

PLOTTED: Tuesday, September 03, 2019 @ 11:46AM

GENERAL NOTES

Unless shown or noted otherwise on these drawings, drawings, materials, and construction shall be in accordance with City of Wichita Standard Specifications and special provisions. References within these plans to KDOT Concrete Grades may be ignored.

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 (telephone) 1-800-870-8390
Cox Communications (cable) 262-0661
Westar (electric) 383-8600
Kansas Gas Service (gas) 1-888-482-4950
City of Wichita Water & Sewer Maint. 262-6000
Black Hills (gas) 1-800-694-8989
Verizon Wireless - VzB (MCI)
Verizon Wireless - VzW (Williams) 1-800-248-0133
Public Works & Utilities - Environmental Services (GW) 268-8351

The Contractor shall be responsible for preserving existing property irons shown on plans. The Contractor will be required to reestablish any shown property irons which are damaged or destroyed by his construction operations. Such irons shall be reestablished at the Contractor's expense by a licensed land surveyor in accordance with state laws.

Construction staking shall be performed by the City of Wichita Public Works Department. All staking performed by the City of Wichita will be done at no cost to the contractor. The contractor shall coordinate the survey staking with the City of Wichita Public Works Department and give the surveyor 24 hours notice when stakes are required.

Utility service lines, poles, valve boxes, meters, etc... are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the contractor. Existing utilities and their location, as shown on the plans, represent the best information obtainable for design. Some utilities have been relocated and may not reflect so on the plans. 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. The contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.

The contractor shall adjust water valve boxes as directed by the engineer at the price bid for said adjustments. The water department shall locate water valves one time during construction when requested by the contractor. It shall be the contractors responsibility to preserve such field locations during the construction process. Water valves or water valve boxes damaged during construction shall be repaired by the contractor at his own expense.

All stationing, radii, pavement widths, offset distances, etc... are measured to the back of the curb and gutter and along the project baseline unless otherwise noted on the plans. Spot elevations on plan sheets are at Back of Full-Height Curb and Gutter flow line. Spot elevations on Intersection Details are as noted. Cross-section elevations are existing surface and top of proposed surface at the project baseline.

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 Environment. Material either stockpiled or disposed of in a 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 archeological investigations unless buried in a previously approved borrow location. Millings from the "Mill and Overlay" operation shall become the property of the contractor and disposed of on sites provided by the contractor. These sites shall be approved by the Engineer as to suitability, appearance and site location.

A saw cut of at least one-half the depth of the 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 or Pavement for which partial removal of that surface or pavement is required. Saw Joint to facilitate removal within three (3) feet of Existing Joints will not be permitted and for such instances the Limits of Removal shall extend to the Existing Joint.

Contractor shall remove and deliver to 1801 S. McLean all traffic signal components, regulatory signs, street name signs, manhole frames and lids, removed hydrants, etc., noted for removal during construction. Contractor shall be responsible for the installation of new signs. All associated costs to transport the salvaged material will be Subsidiary to the bid item "Transportation of Salvaged Materials".

Unless otherwise shown on the plans, all asphaltic concrete pavement placed on city projects shall use PG 64-22 asphalt cement for the full thickness on non-arterial streets and private pavements, with BC-1 and SC-1 mix designs for base and surface asphalt, respectively. Arterial streets shall utilize a BM-2 mix design with PG 64-22 asphalt cement for the base and PG 70-28 for surface. Mill and overlay projects using BM1-B surface mixes shall also use PG 70-28 graded oil. The contractor may substitute an alternate grade of asphalt that complies with or exceeds the upper and lower grade designations for the grade specified. Such substitutions require advanced approval by the Engineer and any additional cost will be the responsibility of the contractor. All temporary asphalt pavement on the project shall be 6" asphalt meeting the specifications for City of Wichita BC-1 mix.

Bituminous pavement shall be placed with a laydown machine having automatic controls for line and grade.

A tack coat of emulsified Asphalt (SC-1H or CSS-1H) shall be applied at an approximate rate of 0.05 gal. per square yard between each lift of Bituminous Material.

Construction Joints in each lift shall be staggered a minimum distance of 12 inches from joints in preceding lifts and placed so that a joint will be constructed on the centerline of the top lift.

Crushed Rock Base is to be compacted and smoothed with a steel faced roller prior to placement of pavement. Tack coat will not be applied to Rock Base.

Inlet Hook-ups shall be constructed as indicated on the inlet detail drawings and shall be Bid as "Inlet Hookup". No distinction will be made between Hook-ups based on the size and type of inlet.

Contractor to erect temporary 4' tall plastic mesh safety fence with posts to prevent construction activities from encroaching onto adjacent private property at locations where temporary construction easement has not been obtained on adjacent properties. If easement has been obtained, fencing is not required. Driveways to be constructed half at a time shall not utilize this method of preventing private property encroachments. Fence shall be paid for as "Fence (Temporary Construction)" and will be paid for at the lump sum price to perform all temporary fence erections and removals. Work shall include all materials, equipment and labor necessary to install and remove the fence in segments necessary to accommodate constructions. Multiple erections and removals will be required. Materials may be reused as the contractor sees fit.

In locations where existing retaining walls abut proposed construction, the Contractor may not stand on or behind walls unless temporary construction easement is provided.

All areas disturbed by construction that are adjacent to developed properties shall be restored with sod to match existing turf type. Restoration of disturbed areas shall include, but not be limited to, top soil preparation and sodding. All Sodding work shall be in accordance with City Standard Specifications and the City Administrative Regulation No. AR6.5, which governs cleanup and restoration or replacement following construction. The "Recapitulation of Quantities" shows the estimated Square Yards of Sodding, with a bid item for the same. When the weather/season prevents the installation of Sod, the Contractor shall be responsible for installing Erosion Control Blanket (Curlax I, or approved equal) at the Back of Curb (B' wide minimum). All costs for Erosion Mat installation shall be Subsidiary to "Site Restoration". See Sections 902.7 and 902.8 of the standard specifications.

The contractor shall reseed all undeveloped areas disturbed by construction with a mixture of Ryegrass (applied at a rate of 200 lbs. per acre) and Buffalo grass, depending on the soil conditions (applied per Standard Specifications). Pure nitrogen fertilizer shall also be applied at a rate of 1.5 lbs. per thousand square feet. The seed shall be watered with a deep soaking every two (2) weeks during dry periods until a mature stand of grass is obtained. The "Recapitulation of Quantities" shows the estimated square yards of sodding area to be seeded, with a bid item for the same. The permanent seeding may be omitted only if sodding is required. The contractor shall be responsible for installing Erosion Control Blanket (Curlax I, or approved equal) at the back of curb, to and including the limits of all seeded areas. All costs for this work shall be Subsidiary to "seeding".

See the Roadside Improvement Plans for delineation of seeding and sodding areas.

All private property and landscaping features in conflict with the new construction will be relocated by others prior to construction. Upon the start of construction, all items that remain within the construction limits shall be removed and disposed of by the contractor unless otherwise noted. Removals are paid for as "Removal of Existing Structures" unless specifically noted to be paid for under a separate bid item.

Select Soil (Topsoil) shall be placed at a minimum depth of 6 inches or as specified on the drawings. The finished grade indicates the surface elevation after the prescribed select soil (topsoil) thickness has been placed. Where offsite select soil is needed, it shall be fertile natural topsoil, typical of the locality, obtained from well drained areas. Stockpiled topsoil may be used. It shall be without admixture of subsoil or slag and shall be free of stones, lumps, sticks, plants, or their roots, toxic substances or other extraneous matter that may be harmful to plant growth or would interfere with future maintenance. Topsoil ph range shall be 5.5 to 7.0. Topsoil shall be approved by the Project Engineer prior to placement.

All gravel or other similar debris larger than 1/2 inch in diameter shall be raked up and removed during final grade preparation.

New storm sewer installed under proposed pavements shall be protected from construction traffic during construction operations.

Proposed curbs matching existing curbs shall be altered to match the shape and dimensions of the existing curb. Positive drainage shall be maintained through such transitions.

Pavement cross-slope transitions will be required where proposed pavement matches existing pavement. Transitions shall be made over an adequate length to prevent sumps from being created in gutters.

Trees to be removed are marked with an X or are noted on the plan. Tree removal shall be paid for as "Tree Removal, Large" or "Tree Removal, Small". Removal of mass tree areas, brush, shrubs and other vegetative debris including stumps from trees that have already been removed prior to construction shall be Subsidiary to "Site Clearing". See the Special Provisions.

All backfill for storm sewer trenches shall be in accordance with the City of Wichita's standard specifications. Backfill for storm sewer under existing or proposed pavement, including lines running parallel and adjacent to the back of curb, shall be jetted and vibrated sand. The sand fill shall be brought up uniformly to an elevation two feet below the bottom of the existing or proposed pavement (12 inches above the top of pipe shall be the minimum). Cost for this backfill shall be paid on a linear foot basis as "Fill, Sand (Flushed & Vibrated)". See the Special Provisions.

Temporary concrete safety barriers shall be utilized where open utility trenches and non-traversable drop-offs are immediately located adjacent to traffic. The bid price for "Concrete Safety Barrier, Temporary" shall include providing the barrier and include the cost of multiple installations and removals as necessary for construction. Refer to the traffic control plans for the proper handling of traffic during construction. The quantity of barrier noted in the recapitulation represents the maximum amount of barrier needed for the set-up requiring the most barrier. This is anticipated to be during phase 12 on Broadway. Not all set-ups will require the full plan quantity amount.

Prior to Installation, Contractor shall verify whether Manholes are shallow or standard. No Adjustment in price will be made for changes from the Bid.

Storm Sewer and structure removals are noted in the paving plans. All storm sewer and structure removals shall be Subsidiary to "Pipe Removed", "Inlet Removed" and "MH Removed". A summary of storm sewer removals is provided for information only on each paving plan sheet. Existing storm sewer inlets and pipes noted to be removed within the paved roadway and not being replaced within the same trench shall be back filled with flushed and vibrated sand to the subgrade line work and shall be paid for as "Fill, Sand (Flushed & Vibrated)".

All connections between existing Storm Sewer and Storm Sewer Structures and proposed Storm Sewer and Storm Sewer Structures shall be Subsidiary to the cost of installation of the new Storm Sewer and/or Structure. Contractor shall verify the exact location of existing storm sewers and structures prior to construction.

Existing pavement thicknesses have been determined or assumed as follows:

- 17th Street from Sta. 18+35 to Sta. 19+77 is thin asphalt overlay on concrete pavement
17th Street from Sta. 19+77 to Sta. 24+00+/- is thin asphalt overlay on brick pavement
17th Street from Sta. 24+00+/- to Sta. 37+00+/- is thin asphalt over 9" concrete pavement.
17th Street from Sta. 37+00+/- to Sta. 38+50 is thin asphalt overlay on brick pavement.
17th Street from Sta. 38+50 to Sta. 42+25 is 3" to 6" asphalt on 4" concrete base
17th Street from Sta. 43+50 to Sta. 55+65 is 3" to 6" asphalt on 4" concrete base
17th Street from Sta. 55+65 to Sta. 57+50 is 8" concrete pavement
Broadway pavement is thin asphalt overlay on brick pavement
Mosley pavement, including 17th Street from Sta. 42+25 to Sta. 43+50 is 8" concrete pavement on 4" bituminous base
Railroad approach slabs of varying length are located on each side of railroad crossings and are assumed to be 12" reinforced concrete pavement.

The contractor shall salvage existing brick pavement and deliver to the City. Brick removal is Subsidiary to "Pavement Removal". Handling, stockpiling, protecting and transporting the brick is Subsidiary to "Transport of Salvaged Materials".

PROJECT SURVEY CONTROL:

The Project Horizontal Datum is based on the NAD83, Kansas State Plane Coordinate System, South Zone, (US Survey Feet Definition), with a Combined Adjustment Factor (CAF) of 1.000120014. All coordinate and dimensions shown on these plans are modified to Ground values.

The following equations can be used for conversion:

Ground Coordinates to State Plane Coordinates = Ground x 1/CAF
State Plane Coordinates to Ground Coordinates = State Plane x CAF

The Vertical Datum used is NAVD88.

A utility line labeled "NIC GW Remediation (Prop. )" is shown on the paving plans across 17th at Wabash. This line is a proposed groundwater remediation line for the City of Wichita's North Industrial Corridor (NIC) groundwater remediation project. If the remediation line is not installed at the time of 17th Street construction in this area, it is the intent of the City to install the line to avoid conflict with the improvements of the 17th Street project. If the line is installed prior to the 17th Street project construction in this location, the contractor shall confirm the remediation pipe location and depth prior to construction. If necessary, the contractor shall support the remediation line when excavating and installing the storm sewer box below the line. The proposed remediation pipe will be an 8" SDR-11 HDPE pipe that is black with purple stripe.

Six groundwater monitoring wells are located within the project corridor. The contractor is to coordinate with the City's Environmental Services Department regarding the field-locating and determining whether wells are in conflict with proposed improvements. Wells in conflict will be relocated by others and the existing well will be plugged and capped by the contractor and paid for as "Monitoring Well Capped". The contractor shall protect active wells from damage throughout construction. Contact Mikes Boes at 268-8376.

UTILITY NOTES:

The Contractor is responsible for the support of Existing Water and Sanitary Sewer lines during utility trenching operations.

Contractor shall limit the extent of trench open overnight and weekends to less than 50 feet.

Contractor shall provide positive drainage away from all manhole covers.

All stubs and plugged pipes shall be located with green plastic tape in the same manner as risers.

The contractor shall prevent any construction debris from entering the existing sanitary sewer during construction.

The Contractor shall be responsible for maintaining continuous flow of sewage through construction. Contractor's proposed method for maintaining sewage flow shall be submitted and approved by the Sewer Maintenance Division (316-268-4073) prior to starting and by-passing of sewage flows.

All new manholes with pipe size greater or equal to 15" diameter shall have a liner system applied per City Standard Specifications and approved material list. Cost of liner is Subsidiary to the manhole. Existing manhole adjustments are noted on paving plan sheets.

Opening and closing of water valves shall be done slowly to prevent damage to the water distributions system from water hammer. All valves closed by the contractor must be reopened as new construction permits. The project inspector must ascertain that any valve closed by the contractor is reopened. The contractor will be permitted to operate water valves only when the project inspector assigned to the project is present.

The contractor shall lay a tracer wire and set test stations along all water pipe installed in accordance with city specifications and tracer wire detail on detail sheet 94, cost is subsidiary to pipe installation.

The contractor shall provide materials for temporary blowoff of waterlines. Connections to the existing waterline(s) shall be made with clean, swabbed pipe and flushed upon completion of tie-ins.

Deflections at pipe joint or couplings shall not exceed the pipe manufacturer's recommended maximum. Where deflections are greater than the maximum allowed, the contractor shall utilize CIMJ long sleeve (only if approved by the engineer) or multiple joints.

Any extension greater than one length of pipe shall require testing.

Any existing joint exposed during excavation shall be replaced if within four feet of proposed joint.

The contractor shall protect from damage and support existing utilities through construction as approved by the utility owner and the engineer at the contractor's expense.

Water and gas service lines serving customers are shown on the plan drawings. Not necessarily all service lines have been located. The depths of service lines have not been determined. In general, water service lines are 42 inches deep and gas service lines are between 18 inches and 36 inches deep.

The bid item "Water Meter Adjusted" will involve removal of the existing box, ring and lid and installing a new box, ring and lid at the final surrounding grade at a location near the existing meter. Removals are Subsidiary to "Removal of Existing Structures".

The bid item "Short Service" and "Long Service" will involve installing a new box, ring and lid and reinstalling the existing meter as near to the existing meter as practical. The station and offset noted in the Summary of Quantities are to the existing meter. The work will include installation of a new service line between the meter and the water main. Existing corporation stops on the existing mains shall be re-used. The existing meter, box ring and lid is to be removed. Removals are Subsidiary to "Removal of Existing Structures".

All service lines under street pavement shall be installed by trenchless methods. In general, meters should not be located under pavement, sidewalks or driveways.

All water line installations 16" and greater in diameter shall utilize restrained joint pipe in place of thrust blocks. The contractor is responsible for determining the required number of restrained joint fittings to provide adequate thrust restraint. Restrained joints may be utilized on water lines less than 16" in diameter at no additional cost to the City.

All water valves being abandoned shall have the cans removal and the space filled with sand. Removals are Subsidiary to "Removal of Existing Structures".

Work required for the bid item "Fire Hydrant Adjustment" includes adjusting the elevation of the existing fire hydrant at the same location to match final plan grades. Adjustment of the valve on the fire hydrant lead line shall be paid for separately.

Work required for the bid item "Fire Hydrant Relocation" includes removal of the existing hydrant, extending the fire hydrant lead piping as shown in the plans and installing a new hydrant at the location shown in the plans. The existing valve on the fire hydrant lead line will remain. Any adjustment necessary for this valve will be paid for separately.

Work required for the bid item "MH Adjusted" shall include adjusting the elevation of the manhole ring and lid to match the final plan grade in accordance with the City's standard specifications. Manholes belong to private utility companies to be adjusted will be included under this bid item. No adjustment in bid price will be made for manhole adjustments regardless of manhole type, size or ownership.

Work required for the bid item "MH Adjusted w/ New Ring & Cover" shall include providing a new City-standard ring and lid in addition to adjusting the elevation of the manhole ring and lid to match the final plan grade in accordance with the City's standard specifications.

At locations where Westar poles are located in the path of proposed sidewalks, contractor shall warp sidewalk gently around the Westar pole, maintaining full sidewalk width. The engineer shall approve all sidewalk changes prior to construction.

Contractor shall contact Westar to support utility poles during construction excavations occur close to Westar utility poles.

Table with 5 columns: STATE, PROJECT NO., YEAR, SHEET NO., TOTAL SHEETS. Values: KANSAS, 87 N-0662-01, 2019, 2, 194



STREET IMPROVEMENTS FOR 17TH ST - BROADWAY TO I-135 FROM BROADWAY TO I-135

©2019 MKEC Engineering All Rights Reserved www.mkec.com These drawings and their contents, including, but not limited to, all concepts, designs, & ideas are the exclusive property of MKEC Engineering (MKEC), and may not be used or reproduced in any way without the express consent of MKEC.

GENERAL NOTES

Table with 2 columns: PROJECT NO., DATE, SCALE, DESIGNED, DRAWN, CHECKED. Values: 87 N-0662-01, 8/30/2019, AS NOTED, JRA, WNJ, JRA

Table with 3 columns: NO., REVISION, DATE

SHEET NO.

2 OF 194

J:\CH16\177\DWG\01 GENERAL\0177-ND01.DWG