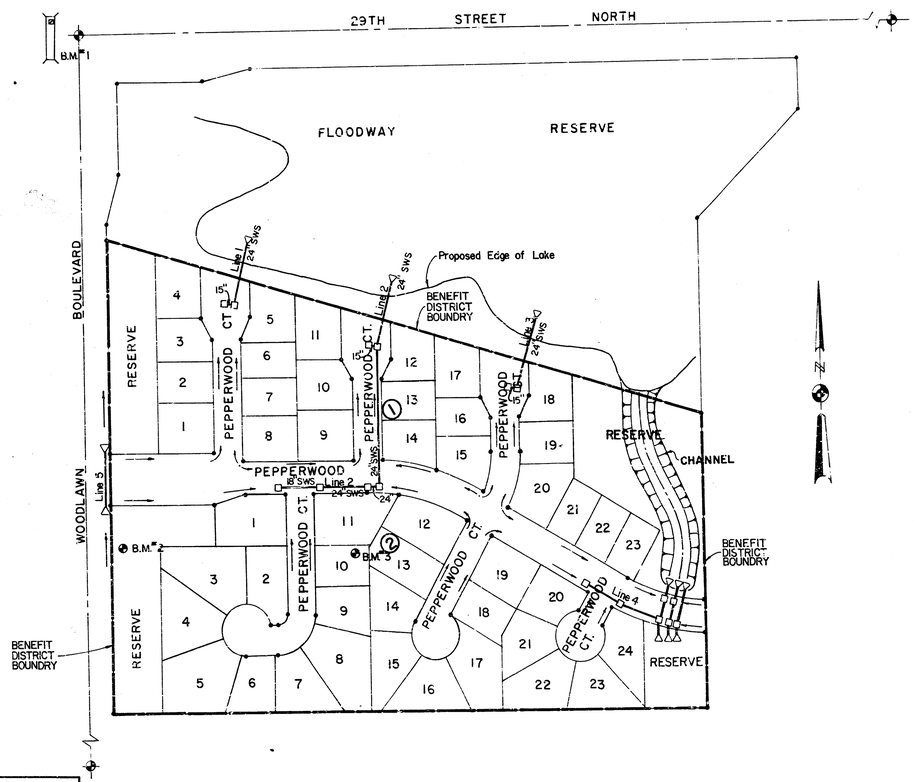
STORM SEWERS IN PEPPERWOOD ADDITION

PROJECT NO.
468-76-245-80836-000-000-001

S. W. S. NO. 170

CITY OF WICHITA, KANSAS
R. W. BRUGGEMAN, CITY ENGINEER



GENERAL NOTES

1. CONTRACTOR SHALL COORDINATE WORK WITH PAVING AND SANITARY CONTRACTORS AND CONTACT RELEVANT UTILITY COMPANIES AND OTHER AGENCIES INVOLVED WITH THIS PROJECT SITE DEVELOPMENT.
2. FIELD ENGINEER SHALL TAKE TIES TO ALL IRONS AND THIMBLES IN THE PROJECT AREA BEFORE CONSTRUCTION BEGINS. FIELD ENGINEER SHALL REPLACE ALL SUCH IRONS AND THIMBLES DISTURBED DURING CONSTRUCTION.
3. THE TOPS OF INLETS AS NOTED ON THE PLANS MAY VARY SO AS TO MEET PROPOSED TOP OF CURB ELEVATION OR PAVEMENT ELEVATIONS. THE FIELD ENGINEER SHALL LOCATE INLETS WITH REFERENCE TO PROPOSED PAVING PLANS OF THE PERTINENT STREETS.
4. ALL METAL PIPES SHALL BE HELICALLY CORRUGATED PIPE FULLY COATED BOTH INSIDE AND OUTSIDE. THE COATING MAY BE BITUMINOUS OR POLYMERIC AS SPECIFIED IN AASHTO DESIGNATION: M246 - 78, TYPE B. ALL SUCH COATED CORRUGATED PIPE SHALL BE SMOOTH FLOW PIPES FOR SIZES 24" DIAMETER AND LARGER. ALL CONNECTIONS FOR THESE FULLY COATED OR FULLY PAVED AND FULLY COATED PIPES SHALL BE OF FAIRLY WATERTIGHT CONSTRUCTION USING HUGGER TYPE COUPLER OR EQUAL.
5. ALL CONCRETE SHALL BE "6 - SACK CONCRETE" UNLESS OTHERWISE NOTED.
6. THE RIPRAP FOR THIS PROJECT SHALL BE TYPE 3. THE TYPE 3 RIPRAP SHALL BE 12" RIPRAP. THE ROCK FOR RIPRAP AND GRAVEL PROTECTION SHALL BE HARD, DENSE, DURABLE AND SHALL BE REASONABLY WELL GRADED. THE SIZE RANGE OF ROCK USED SHALL BE A MAXIMUM OF ONE CUBIC FOOT AND A MINIMUM OF 1 1/2".
7. CONTRACTOR SHALL AVOID UNCOVERING EXISTING WATER LINES UNLESS ABSOLUTELY NECESSARY. UNCOVERING SHALL BE DONE ONLY IN THE PRESENCE OF A WATER DEPARTMENT ENGINEER.
8. CONTRACTOR SHALL HAVE THE OPTION OF INSTALLING PRECAST CONCRETE TYPE 1A CURB INLETS IN LIEU OF THE BRICK TYPE STRUCTURE. SEE STANDARD DETAIL PRECAST TYPE 1A CURB INLET DATED AUGUST, 1979. ALL INLETS SHALL BE OF THE SAME TYPE UNLESS OTHERWISE SPECIFIED ON PLANS.
9. CONTRACTOR SHALL MEET WITH ENGINEER AND OWNER PRIOR TO CONSTRUCTION TO ESTABLISH LIMITS OF CONSTRUCTION.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR SEEDING AND MULCHING ALL AREAS DISTURBED IN THE CONTRACT OUTSIDE OF THE STREET RIGHT-OF-WAY.

INDEX TO DRAWINGS

SHT. NO.	DESCRIPTION
1	TITLE SHEET
2	LINE 5 & LINE 1
3	LINE 2
4	LINE 2 & LINE 4
5	CHANNEL
6	LINE 3
7	INLET DETAIL

BENCHMARKS

B.M. 1: "□" in E. end N. headwall first Culvert W. of Woodlawn on 29th St. N. Elev. = 1765.85

B.M. 2: Stp. Spk. N.E. fc. Temporary p.p. Elev. = 1786.53

B.M. 3: Stp. Spk. N. fc. Temporary p.p. Elev. = 1783.12

REVISED 25 AUG. 1981 - SHEETS 4 & 5

Van Doren - Hazard - Stallings
Architects • Engineers • Planners
Topeka Wichita Minneapolis

Sheet 1 of 7

22 x 34

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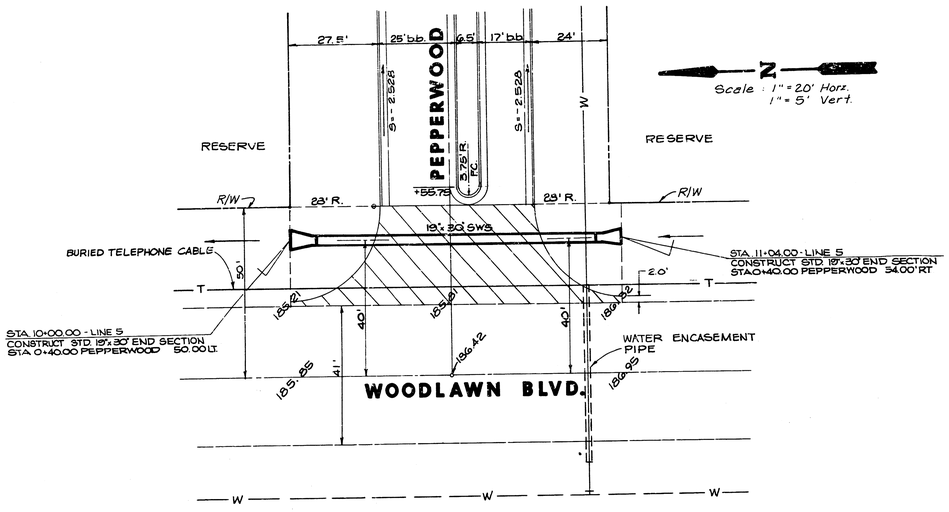
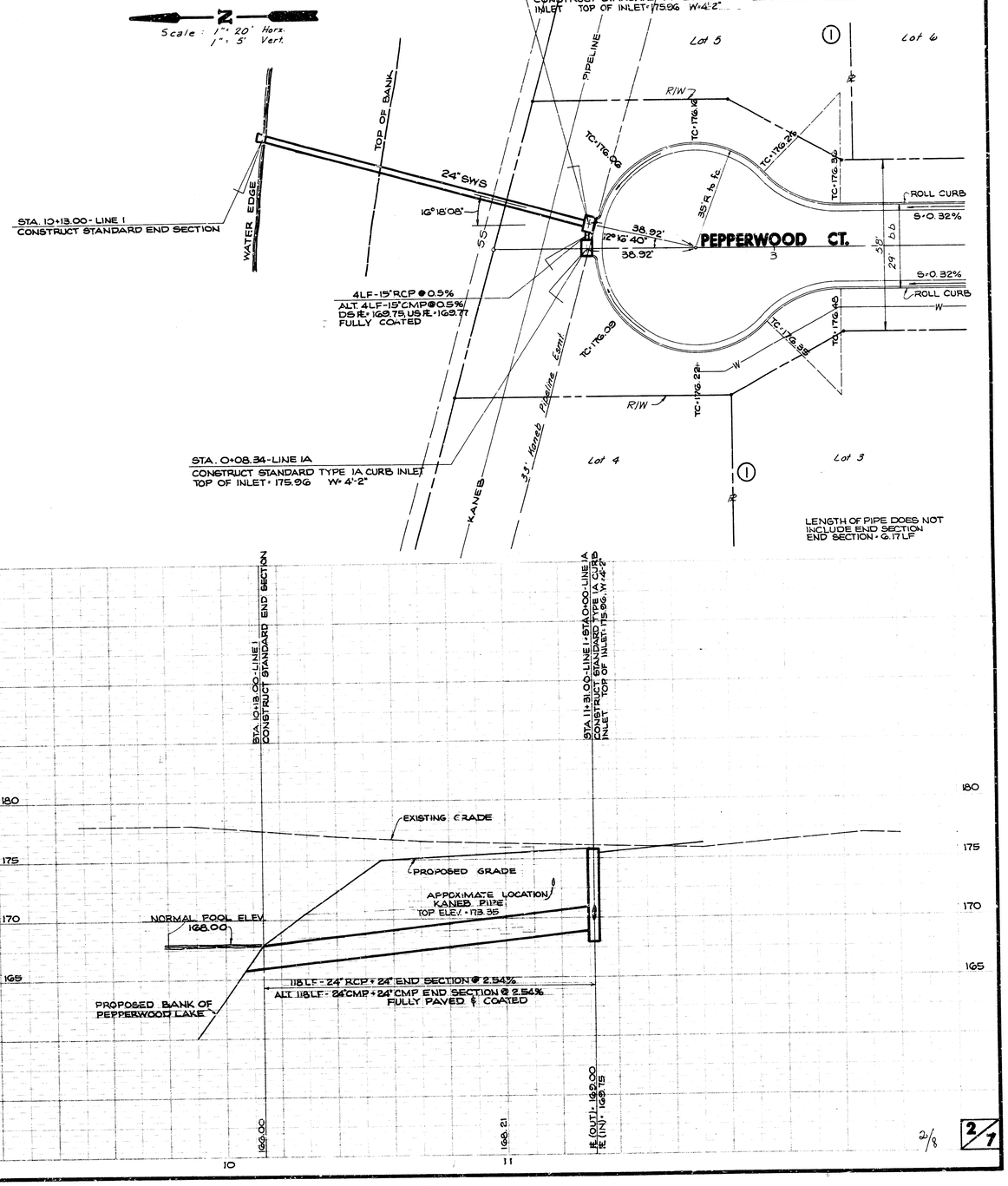
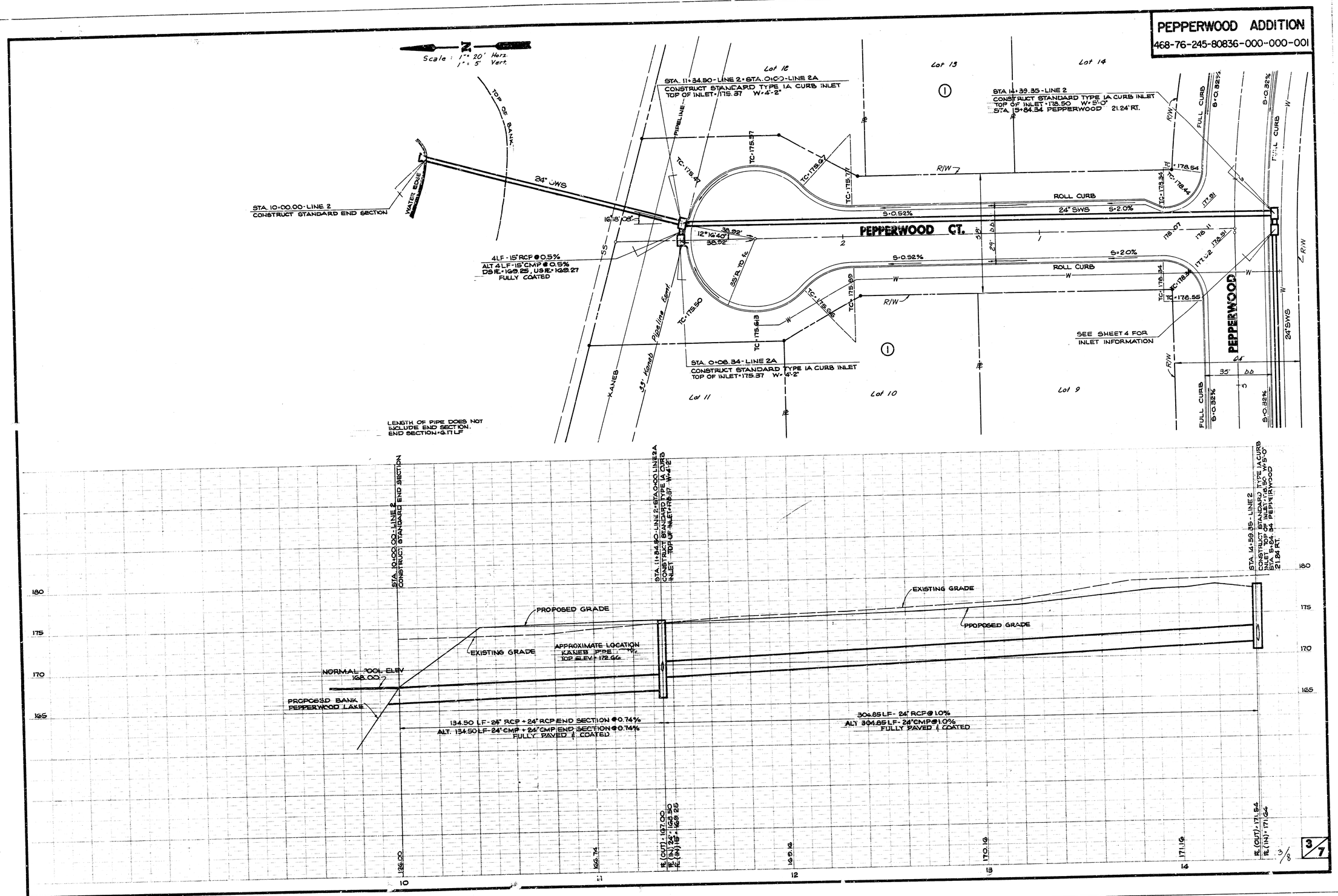
PEPPERWOOD ADDITION

468-76-245-80836-000-000-001



Scale : 1" = 20' Horz.
1" = 5' Vert.




PEPPERWOOD ADDITION
468-76-245-80836-000-000-001
Scale: 1" = 20' Horz. 1" = 5' Vert.
TOP OF BANK
WATER EDGE
24" SWS
STA. 10+00.00-LINE 2
CONSTRUCT STANDARD END SECTION
4LF-15" RCP @ 0.5%
ALT 4LF-15" CMP @ 0.5%
DS FE=169.25, US FE=169.27
FULLY COATED
PIPELINE
KANEB
35' Kaneb Pipeline Esmt.
Lot 12
Lot 13
Lot 14
Lot 11
Lot 10
Lot 9
STA. 11+34.50-LINE 2 • STA. 0+00-LINE 2A
CONSTRUCT STANDARD TYPE 1A CURB INLET
TOP OF INLET=175.37 W=4'-2"
STA 14+39.35-LINE 2
CONSTRUCT STANDARD TYPE 1A CURB INLET
TOP OF INLET=178.50 W=5'-0"
STA 15+84.34 PEPPERWOOD 21.24' RT.
STA. 0+08.34-LINE 2A
CONSTRUCT STANDARD TYPE 1A CURB INLET
TOP OF INLET=175.37 W=4'-2"
PEPPERWOOD CT.
PEPPERWOOD
ROLL CURB
FULL CURB
S=0.52%
S=2.0%
R/W
SEE SHEET 4 FOR INLET INFORMATION
LENGTH OF PIPE DOES NOT INCLUDE END SECTION. END SECTION=6.17 LF
STA. 10+00.00-LINE 2
CONSTRUCT STANDARD END SECTION
STA. 11+34.50-LINE 2 • STA. 0+00-LINE 2A
CONSTRUCT STANDARD TYPE 1A CURB INLET TOP OF INLET=175.37 W=4'-2"
STA. 14+39.35-LINE 2
CONSTRUCT STANDARD TYPE 1A CURB INLET TOP OF INLET=178.50 W=5'-0"
STA 15+84.34 PEPPERWOOD 21.24' RT.
PROPOSED GRADE
EXISTING GRADE
APPROXIMATE LOCATION KANEB PIPE TOP ELEV=172.66
NORMAL POOL ELEV 168.00
PROPOSED BANK PEPPERWOOD LAKE
134.50 LF-24" RCP + 24" RCP END SECTION @ 0.74%
ALT. 134.50 LF-24" CMP + 24" CMP END SECTION @ 0.74%
FULLY PAVED & COATED
304.85 LF-24" RCP @ 1.0%
ALT 304.85 LF-24" CMP @ 1.0%
FULLY PAVED & COATED
180
175
170
165
126.00
166.74
169.16
170.16
171.16
10
11
12
13
14
3/7

PEPPERWOOD ADDITION

468-76-245-80836-000-000-001

SEE SHEET 3 FOR INLET INFORMATION

Scale: 1" = 20' Horz.
1" = 5' Vert.

N

Lot 11

② STA. 14+47.69 - LINE 2
CONSTRUCT STANDARD TYPE 1A CURB INLET TOP OF INLET = 178.48 W=5'-0"
STA. 5+76.00 PEPPERWOOD 21.24' RT.

R/W

W

24" SWS

18" SWS

FULL CURB

S=0.32%

PEPPERWOOD CT.

58'

29'

bb

ROLL CURB

PEPPERWOOD

35'

Lot 9

STA. 15+55.85 - LINE 2
CONSTRUCT STANDARD TYPE 1A CURB INLET
TOP OF INLET = 178.81 W=5'-0"
STA. 4+67.84 PEPPERWOOD 21.24' RT

① STA. 16+27.53 - LINE 2
CONSTRUCT STANDARD TYPE 1A CURB INLET
TOP OF INLET = 179.04 W=4'-2"
STA. 3+96.16 PEPPERWOOD 20.92' RT

S=2.0%

STA 0+00.00 - LINE 4A
CONSTRUCT STD 42" END SECTION
STA. 12+53.10 PEPPERWOOD 47.96' RT.

STA 0+00.00 - LINE 4B
CONSTRUCT STD 42" END SECTION
STA. 12+55.82 PEPPERWOOD 47.11' RT.

STA 0+00.00 - LINE 4C
CONSTRUCT STD 42" END SECTION
STA. 12+66.57 PEPPERWOOD 46.40' RT.

FLOOD WAY

SCALE: 1"=20' HORZ.
1"=5' VERT.

STA 0+29.35 - LINE 4C
CONSTRUCT STD TYPE 1A CURB INLET
TOP OF INLET = 177.12 W=4'-2"
STA. 12+94.50 PEPPERWOOD 20.92' RT.

18.08 LF - 42" RCP & END SECTION @ 0.3%
ALT 18.08 LF - 42" CMP & END SECTION @ 0.3%
FULLY PAVED & COATED
DS I.E. = 171.21 US I.E. = 171.29

STA 10+97.77 - LINE 4
CONSTRUCT STANDARD TYPE 1A CURB INLET
TOP OF INLET = 177.51 W=4'-2"
STA. 11+57.45 PEPPERWOOD 20.92' RT.

Lot 24

19.06 LF - 42" RCP & END SECTION @ 0.3%
ALT 19.06 LF - 42" CMP & END SECTION @ 0.3%
FULLY PAVED & COATED
DS I.E. = 171.21 US I.E. = 171.29

18.58 LF - 42" RCP END SECTION @ 0.3%
ALT 18.58 LF - 42" CMP & END SECTION @ 0.3%
FULLY PAVED & COATED
DS I.E. = 171.21 US I.E. = 171.29

18.08 LF - 42" RCP & END SECTION @ 0.3%
ALT 18.08 LF - 42" CMP & END SECTION @ 0.3%
FULLY PAVED & COATED
DS I.E. = 171.21 US I.E. = 171.28

STA 10+00.00 - LINE 4 + STA 0+27.25 LINE 4A
CONSTRUCT STD TYPE 1A CURB INLET
TOP OF INLET = 177.10 W=4'-2"
STA. 12+50.00 PEPPERWOOD 20.92' RT.

STA 0+26.75 - LINE 4B
CONSTRUCT STD TYPE 1A CURB INLET
TOP OF INLET = 177.10 W=4'-2"
STA. 12+57.25 PEPPERWOOD 20.92' RT.

STA 0+69.09 - LINE 4A
CONSTRUCT STANDARD TYPE 1A CURB INLET
TOP OF INLET = 177.10 W=4'-2"
STA. 12+50.00 PEPPERWOOD 20.92' LT.

STA. 11+69.77 - LINE 4
CONSTRUCT STANDARD TYPE 1A CURB INLET
TOP OF INLET = 177.85 W=4'-2"
STA 10+82.48 PEPPERWOOD 20.92' RT.

STA 0+69.52 - LINE 4B
CONSTRUCT STANDARD TYPE 1A CURB INLET
TOP OF INLET = 177.10 W=4'-2"
STA. 12+56.17 PEPPERWOOD 20.92' LT.

19.06 LF - 42" RCP & END SECTION @ 0.3%
ALT 19.06 LF - 42" CMP & END SECTION @ 0.3%
FULLY PAVED & COATED
DS I.E. = 171.00 US I.E. = 171.08

18.58 LF - 42" RCP & END SECTION @ 0.3%
ALT 18.58 LF - 42" CMP & END SECTION @ 0.3%
FULLY PAVED & COATED
DS I.E. = 171.00 US I.E. = 171.08

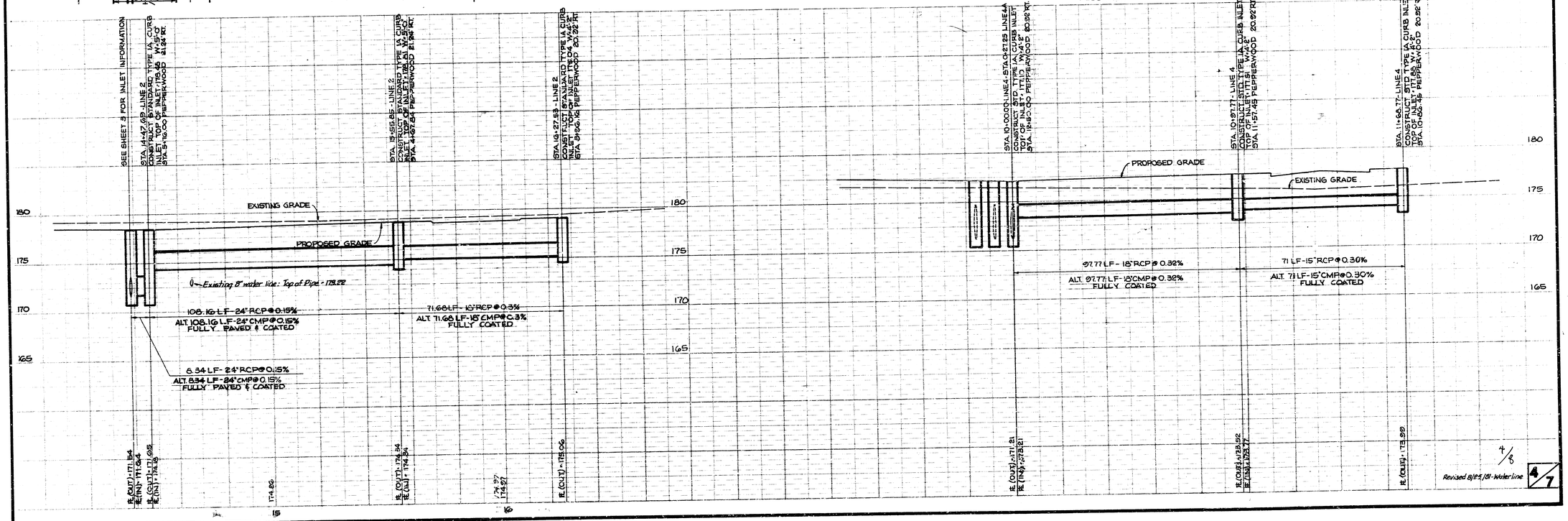
STA 0+24.66 - LINE 4C
CONSTRUCT STANDARD 42" END SECTION
STA. 12+67.78 PEPPERWOOD 47.78' LT.

STA 0+96.34 - LINE 4A
CONSTRUCT STANDARD 42" END SECTION
STA. 12+50.00 PEPPERWOOD 48.17' LT.

STA 0+95.34 - LINE 4B
CONSTRUCT STANDARD 42" END SECTION
STA. 12+56.90 PEPPERWOOD 48.07' LT.

① Lot 23

NOTE: LENGTH OF PIPE DOES NOT INCLUDED END SECTION.
42" END SECTION = 5.17 LF



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Revised 8/23/01 - Waterline

4/7

PEPPERWOOD ADDITION

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NOTE
CAUTION - HIGH PRESSURE PIPELINE TO BE RELOCATED VERTICALLY BY KANEB UNDER SEPERATE CONTRACT

33' KANEB PIPELINE ESMT.

PROPERTY LINE

RESERVE 'A' FLOODWAY

TOP OF PROPOSED BANK

EROSION CONTROL HEADER

STA 4+67.90 P.T.

Δ = 42°47' 19"
C.L. = 171.56
R = 229.72'

21' BOTTOM / 5:1 SIDE SLOPE

STA 2+68.39 P.T.

7.99%

STA 2+96.34 P.C.

STA 1+07.86

WATERS EDGE

100'

STA 1+17.86 P.C.

R = 215.76'
C.L. = 170.53'
Δ = 45°17' 06"

TOP OF EXISTING BANK

TOP OF PROPOSED BANK

FORM MIN. OF TOP 1-0 EACH SIDE

#4 @ 16" CENTERS

4 - #4 CONT. @ 12" CENTERS

4 x 3 - 8 @ 16" CENTERS

4'-0"

12" MIN.

12" 3-#4 CONT.

TRENCH FOR CONCRETE WALL. POUR TO NEAT LINE OF EXCAVATION.

10.5'

5'

5:1

4'-0"

℄ SPILLWAY

EROSION CONTROL HEADER (NO SCALE)

R/W

PEPPERWOOD

R/W

STA. 5+00

TYPE 3 RIP RAP

TOP OF PROPOSED BANK

TYPE 3 RIP RAP

10'

NOTE: SEE PAGE 4 FOR INFORMATION RELATING TO INLETS WHICH WILL SUPPLY CHANNEL.

W

SCALE: 1"=20' HORZ.
1"=5' VERT.

STA. 0+75.86

STA. 1+07.86 PROPERTY LINE

EXISTING GRADE

NOTE
CAUTION - HIGH PRESSURE PIPELINE TO BE RELOCATED VERTICALLY BY KANEB UNDER SEPERATE CONTRACT.

TOP OF PIPE ELEV. = 171.73

21' BOTTOM 5:1 SIDE SLOPES @ 0.71 %

EROSION CONTROL HEADER

20'

TYPE 3 RIP RAP

STA. 4+72.00 EROSION CONTROL HEADER

STA. 5+00.00 END OF PIPE

STA. 5+18.58 CONSTRUCT STANDARD TYPE 1A INLETS

STA. 5+60.48 CONSTRUCT STANDARD TYPE 1A INLETS

STA. 5+79.00 END OF PIPE

STA. 6+04.00 BEGIN TYPE 3 RIP RAP

STA. 6+14.00 BEGIN SIDE SLOPE

STA. 6+36.00 TOP OF BANK

RIP RAP

0.71 % SLOPE

10'

Approx. location of exist. 8" water line. Contractor shall varify before contruction begins.

175
170
165

FL = 168.00
FL = 168.17
FL = 168.23
FL = 168.35
FL = 168.58
FL = 168.70
FL = 168.88
FL = 169.08
FL = 169.24
FL = 169.41
FL = 169.5
FL = 169.77
FL = 169.93
FL = 170.15
FL = 170.30
FL = 170.48
FL = 170.66
FL = 170.84
FL = 171.00
FL = 171.08
FL = 171.21
FL = 171.29
FL = 171.54
ELEV. 178.00

1 2 3 4 5 6

5/8

Revised 8/28/81 Water line

5/7

PEPPERWOOD ADDITION

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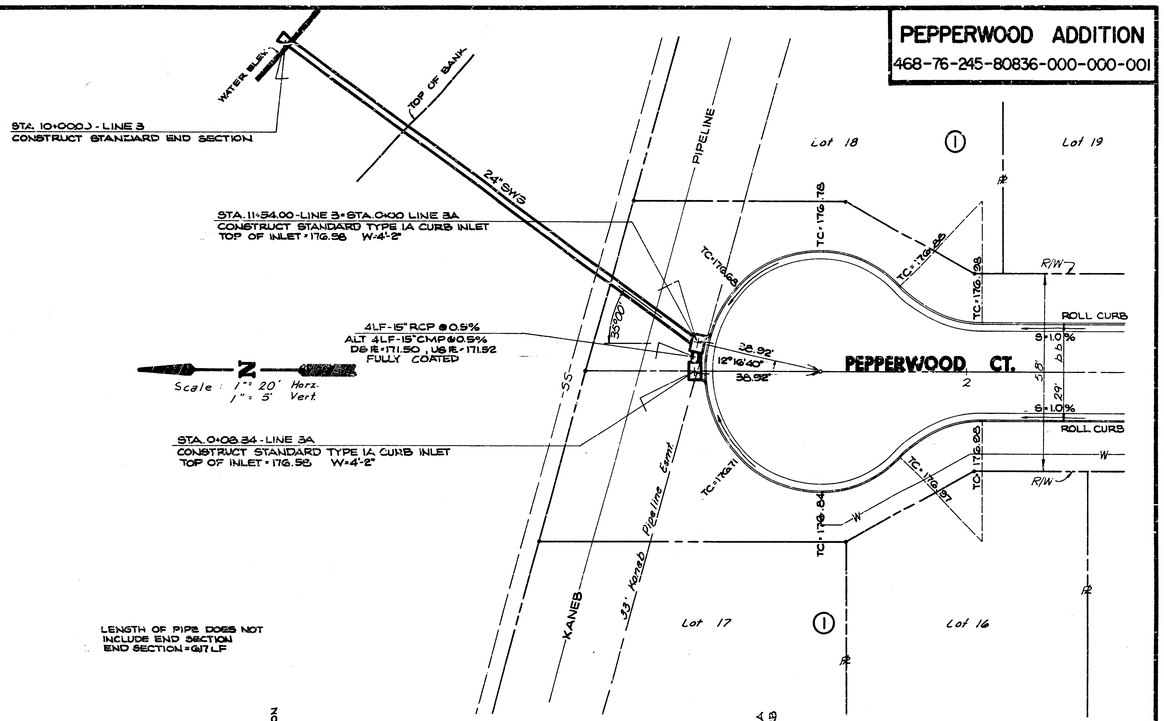
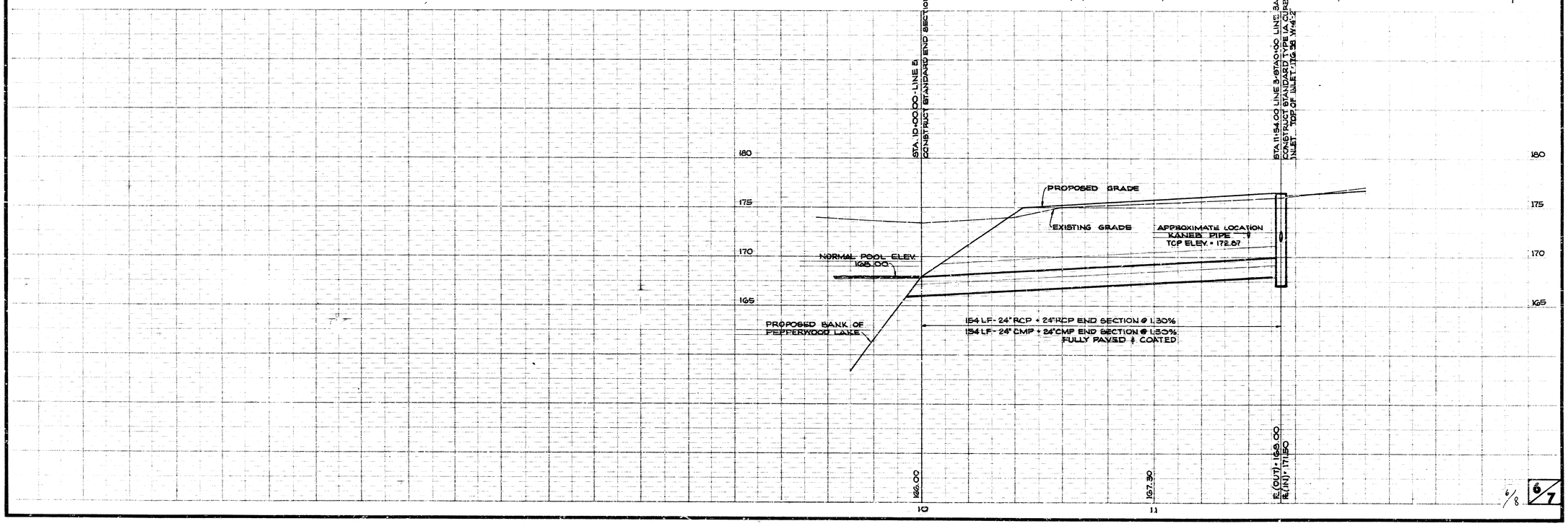


LENGTH OF PIPE DOES NOT INCLUDE END SECTION
END SECTION = 6.17 LF



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DETAIL STANDARD TYPE IA CURB INLET

CITY OF WICHITA, KANSAS

R. W. LINN — CITY ENGINEER

OCTOBER 1978

NOTE: MANHOLE FRAMES AND COVER ARE WESTERN IRON AND FOUNDRY CO. INC. OR EQUAL DESIGNS AS FOLLOWS:

FRAME 200 Lbs

FRAME (ALTERNATE) 200 Lbs

COVER 555 Lbs. NORMAL

SECTION B - B

(SCALE 1" = 1'-0")

(UNLESS OTHERWISE NOTED)
SLAB BY PAVING CONTRACTOR

OPTIONAL KEYED JOINT

1" BELOW STD GUTTER

HIGH EDGE

STD CURB BACK OF

AS TOP OF STD CURB

TOP OF INLET SAME ELEV

SECTION C - C

(SCALE 1" = 1'-0")

NOTE: BRICK FOR INLET CONSTRUCTION SHALL CONFORM WITH THE LATEST REVISION OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS DESIGNATION C-32 FOR MANHOLE BRICK GRADE MS

PAVEMENT BY PAVING CONTRACTOR

MANHOLE FRAME (ALTERNATE)

(SCALE 1" = 1'-0")

WEIGHT = 180 LBS.

MANHOLE COVER

(SCALE 1" = 1'-0")

WEIGHT = 110 LBS.

CITY OF WICHITA

MANHOLE FRAME

(SCALE 1" = 1'-0")

WEIGHT = 180 LBS.

PLAN

(SCALE 1" = 1'-0")

HIGH EDGE

BENDING DIAGRAM

d1 bar = W - 1'-1"

STEEL SCHEDULE

BAR	d1	d2	W=4'-5"	W=5'-0"	W=5'-6"	W=6'-0"	d3	d4	d5	LBS.	WT.
NUMBER	6	5	1	1	1	1	8	8	1	1	
SIZE	4"	4"	4"	4"	4"	4"	4"	4"	4"		
W=4'-5"	4'-5"	2'-2"	2'-2"	–	–	–	1'-2"	2'-2"	2'-2"	60 #	
W=5'-0"	5'-0"	2'-2"	–	2'-2"	–	–	1'-2"	2'-2"	2'-2"	77 #	
W=5'-6"	5'-6"	2'-2"	–	–	2'-2"	–	1'-2"	2'-2"	2'-2"	92 #	
W=6'-0"	6'-0"	2'-2"	–	–	–	2'-2"	1'-2"	2'-2"	2'-2"	111 #	
LENGTH	4'-4"	11'-1"	6'-4"	7'-0"	7'-6"	8'-0"	10'-1"	6'-4"	15'-1"	151 #	

* NOTE: 45 BARS TO BE PLACED APPROX. 5" BELOW TOP OF INLET COVER

STANDARD CURB INLET PRECAST TOPS

W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4'-5"	36"x8"x2'-8"	15" & SMALLER	0.38 *
5'-0"	42"x8"x2'-8"	18" & 24"	0.42 *
5'-6"	48"x8"x2'-8"	30" & 36"	0.47 *
6'-0"	54"x8"x2'-8"	42" & 48"	0.52 *

* GROSS VOLUME

SECTION A-A

(SCALE 1" = 1'-0")

NOTE: CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE EVEN SUPPORT ALONG BRICK WALLS. CONCRETE SHALL BE 6-SACK PAVING MIX CONCRETE FOR INLET TOPS AND FLOORS TOPS MAY BE CAST IN PLACE OR PRECAST

VARIES

BACK OF STD CURB

HIGH EDGE

PLAN

(SCALE 1" = 1'-0")

BEVELLED INLET TOP

TOP THIS 8" AT EACH END DO NOT BEVEL INLET

1" BELOW STD GUTTER

STD GUTTER

EXPANSION JOINT (TYPICAL)

MATCH INSIDE OF INLET TRANSITION CURB TO

NOTE: p2 bar to be field bent to clear manhole items

PEPPERWOOD ADDITION
S.W.S. NO. 170
CROSS SECTIONS

