SANITARY SEWER EXTENSION
TO SERVE
LOT 1, BLOCK A
TEAL BROOK COMMERCIAL ADDITION

PRIVATE PROJECT NO. 859PPS

CITY OF WICHITA, KANSAS
SEDGWICK COUNTY, KANSAS
MICHAEL E. LINDEBAK, P.E., CITY ENGINEER
INDEX CODE: 607861

GENERAL NOTES

1. ALL CONCRETE SHALL BE STANDARD PAVING MIX--UNLESS OTHERWISE NOTED.

2. 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.

3. EXISTING UTILITIES AND THEIR LOCATIONS AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS COMPANIES AND IS EITHER FROM COMPANY UTILITY DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED. CONTRACTOR SHALL EXPOSE ALL UTILITIES AT POSSIBLE POINTS OF CONFLICT PRIOR TO ANY CONSTRUCTION.

4. CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF FORTY-EIGHT (48) HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:
KANSAS ONE-CALL 1-800-344-7233

THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:

CABLEVISION	316-263-2061
KANSAS GAS & ELECTRIC	316-264-1141
SOUTHWEST BELL TELEPHONE COMPANY	316--571-2611
CITY OF WICHITA WATER DEPARTMENT	316-268-4908
CITY OF WICHITA SEWER MAINTENANCE	316-268-4071
FARMLAND PIPE LINE	316-755-1401

5. UNLESS SHOWN OR STATED OTHERWISE ON THESE DRAWINGS, MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF WICHITA SPECIFICATIONS.

6. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WOULD REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WOULD REQUIRE ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.

7. SITE RESTORATION AND PREPARATION SHALL BE SUBSIDIARY TO THE PROJECT.

8. COST OF EXCAVATION, HAULING AND DUMPING OF EXCESS EXCAVATION SHALL BE SUBSIDIARY TO THE PROJECT.

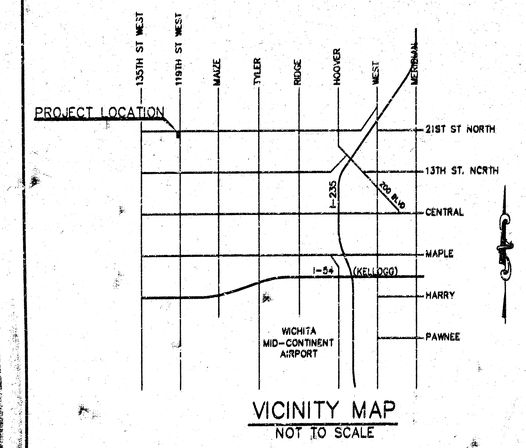
9. A PORTION OF EXCESS EXCAVATED MATERIAL SHALL BE MOUNDED AROUND MANHOLES WHICH EXTEND MORE THAN ONE (1) FOOT ABOVE THE EXISTING GROUND. SUCH MOUNDS SHALL BE CONSTRUCTED WITH A SIX (6) FOOT DIAMETER FLAT TOP WITH 4 TO 1 SIDE SLOPES DOWN TO THE ORIGINAL GROUND. THE ELEVATION OF THE FLAT TOP OF THE MOUND SHALL BE 0.4 FOOT BELOW THE TOP OF THE MANHOLE.

10. ALL STUBS AND PLUGGED PIPES SHALL BE LOCATED WITH GREEN PLASTIC TAPE IN THE SAME MANNER AS RISERS.

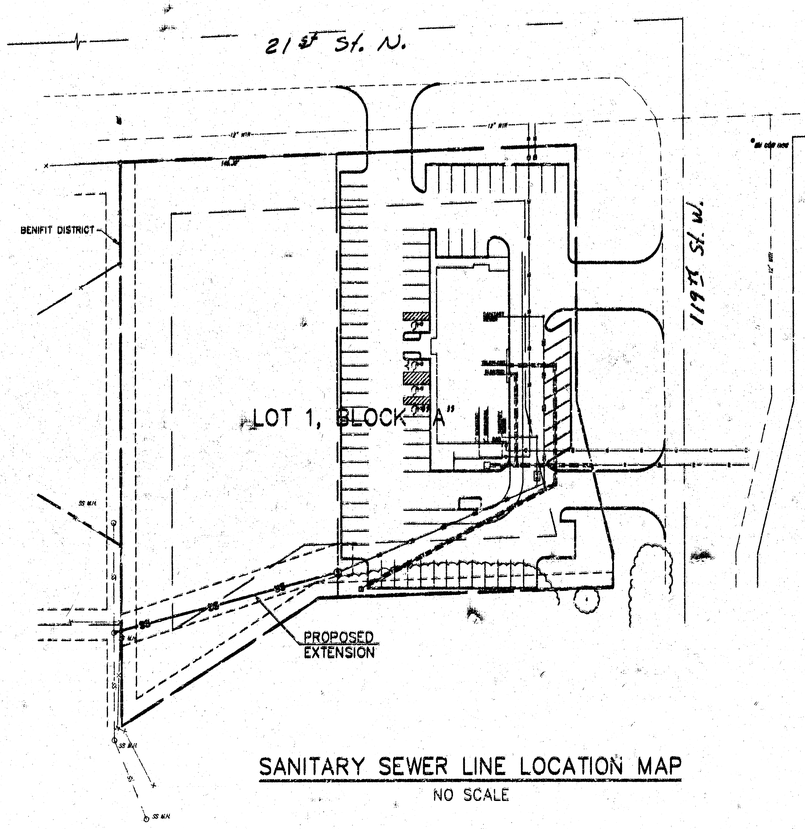
11. PRIOR TO LAYING SEWER LINES USING EXISTING MAINS OR MANHOLES, THE CONTRACTOR SHALL EXPOSE AND VERIFY THE ELEVATION, GRADE AND ALIGNMENT OF EXISTING AND NOTIFY THE ENGINEER OF ANY DEVIATION FROM THE PLAN. WHERE CONNECTION TO AN EXISTING MANHOLE THAT DOES NOT HAVE AN EXISTING STUB OR THE STUB IS UNUSABLE DUE TO ELEVATION GRADE OR ALIGNMENT, THE CONTRACTOR SHALL RESHAPE THE EXISTING MANHOLE INVERT TO PROVIDE SMOOTH FLOW. THE COST OF RESHAPING EXISTING MANHOLE INVERTS IS INCIDENTAL TO THE PROJECT.

12. ALL UNPAVED AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED BACK TO ORIGINAL GROUND LINE, SEEDED AND MULCHED.

13. 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 PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.



VICINITY MAP
NOT TO SCALE



SANITARY SEWER LINE LOCATION MAP
NO SCALE

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA
SANITARY SEWERS VRH 11/4/98

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

INDEX TO SHEETS:

1. TITLE SHEET
2. ALTA/ACSM LAND TITLE SURVEY
3. SANITARY SEWER PLAN & PROFILE AND DETAILS

BENCHMARKS

ALL ELEVATIONS SHOWN ARE IN CITY OF WICHITA DATUM. ADD 1187.4 TO ATTAIN U.S.G.S DATUM.

BENCHMARK:
CITY OF WICHITA DISC 67'S & 46'E OF THE INTERSECTION OF 119TH ST. W & 21ST ST. N.
ELEVATION = 172.06 (CITY DATUM)

Booked
P. 90
8-16-99
RDL

S.D. MALINOWSKY 11-23-98
No. 12595
STATE OF KANSAS
PROFESSIONAL ENGINEER
SAMUEL D. MALINOWSKY
PROFESSIONAL ENGINEER

AS BUILT SURVEY 4/23/99
AMEC #8

KAW VALLEY ENGINEERING, INC. - CONSULTING ENGINEERS
2319 NORTH JACKSON
P.O. BOX 1304
JUNCTION CITY, KANSAS 66441
785-762-5040 FAX 785-762-7744
E-MAIL jkaw@jcnet
122 N.W. PARKWAY
BLUE SPRINGS, MO. 64150
816-587-9033 FAX 816-387-0129
14031 W. 95TH STREET
LENEXA, KANSAS 66215
913-894-5150 FAX 913-894-5277

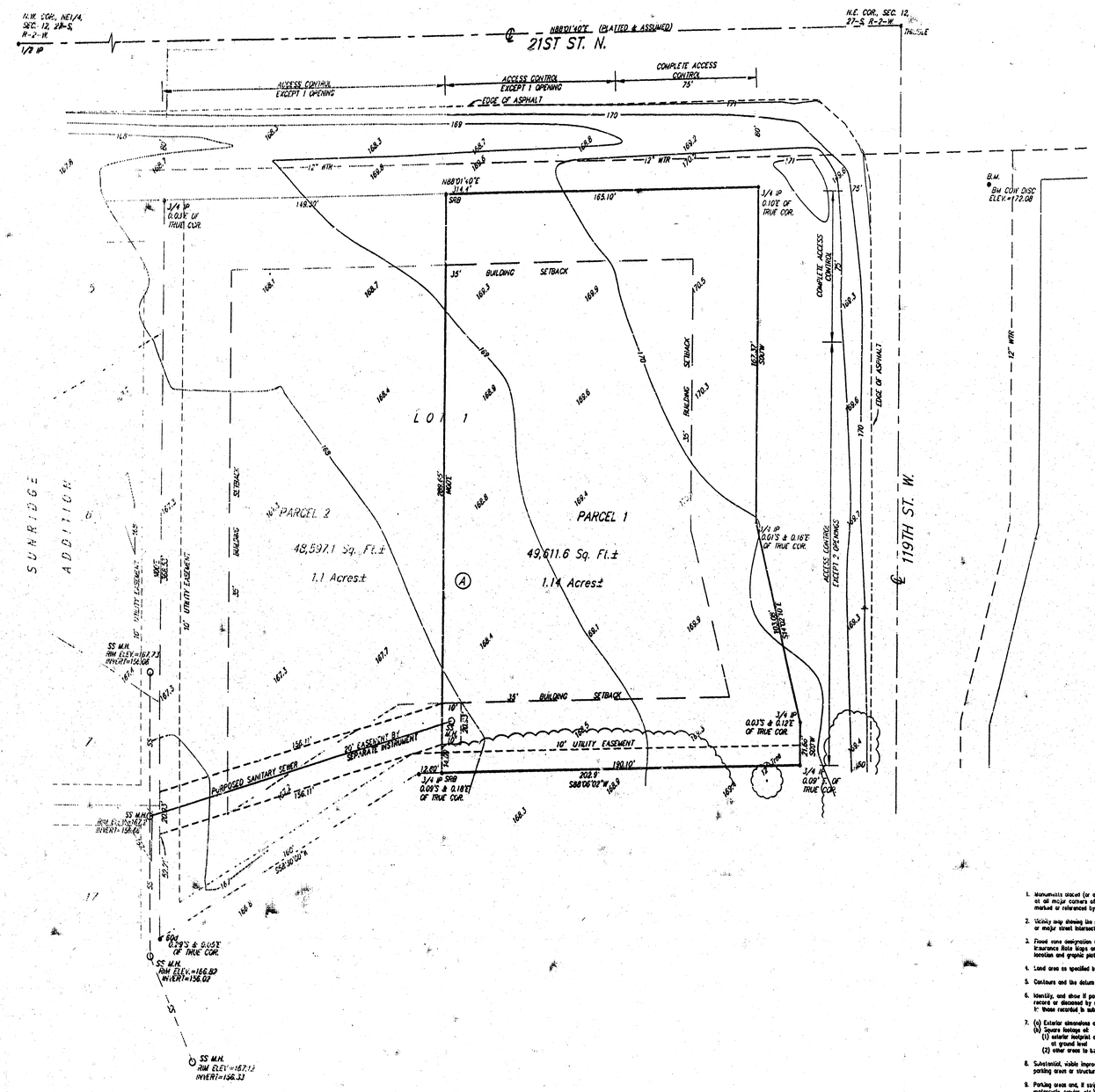
REVISIONS

BRAUM'S ICE CREAM STORE
119TH STREET WEST & 21ST STREET NORTH
WICHITA, KANSAS

TITLE SHEET

PROJ. NO. A02025
DATE OCT. 12, 1998
DESIGNED
DRAWN BY JO
CHECKED BY
CFN 202STTL8
SHEET 1 OF 3

20 11:12:33 1998 Jennifer



GRAPHIC SCALE

30 0 15 30 60

(IN FEET)
1 inch = 30 ft.

ELEV. = CITY DATUM

BENCH MARK:
67'S & 46'E OF THE INTERSECTION OF 119TH ST. W. & 21ST ST. N.
ELEV. = 172.08 (CITY DATUM)

LEGEND

WTR = Water Line
UGE = Under Ground Electric
UGT = Under Ground Telephone

- TELE. PED ..... TELEPHONE PEDESTAL
- XFMR ..... TRANSFORMER
- CATV ..... CABLE TV
- ELEC. BOX ..... JUNCTION BOX
- SS M.H. ..... SANITARY SEWER MANHOLE
- ..... SIGN

LEGEND

- TRIANGLE ..... CITY OF WICHITA CONTROL (FOUND)
- IP ..... IRON PIPE (FOUND)
- 604 ..... NAIL (FOUND)
- SRB ..... 1/2" REBAR W/SRB CAP (SET)

TABLE "A"
OPTIONAL SURVEY RESPONSIBILITIES AND SPECIFICATIONS
To be used
Minimum Standard Detail Requirements for
ALTA/ACSM
LAND TITLE SURVEYS
as adopted by
American Land Title Association
and
American Congress on Surveying & Mapping
1997

1. Monuments placed (or a reference monument or witness to the corner) at all major corners of the boundary of the property, unless already marked or referenced by an existing monument or witness to the corner.
2. Vicinity map showing the property surveyed in reference to nearby highway(s) or major street intersection(s).
3. Flood zone designation (with proper annotation based on Federal Flood Insurance Rate Maps or the state or local equivalent, by scaled map location and graphic plotting only.)
4. Land area as specified by the client.
5. Contours and the datum of the elevations.
6. Identify, and show if possible, setback, height and bulk restrictions of record or discovered by applicable zoning or building codes (in addition to those recorded in subdivision maps). If none, so state.
7. (a) Exterior dimensions of all buildings at ground level
   (b) Square footage of:
   (1) exterior footprint of all buildings, or gross floor area of all buildings, at ground level
   (2) other areas to be defined by the client
8. Substantial, visible improvements (in addition to buildings) such as signs, parking areas or structures, swimming pools, etc.
9. Parking areas and, if striped, the striping and the type (e.g. handicapped, motorcycle, regular, etc.) and number of parking spaces.
10. Indication of access to public way such as curb cuts, alleyways marked.
11. Location of utilities serving or existing on the property as evidenced by: on-site observations or as determined by records provided by client, utility companies and other appropriate sources (with reference as to the source of information) (for example):
    (a) mid-and tracks and siding;
    (b) manholes, catch basins, valve vaults or other surface indications of subterranean uses;
    (c) wires and cables (including their function) crossing the surveyed premises, all poles on or within ten feet of the surveyed premises; and the dimensions of all structures of overhangs affecting the surveyed premises; and
    (d) utility company installations on the surveyed premises.
12. Governmental Agency survey-related requirements as specified by the client.
13. Significant observations not otherwise disclosed.
14. Observable evidence of earth moving work, building construction or building additions within recent months.
15. Any changes in street rights of way lines either completed or proposed, and available from the controlling jurisdiction. Observable evidence of recent street or sidewalk construction or repairs.
16. Observable evidence of site use as a solid waste dump, sump or sanitary landfill.

TO ALL PARTIES INTERESTED IN TITLE TO THE PREMISES SURVEYED:

Retail Buildings, Inc., an Oklahoma Corporation
Chicago Title Insurance Company

LEGAL DESCRIPTION:

That part of Lot 1, Block A, Teal Brook Commercial Addition to Wichita, Sedgwick County, Kansas, described as beginning at the N.E. Corner of said Lot 1; thence S00°W, along the East Line of said Lot 1, 167.37 feet; thence S14°02'10"E, along the East Line of said Lot 1, 103.08 feet; thence S00°W, along the East Line of said Lot 1, 21.66 feet to the S.E. Corner of said Lot 1; thence S88°06'02"W, along the South Line of said Lot 1, 190.10 feet; thence N00°E, 289.65 feet to the North Line of said Lot 1; thence N88°01'40"E, along the North Line of said Lot 1, 165.10 feet to the place of beginning.

State of Kansas)
) SS
Sedgwick County)

We, Savoy, Ruggles & Bohm, P.A., Surveyors in aforesaid county and state, do hereby certify that we did on this 20th day of July, 1998, survey the above described property and the accompanying plat of survey on which it is based is made in accordance with "Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys," jointly established and adopted by ALTA and ACSM in 1997 and includes items 1, 3, 4, 5, 6, 8, and 11 of Table "A" thereof, and pursuant to the Accuracy Standards (as adopted by ALTA and ACSM in effect on the date of this certification) of an Urban Survey.

MARK A. SAVOY REGISTERED LS-788 95 STATE OF KANSAS LAND SURVEYOR

Mark A. Savoy Surveyor
Mark A. Savoy, PLS #788

NOTES:

1) SURVEY DATE: July 20, 1998

2) RECORD INFORMATION: Security Title Insurance Co. Commitment # C529179

3) FLOOD ZONE DESIGNATION: According to the FEMA/FIRM Community Panel No. 200321 0125 A, effective June 3, 1996, the property shown hereon is located in Zone C, an area of minimal flooding.

4) AREA:
LOT, (GROSS); 46,611.6 sq.ft.±
1.14 Acres±

NOTE:

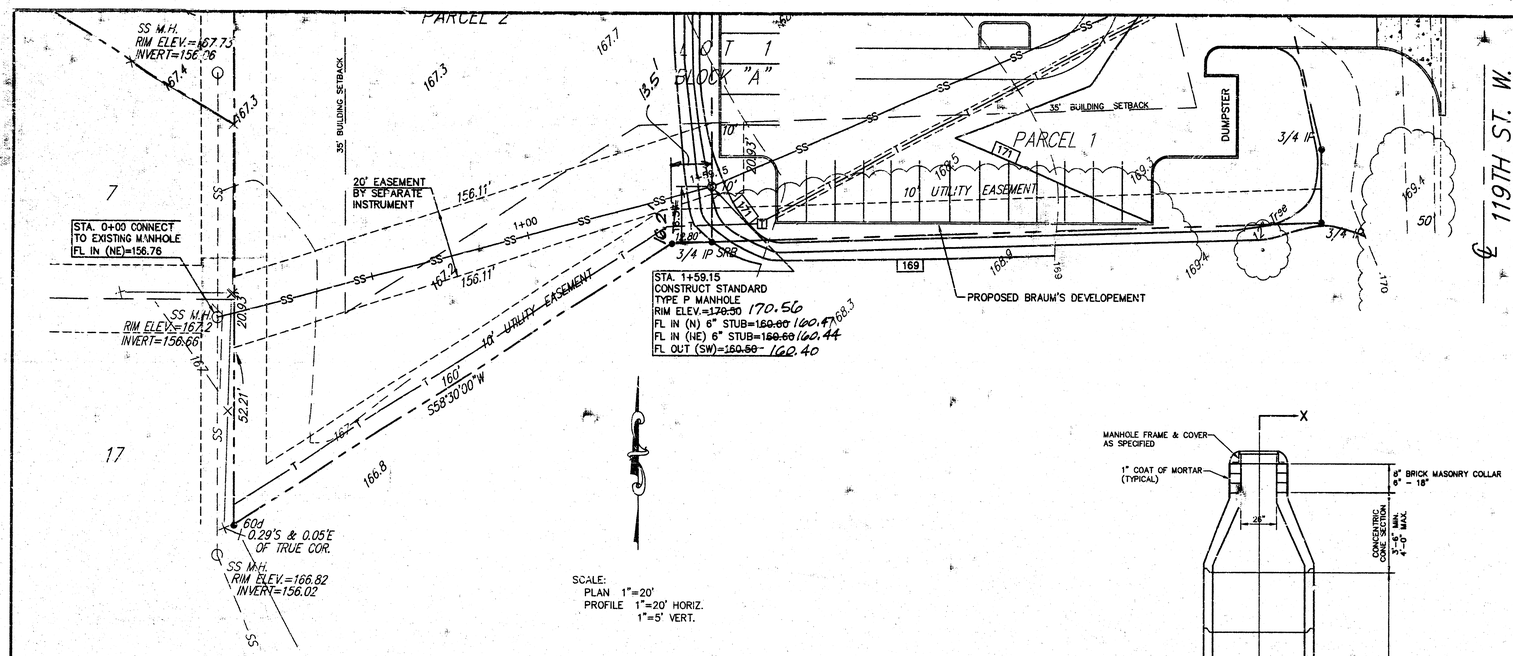
Location of all utilities shown on this drawing, reflect the best information available, consisting of both field observation and information from the records of the various utility companies. Before completing any final design or beginning any excavation on this site, contact the appropriate utility companies for verification of the utility locations.

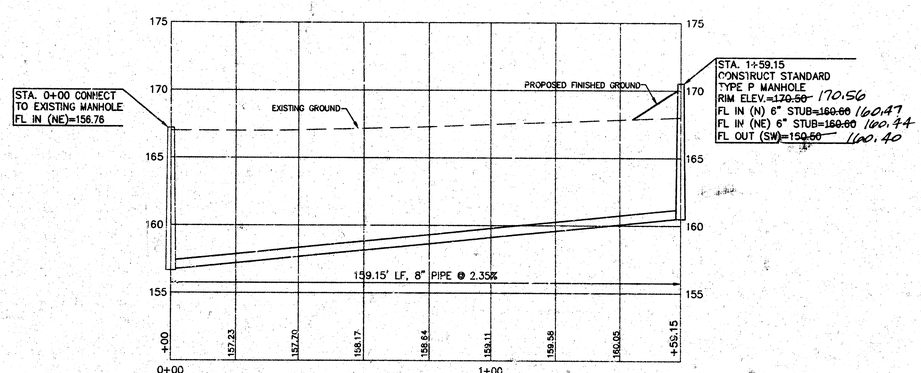
Kansas One-Call 687-2470

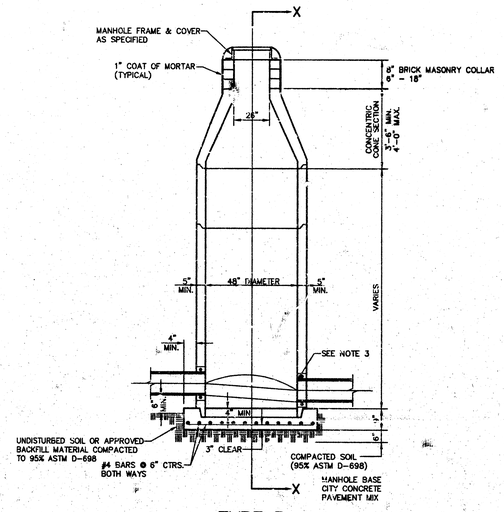
DWG FILE: 10755-C.K.
PROJECT NO. 98101075A

SRB
924 NORTH MAIN
WICHITA, KANSAS 67203
http://www.feist.com/~srb
316-264-8008
FAX 264-4621
E-mail: srb@feist.com
SAVOY, RUGGLES & BOHM, P.A.
ENGINEERING & SURVEYING

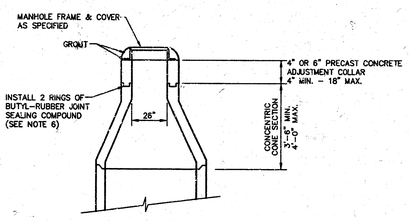
20 JULY 1998



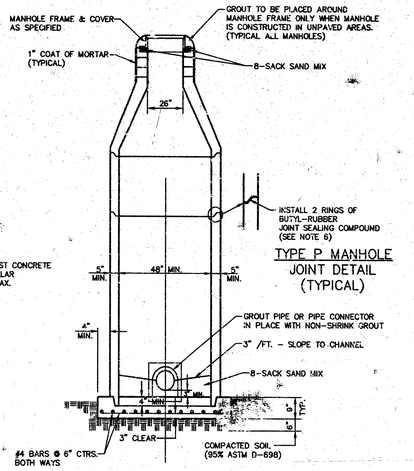




TYPE P
STANDARD MANHOLE



ALTERNATE CONSTRUCTION
IN UNPAVED AREAS



TYPE P MANHOLE
JOINT DETAIL
(TYPICAL)

SECTION X
TYPICAL

WARRANTY / DISCLAIMER
THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY BRAUM'S INC. AT THIS TIME. HOWEVER, NEITHER KAW VALLEY ENGINEERING, INC NOR ITS PERSONNEL CAN OR DO WARRANTY THESE DESIGNS OR PLANS AS CONSTRUCTED, EXCEPT IN THE SPECIFIC CASES WHERE KAW VALLEY ENGINEERING PERSONNEL INSPECT AND CONTROL THE PHYSICAL CONSTRUCTION ON A CONTEMPORARY BASIS AT THE SITE.

CAUTION – NOTICE TO CONTRACTOR
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. **THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICTS PRIOR TO ANY CONSTRUCTION.**

SAFETY NOTICE TO CONTRACTOR
IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRANCE, SLOPED PAVING, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.

NOTE:
THESE PLANS HAVE NOT BEEN VERIFIED WITH FINAL ARCHITECURAL CONTRACT DRAWINGS. CONTRACTOR SHALL VERIFY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES. CONTRACTOR IS FULLY RESPONSIBLE FOR REVIEW AND COORDINATION OF ALL DRAWINGS AND CONTRACT DOCUMENTS.

GENERAL NOTES
PRECAST MANHOLE NOTES

1. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISION 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 P.V.C. 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 WALL 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 INCHES SHALL HAVE AN INSIDE DIAMETER OF 4 FEET. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE 24 INCHES OR LARGER SHALL HAVE AN INSIDE DIAMETER OF 5 FEET. 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 INCH CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED AT LEAST 3 INCHES ABOVE THE BOTTOM OF THE MANHOLE BASE.

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 NON-SHRINK 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.

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 MANHOLE. THE CRADLE SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT.

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 FREE FALL DROP INSIDE MANHOLES SHALL NOT EXCEED 2 FEET. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.

17. A BRICK MASONRY COLLAR SHALL BE INSTALLED BETWEEN THE CAST IRON FRAME AND THE CONCENTRIC CONE. THE COLLAR WILL HAVE 8 INCH WALLS AND A VERTICAL HEIGHT OF 6 INCHES MINIMUM AND 18 INCHES MAXIMUM. A 1 INCH COAT OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR.

18. MANHOLE RIMS NOT IN PAVED AREAS ARE TO BE 0.4' ABOVE FINISHED GROUND.

KAW VALLEY ENGINEERING, INC. – CONSULTING ENGINEERS
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14431 W. 95TH STREET
LENEXA, KANSAS 66215
913-894-5150 FAX 913-894-5977

REVISIONS

BRAUM'S ICE CREAM STORE
119TH STREET WEST & 21ST STREET NORTH
WICHITA, KANSAS
SANITARY SEWER EXTENSION

PROJ. NO. A02025
DATE SEPT. 1ST, 1998
DESIGNER
DRAWN BY JO
CHECKED BY
CFN 2025SS
SHEET 3 OF 3

Oct 20 11:13:10 1998 jemi