PLOTTED: Tuesday, October 04, 2016 @ 05:13PM

## PAVEMENT PATCHES

| Location | Side | Concrete Pavement Removed & Replaced* (sy) | Concrete Driveway Removed & Replaced* (lf) | AC Pavement Removed & Replaced* (sy) | Concrete Sidewalk Removed & Replaced (sf) | Sidewalk Thickening (lf) | Concrete C&G Removed & Replaced (lf) | Concrete Curb, Mono Edge, Removed & Replaced (lf) | Wheelchair Ramp w/ Detectable Warning, Removed & Replaced (ea) | AC Pavement 6" Temporary+ (sy) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 21st from Sta. 19+35.84 to Sta. 11+56.05 | Lt. | | | 12.20 | 123.83 | 21.08 | 20.16 | | | | |
| 21st from Sta. 19+56.05 to Sta. 20+18.11 | Lt. | 60.5 | | 38.50 | | 10.69 | | 36.14 | 2 | | |
| 21st from Sta. 20+18.11 to Sta. 22+65.58 | Lt. | | | 156.20 | 1420.97 | 222.56 | 222.56 | | | | |
| 21st from Sta. 22+65.58 to Sta. 23+25.45 | Lt. | 49.7 | | 38.80 | | 8.88 | | 28.65 | 2 | | |
| 21st from Sta. 23+25.45 to Sta. 24+13.52 | Lt. | | | 55.10 | 505.64 | 88.67 | 88.67 | | | | |
| 21st from Sta. 36+87.33 to Sta. 37+54.39 | Lt. | | 67.06 | | | | | | | | |
| Oliver from Sta. 39+04.29 to Sta. 39+30.47 | Rt. | | 26.18 | | | | | | | | |
| Oliver from Sta. 45+84.82 to Sta. 45+92.95 | Rt. | | | | 47.80 | 6.00 | | | | | |
| Various Locations | | | | | | | | | | 250.0 | |
| | Totals | 110.2 | 93.24 | 300.8 | 2,098.24 | 357.88 | 331.39 | 64.79 | 4 | 250.0 | |

* Concrete and asphalt pavement removal limits shall be aproved by the Engineer. + Includes the eventual removal of the material placed. Thickness is nominal. See note on sheet 87.

Thickness of new pavement shall be equal or greater than existing thickness.

## DRIVEWAY PAVEMENT

| Location | Side | Concrete Driveway 8" (Reinf.) (sf) | P (ft) | X (ft) | Width (ft) | Quantities beyond initial approach: Concrete Driveway, 8" (Reinf.) (sf) | AC Pavement 5" (sy) | Crushed Rock Base 5" Reinf. (sy) | Concrete Curb, Mono Edge, Special (lf) | Concrete Curb, Mono Edge (6" & 1-1/2") (lf) | Concrete C & G, Type 1 (6" & 1-1/2") (lf) | Concrete Ramp Nose Section (ea) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21ST STREET: | | | | | | | | | | | | | |
| Sta. 25+14.45 | 50.00 Rt. | 865.50 | 24.10 | 24.10 | 30.00 | | | | | | | | |
| Sta. 27+60.25 | 44.00 Lt. | 323.28 | 11.50 | 16.50 | 24.00 | 74.35 | | | | | | | |
| Sta. 33+30.66 | 44.00 Rt. | 334.92 | 11.20 | 26.20 | 26.00 | | 84.4 | | | | | | |
| Sta. 34+45.17 | 54.00 Lt. | 429.06 | 12.38 | 12.38 | 30.00 | | | | | | | | |
| Sta. 35+20.92 | 44.00 Rt. | 523.73 | 18.75 | 28.50 | 21.00 | | 21.6 | | 19.50 | | | | |
| Sta. 36+03.88 | 44.00 Rt. | 730.22 | 22.04 | 32.04 | 26.00 | 259.77 | | | | 10.00 | | | |
| OLIVER: | | | | | | | | | | | | | |
| Sta. 40+20.59 | 50.00 Rt. | 800.82 | 26.00 | 26.00 | 24.20 | | | | | | | | |
| Sta. 41+82.00 | 45.00 Rt. | 951.68 | 30.00 | N/A | 30.00 | | | | | | | | See Grading Plan sheet 22 |
| Sta. 43+89.34 | 45.00 Rt. | 765.18 | 21.00 | 31.00 | 29.00 | | 33.9 | | | | | | |
| Sta. 46+06.16 | 65.00 Lt. | 842.66 | 23.50 | 23.50 | 30.00 | | | | | | | | |
| Sta. 52+13.83 | 56.50 Lt. | 252.00 | 6.00 | 21.14 | 24.00 | 215.78 | | | | | | | |
| Sta. 53+19.43 | 51.23 Lt. | 180.00 | 6.00 | 17.40 | 12.00 | | 12.7 | | | | | | |
| Sta. 53+97.73 | 54.00 Rt. | 576.44 | 11.50 | 26.50 | 46.00 | | 59.0 | | | | 35.00 | 1 | |
| Sta. 55+11.87 | 37.56 Lt. | 189.00 | 13.45 | 13.45 | 13.50 | | 3.7 | | | | | | |
| Oliver Special Grading at Sta. 41+82 | | | | | | 4,985.00 | 118.4 | 118.4 | 99.45 | | | | |
| Totals | | 7,764.49 | | | | 5,534.90 | 333.7 | 118.4 | 118.95 | 10.00 | 35.00 | 1 | |

P = Distance from back of curb to right-of-way line. X = Distance from back of curb to limit of driveway paving

## TREE REMOVAL

| Location | Offset | Large | Small |
|---|---|---|---|
| 21ST STREET: | | | |
| Sta. 15+66.62 | 55.31' Rt. | 1 | |
| Sta. 15+88.53 | 62.36' Rt. | | 1 |
| Sta. 15+96.03 | 50.33' Rt. | 1 | |
| Sta. 16+13.60 | 55.04' Rt. | 1 | |
| Sta. 16+36.79 | 64.10' Rt. | | 1 |
| Sta. 16+46.24 | 65.23' Rt. | | 1 |
| Sta. 16+72.81 | 65.69' Rt. | | 1 |
| Sta. 17+07.42 | 53.22' Rt. | | 1 |
| Sta. 18+35.67 | 56.47' Rt. | | 1 |
| Sta. 18+54.64 | 62.19' Rt. | 1 | |
| Sta. 19+24.83 | 50.10' Rt. | | 1 |
| Sta. 19+33.93 | 61.77' Rt. | | 1 |
| Sta. 19+45.43 | 61.13' Rt. | | 1 |
| Sta. 19+71.43 | 60.32' Rt. | | 1 |
| Sta. 19+88.90 | 74.24' Rt. | | 1 |
| Sta. 20+51.84 | 62.82' Rt. | | 1 |
| Sta. 21+84.27 | 60.77' Rt. | | 1 |
| Sta. 22+21.10 | 46.68' Rt. | | 1 |
| Sta. 22+35.26 | 48.78' Rt. | | 1 |
| Sta. 22+49.41 | 50.12' Rt. | | 1 |
| Sta. 22+70.73 | 50.55' Rt. | | 1 |
| Sta. 23+27.65 | 52.87' Rt. | | 1 |
| Sta. 23+91.01 | 66.86' Rt. | | 1 |
| Sta. 24+03.37 | 50.40' Rt. | | 1 |
| Sta. 24+16.22 | 62.94' Rt. | | 1 |
| Sta. 24+27.08 | 65.99' Rt. | | 1 |
| Sta. 24+36.45 | 51.61' Rt. | | 1 |
| Sta. 24+89.68 | 53.49' Rt. | | 1 |
| Sta. 25+02.81 | 53.08' Rt. | | 1 |
| Sta. 25+32.76 | 48.26' Rt. | | 1 |
| Sta. 25+37.01 | 52.48' Rt. | | 1 |
| Sta. 25+41.98 | 52.22' Rt. | | 1 |
| Sta. 25+44.66 | 46.36' Rt. | | 1 |

## TREE REMOVAL

| Location | Offset | Large | Small |
|---|---|---|---|
| Sta. 25+49.28 | 53.32' Rt. | | 1 |
| Sta. 25+71.97 | 47.52' Rt. | | 1 |
| Sta. 25+76.01 | 44.64' Lt. | 1 | |
| Sta. 25+82.82 | 48.48' Rt. | | 1 |
| Sta. 25+83.76 | 43.74' Rt. | | 1 |
| Sta. 26+11.76 | 39.72' Rt. | | 1 |
| Sta. 26+27.30 | 49.29' Lt. | | 1 |
| Sta. 26+28.91 | 58.88' Rt. | | 1 |
| Sta. 26+42.73 | 44.29' Lt. | 1 | |
| Sta. 26+68.30 | 51.30' Rt. | | 1 |
| Sta. 26+78.37 | 42.29' Lt. | 1 | |
| Sta. 27+05.57 | 45.57' Rt. | | 1 |
| Sta. 27+15.75 | 36.46' Rt. | | 1 |
| Sta. 27+18.35 | 43.83' Rt. | | 1 |
| Sta. 27+21.00 | 54.68' Rt. | | 1 |
| Sta. 27+31.01 | 51.56' Rt. | | 1 |
| Sta. 27+39.19 | 49.34' Rt. | | 1 |
| Sta. 27+43.81 | 29.72' Rt. | | 1 |
| Sta. 27+51.51 | 32.32' Rt. | | 1 |
| Sta. 27+55.86 | 47.15' Rt. | | 1 |
| Sta. 27+67.58 | 39.13' Rt. | | 1 |
| Sta. 27+71.29 | 75.24' Rt. | 1 | |
| Sta. 28+02.47 | 44.75' Lt. | | 1 |
| Sta. 28+46.98 | 44.88' Lt. | | 1 |
| Sta. 28+55.26 | 61.38' Rt. | | 1 |
| Sta. 28+72.99 | 44.32' Lt. | 1 | |
| Sta. 28+98.52 | 56.45' Rt. | | 1 |
| Sta. 29+32.45 | 65.03' Lt. | 1 | |
| Sta. 33+65.58 | 38.11' Rt. | | 1 |
| Sta. 33+97.61 | 36.60' Rt. | | 1 |
| Sta. 34+22.86 | 38.17' Rt. | | 1 |
| Sta. 34+53.08 | 38.14' Rt. | | 1 |

## TREE REMOVAL

| Location | Offset | Large | Small |
|---|---|---|---|
| OLIVER: | | | |
| Sta. 40+35.46 | 33.38' Lt. | | 1 |
| Sta. 41+05.26 | 33.33' Lt. | | 1 |
| Sta. 41+65.97 | 67.51' Lt. | | 1 |
| Sta. 41+92.79 | 54.29' Rt. | | 1 |
| Sta. 41+95.38 | 99.27' Rt. | | 1 |
| Sta. 42+20.56 | 68.24' Lt. | | 1 |
| Sta. 42+75.13 | 55.81' Lt. | | 1 |
| Sta. 43+02.55 | 37.82' Lt. | | 1 |
| Sta. 43+75.42 | 34.30' Lt. | | 1 |
| Sta. 44+01.02 | 27.19' Lt. | | 1 |
| Sta. 44+59.73 | 27.65' Lt. | | 1 |
| Sta. 45+46.13 | 33.49' Lt. | | 1 |
| Sta. 45+66.03 | 33.20' Lt. | | 1 |
| Sta. 45+85.90 | 33.35' Lt. | | 1 |
| Sta. 46+70.70 | 34.09' Lt. | | 1 |
| Sta. 47+49.66 | 34.54' Lt. | | 1 |
| Sta. 47+69.28 | 56.13' Rt. | 1 | |
| Sta. 48+12.64 | 60.27' Rt. | 1 | |
| Sta. 48+45.60 | 39.84' Lt. | | 1 |
| Sta. 50+64.60 | 68.77' Lt. | 1 | |
| Sta. 51+30.84 | 41.62' Lt. | 1 | |
| Sta. 52+05.48 | 40.43' Lt. | | 1 |
| Sta. 52+72.78 | 41.80' Lt. | 1 | |
| Sta. 53+01.20 | 58.23' Lt. | 1 | |
| Sta. 53+11.27 | 48.50' Lt. | 1 | |
| Sta. 53+30.46 | 47.44' Lt. | 1 | |
| Sta. 53+78.54 | 42.33' Lt. | 1 | |
| Sta. 53+91.59 | 41.35' Lt. | 1 | |
| Sta. 54+11.42 | 40.69' Lt. | 1 | |
| Sta. 54+41.85 | 41.59' Lt. | 1 | |
| Sta. 56+22.07 | 38.96' Lt. | 1 | |
| Totals | | 23 | 73 |

## RECAPITULATION OF QUANTITIES

| LINE NO. | BID ITEM DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| | ***Lump Sum Bid Items - Paving*** | | |
| 1 | Mobilization | 1 | LS |
| 2 | Removal of Existing Structures | 1 | LS |
| 3 | Transport of Salvaged Materials | 1 | LS |
| 4 | Site Clearing | 1 | LS |
| 5 | Site Restoration | 1 | LS |
| 6 | Pavement &/or Curb Removed | 21,370 | sy |
| 7 | Excavation | 18,751 | cy |
| 8 | Fill, Compacted (95% Density) | 365 | cy |
| 9 | Crushed Rock Base 8", Reinforced | 14,448 | sy |
| 10 | Crushed Rock Base 7", Reinforced | 440 | sy |
| 11 | Crushed Rock Base 6", Reinforced | 13,781 | sy |
| 12 | Crushed Rock Base 5", Reinforced | 119 | sy |
| 13 | Retaining Wall, Modular Block | 159 | sf-face |
| | | | |
| | ***Lump Sum Bid Items - Landscaping*** | | |
| 14 | Sodding | 1 | LS |
| 15 | Tree Row Removed | 126 | lf |
| | | | |
| | ***Lump Sum Bid Items - Traffic*** | | |
| 16 | Pavement Markings | 1 | LS |
| 17 | Signing, Except Street Name Signs | 1 | LS |
| 18 | Signing, Street Name Signs Only | 1 | LS |
| 19 | Traffic Signalization | 1 | LS |
| 20 | Traffic Signalization (Temporary) | 1 | LS |
| 21 | Traffic Control | 1 | LS |
| | | | |
| | ***Measured Quantity Bid Items - Paving*** | | |
| 22 | Field Office and Laboratory (Type A) | 1 | ea |
| 23 | Sidewalk, Drive &/or Pkg Lot Removed | 3,192 | sy |
| 24 | Grading, Ditch | 136 | lf |
| 25 | AC Pavement, 7" (5" Bit. Base) | 13,049 | sy |
| 26 | AC Pavement 2" Mill & Overlay | 4,890 | sy |
| 27 | Concrete Pavement 9" (Reinf.) | 2,914 | sy |
| 28 | Concrete Pavement 9" (NRDJ) | 9,384 | sy |
| 29 | Concrete Pavement (VG) 8" Reinf. | 417 | sy |
| 30 | Concrete Driveway 8" (Reinf.) | 14,289 | sf |
| 31 | Concrete Sidewalk 4" | 16,449 | sf |
| 32 | Concrete Sidewalk 5" | 20,481 | sf |
| 33 | Concrete Sidewalk 5", Reinf. | 250 | sf |
| 34 | Sidewalk Thickening | 877 | lf |
| 35 | Concrete Sidewalk Protection Curb | 275 | lf |
| 36 | Bus Shelter, Removed & Replaced | 1 | ea |
| 37 | Concrete C&G, Type 1 (6" & 1-1/2") | 5,655 | lf |
| 38 | Concrete C&G, Type 3 (8") | 2,248 | lf |
| 39 | Concrete Curb, Mono Edge (6" & 1-1/2") | 190 | lf |
| 40 | Concrete Curb, Mono Edge (8") | 35 | lf |
| 41 | Concrete Curb, Mono Edge, Special | 119 | lf |
| 42 | Concrete Ramp Nose Section (Median) | 9 | ea |
| 43 | Wheelchair Ramp w/ Detectable Warnings | 12 | ea |
| 44 | Brick Pavers, Median | 336 | sy |
| 45 | Brick Pavers, Sidewalk | 24 | sy |
| 46 | Brick Pavers, Crosswalk | 455 | sy |
| 47 | Concrete Base 8" (Reinf.) | 455 | sy |
| 48 | AC Pavement, 5" | 334 | sy |
| 49 | Asphalt Hook-up | 29 | sy |
| 50 | Riprap, Light Stone | 135 | sy |
| 51 | Concrete Pavement Removed & Replaced | 111 | lf |
| 52 | Concrete Driveway Removed & Replaced | 94 | lf |
| 53 | AC Pavement Removed & Replaced | 301 | sy |
| 54 | Concrete Sidewalk Removed & Replaced | 2,099 | sf |
| 55 | Concrete C & G Removed and Replaced | 332 | lf |
| 56 | Concrete Curb, Mono Edge, Removed & Replaced | 65 | lf |
| 57 | Wheelchair Ramp Removed and Replaced | 4 | ea |
| 58 | AC Pavement 6", Temporary | 250 | sy |
| 59 | Manhole Adjusted w/ New Ring & Cover | 2 | ea |
| 60 | Manhole Adjusted | 5 | ea |
| 61 | Manhole Frame & Cover, Replaced | 1 | ea |

## RECAPITULATION OF QUANTITIES

| LINE NO. | BID ITEM DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| | ***Measured Quantity Bid Items - Drainage*** | | |
| 62 | Pipe, End Section, RC 15" | 2 | ea |
| 63 | Pipe, SWS, RCP 15" | 121 | lf |
| 64 | Pipe, SWS, RCP 18" | 811 | lf |
| 65 | Pipe, SWS, RCP 24" | 757 | lf |
| 66 | Pipe, SWS, RCP 30" | 561 | lf |
| 67 | Pipe, SWS, RCP 36" | 407 | lf |
| 68 | Pipe, SWS, HERCP (14"x23")(18") | 113 | lf |
| 69 | Sand Backfill, Flushed and Vibrated | 2,760 | lf |
| 70 | Inlet, Curb (Type 1)(L=10' W=3') | 9 | ea |
| 71 | Inlet, Curb (Type 1)(L=10' W=4') | 5 | ea |
| 72 | Inlet, Curb (Type 1)(L=10' W=5') | 4 | ea |
| 73 | Inlet, Curb (Type 2)(L=6' 2-1/2" W=3' 4-3/8") | 4 | ea |
| 74 | Pipe, SWS, PVC 4", Perforated | 220 | lf |
| 75 | Inlet Hook-up | 22 | ea |
| 76 | Inlet, Drop (Single) | 2 | ea |
| 77 | MH, Standard SWS (6') | 1 | ea |
| 78 | MH, Shallow SWS (4') | 1 | ea |
| 79 | Manhole Water Quality BMP | 2 | ea |
| 80 | Pipe, Plug (SWS) | 1 | ea |
| | | | |
| | ***Measured Quantity Bid Items - Erosion Control BMP*** | | |
| 81 | BMP, Back of Curb Protection | 6,880 | lf |
| 82 | BMP, Curb Inlet Protection | 26 | ea |
| 83 | BMP, Drop Inlet Protection | 2 | ea |
| 84 | BMP, Construction Entrance | 8 | ea |
| | | | |
| | ***Measured Quantity Bid Items - Landscaping*** | | |
| 85 | Tree Removed, Large | 23 | ea |
| 86 | Tree Removed, Small | 73 | ea |
| | | | |
| | ***Measured Quantity Bid items - Traffic*** | | |
| 87 | Traffic Signal Conduit | 390 | lf |
| 88 | Traffic Signal Service Box | 4 | ea |
| 89 | Sign, Elec. Portable Message (each per day) | 300 | days |
| | | | |
| | ***Measured Quantity Bid Items - Water*** | | |
| 90 | Pipe, DICL 6" | 38 | lf |
| 91 | Pipe, DICL 8" | 37 | lf |
| 92 | Pipe, DICL 12" | 82 | lf |
| 93 | Pipe, WL 8" | 45 | lf |
| 94 | Pipe, WL 12" | 566 | lf |
| 95 | Valve Assembly, 6" | 1 | ea |
| 96 | Valve Assembly, 8" | 3 | ea |
| 97 | Valve Assembly, 12" | 1 | ea |
| 98 | Fire Hydrant | 4 | ea |
| 99 | Fire Hydrant Relocation | 1 | ea |
| 100 | Pipe, Cut and Cap | 12 | ea |
| 101 | Pipe, Plug (Water) | 3 | ea |
| 102 | Valve Box Adjusted | 15 | ea |
| 103 | Valve Assembly, Air Release | 2 | ea |
| 104 | Water Meter Adjusted | 5 | ea |
| 105 | Water Meter Relocated | 8 | ea |
| 106 | Water Meter Relocated, Special | 1 | ea |
| 107 | Short Service | 9 | ea |
| 108 | Private Service Line Replaced | 45 | lf |
| 109 | Concrete C & G Removed and Replaced (Utility Patch) | 296 | lf |
| 110 | AC Pavement 6", Temporary (Utility Patch) | 80 | sy |
| | | | |

For Storm Sewer summary of quantities, see sheet 27.
For Erosion Control summary of quantities, see sheet 68.
For Roadside Improvements summary of quantities, see sheet 74.
For Traffic Signal summary of quantities, see sheet 77 and 78.
For Pavement Marking summary of quantitites, see sheet 82.
For Signing summary of quantitites, see sheet 86.

MKEC
Wichita, KS • 316-684-9600

STREET IMPROVEMENTS FOR

# 21ST & OLIVER INTERSECTION

WICHITA, KANSAS

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SUMMARY & RECAP OF QUANTITIES

| | |
|---|---|
| PROJECT NO, | 472-85213 |
| DATE | SEPT. 2016 |
| SCALE | NONE |

| DESIGNED | DRAWN | CHECKED |
|---|---|---|
| JRA | LES | JRA |

| NO. | REVISION | DATE |
|---|---|---|
| | | |

SHEET NO.

66 OF 125

J:\PROJECTS\2015\15104\178_CONV_21ST & OLIVER_XXXXXX CAD\SHTS\05 CIVIL\PAVING\15178E002.DWG