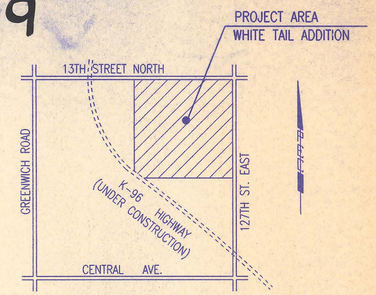
4MC-099

BUREAU OF PUBLIC SERVICES



LOCATION MAP
NOT TO SCALE

INDEX OF SHEETS

SHEET NO.	1	TITLE SHEET
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SHEET NO.	8	BACKFILL DETAILS
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SHEET NO.	10-26	PLAN\PROFILE

CONSTRUCTION PLANS FOR

SANITARY SEWER IMPROVEMENTS

IN

WHITE TAIL ADDITION

TO SEDGWICK COUNTY, KANSAS

PHASE 1 THRU 7

DECEMBER, 1993

RECORD DRAWING
MDK PROJ ENG. 10/19/94 DATE

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

CHRISTOPHER T. YOUNG LICENSED 11315 KANSAS PROFESSIONAL ENGINEER
12-16-93

APPROVED:

David C. Spears

DAVID C. SPEARS, P.E.
DIRECTOR OF PUBLIC SERVICES/COUNTY ENGINEER
DATE: 12/21/93

APPROVED:

Mark A. Schmidt

CHAIRMAN, BOARD OF COUNTY COMMISSIONERS
DATE: 12/28/93

FILED IN THE OFFICE OF
THE SEDGWICK COUNTY CLERK

Brenda Shelton

Deputy COUNTY CLERK
DATE: 12-23-93

4MC-099

USNR: REJ OPER: TLS SCALE: 1 = 1
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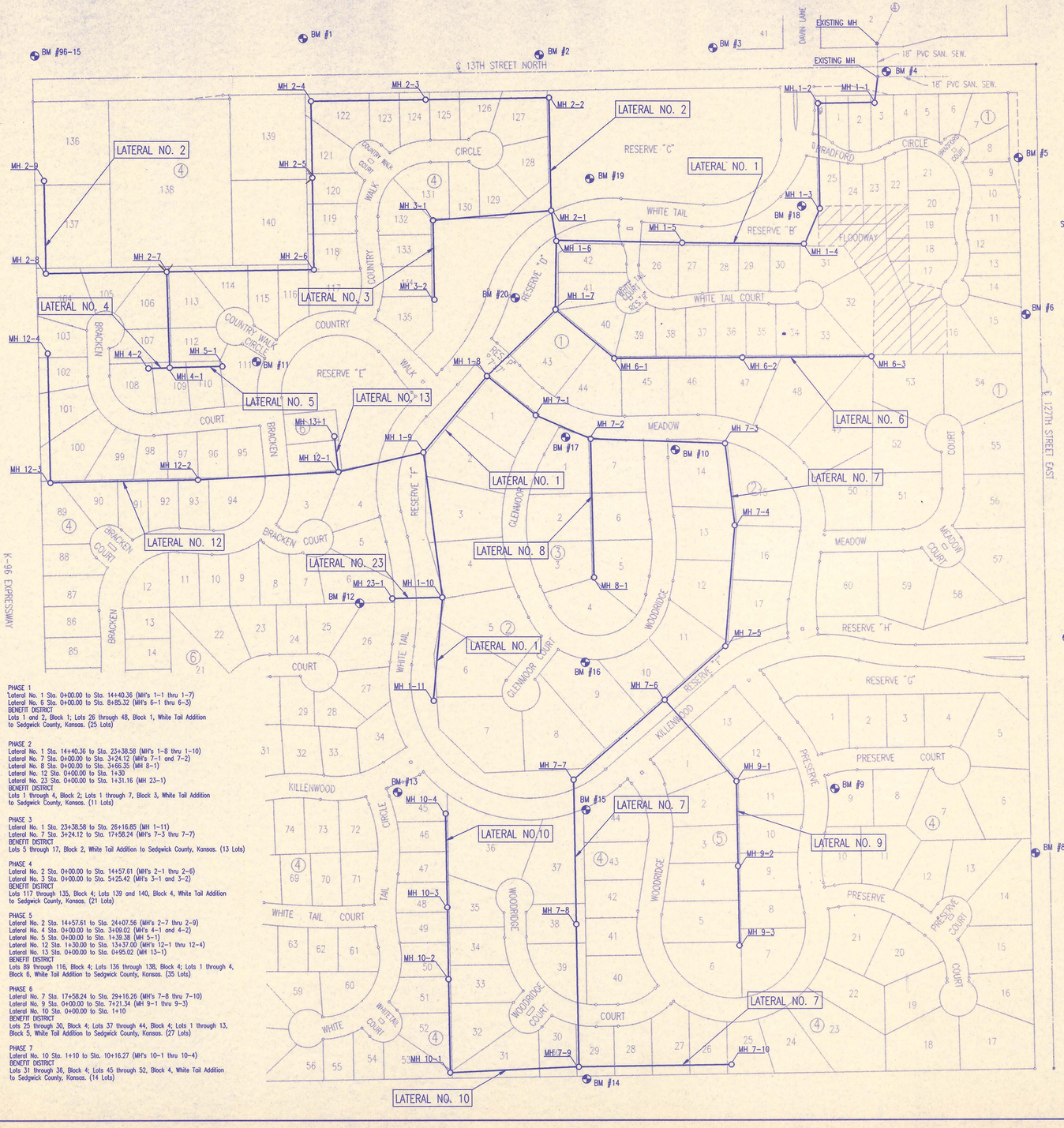

PHASE 1
Lateral No. 1 Sta. 0+00.00 to Sta. 14+40.36 (MH's 1-1 thru 1-7)
Lateral No. 5 Sta. 0+00.00 to Sta. 8+85.32 (MH's 6-1 thru 6-3)
BENEFIT DISTRICT
Lots 1 and 2, Block 1; Lots 26 through 48, Block 1, White Tail Addition to Sedgwick County, Kansas. (25 Lots)

PHASE 2
Lateral No. 1 Sta. 14+40.36 to Sta. 23+38.58 (MH's 1-8 thru 1-10)
Lateral No. 7 Sta. 0+00.00 to Sta. 3+24.12 (MH's 7-1 and 7-2)
Lateral No. 8 Sta. 0+00.00 to Sta. 3+66.35 (MH 8-1)
Lateral No. 12 Sta. 0+00.00 to Sta. 1+30
Lateral No. 23 Sta. 0+00.00 to Sta. 1+31.16 (MH 23-1)
BENEFIT DISTRICT
Lots 1 through 4, Block 2; Lots 1 through 7, Block 3, White Tail Addition to Sedgwick County, Kansas. (11 Lots)

PHASE 3
Lateral No. 1 Sta. 23+38.58 to Sta. 26+16.85 (MH 1-11)
Lateral No. 7 Sta. 3+24.12 to Sta. 17+58.24 (MH's 7-3 thru 7-7)
BENEFIT DISTRICT
Lots 5 through 17, Block 2, White Tail Addition to Sedgwick County, Kansas. (13 Lots)

PHASE 4
Lateral No. 2 Sta. 0+00.00 to Sta. 14+57.61 (MH's 2-1 thru 2-6)
Lateral No. 3 Sta. 0+00.00 to Sta. 5+25.42 (MH's 3-1 and 3-2)
BENEFIT DISTRICT
Lots 117 through 135, Block 4; Lots 139 and 140, Block 4, White Tail Addition to Sedgwick County, Kansas. (21 Lots)

PHASE 5
Lateral No. 2 Sta. 14+57.61 to Sta. 24+07.56 (MH's 2-7 thru 2-9)
Lateral No. 4 Sta. 0+00.00 to Sta. 3+09.02 (MH's 4-1 and 4-2)
Lateral No. 5 Sta. 0+00.00 to Sta. 1+39.38 (MH 5-1)
Lateral No. 12 Sta. 1+30.00 to Sta. 13+37.00 (MH's 12-1 thru 12-4)
Lateral No. 13 Sta. 0+00.00 to Sta. 0+95.02 (MH 13-1)
BENEFIT DISTRICT
Lots 89 through 116, Block 4; Lots 136 through 138, Block 4; Lots 1 through 4, Block 6, White Tail Addition to Sedgwick County, Kansas. (35 Lots)

PHASE 6
Lateral No. 7 Sta. 17+58.24 to Sta. 29+16.26 (MH's 7-8 thru 7-10)
Lateral No. 9 Sta. 0+00.00 to Sta. 7+21.34 (MH 9-1 thru 9-3)
Lateral No. 10 Sta. 0+00.00 to Sta. 1+10
BENEFIT DISTRICT
Lots 25 through 30, Block 4; Lots 37 through 44, Block 4; Lots 1 through 13, Block 5, White Tail Addition to Sedgwick County, Kansas. (27 Lots)

PHASE 7
Lateral No. 10 Sta. 1+10 to Sta. 10+16.27 (MH's 10-1 thru 10-4)
BENEFIT DISTRICT
Lots 31 through 36, Block 4; Lots 45 through 52, Block 4, White Tail Addition to Sedgwick County, Kansas. (14 Lots)

GENERAL NOTES

1. ALL ELEVATIONS SHOWN ARE USGS DATUM.
2. AT LEAST 72 HOURS PRIOR TO BEGINNING ANY EXCAVATION (EXCLUDING WEEKENDS AND HOLIDAYS), THE CONTRACTOR SHALL CONTACT THE KANSAS ONE-CALL SYSTEM, A UTILITY LOCATION SERVICE, AT 687-2470 TO REQUEST THE FOLLOWING UTILITY COMPANIES TO LOCATE ANY EXISTING LINES WITHIN THE PROJECT AREA: MULTIMEDIA CABLE TV, WICHITA WATER, SOUTHWESTERN BELL TELEPHONE, K G & E GAS, AND K G & E ELECTRIC.
3. THE BURIED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE LOCATIONS ONLY. IT SHOULD BE NOTED THAT OTHER BURIED LINES AND CABLES MAY EXIST WHICH ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING TRENCHING OPERATIONS TO AVOID DAMAGING THESE LINES. ANY LINES DAMAGED SHALL BE REPLACED OR REPAIRED IMMEDIATELY AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
4. AT LEAST 24 HOURS BEFORE CONNECTING NEW SEWER PIPE TO THE EXISTING SEWAGE SYSTEM, THE CONTRACTOR SHALL CONTACT THE SEDGWICK COUNTY EASTERN SEWER DISTRICT (733-0202). THE CONTRACTOR SHALL KEEP ANY CONSTRUCTION DEBRIS FROM ENTERING THE EXISTING SANITARY SEWER DURING CONSTRUCTION. TO PREVENT WATER OR DEBRIS FROM ENTERING THE EXISTING SEWER, A MECHANICAL PLUG SHALL BE INSTALLED AND MAINTAINED TO ISOLATE THE EXISTING SEWER FROM THE NEW CONSTRUCTION UNTIL THE NEW CONSTRUCTION IS CLEANED, TELEVISED, AND HAS BEEN ACCEPTED. THE WATER USED FOR CLEANING SHALL NOT BE ADDED TO THE FLOW OF THE EXISTING SEWER. THE CLEANING OR OTHERWISE ACCUMULATED WATER SHALL BE PUMPED OR OTHERWISE REMOVED PRIOR TO TELEVISING.
5. ALL PIPE JOINTS SHALL BE LAID AND PUSHED 'FULL HOME', WITH THE BEVELED END OF THE SPIGOT MAKING FULL CONTACT WITH THE CHAMFERED AREA AT THE THROAT OF THE BELL OR SOCKET, WITH NO SEPARATION BETWEEN THEM. IF SEPARATION IS DETERMINED, THE PIPE SHALL BE EXCAVATED AND RE-LAID ACCORDING TO SPECIFICATIONS AT THE CONTRACTORS EXPENSE.
6. EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE STOCKPILED WITHIN THE WHITE TAIL ADDITION AT NO ADDITIONAL COST TO THE OWNER. STOCKPILE LOCATIONS SHALL BE AS DIRECTED BY MR. JACK RITCHIE, RITCHIE ASSOCIATES INC., AT (316) 684-7300 AND IN ACCORDANCE WITH GENERAL NOTE NO. 19. NO ACCEPTABLE EXCAVATED MATERIAL SHALL BE REMOVED FROM THE WHITE TAIL ADDITION.
7. THE CONTRACTOR SHALL CONTAIN HIS OPERATIONS TO PERMIT TRAFFIC THROUGH AND ACROSS CONSTRUCTION AT EXISTING ROADWAYS AT ALL TIMES. THE CONTRACTOR SHALL ERECT WARNING SIGNS, FLASHING LIGHTS, AND BARRICADES IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES TO ENSURE SAFETY AS DIRECTED IN THE GENERAL CONDITIONS. THE CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH TO REMAIN OPEN OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.
8. 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. PRIOR TO START OF CONSTRUCTION THE CONTRACTOR SHALL FLAG AND REFERENCE ALL PROPERTY CORNERS THAT MAY BE DISTURBED BY CONSTRUCTION OPERATIONS, AND VERIFY THESE IN THE FIELD IN THE PRESENCE OF THE ENGINEER AND THE CONTRACTOR'S SURVEYOR. AFTER CONSTRUCTION AND BEFORE THE FINAL INSPECTION, A LETTER SIGNED AND SEALED BY THE LICENSED LAND SURVEYOR CERTIFYING REPLACEMENT OF ALL DISTURBED PROPERTY CORNERS SHALL BE SUBMITTED TO THE ENGINEER.
9. THE CONTRACTOR SHALL RESTORE ALL DITCHES, SWALES, ROAD SHOULDERS, AND BANKS TO THEIR ORIGINAL SLOPES AND GRADES. WHERE EXISTING ENTRANCE PIPE, DRAINAGE PIPE, SIGNS, FENCES, ETC., CONFLICT WITH THE PROPOSED WORK HEREIN, THEY SHALL BE REMOVED AND REPLACED OR RESET UNLESS OTHERWISE INDICATED ON THE PLANS. THE REPLACEMENT OF ALL THE AFOREMENTIONED ITEMS, INCLUDING SEEDING, FERTILIZER, AND MULCHING SHALL BE CONSIDERED SUBSIDIARY TO "SITE CLEARING AND RESTORATION".
10. EASEMENTS AND RIGHTS-OF-WAY PROVIDED BY THE OWNER FOR THE PROJECT ARE SHOWN IN THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACQUISITION OF ANY ADDITIONAL TEMPORARY EASEMENTS OR RIGHTS-OF-WAY THAT HE DESIRES TO USE IN COMPLETING THE WORK.
11. POSITIVE DRAINAGE SHALL BE PROVIDED FOR ALL AREAS ON OR NEAR SPOIL AREAS. NATURAL DRAINAGE WAYS SHALL BE MAINTAINED.
12. THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL MANHOLE COVERS.
13. THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY ABUTTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF 10 DAYS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION IN THE VICINITY OF THE AFFECTED PROPERTY.
14. ALL TRENCH BACKFILL SHALL BE EITHER TYPE I OR TYPE III UNLESS NOTED OTHERWISE.
15. THE CONTRACTOR SHALL ALSO CONTACT THE FOLLOWING AT LEAST 72 HOURS PRIOR TO BEGINNING CONSTRUCTION TO ADVISE THEM OF THE INTENDED WORK AND OF HIS PROPOSED SCHEDULE:

    SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
    1250 S. SENECA
    WICHITA, KS 67213
    MR. JIM WEBER
    (316) 383-7901
16. CONTRACTOR SHALL GRADE THE EASEMENTS TO THE PROFILE AND ELEVATIONS SHOWN ON THE EASEMENT GRADING PLAN. ALL COSTS FOR EASEMENT GRADING SHALL BE SUBSIDIARY TO THE LUMP SUM PRICE BID FOR "EASEMENT GRADING". (SEE EASEMENT GRADING PLAN, SHEET 3)
17. CONTRACTOR SHALL PROVIDE MOUNDED EARTH AT MANHOLES AS SHOWN ON THE PLAN/PROFILE SHEETS. COSTS FOR MOUNDING SHALL BE CONSIDERED SUBSIDIARY TO THE LUMP SUM PRICE BID FOR "SITE RESTORATION".
18. THE CONTRACTOR SHALL AVOID REMOVAL OR TRIMMING OF ANY TREES WHERE POSSIBLE. WHERE THE CONTRACTOR BELIEVES THE REMOVAL OR TRIMMING IS UNAVOIDABLE, HE SHALL OBTAIN THE CONCURRENCE OF THE ENGINEER BEFORE PROCEEDING WITH SUCH WORK.
19. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES INCLUDING ANY TREES REMOVED, TREE TRIMMINGS, AND EXCESS EXCAVATION WHICH IS TO BE WASTED, SHALL BE DISPOSED OF ON SITES PROVIDED BY THE CONTRACTOR. THESE SITES SHALL ALSO BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE, AND SITE LOCATION. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOODPLAIN WILL REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT AND A FLOODPLAIN DEVELOPMENT PERMIT FROM SEDGWICK COUNTY. ANY MATERIALS DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIALS BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS MAY REQUIRE ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED DISPOSAL LOCATION.
20. EACH BIDDER SHALL VISIT THE SITE OF THE PROJECT BEFORE SUBMITTING THE PROPOSAL FOR THIS WORK SO THAT HE WILL BE FULLY INFORMED OF THE EXISTING FIELD CONDITIONS AND THE OBSTACLES WHICH MIGHT BE ENCOUNTERED. UPON AWARD OF THE CONTRACT, THE CONTRACTOR WILL NOT BE GRANTED ANY ADDITIONAL COMPENSATION WITH REGARDS TO TIME AND MONEY FOR CONDITIONS THAT MAY HAVE BEEN EVALUATED DURING AN INSPECTION OF THE SITE.
21. MINIMUM ADJUSTMENT FOR MANHOLES ON THIS PROJECT SHALL BE 8", IN ACCORDANCE WITH THE PRECAST MANHOLE DETAIL SHEET.

RECORD DRAWING
MDK PROJ. ENG. 10/13/94 DATE
_____ RES. ENG. _____ DATE

BENCH MARK LIST

BM#96-15 (DATUM BM) – FOUND CHISELED "+" ON TOP NORTH CURB ALONG 13TH STREET NORTH ON EAST SIDE GRAVEL ACCESS ROAD ON WEST PROPERTY LINE OF LAKEVIEW CEMETERY.
ELEV. = 1347.35

BM#13-A (DATUM BM) – FOUND 40¢ SPIKE STEP IN EAST FACE HIGH VOLTAGE POLE ON WEST R/W 127TH STREET EAST ON 1ST POLE SOUTH OF CENTERLINE CRESTVIEW COUNTRY CLUB VILLAS ENTRANCE TO EAST.
ELEV. = 1371.375

BM#1 – SET RAILROAD SPIKE IN SOUTH FACE OF HIGH VOLTAGE POLE ON NORTH R/W 13TH STREET NORTH ON 2ND POLE EAST OF ENTRANCE TO LAKEVIEW CEMETERY.
ELEV. = 1371.688

BM#2 – SET RAILROAD SPIKE IN SOUTH FACE OF HIGH VOLTAGE POLE AT 39± NORTH-NORTHEAST OF THE NORTH 1/16 CORNER OF THE NORTHEAST 1/4 OF SECTION 15, TOWNSHIP 27 SOUTH, RANGE 2 EAST, OF THE 6TH P.M..
ELEV. = 1363.638

BM#3 – SET RAILROAD SPIKE IN SOUTH FACE OF HIGH VOLTAGE POLE ON NORTH R/W 13TH STREET NORTH AT 210'± WEST OF CENTERLINE DAWN LANE TO NORTH.
ELEV. = 1354.930

BM#4 – SET CHISELED "X" ON CENTERLINE HEADWALL IN SOUTH-SOUTHWEST END OF RCB UNDER 13TH STREET NORTH AT 395'± WEST OF CENTERLINE 127TH STREET EAST.
ELEV. = 1349.085

BM#5 – SET RAILROAD SPIKE IN NORTHWEST FACE OF HIGH VOLTAGE POLE ON WEST R/W 127TH STREET EAST AT 240'± SOUTH OF CENTERLINE 13TH STREET NORTH.
ELEV. = 1351.495

BM#6 – SET RAILROAD SPIKE IN WEST-NORTHWEST FACE OF HIGH VOLTAGE POLE ON WEST R/W 127TH STREET EAST ON 3RD POLE NORTH OF CENTERLINE KILLENWOOD STREET TO EAST.
ELEV. = 1357.340

BM#7 – SET RAILROAD SPIKE IN WEST FACE OF LIGHT POLE ON NORTHEAST CORNER OF KILLENWOOD STREET AND 127TH STREET EAST.
ELEV. = 1367.900

BM#8 – SET RAILROAD SPIKE IN WEST FACE OF HIGH VOLTAGE POLE ON WEST R/W 127TH STREET EAST ON 2ND POLE SOUTH OF CENTERLINE KILLENWOOD STREET TO EAST.
ELEV. = 1371.810

BM#9 – SET TEE POST (1.5' DEEP) AT 30' SOUTH AND 25'± EAST OF NORTHWEST CORNER LOT 9, BLOCK 4, WHITE TAIL ADDITION.
ELEV. = 1366.855

BM#10 – SET TEE POST (1.5' DEEP) AT 25'± SOUTH AND 25'± EAST OF NORTHWEST CORNER LOT 14, BLOCK 2, WHITE TAIL ADDITION.
ELEV. = 1366.740

BM#11 – SET TEE POST (1.5' DEEP) AT 30'± WEST OF NORTHEAST P.I. CORNER LOT 111, BLOCK 4, WHITE TAIL ADDITION.
ELEV. = 1372.287

BM#12 – SET 40¢ SPIKE STEP IN EAST FACE GATE POST IN EAST-WEST FENCE/HEDGEROW NEAR NORTHEAST CORNER LOT 25, BLOCK 6, WHITE TAIL ADDITION.
ELEV. = 1379.240

BM#13 – SET TEE POST (1' DEEP) AT 20'± SOUTH AND 30'± EAST OF NORTHWEST CORNER LOT 45, BLOCK 4, WHITE TAIL ADDITION.
ELEV. = 1377.707

BM#14 – SET RAILROAD SPIKE IN NORTHEAST FACE 12" HEDGE TREE IN NORTH-SOUTH HEDGE ROW AT 30'± EAST-SOUTHEAST OF NORTHEAST CORNER LOT 30, BLOCK 4, WHITE TAIL ADDITION.
ELEV. = 1373.538

BM#15 – SET RAILROAD SPIKE IN NORTH FACE 12" HACKBERRY IN NORTH-SOUTH HEDGE ROW AT 2'± EAST OF NORTHEAST CORNER LOT 37, BLOCK 4, WHITE TAIL ADDITION.
ELEV. = 1375.567

BM#16 – SET RAILROAD SPIKE IN NORTH FACE 15" HEDGE TREE IN NORTH-SOUTH HEDGEROW AT 40'± WEST OF NORTHEAST CORNER LOT 9, BLOCK 2, WHITE TAIL ADDITION.
ELEV. = 1374.655

BM#17 – SET RAILROAD SPIKE IN NORTH FACE 18" TRIPLE HEDGE TREE IN NORTH-SOUTH HEDGE ROW AT 45'± EAST-SOUTHEAST OF NORTHWEST CORNER LOT 1, BLOCK 3, WHITE TAIL ADDITION.
ELEV. = 1372.875

BM#18 – SET RAILROAD SPIKE IN NORTHEAST FACE 36" ELM IN EAST-WEST FENCE LINE AT 70'± NORTHWEST OF SOUTHWEST CORNER LOT 25, BLOCK 1, WHITE TAIL ADDITION.
ELEV. = 1355.275

BM#19 – SET RAILROAD SPIKE IN NORTHEAST FACE 18" COTTONWOOD IN AT 150'± NORTHWEST OF NORTHEAST CORNER RESERVE "D", WHITE TAIL ADDITION.
ELEV. = 1354.88

BM#20 – SET TEE POST (1' DEEP) AT 21'± EAST-SOUTHEAST OF P.R.C. ON WEST PROPERTY LINE OF RESERVE "D", WHITE TAIL ADDITION.
ELEV. = 1362.045

SEWER LATERAL SCHEDULE

LATERAL NO.	STATION TO STATION	MANHOLES	SHEET NO.
LATERAL NO. 1	00+00.00 TO 09+24.99	EXIST. MH. 1-1 THRU 1-5	10
LATERAL NO. 1	09+24.99 TO 19+57.40	1-5 THRU 1-9	11
LATERAL NO. 1	19+57.40 TO 26+16.85	1-9 THRU 1-11	12
LATERAL NO. 2	00+00.00 TO 07+07.61	1-6, 2-1 THRU 2-3	13
LATERAL NO. 2	07+07.61 TO 14+57.61	2-3 THRU 2-6	14
LATERAL NO. 2	14+57.61 TO 24+07.56	2-6 THRU 2-9	15
LATERAL NO. 3	00+00.00 TO 05+25.42	2-1, 3-1 AND 3-2	16
LATERAL NO. 4	00+00.00 TO 03+09.02	2-7, 4-1 AND 4-2	17
LATERAL NO. 5	00+00.00 TO 01+39.38	4-1, 5-1	17
LATERAL NO. 6	00+00.00 TO 08+85.32	1-7, 6-1 THRU 6-3	18
LATERAL NO. 7	00+00.00 TO 06+81.44	1-8, 7-1 THRU 7-3	19
LATERAL NO. 7	06+81.44 TO 17+58.24	7-3 THRU 7-7	20
LATERAL NO. 7	17+58.24 TO 29+16.26	7-7 THRU 7-10	21
LATERAL NO. 8	00+00.00 TO 03+66.35	7-2, 8-1	22
LATERAL NO. 9	00+00.00 TO 07+21.34	7-6, 9-1 THRU 9-3	23
LATERAL NO. 10	00+00.00 TO 10+16.27	7-9, 10-1 THRU 10-4	24
LATERAL NO. 12	00+00.00 TO 09+95.70	1-9, 12-1 THRU 12-3	25
LATERAL NO. 12	09+95.70 TO 13+37.00	12-3 AND 12-4	26
LATERAL NO. 13	00+00.00 TO 00+95.02	12-1, 13-1	26
LATERAL NO. 23	00+00.00 TO 01+31.16	1-10, 23-1	26

THE CONTRACTOR SHALL SUBMIT HIS PROPOSED CONSTRUCTION SCHEDULE TO THE ENGINEER FOR APPROVAL AT LEAST 10 DAYS PRIOR TO THE NOTICE TO PROCEED. THE CONTRACTOR'S PROPOSED SCHEDULE SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO THE FOLLOWING CONSTRUCTION STAGES:

STAGE 1: Lateral No. 1, Sta 0+00.00 to Sta. 12+59.33 Lateral No. 2, All Lateral No. 3, All Lateral No. 4, All Lateral No. 5, All	**STAGE 2:** Lateral No. 1, Sta 12+59.33 to Sta. 16+93.51 Lateral No. 7, All Lateral No. 8, All Lateral No. 9, All Lateral No. 10, All
STAGE 3: Lateral No. 1, Sta 16+93.51 to End Lateral No. 12, All Lateral No. 13, All	**STAGE 4:** Lateral No. 6, All

No.	Revision	By	Date

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

KEY MAP

SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION PHASE 1 THRU 7

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

Designed by	CRY, MDK	Job No.	34-93445-1
Drawn by	TLS, GM	Date	NOVEMBER, 1993

Sht. 2 of 26

DSNR: REJ OPER: RFJ SCALE: 1 = 150
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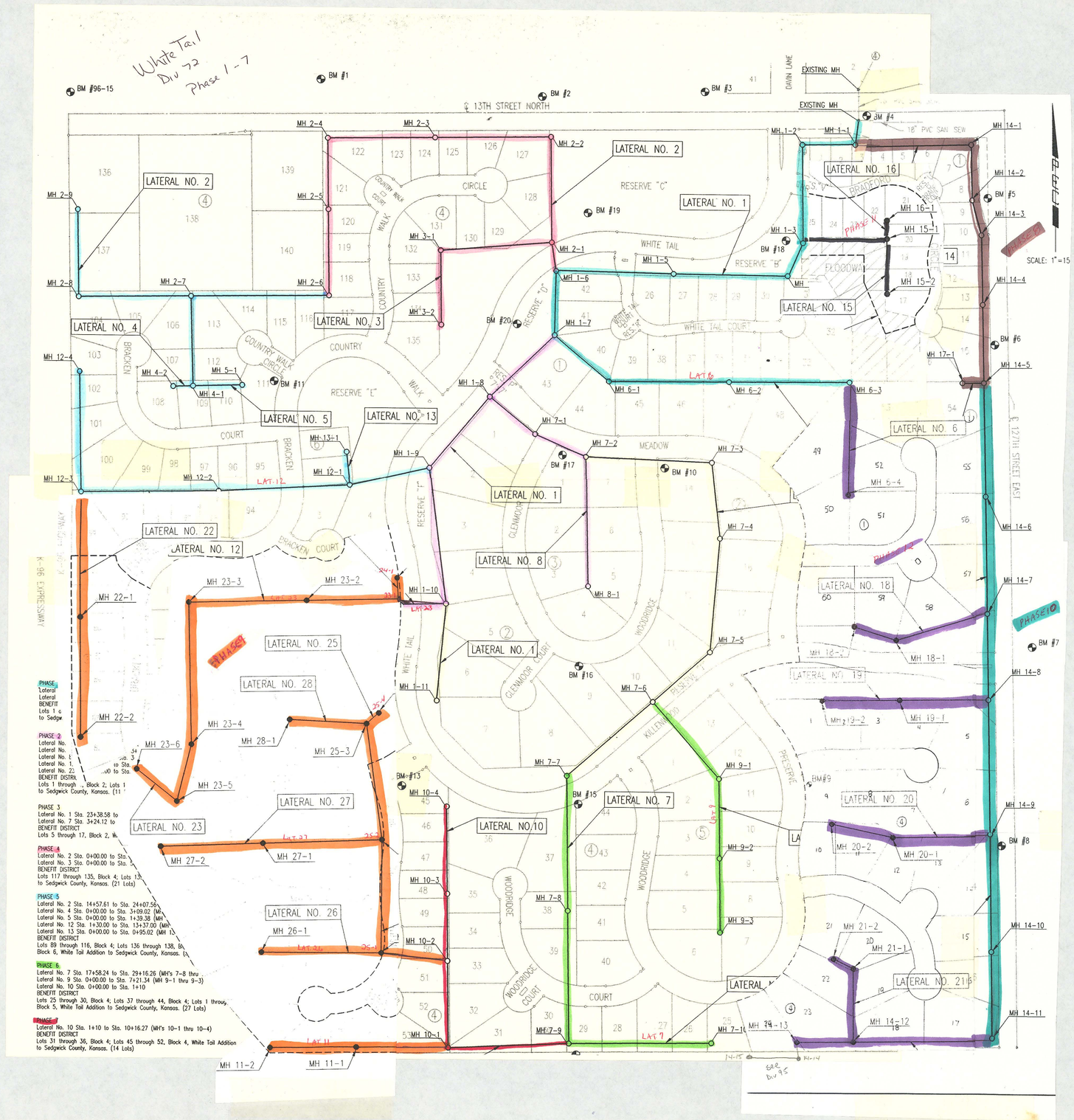
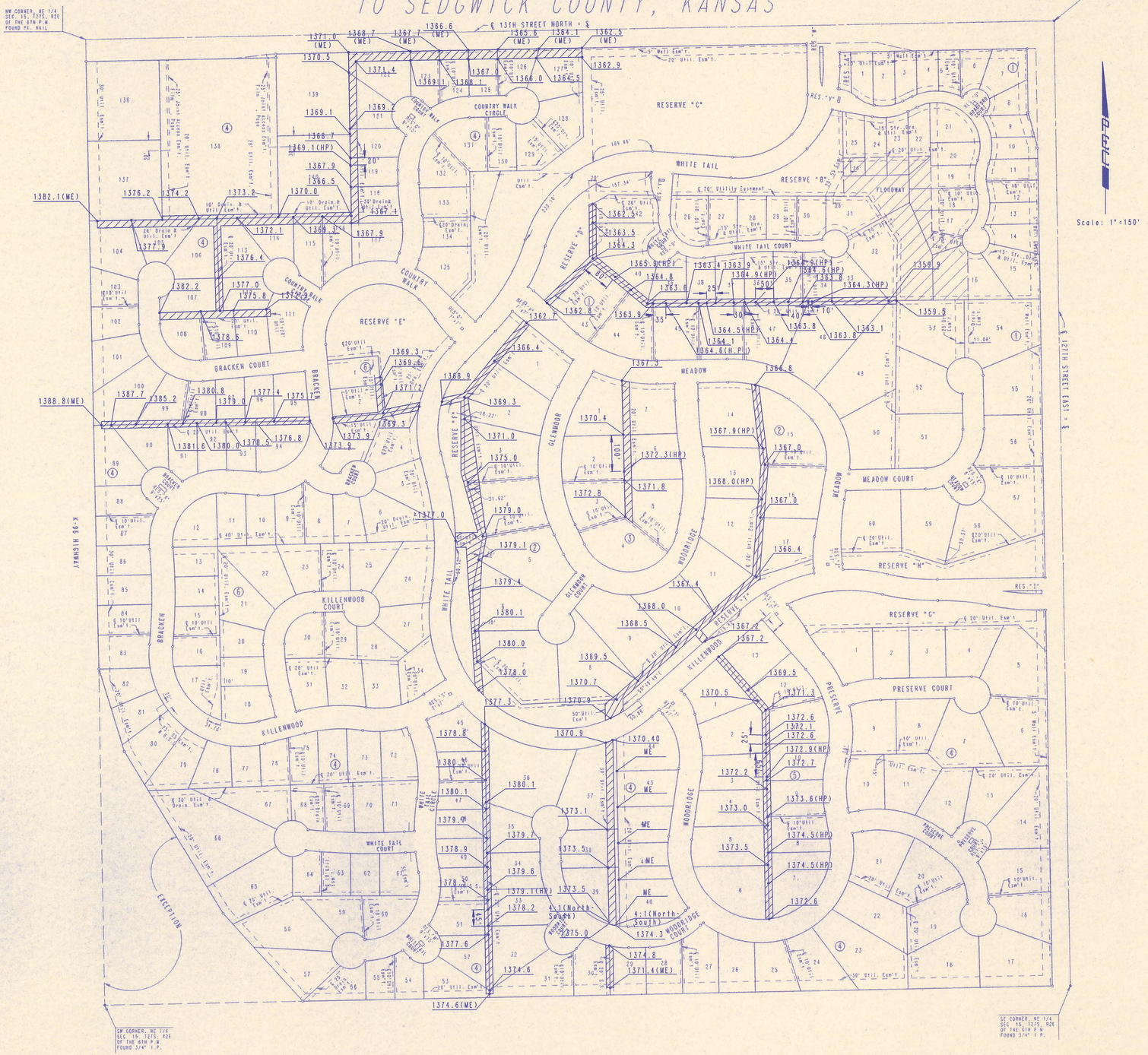
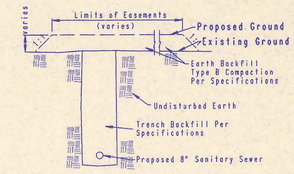
White Tail
Div 72
Phase 1-7



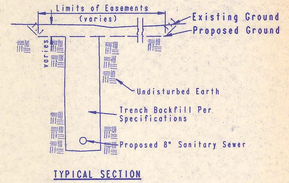
WHITE TAIL ADDITION
TO SEDGWICK COUNTY, KANSAS



Scale: 1" = 150'



TYPICAL SECTION



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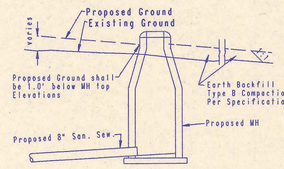
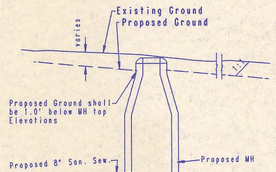


TYPICAL PROFILE

"FILL" SITUATIONS



TYPICAL PROFILE

"CUT" SITUATIONS

EASEMENT GRADING

▨ = AREAS TO BE GRADED

HP = HIGH POINT

ME = MATCH EXISTING

Easement Grading will be bid on a lump sum basis for grading the easement to the profile and elevations shown on the Easement Grading Plan (this sheet). Approximate quantities of earthwork for easement grading are shown below. These approximate quantities are given for information only. The contractor should verify the quantities when preparing the proposal.

Cut 7,800 C.Y. (Approximate)
Fill 7,500 C.Y. (Approximate)

RECORD DRAWING
MDK PROJ. ENG. 12/19/94 DATE
L. REG. ENG. _____ DATE

No.	Revision	By	Date

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

EASEMENT GRADING PLAN

SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION PHASE 1 THRU 7

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

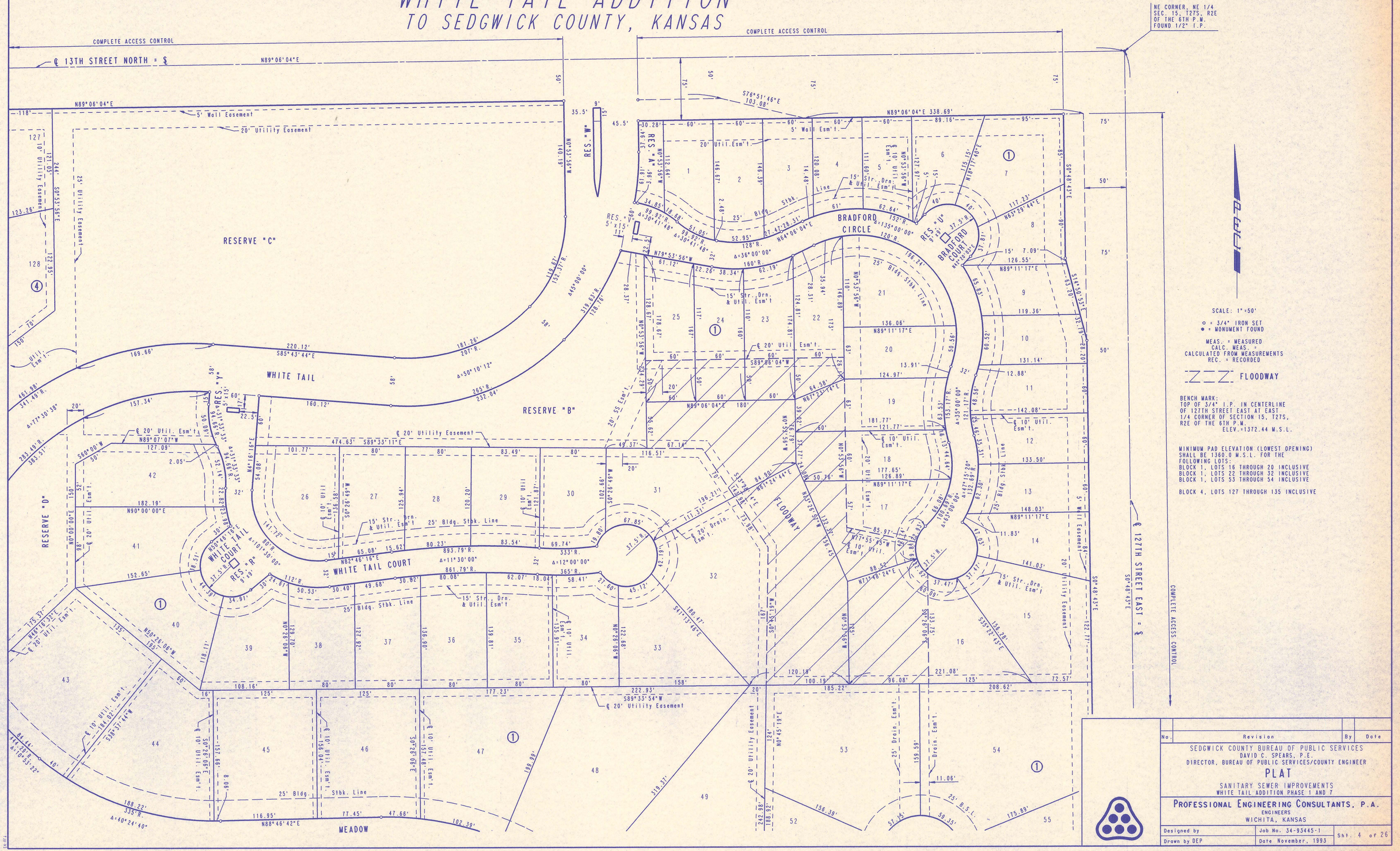
Designed by CRY, MDK	Job No. 34-93445-1	Sht. 3 of 26
Drawn by TLS	Date November, 1993	

PLAN CHECKED / CHECKED

DATE | BY

DRAWING NAME: 34-93445-1 WT SS ESMTGD
LOCATION: E4 DWG.#519
CENTER COORDINATES:
ROTATION ANGLE:
DATE LAST WORKED ON: DEC. 16, 1993
SPECIAL INSTRUCTIONS:
E - #82

WHITE TAIL ADDITION
TO SEDGWICK COUNTY, KANSAS



SCALE: 1"=50'

○ = 3/4" IRON SET
● = MONUMENT FOUND

MEAS. = MEASURED
CALC. MEAS. = CALCULATED FROM MEASUREMENTS
REC. = RECORDED

ZZZ FLOODWAY

BENCH MARK:
TOP OF 3/4" I.P. IN CENTERLINE OF 127TH STREET EAST AT EAST 1/4 CORNER OF SECTION 15, T27S, R2E OF THE 6TH P.M.
ELEV.=1372.44 M.S.L.

MINIMUM PAD ELEVATION (LOWEST OPENING) SHALL BE 1360.0 M.S.L. FOR THE FOLLOWING LOTS:
BLOCK 1, LOTS 16 THROUGH 20 INCLUSIVE
BLOCK 1, LOTS 22 THROUGH 32 INCLUSIVE
BLOCK 1, LOTS 53 THROUGH 54 INCLUSIVE

BLOCK 4, LOTS 127 THROUGH 135 INCLUSIVE

No.	Revision	By	Date

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

PLAT

SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION PHASE 1 AND 7

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

Designed by	Job No. 34-93445-1	Sht. 4 of 26
Drawn by DEP	Date November, 1993	

DRAWING NAME: 34-93445-1 WT SS PLAT
COORDINATE SYSTEM: NAD83 (1993) # 523
CENTER COORDINATES:
ROTATION ANGLE:
DATE LAST WORKED ON: JAN 06, 1994 CKD. BY: DATE
SPECIAL INSTRUCTIONS:

WHITE TAIL ADDITION
TO SEDGWICK COUNTY, KANSAS

SCALE: 1"=100'

○ = 3/4" IRON SET
● = MONUMENT FOUND
MEAS. = MEASURED
CALC. MEAS. = CALCULATED FROM MEASUREMENTS
REC. = RECORDED

BSL = BUILDING SETBACK LINE
SS = SANITARY SEWER

BENCH MARK:
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BLOCK 1, LOTS 16 THROUGH 20 INCLUSIVE
BLOCK 1, LOTS 22 THROUGH 32 INCLUSIVE
BLOCK 1, LOTS 53 THROUGH 54 INCLUSIVE

BLOCK 4, LOTS 127 THROUGH 135 INCLUSIVE

NW CORNER, NE 1/4 SEC. 15, T27S, R2E OF THE 6TH P.M. FOUND PK. NAIL

NE CORNER, NE 1/4 SEC. 15, T27S, R2E OF THE 6TH P.M. FOUND 1/2" I.P.

ACCESS CONTROL EXCEPT ONE OPENING

COMPLETE ACCESS CONTROL

℄ 13TH STREET NORTH = ℄ N89°06'04"E 2663.50' MEAS.

N89°06'04"E 1671.23'

N89°06'04"E 338.69'

S76°51'46"E 103.08'

N83°23'26"E 100.50'

N89°06'04"E 403.29'

13TH STREET NORTH

WHITE TAIL

WHITE TAIL COURT

COUNTRY WALK CIRCLE

COUNTRY WALK COURT

BRACKEN COURT

BRACKEN CIRCLE

BRADFORD CIRCLE

BRADFORD COURT

MEADOW CIRCLE

MEADOW COURT

MEADOW

WOODRIDGE

GLENMOOR

WHITE TAIL COURT

RESERVE "A"

RESERVE "B"

RESERVE "C"

RESERVE "D"

RESERVE "E"

RESERVE "F"

RESERVE "V"

FLOODWAY

K-96 HIGHWAY

COMPLETE ACCESS CONTROL

℄ 127TH STREET EAST = ℄

13TH STREET NORTH

WHITE TAIL RES. "W"

BRADFORD CIRCLE RES. "V"

DRAWING NAME: 34-93445-1 WT SS PLAT
LAST UPDATED: 11-06-94 9:52
CENTER COORDINATE:
ROTATION ANGLE
DATE LAST WORKED ON: JAN 06, 1994 CKD. BY: DATE
SPECIAL INSTRUCTIONS.
REF.

No.	Revision	By	Date

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

PLAT

SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION PHASE 8 AND 10

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

Designed by	Job No. 34-93445-1	Sht. 5 of 26
Drawn by DEP	Date November, 1993	

WHITE TAIL ADDITION
TO SEDGWICK COUNTY, KANSAS

SCALE: 1"=100'

○ = 3/4" IRON SET

● = MONUMENT FOUND

MEAS. = MEASURED
CALC. MEAS. = CALCULATED FROM MEASUREMENTS
REC. = RECORDED

BSL = BUILDING SETBACK LINE
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BENCH MARK:
TOP OF 3/4" I.P. IN CENTERLINE OF 127TH STREET EAST AT EAST 1/4 CORNER OF SECTION 15, T27S, R2E OF THE 6TH P.M.
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BLOCK 1, LOTS 22 THROUGH 32 INCLUSIVE
BLOCK 1, LOTS 53 THROUGH 54 INCLUSIVE

BLOCK 4, LOTS 127 THROUGH 135 INCLUSIVE

K-96 HIGHWAY

COMPLETE ACCESS CONTROL

127TH STREET EAST

EXCEPTION

SW CORNER, NE 1/4 SEC. 15, T27S, R2E OF THE 6TH P.M. FOUND 3/4" I.P.

SE CORNER, NE 1/4 SEC. 15, T27S, R2E OF THE 6TH P.M. FOUND 3/4" I.P.

No.	Revision	By	Date

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

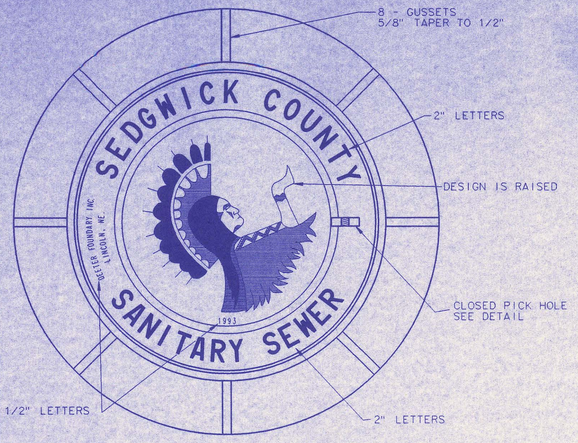
PLAT

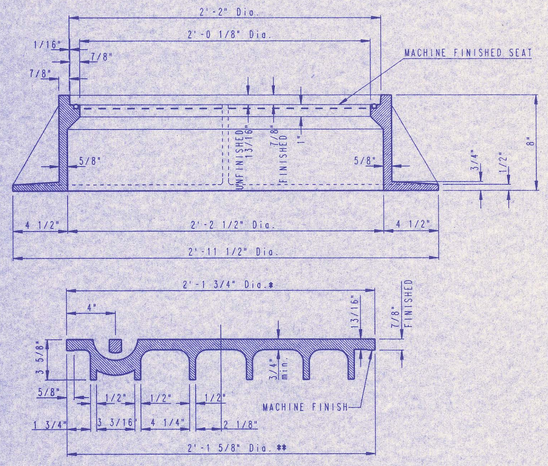
SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION PHASE 8 AND 10

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

Designed by	Job No. 34-93445-1	Sht. 6 of 26
Drawn by DEP	Date November, 1993	

DRAWING NAME: 34-93445-1 WT SS PLAT3
LOCATION: E2 E2 DWG # 52c
CENTER COORDINATES:
ROTATION ANGLE
LAST WORKED ON: JAN 06, 1994 CKD. BY: DATE
SPECIAL INSTRUCTIONS:





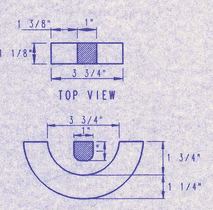
*OUTSIDE DIA. TOP OF COVER
**OUTSIDE DIA. BOTTOM OF COVER

MANHOLE FRAME AND COVER

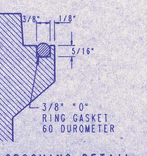
(TOTAL WEIGHT = 430 LBS.)

MANHOLE FRAME AND COVER NOTES

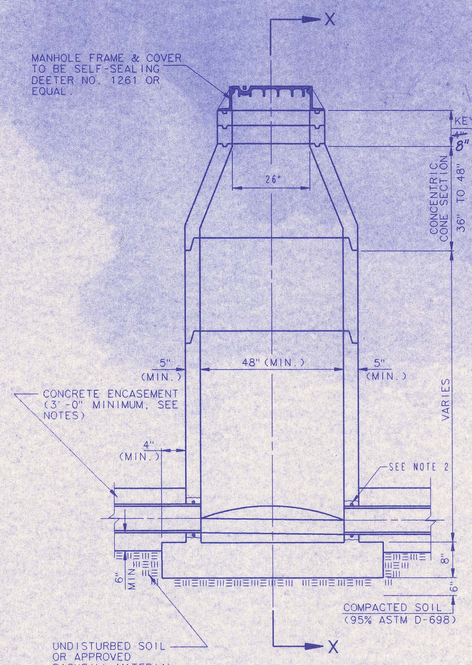
1. CAST IRON MANHOLE FRAME AND COVER SHALL CONFORM TO ASTM A-48, CLASS 35B, OR BETTER.
2. CASTINGS ARE TO BE MANUFACTURED TRUE TO PATTERN AND WITH SATISFACTORY FIT OF COMPONENT PARTS. CASTINGS SHALL BE FREE OF DEFECTS AND ALL BURRS SHALL BE GROUND SMOOTH. DIMENSIONS AS DETAILED ON PLAN SHALL NOT DEVIATE BY ± 1/16" PER FOOT.
3. NO OTHER LETTERING OR MARKINGS OTHER THAN THOSE DETAILED ON PLAN WILL BE PERMITTED ON CASTINGS.
4. CASTINGS MUST BE DOMESTICALLY MANUFACTURED IN THE UNITED STATES OF AMERICA.
5. THE FRAMES AND COVERS SHALL BE FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACES SO FITTING PARTS WILL NOT RATTLE OR ROCK UNDER TRAFFIC.
6. MANHOLE CASTINGS SHALL BE SELF-SEALING DEETER FOUNDRY INC. NO. 1261 OR APPROVED EQUAL, UNLESS OTHERWISE SPECIFIED IN THE SPECIAL CONDITIONS. (MINIMUM WT. =430 LBS.) ALL MANHOLE CASTINGS SHALL BE CONSIDERED SUBSIDIARY TO THE UNIT PRICES BID FOR THE VARIOUS MANHOLE TYPES.
7. THE MANUFACTURER SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO MANUFACTURE. THE ENGINEER SHALL RETAIN THE RIGHT TO REJECT CASTINGS NOT CONFORMING TO THE SPECIFICATIONS OR THE APPROVED SHOP DRAWINGS.
8. THE MANHOLE FRAME SHALL BE FURNISHED WITH AN APPROVED CONTINUOUS "O" RING GASKET GROOVED INTO THE BEARING SURFACE OF THE MANHOLE FRAME (PER DETAIL). THE "O" RING GASKET SHALL BE FACTORY INSTALLED IN THE MANHOLE FRAME WITH 100% SILICON SEALANT-DOW CORNING OR EQUAL.



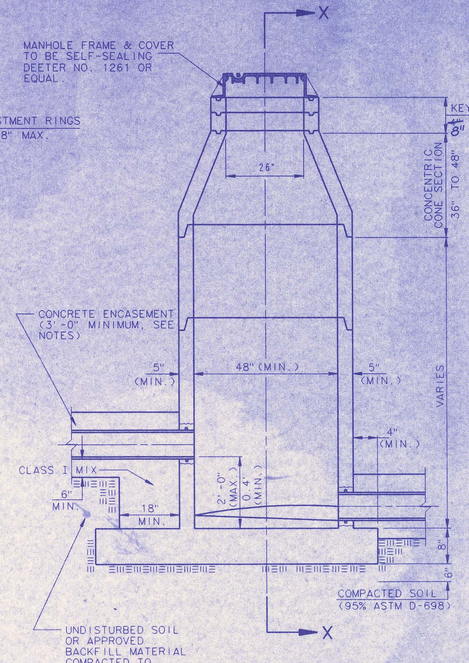
PICK HOLE DETAIL



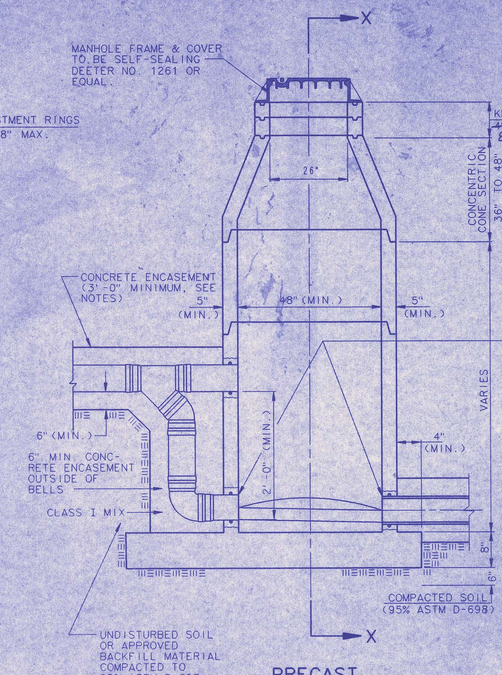
FRAME GROOVING DETAIL
(TYPICAL ALL MANHOLES)



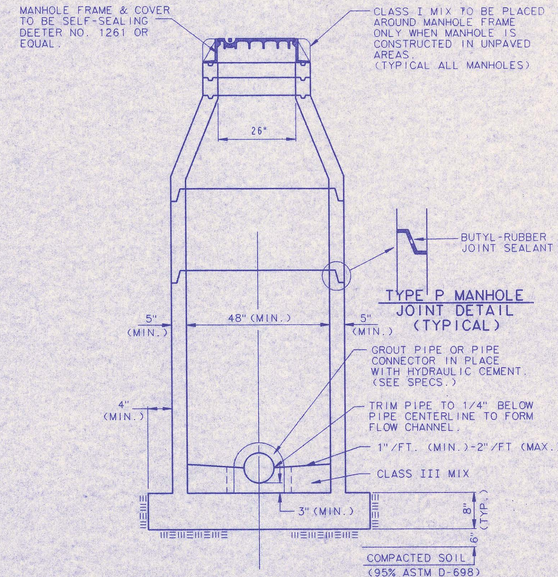
PRECAST
STANDARD MANHOLE
TYPE "A"



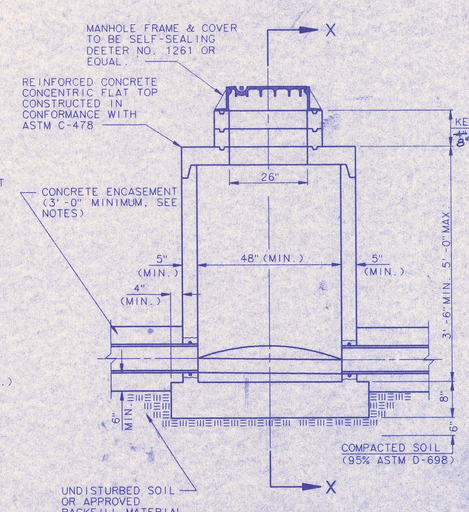
PRECAST
INSIDE DROP MANHOLE
TYPE "B"



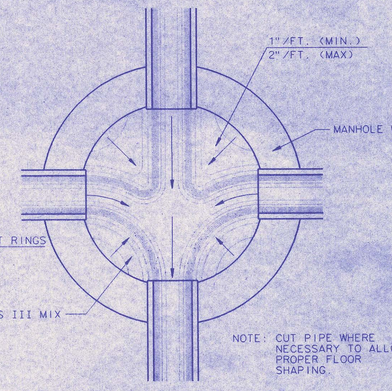
PRECAST
OUTSIDE DROP MANHOLE
TYPE "C"



SECTION X
(TYPICAL)



PRECAST
SHALLOW MANHOLE
TYPE "D"



TYPICAL MANHOLE
FLOOR SHAPING

PRECAST MANHOLE NOTES

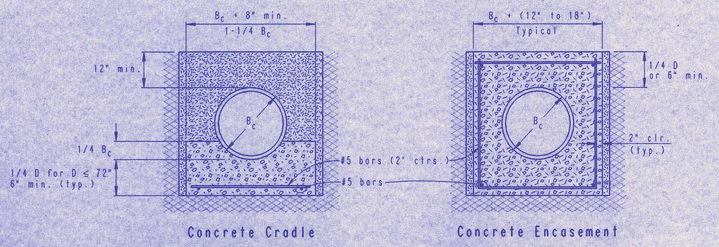
1. IF, IN THE OPINION OF THE ENGINEER, THE MANHOLE SUBGRADE APPEARS UNSTABLE, THE CONTRACTOR WILL OVEREXCAVATE TO A SUITABLE SUBGRADE CONDITION AND CRUSHED ROCK SHALL BE PLACED AND COMPACTED TO THE REQUIRED GRADE.
2. "ALOK" OR APPROVED EQUAL FLEXIBLE WATER-STOP GASKETS WHICH MEET OR EXCEED THE TEST REQUIREMENTS OF ASTM C-923 SHALL BE INSTALLED TO JOIN THE SEWER TO THE MANHOLE WALL. SEWER PIPES EXTENDING FROM MANHOLES SHALL BE SUPPORTED WITH CLASS I CONCRETE ENCASEMENT A MINIMUM OF 3 FEET FROM THE MANHOLE WALL.
3. THE MANHOLE FRAME SHALL BE SEATED ON AN APPROVED BUTYL-RUBBER SEALANT TO PROVIDE A WATER-TIGHT SEAL BETWEEN THE MANHOLE ADJUSTMENT RING AND THE MANHOLE FRAME.
4. GASKETED PIPE CAPS SHALL BE PROVIDED BY THE PIPE SUPPLIER. GLUED OR CEMENTED CAPS WILL NOT BE ACCEPTED.
5. ALL MANHOLE CONSTRUCTION SHALL BE WATER TIGHT.
6. TOP OF MANHOLE FLOOR SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHAPED INVERT.
7. MANHOLES WITH PIPE SIZES 24" AND LARGER SHALL HAVE 5' INSIDE DIAMETER (MIN.).
8. INSIDE DIAMETER OF FIVE-FOOT DIAMETER PRECAST MANHOLES SHALL REMAIN CONSTANT TO THE LOCATION OF THE REDUCING FLAT TOP WHICH CONNECTS THE FOUR-FOOT DIAMETER CONE SECTION TO THE FIVE-FOOT DIAMETER MANHOLE BARREL.
9. MANHOLES SHALL BE SUPPLIED WITH PRECAST MONOLITHICALLY CAST BASE SECTIONS UNLESS OTHERWISE APPROVED. ALL PRECAST CONCRETE MANHOLE SECTIONS AND BASES SHALL CONFORM TO THE LATEST REVISION OF ASTM C478 AS MODIFIED BY THE SPECIFICATIONS.
10. WHERE MANHOLE STUBS ARE SHOWN ON THE PLANS, THE STUB SHALL EXTEND AT LEAST 5 FEET FROM THE INSIDE WALL OF THE MANHOLE WITH A MINIMUM OF 3 FEET OF CONCRETE ENCASEMENT. THE CONTRACTOR SHALL PREVENT ANY CONCRETE FROM BEING WITHIN 1 FOOT OF THE END OF THE STUB.
    4" STUBS SHALL BE SET AT 2.0% GRADE.
    6" STUBS SHALL BE SET AT 1.0% GRADE.
11. MANHOLE SECTIONS SHALL BE SUPPLIED WITH RECESSED LIFTING EYES. LIFTING EYE RECESSES SHALL BE GROUTED FLUSH TO THE MANHOLE WALL WITH HYDRAULIC CEMENT AFTER THE MANHOLE IS IN PLACE. LIFTING HOLES THRU THE MANHOLE WALL WILL NOT BE ACCEPTED.

No.	Revision	By	Date
4	Precast Bases, Precast Manhole Notes, Manhole Frame and Cover Notes, Keyed Adjustment Rings, and Class I mix at concrete encasement and field cap	RJ	8/27/93
3	All Manholes self-sealing/MH Cover	RJ	1/25/93
2	Modified pipe connection note	RJ	6/01/92
1	Manhole Frame and Cover Note 1	RJ	7/16/91

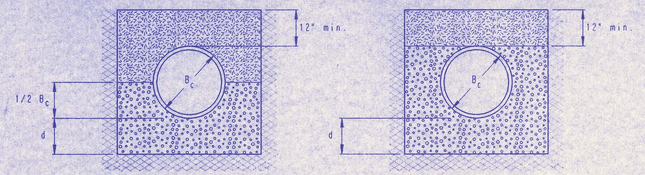
PRECAST
MANHOLE DETAILS

ADOPTED AS STANDARD DESIGN SEPTEMBER, 1989
BY
SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E. DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

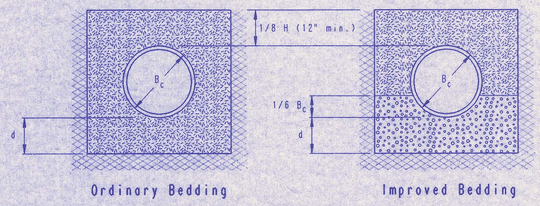
E4-55



CLASS A



CLASS B



CLASS C

PIPE ZONE BACKFILLING

B_c = Outside Pipe Diameter

H = Backfill from Top of Pipe to Existing Ground

D = Inside Pipe Diameter

d = Depth of Bedding Material Below Pipe

= Granular Bedding Material or Sand-Gravel Bedding

= Compacted Embedment

= Concrete (Class III)

Depth of Bedding Material Below Pipe		
D	d(min) Soil	d(min) Rock
27" & smaller	4"	6"
30" to 60"	5"	9"
66" & larger	6"	12"

Granular Bedding Material shall be an approved material consisting of durable crushed rock conforming with the requirements of the latest revision of ASTM C-33 Size No. 67 (3/4" to No. 4); to be placed in not more than 6" layers and compacted by slicing with a shovel or vibrating. Soundness, abrasion, and absorption limits shall be as required for coarse aggregates in Section 03010-Concrete Work in the specifications.

Sand-Gravel Bedding Material - sand-gravel mix meeting Type UD-1 of the 1990 Kansas Standard Specifications for State Road and Bridge Construction.

Compacted Embedment shall be an approved sand material free from debris, organic material, and stones with 100% passing the 3/4" sieve to be placed in uniform layers not more than 6" thick and compacted to 90 percent maximum density as determined by ASTM D1557 Granular Bedding Material may be substituted for all or part of Compacted Embedment Materials.

Class A "Concrete Cradle" and/or Class A "Concrete Encasement" is not required unless specified on the plans. However, where unexpected trench conditions exist or improper trenching is performed Class A Bedding may be required as determined by the Engineer.

Class B Bedding shall be used for all flexible pipe.

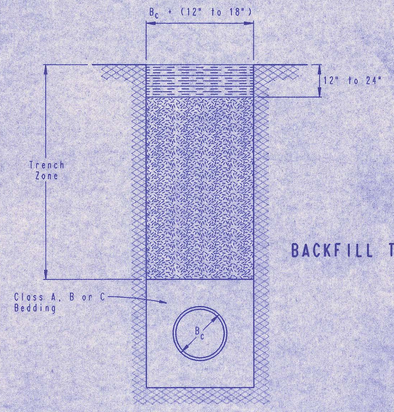
a. Class B Normal Bedding shall be used for PVC Pipe unless wet conditions are encountered.

b. Class B Improved Bedding shall be used for other flexible pipe, and for PVC pipe in wet conditions.

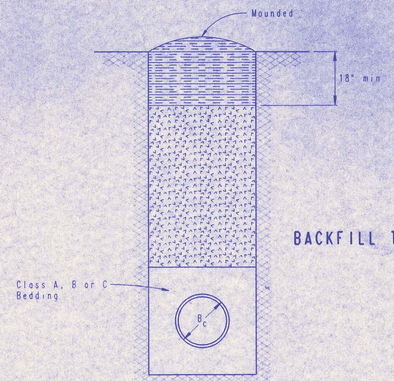
Class C Bedding shall be used for all rigid pipe.

a. Class C Ordinary Bedding shall be used for all rigid pipe unless wet conditions are encountered.

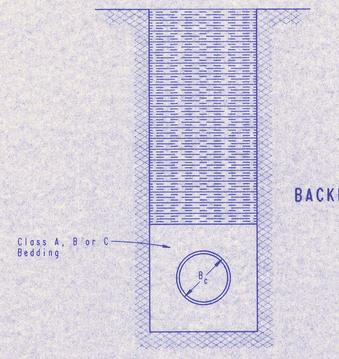
b. Class C Improved Bedding shall be used for wet conditions existing in the trench, as directed by the Engineer, at no additional cost to the Owner. The dimensions shall be equal to that required for "rock" excavation (see specifications).



BACKFILL TYPE I



BACKFILL TYPE II



BACKFILL TYPE III

TRENCH ZONE BACKFILLING

B_c = Outside Pipe Diameter

= Compacted Granular Backfill

= Uncompacted Earth Backfill

= Compacted Earth Backfill

Compacted Granular Backfill material shall be an approved sand material free from debris, organic material and stones with 100% passing the 3/4" sieve and not more than 15% passing a No. 200 sieve; to be jetted and mechanically vibrated into place and compacted to 90% density as determined by ASTM D1557.

Uncompacted Earth Backfill material may be natural soil free from large clods or stones, brush, roots more than 2 inches in diameter, debris, and junk. Flooding with water shall be provided as directed by the Engineer.

Compacted Earth Backfill shall consist of material existing prior to trenching or selected material as directed by the Engineer, and shall be compacted to 90% density as determined by ASTM D1557.

Backfill: Backfill material and compaction requirements shall conform to either Type I, Type II or Type III as specified in the plans. One years maintenance will be required on all backfill.

Backfilling Through Rock: Backfilling through rock shall be performed as specified in the paragraph Backfill above, except that the Pipe Zone is increased to provide eighteen (18) inches of cover over the pipe. When approved by the Engineer the remainder of the backfill may be excavated rock provided the excavated rock has been broken up so that earth and rock will thoroughly mix and not result in voids around the larger pieces of rock. Any excess rock remaining after the trench has been backfilled shall be removed or wasted as directed by the Engineer.

Backfilling Under Pavement: Backfilling under existing or proposed pavement shall be performed as Backfill Type I to a level of two (2) feet from the bottom of the pavement. The remainder of the trench shall be backfilled with selected material, sufficiently damp to be properly compacted in layers not exceeding six (6) inches in depth, compaction shall be performed with mechanical tampers and continued until a relative density of 95 percent of modified density, in conformance with ASTM D1557 is attained.

Backfilling Under Gravel Streets: Where the trench crosses or is in existing gravel surfaced streets, the backfill shall be compacted as provided in the paragraph "Backfilling Under Pavement".

No.	Revision	By	Date

BACKFILL DETAILS

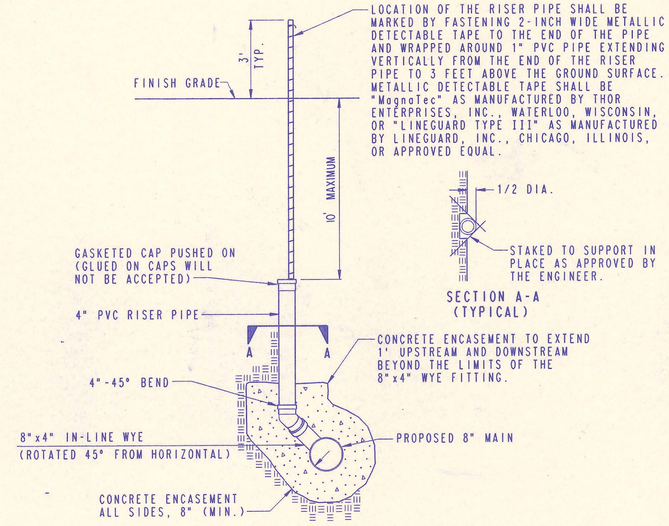
ADOPTED AS STANDARD DESIGN SEPTEMBER, 1989
BY
SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E. DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

PLAN CHECKED CHECKED BY DATE

E4-137

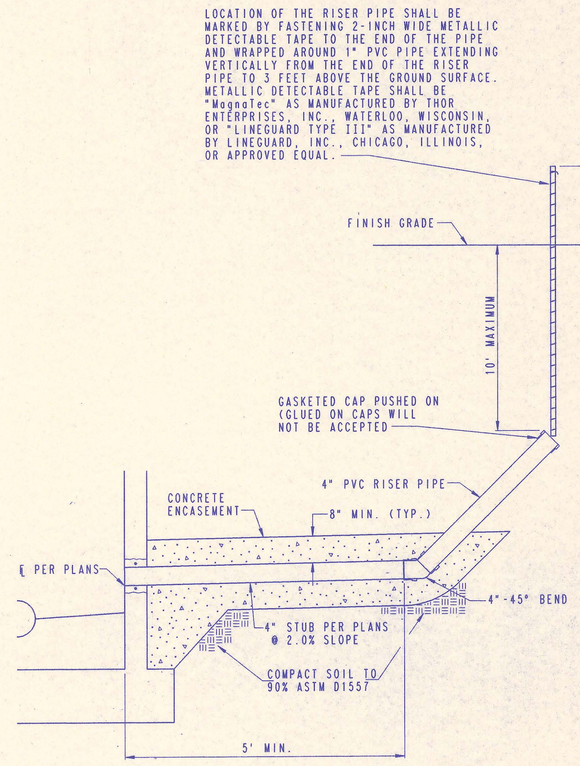
SEWER SERVICE TABLE

NO.	LOCATION TYPE	LOT NO.	BLOCK NO.	LATERAL NO.	STATION/ DIRECTION	FOR INFORMATION ONLY: APPROXIMATE LENGTH 4" PIPE	RECORD INFORMATION (TO BE COMPLETED BY PROJECT INSPECTOR): DISTANCE FROM NEAREST MANHOLE UPSTREAM	DOWNSTREAM	NO.
1	WYE SERVICE CONNECTION	25	1	1	4+11/LT.	9		85' MH 1-3	1
2	MANHOLE SERVICE CONNECTION	31	1	1	6+02/LT.	15	S. Easterly 0' &	MH 1-4	2
3	WYE SERVICE CONNECTION	30	1	1	6+30/LT.	10	28' MH 1-4		3
4	WYE SERVICE CONNECTION	29	1	1	7+10/LT.	10	107.5 MH 1-4		4
5	WYE SERVICE CONNECTION	28	1	1	7+90/LT.	10		134' MH 1-5	5
6	WYE SERVICE CONNECTION	27	1	1	8+70/LT.	9		54' MH 1-5	6
7	WYE SERVICE CONNECTION	26	1	1	9+65/LT.	9	40' MH 1-5		7
8	WYE SERVICE CONNECTION	42	1	1	11+49/LT.	9		111' MH 1-6	8
9	WYE SERVICE CONNECTION	41	1	1	13+69/LT.	11		72' MH 1-7	9
10	WYE SERVICE CONNECTION	43	1	1	14+90/LT.	10	40.5' MH 1-7		10
11	WYE SERVICE CONNECTION	5	2	1	23+65/LT.	8	27.5' MH 1-10		11
12	WYE SERVICE CONNECTION	127	4	2	3+10/LT.	7		72' MH 2-2	12
13	WYE SERVICE CONNECTION	123	4	2	8+00/LT.	7	92' MH 2-3		13
14	WYE SERVICE CONNECTION	122	4	2	9+00/LT.	8		115' MH 2-4	14
15	MANHOLE SERVICE CONNECTION	139	4	2	10+13/RT.	13 (6" Pipe)	W.S.W. 12' & MH	2-4	15
16	WYE SERVICE CONNECTION	121	4	2	11+27/LT.	6	115' MH 2-4	87' MH 2-5	16
17	MANHOLE SERVICE CONNECTION (6")	137	4	2	21+68/RT.	13 (6" Pipe)	E.N.E. 12' & MH	2-8	17
18	WYE SERVICE CONNECTION	107	4	4	1+72/RT.	7		81' MH 4-1	18
19	WYE SERVICE CONNECTION	112	4	4	1+82/LT.	7		60' MH 4-1	19
20	WYE SERVICE CONNECTION	40	1	6	0+64/LT.	12	64' MH 1-7		20
21	WYE SERVICE CONNECTION	44	1	6	1+60/RT.	11		42' MH 6-1	21
22	WYE SERVICE CONNECTION	39	1	6	2+37/LT.	10	36' MH 6-1		22
23	WYE SERVICE CONNECTION	45	1	6	2+57/RT.	10	54' MH 6-1		23
24	WYE SERVICE CONNECTION	38	1	6	3+27/LT.	9	126' MH 6-1		24
25	WYE SERVICE CONNECTION	46	1	6	3+75/RT.	10		106' MH 6-2	25
26	WYE SERVICE CONNECTION	37	1	6	4+07/LT.	9		135' MH 6-2	26
27	WYE SERVICE CONNECTION	36	1	6	4+92/LT.	9		31' MH 6-2	27
28	WYE SERVICE CONNECTION	47	1	6	5+12/RT.	9		50' MH 6-2	28
29	WYE SERVICE CONNECTION	35	1	6	5+70/LT.	8	30' MH 6-2		29
30	WYE SERVICE CONNECTION	34	1	6	6+50/LT.	8	108' MH 6-2		30
31	WYE SERVICE CONNECTION	48	1	6	6+70/RT.	8	127' MH 6-2		31
32	WYE SERVICE CONNECTION	1	2	7	0+45/RT.	9	46' MH 1-8		32
33	WYE SERVICE CONNECTION	14	2	7	7+25/RT.	8	44' MH 7-3		33
34	WYE SERVICE CONNECTION	15	2	7	7+85/LT.	9	105.5' MH 7-3		34
35	WYE SERVICE CONNECTION	13	2	7	9+09/RT.	8	9' MH 7-4		35
36	WYE SERVICE CONNECTION	16	2	7	9+39/LT.	8	42' MH 7-4		36
37	WYE SERVICE CONNECTION	12	2	7	10+34/RT.	7	136' MH 7-4		37
38	WYE SERVICE CONNECTION	17	2	7	10+79/LT.	7		142' MH 7-5	38
39	WYE SERVICE CONNECTION	8	2	7	16+70/RT.	7		89' MH 7-7	39
40	WYE SERVICE CONNECTION	44	4	7	18+49/LT.	7	90' MH 7-7		40
41	WYE SERVICE CONNECTION	37	4	7	19+49/RT.	9	~~150' MH 7-7~~ or	187' MH 7-8	41
42	WYE SERVICE CONNECTION	43	4	7	19+59/LT.	9		176' MH 7-8	42
43	WYE SERVICE CONNECTION	42	4	7	20+59/LT.	9		75' MH 7-8	43
44	WYE SERVICE CONNECTION	38	4	7	21+14/RT.	9		20' MH 7-8	44
45	WYE SERVICE CONNECTION	41	4	7	21+50/LT.	8	16' MH 7-8		45
46	WYE SERVICE CONNECTION	39	4	7	22+25/RT.	8	91' MH 7-8		46
47	WYE SERVICE CONNECTION	40	4	7	22+50/LT.	8	116' MH 7-8		47
48	WYE SERVICE CONNECTION	30	4	7	24+45/RT.	7		70' MH 7-9	48
49	WYE SERVICE CONNECTION	29	4	7	24+60/LT.	7		56' MH 7-9	49
50	WYE SERVICE CONNECTION	52	4	10	4+18/LT.	7	78' MH 10-1		50
51	WYE SERVICE CONNECTION	32	4	10	4+28/RT.	8	87' MH 10-1		51
52	WYE SERVICE CONNECTION	51	4	10	5+13/LT.	9		78' MH 10-2	52
53	WYE SERVICE CONNECTION	33	4	10	5+38/RT.	9		48' MH 10-2	53
54	WYE SERVICE CONNECTION	100	4	12	10+40/RT.	9	45' MH 12-3		54
55	WYE SERVICE CONNECTION	101	4	12	11+55/RT.	7	160' MH 12-3		55
56	MANHOLE SERVICE CONNECTION	89	4	12	9+95/LT.	15	South & MH 12-3		56
57	MH STUB (4")	7	2	1	26+17.50/SE	0	MH 1-11		57
58	MH STUB (6")	139	4	2	12+13.91/NW	0	MH 2-5		58
59	MH STUB (6")	140	4	2	12+13.91/SW	0	MH 2-5		59
60	MH STUB (6")	140	4	2	14+57.78/NW	0	MH 2-6		60
61	MH STUB (4")	117	4	2	14+57.78/SE	0	MH 2-6		61
62	MH STUB (6")	138	4	2	18+48.03/E	0	MH 2-7		62
63	MH STUB (6")	138	4	2	18+48.03/N	0	MH 2-7		63
64	MH STUB (6")	137	4	2	24+07.96/SE	0	MH 2-9		64
65	MH STUB (6")	136	4	2	24+07.96/NE	0	MH 2-9		65
66	MH STUB (4")	132	4	3	3+15.73/W	0	MH 3-1		66
67	MH STUB (4")	135	4	3	5+24.80/SW	0	MH 3-2		67
68	MH STUB (4")	109	4	4	2+53.46/S	0	MH 4-1		68
69	MH STUB (4")	108	4	4	2+53.46/SW	0	MH 4-2		69
70	MH STUB (4")	111	4	5	1+39.97/E	0	MH 5-1		70
71	MH STUB (4")	32	1	6	8+85.66/N	0	MH 6-3		71
72	MH STUB (4")	25	4	7	29+16.08/NE	0	MH 7-10		72
73	MH STUB (4")	4	3	8	9+66.86/S	0	MH 8-1		73
74	MH STUB (4")	6	5	9	7+21.69/SW	0	MH 9-3		74
75	MH STUB (4")	45	4	10	10+15.65/SE	0	MH 10-4		75
76	MH STUB (4")	103	4	12	13+30.81/NE	0	MH 12-4		76
77	MH STUB (4")	1	6	13	0+85.70/NW	0	MH 13-1		77



WYE SERVICE CONNECTION

SEE SEWER SERVICE TABLE FOR LOCATIONS



MH SERVICE CONNECTION

SEE SEWER SERVICE TABLE FOR LOCATIONS

RECORD DRAWING

MDK PROJ. ENG. 10/19/94 DATE

REP. ENG. _____ DATE

CHRISTOPHER R. YOUNG LICENSED 11315 KANSAS PROFESSIONAL ENGINEER 12-14-93

No.	Revision	By	Date

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

SERVICE CONNECTION DETAILS

SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION PHASE 1 THRU 7

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

Designed by CRY, MDK	Job No. 34-93445-1	Sht. 9 of 26
Drawn by DMW	Date November, 1993	

PLAN CHECKED CHECKED BY MDK DATE 12/16/93

DRAWING NAME: 34-93445-1 WT SS Connect
LOCATION: 4 49
LAST ROOD COORDINATES:
ROTATION ANGLE:
DATE LAST WORKED ON: Dec. 15, 1993
SPECIAL INSTRUCTIONS:
Sht #2

Sta. 0+00.00, Existing Concrete MH.
Core existing MH wall and install new 8" pipes
Seal new 8" pipes to MH wall with quick-set hydraulic cement.
Construct Outside drop on existing MH.
Remove existing frame and cover.
Adjust MH top elevation +1.0' per specifications.
Fill all MH wall imperfections with quick-set hydraulic cement.
Coat MH interior with Strong Seal MS 2-A per manufacturers recommendations.
Install new self-sealing frame and cover.

CAUTION!! Prop. 16" Waterline (by others)

CAUTION!! Buried tel. cable Contractor shall work around tele. cable (SW Bell)

Sta. 0+70.10 Const. MH 1-1 Type A

Remove fence as required

Remove fence as required

Sta. 2+20.83 .54 Const. MH 1-2 Type A

Remove fence as required

Sta. 4+86.97 +88.57 Const. MH 1-3 Type A (5' Dia.)

Sta. 6+01.50 +02.17 Const. MH 1-4 Type A (5' Dia.)

Install 1-4" Stub and cap

Sta. 9+24.99 +25.72 Const. MH 1-5 Type A

Proposed 16" Waterline

45.5'

97°51'16"

82°17'45"

20'

5'

10'

90°00'00"

66°18'21"

25°02'24"

180°17'21"

CAUTION!! Prop. 15" RCP SWS (by others)

CAUTION !!! Prop. 15" RCP SWS (by others)

Not Parallel

Not Parallel

Proposed Sidewalk

Proposed 8" Waterline

Install 70.10 L.F. 8" Pipe

Sta. 0+16 to Sta. 0+36 Const. 20 L.F. Reinforced Concrete Encasement on 8" Pipe.

Install 150.55 L.F. 8" Pipe .44

103.60 Install 104.53 L.F. 8" Pipe

278.03 Install 276.34 L.F. 8" Pipe

.55 Install 323.49 L.F. 8" Pipe

ADDITION

WHITE TAIL COURT

BRADFORD CIRCLE

WHITE TAIL

RESERVE "B"

RES. "A"

FLOODWAY

15TH STREET

Proposed 16" Waterline
5' Water Esmt.
16" PVC San. Sewer
6' Esmt.
3M 6" Hwy.
15" Round Olive
2-2' Round Olive
2-2' Round Olive
4x4' RCB
2-3' Willow
2-12" Hwy.
3-3' Hwy.
8-8"-15" Elms
4-8" Willow
24" Willow
18" PVC San. Sewer
Reinforced Wire Fence Buried in Ground
4' Barb Wire Fence
Natural Spring
Yellow Spring
Surface Water Flow
Sanitary Sewer Manhole
Storm Sewer Manhole
Storm Sewer Inlet
Existing Contour
Proposed Contour
Proposed Sidewalk
6' Esmt.
20' UIE Esmt.
4' UIE Esmt.
10' UIE Esmt.
5' Esmt.
Not Parallel
Not Parallel
Proposed 8" Waterline
Top of Bank
Toe of Slope
Top of Ditch
Bottom of Ditch
Flow Line
Top of Curb
Back of Curb
Face of Curb
Gutter
Edge of Pavement
Edge of Gravel
Edge of Concrete
Edge of Asphalt
Edge of Water
Edge of Creek
Edge of Pond
Edge of Lake
Edge of Swamp
Edge of Marsh
Edge of Bog
Edge of Fen
Edge of Moor
Edge of Heath
Edge of Tundra
Edge of Desert
Edge of Steppe
Edge of Prairie
Edge of Savanna
Edge of Woodland
Edge of Forest
Edge of Jungle
Edge of Rainforest
Edge of Taiga
Edge of Boreal Forest
Edge of Temperate Forest
Edge of Tropical Forest
Edge of Subtropical Forest
Edge of Mediterranean Forest
Edge of Monsoon Forest
Edge of Dry Forest
Edge of Thorn Forest
Edge of Scrub
Edge of Shrubland
Edge of Grassland
Edge of Meadow
Edge of Pasture
Edge of Cropland
Edge of Orchard
Edge of Vineyard
Edge of Plantation
Edge of Garden
Edge of Park
Edge of Golf Course
Edge of Cemetery
Edge of Playground
Edge of Sports Field
Edge of Stadium
Edge of Arena
Edge of Racetrack
Edge of Airport
Edge of Runway
Edge of Taxiway
Edge of Apron
Edge of Hangar
Edge of Terminal
Edge of Control Tower
Edge of Radar
Edge of Navigation Aid
Edge of Lighting
Edge of Signage
Edge of Fencing
Edge of Gate
Edge of Barrier
Edge of Guardrail
Edge of Crash Cushion
Edge of Impact Attenuator
Edge of Median
Edge of Island
Edge of Roundabout
Edge of Intersection
Edge of Junction
Edge of Interchange
Edge of Ramp
Edge of Loop
Edge of Cloverleaf
Edge of Diamond
Edge of Trumpet
Edge of Directional
Edge of Stack
Edge of Flyover
Edge of Underpass
Edge of Overpass
Edge of Bridge
Edge of Tunnel
Edge of Culvert
Edge of Pipe
Edge of Conduit
Edge of Duct
Edge of Cable
Edge of Wire
Edge of Fiber
Edge of Optical
Edge of Electrical
Edge of Telephone
Edge of Telegraph
Edge of Radio
Edge of Television
Edge of Satellite
Edge of Microwave
Edge of Infrared
Edge of Ultraviolet
Edge of X-Ray
Edge of Gamma Ray
Edge of Cosmic Ray
Edge of Neutrino
Edge of Graviton
Edge of Tachyon
Edge of Quark
Edge of Lepton
Edge of Boson
Edge of Hadron
Edge of Meson
Edge of Baryon
Edge of Nucleon
Edge of Proton
Edge of Neutron
Edge of Electron
Edge of Positron
Edge of Muon
Edge of Tau
Edge of Neutrino
Edge of Antineutrino
Edge of Photon
Edge of Gluon
Edge of Graviton
Edge of Tachyon
Edge of Quark
Edge of Lepton
Edge of Boson
Edge of Hadron
Edge of Meson
Edge of Baryon
Edge of Nucleon
Edge of Proton
Edge of Neutron
Edge of Electron
Edge of Positron
Edge of Muon
Edge of Tau
Edge of Neutrino
Edge of Antineutrino
Edge of Photon
Edge of Gluon

SCALE:
PLAN: LAT. & LONG. 40 0 40 80
PROFILE: HORIZ. SAME AS ABOVE
VERT. 5 0

SEWER SERVICE LEGEND
8" X 4" SERVICE CONNECTION ASSEMBLY (In line wye's)
4" SERVICE CONNECTION ASSEMBLY AT MH
20
21
SEE THE SEWER SERVICE TABLE ON SHEET NO. 9 FOR LOCATIONS OF SEWER SERVICE CONNECTIONS TO BE INSTALLED BY THE SANITARY SEWER CONTRACTOR.

ALL PIPE INSTALLED IS PVC PIPE.

SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.

RECORD DRAWING
MDK FINAL ENGR. 10/19/94 DATE
FIELD ENGR. DATE

LATERAL NO. 1

Existing MH
Existing Top Elev.=1348.89
Proposed Top Elev.=1349.9
+26 ± Prop. 16" Waterline
Top of pipe = 1340.0
+28 ± Existing Telephone (SWB)
MH 1-1
Top Elev.=1353.79
Top of mound = 1352.9
10' dia. (Typ)
4:1 (Typ)
4:1 (Typ)
Prop. 15" RCP SWS
Elev. = 1347.89
+6.4
MH 1-2
Top Elev.=1354 ± .05
Top of mound = 1353.1
Prop. 15" RCP SWS
Elev. = 1351.67
+25.8
Proposed Ground (by others)
Existing Ground
MH 1-3
Top Elev.=1360.43 .13
Top of mound = 1359.1
MH 1-4
Top Elev.=1360.5 .90
Top of mound = 1359.5
MH 1-5
Top Elev.=1360.5 .67
Top of mound = 1359.5
℄ In = 1339.74 .68
from 1-4" Stub (SE)
TYPE III BACKFILL
+.30
+.70
℄ In = 1327.70
from Exist. 18" PVC (N)
Concrete Encasement
℄ Out=1327.68 (18"PVC)
℄ In=1336.40
70.10 L.F. 8" Pipe @ 0.40%
℄ Out=1336.69 .75
℄ In= 1336.80 .05
℄ Out=1337.25 .50
℄ In= 1337.35 .65
150.55 L.F. 8" Pipe @ 0.40%
℄ Out=1338.18 .78
℄ In= 1338.28 .68
278.03 L.F. 8" Pipe @ 0.40%
℄ Out=1339.41 .40
℄ In= 1339.51 .50
103.60 L.F. 8" Pipe @ 0.40%
℄ Out=1340.98 .95
℄ In= 1341.08 1.05
323.49 L.F. 8" Pipe @ 0.40%
1360 1355 1350 1345 1340 1335 1330 1325 1320
0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00 8+00 9+00

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPOHN, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS
Designed By CRY, MDK
Drawn By TLS, GM
Job No. 34-93445-1
Date September, 1993

LATERAL NO. 1
SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION-PHASE 1 THRU. 7

Sheet 10 of 26

DSWR: REJ OPER: RFJ SCALE: 1 = 40
Q:\93445\PP1 07-20-1994 13:26:51

PLAN CHECKED CHECKED BY DATE
PROFILE: CHECKED CHECKED BY DATE

Sta. 9+25.72 ~~24.99~~
MH 1-5

Sta. 12+59.03 ~~59.33~~
Const. MH 1-6
Type A

Sta. 14+41.03 ~~40.36~~
Const. MH 1-7
Type A
(5' Dia.)

Sta. 16+94.10 ~~93.51~~
Const. MH 1-8
Type C

Sta. 19+58.30 ~~57.40~~
Const. MH 1-9
Type B

SCALE:
PLAN: LAT. & LONG. 40 0 40 80
PROFILE: HORIZ. SAME AS ABOVE
VERT. 0 5

Lateral No. 7
See sheet no. 19

Lateral No. 12
See sheet no. 25

Lateral No. 6
See sheet no. 18

LATERAL NO. 1

WHITE TAIL COURT
RES "R"
WHITE TAIL COURT
RESERVE "C"
RESERVE "D"
RES "O"
WHITE TAIL COURT
MEADOW ADDITION
COUNTRY WALK
RESERVE "I"

Proposed Sidewalk
Proposed 8" Waterline
Prop. 8" Waterline
CAUTION !!! Proposed 8" Waterline (by others)
Not Parallel
Remove fence as required
LATERAL NO. 2 See sheet no. 13
Install 333.01 ~~334.34~~ L.F. 8" Pipe
Install 253.15 ~~253.15~~ L.F. 8" Pipe
Install 181.40 ~~181.03~~ L.F. 8" Pipe
Install 263.20 ~~263.89~~ L.F. 8" Pipe
15"RCP
24"RCP
18"RCP
6'x4' RCP
7'x7' RCP
4'x4' RCP
9°11'16"
89°56'19"
180°17'21"
45°17'11"
51°14'15"
37°08'41"
47°07'56"
6.05'02"
4.20
.07
.40
.20
.70
.59
.76
.55
.36
.33
.84
.55
.95
.39
.30
.80

SEWER SERVICE LEGEND
8" x 4" SERVICE CONNECTION ASSEMBLY (In line wye's)
4" SERVICE CONNECTION ASSEMBLY AT MH
SEE THE SEWER SERVICE TABLE ON SHEET NO. 9 FOR LOCATIONS OF SEWER SERVICE CONNECTIONS TO BE INSTALLED BY THE SANITARY SEWER CONTRACTOR.

ALL PIPE INSTALLED IS PVC PIPE.

SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.

RECORD DRAWING
MDK PROJ. ENG. 10/19/94 DATE
RES. ENG. DATE

PLAN | BY | DATE | CHECKED | CHECKED

PROFILE | BY | DATE | CHECKED | CHECKED

Top of mound = 1359.5
10' dia. (Typ)
Proposed Ground (by others)
Top of mound = 1361.2
Proposed Ground
Existing Ground
Proposed Ground
MH 1-5 Top Elev.= 1360.67
MH 1-6 Top Elev.= 1362.24
MH 1-7 Top Elev.= 1365.55
MH 1-8 Top Elev.= 1358.19
MH 1-9 Top Elev.= 1370.41
Proposed 8" Waterline Top Pipe Elev.= 1357
Proposed 8" Waterline Top Pipe Elev.= 1356.6
+92.30
+16.24
℄ In = 1340.95
℄ Out = 1341.15
℄ In = 1340.55
℄ Out = 1342.44
℄ In = 1342.84
℄ Out = 1343.33
℄ In = 1343.56
℄ In = 1345.83
℄ Out = 1357.85
℄ In = 1358.05
℄ In = 1359.89 from Lateral No. 12
℄ In = 1345.83 from Lateral No. 7
℄ In = 1343.56 from Lateral No. 6
℄ In = 1342.84 from Lateral No. 2
℄ In = 1345.56 (SW)
333.01 ~~334.34~~ L.F. 8" Pipe @ 0.40%
181.40 ~~181.03~~ L.F. 8" Pipe @ 0.40%
253.15 ~~253.15~~ L.F. 8" Pipe @ 0.70%
263.20 ~~263.89~~ L.F. 8" Pipe @ 0.40%
1375 1370 1365 1360 1355 1350 1345 1340 1335
10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00

DSNR: REJ OPER: RFJ SCALE: 1 = 40
Q:\93445\PP2 07-20-1994 13:27:20

SEDGWICK COUNTY, BUREAU OF PUBLIC SERVICES
DAVID C. SPOMS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

LATERAL NO. 1
SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION-PHASE 1 THRU 7

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

Job No. 34-93445-1
Date September, 1993
Designed By CRY, MDK
Drawn By TLS, GM

Sheet 11 of 26

Sta. 19+57.30 ~~40~~
MH 1-9

+30.05
Sta. 23+~~38.55~~
Const. MH 1-10
Type A

+17.50
Sta. 26+~~16.85~~
Const. MH 1-11
Type A

Remove fence as required

Install 1-4" Stub and Cap

SCALE:
PLAN: LAT. & LONG. 40 0 40 80
PROFILE: HORIZ. SAME AS ABOVE
VERT.

PLAN

	DATE
BY	
CHECKED	
CHECKED	

Lateral No. 12
See sheet no. 25

SEWER SERVICE LEGEND
8" x 4" SERVICE CONNECTION ASSEMBLY (In line wye's)
4" SERVICE CONNECTION ASSEMBLY AT MH

SEE THE SEWER SERVICE TABLE ON SHEET NO. 9 FOR LOCATIONS OF SEWER SERVICE CONNECTIONS TO BE INSTALLED BY THE SANITARY SEWER CONTRACTOR.

380.75
Install ~~381.18~~ L.F.
8" Pipe

Lateral No. 23
See sheet no. 26

.45
Install 278.~~27~~ L.F.
8" Pipe

ALL PIPE INSTALLED IS PVC PIPE.

SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.

RECORD DRAWING
MDK PROJ. ENG. 10/19/94 DATE
REB. ENG. DATE

LATERAL NO. 1

PROFILE

	DATE
BY	
CHECKED	
CHECKED	

DSNR: REJ OPER: REJ SCALE: 1 = 40
Q:\93445\PP3 07-20-1994 13:32:41

MH 1-9
Top Elev.=1370.41

MH 1-10
Top Elev.=1379.80

MH 1-11
Top Elev.=1381.35

Proposed Ground
Existing Ground

℄ In = 1359.~~89~~ 20
from Lateral No. 12

℄ In = 1361.~~32~~ 40
from Lateral No. 23

℄ In = 1366.~~42~~ 09
from 1-4" Stub (SE)

℄ Out = 1357.~~82~~ 32
℄ In = 1358.~~02~~ 11

℄ Out = 1361.~~32~~ 20
℄ In = 1361.~~52~~ 40

℄ = 1365.~~36~~ 76

380.75 L.F. 8" Pipe @ 0.80%

278.~~27~~ .45 L.F. 8" Pipe @ 1.60%

20+00 21+00 22+00 23+00 24+00 25+00 26+00

1385 1380 1375 1370 1365 1360 1355 1350 1345

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

LATERAL NO. 1
SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION—PHASE 1 THRU 7

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

Job No. 34-93445-1
Date September, 1993
Designed By CRY, MDK
Drawn By GM

Sheet 12 of 26

Sta. 12+59.~~33~~ .63 Lateral No. 1=
Sta. 0+00.00 Lateral No. 2
MH 1-6

Lateral No. 3
See sheet no. 16

Sta. 0+81.~~75~~ .47
Const. MH 2-1
Type A

Sta. 3+79.~~88~~ .84
Const. MH 2-2
Type C

Sta. 7+07.~~81~~ .22
Const. MH 2-3
Type A

Lateral No. 1
See sheet no. 11

CAUTION "I"
Prop. 8" Waterline
(by others)

Install 81.~~75~~ .47 L.F.
8" Pipe

Install 298.~~13~~ .37 L.F.
8" Pipe

Sta. 0+95 to Sta. 1+40
Const. 45 L.F. Reinforced
Concrete Encasement on 8" Pipe

Install 327.~~73~~ .38 L.F.
8" Pipe

Prop. 8" Waterline

WHITE TAIL COURT

RESERVE "C"

COUNTRY WALK CIRCLE

ADDITION

C. 13TH STREET NORTH

Buried Telephone

79°30'08"

84°55'52"

8°51'46"

90°00'00"

180°00'00"

SCALE:
PLAN: LAT. & LONG. 40 0 40 80
PROFILE: HORIZ. SAME AS ABOVE
VERT. 5 0

SEWER SERVICE LEGEND

8" X 4" SERVICE CONNECTION ASSEMBLY (In line wye's)

4" SERVICE CONNECTION ASSEMBLY AT MH

SEE THE SEWER SERVICE TABLE ON SHEET NO. 9 FOR LOCATIONS OF SEWER SERVICE CONNECTIONS TO BE INSTALLED BY THE SANITARY SEWER CONTRACTOR.

ALL PIPE INSTALLED IS PVC PIPE.

SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.

RECORD DRAWING
MDK PROJ. ENG. 10/19/94 DATE
_____ RES. ENG. _____ DATE

LATERAL NO. 2

PLAN

	BY	DATE
CHECKED		
CHECKED		

PROFILE

	BY	DATE
CHECKED		
CHECKED		

Top of mound = 1361.2
10' dia. (Typ)
4:1 (Typ)
(Typ)
+4½ Proposed 8" Waterline Top pipe = 1356.72
MH 1-6 Top Elev. = 1362.~~41~~ .26
MH 2-1 Top Elev. = 1360.~~55~~ .60
MH 2-2 Top Elev. = 1363.~~25~~ 90.73
MH 2-3 Top Elev. = 1368.~~41~~ .22
Top of mound = 1359.5
Existing Ground
Proposed Ground
Proposed Ground (by others)
E Out = 1342.~~84~~ .53 from Lateral no. 1
E In = 1343.~~37~~ .40 from Lateral no. 3
Type III Backfill
E IN = 1344.77 (W)
Concrete Encasement
E Out = 1342.~~84~~ .34
E In = 1342.~~87~~ .76
81.~~75~~ .47 L.F. 8" Pipe @ 0.40%
E Out = 1343.~~37~~ .12
E In = 1343.~~37~~ .35
298.~~13~~ .37 L.F. 8" Pipe @ 0.40%
E Out = 1344.~~88~~ .53
E In = 1350.~~36~~ .46
327.~~73~~ .38 L.F. 8" Pipe @ 0.40%
E Out = 1351.~~87~~ .66
E In = 1351.~~87~~ .82

1375 1370 1365 1360 1355 1350 1345 1340 1335

0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00

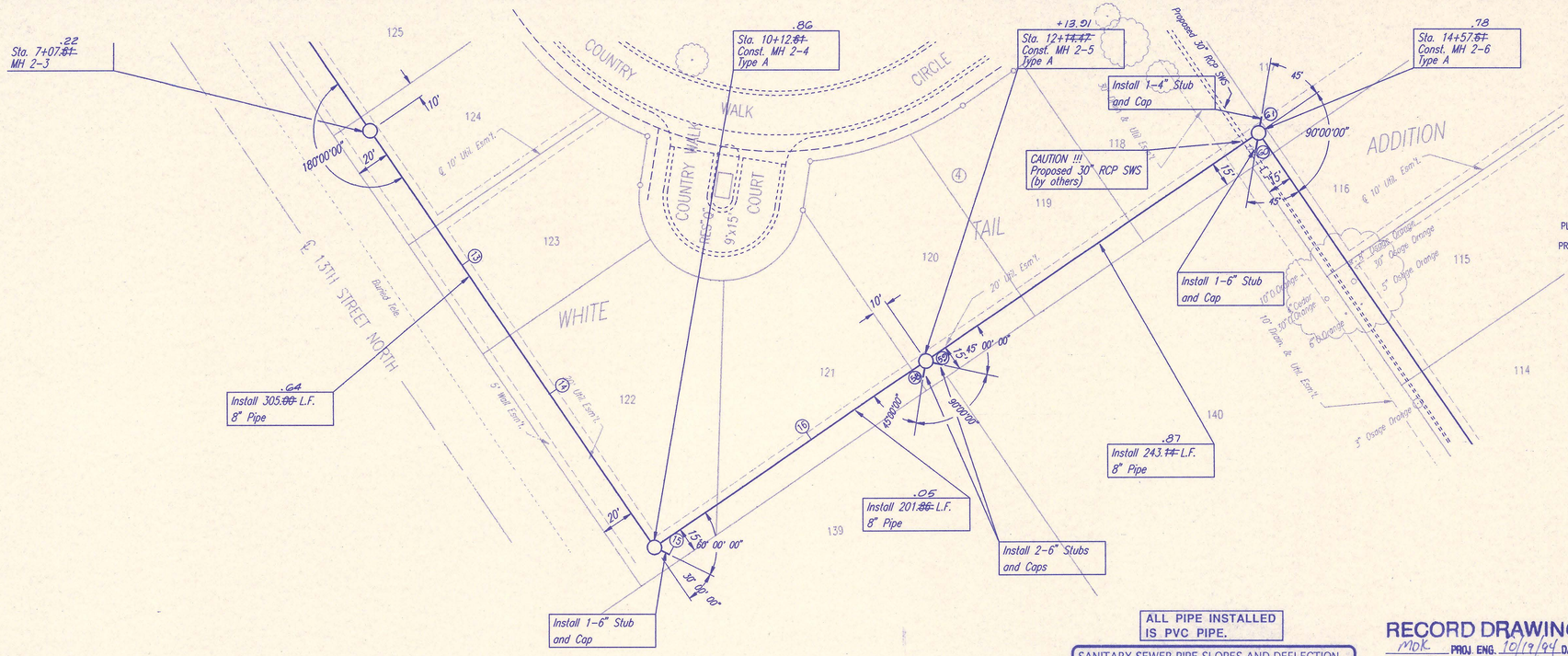
SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPOMS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

LATERAL NO. 2
SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION-PHASE I THRU 7

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

Job No. 34-93445-1
Date September, 1993
Designed By CPY, MDK
Drawn By TLS, GM
Sheet 13 of 26

DSNR: REJ OPER: REJ SCALE: 1 = 40
Q:\93445\PS 07-20-1994 13:33:21



SEWER SERVICE LEGEND

8" x 4" SERVICE CONNECTION ASSEMBLY (In line wye's)

4" SERVICE CONNECTION ASSEMBLY AT MH

20 21

SEE THE SEWER SERVICE TABLE ON SHEET NO. 9 FOR LOCATIONS OF SEWER SERVICE CONNECTIONS TO BE INSTALLED BY THE SANITARY SEWER CONTRACTOR.

LATERAL NO. 2

ALL PIPE INSTALLED IS PVC PIPE.

SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.

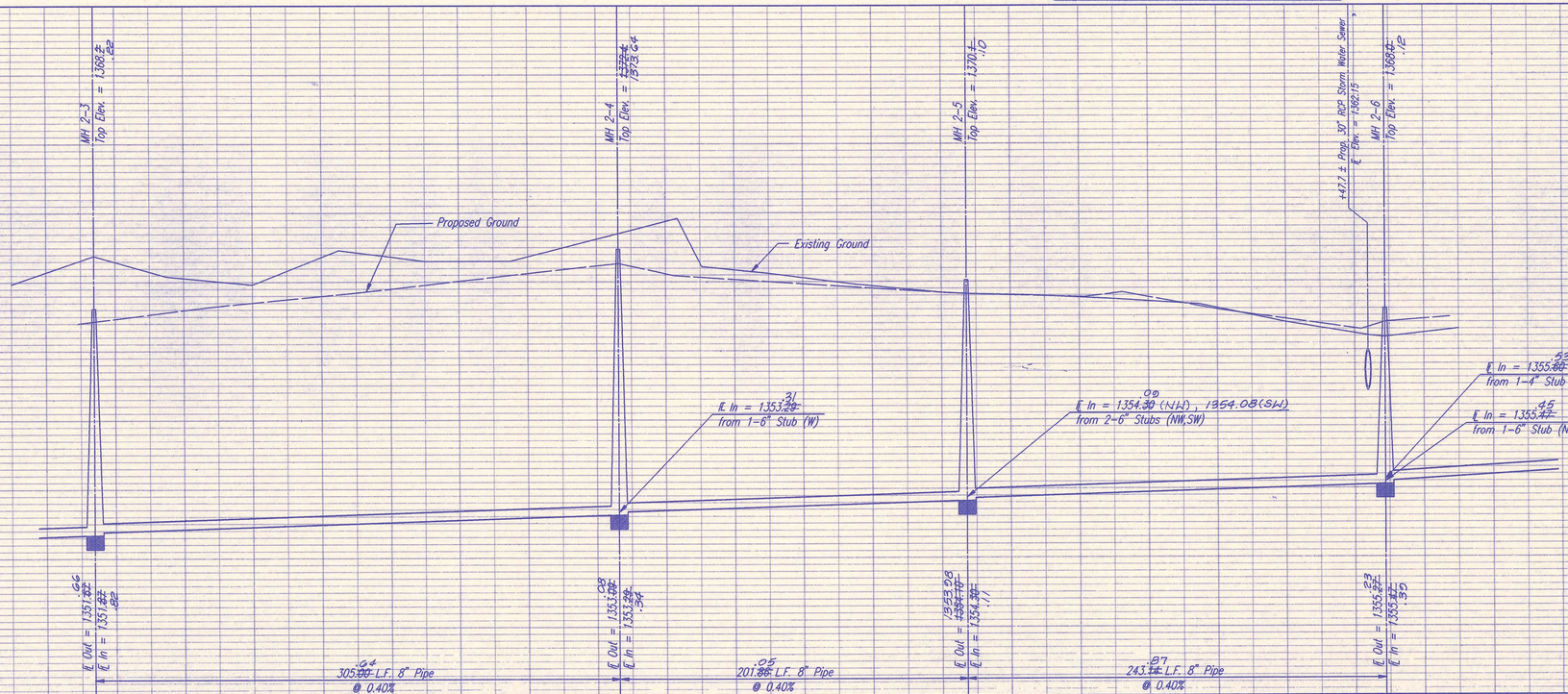
RECORD DRAWING

MDK PROJ. ENG. 10/19/94 DATE

RES. ENG. DATE

PLAN | CHECKED | CHECKED | BY | DATE

PROFILE | CHECKED | CHECKED | BY | DATE



SEDGWICK COUNTY, BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

LATERAL NO. 2
SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION-PHASE 1 THRU 7

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

Job No. 34-93445-1
Date September, 1993
Designed By CRY, MDK
Drawn By TLS, GM
Sheet 14 of 26

DSNR: REJ OPER: REJ SCALE: 1 = 40
Q:\93445\PP6 07-20-1994 13:33:47

Sta. 14+57.78 MH 2-6

RESERVE "E"

WALK

COUNTRY WALK CIRCLE

Proposed 8" Waterline

COUNTRY

2-30.0 Orange

4-24.0 Orange

WHITE TAIL

Lateral No. 4 See sheet no. 17

Sta. 18+47.12 Const. MH 2-7 Type C

+48.03

Proposed 15" RCP SWS

90°00'00"

45°00'00"

97°00'00"

97°41'52"

345°00'00"

390.25 Install 389.81 L.F. 8" Pipe

Install 2-6" Stubs and Caps

20' Drain & Util. Esm't

Install 1-6" Stub and Cap

Sta. 21+87.56 Const. MH 2-8 Type A

+68.40

89°49'28"

.37 Install 320.74 L.F. 8" Pipe

ADDITION

239.56 Install 240.00 L.F. 8" Pipe

Gravel Parking Lot (Brick Yard)

Sta. 24+07.56 Const. MH 2-9 Type A

.96

Install 2-6" Stubs and Caps

SCALE:

PLAN: LAT. & LONG. 40 0 40 80

PROFILE: HORIZ. SAME AS ABOVE

VERT. 0 5

SEWER SERVICE LEGEND

8" X 4" SERVICE CONNECTION ASSEMBLY (In line wye's)

4" SERVICE CONNECTION ASSEMBLY AT MH

SEE THE SEWER SERVICE TABLE ON SHEET NO. 9 FOR LOCATIONS OF SEWER SERVICE CONNECTIONS TO BE INSTALLED BY THE SANITARY SEWER CONTRACTOR.

ALL PIPE INSTALLED IS PVC PIPE.

SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.

RECORD DRAWING

MDK PROJ. ENG. 10/19/94 DATE

RES. ENG. DATE

LATERAL NO. 2

PLAN | CHECKED | CHECKED | BY | DATE

PROFILE | CHECKED | CHECKED | BY | DATE

DSNR: RFJ OPER: RFJ SCALE: 1 = 40
Q:\93445\PP7 07-20-1994 13:45:10

MH 2-6 Top Elev. = 1368.68

MH 2-7 Top Elev. = 1374.56

MH 2-8 Top Elev. = 1383.32

MH 2-9 Top Elev. = 1377.34

Proposed Ground

Existing Ground

℄ In = 1355.47 from 1-6" Stub (NW)

℄ In = 1355.60 from 1-4" Stub (SE)

℄ In = 1358.79 from 2-6" Stubs (N,E)

℄ In = 1358.79 from Lateral No. 4

℄ In = 1364.27 from 1-6" Stub (ENE)

℄ In = 1365.43(NE), 1365.47(SE) from 2-6" Stubs (NE,SE)

℄ Out = 1353.22

℄ In = 1355.42

390.25 389.81 L.F. 8" Pipe @ 0.80%

℄ Out = 1358.99

℄ In = 1362.95

37 320.74 L.F. 8" Pipe @ 0.40%

℄ Out = 1363.32

℄ In = 1364.12

239.56 240.00 L.F. 8" Pipe @ 0.40%

℄ Out = 1365.82

1390 1385 1380 1375 1370 1365 1360 1355 1350

15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00 23+00 24+00

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPOHN, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

LATERAL NO. 2

SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION--PHASE 1 THRU 7

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

Job No. 34-93445-1
Date September, 1993
Designed By CRY; MDK
Drawn By TLS, GM

Sheet 15 of 26

Sta. 0+81.~~75~~.47 Lateral no. 2=
Sta. 0+00.00 Lateral no. 3
MH 2-1

Lateral No. 2
See sheet no. 13

Sta. 3+15.~~42~~.73
Const. MH 3-1
Type C

Sta. 5+~~25.42~~+24.80
Const. MH 3-2
Type A

CAUTION !!!
Proposed 30" RCP SWS
(by others)

Proposed 8" Waterline

Proposed 30" RCP

Install 315.~~42~~.73 L.F.
8" Pipe

Install 1-4" Stub
and cap

Install 1-4" Stub
and Cap

Install ~~210.00~~ 209.07 L.F.
8" Pipe

Sta. 0+40 to Sta. 0+80
Const. 40 L.F. Reinforced
Concrete Encasement on 8" Pipe.

Sta. 4+22 to Sta. 4+42
Const. 20 L.F. Reinforced
Concrete Encasement on 8" Pipe.

8°55'52"

86°12'22"

WHITE TAIL

RESERVE "C"

COUNTRY WALK CIRCLE

ADDITION

RES'D. 7.47

129 130 131 132 133 134 135 117

SEWER SERVICE LEGEND

8" X 4" SERVICE CONNECTION ASSEMBLY (In line wye's)

4" SERVICE CONNECTION ASSEMBLY AT MH

SEE THE SEWER SERVICE TABLE ON SHEET NO. 9 FOR LOCATIONS OF SEWER SERVICE CONNECTIONS TO BE INSTALLED BY THE SANITARY SEWER CONTRACTOR.

ALL PIPE INSTALLED IS PVC PIPE.

SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.

SCALE:
PLAN: LAT. & LONG. 40 0 40 80
PROFILE: HORIZ. SAME AS ABOVE
VERT. 5 0

RECORD DRAWING
MDK PROJ. ENG. 10/19/94 DATE
_____ PROJ. ENG. _____ DATE

PLAN | CHECKED | CHECKED | BY | DATE

PROFILE | CHECKED | CHECKED | BY | DATE

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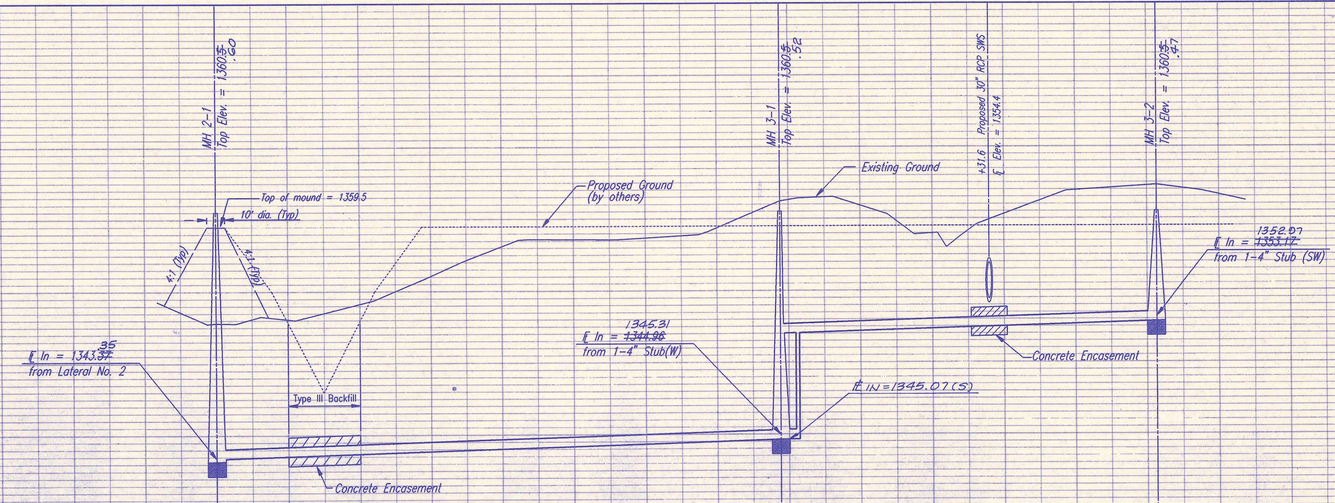
LATERAL NO. 3



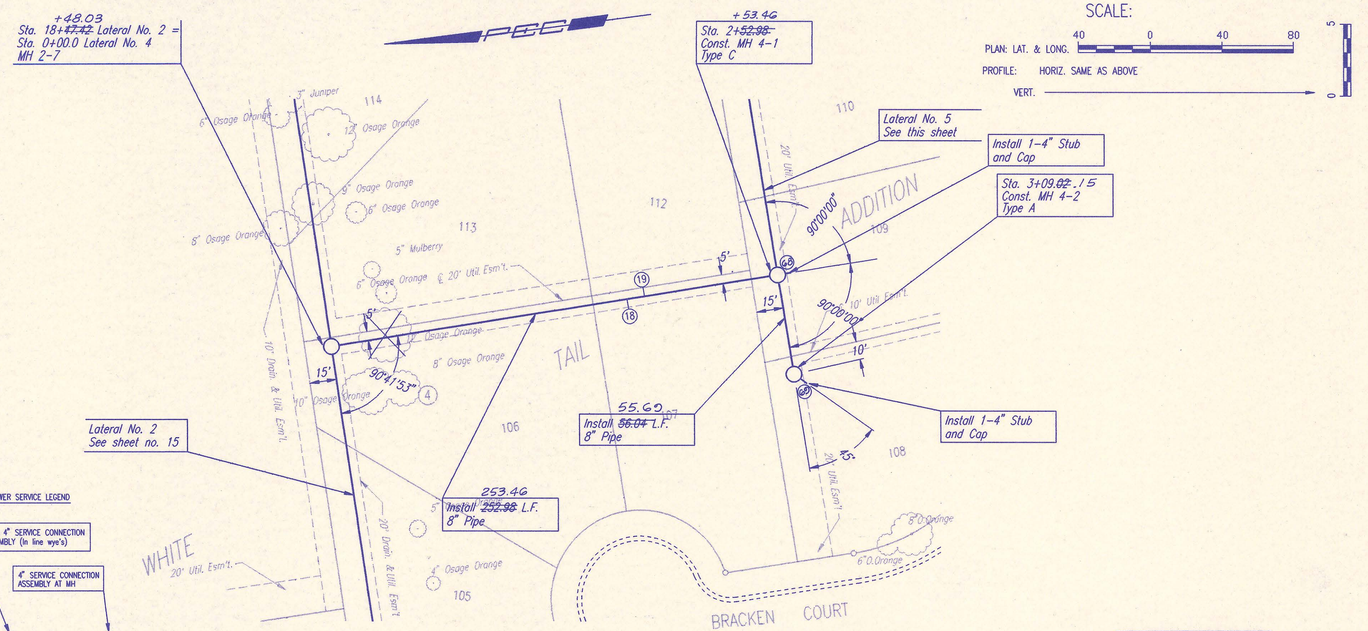
SEDGWICK COUNTY, BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

LATERAL NO. 3
SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION-PHASE 1 THRU 7

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

Job No. 34-93445-1
Date September, 1993
Designed By CRY, MDK
Drawn By TLS, CM

Sheet 16 of 26



LATERAL NO. 4

SCALE:

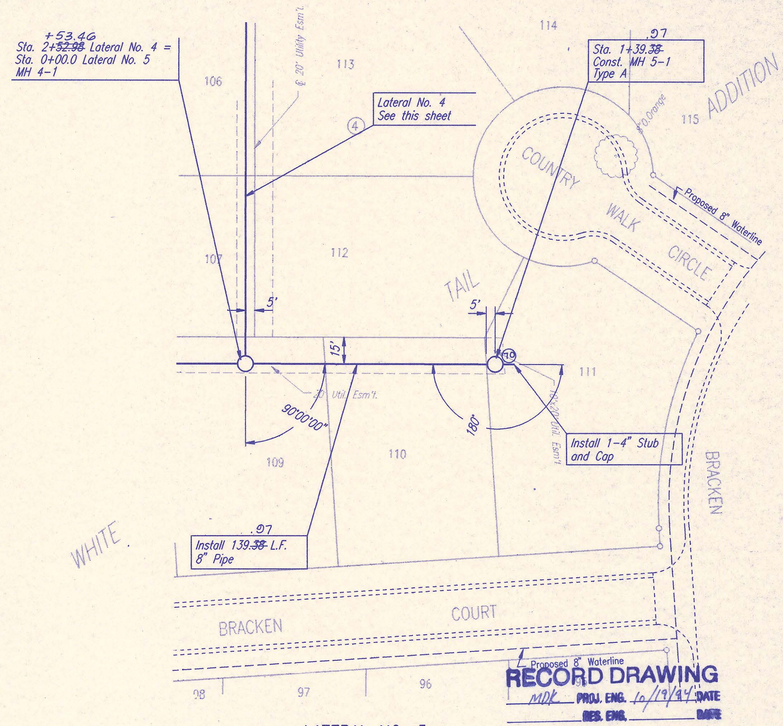
PLAN: LAT. & LONG. 40 0 40 80

PROFILE: HORIZ. SAME AS ABOVE

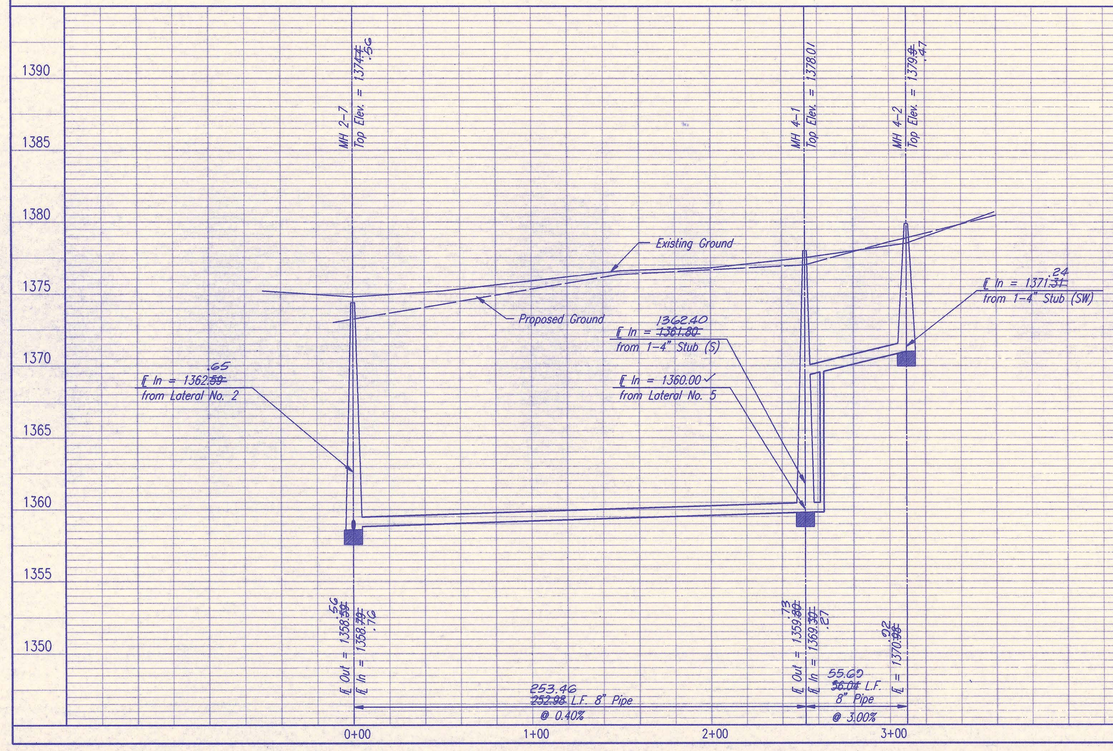
VERT. 5 0

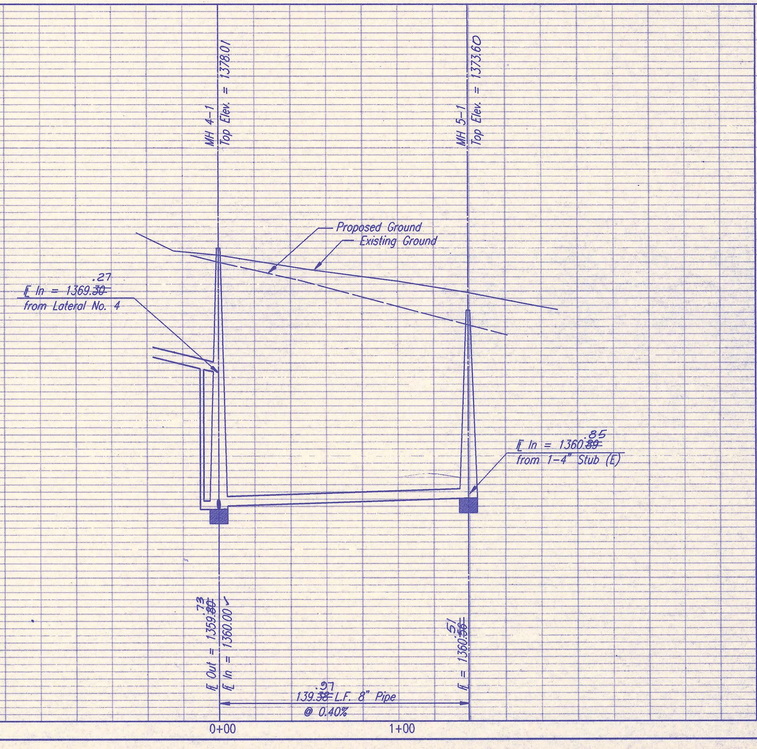
ALL PIPE INSTALLED IS PVC PIPE.

SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.



LATERAL NO. 5





LATERAL NO. 4 and 5

SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION-PHASE 1 THRU 7

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPURS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

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

Job No. 34-93445-1
Date September, 1993
Designed By CRY, MDK
Drawn By TLS, GM

Sheet 17 of 26

PLAN: BY | DATE | CHECKED | CHECKED

PROFILE: CHECKED | CHECKED

DSNR: RFJ OPER: RFJ SCALE: 1 = 40
Q:\93445\PP9 07-20-1994 13:35:02

+41.03
Sta. 14+~~40.36~~ Lateral No. 1 =
Sta. 0+00.00 Lateral No. 6
MH 1-7

.5G
Sta. 2+02.~~44~~
Const. MH 6-1
Type A
(5' Dia.)

+93.07
Sta. 5+~~42.42~~
Const. MH 6-2
Type A

.66
Sta. 8+85.~~32~~
Const. MH 6-3
Type A

WHITE TAIL COURT

WHITE TAIL COURT (RESERVE "A")

WHITE TAIL COURT

WHITE TAIL COURT ADDITION

FLOODWAY

RESERVE "D"

WHITE MEADOW COURT

Remove fence as required

Proposed 8" Waterline

15' Str., Drn. & Util. Esm't

℄ 20' Util. Esm't.

℄ 10' Util. Esm't.

Install 1-4" Stub and cap

90°

Lateral No. 1
See sheet no. 11

51°

135°

40°00'00"

180°00'00"

SCALE:
PLAN: LAT. & LONG. 40 0 40 80
PROFILE: HORIZ. SAME AS ABOVE
VERT.

.56
Install 202.~~44~~ L.F.
8" Pipe

340.51
Install ~~339.98~~ L.F.
8" Pipe

.59
Install 342.~~90~~ L.F.
8" Pipe

SEWER SERVICE LEGEND

8" X 4" SERVICE CONNECTION ASSEMBLY (In line wye's)

4" SERVICE CONNECTION ASSEMBLY AT MH

SEE THE SEWER SERVICE TABLE ON SHEET NO. 9 FOR LOCATIONS OF SEWER SERVICE CONNECTIONS TO BE INSTALLED BY THE SANITARY SEWER CONTRACTOR.

ALL PIPE INSTALLED IS PVC PIPE.

SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.

RECORD DRAWING
MDK PROJ. ENG. 10/19/94 DATE
REG. ENG. DATE

LATERAL NO. 6

PLAN: BY | DATE | CHECKED | CHECKED

PROFILE: CHECKED | CHECKED

DSNR: RFJ OPER: RFJ SCALE: 1 = 40
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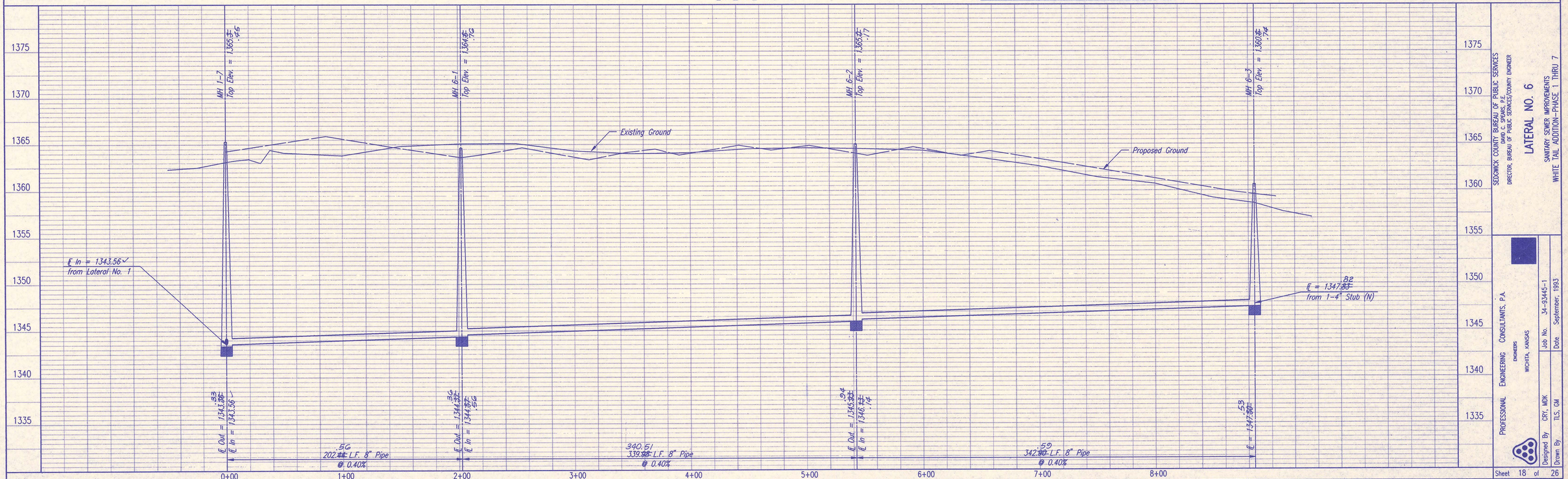


PROFILE: CHECKED | CHECKED

BY | DATE

SEDGWICK COUNTY, BUREAU OF PUBLIC SERVICES
DAVID C. SPOHN, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

LATERAL NO. 6
SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION-PHASE 1 THRU 7

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

Job No. 34-93445-1
Date September, 1993
Designed By CRY, MDK
Drawn By TLS, GM

Sheet 18 of 26

Sta. 16+~~93.51~~ 94.10 Lateral No. 1=
Sta. 0+00.00 Lateral No. 7
MH 1-8

Sta. 1+~~85.66~~ 66.23
Const. MH 7-1
Type A
(5' Dia.)

Sta. 3+24.~~12~~ .03
Const. MH 7-2
Type C
(5' Dia.)

Sta. 6+81.~~44~~ .72
Const. MH 7-3
Type A

Remove fence as required

Not Parallel

91°16'10"

81°35'25"

21°21'41"

65°32'38"

166.23 ~~185.66~~ L.F. 8" Pipe

Lateral No. 1
See sheet no. 11

157.80 ~~158.46~~ L.F. 8" Pipe

357.~~32~~ 60 L.F. 8" Pipe

Lateral No. 8
See sheet no. 22

CAUTION !!!
Proposed 8" Waterline
(by others)

Prop. 8" Waterline

SEWER SERVICE LEGEND

8" X 4" SERVICE CONNECTION ASSEMBLY (In line wye's)

4" SERVICE CONNECTION ASSEMBLY AT MH

SEE THE SEWER SERVICE TABLE ON SHEET NO. 9 FOR LOCATIONS OF SEWER SERVICE CONNECTIONS TO BE INSTALLED BY THE SANITARY SEWER CONTRACTOR.

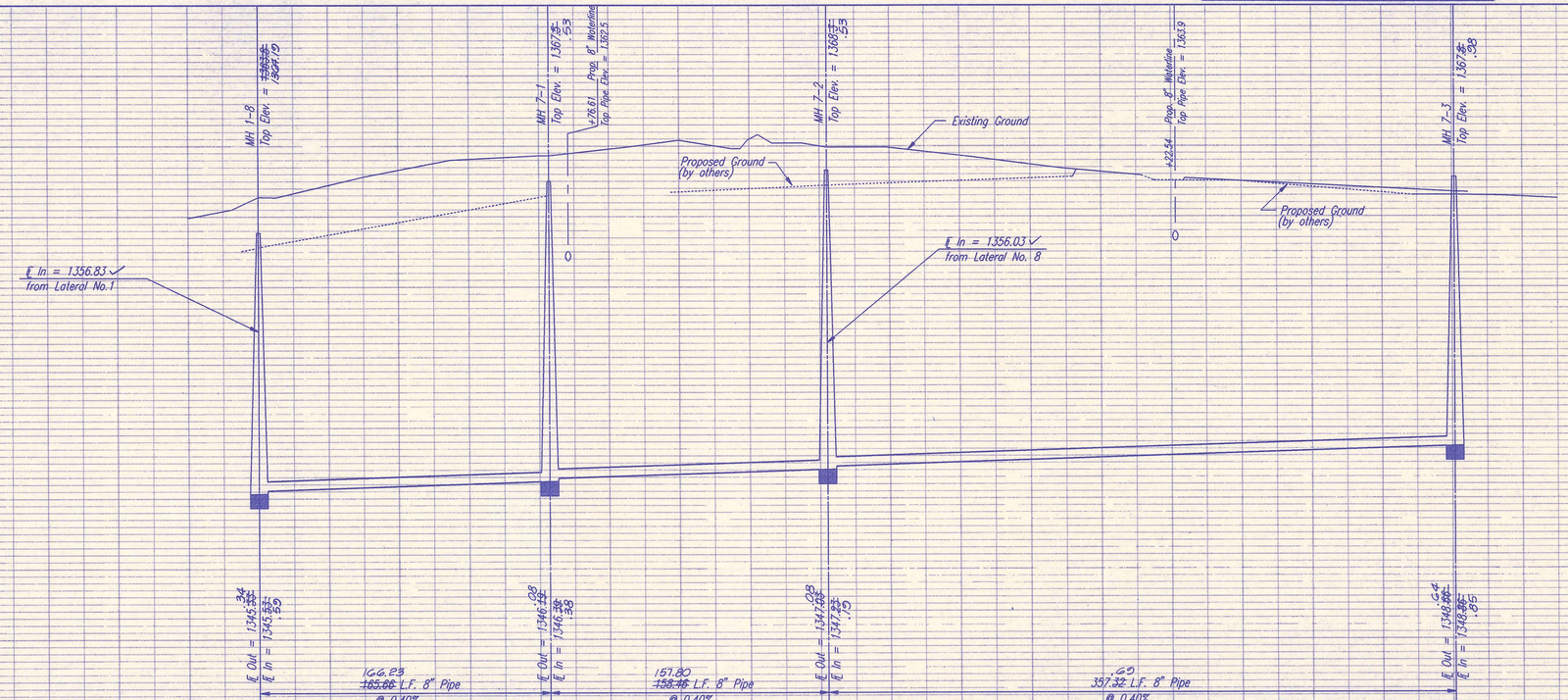
SCALE:
PLAN: LAT. & LONG. 40 0 40 80
PROFILE: HORIZ. SAME AS ABOVE
VERT. 5 0

ALL PIPE INSTALLED IS PVC PIPE.

SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.

RECORD DRAWING
MDK PROJ. ENG. 10/19/94 DATE
RES. ENG. DATE

LATERAL NO. 7



PLAN / PROFILE — BY | DATE | CHECKED | CHECKED

DSNR: REJ OPER: REJ SCALE: 1 = 40
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SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

LATERAL NO. 7
SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION-PHASE 1 THRU 7

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

Job No. 34-93445-1
Date September, 1993
Designed By CRY, MDK
Drawn By TLS, GM

Sheet 19 of 26

Sta. 6+81.~~44~~ .72
MH 7-3

Sta. 8+99.~~01~~ .46
Const. MH 7-4
Type A

Sta. 12+~~20.79~~ +21.20
Const. MH 7-5
Type A

Sta. 14+34.~~26~~ .66
Const. MH 7-6
Type B

Sta. 17+58.~~24~~ .86
Const. MH 7-7
Type A

LATERAL NO. 9
See sheet no. 23

SCALE:
PLAN: LAT. & LONG. 40 0 40 80
PROFILE: HORIZ. SAME AS ABOVE
VERT. 5 0

MEADOW
WHITE
TAIL
KILLENWOOD
WOODRIDGE
ADDITION
RESERVE "C"
PBE

15 16 17 13 1 44 14 13 12 11 10 9 8

@ 10' Util. Esm't
@ 20' Util. Esm't

Proposed 30" RCP
Proposed 8" Waterline
Proposed Sidewalk
18" Osage Orange Row

44°20'13"
11°08'52"
81°35'25"
90° 00' 00"
180° 00' 00"
49°16'42"

33 34 35 36 37 38 39

5' 25'

Install 217.~~57~~ .74 L.F.
8" Pipe

Install 321.~~78~~ .74 L.F.
8" Pipe

Install 213.~~47~~ .46 L.F.
8" Pipe

Install 324.20 L.F.
8" Pipe

SEWER SERVICE LEGEND

8" x 4" SERVICE CONNECTION ASSEMBLY (In line wye's)

4" SERVICE CONNECTION ASSEMBLY AT MH

20 21

SEE THE SEWER SERVICE TABLE ON SHEET NO. 9 FOR LOCATIONS OF SEWER SERVICE CONNECTIONS TO BE INSTALLED BY THE SANITARY SEWER CONTRACTOR.

ALL PIPE INSTALLED IS PVC PIPE.

SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.

RECORD DRAWING
MDK PROJ. ENG. 10/19/94 DATE
RES. ENG. DATE

PLAN

BY	DATE
CHECKED	
CHECKED	

LATERAL NO. 7

PROFILE

BY	DATE
CHECKED	
CHECKED	

1380 1375 1370 1365 1360 1355 1350 1345 1340

MH 7-3 Top Elev. = 1367.~~43~~ .38
MH 7-4 Top Elev. = 1368.~~15~~ .10
MH 7-5 Top Elev. = 1367.~~47~~ .32
MH 7-6 Top Elev. = 1369.~~47~~ 1368.97
MH 7-7 Top Elev. = 1372.~~45~~ .25

Existing Ground
Proposed Ground

℄ Out = 1346.~~68~~ .64
℄ In = 1346.~~85~~ .85

℄ Out = 1349.~~15~~ .12
℄ In = 1349.~~32~~ .32

℄ Out = 1351.~~21~~ .13
℄ In = 1351.~~38~~ .38

℄ Out = 1352.~~27~~ .16
℄ In = 1352.~~37~~ .37

℄ In = 1353.~~77~~ .62
from Lateral No. 9

℄ Out = 1353.~~98~~ .68
℄ In = 1353.98

.74 217.~~57~~ L.F. 8" Pipe @ 0.40%

.74 321.~~78~~ L.F. 8" Pipe @ 0.40%

.46 213.~~47~~ L.F. 8" Pipe @ 0.40%

324.20 ~~323.98~~ L.F. 8" Pipe @ 0.40%

7+00 8+00 9+00 10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00

PROFILE

BY	DATE
CHECKED	
CHECKED	

DSNR: REJ OPER: RFJ SCALE: 1 = 40
O:\93445\PP12 07-20-1994 13:37:21

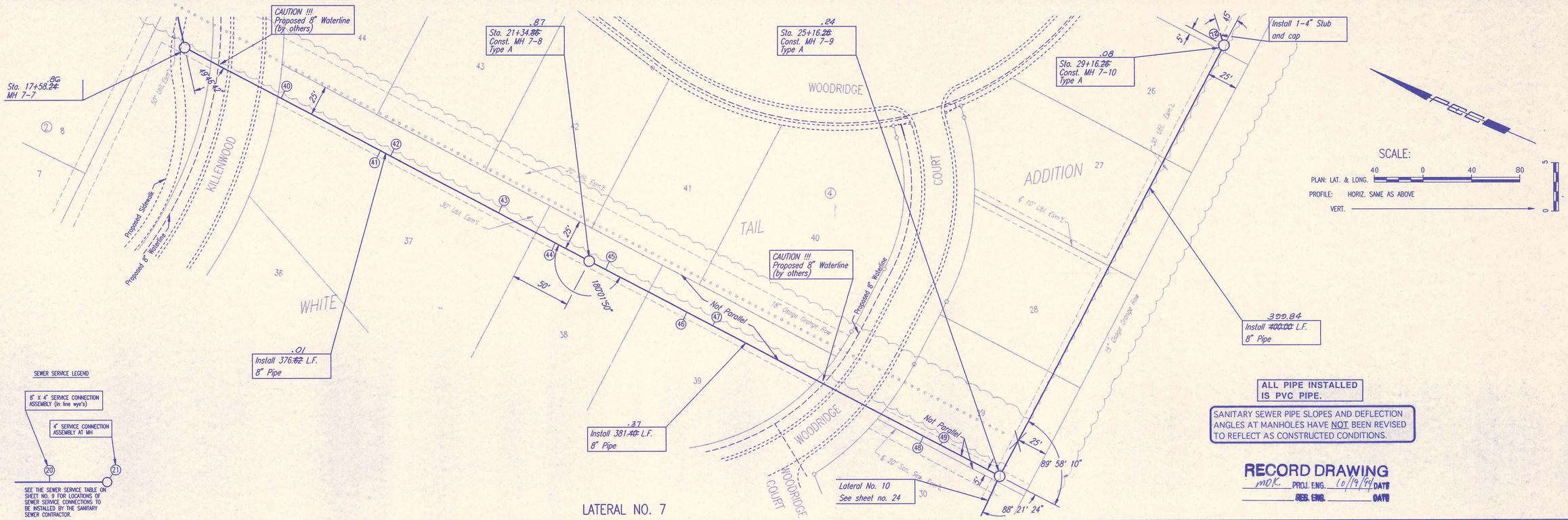
SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

LATERAL NO. 7
SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION--PHASE 1 THRU 7

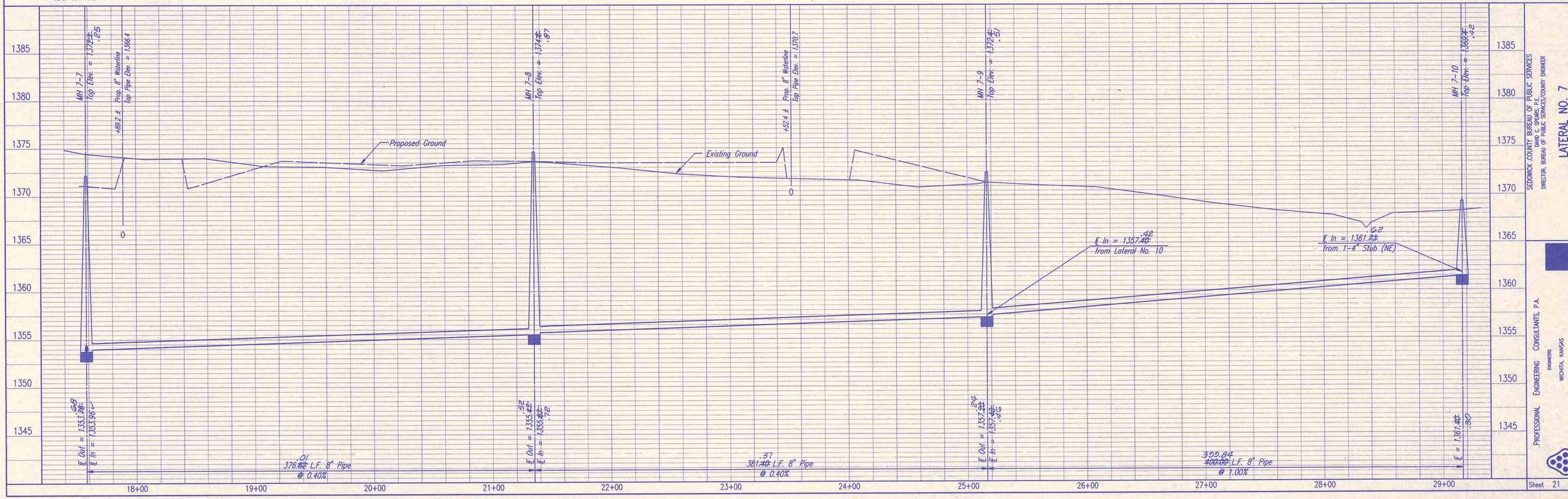
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

Job No. 34-93445-1
Date September, 1993
Designed By CRY, MDK
Drawn By TLS, GM

Sheet 20 of 26



LATERAL NO. 7



PLAN — DATE | BY | CHECKED | CHECKED

PROFILE — DATE | BY | CHECKED | CHECKED

DSNR: REJ OPER: RFJ SCALE: 1 = 40
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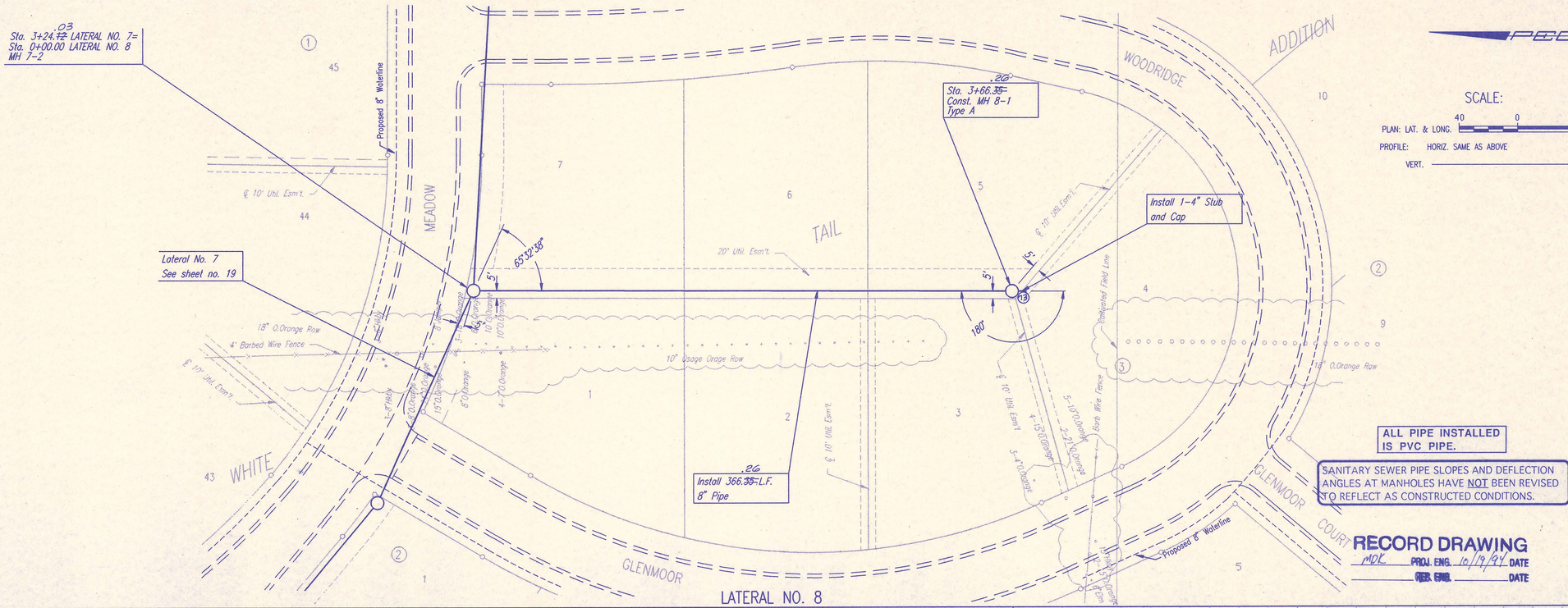
SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

LATERAL NO. 7
SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION-PHASE 1 THRU 7

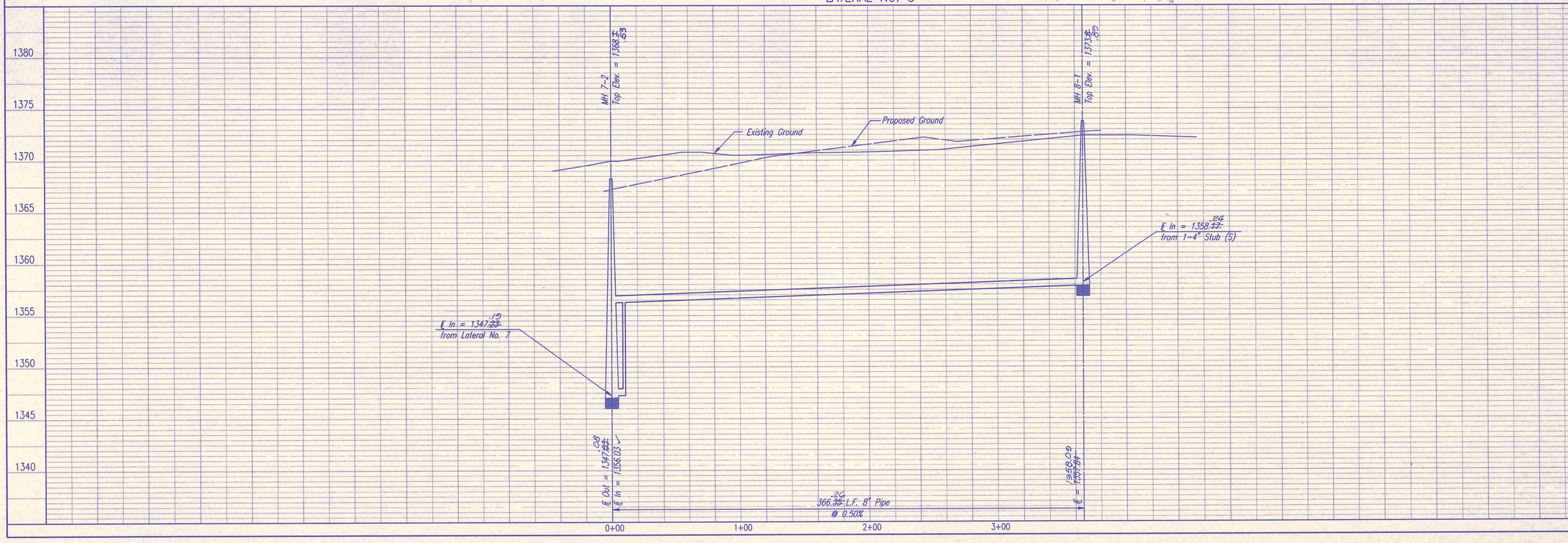
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

Job No. 34-93445-1
Date September, 1993
Designed By CRY, MDK
Drawn By TLS, CM

Sheet 21 of 26



LATERAL NO. 8



SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

LATERAL NO. 8

SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION-PHASE 1 THRU 7

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

Designed By CRY, MDK | Job No. 34-93445-1
Drawn By TLS, GM | Date September, 1993

Sheet 22 of 26

PLAN: CHECKED / CHECKED — BY — DATE

PROFILE: CHECKED / CHECKED — BY — DATE

DSNR: RFJ OPER: RFJ SCALE: 1 = 40
Q:\93445\PP14 07-20-1994 13:38:06

Sta. 14+34.~~26~~ .66 LATERAL NO. 7=
Sta. 0+00.00 LATERAL NO. 9
MH 7-6

CAUTION !!!
Proposed 8" Waterline
(by others)

Sta. 2+86.~~17~~ .03
Const. MH 9-1
Type A

CAUTION !!!
Proposed 30" RCP SWS
(by others)

Sta. 5+11.~~34~~ .17
Const. MH 9-2
Type A

Sta. 7+21.~~34~~ .60
Const. MH 9-3
Type A

SCALE:
PLAN: LAT. & LONG. 40 0 40 80
PROFILE: HORIZ. SAME AS ABOVE
VERT.

RESERVE "F"
KILLENWOOD
ADDITION
TAIL
WOODRIDGE
WHITE
WOODRIDGE
RES.

Proposed 8" Waterline
20' Util. Esm't.
℄ 20' Util. Esm't.
℄ 10' Util. Esm't.
℄ Prop. Util. Esm't.
Proposed Sidewalk
30" RCP
24" RCP

40° 13' 18"
90° 00' 00"
180°00'00"
5'
10'
15'

Install 286.~~17~~ .03 L.F.
8" Pipe

Install 225.~~17~~ .14 L.F.
8" Pipe

Install 210.~~00~~ .43 L.F.
8" Pipe

Install 1-4" Stub
and Cap

Lateral No. 7
See sheet no. 20

ALL PIPE INSTALLED IS PVC PIPE.

SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.

RECORD DRAWING
MDK PROJ. ENG. 10/19/94 DATE
RES. ENG. DATE

LATERAL NO. 9

PLAN	CHECKED	BY	DATE
	CHECKED		

PROFILE	CHECKED
	CHECKED

DSNR: REJ OPER: RFJ SCALE: 1 = 40
Q:\93445\PP15 07-20-1994 13:38:24

1380 1375 1370 1365 1360 1355 1350 1345 1340

MH 7-6 Top Elev. = ~~1388.02~~ 1388.57
+41.13 Proposed 8" Waterline
Top Pipe Elev. = 1362.9
+45.44 Proposed 30" RCP SWS
℄ Elev. = 1360.16
MH 9-1 Top Elev. = 1372.~~35~~ .27
MH 9-2 Top Elev. = 1373.~~35~~ .36
MH 9-3 Top Elev. = 1374.~~28~~ .28

Existing Ground
Proposed Ground

℄ In = 1352.~~47~~ .37
from Lateral No. 7

℄ In = 1358.~~47~~ .33
from 1-4" Stub (SW)

℄ Out = 1352.~~47~~ .37
℄ In = 1353.~~22~~ .02

℄ Out = 1355.~~48~~ .36
℄ In = 1355.~~68~~ .57

℄ Out = 1357.~~04~~ .01
℄ In = 1357.~~24~~ .16

℄ = 1358.~~47~~ .33

.03 286.~~17~~ L.F. 8" Pipe @ 0.60%
.14 225.~~17~~ L.F. 8" Pipe @ 0.60%
.43 210.~~00~~ L.F. 8" Pipe @ 0.40%

0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00

SEDGWICK COUNTY, BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

LATERAL NO. 9
SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION-PHASE 1 THRU 7

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

Job No. 34-33445-1
Date September, 1993
Designed By CRY, MDK
Drawn By TLS, GM

Sheet 23 of 26

SCALE:

PLAN: LAT. & LONG. 40 0 40 80

PROFILE: HORIZ. SAME AS ABOVE

VERT. 5 0

PLAN

Sta. 25+16.26 24 Lateral No. 7 = Sta. 0+00.00, Lateral No. 10
MH 7-9

Sta. 3+42.35 +41.90
Const. MH 10-1
Type A

IDENTICAL POINTS

18" Osage Orange Row

10" Hackberry, 24" Hackberry, 6" Hackberry, 12" Hackberry, 8" Hackberry, 10" Hackberry, 8" Hackberry, 4" Hackberry, 2" Hackberry, 10" Hackberry

88° 21' 26"

91° 40' 26"

25' 15' 5' 5' 15'

20' Util. Esm't.

10' Utility Esm't.

20' S.S. Esm't.

341.90
Install 342.35 L.F. 8" Pipe

Lateral No. 7
See Sheet No. 21

WOODRIDGE COURT

29 30 31 32 4

SEWER SERVICE LEGEND

8" X 4" SERVICE CONNECTION ASSEMBLY (In line wye's)

4" SERVICE CONNECTION ASSEMBLY AT MH

20 21

SEE THE SEWER SERVICE TABLE ON SHEET NO. 9 FOR LOCATIONS OF SEWER SERVICE CONNECTIONS TO BE INSTALLED BY THE SANITARY SEWER CONTRACTOR.

WHITETAIL RES. "M" 9'x15' COURT

Sta. 3+42.35 +41.90
MH 10-1

15" Osage Orange Row

20' Util. Esm't.

6" Hackberry, 4" Hackberry, 8" Hackberry, 10" Hackberry, 8" Hackberry

30' Util. Esm't.

53 52 4 31 WHITE

Sta. 5+90.35 +80.72
Const. MH 10-2
Type C

20' S.S. Esm't.

50 51 52 53

180° 00' 00"

247.82
Install 248.00 L.F. 8" Pipe

WHITE TAIL

Sta. 7+76.27 +75.78
Const. MH 10-3
Type A

49 48 ADDITION 47

10'

186.06
Install 185.97 L.F. 8" Pipe

CIRCLE

Sta. 10+16.27 +15.65
Const. MH 10-4
Type A

Install 1-4" Stub and Cap

46 45

10' 45°

239.87
Install 240.00 L.F. 8" Pipe

36 WHITE TAIL

ALL PIPE INSTALLED IS PVC PIPE.

SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.

RECORD DRAWING
MDK PROJ. ENG. 10/19/94 DATE
RES. ENG. DATE

LATERAL NO. 10

PROFILE

MH 7-9 Top Elev. = 1372.45

MH 10-1 Top Elev. = 1375.66

MH 10-2 Top Elev. = 1379.56

MH 10-3 Top Elev. = 1380.87

MH 10-4 Top Elev. = 1379.56

Proposed Ground (by others)

Proposed Ground

Existing Ground

℄ In = 1357.40 42
from Lateral No. 7

℄ In = 1366.38 34
from 1-4" Stub (SE)

℄ IN = 1360.23 (N)

℄ Out = 1357.24 22
℄ In = 1357.40 42

341.50
342.38 L.F. 8" Pipe
@ 0.40%

℄ Out = 1358.77 84
℄ In = 1358.97

247.82
248.00 L.F. 8" Pipe
@ 0.40%

℄ Out = 1360.00
℄ In = 1360.23

186.06
185.92 L.F. 8" Pipe
@ 0.50%

℄ Out = 1364.86 86
℄ In = 1365.06 86

239.87
240.00 L.F. 8" Pipe
@ 0.40%

℄ Out = 1366.05 05

1385 1380 1375 1370 1365 1360 1355 1350 1345

0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00 8+00 9+00 10+00

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

LATERAL NO. 10
SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION-PHASE 1 THRU 7

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

Job No. 34-93445-1
Date September, 1993
Designed By CRY, MDK
Drawn By GM

Sheet 24 of 26

BY DATE
PLAN CHECKED CHECKED
PROFILE CHECKED CHECKED

DSNR: REJ OPER: REJ SCALE: 1 = 40
Q:\93445\PP4 07-20-1994 13:33:00

SCALE:
PLAN: LAT. & LONG. 40 0 40 80
PROFILE: HORIZ. SAME AS ABOVE
VERT. 5 0

+58.30
Sta. 19+~~57.70~~ LATERAL NO. 1=
Sta. 0+0.00 LATERAL NO. 12
MH 1-9

CAUTION !!!
Proposed 8" Waterline
(by others)

+30.79
Sta. 2+~~31.02~~
Const. MH 12-1
Type A

CAUTION !!!
Proposed 15" RCP SWS
(by others)

CAUTION !!!
Proposed 8" Waterline
(by others)

+05.55
Sta. 6+~~04.55~~
Const. MH 12-2
Type C

.68
Sta. 9+95.~~70~~
Const. MH 12-3
Type A
(5' Dia.)

Install 1-4" Stub and cap

Lateral No. 1
See sheet no. 11

Lateral No. 13
See sheet no. 26

230.79
Install ~~231.02~~ L.F.
8" Pipe

374.76
Install ~~373.55~~ L.F.
8" Pipe

390.13
Install ~~391.15~~ L.F.
8" Pipe

Proposed 8" Waterline

ALL PIPE INSTALLED IS PVC PIPE.

SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.

RECORD DRAWING
MDK PROJ. ENG. 10/19/94 DATE
____ RES. ENG. ____ DATE

LATERAL NO. 12

PLAN | CHECKED | CHECKED | BY | DATE

PROFILE | CHECKED | CHECKED | BY | DATE

DSNR: RFJ OPER: RFJ SCALE: 1" = 40'
Q:\93445\PP16 07-20-1994 13:39:08

Existing Ground
Proposed Ground

MH 1-9 Top Elev. = 1370.~~47~~
+61.61 Proposed 8" Waterline Top Pipe Elev. = 1364.90
+04.40 Proposed 15" RCP Storm Water Sewer ℄ Elev. = 1361.42
MH 12-1 Top Elev. = 1372.~~42~~
+20.5 ± Proposed 8" Waterline Top Pipe Elev. = 1369.9
MH 12-2 Top Elev. = 1378.~~46~~
MH 12-3 Top Elev. = 1388.~~61~~

℄ In = 1358.~~09~~ from Lateral No. 1
℄ In = 1360.28 from Lateral No. 13 (~~1361.01~~)
℄ In = 1360.05 from 1-4" Stub (S) (~~1368.20~~)
℄ In = 1362.63 (W)

℄ Out = 1357.~~89~~ 1359.~~84~~ .50
℄ In = 1359.~~84~~ .32
℄ Out = 1360.~~84~~ .32
℄ In = 1361.~~84~~ .42
℄ Out = 1366.~~84~~ .32
℄ In = 1367.~~84~~ .45
℄ Out = 1388.~~84~~ .80
℄ In = 1388.~~84~~ .95

230.79 ~~231.02~~ L.F. 8" Pipe @ 0.40%
374.76 ~~373.55~~ L.F. 8" Pipe @ 0.40%
390.13 ~~391.15~~ L.F. 8" Pipe @ 0.40%

1390 1385 1380 1375 1370 1365 1360 1355 1350
0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00 8+00 9+00 10+00

SEDGWICK COUNTY, BUREAU OF PUBLIC SERVICES
DAVID C. SPOHN, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

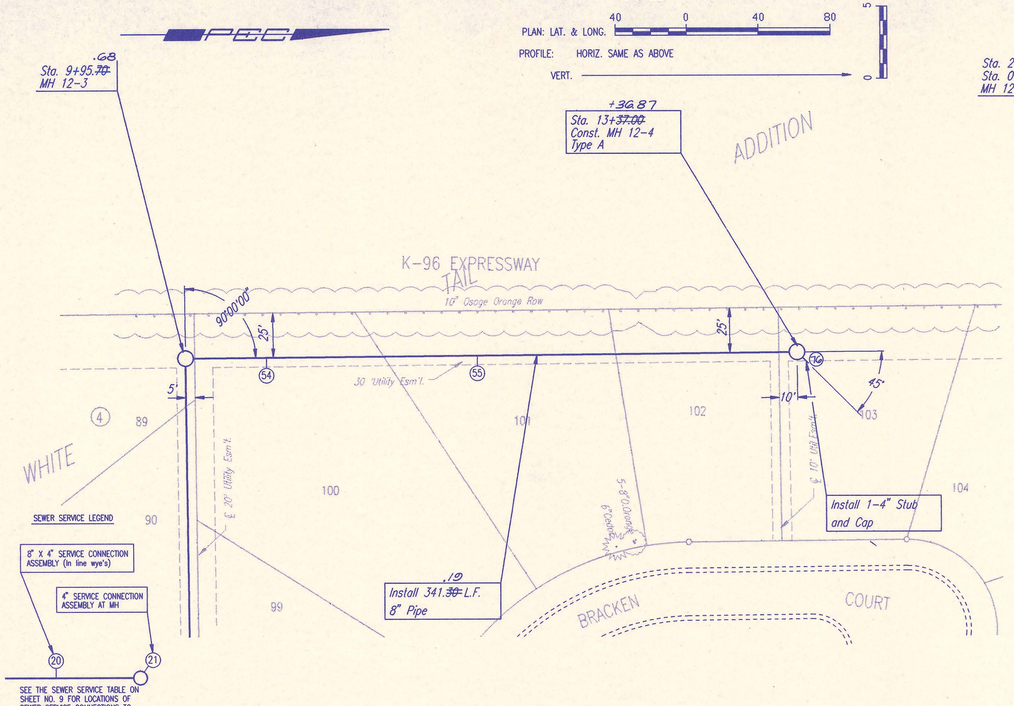
LATERAL NO. 12
SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION-PHASE 1 THRU 7

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

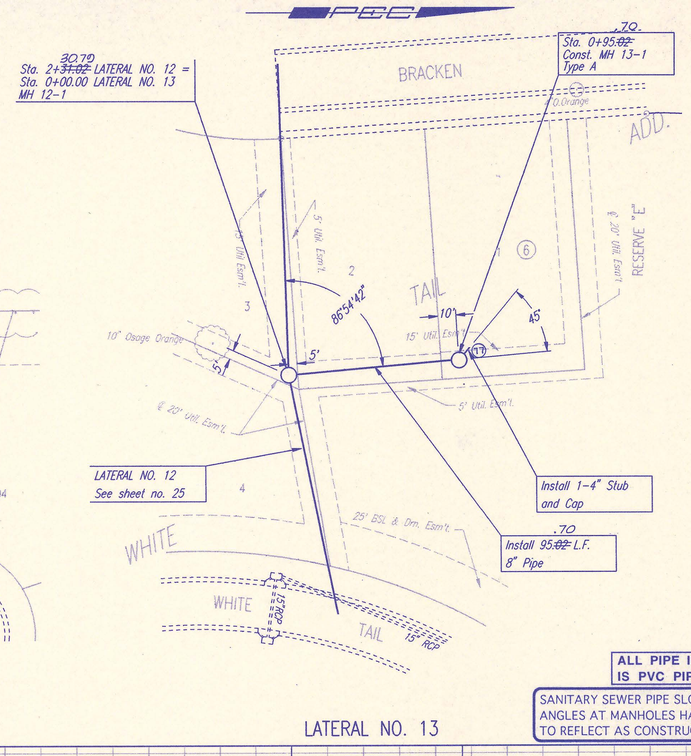
Designed By CRY, MDK | Job No. 34-93445-1
Drawn By TLS, GM | Date September, 1993

Sheet 25 of 26

SCALE:
PLAN: LAT. & LONG. 40 0 40 80
PROFILE: HORIZ. SAME AS ABOVE
VERT. 5 0



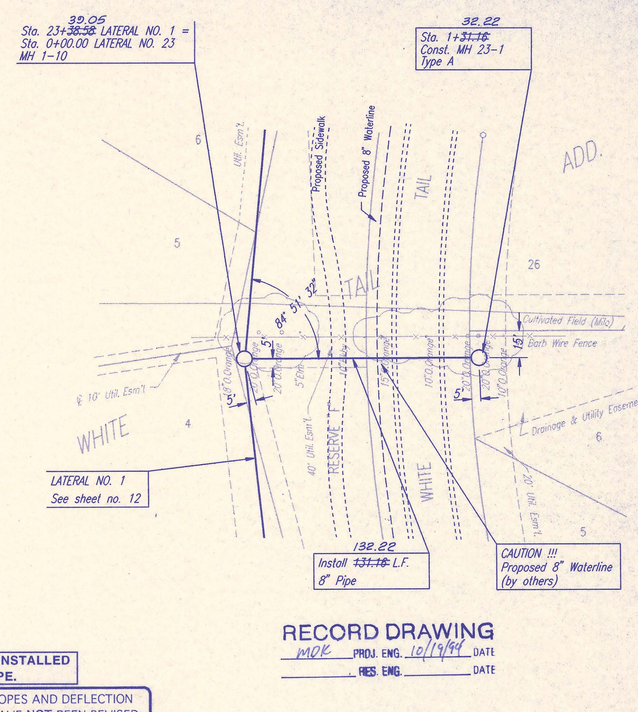
LATERAL NO. 12



LATERAL NO. 13

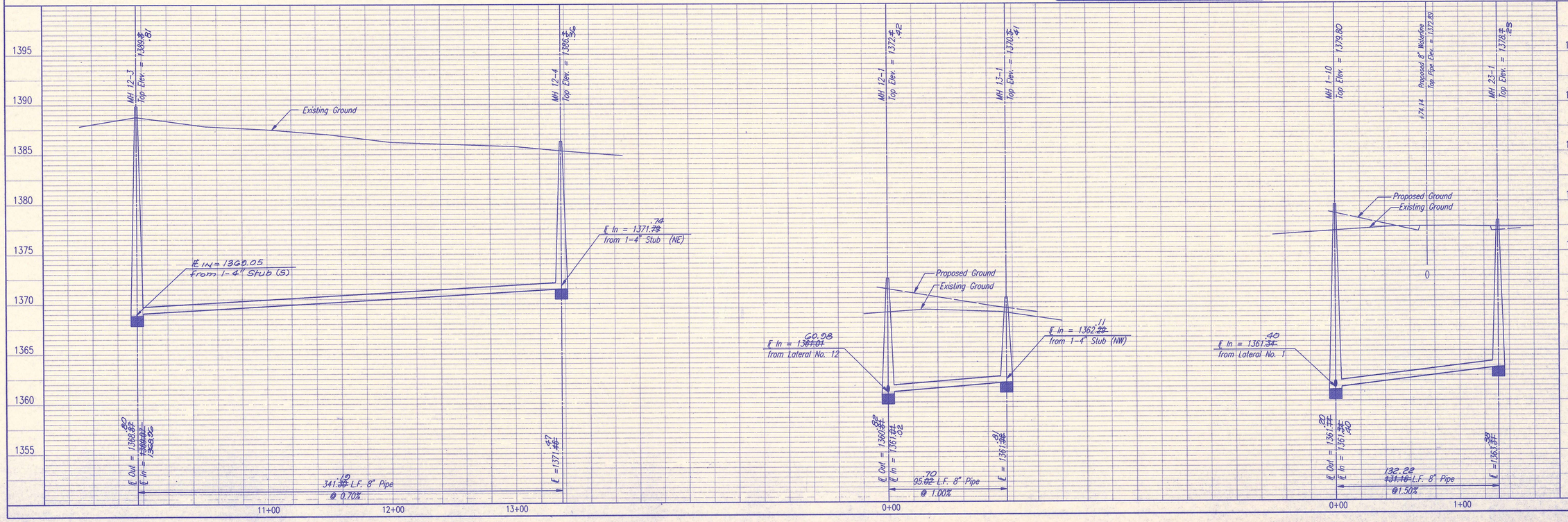
ALL PIPE INSTALLED IS PVC PIPE.

SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.



LATERAL NO. 23

RECORD DRAWING
MDK PROJ. ENG. 10/19/94 DATE
RES. ENG. DATE



PROFILE

	BY	DATE
CHECKED		
CHECKED		

PLAN

	BY	DATE
CHECKED		
CHECKED		

DSNR: REJ OPER: RFJ SCALE: 1 = 40
Q:\93445\PP17 07-20-1994 13:39:32

SEDGWICK COUNTY, BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

LATERAL NO. 12, 13 AND 23

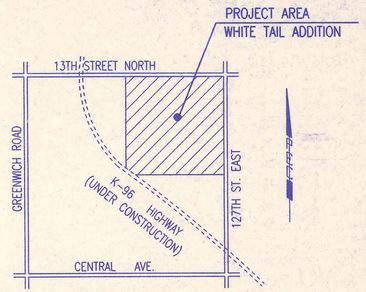
SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION—PHASE 1 THRU 7

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

Job No. 34-93445-1
Date September, 1993
Designed By CRY, MDK
Drawn By TLS, GM

Sheet 26 of 26

BUREAU OF PUBLIC SERVICES



LOCATION MAP

NOT TO SCALE

INDEX OF SHEETS

SHEET NO.	1	TITLE SHEET
SHEET NO.	2	KEY MAP
SHEET NO.	3-5	PLAT
SHEET NO.	6	PRECAST MANHOLE DETAILS
SHEET NO.	7	BACKFILL DETAILS
SHEET NO.	8	SEWER SERVICE DETAILS
SHEET NO.	9-11	PLAN\PROFILE

CONSTRUCTION PLANS FOR

SANITARY SEWER IMPROVEMENTS

IN

WHITE TAIL ADDITION

TO SEDGWICK COUNTY, KANSAS

PHASE 8 AND 10

MARCH, 1994

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

ENGINEERS

WICHITA, KANSAS

RECORD DRAWING

MDK PROJ. ENG. 10/24/94 DATE

_____ RES. ENG. _____ DATE

APPROVED:

David C. Spears

DAVID C. SPEARS, P.E.
DIRECTOR OF PUBLIC SERVICES/COUNTY ENGINEER

DATE: 3/24/94

CHRISTOPHER R. YOUNG LICENSED 11315 KANSAS PROFESSIONAL ENGINEER 3-15-94

APPROVED:

Betsy Gwin

CHAIRMAN, BOARD OF COUNTY COMMISSIONERS

DATE: 3/28/94

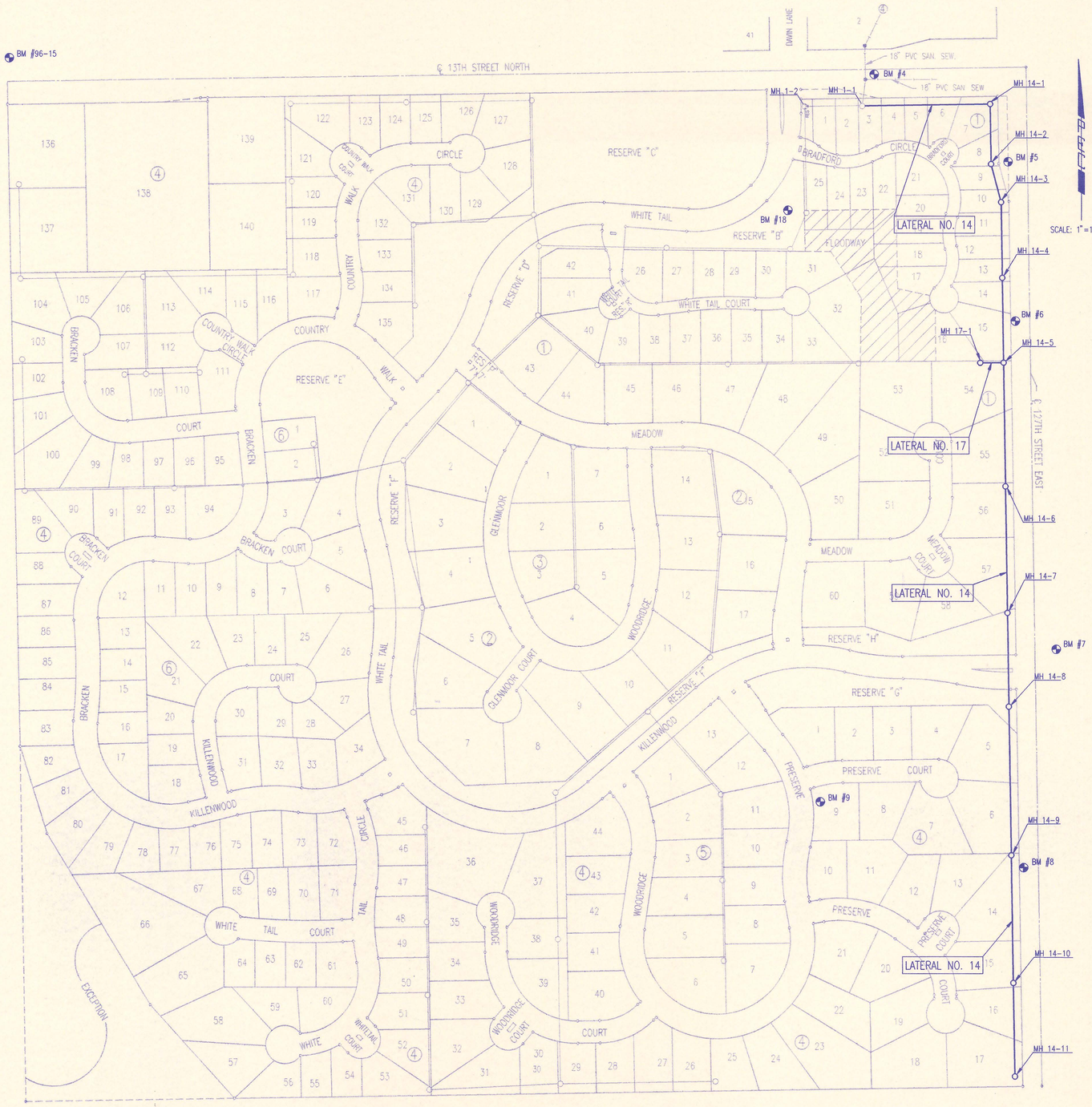
FILED IN THE OFFICE OF
THE SEDGWICK COUNTY CLERK

Deputy Juretta H. Mason

COUNTY CLERK

DATE: March 28, 1994

DSNR: REJ OPER: BB SCALE: 1 = 1
Q:\93445\TITPH810 03-10-1994 13:16:24



GENERAL NOTES

1. ALL ELEVATIONS SHOWN ARE USGS DATUM.
2. AT LEAST 72 HOURS PRIOR TO BEGINNING ANY EXCAVATION (EXCLUDING WEEKENDS AND HOLIDAYS), THE CONTRACTOR SHALL CONTACT THE KANSAS ONE-CALL SYSTEM, A UTILITY LOCATION SERVICE, AT 687-2470 TO REQUEST THE FOLLOWING UTILITY COMPANIES TO LOCATE ANY EXISTING LINES WITHIN THE PROJECT AREA: MULTIMEDIA CABLE TV, WICHITA WATER, SOUTHWESTERN BELL TELEPHONE, K G & E GAS, AND K G & E ELECTRIC.
3. THE BURIED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE LOCATIONS ONLY. IT SHOULD BE NOTED THAT OTHER BURIED LINES AND CABLES MAY EXIST WHICH ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING TRENCHING OPERATIONS TO AVOID DAMAGING THESE LINES. ANY LINES DAMAGED SHALL BE REPLACED OR REPAIRED IMMEDIATELY AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
4. AT LEAST 24 HOURS BEFORE CONNECTING NEW SEWER PIPE TO THE EXISTING SEWAGE SYSTEM, THE CONTRACTOR SHALL CONTACT THE SEDGWICK COUNTY EASTERN SEWER DISTRICT (733-0202). THE CONTRACTOR SHALL KEEP ANY CONSTRUCTION DEBRIS FROM ENTERING THE EXISTING SANITARY SEWER DURING CONSTRUCTION. TO PREVENT WATER OR DEBRIS FROM ENTERING THE EXISTING SEWER, A MECHANICAL PLUG SHALL BE INSTALLED AND MAINTAINED TO ISOLATE THE EXISTING SEWER FROM THE NEW CONSTRUCTION UNTIL THE NEW CONSTRUCTION IS CLEANED, TELEVISED, AND HAS BEEN ACCEPTED. THE WATER USED FOR CLEANING SHALL NOT BE ADDED TO THE FLOW OF THE EXISTING SEWER. THE CLEANING OR OTHERWISE ACCUMULATED WATER SHALL BE PUMPED OR OTHERWISE REMOVED PRIOR TO TELEVISING.
5. ALL PIPE JOINTS SHALL BE LAID AND PUSHED 'FULL HOME', WITH THE BEVELED END OF THE SPIGOT MAKING FULL CONTACT WITH THE CHAMFERED AREA AT THE THROAT OF THE BELL OR SOCKET, WITH NO SEPARATION BETWEEN THEM. IF SEPARATION IS DETERMINED, THE PIPE SHALL BE EXCAVATED AND RE-LAID ACCORDING TO SPECIFICATIONS AT THE CONTRACTORS EXPENSE.
6. EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE STOCKPILED WITHIN THE WHITE TAIL ADDITION AT NO ADDITIONAL COST TO THE OWNER. STOCKPILE LOCATIONS SHALL BE AS DIRECTED BY MR. JACK RITCHIE, RITCHIE ASSOCIATES INC., AT (316) 684-7300 AND IN ACCORDANCE WITH GENERAL NOTE NO. 19. NO ACCEPTABLE EXCAVATED MATERIAL SHALL BE REMOVED FROM THE WHITE TAIL ADDITION.
7. THE CONTRACTOR SHALL CONTAIN HIS OPERATIONS TO PERMIT TRAFFIC THROUGH AND ACROSS CONSTRUCTION AT EXISTING ROADWAYS AT ALL TIMES. THE CONTRACTOR SHALL ERECT WARNING SIGNS, FLASHING LIGHTS, AND BARRICADES IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES TO ENSURE SAFETY AS DIRECTED IN THE GENERAL CONDITIONS. THE CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH TO REMAIN OPEN OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.
8. 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. PRIOR TO START OF CONSTRUCTION THE CONTRACTOR SHALL FLAG AND REFERENCE ALL PROPERTY CORNERS THAT MAY BE DISTURBED BY CONSTRUCTION OPERATIONS, AND VERIFY THESE IN THE FIELD IN THE PRESENCE OF THE ENGINEER AND THE CONTRACTOR'S SURVEYOR. AFTER CONSTRUCTION AND BEFORE THE FINAL INSPECTION, A LETTER SIGNED AND SEALED BY THE LICENSED LAND SURVEYOR CERTIFYING REPLACEMENT OF ALL DISTURBED PROPERTY CORNERS SHALL BE SUBMITTED TO THE ENGINEER.
9. THE CONTRACTOR SHALL RESTORE ALL DITCHES, SWALES, ROAD SHOULDERS, AND BANKS TO THEIR ORIGINAL SLOPES AND GRADES. WHERE EXISTING ENTRANCE PIPE, DRAINAGE PIPE, SIGNS, FENCES, ETC., CONFLICT WITH THE PROPOSED WORK HEREIN, THEY SHALL BE REMOVED AND REPLACED OR RESET UNLESS OTHERWISE INDICATED ON THE PLANS. THE REPLACEMENT OF ALL THE AFOREMENTIONED ITEMS, INCLUDING SEEDING, FERTILIZER, AND MULCHING SHALL BE CONSIDERED SUBSIDIARY TO "SITE CLEARING AND RESTORATION".
10. EASEMENTS AND RIGHTS-OF-WAY PROVIDED BY THE OWNER FOR THE PROJECT ARE SHOWN IN THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACQUISITION OF ANY ADDITIONAL TEMPORARY EASEMENTS OR RIGHTS-OF-WAY THAT HE DESIRES TO USE IN COMPLETING THE WORK.
11. POSITIVE DRAINAGE SHALL BE PROVIDED FOR ALL AREAS ON OR NEAR SPOIL AREAS. NATURAL DRAINAGE WAYS SHALL BE MAINTAINED.
12. THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL MANHOLE COVERS.
13. THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY ABUTTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF 10 DAYS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION IN THE VICINITY OF THE AFFECTED PROPERTY.
14. ALL TRENCH BACKFILL SHALL BE EITHER TYPE I OR TYPE III UNLESS NOTED OTHERWISE.
15. THE CONTRACTOR SHALL ALSO CONTACT THE FOLLOWING AT LEAST 72 HOURS PRIOR TO BEGINNING CONSTRUCTION TO ADVISE THEM OF THE INTENDED WORK AND OF HIS PROPOSED SCHEDULE:

    SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
    1250 S. SENECA
    WICHITA, KS 67213
    MR. JIM WEBER
    (316) 383-7901
16. CONTRACTOR SHALL PROVIDE MOUNDED EARTH AT MANHOLES AS SHOWN ON THE PLAN/PROFILE SHEETS. COSTS FOR MOUNDING SHALL BE CONSIDERED SUBSIDIARY TO THE LUMP SUM PRICE BID FOR "SITE CLEARING AND RESTORATION".
17. THE CONTRACTOR SHALL NOT BURY MANHOLES THAT HAVE RIM ELEVATIONS WHICH ARE LOWER THAN EXISTING GROUND AT THE MANHOLE. THE GROUND AROUND SUCH MANHOLES SHALL BE GRADED AS SHOWN ON THE PLAN/PROFILE SHEETS. THE CONTRACTOR SHALL ALSO PROVIDE DRAINAGE AWAY FROM THESE MANHOLES BY CONSTRUCTION OF TEMPORARY DITCHES OR SLOPING THE GROUND AS REQUIRED. ALL COSTS FOR THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO THE LUMP SUM PRICE BID FOR "SITE CLEARING AND RESTORATION".
18. THE CONTRACTOR SHALL AVOID REMOVAL OR TRIMMING OF ANY TREES WHERE POSSIBLE. WHERE THE CONTRACTOR BELIEVES THE REMOVAL OR TRIMMING IS UNAVOIDABLE, HE SHALL OBTAIN THE CONCURRENCE OF THE ENGINEER BEFORE PROCEEDING WITH SUCH WORK.
19. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES INCLUDING ANY TREES REMOVED, TREE TRIMMINGS, AND EXCESS EXCAVATION WHICH IS TO BE WASTED, SHALL BE DISPOSED OF ON SITES PROVIDED BY THE CONTRACTOR. THESE SITES SHALL ALSO BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE, AND SITE LOCATION. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOODPLAIN WILL REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT AND A FLOODPLAIN DEVELOPMENT PERMIT FROM SEDGWICK COUNTY. ANY MATERIALS DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIALS BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS MAY REQUIRE ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED DISPOSAL LOCATION.
20. EACH BIDDER SHALL VISIT THE SITE OF THE PROJECT BEFORE SUBMITTING THE PROPOSAL FOR THIS WORK SO THAT HE WILL BE FULLY INFORMED OF THE EXISTING FIELD CONDITIONS AND THE OBSTACLES WHICH MIGHT BE ENCOUNTERED. UPON AWARD OF THE CONTRACT, THE CONTRACTOR WILL NOT BE GRANTED ANY ADDITIONAL COMPENSATION WITH REGARDS TO TIME AND MONEY FOR CONDITIONS THAT MAY HAVE BEEN EVALUATED DURING AN INSPECTION OF THE SITE.

BENCH MARK LIST

BM#96-15 (DATUM BM) – FOUND CHISELED "+" ON TOP NORTH CURB ALONG 13TH STREET NORTH ON EAST SIDE GRAVEL ACCESS ROAD ON WEST PROPERTY LINE OF LAKEVIEW CEMETERY.
ELEV. = 1347.35

BM#43-A (DATUM BM) – FOUND 40d SPIKE STEP IN EAST FACE HIGH VOLTAGE POLE ON WEST R/W 127TH STREET EAST ON 1ST POLE SOUTH OF CENTERLINE CRESTVIEW COUNTRY CLUB VILLAS ENTRANCE TO EAST.
ELEV. = 1371.375

BM#4 – SET CHISELED "℄" ON CENTERLINE HEADWALL IN SOUTH-SOUTHWEST END OF RCB UNDER 13TH STREET NORTH AT 395'± WEST OF CENTERLINE 127TH STREET EAST.
ELEV. = 1349.085

BM#5 – SET RAILROAD SPIKE IN NORTHWEST FACE OF HIGH VOLTAGE POLE ON WEST R/W 127TH STREET EAST AT 240'± SOUTH OF CENTERLINE 13TH STREET NORTH.
ELEV. = 1351.495

BM#6 – SET RAILROAD SPIKE IN WEST-NORTHWEST FACE OF HIGH VOLTAGE POLE ON WEST R/W 127TH STREET EAST ON 3RD POLE NORTH OF CENTERLINE KILLENWOOD STREET TO EAST.
ELEV. = 1357.340

BM#7 – SET RAILROAD SPIKE IN WEST FACE OF LIGHT POLE ON NORTHEAST CORNER OF KILLENWOOD STREET AND 127TH STREET EAST.
ELEV. = 1367.900

BM#8 – SET RAILROAD SPIKE IN WEST FACE OF HIGH VOLTAGE POLE ON WEST R/W 127TH STREET EAST ON 2ND POLE SOUTH OF CENTERLINE KILLENWOOD STREET TO EAST.
ELEV. = 1371.810

BM#9 – SET TEE POST (1.5' DEEP) AT 30' SOUTH AND 25'± EAST OF NORTHWEST CORNER LOT 9, BLOCK 4, WHITE TAIL ADDITION.
ELEV. = 1366.855

BM#18 – SET RAILROAD SPIKE IN NORTHEAST FACE 36" ELM IN EAST-WEST FENCE LINE AT 70'± NORTHWEST OF SOUTHWEST CORNER LOT 25, BLOCK 1, WHITE TAIL ADDITION.
ELEV. = 1355.275

RECORD DRAWING
MDK PROJ. ENG. 10/24/94 DATE
RES. ENG. DATE

PHASE 8
Lateral No. 14 Sta. 0+00.00 to Sta. 10+12.01 (MH's 14-1 thru 14-5)
Lateral No. 17 Sta. 0+00.00 to Sta. 0+61.31 (MH 17-1)
BENEFIT DISTRICT
Lots 3 thru 16, Block 1, White Tail Addition
to Sedgwick County, Kansas. (14 Lots)

PHASE 10
Lateral No. 14 Sta. 10+12.01 to Sta. 28+75.27 (MH's 14-6 thru 14-11)
BENEFIT DISTRICT
Lots 49 through 60, Block 1; Lots 1 through 24, Block 4, White Tail
Addition to Sedgwick County, Kansas. (36 Lots)

CHRISTOPHER R. YOUNG LICENSED 11315 KANSAS PROFESSIONAL ENGINEER 9-15-94

No.	Revision	By	Date

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

KEY MAP

SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION PHASE 8 AND 10

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

Designed by	CRY, MDK	Job No.	34-93445-1
Drawn by	TLS	Date	DECEMBER, 1993

Sht. 2 of 11

DSNR: REJ OPER: BB SCALE: 1 = 150
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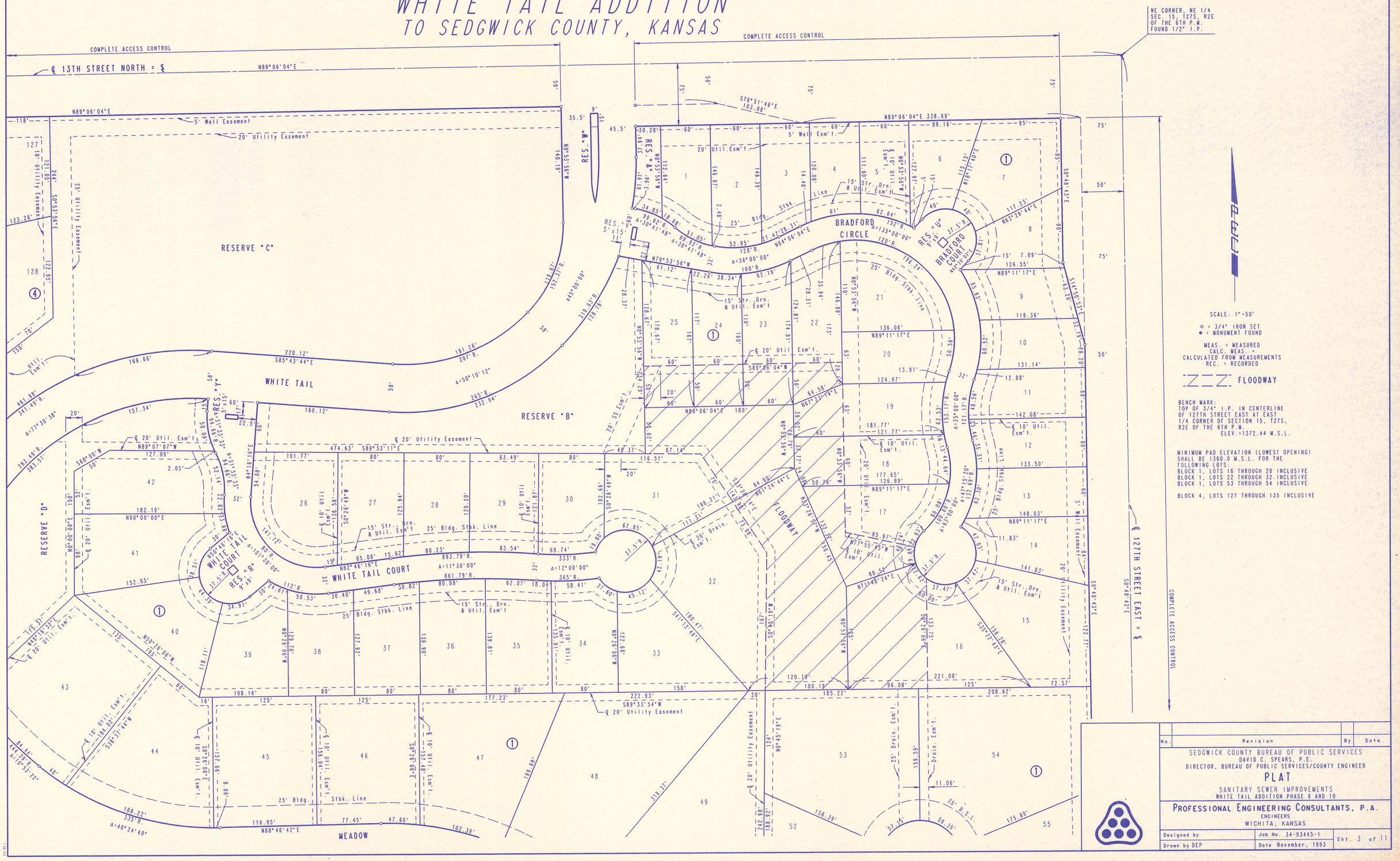
WHITE TAIL ADDITION
TO SEDGWICK COUNTY, KANSAS



DRAWING NAME: 34-93445-1 WTSS PLAT
SURVEY CONTROL: GPS & ONE # 528
CENTER COORDINATES:
ROTATION ANGLE:
DATE LAST WORKED ON: JAN 06, 1994
SPECIAL INSTRUCTIONS:
DWG

CKD. BY: DATE:

No.	Revision	By	Date

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

PLAT

SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION PHASE 8 AND 10

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

Designed by	Job No. 34-93445-1	Sht. 3 of 11
Drawn by DEP	Date November, 1993	

WHITE TAIL ADDITION

TO SEDGWICK COUNTY, KANSAS

SCALE: 1"=100'

○ = 3/4" IRON SET
● = MONUMENT FOUND
MEAS. = MEASURED
CALC. MEAS. = CALCULATED FROM MEASUREMENTS
REC. = RECORDED

BSL = BUILDING SETBACK LINE
SS = SANITARY SEWER

BENCH MARK:
TOP OF 3/4" I.P. IN CENTERLINE OF 127TH STREET EAST AT EAST 1/4 CORNER OF SECTION 15, T27S, R2E OF THE 6TH P.M.
ELEV.=1372.44 M.S.L.

MINIMUM PAD ELEVATION (LOWEST OPENING) SHALL BE 1360.0 M.S.L. FOR THE FOLLOWING LOTS:
BLOCK 1, LOTS 16 THROUGH 20 INCLUSIVE
BLOCK 1, LOTS 22 THROUGH 32 INCLUSIVE
BLOCK 1, LOTS 53 THROUGH 54 INCLUSIVE

BLOCK 4, LOTS 127 THROUGH 135 INCLUSIVE

NW CORNER, NE 1/4 SEC. 15, T27S, R2E OF THE 6TH P.M. FOUND PK. NAIL

NE CORNER, NE 1/4 SEC. 15, T27S, R2E OF THE 6TH P.M. FOUND 1/2" I.P.

ACCESS CONTROL EXCEPT ONE OPENING

COMPLETE ACCESS CONTROL

℄ 13TH STREET NORTH = ℄ N89°06'04"E 2663.50' MEAS.

N89°06'04"E 1671.23'

N89°06'04"E 338.69'

S76°51'46"E 103.08'

RESERVE "A"

RESERVE "B"

RESERVE "C"

RESERVE "D"

RESERVE "E"

RESERVE "F"

RESERVE "V"

RESERVE "W"

RESERVE "Y"

WHITE TAIL

WHITE TAIL COURT

BRADFORD CIRCLE

BRADFORD COURT

FLOODWAY

COUNTRY WALK CIRCLE

COUNTRY WALK COURT

COUNTRY CIRCLE

BRACKEN COURT

BRACKEN

WHITE TAIL COURT

GLENMOOR

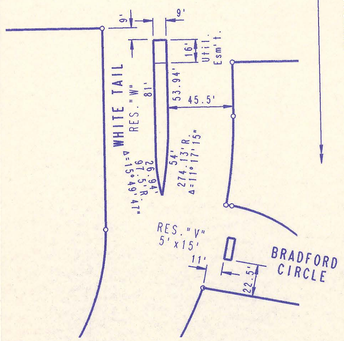
MEADOW

MEADOW COURT

WOODRIDGE

K-96 HIGHWAY

13TH STREET NORTH



No.	Revision	By	Date

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

PLAT

SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION PHASE 8 AND 10

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

Designed by	Job No. 34-93445-1	Sht. 4 of 11
Drawn by DEP	Date November, 1993	

DRAWING NAME: 34-93445-1 WT SS PLAT
LOCATION: E4 DWG. # 52
CENTER COORDINATES:
CONTROL POINTS:
DATE LAST WORKED ON: JAN. 06, 1994
SPECIAL INSTRUCTIONS:
CKD. BY: DATE

WHITE TAIL ADDITION
TO SEDGWICK COUNTY, KANSAS

SCALE: 1"=100'

○ = 3/4" IRON SET
● = MONUMENT FOUND
MEAS. = MEASURED
CALC. MEAS. = CALCULATED FROM MEASUREMENTS
REC. = RECORDED

BSL = BUILDING SETBACK LINE
SS = SANITARY SEWER

BENCH MARK:
TOP OF 3/4" I.P. IN CENTERLINE OF 127TH STREET EAST AT EAST 1/4 CORNER OF SECTION 15, T27S, R2E OF THE 6TH P.M.
ELEV.=1372.44 M.S.L.

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BLOCK 1, LOTS 16 THROUGH 20 INCLUSIVE
BLOCK 1, LOTS 22 THROUGH 32 INCLUSIVE
BLOCK 1, LOTS 53 THROUGH 54 INCLUSIVE

BLOCK 4, LOTS 127 THROUGH 135 INCLUSIVE

K-96 HIGHWAY (CALC. MEAS.) N89°06'31"E 2655.20' (CALC. MEAS.)

COMPLETE ACCESS CONTROL

S89°48'43"E 2658.20' MEAS.

127TH STREET EAST

539.61' MEAS
N89°06'31"E 544.27' (REC.)

S89°10'11"W 2061.73'
S89°10'11"W 2651.34' (CALC. MEAS.)

SW CORNER, NE 1/4 SEC. 15, T27S, R2E OF THE 6TH P.M. FOUND 3/4" I.P.

SE CORNER, NE 1/4 SEC. 15, T27S, R2E OF THE 6TH P.M. FOUND 3/4" I.P.

EXCEPTION

926.23' (CALC. MEAS.) S89°10'11"W 923.41' (CALC. MEAS.)

KILLENWOOD
MEADOW
WHITE TAIL
WHITE TAIL CIRCLE
WHITE TAIL COURT
KILLENWOOD COURT
BRACKEN
BRACKEN COURT
GLENWOOD
GLENWOOD COURT
WOODRIDGE
WOODRIDGE COURT
MEADOW COURT
PRESERVE COURT
RESERVE "F"
RESERVE "G"
RESERVE "H"
RES. "I"

No.	Revision	By	Date

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

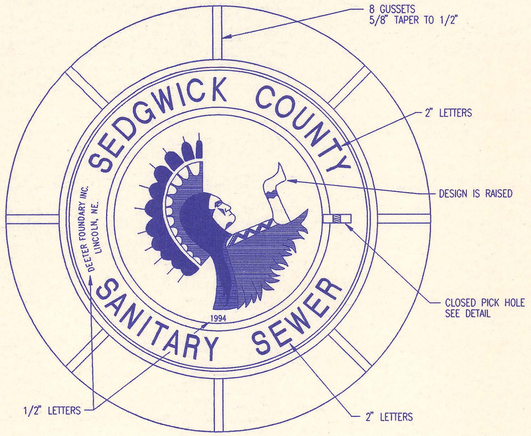
PLAT

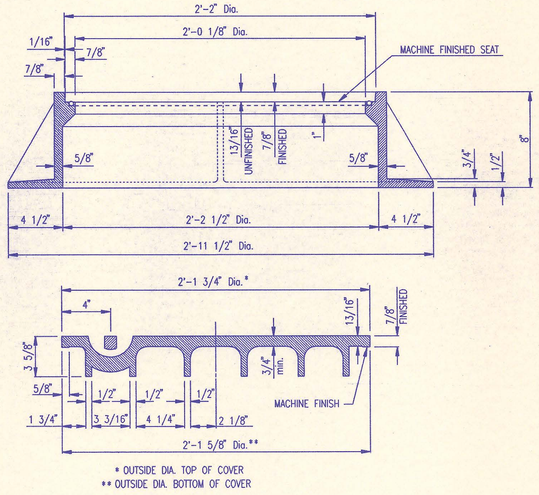
SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION PHASE 8 AND 10

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

Designed by	Job No. 34-93445-1	Sht. 5 of 11
Drawn by DEP	Date November, 1993	

DRAWING NAME 34-93445-1 W1 SS PLAT3
LOCATION COORDINATES
ROTATION ANGLE
DATE LAST WORKED ON: JAN 06, 1994 CKD. BY: DATE:
SPECIAL INSTRUCTIONS:





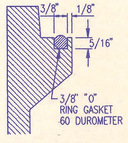
* OUTSIDE DIA. TOP OF COVER
** OUTSIDE DIA. BOTTOM OF COVER

MANHOLE FRAME AND COVER

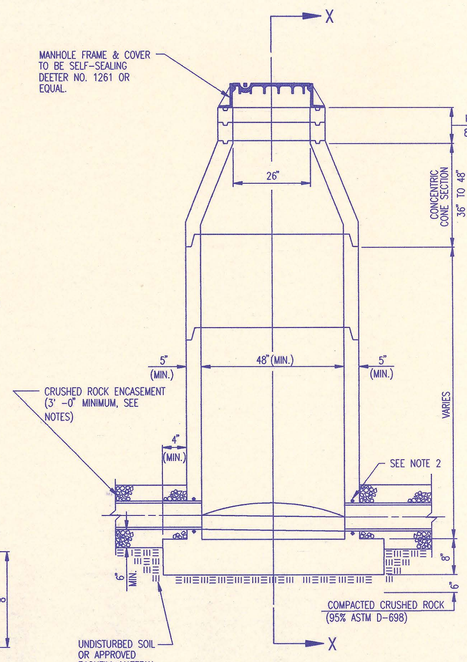
(TOTAL WEIGHT = 430 LBS.)

MANHOLE FRAME AND COVER NOTES

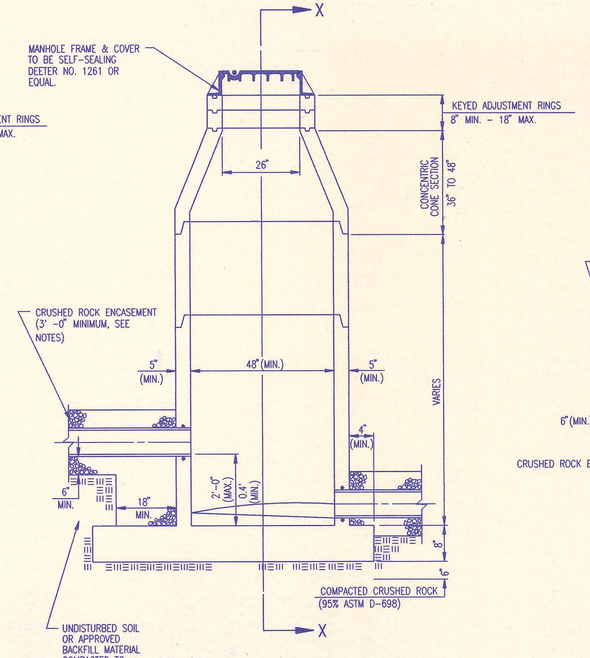
1. CAST IRON MANHOLE FRAME AND COVER SHALL CONFORM TO ASTM A-48, CLASS 35B, OR BETTER.
2. CASTINGS ARE TO BE MANUFACTURED TRUE TO PATTERN AND WITH SATISFACTORY FIT OF COMPONENT PARTS. CASTINGS SHALL BE FREE OF DEFECTS AND ALL BURRS SHALL BE GROUND SMOOTH. DIMENSIONS AS DETAILED ON PLAN SHALL NOT DEVIATE BY ± 1/16" PER FOOT.
3. NO OTHER LETTERING OR MARKINGS OTHER THAN THOSE DETAILED ON PLAN WILL BE PERMITTED ON CASTINGS.
4. CASTINGS MUST BE DOMESTICALLY MANUFACTURED IN THE UNITED STATES OF AMERICA.
5. THE FRAMES AND COVERS SHALL BE FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACES SO FITTING PARTS WILL NOT RATTLE OR ROCK UNDER TRAFFIC.
6. MANHOLE CASTINGS SHALL BE SELF-SEALING DEETER FOUNDRY INC. NO. 1261 OR APPROVED EQUAL, UNLESS OTHERWISE SPECIFIED IN THE SPECIAL CONDITIONS. (MINIMUM WT. = 430 LBS.) ALL MANHOLE CASTINGS SHALL BE CONSIDERED SUBSIDIARY TO THE UNIT PRICES BID FOR THE VARIOUS MANHOLE TYPES.
7. THE MANUFACTURER SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO MANUFACTURE. THE ENGINEER SHALL RETAIN THE RIGHT TO REJECT CASTINGS NOT CONFORMING TO THE SPECIFICATIONS OR THE APPROVED SHOP DRAWINGS.
8. THE MANHOLE FRAME SHALL BE FURNISHED WITH AN APPROVED CONTINUOUS "O" RING GASKET GROOVED INTO THE BEARING SURFACE OF THE MANHOLE FRAME (PER DETAIL). THE "O" RING GASKET SHALL BE FACTORY INSTALLED IN THE MANHOLE FRAME WITH 100% SILICON SEALANT-DOW CORNING OR EQUAL.



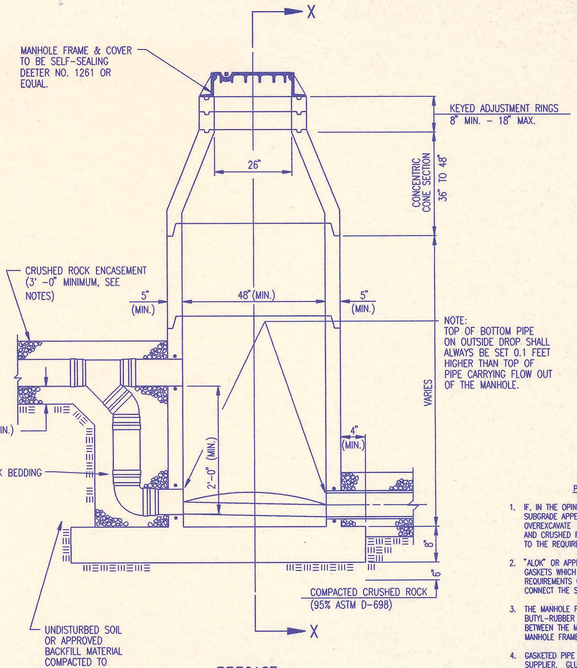
FRAME GROOVING DETAIL
(TYPICAL ALL MANHOLES)



PRECAST STANDARD MANHOLE TYPE "A"



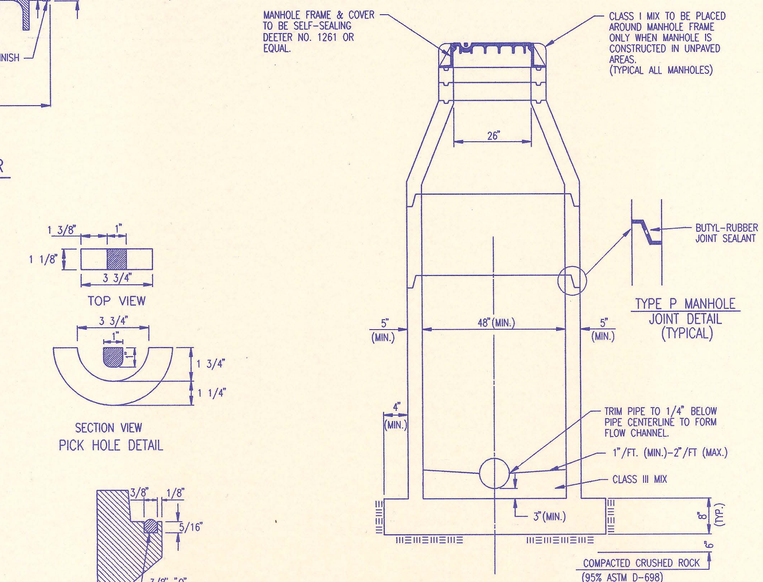
PRECAST INSIDE DROP MANHOLE TYPE "B"



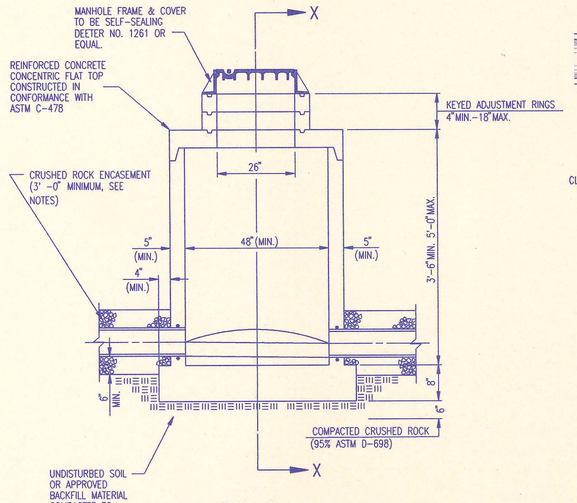
PRECAST OUTSIDE DROP MANHOLE TYPE "C"

PRECAST MANHOLE NOTES

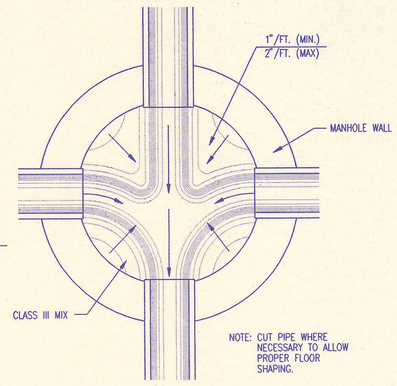
1. IF, IN THE OPINION OF THE ENGINEER, THE MANHOLE SUBGRADE APPEARS UNSTABLE, THE CONTRACTOR WILL OVEREXCAVATE TO A SUITABLE SUBGRADE CONDITION AND CRUSHED ROCK SHALL BE PLACED AND COMPACTED TO THE REQUIRED GRADE.
2. "ALOK" OR APPROVED EQUAL FLEXIBLE WATER-STOP GASKETS WHICH MEET OR EXCEED THE TEST REQUIREMENTS OF ASTM C-923 SHALL BE INSTALLED TO CONNECT THE SEWER TO THE MANHOLE WALL.
3. THE MANHOLE FRAME SHALL BE SEATED ON AN APPROVED BUTYL-RUBBER SEALANT TO PROVIDE WATER-TIGHT SEAL BETWEEN THE MANHOLE ADJUSTMENT RING AND THE MANHOLE FRAME.
4. GASKETED PIPE CAPS SHALL BE PROVIDED BY THE PIPE SUPPLIER. GLUED OR CEMENTED CAPS WILL NOT BE ACCEPTED.
5. ALL MANHOLE CONSTRUCTION SHALL BE WATER TIGHT.
6. TOP OF MANHOLE FLOOR SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHAPED INVERT.
7. MANHOLES WITH PIPE SIZES 24" AND LARGER SHALL HAVE 5' INSIDE DIAMETER (MIN.).
8. INSIDE DIAMETER OF FIVE-FOOT DIAMETER PRECAST MANHOLES SHALL REMAIN CONSTANT TO THE LOCATION OF THE REDUCING FLAT TOP WHICH CONNECTS THE FOUR-FOOT DIAMETER CONE SECTION TO THE FIVE-FOOT DIAMETER MANHOLE BARREL.
9. MANHOLES SHALL BE SUPPLIED WITH PRECAST MONOLITHICALLY CAST BASE SECTIONS UNLESS OTHERWISE APPROVED. ALL PRECAST CONCRETE MANHOLE SECTIONS AND BASES SHALL CONFORM TO THE LATEST REVISION OF ASTM C478 AS MODIFIED BY THE SPECIFICATIONS.
10. WHERE MANHOLE STUBS ARE SHOWN ON THE PLANS, THE STUB SHALL EXTEND AT LEAST 5 FEET FROM THE INSIDE WALL OF THE MANHOLE.
    4" STUBS SHALL BE SET AT 2.0% GRADE.
    6" STUBS SHALL BE SET AT 1.00% GRADE.
11. MANHOLE SECTIONS SHALL BE SUPPLIED WITH RECESSED LIFTING EYES. LIFTING EYE RECESSES SHALL BE GROUTED FLUSH TO THE MANHOLE WALL WITH HYDRAULIC CEMENT AFTER THE MANHOLE IS IN PLACE. LIFTING HOLES THRU THE MANHOLE WALL WILL NOT BE ACCEPTED.
12. WHERE A-LOK GASKETS ARE REQUIRED, THE CONTRACTOR SHALL UTILIZE A CRUSHED ROCK BEDDING MATERIAL. THE ROCK BEDDING MATERIAL SHALL EXTEND TO 3 FEET FROM THE MANHOLE WALL, AND SHALL BE COMPACTED IN PLACE FROM THE BOTTOM OF THE DISTURBED AREA TO 1 FOOT ABOVE THE TOP OF PIPE. THE CRUSHED ROCK WHICH IS PLACED BELOW THE PIPE BEDDING ZONE SHALL BE COMPACTED TO 95% ASTM D-698(MIN).
13. WHERE MANHOLES ARE TO BE BUILT OVER EXISTING SANITARY SEWER LINES, SEWER PIPES SHALL BE SUPPORTED WITH CLASS I CONCRETE ENCASEMENT A MINIMUM OF 3 FEET OUTSIDE THE MANHOLE WALL.
14. CRUSHED ROCK SHALL MEET THE REQUIREMENTS FOR GRANULAR BEDDING MATERIAL, AS OUTLINED IN THE SPECIFICATIONS.



SECTION X (TYPICAL)



PRECAST SHALLOW MANHOLE TYPE "D"

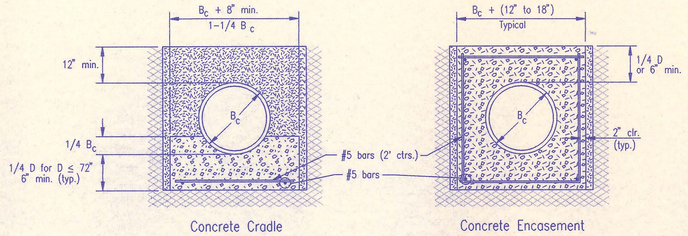


TYPICAL MANHOLE FLOOR SHAPING

No.	Revision	By	Date
5	Change concrete encasement to crushed rock encasement	RJ	3/9/94
4	Precast Bases, Precast Manhole Notes, Manhole Frame and Cover Notes, Keyed Adjustment Rings, and Class I mix at concrete encasement and field cap.	RJ	8/27/93
3	All Manholes self-sealing/MH Cover	RJ	1/25/93
2	Modified pipe connection note	RJ	6/01/92
1	Manhole Frame and Cover Note 1	RJ	7/16/91

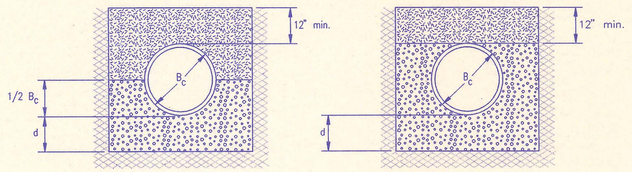
PRECAST MANHOLE DETAILS

ADOPTED AS STANDARD DESIGN SEPTEMBER, 1989
BY
SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E. DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER



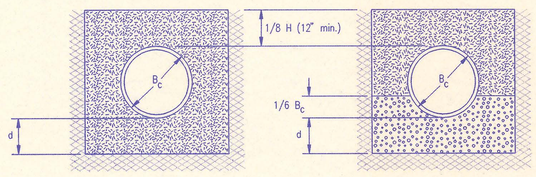
Concrete Cradle — Concrete Encasement

CLASS A



Normal Bedding — Improved Bedding

CLASS B



Ordinary Bedding — Improved Bedding

CLASS C

PIPE ZONE BACKFILLING

B_c = Outside Pipe Diameter

H = Backfill from Top of Pipe to Existing Ground

D = Inside Pipe Diameter

d = Depth of Bedding Material Below Pipe

= Granular Bedding Material or Sand-Gravel Bedding

= Compacted Embedment

= Concrete

Depth of Bedding Material Below Pipe		
D	d(min) Soil	d(min) Rock
27" & smaller	4"	6"
30" to 60"	5"	9"
66" & larger	6"	12"

Granular Bedding Material shall be an approved material consisting of durable crushed rock conforming with the requirements of the latest revision of ASTM C-33 Size No. 67 (3/4" to No. 4); to be placed in not more than 6" layers and compacted by slicing with a shovel or vibrating. Soundness, abrasion, and absorption limits shall be as required for coarse aggregates in Section 03010-Concrete Work in the specifications.

Sand-Gravel Bedding Material - sand-gravel mix meeting Type UD-1 of the 1990 Kansas Standard Specifications for State Road and Bridge Construction.

Compacted Embedment shall be an approved sand material free from debris, organic material, and stones with 100% passing the 3/4" sieve to be placed in uniform layers not more than 6" thick and compacted to 95 percent maximum density as determined by ASTM D698. Granular Bedding Material may be substituted for all or part of Compacted Embedment Materials.

Class A "Concrete Cradle" and/or Class A "Concrete Encasement" is not required unless specified on the plans. However, where unexpected trench conditions exist or improper trenching is performed Class A Bedding may be required as determined by the Engineer.

Class B Bedding shall be used for all flexible pipe.

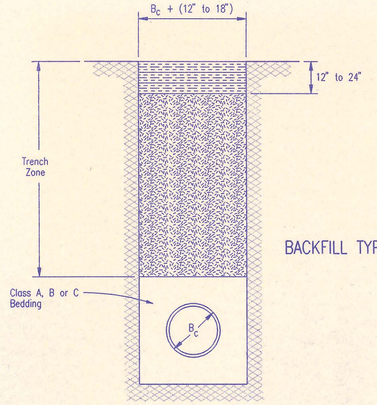
a. Class B Normal Bedding shall be used for PVC Pipe unless wet conditions are encountered.

b. Class B Improved Bedding shall be used for other flexible pipe, and for PVC pipe in wet conditions.

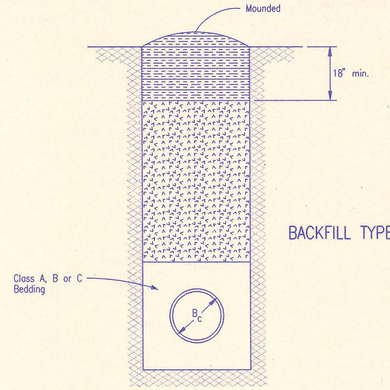
Class C Bedding shall be used for all rigid pipe.

a. Class C Ordinary Bedding shall be used for all rigid pipe unless wet conditions are encountered.

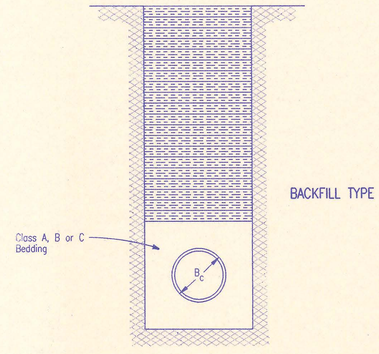
b. Class C Improved Bedding shall be used for wet conditions existing in the trench, as directed by the Engineer, at no additional cost to the Owner. The dimensions shall be equal to that required for "rock" excavation (see specifications).



BACKFILL TYPE I



BACKFILL TYPE II



BACKFILL TYPE III

TRENCH ZONE BACKFILLING

B_c = Outside Pipe Diameter

= Compacted Granular Backfill

= Uncompacted Earth Backfill

= Compacted Earth Backfill

Compacted Granular Backfill material shall be an approved sand material free from debris, organic material and stones with 100% passing the 3/4" sieve and not more than 15% passing a No. 200 sieve; to be jetted and mechanically vibrated into place and compacted to 95% density as determined by ASTM D698.

Uncompacted Earth Backfill material may be natural soil free from large clods or stones, brush, roots more than 2 inches in diameter, debris, and junk. Flooding with water shall be provided as directed by the Engineer.

Compacted Earth Backfill shall consist of material existing prior to trenching or selected material as directed by the Engineer, and shall be compacted to 90% density as determined by ASTM D698.

Backfill: Backfill material and compaction requirements shall conform to either Type I, Type II or Type III as specified in the plans. One years maintenance will be required on all backfill.

Backfilling Through Rock: Backfilling through rock shall be performed as specified in the paragraph Backfill above, except that the Pipe Zone is increased to provide eighteen (18) inches of cover over the pipe. When approved by the Engineer the remainder of the backfill may be excavated rock provided the excavated rock has been broken up so that earth and rock will thoroughly mix and not result in voids around the larger pieces of rock. Any excess rock remaining after the trench has been backfilled shall be removed or wasted as directed by the Engineer.

Backfilling Under Pavement: Backfilling under existing or proposed pavement shall be performed as Backfill Type I to a level of two (2) feet from the bottom of the pavement. The remainder of the trench shall be backfilled with selected material, sufficiently damp to be properly compacted in layers not exceeding six (6) inches in depth, compaction shall be performed with mechanical tampers and continued until a relative density of 100 percent of modified density, in conformance with ASTM D698 is attained.

Backfilling Under Gravel Streets: Where the trench crosses or is in existing gravel surfaced streets, the backfill shall be compacted as provided in the paragraph "Backfilling Under Pavement".

No.	Revision	By	Date
1	Revised compaction designation	RJ	3/9/94

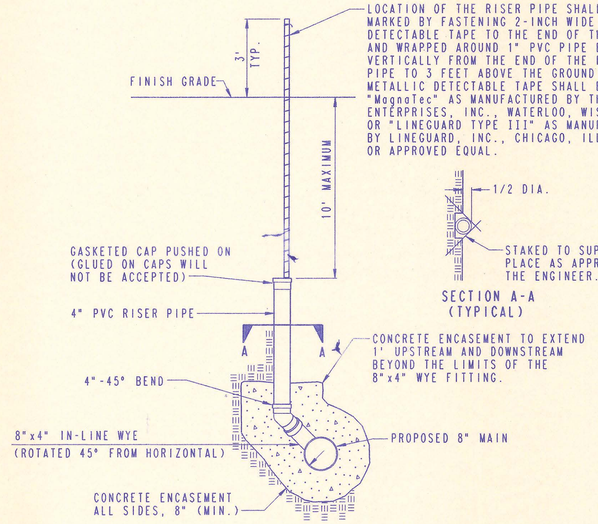
BACKFILL DETAILS

ADOPTED AS STANDARD DESIGN SEPTEMBER, 1989
BY
SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E. DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

PLAN | CHECKED | CHECKED | BY | DATE

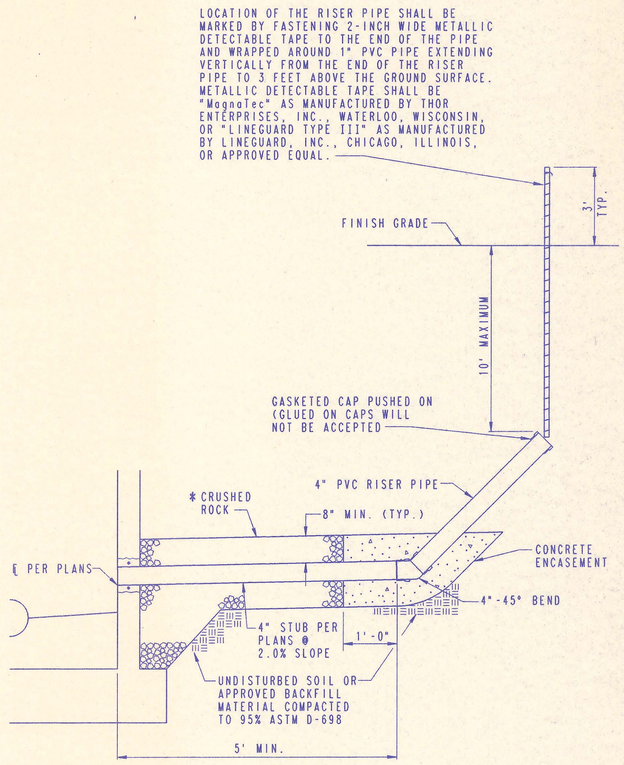
SEWER SERVICE TABLE

NO.	LOCATION TYPE	LOT NO.	BLOCK NO.	LATERAL NO.	STATION/ DIRECTION	FOR INFORMATION ONLY: APPROXIMATE LENGTH 4" PIPE	RECORD INFORMATION (TO BE COMPLETED BY PROJECT INSPECTOR): DISTANCE FROM NEAREST MANHOLE UPSTREAM	DISTANCE FROM NEAREST MANHOLE DOWNSTREAM	NO.
1	WYE SERVICE CONNECTION	5	4	14	20+10/RT	6'	283.5' MH 14-9	MH 14-8 101'	1
2	WYE SERVICE CONNECTION	6	4	14	22+05/RT	8'	88.5' MH 14-9	MH 14-8 256'	2
3	WYE SERVICE CONNECTION	14	4	14	24+50/RT	8'	177' MH 14-10	MH 14-9 158.5'	3
4	WYE SERVICE CONNECTION	15	4	14	25+85/RT	8'	94' MH 14-10	MH 14-9 201.5'	4
5	WYE SERVICE CONNECTION	16	4	14	27+15/RT	7'	159' MH 14-11	MH 14-10 85'	5
6	4" STUB	16	1	17	0+61.83	6'	MH 17-1		6



WYE SERVICE CONNECTION

SEE SEWER SERVICE TABLE FOR LOCATIONS



MH SERVICE CONNECTION

SEE SEWER SERVICE TABLE FOR LOCATIONS

* CRUSHED ROCK SHALL MEET THE REQUIREMENTS FOR GRANULAR BEDDING MATERIAL, AS OUTLINED IN THE SPECIFICATIONS.

RECORD DRAWING
MDK PROJ. ENG. 10/24/94 DATE
_____ RES. ENG. _____ DATE

PLAN CHECKED CHECKED

No.	Revision	By	Date

CHRISTOPHER B. THOMAS LICENSED 11915 KANSAS PROFESSIONAL ENGINEER 3-16-94

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

SERVICE CONNECTION DETAILS

SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION PHASE 8 AND 10

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

Designed by CRY, MDK	Job No. 34-93445-1	Sht. 8 of 11
Drawn by DMM	Date March, 1994	

DRAWING NAME: 34-93445-1 WT SS Cnfn 2
LOCATION: E4 #291
CENTER COORDINATES:
ROTATION ANGLE:
DATE LAST WORKED ON: Mar. 11, 1994
SPECIAL INSTRUCTIONS:
EW - REJ

3+34.18
Sta. ~~3+34.13~~
Const. MH 14-1
Type A

4+02.57
Sta. ~~4+01.56~~
Const. MH 14-2
Type A

5+25.20
Sta. ~~5+24.19~~
Const. MH 14-3
Type A

7+21.53
Sta. ~~7+20.37~~
Const. MH 14-4
Type A

10+12.73
Sta. ~~10+12.01~~
Const. MH 14-5
Type A

Sta. 0+00.00
Proposed Concrete MH (By Others)
Core thru MH wall as required to install new 8" pipe. Install approved water stop gasket around pipe. Seal around new 8" pipe with a quick-set hydraulic cement. Construct concrete encasement on 8" pipe (3 Feet min.).

334.81
Install ~~334.13~~ L.F. 8" Pipe

158.16
Install ~~157.13~~ L.F. 8" Pipe

102.23
Install ~~103.08~~ L.F. 8" Pipe

106.33
Install ~~105.73~~ L.F. 8" Pipe

221.20
Install ~~221.64~~ L.F. 8" Pipe

90°05'13"
14°02'10"
14°02'10"
180°00'00"
89°37'23"
90°22'37"

LATERAL NO. 17
See sheet no. 11

ALL PIPE INSTALLED IS PVC PIPE.

SCALE:
PLAN: LAT. & LONG. 40 0 40 80
PROFILE: HORIZ. SAME AS ABOVE
VERT.

RECORD DRAWING
MDK PROJ. ENG. 10/24/94 DATE
REG. ENG. DATE

SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.

CHRISTOPHER R. YOUNG LICENSED 11315 KANSAS PROFESSIONAL ENGINEER 3-15-94

LATERAL NO. 14

PLAN CHECKED CHECKED BY MDK DATE 2/15/94

PROFILE CHECKED CHECKED BY MDK DATE 2/15/94

DRAWING NAME: 34-93445-1 SS P/P1
LOCATION: 14 SW 14
CENTER COORDINATES:
ROTATION ANGLE:
DATE LAST WORKED ON: Jan. 10, 1994
SCALE INSTRUCTIONS:
SCALE:

Proposed MH 1-1 (By Others) Top Elev.=1351.86
MH 14-1 Top Elev.=1356.45
MH 14-2 Top Elev.=1355.54
MH 14-3 Top Elev.=1354.60
MH 14-4 Top Elev.=1354.33
MH 14-5 Top Elev.=1352.66

Future Ground (By Others)
Existing Ground
10' dia. (Typ.)
Top of Mound=1355.4
Top of Mound=1354.5
Top of Mound=1353.5
Top of Mound=1353.1
1351.5
℄ In=1336.88 from existing 8" Pipe (W)
℄ In=1347.26 from LATERAL 17

℄ Out=1336.15 ~~1336.86~~
℄ In=1336.12 ~~1336.83~~
334.81 ~~334.13~~ L.F. 8" Pipe @0.96%
℄ Out=1341.84 ~~1341.55~~
℄ In=1342.03 ~~1342.33~~
158.16 ~~157.13~~ L.F. 8" Pipe @0.40%
℄ Out=1342.68 ~~1342.39~~
℄ In=1342.85 ~~1342.55~~
102.23 ~~103.08~~ L.F. 8" Pipe @0.40%
℄ Out=1343.33 ~~1343.04~~
℄ In=1343.55 ~~1343.26~~
106.33 ~~105.73~~ L.F. 8" Pipe @0.40%
℄ Out=1344.27 ~~1344.27~~
℄ In=1344.44 ~~1344.44~~
221.20 ~~221.64~~ L.F. 8" Pipe @0.40%
℄ Out=1345.37 ~~1345.44~~
℄ In=1345.54 ~~1345.61~~

0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00 8+00 9+00 10+00
1365 1360 1355 1350 1345 1340 1335 1330 1325

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID L. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

LATERAL NO. 14
SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION PHASE 8 AND 10

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

Job No. 34-93445-1
Date November, 1993
Designed By CRY, MDK
Drawn By DMM

Sheet 9 of 11

SCALE:
PLAN: LAT. & LONG. 40 0 40 80
PROFILE: HORIZ. SAME AS ABOVE
VERT. 5 0

10+12.73
Sta. ~~10+12.01~~
MH 14-5

13+34.23
Sta. ~~13+35.35~~
Const. MH 14-6
Type A

16+64.58
Sta. ~~16+64.45~~
Const. MH 14-7
Type A

19+00.44
Sta. ~~19+09.34~~
Const. MH 14-8
Type A

℄ 127TH STREET EAST = ℄

Gravel Shoulder
Asphalt Pavement
Gravel Shoulder
Buried Telephone
6" Gas -Stl.(KG&E)
Ovhd. Electric
5' Chain Link Fence
Exist. 12" Water
SY16438
Sign
Sign
Gas Line
Riprap
4.93E
4.54E
18" CMP
Gravel
Asphalt Pavement
Gravel Shoulder
Buried Telephone
6" Gas Stl. (KG&E)
Ovhd Electric
BM#6
5' Wall Esm't.
20'
20'
20'
20'
20'
20'
89°37'23"
90°22'37"
180°00'00"
180°00'00"
180°00'00"
10' U/G. Esm't.
℄ 10' Util. Esm't.
℄ 20' Util. Esm't.
5'
5'
5'
1'-8" Elm
6" Osage Orange
6" Osage Orange
10" Elm
6" Osage Orange
6" Osage Orange
LATERAL NO. 17
See sheet no. 11
15
16
WHITE
54
55
TAIL
56
57
ADDITION
58
RESERVE "H"
RESERVE "G"
KILLENWOOD
RES. 1
Future 8" Waterline
322.20
Install ~~323.31~~ L.F.
8" Pipe
320.65
Install ~~329.10~~ L.F.
8" Pipe
244.86
Install ~~241.89~~ L.F.
8" Pipe
A
5

RECORD DRAWING
MDK PROJ. ENG. 10/24/94 DATE
RES. ENG. DATE

SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.

CHRISTOPHER R. YOUNG LICENSED 11315 KANSAS PROFESSIONAL ENGINEER 3-15-94

ALL PIPE INSTALLED IS PVC PIPE.

LATERAL NO. 14

PLAN | CHECKED | CHECKED | BY MDK | DATE 3/15/94

PROFILE | CHECKED | CHECKED | BY MDK | DATE 3/15/94

DRAWING NAME: 34-93445-1 SS P/P2
ACAD FILE:
CENTER COORDINATES:
ROTATION ANGLE:
DATE LAST WORKED ON: MAR. 14, 1994
SPECIAL INSTRUCTIONS:
SHEET 8 OF 11

1380
1375
1370
1365
1360
1355
1350
1345
1340

WH 14-5
Top Elev.=1352.~~46~~
WH 14-6
Top Elev.=1358.54
WH 14-7
Top Elev.=1363.~~46~~
WH 14-8
Top Elev.=1368.~~46~~
5.22
Future 8" Waterline
Elevation unknown
Existing Ground
Future Ground (By Others)
1357.5
1364.2
1367.9
Future Ground (By Others)
E In= 1347.~~40~~
From LATERAL 17
20
1351.5
E Out=1345.~~37~~
E In= 1345.~~87~~
.50
E Out=1346.89
E In= 1347.~~39~~
.10
E Out=1348.~~47~~
E In= 1350.~~97~~
.50
E Out=1352.~~72~~
E In= 1352.~~97~~
.25
322.20
~~323.31~~ L.F. 8" Pipe
@0.40%
320.65
~~329.10~~ L.F. 8" Pipe
@0.40%
244.86
~~241.89~~ L.F. 8" Pipe
@0.72%
10+00
11+00
12+00
13+00
14+00
15+00
16+00
17+00
18+00
19+00

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
KENT T. LEAHY, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

LATERAL NO. 14
SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION PHASE 8 AND 10

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS
Designed By CRY, MDK | Job No. 34-93445-1
Drawn By DMM | Date November, 1993

Sheet 10 of 11

SCALE:

PLAN: LAT. & LONG. 40 0 40 80

PROFILE: HORIZ. SAME AS ABOVE

VERT.

PEC

10+09.44
Sta. ~~19+09.34~~
MH 14-8

22+56.52
Sta. ~~22+97.34~~
Const. MH 14-9
Type A

26+30.43
Sta. ~~26+30.64~~
Const. MH 14-10
Type A

28+75.26
Sta. ~~28+75.27~~
Const. MH 14-11
Type A

Remove Sign and 4" Stl. Posts Do Not Reset

Gas Line

Asphalt Pavement

Gravel Shoulder

Buried Telephone

6" Gas Stl. (KG&E)

Ovhd Electric

℄ 127TH STREET EAST = ℄

SE CORNER, NE 1/4

5' Watl Esm't.

20' Utilt. Esm't.

180°00'00"

5'

10'

25'

SEWER SERVICE LEGEND

8"x4" SERVICE CONNECTION ASSEMBLY (in line wye's)

4" SERVICE CONNECTION ASSEMBLY AT MH

SEE THE SEWER SERVICE TABLE ON SHEET NO. 8 FOR LOCATIONS OF SEWER SERVICE CONNECTIONS TO BE INSTALLED BY THE SANITARY SEWER CONTRACTOR.

387.08
Install ~~388.00~~ L.F. 8" Pipe

333.51
Install ~~333.30~~ L.F. 8" Pipe

244.83
Install ~~244.63~~ L.F. 8" Pipe

WHITE

TAIL

ADDITION

4" Barb Wire Fence

RECORD DRAWING
MDK PROJ. ENG. 10/24/94 DATE
RES. ENG. DATE

SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.

ALL PIPE INSTALLED IS PVC PIPE.

LATERAL NO. 14

10+12.73
Sta. ~~10+12.01~~ LATERAL 14=
Sta. 0+00.0, LATERAL NO. 17
MH 14-5

BM#6

0+61.83
Sta. ~~0+61.31~~
Const. MH 17-1
Type A

Install 1-4" Stub and Cap

90°22'37"

89°37'23"

35°

2-6" Osage Orange

19" Elm

6" Osage Orange

3-8" Elm

3-6" Elm

3-7" Elm

2-8" Elm

5" Elm

8" Elm

61.83
Install ~~61.31~~ L.F. 8" Pipe

LATERAL NO. 14
See sheet no. 9

LATERAL NO. 17

1380
1375
1370
1365
1360
1355
1350
1345
1340

MH 14-8 Top Elev.=1368.~~##~~ 22
MH 14-9 Top Elev.=1371.~~##~~ 61
MH 14-10 Top Elev.=1374.~~##~~ 45
MH 14-11 Top Elev.=1371.~~##~~ 21
MH 14-5 Top Elev.=1352.~~##~~ 62
MH 17-1 Top Elev.=1354.~~##~~ 91

Future Ground (By Others)

Existing Ground

1367.9

1370.3

℄ Out=1352.~~##~~ 22
℄ In=1352.~~##~~ 36

℄ Out=1353.~~##~~ 22
℄ In=1354.~~##~~ 10

℄ Out=1355.~~##~~ 33
℄ In=1355.~~##~~ 68

℄ =1356.~~##~~ 56

℄ Out=1345.~~##~~ 37
℄ In=1347.~~##~~ 28

℄ =1349.~~##~~ 11

387.08 L.F. 8" Pipe @0.40%

333.51 L.F. 8" Pipe @0.40%

244.83 L.F. 8" Pipe @0.40%

61.83 L.F. 8" Pipe @2.90%

19+00 20+00 21+00 22+00 23+00 24+00 25+00 26+00 27+00 28+00 0+00

Existing Ground

10" dia (Typ.)

Top of Mound= 1353.3 ± (Typ.)

Future Ground (By Others)

1351.5

℄ In= 1349 ~~##~~.31 From 1-4" Stub(SW)

℄ In= 1345 ~~##~~.51 From LATERAL 14

CHRISTOPHER R. YOUNG LICENSED 11315 KANSAS PROFESSIONAL ENGINEER 7-14-94

PROFILE

	CHECKED	
	CHECKED	

PLAN

	CHECKED	
	CHECKED	

BY	DATE
MDK	7/15/94

DRAWING NAME: 34-93445-1 SS P/P3
LOCATION: E4 #318
CENTER COORDINATES:
ROTATION ANGLE:
LAST WORKED ON: MAR. 14, 1994
SPECIAL INSTRUCTIONS:
EN - RFJ

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES
DAVID C. SPEARS, P.E.
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

LATERAL NO. 14 AND 17
SANITARY SEWER IMPROVEMENTS
WHITE TAIL ADDITION PHASE B AND 10

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

Job No. 34-93445-1
Date November, 1993
Designed By CRY, MDK
Drawn By DMM

Sheet 11 of 11