	NP Erosion Control Plan
C2–750	Erosion Control Details
C3–108	NP Site Plan Overview
C3–109	NP1 Site Plan
C3–110	NP2 Site Plan
C3–111	NP3 Site Plan
C3–112	NP4 Site Plan
C3–113	NP5 Site Plan
C3–501	Site Details
C3–502	Site Details
C3–503	Concrete Paving Joint Details
C5–113	NP Grading Overview
C5–114	NP1 Grading Plan
C5–115	NP2 Grading Plan
C5–116	NP3 Grading Plan
C5–117	NP4 Grading Plan
C5–118	NP5 Grading Plan
C5–210	NP Coordinates and Elevations Table
C6–201	NP Storm Plan & Profile
C6–202	NP Storm Plan & Profile
C6–501	Storm Drain Details
C6–502	Storm Drain Details
C6–503	Storm Drain Details
C6–504	Storm Drain Details
C6–505	Storm Drain Details
C6–802	NP Existing Hydrology
C6–803	NP Development Hydrology
C8–201	Force Main Plan & Profile
C8–501	Force Main Details
C9–201	Downing Driveway Plan & Profile
C9–501	Downing Driveway Details

BEFORE YOU DIG CALL OKIE (800) 522–6543

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

REGISTERED PROFESSIONAL ENGINEER COREY W. LIPPS 21291 OKLAHOMA 7/29/22

CONSULTANT LOGO:

Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:

CHEROKEE NATION SEAL OF THE CHEROKEE NATION ESTABLISHED SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER:	21-08.21
DATE:	07-29-2022
SHEET NUMBER:	C0-102
SHEET TITLE:	GENERAL CIVIL NOTES - BP1

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C0-TITL-BP1-5123.DWG

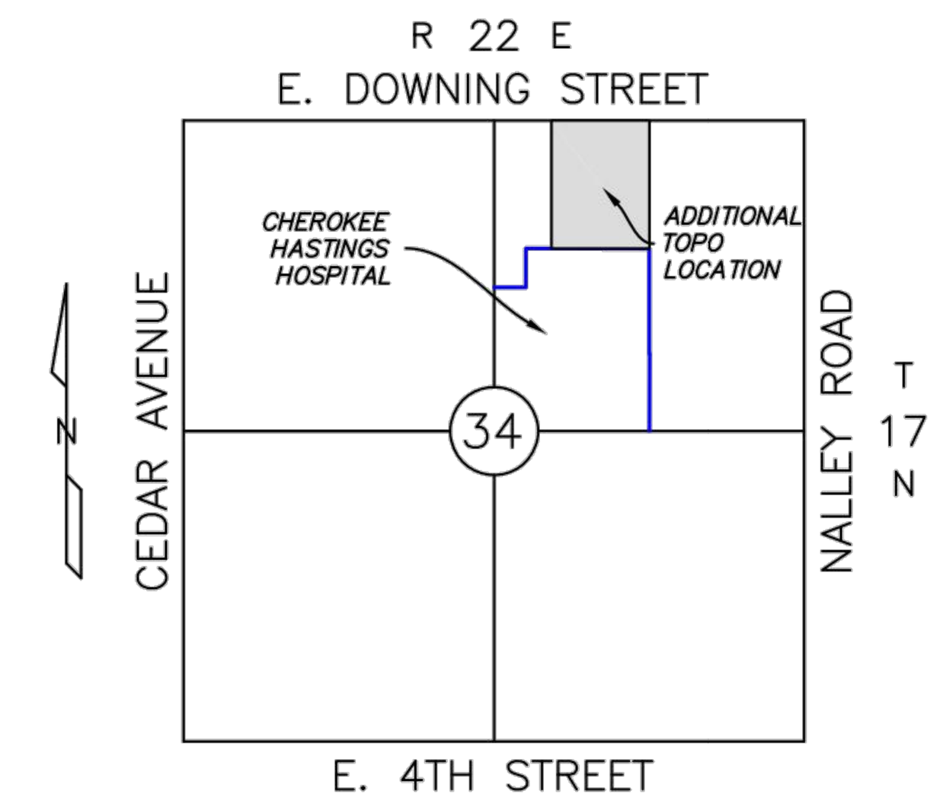
A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C0-TITL-BP1-5123.dwg, 7/29/2022 12:04:58 PM, DWG To PDF.pc3

ADDITIONAL TOPOGRAPHIC SURVEY FOR

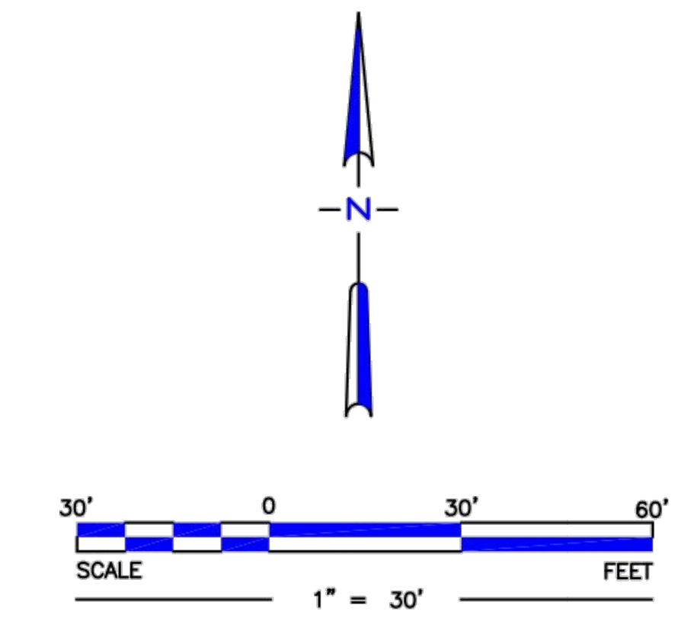
HASTINGS HOSPITAL
CITY OF TAHLEQUAH, CHEROKEE COUNTY, OKLAHOMA

SURVEY CONTROL

ON SITE SURVEY CONTROL				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
LLS 12	344840.118	2872712.125	892.08	SET #4 BAR W CAP LEMKE CONTROL
LLS 3103	346217.676	2873115.356	921.09	CUT "X" ON GUTTER
LLS 3104	346035.837	2873105.445	919.07	CUT "X" ON GUTTER
LLS 3105	345784.347	2873050.956	915.15	CUT "X" ON GUTTER
LLS 3106	346396.032	2872633.617	924.53	SET #4 BAR W CAP LEMKE CONTROL
LLS 5534	345941.027	2873180.316	923.70	SET #4 BAR W CAP LEMKE CONTROL
LLS 1010	345436.210	2872798.389	911.06	SET #4 BAR W CAP LEMKE CONTROL
LLS 1011	346330.140	2872808.223	924.99	SET #4 BAR W CAP LEMKE CONTROL
LLS 8001	347444.379	2872589.474	893.98	SET #4 BAR W CAP LEMKE CONTROL
LLS 8002	347460.719	2872902.472	902.64	SET #4 BAR W CAP LEMKE CONTROL
LLS BM 8003	347473.632	2872435.699	888.48	SET CHISELED BOX SE CORNER LIGHT POLE BASE
HORIZONTAL DATUM: OKLAHOMA STATE PLANE COORDINATES NAD83 NORTH ZONE 3501				
VERTICAL DATUM: NAVD88				



LOCATION MAP



TOPOGRAPHIC LEGEND

- AIR CONDITIONER UNIT
- GROUND TRANSFORMER
- LIGHT POLE
- POWER POLE
- DOWN GUY
- GROUND LIGHT
- ELECTRIC METER
- ELECTRIC VAULT
- ELECTRIC RISER
- TELEPHONE RISER
- GAS METER
- SPRINKLER HEAD
- SPRINKLER VALVE
- FIRE HYDRANT
- FIRE DEPARTMENT CONNECTION
- WATER METER
- WATER VALVE BOX
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- STORM DRAIN MANHOLE
- WATER VAULT ACCESS
- SIGN
- UTILITY PULL BOX
- BENCHMARK
- SATELLITE DISH
- BARBED WIRE FENCE
- CHAINLINK FENCE
- PIPERAIL FENCE
- ELECTRIC UNDERGROUND LINE
- OVERHEAD ELECTRIC LINE
- GAS LINE
- SANITARY SEWER LINE
- SANITARY SEWER FORCE MAIN
- STORM DRAIN LINE
- UNDERGROUND FIBER OPTIC LINE
- WATER LINE
- WATER LINE (FIRE LINE)
- GROUND SURFACE CONTOUR
- CURB AND GUTTER
- SURFACE DRAINAGE FLOWLINE
- TREE DRIP LINE
- SHRUB LINE
- CONCRETE
- ASPHALT
- GRAVEL
- FF FINISHED FLOOR
- PB PARKING BUMPER
- FLOW LINE ELEVATION

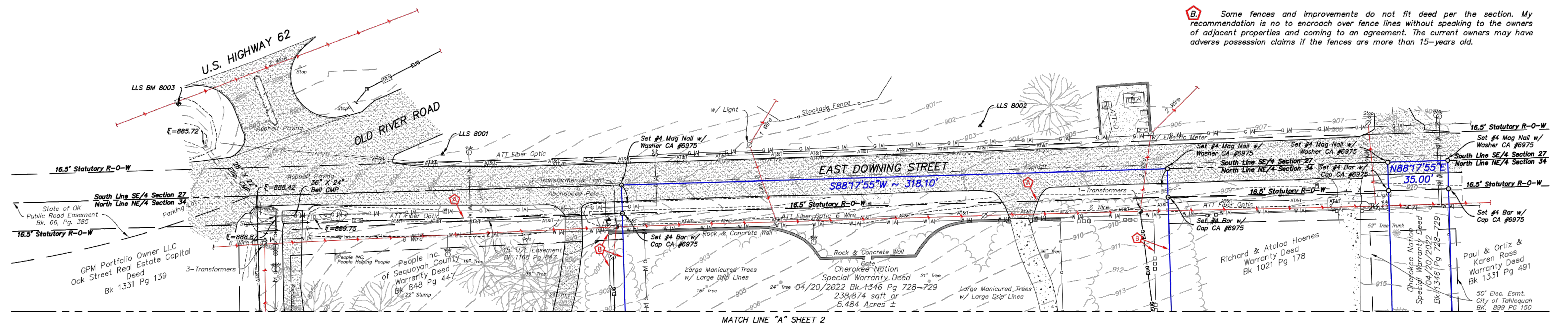
SURVEYOR'S NOTES:

1. This survey was prepared without the benefit of a Title Commitment, Title Opinion, or Abstract as none were provided to the surveyor. Although a due diligence search for easements and items affecting the property was performed, there may be items that affect the subject property that are not shown hereon.
2. Basis of Bearings is Grid, Oklahoma State Plane Coordinate System (NAD83) North Zone (3501).
3. Utilities were located using visible evidence, city atlas maps (where available) and markings/flags by an Okie–811 call. There may be underground utilities that are not shown hereon. CALL 811 BEFORE DIGGING!
4. All points were located with RTK Observations in U.S. survey feet unless an assumed coordinate system was used and noted hereon. All field measurements and angles applied to control points were made with a Topcon HiperHR GPS and Topcon GT603 Robotic Total Station.
5. All elevations of control points are based on initial elevation of LLS 12 and the datum used is NAVD88. All elevations of control points are determined by and Sokkia Bar–code Reading Automatic Level or Robotic Total Station to practice accuracy standards unless otherwise noted.
6. This survey was performed to meet the Specifications for Topographic and Planimetric Mapping contained in the Oklahoma Minimum Standards for the Practice of Land Surveying as adopted by the Oklahoma State Board of Licensure for Professional Engineers and Land Surveyors unless a more stringent level of accuracy was requested. The original data was obtained between 05–03–2022 Thru 05–10–2022. Additional scope was completed on 05–16–2022.

SIGNIFICANT OBSERVATIONS

A. No additional Right–of–Way was found for East Downing Street during the search for easements and encumbrances. The highway plans SAP 184 for Old Highway 62 dated 1926 show an extended 80–foot Right–of–Way down East Downing Street, 40–foot each way centered on the section line, but highway plans FAP F–508(13) dated 8/23/1973 show only the 16.5–foot Statutory Right–of–Way which is where we set the monuments.

B. Some fences and improvements do not fit deed per the section. My recommendation is no to encroach over fence lines without speaking to the owners of adjacent properties and coming to an agreement. The current owners may have adverse possession claims if the fences are more than 15–years old.



TOPOGRAPHIC CERTIFICATION:
I, Charles D. Cahill, Professional Land Surveyor No. 1470 in and for the State of Oklahoma, do hereby certify that I or those under my direct supervision have performed a careful topographic survey of the property as shown by the annexed plat, and that this ground survey was performed at the percent confidence level to meet Federal Geographic Data Committee Standards. This survey was performed to meet the Specifications for Topographic and Planimetric Mapping contained in the Oklahoma Minimum Standards for the Practice of Land Surveying as adopted by the Oklahoma State Board of Licensure for Professional Engineers and Land Surveyors.

LICENSED PROFESSIONAL LAND SURVEYOR Charles D Cahill 1470 OKLAHOMA

If the surveyor's signature is not red colored, the plan is a copy that should be assumed to contain unauthorized alterations. The certification contained on this document shall not apply to any copies.

CHARLES D. CAHILL, P.L.S. NO. 1470 DATED: 06/15/2022

DATE OF LAST FIELD VISIT: 05/25/2022

UTILITY WARNING:
The underground utilities shown have been located from record documents or field locations by the operator. The surveyor makes no guarantee that the underground utilities shown comprise all such utilities in the area either in service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated although the surveyor does certify that they are located as accurately as possible from the information available. The surveyor has not physically located the underground utilities.

Utility elevations and sizes may have been measured under adverse field conditions. Upon exposing the utility, elevations and line sizes should be verified by the contractor prior to construction. Contractor should verify critical elevations using the benchmark provided by the surveyor or engineer. Any discrepancies should be immediately brought to the engineer's and surveyor's attention.

Call OKIE Ticket Nos. 22050312032304 ~ 22050312082335 ~ 22050312342442 ~ 22050312392459

BEFORE YOU DIG.. CALL OKIE 1-800-522-6543

MEMBERS NOTIFIED:

T09104	NE OK Pub Fac Auth	T11158	AT&T Distribution
T09918	Tahlequah PWA	T03145	Chouteau Telephone
T09543	Lake Region Electric		

SURVEY INFORMATION SHOWN ON THE DRAWINGS WERE PROVIDED BY LEMKE LAND SURVEYING, 3226 BART CONNER DRIVE, NORMAN, OK, 73072 PHONE (405) 366–8541, CA #2054. THE OFFICIAL RECORD OF THIS TOPOGRAPHIC SURVEY IS LOCATED AT THE OFFICE OF LEMKE LAND SURVEYING.

LEMKE LAND SURVEYING

R 1	RE–LABELED EASEMENTS ON SHEETS 1–3 6/20/22 CDC
Surveyed By:	JL / ER
Drawn By:	RLR
Approved By:	CDC
Date:	06/14/2022
Scale:	1" = 30'
Project No:	01512321.00

Project: ADDITIONAL TOPOGRAPHIC DESIGN SURVEY EAST DOWNING STREET / PROPERTIES TO SOUTH

Project Location: PART OF SECTION 34 T–17–N R–22–E TAHLEQUAH, CHEROKEE COUNTY, OKLAHOMA

Client: JAMES R. CHILDERS, ARCHITECT, INC. 45 SOUTH 4TH STREET FORT SMITH, ARKANSAS 72901

Sheet Number 1 Sheet 1 of 3

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

CONSULTANT LOGO:

Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT: SEAL OF THE CHEROKEE NATION SEPT. 6, 1839

CHEROKEE NATION W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

PROJECT PHASE: **BID PACKAGE 01** (NORTH PARKING AND ACCESS)

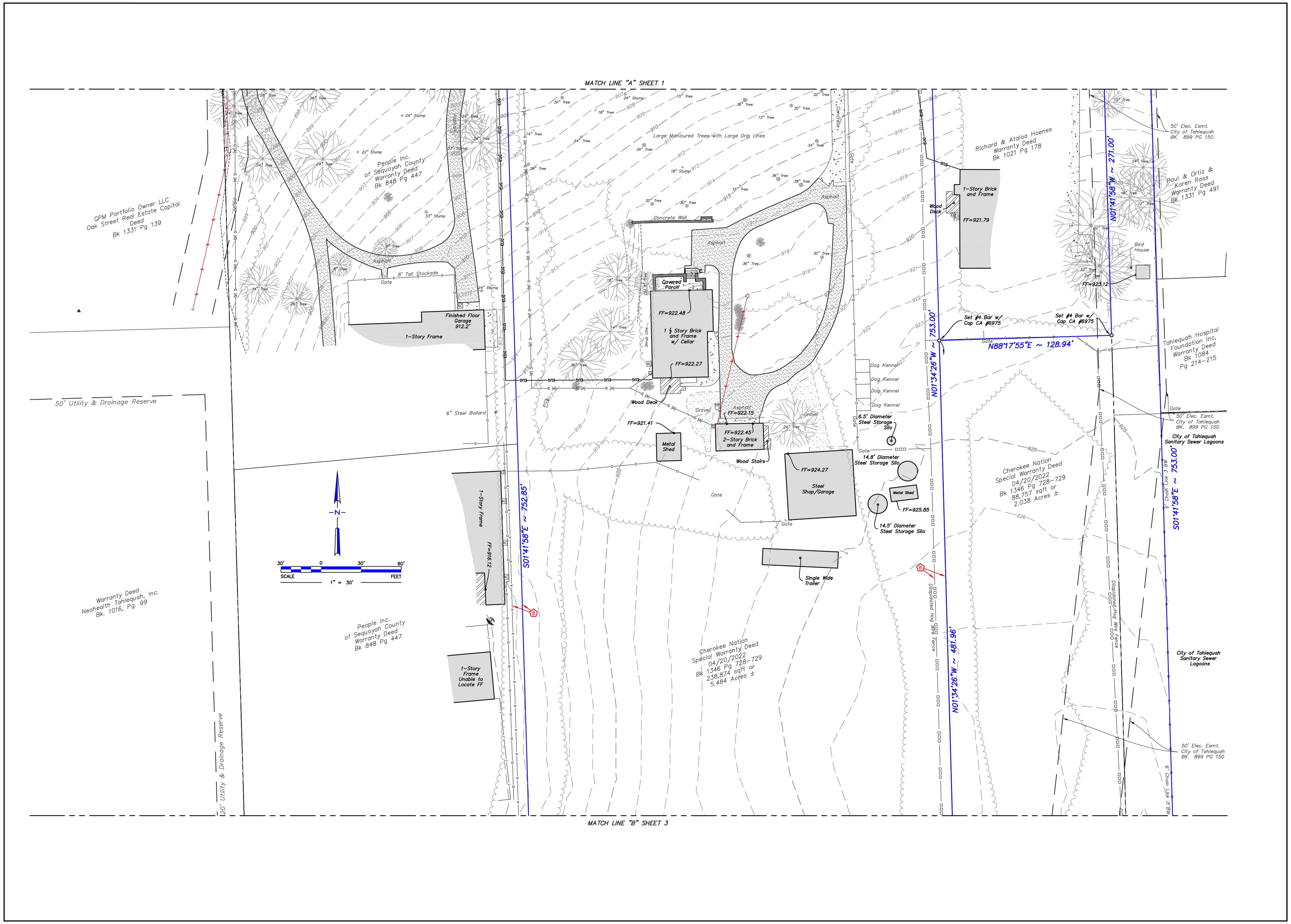
REVISIONS

JOB NUMBER: 21-08.21

DATE: 07-29-22

SHEET NUMBER: **C1-103**

SHEET TITLE: EXISTING CONDITIONS



LEMKE LAND SURVEYING

R 1	RE-LABELED EASEMENTS ON SHEETS 1-3	6/20/22	CDC
Mark	Description	Date	Appr.

Surveyed By: JL / ER
Drawn By: RLR
Approved By: CDC
Date: 06/14/2022
Scale: 1" = 30'
Project No: 01512321.00

Project: ADDITIONAL TOPOGRAPHIC DESIGN SURVEY EAST DOWNING STREET / PROPERTIES TO SOUTH
Project Location: PART OF SECTION 34 T-17-N R-22-E TAHLEQUAH, CHEROKEE COUNTY, OKLAHOMA
Client: JAMES R. CHILDERS, ARCHITECT, INC. 45 SOUTH 4TH STREET FORT SMITH, ARKANSAS 72901

Sheet Number 2
Sheet 2 of 3

SURVEY INFORMATION SHOWN ON THE DRAWINGS WERE PROVIDED BY LEMKE LAND SURVEYING, 3226 BART CONNER DRIVE, NORMAN, OK, 73072 PHONE (405) 366-8541, CA #2054. THE OFFICIAL RECORD OF THIS TOPOGRAPHIC SURVEY IS LOCATED AT THE OFFICE OF LEMKE LAND SURVEYING.

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

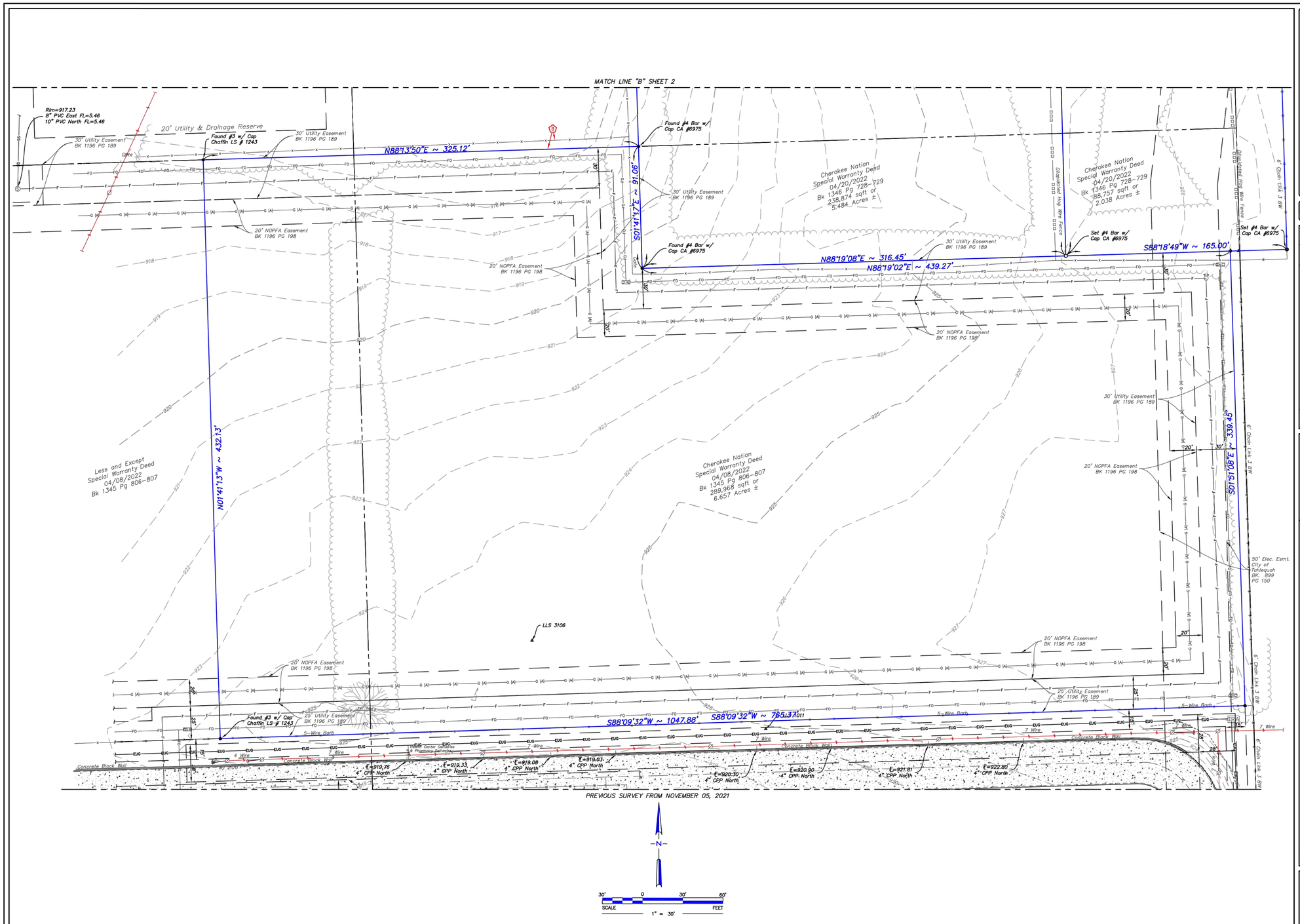
KEY PLAN

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: C1-104
SHEET TITLE: EXISTING CONDITIONS

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C1-SRVY-5123.1.DWG



SURVEY INFORMATION SHOWN ON THE DRAWINGS WERE PROVIDED BY LEMKE LAND SURVEYING, 3226 BART CONNER DRIVE, NORMAN, OK, 73072 PHONE (405) 366-8541, CA #2054. THE OFFICIAL RECORD OF THIS TOPOGRAPHIC SURVEY IS LOCATED AT THE OFFICE OF LEMKE LAND SURVEYING.

LEMKE LAND SURVEYING
LEMKE LAND SURVEYING, INC.
3226 BART CONNER DR. NORMAN, OK 73072
PH:(405)366-8541 FAX:(405)360-9768
CA # 6975 EX. 06/30/2023
http://www.lemke-laura.com

No.	Description	Date	Appr.
R 1	RE-LABELED EASEMENTS ON SHEETS 1-3	10/20/23	CDC

Surveyed By: JL / ER
Drawn By: RLR
Approved By: CDC
Date: 06/14/2022
Scale: 1" = 30'
Project No: 01512321.00

ADDITIONAL TOPOGRAPHIC DESIGN SURVEY
EAST DOWNING STREET / PROPERTIES TO SOUTH
PART OF SECTION 34 T-17-N R-22-E
TAHLEQUAH, CHEROKEE COUNTY, OKLAHOMA
JAMES R. CHILDERS, ARCHITECT, INC.
45 SOUTH 4TH STREET FORT SMITH, ARKANSAS 72901

Projects:
Project Location:
Owners:

Sheet Number 3
Sheet 3 of 3

G:\Projects\01512321.00 Cherokee Hospital Topo\Final\Final\Dgn-01512321.00_CHEROKEE HOSPITAL-ADDITIONAL TOPO_C3D2018-HWY 82-DOWNING-R1.dwg 6/20/2022 11:07:39 AM

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C1-SRVY-5123.1.DWG

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C1-105**
SHEET TITLE: EXISTING CONDITIONS

A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C1-SRVY-5123.1.dwg, 7/29/2022 12:05:13 PM, DWG To PDF.pc3

⌗	KEYNOTES
1	REMOVE CONCRETE PAVEMENT.
2	REMOVE TREES, SHRUBS, AND VEGETATION.
3	PRESERVE TREES.
4	REMOVE SIGN. PRESERVE, PROTECT, AND STORE SIGN TO REINSTALL AFTER PAVEMENT CONSTRUCTION AND REVEGETATION.
5	REMOVE GAS SERVICE LINE FROM THE MAIN. COORDINATE REMOVAL WITH NOPFA GAS.
6	REMOVE ELECTRIC SERVICE LINE. COORDINATE WITH POWER PROVIDER.
7	REMOVE POWER/LIGHT POLE.
8	REMOVE MASONRY WALL.
9	REMOVE ASPHALT PAVEMENT.
10	REMOVE EXISTING BUILDINGS, FOUNDATIONS, AND FOOTINGS. REMOVE UTILITY SERVICE LINES TO BUILDINGS. REMOVE EXTERIOR MECHANICAL EQUIPMENT SERVING THE BUILDINGS.
11	REMOVE DOG KENNELS.
12	REMOVE FENCE AND GATE.
13	PRESERVE FENCE.
14	REMOVE FENCE SOUTH OF THE PROPERTY CORNER. INSTALL BRACE POST, IF NECESSARY TO MAINTAIN CURRENT CONDITION OF THE FENCE REMAINING NORTH OF THE PROPERTY CORNER.
15	REMOVE FENCE EAST OF THE PROPERTY CORNER. INSTALL BRACE POST, IF NECESSARY TO MAINTAIN CURRENT CONDITION OF THE FENCE REMAINING WEST OF THE PROPERTY CORNER.
16	REMOVE GRAVEL.
17	REMOVE CONCRETE WALL.
18	EXISTING 3-IN POLY MEDIUM PRESSURE NOPFA GAS MAIN TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-). REMOVE TERMINATED GAS MAIN ONCE RELOCATION IS COMPLETE.
19	EXISTING 6-IN SEWER FORCE MAIN TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-) AND SEWER PLAN AND PROFILE SHEETS (C8-). REMOVE TERMINATED FORCE MAIN ONCE RELOCATION IS COMPLETE.
20	EXISTING OWNER FIBER OPTIC TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-). REMOVE TERMINATED CONDUITS AND CABLES ONCE RELOCATION IS COMPLETE.
21	EXISTING LREC UNDERGROUND 3-PHASE POWER AND FIBER OPTIC CABLES TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-). REMOVE TERMINATED CONDUITS AND CABLES ONCE RELOCATION IS COMPLETE.
22	REMOVE MASONRY BLOCK GRAVITY RETAINING WALL, GRAVEL, AND DRAIN PIPES. DO NOT BEGIN DEMOLITION UNTIL BURIED LREC POWER LINE IS RELOCATED.
23	SAWCUT AND REMOVE CURB FOR DRIVEWAY AND SIDEWALK CONSTRUCTION. REFER TO (C3-) SHEETS FOR SITE PLAN.

DEMOLITION PLAN NOTES

A. CM SHALL CONTACT OKIE (811 OR 1-800-522-OKIE) PRIOR TO CONSTRUCTION FOR LOCATING EXISTING UTILITIES.

B. THE UNDERGROUND UTILITIES SHOWN ON THE DRAWINGS HAVE BEEN LOCATED FROM FIELD SURVEY SURFACE INFORMATION AND EXISTING DRAWINGS. ENGINEER AND SURVEYOR MAKE NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE UNDERGROUND UTILITIES ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE; HOWEVER, ENGINEER AND SURVEYOR FURTHER DO NOT GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED EITHER VERTICALLY OR HORIZONTALLY. ENGINEER AND SURVEYOR HAVE NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES BY PROBING, EXCAVATING, HYDROVAC, OR BY ANY OTHER MEANS.

C. CM SHALL NOTIFY ALL UTILITY COMPANIES AND GOVERNMENTAL AGENCIES WHO MAY HAVE UTILITY LINES ON OR ABOUT THE PREMISES OR WHO MAY BE AFFECTED BY THE CONSTRUCTION. NOTICE SHALL BE GIVEN NO LESS THAN TWENTY-FOUR HOURS PRIOR TO ANY WORK THAT MAY INTERFERE WITH A UTILITY.

D. ALL EXISTING BUILDINGS, STRUCTURES, PAVEMENTS, IMPROVEMENTS, AND UTILITIES DESIGNATED TO REMAIN OR NOT DESIGNATED TO BE REMOVED SHALL BE ADEQUATELY PROTECTED FROM DAMAGE THAT MIGHT OTHERWISE OCCUR DUE TO CONSTRUCTION OPERATIONS. WHERE CONSTRUCTION COMES NEAR EXISTING BUILDINGS, STRUCTURES, PAVEMENTS, IMPROVEMENTS, UTILITIES OR APPURTENANCES, OR IF IT BECOMES NECESSARY TO MOVE SERVICES, POLES, GUY WIRES, PIPE LINES OR OTHER OBSTRUCTIONS, CM SHALL NOTIFY AND COOPERATE WITH THE OWNER OF THE UTILITY, STRUCTURE, OR APPURTENANCE. THE UTILITY LINES AND OTHER EXISTING STRUCTURES SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND ARE NOT GUARANTEED TO BE COMPLETE OR ACCURATE AS TO LOCATION AND/OR DEPTH. CM SHALL BE LIABLE FOR DAMAGE TO ANY BUILDINGS, STRUCTURES, PAVEMENTS, IMPROVEMENTS, AND UTILITIES RESULTING FROM THE CM'S OPERATIONS. DURING CONSTRUCTION, ALL FIRE HYDRANTS, VALVE BOXES, TRAFFIC SIGNALS, FIRE OR POLICE CALL BOXES AND OTHER EXISTING UTILITY CONTROLS SHALL BE LEFT INTACT, UNOBSTRUCTED AND ACCESSIBLE UNLESS NOTED ON THE PLAN.

E. CM SHALL SATISFY THEMSELVES AS TO THE ACTUAL EXISTING SUBSURFACE CONDITIONS, INCLUDING BUT NOT LIMITED TO THE DEPTH, LOCATION AND SIZES OF PIPE OR CONDUITS OF VARIOUS KINDS IN PLACE PRIOR TO BEGINNING WORK. WHERE THE EXACT DEPTH OF ANY UTILITY OR OBSTRUCTION IS NOT SHOWN ON A PLAN, EXCAVATION SHALL BE MADE PRIOR TO REACHING THE OBSTRUCTION IN ORDER TO DETERMINE ADJUSTMENTS IN GRADE IF NEEDED TO PREVENT INTERFERENCE. REDESIGN TO ELIMINATE CONFLICTS MAY BE NECESSARY.

F. NOTIFY ENGINEER OF DISCREPANCIES BETWEEN EXISTING CONDITIONS AND DRAWINGS BEFORE PROCEEDING WITH SELECTIVE DEMOLITION.

G. IF CM ENCOUNTERS A HAZARDOUS ENVIRONMENTAL CONDITION OR IF CM OR ANYONE FOR WHOM CM IS RESPONSIBLE CREATES A HAZARDOUS ENVIRONMENTAL CONDITION, CM SHALL IMMEDIATELY: (I) SECURE OR OTHERWISE ISOLATE SUCH CONDITION; (II) STOP ALL WORK IN CONNECTION WITH SUCH CONDITION AND IN ANY AREA AFFECTED THEREBY (EXCEPT IN AN EMERGENCY); AND (III) NOTIFY OWNER AND ENGINEER (AND PROMPTLY THEREAFTER CONFIRM SUCH NOTICE IN WRITING). OWNER SHALL PROMPTLY CONSULT WITH ENGINEER CONCERNING THE NECESSITY FOR OWNER TO RETAIN A QUALIFIED EXPERT TO EVALUATE SUCH CONDITION OR TAKE CORRECTIVE ACTION, IF ANY.

H. UNLESS OTHERWISE SPECIFIED, ALL EXCAVATION IS UNCLASSIFIED AND SHALL INCLUDE ALL MATERIALS ENCOUNTERED.

I. CM SHALL SATISFY THEMSELVES AS TO THE ACTUAL EXISTING SUBSURFACE CONDITIONS, INCLUDING BUT NOT LIMITED TO THE DEPTH, LOCATION AND SIZES OF PIPE OR CONDUITS OF VARIOUS KINDS IN PLACE. WHERE THE EXACT DEPTH OF ANY UTILITY OR OBSTRUCTION IS NOT SHOWN ON A PLAN, EXCAVATION SHALL BE MADE PRIOR TO REACHING THE OBSTRUCTION IN ORDER TO DETERMINE ADJUSTMENTS IN GRADE IF NEEDED TO PREVENT INTERFERENCE. REDESIGN TO ELIMINATE CONFLICTS MAY BE NECESSARY.

J. CM SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING THE SITE. UNSUITABLE EXCAVATED MATERIALS AND ALL WASTE RESULTING FROM CLEARING AND GRUBBING SHALL BE DISPOSED OFF-SITE.

K. THE REMOVAL OF ANY UTILITY LINE, SERVICE, APPURTENANCE, AND STRUCTURE SHALL BE COORDINATED WITH THE OWNER OF THE RESPECTIVE UTILITY.

L. ALL PAVEMENT REMOVAL CONTIGUOUS TO PAVEMENT REMAINING SHALL BE SAWED IN STRAIGHT LINES TO THE FULL DEPTH OF THE EXISTING PAVEMENT.

M. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS SHALL NOT BE PERMITTED.

N. CM SHALL BACKFILL ANY VOIDS RESULTING FROM STRUCTURES, VEGETATION, AND OBJECTS REMOVED. FILL SHALL BE PLACED IN MAXIMUM 6" LIFTS AND COMPACTED TO A DRY DENSITY OF AT LEAST 98% OF THE MAXIMUM DRY DENSITY OBTAINED BY THE STANDARD COMPACTION TEST (ASTM D-698) AT A WATER CONTENT WITHIN 3% OF THE OPTIMUM.

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CM PRIOR TO CONSTRUCTION. CM SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

N

0' 20' 40' 80'
SCALE: 1" = 20'

James R. Childers
Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS		

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C2-108**
SHEET TITLE: NP DEMOLITION OVERVIEW

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C2-DEMO-5123.1.DWG

UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CM PRIOR TO CONSTRUCTION. CM SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

0' 20' 40' 80'
SCALE: 1" = 20'

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

NP1

KEYNOTES

1	REMOVE CONCRETE PAVEMENT.
2	REMOVE TREES, SHRUBS, AND VEGETATION.
3	PRESERVE TREES.
4	REMOVE SIGN. PRESERVE, PROTECT, AND STORE SIGN TO REINSTALL AFTER PAVEMENT CONSTRUCTION AND REVEGETATION.
5	REMOVE GAS SERVICE LINE FROM THE MAIN. COORDINATE REMOVAL WITH NOPFA GAS.
6	REMOVE ELECTRIC SERVICE LINE. COORDINATE WITH POWER PROVIDER.
7	REMOVE POWER/LIGHT POLE.
8	REMOVE MASONRY WALL.
9	REMOVE ASPHALT PAVEMENT.
10	REMOVE EXISTING BUILDINGS, FOUNDATIONS, AND FOOTINGS. REMOVE UTILITY SERVICE LINES TO BUILDINGS. REMOVE EXTERIOR MECHANICAL EQUIPMENT SERVING THE BUILDINGS.
11	REMOVE DOG KENNELS.
12	REMOVE FENCE AND GATE.
13	PRESERVE FENCE.
14	REMOVE FENCE SOUTH OF THE PROPERTY CORNER. INSTALL BRACE POST, IF NECESSARY TO MAINTAIN CURRENT CONDITION OF THE FENCE REMAINING NORTH OF THE PROPERTY CORNER.
15	REMOVE FENCE EAST OF THE PROPERTY CORNER. INSTALL BRACE POST, IF NECESSARY TO MAINTAIN CURRENT CONDITION OF THE FENCE REMAINING WEST OF THE PROPERTY CORNER.
16	REMOVE GRAVEL.
17	REMOVE CONCRETE WALL.
18	EXISTING 3-IN POLY MEDIUM PRESSURE NOPFA GAS MAIN TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-). REMOVE TERMINATED GAS MAIN ONCE RELOCATION IS COMPLETE.
19	EXISTING 6-IN SEWER FORCE MAIN TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-) AND SEWER PLAN AND PROFILE SHEETS (C8-). REMOVE TERMINATED FORCE MAIN ONCE RELOCATION IS COMPLETE.
20	EXISTING OWNER FIBER OPTIC TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-). REMOVE TERMINATED CONDUITS AND CABLES ONCE RELOCATION IS COMPLETE.
21	EXISTING LREC UNDERGROUND 3-PHASE POWER AND FIBER OPTIC CABLES TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-). REMOVE TERMINATED CONDUITS AND CABLES ONCE RELOCATION IS COMPLETE.
22	REMOVE MASONRY BLOCK GRAVITY RETAINING WALL, GRAVEL, AND DRAIN PIPES. DO NOT BEGIN DEMOLITION UNTIL BURIED LREC POWER LINE IS RELOCATED.
23	SAWCUT AND REMOVE CURB FOR DRIVEWAY AND SIDEWALK CONSTRUCTION. REFER TO (C3-) SHEETS FOR SITE PLAN.

DEMOLITION PLAN NOTES

A. CM SHALL CONTACT OKIE (811 OR 1-800-522-OKIE) PRIOR TO CONSTRUCTION FOR LOCATING EXISTING UTILITIES.
B. THE UNDERGROUND UTILITIES SHOWN ON THE DRAWINGS HAVE BEEN LOCATED FROM FIELD SURVEY SURFACE INFORMATION AND EXISTING DRAWINGS. ENGINEER AND SURVEYOR MAKE NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE UNDERGROUND UTILITIES ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE; HOWEVER, ENGINEER AND SURVEYOR FURTHER DO NOT GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED EITHER VERTICALLY OR HORIZONTALLY. ENGINEER AND SURVEYOR HAVE NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES BY PROBING, EXCAVATING, HYDROVAC, OR BY ANY OTHER MEANS.
C. CM SHALL NOTIFY ALL UTILITY COMPANIES AND GOVERNMENTAL AGENCIES WHO MAY HAVE UTILITY LINES ON OR ABOUT THE PREMISES OR WHO MAY BE AFFECTED BY THE CONSTRUCTION. NOTICE SHALL BE GIVEN NO LESS THAN TWENTY-FOUR HOURS PRIOR TO ANY WORK THAT MAY INTERFERE WITH A UTILITY.
D. ALL EXISTING BUILDINGS, STRUCTURES, PAVEMENTS, IMPROVEMENTS, AND UTILITIES DESIGNATED TO REMAIN OR NOT DESIGNATED TO BE REMOVED SHALL BE ADEQUATELY PROTECTED FROM DAMAGE THAT MIGHT OTHERWISE OCCUR DUE TO CONSTRUCTION OPERATIONS. WHERE CONSTRUCTION COMES NEAR EXISTING BUILDINGS, STRUCTURES, PAVEMENTS, IMPROVEMENTS, UTILITIES OR APPURTENANCES, OR IF IT BECOMES NECESSARY TO MOVE SERVICES, POLES, GUY WIRES, PIPE LINES OR OTHER OBSTRUCTIONS, CM SHALL NOTIFY AND COOPERATE WITH THE OWNER OF THE UTILITY, STRUCTURE, OR APPURTENANCE. THE UTILITY LINES AND OTHER EXISTING STRUCTURES SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND ARE NOT GUARANTEED TO BE COMPLETE OR ACCURATE AS TO LOCATION AND/OR DEPTH. CM SHALL BE LIABLE FOR DAMAGE TO ANY BUILDINGS, STRUCTURES, PAVEMENTS, IMPROVEMENTS, AND UTILITIES RESULTING FROM THE CM'S OPERATIONS. DURING CONSTRUCTION, ALL FIRE HYDRANTS, VALVE BOXES, TRAFFIC SIGNALS, FIRE OR POLICE CALL BOXES AND OTHER EXISTING UTILITY CONTROLS SHALL BE LEFT INTACT, UNOBSTRUCTED AND ACCESSIBLE UNLESS NOTED ON THE PLAN.
E. CM SHALL SATISFY THEMSELVES AS TO THE ACTUAL EXISTING SUBSURFACE CONDITIONS, INCLUDING BUT NOT LIMITED TO THE DEPTH, LOCATION AND SIZES OF PIPE OR CONDUITS OF VARIOUS KINDS IN PLACE PRIOR TO BEGINNING WORK. WHERE THE EXACT DEPTH OF ANY UTILITY OR OBSTRUCTION IS NOT SHOWN ON A PLAN, EXCAVATION SHALL BE MADE PRIOR TO REACHING THE OBSTRUCTION IN ORDER TO DETERMINE ADJUSTMENTS IN GRADE IF NEEDED TO PREVENT INTERFERENCE. REDESIGN TO ELIMINATE CONFLICTS MAY BE NECESSARY.
F. NOTIFY ENGINEER OF DISCREPANCIES BETWEEN EXISTING CONDITIONS AND DRAWINGS BEFORE PROCEEDING WITH SELECTIVE DEMOLITION.
G. IF CM ENCOUNTERS A HAZARDOUS ENVIRONMENTAL CONDITION OR IF CM OR ANYONE FOR WHOM CM IS RESPONSIBLE CREATES A HAZARDOUS ENVIRONMENTAL CONDITION, CM SHALL IMMEDIATELY: (I) SECURE OR OTHERWISE ISOLATE SUCH CONDITION; (II) STOP ALL WORK IN CONNECTION WITH SUCH CONDITION AND IN ANY AREA AFFECTED THEREBY (EXCEPT IN AN EMERGENCY); AND (III) NOTIFY OWNER AND ENGINEER (AND PROMPTLY THEREAFTER CONFIRM SUCH NOTICE IN WRITING). OWNER SHALL PROMPTLY CONSULT WITH ENGINEER CONCERNING THE NECESSITY FOR OWNER TO RETAIN A QUALIFIED EXPERT TO EVALUATE SUCH CONDITION OR TAKE CORRECTIVE ACTION, IF ANY.
H. UNLESS OTHERWISE SPECIFIED, ALL EXCAVATION IS UNCLASSIFIED AND SHALL INCLUDE ALL MATERIALS ENCOUNTERED.
I. CM SHALL SATISFY THEMSELVES AS TO THE ACTUAL EXISTING SUBSURFACE CONDITIONS, INCLUDING BUT NOT LIMITED TO THE DEPTH, LOCATION AND SIZES OF PIPE OR CONDUITS OF VARIOUS KINDS IN PLACE. WHERE THE EXACT DEPTH OF ANY UTILITY OR OBSTRUCTION IS NOT SHOWN ON A PLAN, EXCAVATION SHALL BE MADE PRIOR TO REACHING THE OBSTRUCTION IN ORDER TO DETERMINE ADJUSTMENTS IN GRADE IF NEEDED TO PREVENT INTERFERENCE. REDESIGN TO ELIMINATE CONFLICTS MAY BE NECESSARY.
J. CM SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING THE SITE. UNSUITABLE EXCAVATED MATERIALS AND ALL WASTE RESULTING FROM CLEARING AND GRUBBING SHALL BE DISPOSED OFF-SITE.
K. THE REMOVAL OF ANY UTILITY LINE, SERVICE, APPURTENANCE, AND STRUCTURE SHALL BE COORDINATED WITH THE OWNER OF THE RESPECTIVE UTILITY.
L. ALL PAVEMENT REMOVAL CONTIGUOUS TO PAVEMENT REMAINING SHALL BE SAWED IN STRAIGHT LINES TO THE FULL DEPTH OF THE EXISTING PAVEMENT.
M. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS SHALL NOT BE PERMITTED.
N. CM SHALL BACKFILL ANY VOIDS RESULTING FROM STRUCTURES, VEGETATION, AND OBJECTS REMOVED. FILL SHALL BE PLACED IN MAXIMUM 6" LIFTS AND COMPACTED TO A DRY DENSITY OF AT LEAST 98% OF THE MAXIMUM DRY DENSITY OBTAINED BY THE STANDARD COMPACTION TEST (ASTM D-698) AT A WATER CONTENT WITHIN 3% OF THE OPTIMUM.

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-810-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
THE SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:
P5
P3 P4
P1 P2

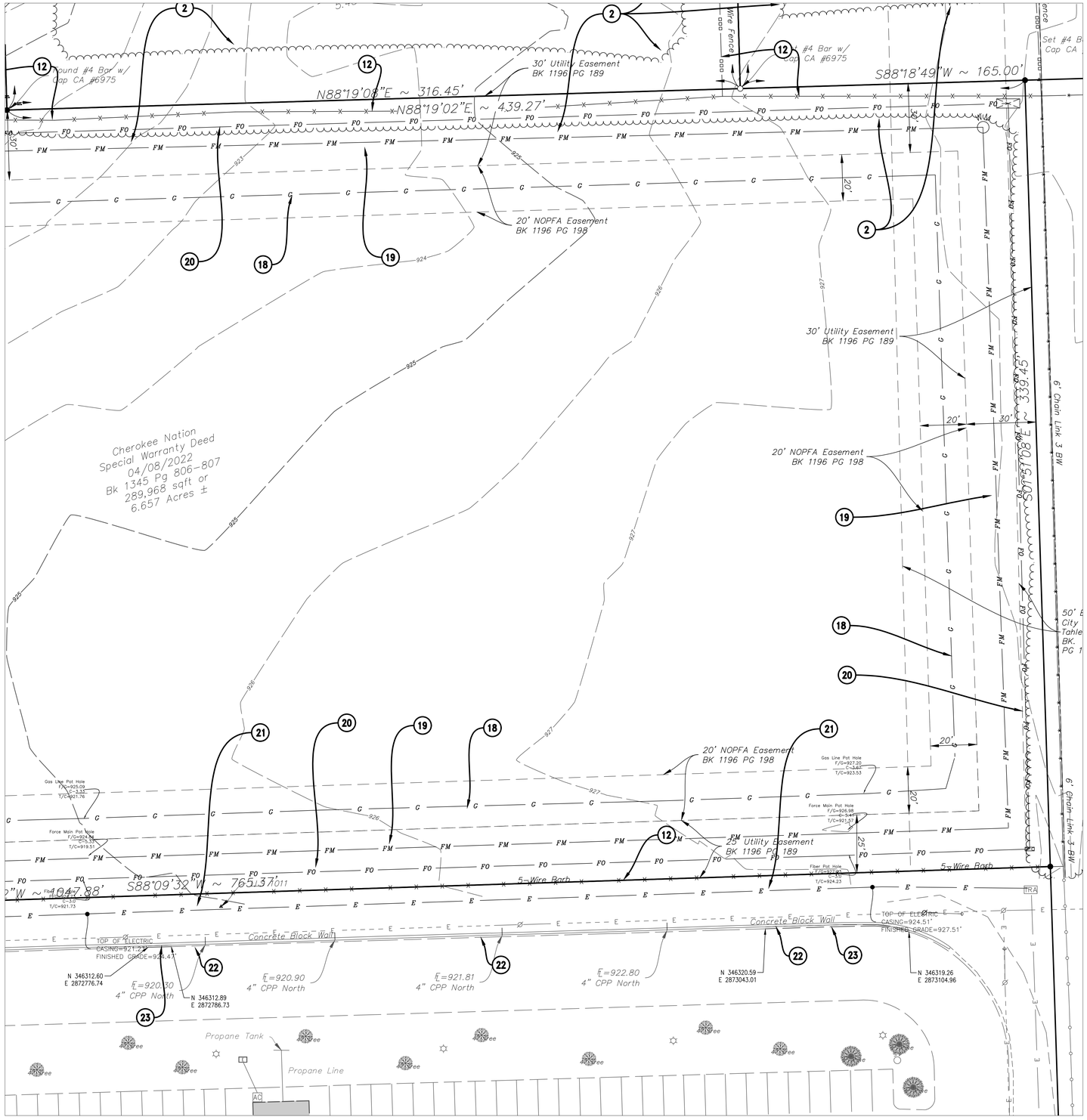
PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: C2-109
SHEET TITLE: NP1 DEMOLITION PLAN

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C2-DEMO-51231.DWG

A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C2-DEMO-5123.1.dwg, 7/29/2022 12:18:24 PM, DWG To PDF.pc3



KEYNOTES

1	REMOVE CONCRETE PAVEMENT.
2	REMOVE TREES, SHRUBS, AND VEGETATION.
3	PRESERVE TREES.
4	REMOVE SIGN. PRESERVE, PROTECT, AND STORE SIGN TO REINSTALL AFTER PAVEMENT CONSTRUCTION AND REVEGETATION.
5	REMOVE GAS SERVICE LINE FROM THE MAIN. COORDINATE REMOVAL WITH NOPFA GAS.
6	REMOVE ELECTRIC SERVICE LINE. COORDINATE WITH POWER PROVIDER.
7	REMOVE POWER/LIGHT POLE.
8	REMOVE MASONRY WALL.
9	REMOVE ASPHALT PAVEMENT.
10	REMOVE EXISTING BUILDINGS, FOUNDATIONS, AND FOOTINGS. REMOVE UTILITY SERVICE LINES TO BUILDINGS. REMOVE EXTERIOR MECHANICAL EQUIPMENT SERVING THE BUILDINGS.
11	REMOVE DOG KENNELS.
12	REMOVE FENCE AND GATE.
13	PRESERVE FENCE.
14	REMOVE FENCE SOUTH OF THE PROPERTY CORNER. INSTALL BRACE POST, IF NECESSARY TO MAINTAIN CURRENT CONDITION OF THE FENCE REMAINING NORTH OF THE PROPERTY CORNER.
15	REMOVE FENCE EAST OF THE PROPERTY CORNER. INSTALL BRACE POST, IF NECESSARY TO MAINTAIN CURRENT CONDITION OF THE FENCE REMAINING WEST OF THE PROPERTY CORNER.
16	REMOVE GRAVEL.
17	REMOVE CONCRETE WALL.
18	EXISTING 3-IN POLY MEDIUM PRESSURE NOPFA GAS MAIN TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-). REMOVE TERMINATED GAS MAIN ONCE RELOCATION IS COMPLETE.
19	EXISTING 6-IN SEWER FORCE MAIN TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-) AND SEWER PLAN AND PROFILE SHEETS (C8-). REMOVE TERMINATED FORCE MAIN ONCE RELOCATION IS COMPLETE.
20	EXISTING OWNER FIBER OPTIC TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-). REMOVE TERMINATED CONDUITS AND CABLES ONCE RELOCATION IS COMPLETE.
21	EXISTING LREC UNDERGROUND 3-PHASE POWER AND FIBER OPTIC CABLES TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-). REMOVE TERMINATED CONDUITS AND CABLES ONCE RELOCATION IS COMPLETE.
22	REMOVE MASONRY BLOCK GRAVITY RETAINING WALL, GRAVEL, AND DRAIN PIPES. DO NOT BEGIN DEMOLITION UNTIL BURIED LREC POWER LINE IS RELOCATED.
23	SAWCUT AND REMOVE CURB FOR DRIVEWAY AND SIDEWALK CONSTRUCTION. REFER TO (C3-) SHEETS FOR SITE PLAN.

DEMOLITION PLAN NOTES

A. CM SHALL CONTACT OKIE (811 OR 1-800-522-OKIE) PRIOR TO CONSTRUCTION FOR LOCATING EXISTING UTILITIES.
B. THE UNDERGROUND UTILITIES SHOWN ON THE DRAWINGS HAVE BEEN LOCATED FROM FIELD SURVEY SURFACE INFORMATION AND EXISTING DRAWINGS. ENGINEER AND SURVEYOR MAKE NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE UNDERGROUND UTILITIES ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE; HOWEVER, ENGINEER AND SURVEYOR FURTHER DO NOT GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED EITHER VERTICALLY OR HORIZONTALLY. ENGINEER AND SURVEYOR HAVE NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES BY PROBING, EXCAVATING, HYDROVAC, OR BY ANY OTHER MEANS.
C. CM SHALL NOTIFY ALL UTILITY COMPANIES AND GOVERNMENTAL AGENCIES WHO MAY HAVE UTILITY LINES ON OR ABOUT THE PREMISES OR WHO MAY BE AFFECTED BY THE CONSTRUCTION. NOTICE SHALL BE GIVEN NO LESS THAN TWENTY-FOUR HOURS PRIOR TO ANY WORK THAT MAY INTERFERE WITH A UTILITY.
D. ALL EXISTING BUILDINGS, STRUCTURES, PAVEMENTS, IMPROVEMENTS, AND UTILITIES DESIGNATED TO REMAIN OR NOT DESIGNATED TO BE REMOVED SHALL BE ADEQUATELY PROTECTED FROM DAMAGE THAT MIGHT OTHERWISE OCCUR DUE TO CONSTRUCTION OPERATIONS. WHERE CONSTRUCTION COMES NEAR EXISTING BUILDINGS, STRUCTURES, PAVEMENTS, IMPROVEMENTS, UTILITIES OR APPURTENANCES, OR IF IT BECOMES NECESSARY TO MOVE SERVICES, POLES, GUY WIRES, PIPE LINES OR OTHER OBSTRUCTIONS, CM SHALL NOTIFY AND COOPERATE WITH THE OWNER OF THE UTILITY, STRUCTURE, OR APPURTENANCE. THE UTILITY LINES AND OTHER EXISTING STRUCTURES SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND ARE NOT GUARANTEED TO BE COMPLETE OR ACCURATE AS TO LOCATION AND/OR DEPTH. CM SHALL BE LIABLE FOR DAMAGE TO ANY BUILDINGS, STRUCTURES, PAVEMENTS, IMPROVEMENTS, AND UTILITIES RESULTING FROM THE CM'S OPERATIONS. DURING CONSTRUCTION, ALL FIRE HYDRANTS, VALVE BOXES, TRAFFIC SIGNALS, FIRE OR POLICE CALL BOXES AND OTHER EXISTING UTILITY CONTROLS SHALL BE LEFT INTACT, UNOBSTRUCTED AND ACCESSIBLE UNLESS NOTED ON THE PLAN.
E. CM SHALL SATISFY THEMSELVES AS TO THE ACTUAL EXISTING SUBSURFACE CONDITIONS, INCLUDING BUT NOT LIMITED TO THE DEPTH, LOCATION AND SIZES OF PIPE OR CONDUITS OF VARIOUS KINDS IN PLACE PRIOR TO BEGINNING WORK. WHERE THE EXACT DEPTH OF ANY UTILITY OR OBSTRUCTION IS NOT SHOWN ON A PLAN, EXCAVATION SHALL BE MADE PRIOR TO REACHING THE OBSTRUCTION IN ORDER TO DETERMINE ADJUSTMENTS IN GRADE IF NEEDED TO PREVENT INTERFERENCE. REDESIGN TO ELIMINATE CONFLICTS MAY BE NECESSARY.
F. NOTIFY ENGINEER OF DISCREPANCIES BETWEEN EXISTING CONDITIONS AND DRAWINGS BEFORE PROCEEDING WITH SELECTIVE DEMOLITION.
G. IF CM ENCOUNTERS A HAZARDOUS ENVIRONMENTAL CONDITION OR IF CM OR ANYONE FOR WHOM CM IS RESPONSIBLE CREATES A HAZARDOUS ENVIRONMENTAL CONDITION, CM SHALL IMMEDIATELY: (I) SECURE OR OTHERWISE ISOLATE SUCH CONDITION; (II) STOP ALL WORK IN CONNECTION WITH SUCH CONDITION AND IN ANY AREA AFFECTED THEREBY (EXCEPT IN AN EMERGENCY); AND (III) NOTIFY OWNER AND ENGINEER (AND PROMPTLY THEREAFTER CONFIRM SUCH NOTICE IN WRITING). OWNER SHALL PROMPTLY CONSULT WITH ENGINEER CONCERNING THE NECESSITY FOR OWNER TO RETAIN A QUALIFIED EXPERT TO EVALUATE SUCH CONDITION OR TAKE CORRECTIVE ACTION, IF ANY.
H. UNLESS OTHERWISE SPECIFIED, ALL EXCAVATION IS UNCLASSIFIED AND SHALL INCLUDE ALL MATERIALS ENCOUNTERED.
I. CM SHALL SATISFY THEMSELVES AS TO THE ACTUAL EXISTING SUBSURFACE CONDITIONS, INCLUDING BUT NOT LIMITED TO THE DEPTH, LOCATION AND SIZES OF PIPE OR CONDUITS OF VARIOUS KINDS IN PLACE. WHERE THE EXACT DEPTH OF ANY UTILITY OR OBSTRUCTION IS NOT SHOWN ON A PLAN, EXCAVATION SHALL BE MADE PRIOR TO REACHING THE OBSTRUCTION IN ORDER TO DETERMINE ADJUSTMENTS IN GRADE IF NEEDED TO PREVENT INTERFERENCE. REDESIGN TO ELIMINATE CONFLICTS MAY BE NECESSARY.
J. CM SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING THE SITE. UNSUITABLE EXCAVATED MATERIALS AND ALL WASTE RESULTING FROM CLEARING AND GRUBBING SHALL BE DISPOSED OFF-SITE.
K. THE REMOVAL OF ANY UTILITY LINE, SERVICE, APPURTENANCE, AND STRUCTURE SHALL BE COORDINATED WITH THE OWNER OF THE RESPECTIVE UTILITY.
L. ALL PAVEMENT REMOVAL CONTIGUOUS TO PAVEMENT REMAINING SHALL BE SAWED IN STRAIGHT LINES TO THE FULL DEPTH OF THE EXISTING PAVEMENT.
M. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS SHALL NOT BE PERMITTED.
N. CM SHALL BACKFILL ANY VOIDS RESULTING FROM STRUCTURES, VEGETATION, AND OBJECTS REMOVED. FILL SHALL BE PLACED IN MAXIMUM 6" LIFTS AND COMPACTED TO A DRY DENSITY OF AT LEAST 98% OF THE MAXIMUM DRY DENSITY OBTAINED BY THE STANDARD COMPACTION TEST (ASTM D-698) AT A WATER CONTENT WITHIN 3% OF THE OPTIMUM.

UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CM PRIOR TO CONSTRUCTION. CM SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

0' 20' 40' 80'
SCALE: 1" = 20'

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

NP2

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
THE SEAL OF THE CHEROKEE NATION SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:
P5
P3 P4
P1 P2

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C2-110**
SHEET TITLE: NP2 DEMOLITION PLAN

UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CM PRIOR TO CONSTRUCTION. CM SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

N

0' 20' 40' 80'

SCALE: 1" = 20'

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

NP3

KEYNOTES

1	REMOVE CONCRETE PAVEMENT.
2	REMOVE TREES, SHRUBS, AND VEGETATION.
3	PRESERVE TREES.
4	REMOVE SIGN. PRESERVE, PROTECT, AND STORE SIGN TO REINSTALL AFTER PAVEMENT CONSTRUCTION AND REVEGETATION.
5	REMOVE GAS SERVICE LINE FROM THE MAIN. COORDINATE REMOVAL WITH NOPFA GAS.
6	REMOVE ELECTRIC SERVICE LINE. COORDINATE WITH POWER PROVIDER.
7	REMOVE POWER/LIGHT POLE.
8	REMOVE MASONRY WALL.
9	REMOVE ASPHALT PAVEMENT.
10	REMOVE EXISTING BUILDINGS, FOUNDATIONS, AND FOOTINGS. REMOVE UTILITY SERVICE LINES TO BUILDINGS. REMOVE EXTERIOR MECHANICAL EQUIPMENT SERVING THE BUILDINGS.
11	REMOVE DOG KENNELS.
12	REMOVE FENCE AND GATE.
13	PRESERVE FENCE.
14	REMOVE FENCE SOUTH OF THE PROPERTY CORNER. INSTALL BRACE POST, IF NECESSARY TO MAINTAIN CURRENT CONDITION OF THE FENCE REMAINING NORTH OF THE PROPERTY CORNER.
15	REMOVE FENCE EAST OF THE PROPERTY CORNER. INSTALL BRACE POST, IF NECESSARY TO MAINTAIN CURRENT CONDITION OF THE FENCE REMAINING WEST OF THE PROPERTY CORNER.
16	REMOVE GRAVEL.
17	REMOVE CONCRETE WALL.
18	EXISTING 3-IN POLY MEDIUM PRESSURE NOPFA GAS MAIN TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-). REMOVE TERMINATED GAS MAIN ONCE RELOCATION IS COMPLETE.
19	EXISTING 6-IN SEWER FORCE MAIN TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-) AND SEWER PLAN AND PROFILE SHEETS (C8-). REMOVE TERMINATED FORCE MAIN ONCE RELOCATION IS COMPLETE.
20	EXISTING OWNER FIBER OPTIC TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-). REMOVE TERMINATED CONDUITS AND CABLES ONCE RELOCATION IS COMPLETE.
21	EXISTING LREC UNDERGROUND 3-PHASE POWER AND FIBER OPTIC CABLES TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-). REMOVE TERMINATED CONDUITS AND CABLES ONCE RELOCATION IS COMPLETE.
22	REMOVE MASONRY BLOCK GRAVITY RETAINING WALL, GRAVEL, AND DRAIN PIPES. DO NOT BEGIN DEMOLITION UNTIL BURIED LREC POWER LINE IS RELOCATED.
23	SAWCUT AND REMOVE CURB FOR DRIVEWAY AND SIDEWALK CONSTRUCTION. REFER TO (C3-) SHEETS FOR SITE PLAN.

DEMOLITION PLAN NOTES

A. CM SHALL CONTACT OKIE (811 OR 1-800-522-OKIE) PRIOR TO CONSTRUCTION FOR LOCATING EXISTING UTILITIES.
B. THE UNDERGROUND UTILITIES SHOWN ON THE DRAWINGS HAVE BEEN LOCATED FROM FIELD SURVEY SURFACE INFORMATION AND EXISTING DRAWINGS. ENGINEER AND SURVEYOR MAKE NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE UNDERGROUND UTILITIES ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE; HOWEVER, ENGINEER AND SURVEYOR FURTHER DO NOT GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED EITHER VERTICALLY OR HORIZONTALLY. ENGINEER AND SURVEYOR HAVE NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES BY PROBING, EXCAVATING, HYDROVAC, OR BY ANY OTHER MEANS.
C. CM SHALL NOTIFY ALL UTILITY COMPANIES AND GOVERNMENTAL AGENCIES WHO MAY HAVE UTILITY LINES ON OR ABOUT THE PREMISES OR WHO MAY BE AFFECTED BY THE CONSTRUCTION. NOTICE SHALL BE GIVEN NO LESS THAN TWENTY-FOUR HOURS PRIOR TO ANY WORK THAT MAY INTERFERE WITH A UTILITY.
D. ALL EXISTING BUILDINGS, STRUCTURES, PAVEMENTS, IMPROVEMENTS, AND UTILITIES DESIGNATED TO REMAIN OR NOT DESIGNATED TO BE REMOVED SHALL BE ADEQUATELY PROTECTED FROM DAMAGE THAT MIGHT OTHERWISE OCCUR DUE TO CONSTRUCTION OPERATIONS. WHERE CONSTRUCTION COMES NEAR EXISTING BUILDINGS, STRUCTURES, PAVEMENTS, IMPROVEMENTS, UTILITIES OR APPURTENANCES, OR IF IT BECOMES NECESSARY TO MOVE SERVICES, POLES, GUY WIRES, PIPE LINES OR OTHER OBSTRUCTIONS, CM SHALL NOTIFY AND COOPERATE WITH THE OWNER OF THE UTILITY, STRUCTURE, OR APPURTENANCE. THE UTILITY LINES AND OTHER EXISTING STRUCTURES SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND ARE NOT GUARANTEED TO BE COMPLETE OR ACCURATE AS TO LOCATION AND/OR DEPTH. CM SHALL BE LIABLE FOR DAMAGE TO ANY BUILDINGS, STRUCTURES, PAVEMENTS, IMPROVEMENTS, AND UTILITIES RESULTING FROM THE CM'S OPERATIONS. DURING CONSTRUCTION, ALL FIRE HYDRANTS, VALVE BOXES, TRAFFIC SIGNALS, FIRE OR POLICE CALL BOXES AND OTHER EXISTING UTILITY CONTROLS SHALL BE LEFT INTACT, UNOBSTRUCTED AND ACCESSIBLE UNLESS NOTED ON THE PLAN.
E. CM SHALL SATISFY THEMSELVES AS TO THE ACTUAL EXISTING SUBSURFACE CONDITIONS, INCLUDING BUT NOT LIMITED TO THE DEPTH, LOCATION AND SIZES OF PIPE OR CONDUITS OF VARIOUS KINDS IN PLACE PRIOR TO BEGINNING WORK. WHERE THE EXACT DEPTH OF ANY UTILITY OR OBSTRUCTION IS NOT SHOWN ON A PLAN, EXCAVATION SHALL BE MADE PRIOR TO REACHING THE OBSTRUCTION IN ORDER TO DETERMINE ADJUSTMENTS IN GRADE IF NEEDED TO PREVENT INTERFERENCE. REDESIGN TO ELIMINATE CONFLICTS MAY BE NECESSARY.
F. NOTIFY ENGINEER OF DISCREPANCIES BETWEEN EXISTING CONDITIONS AND DRAWINGS BEFORE PROCEEDING WITH SELECTIVE DEMOLITION.
G. IF CM ENCOUNTERS A HAZARDOUS ENVIRONMENTAL CONDITION OR IF CM OR ANYONE FOR WHOM CM IS RESPONSIBLE CREATES A HAZARDOUS ENVIRONMENTAL CONDITION, CM SHALL IMMEDIATELY: (I) SECURE OR OTHERWISE ISOLATE SUCH CONDITION; (II) STOP ALL WORK IN CONNECTION WITH SUCH CONDITION AND IN ANY AREA AFFECTED THEREBY (EXCEPT IN AN EMERGENCY); AND (III) NOTIFY OWNER AND ENGINEER (AND PROMPTLY THEREAFTER CONFIRM SUCH NOTICE IN WRITING). OWNER SHALL PROMPTLY CONSULT WITH ENGINEER CONCERNING THE NECESSITY FOR OWNER TO RETAIN A QUALIFIED EXPERT TO EVALUATE SUCH CONDITION OR TAKE CORRECTIVE ACTION, IF ANY.
H. UNLESS OTHERWISE SPECIFIED, ALL EXCAVATION IS UNCLASSIFIED AND SHALL INCLUDE ALL MATERIALS ENCOUNTERED.
I. CM SHALL SATISFY THEMSELVES AS TO THE ACTUAL EXISTING SUBSURFACE CONDITIONS, INCLUDING BUT NOT LIMITED TO THE DEPTH, LOCATION AND SIZES OF PIPE OR CONDUITS OF VARIOUS KINDS IN PLACE. WHERE THE EXACT DEPTH OF ANY UTILITY OR OBSTRUCTION IS NOT SHOWN ON A PLAN, EXCAVATION SHALL BE MADE PRIOR TO REACHING THE OBSTRUCTION IN ORDER TO DETERMINE ADJUSTMENTS IN GRADE IF NEEDED TO PREVENT INTERFERENCE. REDESIGN TO ELIMINATE CONFLICTS MAY BE NECESSARY.
J. CM SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING THE SITE. UNSUITABLE EXCAVATED MATERIALS AND ALL WASTE RESULTING FROM CLEARING AND GRUBBING SHALL BE DISPOSED OFF-SITE.
K. THE REMOVAL OF ANY UTILITY LINE, SERVICE, APPURTENANCE, AND STRUCTURE SHALL BE COORDINATED WITH THE OWNER OF THE RESPECTIVE UTILITY.
L. ALL PAVEMENT REMOVAL CONTIGUOUS TO PAVEMENT REMAINING SHALL BE SAWED IN STRAIGHT LINES TO THE FULL DEPTH OF THE EXISTING PAVEMENT.
M. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS SHALL NOT BE PERMITTED.
N. CM SHALL BACKFILL ANY VOIDS RESULTING FROM STRUCTURES, VEGETATION, AND OBJECTS REMOVED. FILL SHALL BE PLACED IN MAXIMUM 6" LIFTS AND COMPACTED TO A DRY DENSITY OF AT LEAST 98% OF THE MAXIMUM DRY DENSITY OBTAINED BY THE STANDARD COMPACTION TEST (ASTM D-698) AT A WATER CONTENT WITHIN 3% OF THE OPTIMUM.

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
CHEROKEE NATION

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:
P5
P3 P4
P1 P2

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C2-111**
SHEET TITLE: NP3 DEMOLITION PLAN

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C2-DEMO-5123.1.DWG

UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CM PRIOR TO CONSTRUCTION. CM SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

0' 20' 40' 80'
SCALE: 1" = 20'

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

NP4

KEYNOTES

1	REMOVE CONCRETE PAVEMENT.
2	REMOVE TREES, SHRUBS, AND VEGETATION.
3	PRESERVE TREES.
4	REMOVE SIGN. PRESERVE, PROTECT, AND STORE SIGN TO REINSTALL AFTER PAVEMENT CONSTRUCTION AND REVEGETATION.
5	REMOVE GAS SERVICE LINE FROM THE MAIN. COORDINATE REMOVAL WITH NOPFA GAS.
6	REMOVE ELECTRIC SERVICE LINE. COORDINATE WITH POWER PROVIDER.
7	REMOVE POWER/LIGHT POLE.
8	REMOVE MASONRY WALL.
9	REMOVE ASPHALT PAVEMENT.
10	REMOVE EXISTING BUILDINGS, FOUNDATIONS, AND FOOTINGS. REMOVE UTILITY SERVICE LINES TO BUILDINGS. REMOVE EXTERIOR MECHANICAL EQUIPMENT SERVING THE BUILDINGS.
11	REMOVE DOG KENNELS.
12	REMOVE FENCE AND GATE.
13	PRESERVE FENCE.
14	REMOVE FENCE SOUTH OF THE PROPERTY CORNER. INSTALL BRACE POST, IF NECESSARY TO MAINTAIN CURRENT CONDITION OF THE FENCE REMAINING NORTH OF THE PROPERTY CORNER.
15	REMOVE FENCE EAST OF THE PROPERTY CORNER. INSTALL BRACE POST, IF NECESSARY TO MAINTAIN CURRENT CONDITION OF THE FENCE REMAINING WEST OF THE PROPERTY CORNER.
16	REMOVE GRAVEL.
17	REMOVE CONCRETE WALL.
18	EXISTING 3-IN POLY MEDIUM PRESSURE NOPFA GAS MAIN TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-). REMOVE TERMINATED GAS MAIN ONCE RELOCATION IS COMPLETE.
19	EXISTING 6-IN SEWER FORCE MAIN TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-) AND SEWER PLAN AND PROFILE SHEETS (C8-). REMOVE TERMINATED FORCE MAIN ONCE RELOCATION IS COMPLETE.
20	EXISTING OWNER FIBER OPTIC TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-). REMOVE TERMINATED CONDUITS AND CABLES ONCE RELOCATION IS COMPLETE.
21	EXISTING LREC UNDERGROUND 3-PHASE POWER AND FIBER OPTIC CABLES TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-). REMOVE TERMINATED CONDUITS AND CABLES ONCE RELOCATION IS COMPLETE.
22	REMOVE MASONRY BLOCK GRAVITY RETAINING WALL, GRAVEL, AND DRAIN PIPES. DO NOT BEGIN DEMOLITION UNTIL BURIED LREC POWER LINE IS RELOCATED.
23	SAWCUT AND REMOVE CURB FOR DRIVEWAY AND SIDEWALK CONSTRUCTION. REFER TO (C3-) SHEETS FOR SITE PLAN.

DEMOLITION PLAN NOTES

A. CM SHALL CONTACT OKIE (811 OR 1-800-522-OKIE) PRIOR TO CONSTRUCTION FOR LOCATING EXISTING UTILITIES.
B. THE UNDERGROUND UTILITIES SHOWN ON THE DRAWINGS HAVE BEEN LOCATED FROM FIELD SURVEY SURFACE INFORMATION AND EXISTING DRAWINGS. ENGINEER AND SURVEYOR MAKE NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE UNDERGROUND UTILITIES ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE; HOWEVER, ENGINEER AND SURVEYOR FURTHER DO NOT GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED EITHER VERTICALLY OR HORIZONTALLY. ENGINEER AND SURVEYOR HAVE NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES BY PROBING, EXCAVATING, HYDROVAC, OR BY ANY OTHER MEANS.
C. CM SHALL NOTIFY ALL UTILITY COMPANIES AND GOVERNMENTAL AGENCIES WHO MAY HAVE UTILITY LINES ON OR ABOUT THE PREMISES OR WHO MAY BE AFFECTED BY THE CONSTRUCTION. NOTICE SHALL BE GIVEN NO LESS THAN TWENTY-FOUR HOURS PRIOR TO ANY WORK THAT MAY INTERFERE WITH A UTILITY.
D. ALL EXISTING BUILDINGS, STRUCTURES, PAVEMENTS, IMPROVEMENTS, AND UTILITIES DESIGNATED TO REMAIN OR NOT DESIGNATED TO BE REMOVED SHALL BE ADEQUATELY PROTECTED FROM DAMAGE THAT MIGHT OTHERWISE OCCUR DUE TO CONSTRUCTION OPERATIONS. WHERE CONSTRUCTION COMES NEAR EXISTING BUILDINGS, STRUCTURES, PAVEMENTS, IMPROVEMENTS, UTILITIES OR APPURTENANCES, OR IF IT BECOMES NECESSARY TO MOVE SERVICES, POLES, GUY WIRES, PIPE LINES OR OTHER OBSTRUCTIONS, CM SHALL NOTIFY AND COOPERATE WITH THE OWNER OF THE UTILITY, STRUCTURE, OR APPURTENANCE. THE UTILITY LINES AND OTHER EXISTING STRUCTURES SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND ARE NOT GUARANTEED TO BE COMPLETE OR ACCURATE AS TO LOCATION AND/OR DEPTH. CM SHALL BE LIABLE FOR DAMAGE TO ANY BUILDINGS, STRUCTURES, PAVEMENTS, IMPROVEMENTS, AND UTILITIES RESULTING FROM THE CM'S OPERATIONS. DURING CONSTRUCTION, ALL FIRE HYDRANTS, VALVE BOXES, TRAFFIC SIGNALS, FIRE OR POLICE CALL BOXES AND OTHER EXISTING UTILITY CONTROLS SHALL BE LEFT INTACT, UNOBSTRUCTED AND ACCESSIBLE UNLESS NOTED ON THE PLAN.
E. CM SHALL SATISFY THEMSELVES AS TO THE ACTUAL EXISTING SUBSURFACE CONDITIONS, INCLUDING BUT NOT LIMITED TO THE DEPTH, LOCATION AND SIZES OF PIPE OR CONDUITS OF VARIOUS KINDS IN PLACE PRIOR TO BEGINNING WORK. WHERE THE EXACT DEPTH OF ANY UTILITY OR OBSTRUCTION IS NOT SHOWN ON A PLAN, EXCAVATION SHALL BE MADE PRIOR TO REACHING THE OBSTRUCTION IN ORDER TO DETERMINE ADJUSTMENTS IN GRADE IF NEEDED TO PREVENT INTERFERENCE. REDESIGN TO ELIMINATE CONFLICTS MAY BE NECESSARY.
F. NOTIFY ENGINEER OF DISCREPANCIES BETWEEN EXISTING CONDITIONS AND DRAWINGS BEFORE PROCEEDING WITH SELECTIVE DEMOLITION.
G. IF CM ENCOUNTERS A HAZARDOUS ENVIRONMENTAL CONDITION OR IF CM OR ANYONE FOR WHOM CM IS RESPONSIBLE CREATES A HAZARDOUS ENVIRONMENTAL CONDITION, CM SHALL IMMEDIATELY: (I) SECURE OR OTHERWISE ISOLATE SUCH CONDITION; (II) STOP ALL WORK IN CONNECTION WITH SUCH CONDITION AND IN ANY AREA AFFECTED THEREBY (EXCEPT IN AN EMERGENCY); AND (III) NOTIFY OWNER AND ENGINEER (AND PROMPTLY THEREAFTER CONFIRM SUCH NOTICE IN WRITING). OWNER SHALL PROMPTLY CONSULT WITH ENGINEER CONCERNING THE NECESSITY FOR OWNER TO RETAIN A QUALIFIED EXPERT TO EVALUATE SUCH CONDITION OR TAKE CORRECTIVE ACTION, IF ANY.
H. UNLESS OTHERWISE SPECIFIED, ALL EXCAVATION IS UNCLASSIFIED AND SHALL INCLUDE ALL MATERIALS ENCOUNTERED.
I. CM SHALL SATISFY THEMSELVES AS TO THE ACTUAL EXISTING SUBSURFACE CONDITIONS, INCLUDING BUT NOT LIMITED TO THE DEPTH, LOCATION AND SIZES OF PIPE OR CONDUITS OF VARIOUS KINDS IN PLACE. WHERE THE EXACT DEPTH OF ANY UTILITY OR OBSTRUCTION IS NOT SHOWN ON A PLAN, EXCAVATION SHALL BE MADE PRIOR TO REACHING THE OBSTRUCTION IN ORDER TO DETERMINE ADJUSTMENTS IN GRADE IF NEEDED TO PREVENT INTERFERENCE. REDESIGN TO ELIMINATE CONFLICTS MAY BE NECESSARY.
J. CM SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING THE SITE. UNSUITABLE EXCAVATED MATERIALS AND ALL WASTE RESULTING FROM CLEARING AND GRUBBING SHALL BE DISPOSED OFF-SITE.
K. THE REMOVAL OF ANY UTILITY LINE, SERVICE, APPURTENANCE, AND STRUCTURE SHALL BE COORDINATED WITH THE OWNER OF THE RESPECTIVE UTILITY.
L. ALL PAVEMENT REMOVAL CONTIGUOUS TO PAVEMENT REMAINING SHALL BE SAWED IN STRAIGHT LINES TO THE FULL DEPTH OF THE EXISTING PAVEMENT.
M. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS SHALL NOT BE PERMITTED.
N. CM SHALL BACKFILL ANY VOIDS RESULTING FROM STRUCTURES, VEGETATION, AND OBJECTS REMOVED. FILL SHALL BE PLACED IN MAXIMUM 6" LIFTS AND COMPACTED TO A DRY DENSITY OF AT LEAST 98% OF THE MAXIMUM DRY DENSITY OBTAINED BY THE STANDARD COMPACTION TEST (ASTM D-698) AT A WATER CONTENT WITHIN 3% OF THE OPTIMUM.

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
SEAL OF THE CHEROKEE NATION SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:
P5
P3 P4
P1 P2

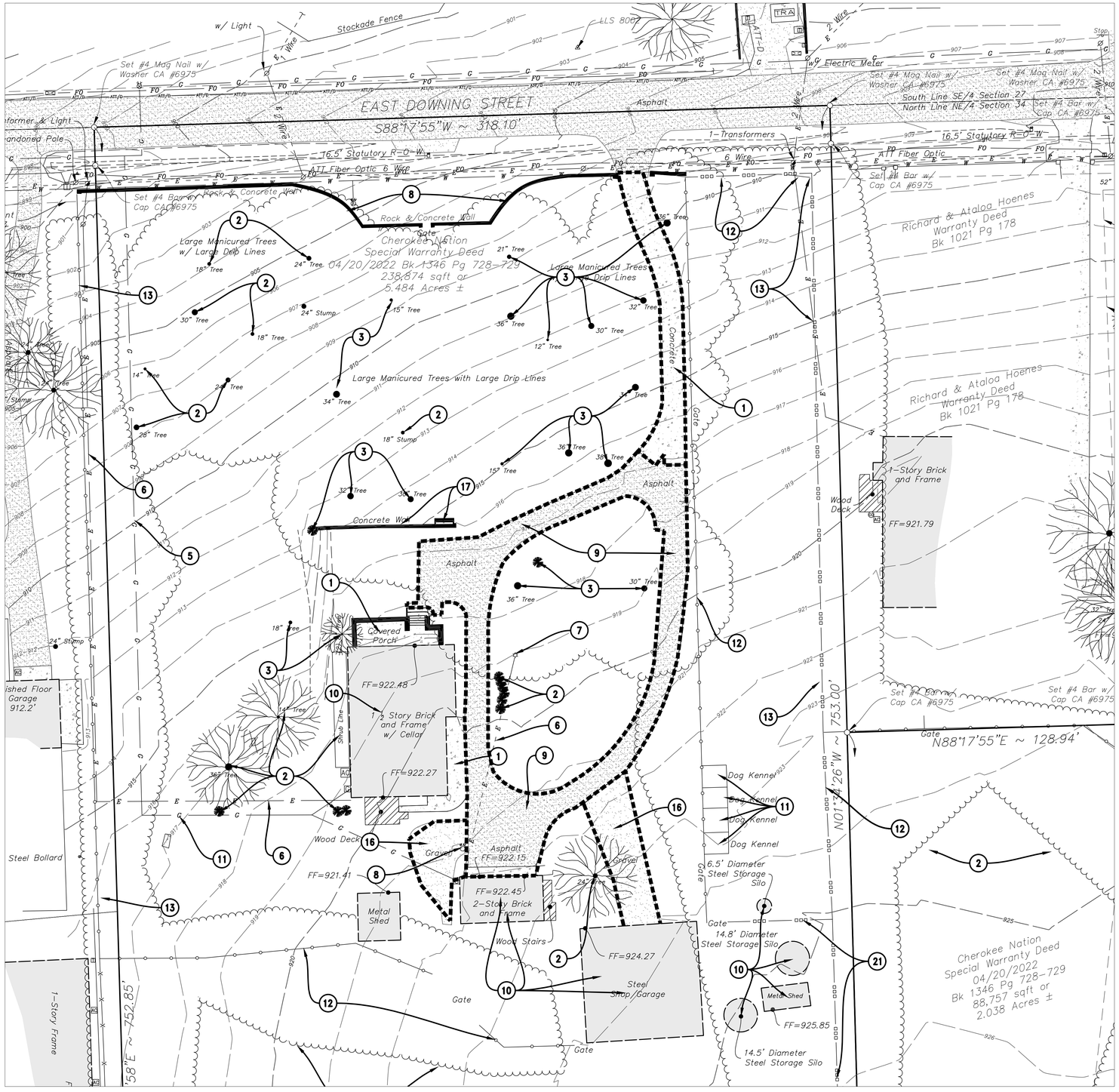
PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C2-112**
SHEET TITLE: NP4 DEMOLITION PLAN

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C2-DEMO-5123.1.DWG

A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C2-DEMO-5123.1.dwg, 7/29/2022 12:18:58 PM, DWG To PDF.pc3



KEYNOTES

#	
1	REMOVE CONCRETE PAVEMENT.
2	REMOVE TREES, SHRUBS, AND VEGETATION.
3	PRESERVE TREES.
4	REMOVE SIGN. PRESERVE, PROTECT, AND STORE SIGN TO REINSTALL AFTER PAVEMENT CONSTRUCTION AND REVEGETATION.
5	REMOVE GAS SERVICE LINE FROM THE MAIN. COORDINATE REMOVAL WITH NOPFA GAS.
6	REMOVE ELECTRIC SERVICE LINE. COORDINATE WITH POWER PROVIDER.
7	REMOVE POWER/LIGHT POLE.
8	REMOVE MASONRY WALL.
9	REMOVE ASPHALT PAVEMENT.
10	REMOVE EXISTING BUILDINGS, FOUNDATIONS, AND FOOTINGS. REMOVE UTILITY SERVICE LINES TO BUILDINGS. REMOVE EXTERIOR MECHANICAL EQUIPMENT SERVING THE BUILDINGS.
11	REMOVE DOG KENNELS.
12	REMOVE FENCE AND GATE.
13	PRESERVE FENCE.
14	REMOVE FENCE SOUTH OF THE PROPERTY CORNER. INSTALL BRACE POST, IF NECESSARY TO MAINTAIN CURRENT CONDITION OF THE FENCE REMAINING NORTH OF THE PROPERTY CORNER.
15	REMOVE FENCE EAST OF THE PROPERTY CORNER. INSTALL BRACE POST, IF NECESSARY TO MAINTAIN CURRENT CONDITION OF THE FENCE REMAINING WEST OF THE PROPERTY CORNER.
16	REMOVE GRAVEL.
17	REMOVE CONCRETE WALL.
18	EXISTING 3-IN POLY MEDIUM PRESSURE NOPFA GAS MAIN TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-). REMOVE TERMINATED GAS MAIN ONCE RELOCATION IS COMPLETE.
19	EXISTING 6-IN SEWER FORCE MAIN TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-) AND SEWER PLAN AND PROFILE SHEETS (C8-). REMOVE TERMINATED FORCE MAIN ONCE RELOCATION IS COMPLETE.
20	EXISTING OWNER FIBER OPTIC TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-). REMOVE TERMINATED CONDUITS AND CABLES ONCE RELOCATION IS COMPLETE.
21	EXISTING LREC UNDERGROUND 3-PHASE POWER AND FIBER OPTIC CABLES TO BE RELOCATED. REFER TO SITE PLAN SHEETS (C3-). REMOVE TERMINATED CONDUITS AND CABLES ONCE RELOCATION IS COMPLETE.
22	REMOVE MASONRY BLOCK GRAVITY RETAINING WALL, GRAVEL, AND DRAIN PIPES. DO NOT BEGIN DEMOLITION UNTIL BURIED LREC POWER LINE IS RELOCATED.
23	SAWCUT AND REMOVE CURB FOR DRIVEWAY AND SIDEWALK CONSTRUCTION. REFER TO (C3-) SHEETS FOR SITE PLAN.

DEMOLITION PLAN NOTES

A. CM SHALL CONTACT OKIE (811 OR 1-800-522-OKIE) PRIOR TO CONSTRUCTION FOR LOCATING EXISTING UTILITIES.

B. THE UNDERGROUND UTILITIES SHOWN ON THE DRAWINGS HAVE BEEN LOCATED FROM FIELD SURVEY SURFACE INFORMATION AND EXISTING DRAWINGS. ENGINEER AND SURVEYOR MAKE NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE UNDERGROUND UTILITIES ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE; HOWEVER, ENGINEER AND SURVEYOR FURTHER DO NOT GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED EITHER VERTICALLY OR HORIZONTALLY. ENGINEER AND SURVEYOR HAVE NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES BY PROBING, EXCAVATING, HYDROVAC, OR BY ANY OTHER MEANS.

C. CM SHALL NOTIFY ALL UTILITY COMPANIES AND GOVERNMENTAL AGENCIES WHO MAY HAVE UTILITY LINES ON OR ABOUT THE PREMISES OR WHO MAY BE AFFECTED BY THE CONSTRUCTION. NOTICE SHALL BE GIVEN NO LESS THAN TWENTY-FOUR HOURS PRIOR TO ANY WORK THAT MAY INTERFERE WITH A UTILITY.

D. ALL EXISTING BUILDINGS, STRUCTURES, PAVEMENTS, IMPROVEMENTS, AND UTILITIES DESIGNATED TO REMAIN OR NOT DESIGNATED TO BE REMOVED SHALL BE ADEQUATELY PROTECTED FROM DAMAGE THAT MIGHT OTHERWISE OCCUR DUE TO CONSTRUCTION OPERATIONS. WHERE CONSTRUCTION COMES NEAR EXISTING BUILDINGS, STRUCTURES, PAVEMENTS, IMPROVEMENTS, UTILITIES OR APPURTENANCES, OR IF IT BECOMES NECESSARY TO MOVE SERVICES, POLES, GUY WIRES, PIPE LINES OR OTHER OBSTRUCTIONS, CM SHALL NOTIFY AND COOPERATE WITH THE OWNER OF THE UTILITY, STRUCTURE, OR APPURTENANCE. THE UTILITY LINES AND OTHER EXISTING STRUCTURES SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND ARE NOT GUARANTEED TO BE COMPLETE OR ACCURATE AS TO LOCATION AND/OR DEPTH. CM SHALL BE LIABLE FOR DAMAGE TO ANY BUILDINGS, STRUCTURES, PAVEMENTS, IMPROVEMENTS, AND UTILITIES RESULTING FROM THE CM'S OPERATIONS. DURING CONSTRUCTION, ALL FIRE HYDRANTS, VALVE BOXES, TRAFFIC SIGNALS, FIRE OR POLICE CALL BOXES AND OTHER EXISTING UTILITY CONTROLS SHALL BE LEFT INTACT, UNOBSTRUCTED AND ACCESSIBLE UNLESS NOTED ON THE PLAN.

E. CM SHALL SATISFY THEMSELVES AS TO THE ACTUAL EXISTING SUBSURFACE CONDITIONS, INCLUDING BUT NOT LIMITED TO THE DEPTH, LOCATION AND SIZES OF PIPE OR CONDUITS OF VARIOUS KINDS IN PLACE PRIOR TO BEGINNING WORK. WHERE THE EXACT DEPTH OF ANY UTILITY OR OBSTRUCTION IS NOT SHOWN ON A PLAN, EXCAVATION SHALL BE MADE PRIOR TO REACHING THE OBSTRUCTION IN ORDER TO DETERMINE ADJUSTMENTS IN GRADE IF NEEDED TO PREVENT INTERFERENCE. REDESIGN TO ELIMINATE CONFLICTS MAY BE NECESSARY.

F. NOTIFY ENGINEER OF DISCREPANCIES BETWEEN EXISTING CONDITIONS AND DRAWINGS BEFORE PROCEEDING WITH SELECTIVE DEMOLITION.

G. IF CM ENCOUNTERS A HAZARDOUS ENVIRONMENTAL CONDITION OR IF CM OR ANYONE FOR WHOM CM IS RESPONSIBLE CREATES A HAZARDOUS ENVIRONMENTAL CONDITION, CM SHALL IMMEDIATELY: (I) SECURE OR OTHERWISE ISOLATE SUCH CONDITION; (II) STOP ALL WORK IN CONNECTION WITH SUCH CONDITION AND IN ANY AREA AFFECTED THEREBY (EXCEPT IN AN EMERGENCY); AND (III) NOTIFY OWNER AND ENGINEER (AND PROMPTLY THEREAFTER CONFIRM SUCH NOTICE IN WRITING). OWNER SHALL PROMPTLY CONSULT WITH ENGINEER CONCERNING THE NECESSITY FOR OWNER TO RETAIN A QUALIFIED EXPERT TO EVALUATE SUCH CONDITION OR TAKE CORRECTIVE ACTION, IF ANY.

H. UNLESS OTHERWISE SPECIFIED, ALL EXCAVATION IS UNCLASSIFIED AND SHALL INCLUDE ALL MATERIALS ENCOUNTERED.

I. CM SHALL SATISFY THEMSELVES AS TO THE ACTUAL EXISTING SUBSURFACE CONDITIONS, INCLUDING BUT NOT LIMITED TO THE DEPTH, LOCATION AND SIZES OF PIPE OR CONDUITS OF VARIOUS KINDS IN PLACE. WHERE THE EXACT DEPTH OF ANY UTILITY OR OBSTRUCTION IS NOT SHOWN ON A PLAN, EXCAVATION SHALL BE MADE PRIOR TO REACHING THE OBSTRUCTION IN ORDER TO DETERMINE ADJUSTMENTS IN GRADE IF NEEDED TO PREVENT INTERFERENCE. REDESIGN TO ELIMINATE CONFLICTS MAY BE NECESSARY.

J. CM SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING THE SITE. UNSUITABLE EXCAVATED MATERIALS AND ALL WASTE RESULTING FROM CLEARING AND GRUBBING SHALL BE DISPOSED OFF-SITE.

K. THE REMOVAL OF ANY UTILITY LINE, SERVICE, APPURTENANCE, AND STRUCTURE SHALL BE COORDINATED WITH THE OWNER OF THE RESPECTIVE UTILITY.

L. ALL PAVEMENT REMOVAL CONTIGUOUS TO PAVEMENT REMAINING SHALL BE SAWED IN STRAIGHT LINES TO THE FULL DEPTH OF THE EXISTING PAVEMENT.

M. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS SHALL NOT BE PERMITTED.

N. CM SHALL BACKFILL ANY VOIDS RESULTING FROM STRUCTURES, VEGETATION, AND OBJECTS REMOVED. FILL SHALL BE PLACED IN MAXIMUM 6" LIFTS AND COMPACTED TO A DRY DENSITY OF AT LEAST 98% OF THE MAXIMUM DRY DENSITY OBTAINED BY THE STANDARD COMPACTION TEST (ASTM D-698) AT A WATER CONTENT WITHIN 3% OF THE OPTIMUM.

UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CM PRIOR TO CONSTRUCTION. CM SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

SCALE: 1" = 20'

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

NP5

James R. Childers
Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:

Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:

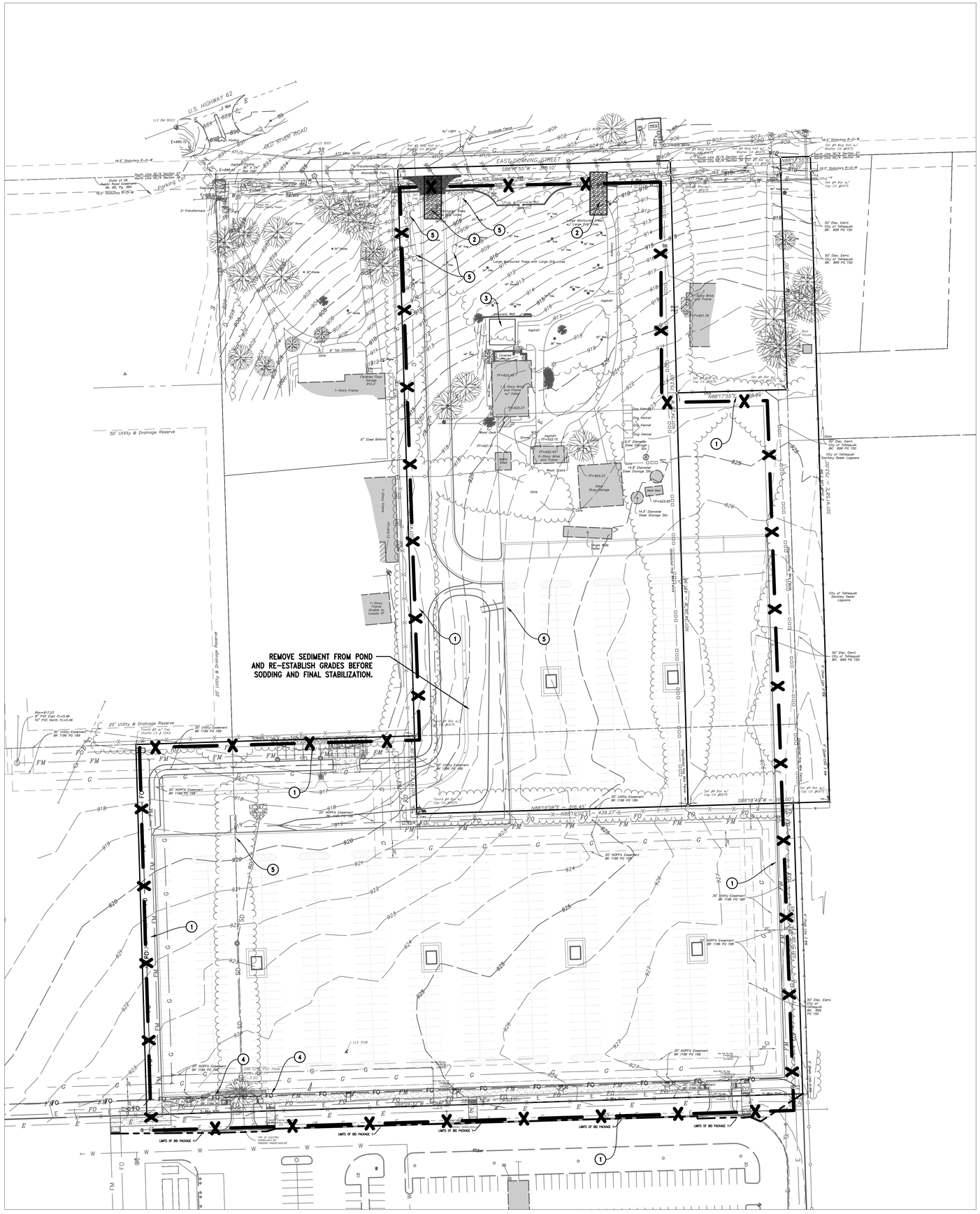
CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C2-113**
SHEET TITLE: NP5 DEMOLITION PLAN



KEYNOTES

1	INSTALL SILT FENCE. SEE SHEET C2-750, DETAIL 01
2	INSTALL TEMPORARY CONSTRUCTION ENTRANCE. SEE SHEET C2-750, DETAIL 02
3	CONCRETE WASHOUT, SEE SHEET C2-750, DETAIL 05
4	INSTALL CURB INLET FILER MAT SEDIMENT BARRIER. SEE DTL 3, SHEET C2-750.
5	INSTALL ROCK BAG CHECK DAMS. SEE DTL 4, SHEET C2-750.

0' 50' 100' 200'

SCALE: 1" = 50'

UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:

Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:

SEAL OF THE CHEROKEE NATION SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

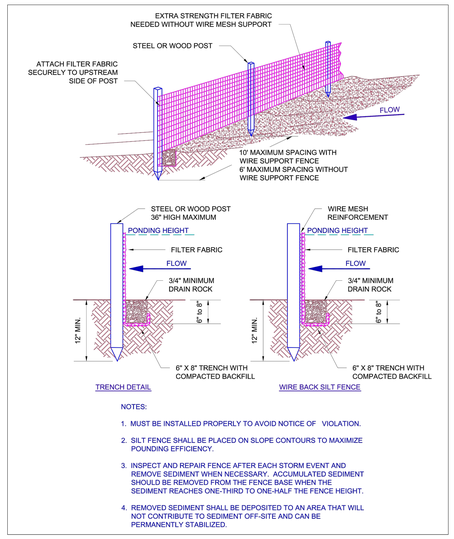
KEY PLAN:

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER:	21-08.21
DATE:	07-29-22
SHEET NUMBER:	**C2-702**
SHEET TITLE:	NP EROSION CONTROL PLAN

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C2-EROS-5123.1.DWG

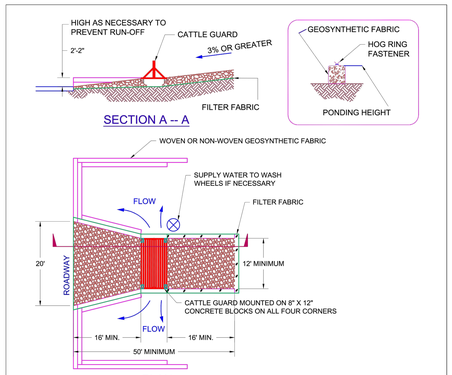


NOTES:

1. MUST BE INSTALLED PROPERLY TO AVOID NOTICE OF VIOLATION.
2. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE POUNDING EFFICIENCY.
3. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. ACCUMULATED SEDIMENT SHOULD BE REMOVED FROM THE FENCE BASE WHEN THE SEDIMENT REACHES ONE-THIRD TO ONE-HALF THE FENCE HEIGHT.
4. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE TO SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

01 SILT FENCE

Scale: NTS

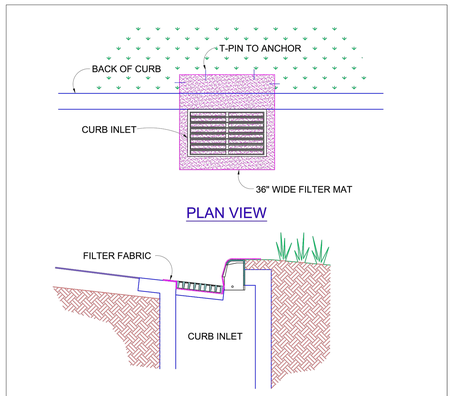


NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE A MOUNTED CATTLE GUARD AND SEDIMENT PONDS TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON THE CATTLE GUARD. FIRST WASH ONE SET OF TIRES THEN, MOVE FORWARD TO WASH THE SECOND SET OF TIRES. THE GUARD IS TO BE MOUNTED ON 8" X 12" CEMENT BLOCK ON AN AREA OF STABILIZED CRUSHED STONE WITH A DRAIN INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN ON BOTH SIDES.

2 TEMPORARY ROCK CONSTRUCTION ENTRANCE

Scale: 1" = 1'

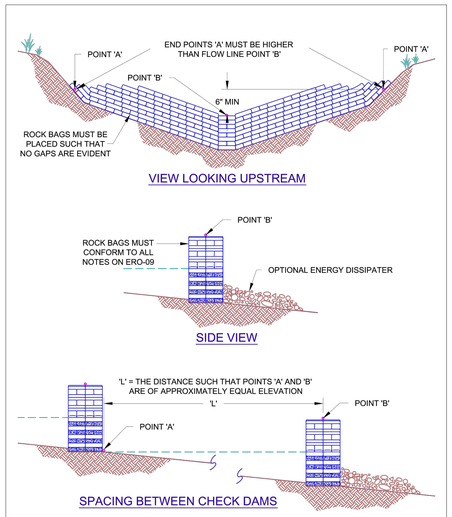


NOTES:

1. USE FILTER MAT SEDIMENT BARRIER WHEN CURB INLET IS LOCATED IN GENTLY SLOPING STREET, WITH MINIMAL NEED, WHERE WATER CAN FILTER AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. BARRIER SHALL ALLOW FOR OVERFLOW FROM SEVERE STORM EVENT.
3. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

03 CURB INLET FILTER MAT SEDIMENT BARRIER

Scale: NTS



4 ROCK BAG CHECK DAMS

Scale: 1" = 1'

EROSION CONTROL NOTES

STORMWATER POLLUTION PREVENTION PLAN

A STORMWATER POLLUTION PREVENTION PLAN (SWP3) HAS BEEN PREPARED FOR THE WORK AND AN NOTICE OF INTENT (NOI) HAS BEEN SUBMITTED BY OWNER TO THE ENVIRONMENTAL PROTECTION AGENCY. CONTRACTOR SHALL IMPLEMENT THE SWP3, AND CONSTRUCT, INSPECT, AND MAINTAIN THE EROSION CONTROLS TO PREVENT RUNOFF OF SILT AND SEDIMENT FROM THE SITE. A COPY OF THE SWP3 SHALL BE KEPT AT THE SITE AT ALL TIMES AND BE MADE AVAILABLE TO INSPECTORS UPON REQUEST. INSPECTIONS REPORTS SHALL BE MAINTAINED IN THE SWP3 AND THE SWP3 SHALL BE UPDATED WHEN NECESSARY.

POSTING OF PUBLIC NOTICE

1. CONTRACTOR SHALL BE RESPONSIBLE FOR POSTING PUBLIC NOTICE. THE NOTICE SHALL BE POSTED NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE THAT INDICATES THE FOLLOWING INFORMATION:
   - THE PERMIT NUMBER FOR THE PROJECT OR A COPY OF THE NOI IF A PERMIT NUMBER HAS NOT YET BEEN ASSIGNED.
   - THE NAME AND TELEPHONE NUMBER OF A LOCAL CONTACT PERSON.
   - A BRIEF DESCRIPTION OF THE PROJECT.
   - THE LOCATION OF THIS SWP3 IF THE SITE IS INACTIVE OR DOES NOT HAVE AN ON-SITE LOCATION TO STORE THE PLAN.

EROSION AND SEDIMENT CONTROLS

1. CONSTRUCTION AND PLACEMENT OF EROSION AND SEDIMENT CONTROL DEVICES SHALL BE PERFORMED IN CONJUNCTION WITH THE PROGRESS OF GENERAL CONSTRUCTION. CONTRACTOR SHALL INSTALL THE EROSION CONTROL DEVICES SHOWN AND INSTALL ADDITIONAL EROSION CONTROL DEVICES AS NECESSARY TO PREVENT SILT RUNOFF FROM THE WORK AREA ONTO ADJACENT AREAS.
2. THE EROSION AND SEDIMENT CONTROLS TO BE USED FOR THIS SITE ARE:
   - TEMPORARY CONSTRUCTION ENTRANCE/EXIT – STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL POINTS WHERE CONSTRUCTION OR EMPLOYEE VEHICLES ENTER OR LEAVE THE CONSTRUCTION OR STAGING AREAS.
   - ROCK BAG FILTER BERMS – ROCK BAG FILTER BERMS SHALL BE PLACED IN SMALL OPEN CHANNELS. THE BERMS SHALL BE PLACED SO THAT THE TOE OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM DAM.
   - ROCK BAG INLET BARRIER – ROCK BAG INLET BARRIERS SHALL BE PLACED AROUND ALL INLETS PROPOSED AND EXISTING THAT ARE RECEIVING RUNOFF FROM THE SITE.
   - SILT FENCES – SILT FENCES SHALL BE PLACED ALONG THE PERIMETER OF THE PROJECT WHERE STORM WATER WILL EXIT THE SITE. SILT FENCES SHALL ALSO BE UTILIZED ALONG SLOPE CONTOURS IN J-HOOK LAYOUTS WHERE VEGETATIVE COVER IS NOT SUFFICIENTLY ESTABLISHED TO PREVENT EROSION. SODDING/SITE SEEDING – SODDING AND SEEDING SHALL BE USED TO ESTABLISH FINAL VEGETATIVE COVER.
3. THE FOLLOWING ARE SOME OTHER CONTROLS THAT MAY BE USED IN THE COURSE OF THIS PROJECT.
   - COMMON VEGETATIVE PRACTICES – TEMPORARY SEEDING, MULCHING, PERMANENT SEEDING AND PLANTING, PRESERVATION OF NATURAL VEGETATION, DUST CONTROL
   - STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES – SILT FENCE, STORM DRAIN INLET PROTECTION, OUTLET PROTECTION, BERMS FOR FUEL STORAGE AND DISPENSING AREAS
4. ADDITIONAL CONTROLS NOT LISTED ABOVE MAY ALSO BE CONSIDERED FOR USE.

OTHER CONTROLS

1. THE PREMISES AND THE JOB SITE SHALL BE MAINTAINED IN A REASONABLY NEAT AND ORDERLY CONDITION AND KEPT FREE FROM ACCUMULATIONS OF WASTE MATERIALS AND RUBBISH DURING THE ENTIRE CONSTRUCTION PERIOD. REMOVE CRATES, CARTONS, AND FLAMMABLE WASTE MATERIALS OR TRASH FROM THE WORK AREAS AT THE END OF EACH WORKING DAY.
2. PAVEMENT ON-SITE AND ON ADJOINING STREETS SHALL BE KEPT FREE OF ANY SEDIMENT OR MUD TRACKING FROM TRUCK TIRES OR FROM OTHER EQUIPMENT.
3. CHEMICAL TOILETS FOR THE USE OF ALL CONSTRUCTION PERSONNEL SHALL BE PROVIDED AT A LOCATION WITHIN THE LIMITS OF THE SITE. CHEMICAL TOILETS SHALL BE MAINTAINED IN A SANITARY CONDITION.
4. ANY DISPOSAL OF CONSTRUCTION WASTES, HAZARDOUS PRODUCTS, CONTAMINATED SOILS SHALL BE DISPOSED OF ACCORDING TO REQUIREMENTS OF THE CITY, COUNTY, ODEQ, AND THE U.S. ENVIRONMENTAL PROTECTION AGENCY.
5. THE WHEELS OF VEHICLES LEAVING THE CONSTRUCTION AREAS SHALL BE CLEANED OF MUD PRIOR TO LEAVING THE CONSTRUCTION OR STAGING AREAS. WHEEL WASHING SHALL BE PERFORMED IN AN AREA STABILIZED WITH STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
6. ADEQUATE CONTROLS SHALL BE MADE TO PREVENT AND/OR CONTROL ANY RELEASE OF PESTICIDES, PETROLEUM PRODUCTS, FERTILIZERS AND DETERGENTS, AND HAZARDOUS PRODUCTS.
7. ANY SPILL OF PESTICIDES, PETROLEUM PRODUCTS, FERTILIZERS AND DETERGENTS, AND HAZARDOUS PRODUCTS SHALL BE CONTAINED AND REMOVED ACCORDING TO STATE AND FEDERAL REQUIREMENTS. ANY SPILL OF PESTICIDES, PETROLEUM PRODUCTS, FERTILIZERS AND DETERGENTS, AND HAZARDOUS PRODUCTS SHALL BE REPORTED ACCORDING TO STATE AND FEDERAL REQUIREMENTS.
8. CONTROL AND MINIMIZE THE DUST GENERATION BLOWING FROM THE SITE. PROVIDE SPRINKLING AND/OR COVER OF SOIL STOCKPILES. PROVIDE SPRINKLING AND/OR TEMPORARY SOIL EROSION CONTROLS OF AREAS THAT WILL BE EXPOSED FOR EXTENDED PERIODS.

MAINTENANCE

1. ALL EROSION AND SEDIMENT CONTROL MEASURES AND OTHER PROTECTIVE MEASURES SHALL BE MAINTAINED IN EFFECTIVE OPERATING CONDITION. IF SITE INSPECTIONS IDENTIFY EROSION CONTROLS THAT ARE NOT OPERATING EFFECTIVELY, MAINTENANCE SHALL BE PERFORMED BEFORE THE NEXT ANTICIPATED STORM EVENT, OR AS NECESSARY TO MAINTAIN THE CONTINUED EFFECTIVENESS OF STORM WATER CONTROLS. IF MAINTENANCE PRIOR TO THE NEXT ANTICIPATED STORM EVENT IS IMPRACTICABLE, MAINTENANCE MUST BE SCHEDULED AND ACCOMPLISHED AS SOON AS PRACTICABLE.
2. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT SHALL BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFFSITE IMPACTS (E.G., FUGITIVE SEDIMENT IN STREET COULD BE WASHED INTO STORM SEWERS BY THE END OF THE DAY AND/OR POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS).
3. SEDIMENT SHALL BE REMOVED FROM SEDIMENT TRAPS OR SEDIMENTATION PONDS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50%.
4. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORM WATER SHALL BE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORM WATER DISCHARGES (E.G., SCREENING OUTFALLS, PICKED UP DAILY).

INSPECTIONS

1. CONTRACTOR SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.25 INCHES OR GREATER.
2. THE FOLLOWING ITEMS, LOCATIONS, AND AREAS SHALL BE INSPECTED.
   - DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM.
   - SEDIMENT AND EROSION CONTROL MEASURES SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY.
   - WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS.
   - WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWNSTREAM LOCATIONS SHALL BE INSPECTED TO THE EXTENT THAT SUCH INSPECTIONS ARE PRACTICABLE.
   - LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFFSITE SEDIMENT TRACKING.

REPORTS

1. A REPORT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, AND MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF EROSION CONTROLS SHALL BE MADE.
2. MAJOR OBSERVATIONS SHOULD INCLUDE: THE LOCATION(S) OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE; LOCATION(S) OF EROSION CONTROLS THAT NEED TO BE MAINTAINED; LOCATION(S) OF EROSION CONTROLS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION; AND LOCATION(S) WHERE ADDITIONAL EROSION CONTROLS ARE NEEDED THAT DID NOT EXIST AT THE TIME OF INSPECTION.
3. MODIFICATIONS MADE TO EROSION CONTROLS AS A RESULT OF INSPECTIONS SHALL BE RECORDED.
4. REPORTS SHALL IDENTIFY ANY INCIDENTS OF NONCOMPLIANCE.
5. WHERE A REPORT DOES NOT IDENTIFY ANY INCIDENTS OF NONCOMPLIANCE, THE REPORT SHALL CONTAIN A CERTIFICATION THAT THE FACILITY IS IN COMPLIANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN AND THIS PERMIT. THE OWNER OR CONTRACTOR SHALL SIGN THE REPORT.
6. ANY PERSON SIGNING THE REPORT SHALL MAKE THE FOLLOWING CERTIFICATION. I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.
7. INSPECTION REPORTS SHALL BE MAINTAINED ON SITE.

MODIFICATIONS OR ADDITIONS TO EROSION CONTROLS

1. BASED ON THE RESULTS OF THE INSPECTION, EROSION CONTROLS SHALL BE MODIFIED AS NECESSARY OR ADDITIONAL CONTROL SHALL BE PROVIDED TO CORRECT THE PROBLEMS IDENTIFIED. IF EXISTING EROSION CONTROLS NEED TO BE MODIFIED OR IF ADDITIONAL CONTROLS ARE NECESSARY, IMPLEMENTATION SHALL BE COMPLETED BEFORE THE NEXT ANTICIPATED STORM EVENT. IF IMPLEMENTATION BEFORE THE NEXT ANTICIPATED STORM EVENT IS IMPRACTICABLE, THEY SHALL BE IMPLEMENTED AS SOON AS PRACTICABLE.

STABILIZATION REQUIREMENTS

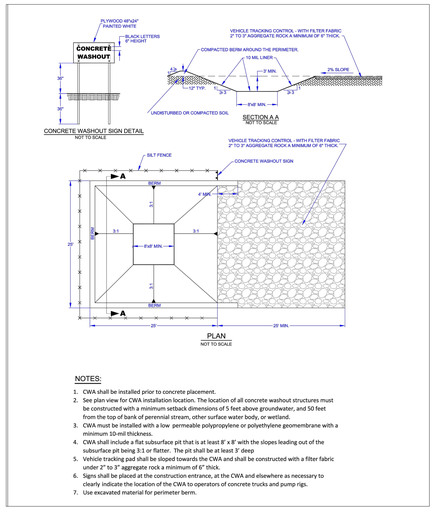
1. FINE GRADING SHALL BE PERFORMED ACCORDING TO THE GRADING PLAN.
2. ALL AREAS DISTURBED DURING THE COURSE OF CONSTRUCTION SHALL BE REVEGETATED ACCORDING TO THE LANDSCAPING PLAN. IF A LANDSCAPING PLAN IS NOT PROVIDED, THE DISTURBED AREAS SHALL BE SEEDED OR HYDRO-MULCHED AND MAINTAINED UNTIL THE GROWTH AND COVER IS ESTABLISHED UNTIL FINAL STABILIZATION IS ATTAINED.
2. EXCEPT WHERE THE LANDSCAPING PLAN IDENTIFIES OTHER GRASSES, GROUNDCOVER, PLANTS, OR SHRUBS TO BE PLANTED, A 4 FT WIDE STRIP OF BERMUDA GRASS SOD SHALL BE PLACED BEHIND ALL CURBS.
3. CONTRACTOR SHALL PROVIDE SUFFICIENT WATER AND FERTILIZER TO ESTABLISH THE SUFFICIENT GROWTH OF SOD AND SEEDS UNTIL FINAL STABILIZATION OF THE AREA IS ACHIEVED.
4. INITIATE THE INSTALLATION OF STABILIZATION MEASURES IMMEDIATELY IN ANY DISTURBED AREAS WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE SITE OR WILL BE TEMPORARILY INACTIVE FOR 14 OR MORE CALENDAR DAYS ON ANY PORTION OF THE SITE. THE TERM "IMMEDIATELY" IS USED TO DEFINE THE DEADLINE FOR INITIATING STABILIZATION MEASURES. IN THE CONTEXT OF THIS PROVISION, "IMMEDIATELY" MEANS AS SOON AS PRACTICABLE, BUT NO LATER THAN THE END OF THE NEXT WORK DAY, FOLLOWING THE DAY WHEN THE EARTH-DISTURBING ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED.
5. COMPLETE THE INSTALLATION OF STABILIZATION MEASURES AS SOON AS PRACTICABLE, BUT NO LATER THAN 7 CALENDAR DAYS.
   5.1. FOR VEGETATIVE STABILIZATION, ALL ACTIVITIES NECESSARY TO INITIALLY SEED OR PLANT THE AREA TO BE STABILIZED; AND/OR
   5.2. FOR NON-VEGETATIVE STABILIZATION, THE INSTALLATION OR APPLICATION OF ALL SUCH NON-VEGETATIVE MEASURES TO PROVIDE EFFECTIVE COVER.
   5.3. THE STABILIZATION IN 5.1 AND 5.2 SHALL BE COMPLETED WITHIN 7 CALENDAR DAYS AFTER TEMPORARY OR PERMANENT CESSATION OF EARTH-DISTURBING ACTIVITIES.

CONSTRUCTION COMPLETION AND FINAL STABILIZATION

1. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL STRUCTURES UPON COMPLETION OF CONSTRUCTION AND THE ESTABLISHMENT OF FINAL STABILIZATION.
2. FINAL STABILIZATION SHALL BE COMPLETE WHEN ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND A UNIFORM (E.G., EVENLY DISTRIBUTED, WITHOUT LARGE BARE AREAS OF >10 SQ.FT) PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70% OF THE NATIVE BACKGROUND VEGETATIVE COVER FOR THE AREA HAS BEEN ESTABLISHED ON ALL UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES, OR EQUIVALENT PERMANENT STABILIZATION MEASURES (SUCH AS THE USE OF RIPRAP, GABIONS, OR GEOTEXTILES) HAVE BEEN EMPLOYED.

ROCK BAG NOTES

1. ROCK BAGS SHALL BE WOVEN POLYPROPYLENE BAGS WITH APPROXIMATE DIMENSIONS OF 18.5 INCHES BY 28 INCHES. BAGS SHALL BE FILLED ½ TO ⅔ FULL WITH 1 TO 3 INCH STONE. THE ENDS OF FILLED BAGS SHALL BE SEALED USING EITHER DRAW STRINGS OR WIRE TIES.
2. INTERWEAVE THE LOOSE ENDS OF THE BAGS SO THAT GAPS BETWEEN BAGS ARE FILLED AND ENDS OF BAGS ARE SEALED. COMPLETELY SURROUND INLET WITH A MINIMUM OF TWO ROWS OF BAGS TO MINIMUM OF 12 INCHES IN HEIGHT.
3. THE CONDITION OF THE ROCK BAGS SHALL BE EXAMINED DURING INSPECTIONS. ANY DAMAGE TO BAGS SHALL BE REPAIRED IMMEDIATELY. IF BAGS HAVE DETERIORATED DUE TO ULTRAVIOLET BREAKDOWN OR WEAR AND TEAR, THE SHALL BE REPLACED.
4. SEDIMENT MUST BE REMOVED WHEN IT REACHES 3 INCHES HIGH ON THE BAGS.

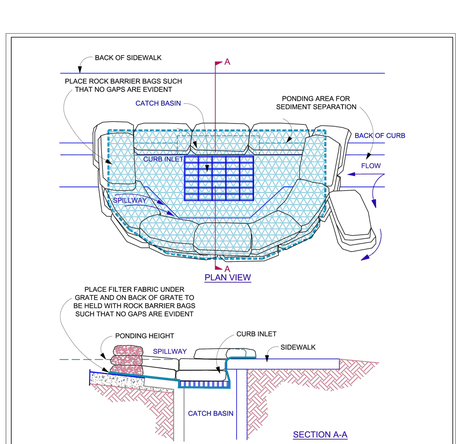


NOTES:

1. CWA shall be installed prior to concrete placement.
2. See plan view for CWA installation location. The location of all concrete washout structures must be constructed with a minimum setback dimensions of 5 feet above groundwater, and 50 feet from the top of bank of perennial stream, other surface water body, or wetland.
3. CWA must be installed with a low permeable polypropylene or polyethylene geomembrane with a minimum 10-mil thickness.
4. CWA shall include a flat subsurface pit that is at least 8' x 8' with the slopes leading out of the subsurface pit being 3:1 or flatter. The pit shall be at least 3' deep
5. Vehicle tracking pad shall be sloped towards the CWA and shall be constructed with a filter fabric under 2" to 3" aggregate rock a minimum of 6" thick.
6. Signs shall be placed at the construction entrance, at the CWA and elsewhere as necessary to clearly indicate the location of the CWA to operators of concrete trucks and pump rigs.
7. Use excavated material for perimeter berm.

5 CONCRETE WASHOUT

Scale: NTS



NOTES:

1. PLACE CURB TYPE ROCK BAG BARRIER ON GENTLY SLOPING STREET, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. BAGS OF WOVEN GEOTEXTILE FABRIC, FILLED WITH GRAVEL MUST BE LAYERED SUCH THAT NO GAPS ARE EVIDENT.
3. LEAVE ONE SANDBAG GAP IN THE TOP ROW ON THE SIDE AWAY FROM FLOW, TO PROVIDE A SPILLWAY; OR IN THE CENTER IF PONDING IS NEEDED ON BOTH SIDES.
4. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT, SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

ROCK BAG CURB INLET BARRIER

6 ROCK BAG CURB INLET BARRIER

Scale: 1" = 1'

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:

Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-810-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:

THE SEAL OF THE CHEROKEE NATION
SEQUOYAH
SEPT. 6, 1839

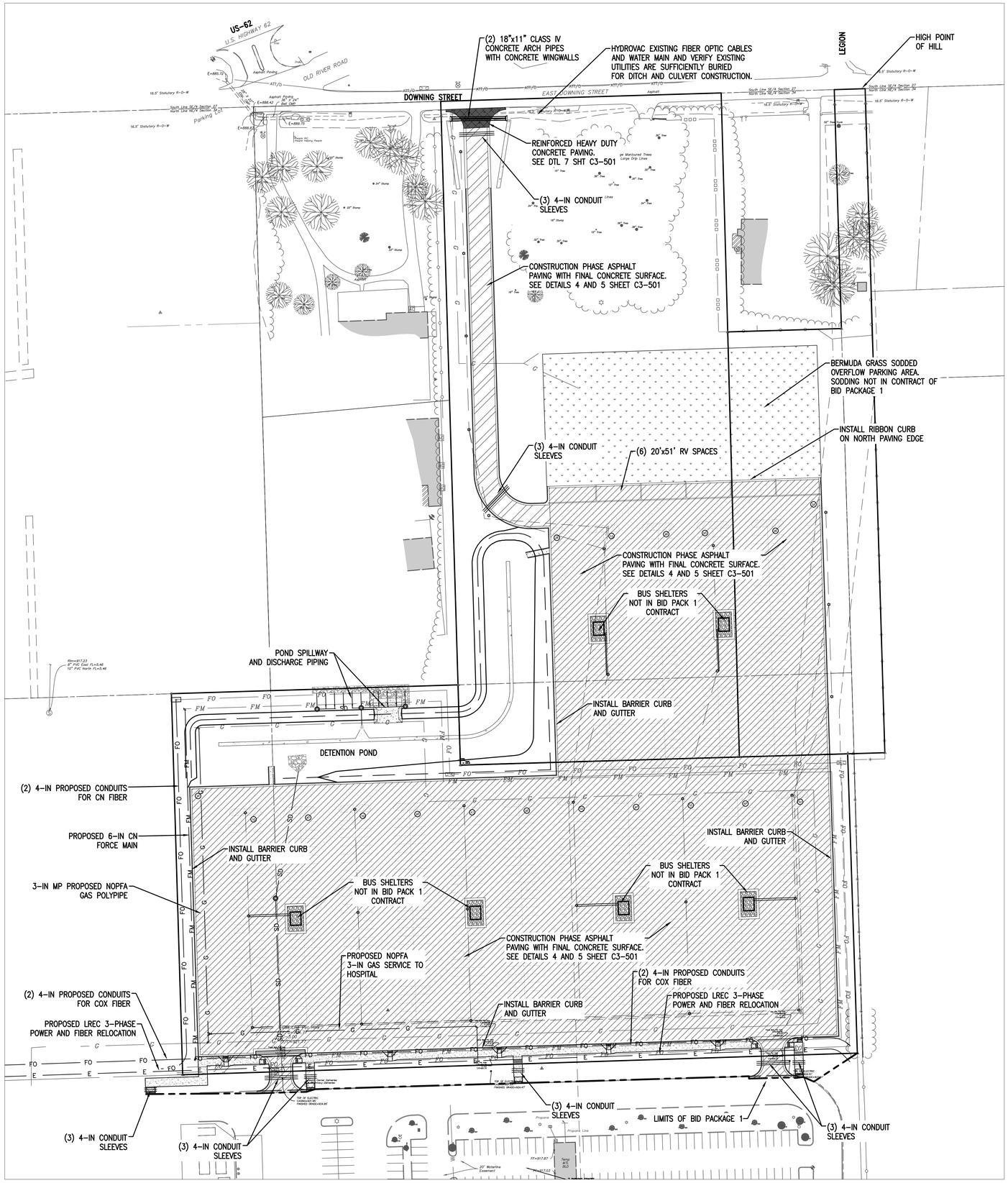
CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS	

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C2-750**
SHEET TITLE: EROSION CONTROL DETAILS



PARKING TOTALS

846 STANDARD SPACES

HARDSCAPE PATTERNS

- CONCRETE SIDEWALKS
- CONSTRUCTION PHASE ASPHALT PAVING WITH FINAL CONCRETE PAVING
- REINFORCED HEAVY DUTY CONCRETE PAVING
- SODDING / SEEDING / VEGETATIVE COVER

0' 50' 100' 200'

SCALE: 1" = 50'

UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

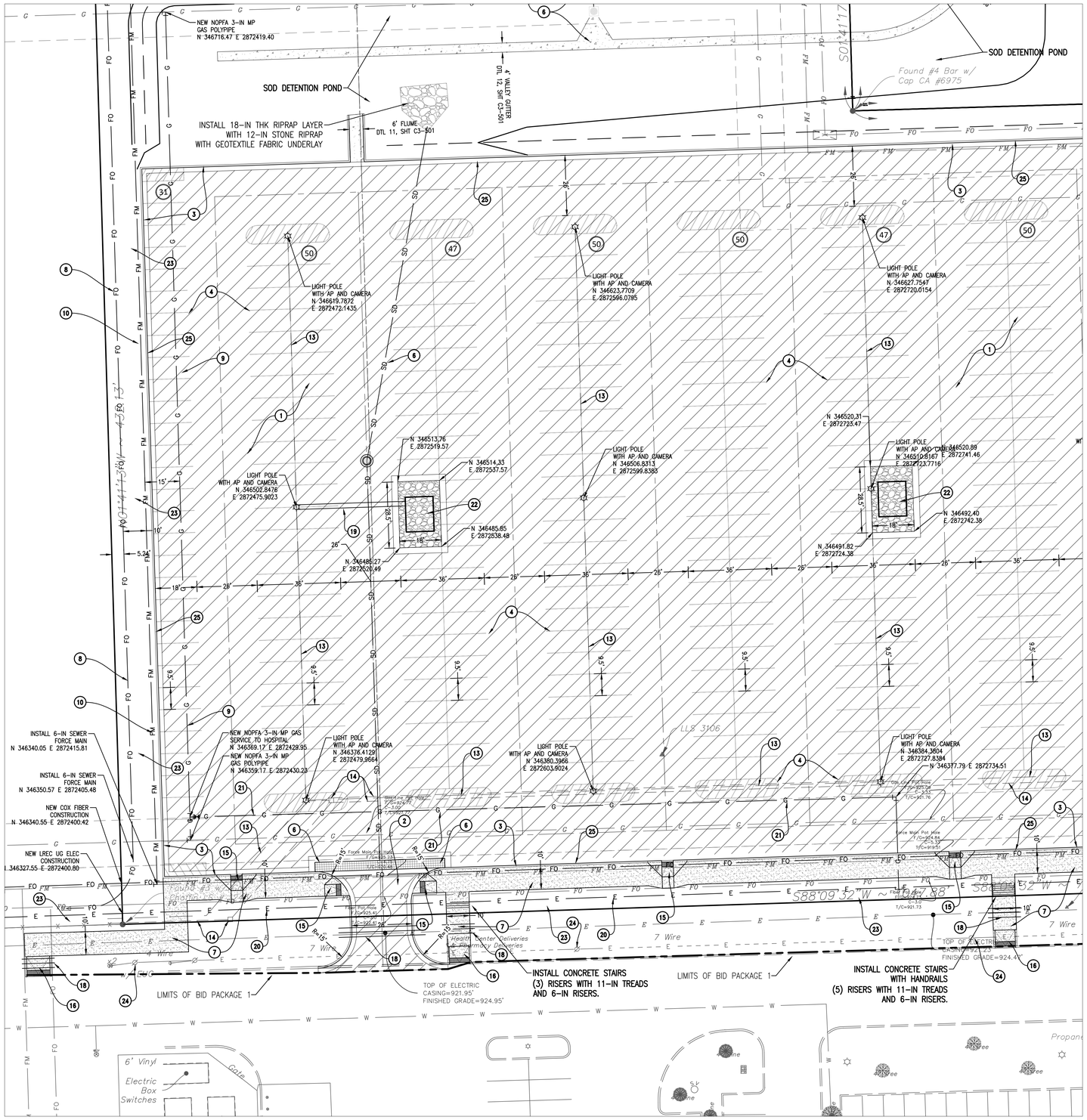
CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C3-108**
SHEET TITLE: NP SITE PLAN OVERVIEW



HARDSCAPE PATTERNS

- CONCRETE SIDEWALKS
- CONSTRUCTION PHASE ASPHALT PAVING WITH FINAL CONCRETE PAVING
- REINFORCED HEAVY DUTY CONCRETE PAVING
- SODDING / SEEDING / VEGETATIVE COVER

UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

N

0' 20' 40' 80'

SCALE: 1" = 20'

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

NP1

KEYNOTES

#	
1	INSTALL ASPHALT PAVING WITH CONCRETE OVERLAY. SEE DTLS 3 AND 4 SHEET C3-501. ASPHALT PAVING SHALL BE INSTALLED AND USED DURING HOSPITAL CONSTRUCTION FOR CNOHC PARKING AND FOR CONTRACTOR'S TRAILERS, EQUIPMENT, AND MATERIALS STORAGE. PROVIDE PARKING SPACE STRIPING TO ASPHALT FOR CNOHC PARKING.
2	INSTALL REINFORCE HEAVY DUTY CONCRETE PAVING. SEE DETAIL 7 SHEET C3-501.
3	INSTALL 6-IN TALL BARRIER CURB WITH 24-IN GUTTER. SEE DTL 1 SHEET C3-501.
4	INSTALL 4-IN WIDE WHITE TRAFFIC STRIPING FOR STANDARD PARKING SPACES AND AT END OF PARKING ROWS.
5	INSTALL 2-FT WIDE WHITE TRAFFIC STRIPING FOR RECREATIONAL VEHICLE PARKING.
6	REFER TO STORM DRAIN DRAWINGS FOR CONSTRUCTION.
7	INSTALL CONCRETE SIDEWALK.
8	RELOCATE CHEROKEE NATION FIBER OPTIC. INSTALL (2) 4-IN CONDUITS. BURY CONDUITS WITH A MINIMUM 3-FT COVER BELOW FINAL GRADE. EMBED CONDUIT WITH SAND OR ROCK SCREENINGS A MINIMUM 6-IN ON ALL SIDES.
9	RELOCATE 3-IN NOPFA GAS MAIN PER NOPFA REQUIREMENTS. CM TO PERFORM TRENCHING, EMBEDMENT, AND BACKFILL. CM TO PROVIDE SAND OR ROCK SCREENINGS FOR PIPE EMBEDMENT AND BACKFILL. NOPFA TO PROVIDE MATERIALS AND INSTALLATION OF 3-IN GAS MAIN.
10	RELOCATE 6-IN CHEROKEE NATION SEWER FORCE MAIN. REFER TO SEWER DRAWINGS FOR CONSTRUCTION.
11	INSTALL RIBBON CURB ALONG NORTH EDGE OF RECREATIONAL VEHICLE PARKING.
12	SODDED BERMUDA GRASS OVERFLOW PARKING AREA. SODDING OF OVERFLOW PARKING AREA NOT INCLUDED IN BID PACKAGE 1.
13	INSTALL CONDUIT FOR UNDERGROUND ELECTRIC. REFER TO ELECTRICAL DRAWINGS.
14	INSTALL CONDUIT AND PULLBOXES FOR UNDERGROUND COMMUNICATIONS. REFER TO LOW VOLTAGE DRAWINGS.
15	INSTALL ADA COMPLIANT CURB TYPE A. REFER TO SHEET C3-501, DETAIL 7.
16	INSTALL ADA COMPLIANT CURB TYPE B. REFER TO SHEET C3-501, DETAIL 8.
17	INSTALL ADA COMPLIANT COMBINATION CURB TYPE A AND B. REFER TO SHEET C3-501, DETAILS 7 AND 8.
18	INSTALL (3) 4-IN CONDUIT SLEEVES ACROSS DRIVE/SIDEWALK. EXTEND SLEEVE 5-FT BEYOND BACK OF CURB AND 2-FT BEYOND SIDEWALK. BURY CONDUITS 3-FT BELOW FINAL GRADE. EMBED AND BACKFILL CONDUITS WITH ODOT TYPE A AGGREGATE UNDER PAVEMENT.
19	INSTALL (2) 4-IN CONDUIT SLEEVES FROM LIGHT POLE TO FUTURE BUS SHELTER. BURY CONDUITS 3-FT BELOW FINAL GRADE.
20	LREC 3-PHASE POWER AND FIBER RELOCATION. COORDINATE WITH LREC. CM TO PERFORM TRENCHING, EMBEDMENT, AND BACKFILL. CM TO PROVIDE SAND OR ROCK SCREENINGS FOR PIPE EMBEDMENT AND BACKFILL. LREC TO PROVIDE MATERIALS AND INSTALLATION OF 3-PHASE POWER AND FIBER.
21	INSTALL 3-IN NOPFA GAS MAIN PER NOPFA REQUIREMENTS. CM TO PERFORM TRENCHING, EMBEDMENT, AND BACKFILL. CM TO PROVIDE SAND OR ROCK SCREENINGS FOR PIPE EMBEDMENT AND BACKFILL. NOPFA TO PROVIDE MATERIALS AND INSTALLATION OF 3-IN GAS MAIN. PLUG END OF GAS PIPE FOR FUTURE EXTENSION TO THE HOSPITAL.
22	FUTURE BUS SHELTER AREA. BUS SHELTERS NOT IN BID PACKAGE 1 CONTRACT. INSTALL 32-IN WIDE RIBBON CURB AROUND SHELTER AREA. BACKFILL AREA WITH ODOT TYPE A AGGREGATE BASE FROM SUBGRADE TO EDGE OF CURB AND COMPACT TO 95% SPD PER EARTHWORK SPECIFICATIONS.
23	INSTALL SOD FROM THE LESSER OF 20-FT OR THE DISTANCE FROM THE CURB OR SIDEWALK TO THE PROPERTY LINE.
24	CONSULTATION WITH OG&E IS NEEDED TO VERIFY IF THE EXCAVATION PROPOSED AROUND THE EXISTING POWER POLES IS ALLOWABLE.
25	SEE DTL 6, SHEET C3-502 FOR PHASED EDGE OF PAVING DETAIL.

PROVIDE PARKING SPACE STRIPING FOR CNOHC PARKING SPACES ON THE CONSTRUCTION PHASE ASPHALT PAVEMENT. CNOHC PARKING SPACE AREA AND CONTRACTOR AREA TO BE LATER DEFINED.

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

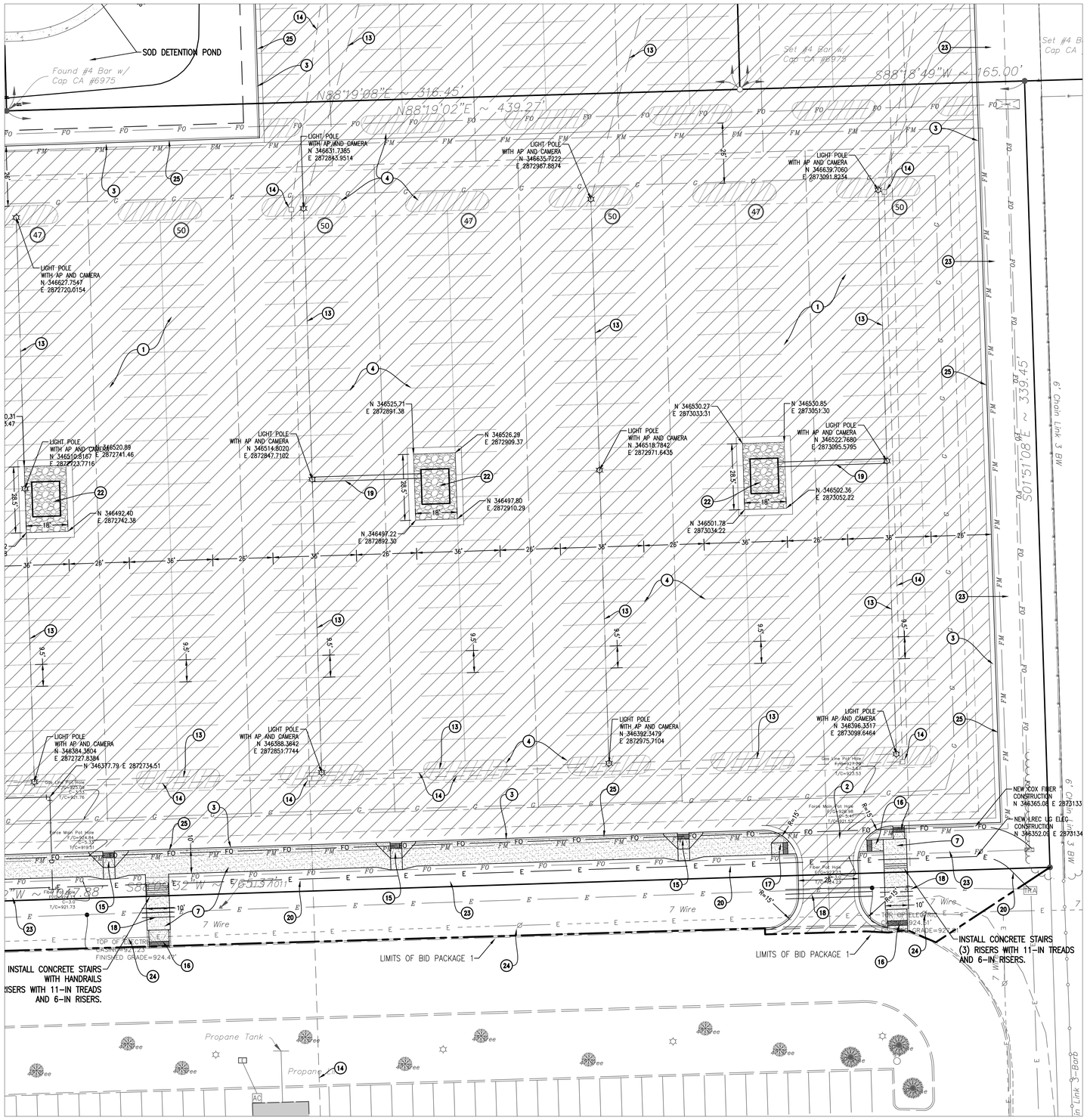
CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:
P5
P3 P4
P1 P2

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C3-109**
SHEET TITLE: NP1 SITE PLAN



KEYNOTES

#	
1	INSTALL ASPHALT PAVING WITH CONCRETE OVERLAY. SEE DTLS 3 AND 4 SHEET C3-501. ASPHALT PAVING SHALL BE INSTALLED AND USED DURING HOSPITAL CONSTRUCTION FOR CNOHC PARKING AND FOR CONTRACTOR'S TRAILERS, EQUIPMENT, AND MATERIALS STORAGE. PROVIDE PARKING SPACE STRIPING TO ASPHALT FOR CNOHC PARKING.
2	INSTALL REINFORCE HEAVY DUTY CONCRETE PAVING. SEE DETAIL 7 SHEET C3-501.
3	INSTALL 6-IN TALL BARRIER CURB WITH 24-IN GUTTER. SEE DTL 1 SHEET C3-501.
4	INSTALL 4-IN WIDE WHITE TRAFFIC STRIPING FOR STANDARD PARKING SPACES AND AT END OF PARKING ROWS.
5	INSTALL 2-FT WIDE WHITE TRAFFIC STRIPING FOR RECREATIONAL VEHICLE PARKING.
6	REFER TO STORM DRAIN DRAWINGS FOR CONSTRUCTION.
7	INSTALL CONCRETE SIDEWALK.
8	RELOCATE CHEROKEE NATION FIBER OPTIC. INSTALL (2) 4-IN CONDUITS. BURY CONDUITS WITH A MINIMUM 3-FT COVER BELOW FINAL GRADE. EMBED CONDUIT WITH SAND OR ROCK SCREENINGS A MINIMUM 6-IN ON ALL SIDES.
9	RELOCATE 3-IN NOPFA GAS MAIN PER NOPFA REQUIREMENTS. CM TO PERFORM TRENCHING, EMBEDMENT, AND BACKFILL. CM TO PROVIDE SAND OR ROCK SCREENINGS FOR PIPE EMBEDMENT AND BACKFILL. NOPFA TO PROVIDE MATERIALS AND INSTALLATION OF 3-IN GAS MAIN.
10	RELOCATE 6-IN CHEROKEE NATION SEWER FORCE MAIN. REFER TO SEWER DRAWINGS FOR CONSTRUCTION.
11	INSTALL RIBBON CURB ALONG NORTH EDGE OF RECREATIONAL VEHICLE PARKING.
12	SODDED BERMUDA GRASS OVERFLOW PARKING AREA. SODDING OF OVERFLOW PARKING AREA NOT INCLUDED IN BID PACKAGE 1.
13	INSTALL CONDUIT FOR UNDERGROUND ELECTRIC. REFER TO ELECTRICAL DRAWINGS.
14	INSTALL CONDUIT AND PULLBOXES FOR UNDERGROUND COMMUNICATIONS. REFER TO LOW VOLTAGE DRAWINGS.
15	INSTALL ADA COMPLIANT CURB TYPE A. REFER TO SHEET C3-501, DETAIL 7.
16	INSTALL ADA COMPLIANT CURB TYPE B. REFER TO SHEET C3-501, DETAIL 8.
17	INSTALL ADA COMPLIANT COMBINATION CURB TYPE A AND B. REFER TO SHEET C3-501, DETAILS 7 AND 8.
18	INSTALL (3) 4-IN CONDUIT SLEEVES ACROSS DRIVE/SIDEWALK. EXTEND SLEEVE 5-FT BEYOND BACK OF CURB AND 2-FT BEYOND SIDEWALK. BURY CONDUITS 3-FT BELOW FINAL GRADE. EMBED AND BACKFILL CONDUITS WITH ODOT TYPE A AGGREGATE UNDER PAVEMENT.
19	INSTALL (2) 4-IN CONDUIT SLEEVES FROM LIGHT POLE TO FUTURE BUS SHELTER. BURY CONDUITS 3-FT BELOW FINAL GRADE.
20	LREC 3-PHASE POWER AND FIBER RELOCATION. COORDINATE WITH LREC. CM TO PERFORM TRENCHING, EMBEDMENT, AND BACKFILL. CM TO PROVIDE SAND OR ROCK SCREENINGS FOR PIPE EMBEDMENT AND BACKFILL. LREC TO PROVIDE MATERIALS AND INSTALLATION OF 3-PHASE POWER AND FIBER.
21	INSTALL 3-IN NOPFA GAS MAIN PER NOPFA REQUIREMENTS. CM TO PERFORM TRENCHING, EMBEDMENT, AND BACKFILL. CM TO PROVIDE SAND OR ROCK SCREENINGS FOR PIPE EMBEDMENT AND BACKFILL. NOPFA TO PROVIDE MATERIALS AND INSTALLATION OF 3-IN GAS MAIN. PLUG END OF GAS PIPE FOR FUTURE EXTENSION TO THE HOSPITAL.
22	FUTURE BUS SHELTER AREA. BUS SHELTERS NOT IN BID PACKAGE 1 CONTRACT. INSTALL 32-IN WIDE RIBBON CURB AROUND SHELTER AREA. BACKFILL AREA WITH ODOT TYPE A AGGREGATE BASE FROM SUBGRADE TO EDGE OF CURB AND COMPACT TO 95% SPD PER EARTHWORK SPECIFICATIONS.
23	INSTALL SOD FROM THE LESSER OF 20-FT OR THE DISTANCE FROM THE CURB OR SIDEWALK TO THE PROPERTY LINE.
24	CONSULTATION WITH OG&E IS NEEDED TO VERIFY IF THE EXCAVATION PROPOSED AROUND THE EXISTING POWER POLES IS ALLOWABLE.
25	SEE DTL 6, SHEET C3-502 FOR PHASED EDGE OF PAVING DETAIL.

PROVIDE PARKING SPACE STRIPING FOR CNOHC PARKING SPACES ON THE CONSTRUCTION PHASE ASPHALT PAVEMENT. CNOHC PARKING SPACE AREA AND CONTRACTOR AREA TO BE LATER DEFINED.

HARDSCAPE PATTERNS

- CONCRETE SIDEWALKS
- CONSTRUCTION PHASE ASPHALT PAVING WITH FINAL CONCRETE PAVING
- REINFORCED HEAVY DUTY CONCRETE PAVING
- SODDING / SEEDING / VEGETATIVE COVER

UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

0' 20' 40' 80'
SCALE: 1" = 20'

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

NP2

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
CHEROKEE NATION

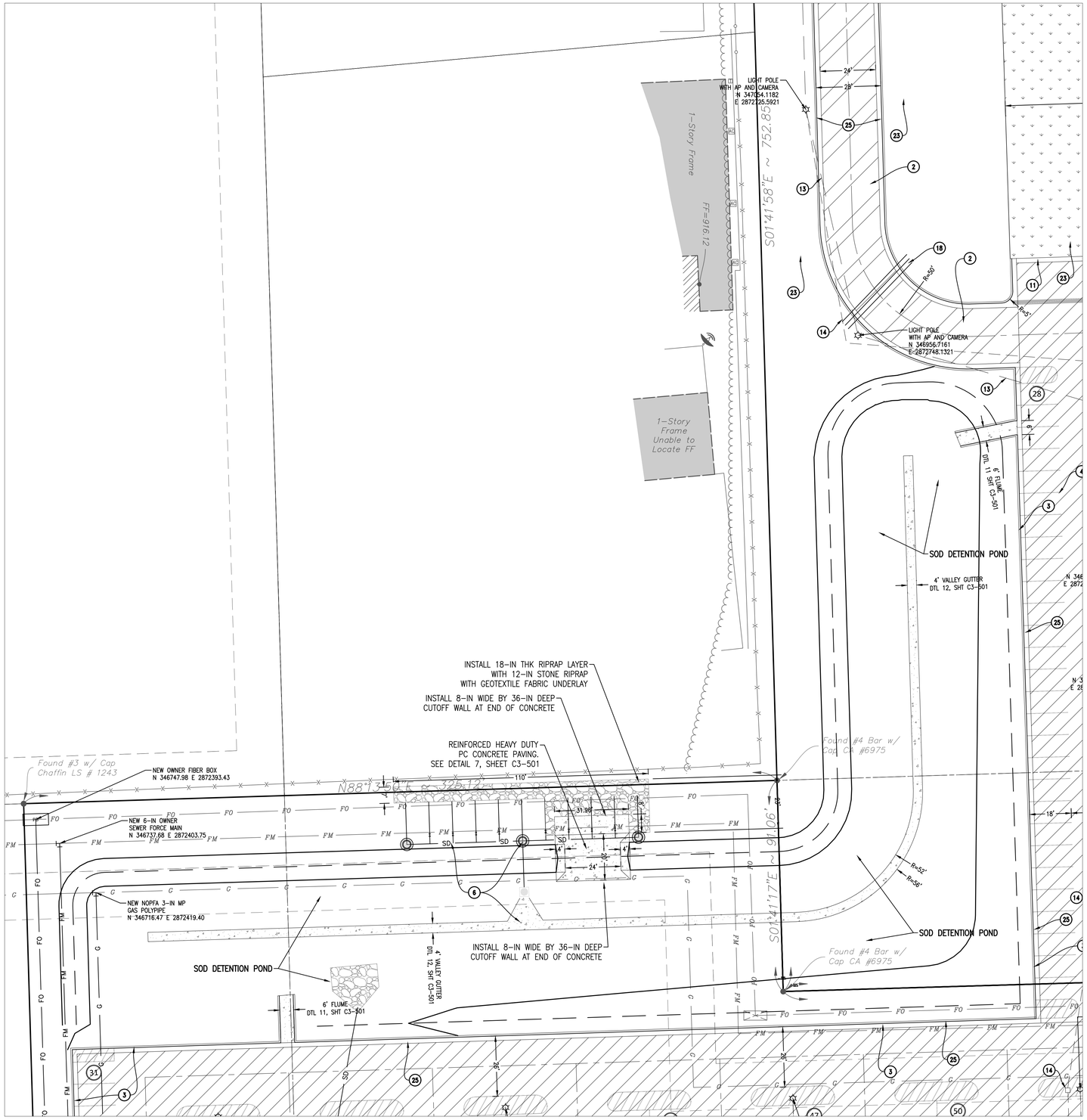
CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:
P5
P3 P4
P1 P2

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C3-110**
SHEET TITLE: NP2 SITE PLAN



KEYNOTES

#	
1	INSTALL ASPHALT PAVING WITH CONCRETE OVERLAY. SEE DTLS 3 AND 4 SHEET C3-501. ASPHALT PAVING SHALL BE INSTALLED AND USED DURING HOSPITAL CONSTRUCTION FOR CNOHC PARKING AND FOR CONTRACTOR'S TRAILERS, EQUIPMENT, AND MATERIALS STORAGE. PROVIDE PARKING SPACE STRIPING TO ASPHALT FOR CNOHC PARKING.
2	INSTALL REINFORCE HEAVY DUTY CONCRETE PAVING. SEE DETAIL 7 SHEET C3-501.
3	INSTALL 6-IN TALL BARRIER CURB WITH 24-IN GUTTER. SEE DTL 1 SHEET C3-501.
4	INSTALL 4-IN WIDE WHITE TRAFFIC STRIPING FOR STANDARD PARKING SPACES AND AT END OF PARKING ROWS.
5	INSTALL 2-FT WIDE WHITE TRAFFIC STRIPING FOR RECREATIONAL VEHICLE PARKING.
6	REFER TO STORM DRAIN DRAWINGS FOR CONSTRUCTION.
7	INSTALL CONCRETE SIDEWALK.
8	RELOCATE CHEROKEE NATION FIBER OPTIC. INSTALL (2) 4-IN CONDUITS. BURY CONDUITS WITH A MINIMUM 3-FT COVER BELOW FINAL GRADE. EMBED CONDUIT WITH SAND OR ROCK SCREENINGS A MINIMUM 6-IN ON ALL SIDES.
9	RELOCATE 3-IN NOPFA GAS MAIN PER NOPFA REQUIREMENTS. CM TO PERFORM TRENCHING, EMBEDMENT, AND BACKFILL. CM TO PROVIDE SAND OR ROCK SCREENINGS FOR PIPE EMBEDMENT AND BACKFILL. NOPFA TO PROVIDE MATERIALS AND INSTALLATION OF 3-IN GAS MAIN.
10	RELOCATE 6-IN CHEROKEE NATION SEWER FORCE MAIN. REFER TO SEWER DRAWINGS FOR CONSTRUCTION.
11	INSTALL RIBBON CURB ALONG NORTH EDGE OF RECREATIONAL VEHICLE PARKING.
12	SODDED BERMUDA GRASS OVERFLOW PARKING AREA. SODDING OF OVERFLOW PARKING AREA NOT INCLUDED IN BID PACKAGE 1.
13	INSTALL CONDUIT FOR UNDERGROUND ELECTRIC. REFER TO ELECTRICAL DRAWINGS.
14	INSTALL CONDUIT AND PULLBOXES FOR UNDERGROUND COMMUNICATIONS. REFER TO LOW VOLTAGE DRAWINGS.
15	INSTALL ADA COMPLIANT CURB TYPE A. REFER TO SHEET C3-501, DETAIL 7.
16	INSTALL ADA COMPLIANT CURB TYPE B. REFER TO SHEET C3-501, DETAIL 8.
17	INSTALL ADA COMPLIANT COMBINATION CURB TYPE A AND B. REFER TO SHEET C3-501, DETAILS 7 AND 8.
18	INSTALL (3) 4-IN CONDUIT SLEEVES ACROSS DRIVE/SIDEWALK. EXTEND SLEEVE 5-FT BEYOND BACK OF CURB AND 2-FT BEYOND SIDEWALK. BURY CONDUITS 3-FT BELOW FINAL GRADE. EMBED AND BACKFILL CONDUITS WITH ODOT TYPE A AGGREGATE UNDER PAVEMENT.
19	INSTALL (2) 4-IN CONDUIT SLEEVES FROM LIGHT POLE TO FUTURE BUS SHELTER. BURY CONDUITS 3-FT BELOW FINAL GRADE.
20	LREC 3-PHASE POWER AND FIBER RELOCATION. COORDINATE WITH LREC. CM TO PERFORM TRENCHING, EMBEDMENT, AND BACKFILL. CM TO PROVIDE SAND OR ROCK SCREENINGS FOR PIPE EMBEDMENT AND BACKFILL. LREC TO PROVIDE MATERIALS AND INSTALLATION OF 3-PHASE POWER AND FIBER.
21	INSTALL 3-IN NOPFA GAS MAIN PER NOPFA REQUIREMENTS. CM TO PERFORM TRENCHING, EMBEDMENT, AND BACKFILL. CM TO PROVIDE SAND OR ROCK SCREENINGS FOR PIPE EMBEDMENT AND BACKFILL. NOPFA TO PROVIDE MATERIALS AND INSTALLATION OF 3-IN GAS MAIN. PLUG END OF GAS PIPE FOR FUTURE EXTENSION TO THE HOSPITAL.
22	FUTURE BUS SHELTER AREA. BUS SHELTERS NOT IN BID PACKAGE 1 CONTRACT. INSTALL 32-IN WIDE RIBBON CURB AROUND SHELTER AREA. BACKFILL AREA WITH ODOT TYPE A AGGREGATE BASE FROM SUBGRADE TO EDGE OF CURB AND COMPACT TO 95% SPD PER EARTHWORK SPECIFICATIONS.
23	INSTALL SOD FROM THE LESSER OF 20-FT OR THE DISTANCE FROM THE CURB OR SIDEWALK TO THE PROPERTY LINE.
24	CONSULTATION WITH OG&E IS NEEDED TO VERIFY IF THE EXCAVATION PROPOSED AROUND THE EXISTING POWER POLES IS ALLOWABLE.
25	SEE DTL 6, SHEET C3-502 FOR PHASED EDGE OF PAVING DETAIL.

PROVIDE PARKING SPACE STRIPING FOR CNOHC PARKING SPACES ON THE CONSTRUCTION PHASE ASPHALT PAVEMENT. CNOHC PARKING SPACE AREA AND CONTRACTOR AREA TO BE LATER DEFINED.

HARDSCAPE PATTERNS

- CONCRETE SIDEWALKS
- CONSTRUCTION PHASE ASPHALT PAVING WITH FINAL CONCRETE PAVING
- REINFORCED HEAVY DUTY CONCRETE PAVING
- SODDING / SEEDING / VEGETATIVE COVER

UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

0' 20' 40' 80'
SCALE: 1" = 20'

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

NP3

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

CHEROKEE NATION W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:
P5
P3 P4
P1 P2

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C3-111**
SHEET TITLE: NP3 SITE PLAN

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C3-SITE-NPRK-5123.DWG

KEYNOTES

#	
1	INSTALL ASPHALT PAVING WITH CONCRETE OVERLAY. SEE DTLS 3 AND 4 SHEET C3-501. ASPHALT PAVING SHALL BE INSTALLED AND USED DURING HOSPITAL CONSTRUCTION FOR CNOHC PARKING AND FOR CONTRACTOR'S TRAILERS, EQUIPMENT, AND MATERIALS STORAGE. PROVIDE PARKING SPACE STRIPING TO ASPHALT FOR CNOHC PARKING.
2	INSTALL REINFORCE HEAVY DUTY CONCRETE PAVING. SEE DETAIL 7 SHEET C3-501.
3	INSTALL 6-IN TALL BARRIER CURB WITH 24-IN GUTTER. SEE DTL 1 SHEET C3-501.
4	INSTALL 4-IN WIDE WHITE TRAFFIC STRIPING FOR STANDARD PARKING SPACES AND AT END OF PARKING ROWS.
5	INSTALL 2-FT WIDE WHITE TRAFFIC STRIPING FOR RECREATIONAL VEHICLE PARKING.
6	REFER TO STORM DRAIN DRAWINGS FOR CONSTRUCTION.
7	INSTALL CONCRETE SIDEWALK.
8	RELOCATE CHEROKEE NATION FIBER OPTIC. INSTALL (2) 4-IN CONDUITS. BURY CONDUITS WITH A MINIMUM 3-FT COVER BELOW FINAL GRADE. EMBED CONDUIT WITH SAND OR ROCK SCREENINGS A MINIMUM 6-IN ON ALL SIDES.
9	RELOCATE 3-IN NOPFA GAS MAIN PER NOPFA REQUIREMENTS. CM TO PERFORM TRENCHING, EMBEDMENT, AND BACKFILL. CM TO PROVIDE SAND OR ROCK SCREENINGS FOR PIPE EMBEDMENT AND BACKFILL. NOPFA TO PROVIDE MATERIALS AND INSTALLATION OF 3-IN GAS MAIN.
10	RELOCATE 6-IN CHEROKEE NATION SEWER FORCE MAIN. REFER TO SEWER DRAWINGS FOR CONSTRUCTION.
11	INSTALL RIBBON CURB ALONG NORTH EDGE OF RECREATIONAL VEHICLE PARKING.
12	SODDED BERMUDA GRASS OVERFLOW PARKING AREA. SODDING OF OVERFLOW PARKING AREA NOT INCLUDED IN BID PACKAGE 1.
13	INSTALL CONDUIT FOR UNDERGROUND ELECTRIC. REFER TO ELECTRICAL DRAWINGS.
14	INSTALL CONDUIT AND PULLBOXES FOR UNDERGROUND COMMUNICATIONS. REFER TO LOW VOLTAGE DRAWINGS.
15	INSTALL ADA COMPLIANT CURB TYPE A. REFER TO SHEET C3-501, DETAIL 7.
16	INSTALL ADA COMPLIANT CURB TYPE B. REFER TO SHEET C3-501, DETAIL 8.
17	INSTALL ADA COMPLIANT COMBINATION CURB TYPE A AND B. REFER TO SHEET C3-501, DETAILS 7 AND 8.
18	INSTALL (3) 4-IN CONDUIT SLEEVES ACROSS DRIVE/SIDEWALK. EXTEND SLEEVE 5-FT BEYOND BACK OF CURB AND 2-FT BEYOND SIDEWALK. BURY CONDUITS 3-FT BELOW FINAL GRADE. EMBED AND BACKFILL CONDUITS WITH ODOT TYPE A AGGREGATE UNDER PAVEMENT.
19	INSTALL (2) 4-IN CONDUIT SLEEVES FROM LIGHT POLE TO FUTURE BUS SHELTER. BURY CONDUITS 3-FT BELOW FINAL GRADE.
20	LREC 3-PHASE POWER AND FIBER RELOCATION. COORDINATE WITH LREC. CM TO PERFORM TRENCHING, EMBEDMENT, AND BACKFILL. CM TO PROVIDE SAND OR ROCK SCREENINGS FOR PIPE EMBEDMENT AND BACKFILL. LREC TO PROVIDE MATERIALS AND INSTALLATION OF 3-PHASE POWER AND FIBER.
21	INSTALL 3-IN NOPFA GAS MAIN PER NOPFA REQUIREMENTS. CM TO PERFORM TRENCHING, EMBEDMENT, AND BACKFILL. CM TO PROVIDE SAND OR ROCK SCREENINGS FOR PIPE EMBEDMENT AND BACKFILL. NOPFA TO PROVIDE MATERIALS AND INSTALLATION OF 3-IN GAS MAIN. PLUG END OF GAS PIPE FOR FUTURE EXTENSION TO THE HOSPITAL.
22	FUTURE BUS SHELTER AREA. BUS SHELTERS NOT IN BID PACKAGE 1 CONTRACT. INSTALL 32-IN WIDE RIBBON CURB AROUND SHELTER AREA. BACKFILL AREA WITH ODOT TYPE A AGGREGATE BASE FROM SUBGRADE TO EDGE OF CURB AND COMPACT TO 95% SPD PER EARTHWORK SPECIFICATIONS.
23	INSTALL SOD FROM THE LESSER OF 20-FT OR THE DISTANCE FROM THE CURB OR SIDEWALK TO THE PROPERTY LINE.
24	CONSULTATION WITH OG&E IS NEEDED TO VERIFY IF THE EXCAVATION PROPOSED AROUND THE EXISTING POWER POLES IS ALLOWABLE.
25	SEE DTL 6, SHEET C3-502 FOR PHASED EDGE OF PAVING DETAIL.

PROVIDE PARKING SPACE STRIPING FOR CNOHC PARKING SPACES ON THE CONSTRUCTION PHASE ASPHALT PAVEMENT. CNOHC PARKING SPACE AREA AND CONTRACTOR AREA TO BE LATER DEFINED.

HARDSCAPE PATTERNS

- CONCRETE SIDEWALKS
- CONSTRUCTION PHASE ASPHALT PAVING WITH FINAL CONCRETE PAVING
- REINFORCED HEAVY DUTY CONCRETE PAVING
- SODDING / SEEDING / VEGETATIVE COVER

UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

0' 20' 40' 80'
SCALE: 1" = 20'

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

NP4

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
THE SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:
P5
P3 P4
P1 P2

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C3-112**
SHEET TITLE: NP4 SITE PLAN

HARDSCAPE PATTERNS

- CONCRETE SIDEWALKS
- CONSTRUCTION PHASE ASPHALT PAVING WITH FINAL CONCRETE PAVING
- REINFORCED HEAVY DUTY CONCRETE PAVING
- SODDING / SEEDING / VEGETATIVE COVER

UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

N

0' 20' 40' 80'
SCALE: 1" = 20'

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

NP5

KEYNOTES

1	INSTALL ASPHALT PAVING WITH CONCRETE OVERLAY. SI AND 4 SHEET C3-501. ASPHALT PAVING SHALL BE IN AND USED DURING HOSPITAL CONSTRUCTION FOR CNOH AND FOR CONTRACTOR'S TRAILERS, EQUIPMENT, AND MA STORAGE. PROVIDE PARKING SPACE STRIPING TO ASPH CNOHC PARKING.
2	INSTALL REINFORCE HEAVY DUTY CONCRETE PAVING. SE SHEET C3-501.
3	INSTALL 6-IN TALL BARRIER CURB WITH 24-IN GUTTER 1 SHEET C3-501.
4	INSTALL 4-IN WIDE WHITE TRAFFIC STRIPING FOR STAND PARKING SPACES AND AT END OF PARKING ROWS.
5	INSTALL 2-FT WIDE WHITE TRAFFIC STRIPING FOR RECR VEHICLE PARKING.
6	REFER TO STORM DRAIN DRAWINGS FOR CONSTRUCTION
7	INSTALL CONCRETE SIDEWALK.
8	RELOCATE CHEROKEE NATION FIBER OPTIC. INSTALL (2 CONDUITS. BURY CONDUITS WITH A MINIMUM 3-FT CO FINAL GRADE. EMBED CONDUIT WITH SAND OR ROCK S A MINIMUM 6-IN ON ALL SIDES.
9	RELOCATE 3-IN NOPFA GAS MAIN PER NOPFA REQUIRE TO PERFORM TRENCHING, EMBEDMENT, AND BACKFILL. PROVIDE SAND OR ROCK SCREENINGS FOR PIPE EMBEI BACKFILL. NOPFA TO PROVIDE MATERIALS AND INSTALL 3-IN GAS MAIN.
10	RELOCATE 6-IN CHEROKEE NATION SEWER FORCE MAIN TO SEWER DRAWINGS FOR CONSTRUCTION.
11	INSTALL RIBBON CURB ALONG NORTH EDGE OF RECREA VEHICLE PARKING.
12	SODDED BERMUDA GRASS OVERFLOW PARKING AREA. S OVERFLOW PARKING AREA NOT INCLUDED IN BID PACKA
13	INSTALL CONDUIT FOR UNDERGROUND ELECTRIC. REFER ELECTRICAL DRAWINGS.
14	INSTALL CONDUIT AND PULLBOXES FOR UNDERGROUND COMMUNICATIONS. REFER TO LOW VOLTAGE DRAWINGS.
15	INSTALL ADA COMPLIANT CURB TYPE A. REFER TO SHEE DETAIL 7.
16	INSTALL ADA COMPLIANT CURB TYPE B. REFER TO SHEI DETAIL 8.
17	INSTALL ADA COMPLIANT COMBINATION CURB TYPE A AN TO SHEET C3-501, DETAILS 7 AND 8.
18	INSTALL (3) 4-IN CONDUIT SLEEVES ACROSS DRIVE/SID EXTEND SLEEVE 5-FT BEYOND BACK OF CURB AND 2- SIDEWALK. BURY CONDUITS 3-FT BELOW FINAL GRADE AND BACKFILL CONDUITS WITH ODOT TYPE A AGGREGATI PAVEMENT.
19	INSTALL (2) 4-IN CONDUIT SLEEVES FROM LIGHT POLE BUS SHELTER. BURY CONDUITS 3-FT BELOW FINAL GF
20	LREC 3-PHASE POWER AND FIBER RELOCATION. COOR LREC. CM TO PERFORM TRENCHING, EMBEDMENT, AND CM TO PROVIDE SAND OR ROCK SCREENINGS FOR PIPE EMBEDMENT AND BACKFILL. LREC TO PROVIDE MATERIA INSTALLATION OF 3-PHASE POWER AND FIBER.
21	INSTALL 3-IN NOPFA GAS MAIN PER NOPFA REQUIREME TO PERFORM TRENCHING, EMBEDMENT, AND BACKFILL. PROVIDE SAND OR ROCK SCREENINGS FOR PIPE EMBEI BACKFILL. NOPFA TO PROVIDE MATERIALS AND INSTALL 3-IN GAS MAIN. PLUG END OF GAS PIPE FOR FUTURI TO THE HOSPITAL.
22	FUTURE BUS SHELTER AREA. BUS SHELTERS NOT IN E 1 CONTRACT. INSTALL 32-IN WIDE RIBBON CURB ARO SHELTER AREA. BACKFILL AREA WITH ODOT TYPE A AG BASE FROM SUBGRADE TO EDGE OF CURB AND COMPA SPD PER EARTHWORK SPECIFICATIONS.
23	INSTALL SOD FROM THE LESSER OF 20-FT OR THE DI FROM THE CURB OR SIDEWALK TO THE PROPERTY LINE
24	CONSULTATION WITH OG&E IS NEEDED TO VERIFY IF TH EXCAVATION PROPOSED AROUND THE EXISTING POWER I ALLOWABLE.
25	SEE DTL 6, SHEET C3-502 FOR PHASED EDGE OF PA

PROVIDE PARKING SPACE STRIPING FOR CN PARKING SPACES ON THE CONSTRUCTION I ASPHALT PAVEMENT. CNOHC PARKING SP. AND CONTRACTOR AREA TO BE LATER DEF

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
THE SEAL OF THE CHEROKEE NATION SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:
P5 | P3 P4 | P1 P2

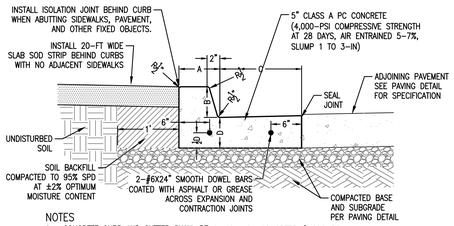
PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C3-113**
SHEET TITLE: NP5 SITE PLAN

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C3-SITE-NPRK-5123.DWG

A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C3-SITE-NPRK-5123.dwg, 7/29/2022 12:08:36 PM, DWG To PDF.pc3



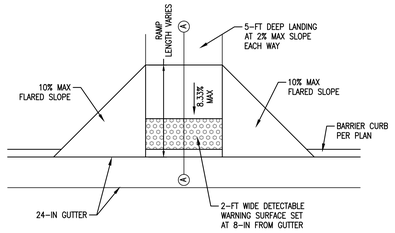
NOTES

1. CONCRETE CURB AND GUTTER SHALL BE CLASS A PC CONCRETE, (4,000-PSI COMPRESSIVE STRENGTH AT 28 DAYS, AIR ENTRAINED 5-7%, SLUMP 1 TO 3-IN).
2. WHEN THE PAVING ADJACENT TO A GUTTER SLOPES AWAY FROM THE GUTTER, THE GUTTER SLOPE SHALL MATCH THE SLOPE OF THE ADJACENT PAVING. THE GUTTER THICKNESS "D" SHALL MATCH THE THICKNESS OF THE ADJACENT PAVEMENT AND SHALL NOT BE LESS THAN 6 INCHES.
3. SET ½" EXPANSION JOINTS AT MAXIMUM 100' C/C SPACING USING ½"X4" PRE-MOLDED EXPANSION JOINT MATERIAL. SET CONTRACTION JOINTS AT 15' TO 20' C/C. FILL ALL JOINTS TO SURFACE WITH SILICONE SEALANT.
4. USE TYPE E TIED JOINT BETWEEN PC CONCRETE PAVEMENT AND GUTTER WHEN CURB AND GUTTER ARE POURED SEPARATELY FROM THE PAVING.
5. USE TYPE E TIED JOINT BETWEEN PC CONCRETE PAVEMENT AND GUTTER WHEN SOIL AREAS BEHIND THE CURB SLOPES AWAY FROM THE CURB.

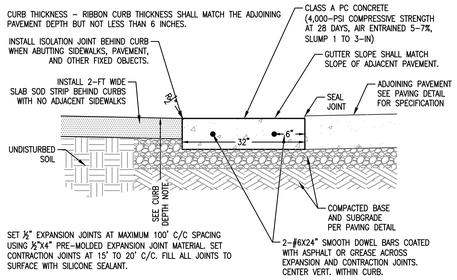
SPECIFIED CURB	C&G NUMBER (AB-CD)	CURB DIMENSIONS A WIDTH (IN)	CURB DIMENSIONS B HEIGHT (IN)	GUTTER DIMENSIONS C WIDTH (IN)	GUTTER DIMENSIONS D THICKNESS (IN)
	86-166	8	6	16	6
	86-168	8	6	16	8
	86-226	8	6	22	6
	86-228	8	6	22	8
X	86-246	8	6	24	6
	88-246	8	8	24	6
	88-248	8	8	24	8

1 CURB AND GUTTER

Scale: NTS



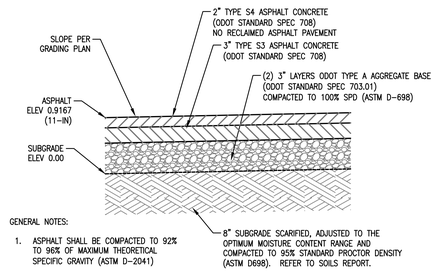
CURB THICKNESS – RIBBON CURB THICKNESS SHALL MATCH THE ADJOINING PAVEMENT DEPTH BUT NOT LESS THAN 6 INCHES.



SET ½" EXPANSION JOINTS AT MAXIMUM 100' C/C SPACING USING ½"X4" PRE-MOLDED EXPANSION JOINT MATERIAL. SET CONTRACTION JOINTS AT 15' TO 20' C/C. FILL ALL JOINTS TO SURFACE WITH SILICONE SEALANT.

2 RIBBON CURB

Scale: NTS

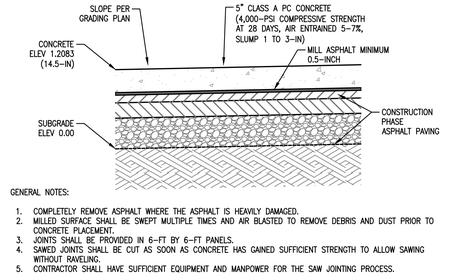


GENERAL NOTES:

1. ASPHALT SHALL BE COMPACTED TO 92% TO 96% OF MAXIMUM THEORETICAL SPECIFIC GRAVITY (ASTM D-2041)

3 NP CONST. PHASE ASPHALT PAVING

Scale: NTS

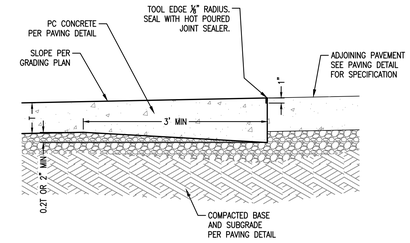


GENERAL NOTES:

1. COMPLETELY REMOVE ASPHALT WHERE THE ASPHALT IS HEAVILY DAMAGED.
2. MILLED SURFACE SHALL BE SWEPT MULTIPLE TIMES AND AIR BLASTED TO REMOVE DEBRIS AND DUST PRIOR TO CONCRETE PLACEMENT.
3. JOINTS SHALL BE PROVIDED IN 6-FT BY 6-FT PANELS.
4. SAWED JOINTS SHALL BE CUT AS SOON AS CONCRETE HAS GAINED SUFFICIENT STRENGTH TO ALLOW SAWING WITHOUT RAVELING.
5. CONTRACTOR SHALL HAVE SUFFICIENT EQUIPMENT AND MANPOWER FOR THE SAW JOINTING PROCESS.

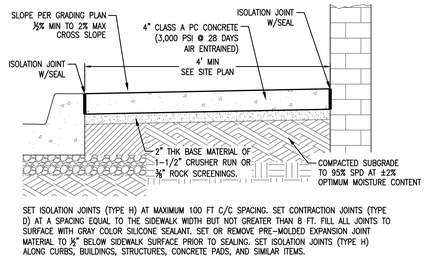
4 NP FINAL CONCRETE PAVING

Scale: NTS



5 THICKENED CONCRETE EDGE

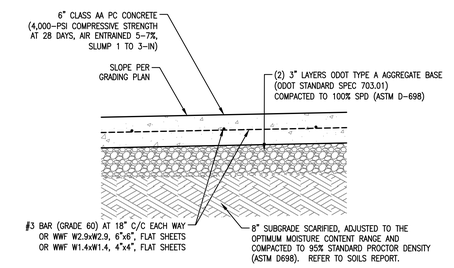
Scale: NTS



SET ISOLATION JOINTS (TYPE H) AT MAXIMUM 100 FT C/C SPACING. SET CONTRACTION JOINTS (TYPE D) AT A SPACING EQUAL TO THE SIDEWALK WIDTH BUT NOT GREATER THAN 8 FT. FILL ALL JOINTS TO SURFACE WITH GRAY COLOR SILICONE SEALANT. SET OR REMOVE PRE-MOLDED EXPANSION JOINT MATERIAL TO ½" BELOW SIDEWALK SURFACE PRIOR TO SEALING. SET ISOLATION JOINTS (TYPE H) ALONG CURBS, BUILDINGS, STRUCTURES, CONCRETE PADS, AND SIMILAR ITEMS.

6 SIDEWALKS

Scale: NTS



7 REINFORCED HD PC CONC PAVING

Scale: NTS

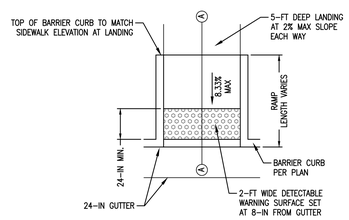
SECTION A–A

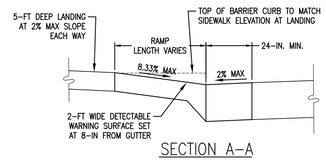
8 CURB RAMP (TYPE A)

Scale: NTS

DETECTABLE WARNING SURFACE SPECIFICATIONS

1. DOME SIZE: BOTTOM DIAMETER SHALL BE 0.9-IN TO 1.4-IN. TOP DIAMETER SHALL BE 50% TO 65% OF THE BASE DIAMETER. DOME HEIGHT SHALL BE 0.2-IN.
2. DOME SPACING: CENTER-TO-CENTER SPACING SHALL BE 1.6-IN TO 2.4-IN. BASE-TO-BASE SPACING OF 0.65-IN MINIMUM. DISTANCE SHALL BE MEASURED BETWEEN THE MOST ADJACENT DOMES ON A SQUARE GRID.
3. DETECTABLE WARNING SURFACE SHALL CONTRAST VISUALLY WITH ADJACENT SURFACES EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT.
4. DETECTABLE WARNING SURFACE SHALL BE 24-IN WIDE AND EXTEND THE FULL LENGTH OF THE RAMP.

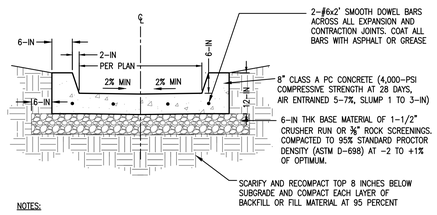




SECTION A–A

9 CURB RAMP (TYPE B)

Scale: NTS



NOTES:

1. PROVIDE CONTRACTION JOINTS @ 20-FT O.C. AND EXPANSION JOINTS @ 100-FT O.C.
2. INSTALL A MINIMUM WIDTH OF 24-IN SOLID SLAB SOD ON EITHER SIDE OF CURB FLUME.
3. CONTRACTOR SHALL REMOVE ALL SILT AND SEDIMENT FROM FLUME PRIOR TO FINAL INSPECTION AND ACCEPTANCE BY OWNER.

11 FLUMES

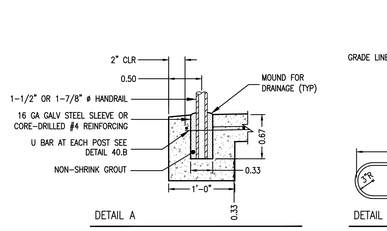
Scale: NTS

NOTES:

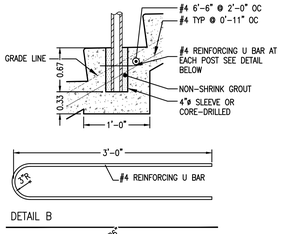
1. FLIGHTS OF STAIRS SHOULD BE SHORT (MAX 20 STEPS PER FLIGHT BEFORE A LANDING IS REQUIRED).
2. AVOID FEWER THAN 2 STEPS PER FLIGHT.
3. STEPS IN FLIGHT MUST HAVE UNIFORM TREAD RUNS AND UNIFORM RISER HEIGHTS WITH TOLERANCE OF ±3/8".
4. TREADS SHALL BE 11"MIN, 12"MAX. RISERS SHALL BE 5"MIN, 7"MAX.
5. LANDINGS BETWEEN FLIGHTS OF STEPS MUST HAVE SAME WIDTH AS STEPS AND A MIN LENGTH OF 4'-0".
6. FLIGHTS OF 4 OR MORE STEPS SHALL HAVE HANDRAILS ON BOTH SIDES
7. FLIGHTS OF 4 OR MORE STEPS WIDER THAN 60 INCHES SHALL HAVE A CENTER HANDRAIL IN ADDITION TO EACH SIDE.
8. HANDRAILS SHALL BE CONTINUOUS ACROSS LANDINGS BETWEEN FLIGHTS OF STEPS.
9. HANDRAILS SHALL BE 1.5" OR 1.9" O.D. TYPE 304 OR 316L POLISHED STAINLESS STEEL OR POWDER COATED STEEL (COLOR TO BE BLACK UNLESS INDICATED BY ARCHITECT/ENGINEER).
10. PIPE MATERIAL SHALL BE ASTM A53.
11. REINFORCING STEEL SHALL BE ASTM A615 GR 60.
12. ALL CONCRETE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 3,500-PSI MINIMUM AND SHALL MEET THE REQUIREMENTS OF SECTION 03300 OF THE PROJECT SPECIFICATIONS.
13. SEE GRADING PLAN (C8 SERIES) FOR ACTUAL NUMBER OF STAIR RISERS/TREADS.

10 STAIRS

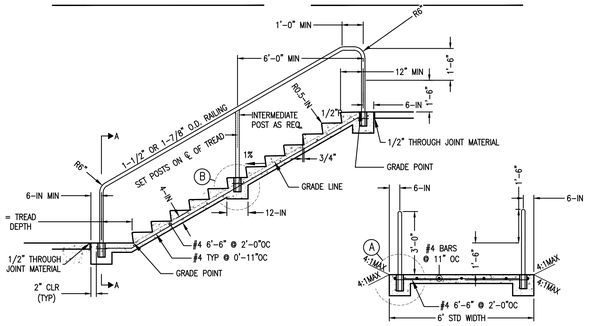
Scale: NTS



DETAIL A



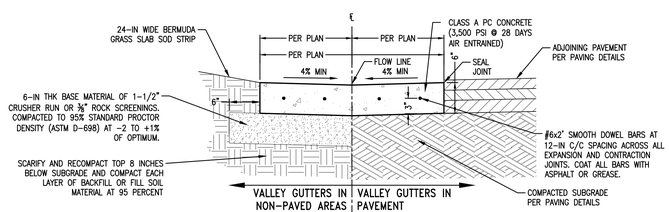
DETAIL B



SECTION A–A

12 VALLEY GUTTER

Scale: NTS



NOTES

1. THE GUTTER THICKNESS SHALL MATCH THE THICKNESS OF THE ADJACENT PAVEMENT AND SHALL NOT BE LESS THAN 6 INCHES.
2. SET ½" EXPANSION JOINTS AT MAXIMUM 100' C/C SPACING USING ½"X4" PRE-MOLDED EXPANSION JOINT MATERIAL. SET CONTRACTION JOINTS AT 15' TO 20' C/C. FILL ALL JOINTS TO SURFACE WITH GREY SILICONE SEALANT.
3. USE TYPE E TIED JOINT BETWEEN PC CONCRETE PAVEMENT AND GUTTER WHEN VALLEY GUTTER IS POURED SEPARATELY FROM THE PAVING.

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

CONSULTANT LOGO:

Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

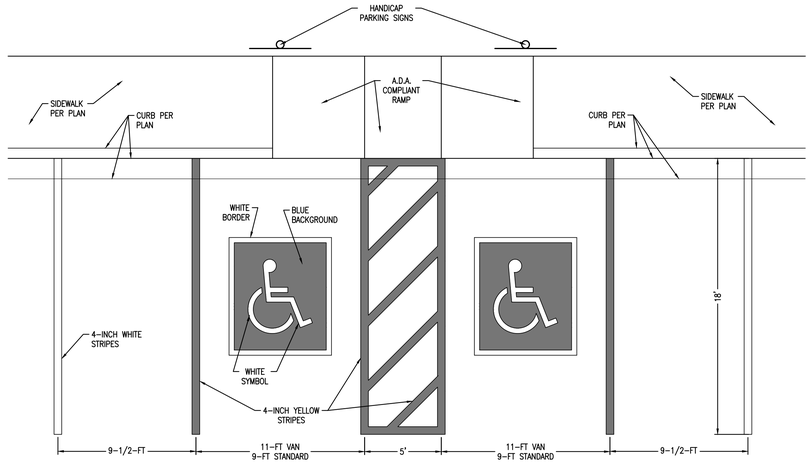
PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER:	21-08.21
DATE:	07-29-2022
SHEET NUMBER:	C3-501
SHEET TITLE:	SITE DETAILS

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C3-DETL-5123.DWG

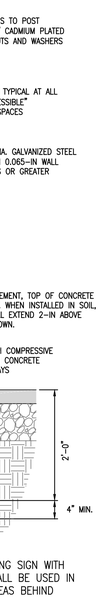
A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C3-DETL-5123.dwg, 7/29/2022 12:08:57 PM, DWG To PDF.pc3



PARKING SPACE LINES SHALL BE PAINTED WHITE. HANDICAPPED ACCESS AISLES AND NO PARKING AREAS SHALL BE PAINTED YELLOW. HANDICAPPED PARKING SPACE SYMBOLS SHALL BE PAINTED BLUE AND WHITE AS SHOWN IN DETAIL PROVIDED. FIRELANE STRIPING SHALL BE PAINTED RED. PAVEMENT STRIPING SHALL BE APPLIED IN TWO COATS, FOUR (4) INCHES WIDE, UNLESS SHOWN OTHERWISE ON THE PLANS.

1 PARKING SPACE PAINT STRIPING

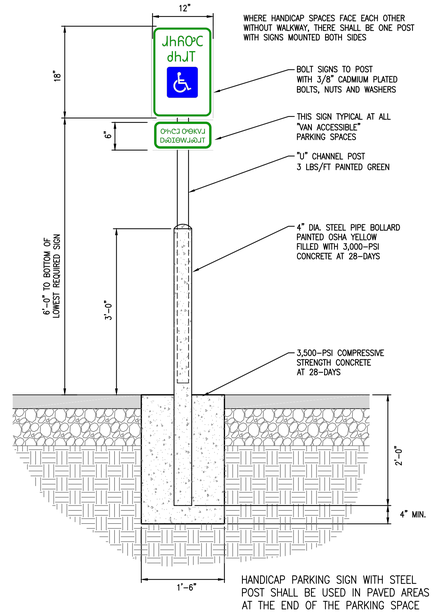
Scale: NTS



HANDICAP PARKING SIGN WITH STEEL POST SHALL BE USED IN LANDSCAPED AREAS BEHIND THE SIDEWALK

2 HANDICAP SIGN WITH STEEL POST

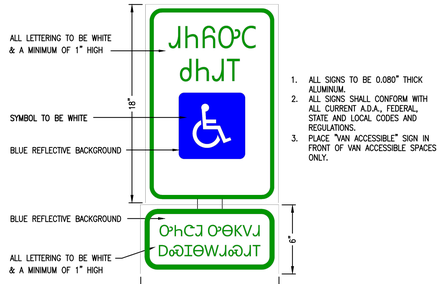
Scale: NTS



HANDICAP PARKING SIGN WITH STEEL POST SHALL BE USED IN PAVED AREAS AT THE END OF THE PARKING SPACE

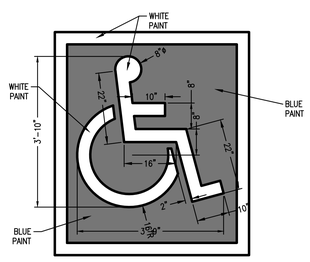
3 HANDICAP SIGN WITH BOLLARD POST

Scale: NTS



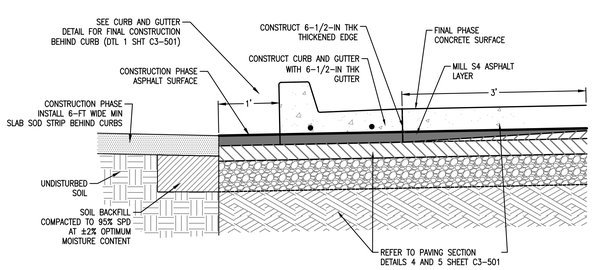
4 HANDICAP PARKING SIGN

Scale: NTS



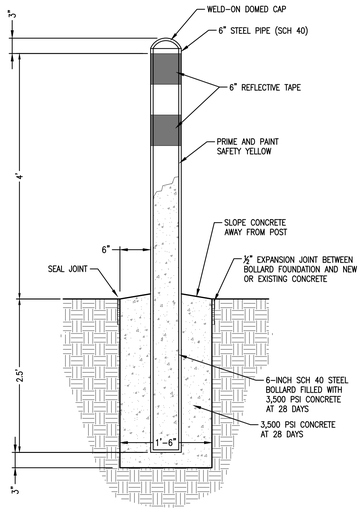
5 HANDICAP PARKING PAVEMENT MARKING

Scale: NTS



6 NORTH PARKING PHASED EDGE OF PAVING DETAIL

Scale: NTS



7 BOLLARDS

Scale: NTS

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

CONSULTANT LOGO:

Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-810-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

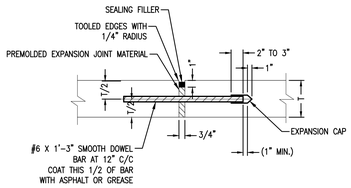
KEY PLAN:

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

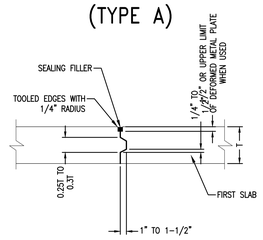
JOB NUMBER: 21-08.21
DATE: 07-29-2022
SHEET NUMBER: **C3-502**
SHEET TITLE: SITE DETAILS

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C3-DETL-5123.DWG



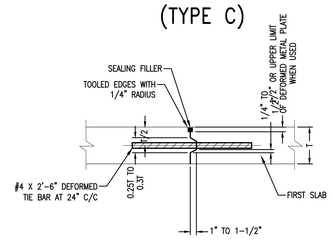
SMOOTH DOWEL BARS ACROSS EXPANSION JOINTS SHALL BE PROVIDED WITH EXPANSION CAPS, AND COATED WITH ASPHALT OR GREASE. GROOVES IN JOINTS MAY BE FORMED BY: (1) TEMPORARY EMBEDMENT OF A SUITABLE MANDREL, (2) INSTALLATION OF A THIN STRIP OF PREMOULDED JOINT FILLER MATERIAL, (3) SAWING THE PAVEMENT AFTER THE CONCRETE HAS HARDENED.

EXPANSION JOINT (TYPE A)



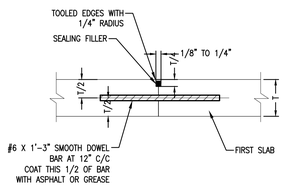
GROOVES IN JOINTS MAY BE FORMED BY: (1) TEMPORARY EMBEDMENT OF A SUITABLE MANDREL, (2) INSTALLATION OF A THIN STRIP OF PREMOULDED JOINT FILLER MATERIAL, (3) SAWING THE PAVEMENT AFTER THE CONCRETE HAS HARDENED.

TONGUE & GROOVE CONSTRUCTION JOINT (TYPE C)



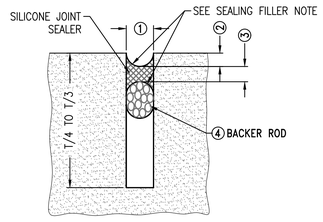
GROOVES IN JOINTS MAY BE FORMED BY: (1) TEMPORARY EMBEDMENT OF A SUITABLE MANDREL, (2) INSTALLATION OF A THIN STRIP OF PREMOULDED JOINT FILLER MATERIAL, (3) SAWING THE PAVEMENT AFTER THE CONCRETE HAS HARDENED.

TIED CONSTRUCTION JOINT (TYPE E)

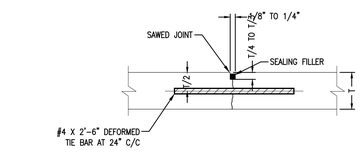


GROOVES IN JOINTS MAY BE FORMED BY: (1) TEMPORARY EMBEDMENT OF A SUITABLE MANDREL, (2) INSTALLATION OF A THIN STRIP OF PREMOULDED JOINT FILLER MATERIAL, (3) SAWING THE PAVEMENT AFTER THE CONCRETE HAS HARDENED.

DOWELED CONSTRUCTION JOINT (TYPE G)

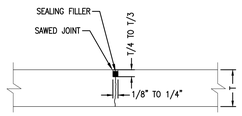


CONTRACTION JOINT
SEALING FILLER



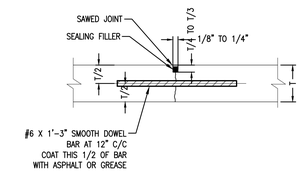
GROOVES IN JOINTS MAY BE FORMED BY: (1) TEMPORARY EMBEDMENT OF A SUITABLE MANDREL, (2) INSTALLATION OF A THIN STRIP OF PREMOULDED JOINT FILLER MATERIAL, (3) SAWING THE PAVEMENT AFTER THE CONCRETE HAS HARDENED.

TIED JOINT (TYPE B)



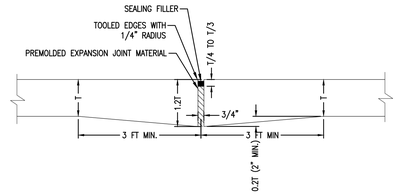
GROOVES IN JOINTS MAY BE FORMED BY: (1) TEMPORARY EMBEDMENT OF A SUITABLE MANDREL, (2) INSTALLATION OF A THIN STRIP OF PREMOULDED JOINT FILLER MATERIAL, (3) SAWING THE PAVEMENT AFTER THE CONCRETE HAS HARDENED.

CONTRACTION JOINT (TYPE D)



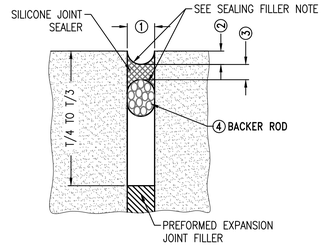
GROOVES IN JOINTS MAY BE FORMED BY: (1) TEMPORARY EMBEDMENT OF A SUITABLE MANDREL, (2) INSTALLATION OF A THIN STRIP OF PREMOULDED JOINT FILLER MATERIAL, (3) SAWING THE PAVEMENT AFTER THE CONCRETE HAS HARDENED.

DOWELED CONTRACTION JOINT (TYPE F)



FORM ISOLATION JOINTS OF PREFORMED EXPANSION JOINT MATERIAL STRIPS ABUTTING CONCRETE CURBS, CATCH BASINS, MANHOLES, INLETS, STRUCTURES, OTHER FIXED OBJECTS, AND WHERE INDICATED.

ISOLATION JOINT (TYPE H)



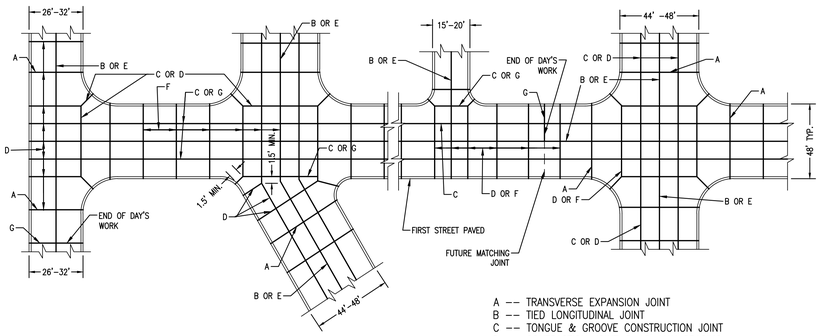
EXPANSION JOINTS / ISOLATION JOINTS
SEALING FILLER

JOINT REQUIREMENTS

1. Avoid odd-shaped slabs.
2. The maximum transverse joint spacing for drives shall be 24 to 30 times the slab thickness or 15 ft, whichever is less. Divide the length between the concrete being placed into equally spaced joints.
3. Slabs shall be as square as possible. The length of a panel shall not be more than 25% greater than its width.
4. All transverse contraction joints shall be continuous through the curb and have a depth equal to 1/4 to 1/3 the pavement thickness.
5. In isolation joints, the filler shall be full depth and extend through the curb.
6. If there is no curb, longitudinal joints shall be tied with deformed tie bars.
7. Offsets at radius points shall be at least 1.5 ft wide. Joint intersection angles less than 60 degrees shall be avoided.
8. Minor adjustments in joint location made by shifting or skewing to meet inlets and manholes is allowable.
9. Place joints to meet drainage structures, if possible.
10. In parking lots, tie bars shall be used in the first longitudinal joint from the pavement edge to keep the outside slab from separating from the pavement. Tie bars are not required in the interior joints of parking lots and other wide paved areas because they are confined by surrounding slabs. Tie bars shall be used on the centerline joints of entrance drives.
11. Planned interruptions in paving shall have either a Doweled Construction Joint Type G or a Tongue and Groove Construction Joint Type C.
12. If curbs are poured separate from pavement, a Tied Construction Joint Type E shall be used between the curb and the pavement.
13. Where slabs of different paving thickness come together, the subgrade under the thinner pavement shall be sloped from a distance of 3 ft or more to provide a gradual transition to the larger pavement thickness.
14. Seal joints according to joint sealing details and specifications.
15. Submit joint layout plan to Engineer for approval prior to concrete placement.
16. See specifications 32 13 00 RIGID PAVING, 32 13 73 JOINT SEALANTS, and 32 16 13 CONCRETE CURBS AND GUTTERS for additional requirements.

SPACING BETWEEN JOINTS	
PAVEMENT THICKNESS, INCHES	MAXIMUM SPACING, FEET
4 AND 4.5	8
5-IN OVER ASPHALT PAVING	6
5 AND 5.5	10
6	12
OVER 6	15

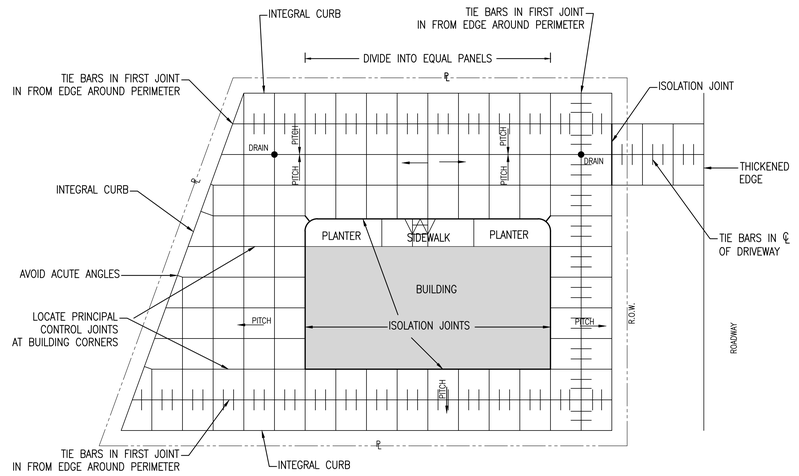
JOINT REQUIREMENTS



NOTE:
USE TYPE E TIED JOINT BETWEEN PAVEMENT AND GUTTER WHEN CURB AND GUTTER ARE POURED SEPARATELY FROM THE PAVING.

A -- TRANSVERSE EXPANSION JOINT
B -- TIED LONGITUDINAL JOINT
C -- TONGUE & GROOVE CONSTRUCTION JOINT
D -- CONTRACTION JOINT @ 12' MAX SPACING
E -- TIED LONGITUDINAL JOINT
F -- DOWELED CONTRACTION JOINT
G -- DOWELED CONSTRUCTION JOINT

TYPICAL JOINT LAYOUT DETAILS FOR ROADWAYS



TYPICAL JOINT LAYOUT DETAILS FOR PARKING LOTS

SEALING FILLER SHAPE NOTE

1. THE SHAPE FACTOR COMBINED WITH THE JOINT CLEANLINESS IS THE CRITICAL COMBINATION NECESSARY TO GUARANTEE DESIRED BONDING AND FUNCTION OF SEALED JOINTS. THE JOINT SHAPE FACTOR IS DEFINED AS THE FINAL PRESSED SHAPE OF THE SILICONE MATERIAL.
2. THE TOOLING OPERATION WILL FIRMLY PRESS THE FRESHLY APPLIED MATERIAL INTIMATELY AGAINST THE CUT SIDES OF THE RECESS AND THE BACKER ROD SURFACES. THE ROUNDED SHAPE ON TOP AND BOTTOM OF THE SILICONE ALLOWS THE SEALANT TO PROPERLY FLEX BUT MAINTAIN ADHERENCE TO THE PAVING.
3. SELF LEVELING SEALANTS WILL BE INSTALLED TO BE FLUSH WITH THE PAVEMENT SURFACE OR BY MANUFACTURER'S RECOMMENDATION.

SEALING FILLER NOTES

EXPANSION JOINT / ISOLATION JOINT TREATMENT TABLE			
JOINT WIDTH ①	SEALANT RECESS DEPTH ②	SILICONE SEALANT THICKNESS ③	BACKER AND DIAMETER ④
1/2"	3/8"	1/4"	5/8"
3/4"	3/8"	3/8"	7/8"
1"	3/8"	1/2"	1-1/4"
1-1/2"	1/2"	3/4"	2"
2"	1/2"	3/4"	2-1/2"

EXPANSION AND ISOLATION JOINT WIDTHS SHALL BE 3/4" UNLESS OTHERWISE SPECIFIED ON THE PLANS. TABLE VALUES AS SHOWN IN THIS TABLE SHALL BE USED IN THOSE SPECIFIED CASES.

SEALING FILLER TREATMENT TABLE

1 CONCRETE JOINT DETAILS

Scale: NTS

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-810-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-2022
SHEET NUMBER: C3-503
SHEET TITLE: CONCRETE PAVING JOINT DETAILS

EARTHWORK CALCULATION NOTES

1. THE EARTHWORK VOLUMES PROVIDED ARE CALCULATED BY COMPARING THE FINISHED GRADE SURFACE MODEL WITH THE EXISTING GRADE SURFACE MODEL.
2. NO ADJUSTMENTS MADE FOR COMPACTION OR EXPANSION OF MATERIAL.
3. NO ADJUSTMENTS ARE MADE FOR BUILDING PAD(S), STRUCTURES, OR PAVEMENTS.
4. NO ADJUSTMENTS ARE MADE FOR UTILITY TRENCH SPOILS.

CUT VOLUME = 20,755 CY
FILL VOLUME = 21577 CY

NET VOLUME = 18,577 NET CY CUT

0' 50' 100' 200'
SCALE: 1" = 50'

UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

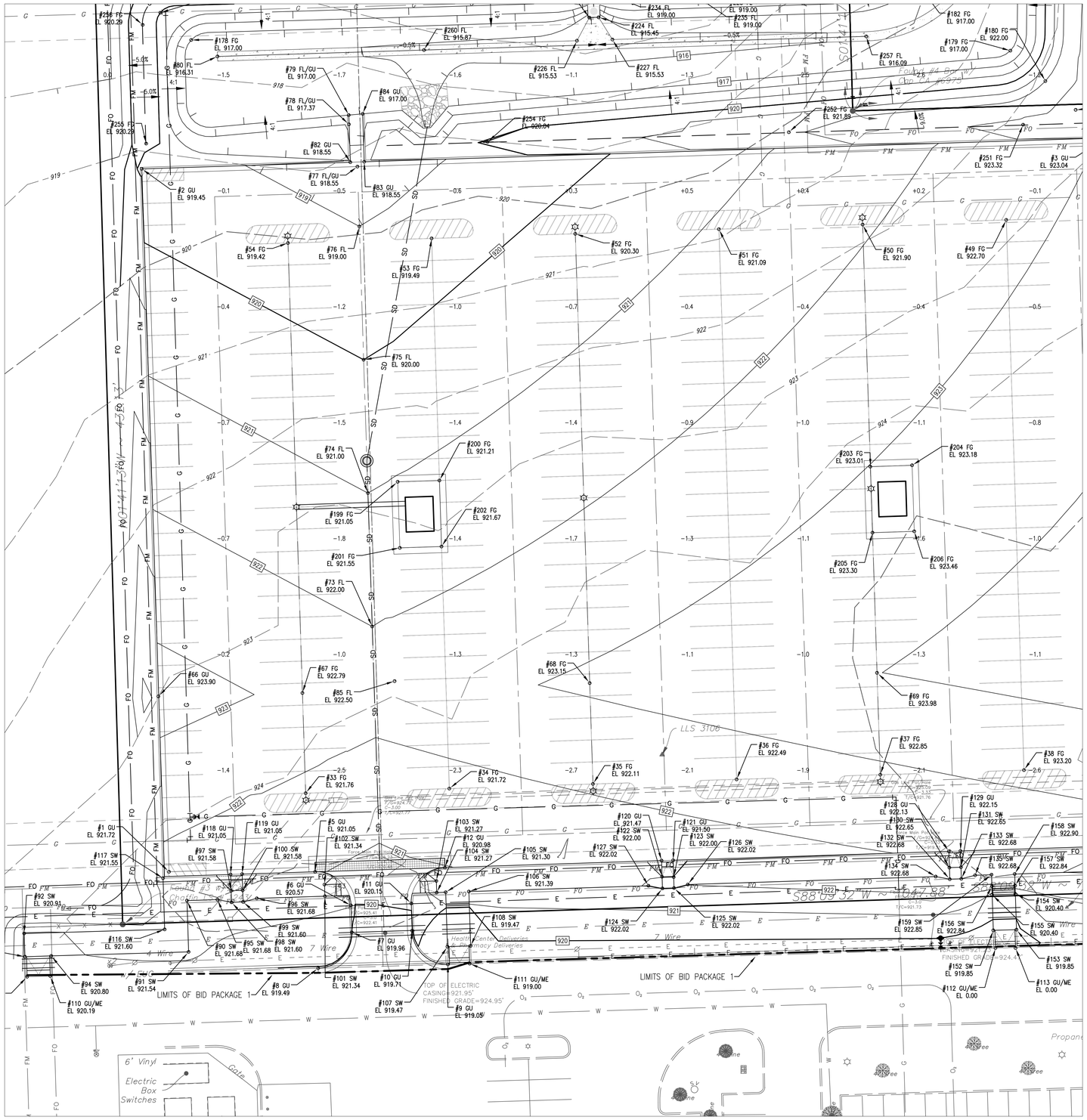
PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C5-113**
SHEET TITLE: NP GRADING OVERVIEW

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C5-GRAD-NPRK-5123.DWG

A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C5-GRAD-NPRK-5123.dwg, 7/29/2022 12:09:54 PM, DWG To PDF.pc3



UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

0' 20' 40' 80'
SCALE: 1" = 20'

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

NP1

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:
P5
P3 P4
P1 P2

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C5-114**
SHEET TITLE: NP1 GRADING PLAN

UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

0' 20' 40' 80'
SCALE: 1" = 20'

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

NP2

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-810-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

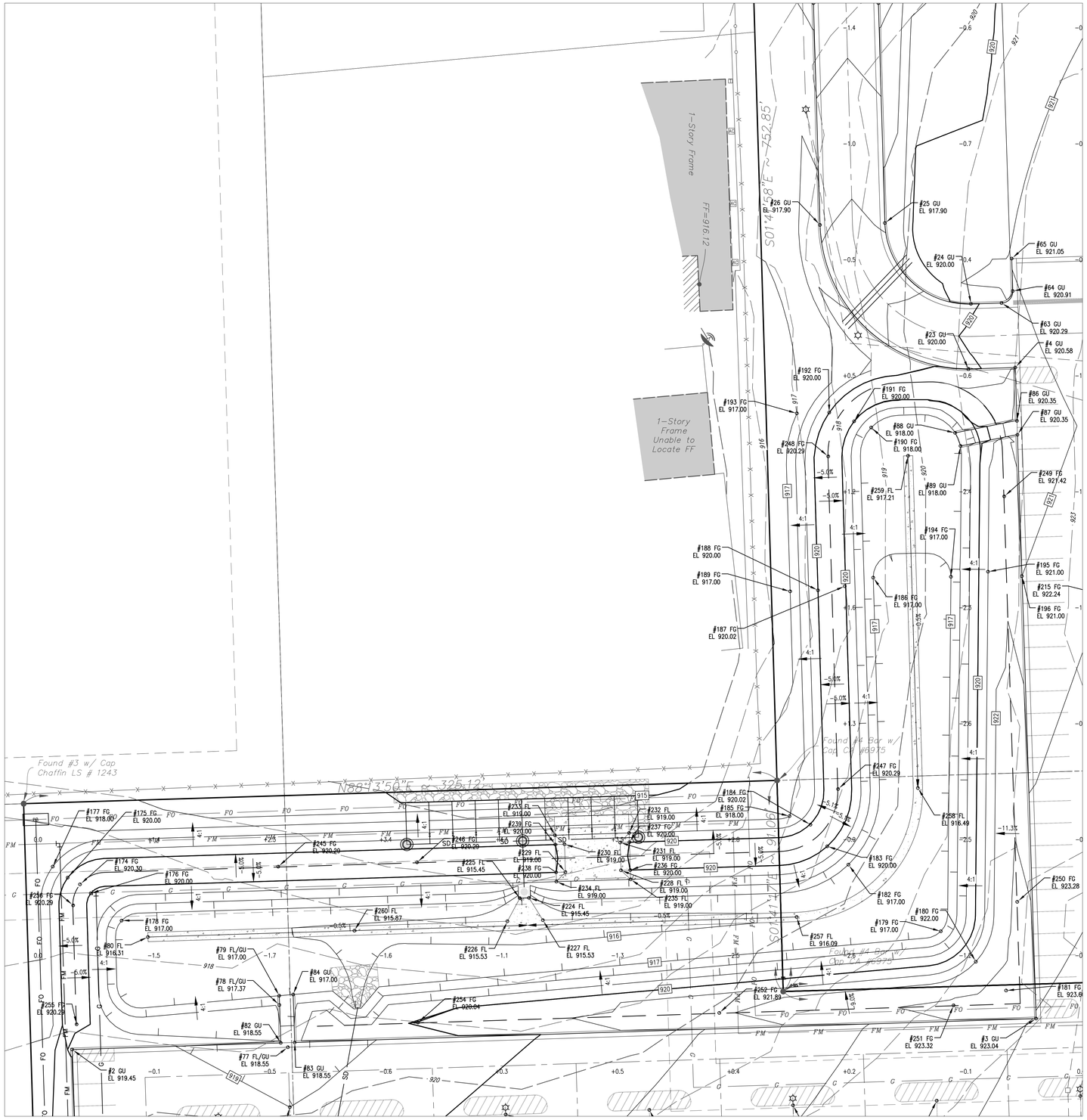
CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:
P5
P3 P4
P1 P2

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C5-115**
SHEET TITLE: NP2 GRADING PLAN



UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

NP3

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

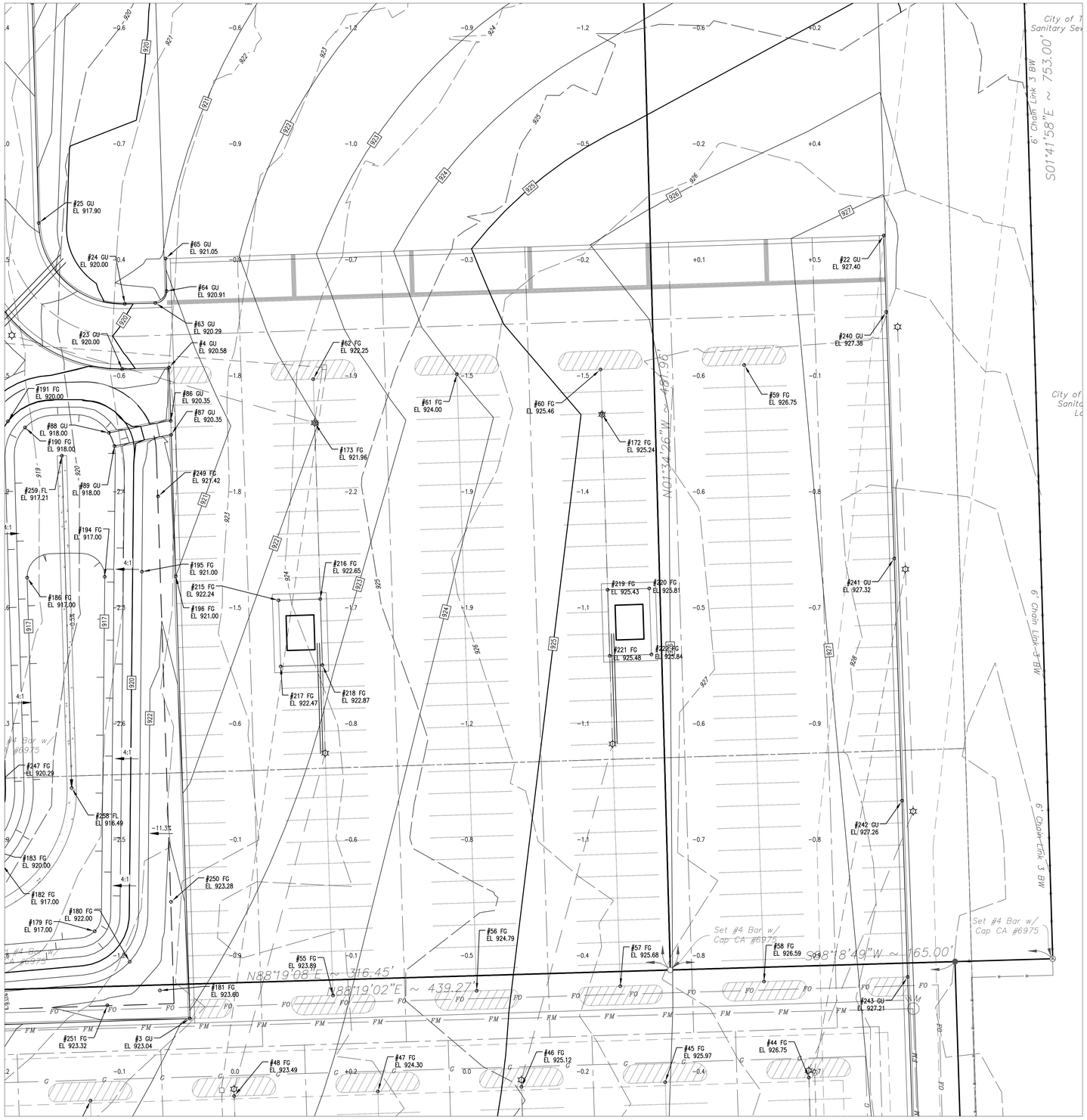
KEY PLAN:
P5
P3 P4
P1 P2

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: C5-116
SHEET TITLE: NP3 GRADING PLAN

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C5-GRAD-NPRK-5123.DWG



UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

0' 20' 40' 80'
SCALE: 1" = 20'

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

NP4

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C5-GRAD-NPRK-5123.DWG

A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C5-GRAD-NPRK-5123.dwg, 7/29/2022 12:10:23 PM, DWG To PDF.pc3

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

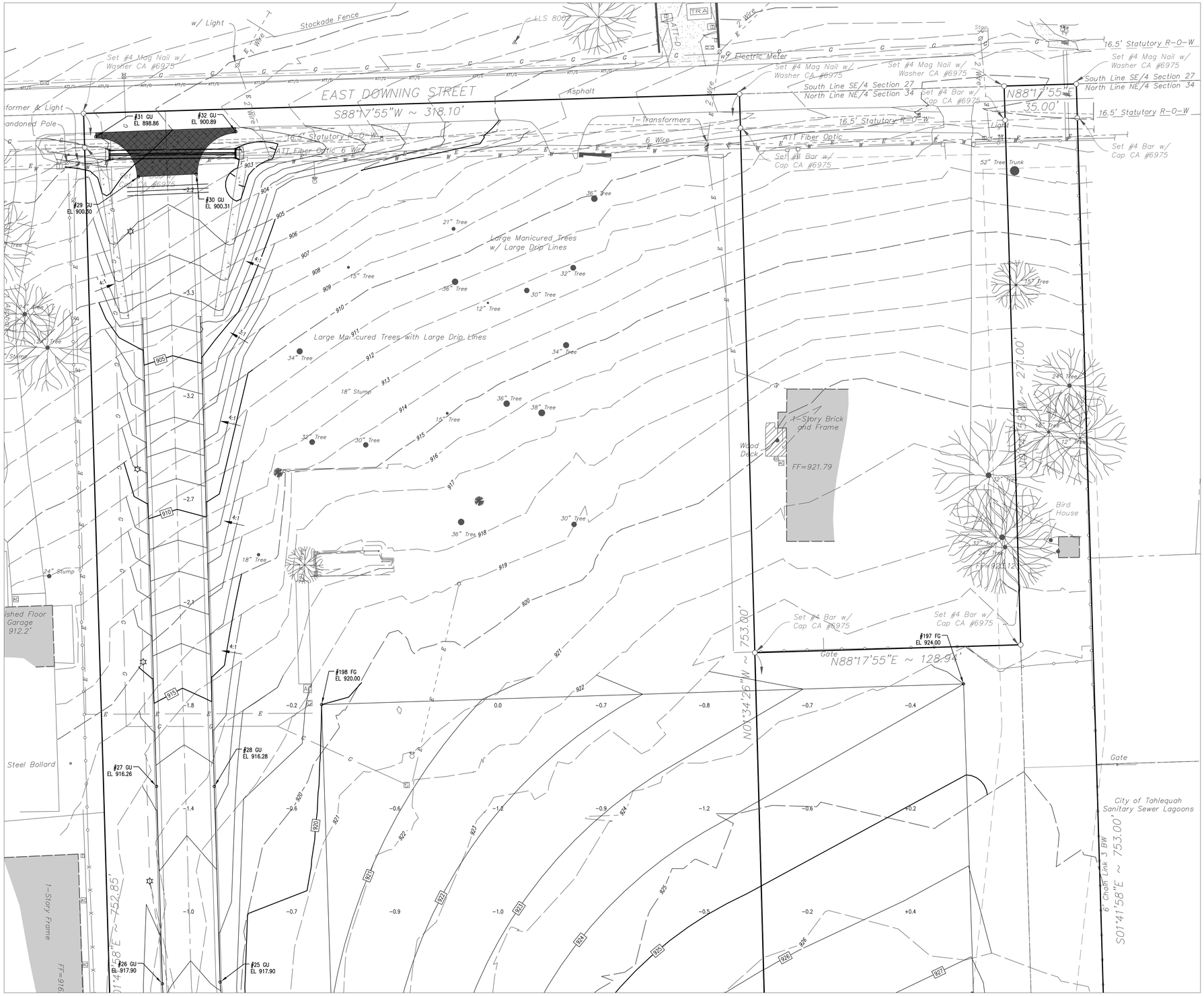
CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:
P5
P3 P4
P1 P2

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C5-117**
SHEET TITLE: NP4 GRADING PLAN



UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

0' 20' 40' 80'
SCALE: 1" = 20'

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

NP5

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:
P5
P3 P4
P1 P2

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C5-118**
SHEET TITLE: NP5 GRADING PLAN

Point Table				
Point #	Elevation	Northing	Easting	Description
1	921.72	346345.50	2872420.93	GU
2	919.45	346648.78	2872409.18	GU
3	923.04	346662.14	2872824.96	GU
4	920.58	346942.85	2872815.94	GU
5	921.05	346345.53	2872483.96	GU
6	920.57	346331.01	2872499.40	GU
7	919.96	346319.37	2872499.81	GU
8	919.49	346303.90	2872485.26	GU
9	919.05	346305.55	2872541.24	GU
10	919.71	346320.06	2872525.80	GU
11	920.15	346331.85	2872525.42	GU
12	920.98	346347.32	2872539.93	GU
13	923.63	346363.45	2873041.67	GU
14	923.34	346353.25	2873056.37	GU
15	922.41	346335.98	2873057.56	GU
16	921.81	346320.50	2873043.02	GU
17	921.89	346321.38	2873095.84	GU/ME
18	922.50	346335.64	2873083.59	GU
19	923.68	346349.78	2873083.13	GU
20	924.12	346365.25	2873097.64	GU
21	924.59	346366.76	2873144.62	GU
22	927.40	346999.78	2873124.27	GU
23	920.00	346942.18	2872795.71	GU
24	920.00	346970.28	2872796.87	GU
25	917.90	347005.16	2872759.73	GU
26	917.90	347004.33	2872731.74	GU
27	916.26	347100.00	2872728.90	GU
28	916.28	347100.00	2872756.91	GU
29	900.30	347395.60	2872720.13	GU
30	900.31	347396.89	2872748.10	GU

Point Table				
Point #	Elevation	Northing	Easting	Description
31	898.86	347414.99	2872699.41	GU
32	900.89	347417.47	2872767.37	GU
33	921.76	346379.41	2872479.87	FG
34	921.72	346381.40	2872541.84	FG
35	922.11	346383.40	2872603.81	FG
36	922.49	346385.39	2872665.77	FG
37	922.85	346387.38	2872727.74	FG
38	923.20	346389.37	2872789.71	FG
39	923.54	346391.36	2872851.68	FG
40	923.88	346393.35	2872913.65	FG
41	924.24	346395.35	2872975.61	FG
42	924.50	346397.34	2873037.58	FG
43	924.85	346399.33	2873099.55	FG
44	926.75	346636.71	2873091.92	FG
45	925.97	346634.72	2873029.95	FG
46	925.12	346632.72	2872967.98	FG
47	924.30	346630.73	2872906.02	FG
48	923.49	346628.74	2872844.05	FG
49	922.70	346626.75	2872782.08	FG
50	921.90	346624.76	2872720.11	FG
51	921.09	346622.76	2872658.14	FG
52	920.30	346620.77	2872596.18	FG
53	919.49	346618.78	2872534.21	FG
54	919.42	346616.79	2872472.24	FG
55	923.89	346672.15	2872886.68	FG
56	924.79	346674.12	2872948.64	FG
57	925.68	346676.12	2873010.61	FG
58	926.59	346678.11	2873072.58	FG
59	926.75	346943.97	2873064.03	FG
60	925.46	346941.98	2873002.07	FG

Point Table				
Point #	Elevation	Northing	Easting	Description
61	924.00	346939.99	2872940.10	FG
62	922.25	346937.84	2872878.13	FG
63	920.29	346970.67	2872810.05	GU
64	920.91	346975.83	2872814.88	GU
65	921.05	346989.82	2872814.43	GU
66	923.90	346421.16	2872416.33	GU
67	922.79	346422.64	2872478.48	FG
68	923.15	346426.91	2872602.41	FG
69	923.98	346431.34	2872726.33	FG
70	924.82	346435.77	2872850.25	FG
71	925.65	346440.19	2872974.17	FG
72	926.34	346444.46	2873098.10	FG
73	922.00	346451.34	2872508.57	FL
74	921.00	346508.88	2872506.72	FL
75	920.00	346566.42	2872504.87	FL
76	919.00	346623.95	2872503.03	FL
77	918.55	346649.77	2872502.20	FL/GU
78	917.37	346667.98	2872498.53	FL/GU
79	917.00	346671.99	2872498.48	FL/GU
80	916.31	346697.30	2872441.84	FL
82	918.55	346651.67	2872499.13	GU
83	918.55	346651.86	2872505.13	GU
84	917.00	346672.52	2872504.47	GU
85	922.50	346427.75	2872518.23	FL
86	920.35	346919.86	2872816.68	GU
87	920.35	346913.86	2872816.87	GU
88	918.00	346914.68	2872790.03	GU
89	918.00	346909.03	2872792.36	GU
90	921.68	346333.08	2872428.67	SW
91	921.54	346310.95	2872429.38	SW

Point Table				
Point #	Elevation	Northing	Easting	Description
92	920.91	346318.89	2872358.45	SW
93	920.79	346308.87	2872358.77	SW
94	920.80	346309.23	2872370.10	SW
95	921.68	346333.50	2872441.83	SW
96	921.68	346334.04	2872458.82	SW
97	921.58	346337.36	2872447.70	SW
98	921.60	346332.36	2872447.87	SW
99	921.60	346332.52	2872452.86	SW
100	921.58	346337.52	2872452.70	SW
101	921.34	346334.99	2872488.18	SW
102	921.34	346339.99	2872488.02	SW
103	921.27	346341.54	2872536.24	SW
104	921.27	346336.54	2872536.40	SW
105	921.30	346336.66	2872540.27	SW
106	921.39	346336.98	2872550.27	SW
107	919.47	346313.21	2872541.03	SW
108	919.47	346313.54	2872551.02	SW
109	920.17	346300.21	2872359.72	GU/ME
110	920.19	346300.50	2872369.72	GU/ME
111	919.00	346305.87	2872550.63	GU/ME
112	0.00	346312.61	2872777.41	GU/ME
113	0.00	346312.61	2872786.07	GU/ME
114	923.88	346357.91	2873045.73	GU/ME
115	921.74	346319.60	2873104.57	GU/ME
116	921.60	346320.65	2872419.06	SW
117	921.55	346342.75	2872418.35	SW
118	921.05	346344.35	2872447.48	GU
119	921.05	346344.51	2872452.48	GU
120	921.47	346350.33	2872633.38	GU
121	921.50	346350.49	2872638.38	GU

Point Table				
Point #	Elevation	Northing	Easting	Description
122	922.00	346343.33	2872633.61	SW
123	922.00	346343.21	2872638.62	SW
124	922.02	346338.33	2872633.77	SW
125	922.02	346338.50	2872638.77	SW
126	922.02	346340.02	2872644.72	SW
127	922.02	346339.47	2872627.73	SW
128	922.13	346354.31	2872757.32	GU
129	922.15	346354.47	2872762.32	GU
130	922.65	346347.32	2872757.54	SW
131	922.65	346347.48	2872762.54	SW
132	922.68	346342.32	2872757.71	SW
133	922.68	346342.48	2872762.70	SW
134	922.68	346343.46	2872751.67	SW
135	922.68	346344.00	2872768.66	SW
136	922.78	346358.30	2872881.26	GU
137	922.81	346358.46	2872886.25	GU
138	923.31	346351.30	2872881.48	SW
139	923.31	346351.46	2872886.48	SW
140	923.33	346346.30	2872881.64	SW
141	923.33	346346.46	2872886.64	SW
142	923.33	346347.44	2872875.60	SW
143	923.33	346347.99	2872892.59	SW
144	923.43	346362.28	2873005.19	GU
145	923.46	346362.44	2873010.19	GU
146	923.96	346355.28	2873005.42	SW
147	923.96	346355.44	2873010.41	SW
148	923.98	346350.29	2873005.58	SW
149	923.98	346350.45	2873010.57	SW
150	923.98	346351.43	2872999.54	SW
151	923.98	346351.97	2873016.53	SW

Point Table				
Point #	Elevation	Northing	Easting	Description
152	919.85	346320.25	2872776.49	SW
153	919.85	346320.55	2872786.49	SW
154	920.40	346335.89	2872786.00	SW
155	920.40	346335.57	2872776.00	SW
156	922.84	346339.23	2872775.88	SW
157	922.84	346339.56	2872785.88	SW
158	922.90	346344.55	2872785.72	SW
159	922.85	346344.23	2872775.72	SW
160	924.17	346365.43	2873103.10	GU
161	924.37	346359.78	2873103.94	SW
162	924.29	346349.12	2873104.29	SW
163	924.29	346348.80	2873094.29	SW
164	924.36	346353.80	2873094.13	SW
165	924.37	346359.46	2873093.95	SW
166	922.42	346329.23	2873094.92	SW
167	922.28	346329.53	2873104.92	SW
168	922.79	346346.89	2873094.35	SW
169	922.79	346347.21	2873104.35	SW
171	923.88	346352.92	2873045.89	SW
172	925.24	346922.83	2873002.68	FG
173	921.96	346919.00	2872878.74	FG
174	920.30	346720.00	2872412.56	FG
175	920.00	346722.90	2872407.22	FG
176	920.00	346716.16	2872417.17	FG
177	918.00	346727.67	2872400.80	FG
178	917.00	346704.38	2872430.47	FG
179	917.00	346699.77	2872783.87	FG
180	922.00	346686.65	2872798.96	FG
181	923.60	346674.24	2872812.02	FG
182	917.00	346728.52	2872743.98	FG

Point Table				
Point #	Elevation	Northing	Easting	Description
183	920.00	346736.41	2872734.85	FG
184	920.02	346745.75	2872727.64	FG
185	918.00	346749.44	2872718.60	FG
186	917.00	346852.28	2872754.70	FG
187	920.02	346848.57	2872742.42	FG
188	920.00	346846.81	2872730.85	FG
189	917.00	346846.33	2872718.86	FG
190	918.00	346917.00	2872753.82	FG
191	920.00	346919.67	2872746.44	FG
192	920.00	346923.46	2872735.72	FG
193	917.00	346923.09	2872721.75	FG
194	917.00	346852.64	2872788.22	FG
195	921.00	346854.82	2872804.23	FG
196	921.00	346852.90	2872818.83	FG
197	924.00	347149.72	2873120.12	FG
198	920.00	347139.72	2872808.95	FG
199	921.05	346513.76	2872519.57	FG
200	921.21	346514.33	2872537.57	FG
201	921.55	346485.27	2872520.49	FG
202	921.67	346485.85	2872538.48	FG
203	923.01	346520.31	2872723.47	FG
204	923.18	346520.89	2872741.46	FG
205	923.30	346491.82	2872724.38	FG
206	923.46	346492.40	2872742.38	FG
207	924.60	346525.71	2872891.38	FG
208	924.78	346526.29	2872909.37	FG
209	924.77	346497.22	2872892.30	FG
210	924.94	346497.80	2872910.29	FG
211	926.05	346530.27	2873033.31	FG
212	926.24	346530.85	2873051.30	FG

Point Table				
Point #	Elevation	Northing	Easting	Description
213	926.06	346501.78	2873034.22	FG
214	926.23	346502.36	2873052.22	FG
215	922.24	346842.47	2872863.19	FG
216	922.65	346843.04	2872881.18	FG
217	922.47	346813.98	2872864.11	FG
218	922.87	346814.56	2872882.10	FG
219	925.43	346847.03	2873005.12	FG
220	925.81	346847.61	2873023.11	FG
221	925.48	346818.54	2873006.03	FG
222	925.84	346819.12	2873024.02	FG
224	915.45	346714.16	2872606.24	FL
225	915.45	346714.04	2872602.25	FL
226	915.53	346704.10	2872596.91	FL
227	915.53	346704.57	2872612.18	FL
228	919.00	346726.06	2872645.90	FL
229	919.00	346725.32	2872621.91	FL
230	919.00	346737.31	2872621.54	FL
231	919.00	346738.05	2872645.52	FL
232	919.00	346742.18	2872649.40	FL
233	919.00	346741.19	2872617.41	FL
234	919.00	346721.20	2872618.03	FL
235	919.00	346722.19	2872650.02	FL
236	920.00	346726.18	2872649.89	FG
237	920.00	346738.18	2872649.52	FG
238	920.00	346725.19	2872617.91	FG
239	920.00	346737.19	2872617.54	FG
240	927.38	346966.80	2873125.33	GU
241	927.32	346860.51	2873128.75	GU
242	927.26	346756.06	2873132.11	GU
243	927.21	346680.10	2873134.55	GU

Point Table				
Point #	Elevation	Northing	Easting	Description
244	927.12	346533.63	2873139.26	GU
245	920.29	346727.65	2872498.03	FG
246	920.29	346729.51	2872557.94	FG
247	920.29	346761.11	2872739.54	FG
248	920.29	346904.53	2872735.28	FG
249	921.42	346887.28	2872811.20	FG
250	923.28	346712.47	2872816.82	FG
251	923.32	346667.84	2872789.35	FG
252	921.89	346664.59	2872688.28	FG
254	920.04	346660.41	2872558.33	FG
255	920.29	346659.67	2872411.08	FG
256	920.29	346710.93	2872409.57	FG
257	916.09	346705.96	2872721.66	FL
258	916.49	346761.53	2872773.96	FL
259	917.21	346904.81	2872769.71	FL
260	915.87	346700.05	2872530.90	FL

UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

LEGEND

ME = MATCH EXISTING
GU = GUTTER
FG = FUTURE GRADE
FL = FLOWLINE

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

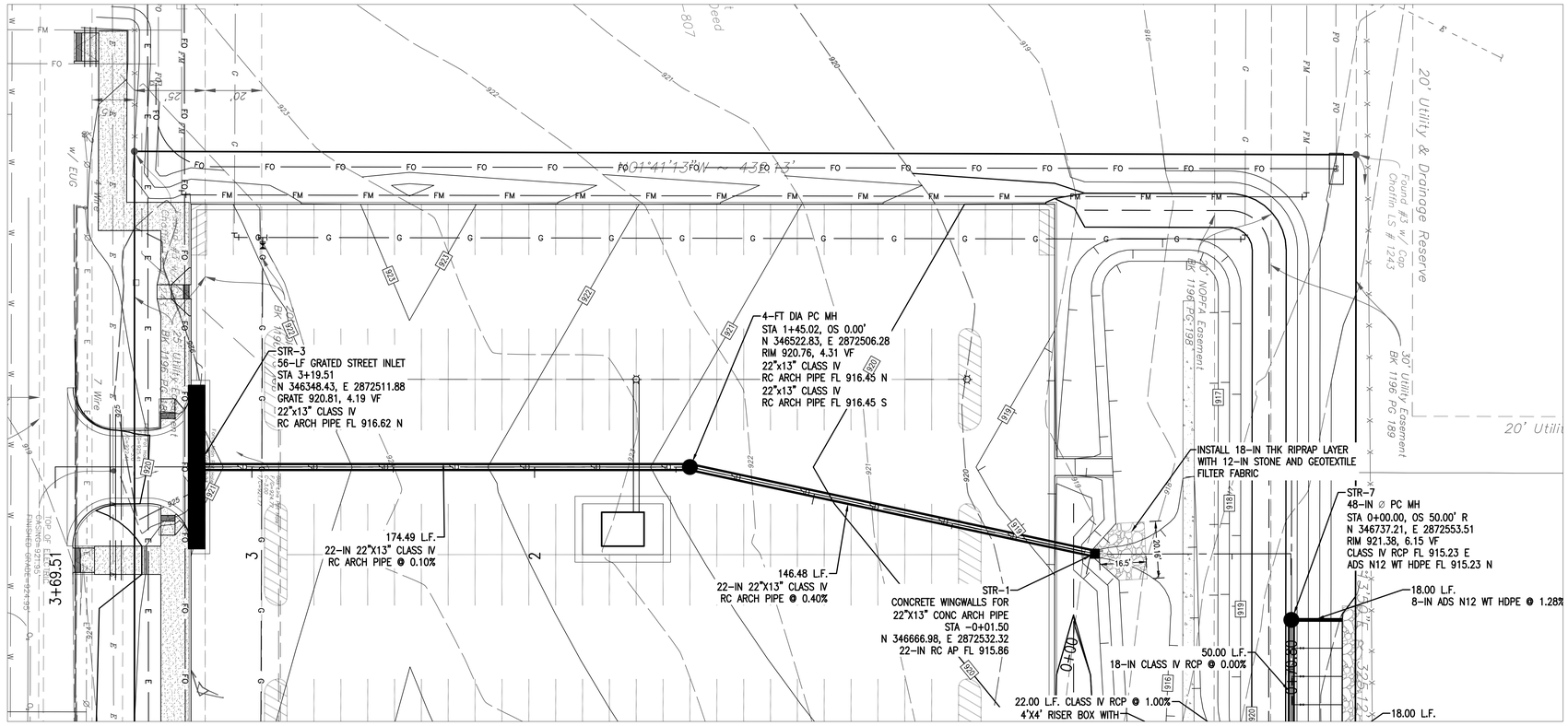
KEY PLAN:
P5
P3 P4
P1 P2

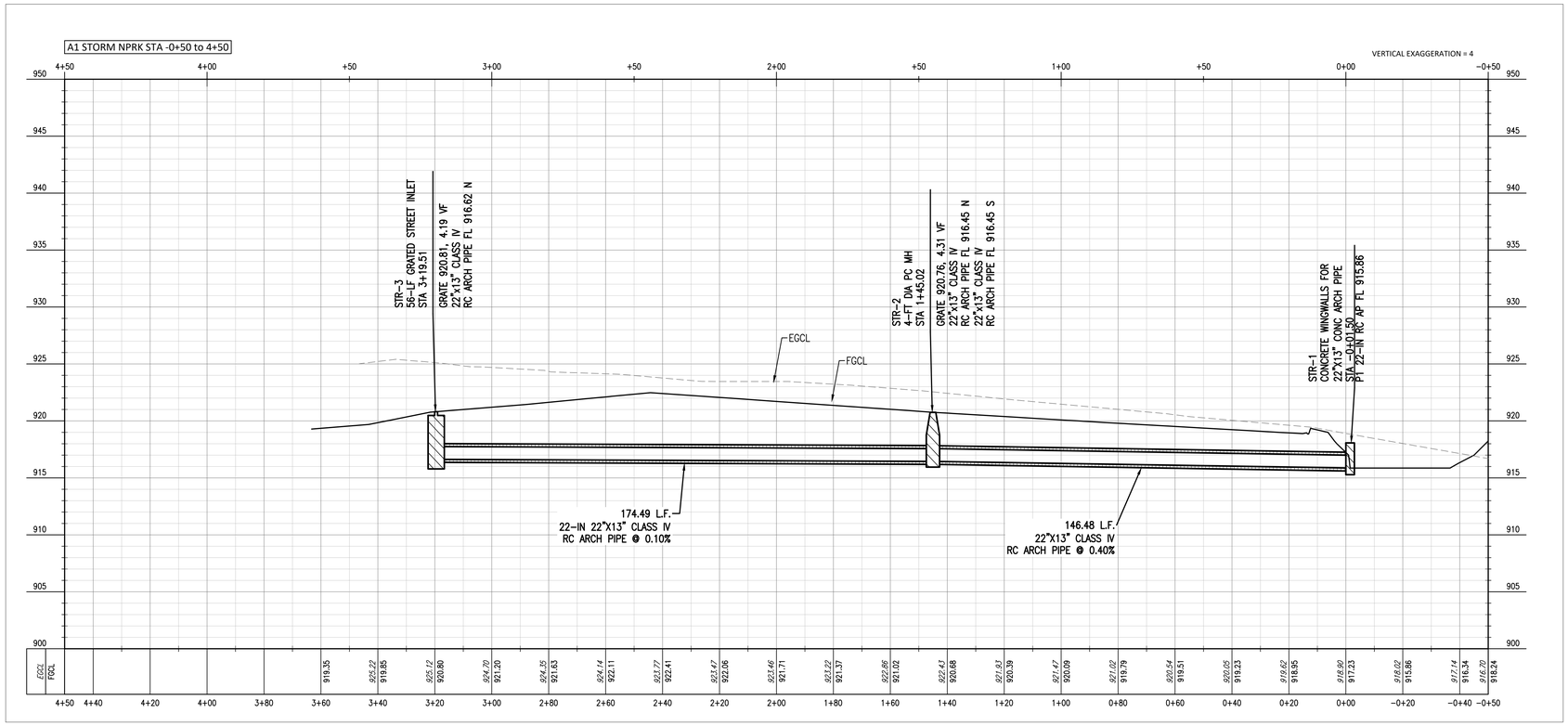
PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: C5-210
SHEET TITLE: NP COORDINATES AND ELEVATIONS TABLE

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C5-GRAD-NPRK-5123.DWG





James R. Childers
Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

COREY W. LIPPS 21291 REGISTERED PROFESSIONAL ENGINEER
7/29/22

CONSULTANT LOGO:

Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

P5
P3 P4
P1 P2

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

0' 20' 40' 80'
SCALE: 1" = 20'

UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

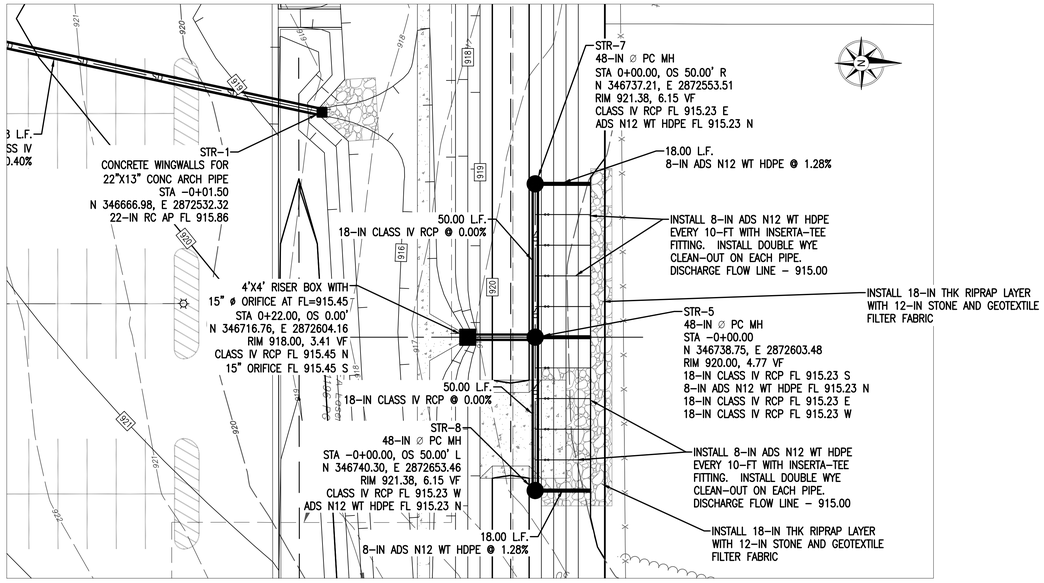
UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

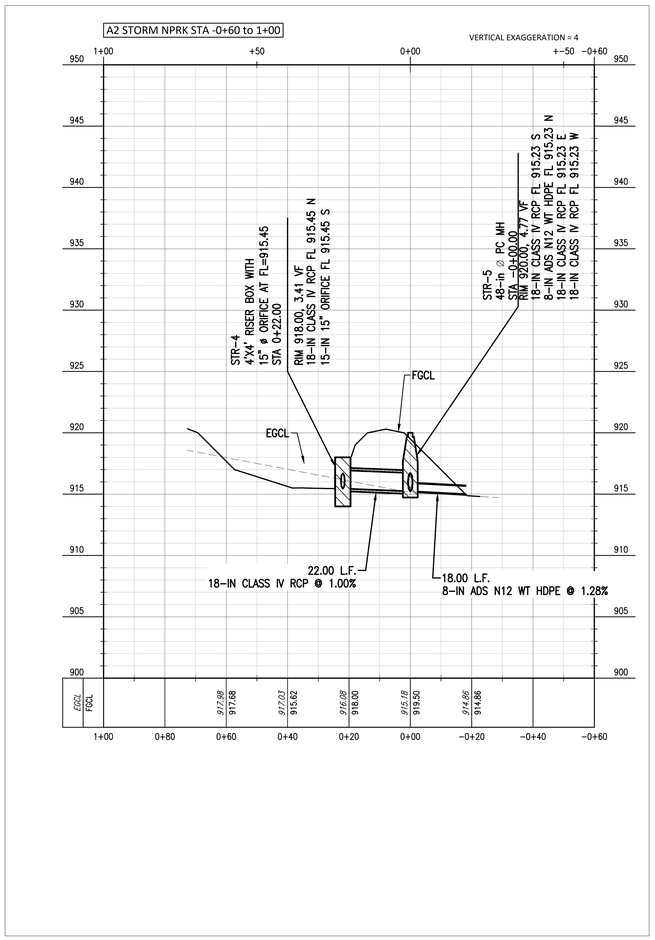
BEFORE YOU DIG
CALL OKIE
(800) 522-6543

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C6-201**
SHEET TITLE: NP STORM PLAN & PROFILE

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C6-STRM-NPRK-5123.DWG

A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C6-STRM-NPRK-5123.dwg, 7/29/2022 12:11:07 PM, DWG To PDF.pc3





James R. Childers
Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:

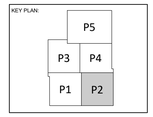
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #6935, Expires 6/30/2023

CLIENT:

SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:



PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

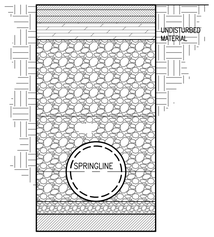
JOB NUMBER:	21-08.21
DATE:	07-29-22
SHEET NUMBER:	**C6-202**
SHEET TITLE:	NP STORM PLAN & PROFILE

0' 20' 40' 80'
SCALE: 1" = 20'

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

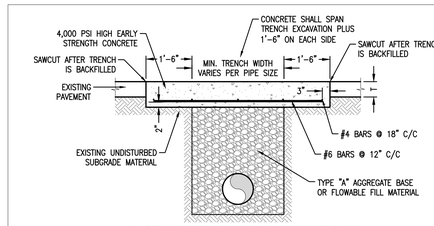


GENERAL NOTES

1. RCP SHALL MEET THE REQUIREMENTS OF ASTM C-76, CLASS III, WALL B OR WALL C. WALL B PIPE SHALL BE USED FOR ALL PIPE SIZES LESS THAN 24-IN WHERE DEPTH IS LESS THAN 16-FT. WALL C SHALL BE USED FOR PIPE SIZES 24-IN AND LARGER AT ANY DEPTH AND FOR ALL PIPE SIZES WHERE DEPTH IS GREATER THAN 16-FT.
2. CONTRACTOR SHALL FULLY COMPLY WITH THE U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS PERTAINING TO EXCAVATIONS, TRENCHING, AND SHORING AND SHALL PROVIDE AND FAMILIARIZE ITS EMPLOYEES INVOLVED IN EXCAVATION AND TRENCHING WITH THE PROVISIONS IN OSHA PAMPHLET NUMBER 2226, EXCAVATING AND TRENCHING OPERATIONS.
3. ALL FILL MATERIAL SHALL BE INSTALLED IN 6-IN MAXIMUM LAYERS AND COMPACTED.
4. RCP INSTALLATION IN PAVED AREAS
   - 4.1. FOUNDATION: IF TRENCH IS DRY, COMPACT TRENCH BOTTOM TO 95% SPD ASTM D698, AT ±3% OPTIMUM MOISTURE CONTENT. IF TRENCH IS WET, OVEREXCATE AND REPLACE WITH ASTM C-33 NO. 57 OR NO. 67 AGGREGATE COMPACTED TO 95% SPD ASTM D698.
   - 4.2. BEDDING: ODOT TYPE A AGGREGATE BASE. COMPACT TO 95% SPD ASTM D698, AT ±3% OPTIMUM MOISTURE CONTENT.
   - 4.3. HAUNCH ZONE: ODOT TYPE A AGGREGATE BASE. COMPACT TO 95% SPD ASTM D698, AT ±3% OPTIMUM MOISTURE CONTENT.
   - 4.4. INITIAL BACKFILL: ODOT TYPE A AGGREGATE BASE. COMPACT TO 95% SPD ASTM D698, AT ±3% OPTIMUM MOISTURE CONTENT.
   - 4.5. FINAL BACKFILL: ODOT TYPE A AGGREGATE BASE. COMPACT TO 95% SPD ASTM D698, AT ±3% OPTIMUM MOISTURE CONTENT.
5. RCP INSTALLATION IN NON-PAVED AREAS
   - 4.1. FOUNDATION: IF TRENCH IS DRY, COMPACT TRENCH BOTTOM TO 95% SPD ASTM D698, AT ±3% OPTIMUM MOISTURE CONTENT. IF TRENCH IS WET, OVEREXCATE AND REPLACE WITH ASTM C-33 NO. 57 OR NO. 67 AGGREGATE COMPACTED TO 95% SPD ASTM D698.
   - 4.2. BEDDING: ODOT TYPE A AGGREGATE BASE. COMPACT TO 95% SPD ASTM D698, AT ±3% OPTIMUM MOISTURE CONTENT.
   - 4.3. HAUNCH ZONE: ODOT TYPE A AGGREGATE BASE. COMPACT TO 95% SPD ASTM D698, AT ±3% OPTIMUM MOISTURE CONTENT.
   - 4.4. INITIAL AND FINAL BACKFILL: BACKFILL SHALL BE LOOSE EXCAVATED MATERIAL, FREE OF ROCKS LARGER THAN 2-IN, ORGANIC MATERIAL, RUBBISH, DEBRIS OR OTHER OBJECTIONABLE MATERIALS. PLACE BACKFILL IN 6-IN LIFTS AND COMPACT TO A 90% SPD ASTM D698, AT ±3% OPTIMUM MOISTURE CONTENT. COMPLETE BACKFILL TO FINISHED GRADE. THE TOP 12-IN OF MATERIAL SHALL BE OF AS GOOD QUALITY AS THE ORIGINAL TOPSOIL THAT WAS REMOVED.
   - 4.5. SAND MAY BE USED FOR HAUNCH ZONE AND ALL BACKFILL IF CONCRETE PIPE USES RUBBER O-RING JOINTS.

01 STORM PIPE TRENCH DETAIL – RCP

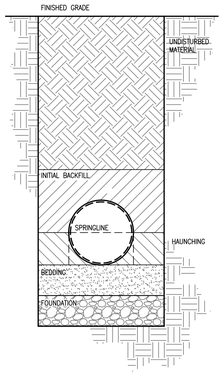
Scale: NTS



1. TYPE "A" AGGREGATE BASE BACKFILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY IN 6" LIFTS.
2. CONCRETE THICKNESS SHALL BE T+2" AND NO LESS THAN 10".

02 PAVEMENT CUT REPAIR FOR UTILITY TRENCH

Scale: NTS



GENERAL NOTES

1. THE FOLLOWING STANDARDS (LATEST EDITION) FOR PRIVATE GRAVITY PVC SANITARY SEWER LINE SHALL APPLY AS APPROPRIATE:
   - 1.1. SDR PIPE: ASTM D3034 – STANDARD SPECIFICATION FOR TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS.
   - 1.2. SCHEDULE PIPE: ASTM D2665 – STANDARD SPECIFICATION FOR POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS.
2. CONTRACTOR SHALL FULLY COMPLY WITH THE U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS PERTAINING TO EXCAVATIONS, TRENCHING, AND SHORING AND SHALL PROVIDE AND FAMILIARIZE ITS EMPLOYEES INVOLVED IN EXCAVATION AND TRENCHING WITH THE PROVISIONS IN OSHA PAMPHLET NUMBER 2226, EXCAVATING AND TRENCHING OPERATIONS.
3. PROVIDED DETAIL SHALL BE USED FOR EXTENSION OF PRIVATE SANITARY SEWER LINES ONLY. PUBLIC SANITARY SEWER LINE EXTENSIONS SHALL BE BEDDED AND BACKFILLED PER THE REQUIREMENTS OF THE MUNICIPALITY WHICH WILL BE ACCEPTING THE IMPROVEMENTS AT THE COMPLETION OF THE WORK.
4. ALL INSTALLATIONS SHALL MEET THE REQUIREMENTS OF INTERNATIONAL PLUMBING CODE (CURRENT EDITION) AND OAC 252:656 WATER POLLUTION CONTROL FACILITY CONSTRUCTION STANDARDS (CURRENT EDITION).
5. DEPTH FROM FINISHED GRADE TO TOP OF PIPE SHALL BE AS SPECIFIED ON THE CONSTRUCTION DRAWINGS. IN NO INSTANCE SHALL THE DEPTH OF COVER BE LESS THAN 30-IN.
3. ALL FILL MATERIAL SHALL BE INSTALLED IN 6-IN MAXIMUM LAYERS AND COMPACTED.
4. FOR INSTALLATIONS BENEATH PROPOSED VEHICULAR PAVING, CONTRACTOR SHALL PROVIDE CLASS I OR CLASS II MATERIAL TO BOTTOM OF PROPOSED PAVING ELEVATION.
5. WHERE TRENCH WALLS ARE STABLE OR SUPPORTED, PROVIDE A WIDTH SUFFICIENT, BUT NO GREATER THAN NECESSARY, TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING AND OTHER EMBEDMENT MATERIALS. THE SPACE BETWEEN THE PIPE AND TRENCH WALL MUST BE WIDER THAN THE COMPACTION EQUIPMENT USED IN THE PIPE ZONE. MINIMUM WIDTH SHALL BE NOT LESS THAN THE GREATER OF EITHER THE PIPE OUTSIDE DIAMETER PLUS 16-IN OR THE PIPE OUTSIDE DIAMETER TIMES 1.25, PLUS 12-IN.
6. CONTRACTOR RESPONSIBLE FOR REVEGATATION OF ALL DISTURBED AREAS THAT ARE OUTSIDE THE LIMITS OF AREAS SPECIFICALLY IDENTIFIED TO RECEIVE VEGETATIVE COVER AT THE COMPLETION OF THE PROJECT. REVEGATATION TO BE COMPLETED VIA SOLID SLAB SOD PER CORRESPONDING SECTIONS OF THE PROJECT SPECIFICATIONS.

COMPACTION REQUIREMENTS

1. FOUNDATION – IF TRENCH IS DRY, COMPACT TRENCH BOTTOM TO 95% SPD ASTM D698, AT ±3% OPTIMUM MOISTURE CONTENT. IF TRENCH IS WET, OVEREXCATE AND REPLACE WITH ASTM C-33 NO. 57 OR NO. 67 AGGREGATE COMPACTED TO 95% SPD ASTM D698.
2. PAVED AREAS – BEDDING, INITIAL BACKFILL, AND FINAL BACKFILL SHALL BE COMPACTED TO 95% SPD ASTM D698.
3. NON-PAVED AREAS – BEDDING AND INITIAL BACKFILL SHALL BE COMPACTED TO 95% SPD ASTM D698. FINAL BACKFILL SHALL BE COMPACTED TO 90% SPD ASTM D698.

Soils and Aggregates for Foundation and Pipe-Zone Embedment per ASTM D2321

Soil Class (A)	Class I (B)	Class II	Class III	Class IV
General Recommendations and Restrictions	Acceptable and common where no migration is probable or when combined with a geotextile filter media. Suitable for use as a drainage blanket and under drain where adjacent material is suitably graded or when used with a geotextile filter fabric	Where hydraulic gradient exists check gradation to minimize migration. Clean groups are suitable for use as a drainage blanket and underdrain. Uniform fine sands (SP) with more than 50% passing a #100 sieve (0.006-in) behave like silts and should be treated as Class IV soils.	Do not use where water conditions in trench prevent proper placement and compaction. Not recommended for use with pipes with stiffness of 9 psi or less	Difficult to achieve high-soil stiffness. Do not use where water conditions in trench prevent proper placement and compaction. Not recommended for use with pipes with stiffness of 9 psi or less
Foundation	Suitable as foundation and for replacing over-excavated and unstable trench bottom as restricted above.	Suitable as foundation and for replacing over-excavated and unstable trench bottom as restricted above. Install and compact in 12-in maximum layers	Suitable for replacing over-excavated trench bottom as restricted above. Install and compact in 6 in. (150 mm) maximum layers	
Pipe Embedment	Suitable as restricted above. Work material under pipe to provide uniform haunch support.		Suitable as restricted above. Difficult to place and compact in the haunch zone.	Suitable as restricted above. Difficult to place and compact in the haunch zone.
Embedment Compaction: recommended Percent Compaction, SPD (D)	See Note (C)	85% (SW and SP soils). For GW and GP soils, See Note (E)	90%	95%
Relative Compactive Effort Required to Achieve Minimum Percent Compaction	Low	Moderate	High	Very High
Compaction Methods	Vibration or Impact	Vibration or Impact	Impact	Impact
Required Moisture Control	None	None	Maintain near optimum to minimize compactive effort	

(A) Class V materials are unsuitable as embedment. They may be used as final backfill as permitted by the engineer.

(B) Class I materials have higher stiffness than Class II materials, but data on specific soil stiffness of placed, uncompacted Class I materials can be taken equivalent to Class II materials compacted to 95% of maximum Standard Proctor Density, and the soil stiffness of compacted Class I materials can be taken equivalent to Class II materials compacted to 100% of maximum Standard Proctor Density. Even if placed uncompacted (that is, dumped), Class I materials should always be worked into the haunch zone to assure complete placement.

(C) Suitable compaction typically achieved by dumped placement (that is, uncompacted but worked into haunch zone to ensure complete placement).

(D) SPD is standard Proctor density as determined by Test Method D698.

(E) Place and compact GW and GP soils with at least two passes of compaction equipment.

Soil Classes (ASTM D2321)

Class	Description (A,B)	Percentage Passing Sieve Sizes				AASHTO Soil Groups (C)
		1.5-in	3/8-in	No. 4	No. 200	
I	Crushed rock, angular (D)	100%	less than or equal to 25%	less than or equal to 15%	less than or equal to 12%	
II	Clean, coarse grained soils: SW, SP, GW, GP or any soil beginning with one of these symbols				less than or equal to 12% (E,F)	A1, A3
III	Coarse grained soils with fines: GM, GC, SM, SC, or any soil beginning with one of these symbols				greater than 12%	A-2-4, A-2-5, A-2-6
	Sandy or gravelly fine-grained soils: CL, ML, or any soil beginning with one of these symbols				less than 70%	A-4, A-6
IV	Fine-grained soils: CL, ML, or any soil beginning with one of these symbols				greater than 70%	A-2-7, A-4, A-6
V	MH, CH, OL, OH, PT					A5, A7

(A) See Classification D2487, Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).

(B) Limits may be imposed on the soil group to meet project or local requirements if the specified soil remains within the group. For example, some project applications require a Class I material with minimal fines to address specific structural or hydraulic conditions and the specification may read "Use Class I soil with a maximum of 5% passing the #200 sieve."

(C) AASHTO M145, Classification of Soils and Soil Aggregate Mixtures.

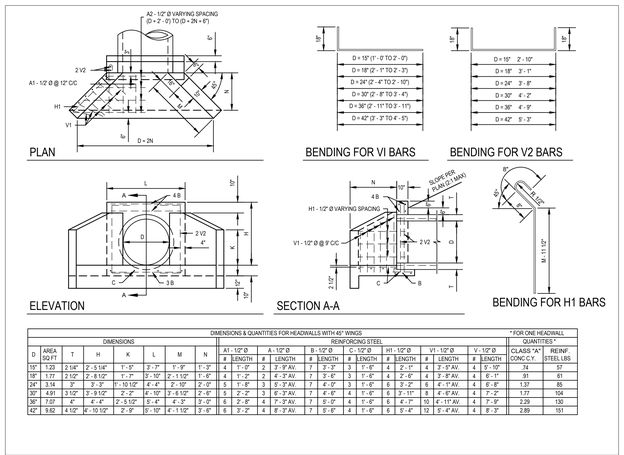
(D) All particle faces shall be fractured.

(E) Materials such as broken coral, shells, and recycled concrete, with less than or equal to 12% passing a No. 200 sieve, are considered to be Class II materials. These materials should only be used when evaluated and approved by the Engineer.

(F) Uniform fine sands (SP) with more than 50% passing a No. 100 sieve (0.006-in) are very sensitive to moisture and should not be used as backfill unless specifically allowed in the contract documents. If use of these materials is allowed, compaction and handling procedures should follow the guidelines for Class III materials.

03 STORM PIPE TRENCH DETAIL – PVC AND PP

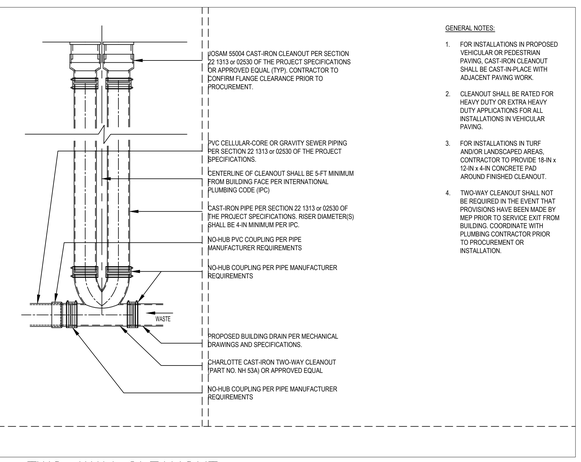
Scale: NTS



DIMENSIONS & QUANTITIES FOR HEADWALLS WITH 45° WINGS																			* FOR ONE HEADWALL	
DIMENSIONS							REINFORCING STEEL												QUANTITIES *	
D	AREA SQ FT	T	H	K	L	M	N	A1 - 1/2" Ø		A - 1/2" Ø		B - 1/2" Ø		C - 1/2" Ø		H1 - 1/2" Ø		V1 - 1/2" Ø		V - 1/2" Ø		CLASS "A" CONC C.Y.	REINF STEEL LBS
								#	LENGTH	#	LENGTH	#	LENGTH	#	LENGTH	#	LENGTH	#	LENGTH	#	LENGTH		
15"	1.23	2 1/4"	2' - 5 1/4"	1' - 5"	3' - 7"	1' - 9"	1' - 3"	4	1' - 0"	2	3' - 3" AV.	7	3' - 2"	3	1' - 6"	4	2' - 1"	4	3' - 5" AV.	4	5' - 10"	.74	57
18"	1.77	2 1/2"	2' - 8 1/2"	1' - 7"	3' - 10"	2' - 1 1/2"	1' - 6"	4	1' - 2"	2	4' - 3" AV.	7	3' - 6"	3	1' - 6"	4	2' - 6"	4	3' - 8" AV.	4	6' - 1"	.91	61
24"	3.14	3"	3' - 3"	1' - 10 1/2"	4' - 4"	2' - 10"	2' - 0"	5	1' - 8"	3	5' - 3" AV.	7	4' - 0"	3	1' - 6"	6	3' - 2"	6	4' - 1" AV.	4	6' - 8"	1.37	85
30"	4.91	3 1/2"	3' - 9 1/2"	2' - 2"	4' - 10"	3' - 6 1/2"	2' - 6"	5	2' - 2"	3	6' - 3" AV.	7	4' - 6"	4	1' - 6"	6	3' - 11"	8	4' - 6" AV.	4	7' - 2"	1.77	104
36"	7.07	4"	4' - 4"	2' - 5 1/2"	5' - 4"	4' - 3"	3' - 0"	6	2' - 8"	4	7' - 3" AV.	7	5' - 0"	4	1' - 6"	6	4' - 7"	10	4' - 11" AV.	4	7' - 9"	2.29	130
42"	9.62	4 1/2"	4' - 10 1/2"	2' - 9"	6' - 10"	4' - 11 1/2"	3' - 6"	6	3' - 2"	4	8' - 3" AV.	7	5' - 6"	4	1' - 6"	6	5' - 4"	12	5' - 4" AV.	4	8' - 7"	2.89	151

04 45-DEG WINGWALLS – 15 TO 42-IN

Scale: 1" = 1'



05 TWO-WAY CLEANOUT

Scale: 1" = 1'

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

CONSULTANT LOGO:

Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:

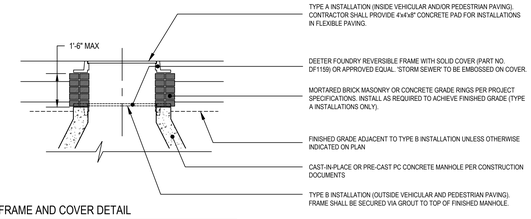
CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

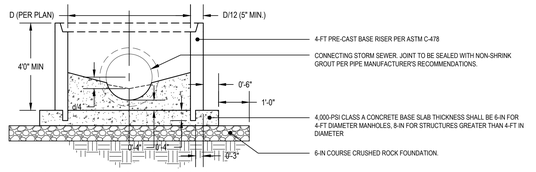
PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS:

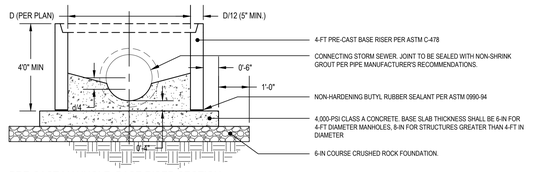
JOB NUMBER: 21-08.21
DATE: 07-29-2022
SHEET NUMBER: **C6-501**
SHEET TITLE: STORM DRAIN DETAILS



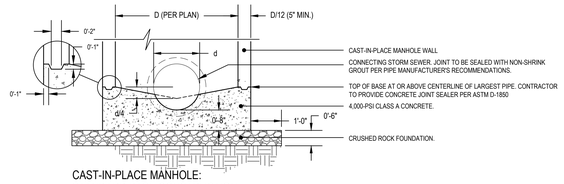
FRAME AND COVER DETAIL



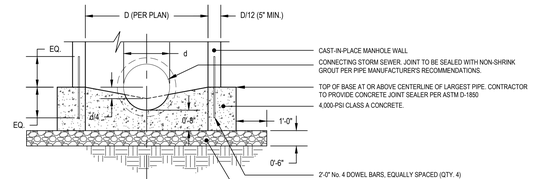
PRE-CAST MANHOLE: BASE RISER SECTION WITH PRE-FORMED SOCKET (OPTION II)



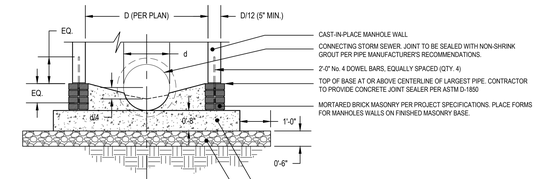
PRE-CAST MANHOLE: BASE RISER SECTION WITH MASTIC SEALER (OPTION I)



CAST-IN-PLACE MANHOLE: STANDARD BASE CONSTRUCTION



CAST-IN-PLACE MANHOLE: BASE CONSTRUCTION (ALTERNATE I)



CAST-IN-PLACE MANHOLE: BASE CONSTRUCTION (ALTERNATE II)

GENERAL NOTES:

1. CONTRACTOR SHALL UTILIZE NON-SHRINK GROUT MATERIAL PER THE PROJECT SPECIFICATIONS AT THE MANHOLE/PIPE INTERFACE UNLESS OTHERWISE INDICATED ON THE DRAWINGS OR REQUIRED BY THE PIPE MANUFACTURER. CONTRACTOR RESPONSIBLE FOR ESTABLISHING WATER-TIGHT CONNECTION AT INTERFACE.
2. THE MANHOLE RING AND COVER SHALL BE ADJUSTED TO GRADE WITH CONCRETE RINGS OR SUCCESSIVE COURSES OF BRICK MASONRY. WHEN MASONRY UNITS ARE USED, TOTAL HEIGHT OF MASONRY WORK SHALL BE BETWEEN 12-IN AND 18-IN.
3. ALL CONCRETE FOR MANHOLE BASES, INVERTS AND WALL SHALL HAVE A MINIMUM COMPRESSION STRENGTH OF 4,000-PSI AT 28-DAYS CLASS A CONCRETE PER THE PROJECT SPECIFICATIONS.
4. FORMS SHALL BE PROVIDED FOR THE SHAPING AND FINISHING OF THE MANHOLE BOTTOMS. A MINIMUM OF TWENTY-FOUR (24) HOURS SHALL ELAPSE PRIOR TO POURING THE MANHOLE WALLS.
5. HONEYCOMBING OF CONCRETE LESS THAN TWO (2") INCHES DEEP IN MANHOLE WALLS MAY BE REPAIRED USING TYPE S MORTAR PER ASTM C-270.
6. ALL CONSTRUCTION JOINTS SHALL BE CLEANED OF ANY EXCESS FOREIGN MATTER PRIOR TO APPLICATION OF CONCRETE JOINT SEALER. CONCRETE JOINT SEALER SHALL COMPLY WITH ASTM D-1850.
7. CAST-IN-PLACE NON-REINFORCED CONCRETE MANHOLES
   7.1. CAST-IN-PLACE MANHOLE DIMENSIONS SHALL MEET OR EXCEED THE REQUIRED DIMENSIONS FOR PRECAST REINFORCED CONCRETE MANHOLES AS SPECIFIED BY ASTM C-479 (SEE BELOW).
   7.2. PROTECTIVE COATING: PROTECTIVE COATING SHALL NOT BE REQUIRED UNLESS OTHERWISE INDICATED ON THE PLANS OR DIRECTED BY THE ENGINEER.
   7.3. THE VERTICAL DROP OF CONCRETE POURS SHALL NOT EXCEED TEN (10) FEET. THE CONTRACTOR MAY UTILIZE A KEYED CONSTRUCTION JOINT WITH (4) NO. 4 DOWEL BARS (EQUALLY SPACED), OR A TREMMIE.
   7.4. MONOLITHIC POURS OF THE MANHOLE BOTTOM AND WALLS SHALL BE PERMITTED PROVIDED THAT ALL CONCRETE (BOTTOM AND WALLS) IS VIBRATED ACCORDING TO THE PROJECT SPECIFICATIONS.
8. PRECAST MANHOLES
   8.1. SHOP DRAWINGS OF ALL PRE-CAST MANHOLE STRUCTURES SHALL BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO STRUCTURE PROCUREMENT.
   8.1. PRE-CAST MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C-478. ALL MANHOLE SECTIONS SHALL BE INSTALLED COMPLETE WITH O-RING GASKETS AT EACH JOINT.
   8.2. PRE-CAST MANHOLE DIMENSIONS SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM C-478. THE MINIMUM WALL THICKNESS SHALL NOT BE LESS THAN ONE-TWELTH (1/12) OF THE INTERNAL DIAMETER OF THE LARGEST CONE OR RISER SECTION OR 5-IN, WHICHEVER IS GREATER.
   8.3. FIRST JOINT IN MANHOLE WALL SHALL NOT BE LESS THAN 4-FT FROM FLOOR OF STRUCTURE.
   8.4. CONCENTRIC AND ECCENTRIC CONE HEIGHTS SHALL BE 3'0" MINIMUM UNLESS OTHERWISE INDICATED ON PLANS. CONE SECTIONS SHALL NOT BE PERMITTED FOR MANHOLE INSTALLATIONS LESS THAN 4-FT IN HEIGHT.
   8.5. MANHOLES GREATER THAN 4-FT IN DIAMETER SHALL BE FINISHED WITH A PRE-CAST SOLID SLAB TOP AS REQUIRED TO PERMIT INSTALLATION OF A STANDARD 4-FT DIAMETER CONE SECTION. SHOP DRAWINGS TO BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PROCUREMENT.
   8.6. ALL LIFTING HOLES SHALL BE REPAIRED WITH A MIXTURE OF CEMENT AND SAND GROUT FIRMLY PACKED.
9. MANHOLE STEPS AND LADDERS: STEPS AND LADDERS SHALL NOT BE CONSTRUCTED UNLESS OTHERWISE DIRECTED BY THE ENGINEER. IF CALLED FOR, THEY SHALL CONFORM WITH SECTION 13 OF ASTM C-478.

01 MANHOLES

Scale: NTS

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

REGISTERED PROFESSIONAL ENGINEER COREY W. LIPPS 21291 OKLAHOMA 7/29/22

CONSULTANT LOGO:

Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-8320-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:

CHEROKEE NATION

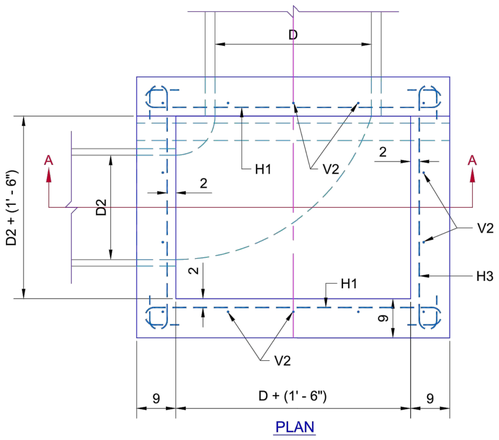
CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

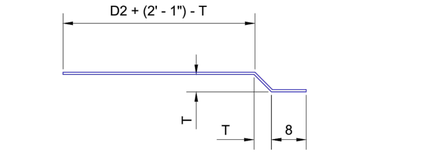
PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

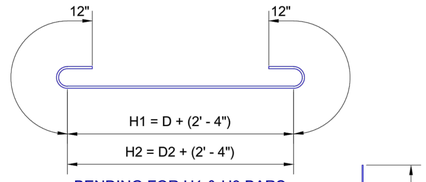
JOB NUMBER: 21-08.21
DATE: 07-29-2022
SHEET NUMBER: **C6-502**
SHEET TITLE: STORM DRAIN DETAILS



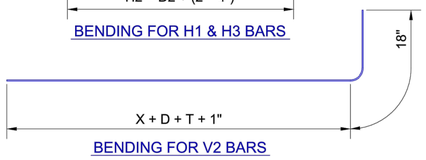
PLAN



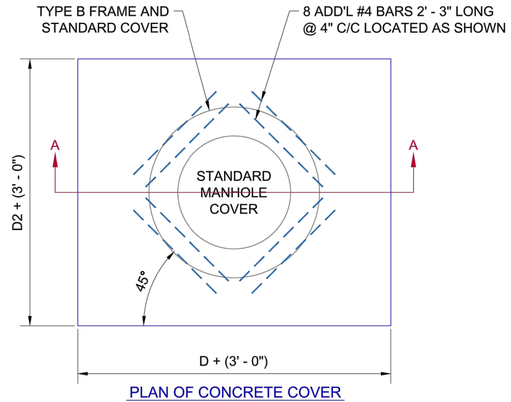
BENDING FOR H2 BARS



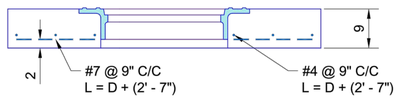
BENDING FOR H1 & H3 BARS



BENDING FOR V2 BARS



PLAN OF CONCRETE COVER



SECTION A-A

SECTION A-A

SECTION ON ℄

JUNCTION BOX 36" TO 72"
REINFORCED CONCRETE PIPE

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF TAHLEQUAH STANDARD SPECIFICATIONS.
2. ALL EXPOSED CONCRETE SURFACES SHALL HAVE A CARBORUNDUM FINISH.
3. ALL EXPOSED CONCRETE SURFACES SHALL HAVE A 3/4" CHAMFER
4. ALL REINFORCED STEEL SHALL BE 1/2" DIAMETER, EXCEPT AS NOTED. ALL HORIZONTAL BARS SHALL BE SPACED AS SHOWN. (18" MAXIMUM)
5. MAXIMUM DEPTHS OF BOXES FOR 48" TO 72" R.C.P. SHALL BE AS FOLLOWS: 48" - 18'; 54" - 16'; 60" - 12'; 72" - 10'.
6. REINFORCED CONCRETE PIPE SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. M-170 (ASTM C-78) CLASS III UNLESS OTHERWISE DESIGNATED.
7. WALL THICKNESS (DIMENSION "T") OF PIPES SHOWN, ARE FROM "WALL B" COLUMN OF A.A.S.H.T.O. TABLES.

D	36"	42"	48"	54"	60"	66"	72"
T	4"	4 1/2"	5"	5 1/2"	6"	6 1/2"	7"

8. DIMENTION D2 IS THE DIAMETER OF THE LARGEST PIPE ENTERING THE JUNCTION BOX THROUGH THE SIDE.
9. DIMENTION "X" DEPENDS ON THE DEPTHS AS CALLED FOR IN THE PLANS.

01 REINFORCED CONCRETE JUNCTION BOX (RCJB)

Scale: NTS

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:

Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-810-9900
www.parkhill.com
Oklahoma CA #6935, Expires 6/30/2023

CLIENT:

SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

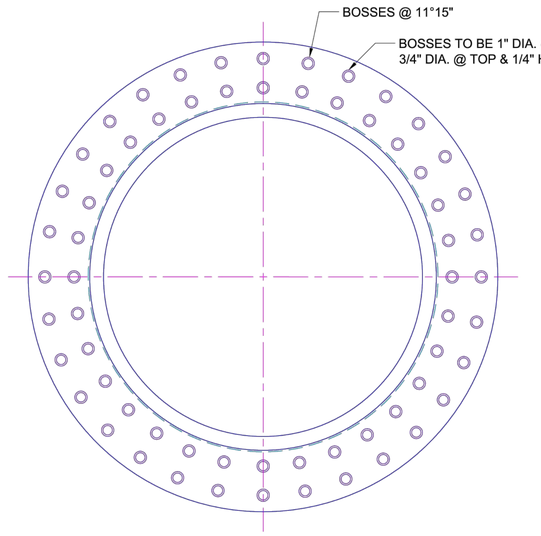
PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

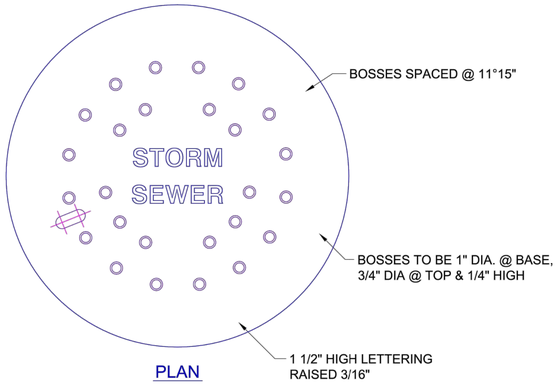
JOB NUMBER: 21-08.21
DATE: 07-29-2022
SHEET NUMBER: C6-503
SHEET TITLE: STORM DRAIN DETAILS

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C6-DETL-5123.DWG

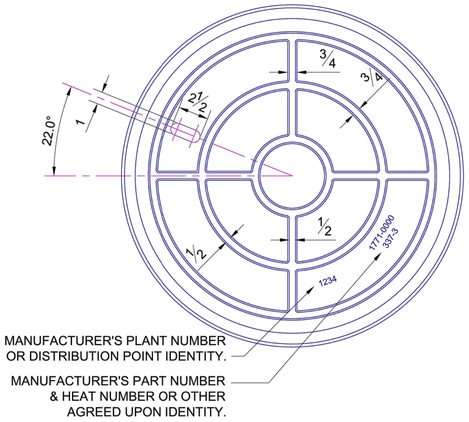
A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C6-DETL-5123.dwg, 7/29/2022 12:12:10 PM, DWG To PDF.pc3



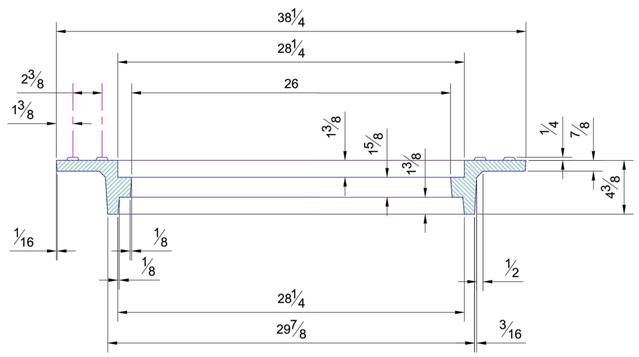
PLAN



PLAN

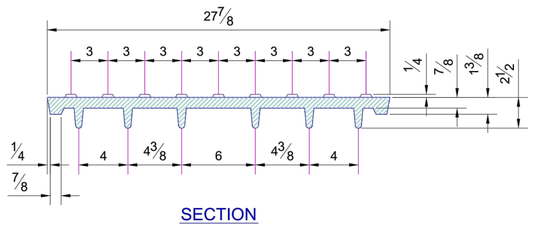


PLAN OF UNDERSIDE



SECTION

REVERSIBLE MANHOLE FRAME



SECTION

STANDARD MANHOLE COVER

GENERAL NOTES:

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT SPECIFICATIONS.
2. SHARP EDGES RESULTING FROM FABRICATION SHALL BE DULLED BY ANY ACCEPTABLE METHOD FOR SAFETY IN HANDLING.
3. COVERS SHALL BE GRAY IRON CONFORMING TO THE REQUIREMENTS OF ASHTO M-105 CLASS 35B OR ASTM A-48-76 CLASS 35B OR ASTM A-48-76 CLASS 30B.
4. FERROUS CASTINGS SHALL BE OF UNIFORM QUALITY, FREE OF BLOWHOLES, POROSITY HARDSPOTS, SHRINKAGE DISTORTION OR OTHER DEFECTS. THEY SHALL BE SMOOTH AND WELL CLEANED BY SHOT BLASTING OR OTHER APPROVED CLEANING METHOD.
5. ALL CASTINGS SHALL BE MANUFACTURED TRUE TO PATTERN; COMPONENT PARTS SHALL FIT TOGETHER IN A SATISFACTORY MANNER.
6. WHERE INDICATED, MACHINED SURFACES SHALL BE FURNISHED.
7. WEIGHTS ARE APPROXIMATE AND AVERAGE. DEVIATION FROM THE FOLLOWING WEIGHTS SHALL NOT EXCEED 5% PLUS OR MINUS: FRAME 235 L.B. COVERS 195 L.B.
8. CASTING SHALL BE UNPAINTED.

01 MANHOLE FRAME AND COVER

Scale: NTS

James R. Childers
Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:

Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-810-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:

SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-2022
SHEET NUMBER: C6-504
SHEET TITLE: STORM DRAIN DETAILS

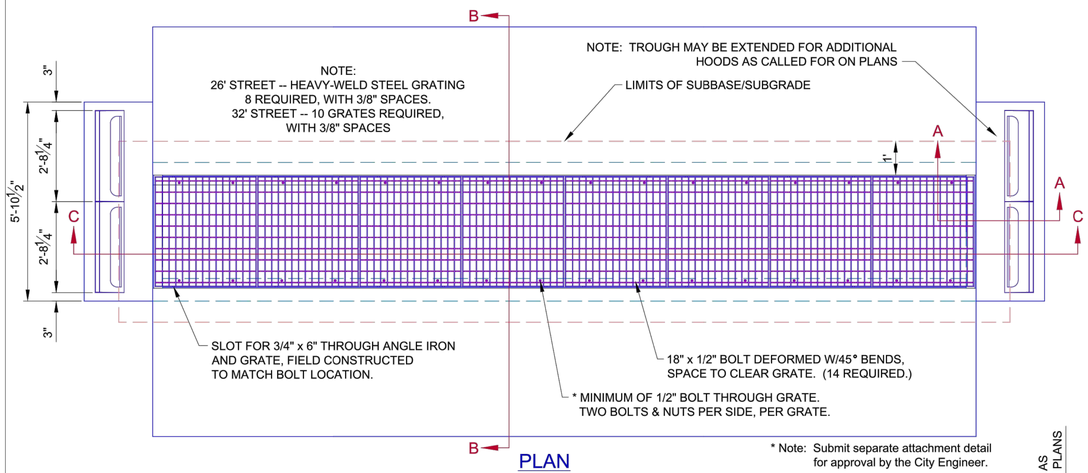
7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C6-DETL-5123.DWG

A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C6-DETL-5123.dwg, 7/29/2022 12:12:12 PM, DWG To PDF.pc3

QUANTITIES OF ANGLE IRON FOR CURB INLETS		
# OF CAST HOODS	# OF PIECES	LENGTH OF 3" x 3" ∠
2 - 0	1	5' - 1 5/8"
2 - 1	1	10' - 6 1/8"
2 - 2	1	15' - 10 5/8"
2 - 3	2	10' - 6 1/8"

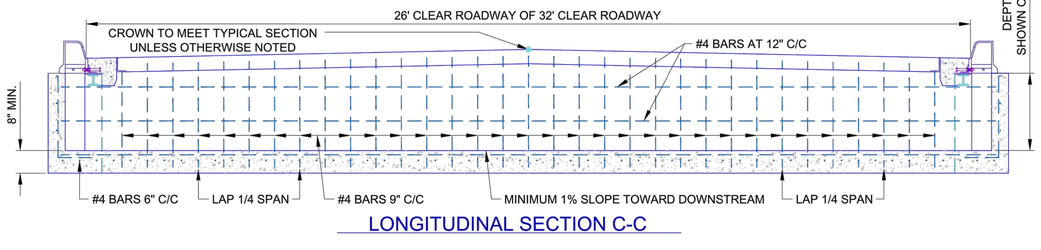
VARIABLE DIMENSION FOR ALL CURB CASTINGS			
	A	B	C
6" CURB FACE	7"	11 3/8"	8 1/4"
8" CURB FACE	9"	13 3/8"	10 1/4"

INLET CAPACITIES (CFS)		
STREET WIDTH	IKG GRATE	
	SUMP	ON GRADE (NOT IN SUMP)
26'	112	67
32'	140	84

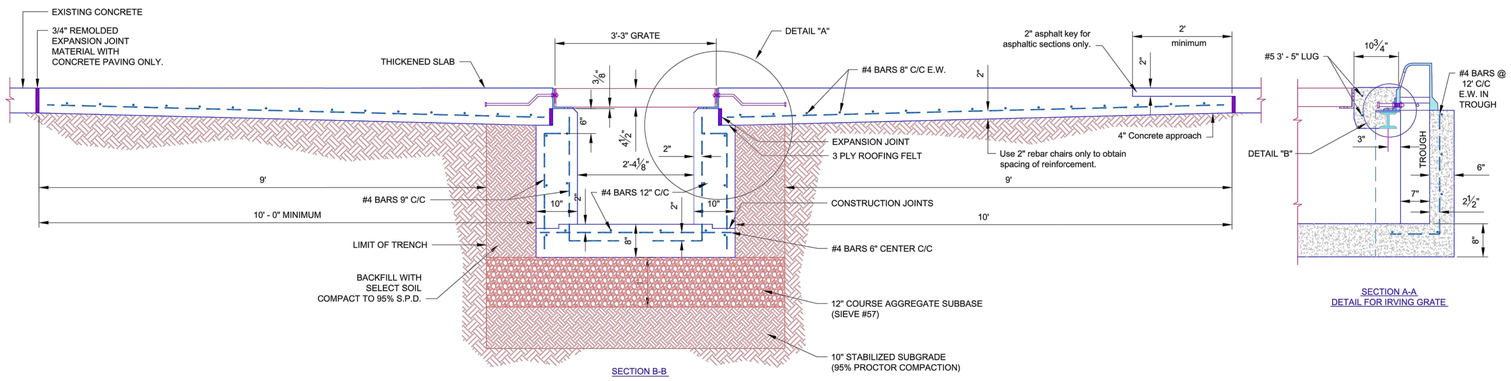


PLAN

* Note: Submit separate attachment detail for approval by the City Engineer.

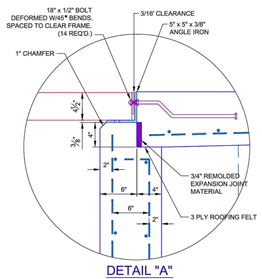


LONGITUDINAL SECTION C-C

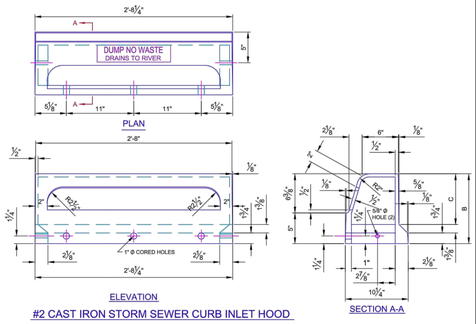


SECTION B-B

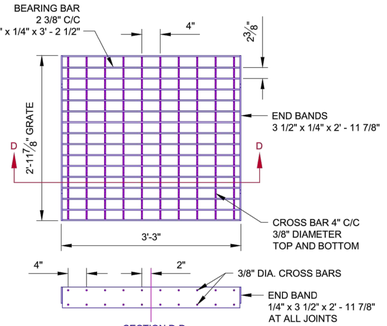
SECTION A-A
DETAIL FOR IRVING GRATE



DETAIL "A"
ALTERNATE "A" ONLY

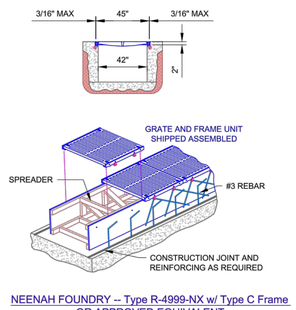


#2 CAST IRON STORM SEWER CURB INLET HOOD



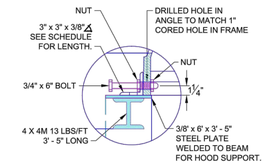
16 BEARING BARS 4 1/2" X 1/4" x 3' - 2 1/2" LONG SPACED AT 2 3/8" C/C.
OVERALL DIMENSIONS 3' - 3" X 2' - 11 7/8" ARRANGED WITH 4 1/2" X 1/4" BEARING BARS
3' - 2 1/2" LONG WITH END BANDING 3 1/2" 1/4" END BANDS 2' 11 7/8" LONG & 3/8"
CROSS BARS TOP AND BOTTOM, 4" C/C SPACED AS SHOWN.

IKG INDUSTRIES IRVING HEAVY - WELD
GALVANIZED STEEL GRATING TYPE HE
ALTERNATE "A" ONLY



NEENAH FOUNDRY -- Type R-4999-NX w/ Type C Frame
OR APPROVED EQUIVALENT

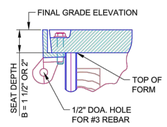
ALTERNATE "B" ONLY
To be installed as per manufacturer's specifications.



DETAIL "B"

NOTE: ANGLE IRON TO BE BOLTED TO CURB WITH 3(3/4" x 6") MACHINE BOLTS IN EACH CURB SECTION

ALTERNATE "A" ONLY



DETAIL "B"
For dimensions chart see 102-a06

ALTERNATE "B" ONLY

1 GRATED STREET INLET

Scale: 1" = 1'

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER COREY W. LIPPS 21291 7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
THE SEAL OF THE CHEROKEE NATION SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

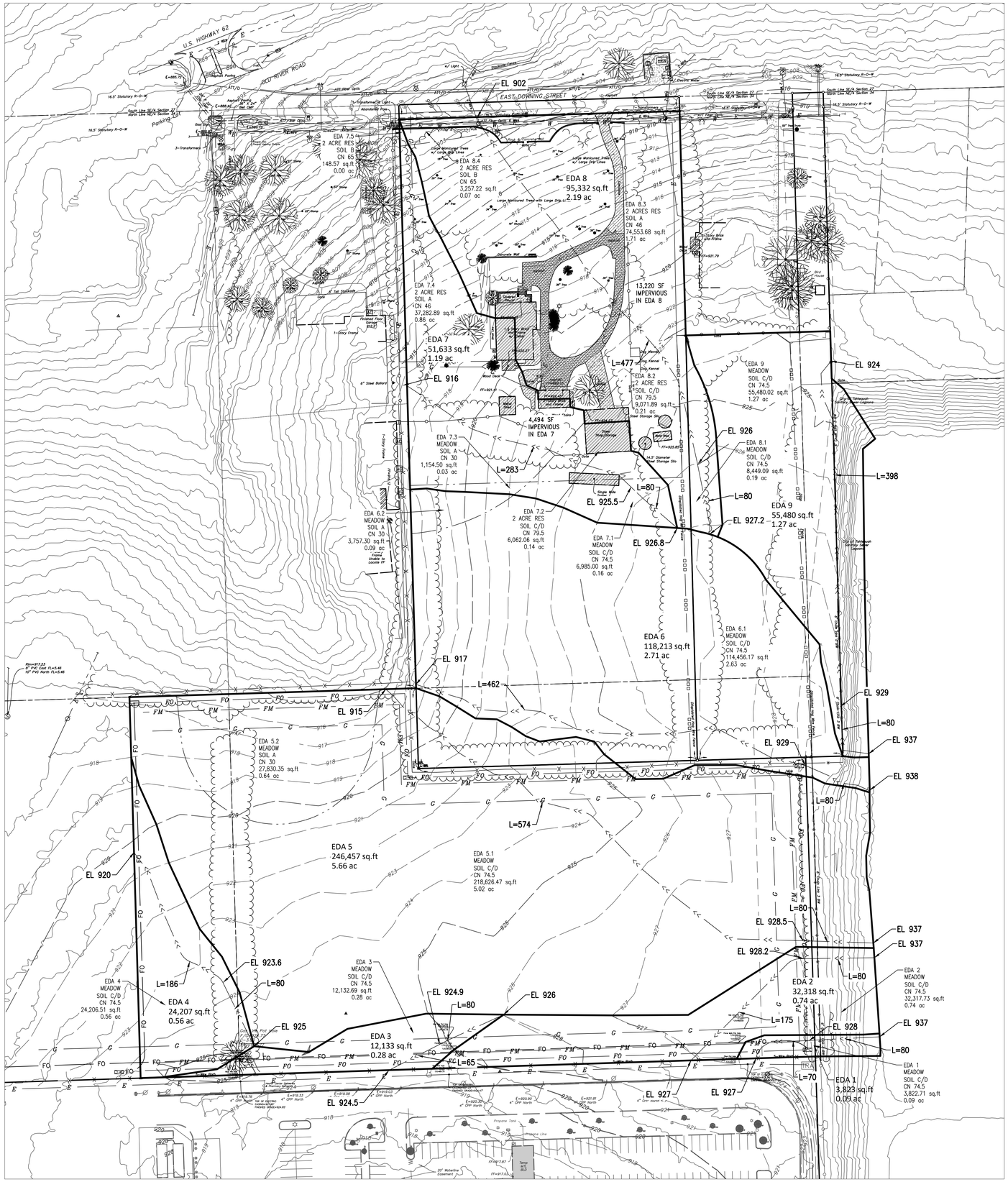
PROJECT PHASE:
BID PACKAGE 01
(SITE DEMO / STORM SEWER RELOCATION / EROSION CONTROL)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 03-31-2022
SHEET NUMBER: C6-505
SHEET TITLE: STORM DRAIN DETAILS

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C6-DETL-5123.DWG

A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C6-DETL-5123.dwg, 7/29/2022 12:12:14 PM, DWG To PDF.pc3



	DRAINAGE SUB-BASIN(S)								
ZONE 5	Sub-Basin ID(s) / Description	EDA 1	EDA 2	EDA 3	EDA 4	EDA 5	EDA 6	EDA 7	EDA 8	EDA 9
	area (sq.ft)	3,822.71	32,317.73	12,132.69	24,206.51	246,456.82	118,213.48	51,633.02	95,331.87	55,480.02
	area (acres)	0.09	0.74	0.28	0.56	5.66	2.71	1.19	2.19	1.27
	RUNOFF CURVE NUMBER	74.5	74.5	74.5	74.5	69.5	73.1	55.4	58.7	74.5
	Area 1 - Area (sq.ft)	3,823	32,318	12,133	24,207	218,626	114,456	6,985	8,449	55,480
	Description	Meadow	Meadow	Meadow	Meadow	Meadow	Meadow	Meados	Meadow	Meadow
	Soil Type	C/D	C/D	C/D	C/D	C/D	C/D	C/D	C/D	C/D
	Curve Number 1	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5
	Area 2 - Area (sq.ft)					27,830	3,757	6,062	9,072	
	Description					Meadow	Meadow	2 Acre Res	2 Acre Res	
	Soil Type					A	A	C/D	C/D	
	Curve Number 2					30	30	79.5	79.5	
	Area 3 - Area (sq.ft)							1,155	74,554	
	Description							Meadow	2 Acre Res	
	Soil Type							A	A	
	Curve Number 3							30	46	
	Area 4 - Area (sq.ft)							37,283	3,257	
	Description							2 Acre Res	2 Acre Res	
	Soil Type							A	B	
	Curve Number 4							46	65	
	Area 5 - Area (sq.ft)							149		
	Description							2 Acre Res		
	Soil Type							B		
	Curve Number 5							65		
	COMPOSITE CURVE CALCULATION									
	Total Area (sq.ft)	3,823	32,318	12,133	24,207	246,457	118,213	51,633	95,332	55,480
	Composite Curve Number	74.5	74.5	74.5	74.5	69.5	73.1	53.5	52.4	74.5
	CONNECTED EFFECT									
	Impervious Area (sq.ft)								13,220	
	Fraction Impervious Area								0.14	
	Weighted Curve Number								58.7	
	UNCONNECTED EFFECT									
	Impervious Area (sq.ft)	-	-	-	-	-	-	4,494		-
	Percent Impervious Area	0.00	0.00	0.00	0.00	0.00	0.00	8.70		0.00
	Ratio of Unconnected Imp A to Total Imp A	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
	Weighted Curve Number	74.5	74.5	74.5	74.5	69.5	73.1	55.4		74.5
	Curve Number	74.5	74.5	74.5	74.5	69.5	73.1	55.4	58.7	74.5
	TIME OF CONCENTRATION									
SHEET FLOW TIME	elevation 1 (ft)	937	937	926	925	937	938	927	927.2	937
	elevation 2 (ft)	928	928	925	923.6	928.5	929	926	926	929
	sheet flow length (ft)	80	80	80.0	80	80	80	50	80	80
	sheet flow slope (ft/ft)	0.11	0.11	0.01	0.02	0.11	0.11	0.03	0.02	0.10
	Surface Description	Dense Grass	Dense Grass	Dense Grass	Dense Grass	Dense Grass	Dense Grass	Dense Grass	Dense Grass	Dense Grass
	roughness coefficient	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
	T-sheet (min)	5.7	5.8	13.3	12.0	5.9	5.7	7.1	12.8	6.0
SHALLOW CONC	elevation 1 (ft)	928	928.2	924.9	923.6	928.5	929	925.5	926	929
	elevation 2 (ft)	927	927	924.5	920	915	917	916	902	924
	shallow flow length (ft)	70	175	65	186	574	462	283	477	398
	shallow flow slope (ft/ft)	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.05	0.01
	v elocity (fps)	1.9	1.3	1.3	2.2	2.5	2.6	3.0	3.6	1.8
	time of channel flow (Tf, min)	0.60	2.18	0.86	1.38	3.87	2.96	1.60	2.20	3.67
Tc	total time of concentration (Tc, min)	6.3	8.0	14.1	13.4	9.7	8.7	8.7	15.0	9.7

Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	SCS Runoff	-------	-------	0.135	-------	0.227	0.299	0.391	0.466	0.542	EDA 1
2	SCS Runoff	-------	-------	1.005	-------	1.693	2.225	2.912	3.473	4.039	EDA 2
3	SCS Runoff	-------	-------	0.316	-------	0.532	0.701	0.920	1.099	1.279	EDA 3
4	SCS Runoff	-------	-------	0.653	-------	1.102	1.452	1.903	2.272	2.645	EDA 4 - Flow West Pre
5	SCS Runoff	-------	-------	5.388	-------	9.946	13.60	18.40	22.39	26.45	EDA 5
6	SCS Runoff	-------	-------	3.253	-------	5.620	7.468	9.867	11.83	13.83	EDA 6
7	SCS Runoff	-------	-------	0.217	-------	0.773	1.305	2.062	2.724	3.433	EDA 7
8	SCS Runoff	-------	-------	0.630	-------	1.683	2.627	3.944	5.083	6.277	EDA 8 - Downing Flow Pre
9	SCS Runoff	-------	-------	1.654	-------	2.793	3.675	4.814	5.744	6.684	EDA 9 - NE Flow Pre
10	Combine	1, 2, 3,	-------	1.401	-------	2.372	3.125	4.099	4.893	5.697	Hastings Flow Pre
11	Combine	5, 6, 7,	-------	8.799	-------	16.31	22.35	30.33	36.95	43.71	W Downing Prop Pre
12	SCS Runoff	-------	-------	1.227	-------	1.736	2.105	2.564	2.929	3.293	PDA 1
13	SCS Runoff	-------	-------	3.170	-------	4.185	4.922	5.842	6.578	7.313	PDA 2
14	SCS Runoff	-------	-------	1.550	-------	2.046	2.406	2.856	3.216	3.575	PDA 3
15	SCS Runoff	-------	-------	0.352	-------	0.465	0.547	0.649	0.731	0.813	PDA 4
16	SCS Runoff	-------	-------	12.67	-------	16.76	19.72	23.42	26.37	29.32	PDA 5
17	SCS Runoff	-------	-------	0.188	-------	0.306	0.396	0.511	0.604	0.697	PDA 6 - Flow West Post
18	SCS Runoff	-------	-------	7.563	-------	9.991	11.75	13.95	15.71	17.47	PDA 7
19	SCS Runoff	-------	-------	1.234	-------	2.012	2.607	3.369	3.990	4.617	PDA 8 - Pond
20	SCS Runoff	-------	-------	1.081	-------	1.826	2.402	3.146	3.754	4.368	PDA 9 - NE Flow Post
21	SCS Runoff	-------	-------	0.322	-------	1.348	2.533	4.310	5.907	7.624	PDA 10 - Downing Flow Post
22	SCS Runoff	-------	-------	0.959	-------	1.558	2.015	2.599	3.072	3.549	PDA 11 - W Downing Prop Bypass
23	Combine	12, 14,	-------	2.776	-------	3.782	4.511	5.420	6.145	6.868	Hastings Flow Post
24	Combine	13, 15, 16, 18, 19, 24	-------	24.26	-------	32.40	38.34	45.77	51.72	57.67	Pond Inflow
25	Reservoir	24	-------	7.261	-------	12.98	18.79	21.53	22.76	25.64	Pond Discharge
26	Combine	22, 25	-------	7.557	-------	13.50	19.57	22.53	23.89	26.86	W Downing Prop Post

Proj. file: 5123-North Parking Hydrology.gpw | Tuesday, 07 / 5 / 2022

0' 50' 100' 200'

SCALE: 1" = 50'

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:

Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #6935, Expires 6/30/2023

CLIENT:

SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

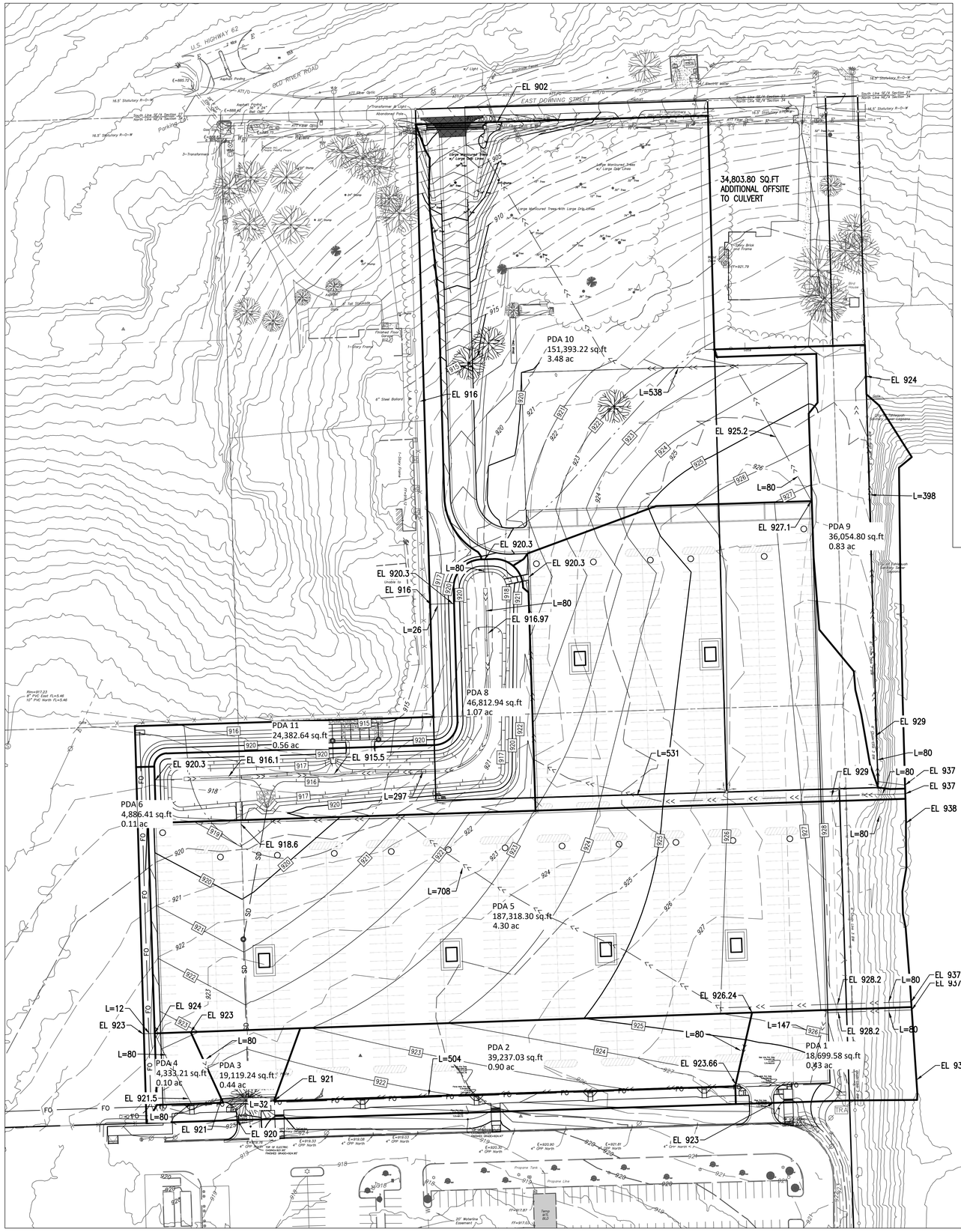
KEY PLAN:

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-2022
SHEET NUMBER: C6-802
SHEET TITLE: NP EXISTING HYDROLOGY

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C6-EMPN-5123.DWG



	DRAINAGE SUB-BASIN(S)											
	Sub-Basin ID(s) / Description	PDA 1	PDA 2	PDA 3	PDA 4	PDA 5	PDA 6	PDA 7	PDA 8	PDA 9	PDA 10	PDA 11
	area (sq.ft)	18,699.58	39,237.03	19,119.24	4,333.21	187,318.30	4,886.41	107,357.50	46,812.94	36,054.80	151,393.22	24,382.64
	area (acres)	0.43	0.90	0.44	0.10	4.30	0.11	2.46	1.07	0.83	3.48	0.56
	RUNOFF CURVE NUMBER	89.3	0.0	98.0	0.0	0.0	77.0	0.0	77.0	74.5		
	Area 1 - Area (sq.ft)	9,427	39,237	19,119	4,333	167,181	-	98,835	-	-	18,160	
	Description	Impervious	Impervious	Impervious	Impervious	Impervious	Impervious	Impervious	Impervious	Impervious	Impervious	Impervious
	Soil Type											
	Curve Number 1	98	98	98	98	98	98	98	98	98	98	
	Area 2 - Area (sq.ft)	9,273				20,137	4,886	8,523	46,813	36,055	32,582	24,383
	Description	Meadow				Meadow	Grass	Meadow	Grass	Meadow	Grass	Grass
	Soil Type	C/D				C/D	C/D	C/D	C/D	C/D	C/D	C/D
	Curve Number 2	74.5				74.5	77	74.5	77	74.5	77	77
	Area 3 - Area (sq.ft)										14,068	
	Description										Grass	
	Soil Type										A	
	Curve Number 3										39	
	Area 4 - Area (sq.ft)										86,583	
	Description										Meadow	
	Soil Type										A	
	Curve Number 4										30	
	COMPOSITE CURVE CALCULATION											
	Total Area (sq.ft)	18,700	39,237	19,119	4,333	187,318	4,886	107,358	46,813	36,055	151,393	24,383
	Composite Curve Number	86.3	98.0	98.0	98.0	95.5	77.0	96.1	77.0	74.5	49.1	77.0
	CONNECTED EFFECT											
	Impervious Area (sq.ft)		39,237		4,333	167,181		98,835	-			
	Fraction Impervious Area		1.000		1.000	0.892		0.921	0.000			
	Weighted Curve Number		98.0		98.0	97.7		97.9	77.0			
	UNCONNECTED EFFECT											
	Impervious Area (sq.ft)	9,427		19,119			-			-	18,160	-
	Percent Impervious Area	50.41		100.00			0.00			0.00	12.00	0.00
	Ratio of Unconnected Imp A to Total Imp A	1.00		1.00			1.00			1.00	1.00	1.00
	Weighted Curve Number	89.3		98.0			77.0			74.5	52.0	77.0
	Curve Number	89.3	98.0	98.0	98.0	97.7	77.0	97.9	77.0	74.5	52.0	77.0
	TIME OF CONCENTRATION											
SHEET FLOW TIME	elevation 1 (ft)	937	926	923	924	937	924	937	920.3	937	927	920
	elevation 2 (ft)	928	924	921	921.5	928.0	923	929	917.0	929	925	916
	sheet flow length (ft)	80	80	80.0	80	80	12	80	80	80	80	26
	sheet flow slope (ft/ft)	0.11	0.03	0.03	0.03	0.11	0.08	0.10	0.042	0.10	0.02	0.17
	Surface Description	Dense Grass	Pavement	Pavement	Pavement	Dense Grass	Bermuda	Dense Grass	Bermuda	Dense Grass	Bermuda	Bermuda
	roughness coefficient	0.24	0.011	0.011	0.011	0.24	0.41	0.24	0.41	0.24	0.24	0.41
	T-sheet (min)	5.7	0.8	0.9	0.8	5.7	2.2	6.0	13.1	6.0	10.7	3.1
SHALLOW CONC	elevation 1 (ft)	928	923.7	921.0	921.5	928.0		929.0	917.0	929	925	
	elevation 2 (ft)	923	921	920	921	918.6		920.3	915.5	924	900	
	shallow flow length (ft)	147	504	32	40	708		531	454	398	538	
	shallow flow slope (ft/ft)	0.03	0.01	0.03	0.01	0.01		0.02	0.003	0.01	0.05	
	v elocity (fps)	3.7	1.5	3.6	2.3	2.3		2.6	1.2	1.8	3.5	
	time of channel flow (Tf, min)	0.66	5.71	0.15	0.29	5.06		3.42	6.57	3.67	2.57	
Tc	total time of concentration (Tc, min)	6.4	6.5	1.0	1.1	10.8	2.2	9.4	19.6	9.7	13.2	3.1

2

Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	SCS Runoff	------	-------	0.135	-------	0.227	0.299	0.391	0.466	0.542	EDA 1
2	SCS Runoff	------	-------	1.005	-------	1.693	2.225	2.912	3.473	4.039	EDA 2
3	SCS Runoff	------	-------	0.316	-------	0.532	0.701	0.920	1.099	1.279	EDA 3
4	SCS Runoff	------	-------	0.653	-------	1.102	1.452	1.903	2.272	2.645	EDA 4 - Flow West Pre
5	SCS Runoff	------	-------	5.388	-------	9.946	13.60	18.40	22.39	26.45	EDA 5
6	SCS Runoff	------	-------	3.253	-------	5.620	7.468	9.867	11.83	13.83	EDA 6
7	SCS Runoff	------	-------	0.217	-------	0.773	1.305	2.062	2.724	3.433	EDA 7
8	SCS Runoff	------	-------	0.630	-------	1.683	2.627	3.944	5.083	6.277	EDA 8 - Downing Flow Pre
9	SCS Runoff	------	-------	1.654	-------	2.793	3.675	4.814	5.744	6.684	EDA 9 - NE Flow Pre
10	Combine	1, 2, 3,	-------	1.401	-------	2.372	3.125	4.099	4.893	5.697	Hastings Flow Pre
11	Combine	5, 6, 7,	-------	8.799	-------	16.31	22.35	30.33	36.95	43.71	W Downing Prop Pre
12	SCS Runoff	------	-------	1.227	-------	1.736	2.105	2.564	2.929	3.293	PDA 1
13	SCS Runoff	------	-------	3.170	-------	4.185	4.922	5.842	6.578	7.313	PDA 2
14	SCS Runoff	------	-------	1.550	-------	2.046	2.406	2.856	3.216	3.575	PDA 3
15	SCS Runoff	------	-------	0.352	-------	0.465	0.547	0.649	0.731	0.813	PDA 4
16	SCS Runoff	------	-------	12.67	-------	16.76	19.72	23.42	26.37	29.32	PDA 5
17	SCS Runoff	------	-------	0.188	-------	0.306	0.396	0.511	0.604	0.697	PDA 6 - Flow West Post
18	SCS Runoff	------	-------	7.563	-------	9.991	11.75	13.95	15.71	17.47	PDA 7
19	SCS Runoff	------	-------	1.234	-------	2.012	2.607	3.369	3.990	4.617	PDA 8 - Pond
20	SCS Runoff	------	-------	1.081	-------	1.826	2.402	3.146	3.754	4.368	PDA 9 - NE Flow Post
21	SCS Runoff	------	-------	0.322	-------	1.348	2.533	4.310	5.907	7.624	PDA 10 - Downing Flow Post
22	SCS Runoff	------	-------	0.959	-------	1.558	2.015	2.599	3.072	3.549	PDA 11 - W Downing Prop Bypass
23	Combine	12, 14,	-------	2.776	-------	3.782	4.511	5.420	6.145	6.868	Hastings Flow Post
24	Combine	13, 15, 16, 18, 19,	-------	24.26	-------	32.40	38.34	45.77	51.72	57.67	Pond Inflow
25	Reservoir	24	-------	7.261	-------	12.98	18.79	21.53	22.76	25.64	Pond Discharge
26	Combine	22, 25	-------	7.557	-------	13.50	19.57	22.53	23.89	26.86	W Downing Prop Post

Proj. file: 5123-North Parking Hydrology.gpw   Tuesday, 07 / 5 / 2022

James R. Childers
Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

REGISTERED PROFESSIONAL ENGINEER
COREY W.
LIPPS
21291
OKLAHOMA
7/29/22

CONSULTANT LOGO:

Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

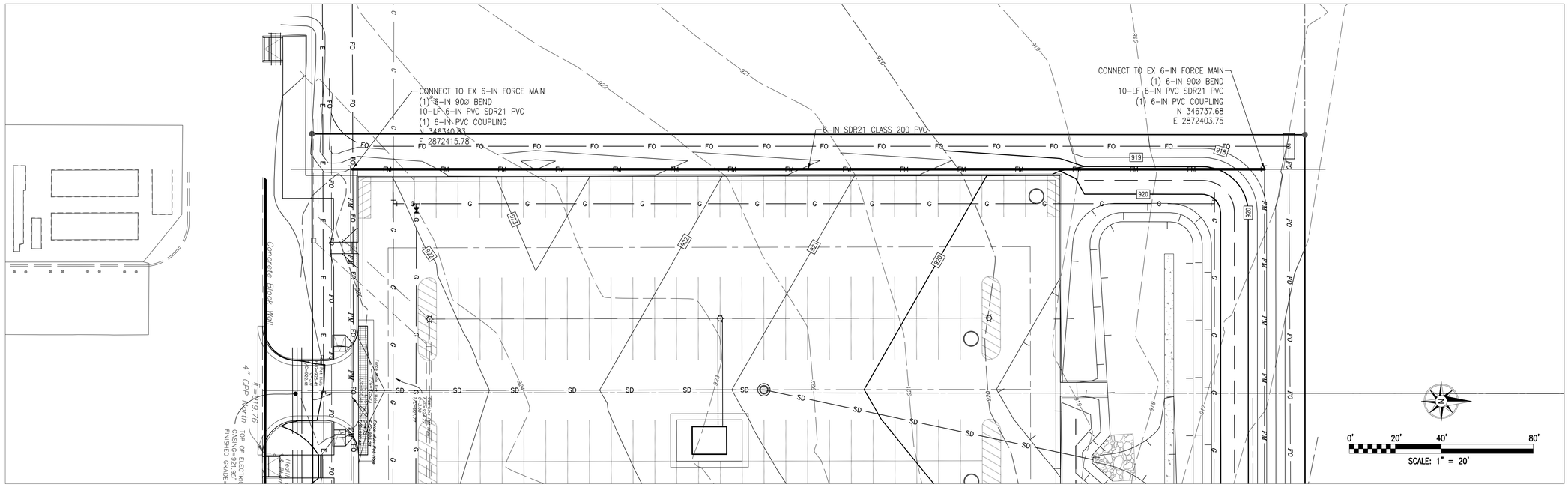
KEY PLAN:

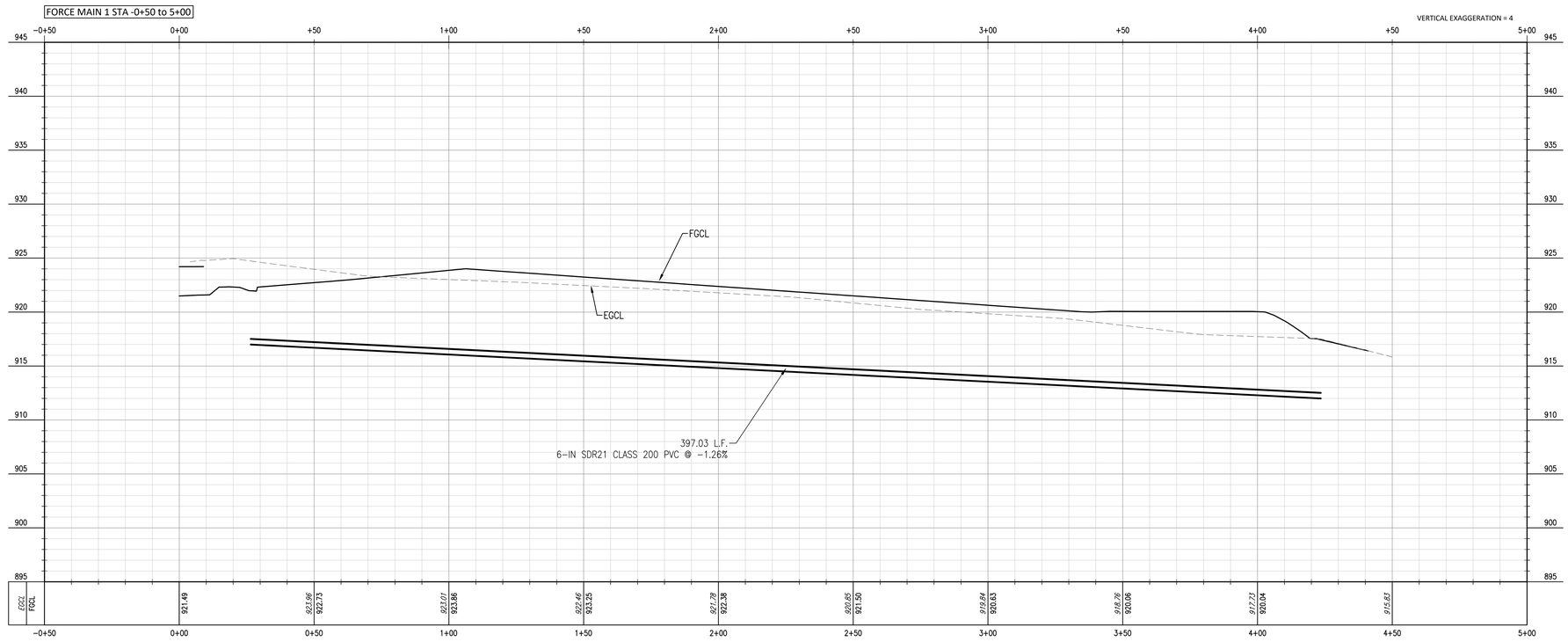
PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-2022
SHEET NUMBER: **C6-803**
SHEET TITLE: NP DEVELOPMENT HYDROLOGY

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C6-PMPN-5123.DWG





James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:

Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-810-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:

SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

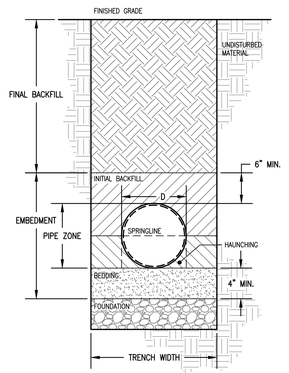
KEY PLAN:

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C8-201**
SHEET TITLE: FORCE MAIN PLAN & PROFILE

7/29/2022 A:\2021\5123.21\03_DSGN\01_DWG\050_CIVIL\C10-FORCE-NPRK-5123.DWG



GENERAL NOTES

1. THE FOLLOWING STANDARDS (LATEST EDITION) SHALL APPLY TO PRIVATE PVC WATER LINES AS APPROPRIATE:
   1.1. ASTM D1785 – STANDARD SPECIFICATION FOR POLYVINYL CHLORIDE (PVC) PLASTIC PIPE, SCHEDULES 40, 80, AND 120.
   1.2. ASTM D2241 – STANDARD SPECIFICATION FOR POLYVINYL CHLORIDE (PVC) PRESSURE-RATED PIPE (SDR SERIES).
   1.3. AWWA C900 – POLYVINYL CHLORIDE (PVC) PRESSURE PIPE AND FABRICATED FITTINGS, 4-IN THROUGH 12-IN, FOR WATER DISTRIBUTION.
   1.4. AWWA C905 – POLYVINYL CHLORIDE (PVC) PRESSURE PIPE AND FABRICATED FITTINGS, 14-IN THROUGH 48-IN, FOR WATER TRANSMISSION AND DISTRIBUTION.
2. CONTRACTOR SHALL FULLY COMPLY WITH THE U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS PERTAINING TO EXCAVATIONS, TRENCHING, AND SHORING AND SHALL PROVIDE AND FAMILIARIZE ITS EMPLOYEES INVOLVED IN EXCAVATION AND TRENCHING WITH THE PROVISIONS IN OSHA PAMPHLET NUMBER 2226, EXCAVATING AND TRENCHING OPERATIONS.
3. PROVIDED DETAIL SHALL BE USED FOR EXTENSION OF PRIVATE PVC WATER LINES ONLY. PUBLIC PVC WATER LINE EXTENSIONS SHALL BE BEDDED AND BACKFILLED PER THE REQUIREMENTS OF THE MUNICIPALITY WHICH WILL BE ACCEPTING THE IMPROVEMENTS AT THE COMPLETION OF THE WORK.
4. ALL INSTALLATIONS SHALL MEET THE REQUIREMENTS OF INTERNATIONAL PLUMBING CODE (CURRENT EDITION), AWWA C605 (CURRENT EDITION) AND OAC 252:626 PUBLIC WATER SUPPLY CONSTRUCTION STANDARDS CONSTRUCTION STANDARDS (CURRENT EDITION).
5. CONTRACTOR IS RESPONSIBLE FOR RE-VEGETATION OF ALL DISTURBED AREAS THAT ARE OUTSIDE THE LIMITS OF AREAS SPECIFICALLY IDENTIFIED TO RECEIVE VEGETATIVE COVER AT THE COMPLETION OF THE PROJECT. RE-VEGETATION TO BE COMPLETED VIA SOLID SLAB SOD PER CORRESPONDING SECTIONS OF THE PROJECT SPECIFICATIONS.

TRENCHING

1. TRENCH STABILITY – DURING TRENCH EXCAVATION, ENSURE THAT THE TRENCH SIDES SHALL BE STABLE UNDER ALL WORKING CONDITIONS. THE TRENCH WALLS SHALL BE SLOPED OR APPROPRIATE SUPPORTS PROVIDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS FOR SAFETY.
2. TRENCH WIDTH – THE WIDTH OF THE TRENCH AT ANY POINT BELOW THE TOP OF THE PIPE SHALL BE SUFFICIENT TO PROVIDE ADEQUATE ROOM FOR THE FOLLOWING REQUIREMENTS: (1) JOINING THE PIPE IN THE TRENCH IF THIS IS REQUIRED; (2) SNAKING OF SMALL DIAMETER, HEAT FUSED OR SOLVENT CEMENTED PIPE FROM SIDE-TO-SIDE ALONG THE BOTTOM OF THE TRENCH, WHEN THE EFFECTS OF CONTRACTION ARE NOT OTHERWISE ACCOMMODATED; (3) FILLING AND COMPACTING THE SIDE FILLS; (4) CHECKING THE ELASTOMERIC SEAL JOINTS. MINIMUM TRENCH WIDTHS SHALL BE PERMITTED TO BE UTILIZED WITH MOST SOLVENT-CEMENTED AND HEAT-FUSED PRESSURE PIPE MATERIALS BY JOINING THE PIPE OUTSIDE THE TRENCH AND LOWERING THE PIPE INTO THE TRENCH AFTER ADEQUATE JOINT STRENGTH HAS BEEN ATTAINED. THIS PRACTICE SHALL BE PERMITTED TO BE USED FOR GASKET JOINT PIPE, WITH MANUFACTURERS APPROVAL, PROVIDING CARE IS TAKEN TO NOT DISASSEMBLE THE JOINTS DURING LOWERING.
3. TRENCH BOTTOM – THE TRENCH BOTTOM SHALL BE PREPARED FOR THE DIRECT REPLACEMENT OF THE PIPE AND SHALL BE CONTINUOUS, RELATIVELY SMOOTH, FREE OF ROCKS, AND PROVIDE UNIFORM SUPPORT. FOR BELL-ENDED OR COUPLED PIPE, SUITABLE "BELL-HOLES" SHALL BE PROVIDED AT EACH JOINT TO PERMIT THE JOINT TO BE ASSEMBLED AND THE PIPE TO BE SUPPORTED PROPERLY.
   3.1. WHERE LEDGE ROCK, HARDPAN, OR BOULDERS ARE ENCOUNTERED, IT SHALL BE REQUIRED TO PAD THE TRENCH BOTTOM WITH A BEDDING OF AT LEAST 4-INTHICKNESS OF COMPACTED CLASS I OR II MATERIAL. IN SITUATIONS WHERE RAPID MOVEMENT OF WATER TAKES PLACE THROUGH THIS BEDDING, THE CLASS I OR II MATERIAL USED SHALL HAVE GRADATION THAT PREVENTS LOSS BY MIGRATION OF ANY PIPE EMBEDMENT MATERIAL.
4. TRENCH DEPTH AND PIPE COVER-EXCAVATION FOR PIPE TRENCHES SHALL BE TO THE LINES, GRADES, AND DIMENSIONS SHOWN ON THE CONTRACT DRAWINGS. SUFFICIENT COVER SHALL BE MAINTAINED TO ADEQUATELY REDUCE THE TRAFFIC OR OTHER CONCENTRATED AND IMPACT LOADS.
5. WHERE TRENCH WALLS ARE STABLE OR SUPPORTED, PROVIDE A WIDTH SUFFICIENT, BUT NO GREATER THAN NECESSARY, TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING AND OTHER EMBEDMENT MATERIALS. THE SPACE BETWEEN THE PIPE AND TRENCH WALL MUST BE WIDER THAN THE COMPACTION EQUIPMENT USED IN THE PIPE ZONE. MINIMUM WIDTH SHALL BE NOT LESS THAN THE GREATER OF EITHER THE PIPE OUTSIDE DIAMETER PLUS 16-IN OR THE PIPE OUTSIDE DIAMETER TIMES 1.25, PLUS 12-IN.
6. RELIABILITY AND SAFETY OF SERVICE SHALL ASSUME MAJOR IMPORTANCE IN DETERMINING MINIMUM COVER FOR ANY INTENDED SERVICE. LOCAL, STATE, OR FEDERAL CODES SHALL ALSO GOVERN. PIPE INTENDED FOR WINTER WATER SERVICE SHALL HAVE A MINIMUM COVER EQUAL TO OR GREATER THAN THE MAXIMUM EXPECTED FROST PENETRATION DEPTH.
7. A MINIMUM COVER OF 24-IN FOR PIPE SHALL BE REQUIRED WHEN SUBJECTED TO HEAVY OVERHEAD TRAFFIC. IN AREAS OF LIGHT OVERHEAD TRAFFIC A MINIMUM COVER OF 12 TO 18-IN IS REQUIRED.

GENERAL REQUIREMENTS FOR BEDDING AND BACKFILL

1. THE PIPE SHALL BE UNIFORMLY AND CONTINUOUSLY SUPPORTED OVER ITS ENTIRE LENGTH ON FIRM STABLE MATERIAL. BLOCKING SHALL NOT BE USED TO CHANGE PIPE GRADE OR TO INTERMITTENTLY SUPPORT PIPE ACROSS EXCAVATED SECTIONS.
2. PIPE SHALL BE PERMITTED TO BE INSTALLED IN A WIDE RANGE OF NATIVE SOILS. THE PIPE EMBEDMENT SHALL BE STABLE AND PLACED IN SUCH A MANNER AS TO EVENLY SUPPORT AND PHYSICALLY SHIELD THE PIPE FROM DAMAGE. ATTENTION SHALL BE GIVEN TO LOCAL PIPE LAYING EXPERIENCE WHICH SHALL INDICATE SOLUTIONS TO PARTICULAR PIPE BEDDING PROBLEMS.
3. THE PIPE EMBEDMENT MATERIALS SHALL BE STABLE, SUFFICIENTLY WORKABLE TO BE READILY PLACED UNDER THE SIDES OF THE PIPE TO PROVIDE SATISFACTORY HAUNCHING, AND READILY COMPACTABLE TO ACHIEVE SOIL DENSITIES SPECIFIED BY CONTRACT DOCUMENTS. THE EMBEDMENT SHALL BE EITHER CLASS I, II OR III SOILS, AS DESCRIBED IN BY ASTM D2774.
4. INITIAL BACKFILL MATERIALS SHALL BE PLACED IN COMPACTED LAYERS.
5. FOR INSTALLATIONS BENEATH PROPOSED VEHICULAR PAVING, CONTRACTOR SHALL PROVIDE CLASS I OR CLASS II MATERIAL TO BOTTOM OF PROPOSED PAVING ELEVATION.
6. ALL NATIVE AND OTHER MATERIALS IN THE PIPE EMBEDMENT ZONE SHALL BE FREE FROM REFUSE, ORGANIC MATERIAL, COBBLES, BOULDERS, LARGE ROCKS OR STONES, OR FROZEN SOILS.
7. THE PARTICLE SIZE OF MATERIAL IN CONTACT WITH THE PIPE SHALL NOT EXCEED THE FOLLOWING: 1/2-IN FOR PIPE TO 4-IN, 3/4-IN FOR PIPES 6 TO 8-IN; 1-IN FOR PIPES 10 TO 16-IN; AND 1-1/2-IN FOR LARGER PIPES. EACH SOIL LAYER SHALL BE SUFFICIENTLY COMPACTED TO UNIFORMLY DEVELOP LATERAL PASSIVE SOIL FORCES DURING THE BACKFILL OPERATION.
8. TO MINIMIZE DEFORMATION OF THINNER-WALLED PRESSURE PIPELINES, SUCH AS USED IN IRRIGATION, THE PIPELINE SHALL BE FIRST FILLED WITH WATER, ALL AIR REMOVED, AND KEPT FULL DURING THE BACKFILL OPERATION.
9. WHEN INSTALLING PIPE IN LOCATIONS WHERE RAPID MOVEMENT OF GROUND WATER SHALL RESULT IN MIGRATION OF SOIL FINES INTO, OUT OF, OR BETWEEN LAYERS OF THE EMBEDMENT MATERIAL, THE BEDDING AND BACK FILL SHALL BE OF SUCH GRADATION IN PARTICLE SIZE AS TO PRECLUDE THIS POSSIBILITY. SOIL MIGRATION SHALL ALSO BE CONTROLLED BY USING AN APPROPRIATE SOIL FILTER OR A GEOTEXTILE FILTER FABRIC BETWEEN COARSE EMBEDMENT AND FINE SOILS.
10. UNCOMPACTED FINAL BACKFILL CAN BE EITHER CLASS I, CLASS II, CLASS III, CLASS IV, OR CLASS V SOIL. IF BACKFILL IS TO BE COMPACTED, DO NOT USE CLASS V SOILS. THE FINAL BACKFILL SHALL BE PLACED AND SPREAD IN APPROXIMATELY UNIFORM LAYERS IN SUCH A MANNER AS TO FILL THE TRENCH COMPLETELY SO THAT THERE WILL BE NO UNFILLED SPACES UNDER OR ABOUT ROCKS OR LUMPS OF EARTH IN THE BACKFILL. LARGE ROCKS, STONES, FROZEN CLODS, AND OTHER DEBRIS GREATER THAN 3 IN-IN DIAMETER SHALL BE REMOVED. WHEN COMPACTION IS REQUIRED, ROLLING EQUIPMENT OR HEAVY TAMPERS SHALL ONLY BE USED TO COMPACT THE FINAL BACKFILL, PROVIDED THE PIPE IS COVERED BY AT LEAST 18-IN OF BACKFILL. TRENCHES UNDER PAVEMENTS, SIDEWALKS, OR ROADS SHALL BE BACKFILLED AND COMPACTED TO THE REQUIRED DENSITY SPECIFIED BY CONTRACT DOCUMENTS OR BY THE APPROPRIATE GOVERNMENT JURISDICTION.

COMPACTION REQUIREMENTS

1. FOUNDATION – IF TRENCH IS DRY, COMPACT TRENCH BOTTOM TO 95% SPD ASTM D698, AT ±3% OPTIMUM MOISTURE CONTENT. IF TRENCH IS WET, OVEREXCATE AND REPLACE WITH ASTM C-33 NO. 57 OR NO. 67 AGGREGATE COMPACTED TO 95% SPD ASTM D698.
2. PAVED AREAS – BEDDING, INITIAL BACKFILL, AND FINAL BACKFILL SHALL BE COMPACTED TO 95% SPD ASTM D698.
3. NON-PAVED AREAS – BEDDING AND INITIAL BACKFILL SHALL BE COMPACTED TO 95% SPD ASTM D698. FINAL BACKFILL SHALL BE COMPACTED TO 90% SPD STM D698.

Soil Classes (ASTM D2774) (A)

Class	Description	Percentage Passing Sieve Sizes			
		1.5-in	3/8-in	No. 4	No. 200
I	Crushed rock (B,C)	100% (D)	less than or equal to 25%	less than or equal to 15%	less than or equal to 12%
II	Clean, coarse grained soils E,F: SW, SP, GW, GP or any soil beginning with one of these symbols				less than or equal to 12% (E)
III	Coarse grained soils with fines: GM, GC, SM, SC, or any soil beginning with one of these symbols				
	Sandy or gravelly fine-grained soils: CL, ML, or any soil beginning with one of these symbols				< 70%
IV	Fine-grained soils: CL, ML, or any soil beginning with one of these symbols				> 70%
V	Fine-grained soils, organic soils, high compressibility silts and clays, organic soil: MH, CH, OL, OH, PT				

(A) Soil classification descriptions and symbols are in accordance with ASTM Practice D2487 and D2488.

(B) For Class I, all particle faces shall be fractured.

(C) Additional restrictions on Class I Material particle size: The particle size of material in contact with the pipe shall not exceed the following: 1/2-in for pipe to 4-in, 3/4-in for pipes 6 to 8-in; 1-in for pipes 10 to 16-in; and 1-1/2-in for larger pipes. Each soil layer shall be sufficiently compacted to uniformly develop lateral passive soil forces during the backfill operation.

(D) Sieves and sieve cloths shall be in accordance with ASTM Specification E11.

(C) Materials such as broken coral, shells, and recycled concrete, with less than 12% passing a No. 200 sieve, should be treated as Class II soils.

(F) Uniform fine sands (SP) with more than 50% passing a No. 100 sieve are very sensitive to moisture and should not be used as backfill unless specifically allowed in the contract documents. If use of these materials is allowed, compaction and handling procedures should follow the guidelines for Class III materials.

1 FORCE MAIN TRENCH DETAIL – PVC (ASTM D2774)

Scale: 1" = 1'

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

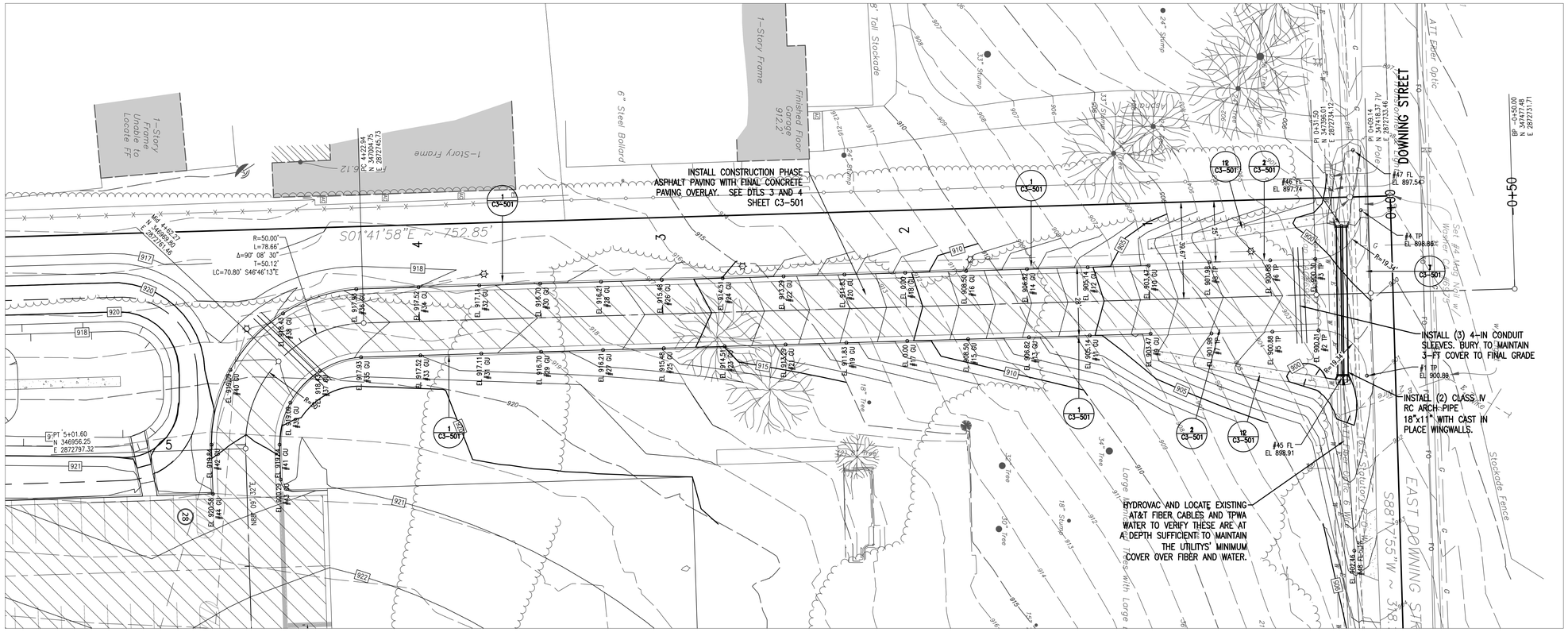
CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

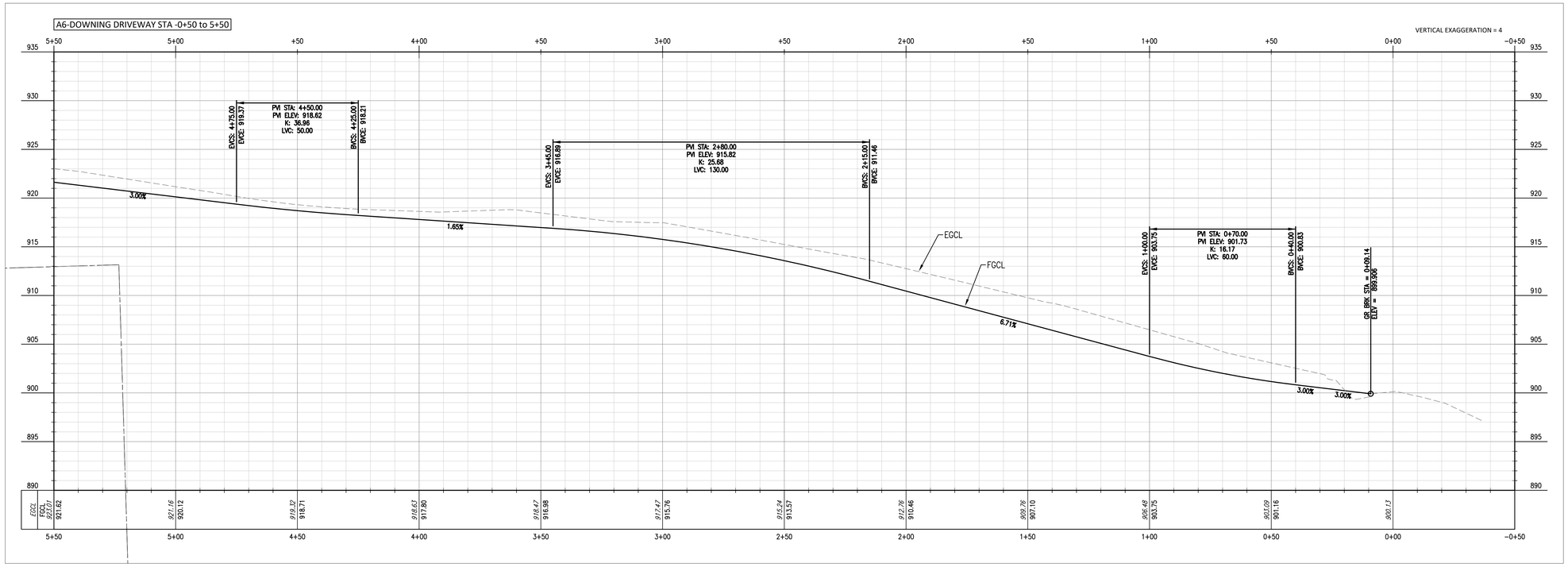
KEY PLAN:

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C8-501**
SHEET TITLE: FORCE MAIN DETAILS





SCALE: 1" = 20'

UTILITY WARNING:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

BEFORE YOU DIG
CALL OKIE
(800) 522-6543

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:
Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:
SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

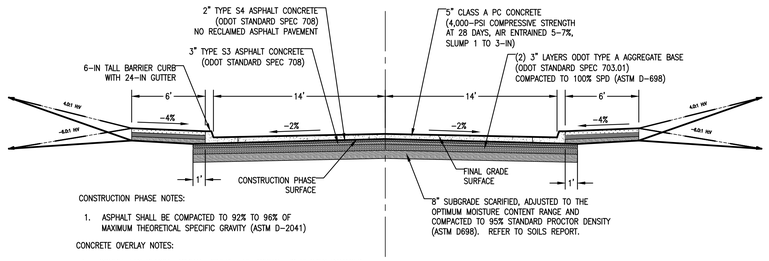
CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: C9-201
SHEET TITLE: DOWNING DRIVEWAY PLAN & PROFILE



CONSTRUCTION PHASE NOTES:

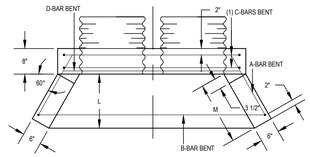
1. ASPHALT SHALL BE COMPACTED TO 92% TO 96% OF MAXIMUM THEORETICAL SPECIFIC GRAVITY (ASTM D-2041)

CONCRETE OVERLAY NOTES:

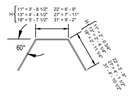
1. COMPLETELY REMOVE ASPHALT WHERE THE ASPHALT IS HEAVILY DAMAGED.
2. MILLED SURFACE SHALL BE SWEPT MULTIPLE TIMES AND AIR BLASTED TO REMOVE DEBRIS AND DUST PRIOR TO CONCRETE PLACEMENT.
3. JOINTS SHALL BE PROVIDED IN 6-FT BY 6-FT PANELS.
4. SAWED JOINTS SHALL BE CUT AS SOON AS CONCRETE HAS GAINED SUFFICIENT STRENGTH TO ALLOW SAWING WITHOUT RAVELING.
5. CONTRACTOR SHALL HAVE SUFFICIENT EQUIPMENT AND MANPOWER FOR THE SAW JOINTING PROCESS.

1 DOWNEY DRIVEWAY TYPICAL SECTION

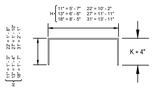
Scale: 1" = 1'



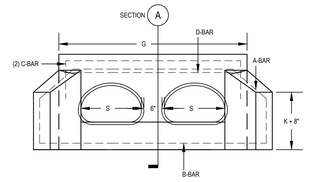
PLAN



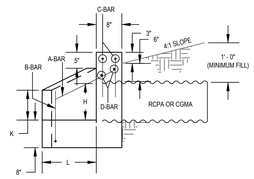
A-BAR BENDING DIAGRAM



B-BAR BENDING DIAGRAM



ELEVATION



SECTION A

C-BAR BENDING DIAGRAM

DIMENSIONS AND QUANTITIES FOR STEEL FOR METAL PIPE ARCH

S	H	A-BARS				B-BARS				C-BARS				D-BARS			
		FORM	#	SIZE	LENGTH	FORM	#	SIZE	LENGTH	FORM	#	SIZE	LENGTH	FORM	#	SIZE	LENGTH
18"	11"	BENT	1	1/2" Ø	7' - 10"	BENT	1	1/2" Ø	8' - 1"	BENT	2	1/2" Ø	6' - 4"	STR.	1	1/2" Ø	4' - 4"
22"	13"	BENT	1	1/2" Ø	9' - 1"	BENT	1	1/2" Ø	9' - 2"	BENT	2	1/2" Ø	7' - 0"	STR.	1	1/2" Ø	5' - 0"
29"	18"	BENT	1	1/2" Ø	11' - 6"	BENT	1	1/2" Ø	11' - 7"	BENT	2	1/2" Ø	8' - 3"	STR.	1	1/2" Ø	6' - 3"
36"	22"	BENT	1	1/2" Ø	13' - 9"	BENT	1	1/2" Ø	13' - 6"	BENT	2	1/2" Ø	9' - 5"	STR.	1	1/2" Ø	7' - 5"
43"	27"	BENT	1	1/2" Ø	16' - 2"	BENT	1	1/2" Ø	15' - 7"	BENT	2	1/2" Ø	10' - 7"	STR.	1	1/2" Ø	8' - 7"
50"	31"	BENT	1	1/2" Ø	18' - 11"	BENT	1	1/2" Ø	18' - 1"	BENT	2	1/2" Ø	11' - 10"	STR.	1	1/2" Ø	9' - 10"

DIMENSIONS FOR CONCRETE

S	H	AREA SQ. FT.	K	G	L	M
18"	11"	2.4	0' - 11"	4' - 8"	1' - 7"	1' - 10"
22"	13"	3.6	1' - 0"	5' - 4"	1' - 10"	2' - 1 1/2"
29"	18"	6.2	1' - 3"	6' - 7"	2' - 4"	2' - 8 1/2"
36"	22"	9.8	1' - 5"	7' - 9"	2' - 10"	3' - 3 1/2"
43"	27"	14.2	1' - 7 1/2"	8' - 11"	3' - 4 1/2"	3' - 11"
50"	31"	19.2	1' - 10 1/2"	10' - 2"	4' - 0 1/2"	4' - 8"

QUANTITIES FOR TWO END WALLS

H	CLASS "A" CONC. C.Y.	REINFORCING STEEL LBS.
11"	0.99	44
13"	1.25	50
18"	1.84	62
22"	2.49	72
27"	3.31	83
31"	4.38	95

2 DOUBLE ARCH PIPE WINGWALLS

Scale: 1" = 1'

Point Table				
Point #	Elevation	Northing	Easting	Description
1	900.89	347416.80	2872767.39	TP
2	900.31	347396.91	2872748.77	TP
3	900.30	347395.58	2872719.46	TP
4	898.86	347414.32	2872699.44	TP
5	900.88	347377.96	2872749.33	TP
6	900.88	347377.09	2872720.01	TP
7	901.98	347352.97	2872750.07	TP
8	901.98	347352.10	2872720.75	TP
9	903.47	347327.96	2872750.15	GU
10	903.47	347327.13	2872722.16	GU
11	905.14	347302.97	2872750.89	GU
12	905.14	347302.14	2872722.90	GU
13	906.82	347277.98	2872751.63	GU
14	906.82	347277.15	2872723.64	GU
15	908.50	347252.99	2872752.37	GU
16	908.50	347252.16	2872724.39	GU
17	0.00	347228.00	2872753.11	GU
18	0.00	347227.17	2872725.13	GU
19	911.83	347203.01	2872753.86	GU
20	911.83	347202.18	2872725.87	GU

Point Table				
Point #	Elevation	Northing	Easting	Description
21	913.29	347178.03	2872754.60	GU
22	913.29	347177.20	2872726.61	GU
23	914.51	347153.04	2872755.34	GU
24	914.51	347152.21	2872727.35	GU
25	915.48	347128.05	2872756.08	GU
26	915.48	347127.22	2872728.09	GU
27	916.21	347103.06	2872756.82	GU
28	916.21	347102.23	2872728.83	GU
29	916.70	347077.64	2872757.58	GU
30	916.70	347077.24	2872729.57	GU
31	917.11	347053.08	2872758.30	GU
32	917.11	347052.25	2872730.32	GU
33	917.52	347028.09	2872759.05	GU
34	917.52	347027.26	2872731.06	GU
35	917.93	347003.68	2872759.80	GU
36	917.93	347001.70	2872731.87	GU
37	918.43	346986.78	2872765.42	GU
38	918.43	346971.65	2872741.86	GU
39	919.09	346974.63	2872778.45	GU
40	919.09	346950.06	2872765.03	GU

Point Table				
Point #	Elevation	Northing	Easting	Description
41	919.84	346970.23	2872795.71	GU
42	919.84	346942.23	2872795.71	GU
43	920.29	346970.67	2872810.05	GU
44	920.58	346942.85	2872815.94	GU
45	898.91	347406.96	2872767.51	FL
46	897.74	347406.31	2872705.81	FL
47	897.54	347411.06	2872674.75	FL
48	902.46	347411.64	2872839.24	FL
49	906.15	347416.24	2872909.94	FL

3 DOWNEY DRIVEWAY POINTS

Scale: 1" = 1'

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

REGISTERED PROFESSIONAL ENGINEER
COREY W. LIPPS
21291
7/29/22

CONSULTANT LOGO:

Parkhill
14101 Wireless Way, Suite 350
Oklahoma City, OK 73134
405-832-9900
www.parkhill.com
Oklahoma CA #4935, Expires 6/30/2023

CLIENT:

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING AND ACCESS)

REVISIONS

JOB NUMBER: 21-08.21
DATE: 07-29-22
SHEET NUMBER: **C9-501**
SHEET TITLE: DOWNING DRIVEWAY DETAILS

CHEROKEE NATION
REPLACEMENT HOSPITAL

BID PACKAGE 01

(NORTH PARKING & ACCESS)

VOLUME 07 OF 11

(ELECTRICAL)

PARKHILL
4101 WIRELESS WAY, SUITE 350
OKLAHOMA CITY, OK 73134
(405) 832-9900

CIVIL ENGINEERING

PALMERTON & PARRISH, INC.
4168 W. KEARNY ST.
SPRINGFIELD, MO 65803
(417) 864-6000

GEOTECHNICAL ENGINEERING

FEC HELIPORTS
5228 RIVER ROAD
CINCINNATI, OH 45233
(877) HELIPAD

HELIPAD DESIGN

HOWARD-FAIRBAIRN SITE DESIGN
3100 NW 149TH ST
OKLAHOMA CITY, OK 73134
(405) 752-8018

LANDSCAPE ARCHITECTURE

HKS
999 18th St, #2255N
DENVER, CO 80202
(303) 293-2903

INTERIOR ARCHITECTURE | INTERIOR DESIGN

FOY CONSULTING & ENGINEERING, LLC
6900 COLLEGE BLVD #600
OVERLAND, KS 66211
(913) 312-0075

STRUCTURAL ENGINEER

HP ENGINEERING, INC.
5504 PINNACLE POINTE DRIVE, SUITE 200
ROGERS, AR 72758
(479) 899-6370

MECHANICAL | ELECTRICAL | PLUMBING

INTERIOR LOGISTICS
1316 E 35TH PLACE, SUITE 100
TULSA, OK 74105
(918) 382-9120

EQUIPMENT | FURNITURE PLANING

MOBLEY FIRE PROTECTION
6242 LLANO AVE.
DALLAS, TX 75214
(817) 614-2361

FIRE PROTECTION | LIFE SAFETY

FDP
2655 VILLA CREEK DR. #233
DALLAS, TX 75234
(972) 245-5300

FOOD SERVICE

ECOWORKS STUDIO
659 AUBURN AVE. NE, SUITE 135
ATLANTA, GA 30312
(404) 480-4499

LEED CONSULTING

CRUX TECHNOLOGY + SECURITY SOLUTIONS
401 SOUTH BOSTON AVE, SUITE 500-15
TULSA, OK 74103
(800) 685-6440

LOW-VOLTAGE | IT | SECURITY

DIRECT 2 COMPLETION
7134 S. YALE AVE #400
TULSA, OK 74136
(918) 457-6905

OWNERS REPRESENTATIVE

FOREMAN MANHATTAN CONSTRUCTION TEAM
5601 S 122nd E AVE
TULSA, OK 74146
(918) 878-3492

CONSTRUCTION MANAGER

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

STATE OF OKLAHOMA
J. BRECK CHILDERS
5120
REGISTERED ARCHITECT
7/29/2022

CONSULTANT LOGO:

CLIENT:

CHEROKEE NATION
REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING & ACCESS)

REVISIONS

#	DATE	DESCRIPTION

JOB NUMBER: 21-08.21
DATE: 07-29-2022
SHEET NUMBER: **VOL 07**
SHEET TITLE: COVER SHEET

INDEX OF DRAWINGS - VOLUME 01 - CIVIL

SHEET NUMBER	SHEET NAME	BID PACKAGE 01 - 07-29-2022
GENERAL		
VOL 01	COVER SHEET	
G0.01	DRAWING INDEX	
CIVIL		
C0-102	GENERAL CIVIL NOTES - BP1	
C1-103	EXISTING CONDITIONS	
C1-104	EXISTING CONDITIONS	
C1-105	EXISTING CONDITIONS	
C2-108	NP DEMOLITION OVERVIEW	
C2-109	NP 1 DEMOLITION PLAN	
C2-110	NP2 DEMOLITION PLAN	
C2-111	NP3 DEMOLITION PLAN	
C2-112	NP4 DEMOLITION PLAN	
C2-113	NP5 DEMOLITION PLAN	
C2-702	NP EROSION CONTROL PLAN	
C2-750	EROSION CONTROL DETAILS	
C3-108	NP SITE PLAN OVERVIEW	
C3-109	NP1 SITE PLAN	
C3-110	NP2 SITE PLAN	
C3-111	NP3 SITE PLAN	
C3-112	NP4 SITE PLAN	
C3-113	NP5 SITE PLAN	
C3-501	SITE DETAILS	
C3-502	SITE DETAILS	
C3-503	CONCRETE PAVING JOINT DETAILS	
C5-113	NP GRADING OVERVIEW	
C5-114	NP1 GRADING PLAN	
C5-115	NP2 GRADING PLAN	
C5-116	NP3 GRADING PLAN	
C5-117	NP4 GRADING PLAN	
C5-118	NP5 GRADING PLAN	
C5-210	NP COORDINATES AND ELEVATIONS TABLE	
C6-201	NP STORM PLAN & PROFILE	
C6-202	NP STORM PLAN & PROFILE	
C6-501	STORM DRAIN DETAILS	
C6-502	STORM DRAIN DETAILS	
C6-503	STORM DRAIN DETAILS	
C6-504	STORM DRAIN DETAILS	
C6-505	STORM DRAIN DETAILS	
C6-802	NP EXISTING HYDROLOGY	
C6-803	NP DEVELOPMENT HYDROLOGY	
C8-201	FORCE MAIN PLAN & PROFILE	
C8-501	FORCE MAIN DETAILS	
C9-201	DOWNING DRIVEWAY PLAN AND PROFILE	
C9-501	DOWNING DRIVEWAY DETAILS	

Grand total: 43

INDEX OF DRAWINGS - VOLUME 07 - ELECTRICAL

SHEET NUMBER	SHEET NAME	BID PACKAGE 01 - 07-29-2022
GENERAL		
VOL 07	COVER SHEET	
G0.01	DRAWING INDEX	
ELECTRICAL		
ENL-00	ELECTRICAL LEGEND	
ENL-01	ELECTRICAL SITE PLAN - NORTH LOT	

Grand total: 4

INDEX OF DRAWINGS - VOLUME 09 - LVIT/SECURITY/DAS

SHEET NUMBER	SHEET NAME	BID PACKAGE 01 - 07-29-2022
GENERAL		
VOL 09	COVER SHEET	
G0.01	DRAWING INDEX	
SECURITY		
TNS1.02	NETWORK SITE PLAN - NORTH PARKING & ACCESS	

Grand total: 3

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

CONSULTANT LOGO:

CLIENT:

CHEROKEE NATION REPLACEMENT HOSPITAL

TAHLEQUAH, OKLAHOMA

KEY PLAN:

PROJECT PHASE:

BID PACKAGE 01

(NORTH PARKING & ACCESS)

REVISIONS

#	DATE	DESCRIPTION

JOB NUMBER: 21-08.21

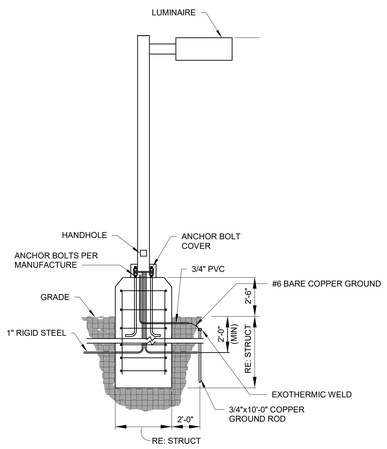
DATE: 07-29-2022

SHEET NUMBER:

G0.01

SHEET TITLE:

DRAWING INDEX



ELECTRICAL SERVICE NOTES

1	THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL SERVICE AND METERING REQUIREMENTS WITH THE UTILTY COMPANY PRIOR TO BID AND SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL MATERIAL AS REQUIRED BY THE SERVING UTILITY AS WELL AS COST INCURRED BY SERVING UTILITY.
2	THE ELECTRICAL CONTRACTOR SHALL VERIFY THE FAULT CURRENT AT THE SECONDARY OF THE TRANSFORMER WITH THE UTILITY COMPANY AND ADJUST THE ELECTRICAL PANEL AIC RATINGS TO THE NEXT HIGHER STANDARD RATING.
3	ALUMINUM SERVICE CONDUCTORS ARE NOT RECOMMENDED AND SHOULD ONLY BE USED WHERE ABSOLUTELY NECESSARY OR REQUIRED BY THE OWNER. CONTRACTOR TO CONTACT ENGINEER FOR SIZING. WHERE ALUMINUM CONDUCTORS ARE USED, THE OWNER SHALL PROVIDE ANNUAL MAINTENANCE OF ALL TERMINATIONS TO ENSURE SECURE CONNECTIONS. ALUMINUM WIRE WILL EXPAND AND CONTRACT AND OVER TIME MAY BECOME BRITTLE. THE OWNER SHALL ASSUME RESPONSIBILITY FOR USING ALUMINUM CONDUCTORS WITHOUT PROPER INSTALLATION, CARE, AND MAINTENANCE.
4	COORDINATE ALL SERVICE AND METERING DETAILS INCLUDING ANY RELOCATION OF EXISTING UTILITY LINES WITH POWER COMPANY.
5	CONTRACTOR TO CONFIRM EXACT LOCATION OF METERS WITH ELECTRIC UTILITY.
6	PAY ANY POWER COMPANY FEES CHARGED TO OWNER FOR SERVICE AND UTILITY LINE WORK ASSOCIATED WITH THIS PROJECT. THESE COSTS SHALL BE INCLUDED IN BIDS.
7	FURNISH AND INSTALL MATERIALS FOR A TEMPORARY CONSTRUCTION SERVICE AS REQUIRED.
8	FURNISH AND/OR INSTALL ALL REQUIRED MATERIAL AND LABOR IN COMPLIANCE WITH POWER COMPANY REQUIREMENTS TO PROVIDE A COMPLETE ELECTRICAL SERVICE, INCLUDING TRENCHING AND BACK FILLING, PRIMARY CONDUIT, CONCRETE TRANSFORMER PAD, SECONDARY CONDUITS AND CABLES, C.T. CABINET, METERING AND GROUNDING SYSTEM.

GENERAL LIGHTING NOTES

1	WHERE RECESSED LIGHTING FIXTURES ARE INDICATED IN A FIRE RATED CEILING, PROVIDE A ONE HOUR RATED "TENT" FOR FIXTURE
2	PROVIDE ALL MOUNTING AND SUPPORT HARDWARE FOR LIGHT FIXTURES TO MEET SPECIFIED MOUNTING HEIGHTS, REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT MOUNTING HEIGHTS OF FIXTURES.
3	CONNECT “UN-SWITCHED” HOT CONDUCTOR FROM CIRCUIT SERVING SPACE LIGHTING TO EACH EXIT SIGN, EMERGENCY LIGHT, AND ANY FIXTURE DESIGNATED AS NIGHT LIGHT SERVING THE SPACE.
4	COORDINATE ALL DEVICES AND WALL-MOUNTED LIGHT FIXTURE LOCATIONS WITH THE ARCHITECTURAL WALL FINISHES AND ELEVATIONS. SPECIAL ATTENTION AND COORDINATION OF WALL TYPES AND FINISHES IS REQUIRED PRIOR TO ROUGH-IN. EXACT LOCATION OF DEVICES SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO ROUGH-IN TO AVOID INSTALLATION ON SPECIAL ARCHITCTURAL WALL FINISHES. DEVICES NOT PROPERLY COORDINATED WITH THE SPECIAL WALL FINISHES INDICATED IN THE CONSTRUCTION DOCUMENTS PRIOR TO ROUGH-IN SHALL BE RELOCATED AT NO ADDITIONAL COST TO THE OWNER.
5	ELECTRICAL CONTRACTOR SHALL VERIFY CHEVRON DIRECTIONS OF ALL EXIT SIGNS PRIOR TO ORDERING.
6	FOR BATTERY FED EMERGENCY LIGHTS: PROVIDE EMERGENCY BALLAST. PROVIDE "HOT" WIRE TO EMERGENCY BALLAST. SWITCH FIXTURE AS INDICATED ON PLANS.
7	COORDINATE AND PROVIDE DIMMER SWITCHES RATED FOR AND COMPATABLE WITH INTENDED LIGHT FIXTURE(S) TO BE CONTROLLED. CIRCUITS CONTROLLED WITH LINE-VOLTAGE DIMMER SWITCHES SHALL NOT SHARE NEUTRAL CONDUCTORS.
8	FOR GENERATOR FED EXIT AND EMERGENCY LIGHTS: CIRCUITS SHALL HAVE RELAY FUNCTION OVERRIDE LIGHTING CONTROLS, DURING GENERATOR OPERATION.

GENERAL POWER NOTES

1	ALL RECEPTACLES SHALL BE GROUNDING TYPE.
2	ALL RECEPTACLES INSTALLED IN BATHROOMS, OUTDOORS AND KITCHENS SHALL HAVE GROUND-FAULT CIRCUIT INTERRUPTER PROTECTION AS REQUIRED BY THE NATIONAL ELECTRIC CODE.
3	COORDINATE MECHANICAL EQUIPMENT CONNECTION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN. LOCATE FEEDERS, DISCONNECTS AND MAINTENANCE RECEPTACLES SO THAT THEY WILL NOT INTERFERE WITH OPERATION OR MAINTENANCE OF MECHANICAL EQUIPMENT.
4	PROVIDE POWER TO MECHANICAL, PLUMBING, AND ALL OTHER EQUIPMENT AS REQUIRED FOR PROPER OPERATION, COORDINATE AND VERIFY EACH PIECE OF EQUIPMENTS POWER/CONTROL REQUIRMENTS PRIOR TO ORDERING RELATED ELECTRICAL EQUIPMENT. REFER TO RELATED MECHANICAL, PLUMBING, AND OTHER RELATED DOCUMENTS FOR LOCATIONS OF EQUIPMENT AND REQUIRED CLEARANCES AROUND EQUIPMENT.
5	COORDINATE EXACT MOUNTING HEIGHT OF EACH ABOVE COUNTER RECEPTACLE WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN.
6	ALL OUTLETS LOCATED IN AREAS REQUIRING GROUND-FAULT CIRCUIT INTERRUPTER PROTECTION PER NEC-210 SHALL CONSIST OF A GFCI PROTECTED DEVICE, EVEN IF NOT SPECIFICALLY INDICATED IN THE DRAWINGS. THE GROUND-FAULT CIRCUIT INTERRUPTER SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AS DEFINED IN THE NEC. ALL RECEPTACLES SUPPLIED THROUGH A GROUND-FAULT CIRCUIT INTERRUPTER SHALL BE MARKED "GFCI PROTECTED."

ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION
	POLE/AREA LIGHTS
	POST-TOP AREA LIGHT
	BOLLARD LIGHT
▨	DIAGONAL HATCH INDICATES LIGHT ON A CRITICAL CIRCUIT
■	SOLID HATCH INDICATES LIGHT ON AN EMERGENCY OR LIFE SAFETY CIRCUIT
	SINGLE POLE SWITCH
3	3-WAY SWITCH
4	4-WAY SWITCH
K	KEYED SWITCH
D	DIMMER SWITCH
OS	OCCUPANCY SENSOR W/ MANUAL SWITCH
T	TIMER SWITCH
TD	TIME DELAY SWITCH
TC	TIME CONTROL SWITCH
F P	FIRE ALARM PULL STATION
F	FIRE ALARM BELL
F	FIRE ALARM HORN W/STROBE
F S	FIRE ALARM SPEAKER W/STROBE
F	FIRE ALARM BELL W/STROBE
F	FIRE ALARM CHIME W/STROBE
	FIRE ALARM DOOR HOLDER
	FIRE ALARM DOOR CLOSER
FR	FIRE ALARM SHUT DOWN RELAY
	SPRINKLER FLOW SWITCH
	SPRINKLER VALVE TAMPER SWITCH
	THERMAL DETECTOR
S	DUCT SMOKE DETECTOR
	CEILING SMOKE DETECTOR

SYMBOL	DESCRIPTION
	SINGLE RECEPT.
	DUPLEX RECEPT.
48"	(DESIGNATES SPECIFIC MOUNTING HEIGHT) DUPLEX RECEPT.
GFI	GFI DUPLEX RECEPT. (FEED THROUGH)
GFI WP	GFI WEATHERPROOF RECEPT.
	SPLIT DUPLEX RECEPT.
	DUPLEX ISOLATED GROUND RECEPT.
	DUPLEX RECEPT. ON EMERG. CIRCUIT
	FLOOR DUPLEX RECEPT.
CLNG	CEILING DUPLEX RECEPT.
	FOURPLEX RECEPT.
	FOURPLEX RECEPT. ON EMERG. CIRCUIT
	240V RECEPTACLE
	SPECIAL RECEPT.
J	JUNCTION BOX
J	FLOOR JUNCTION BOX
J CLNG	CEILING JUNCTION BOX
	TELEPHONE OUTLET
	FLOOR TELEPHONE OUTLET
CR	CARD READER
	FLOOR DATA OUTLET
CLNG	CEILING DATA OUTLET
	SAFETY DISC. SW. (NON-FUSED)
	SAFETY DISC. SW. (FUSED)
P	POWER POLE (OPEN OFFICE STYLE)
	SURGERY SERVICE COLUMN

XX-1 MOTOR

XX-1 ← IDENTITY (SEE SCHEDULE)

EXISTING TO REMAIN	RELOCATED	DEMOLISHED
XX-1 XX-1	XX-1 XX-1	XX-1 XX-1

T1 TRANSFORMER

ELECTRICAL SYMBOL NOTES

S3 -<unnamed>
d

LIGHTING FIXTURE TAG DESCRIPTORS:
TOP VALUE: FIXTURE TYPE ID.
MIDDLE VALUE, NUMBER: PANEL AND CIRCUIT NUMBER
BOTTOM VALUE, LOWERCASE LETTER: SWITCH DESIGNATION.
ABSENCE OF A SWITCH ID INDICATES FIXTURE IS CONTROLLED BY THE ONLY SWITCH IN THE SPACE.
"x" IN PLACE OF THE SWITCH ID INDICATES NIGHT LIGHT, UNSWITCHED.

WX1 — EXIT LIGHTS. STEM INDICATES WALL MOUNTING. NO STEM INDICATES CEILING MOUNTING. SHADED AREA INDICATES ILLUMINATED FACE(S). ARROW INDICATES DIRECTIONAL ARROW ON ILLUMINATED FACE(S).

<unnamed> — DEVICES. TAG INDICATES PANEL AND CIRCUIT NUMBER. THE SWITCH DESIGNATION IS INDICATED BY A LOWER CASE LETTER. EXAMPLE: SPLIT DUPLEX RECEPTACLE IS CONNECTED TO CIRCUIT 1 AND ONE RECEPTACLE OUTLET IS CONTROLLED BY SWITCH "d".

d — THE CONTROL DEVICE DESIGNATION IS INDICATED BY A LOWER CASE LETTER. EXAMPLE: SINGLE POLE SWITCH "d" TO CONTROL LIGHTING FIXTURES INDICATED BY "d".

D e — WALL BOX DIMMER. EXAMPLE: CONTROL LIGHTING FIXTURES INDICATED BY "e". SEE SPECIFICATIONS FOR WATTAGE.

FLOORBOX WITH DATA: LEGRAND WIREMOLD SERIES RFB4E-OG OR RFB6E-OG WITH EVOLUTION COVER. ROUTE (2)1" FOR DATA FROM FLOOR BOX TO NEAREST ACCESSIBLE CEILING SPACE. ON FLOOR LEVELS WITH ACCESSIBLE SPACE BELOW, USE POKE-THRU STYLE FLOOR BOXES: LEGRAND 6AT SERIES. SEE ARCHITECTURAL PLANS FOR LOCATION UON. POWER AND DATA CONDUITS SHALL BE ROUTED UNDER/IN THE SLAB TO NEAREST ACCESSIBLE FULL HEIGHT WALL.

SURFACE MOUNTED PANELBOARD

PANELBOARDS. PANELBOARD DOORS MAY BE SHOWN TO INDICATE OPENING SIDE OF RECESSED PANELBOARDS. SEE PANELBOARD IDENTIFICATION FOR DESIGNATION CODES.

FLOOR CLEARANCE AREA

XX-1 — MOTOR CONNECTIONS. THE MOTOR IS INDICATED BY A NUMBER WITHIN OR CHARACTERS ADJACENT TO THE MOTOR SYMBOL. SEE THE MOTOR AND EQUIPMENT SCHEDULE FOR THE MOTOR DESCRIPTION AND ELECTRICAL REQUIREMENTS.

T1 — TRANSFORMERS. THE TRANSFORMER TYPE IS INDICATED BY A NUMBER FOLLOWING THE UPPER CASE LETTER "T". SEE THE TRANSFORMER SCHEDULE OR THE SINGLE LINE DIAGRAM FOR THE TRANSFORMER DESCRIPTION AND REQUIREMENTS. EXAMPLE: TRANSFORMER TYPE "T1".

GRAPHICAL REPRESENTATION OF PHASING, TYPICAL FOR ALL SYMBOLS.

- EXISTING TO REMAIN
- EXISTING TO BE REMOVED
- NEW

ITEM TO BE REMOVED ■

AREA NOT IN CONTRACT ▩

REVISION NUMBER - SHOWN ON PLANS

NUMBER OF DETAIL ON SHEET

EX-XX ← NUMBER OF SHEET WHERE DETAIL APPEARS

1 — KEYED NOTE (SEE SCHEDULE)

Room 6 — ROOM NAME AND NUMBER

PANELBOARD IDENTIFICATION

IPL1N1

*1. VOLTAGE:
L = 208Y/120V
H = 480Y/277V

*PREFIX 'IP-' DESIGNATES INTEGRATED POWER CENTER - PANELBOARD AND TRANSFORMER IN A SINGLE ENCLOSURE. REFERENCE PANEL SCHEDULES FOR ADDITIONAL INFORMATION.

2. FLOOR LEVEL:
B = BASEMENT
1 = 1ST FLOOR
2 = 2ND FLOOR
3 = 3RD FLOOR
ETC.

3. SYSTEM DESIGNATION:
N = NORMAL
U = UNINTERRUPTIBLE POWER SOURCE
P = POWER CONDITIONED
C = EMERGENCY POWER, CRITICAL BRANCH
L = EMERGENCY POWER, LIFE SAFETY BRANCH
EQ = EMERGENCY POWER, EQUIPMENT BRANCH

4. SEQUENCE:
- NUMBER INDICATES PANELBOARD ON EACH FLOOR

ELECTRICAL ABBREVIATIONS LIST

1P	1 POLE (2P, 3P, 4P, ETC.)
A	AMPERE
AC	ABOVE COUNTER
ACLG	ABOVE CEILING
ADO	AUTOMATIC DOOR OPENER
AF	AMP FRAME
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFI	ARC FAULT CIRCUIT INTERRUPTER
AHU	AIR HANDLING UNIT
AL	ALUMINUM
ALT	ALTERNATE
AMP	AMPERE
AMPL	AMPLIFIER
ANNUN	ANNUNCIATOR
APPROX	APPROXIMATELY
AQ-STAT	AQUASTAT
ARCH	ARCHITECT, ARCHITECTURAL
AS	AMP SWITCH
AT	AMP TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AV	AUDIO VISUAL
AWG	AMERICAN WIRE GAUGE
BATT	BATTERY
BD	BOARD
BLDG	BUILDING
BMS	BUILDING MANAGEMENT SYSTEM
C	CONDUIT
CAB	CABINET
CAT	CATALOG
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CLG	CEILING
COMB	COMBINATION
CMPR	COMPRESSOR
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUATION OR CONTINUOUS
CONTR	CONTRACTOR
CONV	CONVECTOR
CP	CIRCULATING PUMP
CRT	CATHODE-RAY TUBE
CT	CURRENT TRANSFORMER
CTR	CENTER
CU	COPPER
DCP	DOMESTIC WATER CIRCULATING PUMP
DEPT	DEPARTMENT
DET	DETAIL
DIA	DIAMETER
DISC	DISCONNECT
DIST	DISTRIBUTION
DN	DOWN
DPR	DAMPER
DS	SAFETY DISCONNECT SWITCH
DT	DOUBLE THROW
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
ELEC	ELECTRIC, ELECTRICAL
ELEV	ELEVATOR
ELU	EMERGENCY LIGHTING UNIT
EM	EMERGENCY
EMS	ENERGY MANAGEMENT SYSTEM
EMT	ELECTRICAL METALLIC TUBING
EP	ELECTRIC PNEUMATIC
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EXIST	EXISTING
EXH	EXHAUST
EXP	EXPLOSION PROOF
FA	FIRE ALARM
FABP	FIRE ALARM BOOSTER POWER SUPPLY PANEL
FACP	FIRE ALARM CONTROL PANEL
FCU	FAN COIL UNIT
FIXT	FIXTURE
FLR	FLOOR
FLUOR	FLUORESCENT
FU	FUSE
FUDS	FUSED SAFETY DISCONNECT SWITCH
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GEN	GENERATOR
GFI	GROUND FAULT CIRCUIT INTERRUPTER
GFP	GROUND FAULT PROTECTOR
GND	GROUND
GRS	GALVANIZED RIGID STEEL (CONDUIT)
GYP BD	GYPSUM BOARD
HOA	HANDS-OFF-AUTOMATIC SWITCH
HORIZ	HORIZONTAL
HP	HORSEPOWER
HPF	HIGH POWER FACTOR
HT	HEIGHT
HTG	HEATING
HTR	HEATER
HV	HIGH VOLTAGE
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
IC	INTERRUPTING CAPACITY
IG	ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
INCAND	INCANDESCENT
IR	INFRARED
I/W	INTERLOCK WITH
J-BOX	JUNCTION BOX
KV	KILOVOLT
KVA	KILOVOLT-AMPERE
KVAR	KILOVOLT-AMPERE REACTIVE
KW	KILOWATT
KWH	KILOWATT HOUR
LOC	LOCATE OR LOCATION
LT	LIGHT
LTG	LIGHTING
LTNG	LIGHTNING
LV	LOW VOLTAGE
MAX	MAXIMUM
MAG.S	MAGNETIC STARTER
M/C	MOMENTARY CONTACT
MC	MECHANICAL CONTRACTOR
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MDC	MAIN DISTRIBUTION CENTER
MDP	MAIN DISTRIBUTION PANEL
MFR	MANUFACTURER
MFS	MAIN FUSED DISCONNECT SW
MH	MANHOLE
MIC	MICROPHONE
MIN	MINIMUM
MISC	MISCELLANEOUS
MLO	MAIN LUGS ONLY
MMS	MANUAL MOTOR STARTER
MOA	MULTIOUTLET ASSEMBLY
MSP	MOTOR STARTER PANELBOARD
MSBD	MAIN SWITCHBOARD
MT	MOUNT
MT.C	EMPTY CONDUIT
MTS	MANUAL TRANSFER SWITCH
MTR	MOTOR, MOTORIZED
N.C.	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
NFDS	NON-FUSED SAFETY DISCONNECT SWITCH
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
N.O.	NORMALLY OPEN
NPF	NORMAL POWER FACTOR
NTS	NOT TO SCALE
OH	OVERHEAD
OL	OVERLOADS
PA	PUBLIC ADDRESS
PB	PULL BOX OR PUSHBUTTON
PE	PNEUMATIC ELECTRIC
PED	PEDESTAL
PF	POWER FACTOR
PH	PHASE
PIV	POST INDICATING VALVE
PNL	PANEL
PP	POWER POLE
PR	PAIR
PRI	PRIMARY
PROJ	PROJECTION
PRV	POWER ROOF VENTILATOR
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE (CONDUIT)
PWR	POWER
QUAN	QUANTITY
RCPT	RECEPTACLE
REQD	REQUIRED
RM	ROOM
RSC	RIGID STEEL CONDUIT
RTU	ROOF TOP UNIT
SC	SURFACE CONDUIT
SEC	SECONDARY
SHT	SHEET
SIM	SIMILAR
S/N	SOLID NEUTRAL
SPEC	SPECIFICATION
SPKR	SPEAKER
SP	SPARE
SR	SURFACE RACEWAY
SS	STAINLESS STEEL
SSW	SELECTOR SWITCH
S/S	STOP/START PUSHBUTTONS
STA	STATION
STD	STANDARD
SURF	SURFACE MOUNTED
SW	SWITCH
SWBD	SWITCHBOARD
SYM	SYMMETRICAL
SYS	SYSTEM
TEL	TELEPHONE
TEL/DATA	TELEPHONE/DATA
TERM	TERMINAL
TL	TWIST LOCK
TR	TAMPER RESISTANT
T-STAT	THERMOSTAT
TTC	TELEPHONE TERMINAL CABINET
TV	TELEVISION
TVTC	TELEVISION TERMINAL CABINET
TYP	TYPICAL
UC	UNDER COUNTER
UE	UNDERGROUND ELECTRICAL
UG	UNDERGROUND
UH	UNIT HEATER
UT	UNDERGROUND TELEPHONE
UTIL	UTILITY
UV	ULTRAVIOLET
V	VOLT
VA	VOLT-AMPERES
VDT	VIDEO DISPLAY TERMINAL
VERT	VERTICAL
VFD	VARIABLE FREQUENCY DRIVE
VOL	VOLUME
W	WATT
W/	WITH
WG	WIRE GUARD
WH	WATER HEATER
W/O	WITHOUT
WP	WEATHERPROOF
WR	WEATHER RESISTANT
XFMR	TRANSFORMER
XFR	TRANSFER
∠	ANGLE
@	AT
▲	DELTA
'	FEET
"	INCHES
#	NUMBER
Ø	PHASE
CL	CENTER LINE
P	PLATE

GENERAL ELECTRICAL NOTES

1	DRAWINGS ARE DIAGRAMMATIC ONLY AND REPRESENT THE GENERAL SCOPE OF THE WORK. REVIEW ALL GENERAL NOTES, SPECIFICATIONS AND PLANS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS.
2	SPECIAL ATTENTION SHALL BE GIVEN TO ALL RACEWAYS WITHIN FINISHED AREAS WITHOUT CEILINGS AND EXPOSED TO STRUCTURE. IN GENERAL, ALL RACEWAYS SHALL BE CONCEALED WITHIN WALLS, ABOVE STRUCTURE FINISH, OR BELOW FLOOR SLABS WHEN SPECIFIED. WHERE EXPOSED CONDITIONS ARE NECESSARY OR UNAVOIDABLE DUE TO OTHER CONDITIONS, THE BID SHALL INCLUDE ANY REASONABLE MEANS TO MINIMIZE THE AMOUNT OF SURFACE MOUNTED EQUIPMENT. PRIOR TO ROUGH-IN, COORDINATE ALL EXPOSED RACEWAY AND BOX CONDITIONS WITH ARCHITECT PRIOR TO CONSTRUCTION OF WALLS, ROOF DECK, OR FLOOR SLABS. ATTACHMENT TO ROOF DECK OR JOIST WEBBINGS IS NOT ALLOWED, MAINTAIN A MINIMUM SPACING OF 1-1/2” FROM CONDUIT TO ROOF DECK. IN AREAS WHERE EXPOSED RACEWAYS ARE REQUIRED, INSTALL SYSTEMS SQUARE AND TIGHT TO STRUCTURE AND PAINT TO MATCH THE STRUCTURE PER ARCHITECT AND/OR OWNER SPECIFICATIONS. FAILURE TO PROPERLY COORDINATE THE ROUTING OF EXPOSED RACEWAYS MAY RESULT IN RELOCATION OF SUCH RACEWAYS AT NO ADDITIONAL COST TO THE OWNER.
3	OPENINGS AROUND ELECTRICAL PENETRATIONS THROUGH FIRE-RESISTANT-RATED WALLS, PARTITIONS, FLOORS OR CEILINGS SHALL BE FIRESTOPPED USING APPROVED METHODS TO MAINTAIN THE FIRE RESISTANCE RATING. PROVIDE PENETRATION FIRE STOPPING WITH RATINGS DETERMINED PER ASTM E 814 OR UL 1479. FIRE STOPPING SHALL NOT BE LESS THAN FIRE RESISTANCE RATING OF CONSTRUCTED PENETRATIONS.
4	FIELD MOUNTED DEVICES SUCH AS SWITCHES, MOTOR STARTERS, RECEPTACLES, ETC., ARE SHOWN IN THEIR APPROXIMATE LOCATION. SWITCH MOUNTING HEIGHT SHALL BE 48" ABOVE FINISHED FLOOR AND RECEPTACLE MOUNTING HEIGHT SHALL BE 18" ABOVE FINISHED FLOOR UON. REFER TO THE TYPICAL MOUNTING HEIGHT DETAIL.
5	INSTALL EQUIPMENT IN A MANNER TO REMAIN ACCESSIBLE WITH REASONABLE MEANS BY THE OWNER FOLLOWING COMPLETION OF WORK. SPECIAL ATTENTION AND ADDITIONAL COORDINATION IS EXPECTED IN AREAS OF THE BUILDING WHERE THE CEILING AND STRUCTURE HEIGHTS HAVE SIGNIFICANT DIFFERENT ELEVATIONS. EQUIPMENT REQUIRING POSSIBLE FUTURE ACCESS SHALL BE INSTALLED SUCH THAT IT MAY BE SAFELY ACCESSED FROM A STANDARD STEP LADDER OR PERSONNEL LIFT SUITABLE FOR THE LOCATION AND CEILING HEIGHT, WITHOUT REMOVING OR DAMAGING THE CEILING GRID STRUCTURE.
6	COORDINATE ALL CEILING MOUNTED ELECTRICAL ITEMS WITH OTHER DISCIPLINES, WITH CEILING, AND STRUCTURE. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN.
7	FIELD VERIFY LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT, INCLUDING POWER POLES, TELEPHONE PEDESTALS, OVERHEAD AND UNDERGROUND FEEDERS, METERS, PANELS, DEVICES, ETC. PROVIDE FOR COORDINATION WITH EXISTING EQUIPMENT.
8	ROOM NAMES/NUMBERS SHOWN IN PANELBOARD SCHEDULES ARE PER ARCHITECTURAL FLOOR PLANS. CONTRACTOR SHALL PROVIDE FINALIZED PANELBOARD SCHEDULES AT COMPLETION OF PROJECT WITH OWNER PROVIDED ROOM NAMES/NUMBERS.
9	CONDUCTORS FOR BRANCH CIRCUITS AS DEFINED IN ARTICLE 100, SHALL BE SIZED TO PREVENT A VOLTAGE DROP EXCEEDING 3% AT THE FARTHEST LOAD, AND WHERE THE MAXIMUM TOTAL VOLTAGE DROP ON BOTH FEEDERS AND BRANCH CIRCUITS TO THE FARTHEST LOAD DOES NOT EXCEED 5%.
10	ALL WORK IS TO BE PERFORMED IN STRICT COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE, STATE LAWS, ALL AUTHORITIES HAVING JUISDICTION, AND ALL OTHER REGULATIONS GOVERNING WORK OF THIS NATURE.
11	THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK, MATERIAL, AND LABOR TO SATISFY A COMPLETE AND WORKING SYSTEM WHETHER SPECIFIED OR IMPLIED.
12	CONTRACTOR TO CONFIRM EXACT LOCATION OF EXISTING AND NEW EQUIPMENT.
13	THE CONTRACTOR SHALL FURNISH AND INSTALL ALL GROUNDING SYSTEMS (AS REQUIRED) IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.
14	ALL ELECTRIC MATERIALS AND EQUIPMENT FOR THE PROJECT SHALL BE NEW AND U.L. OR EQUALLY LISTED.
15	SUBMIT TO THE OWNER CERTIFICATES OF INSPECTIONS IN DUPLICATE FROM AN APPROVED INSPECTION AGENCY UPON COMPLETION.
16	THE CONTRACTOR SHALL SECURE ALL PERMITS OR APPLICATIONS AND PAY ANY AND ALL FEES AS REQUIRED,
17	THE CONTRACTOR SHALL FURNISH ALL INSTRUMENTS AND QUALIFIED PERSONNEL OR FIRM TO PERFORM ALL REQUIRED TESTS.
18	NO EQUIPMENT SHALL BE ENERGIZED UNTIL ALL TEST AND ADJUSTMENTS HAVE BEEN MADE. THREE COPIES OF ALL TEST RESULTS SHALL BE DELIVERED TO THE OWNER
19	ALL ELECTRICAL WORK SHALL BE COORDINATED WITH THE MECHANICAL WORK AS CALLED FOR IN MECHANICAL SPECIFICATIONS AND PLANS.
20	JUNCTION BOXES LOCATED ABOVE GRID CEILINGS SHALL BE LOCATED NO GREATER THAN 4-FEET ABOVE THE CEILING IN A LOCATION ACCESSIBLE VIA A LADDER FROM THE ROOM BELOW.
21	ALL WIRING DEVICE COVERPLATES SHALL INDICATE PANELBOARD AND CIRCUIT SERVING THE DEVICE. UTILIZE CLEAR VINYL (BLACK LETTERING) IDENTIFICATION LABLES MANUFACTURED BY 3M COMPANY (OR APPROVED EQUIVALENT).
22	THE TYPE OF CONDUIT SHALL BE AS FOLLOWS FOR ALL FEEDERS AND DISTRIBUTION CIRCUITS, UNLESS OTHERWISE SPECIFIED. APPLICATION - TYPE OF CONDUIT BURIED IN CONCRETE OR OUTDOORS - PVC WITH RIGID GALVANIZED STEEL ELBOWS SERVICE ENTRANCE - GALVANIZED RIGID STEEL OR SERVICE UTILITY SPECIFICATIONS.
23	SEISMIC PROTECTION FOR SEISMIC CONCERNS OF ALL BUILDING SYSTEMS INCLUDING BUT NOT LIMITED TO MECHANICAL, PLUMBING, AND ELECTRICAL MUST MEET MINIMUM REQUIREMENTS OF ALL APPLICABLE CODES FOR BUILDINGS’ CLASSIFIED SEISMIC USE GROUP AND SEISMIC DESIGN CATEGORY. ANY REQUIREMENTS FOR SEISMIC PROTECTION MEASURES TO BE APPLIED SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND/OR FEDERAL CODES AND WITH MANUFACTURER’S REQUIREMENTS, THE MOST STRINGENT SHALL APPLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE TYPE AND LOCATION OF SEISMIC RESTRAINTS REQUIRED FOR THE VARIOUS SYSTEM’S ELEMENTS CONTAINED IN THE CONSTRUCTION DOCUMENTS BASED ON THE RELATED SEISMIC CODE CRITERIA, THE SIZE AND WEIGHT OF THE SUPPORTED ELEMENT AND THE DISTANCE FROM STRUCTURE THAT THE ELEMENT WILL BE INSTALLED. IF REQUIRED BY LOCAL, STATE, FEDERAL CODES AND/OR OTHER AUTHORITY HAVING JURISDICTION (AHJ) THE CONTRACTOR SHALL SUBMIT DESCRIPTIVE CATALOG DATA OF SEISMIC RESTRAINTS, SHOP DRAWINGS SHOWING THE TYPES, LOCATIONS AND INSTALLATION DETAILS OF SEISMIC RESTRAINTS AND CALCULATIONS SHOWING THAT THE SEISMIC RESTRAINTS MEET THE SEISMIC REQUIREMENTS TO THE LOCAL AHJ FOR REVIEW AND APPROVAL. CALCULATIONS SHALL BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER, LICENSED IN THE STATE OF THE PROJECT LOCATION AND EMPLOYED BY THE MANUFACTURER OF THE SEISMIC RESTRAINT PRODUCTS. CALCULATIONS SHALL INCLUDE DEAD LOADS, STATIC SEISMIC LOADS AND CAPACITY OF MATERIALS UTILIZED FOR CONNECTIONS TO EQUIPMENT AND STRUCTURE.
24	UNLESS NOTED OTHERWISE PROVIDE MINIMUM #8 AWG CONDUCTORS IN 1" CONDUIT(S) FOR ALL UNDERGROUND SITE POWER AND LIGHTING CIRCUITS. INCREASE CONDUCTOR AND RELATED CONDUIT SIZE AS NOTED OR OTHERWISE REQUIRED TO LIMIT VOLTAGE DROP TO LESS THAN 5% FOR THE ENTIRE LENGTH OF SYSTEM.
25	UNDERGROUND UTILITIES/FEEDERS/BRANCH CIRCUITS/ETC. SHALL NOT BE ROUTED THROUGH OR WITHIN 25 FEET OF ANY AREAS DEDICATED FOR FUTURE BUILDING ADDITION.
26	DESIGNATED SPARE CIRCUIT BREAKERS SHALL BE PLACED IN THE OFF POSITION
27	PROVIDE EMT WITH PROPERLY INSTALLED COMPRESSION OR SET-SCREW TYPE FITTINGS AND AN INSULATED EQUIPMENT GROUNDING CONDUCTOR FOR ALL RACEWAYS SERVING EXAM ROOMS, LABS, AND OTHER RELATED ROOMS TO COMPLY WITH NEC, HEALTHCARE FACILITIES.

POLE BASE DETAIL SHOWN FOR ELECTRICAL INFORMATION AND COORDINATION ONLY

1 ENL.00 POLE BASE DETAIL
12" = 1'-0"

James R. Childers
Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
MICHAEL LEE WRIGHT
19889
CA5338(PE)
07/27/22

CONSULTANT LOGO:
HP ENGINEERING

CLIENT:

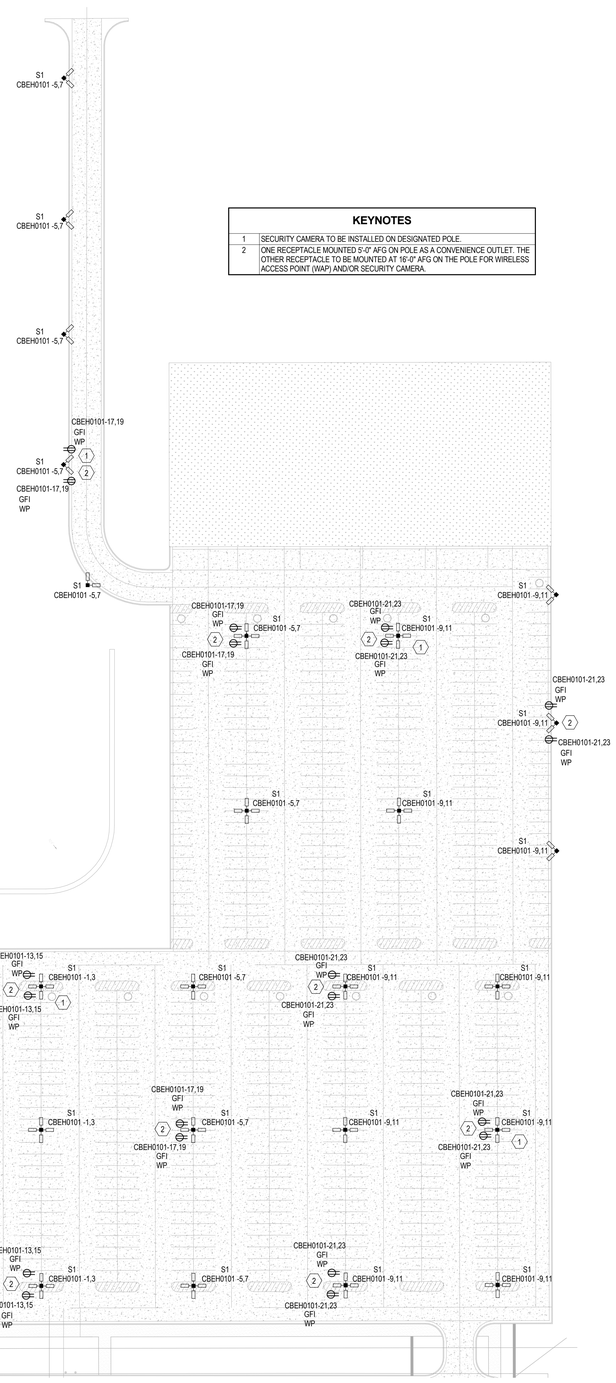
CHEROKEE NATION
REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING & ACCESS)

REVISIONS		
#	DATE	DESCRIPTION
		Title Sheet Revision

JOB NUMBER: 21-08.21
DATE: 07-29-2022
SHEET NUMBER: **ENL.00**
SHEET TITLE: ELECTRICAL LEGEND



1 ENL.01 NORTH LOT ELECTRICAL PLAN
1" = 50'-0"

KEYNOTES

1	SECURITY CAMERA TO BE INSTALLED ON DESIGNATED POLE.
2	ONE RECEPTACLE MOUNTED 5'-0" AFG ON POLE AS A CONVENIENCE OUTLET. THE OTHER RECEPTACLE TO BE MOUNTED AT 16'-0" AFG ON THE POLE FOR WIRELESS ACCESS POINT (WAP) AND/OR SECURITY CAMERA.

PANELBOARD NOTES (#)

1. TERMINATE GROUND ON ISOLATED GROUND BUS.
2. INSTALL LOCKING DEVICE FURNISHED WITH PANELBOARD (LOCK-OFF FOR MAINTENANCE).
3. INSTALL LOCKING DEVICE FURNISHED WITH PANELBOARD (LOCK-ON FOR CRITICAL LOAD).
4. GFI BREAKER FOR PERSONNEL PROTECTION (5mA).
5. GFI BREAKER FOR EQUIPMENT PROTECTION (30mA).
6. CONDUCTOR SIZE SHOWN IN PANEL SCHEDULE HAS BEEN INCREASED FOR VOLTAGE DROP. SIZE EQUIPMENT GROUND PROPORTIONALLY PER NEC. REFERENCE GROUND WIRE SIZING CHART.
7. REFER TO FAULT CURRENT SCHEDULE FOR AVAILABLE FAULT CURRENT FOR INTERRUPT RATINGS.
8. REFER TO ONE-LINE DIAGRAM FOR WIRE SIZES.
9. FACTORY WIRED TO LOAD.
10. THRU CONTROLLER. REFER TO LIGHTING CONTROLLER DETAIL.
11. ADD NEW CIRCUIT BREAKER TO EXISTING PANEL. NEW CIRCUIT BREAKER SHALL MATCH AIC RATING, MANUFACTURER, AND TYPE OF EXISTING CIRCUIT BREAKERS.
12. MATCH AIC RATING OF SERVICING DEVICE.

EQUIPMENT GROUNDING CONDUCTOR SIZING CHART

BRKR AMPS		WIRE SIZE				
15-20	PHASE	12	10	8	6	4
	GROUND	12	10	8	6	4
25-30	PHASE	10	8	6	4	3
	GROUND	10	8	6	4	3
35-50	PHASE	8	6	4	3	2
	GROUND	10	8	4	4	4
60	PHASE	6	4	3	2	1
	GROUND	10	6	6	4	4
70	PHASE	6	4	3	2	1
	GROUND	8	4	4	3	2
80-90	PHASE	4	3	2	1	1/0
	GROUND	8	6	4	4	3
100	PHASE	3	2	1	1/0	2/0
	GROUND	8	6	4	4	3
PER NEC 250.122(B)						

NORTH LOT LIGHTING FIXTURE SCHEDULE

TYPE	CONSTRUCTION		LIGHT SOURCE					ELECTRICAL SOURCE		PRODUCT	NOTE
	DESCRIPTION	MOUNTING	LAMP	DIMMING	LUMENS	CCT	CRI	VOLTAGE	WATTS	MFR	
S1	PARKING LOT LIGHT	30' SQUARE POLE	LED	N/A	12000	3000	70	480	85 W	LSI INDUSTRIES INC.	MRM-LED-12L-SIL-SW-HV-30-70CRI-WHT. WHITE FINISH POLE. B4-U0-G2 BUG RATING

PANELBOARD: CBEH0101 — EXISTING

Location: CNOHC ELEC ROOM 01-14-13
Supply From:
Mounting: SURFACE
Enclosure: NEMA 3R
Volts: 480Y/277
Phases: 3
Wires: 4
Mains Type: MLO
Mains Rating: 250 A

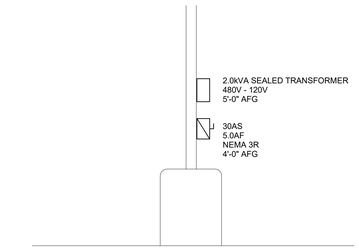
Notes:

CKT	Circuit Description	Trip	Poles	Wire	A		B		C		Wire	Poles	Trip	Circuit Description	CKT
1	NORTH LOT POLE LIGHTS (11)	20 A	2	#8	1.70 kVA	0.90 kVA									2
3							1.70 kVA	0.81 kVA			--	3	20 A	EXISTING	4
5	NORTH LOT POLE LIGHTS (11)	20 A	2	#8					1.42 kVA	0.81 kVA					6
7					1.42 kVA	1.65 kVA									8
9	NORTH LOT POLE LIGHTS (11)	20 A	2	#8			1.79 kVA	1.65 kVA			--	3	20 A	EXISTING	10
11									1.79 kVA	1.50 kVA					12
13	POLE RECEPS (11)	20 A	2	#8	0.90 kVA	0.68 kVA									14
15							0.90 kVA	0.68 kVA			--	3	20 A	EXISTING	16
17	POLE RECEPS (11)	20 A	2	#8					0.54 kVA	0.60 kVA					18
19					0.54 kVA	1.43 kVA									20
21	POLE RECEPS (11)	20 A	2	#8			0.90 kVA	1.73 kVA			--	3	20 A	EXISTING	22
23									0.90 kVA	1.43 kVA					24
25	SPARE	20 A	1	--	0.00 kVA	2.70 kVA									26
27	SPARE	20 A	1	--			0.00 kVA	2.70 kVA			--	3	20 A	EXISTING	28
29	SPARE	20 A	1	--					0.00 kVA	2.70 kVA					30
31	SPARE	20 A	1	--	0.00 kVA	0.68 kVA									32
33	SPARE	20 A	1	--			0.00 kVA	0.68 kVA			--	2	20 A	EXISTING	34
35	SPARE	20 A	1	--					0.00 kVA	0.50 kVA					36
37	SPARE	20 A	1	--	0.00 kVA	0.50 kVA					--	2	20 A	EXISTING	38
39	EXISTING	20 A	1	--			1.35 kVA	1.04 kVA			--	1	20 A	EXISITNG	40
41	EXISTING	20 A	1	--					0.20 kVA	0.99 kVA	--	1	20 A	EXISITNG	42
		Total Load:			13077 VA		15923 VA		13365 VA						
		Total Amps:			47.2 A		57.6 A		48.4 A						

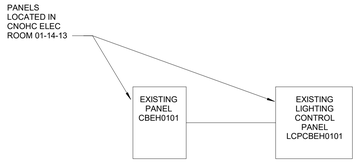
Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	4680 VA	100.00%	4680 VA		
Spare	27863 VA	100.00%	27863 VA	**Total Conn. Load:**	42365 VA
LITES	9822 VA	125.00%	12278 VA	**Total Est. Demand:**	44821 VA
				Total Conn.:	51.0 A
				Total Est. Demand:	53.9 A

Notes:



3 ENL.01 120V POWER AT POLE
NTS



2 ENL.01 ONE-LINE DIAGRAM
NTS

EQUIPMENT LABELS

ALL SWITCHBOARDS AND PANELBOARDS SHALL HAVE A LABEL APPLIED TO WARN OF POTENTIAL ARC FLASH HAZARDS

WARNING

ARC FLASH AND SHOCK HAZARD. APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE) REQUIRED.

NOTES:

A. ALL SWITCHBOARDS AND PANELBOARDS SHALL HAVE A COMMERCIALLY PRODUCED PERMANENT LABEL APPLIED, SIMILAR TO THE ABOVE, TO WARN OF POTENTIAL ARC FLASH HAZARDS, IN ACCORDANCE WITH NEC 110.16 AND NFPA 70E.

B. LABELING MAY BE COMPLETED BY EQUIPMENT MANUFACTURER, EQUIPMENT VENDOR/SUPPLIER, OR THE CONTRACTOR. THE CONTRACTOR SHALL VERIFY THAT ALL SWITCHBOARDS AND PANELBOARDS ARE PROPERLY LABELED IN THE FIELD.

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
MICHAEL LEE WRIGHT 19889 OKLAHOMA PROFESSIONAL ENGINEER
CANCELLED
07/27/22

CONSULTANT LOGO:
HP ENGINEERING

CLIENT:
SEAL OF THE CHEROKEE NATION SEPT. 6, 1839

CHEROKEE NATION
REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING & ACCESS)

REVISIONS

#	DATE	DESCRIPTION

JOB NUMBER: 21-08.21
DATE: 07-29-2022
SHEET NUMBER: **ENL.01**
SHEET TITLE: ELECTRICAL SITE PLAN - NORTH LOT

CHEROKEE NATION
REPLACEMENT HOSPITAL

BID PACKAGE 01

(NORTH PARKING & ACCESS)

VOLUME 09 OF 11

(AUDIO / VIDEO / DATA NETWORK / NURSE CALL / INTRUSION DETECTION / SPECIAL SYSTEMS / DAS)

PARKHILL
4101 WIRELESS WAY, SUITE 350
OKLAHOMA CITY, OK 73134
(405) 832-9900

CIVIL ENGINEERING

PALMERTON & PARRISH, INC.
4168 W. KEARNY ST.
SPRINGFIELD, MO 65803
(417) 864-6000

GEOTECHNICAL ENGINEERING

FEC HELIPORTS
5228 RIVER ROAD
CINCINNATI, OH 45233
(877) HELIPAD

HELIPAD DESIGN

HOWARD-FAIRBAIRN SITE DESIGN
3100 NW 149TH ST
OKLAHOMA CITY, OK 73134
(405) 752-8018

LANDSCAPE ARCHITECTURE

HKS
999 18th St, #2255N
DENVER, CO 80202
(303) 293-2903

INTERIOR ARCHITECTURE | INTERIOR DESIGN

FOY CONSULTING & ENGINEERING, LLC
6900 COLLEGE BLVD #600
OVERLAND, KS 66211
(913) 312-0075

STRUCTURAL ENGINEER

HP ENGINEERING, INC.
5504 PINNACLE POINTE DRIVE, SUITE 200
ROGERS, AR 72758
(479) 899-6370

MECHANICAL | ELECTRICAL | PLUMBING

INTERIOR LOGISTICS
1316 E 35TH PLACE, SUITE 100
TULSA, OK 74105
(918) 382-9120

EQUIPMENT | FURNITURE PLANING

MOBLEY FIRE PROTECTION
6242 LLANO AVE.
DALLAS, TX 75214
(817) 614-2361

FIRE PROTECTION | LIFE SAFETY

FDP
2655 VILLA CREEK DR. #233
DALLAS, TX 75234
(972) 245-5300

FOOD SERVICE

ECOWORKS STUDIO
659 AUBURN AVE. NE, SUITE 135
ATLANTA, GA 30312
(404) 480-4499

LEED CONSULTING

CRUX TECHNOLOGY + SECURITY SOLUTIONS
401 SOUTH BOSTON AVE, SUITE 500-15
TULSA, OK 74103
(800) 685-6440

LOW-VOLTAGE | IT | SECURITY

DIRECT 2 COMPLETION
7134 S. YALE AVE #400
TULSA, OK 74136
(918) 457-6905

OWNERS REPRESENTATIVE

FOREMAN MANHATTAN CONSTRUCTION TEAM
5601 S 122nd E AVE
TULSA, OK 74146
(918) 878-3492

CONSTRUCTION MANAGER

James R. Childers
Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

STATE OF OKLAHOMA
JAMES RANDALL CHILDERS
5120
REGISTERED ARCHITECT
7/29/2022

CONSULTANT LOGO:

CLIENT:

CHEROKEE NATION
REPLACEMENT HOSPITAL
TAHLEQUAH, OKLAHOMA

KEY PLAN:

PROJECT PHASE:
BID PACKAGE 01
(NORTH PARKING & ACCESS)

REVISIONS		
#	DATE	DESCRIPTION

JOB NUMBER: 21-08.21
DATE: 07/05/22
SHEET NUMBER: **VOL 09**
SHEET TITLE: COVER SHEET

INDEX OF DRAWINGS - VOLUME 01 - CIVIL

SHEET NUMBER	SHEET NAME	BID PACKAGE 01 - 07-29-2022
GENERAL		
VOL 01	COVER SHEET	
G0.01	DRAWING INDEX	
CIVIL		
C0-102	GENERAL CIVIL NOTES - BP1	
C1-103	EXISTING CONDITIONS	
C1-104	EXISTING CONDITIONS	
C1-105	EXISTING CONDITIONS	
C2-108	NP DEMOLITION OVERVIEW	
C2-109	NP 1 DEMOLITION PLAN	
C2-110	NP2 DEMOLITION PLAN	
C2-111	NP3 DEMOLITION PLAN	
C2-112	NP4 DEMOLITION PLAN	
C2-113	NP5 DEMOLITION PLAN	
C2-702	NP EROSION CONTROL PLAN	
C2-750	EROSION CONTROL DETAILS	
C3-108	NP SITE PLAN OVERVIEW	
C3-109	NP1 SITE PLAN	
C3-110	NP2 SITE PLAN	
C3-111	NP3 SITE PLAN	
C3-112	NP4 SITE PLAN	
C3-113	NP5 SITE PLAN	
C3-501	SITE DETAILS	
C3-502	SITE DETAILS	
C3-503	CONCRETE PAVING JOINT DETAILS	
C5-113	NP GRADING OVERVIEW	
C5-114	NP1 GRADING PLAN	
C5-115	NP2 GRADING PLAN	
C5-116	NP3 GRADING PLAN	
C5-117	NP4 GRADING PLAN	
C5-118	NP5 GRADING PLAN	
C5-210	NP COORDINATES AND ELEVATIONS TABLE	
C6-201	NP STORM PLAN & PROFILE	
C6-202	NP STORM PLAN & PROFILE	
C6-501	STORM DRAIN DETAILS	
C6-502	STORM DRAIN DETAILS	
C6-503	STORM DRAIN DETAILS	
C6-504	STORM DRAIN DETAILS	
C6-505	STORM DRAIN DETAILS	
C6-802	NP EXISTING HYDROLOGY	
C6-803	NP DEVELOPMENT HYDROLOGY	
C8-201	FORCE MAIN PLAN & PROFILE	
C8-501	FORCE MAIN DETAILS	
C9-201	DOWNING DRIVEWAY PLAN AND PROFILE	
C9-501	DOWNING DRIVEWAY DETAILS	

Grand total: 43

INDEX OF DRAWINGS - VOLUME 07 - ELECTRICAL

SHEET NUMBER	SHEET NAME	BID PACKAGE 01 - 07-29-2022
GENERAL		
VOL 07	COVER SHEET	
G0.01	DRAWING INDEX	
ELECTRICAL		
ENL-00	ELECTRICAL LEGEND	
ENL-01	ELECTRICAL SITE PLAN - NORTH LOT	

Grand total: 4

INDEX OF DRAWINGS - VOLUME 09 - LVIT/SECURITY/DAS

SHEET NUMBER	SHEET NAME	BID PACKAGE 01 - 07-29-2022
GENERAL		
VOL 09	COVER SHEET	
G0.01	DRAWING INDEX	
SECURITY		
TNS1.02	NETWORK SITE PLAN - NORTH PARKING & ACCESS	

Grand total: 3

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:

CONSULTANT LOGO:

CLIENT:

CHEROKEE NATION REPLACEMENT HOSPITAL

TAHLEQUAH, OKLAHOMA

KEY PLAN:

PROJECT PHASE:

BID PACKAGE 01

(NORTH PARKING & ACCESS)

REVISIONS

#	DATE	DESCRIPTION

JOB NUMBER: 21-08.21

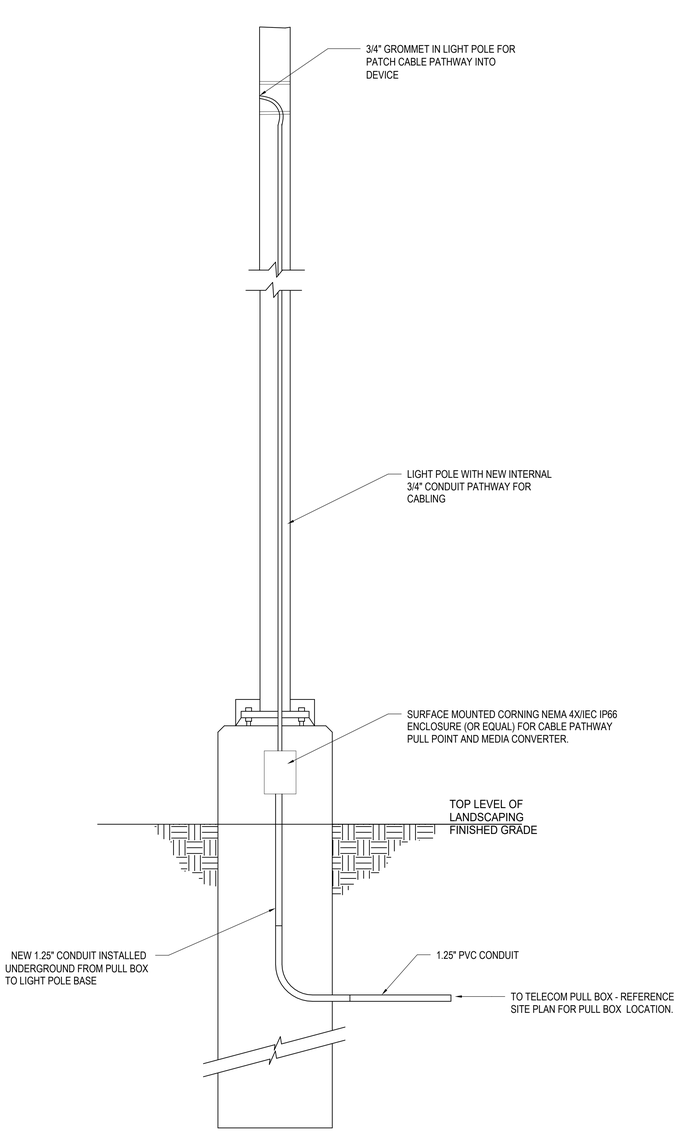
DATE: 07-29-2022

SHEET NUMBER:

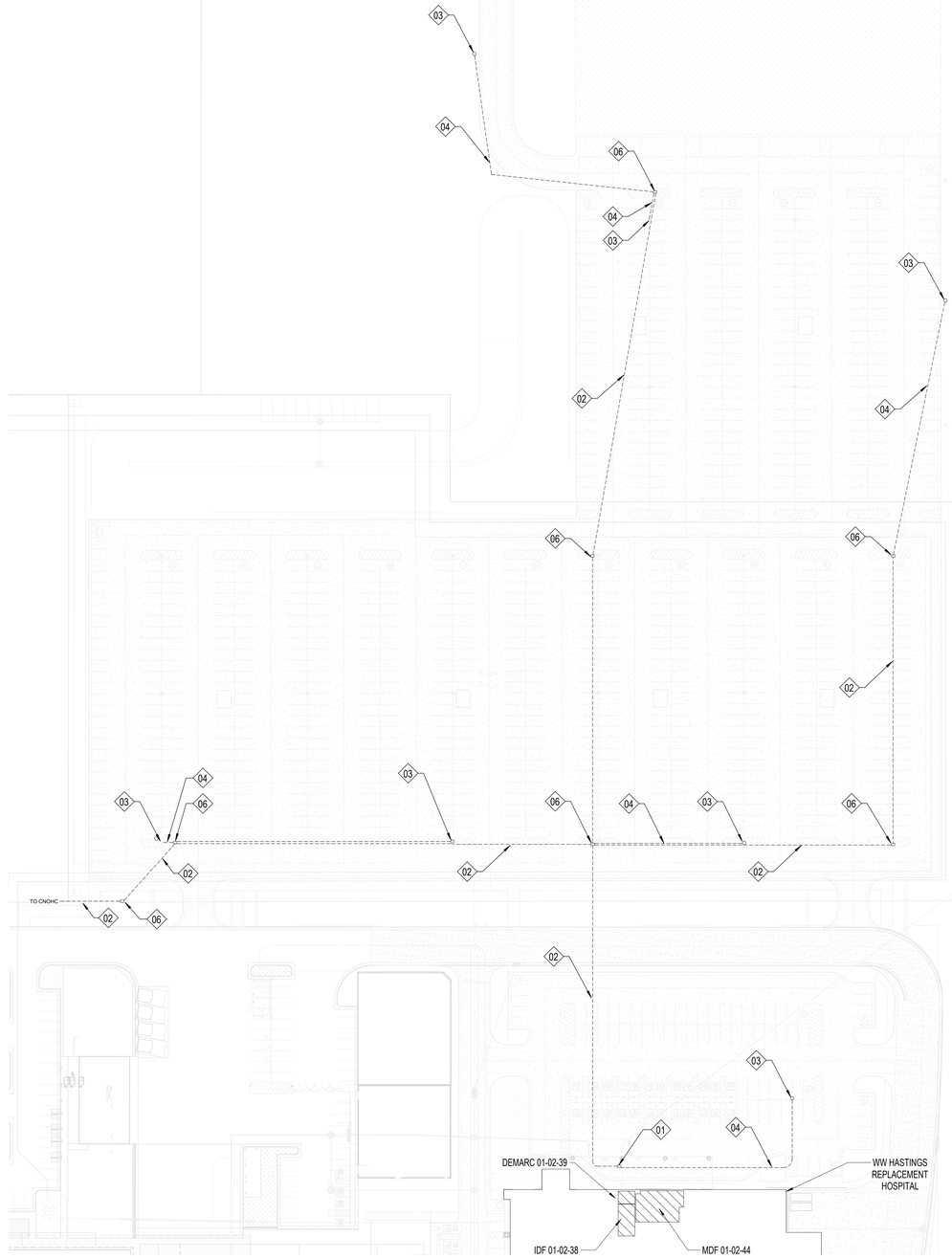
G0.01

SHEET TITLE:

DRAWING INDEX



02 EXT POLE NETWORK TERMINATION WITH UNDERGROUND CONDUIT
NTS



01 SITE PLAN NORTH PARKING
1" = 50'-0"

SHEET NOTES - SITE PLAN

REFERENCE SHEET TG1.1 FOR ALL SYMBOLS AND PROJECT SPECIFIC NOTES.

CONDUITS INSTALLED FOR COMMUNICATIONS CABLING SHALL OBSERVE THE FOLLOWING PRACTICES:

A. USE OF SHARP OR NINETY DEGREE BENDS ARE NOT ALLOWED. CHANGE OF DIRECTION SHALL USE WIDE SWEEPING RADIUS BENDS.
B) PULL BOXES SIZED TO ACCOMMODATE CABLE BEND RADIUS SHALL BE PLACED WHEN CONDUIT CHANGES DIRECTION AS SHOWN ON DRAWINGS.
C) CABLE PULLING TENSION SHALL NOT EXCEED THE MANUFACTURER'S RECOMMENDATIONS – PULL METER SHALL BE USED TO MEASURE TENSION.
D) CONDUIT PATHWAY SHALL BE PROVIDED WITH A METALLIC TRACER WIRE WITHIN THE SAME TRENCH AS THE CONDUIT INSTALLED AT THE SAME LEVEL FOR FUTURE LOCATION PURPOSES. IN ADDITION, A WEATHER PROOF "FIBER OPTIC CABLE" MARKER TAPE SHALL BE INSTALLED AT 18" ABOVE THE CONDUIT TO NOTIFY ANYONE DIGGING IN THE EVENT AN ELECTRONIC LOCATE WAS NOT PERFORMED TO TRACE IN GROUND CONDUITS.
E) CONTRACTOR IS RESPONSIBLE FOR SEALING CONDUITS INSIDE BUILDINGS TO ENSURE NO BUILDING INGRESS OF WATER, INSECTS OR RODENTS.
F) CONDUITS SHOULD TURN NO MORE THAT AN ACCUMULATED 180 DEGREES BETWEEN TWO PULL BOXES. IF FIELD CONDITIONS REQUIRE MORE THAN AN ACCUMULATED 180 DEGREE TURN(S) BETWEEN TWO PULL BOXES THE CONTRACTOR IS REQUIRED TO ADD A THIRD PULL BOX BETWEEN THE TWO AFOREMENTIONED PULL BOXES IN A LOCATION THAT REDUCES THE TURNS BETWEEN ANY TWO OF THE PULL BOXES TO LESS THAN 180 DEGREES.
E) DIV. 26 TO PROVIDE COMMUNICATIONS PATHWAY TO MONUMENT SIGH. REFERENCE ELECTRICAL SHEETS FOR CONDUIT PLACEMENT.

KEYNOTE LEGEND

(NOT ALL KEYNOTES MAY APPLY) X

01. 24" X 24" X 36" ANSI, AASHT0 H-20 TELECOMMUNICATIONS PULL BOX LOCATION. PULL BOX SHALL BE RATED FOR THE TERRAIN IT WILL BE INSTALLED IN. PULL BOXES INSTALLED IN PARKING LOTS OR DRIVEWAYS MUST BE RATED FOR SUCH AN ENVIRONMENT/LOAD. ALL PULL BOXES SHALL BE PROVIDED AND INSTALLED BY ELECTRICAL. COORDINATE FINAL LOCATIONS WITH OWNER AND LANDSCAPE ARCHITECT. ACCEPTABLE MANUFACTURER IS MARTIN INDUSTRIES OR OTHER APPROVED EQUAL.

02. 4" CONDUIT WITH THREE CHAMBER MAXCELL INNERDUCT BETWEEN PULL BOX LOCATIONS.

03. LIGHT POLE LOCATION WITH WAP AND/OR SURVEILLANCE CAMERA. REFERENCE ELECTRICAL SITE PLAN FOR EXACT LOCATION.

04. FURNISH 1-1/4" CONDUIT FOR SURVEILLANCE AND/OR WIRELESS ACCESS POINT CABLING FROM PULL BOX TO LIGHT POLE.

05. FURNISH 1-1/4" CONDUIT FOR FIBER OPTIC CABLING TO MONUMENT SIGN FROM PULL BOX.

06. 24" X 24" X 36" ANSI, TIER 5 TELECOMMUNICATIONS PULL BOX LOCATION. PULL BOX SHALL BE RATED FOR THE TERRAIN IT WILL BE INSTALLED IN. PULL BOXES INSTALLED IN PARKING LOTS OR DRIVEWAYS MUST BE RATED FOR SUCH AN ENVIRONMENT/LOAD. ALL PULL BOXES SHALL BE PROVIDED AND INSTALLED BY ELECTRICAL. COORDINATE FINAL LOCATIONS WITH OWNER AND LANDSCAPE ARCHITECT. ACCEPTABLE MANUFACTURER IS MARTIN INDUSTRIES OR OTHER APPROVED EQUAL.

James R. Childers Architect, Inc.
45 South 4th Street
Fort Smith, AR 72901
479-783-2480
www.childersarchitect.com

PROFESSIONAL SEAL:
REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Chance Sutton
BICSI ID # 112303
EXPIRES 12-31-23
RCDD

CONSULTANT LOGO:
CRUX
TECHNOLOGY + SECURITY CONSULTING
800.885.6440
www.cruxsolutions.com

Project No.	PDS	SEC	AV	NC
D-HPE-1007-01	JJW	CP	MB	CS

CLIENT:
SEAL OF THE CHEROKEE NATION
SEPT. 6, 1839

CHEROKEE NATION
W.W. HASTINGS REPLACEMENT HOSPITAL

KEY PLAN:

PROJECT PHASE:
DESIGN DEVELOPMENT
(NORTH PARKING AND ACCESS)

REVISIONS		
#	DATE	DESCRIPTION

JOB NUMBER: 21-08.21
DATE: 07-29-2022
SHEET NUMBER: **TNS1.02**
SHEET TITLE: NETWORK SITE PLAN - NORTH PARKING & ACCESS