

STORMWATER DRAIN #485: PHASE 1

TO SERVE

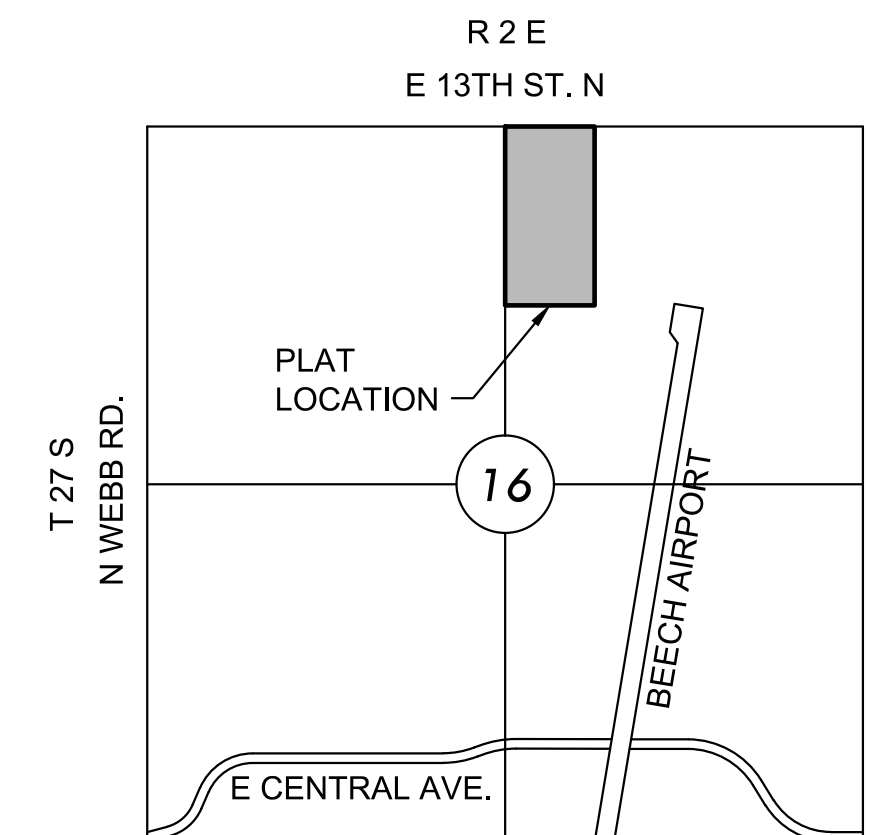
VERANDA SECOND ADDITION

THE CITY OF WICHITA, KANSAS
GARY JANZEN, P.E. - CITY ENGINEER

PROJECT NO. 458-2022-085491

ORG CODE 47310122

MUNIS NO. E2047



VICINITY MAP

No Scale

INDEX TO DRAWINGS

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BENCHMARKS

CONTROL POINTS:

CP 2
"+" CUT IN FRONT CENTER CURB INLET WITH MAGNAIL IN CENTER OF "+" CUT
N=1694401.257, E=1683542.233
ELEV: 1378.30

CP 3
MAGNAIL & WASHER SE CORNER CURB INLET
N=1694405.429, E=1683912.609
ELEV: 1383.39

CP 4
MAGNAIL & WASHER SE CORNER CURB INLET
N=1694412.863, E=1684311.498
ELEV: 1390.30

BENCHMARKS:

BM 1
SQ CUT ON HDWL S. SIDE OF 13TH
N=1694381.300, E=1683340.242
ELEV: 1377.82

DATUM:

THE HORIZONTAL DATUM IS BASED ON THE KANSAS COORDINATE SYSTEM OF 1983, NAD83(2011), EPOCH:2010.0000, SOUTH ZONE. COORDINATES SHOWN HAVE BEEN MODIFIED TO THE GROUND USING A COMBINED ADJUSTMENT FACTOR OF 1.0001200144. STATE PLANE COORDINATES CAN BE CALCULATED BY MULTIPLYING THE SHOWN VALUES BY 0.99988.

ALL ELEVATIONS SHOWN ARE BASED ON THE NAVD 88 VERTICAL DATUM, GEOID18.

NOTE:

ALL CONTROL POINTS SHOWN HAVE ELEVATIONS ESTABLISHED USING STANDARD SURVEYING PROCEDURES AND CAN BE USED AS TEMPORARY BENCHMARKS. WHEN USING A CONTROL POINT AS A TEMPORARY BENCHMARK, IT IS RECOMMENDED THAT CROSS-CHECKS BE MADE TO OTHER CONTROL POINTS OR BENCHMARKS TO CONFIRM ELEVATIONS PRIOR TO USE.

GENERAL GRADING NOTES

- THIS IS DESIGN GRADING. ALL GRADES ABOVE THE NORMAL POOL ELEVATION SHALL BE CONTOURED SMOOTHLY WITH GENTLE ROUNDING/SHAPING OF ALL AFFECTED LAND SURFACES. ABRUPT TRANSITIONS AT THE TOP OF SLOPES WHERE PROPOSED GRADES MEET EXISTING ARE NOT ACCEPTABLE. SURVEY STAKES FOR POND GRADING ARE FOR GENERAL GRADING PURPOSES ONLY. NOT ALL SLOPES ARE CONSTANT AND THEREFORE THE GRADING PLANS SHALL BE REFERRED TO FOR FINAL GRADE SHAPING. ALL BERMS & POND EDGES SHALL BE FINAL GRADED/SHAPED WITH A TRACK DOZER, NOT A BLADE.
- EXISTING NATURAL AREAS (TREES & PASTURE) OUTSIDE OF THE NOTED LIMITS OF GRADING SHALL BE PRESERVED & SHALL BE OFF LIMITS TO ANY TYPE OF CONSTRUCTION ACTIVITY. TEMPORARY CONSTRUCTION FENCE SHALL BE ERECTED AROUND NOTED LOCATIONS PRIOR TO THE START OF CONSTRUCTION.
- REMOVAL OF EXISTING DRIVES, PAVEMENT, STRUCTURES, AND DEBRIS SHALL BE SUBSIDIARY TO SITE CLEARING AND RESTORATION.
- A 6" LAYER OF TOPSOIL SHALL BE STRIPPED IN ALL AREAS OF CUT AND FILL AND SAVED BACK FOR REPLACEMENT ON LOTS AND POND RESERVE AREAS INDICATED. ANY EXCESS TOPSOIL SHALL BE SEPARATELY STOCK PILED ON-SITE AT AN APPROVED LOCATION. NO TOPSOIL SHALL BE PLACED WITHIN STREET RIGHT-OF-WAY, UNLESS SPECIFICALLY NOTED.
- TOPSOIL SHALL BE REPLACED AT A DEPTH OF 6" (MIN.) ON ALL POND RESERVE AREAS AND LOTS. THE FINISHED GRADE SHOWN ON THE PLANS INDICATES THE SURFACE ELEVATION AFTER THE TOPSOIL LAYER HAS BEEN PLACED.
- AS THE PROJECT NEARS COMPLETION, THE CONTRACTOR SHALL RIP (SCARIFY) ALL HAUL ROADS WITH AN AGRICULTURAL IMPLEMENT INTENDED FOR SUCH PURPOSES TO A DEPTH OF 18". MULTIPLE PASSES MAY BE NECESSARY TO THOROUGHLY ALLEVIATE COMPACTION.

Stormwater Certification:

New Development

Stormwater Permit # N/A - future individual lot permits

NOI Permit # KS # S-AR94-1770 FED # KSR120658

These construction plans were prepared in accordance with the current Stormwater management Regulations as set forth in the City of Wichita's Stormwater Management Ordinance 16.32 and the policies/guidelines presented in the Wichita/Sedgwick County Stormwater Manual.

Site Area (Acres) = 19.4 AC

Disturbed Area (Acres) = 5.1 AC

Water Quality Treatment: N/A - future individual lot permits

Downstream Channel Protection: 5.71 ac-ft

Detention: 1.20 ac-ft

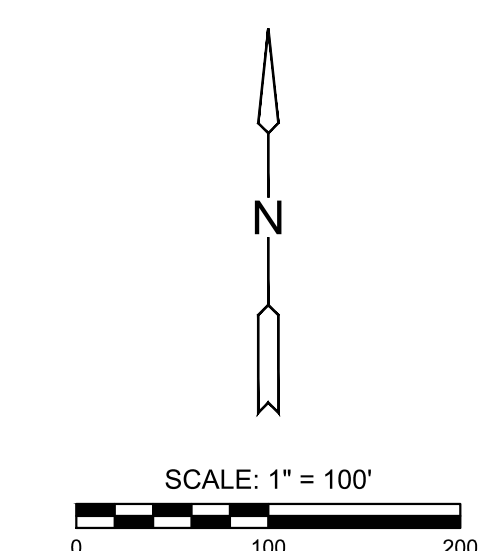
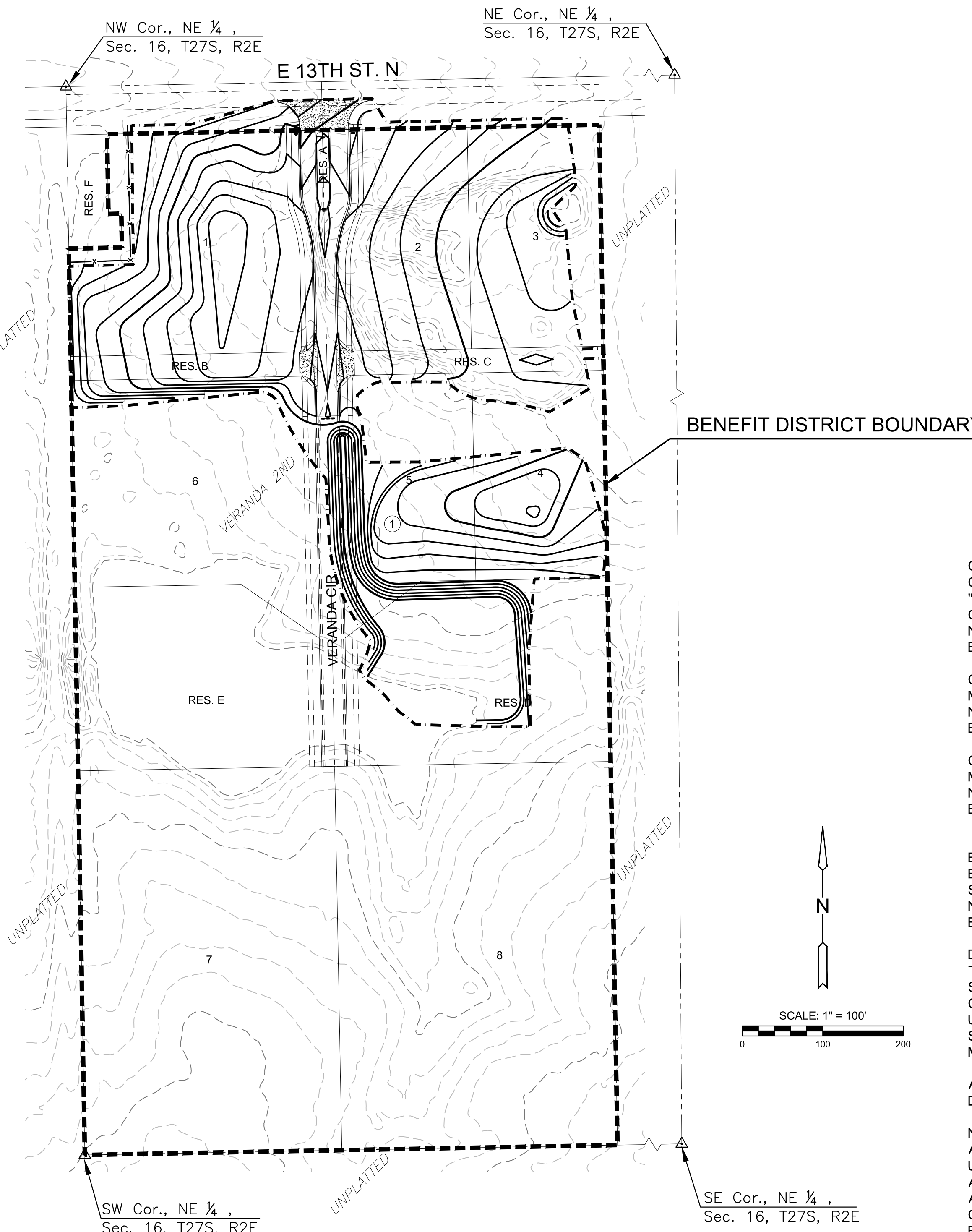
The BMP used for this development is N/A - future individual lot permits

EARTHWORK SUMMARY

EXCAVATION 13,500 C.Y.
*COMPACTED FILL (95%) 12,500 C.Y.

* 15% SHRINK/SWELL FACTOR ADDED

EXCESS MATERIAL TO BE PLACED & COMPACTED ON LOTS 4 & 5.



GENERAL NOTES

- UNLESS SHOWN OR STATED OTHERWISE ON THESE DRAWINGS, MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF WICHITA SPECIFICATIONS & SPECIAL PROVISIONS.
- CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF SEVENTY-TWO (72) HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:

KANSAS ONE-CALL 1-800-344-7233
OR (LOCAL WICHITA) 687-2470

THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:

AT&T 1-800-246-8464
BLACK HILLS ENERGY (GAS) 1-800-694-8989
CITY OF WICHITA WATER & SEWER 1-316-262-6000
CITY OF WICHITA STORMWATER 1-316-268-4498
CITY OF WICHITA TRAFFIC 1-316-268-4501
COX COMMUNICATIONS 1-866-744-0179
KANSAS GAS SERVICE 1-888-482-4950
EVERGY 1-800-544-4857

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.
- EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED.
- RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND FLOOD PLAIN WOULD REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WOULD REQUIRE ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.
- EXCESS EXCAVATION SHALL BE STOCKPILED ON-SITE IN A LOCATION APPROVED BY THE FIELD ENGINEER.
- STAKING, TESTING AND INSPECTION WILL BE PROVIDED BY THE CITY OF WICHITA, EXCEPT AS NOTED IN NOTE #13 BELOW.
- ALL COMPACTION OF EARTHWORK SHALL BE 95% STANDARD DENSITY IN ACCORDANCE WITH ASTM D-698.
- ALL TREE AND HEDGE REMOVAL SHALL BE DONE IN ACCORDANCE WITH C.O.W. STANDARD SPECIFICATIONS SECTION 202.2. ROOTS SHALL BE REMOVED TO A DEPTH OF 24" BELOW EXISTING GRADE WITHIN THE ENTIRETY OF TREE REMOVAL LIMITS SHOWN.
- ON-SITE BURNING SHALL BE ALLOWED BY OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE NECESSARY PERMITS THROUGH THE CITY OF WICHITA FIRE DEPT. & AIRPORT AUTHORITY. ON-SITE BURNING SHALL BE IN CONFORMANCE TO THE AMENDED CITY OF WICHITA BURN PERMIT REQUIREMENTS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND PROVIDE THEIR OWN DUE DILIGENCE FOR SITE CONDITIONS PRIOR TO BIDDING. INDIVIDUAL TREES OR GROUPINGS OF TREES ARE NOT SHOWN IN THIS PLAN SET. ALL TREES, SHRUBS, ETC. SHALL BE REMOVED WITHIN THE TREE REMOVAL AREA SHOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE QUANTITY OF TREE REMOVAL.
- THERE SHALL BE NO CLEARING OF CEDAR TREES PLANTED AROUND THE LIFT STATION AND LIFT STATION DRIVE IN THE NORTHWEST CORNER OF THE SITE. ALL SUCH TREES SHALL BE PRESERVED.
- COMPACTION TESTING, OUTSIDE OF THE RIGHT-OF-WAY, SHALL BE PROVIDED BY THE CONTRACTOR. TESTING SHALL BE PERFORMED UNDER THE DIRECTION OF A CERTIFIED ENGINEERING TECHNICIAN OR PROFESSIONAL ENGINEER. ALL TESTING METHODS AND EQUIPMENT SHALL BE BASED ON CURRENT ASTM AND/OR AASHTO REQUIREMENTS.

TESTING GUIDELINES:

- GENERAL EARTHWORK, OUTSIDE OF PAVEMENT AREAS, ONE NUCLEAR DENSITY TEST PER 8" LIFT PER 2,000 SY.

- PROPOSED GRADES IN THESE DRAWINGS REFLECT THE TOP OF ROADWAY ELEVATION. IT'S THE CONTRACTOR'S RESPONSIBILITY TO ADJUST THE ELEVATIONS TO REFLECT THE PAVEMENT AND ROCK THICKNESS. REFER TO PAVING PROJECT NO. 472-2022-085763 FOR DETAILS.

- DEVELOPER FOR THIS PROJECT IS:
LAHAM DEVELOPMENT
150 N MARKET
WICHITA, KS 67202
GEORGE E. LAHAM, II
316-292-3950

ROUTED: Pkwy, February 03, 2023 @ 08:12PM

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STORMWATER DRAINAGE PLANS FOR
VERANDA SECOND ADDITION
PHASE 1

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TITLE SHEET

PROJECT NO.	458-2022-085491	
DATE	JAN. 2023	
SCALE	1" = 100'	
DESIGNED	MKB	
DRAWN	CJL	
CHECKED	SPE	
NO.	REVISION	DATE
SHEET NO.		