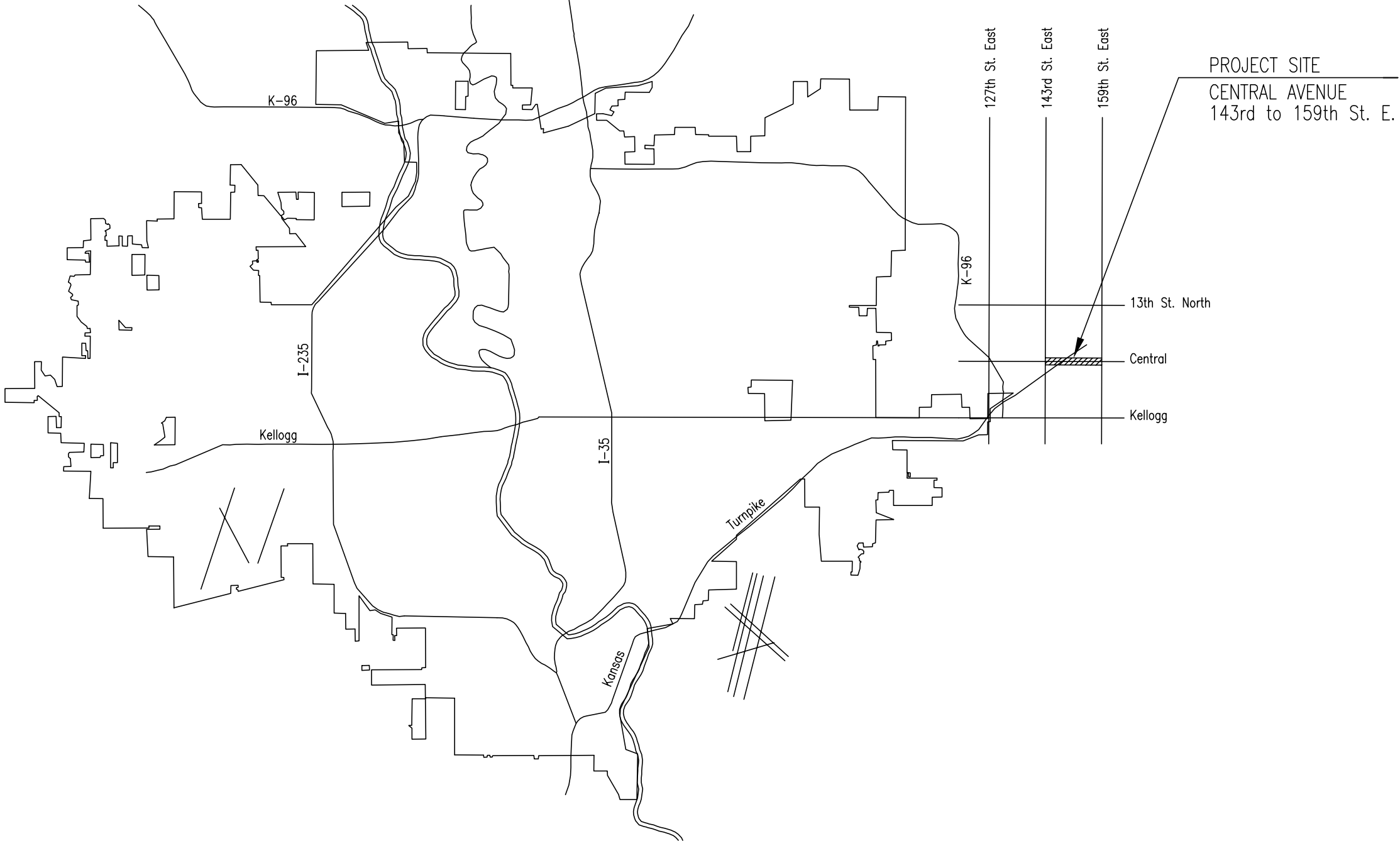


CONSTRUCTION PLANS FOR
20" WATERLINE IMPROVEMENTS
 IN
CENTRAL AVENUE
 143RD STREET EAST TO 159TH STREET EAST
 IN
THE CITY OF WICHITA,
 SEDGWICK COUNTY, KANSAS
 MICHAEL E. LINDEBAK, P.E. - CITY ENGINEER



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LOCATION MAP

OCA NO. 633734

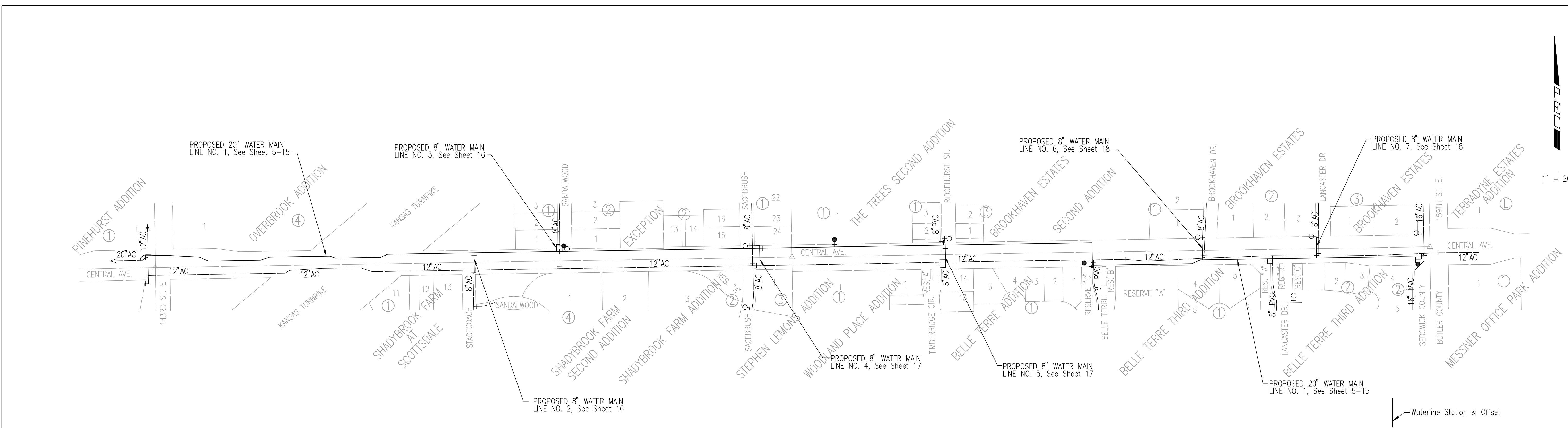
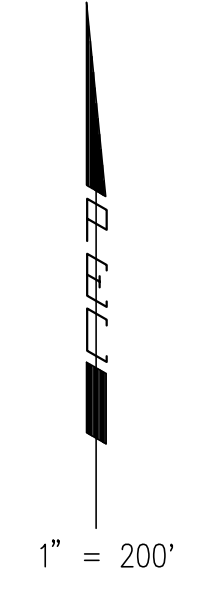
CITY OF WICHITA PROJECT NO. 448-89551

JANUARY 2002

PLANS PREPARED BY

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
 ENGINEERS
 WICHITA, KANSAS

PSNR: MDK OPER: DAW SCALE: 1=1.00
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GENERAL NOTES

- ALL ELEVATIONS SHOWN ARE USGS DATUM (USGS-1187.4- CITY OF WICHITA DATUM).
- CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF FORTY-EIGHT (48) HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:

| | |
|---|-----------------|
| KANSAS ONE-CALL | 687-2470 |
| THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY: | |
| COX COMMUNICATIONS | 262-0661 |
| KANSAS GAS SERVICE | 632-3169 |
| WESTAR ENERGY (FORMERLY KGE- ELECTRIC) | 393-8600 |
| PEOPLES NATURAL GAS | 1(800)-527-0357 |
| SOUTHWESTERN BELL TELEPHONE CO. | 1(800)-870-8390 |
| CITY OF WICHITA WATER DEPARTMENT | 268-4908 |
| CITY OF WICHITA SEWER MAINTENANCE | 268-4908 |
- UNDERGROUND UTILITY SERVICE LINES AND OVERHEAD UTILITY POLE LINES ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR OR UNLESS THE PLANS SPECIFICALLY IDENTIFY A UTILITY TO BE ADJUSTED BY ITS OWNER DURING CONSTRUCTION. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.
- ALL WATER MAINS AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF WICHITA, KANSAS STANDARD SPECIFICATIONS.
- THE WATER MAIN SHALL BE CONSTRUCTED ON THE ALIGNMENT SHOWN BY THE PLANS. TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE. THE COST FOR ANY NECESSARY TREE TRIMMING, CLEARING AND/OR GRUBBING SHALL BE SUBSIDIARY TO SITE CLEARING.
- OPENING AND CLOSING WATER VALVES SHALL BE DONE SLOWLY TO PREVENT DAMAGE TO THE WATER DISTRIBUTION SYSTEM FROM WATER HAMMER. ALL VALVES CLOSED BY THE CONTRACTOR MUST BE REOPENED AS NEW CONSTRUCTION PERMITS. PROJECT INSPECTOR MUST ASCERTAIN THAT ANY VALVE CLOSED BY THE CONTRACTOR IS REOPENED. CONTRACTOR WILL BE PERMITTED TO OPERATE WATER VALVES ONLY WHEN THE PROJECT INSPECTOR ASSIGNED TO THE PROJECT IS PRESENT.
- CONTRACTOR SHALL NOT START WORK ON THE PROJECT UNTIL THE PROJECT INSPECTOR IS ASSIGNED TO THE PROJECT AND IS PRESENT ON THE SITE. ANY WORK DONE WITHOUT INSPECTION WILL BE REQUIRED TO BE UNCOVERED FOR INSPECTION.
- THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY DIRECTLY ADJUTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF TEN (10) DAYS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL 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. ALL COSTS FOR THIS WORK SHALL BE SUBSIDIARY TO SITE RESTORATION.
- THE CONTRACTOR SHALL RESTORE ALL DITCHES, SWALES, ROAD SHOULDERS, ENTRANCES, AND BANK LINES TO THEIR ORIGINAL SLOPES AND GRADES EXCEPT AS SHOWN OTHERWISE.

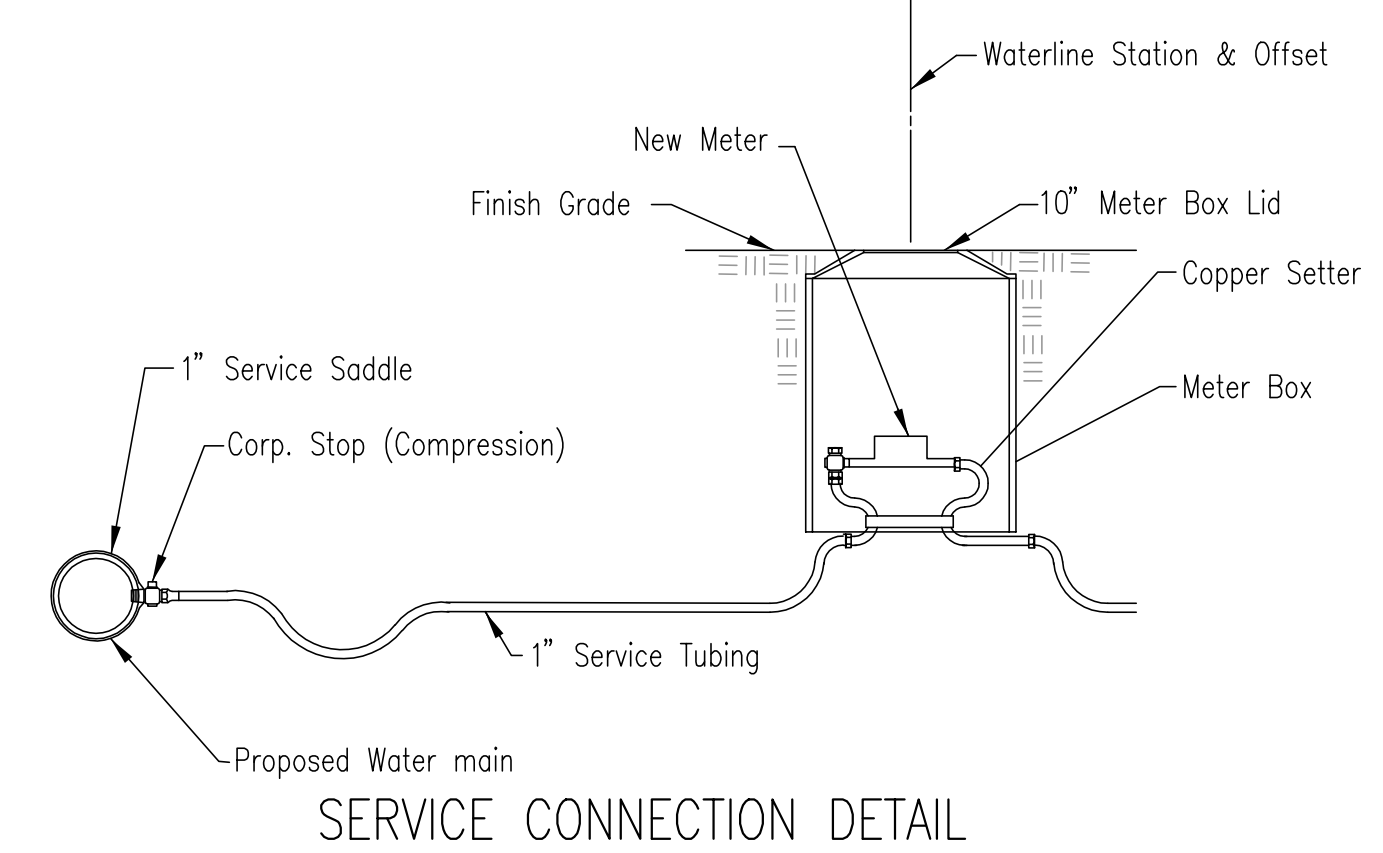
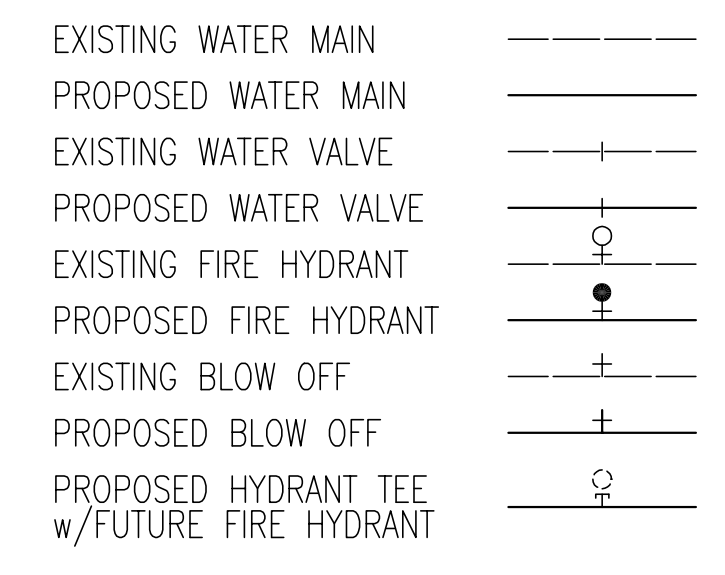
- NO NEW SERVICES WILL BE INSTALLED AS PART OF THIS PROJECT.
- RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES INCLUDING ANY TREES REMOVED AND TREE TRIMMINGS AND EXCESS EXCAVATED MATERIAL SHALL BE DISPOSED OF ON SITES PROVIDED BY THE CONTRACTOR. THESE SITES SHALL ALSO BE APPROVED OF BY THE ENGINEER AS TO SUITABILITY, APPEARANCE, AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WILL REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO US CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS MAY REQUIRE ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED DISPOSAL LOCATION.

- ALL LAWN/TURF AREAS DISTURBED BY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE RESTORED WITH THE SAME GRASS/SOD AS EXISTING. RESTORATION OF DISTURBED AREAS SHALL INCLUDE, BUT NOT BE LIMITED TO, TOP SOIL PREPARATION, SEEDING, MULCH, AND/OR RESEEDING. ALL SEEDING/SODDING WORK SHALL BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD SPECIFICATIONS AND THE CITY OF WICHITA ADMINISTRATIVE REGULATION NO. AR78 WHICH GOVERNS CLEANUP AND RESTORATION OR REPLACEMENT FOLLOWING CONSTRUCTION. ALL COSTS FOR THIS WORK SHALL BE SUBSIDIARY TO THE LUMP SUM PRICE BID FOR "SITE RESTORATION".
- THE TEST PRESSURE FOR THE NEWLY CONSTRUCTED WATERLINE SHALL BE 150 PSI, AND ALL FITTINGS, PIPE, AND APPURTENANCES INSTALLED SHALL HAVE A PRESSURE RATING OF 150 PSI (MIN.)
- THE CONTRACTOR SHALL SEED ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WITH TEMPORARY RYE GRASS. RYE GRASS SEED SHALL BE PLANTED AT A MINIMUM RATE OF SIX (6) POUNDS PER ONE THOUSAND (1,000) SQUARE FEET. THIS TEMPORARY SEEDING MAY BE OMITTED ONLY IF OTHER SEEDING IS REQUIRED IN ACCORDANCE WITH GENERAL NOTE NO. 13 ABOVE. TEMPORARY SEEDING OR PERMANENT SEEDING/SODDING SHALL BE APPLIED WITHIN 14 DAYS AFTER THE AREA HAS BEEN DISTURBED.
- IN LIEU OF UTILIZED CONCRETE THRUST BLOCK FOR THRUST RESTRAINT, THE CONTRACTOR MAY UTILIZE RESTRAINED JOINT PIPING AND FITTINGS AS APPROVED BY THE ENGINEER. RESTRAINED JOINT LENGTHS AND METHODS SHALL BE SUBMITTED FOR APPROVAL AT LEAST 10 DAYS PRIOR TO BIDDING.
- INTERURBAN TRAFFIC GENERATED OUTSIDE THE PROJECT AREA AND LOCAL BUSINESS OR RESIDENTIAL TRAFFIC GENERATED WITHIN THE PROJECT AREA ARE TO BE CARRIED THROUGH CONSTRUCTION AS FURTHER PROMULGATED BY PROJECT SPECIAL PROVISIONS. THE CONTRACTOR SHALL UTILIZE BARRICADES, SIGNS, GUARDS, AND FLAGMEN IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- PAVEMENT REMOVAL AND/OR REPLACEMENT WILL BE MEASURED AND PAID FOR ON THE LINEAL FOOT BASIS AS MEASURED ALONG THE CENTERLINE OF THE WATER LINE REGARDLESS OF WIDTH, PAVEMENT TYPE AND/OR PAVEMENT THICKNESS. MINIMUM LIMITS OF SUCH PAVEMENT REMOVAL AND REPLACEMENT SHALL BE ONE FOOT BEYOND THE LIMITS OF THE EXCAVATION MADE FOR THE WATER LINE OR THE STRUCTURE, EXCEPT WHEN SUCH SAW CUTS ARE WITHIN THREE (3) FEET OF AN EXISTING JOINT. REMOVAL AND REPLACEMENT OF EXISTING PAVEMENT SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE CITY OF WICHITA STANDARD SPECIFICATIONS.

- A SAW CUT OF AT LEAST ONE-HALF THE DEPTH OF EXISTING SURFACE COURSES OR ONE FOURTH THE DEPTH OF THE EXISTING TOTAL PAVEMENT THICKNESS SHALL BE PROVIDED AT LOCATIONS WHERE PROPOSED CONSTRUCTION ABUTS AN EXISTING SURFACE COURSE OR PAVEMENT FOR WHICH PARTIAL REMOVAL OF THAT SURFACE OR PAVEMENT IS REQUIRED, WHEN SUCH SAW CUTS ARE WITHIN THREE (3) FEET OF AN EXISTING JOINT THE LIMITS OF REMOVAL SHALL BE EXTENDED TO THE EXISTING JOINT. SUCH SAW CUTS WILL NOT BE PAID FOR DIRECTLY AND THIS COST SHALL BE CONSIDERED AS SUBSIDIARY TO THE REMOVAL OF THE SURFACE OR PAVEMENT.
- THE CONTRACTOR SHALL PROVIDE EROSION PROTECTION IN ACCORDANCE WITH THE STORM WATER PERMIT AND THE EROSION PROTECTION AND SEDIMENT BARRIER DETAILS. ALL COSTS ASSOCIATED WITH EROSION PROTECTION/STORM WATER MANAGEMENT (OTHER THAN SEDIMENT BARRIERS SPECIFIED IN THE PLANS) SHALL BE INCLUDED IN THE LUMP SUM BID FOR "SITE RESTORATION." ALSO, ANY SLOPES GREATER THAN 6 (HORIZ.): 1 (VERT.) THAT IS DISTURBED SHALL INCLUDE EROSION PROTECTION EITHER BY SEEDING/MULCHING, THE USE OF EROSION MATS, OR OTHER APPROVED METHODS. SLOPED AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE PROTECTED WITHIN 14 DAYS AFTER THE AREA IS DISTURBED.
- THE CONTRACTOR SHALL SUBMIT AN APPLICATION TO THE KANSAS TURNPIKE AUTHORITY FOR A "HIGHWAY CROSSING PERMIT" FOR THE "USE OF RIGHT-OF-WAY." COPIES OF THE KANSAS TURNPIKE AUTHORITY APPROVED PERMIT SHALL BE DELIVERED TO THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION. HIGHWAY CROSSING PERMIT FEES, IF ANY, SHALL BE BORNE BY THE CONTRACTOR. PERMIT FORMS FOR THIS PROJECT ARE AVAILABLE FROM THE KTA OFFICE LISTED BELOW:

 KANSAS TURNPIKE AUTHORITY
 DIVISION OF ENGINEER
 9401 E. KELLOGG
 WICHITA, KS 67207
 MR. PAUL CATER, P.E.
 682-4537, EXT. 2072
- THE CONTRACTOR MUST OBTAIN A COPY OF THE APPROVED SEDGWICK COUNTY "UTILITY PERMIT AGREEMENT" FOR "USE OF PUBLIC ROAD RIGHT-OF-WAY" PRIOR TO THE START OF CONSTRUCTION. SEE PROJECT SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION. PERMIT WILL BE OBTAINED BY THE CITY.
- THE CONTRACTOR SHALL PROVIDE MOUNDED EARTH AT MANHOLES, VALVE BOXES, AND AIR RELEASES THAT HAVE TOP ELEVATIONS GREATER THAN 0.5' ABOVE EXISTING GRADE, AS SHOWN ON THE PLANS.

LEGEND



All material used to complete the construction of service connections shall be in accordance with the City of Wichita Standard Specifications.

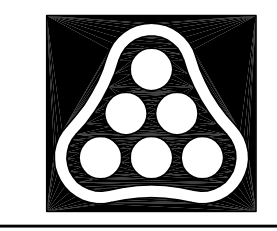
Existing meters and setters shall be salvaged to the City of Wichita Water and Sewer Department. Existing service lines to be abandoned shall be cut and capped. Existing meter boxes, rings, and lids shall be disposed of by the contractor.

Services will be bid on a per each basis for long and short services.
 Long Service line length is greater than 20'.
 Short Service line length is 20' or less.
 No adjustment in cost will be made for modifications to the approximate length as shown.
 The contractor will be reimbursed at the per each bid for services (long or short).
 Minimum depth of bury 60".

| METER NO. | BUILDING NO. | ADDRESS | STATIONING | WATERLINE STATION | DIST./DIRECTION |
|-----------|--------------|--------------|------------|-------------------|-----------------|
| 1 | 14800 | Central Ave. | 14+82.94 | 6.76'/Lt. | |
| 2 | 15024 | Central Ave. | 23+61.48 | 7.28'/Lt. | |
| 3 | 15200 | Central Ave. | 28+73.68 | 11.32'/Lt. | |
| 4 | 15215 | Central Ave. | 29+14.70 | 86.13'/Rt. | |
| 5 | 15315 | Central Ave. | 32+41.53 | 86.23'/Rt. | |
| 6 | 15820 | Central Ave. | 48+48.13 | 87.05'/Lt. | |

NOTE:
 Services crossing paved surfaces shall be installed by trenchless methods.

| | | | |
|--|----------|---------|--------------|
| No. | Revision | By | Date |
| CITY OF WICHITA, KANSAS MICHAEL E. LINDEBAK, P.E. - CITY ENGINEER 20" WATERLINE IMPROVEMENTS IN CENTRAL 143RD STREET EAST TO 159TH STREET EAST KEYMAP AND GENERAL NOTES CITY OF WICHITA PROJECT NO. 448-89551 Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003 | | | |
| Designed by | MDK | Job No. | 34-01257 |
| Drawn by | DAW | Date | June 2001 |
| | | | Sht. 2 of 27 |



NOTE: WATERLINE VALVES TO BE OPERATED BY CONTRACTOR ONLY IF WATER DEPARTMENT REPRESENTATIVE IS ON SITE.