SHEET NO.	TOTAL SHEETS
1	14

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

PRIVATE STREET IMPROVEMENTS

IN

REFLECTION RIDGE COMMERCIAL ADDITION
CITY OF WICHITA PROJECT NO. 472-76-245-80001-000-000-041

INDEX OF SHEETS

PROJECT SURVEY CONTROL

PROJECT DATUM: CITY OF WICHITA DATUM

DATUM BENCH MARK: RAILROAD SPIKE IN SW SIDE OF POWER POLE LOCATED 75' NORTH AND 50' EAST OF THE CENTERLINE INTERSECTION OF RIDGE ROAD AND 21ST STREET NORTH. ELEV. = 143.30

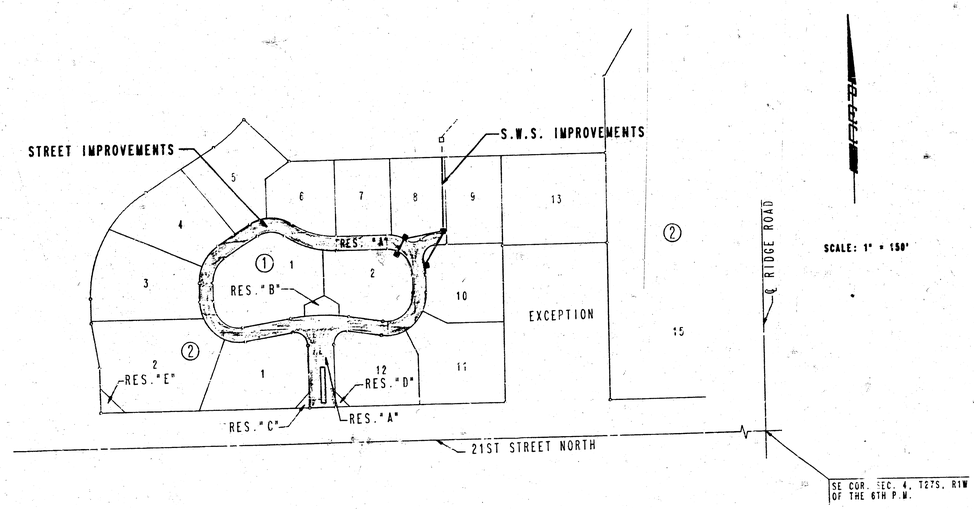
BENCH MARK: RAILROAD SPIKE IN SOUTH SIDE POWER POLE LOCATED APPROXIMATELY 1/4 MILE EAST OF TYLER ROAD ON NORTH SIDE OF 21ST STREET. ELEV. = 171.66

BENCH MARK: RAILROAD SPIKE IN EAST FACE OF 18" ELM LOCATED APPROXIMATELY AT STA. 107+75, 192' RIGHT OF CENTERLINE OF TEE TIME. ELEV. = 151.31

BENCH MARK: RAILROAD SPIKE IN SOUTH FACE OF 38" COTTONWOOD LOCATED APPROXIMATELY AT STA. 56+34.5, 23' LEFT OF CENTERLINE OF LAKE RIDGE COURT. ELEV. = 161.05

BENCH MARK: TOP OF T-POST (1' BELOW GROUND SURFACE) LOCATED 3' NORTH OF THE NORTHEAST CORNER OF THE FIRST MENNONITE CHURCH PROPERTY (NORTHWEST CORNER OF LOT 49, BLOCK 2, REFLECTION RIDGE ADDITION). ELEV. = 168.33

BENCH MARK: TOP OF T-POST (1' BELOW GROUND SURFACE) LOCATED 3' NORTH OF THE NORTHWEST CORNER OF THE FIRST MENNONITE CHURCH PROPERTY (APPROXIMATELY 1,315' WEST OF THE NW CORNER LOT 49, BLOCK 2, REFLECTION RIDGE ADDITION. ELEV. = 168.84



SCALE: 1" = 150'

GENERAL NOTES

ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF WICHITA SPECIFICATIONS UNLESS OTHERWISE NOTED ON THE PLANS.

UTILITY SERVICE LINES, POLES, VALVE BOXES, METERS, AND ETCETERA ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR OR UNLESS THE PLANS SPECIFICALLY IDENTIFY A UTILITY TO BE ADJUSTED BY ITS OWNER DURING CONSTRUCTION. EXISTING UTILITIES 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.

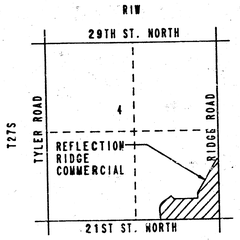
A SAW CUT OF AT LEAST ONE-HALF THE DEPTH OF EXISTING SURFACE COURSES OR ONE-FOURTH THE DEPTH OF THE EXISTING TOTAL PAVEMENT THICKNESS SHALL BE PROVIDED AT LOCATIONS WHERE PROPOSED CONSTRUCTION ABUTS AN EXISTING SURFACE COURSE OR PAVEMENT FOR WHICH PARTIAL REMOVAL OF THAT SURFACE OR PAVEMENT IS REQUIRED. SAWED JOINT TO FACILITATE REMOVAL WITHIN THREE (3) FEET OF EXISTING JOINTS WILL NOT BE PERMITTED AND FOR SUCH INSTANCES THE LIMITS OF REMOVAL SHALL EXTEND TO THE EXISTING JOINT. SUCH SAW CUTS WILL NOT BE PAID FOR DIRECTLY AND THIS COST SHALL BE CONSIDERED SUBSIDIARY TO REMOVAL OF THE SURFACE OR PAVEMENT.

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.

LIMITS OF EARTHWORK SHALL MATCH EXISTING GROUND ELEVATIONS AT THE EASEMENT LINE UNLESS OTHERWISE NOTED ON THE PLANS WITH A NEW FINISHED GRADE ELEVATION. WHEN A NEW FINISHED GRADE ELEVATION IS SHOWN, THE EARTHWORK SHALL EXTEND ONE FOOT BEYOND THE EASEMENT LINE AND THEN SLOPED UP OR DOWN USING PERMISSABLE SLOPES TO MATCH THE EXISTING GROUND SURFACE.

CONTRACTOR SHALL GIVE PROPERTY OWNERS ABUTTING THE PROJECT, WHOSE PROPERTY WILL BE LOWER THAN THE NEW FINISHED GRADE ELEVATIONS AT EASEMENT LINE, AN OPPORTUNITY TO UTILIZE EXCESS EXCAVATED MATERIAL FROM THE PROJECT TO REGRADE THEIR PROPERTY TO DRAIN TO THE NEW PAVEMENT. CONTRACTOR SHALL BE REQUIRED TO SPREAD AND COMPACT THE EXCESS MATERIAL TO KDOT TYPE 3 NR-30.

TRAFFIC ON 21ST STREET NORTH SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. ALL TRAFFIC CONTROL DEVICES, BARRICADES, WORKING SIGNALS, ETC. NECESSARY FOR THE PROPER SAFTEY OF THE PUBLIC SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR. ALL SUCH ITEMS SHALL CONFORM TO THE CITY OF WICHITA BARRICADE MANUAL, LATEST EDITION.



VICINITY MAP

CHARLES E. BROWN LICENSED 7581 KANSAS PROFESSIONAL ENGINEER

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 INCORPORATED INTO DEDICATED EASEMENTS OR THE PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR WITHOUT SUCH INSPECTION NOR SHALL ANY WORK BE CONCEALED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.

Active project 7-90

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA

SANITARY SEWERS _____
STORM SEWERS _____
DRIVEWAY APPROACHES _____
WATER MAINS _____
PAVING VRH 6/17/88

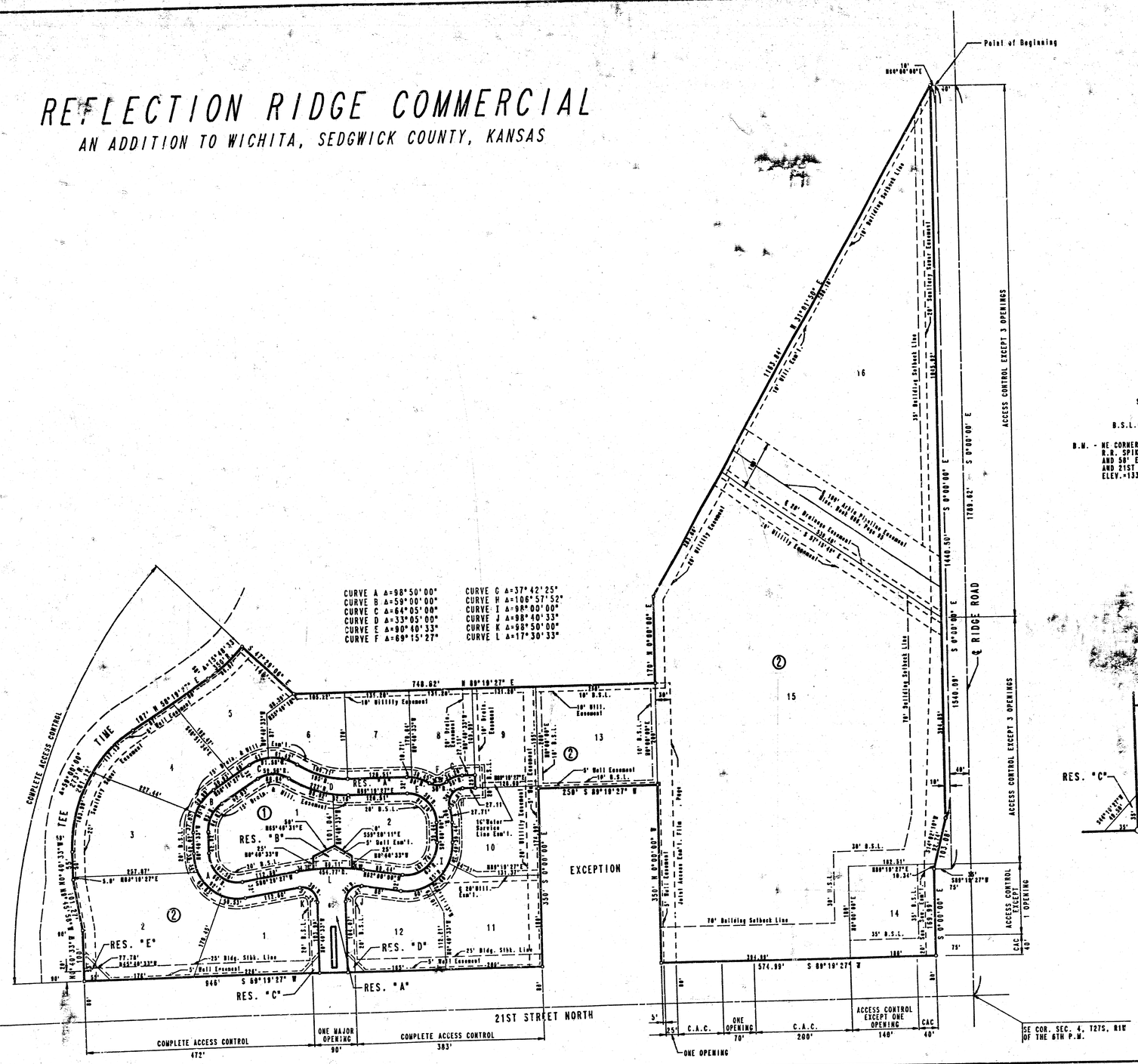
JUNE, 1988

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

PROJECT NO.	SHEET NO.	TOTAL SHEETS
472-76-245-80001-000-000-041	2	14

REFLECTION RIDGE COMMERCIAL

AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS

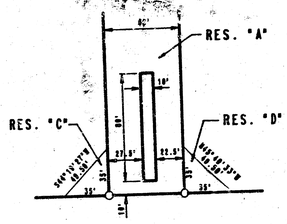


CURVE A Δ=98°50'00"
CURVE B Δ=59°00'00"
CURVE C Δ=64°05'00"
CURVE D Δ=33°05'00"
CURVE E Δ=90°40'33"
CURVE F Δ=69°15'27"
CURVE G Δ=37°42'25"
CURVE H Δ=106°57'52"
CURVE I Δ=98°00'00"
CURVE J Δ=98°40'33"
CURVE K Δ=98°50'00"
CURVE L Δ=17°30'33"

SCALE: 1" = 100'

o = IRON SET
B.S.L.=BUILDING SETBACK LINE

B.M. - NE CORNER RIDGE ROAD AND 21ST STREET NORTH
R.R. SPIKE IN SW SIDE OF POWER POLE 75' NORTH AND 50' EAST OF THE CENTERLINE OF RIDGE ROAD AND 21ST STREET NORTH.
ELEV.=1330.76 M.S.L.=143.30 CITY DATUM



REFLECTION RIDGE COMMERCIAL

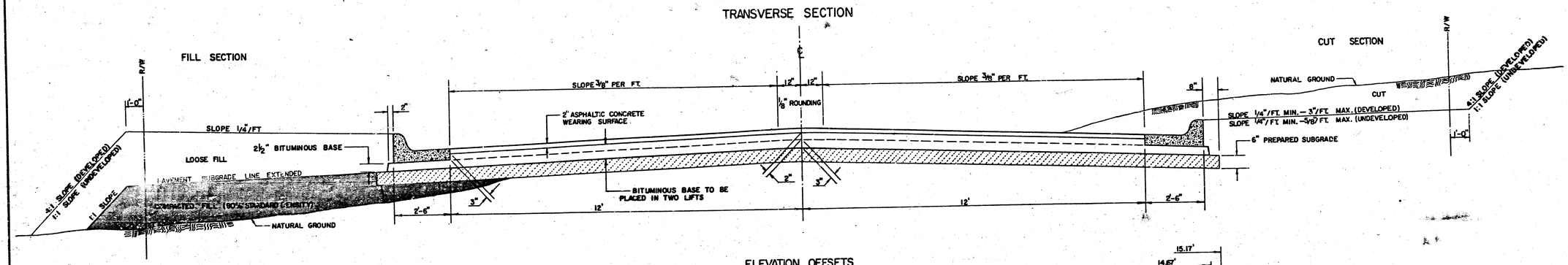
PLAT

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

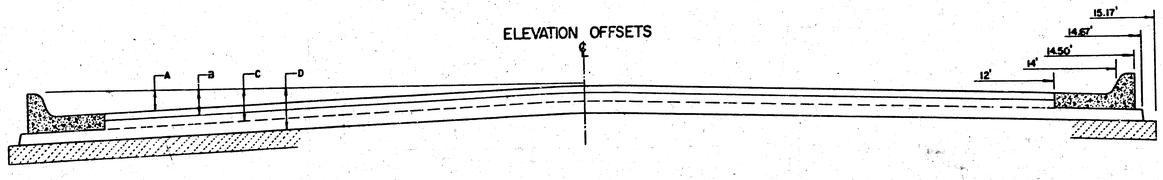
Designed by		Checked by	
Drawn by	DEP	Date APR., 1988	Job No. 88052

TYPICAL 29' PAVEMENT DETAILS

TRANSVERSE SECTION

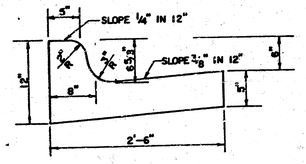


ELEVATION OFFSETS

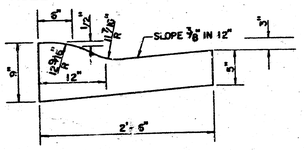


	DISTANCE FROM CENTERLINE (LT. & RT.)											
	0'	2'	4'	6'	7'	8'	10'	12'	14'	14.5'	14.67'	15.17'
A: TOP OF CURBS TO TOP OF SURFACE LIFT	0.13	0.18	0.24	0.30	0.33	0.36	0.43	0.49	—	—	—	—
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	0.30	0.35	0.41	0.47	0.50	0.53	0.60	0.66	—	—	—	—
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	0.47	0.52	0.60	0.68	0.71	0.75	0.83	0.90	0.98	1.00	1.01	—
D: TOP OF CURBS TO TOP OF SUBGRADE	0.72	0.77	0.84	0.91	0.94	0.98	1.05	1.12	1.19	1.21	1.21	1.23

COMBINED CURB & GUTTER



ROLL TYPE COMBINED CURB & GUTTER



GENERAL NOTES

1) THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).

2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 2 1/2" BITUMINOUS BASE.

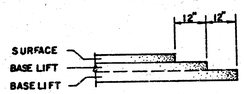
3) A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.

4) BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR LINE AND GRADE.

5) CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF ONE (1) FOOT FROM JOINTS IN PRECEDING LIFTS AND PLACED SO THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE OF THE TOP LIFT.

6) CONTRACTOR TO BID ONLY ONE SUBGRADE TREATMENT ALTERNATE WHEN ALTERNATES ARE PROVIDED IN THE PROPOSAL AND CONTRACT. THE ALTERNATE CHOSEN BY THE SUCCESSFUL BIDDER SHALL BE USED IN CONSTRUCTING THIS PROJECT.

TRANSVERSE CONSTRUCTION JOINTS



TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT JOINS EXISTING FLEXIBLE BASE PAVEMENT AS SHOWN BY THE DETAIL. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION OF THE TRANSVERSE JOINT SHALL BE INCLUDED IN THE BID PRICE FOR SQUARE YARDS 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).

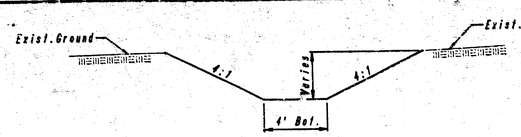
7 INCH RESIDENTIAL ASPHALTIC CONCRETE PAVEMENT WITH 5 INCH BITUMINOUS BASE

CITY OF WICHITA, KANSAS

PROJECT NUMBER

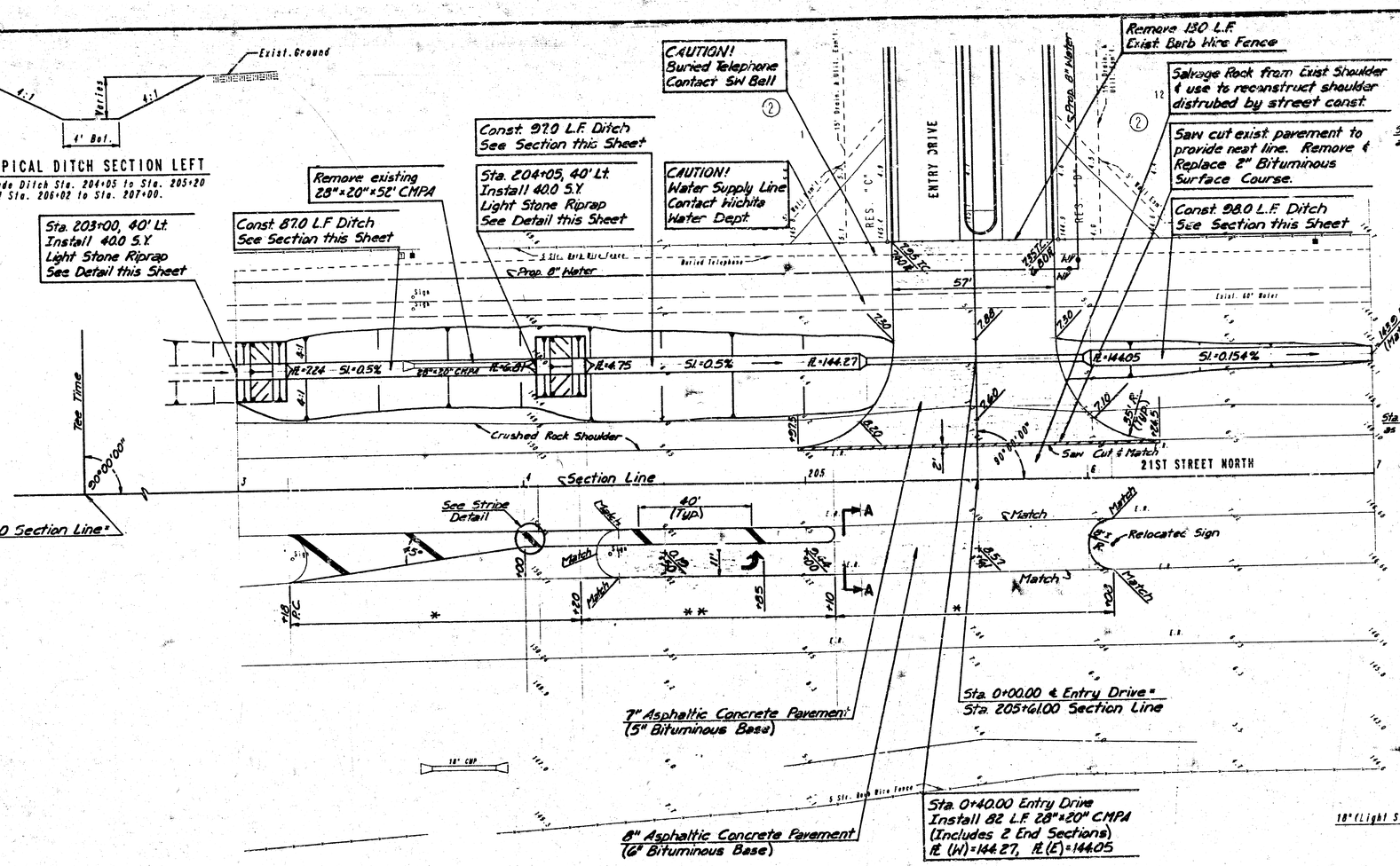
472-76-ZA5-80001-000-000-041

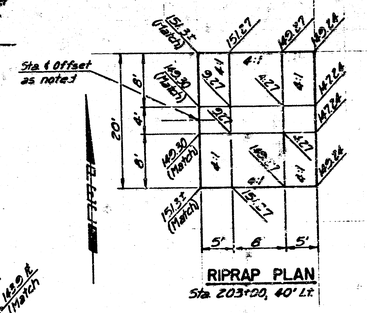
PROJECT NO.	SHEET NO.	TOTAL SHEETS
472-76-245-80001-000-000-041	4	14



TYPICAL DITCH SECTION LEFT

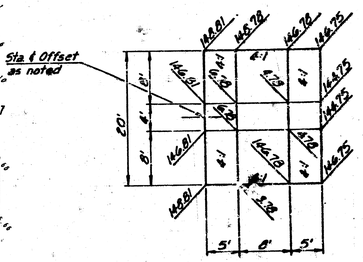
Grade Ditch Sta. 204+05 to Sta. 205+20 and Sta. 206+02 to Sta. 207+00.





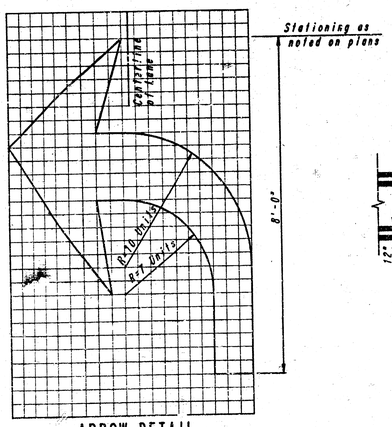
RIPRAP PLAN

Sta. 203+00, 40' Lt.

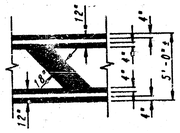


RIPRAP PLAN

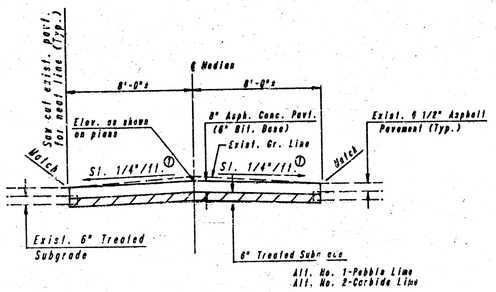
Sta. 204+05, 40' Lt.



ARROW DETAIL

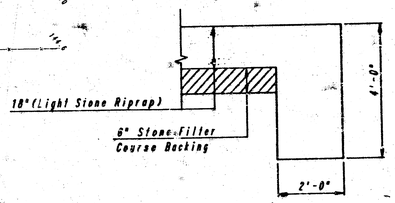


STRIPE DETAIL



SECTION A-A

① 1/4"/ft. minimum or varies



TYPICAL SECTION THRU TOEWALL

NO SCALE

RIPRAP NOTES

1. ALL RIPRAP FOR THIS PROJECT SHALL BE NATURAL STONE. NEITHER BROKEN CONCRETE, FABRIC ENVELOPE, NOR PREMIXED DRY PACKAGED CONCRETE BAG ALTERNATES WILL BE ALLOWED.
2. TOEWALLS SHALL BE INSTALLED ALONG ALL EDGES OF STONE RIPRAP.
3. GROUTING OF THE SURFACE OF THE RIPRAP SHALL NOT BE PERFORMED. GROUTING OF THE TOEWALLS SHALL BE PERFORMED PER CITY SPECIFICATIONS.

MARKING NOTES

1. PAINT FOR THIS WORK SHALL COMPLY TO FEDERAL SPECIFICATION TT-P-001952, OR APPROVED EQUAL. GLASS BEADS SHALL COMPLY TO FEDERAL SPECIFICATION TT-B-1325 OR APPROVED EQUAL.
2. ALL STRIPING SHALL BE YELLOW UNLESS OTHERWISE NOTED.
3. EXISTING SIGN LOCATED AT STA. 204+31 SHALL BE RELOCATED TO STA. 206+88.

* REMOVE EXISTING YELLOW STRIPING

** PAINT 6" WIDE WHITE STRIP OVER EXIST. YELLOW STRIPE

REFLECTION RIDGE COMMERCIAL

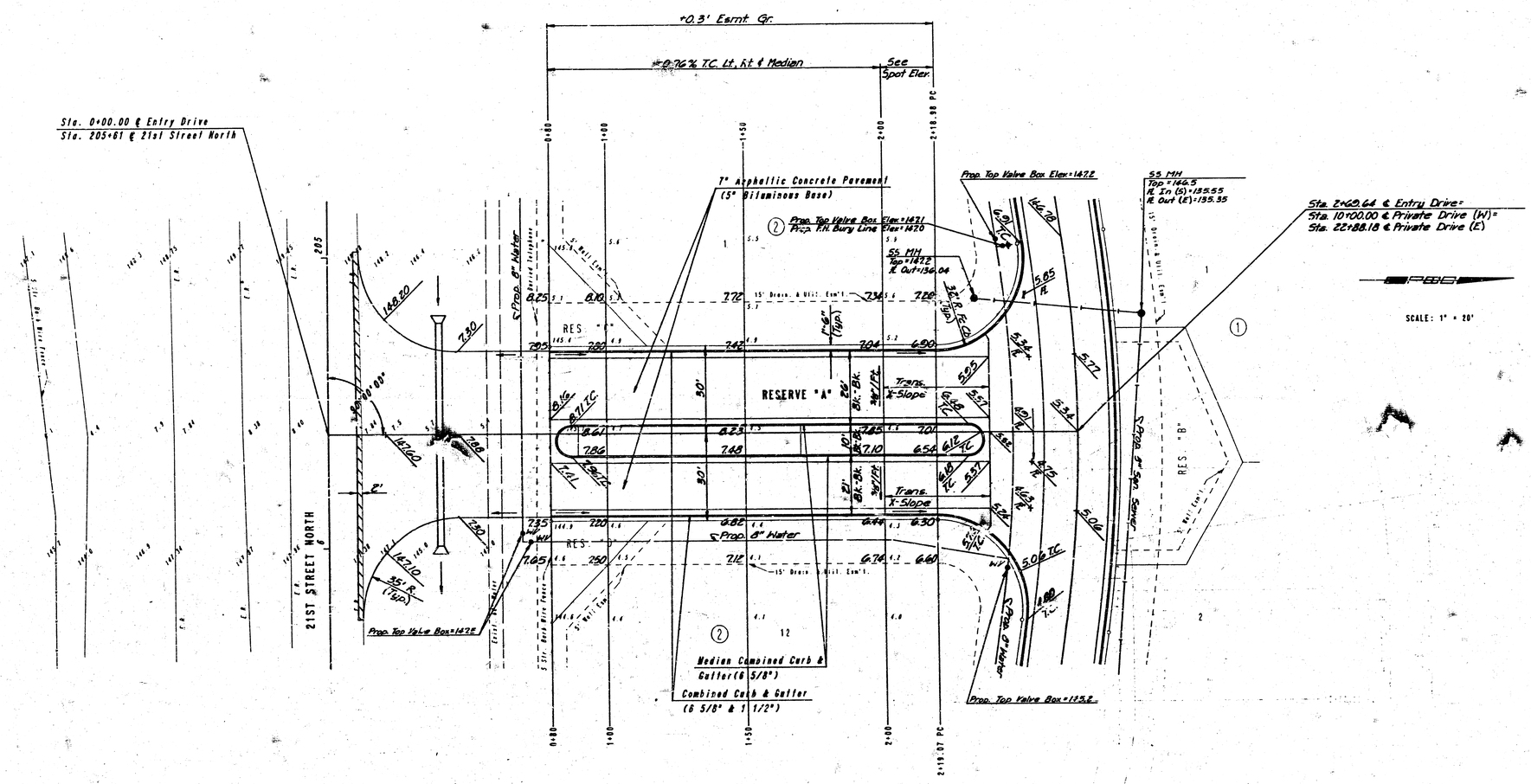
21ST STREET NORTH

STA. 203+00.00 TO STA. 207+00.00

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

Designed by	CSB, GDD	Checked by	
Drawn by	DEP	Date APR., 1988	Job No. 88052

PROJECT NO.	SHEET NO.	TOTAL SHEETS
472-76-215-80001-000-000-041	5	14



REFLECTION RIDGE COMMERCIAL

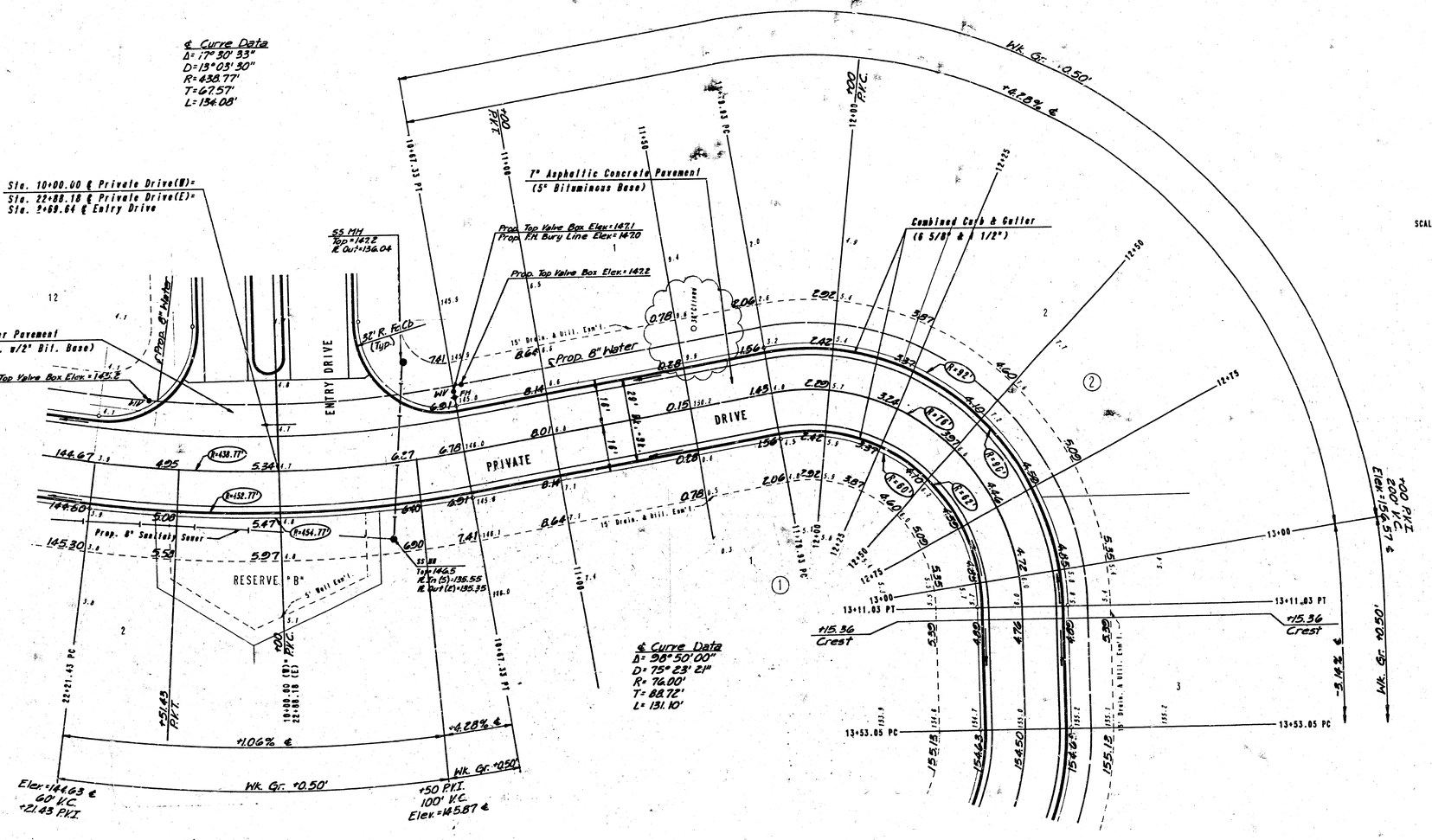
ENTRY DRIVE

STA. 0+00.00 TO STA. 2+69.64

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

Designed by	CSB, GDD	Checked by	
Drawn by	DEP	Date APR., 1988	Job No. 88052

PROJECT NO.	SHEET NO.	TOTAL SHEETS
472-76-245-80001-000-000-041	6	14



REFLECTION RIDGE COMMERCIAL

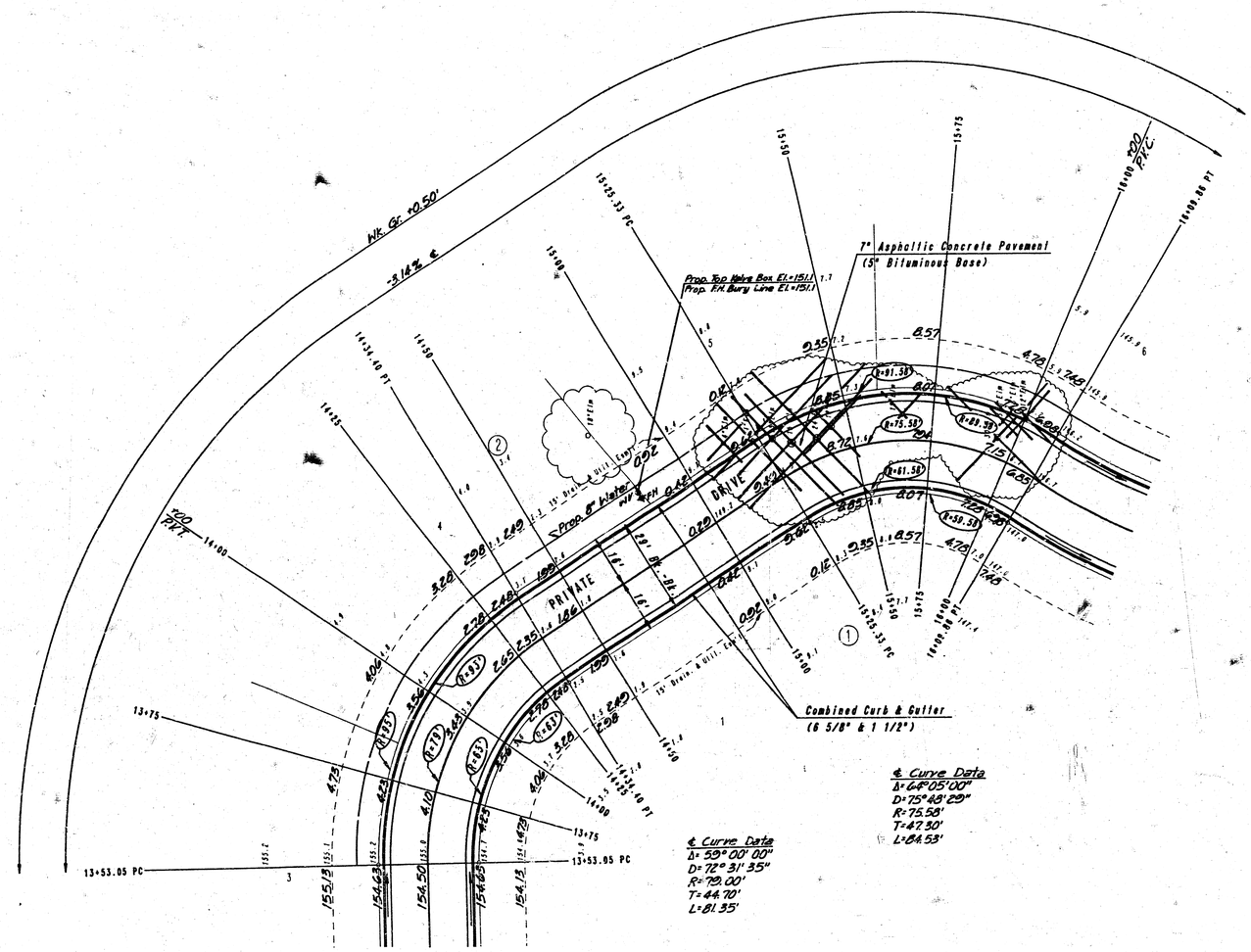
PRIVATE DRIVE

STA. 10+00.00 TO STA. 13+53.05

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

Designed by	CSB, GDD	Checked by	
Drawn by	DEP	Date APR., 1988	Job No. 88052

PROJECT NO.	SHEET NO.	TOTAL SHEETS
472-76-245-80001-000-000-041	7	14



SCALE: 1" = 20'

REFLECTION RIDGE COMMERCIAL

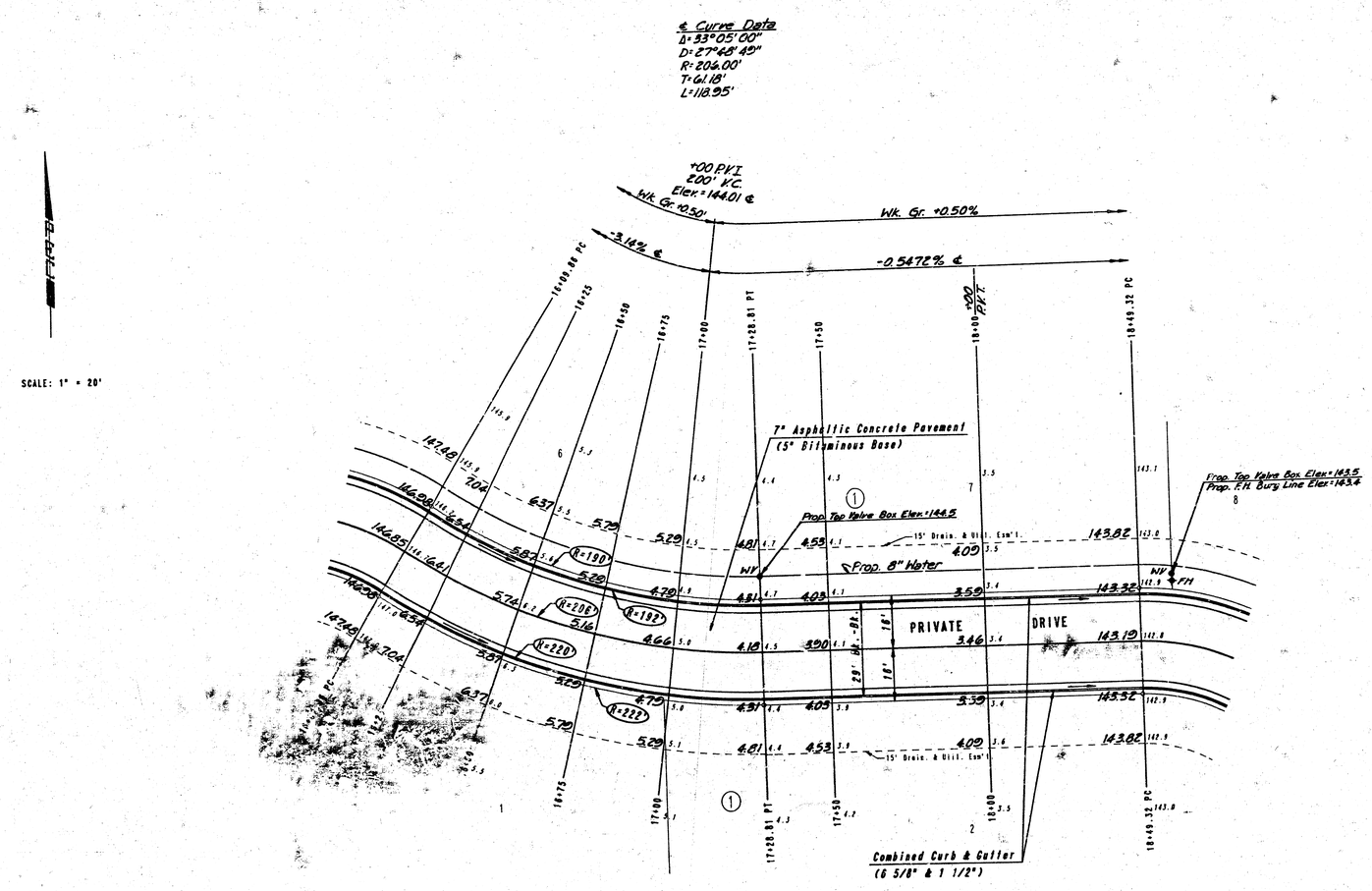
PRIVATE DRIVE

STA. 13+53.05 TO STA. 16+09.86

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

Designed by	CSB, GDD	Checked by	
Drawn by	DEP	Date APR., 1988	Job No. 88052

PROJECT NO.	SHEET NO.	TOTAL SHEETS
#72-76-245-80001-000-000-041	8	14



REFLECTION RIDGE COMMERCIAL

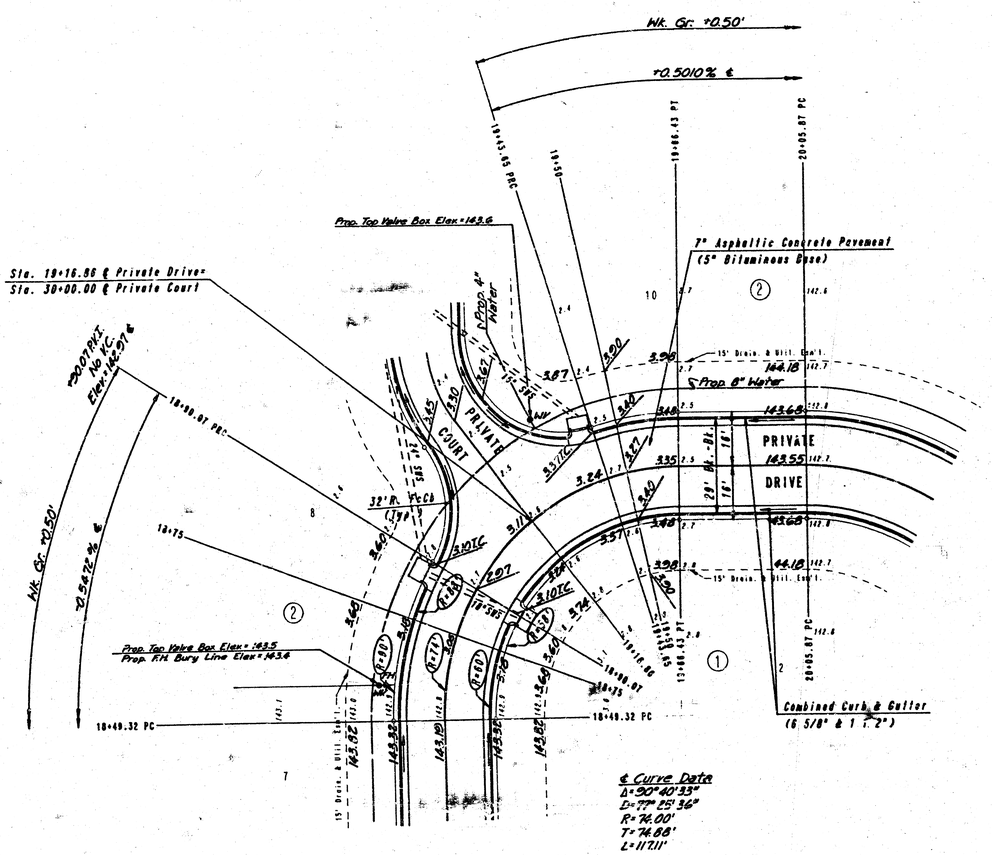
PRIVATE DRIVE

STA. 16+09.86 TO STA. 18+49.32

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

Designed by	CSB, CDD	Checked by	
Drawn by	DEP	Date APR., 1998	Job No. 88652

PROJECT NO.	SHEET NO.	TOTAL SHEETS
472-76-245-80001-000-030-041	9	14



SCALE: 1" = 20'

REFLECTION RIDGE COMMERCIAL

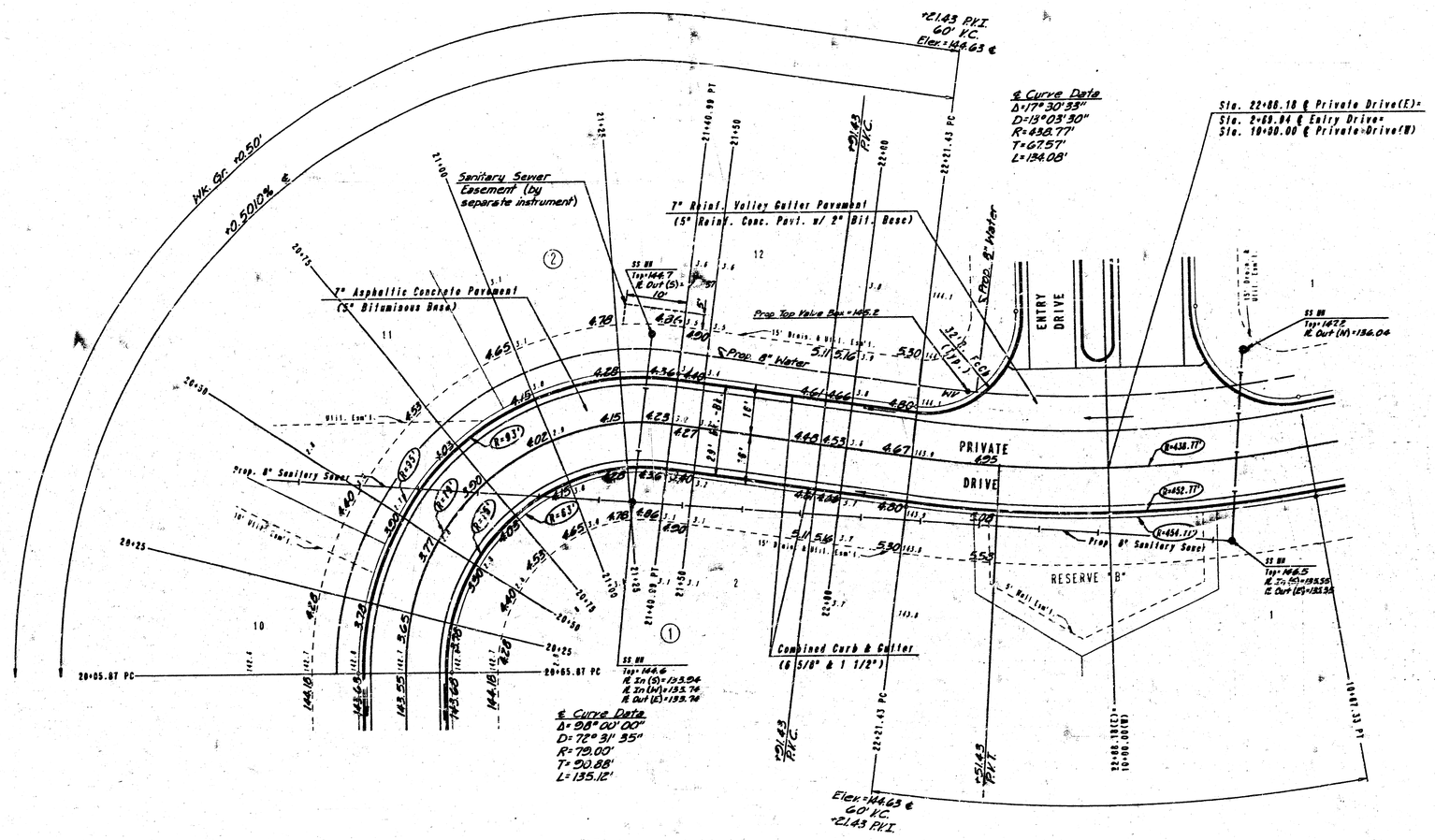
PRIVATE DRIVE

STA. 18+49.32 TO STA. 20+05.87

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

Designed by	CSB, GDD	Checked by	
Drawn by	DEP	Date APR., 1988	Job No. 88052

PROJECT NO.	SHEET NO.	TOTAL SHEETS
472-76-245-80001-000-000-041	10	14



SCALE: 1" = 20'

REFLECTION RIDGE COMMERCIAL

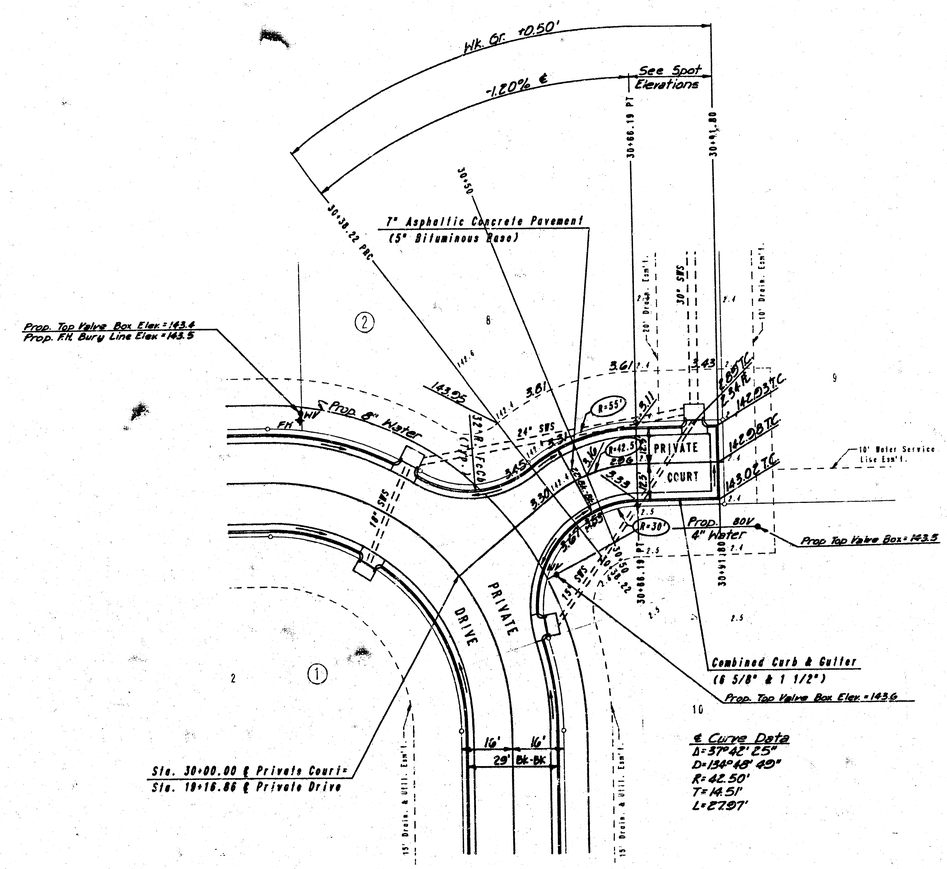
PRIVATE DRIVE

STA. 20+05.87 TO STA. 22+88.18

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

Designed by	CSB, CDD	Checked by	
Drawn by	DEP	Date APR., 1988	Job No. 88052

PROJECT NO.	SHEET NO.	TOTAL SHEETS
472-76-245-83001-000-900-041	11	14



SCALE: 1" = 20'

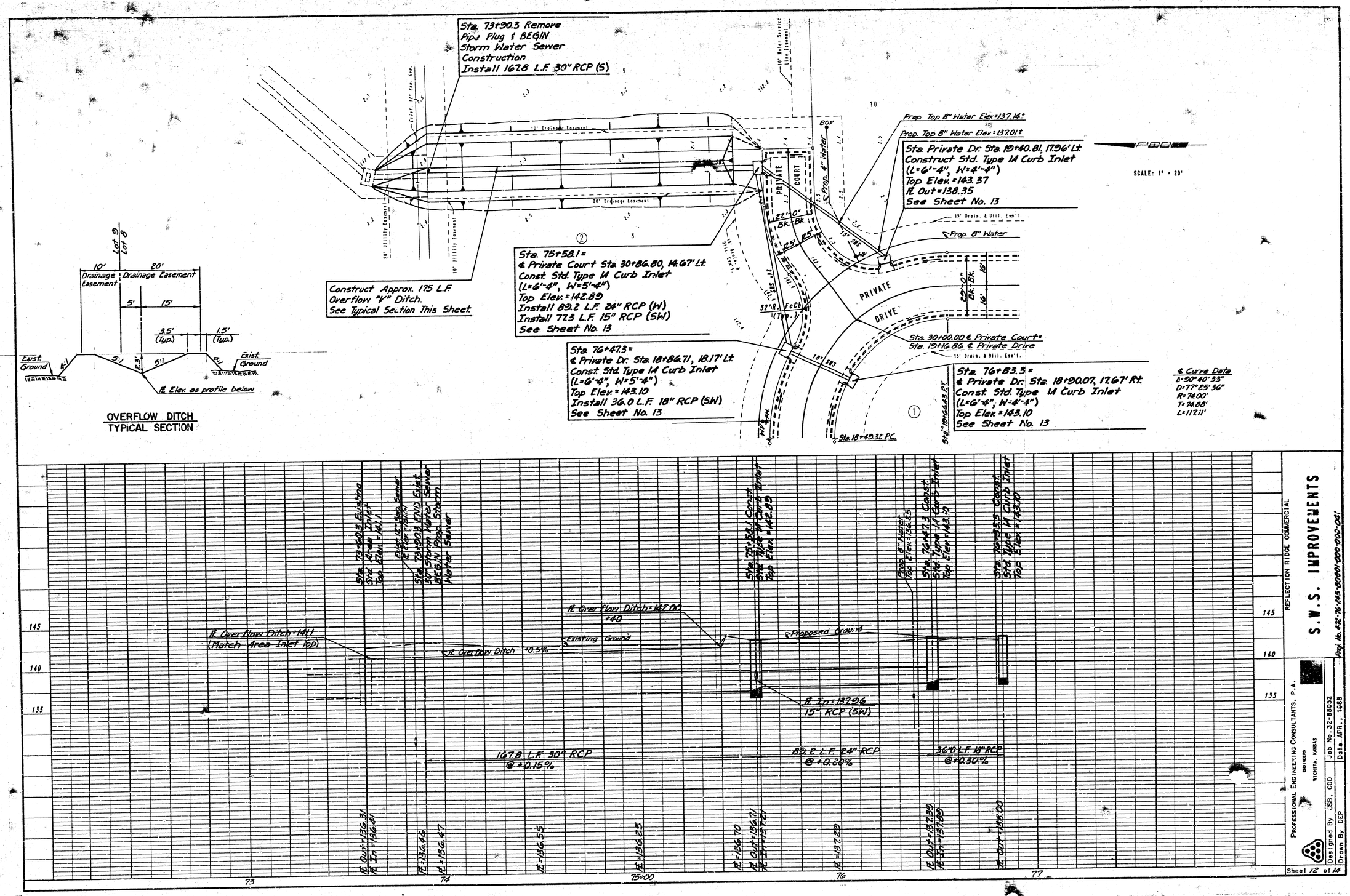
REFLECTION RIDGE COMMERCIAL

PRIVATE COURT

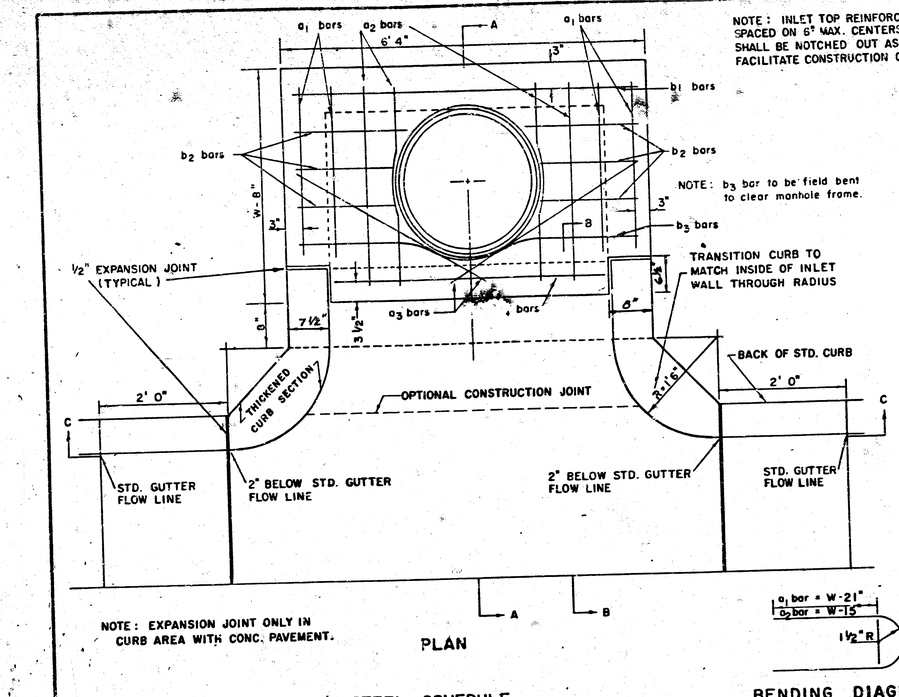
STA. 30+00.00 TO STA. 30+94.10

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

Designed by	CSB, GDD	Checked by	
Drawn by	DEP	Date APR., 1988	Job No. 88052

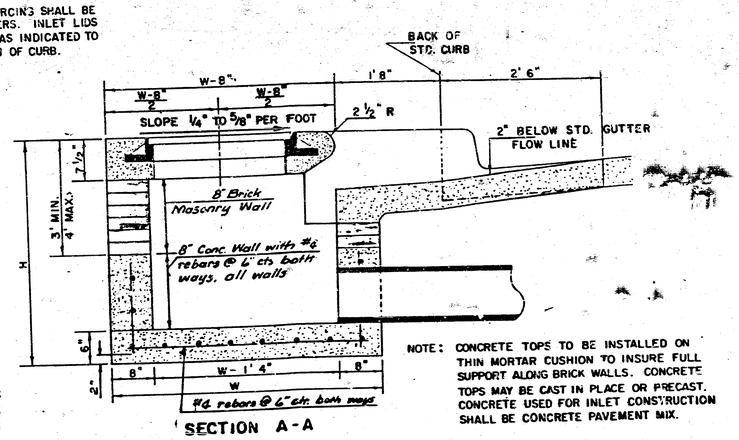

Sta. 73+30.3 Remove Pipe Plug & BEGIN Storm Water Sewer Construction Install 167.8 L.F. 30" RCP (S)
Construct Approx. 175 L.F. Overflow "V" Ditch. See Typical Section This Sheet.
Sta. 75+58.1 = ℄ Private Court Sta. 30+86.80, 14.67' Lt. Const. Std. Type 14 Curb Inlet (L=6'-4", W=5'-4") Top Elev.=142.89 Install 89.2 L.F. 24" RCP (W) Install 77.3 L.F. 15" RCP (SW) See Sheet No. 13
Sta. 76+47.3 = ℄ Private Dr. Sta. 18+86.71, 18.17' Lt. Const. Std. Type 14 Curb Inlet (L=6'-4", W=5'-4") Top Elev.=143.10 Install 36.0 L.F. 18" RCP (SW) See Sheet No. 13
Prop. Top 8" Water Elev.=137.14±
Prop. Top 8" Water Elev.=137.01±
Sta. Private Dr. Sta. 19+40.81, 17.96' Lt. Construct Std. Type 14 Curb Inlet (L=6'-4", W=4'-4") Top Elev.=143.37 Flow Out=138.35 See Sheet No. 13
Sta. 30+00.00 ℄ Private Court = Sta. 19+16.86 ℄ Private Drive
Sta. 76+83.3 = ℄ Private Dr. Sta. 18+90.07, 17.67' Rt. Const. Std. Type 14 Curb Inlet (L=6'-4", W=4'-4") Top Elev.=143.10 See Sheet No. 13
Sta. 18+49.32 P.C.
Sta. 19+66.43 P.T.
PRIVATE COURT
PRIVATE DRIVE
Prop. 8" Water
Prop. 4" Water
BOV
15' Drain. & Util. Eas't.
20' Drainage Easement
10' Drainage Easement
20' Utility Easement
10' Utility Easement
10' Water Service Line Easement
Exist. 12" Sev. Sys.
SCALE: 1" = 20'
℄ Curve Data
Δ=90°40'33"
D=77°25'36"
R=74.00'
T=74.88'
L=117.11'
Lot 9
Lot 8
10' Drainage Easement
20' Drainage Easement
5'
15'
3.5' (Typ.)
1.5' (Typ.)
Exist. Ground
ft. Elev. as profile below
OVERFLOW DITCH TYPICAL SECTION
ft. Over flow Ditch=141.1 (Match Area Inlet top)
ft. Over flow Ditch=142.00 +40
Existing Ground
Proposed Ground
ft. Over flow Ditch +0.5%
ft. In=137.96 15" RCP (SW)
167.8 L.F. 30" RCP @ +0.15%
89.2 L.F. 24" RCP @ +0.20%
36.0 L.F. 18" RCP @ +0.30%
Sta. 73+30.3 Existing Top Elev.=142.1
Sta. 73+30.3 Const. 30" Storm Water Sewer BEGIN Proj. Storm Water Sewer
Sta. 75+58.1 Const. Std. Type 14 Curb Inlet Top Elev.=142.89
Sta. 76+47.3 Const. Std. Type 14 Curb Inlet Top Elev.=143.10
Sta. 76+83.3 Const. Std. Type 14 Curb Inlet Top Elev.=143.10
Prop. 8" Water Top Elev.=137.25
ft. Out=136.31
ft. In=136.41
ft.=136.46
ft.=136.47
ft.=136.55
ft.=136.25
ft.=136.70
ft. Out=136.71
ft. In=137.21
ft.=137.29
ft. Out=137.39
ft. In=137.89
ft. Out=138.00
145
140
135
73
74
75+00
76
77
REFLECTION RIDGE COMMERCIAL
S.W.S. IMPROVEMENTS
Proj. No. 472-76-145-80601-000-000-041
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS
Designed By: JSB, GDD
Drawn By: DEP
Job No. 32-88052
Date APR., 1988
Sheet 12 of 14

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



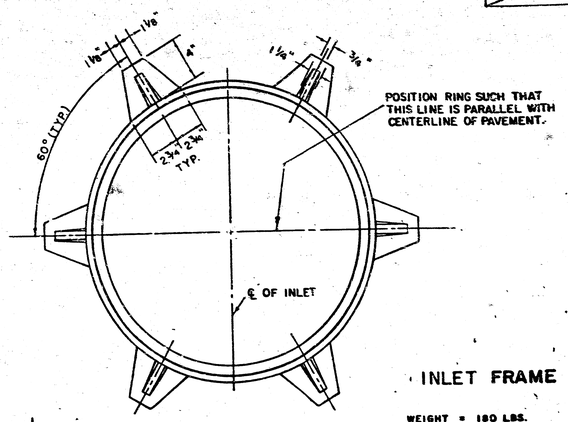
NOTE: EXPANSION JOINT ONLY IN CURB AREA WITH CONC. PAVEMENT.

PLAN



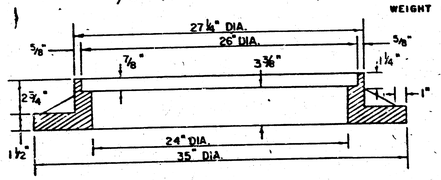
SECTION A-A

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.



INLET FRAME

WEIGHT = 180 LBS.



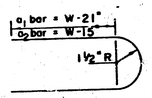
SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.

NOTE: CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN H = 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.



BENDING DIAGRAM

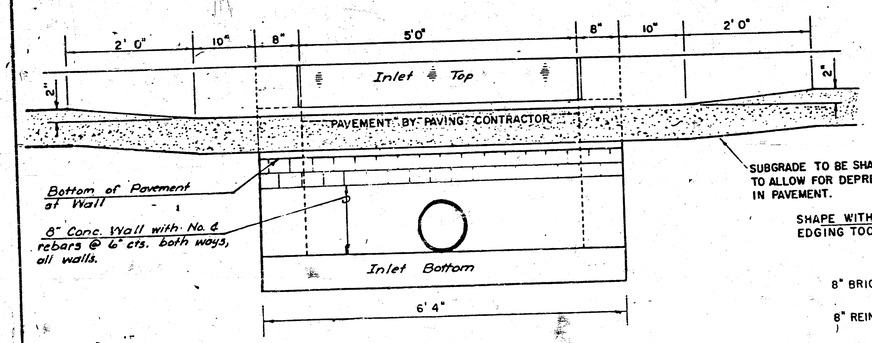
STEEL SCHEDULE

BAR		a_1	a_2	a_3*	b_1 W=4'4"	b_1 W=5'4"	b_1 W=6'4"	b_1 W=7'4"	b_1 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±

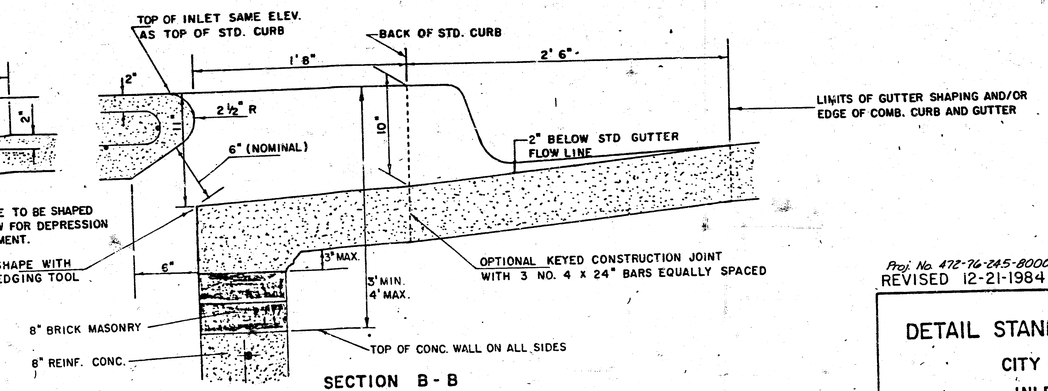
* NOTE: a_3 BARS TO BE PLACED APPROX. 2" BELOW TOP OF INLET COVER

STANDARD CURB INLET PRECAST TOPS

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



SECTION C-C



SECTION B-B

Proj. No. 472-76-245-80001-000-000-041
REVISED 12-21-1984

DETAIL STANDARD TYPE IA CURB INLET

CITY OF WICHITA, KANSAS

INLET OPENING = 6" x 5' 0"

JUNE 1984

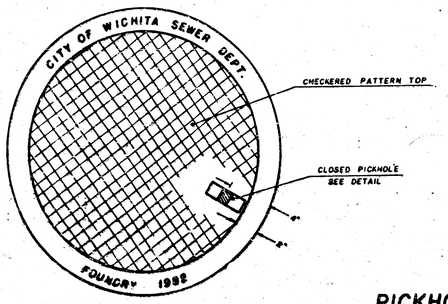
MANHOLE FRAME AND COVER DETAIL

ADOPTED AS STANDARD DESIGN BY

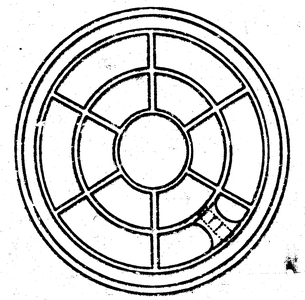
City of Wichita, Kansas

MANHOLE COVER

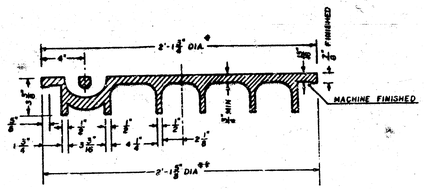
Weight: 180 Lbs.



TOP VIEW



BOTTOM VIEW

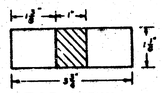


SECTION VIEW

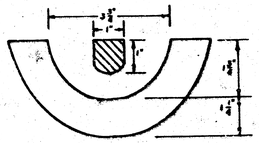
* OUTSIDE DIA. TOP OF COVER

** OUTSIDE DIA. BOTTOM OF COVER

PICKHOLE DETAIL



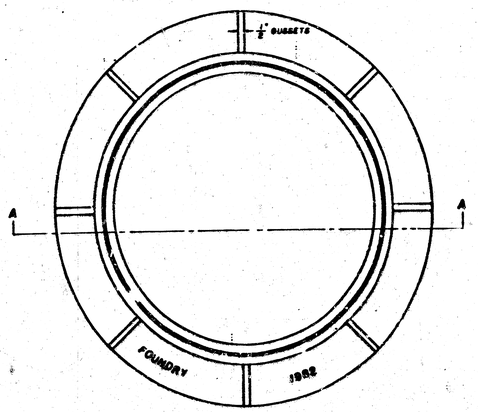
TOP VIEW



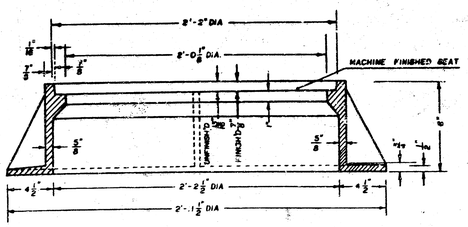
SECTION VIEW

MANHOLE FRAME

Weight: 240 Lbs.



TOP VIEW



SECTION A-A

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

Proj. No. 472-76-245-80001-000-000-041