N

1" = 20'

B.M. #2

Sta. 0+00 Begin Project
10" Pipe with temporary plug

Existing line sta. 39+39.47 = Sta. 0+66.9, 10' Lt. ℄
Existing Manhole

B.M. #1

Sta. 2+05.5, 9.8' Lt. ℄
Existing Manhole

Existing 8" Sanitary Sewer
(Private - Koch Industries)

Sta. 4+34.5, 10' Lt. ℄
Existing Manhole

6" Pine

Asph. Pvmt. w/ C & GTF

Saw and remove pavement and curb as necessary for sewer construction. Compaction of top 1' of backfill to be min. 95% std. Proctor density. Replace curb and gutter and pavement to 1' min beyond excavation. Thickness to match existing.

0.1' W. of ℄

160' (℄)

178° 38' 47"

+25 (NOT TO SCALE)

Sta. 2+00 Construct Std. Manhole; top elev. 178.5 / 178.71

Cross

5+33.4
Sta. ~~5+08~~ Construct Std. Manhole; top elev. 181.31

18" Apple 10" 40' 32"

Proposed 10" Sanitary Sewer to be extended by others after construction of this project.

PLAN
SUBMITTED
PLOTTED
QUANTITY CHECKED
BY OF WAY CHECKED
NOTE BOOK
No.
DATE
BY

PROFILE SCALE
1" = 20' Hz.
1" = 5' Vt.

Sta. 0+00 Begin Project
Temp. 10" Pipe plug

Sta. ~~2+25~~ 2+05 Construct Std. Manhole; top elev. 178.5

Existing or Finish Grade

Sta. 5+33.4
Sta. ~~5+08~~ Construct Std. Manhole; top elev. 181.31

℄ 165.45
℄ 165.55
Sta. 5+33.4

225.0
~~209.0~~ L.F. 10" Pipe @ 0.50%

274.4
~~300.1~~ L.F. 10" Pipe @ 0.50%

℄ 162.50
℄ 163.00
163.61
℄ 163.50
℄ 164.00
℄ 164.50
℄ 165.00

180
175
170
165

0
1
(N.T.S.) 2+25
4
5
6

PROFILE
SUBMITTED
PLOTTED
GRADES CHECKED
NOTE BOOK
No. BA 10
1" = 100' HORIZONTAL
1" = 10' VERTICAL
GRADES CHECKED

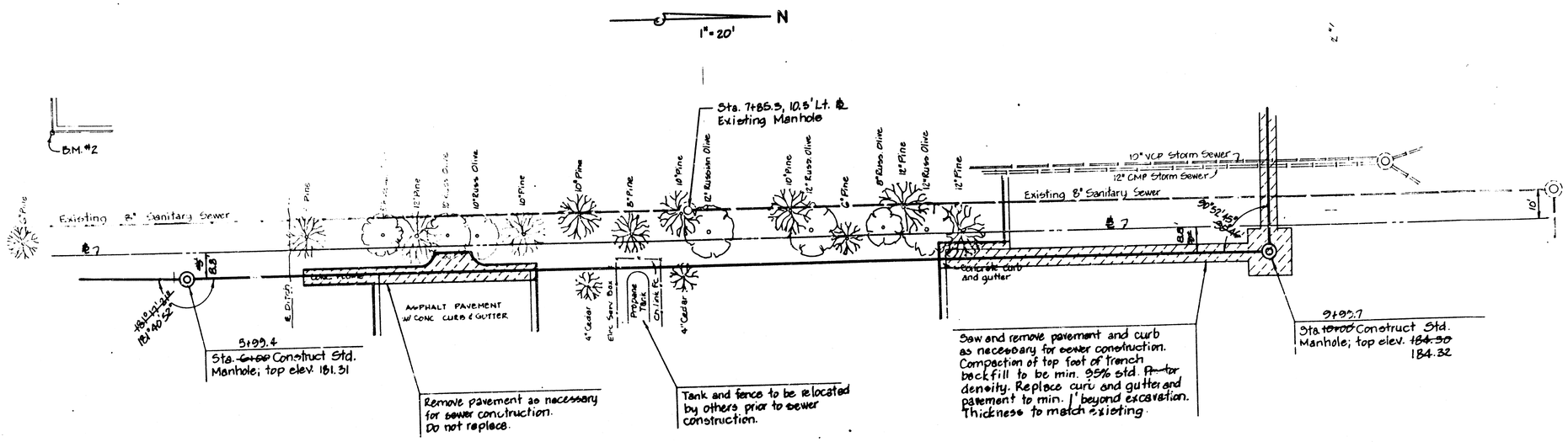
Rev. as built 6-4-20

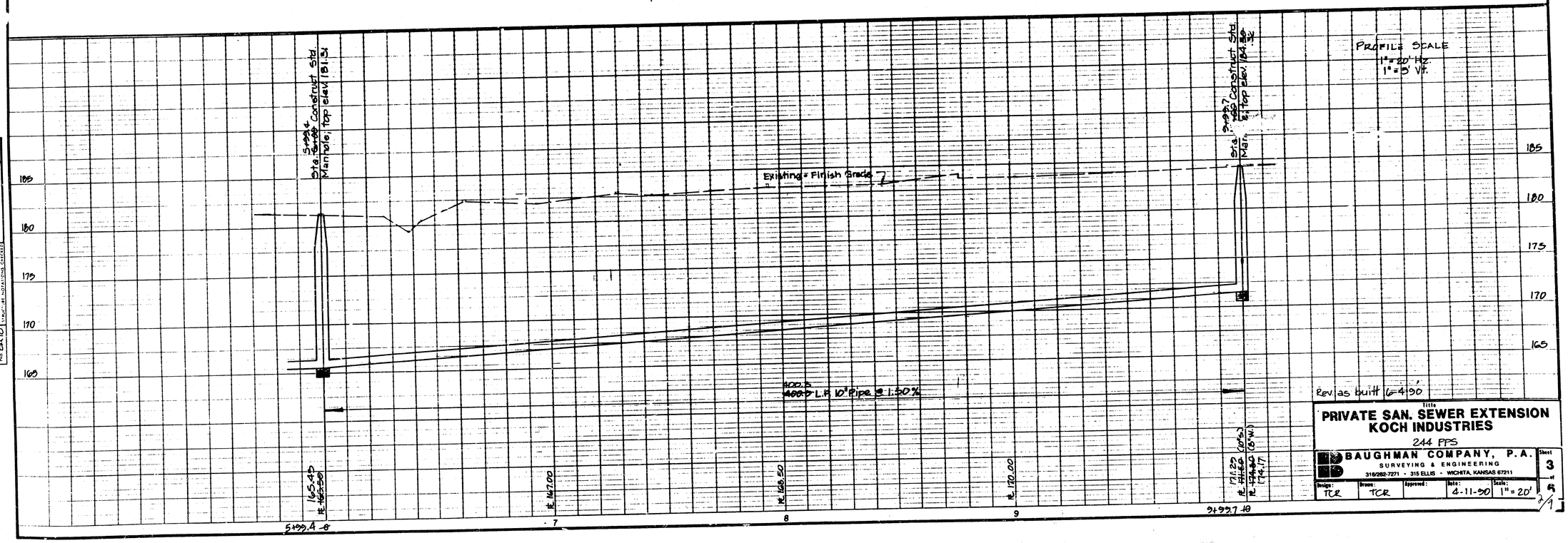
Title
PRIVATE SAN. SEWER EXTENSION
KOCH INDUSTRIES
244 PPS

BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

Design:	Drawn:	Approved:	Date:	Scale:	Sheet
TCR	TCR		4-11-20	1" = 20'	2 of 9

FILMED FROM THE BEST AVAILABLE COPY





Rev as built 6-4-90

Title
PRIVATE SAN. SEWER EXTENSION
KOCH INDUSTRIES
244 PPS

BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/262-7271 · 315 ELLIS · WICHITA, KANSAS 67211

Design:	Drawn:	Approved:	Date:	Scale:	Sheet
TCR	TCR		4-11-90	1" = 20'	3

PLAN — SURVEYED / PLOTTED / DRAWN / CHECKED — NOTE BOOK — No. — DATE

PROFILE — SURVEYED: NOV'13 — DRAWN / CHECKED: E.W.L. NOV'13 — NOTE BOOK: No. BA 10 — DATE: 1 INCH = 20' HORIZONTAL, 5' VERTICAL

FILMED FROM THE BEST AVAILABLE COPY

PLAN
SURVEYED
PLOTTED
NOTE BOOK
No BK. 10
DRAWN
CHECKED
BY DT MAX CHECKED
STRUCTURE NOTATIONS CHECKED
DATE
BY

Remove asphalt to saw joints, 1' min. beyond excavation, Replace pavement to match existing grades and thickness (5" min.).

PAVEMENT

(2) Water mains to be relocated to this area by others prior to sewer construction.

9+22.7
Sta. ~~10+00~~ Construct Std. Manhole; top elev. ~~184.50~~ 184.32

Existing 8" San. Sewer

Exist 12" CMP
Exist 10" PVC Storm Sewers

ASPHALT

Saw rectangular joints and remove concrete pavmt.; replace to match existing thickness and reinforcement

CONC. PVMT.

12+65.0 (End Construction)
Sta. 12+~~65.0~~ Construct Std. Manhole; top ~~182.40~~ 182.37

FUTURE CONSTRUCTION

Underground electric cable and (2) water lines to be removed by others prior to sewer construction.

10" W
6" W
E
E
W
PLANTER

B.M. #3

Remove and replace curb and gutter and walk as necessary.

CONC. WALK
CONC. WALK

FUTURE CONSTRUCTION
Sta 14+23.3 Construct Std. Shallow Manhole; top elev. 184.20; 8" stub w.

GRASS

BUILDING A

N
1" = 20'

BUILDING B

31'

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
No BK. 10
DRAWN
CHECKED
BY
CHECKED
STRUCTURE NOTATIONS CHECKED
DATE
BY

PROFILE SCALE
1" = 20' Hz.
1" = 5' Vt.

Sta 9+99.7 Construct Std. Manhole; top elev. 184.32

Existing - Finish Grade

12+65.0 END CONSTRUCTION Sta. ~~12+65.0~~ Construct Std. Manhole; top ~~182.40~~ 182.37

FUTURE CONSTRUCTION Sta. 14+23.3 Construct Std. Shallow Manhole; top 184.2

10" Water

U/G Elec.
6" Water

185
180
175
170

Proposed relocated water mains (to be verified)

Water & electric lines to be removed prior to construction

~~265.3~~ 265.3 L.F. 8" Pipe @ ~~0.10~~ %

157.5 L.F. 8" Pipe @ 1.00% (FUTURE)

171.22 (10" S.)
~~171.50~~ 171.30 (8" W.)
~~174.17~~ 174.17

Rev as built 6-4-90

title
PRIVATE SAN. SEWER EXTENSION
KOCH INDUSTRIES
244 PPS

BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
310/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

Design:	Drawn:	Approved:	Date:	Scale:
TCR	TCR		4-11-90	1" = 20'

Sheet 4 of 9

FILMED FROM THE BEST AVAILABLE COPY

PRIVATE SANITARY SEWER EXTENSION

TO SERVE

KOCH INDUSTRIES

WICHITA, KANSAS

PROJECT NUMBER
244PPS

APPROVED AS NOTED
By CITY ENGINEER OF WICHITA
Sanitary Sewers VRH 4/13/90
Storm Sewers _____
Driveway Approaches _____
Water Mains _____
Paving _____

NOTE TO CONTRACTOR

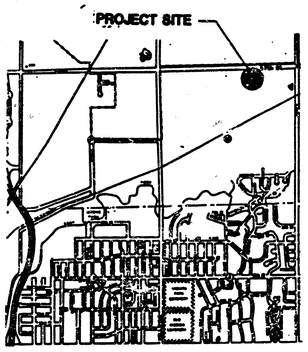
INSPECTION AND TESTING FOR THIS PROJECT IS TO BE PROVIDED BY A LICENSED CONSULTING ENGINEERING FIRM UNDER CONTRACT WITH THE OWNER/DEVELOPER. SAID INSPECTION TO BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD CONSTRUCTION ENGINEERING PRACTICES AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. NO WORK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

GENERAL NOTES

1. The Contractor shall be responsible for verifying the locations and depths of utility line crossings.
2. Flow in the existing 8" sewer shall be maintained during construction of this project.
3. This project shall be constructed in accordance with the Standard Specifications for Sanitary Sewer of the City of Wichita, Kansas.

BENCH MARKS

1. *Square cut on top of curb at sta. 0+56, 10' left of baseline; elev. 178.56*
2. *Square cut on top of curb at SE corner of parking lot, sta. 3+52, 42.5' left of baseline; elev. 182.41*
3. *Square cut on top of south end of west retaining wall of east dock of Building B, elev. 183.93*



LOCATION MAP

INDEX

1 TITLE SHEET
2–4 PLAN AND PROFILE
5–6 MANHOLE DETAILS

THOMAS CHARLES BUMGARDNER LICENSED 9821 KANSAS PROFESSIONAL ENGINEER

TITLE SHEET

BAUGHMAN COMPANY P. A.
ENGINEERING & SUPVEYING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

REV.

PROJECT NUMBER 244 PPS

SHEET 1 OF 6

DESIGN	DRAWN	APPROVED	DATE	SCALE
TCR	TCR		4-11-90	1"=20'

4/9

FILMED FROM THE BEST AVAILABLE COPY

N

1" = 20'

Sta. 0+00 Begin Project
10" Pipe with temporary plug

Existing line sta. 39+39.47 =
Sta. 0+66.9, 10' Lt. ℄
Existing Manhole

B.M. #1

Sta. 2+05.5, 9.8' Lt. ℄
Existing Manhole

Existing 8" Sanitary Sewer
(Private - Koch Industries)

Sta. 4+94.5, 10' Lt. ℄
Existing Manhole

B.M. #2

Saw and remove pavement and curb as necessary for sewer construction. Compaction of top 1' of backfill to be min. 95% std. Proctor density. Replace curb and gutter and pavement to 1' min. beyond excavation. Thickness to match existing.

Asphalt

Grass

178°42'30"

Sta. 2+00 Construct Std. Manhole; top elev. 178.8

Sta. 2+00 Construct Std. Manhole; top elev. 181.3

Proposed 10" Sanitary Sewer to be extended by others after construction of this project.

PLAN
SUPPLYING NOTED ALIGNMENT DETAILS BY OTHERS
NOTE BOOK
No.

PROFILE
SUPPLYING NOTED GRADES CHECKED & NOTED
STRUCTURE NOTATIONS CHECKED
NOTE BOOK
No. BA-10

PROFILE SCALE
1" = 20' Hz.
1" = 5' Vt.

Sta. 0+00 Begin Project
Temp. 10" Pipe plug

Sta. 2+00 Construct std. Manhole; top elev. 178.8

Existing ℄ Finish Grade

Sta. 5+00 Construct std. Manhole; top elev. 181.3

200.0 L.F. 10" Pipe @ 0.50%

400.1 L.F. 10" Pipe @ 0.50%

ft. 162.50 | ft. 163.00 | ft. 163.50 | ft. 164.00 | ft. 164.50 | ft. 165.00 | ft. 165.50

180 | 175 | 170 | 165

0 | 1 | 2 | 3 | 4 | 5 | 6

Title
PRIVATE SAN. SEWER EXTENSION
KOCH INDUSTRIES
244 PPB

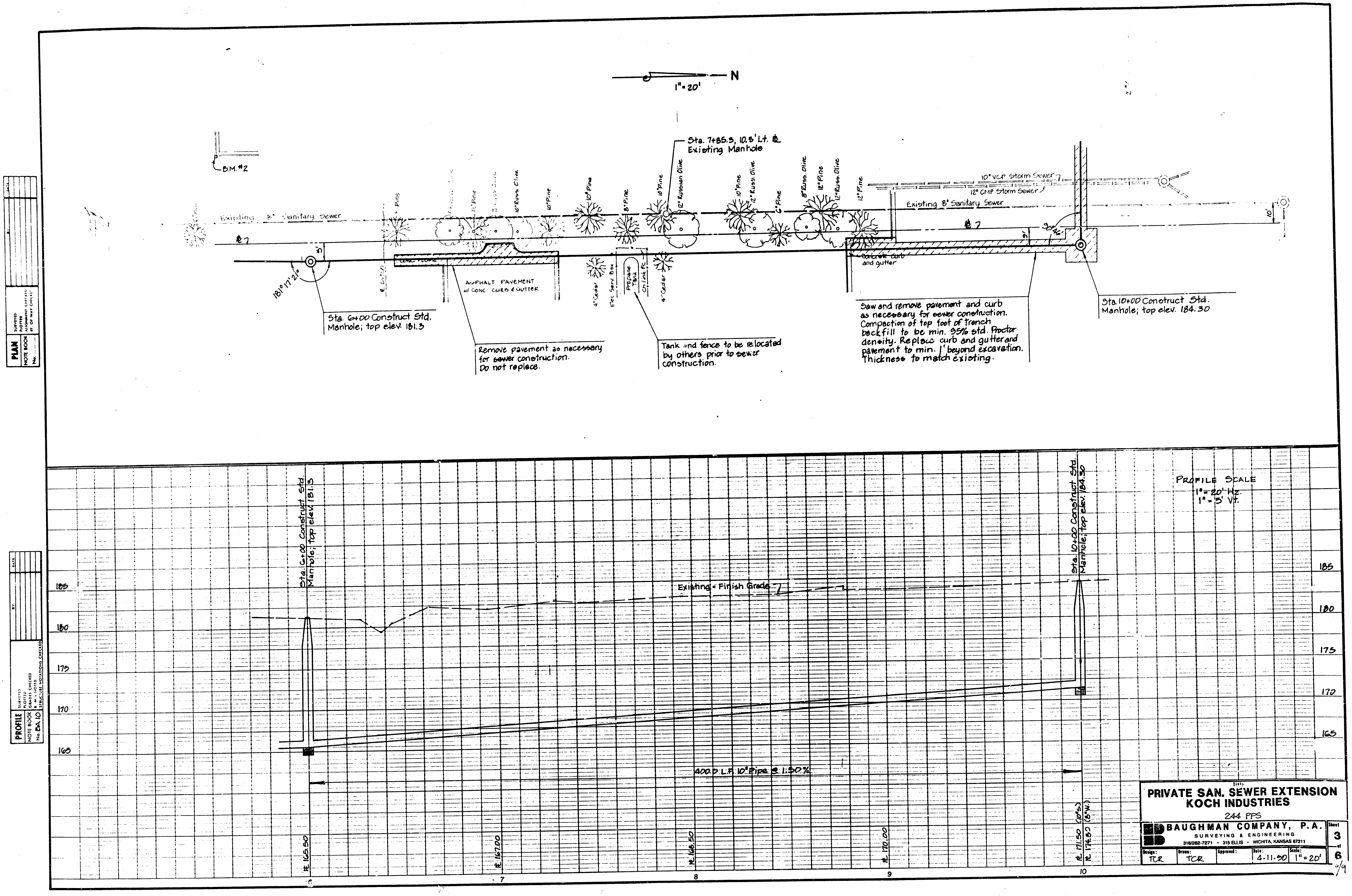
BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

Design:	Drawn:	Approved:	Date:	Scale:
TCR	TCR		4-11-90	1" = 20'

Sheet 2 of 6

3/9

FILMED FROM THE BEST AVAILABLE COPY



FILMED FROM THE BEST AVAILABLE COPY ....

Remove asphalt to saw joints, 1' min. beyond excavation. Replace pavement to match existing grades and thickness (5" min.).

PAVEMENT

(2) Water mains to be relocated to this area by others prior to sewer construction.

Sta. 10+00 Construct Std. Manhole; top elev. 184.50

Existing 8" San. Sewer

Exist. 18" CMP

Exist. 10" PVC Storm Sewers

ASPHALT

Saw rectangular joints and remove concrete pavmt.; replace to match existing thickness and reinforcement

CONC. PVMT.

Sta. 12+65.8 Construct Std. Manhole; top 182.40

Underground electric cable and (2) water lines to be removed by others prior to sewer construction.

10" W

W

PLANTER

B.M. #3

E

E

6" W

165'

Remove and replace curb and gutter and walk as necessary.

CONC

WALK

GRASS

CONC WALK

Sta. 14+23.3 Construct Std. Shallow Manhole; top elev. 184.20; 8" stub W.

12" SHRUBS

6' SHRUBS

7.5'

31'

BUILDING A

BUILDING B

165'

N

1" = 20'

PROFILE SCALE
1" = 20' Hz.
1" = 5' Vt.

Sta. 10+00 Construct Std. Manhole; top elev. 184.50

Sta. 12+65.8 Construct Std. Manhole; top 182.40

Sta. 14+23.3 Construct Std. Shallow Manhole; top 184.2 8"stub W.

185
180
175
170

Existing Finish Grade

12"-SLOPE 13.5%

6" S.S.

10" Water

U/G Elec.

6" Water

Proposed relocated Water mains (to be verified)

Water & electric lines to be removed prior to construction

265.0 L.F. 8" Pipe @ 0.40 %

157.5 L.F. 8" Pipe @ 1.00%

185
180
175

10 | 11 | 12 | +658 | 13 | 14 | +233

Ft. 171.50 (10"S.)
Ft. 174.30 (8"W.)
Ft. 174.70
Ft. 175.10
Ft. 175.36 (8"E.)
Ft. 177.46 (8"N.)
Ft. 177.80
Ft. 178.80
Ft. 179.05 (8"S.)
Ft. 179.13 (8"S.)(16"W.)

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
No. BA-10
GRADES CHECKED
R.O.W.
STRUCTURE LOCATIONS CHECKED
BY
DATE

PLAN
SURVEYED
PLOTTED
NOTE BOOK
No.
ALIGNMENT CHECKED
BY
DATE
RIGHT OF WAY CHECKED

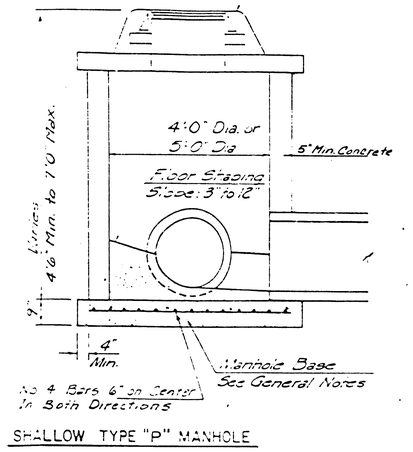
Title
PRIVATE SAN. SEWER EXTENSION
KOCH INDUSTRIES
244 FPS

BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

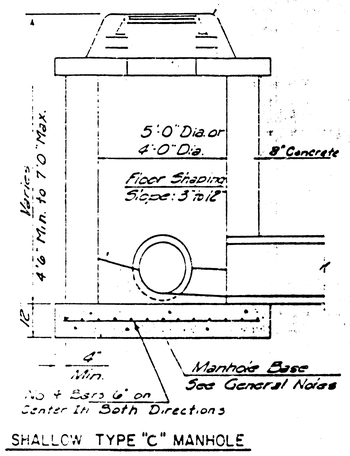
Sheet 4 of 9

Design:	Drawn:	Approved:	Date:	Scale:
TCR	TCR		4-11-90	1"=20'

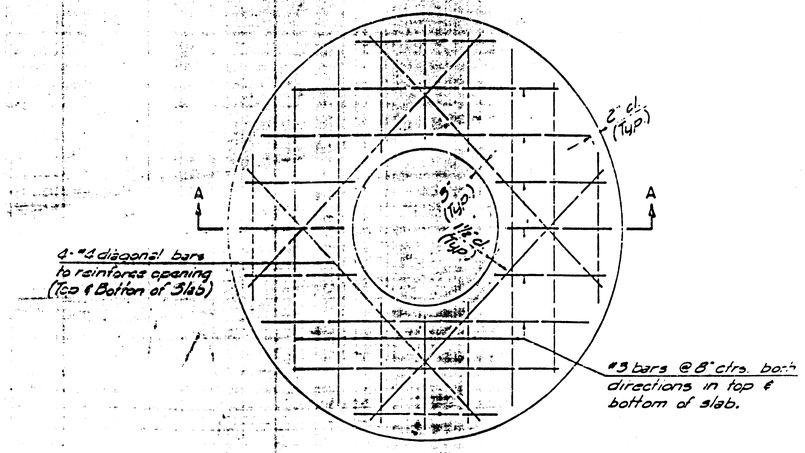
FILMED FROM THE BEST AVAILABLE COPY



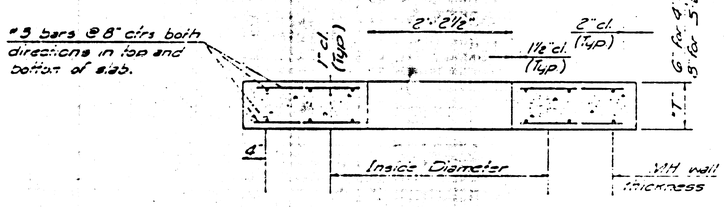
SHALLOW TYPE "P" MANHOLE



SHALLOW TYPE "C" MANHOLE

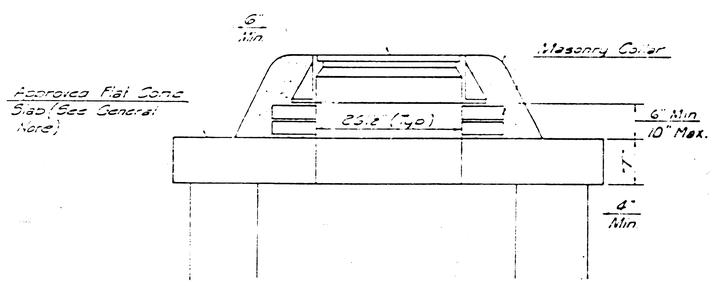


PLAN



SECTION A-A

FLAT CONCRETE SLAB DETAILS



MASONRY COLLAR DETAIL

GENERAL NOTES

1. 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 CEMENT 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. ~~PIPE AS SHOWN ON PLANS MAY BE CUT OFF FLUSH WITH THE MANHOLE IF NOT BUILT WITHIN PUBLIC STREET RIGHT-OF-WAY.~~ 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.

2. 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 6" 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.

3. 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. 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.

4. 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. 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.

5. 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 DRAWINGS.

6. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.

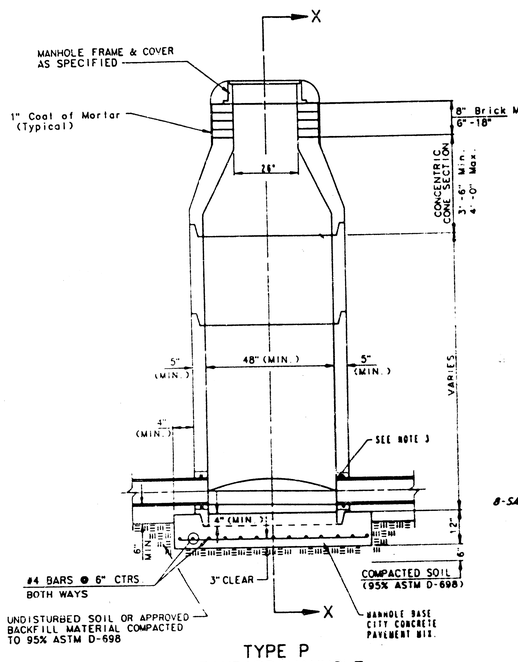
7. STANDARD SHALLOW MANHOLES TYPE "P" AND "C" SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH FOR THE TYPE AND DIAMETER INDICATED. ~~EXCAVATION EXCESS TO SUCH MANHOLE TYPE BID FOR PER LINEAL FOOT OF THE PIPE SHALL BE PAID FOR AT THE TYPE INDICATED.~~ ALL STANDARD SHALLOW MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.

CITY OF WICHITA, KANSAS
STANDARD SHALLOW MANHOLES
TYPE 'P' AND 'C'

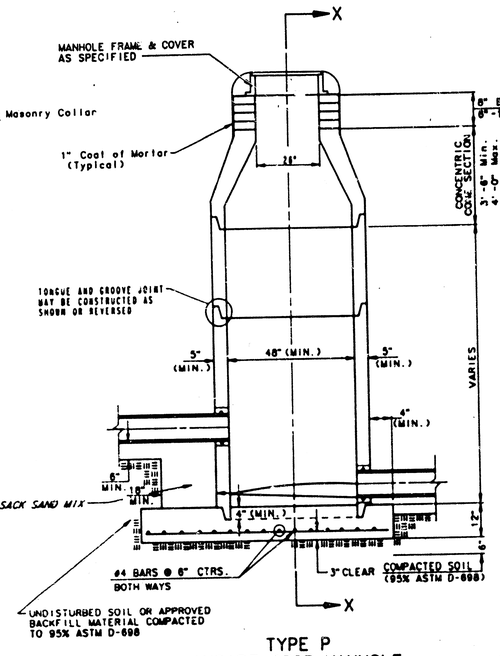
BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

FILMED FROM THE BEST AVAILABLE COPY....

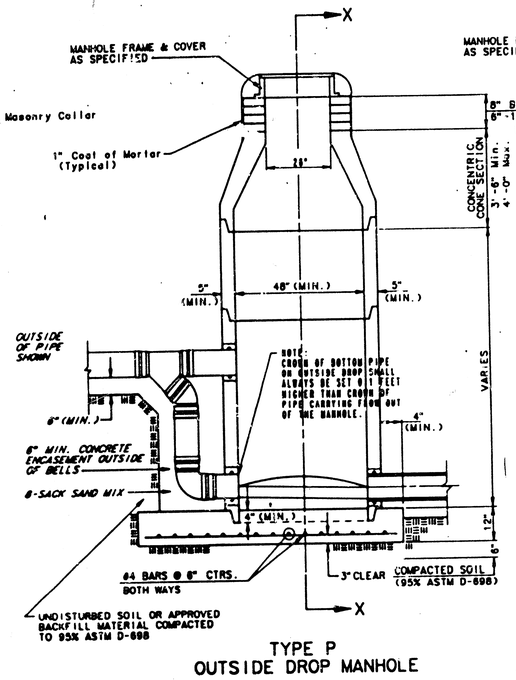
SEWER APPURTENANCES DETAILS
ADOPTED AS STANDARD DESIGN
BY
CITY OF WICHITA



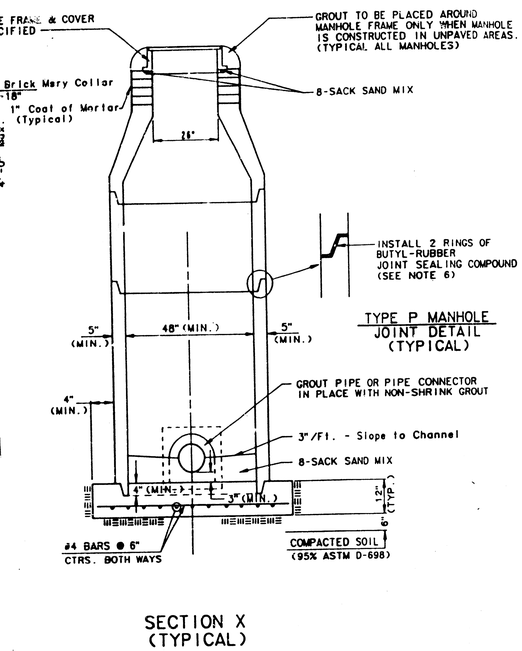
TYPE P
STANDARD MANHOLE



TYPE P
INSIDE DROP MANHOLE



TYPE P
OUTSIDE DROP MANHOLE



TYPE P MANHOLE
JOINT DETAIL
(TYPICAL)

SECTION X
(TYPICAL)

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 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 THEWEC SERIES 66 HI-BUILD (EPOXOLINE), DRY THICKNESS OF 8 MILS (MIN.)
5. EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 633 BITUMINUS 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 MEET 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. 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 4' 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 6" 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.

Revised: June 1, 1979

6/6

FILMED FROM THE BEST AVAILABLE COPY