HOLLAND LANE

FROM THE NORTH LINE OF SUNCREST AVENUE
TO THE SOUTH LINE OF HARVEST LANE

and

HARVEST LANE

FROM THE WEST LINE OF HOLLAND LANE
TO THE SOUTH LINE OF 17th STREET NORTH

PROJECT NO. 472-76-245-81665-000-000-001

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

NOTES

1. 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.

2. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED.

3. WIDENED GUTTER SECTION OF COMBINED CURB AND GUTTER AT INTERSECTIONS WILL NOT BE PAID FOR DIRECTLY, AND THIS COST SHALL BE CONSIDERED AS SUBSIDIARY TO THE OTHER CONTRACT PAY ITEMS OF WORK.

4. CONTRACTOR SHALL GIVE PROPERTY OWNERS ABUTTING THIS PROJECT, WHOSE YARDS WILL BE LOWER THAN THE NEW FINISHED GRADE ELEVATIONS AT THE RIGHT-OF-WAY LINE, AN OPPORTUNITY TO UTILIZE EXCESS EXCAVATED MATERIAL FROM THE PROJECT TO REGRADE THEIR YARDS TO DRAIN TO THE NEW PAVEMENT. CONTRACTOR WILL BE REQUIRED TO DUMP AND SPREAD THE EXCESS MATERIAL AS REQUIRED BY THE SPECIFICATIONS WHEN REQUESTED BY THE PROPERTY OWNER. THE CONTRACTOR SHALL ASCERTAIN THAT A DIRT ORDER FORM HAS BEEN PROPERLY EXECUTED BY THE PROPERTY OWNER BEFORE ANY SUCH EXCESS MATERIAL IS DELIVERED TO SUCH PROPERTIES.

5. THE CONTRACTOR WILL BE PERMITTED TO BID ONLY ONE OF THE ALTERNATE TYPES OF SUBGRADE TREATMENT. THE TYPE BID BY THE SUCCESSFUL BIDDER WILL BE THE TYPE OF SUBGRADE TREATMENT USED TO CONSTRUCT THE PROJECT.

6. 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.

7. LIMITS OF EARTHWORK SHALL MATCH EXISTING GROUND ELEVATIONS AT THE RIGHT-OF-WAY 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 RIGHT-OF-WAY LINE AND THEN SLOPED UP OR DOWN USING PERMISSIBLE SLOPES TO MATCH THE EXISTING GROUND SURFACE.

Benchmarks:

B.M. No. 2 - "□" on Top West Curb Emerson North Side 17th. Elev. = 154.76

B.M. No. 3 - "□" on East End Curb Return North Side Suncrest at Holland Lane. Elev. = 155.94

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1	Cover Sheet
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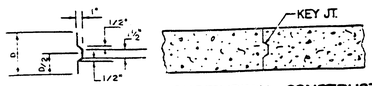
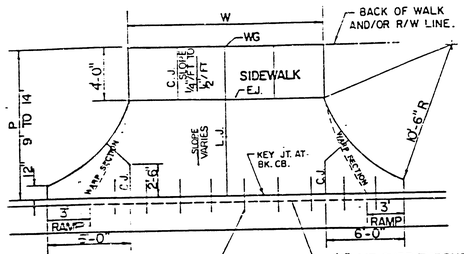
9-11	Cross Sections

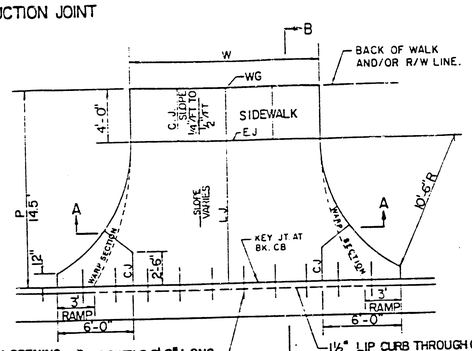
MOEHRING & ASSOCIATES
CONSULTING ENGINEERS
WICHITA

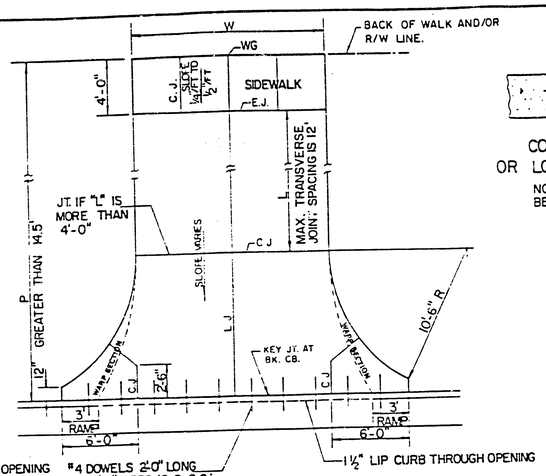
DON C. MOEHRING II LICENSED 3463 KANSAS PROFESSIONAL ENGINEER

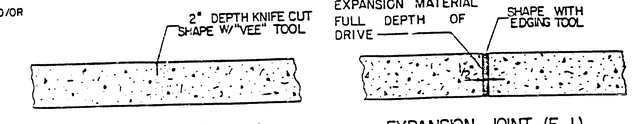


ALT. LONGITUDINAL CONSTRUCTION JOINT





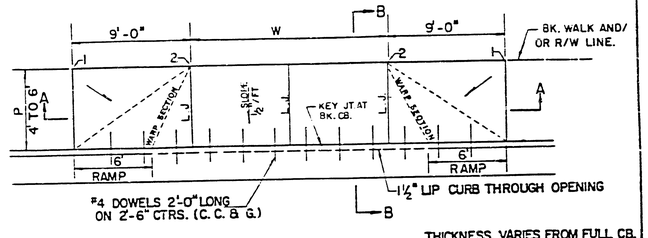


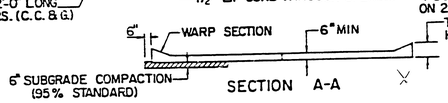


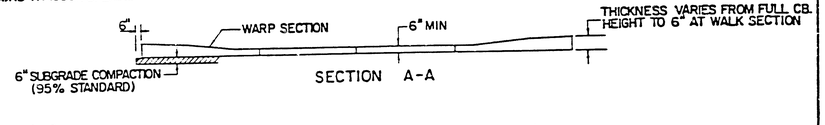
CONTRACTION JOINT (C.J.)
OR LONGITUDINAL JOINT (L.J.)

NO SAWN JOINTS WILL BE ALLOWED.

EXPANSION JOINT (E.J.)

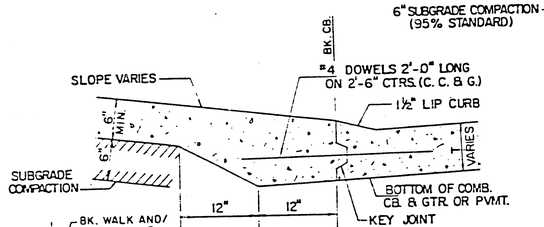






PARKING WIDTH "P"	9'	10'	11'	12'	13'	14.5'	20'	25'	30'	35'	40'	45'	50'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.35'	0.35'	0.40'	0.45'	0.60'	0.80'	1.35'	1.85'	2.35'	2.85'	3.35'	3.85'	4.35'
OPTIMUM MAX. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.35'	0.35'	0.40'	0.45'	0.60'	0.70'	1.04'	1.30'	1.56'	1.82'	2.08'	2.34'	2.60'
OPTIMUM MIN. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.19'	0.21'	0.23'	0.25'	0.27'	0.30'	0.42'	0.52'	0.62'	0.72'	0.82'	0.92'	1.02'
ABSOLUTE MIN. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	-.19'	-.16'	-.13'	-.10'	-.06'	0.00	0.00	0.15'	0.25'	0.35'	0.45'	0.55'	0.65'

RADIUS RAMP DRIVES (P = 9.0' & GREATER)



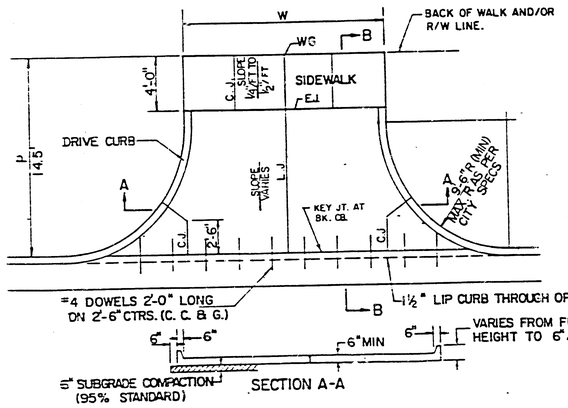
BACK OF CURB DETAIL
SECTION B - B (no scale)

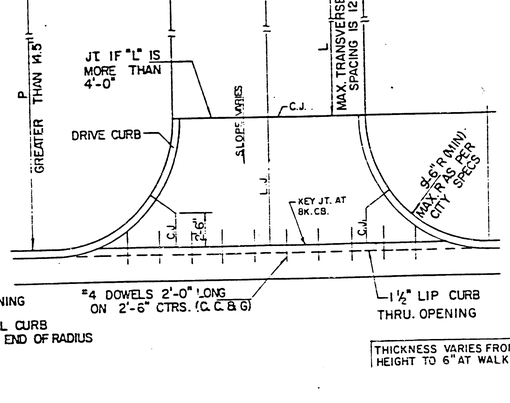
PARKING WIDTH "P"	4'	4.5'	5'	5.5'	6'	6.5'
DIST OF PT. "1" ABOVE TOP OF FULL CB.	0.08'	0.09'	0.10'	0.12'	0.13'	0.14'
DIST. OF PT. "2" BELOW TOP OF FULL CB.	-.26'	-.24'	-.22'	-.20'	-.18'	-.16'

FULL RAMP DRIVE (P=4.0' TO 6.5')

GENERAL NOTES

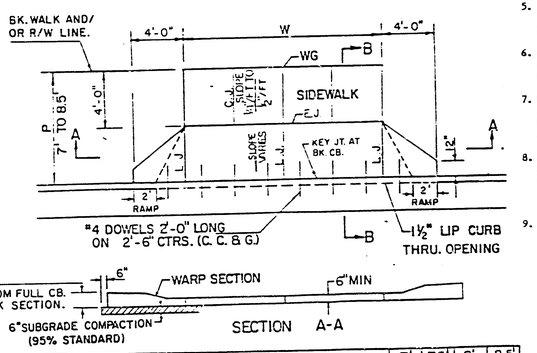
1. DRIVEWAY CONSTRUCTION DETAILED ON THIS SHEET IS FOR USE WITH FULL HEIGHT STREET CURBS AND IN AREAS WITHOUT FULL WALK CONSTRUCTION IN THE PARKING. SEE OTHER DETAIL SHEETS FOR DRIVEWAY CONSTRUCTION WITH ROLL CURB AND/OR FULL WALK.
2. ONE LONGITUDINAL JOINT SHALL BE CONSTRUCTED ALONG THE CENTERLINE OF DRIVES HAVING A "W" DIMENSION OF 24' OR LESS. TWO LONGITUDINAL JOINTS SHALL BE CONSTRUCTED WITH EQUAL SPACINGS NOT TO EXCEED 10' FOR DRIVES WITH A "W" DIMENSION GREATER THAN 24'.
3. DRIVEWAY WIDTH DENOTED AS "W" ON THE DETAIL DRAWINGS SHALL BE A MINIMUM OF 10' AND A MAXIMUM OF 30'. THE MAXIMUM OPENING FOR RADIUS TYPE DRIVES WITH CURBS THROUGH THE RADIUS SHALL NOT EXCEED 52' AT THE STREET CURB LINE.
4. CONSTRUCTION JOINT SPACING IN THE DRIVEWAY WALK SECTION SHALL BE A MINIMUM OF 3' AND A MAXIMUM OF 6' AND ARE TO BE EQUALLY SPACED WITHIN THIS RANGE. WALK SECTION SHALL BE CONSTRUCTED TO THE SAME THICKNESS AS THE DRIVEWAY.
5. DOWEL BARS SHALL BE OMITTED FROM THE KEYED CONSTRUCTION JOINT ALONG THE BACK OF THE STREET CURB LINE WHEN DRIVEWAYS ARE CONSTRUCTED IN CONJUNCTION WITH NEW CONCRETE PAVEMENT CONSTRUCTION.
6. ADDITIONAL THICKNESS OF DRIVE AS INDICATED IN THE DRAWINGS WILL NOT BE PAID FOR DIRECTLY AND THIS COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE DRIVEWAY CONSTRUCTION.
7. ONE HALF INCH EXPANSION JOINTS SHALL BE INSTALLED WHEREVER DRIVE CONSTRUCTION ABUTS SIDEWALK. ONE HALF INCH EXPANSION JOINTS SHALL ALSO BE INSTALLED ALONG THE PROPERTY LINE AND/OR BACK OF WALK LINE WHEN DRIVE CONSTRUCTION ALONG THIS LINE ABUTS CONCRETE PARKING LOTS OR CONCRETE DRIVE EXTENSION.
8. ALL DRIVEWAYS SHALL BE A MINIMUM OF 6" IN THICKNESS AND SHALL BE WITHOUT REINFORCEMENT. DRIVEWAYS MAY BE CONSTRUCTED THICKER THAN 6" AND THEY MAY BE REINFORCED WITH 6"x12" W4-W4 WELDED WIRE FABRIC WHEN PROPERLY AUTHORIZED BY THE PROPERTY OWNER WITH THE ENGINEER'S CONCURRENCE.
9. OPTIMUM DRIVEWAY ELEVATIONS SHOWN IN THE TABLES ARE TO BE USED WHEREVER POSSIBLE. ABSOLUTE MAXIMUM AND MINIMUM ELEVATIONS ARE TO BE USED ONLY WHEN THESE VALUES WILL PERMIT NEW CONSTRUCTION TO MATCH EXISTING DRIVES OR PARKING LOTS. VALUES SHOWN IN THE TABLES ARE BASED ON A FULL CURB HEIGHT ELEVATION OF 0.55' ABOVE THE GUTTER FLOW LINE AND MUST BE ADJUSTED ACCORDINGLY FOR OTHER CURB HEIGHTS. VALUES SHOWN IN THE TABLES WITH MINUS SIGNS INDICATE ELEVATIONS BELOW TOP OF FULL HEIGHT CURB.

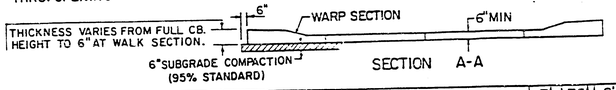




PARKING WIDTH "P"	14.5'	20'	25'	30'	35'	40'	45'	50'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL. CB.	0.80	1.35'	1.85'	2.35'	2.85	3.35'	3.85'	4.35'
OPTIMUM MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL. CB.	0.70'	1.04'	1.30'	1.56'	1.82'	2.08'	2.34'	2.60'
OPTIMUM MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL. CB.	0.30	0.42'	0.52'	0.62'	0.72'	0.82'	0.92'	1.02'
ABSOLUTE MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL. CB.	0.00	0.00	0.15'	0.25'	0.35'	0.45'	0.55'	0.65'

FULL RADIUS DRIVES (P=14.5' & GREATER)





PARKING WIDTH "P"	7'	7.5'	8'	8.5'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.00	0.10'	0.20'	0.30'
OPTIMUM MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.00	0.10'	0.20'	0.30'
OPTIMUM MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.15'	0.16'	0.17'	0.17'
ABSOLUTE MAX. DIST OF PT. "WG" BELOW TOP OF FULL CB.	-.25'	-.20'	-.20'	-.20'

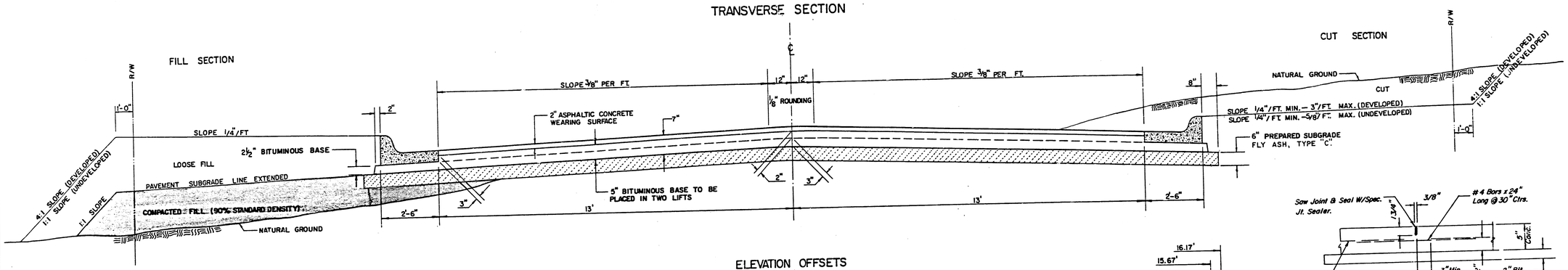
FULL RAMP DRIVE (P=7.0' TO 8.5')

SCALE: 1"=5'

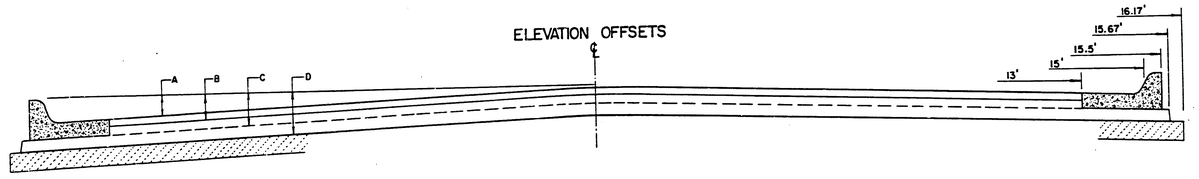
STANDARD DRIVE ENTRANCES
FULL HEIGHT CURB
CITY OF WICHITA, KANSAS

TYPICAL 31' PAVEMENT DETAILS

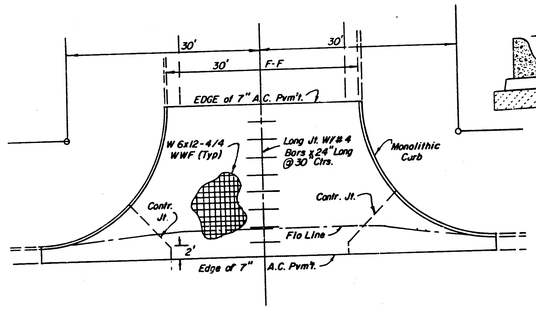
TRANSVERSE SECTION



ELEVATION OFFSETS

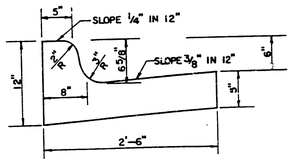


	DISTANCE FROM CENTERLINE (LT. & RT.)											
	0'	2'	4'	6'	7.5'	10'	12'	13'	15'	15.5'	15.67'	16.17'
A: TOP OF CURBS TO TOP OF SURFACE LIFT	0.10	0.14	0.21	0.27	0.32	0.39	0.46	0.49	—	—	—	—
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	0.27	0.31	0.38	0.44	0.49	0.56	0.63	0.66	—	—	—	—
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	0.44	0.49	0.57	0.64	0.70	0.79	0.87	0.90	0.98	1.00	1.00	—
D: TOP OF CURBS TO TOP OF SUBGRADE	0.69	0.73	0.80	0.87	0.93	1.01	1.08	1.12	1.19	1.21	1.21	1.23

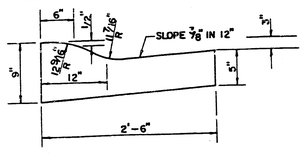


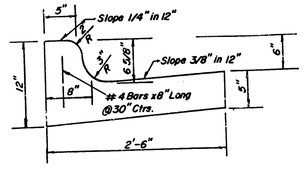
VALLEY GUTTER DETAIL

COMBINED CURB & GUTTER



ROLL TYPE COMBINED CURB & GUTTER





MONOLITHIC CURB
FOR CONCRETE VALLEY 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).

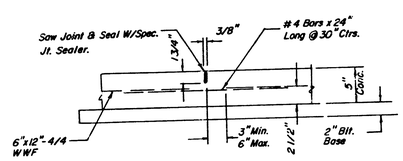
2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 2 1/2" BITUMINOUS BASE.

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.

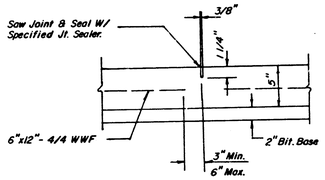
4) BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR LINE AND GRADE.

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.

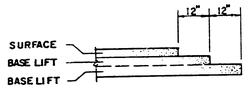


LONGITUDINAL SAWED JOINT
FOR CONCRETE VALLEY GUTTER

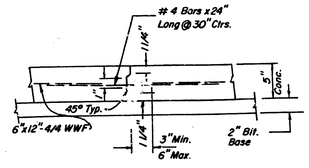


CONTRACTION JOINT
FOR CONCRETE VALLEY GUTTER

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).

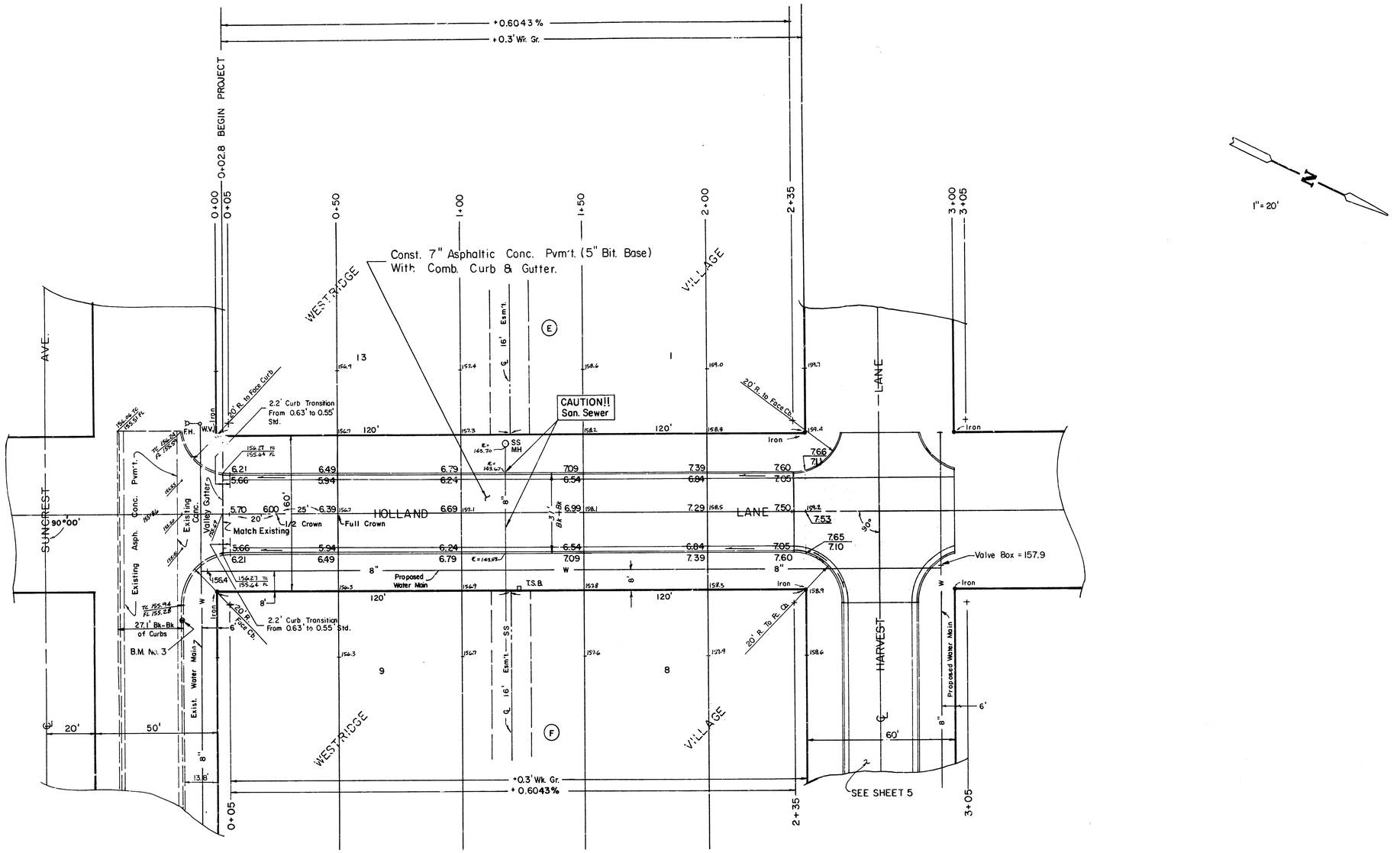


LONGITUDINAL CONSTRUCTION JOINT
FOR CONCRETE VALLEY GUTTER

7 INCH RESIDENTIAL ASPHALTIC CONCRETE PAVEMENT WITH 5 INCH BITUMINOUS BASE

CITY OF WICHITA, KANSAS

PROJECT NUMBER



EXCAVATION

X-Section 4338.46 Cu. Yds.
10 % 433.84 Cu. Yds.
Total 4772.30 Cu. Yds.

4,816.0 Sq. Yds Manipulation.

HOLLAND LANE

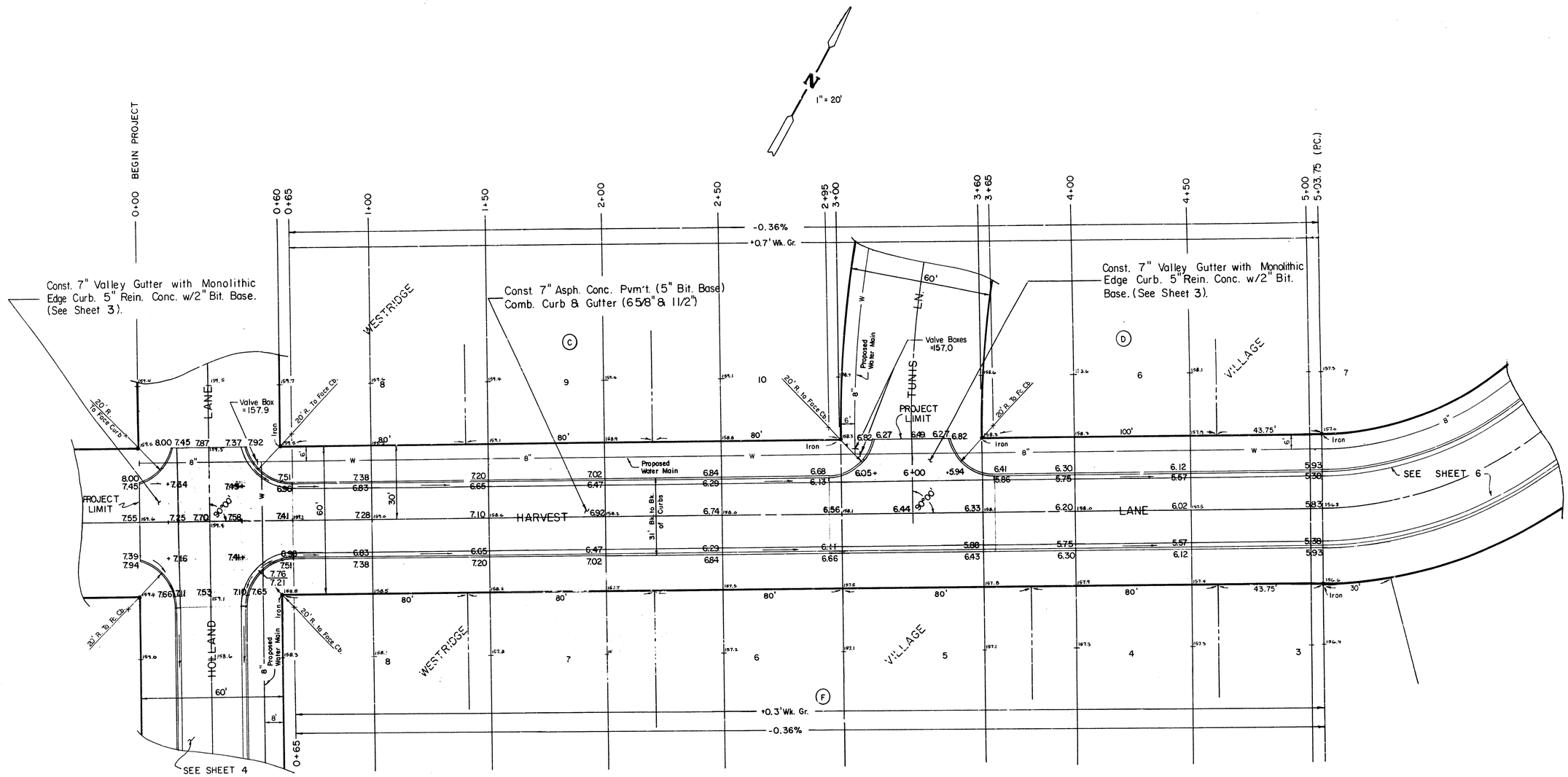
From The North Line Of Suncrest Ave.,
To The South Line Of Harvest Lane.

Project No.
472-76-245-81665-000-000-001.
City of Wichita, Ks

MOEHRING & ASSOCIATES
CONSULTING ENGINEERS
WICHITA

4/11

Sheet 4



INTERSECTION QUANTITIES

_____ S.Y. _____ " Concrete Pavement
274.4 S.Y. 7 " Asphaltic Conc. Pavement
(5 " Bituminous Base)
17.7 S.Y. 2 1/2 " Bituminous Base
57.8 L.F. Combined Curb & Gutter
47.7 L.F. Monolithic Edge Curb
_____ S.F. Wheelchair Ramp
_____ S.F. 4" Walk
311.2 C.Y. Excavation
_____ C.Y. Compacted Fill
_____ Lbs. Reinforcing Steel
384.4 S.Y. Manipulation
_____ Tons Lime or Cement
85.8 S.Y. V.G. 5 " Concrete &
2 " Bituminous Base

INTERSECTION QUANTITIES

_____ S.Y. _____ " Concrete Pavement
202.2 S.Y. 7 " Asphaltic Conc. Pavement
(5 " Bituminous Base)
20.8 S.Y. 2 1/2 " Bituminous Base
70.0 L.F. Combined Curb & Gutter
52.7 L.F. Monolithic Edge Curb
_____ S.F. Wheelchair Ramp
_____ S.F. 4" Walk
318.9 C.Y. Excavation
_____ C.Y. Compacted Fill
_____ Lbs. Reinforcing Steel
317.9 S.Y. Manipulation
_____ Tons Lime or Cement
87.30 S.Y. V.G. 5 " Concrete &
2 " Bituminous Base

HARVEST LANE

From The West Line Of Holland Ln.
To The South Line Of 17 TH. Street N.

Project No.
472-76-245-81665-000-000-001.
City of Wichita, Ks.

MOEHRING & ASSOCIATES
CONSULTING ENGINEERS
WICHITA

5/11
Sheet 5

CURVE DATA BASED ON ℄

R = 160.98' Δ = 62° 50' L = 176.54' LC = 167.82' Tan. = 98.33' Def./Ft. = 0.17795°

CHORD LENGTHS

Station	Arc.	8' Left of Face	8' Right of Face	Def. ∠.	Total Def. ∠.
5+03.75 P.C.	—	—	—	0°00'00"	0°00'00"
5+25	21.25'	18.20'	24.27'	3° 46' 54"	3° 46' 54"
5+50	25'	21.41'	28.54'	4° 26' 56"	8° 13' 50"
5+75	25'	21.41'	28.54'	4° 26' 56"	12° 40' 46"
6+00	25'	21.41'	28.54'	4° 26' 56"	17° 07' 42"
6+25	25'	21.41'	28.54'	4° 26' 56"	21° 34' 38"
6+50	25'	21.41'	28.54'	4° 26' 56"	26° 01' 34"
6+75	25'	21.41'	28.54'	4° 26' 56"	30° 28' 31"
6+80.29 P.T.	5.29	4.53'	6.04'	0° 56' 29"	31° 25' 00"

N

1" = 20'

5+03.75 (P.C.) 5+25 5+50 5+75 6+00 6+25 6+50 6+75 (P.T.) 6+80.29 (P.T.) 7+00 7+50 8+00 8+50 9+00 9+50 10+00 10+28.16 10+36.40 10+40.28 10+45.39 - END PROJECT 10+75.29 11+05.29 11+10.15

SEE SHEET 4

-0.32%

-0.394%

+0.7' Wk. Gr.

Const. 7" Asph. Conc. Pvmt. (5" Bit. Base) Comb. Curb & Gutter (6 5/8" & 1 1/2")

WESTRIDGE VILLAGE

HARVEST LANE

WESTWOOD HEIGHTS SECOND ADDITION

CONNECT TO EXISTING CURB INLETS. ADJUST TOPS TO 154.15

Ctr. Exist. I-A Inlet (w=4'-2") T.C.= 154.15

Ctr. Exist. I-A Inlet (w=4'-2") T.C.= 154.15

Proposed Water Main

Existing

B.M. No. 2

Exist. Pavement

PROJECT LIMIT - END CONSTRUCTION

EMERSON

BOTTOM (O.D.) PROPOSED 12" WATER MAIN = 150.10

TOP (O.D.) PROPOSED 15" R.C.P. STORM SEWER = 149.40

STA. 10+81.29 CONSTRUCT REINFORCED CONCRETE M.H. 19' RT. & TOP = 154.52, SLAB TOP = 152.83 W = 7.0', L = 4.0' SLAB HOLE = 3'-2"

CONSTRUCT TYPE I-A CURB INLET W = 4'-4", L = 6'-4" TOP = 154.15

CAUTION!! CONTRACTOR SHALL BE REQUIRED TO CONSTRUCT 15" S.W.S. UNDERNEATH 12" WATER MAIN.

INSTALL 44' OF 15" R.C.P. USFL = 148.02, DSFL = 147.84

CAUTION!! San. Sewer

Garage Floor 157.19

Exist. F.L. = 151.22

Exist. F.L. 151.63

4.15 T.C. 3.60 F.L.

4.28 T.C. 3.73 F.L.

4.23 T.C. 3.68 F.L.

4.14

4.05

4.18

155.3

155.1

156.4

156.0

156.2

156.1

156.3

156.6

156.7

156.8

156.9

157.0

157.1

157.2

157.3

157.4

157.5

157.6

157.7

157.8

157.9

158.0

158.1

158.2

158.3

158.4

158.5

158.6

158.7

158.8

158.9

159.0

159.1

159.2

159.3

159.4

159.5

159.6

159.7

159.8

159.9

160.0

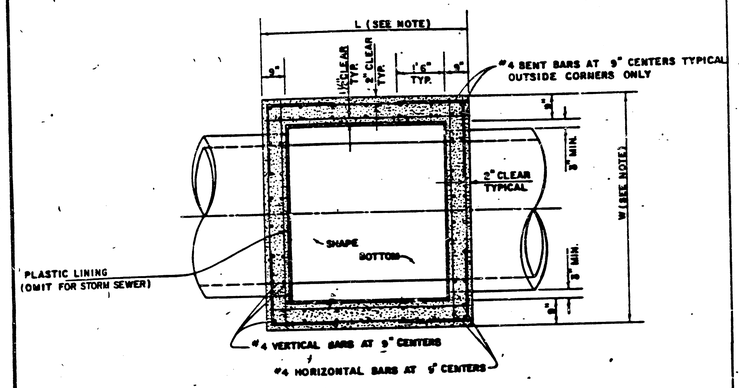
160.1

160.2

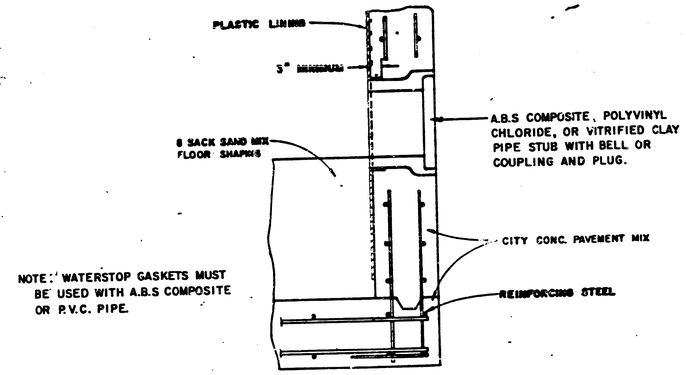
160.3

160.4

160.5

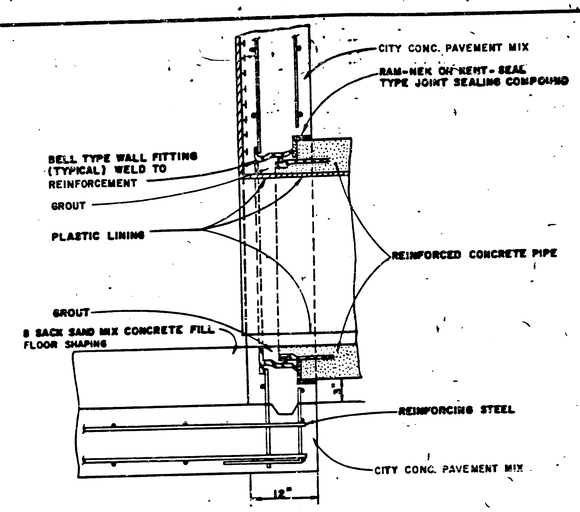


TOP VIEW

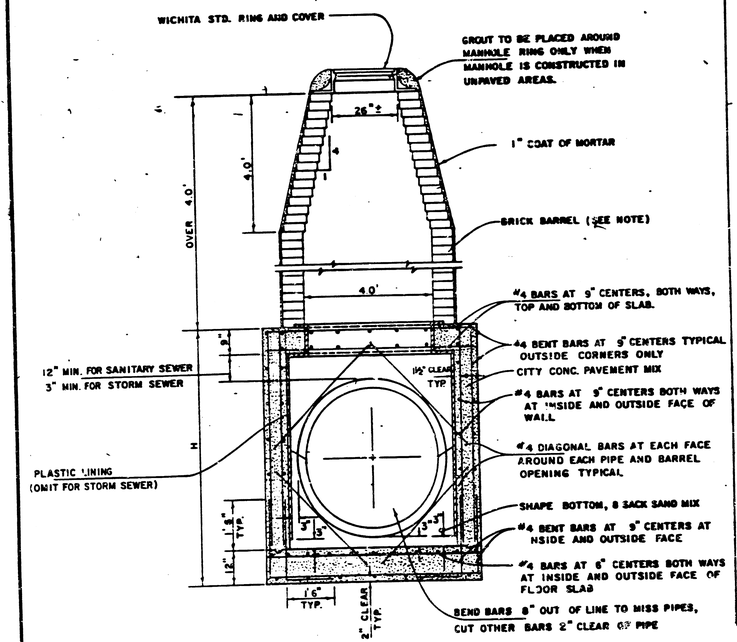


NOTE: WATERSTOP GASKETS MUST BE USED WITH A.B.S COMPOSITE OR P.V.C. PIPE.

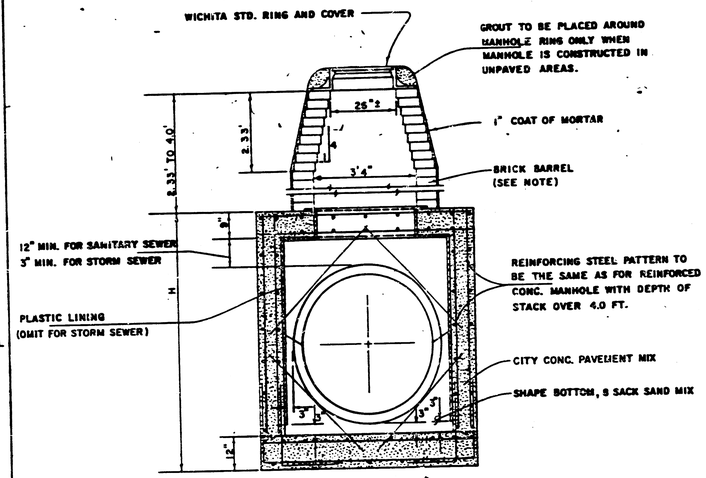
PIPE STUB DETAIL
SANITARY SEWER ONLY



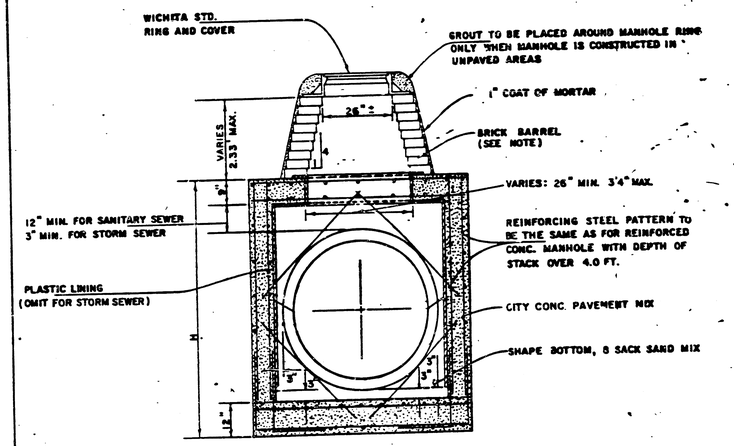
R.C.P. CONNECTION DETAIL
SANITARY SEWER ONLY



REINFORCED CONCRETE MANHOLE
DEPTH OF STACK: OVER 4.0'
SCALE 1" = 2'



REINFORCED CONCRETE MANHOLE
DEPTH OF STACK: 2.33' TO 4.0'
SCALE 1" = 2'



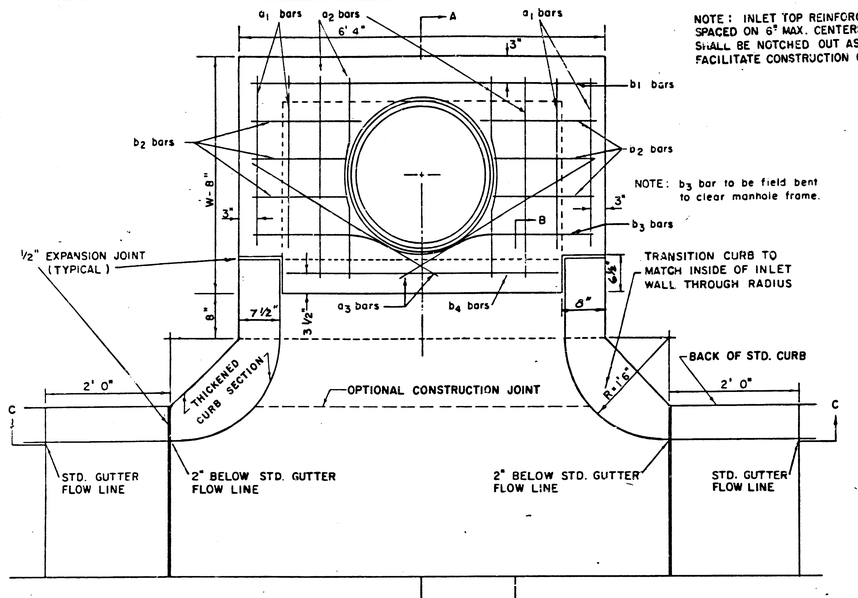
REINFORCED CONCRETE MANHOLE
DEPTH OF STACK: 0' TO 2.33'
SCALE 1" = 2'

NOTE:
BRICK BARRELS LESS THEN 16' DEEP SHALL HAVE 8" WALLS EXCEPT WHEN LOCATED WITHIN PUBLIC STREET OR ALLEY PAVEMENT THEN THE WALL SHALL BE 12" BRICK BARRELS MORE THEN 16' DEEP SHALL HAVE 12" WALLS. THE "L" AND "W" DIMENSIONS SHALL BE A MINIMUM OF 5'6" FOR BRICK BARRELS WITH 8" WALLS AND 6'2" FOR BRICK BARRELS WITH 12" WALLS WHEN THE BRICK BARRELS ARE OVER 4 FT. IN HEIGHT. COMLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATERTIGHT.

REVISIED 1-7-85

STANDARD DETAILS
REINFORCED CONCRETE MANHOLES
CITY OF WICHITA

FEBRUARY 1984

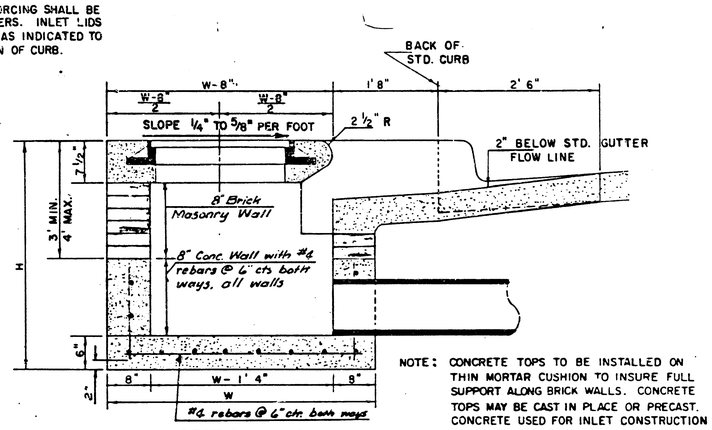


NOTE: EXPANSION JOINT ONLY IN CURB AREA WITH CONC. PAVEMENT.

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.

NOTE: b_3 bar to be field bent to clear manhole frame.



SECTION A-A

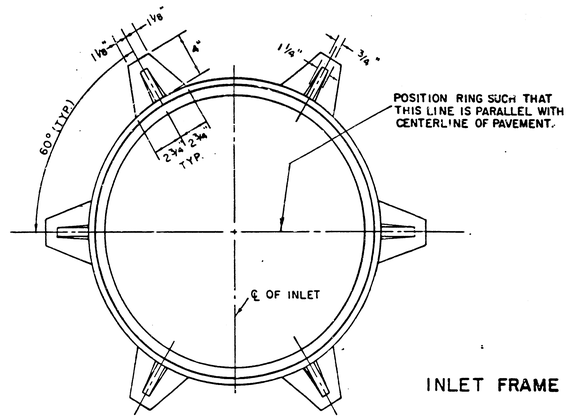
NOTE: CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK WALLS. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL BE CONCRETE PAVEMENT MIX.

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.

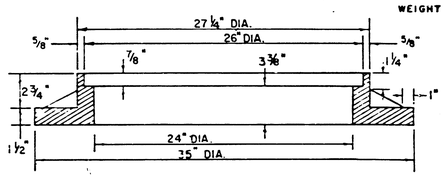
INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.

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.



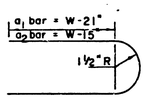
SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.

STEEL SCHEDULE

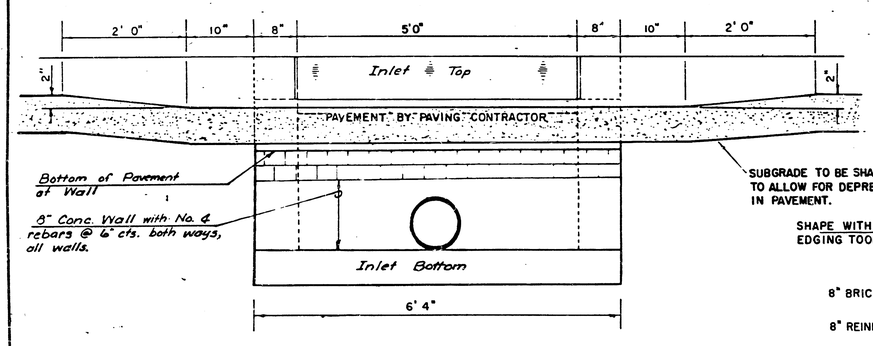
BAR		a_1	a_2	a_3*	b_1 W=4'4"	b_1 W=5'4"	b_1 W=6'4"	b_1 W=7'4"	b_1 W=8'4"	b_2	b_3	b_4	WT. LBS.
NUMBER		4	4	2	1	3	5	7	9	6	1	1	
SIZE		#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#6	
LENGTH	W=4'4"	5'7"	6'7"	4'0"	6'1"	–	–	–	–	1'9"	6'2"	4'8"	60±
	W=5'4"	7'7"	8'7"	5'0"	–	6'1"	–	–	–	1'9"	6'2"	4'8"	81±
	W=6'4"	9'7"	10'7"	6'0"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

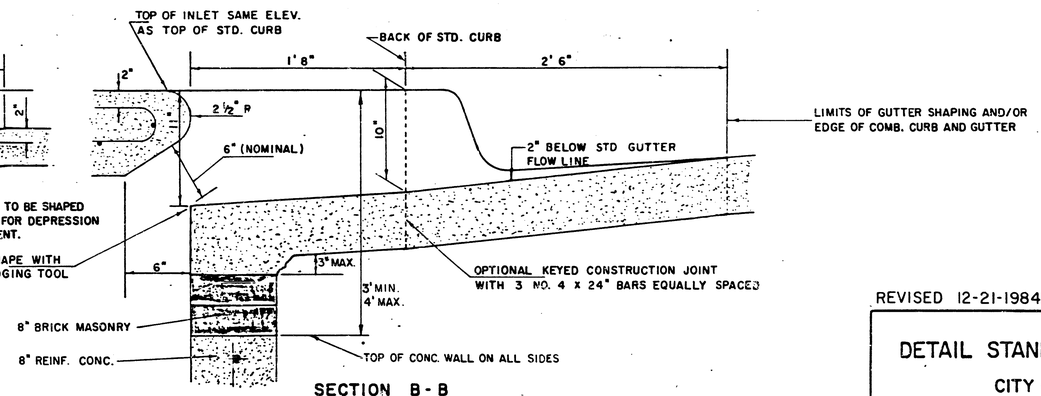
BENDING DIAGRAM



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 C-C



SECTION B-B

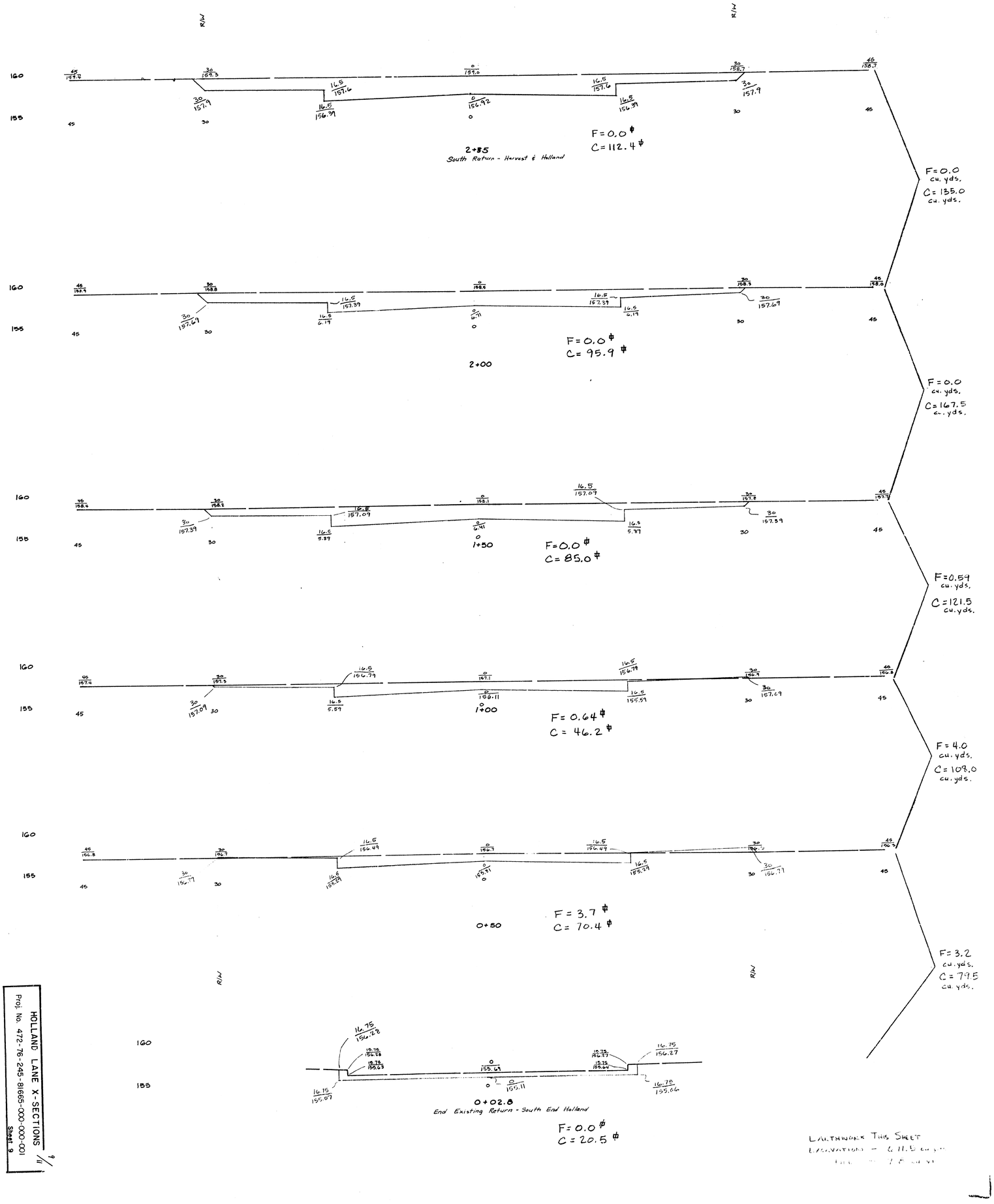
REVISED 12-21-1984

DETAIL STANDARD TYPE IA CURB INLET

CITY OF WICHITA, KANSAS

INLET OPENING = 6" x 5' 0"

JUNE 1984



HOLLAND LANE X-SECTIONS

Proj. No. 472-76-245-81665-000-000-001

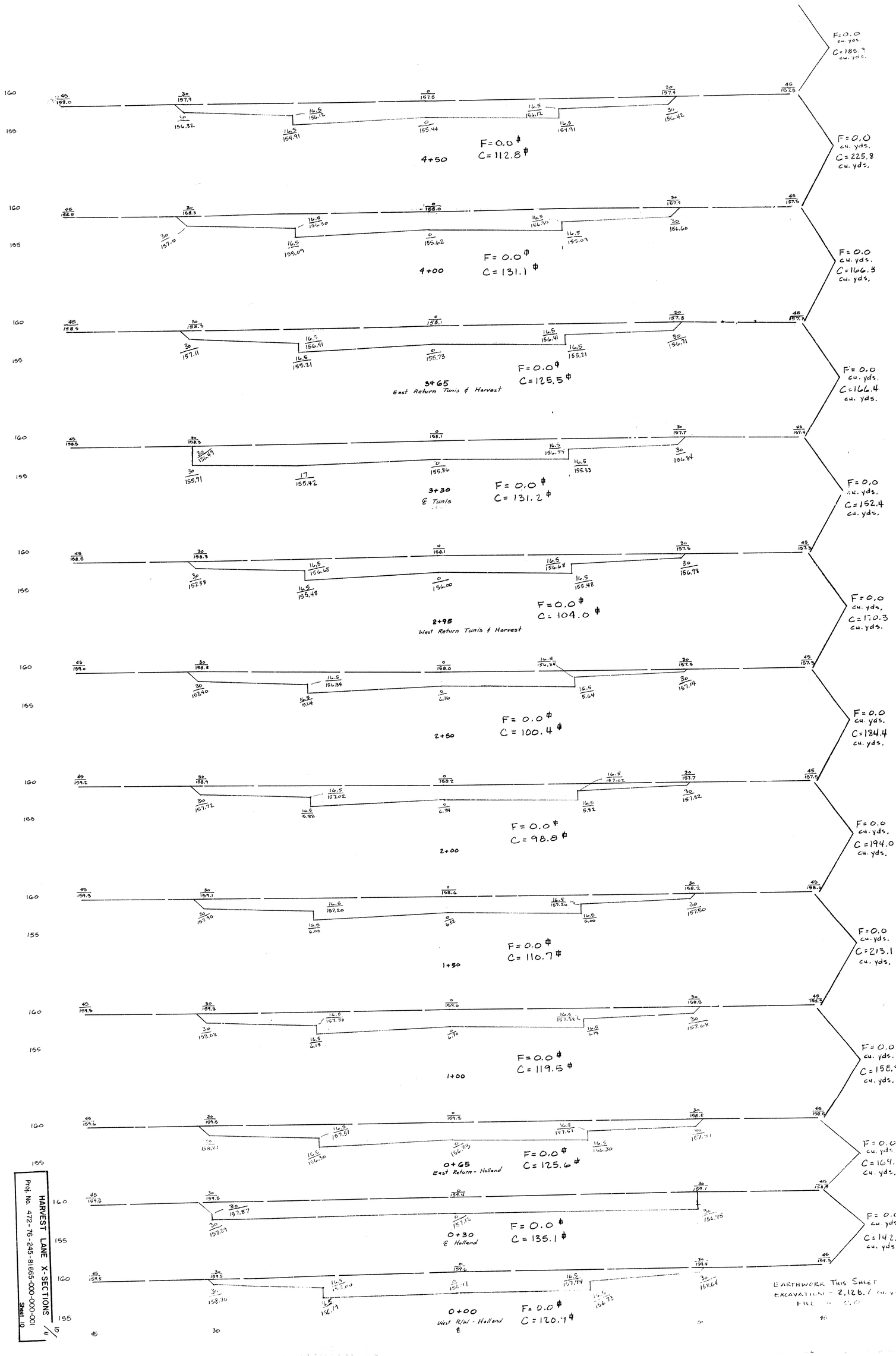
Sheet 9

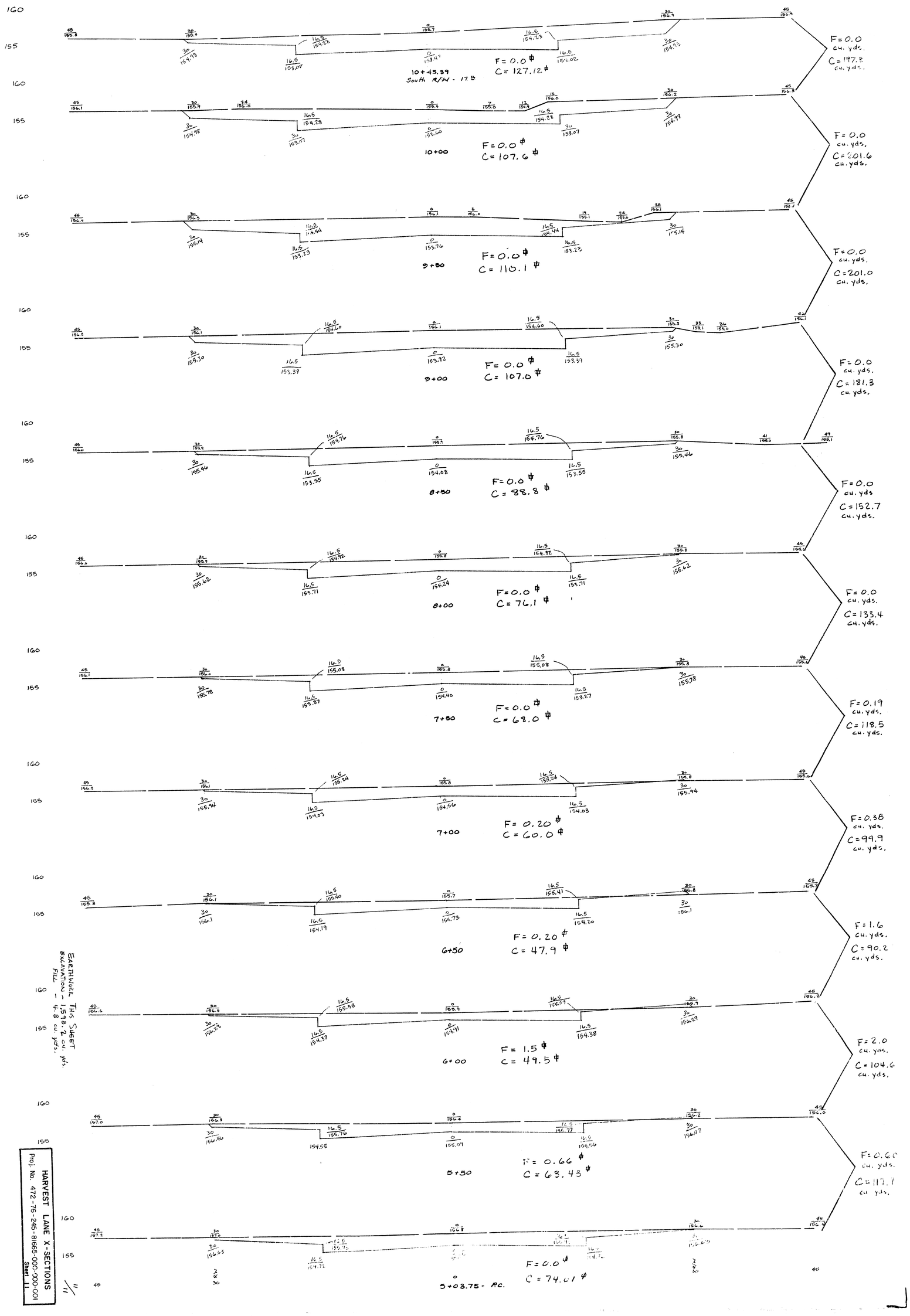
9/11

EARTHWORK THIS SHEET

EXCAVATION = 611.5 cu. yds.

FILL = 7.5 cu. yds.


160
155
45 158.0
30 157.9
0 157.5
30 157.4
45 157.3
30 156.82
16.5 156.72
16.5 154.91
0 155.44
16.5 156.12
16.5 154.91
30 156.42
F=0.0 Φ
C=112.8 Φ
4+50
F=0,0 cu. yds.
C=225.8 cu. yds.
F=0,0 cu. yds.
C=185.3 cu. yds.
45 158.5
30 158.3
0 158.0
30 157.9
45 157.5
30 157.0
16.5 156.30
16.5 155.09
0 155.62
16.5 156.20
16.5 155.07
30 156.60
F=0.0 Φ
C=131.1 Φ
4+00
F=0.0 cu. yds.
C=166.3 cu. yds.
45 158.5
30 158.3
0 158.1
30 157.8
45 157.7
30 157.11
16.5 156.41
16.5 155.21
0 155.73
16.5 156.41
16.5 155.21
30 156.71
F=0.0 Φ
C=125.5 Φ
3+65
East Return Tunis & Harvest
F=0.0 cu. yds.
C=166.4 cu. yds.
45 158.5
30 158.3
0 158.1
30 157.7
45 157.7
30 156.49
30 155.91
17 155.42
0 155.86
16.5 156.24
16.5 155.33
30 156.84
F=0,0 Φ
C=131.2 Φ
3+30
& Tunis
F=0,0 cu. yds.
C=152.4 cu. yds.
45 158.5
30 158.3
0 158.1
30 157.5
45 157.3
30 157.38
16.5 156.68
16.5 155.48
0 156.00
16.5 156.68
16.5 155.48
30 156.98
F=0.0 Φ
C=104.0 Φ
2+95
West Return Tunis & Harvest
F=0.0 cu. yds.
C=170.3 cu. yds.
45 159.0
30 158.8
0 158.0
16.5 156.34
30 157.6
45 157.5
30 157.40
16.5 156.34
16.5 154.14
0 156.16
16.5 156.64
30 157.14
F= 0.0 Φ
C= 100.4 Φ
2+50
F=0.0 cu. yds.
C=184.4 cu. yds.
45 159.2
30 158.9
0 158.2
16.5 157.02
30 157.7
45 157.5
30 157.72
16.5 157.02
16.5 154.82
0 156.34
16.5 156.82
30 157.32
F=0.0 Φ
C=98.8 Φ
2+00
F=0.0 cu. yds.
C=194.0 cu. yds.
45 159.3
30 159.1
0 158.6
16.5 157.20
30 158.2
45 158.3
30 157.90
16.5 157.20
16.5 156.00
0 156.82
16.5 157.20
16.5 156.00
30 157.50
F=0.0 Φ
C=110.7 Φ
1+50
F=0.0 cu. yds.
C=213.1 cu. yds.
45 159.5
30 159.3
0 159.0
16.5 157.38
30 158.5
45 158.5
30 158.02
16.5 156.18
16.5 155.18
0 156.70
16.5 157.38
16.5 156.18
30 157.68
F=0.0 Φ
C=119.5 Φ
1+00
F=0.0 cu. yds.
C=158.9 cu. yds.
45 159.6
30 159.5
0 159.2
16.5 157.51
30 158.6
45 158.5
30 158.27
16.5 156.30
16.5 155.30
0 156.79
16.5 157.51
16.5 156.30
30 157.81
F=0.0 Φ
C=125.6 Φ
0+65
East Return - Holland
F=0.0 cu. yds.
C=169.0 cu. yds.
45 159.5
30 159.5
0 159.4
30 157.87
30 159.1
45 158.9
30 157.27
0 157.16
30 156.15
F=0.0 Φ
C=135.1 Φ
0+30
& Holland
F=0.0 cu. yds.
C=142.2 cu. yds.
45 159.5
30 159.5
0 159.6
16.5 157.20
16.5 157.94
30 159.4
45 159.5
30 158.70
16.5 156.79
0 157.41
16.5 157.94
16.5 156.73
30 156.64
F=0.0 Φ
C=120.4 Φ
0+00
West R/W - Holland
℄
EARTHWORK THIS SHEET
EXCAVATION = 2,128.1 cu. yds.
FILL = 0.0 cu. yds.
HARVEST LANE X-SECTIONS
Proj. No. 472-76-245-81665-000-000-001
Sheet 10
10
11
45
30
30
45


10+45.39
South R/W - 17 ft
F = 0.0 ft
C = 127.12 ft
F = 0.0
cu. yds.
C = 197.2
cu. yds.
10+00
F = 0.0 ft
C = 107.6 ft
F = 0.0
cu. yds,
C = 201.6
cu. yds,
9+50
F = 0.0 ft
C = 110.1 ft
F = 0.0
cu. yds.
C = 201.0
cu. yds,
9+00
F = 0.0 ft
C = 107.0 ft
F = 0.0
cu. yds.
C = 181.3
cu. yds,
8+50
F = 0.0 ft
C = 88.8 ft
F = 0.0
cu. yds
C = 152.7
cu. yds.
8+00
F = 0.0 ft
C = 76.1 ft
F = 0.0
cu. yds.
C = 133.4
cu. yds.
7+50
F = 0.0 ft
C = 68.0 ft
F = 0.19
cu. yds.
C = 118.5
cu. yds.
7+00
F = 0.20 ft
C = 60.0 ft
F = 0.38
cu. yds.
C = 99.9
cu. yds.
6+50
F = 0.20 ft
C = 47.9 ft
F = 1.6
cu. yds.
C = 90.2
cu. yds.
6+00
F = 1.5 ft
C = 49.5 ft
F = 2.0
cu. yds.
C = 104.6
cu. yds.
5+50
F = 0.66 ft
C = 63.43 ft
F = 0.60
cu. yds.
C = 117.1
cu. yds.
5+03.75 - P.C.
F = 0.0 ft
C = 74.01 ft
EARTHWORK THIS SHEET
EXCAVATION - 1,598.2 cu. yds.
FILL - 4.8 cu. yds.
HARVEST LANE X-SECTIONS
Proj. No. 472-76-245-81665-000-000-001
Sheet 11
11/11