CONSTRUCTION PLANS

SANITARY SEWER EXTENSIONS

MAPLE DUNES ADDITION-PHASE II

TO

THE CITY OF WICHITA, KANSAS

LATERAL 7, COWSKIN INTERCEPTOR SEWER

MICHAEL E. LINDEBAK – CITY ENGINEER
PROJECT NO. 468-82715
INDEX CODE 743302

GENERAL NOTES:

1. Existing utility lines and their location, as shown on the plans, represent the best information obtainable for design. The contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.

2. Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be the disposed of on sites to be provided by the Contractor. These sites shall be approved by the Engineer as to suitability, appearance and site location. Locations that, in the opinion of the Engineer, will leave an unsightly appearance will not be approved.

   All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain would require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps. of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits would require additional archaeological investigations unless buried in a previously approved borrow location.

3. The Contractor shall be responsible for maintaining continuous flow of sewage through construction. Contractor's proposed method for maintaining sewage flow shall be approved by the Engineer. Cost of maintaining flow of sewage through construction will not be paid for directly and this cost shall be considered as subsidiary to the other pay items of the work.

4. The Contractor shall be responsible for preserving property irons. The Contractor will 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.

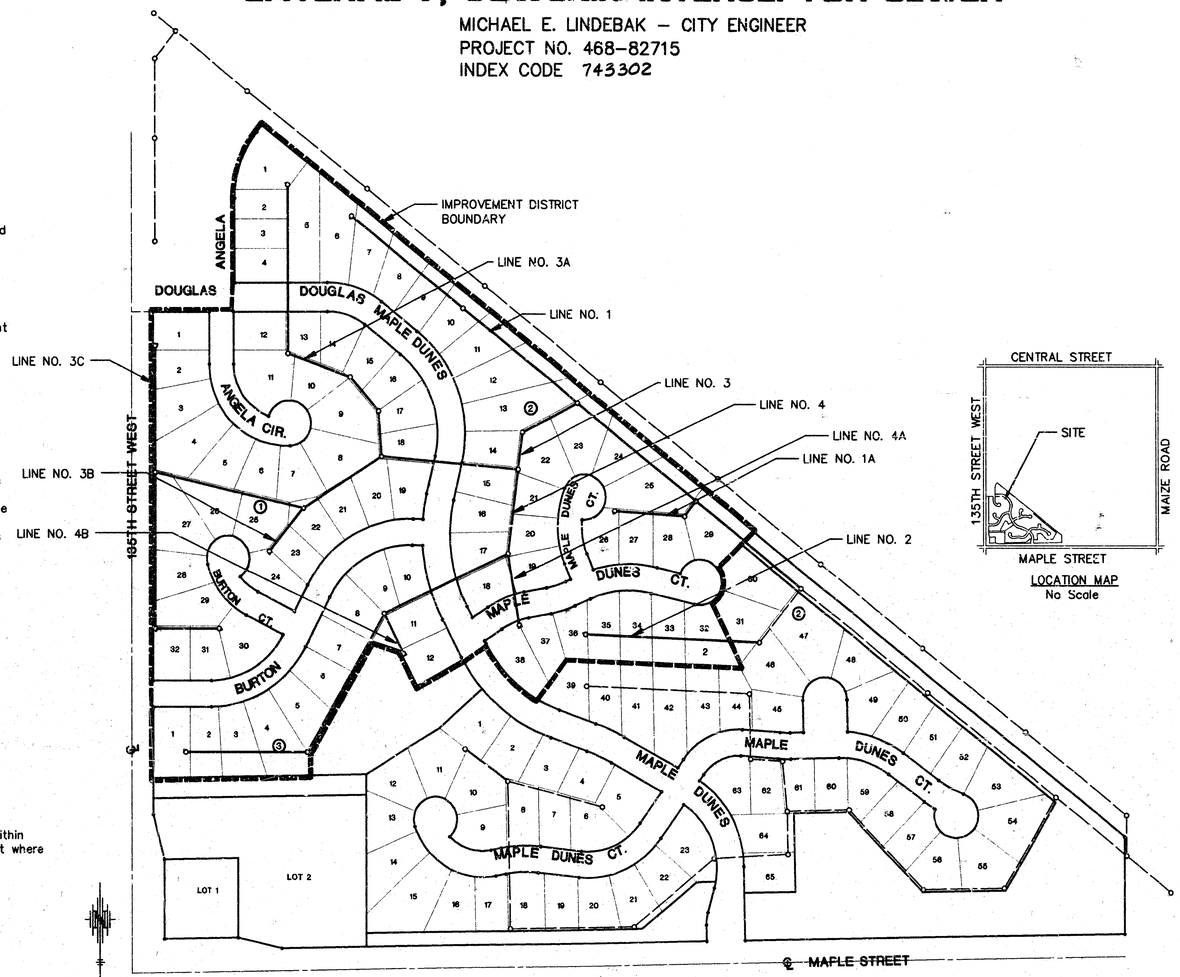
5. Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs which are not in direct conflict with the proposed new construction shall be saved and protected from damage.

6. Contractor shall vacuum test all manholes according to the City of Wichita standard specifications.

7. The tops of all Manholes to be set 0.4 feet above existing ground unless otherwise noted.

8. All disturbed areas shall be seeded with temporary rye grass within 14 days of disturbance at a rate of 250 lbs. per acre, except where otherwise noted on the plans.

   (Cost Subsidiary to Site Restoration)



LOCATION MAP
No Scale

INDEX

TITLE SHEET	SHEET 1
LINE NO. 1	SHEET 2
LINE NO. 1 & 1A	SHEET 3
LINE NO. 2 & 3	SHEET 4
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BENCH MARKS

(City of Wichita Datum)

1. City of Wichita std. disk on headwall at Northeast corner of 135th & Maple, 34' Northeast of Southwest corner of Section 24-T27S-R2W. Elev. 150.20
2. City of Wichita std. disk at Southwest corner of 135th and Rolling Hills Drive, 1/4 mile South of Central, 47' East of CL 135th, 31' South of CL Rolling Hills Drive, 14' South of South curb line. Elev. 161.88
3. City of Wichita std. disk on Southeast corner of East hubguard of RCB under Forestview, 86' North of CL Maple. Elev. 135.58

AUGUST 1997

PLANS PREPARED BY

POE & ASSOCIATES OF KANSAS, INC.
CONSULTING ENGINEERS
5940 E. Central, Suite 200 ■ Wichita KS 67208 ■ 316/685-4114 ■ Fax 316/685-4444

Booked
P-4 + P-5
AS BUILT
4/22/98
R. Loomis

JAMES M. UBERT LICENSED 14688 PROFESSIONAL ENGINEER KANSAS
11-3-97

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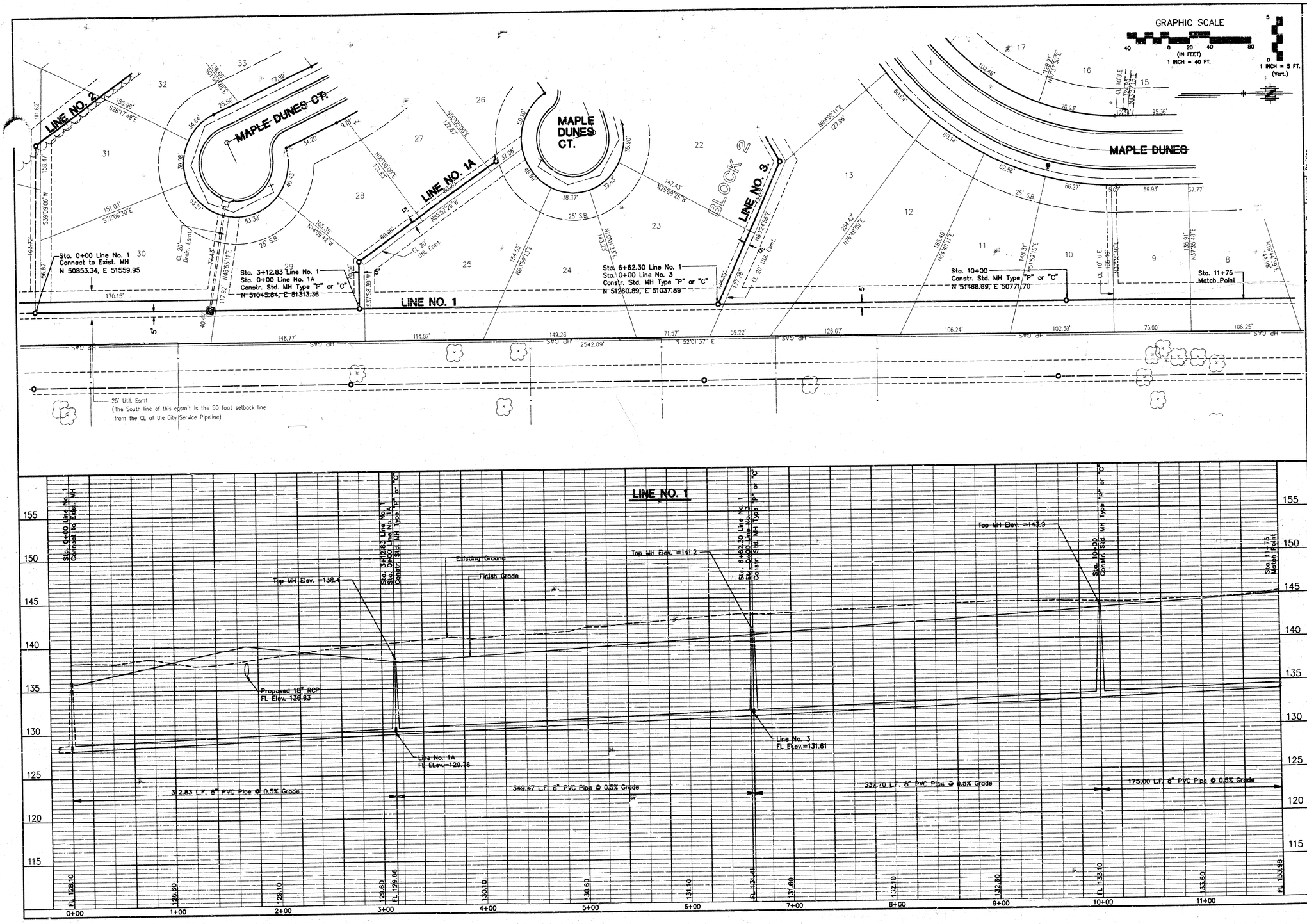

MAPLE DUNES ADDITION-PHASE II
SANITARY SEWER EXTENSIONS
LINE NO. 1
CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBAK, P.E. - CITY ENGINEER
C.O.W. Proj No. 468-81715 Index Code 749502

No. | Date | By | Approved | Revision

POE & ASSOCIATES OF KANSAS, INC.
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Designed By: J. Ubert
Drawn By: S. Schmidt
Poe Job No.: 1601C
Date: August 1997

Sheet
2 of 12

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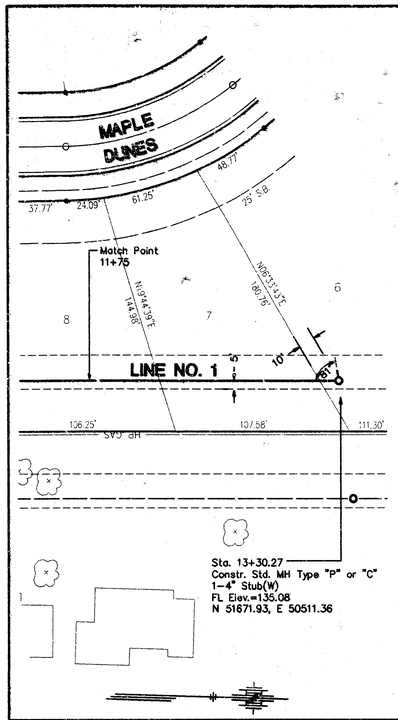

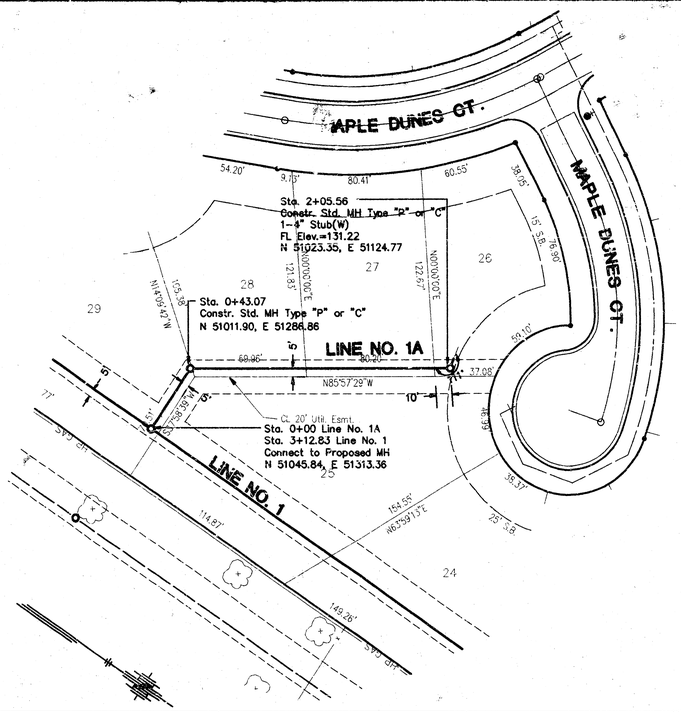

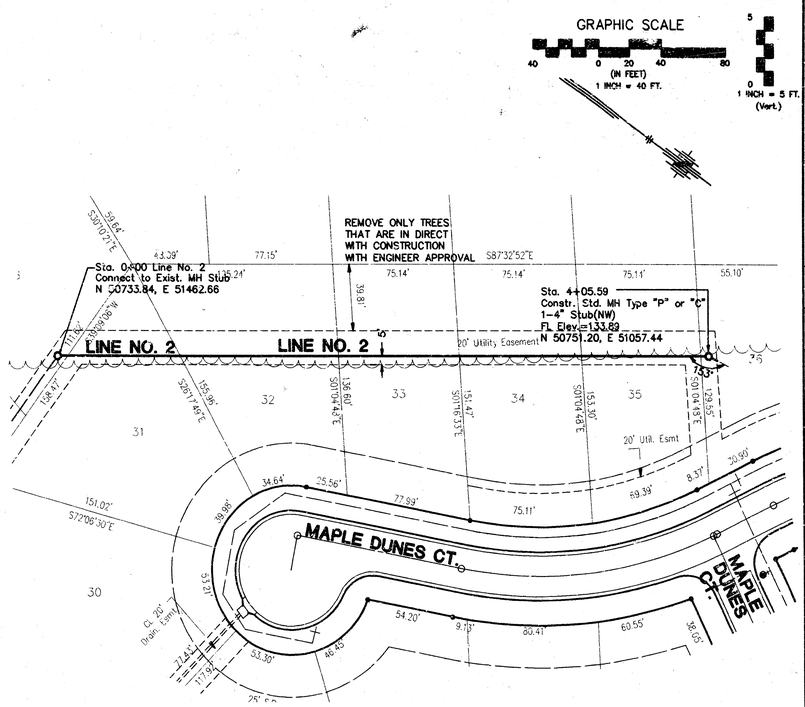

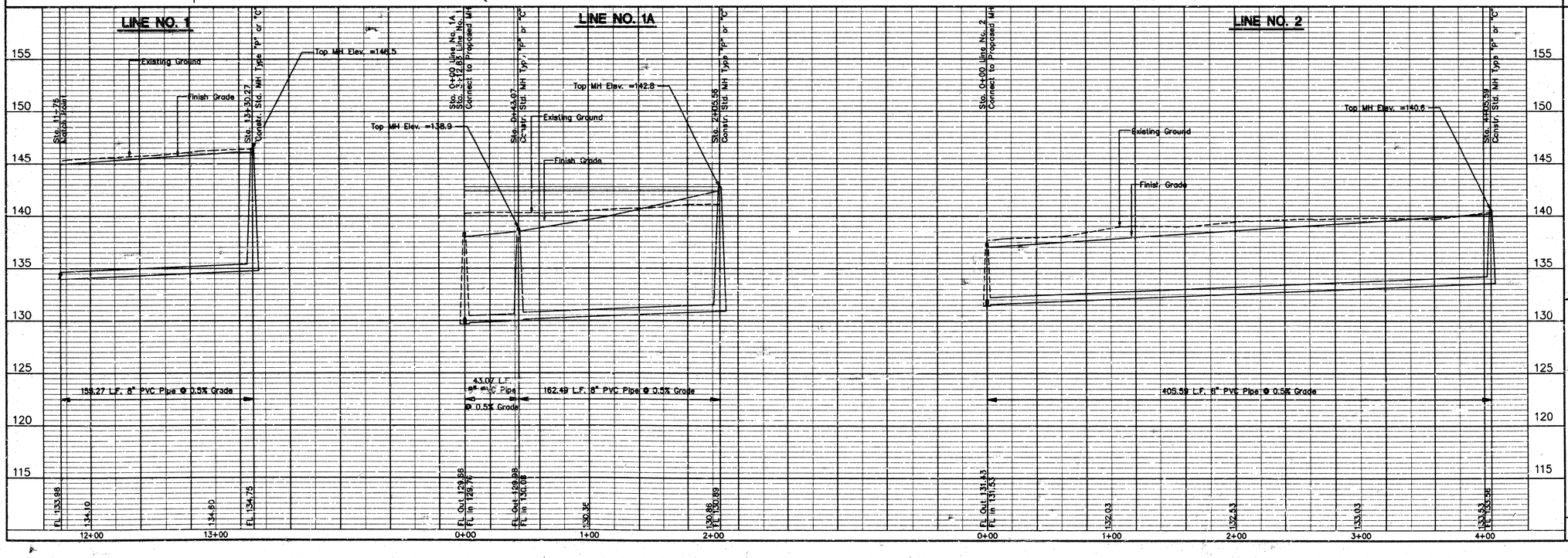

No.	Date	By	Approved	Revision

MAPLE DUNES ADDITION-PHASE II
SANITARY SEWER EXTENSIONS
LINE NO. 1, 1A & 2
CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBAK, P.E. - CITY ENGINEER
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Date: August 1997

Sheet 3 of 12

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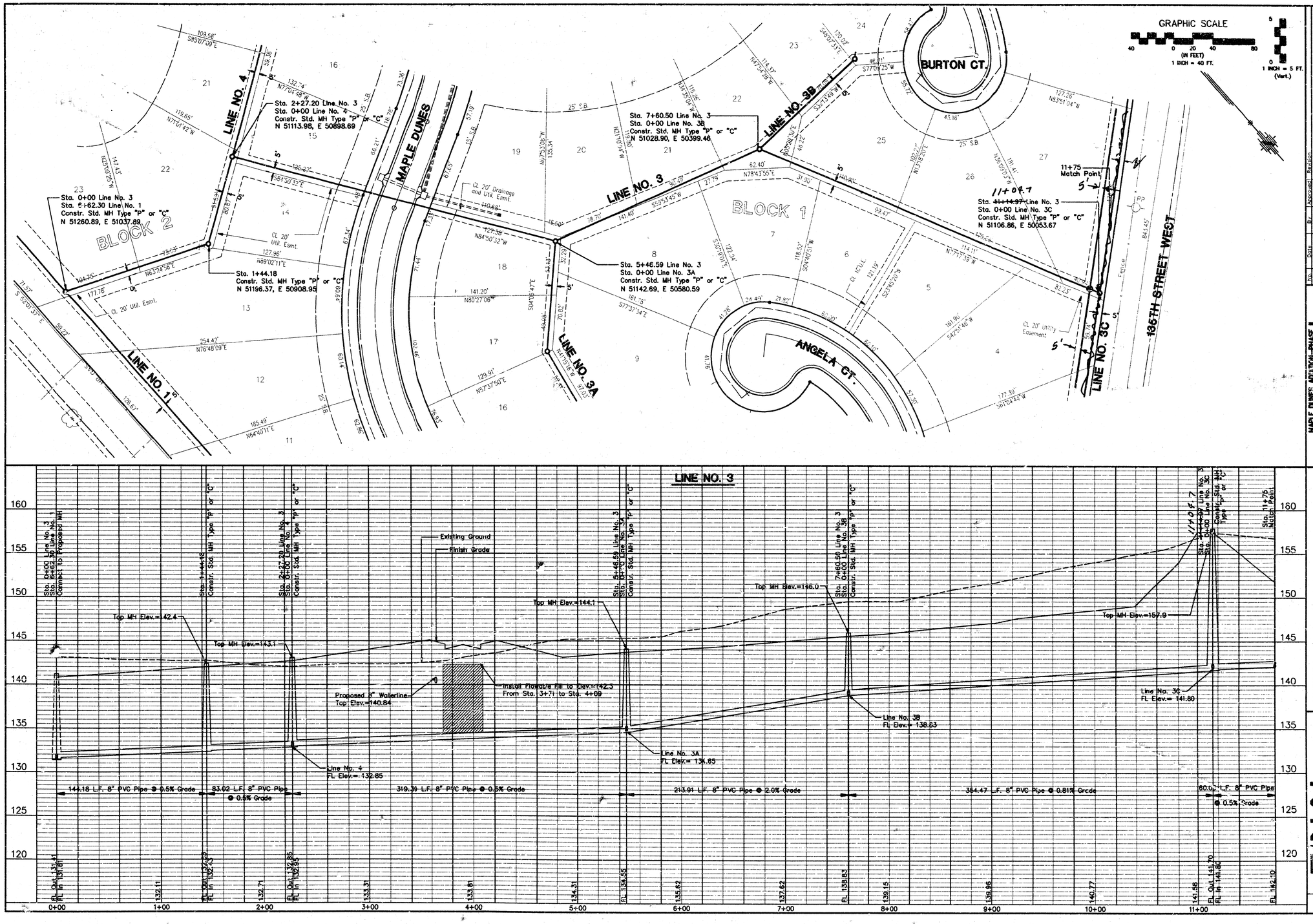

MAPLE DUNES ADDITION-PHASE II
SANITARY SEWER EXTENSIONS
LINE NO. 3
CITY OF WICHITA, KANSAS
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Designed By: J. Ubert
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Poe Job No.: 1601C
Date: August 1997

Sheet 4 of 12

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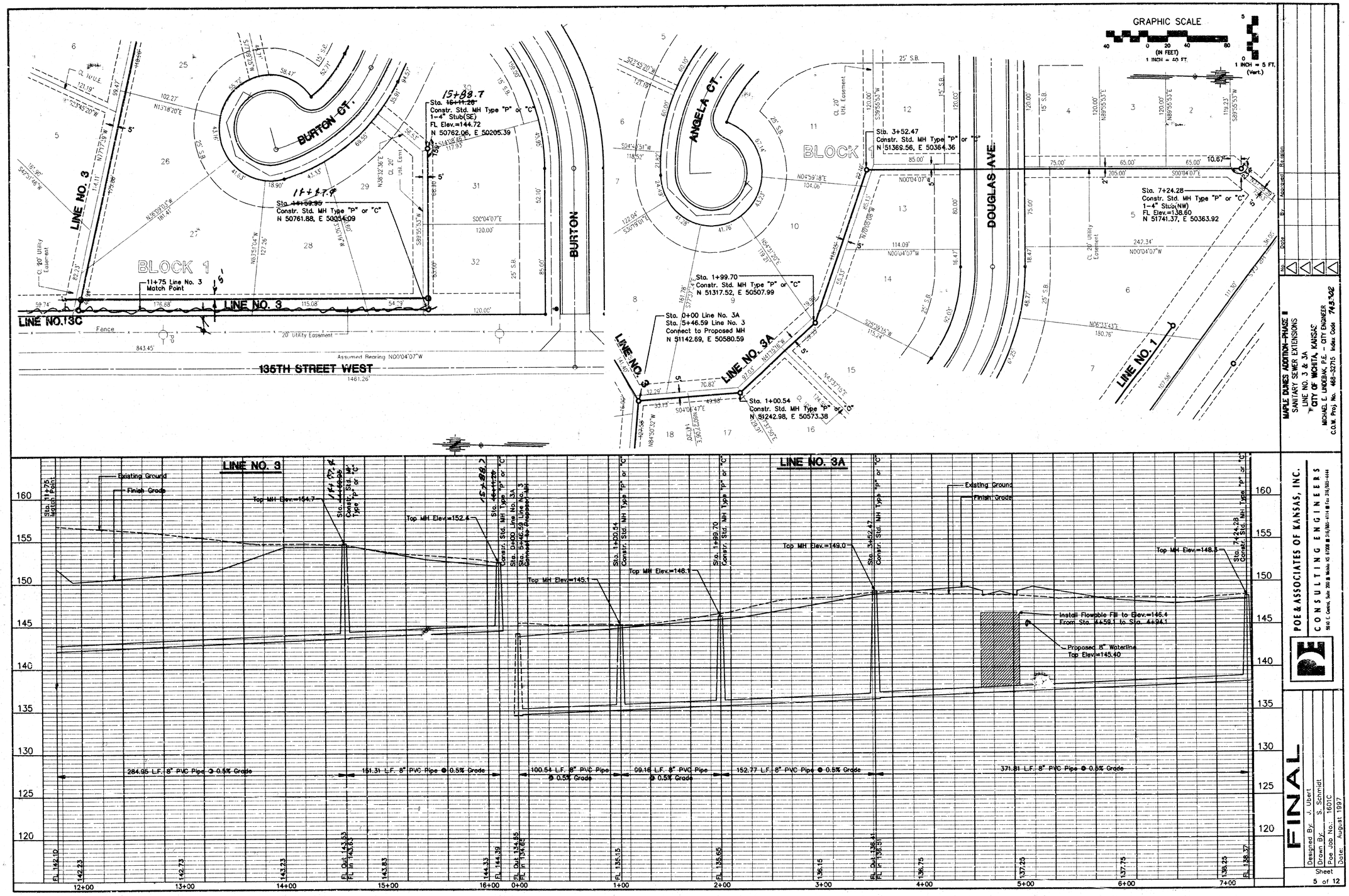

MAPLE DUNES ADDITION-PHASE II
SANITARY SEWER EXTENSIONS
LINE NO. 3 & 3A
CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBAK, P.E. - CITY ENGINEER
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Date: August 1997

Sheet 5 of 12

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GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 INCH = 40 FT.
5 0
1 INCH = 5 FT. (Vert.)

BURTON
BURTON CT.
LINE NO. 3
LINE NO. 3B
Sta. 0+00 Line No. 3B
Sta. 7+60.50 Line No. 3
Connect to Proposed MH
N 51028.90, E 50399.46
Sta. 1+23.81
Constr. Std. MH Type "P" or "C"
1-4" Stub(S)
FL Elev.=139.78
N 50932.99, E 50321.16
BLOCK 1
135TH STREET WEST
LINE NO. 3C
LINE NO. 3
Sta. 0+00 Line No. 3C
Sta. 11+14.97 Line No. 3
Connect to Proposed MH
N 51106.86, E 50053.67
Sta. 2+79.16
Constr. Std. MH Type "P" or "C"
1-4" Stub(NE)
FL Elev.=143.54
N 50386.33, E 50053.34
DOUGLAS AVE.
LINE NO. 4
LINE NO. 4A
Sta. 1+87.17 Line No. 4
Sta. 0+00 Line No. 4A
Constr. Std. MH Type "P" or "C"
Sta. 0+00 Line No. 4
Sta. 2+27.20 Line No. 3
Connect to Proposed MH
N 51113.98, E 50898.69
MAPLE DUNES
MAPLE DUNES CT.
Proposed 30" RCP Storm Sewer
Sta. 4+50
Match Point

MAPLE DUNES ADDITION-PHASE II
SANITARY SEWER EXTENSIONS
LINE NO. 3B, 3C & 4
CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBAK, P.E. - CITY ENGINEER
C.O.W. Proj. No. 468-82715 Index Code

No.	Date	By	Approved	Revision

LINE NO. 3B

Sta. 0+00 Line No. 3B
Sta. 7+60.50 Line No. 3
Connect to Proposed MH
Existing Ground
Finish Grade
Top MH Elev.=147.4
Sta. 1+23.81
Constr. Std. MH Type "P" or "C"
123.81 L.F. 8" PVC Pipe @ 0.5% Grade
FL 138.85
FL 139.33
FL 139.45

LINE NO. 3C

Sta. 0+00 Line No. 3C
Sta. 11+14.97 Line No. 3
Connect to Proposed MH
Existing Ground
Finish Grade
Sta. 2+79.16
Constr. Std. MH Type "P" or "C"
Top MH Elev.=155.7
279.45 L.F. 8" PVC Pipe @ 0.5% Grade
FL Out 141.70
FL In 141.80
FL 143.21

LINE NO. 4

Sta. 0+00 Line No. 4
Sta. 2+27.20 Line No. 3
Connect to Proposed MH
Sta. 1+87.17 Line No. 4
Sta. 0+00 Line No. 4A
Constr. Std. MH Type "P" or "C"
Existing Ground
Finish Grade
Top MH Elev.=144.2
Install Flowable Fill to Elev.=141.5
From Sta. 3+33 to Sta. 3+69
Use low strength mix for storm sewer excavation at later date.
Proposed 8" Waterline
Top Elev.=138.32
Sta. 4+50
Match Point
Proposed 30" RCP
FL Elev.=137.11
Line No. 3
FL Elev.=132.95
Line No. 4A
FL Elev.=133.79
187.17 L.F. 8" PVC Pipe @ 0.5% Grade
262.83 L.F. 8" PVC Pipe @ 0.5% Grade
FL 132.85
FL Out 133.79
FL In 133.89
FL 134.45
FL 134.95
FL 135.20

160 155 150 145 140 135 130 125 120
0+00 1+00 0+00 1+00 2+00 0+00 1+00 2+00 3+00 4+00

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Poe Job No.: 1601C
Date: August 1997

Sheet 6 of 12

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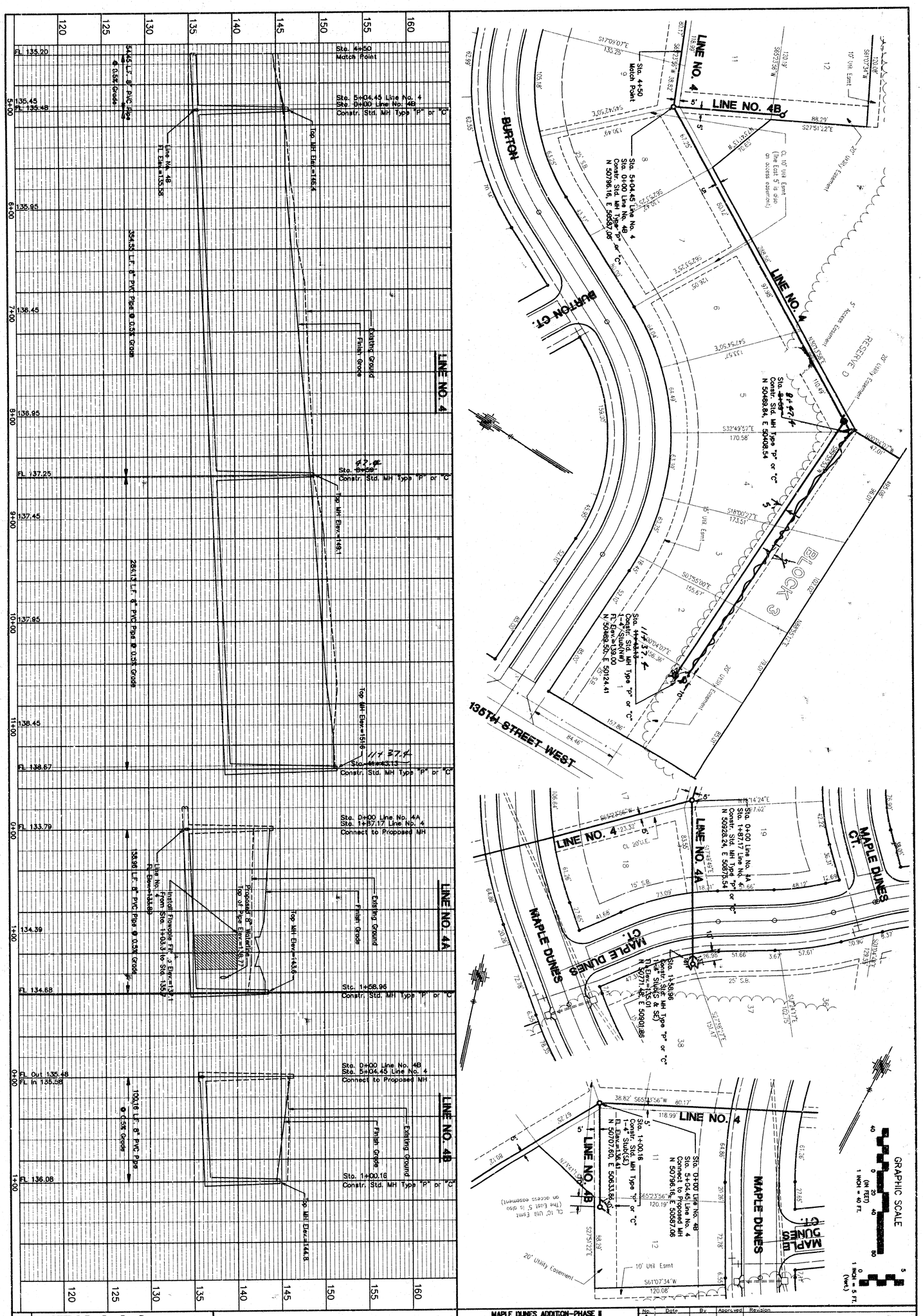

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Poe Job No.: 1601C
Date: August 1997

Sheet 7 of 12

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MAPLE DUNES ADDITION-PHASE II
SANITARY SEWER EXTENSIONS
LINE NO. 4, 4A & 4B
CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBAK, P.E. - CITY ENGINEER
C.O.W. Proj. No. 468-82715 Index Code 743302

No.	Date	By	Approved	Revision
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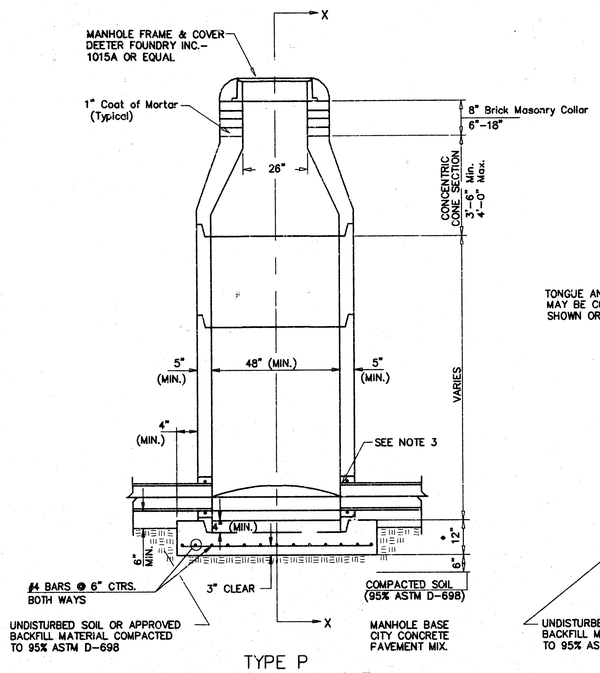
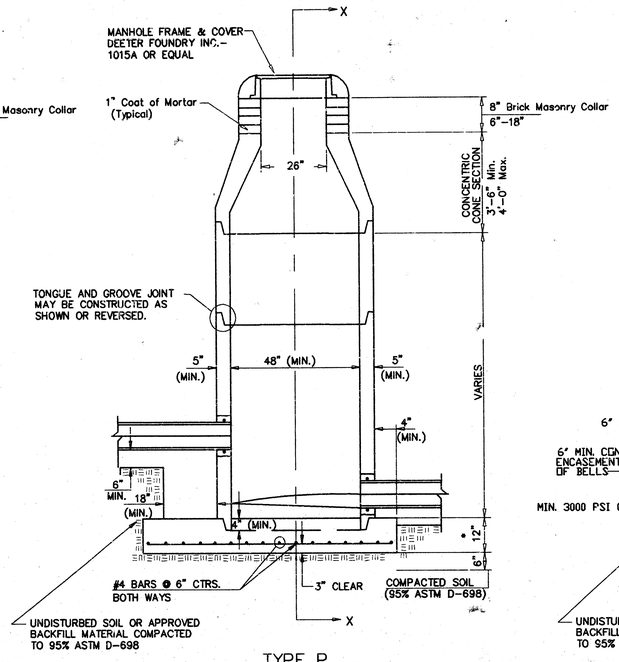
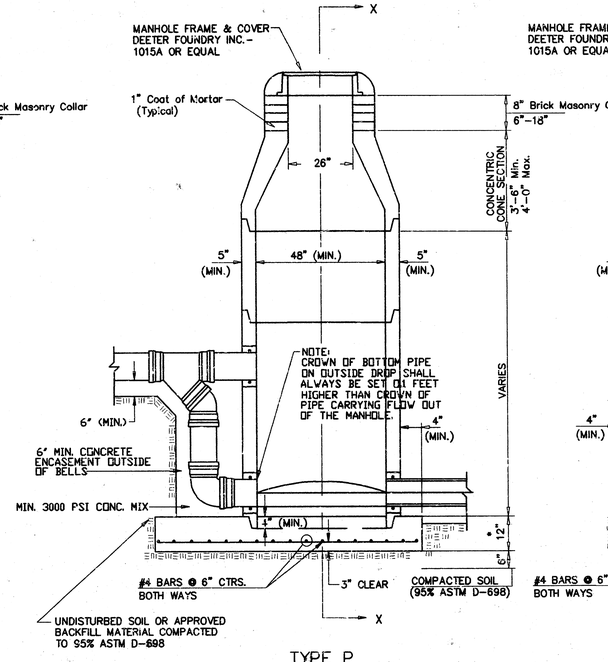
SEWER APPURTENANCES DETAILS



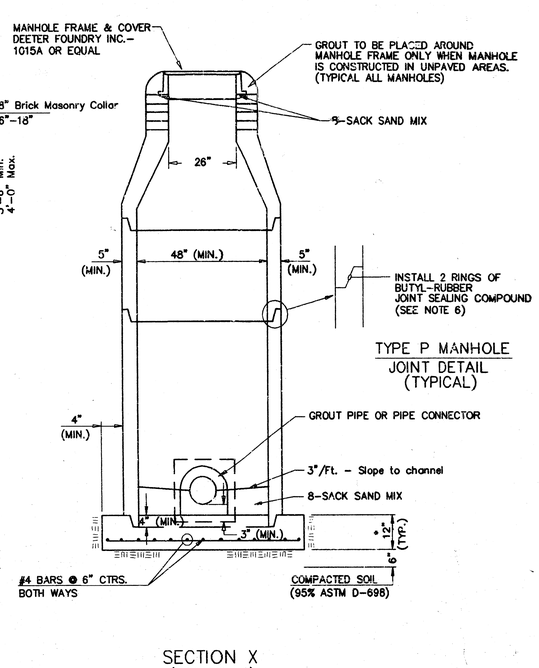
TYPE P
STANDARD MANHOLE



TYPE P
INSIDE DROP MANHOLE



TYPE P
OUTSIDE DROP MANHOLE



SECTION X
(TYPICAL)

GENERAL NOTES

PRECAST MANHOLE NOTES

1. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
2. NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
3. APPROVED FLEXIBLE WATERSTOP GASKETS SHALL BE INSTALLED TO JOIN THE SEWER TO THE MANHOLE WALL WHEN A.B.S. COMPOSITE PIPE OR P.V.C. PIPE IS USED. FOR OTHER TYPES OF PIPE THE SEWER SHALL BE GROUTED IN PLACE WITH NON-SHRINK GROUT. THE SEWER PIPE SHALL BE SUPPORTED WITH CONCRETE ENCASEMENT A MINIMUM OF 3 FEET FROM THE MANHOLE WALL AND TO THE FIRST JOINT FOR V.C.P. SUCH THAT THE JOINT REMAINS FLEXIBLE.
4. ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED WITH 2 COATS THEMEC SERIES 66 HI-BUILD EPOXOLINE, DRY THICKNESS OF 8 MILS (MIN.)
5. EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 633 BITUMINOUS COATING.
6. JOINT SEALING COMPOUND SHALL BE KENT SEAL NO. 2 OR APPROVED EQUAL.
7. PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE.
8. 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.
9. LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
10. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE BASES SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE PAVEMENT MIX WITHOUT AIR ENTRAINING ADMIXTURE. MORTAR SHALL BE PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE SMALLER THAN 24" SHALL HAVE AN INSIDE DIAMETER OF 4'. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE 24" OR LARGER SHALL HAVE AN INSIDE DIAMETER OF 5'. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
11. REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED AT LEAST 3" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
12. OPENINGS SHALL BE CUT INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE CONSTRUCTED ON EXISTING MANHOLES. SUCH OPENINGS CUT INTO EXISTING MANHOLES SHALL BE AS SMALL AS PRACTICAL TO FACILITATE INSTALLING AND GROUTING THE NEW PIPE IN PLACE. WATERSTOP GASKETS SHALL BE USED WITH P.V.C. AND A.B.S. COMPOSITE PIPE. THE NEW PIPE SHALL BE GROUTED INTO THE OPENING USING AN APPROVED NONSHRINK GROUT FOR THE FULL MANHOLE WALL THICKNESS. THE EXTERIOR OF THE COMPLETED CONNECTION SHALL BE SEALED WITH AN APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. FLOOR OF MANHOLE SHALL BE MODIFIED TO FORM NEW FLOW CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWING. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTED ON EXISTING MANHOLE.
13. THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED AS SEWAGE FLOWS THROUGH THE MANHOLE FROM ALL INLET PIPES TO THE OUTLET PIPE. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLOWING PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS EXCEPT FOR INSIDE DROP MANHOLES. FLOW CHANNELS FOR INSIDE DROP MANHOLES SHALL BE CONSTRUCTED AS INDICATED BY THE DRAWING. MANHOLE FLOORS SHALL HAVE SLOPES OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLOPED TOWARD THE FLOW CHANNELS. PIPES LAID THROUGH MANHOLES SHALL HAVE THE TOP HALF REMOVED TO NEAT LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.
14. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION. WHEN CLAY PIPE IS USED, THE CRADLE SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE MAHOLE. THE CRADLE SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT. COST OF CRADLE WITHIN MANHOLE EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT TO MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
15. MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
16. THE VERTICAL DROP IN INSIDE DROP MANHOLES SHALL NOT EXCEED 2' FOR INFLOWING PIPES SIZED 12" OR SMALLER AND 2' FOR INFLOWING PIPES LARGER THAN 12". THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
17. STANDARD MANHOLES AND STANDARD INSIDE DROP MANHOLES SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.
18. A BRICK MASONRY COLLAR SHALL BE INSTALLED BETWEEN THE CAST IRON FRAME AND THE CONCENTRIC CONE. THE COLLAR WILL HAVE 8" WALLS AND A VERTICAL HEIGHT OF 6" MINIMUM AND 18" MAXIMUM. A 1" COAT OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR. THE USE OF PRE-CAST CONCRETE SPACERS FOR MANHOLE TOP ADJUSTMENT IS ALSO ALLOWED.

*19. ALL MANHOLE BASE CONSTRUCTION THAT OCCURS IN THE FIELD MUST HAVE A MINIMUM OF EIGHT INCHES OF CONCRETE BELOW THE MANHOLE WALL AND THE WALL SECTION SHOULD EXTEND FOUR INCHES INTO THE BASE RESULTING IN A MINIMUM TOTAL BASE THICKNESS OF 12 INCHES. MONOLITHIC BASE SECTIONS CONSTRUCTED IN THE FACTORY AND CURED AS PER ASTM C478 MUST HAVE A MINIMUM EIGHT INCH THICK CONCRETE BASE. BASE SECTIONS CONSTRUCTED IN THE FACTORY UTILIZING A PREVIOUSLY MANUFACTURED MANHOLE WALL SECTION, AS OUTLINED IN THE ABOVE PARAGRAPH, MUST HAVE A MINIMUM BASE THICKNESS OF EIGHT INCHES WITH THE WALL SECTION EXTENDING FOUR INCHES INTO THE BASE AND BE MANUFACTURED IN COMPLIANCE WITH ASTM C478.

MAPLE DUNES ADDITION-PHASE II
SANITARY SEWER EXTENSIONS
LATERAL 7, COWSKIN INTERCEPTOR SEWER

Revised Manhole Base See Note 19

THE CITY OF WICHITA

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455 NORTH MAIN STREET
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(316) 268-4351
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STANDARD TYPE 'P' MANHOLES

M. E. LINDEBAK P.E. - CITY ENGINEER

PROJECT NUMBER	INDEX CODE
468-82715	743502
DATE: AUG 97	SHEET 8 OF 12

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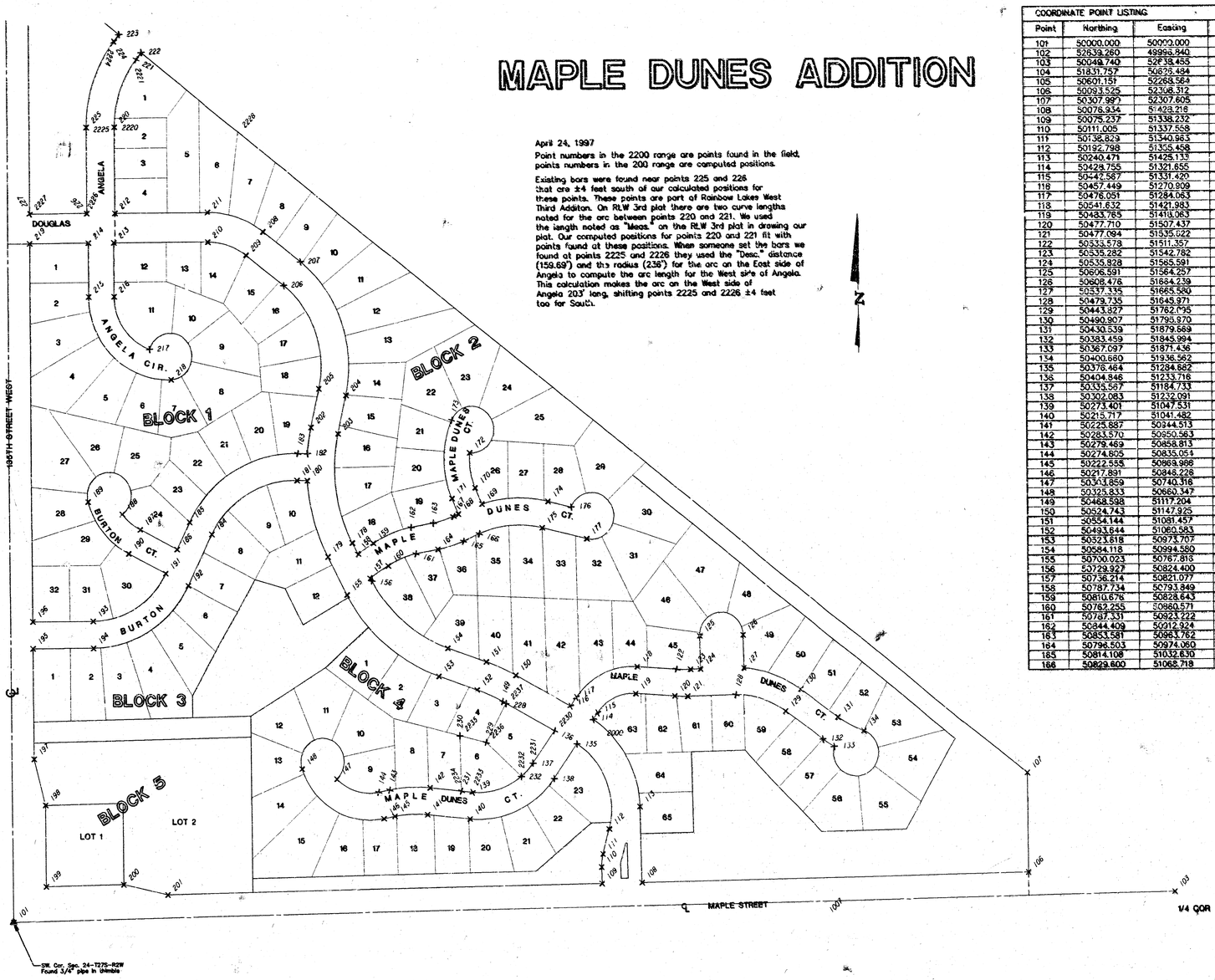
MAPLE DUNES ADDITION



April 24, 1997

Point numbers in the 2200 range are points found in the field, points numbers in the 200 range are computed positions.

Existing bars were found near points 225 and 226 that are ±4 feet south of our calculated positions for these points. These points are part of Rainbow Lakes West Third Addition. On RLW 3rd plat there are two curve lengths noted for the arc between points 220 and 221. We used the length noted as "Meas." on the RLW 3rd plat in drawing our plat. Our computed positions for points 220 and 221 fit with points found at these positions. When someone set the bars we found at points 2225 and 2226 they used the "Desc." distance (159.69') and the radius (236') for the arc on the East side of Angela to compute the arc length for the West side of Angela. This calculation makes the arc on the West side of Angela 203' long, shifting points 2225 and 2226 ±4 feet too far South.

N

COORDINATE POINT LISTING					
Point	Northing	Easting	Point	Northing	Easting
101	50000.000	50000.000	167	50867.405	51009.751
102	52639.260	49996.840	168	50872.410	51021.409
103	50049.740	52738.455	169	50893.658	51075.393
104	51831.757	50828.484	170	50928.656	51080.381
105	50601.151	52268.564	171	50905.777	51007.085
106	50053.535	52368.312	172	51003.850	51046.716
107	50307.997	52307.605	173	51073.720	51007.782
108	50078.934	51428.216	174	50895.196	51223.885
109	50075.237	51338.232	175	50841.775	51210.244
110	50111.005	51337.558	176	50885.638	51276.409
111	50136.823	51340.963	177	50917.777	51310.980
112	50192.798	51355.458	178	50812.179	50780.930
113	50240.471	51428.133	179	50782.274	50724.346
114	50428.755	51321.655	180	50946.218	50678.385
115	50442.587	51331.420	181	50948.953	50654.790
116	50457.449	51270.909	182	51004.225	50679.055
117	50478.051	51284.063	183	51004.925	50656.597
118	50541.632	51421.983	184	50932.207	50460.401
119	50483.765	51419.063	185	50858.638	50408.773
120	50477.710	51507.437	186	50800.368	50378.943
121	50477.094	51535.022	187	50843.485	50294.759
122	50535.578	51511.357	188	50876.725	50254.189
123	50535.282	51542.782	189	50903.881	50178.940
124	50535.928	51565.591	190	50791.837	50268.328
125	50606.591	51564.257	191	50748.740	50352.512
126	50608.476	51684.239	192	50722.391	50404.182
127	50537.335	51685.580	193	50647.036	50186.392
128	50479.735	51645.971	194	50589.038	50186.392
129	50443.827	51782.795	195	50586.872	50049.295
130	50490.907	51795.970	196	50646.872	50049.226
131	50430.539	51879.569	197	50350.997	50049.580
132	50383.459	51845.994	198	50251.453	50074.699
133	50367.097	51871.436	199	50078.425	50074.909
134	50400.660	51936.562	200	50079.725	50249.905
135	50376.484	51284.682	201	50058.606	50349.932
136	50404.946	51233.716	202	51080.685	50687.851
137	50335.567	51184.733	203	51046.376	50750.230
138	50302.083	51239.091	204	51129.211	50769.233
139	50273.401	51047.531	205	51143.521	50708.853
140	50215.717	51041.482	206	51367.024	50626.643
141	50225.887	50344.513	207	51417.734	50665.689
142	50283.570	50950.563	208	51483.445	50580.349
143	50279.469	50858.813	209	51432.735	50541.303
144	50274.605	50835.054	210	51461.809	50455.723
145	50222.555	50969.986	211	51525.809	50455.646
146	50217.891	50848.228	212	51525.553	50242.174
147	50303.859	50740.316	213	51461.549	50239.250
148	50325.833	50660.347	214	51461.480	50181.250
149	50468.598	51117.204	215	51345.590	50181.389
150	50524.743	51147.925	216	51345.660	50239.389
151	50554.144	51081.457	217	51231.179	50319.199
152	50493.644	51060.583	218	51165.725	50368.707
153	50523.818	50973.707	219	51481.321	50048.250
154	50584.118	50994.580	220	51711.553	50241.951
155	50700.023	50767.813	221	51857.042	50291.910
156	50729.927	50824.400	222	51872.114	50303.675
157	50736.214	50821.077	223	51911.493	50253.223
158	50787.734	50793.849	224	51896.420	50241.458
159	50810.676	50828.643	225	51711.478	50177.351
160	50782.255	50980.571	226	51525.476	50178.174
161	50787.331	50921.222	227	51525.321	50048.174
162	50844.409	50912.924	228	50464.184	51125.272
163	50853.581	50961.762	229	50380.413	51079.434
164	50796.503	50974.060	230	50395.389	51020.141
165	50814.108	51032.630	231	50276.038	51022.391
166	50829.600	51068.718	232	50307.072	51158.397

No.	Date	By	Approved	Revision
1				
2				
3				
4				

MAPLE DUNES ADDITION-PHASE II
COORDINATE POINTS LIST
SANITARY SEWER EXTENSIONS
CITY OF WICHITA, KANSAS
MICHAEL E. LANGDON, P.E. - CITY ENGINEER
Project No. 468-82715 Base Code 968942

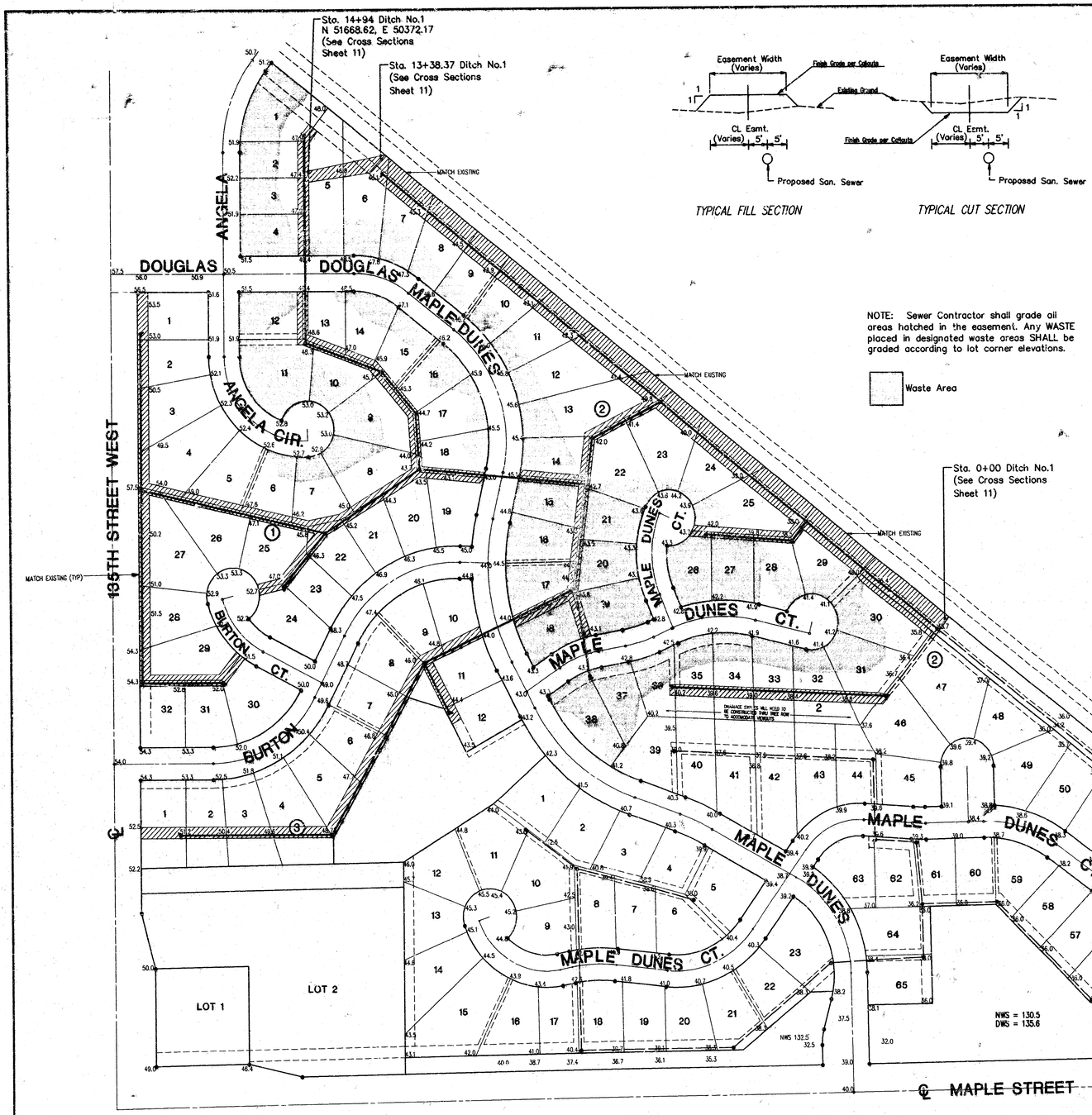
POE & ASSOCIATES OF KANSAS, INC.
CONSULTING ENGINEERS
3840 E. Central, Suite 200 ■ Wichita, KS 67208 ■ 316/681-4111 ■ Fax 316/681-4444

FINAL

Designed By: J. Ubert
Drawn By: S. Schmidt
Poe Job No.: 1601C
Date: August 1997

Sheet 9 of 12

F:\APPS\DCA\P\601\SURVEY\Stakeout.dwg Mon Nov 03 15:17:06 1997 James Ubert - POE & ASSOCIATES of KANSAS, INC.



NOTE: Sewer Contractor shall grade all areas hatched in the easement. Any WASTE placed in designated waste areas SHALL be graded according to lot corner elevations.

Waste Area

NOTE:

1. ONLY THOSE TREES WITHIN PROPOSED STREET RIGHT-OF-WAYS MAY BE REMOVED AT THE APPROVAL OF THE OWNER AND/OR THE ENGINEER
2. THIS GRADING PLAN IS SUBJECT TO CHANGE TO MATCH FINAL PAVING AND DRAINAGE PLANS.
3. FRONT LOT CORNER ELEVATIONS ARE 0.5 FEET ABOVE THE TOP OF CURB ELEVATION.
4. ADD 100 TO LOT CORNER ELEVATIONS TO GET TO CITY OF WICHITA DATUM.

GRAPHIC SCALE

100 0 50 100 200

(IN FEET)

1 INCH = 100 FT.

BENCHMARKS

(City of Wichita Datum)

1. Bench Mark #1 City of Wichita std. disk on headwall at Northeast corner of 135th & Maple, 34' Northeast of Southwest corner of Section 24-T27S-R2W. Elevation 150.20
2. Bench Mark #2 City of Wichita std. disk at Southwest corner of 135th and Rolling Hills Drive, 1/4 mile South of Central, 47' East of CL 135th, 31' South of CL Rolling Hills Drive, 14' South of South curb line. Elevation 161.88
3. Bench Mark #3 City of Wichita std. disk on Southeast corner of East hubguard of RCB under Forestview, 86' North of CL Maple. Elevation 135.58

EARTHWORK SUMMARY

Cut	8330.7 CY
Fill	203.4 CY
Waste	8127.3 CY

Earthwork quantities listed do not account for shrinkage. Excess shall be wasted where shown on this plan.

No.	Date	By	Approved	Revision

MAPLE DUNES ADDITION-PHASE II
EASEMENT GRADING PLAN
SANITARY SEWER EXTENSIONS
CITY OF WICHITA, KANSAS
MICHAEL E. LINGEBAU, P.E. - CITY ENGINEER
Project No. 468-82715 Index Code 744-SA2

POE & ASSOCIATES OF KANSAS, INC.
CONSULTING ENGINEERS
9444 E. Central, Suite 203 ■ Wichita, KS 67206 ■ 316/685-1111 ■ Fax 316/685-1444

FINAL
Designed By: G. Miles
Drawn By: S. Schmidt
Poe Job No.: 1601C
Date: August 1997

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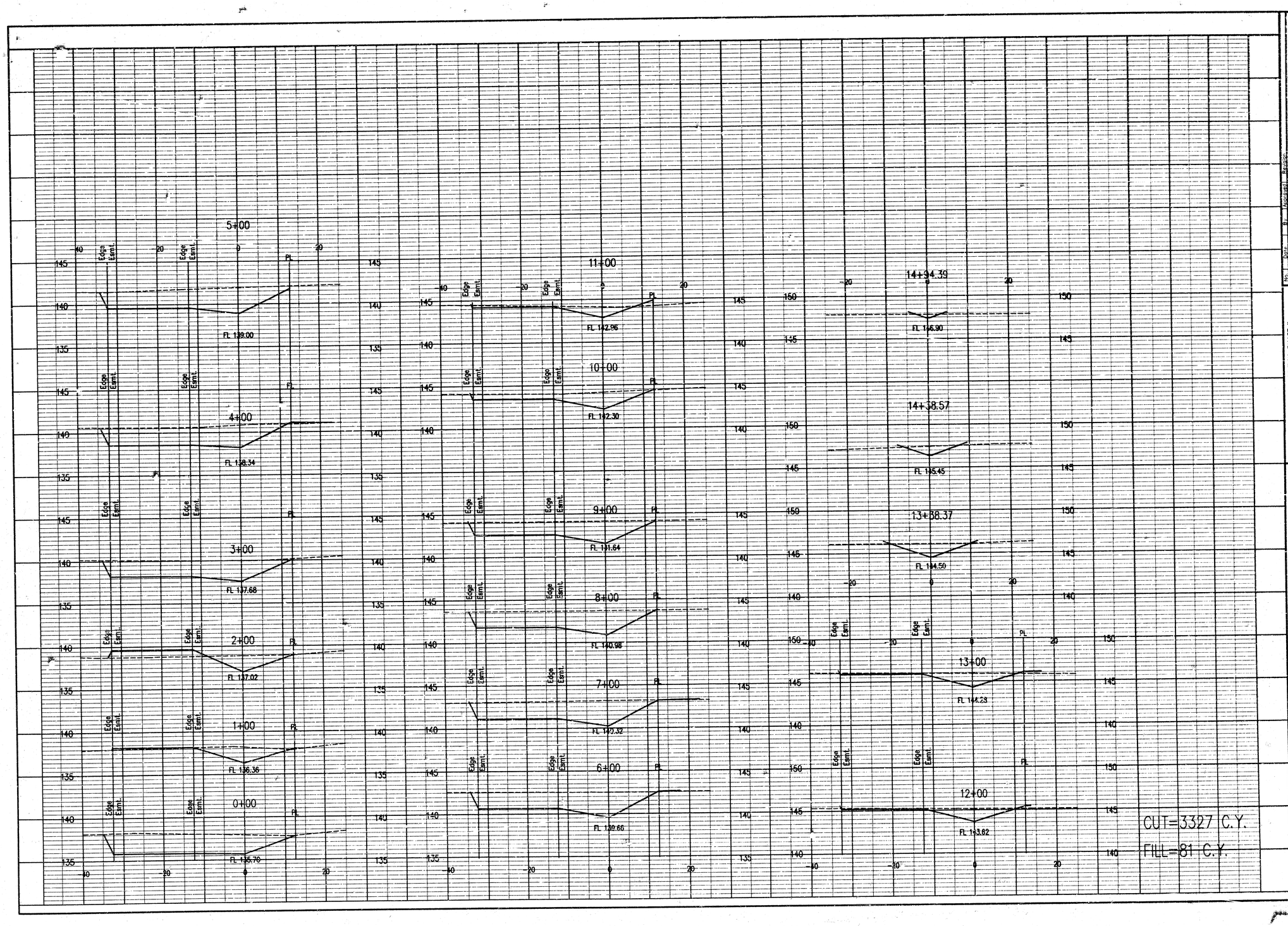
SAT DISPAD



MAPLE DUNES ADDITION-PHASE II
DITCH NO. 1
SANITARY SEWER EXTENSIONS
CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBAK, P.E. - CITY ENGINEER
Proj. No. 466-82715 Index Code 748302

POE & ASSOCIATES OF KANSAS, INC.
CONSULTING ENGINEERS

FINAL

Designed By: J. Ubert
Drawn By: S. Schmidt
Poe Job No.: 1601C
Date: August 1997

Sheet 11 of 12

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MAPLE DUNES ADDITION

TO WICHITA, SEDGWICK COUNTY, KANSAS

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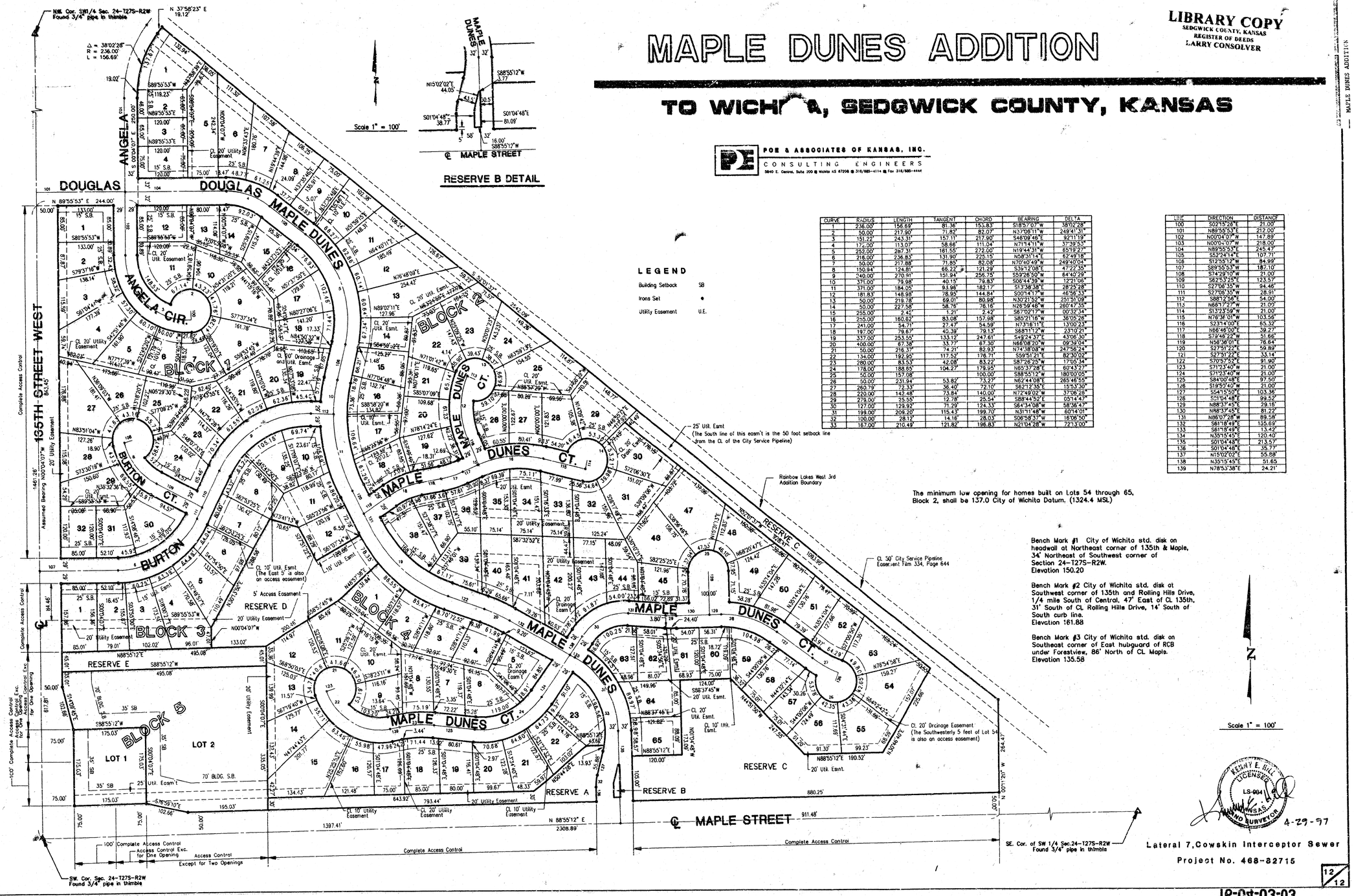
REGISTER OF DEEDS
LARRY CONSOLVER

POE & ASSOCIATES OF KANSAS, INC.
CONSULTING ENGINEERS
3840 E. Central, Suite 200 ■ Wichita KS 67208 ■ 316/685-4114 ■ Fax 316/685-4444



LEGEND

Building Setback	SB
Irons Set	•
Utility Easement	U.E.

CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
1	236.00'	156.69'	81.36'	153.83'	S18°57'07"W	38°02'28"
2	50.00'	217.90'	71.82'	82.07'	N37°06'11"W	249°41'31"
3	151.22'	243.31'	157.11'	217.90'	S46°09'46"E	92°11'19"
4	172.00'	113.07'	58.66'	111.04'	N71°41'11"W	37°39'55"
5	252.00'	297.31'	181.55'	272.00'	N19°44'31"W	65°19'27"
6	216.00'	236.83'	131.90'	225.15'	N58°31'14"E	62°49'18"
7	50.00'	217.88'	71.85'	82.08'	N70°40'49"W	249°40'04"
8	150.94'	124.81'	66.22'	121.29'	S35°12'08"E	47°22'35"
9	240.00'	270.91'	151.94'	256.75'	S59°26'50"W	64°40'29"
10	371.00'	79.98'	40.15'	79.83'	S08°44'39"W	12°21'06"
11	371.00'	184.05'	93.98'	182.17'	S13°38'38"E	28°25'28"
12	181.83'	148.98'	78.90'	144.84'	S00°14'17"W	46°56'33"
13	50.00'	219.78'	69.01'	80.98'	N30°21'52"W	251°51'09"
14	50.00'	227.58'	58.78'	76.16'	N26°59'48"W	260°47'55"
15	255.00'	2.45'	1.21'	2.42'	S87°02'17"W	00°33'34"
16	255.00'	160.62'	83.08'	157.98'	S85°21'16"W	36°05'26"
17	241.00'	54.71'	27.47'	54.59'	N73°18'11"E	13°00'23"
18	197.00'	79.67'	40.39'	79.13'	S68°11'12"W	23°10'21"
19	337.00'	253.55'	133.12'	247.61'	S49°24'37"E	43°06'30"
20	400.00'	67.38'	33.77'	67.30'	N86°08'20"W	09°39'04"
21	50.00'	216.37'	74.21'	82.93'	N74°38'08"W	247°56'24"
22	134.00'	192.95'	117.52'	176.71'	S59°51'21"E	82°30'02"
23	280.00'	83.53'	42.08'	83.22'	S87°26'25"W	17°05'34"
24	178.00'	188.55'	104.27'	179.95'	N83°13'28"E	60°41'27"
25	50.00'	157.08'		100.00'	S88°55'12"W	180°00'05"
26	50.00'	231.94'	53.82'	73.27'	N62°44'08"E	265°46'55"
27	260.73'	72.33'	36.40'	72.10'	S62°13'35"E	15°53'50"
28	220.00'	142.48'	73.84'	140.00'	N72°49'02"W	37°06'28"
29	279.00'	25.55'	12.78'	25.54'	S88°44'52"E	05°14'47"
30	127.00'	129.92'	71.29'	124.33'	S84°34'08"W	58°36'47"
31	199.00'	209.20'	115.43'	199.70'	N31°11'48"W	60°14'01"
32	100.00'	28.12'	14.16'	28.03'	S06°58'37"W	16°06'50"
33	167.00'	210.49'	121.82'	196.83'	N21°04'28"W	72°13'00"

LINE	DIRECTION	DISTANCE
100	S02°15'28"E	21.00'
101	N89°55'53"E	212.00'
102	N00°04'07"W	147.89'
103	N00°04'07"W	218.00'
104	N89°55'53"E	245.47'
105	S52°24'14"E	107.71'
106	S12°55'12"W	84.99'
107	S89°55'53"W	187.10'
108	S74°29'10"W	21.00'
109	S62°53'25"E	123.57'
110	S27°06'35"W	94.46'
111	S27°06'35"W	28.91'
112	S88°12'56"E	54.00'
113	N66°17'07"E	21.09'
114	S13°23'59"W	21.00'
115	N76°36'01"W	103.56'
116	S23°41'00"E	65.32'
117	N66°46'00"E	39.27'
118	S79°46'22"W	51.66'
119	N56°36'01"E	76.64'
120	S27°51'22"E	59.89'
121	S27°51'22"E	33.14'
122	S70°57'52"E	91.90'
123	S71°23'40"W	21.00'
124	S71°23'40"W	21.00'
125	S84°00'48"E	97.50'
126	S19°57'40"W	21.00'
127	S54°15'50"E	103.36'
128	S01°04'48"E	99.52'
129	N88°37'45"E	29.16'
130	N88°37'45"E	81.22'
131	N86°07'28"W	89.58'
132	S61°18'49"E	135.69'
133	S61°18'49"E	13.42'
134	N35°15'45"E	120.40'
135	S01°04'48"E	213.57'
136	S01°04'48"E	35.77'
137	N15°02'02"E	55.88'
138	N35°15'45"E	51.65
139	N78°53'38"E	24.21'

The minimum low opening for homes built on Lots 54 through 65, Block 2, shall be 1371.0 City of Wichita Datum. (1324.4 MSL)

Bench Mark #1 City of Wichita std. disk on headwall at Northeast corner of 135th & Maple, 34' Northeast of Southwest corner of Section 24-T27S-R2W.
Elevation 1320.20

Bench Mark #2 City of Wichita std. disk at Southwest corner of 135th and Rolling Hills Drive, 1/4 mile South of Central, 47' East of CL 135th, 31' South of CL Rolling Hills Drive, 14' South of South curb line.
Elevation 1361.88

Bench Mark #3 City of Wichita std. disk on Southeast corner of East hubguard of RCB under Forestview, 86' North of CL Maple.
Elevation 1355.58

KENNY E. HILL
LICENSED
LS-964
KANSAS
LAND SURVEYOR

4-29-97

Lateral 7, Cowskin Interceptor Sewer
Project No. 468-82715

12/12

Je-04-03-03

MAPLE DUNES ADDITION

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40 of