CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBAK, CITY ENGINEER

STORM WATER SEWER NO. 299
(GOLDEN HILLS ADDITION)

CITY OF WICHITA PROJECT NO. 468-76-245-81507-000-000-001

INDEX OF SHEETS

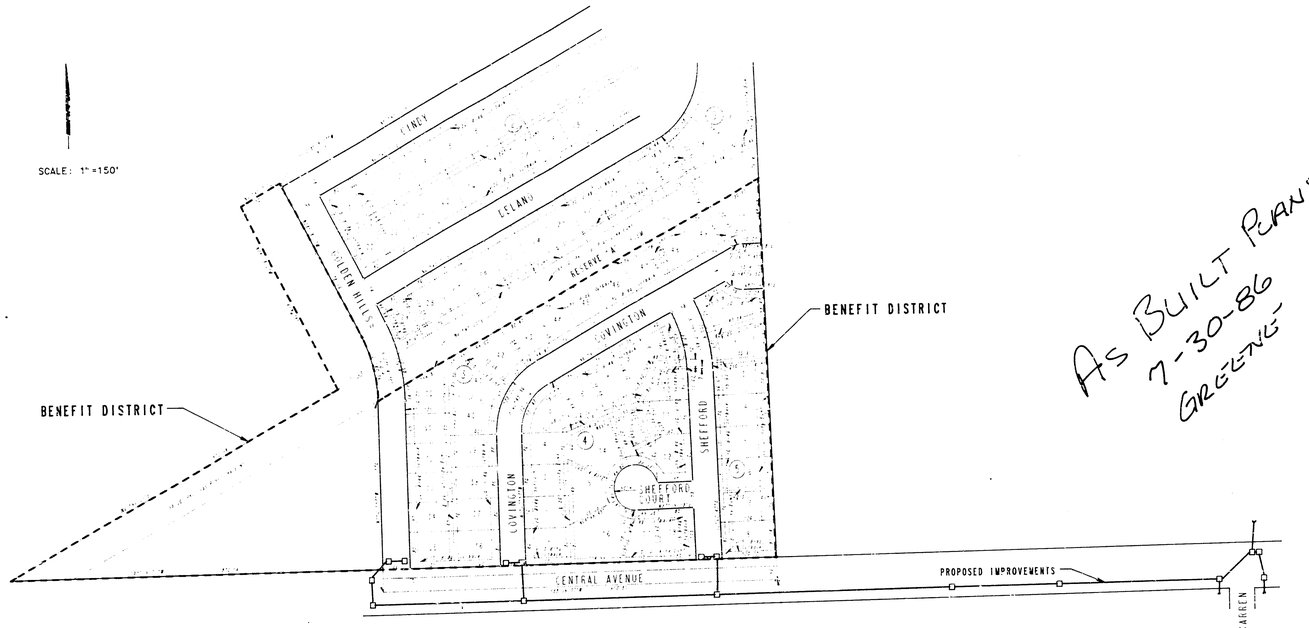
1. TITLE SHEET
2. LINE NO. 1-STA. 6+59 TO STA. 10+04.19
3. LINE NO. 1-STA. 10+04.19 TO STA. 12+00
4. LINE NO. 1-STA. 12+00 TO STA. 18+00
5. LINE NO. 1-STA. 18+00 TO STA. 24+00
6. LINE NO. 1-STA. 24+00 TO STA. 29+76.58
7. AUXILIARY PROFILES
8. STD. TYPE 1A CURB INLET (6" X 5'0" OPENING)
9. STD. TYPE 1A CURB INLET (6" X 10'0" OPENING)
10. STD. TYPE 1 CURB INLET (6" X 10'0" OPENING)
11. MANHOLE FRAME & COVER
12. CHANNEL & RIPRAP DETAILS
13. PROJECT CONSTRUCTION SIGN
14-15. CROSS-SECTIONS

PROJECT SURVEY CONTROL

VERTICAL DATUM: CITY OF WICHITA DATUM

DATUM BENCH MARK: CITY OF WICHITA STANDARD BENCH MARK DISC, S.E. COR. CENTRAL & 119TH ST. WEST
ELEV. = 156.93

SCALE: 1" = 150'



As Built Plans
7-30-86
Greene

APRIL, 1986

PLANS PREPARED BY
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

MICHAEL W. BERRY LICENSED 9989 KANSAS PROFESSIONAL ENGINEER

SURVEYED	DELAMETER, FREUND & ASSOCIATES, P.A.
PLOTTED	PAUSEWANG-P.E.C.
INKED	CAD
DESIGNED	BERRY-P.E.C.

SURVEYED UNDER PROJECT NO. 472-76-245-51096-000-000-001

UTILITY SERVICE LINES, POLES, VALVE BOXES, METERS, AND ETC. ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO OR DURING CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.

THE CONTRACTOR SHALL NOTIFY K.G.& E. AND/OR SOUTHWESTERN BELL AT LEAST 24 HOURS IN ADVANCE OF COMMENCMENT OF WORK ADJACENT TO ANY OF THEIR UNDERGROUND FACILITIES.

PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL UNEARTH THE EXISTING TELEPHONE CONDUIT(S) AT LINE NO. 1 STA. 9+15, LINE NO. 1A STA. 0+20, LINE NO. 1C STA 0+45, LINE NO. 1D STA. 0+45, AND LINE NO. 1E STA. 0+42 TO VERIFY THE ELEVATION OF THE CONDUIT(S) AT EACH LOCATION. IF THE ACTUAL ELEVATION VARIES BY MORE THAN 0.5 FOOT, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO DETERMINE IF ADJUSTMENTS IN LOCATION OR ELEVATION OF THE PROPOSED IMPROVEMENTS WILL BE REQUIRED TO AVOID CONFLICT WITH THE TELEPHONE CONDUIT(S). ANY ALIGNMENT RELOCATION(S) IN PLAN OR PROFILE DIRECTED BY THE ENGINEER TO AVOID CONFLICT WITH THE TELEPHONE CONDUIT(S) SHALL BE PERFORMED AT NO ADDITIONAL COST.

ALL DISTURBED AREAS WITHIN THE PERMANENT DRAINAGE EASEMENT LY. CENTRAL AVENUE STA 36+14 SHALL BE SEEDED, FERTILIZED AND MULCHED IN ACCORDANCE WITH CITY OF WICHITA STANDARD SPECIFICATIONS.

MATERIALS FOR ALL RIPRAP FOR THIS PROJECT SHALL BE NATURAL STONE CONFORMING TO THE REQUIREMENTS OF THE CITY OF WICHITA STANDARD SPECIFICATIONS. GROUTING OF STONE RIPRAP SHALL NOT BE PERFORMED. NEITHER THE BROKEN CONCRETE, FABRIC ENVELOPE, NOR THE PRE-MIXED DRY PACKAGED CONCRETE BAG ALTERNATES WILL BE ALLOWED.

EXCESS EXCAVATED MATERIAL FROM CHANNEL AND/OR STORM SEWER EXCAVATION SHALL BE STOCKPILED AT LOCATIONS WITHIN THE CENTRAL AVENUE RIGHT-OF-WAY OR TEMPORARY EASEMENTS AS DESIGNATED BY THE ENGINEER TO BE USED IN CONSTRUCTION OF THE STREET IMPROVEMENTS.

RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND PAVEMENT REMOVAL WHICH IS TO BE WASTED SHALL BE DISPOSED ON 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 ENTRANCE AND CROSS ROAD PIPE CONFLICTING WITH CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR AND AS OTHERWISE NOTED ON THE PLANS. REMOVAL OF SUCH PIPES SHALL CONFORM TO THE APPLICABLE SECTION OF THE STANDARD SPECIFICATIONS. SUCH PIPE SHALL BE REPLACED WHERE NECESSARY TO MAINTAIN DRAINAGE.

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 OR A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH STATE LAWS.

TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY OR EASEMENTS WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.

THE STORM WATER SEWER CONTRACTOR SHALL SO SCHEDULE THIS WORK SO AS TO MAINTAIN A MEANS OF ACCESS FOR LOCAL TRAFFIC AT ALL TIMES TO GOLDEN HILLS ON THE NORTH AND KARREN LANE TO THE SOUTH, AS WELL AS TO RESIDENCES AT 11596 W. CENTRAL AND AT THE SE CORNER OF KARREN AND CENTRAL. ALSO, ACCESS SHALL BE PROVIDED AT EITHER COVINGTON (N) OR SHEFFORD AT ALL TIMES.

CONSTRUCTION TRAFFIC CONTROL DEVICES, INCLUDING SIGNS, BARRICADES AND/OR CHANNELIZING DEVICES, SHALL BE MAINTAINED BY THE CONTRACTOR ADJACENT TO HIS WORK AREA(S) IN ACCORDANCE WITH THE WICHITA BARRICADE MANUAL.

UTILITIES

KANSAS GAS & ELECTRIC
1900 E. CENTRAL - 67214
DON MORGAN - 261-6434

SOUTHWESTERN BELL TELEPHONE
154 N. BROADWAY 67202
BOB ALLEY - 268-2245

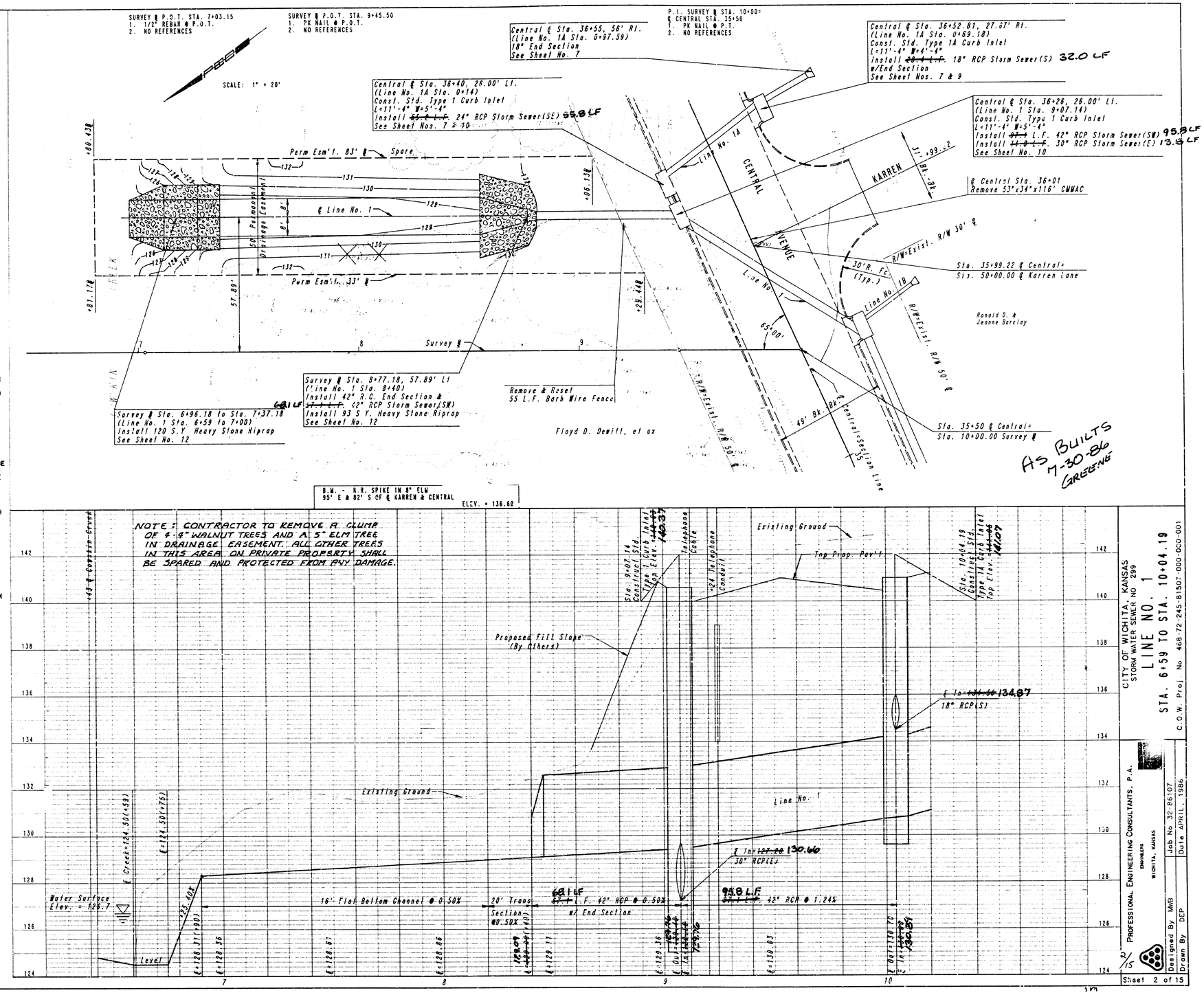
WICHITA WATER DEPARTMENT
455 N. MAIN - 67202
F. E. WITHROW, JR. - 268-4217

WICHITA SEWER MAINT. DIV.
455 N. MAIN - 67202
DARRELL BREWER - 268-4210

MULTIMEDIA CABLEVISION
701 E. DOUGLAS - 67202
DON SHUE - 269-2336

KPL GAS SERVICE
1021 E. 26TH ST. NO. 67219
JAMES SHIMP - 263-7511

ARKLA GAS CO.
1630 S. BAEHR - 67209
JERRY WATKINS - 942-8350

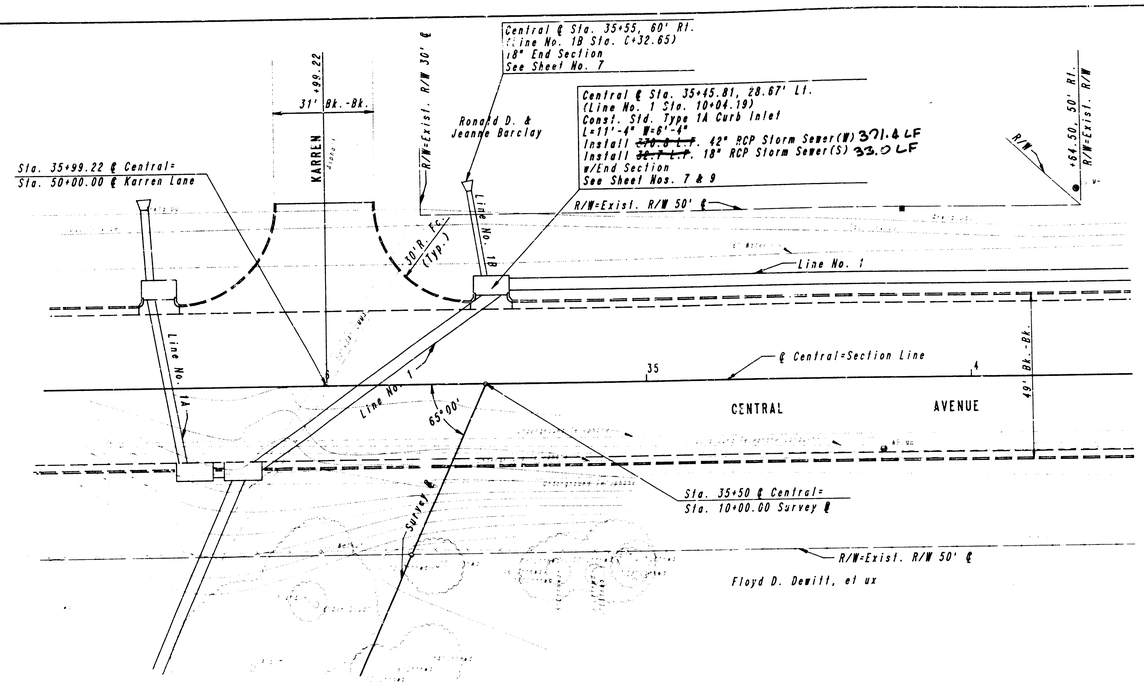


AS BUILTS
M-30-86
GREENE

CITY OF WICHITA, KANSAS
STORM WATER SEWER NO. 299
LINE NO. 1
STA. 6+59 TO STA. 10+04.19
C.O.W. Proj. No. 468-72-245-81507 000 000-001

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS
Job No. 32-86107
Designed By MAB
Drawn By DEP
Date APRIL, 1986

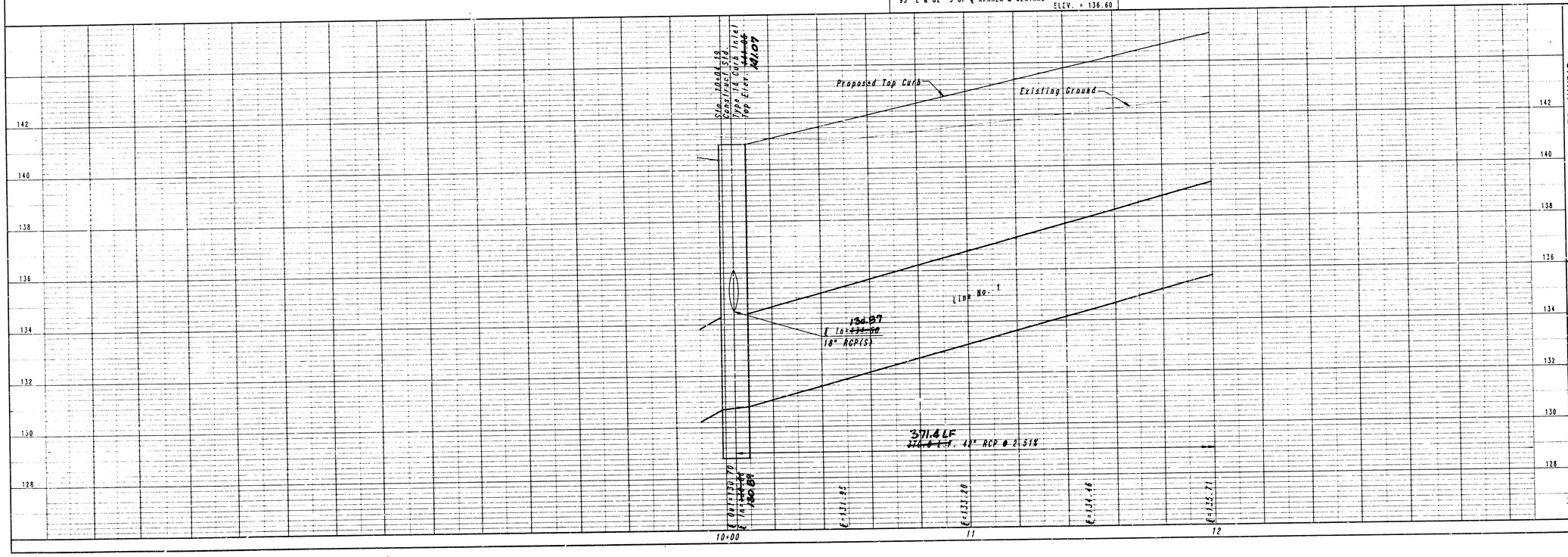
Sheet 2 of 15



SCALE: 1" = 20'

As Built
7-30-86
Greene

B.M. - R.R. SPIKE IN 8" ELM
95' E & 82' S OF ℄ KARREN & CENTRAL
ELEV. = 136.60



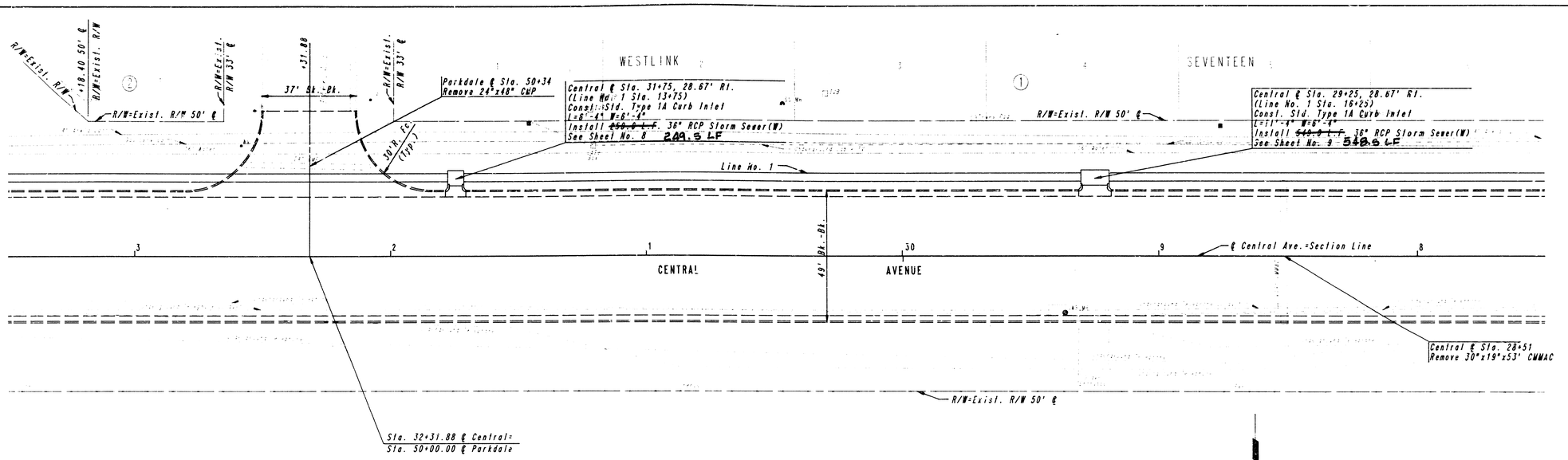
CITY OF WICHITA, KANSAS
STORM WATER SEWER NO. 299
LINE NO. 1
STA. 10+04.19 TO STA. 12+00
C.O.W. Proj. No. 468-72-245-81507-000-001

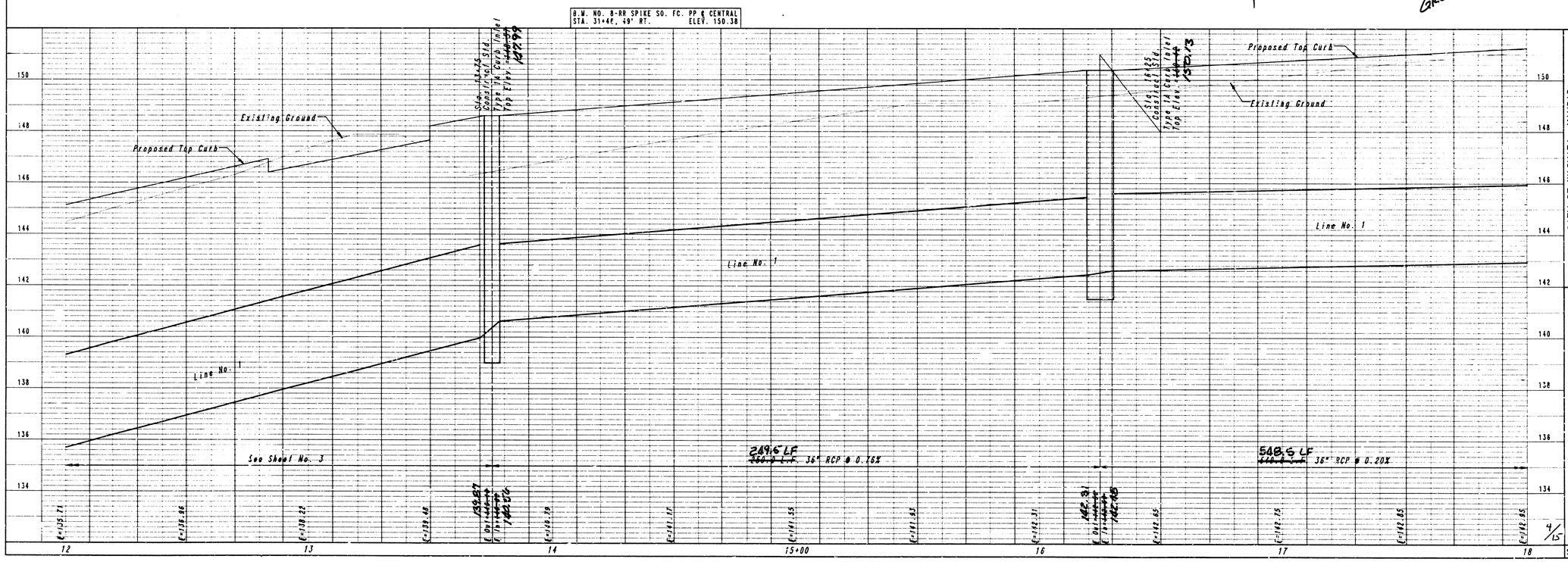
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

Designed By MRB
Drawn By DEP
Job No. 32-86107
Date APRIL, 1986

3/5

Sheet 3 of 15





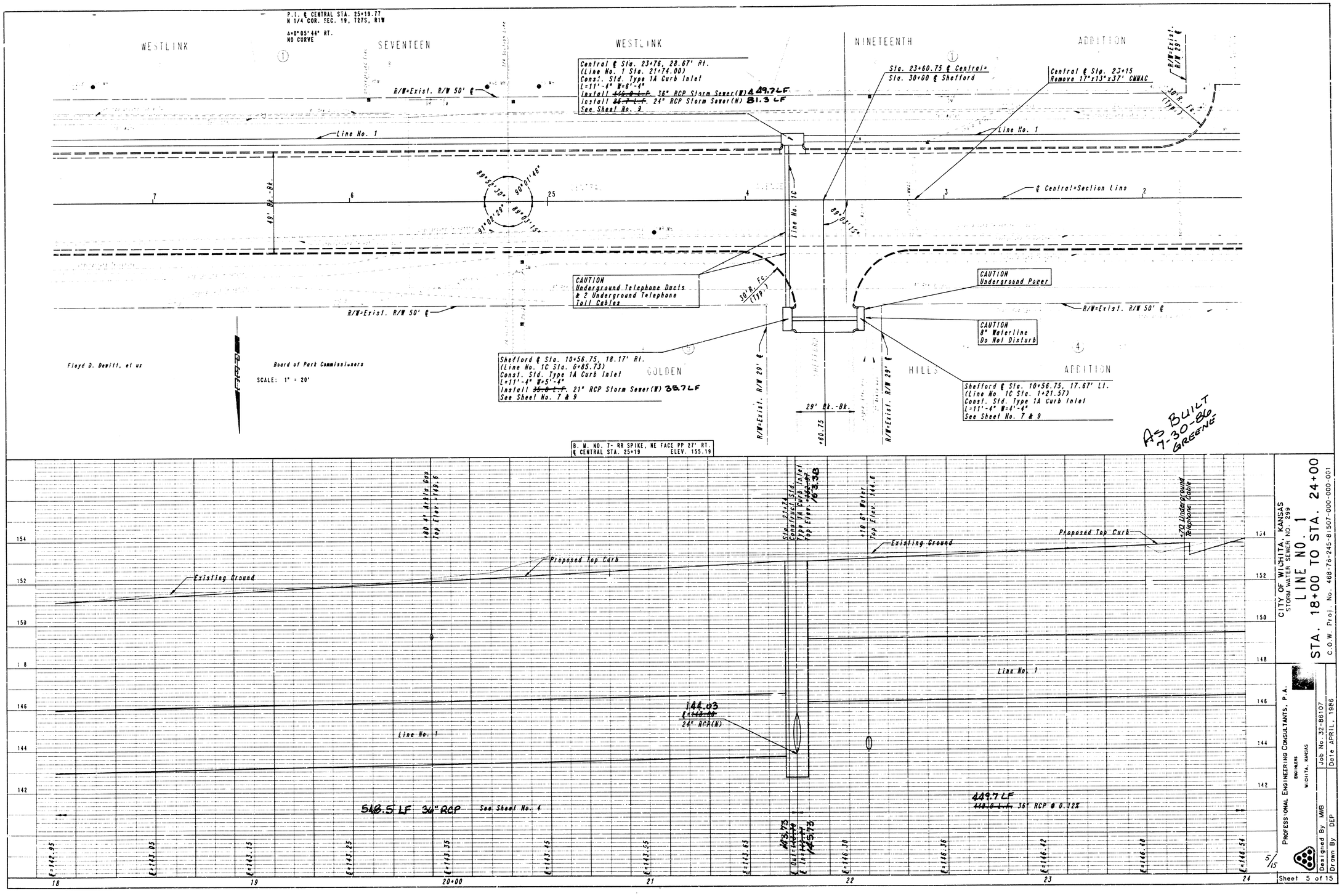
CITY OF WICHITA, KANSAS
STORM WATER SEWER NO. 299
LINE NO. 1
STA. 12+00 TO STA. 18+00
C.O.W. Proj. No. 468-76-245-81507-000-000-001

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

Designed By MWS | Job No. 32-86107
Drawn By DEP | Date APRIL, 1986

4/15

Sheet 4 of 15



CITY OF WICHITA, KANSAS
STORM WATER SEWER NO. 299

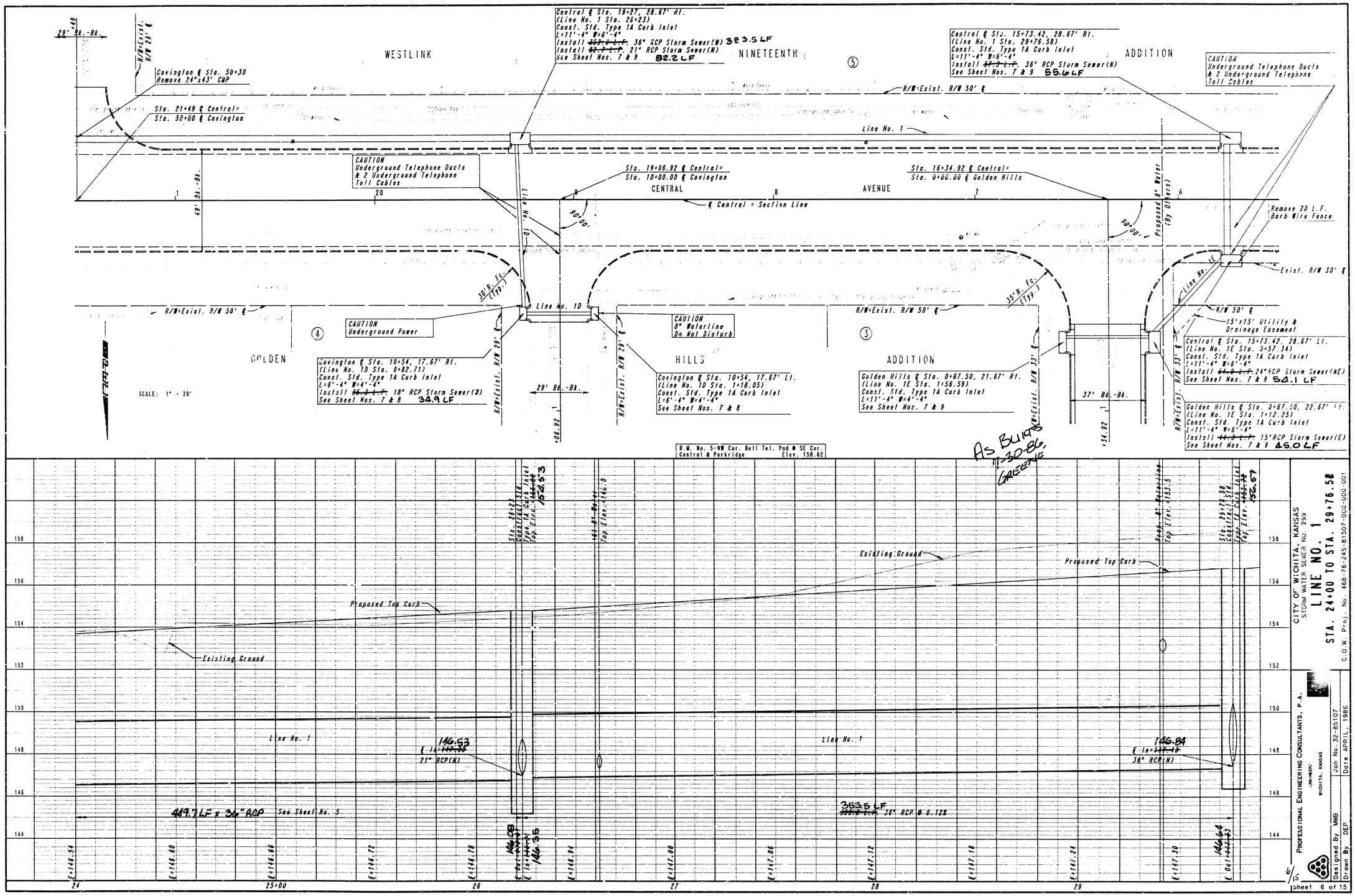
LINE NO. 1
STA. 18+00 TO STA. 24+00

C.O.W. Proj. No. 468-76-245-81507-000-000-001

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

Designed By MWB
Drawn By DEP
Job No. 32-86107
Date APRIL, 1986

Sheet 5 of 15



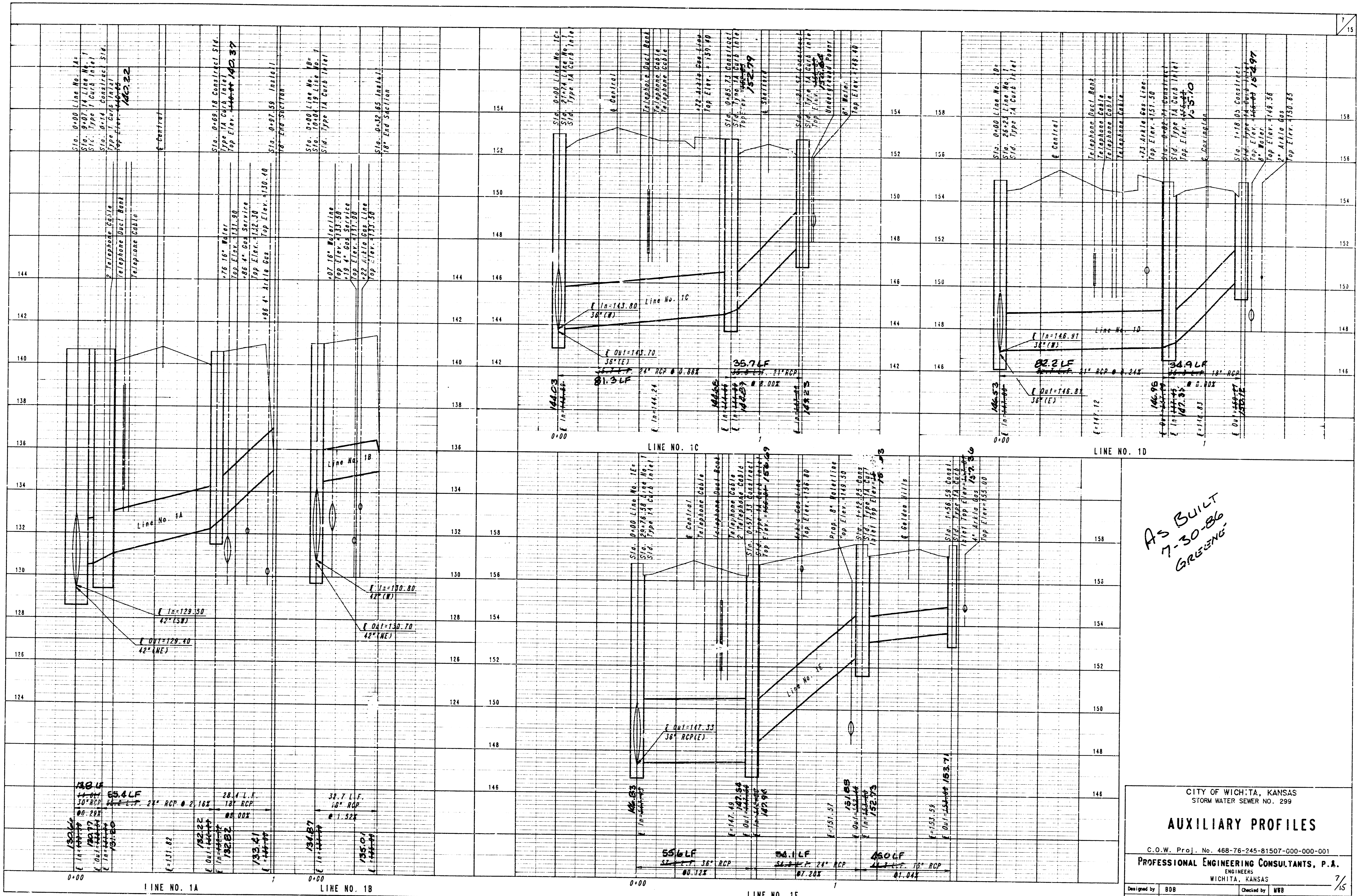
CITY OF WICHITA, KANSAS
STORM WATER SEWER NO. 299
LINE NO. 1
STA. 24+00 TO STA. 29+76.58
C.O.W. Proj. No. 468-76-245-81507-000-000-001

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
WICHITA, KANSAS

Designed By MAB	Job No. 32-65107
Drawn By DEP	Date APRIL, 1986

6/15

Sheet 6 of 15



CITY OF WICHITA, KANSAS
STORM WATER SEWER NO. 299

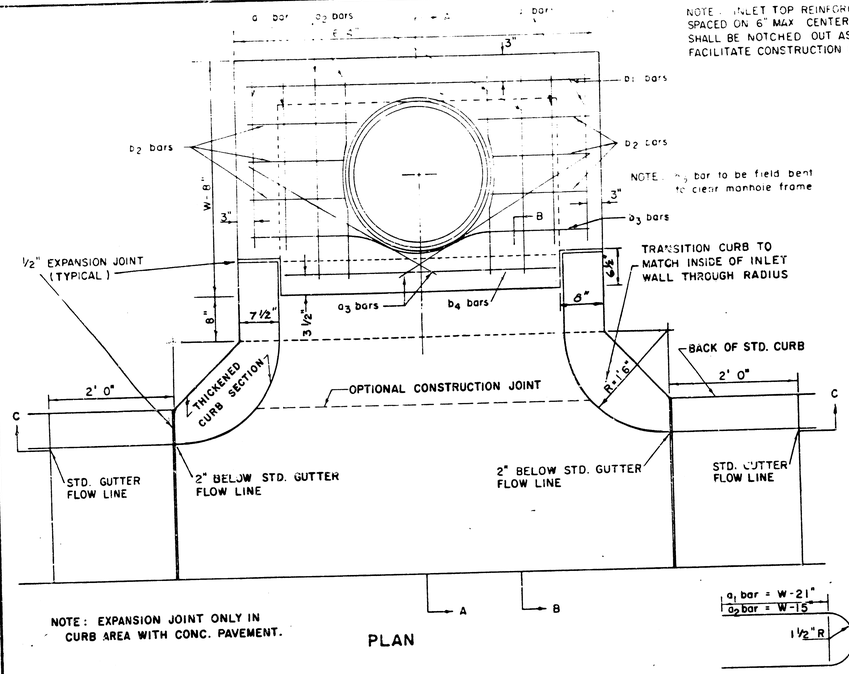
AUXILIARY PROFILES

C.O.W. Proj. No. 468-76-245-81507-000-000-001

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

Designed by	BDB	Checked by	MWB
Drawn by	DEP	Date APRIL, 1986	Job No. 85107

PROJECT NO.	SHEET NO.	TOTAL SHEETS
468-76-245-81307-000-000-001	8	15



NOTE: EXPANSION JOINT ONLY IN CURB AREA WITH CONC. PAVEMENT.

PLAN

NOTE: INLET TOP REINFORCING SHALL BE SPACED ON 6" MAX CENTERS. INLET LIDS SHALL BE NOTCHED OUT AS INDICATED TO FACILITATE CONSTRUCTION OF CURB.

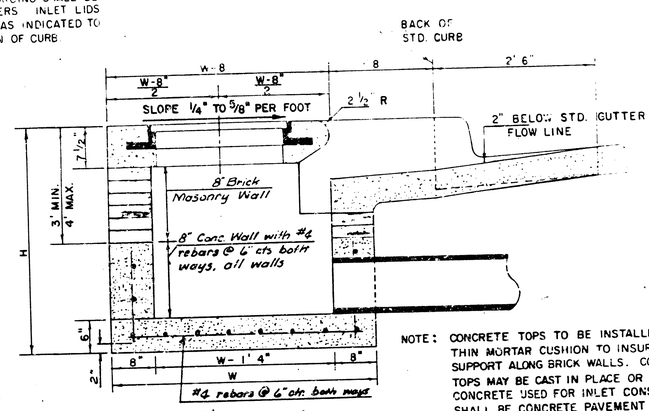
BENDING DIAGRAM

STEEL SCHEDULE

BAR		a_1	a_2	a_3*	b_1 W=4'4"	W=5'4"	W=6'4"	W=7'4"	W=8'4"	b_2	b_3	b_4	WT. LBS.
NUMBER		4	4	2	1	3	5	7	9	6	1	1	
SIZE		#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#6	
LENGTH	W=4'4"	5'7"	6'7"	4'0"	6'1"	–	–	–	–	1'9"	6'2"	4'8"	60±
	W=5'4"	7'7"	8'7"	5'0"	–	6'1"	–	–	–	1'9"	6'2"	4'8"	81±
	W=6'4"	9'7"	10'7"	6'0"	–	–	6'1"	–	–	1'9"	6'2"	4'8"	101±
	W=7'4"	11'7"	12'7"	7'0"	–	–	–	6'1"	–	1'9"	6'2"	4'8"	121±
	W=8'4"	13'7"	14'7"	8'0"	–	–	–	–	6'1"	1'9"	6'2"	4'8"	141±

* NOTE: a_3 BARS TO BE PLACED APPROX. 2" BELOW TOP OF INLET COVER

STANDARD CURB INLET PRECAST TOPS			
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4' 4"	3'8"x 6'4" x7 1/2"	21" & SMALLER	0.38 ±
5' 4"	4'8"x 6'4" x7 1/2"	24" & 30"	0.51 ±
6' 4"	5'8"x 6'4" x7 1/2"	36" & 42"	0.64 ±
7' 4"	6'8"x 6'4" x7 1/2"	48" & 54"	0.77 ±
8' 4"	7'8"x 6'4" x7 1/2"	60" & 66"	0.90 ±



SECTION A-A

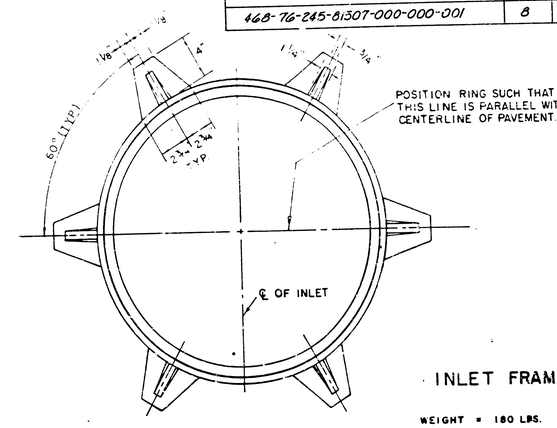
NOTE: CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK WALLS. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL BE CONCRETE PAVEMENT MIX.

NOTE: CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN W = 6'4" AND H = 7'0" OR LESS.

ADDITIONAL CURB AND GUTTER CONSTRUCTION NECESSARY TO CONNECT SET-BACK INLET TO PAVEMENT WILL BE PAID FOR AT THE UNIT PRICE BID FOR EACH INLET HOOKUP.

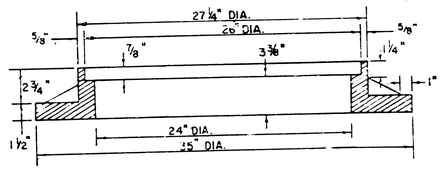
INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.

THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.

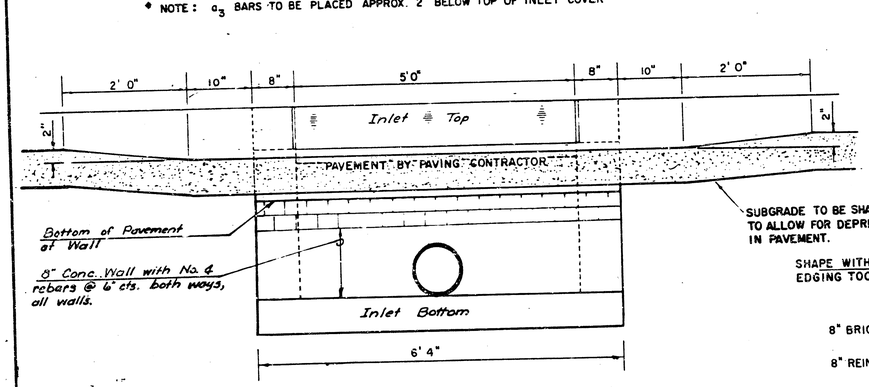


INLET FRAME

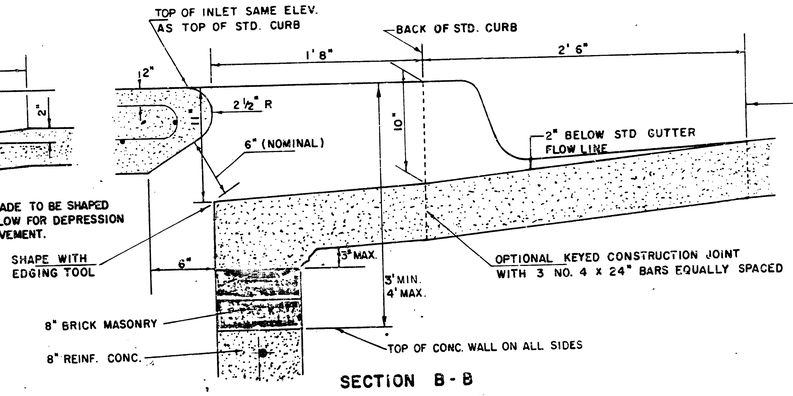
WEIGHT = 180 LBS.



SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.



SECTION C-C



SECTION B-B

REVISED 12-21-1984

DETAIL STANDARD TYPE IA CURB INLET

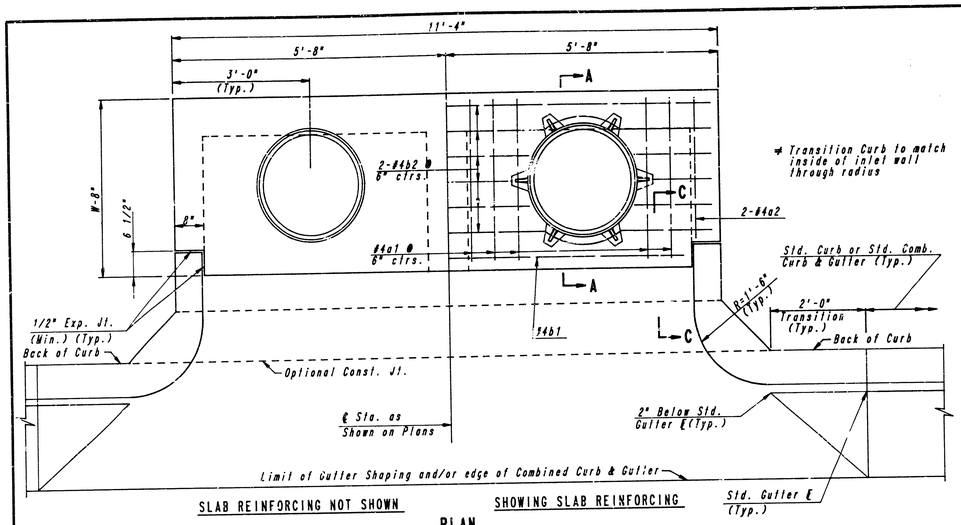
CITY OF WICHITA, KANSAS

INLET OPENING = 6" × 5' 0"

JUNE 1984

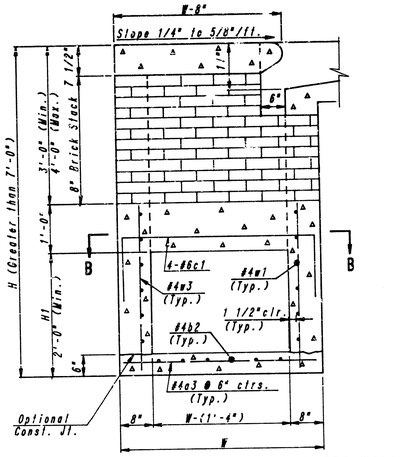
8/15

PROJECT NO.	SHEET NO.	TOTAL SHEETS
468-76-245-81507-000-000-001	9	15

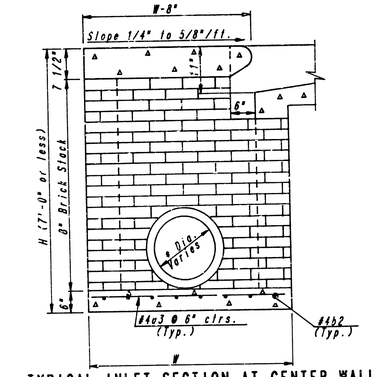


SLAB REINFORCING NOT SHOWN — SHOWING SLAB REINFORCING

PLAN

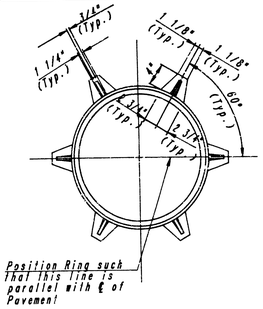


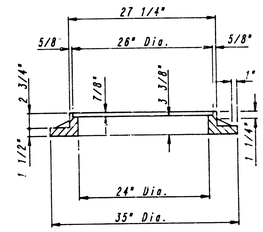
TYPICAL INLET SECTION AT CENTER WALL
(REINFORCED CONCRETE WALLS)



TYPICAL INLET SECTION AT CENTER WALL
(MASONRY WALLS)

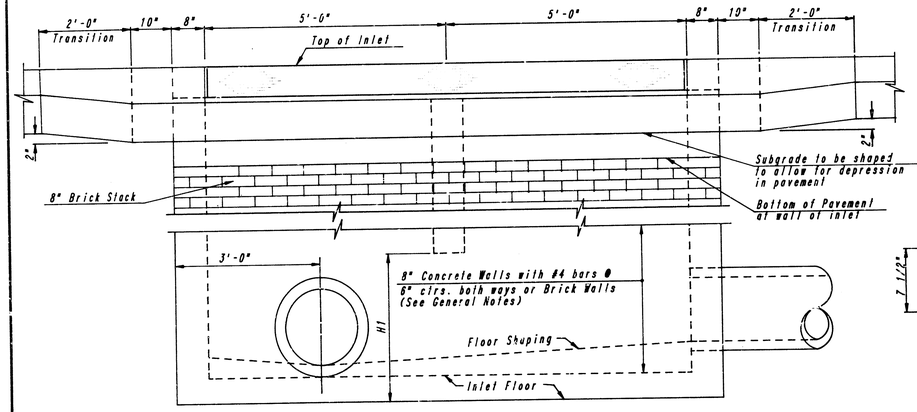
* A center wall opening shall be provided by means of a section of reinforced concrete pipe. The minimum diameter used shall be that of the outlet pipe.



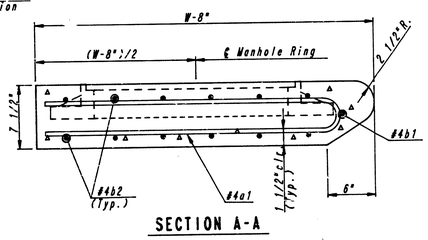


CAST IRON INLET FRAME
Wt.=180 lbs.

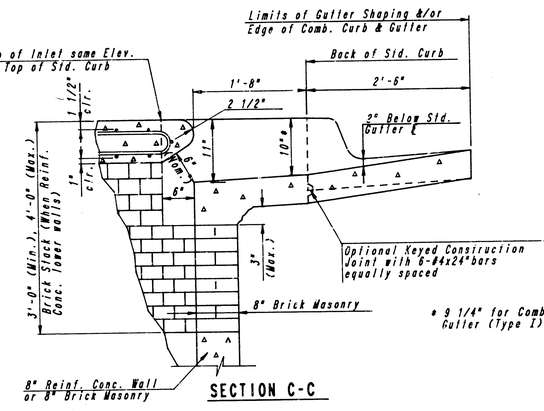
See City of Wichita Standard Manhole Frame and Cover Detail Sheet for Cover Details to be used with Inlet Frame.



ELEVATION

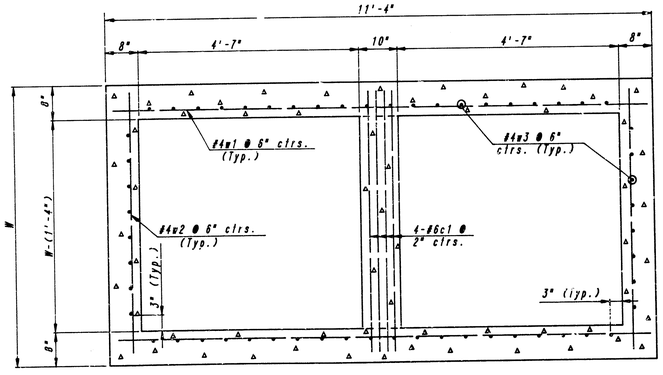


SECTION A-A



SECTION C-C

* 9 1/4" for Combined Curb & Gutter (Type I)



SECTION B-B

SLAB AND FLOOR REINFORCING

		W=4'-4"		W=5'-4"		W=6'-4"		W=7'-4"		W=8'-4"	
MARK	SIZE	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
a1	#4	13	6'-7 1/4"	13	8'-7 1/4"	13	10'-7 1/4"	13	12'-7 1/4"	13	14'-7-1/4"
a2	#4	2	6'-0"	2	8'-0"	2	10'-0"	2	12'-0"	2	14'-0"
a3	#4	20	4'-1"	20	5'-1"	20	6'-1"	20	7'-1"	20	8'-1"
b1	#4	1	9'-8"	1	9'-8"	1	9'-8"	1	9'-8"	1	9'-8"
*b2	#4	18	11'-1"	24	11'-1"	30	11'-1"	36	11'-1"	42	11'-1"

WALL REINFORCING

		W=4'-4"		W=5'-4"		W=6'-4"		W=7'-4"		W=8'-4"	
MARK	SIZE	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
c1	#6	4	6'-1"	4	7'-1"	4	8'-1"	4	9'-1"	4	10'-1"
w1	#4	①	11'-1"	①	11'-1"	①	11'-1"	①	11'-1"	①	11'-1"
w2	#4	②	4'-1"	②	5'-1"	②	6'-1"	②	7'-1"	②	8'-1"
w3	#4	②	③	②	③	②	③	②	③	②	③

* Field bend or cut Reinforcing as required for clearance
① 4(H1-6")+4 (H1-6") Rounded down to nearest 0.5'
② 40+4(W - 16") ③ H1+(9")

GENERAL NOTES

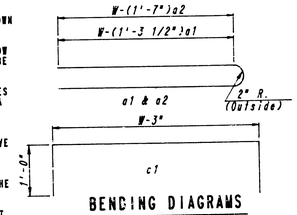
THE CONTRACTOR WILL BE REQUIRED TO CONSTRUCT 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN W=8'-4" OR LESS AND H=7'-0" OR LESS. WHEN W IS GREATER THAN 8'-4" AND H IS LESS THAN 7'-0", THE OUTSIDE WALLS BELOW THE BRICK STACK SHALL BE REINFORCED CONCRETE CONSTRUCTION AND THE CENTER WALL SHALL BE OF MASONRY CONSTRUCTION AS SHOWN FOR THE MASONRY WALL OPTION.

INLET INVERT SHALL BE SHAPED WITH 6 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF-CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.

CONCRETE SHALL BE CITY OF WICHITA STANDARD PAVING MIX. ALL EXPOSED EDGES SHALL BE FINISHED WITH AN EDGING TOOL. INLET TOPS ARE TO BE PLACED ON A THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK WALLS. CONCRETE TOPS MAY BE PRECAST OR CAST IN PLACE. INLET TOPS SHALL BE NOTCHED OUT AS INDICATED TO FACILITATE CONSTRUCTION OF CURB.
UNLESS OTHERWISE NOTED, ALL BARS ARE #4 ON 6" MAX. CENTERS AND SHALL HAVE A MINIMUM CLEARANCE OF 1-1/2". BARS SHALL BE FIELD BENT OR CUT TO CLEAR MANHOLE RINGS AND PIPE OPENINGS.

THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.

ADDITIONAL CURB AND/OR CURB AND GUTTER CONSTRUCTION NECESSARY TO CONNECT SET-BACK INLET TO PAVEMENT WILL BE PAID FOR AT THE UNIT PRICE BID PER EACH FOR "INLET HOOKUP".



BENDING DIAGRAMS

CITY OF WICHITA, KANSAS
STORM WATER SEWER NO. 299

DETAIL STANDARD TYPE IA CURB INLET

INLET OPENING = 8'X10'-0"

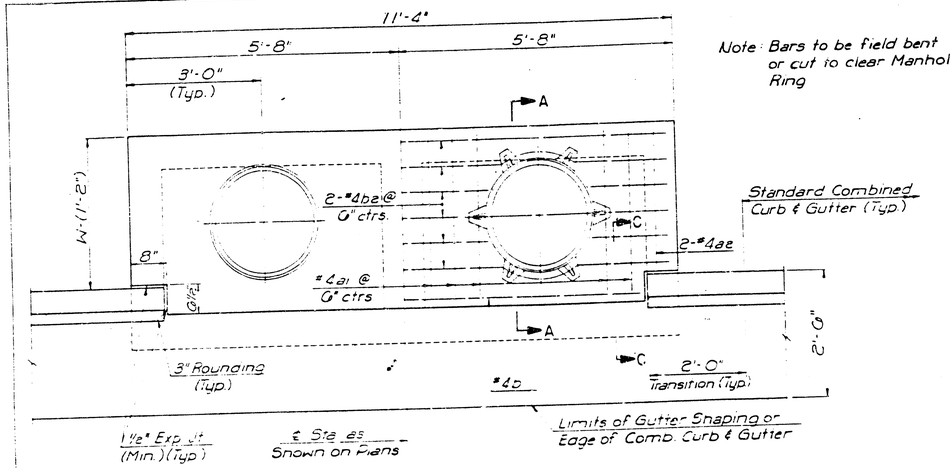
C.O.W. Proj. No. 468-76-245-81507-000-000-001

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

9/15

Designed by		Checked by	
Drawn by		Date April, 86	Job No. 86107

PROJECT NO.	SHEET NO.	TOTAL SHEETS
468-76-245-81507-000-000-001	10	15

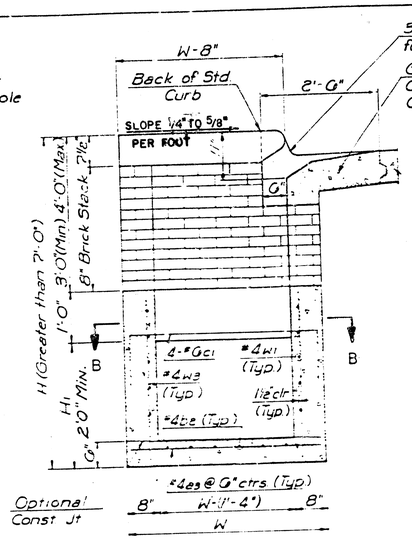


Note: Bars to be field bent or cut to clear Manhole Ring

SLAB REINFORCING NOT SHOWN

SHOWING SLAB REINFORCING

PLAN

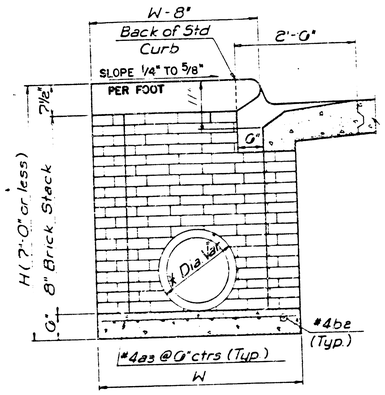


9" R Shaping on Curb Ends for Full Height of Opening

Gutter Pan by Paving Contractor (Unless Otherwise Noted)(Typ.)

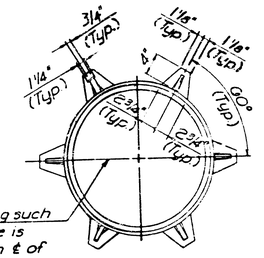
TYPICAL INLET SECTION AT CENTER WALL

(Reinforced Concrete Walls)

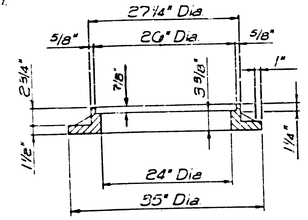


TYPICAL INLET SECTION AT CENTER WALL

(Masonry Walls)

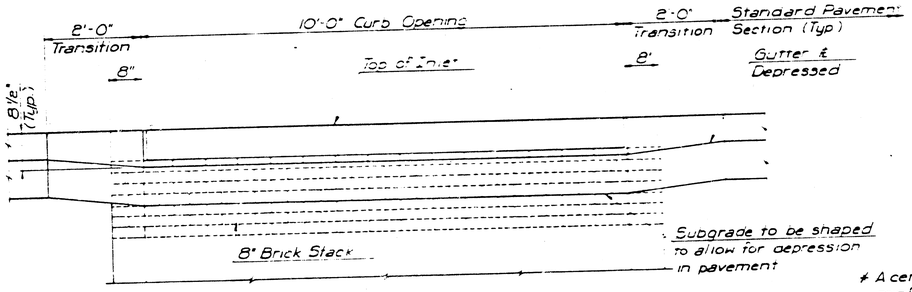


Position Ring such that this line is parallel with ℄ of Pavement

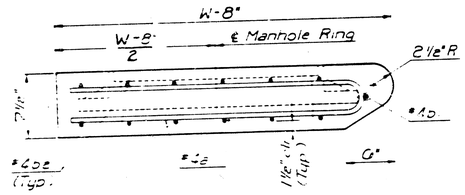


INLET FRAME (Weight = 180 LBS.)

SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.



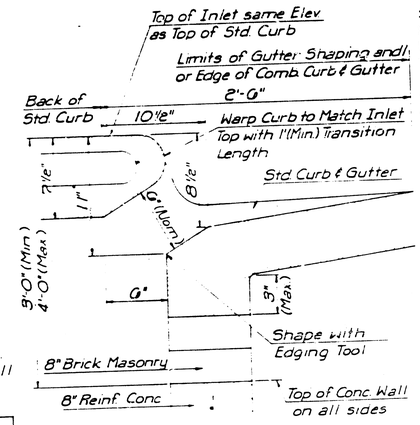
ELEVATION



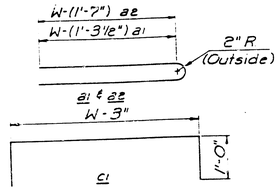
SECTION A-A

* A center wall opening shall be provided by means of a section of reinforced concrete pipe. The minimum diameter used shall be that of the outlet pipe

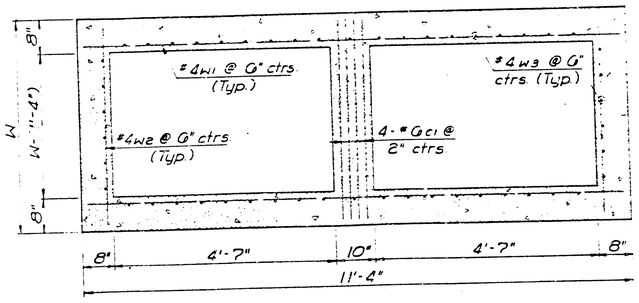
Note Concrete top to be installed on thin mortar cushion to insure full support along walls



SECTION C-C



BENDING DIAGRAMS



SECTION B-B

SLAB AND FLOOR REINFORCING

		W=4'-4"		W=5'-4"		W=6'-4"		W=7'-4"		W=8'-4"	
Mark	Size	No	Length	No	Length	No	Length	No	Length	No	Length
a1	#4	13	6'-7¼"	13	8'-7¼"	13	10'-7¼"	13	12'-7¼"	13	14'-7¼"
a2	#4	2	6'-0"	2	6'-0"	2	10'-0"	2	12'-0"	2	14'-0"
a3	#4	20	4'-1"	20	5'-1"	20	6'-1"	20	7'-1"	20	8'-1"
b1	#4	1	5'-8"	1	6'-8"	1	9'-8"	1	10'-8"	1	11'-1"
*be	#4	18	11'-1"	24	11'-1"	30	11'-1"	36	11'-1"	42	11'-1"

WALL REINFORCING

		W=4'-4"		W=5'-4"		W=6'-4"		W=7'-4"		W=8'-4"	
Mark	Size	No	Length	No	Length	No	Length	No	Length	No	Length
c1	#6	4	6'-1"	4	7'-1"	4	8'-1"	4	9'-1"	4	10'-1"
w1	#4	1	11'-1"	1	11'-1"	1	11'-1"	1	11'-1"	1	11'-1"
w2	#4	1	4'-1"	1	5'-1"	1	6'-1"	1	7'-1"	1	8'-1"
w3	#4	②	③	②	③	②	③	②	③	②	③

*: Field bend or cut Reinforcing as required for clearance

① 4 (H1-6") ② 40+4 (W-1) ③ H1-(10")

GENERAL NOTES

Concrete shall be C.O.W Standard Paving Mix All exposed edges shall be finished with an edging tool. Reinforcing Bars shall be field bent or cut to clear pipes. All bars are #4 bars at 6" Spacing and shall have a minimum clearance of 1½" unless otherwise noted. Floors of inlet shall be shaped with 6 Sack Sand Mix Concrete to increase hydraulic efficiency such that the inlet will be self cleaning between all inlet and/or outfall pipe(s). The Contractor will be required to construct 8" Brick Masonry Walls between the concrete inlet base and top on this inlet when H=7'-0" or less and W 6'-4" or less

THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.

REVISED 12-21-1984

DETAIL STANDARD TYPE I CURB INLET

INLET OPENING = 6" x 10'-0"

CITY OF WICHITA

M. E. LINDEBAK, CITY ENGINEER

OCTOBER 1984

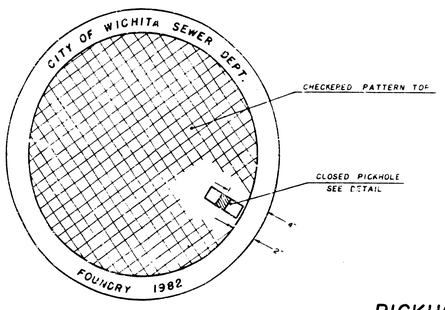
10/15

PROJECT NO.	SHEET NO.	TOTAL SHEETS
468-76-285-81507-000-000-001	11	15

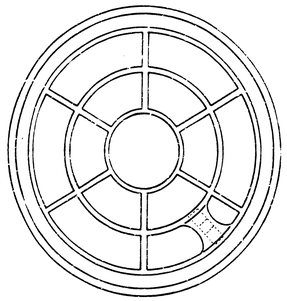
MANHOLE FRAME AND COVER DETAIL

ADOPTED AS STANDARD DESIGN
BY
City of Wichita, Kansas

MANHOLE COVER
Weight: 180 Lbs.

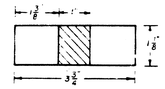


TOP VIEW

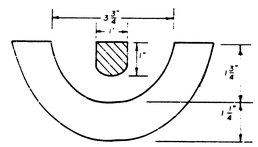


BOTTOM VIEW

PICKHOLE DETAIL

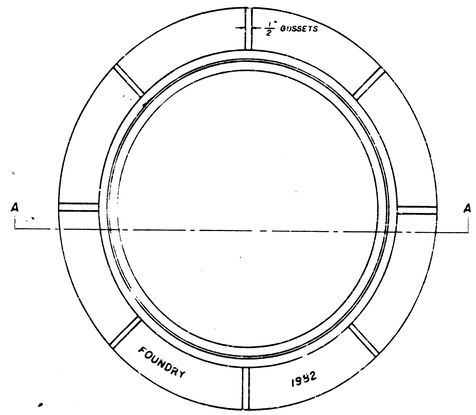


TOP VIEW

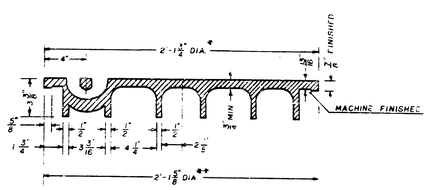


SECTION VIEW

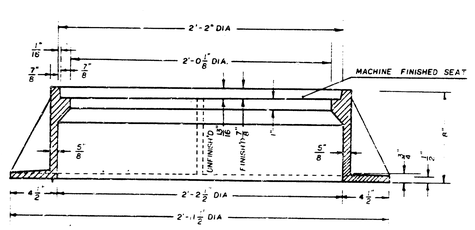
MANHOLE FRAME
Weight: 240 Lbs.



TOP VIEW



SECTION VIEW



SECTION A-A

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

GENERAL NOTES

1. MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. DESIGNATION A-48. DIMENSIONS AND WEIGHTS SHOWN ON THE DETAILED DRAWINGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.

2. MANHOLE CASTINGS SHALL BE COATED WITH AN ASPHALT PAINT RESULTING IN A SMOOTH, TOUGH AND TENACIOUS COATING WHICH IS NOT BRITTLE OR TACKY.

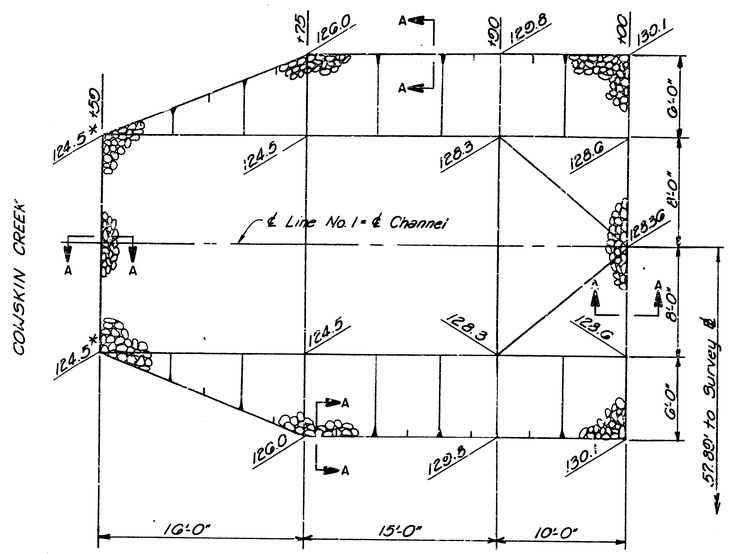
3. MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.

4. THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MACHINED SUCH THAT THESE SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.

5. THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO OWNERSHIP USING LETTERS AT LEAST 1" IN HEIGHT. THIS IDENTIFICATION SHALL BE "CITY OF WICHITA SEWER DEPARTMENT". THE WORD DEPARTMENT MAY BE ABBREVIATED. THE TEXTURE OF THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN A CHECKERED PATTERN DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH BLOCKOUTS SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE BLOCKOUT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWING. POSITIONING OF SMOOTH BLOCKOUTS AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWING.

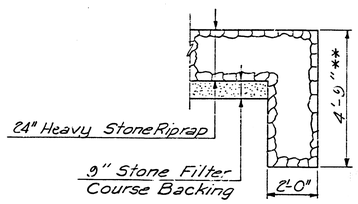
JNL DEC. 1981

PROJECT NO.	SHEET NO.	TOTAL SHEETS
4GB-7G-245-81507-000-000-001	12	13



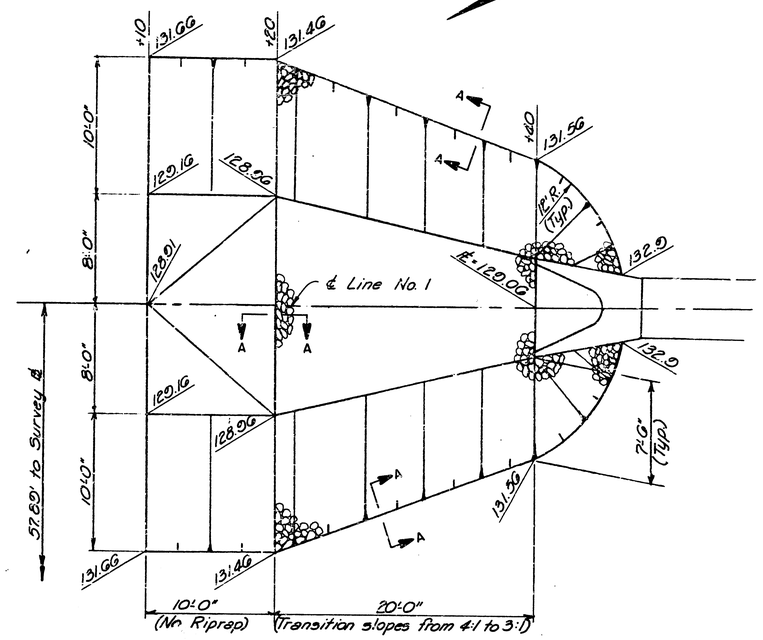
*Match Exist. Elevations

STA. 6+59 TO STA. 7+00 LINE NO. 1

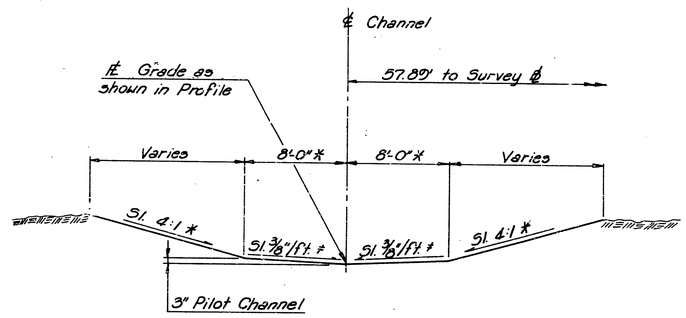


SECTION A-A
(TYPICAL)

** No additional payment will be made for additional thickness for toewalls.



STA. 8+20 TO STA. 8+47 LINE NO. 1



TYPICAL SECTION
STA. 6+59 TO STA. STA. 8+40 LINE NO. 1

* Varies thru transition section Sta. 8+20 to Sta. 8+40.

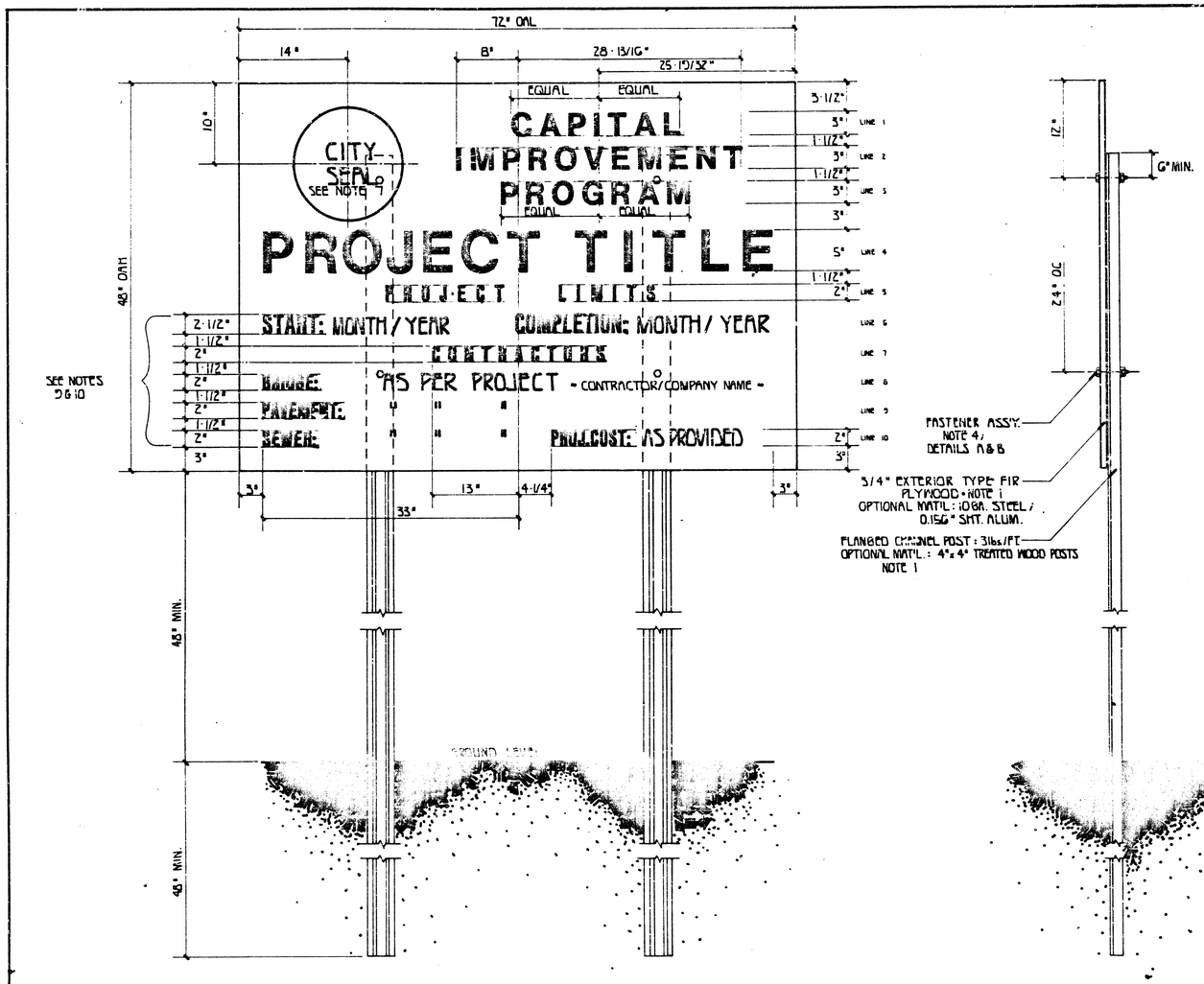
* Level Sta. 6+50 to Sta. 6+90 & Sta. 8+20 to Sta. 8+40.
Varies Sta. 6+90 to Sta. 7+00 & Sta. 8+10 to Sta. 8+20.

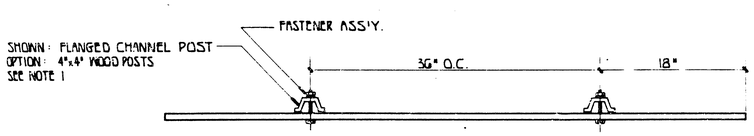
CHANNEL AND RIPRAP DETAILS

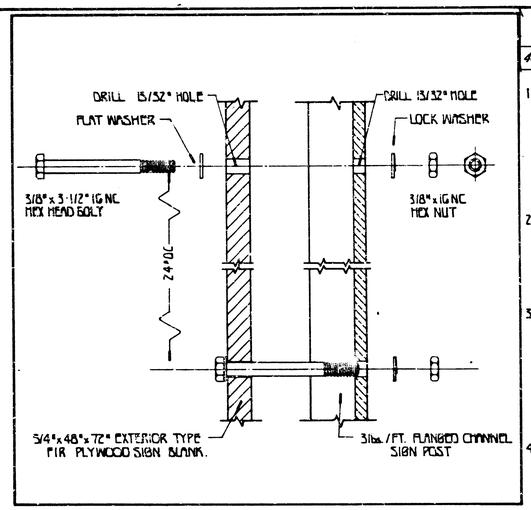
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

12/13

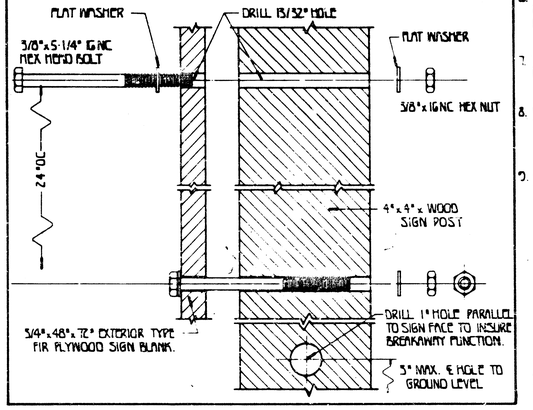
Designed by	M.W.B.	Checked by	
Drawn by	V.J.K.	Date April, 1986	Job No. 86107







DETAIL-A- PLYWOOD / FLANGED CHANNEL POSTS



DETAIL-B- PLYWOOD / 4"x4" WOOD POSTS

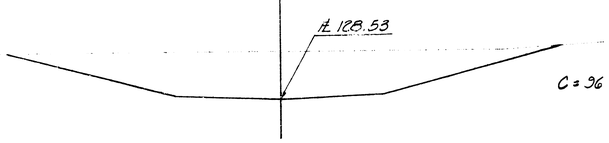
LINE 4 : CENTER AND ADJUST TO FIT (VARIABLE PROJECT TITLE) 5" UC
LINE 5 : " " " " " (VARIABLE PROJECT LIMITS DISCRIPTION) 2" UC

| | | |

100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50

℄ Line No. 1 Sta. 7+32.82

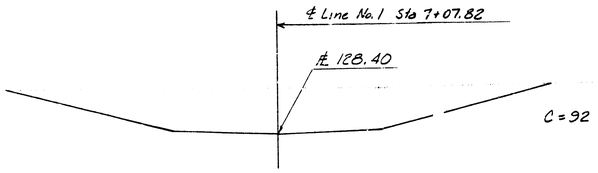
135
7+70
130



135
7+70
130

℄ Line No. 1 Sta 7+07.82

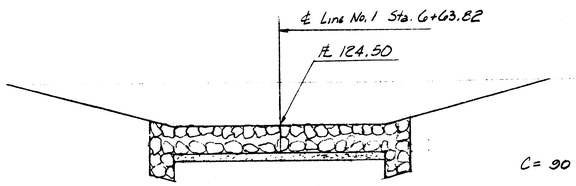
135
7+45
130



135
7+45
130

℄ Line No. 1 Sta. 6+63.82

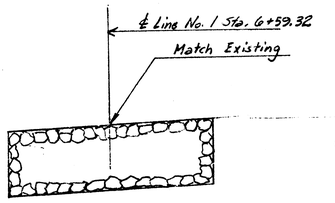
130
7+01
125



130
7+01
125

℄ Line No. 1 Sta. 6+59.32
Match Existing

130
125
6+96.50
120



130
125
6+96.50
120

130
6+64
125

130
6+64
125

130
6+54
125

130
6+54
125

Excavation 501 C.Y.
+10% 50
Total 551 C.Y.

SWS 299
Proj. No. 468-76-245-81507-000-000-001

14/15

100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50

Sh No 14 of 15

100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50

145
140
9+45
135
130
135
9+00
130
135
8+50
130
135
8+00
120

Line No. 1 Sta 8+40
End Channel
℄ = 129.06
C = 36

℄ Line No. 1 Sta. 8+12.82

℄ 128.93

C = 65

℄ Line No. 1 Sta. 7+62.82

℄ 128.68

C = 63

SWS 299
Proj No 468-76-845-81507-000-000-001

100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50

15/15

Sh No 15 of 15