STORM WATER SEWER EXTENSION
FOR
"GALICHIA HOSPITAL RECOVERY ADDITION 2"
LOCATED AT 2610 N. WOODLAWN, LOT 1, BLOCK 1, HINKLE'S ADDITION
WICHITA, KANSAS

COW PRIV. PROJ. NO. 1458 PP8(607861)

JIM ARMOUR, P.E., CITY ENGINEER

FEBRUARY 2004

PROJECT LOCATED IN THE N.W.1/4, SEC. 6, T.27S., R.2E. WICHITA, SEDGWICK COUNTY, KANSAS

PROJECT LOCATION

LOCATION MAP

HORIZONTAL CONTROL POINTS

C.P. #1	N 19108.78 E 20180.53	Existing Manhole	
C.P. #2	N 19187.99 E 20370.21	Property Corner 5/8" IR W/CE	
C.P. #3	N 19198.62 E 20050.07	Property Corner 5/8" RIL	
C.P. #4	N 19993.05 E 19999.87	Property Corner "RLS" 950	
C.P. #5	N 19924.05 E 20130.97	Existing SWS Manhole	

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

1" = 40'

Utilities shown were located by respective owners. Any Utilities not shown are due to no response to Kansas One Call "1-800-DIG-SAFE" Ticket #3037627 and #4044012.

Utility locations shown hereon are based on information received from Kansas One Call (1-800-DIG-SAFE) identified by Ticket #3037627 and #4044012. Prior to any digging, contractor should verify utility locations by calling 1-800-DIG-SAFE.

UTILITIES SHOWN REPRESENT THE BEST INFORMATION AVAILABLE FOR DESIGN. ADDITIONAL UTILITIES MAY BE PRESENT ON THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE LIABLE FOR ANY DAMAGE CAUSED BY THE FAILURE TO DO SO.

SURVEY DISCLAIMER:
TOPOGRAPHIC SURVEY AND CONTOUR MAP USED IN PREPARING THIS PLAN WAS PROVIDED BY SAVOY COMPANY, P.A., 535 S. EMPORIA, SUITE 104, WICHITA, KS. ENGINEER DOES NOT GUARANTEE SURVEY ELEVATIONS FOR ACCURACY. CONTRACTOR SHALL VERIFY ELEVATIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

SURVEY MARKER LEGEND

- 3/4" IRON PIPE W/NMCS CAP (FOUND)
- 5/8" REBAR W/NMCS CAP (FOUND)
- 5/8" STEEL PIN (FOUND)
- 1/2" REBAR W/RLS 950 CAP (FOUND)

LEGEND

- W = WATER MAIN
- SWS = STORM WATER SEWER
- UGT = UNDER GROUND TELEPHONE
- UGFO = UNDER GROUND FIBER OPTIC
- C.O. ..... CLEAN OUT
- C.T.V. ..... CABLE TELEVISION PEDESTAL
- F.H. ..... FIRE HYDRANT
- I.V. ..... IRRIGATION CONTROL VALVE
- L.P. ..... LIGHT POLE
- S ..... SIGN
- W.V. ..... WATER VALVE
- X.FMR. ..... ELECTRIC TRANSFORMER
- SWS MH. ..... STORM WATER SEWER MANHOLE
- F.O. MH. ..... FIBER OPTIC MANHOLE

DRAINAGE LEGEND

- 98.00 = TOP OF CURB ELEVATION
- 98.00 = FLOWLINE ELEVATION
- 98.00 = TOP OF SIDEWALK ELEVATION
- 98.00 = TOP OF PAVEMENT ELEVATION
- 98.00 = DIRT GRADE ELEVATION
- = FLOW GRADE
- = PROPOSED DRAINAGE FLOW DIRECTION
- = EXIST. CONTOURS
- = PROPOSED CONTOURS
- = PROPOSED PAVEMENT
- = PROPOSED CURB INLET
- = PROPOSED AREA INLET
- = PROPOSED SWS MANHOLE

APPROVED AS NOTED
By CITY ENGINEER OF WICHITA

Sanitary Sewers _____
Storm Sewers _____
Driveway Approaches _____
Water Mains _____
Paving _____

NOTE TO CONTRACTOR

INSPECTION AND TESTING FOR THIS PROJECT IS TO BE PROVIDED BY A LICENSED CONSULTING ENGINEERING FIRM UNDER CONTRACT WITH THE OWNER/DEVELOPER. SAID INSPECTION AND TESTING MUST ACCEPT THE CITY OF WICHITA STANDARD CONSTRUCTION SPECIFICATIONS AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. NO WORK SHALL BE PERFORMED IN DEDICATED EASEMENTS OR THE PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR WITHOUT SUCH INSPECTION NOR SHALL ANY WORK BE COMMENCED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.

Contractor shall Reconstruct Existing Asphalt & Curb as necessary to Provide a Smooth Transition Between Proposed & Existing pavement and curbs. (See grading plan)

Contractor Shall Remove Existing Curb & Gutter shown dashed from Proposed Curb & Gutter at South curb line to the existing Curb Inlet North of the Proposed Building

Existing Curb Inlet to remain and existing curb and gutter to remain

Future Curb and Gutter

Future Trench Drain
8" FL Out 189.55
N 19315.89
E 20133.68

Future 120 LF 8" PVC @ 0.40%
See Backfill Note – sheet #10

Future SWS No. 1
N 19298.14
E 20222.16
Proposed Type IA Curb Inlet.
(L=6'-4" W=5'-4")
Top of Curb Inlet Elev.=193.08
Center of Inlet
FL Out 15"(N)=186.56
FL In 8"(W)=189.07

Contractor shall remove and replace existing sidewalk as required to construct storm sewer pipe, match existing grades.

Contractor shall sawcut, remove and replace 3/8 lin. ft. of Asphalt Pavement. See Backfill Note – sheet #10

Contractor Shall Remove Existing Curb & Gutter with existing curb and gutter. Remove and replace asphalt (min. 6 smooth transition from existing to new pavement.

Contractor shall install New Curb and Gutter, Match grades at each end, with existing curb and gutter, remove and replace Asphalt pavement as required to make a smooth transition from existing to new pavement.

Contractor shall install New Curb and Gutter to new curb inlet. Match grades at each end, with existing curb and gutter, remove and replace Asphalt pavement as required to make a smooth transition from existing to new pavement.

Contractor shall remove existing flume and backfill to top of curb, slope away from curb at 4:1 slope, daylite at existing grade.

Contractor shall install 15 lin. ft. 18" RCP with 6' end sections (on both ends) @ 0.50% slope from outlet 7 yds. of Heavy Stone Riprap

Contractor shall grade a 6' flat bottom ditch at 0.50%, 4:1 side slope from outlet pipe to existing ditch. See all on sheet 2

Future SWS Line crossing Proposed 6" San. Sewer Lines – Bottom of 6" PVC = 190.08
Top of 15" RCP – SWS Line = 187.7±

SWS No. 1
E 19500.97
E 20209.94
Prop. Type IA Curb Inlet.
(L=6'-4" W=5'-4")
Top of Curb Inlet Elev.=189.95
Center of Inlet
FL In 18" (W)=185.51
FL Out 24"(E)=184.97
FL In 15"(S)=185.78

Proposed 16 LF 24" RCP and 6' – 24" End Section @ 0.20%
See Backfill Note – sheet #10
FL Out 24"(N)=184.93
N 19812.98
E 20227.88
Contractor to provide 10 yds. of Heavy Stone Riprap

Estimated Excavation Quantities:

Unclassified Excavation	= 15497 c.y.
In Place Fill Required	= 11307 c.y.
Fill Req'd. with 30% Compaction Factor	= 14699 c.y.
Excess Excavation with Fill req'd. and 30% Compaction Factor	= 798 c.y.

Excavation available from Pond is adequate to construct compacted fill required. Pond Bottom Elevation = 174.5.

Pond Excavation Below Elevation 180.0 = side slope shall be adjusted by Contractor during excavation as required to meet compacted fill requirements.

Pond Excavation Above Elevation 180.0 = side slope 3:1

SWS No. 2
N 19501.04
E 20226.07
Prop. Type IA Inlet
Top of Grate Elev.=192.36
Center of Inlet
FL In 18" (W)=186.26
FL Out 18"(E)=186.06
FL In 15"(N)=186.33

SWS No. 3
N 19605.06
E 20226.07
Prop. Type IA Inlet
Top of Grate Elev.=192.9
Center of Inlet
FL Out 15"(S)=186.75

Existing Manhole Adjustment
Center of MH
N 19996.28
E 19992.57
Existing Manhole – fill with Flowbite fill to 1' above RCP pipes. Salvage Existing MH Ring and lid

Proposed 6 LF 24" RCP and 6' – 24" End Section @ 0.20%
See Backfill Note – sheet #10
FL Out 24"(X)=182.0
N 19893.71
E 19992.64
Contractor to provide 10 yds. of Heavy Stone Riprap

Pond Outflow Pipe
18" RCP FL IN = 180.5
18" End Section
N 19973.37
E 20218.71

SWS No. 4
N 19859.58
E 20218.54
Proposed Type IA Curb Inlet.
(L=6'-4" W=5'-4")
Top of Curb Inlet Elev.=188.5
Center of Inlet
FL Out 24"(E)=182.02

Pond Outflow Pipe
18" RCP FL OUT = 180.46
18" End Section
N 19994.06
E 20228.14

Bench Mark: N. Rim of SWS Manhole Located at N.E. Corner of Parking Lot Elevation = 1215.97 NGVD = 1187.4 = 189.52 City of Wichita Datum
N 19796.28
E 19992.57

SWS No. 4
N 19713.27
E 19817.96
Std. 5' MH Type IF
Top Elev.=194.6
Center of MH
FL In 24"(W)=183.83
FL Out 24"(N)=183.73
FL In 12"(SE)=184.81
Plug Existing 24" SWS (E)

Contractor to install 68 LF 12" RCP SWS Line from building to manhole.

Existing SWS Line No.4
N 19711.88,E 19908.04
to N 19713.27, E 19817.96
Abandon Existing 24" SWS line and fill with flowbite fill

Abandon existing Roof Leader from manhole to building and fill with flowbite fill

Existing Manhole Adjustment
Center of MH
N 19711.88
E 19908.04
Existing 4' Manhole – fill with Flowbite fill to 1' above RCP pipes. Salvage Existing MH Ring and lid

Note:
Contractor to verify locations of any other drain lines from the North side of the building and connect to new SWS line

Existing 24" SWS line to remain

Proposed 250 LF 24" RCP @ 0.20%
See Backfill Note – sheet #10

SWS Line No.4

SWSMH

Existing SWS Line No.3
N 19921.88,E 19998.04
to N 19924.65, E 19992.57
Abandon Existing 24" SWS line and fill with flowbite fill

Existing SWS Line No.2
N 19996.28,E 19992.57 to
N 19924.65, E 20120.97
Abandon Existing 24" SWS line and fill with flowbite fill
to 1' above existing SWS line. Salvage MH ring and lid, or cast iron ports

SWS No. 4
N 19893.14
E 19993.84
Prop. Type IA Curb Inlet.
(L=6'-4" W=5'-4")
Top of Curb Inlet Elev.=187.43
Center of Inlet
FL In 24" (W)=182.78
FL Out 24"(SE)=182.68

Proposed 132 LF 24" RCP @ 0.20%
See Backfill Note – sheet #10

SWS No. 4
N 19924.65
E 20120.97
Existing Manhole
Top Elev.=192.9
FL In 24"(W)=182.42
Plug Existing 24" RCP (SW)

Existing 24" SWS line to remain

Top of Dike Elevation = 182.5 (1' Freeboard)
181.43 Max. Stage

Proposed 182 LF 24" RCP @ 0.20%
See Backfill Note – sheet #10

6" Roof Drain to be installed by Bldg. Contractor, daylite at pond embankment per proper slope.

6" Roof Drain to be installed by Bldg. Contractor, daylite at pond embankment, per proper slope.

Existing Curb Inlet
Top Elev.=192.9
Center of Inlet
FL Out 15"(S)=186.75

Existing Curb Inlet
Top Elev.=192.36
Center of Inlet
FL Out 18"(E)=186.06
FL In 15"(N)=186.33