LONGFORD

S. E. LINE BLUESTEM TO E. COR. LT. 4, BLK. 6
& S. COR. LT. 24, BLK. 1, CEDAR RIDGE 2ND

LONGFORD COURT

N. E. LINE LONGFORD TO & INCL'D. CUL-DE-SAC

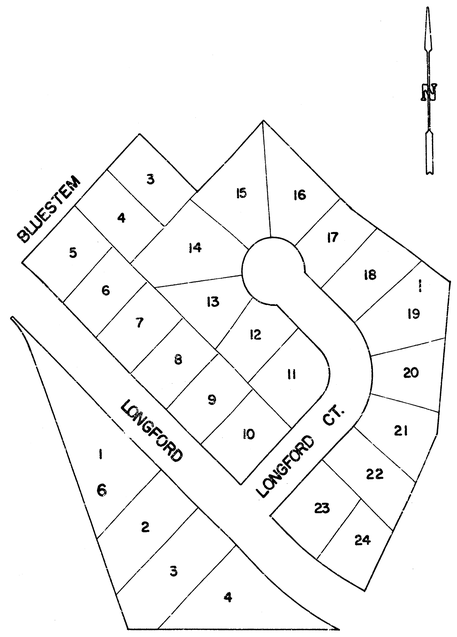
CITY OF WICHITA, KANSAS

DEPARTMENT OF ENGINEERING

R. W. BRUGGEMAN

DIRECTOR OF ENGINEERING/CITY ENGINEER

DATE: PROJ. NO. 472 76 245 81085 000 000 001



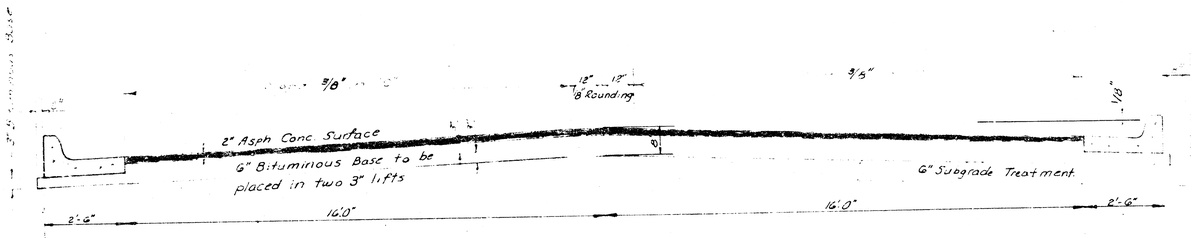
STEPHEN A. LOMEY
LICENSED
7714
REGISTERED
LAND SURVEYOR

Manipulation = 5,305 S.Y.

10

LONGFORD

S. E. LINE BLUESTEM TO E. COR. LT. 4, BLK. 6
& S. COR. LT. 24, BLK. 1, CEDAR RIDGE 2 ND.



TYPICAL SECTION

37' ASPHALTIC CONCRETE PAVEMENT WITH BITUMINOUS BASE

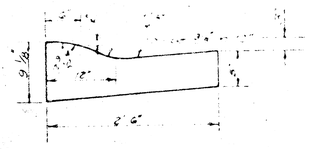
A TACK COAT OF EMULSIFIED ASPHALT (SS-1 H) SHALL BE APPLIED AT AN APPROXIMATE RATE 0.05 GALLONS PER SQ YD BETWEEN LIFTS OF ASPHALTIC MATERIALS WHEN ORDERED BY THE ENGINEER. TACK COAT WILL NOT BE PAID FOR DIRECTLY AND SHALL BE CONSIDERED AS SUBSIDIARY TO PRICE BID FOR ASPHALTIC PAVEMENT.

BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR CROWN AND GRADE. CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF 1' WITH JOINTS IN PRECEDING LIFTS AND PLACED SUCH THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE IN THE TOP LIFT.

CURBED CURB & GUTTER



ROLL TYPE CURB & GUTTER



DETAIL OF TRANSVERSE CONSTRUCTION JOINTS



TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT TEMPORARILY ENDS TO FACILITATE FUTURE PAVEMENT CONSTRUCTION AS SHOWN BY DETAIL. THE COST OF CONSTRUCTING THE TRANSVERSE CONSTRUCTION JOINTS SHALL NOT BE MEASURED OR PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE B.I.D. PRICE FOR SQUARE YARDS OF ASPHALTIC CONCRETE PAVEMENT.

CITY OF WICHITA KANSAS
DEPARTMENT OF ENGINEERING

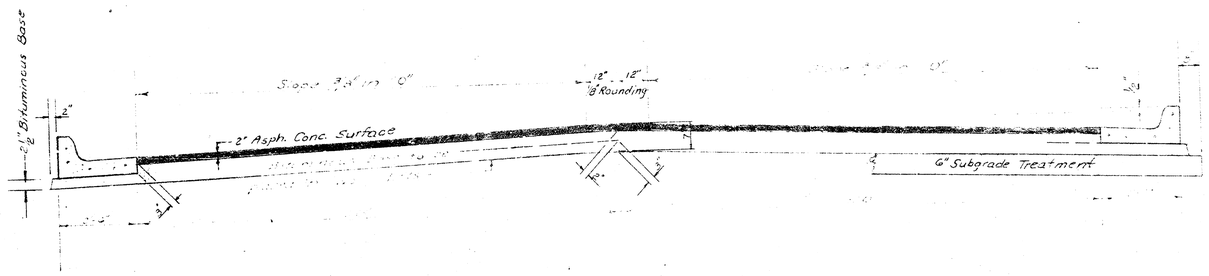
R. W. BRUGGEMAN
DIRECTOR OF ENGINEERING/CITY ENGINEER

DATE _____ Proj. No. 472 76 245 81085 000 000 001

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LONGFORD CT.

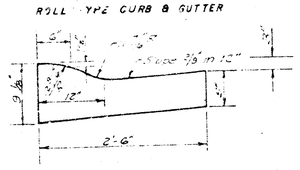
N. E. LINE LONGFORD TO & INCLD. CUL-DE-SAC



TYPICAL SECTION

35' ASPHALTIC CONCRETE PAVEMENT WITH BITUMINOUS BASE





A TACK COAT OF EMULSIFIED ASPHALT (SS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE 0.05 GALLONS PER SQ YD BETWEEN LIFTS OF ASPHALTIC MATERIALS WHEN ORDERED BY THE ENGINEER. TACK COAT WILL NOT BE PAID FOR DIRECTLY AND SHALL BE CONSIDERED AS SUBSIDIARY TO PRICE BID FOR ASPHALTIC PAVEMENT.

BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR CROWN AND GRADE. CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF 1' WITH JOINTS IN PRECEDING LIFTS AND PLACED SUCH THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE IN THE TOP LIFT.

DETAIL OF TRANSVERSE CONSTRUCTION JOINTS



TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT TEMPORARILY ENDS TO FACILITATE FUTURE PAVEMENT CONSTRUCTION AS SHOWN BY DETAIL. THE COST OF CONSTRUCTING THE TRANSVERSE CONSTRUCTION JOINTS SHALL NOT BE MEASURED OR PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE BID PRICE FOR SQUARE YARDS OF ASPHALTIC CONCRETE PAVEMENT.

CITY OF WICHITA KANSAS
DEPARTMENT OF ENGINEERING
R. W. BRUGGEMAN
DIRECTOR OF ENGINEERING/CITY ENGINEER
DATE: PROJ. No. 472 76 245 81085 000 000 001

3/10

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BM = 160.76 ~ "O" Cut Top S. Cb. Longford, 100'± W. of W. L. Bluestem.
BM = 169.52 ~ R.R. Spk. S. W. Fc. HLP N. E. Cor. Mt. Vernon & Cypress.

℄ is ℄ LONGFORD & ℄ LONGFORD EXTENDED WEST.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL 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.

SUB-GRADE

TYPE OF SUB-GRADE TREATMENT SHALL BE DETERMINED BY THE FIELD ENGINEER. SUB-GRADE TREATMENT MAY CONSIST OF LIME TREATMENT, SUB-GRADE MODIFICATION, OR ANY COMBINATION OF THESE.

Scale: 1" = 20'

BLUESTEM

0+04.60 0+09.60 0+50PT 1+00 1+50 2+00 2+50 3+00 PI NO VC EL.= 166.20 3+25 3+50 4+00 4+53.60 4+74.60 CT. 5+06.60 5+38.60 5+53.60 5+79.32 PC

+0.3023 %
+0.3' Wk. Gr.

-0.3715 %
+0.7' Wk. Gr.

+0.4184 %
+0.7' Wk. Gr.

32' R/W

8" Water Line

Const. Wheelchair Ramp Remove Integral cb.

Const. 4' Conc. Walk

Proposed 12" Water Line

Const. Comb. Cb. & Gtr.

7" A.C. (5" Bit. Pvmt. Base)

Proposed 6" Water Line

End 8" A.C. Pvmt. (6" Bit. Base) & Begin 7" A.C. Pvmt. (5" Bit. Base)

Const. Wheelchair Ramps.

STA. 0+04.60 Begin Const.

348'R

350'R

LONGFORD

Const. 8" A.C. Pvmt. (6" Bit. Base)

S.W.S. & Inlets By "Others."

Saw & Match

Begin Taper

End Taper

0+04.60

+0.3' Wk. Gr.
+0.3149 %

+0.7' Wk. Gr.
-0.4181 %

PI NO VC EL.= 165.20

+0.3493 %

PI 4+44.60 60' VC EL.= 164.70

Note: Contractor to coordinate work with sewer contractors.

Note: Trees to be removed are marked thus, except that any tree marked for removal which in the opinion of the Engineer can be saved shall be spared.

Note: Const. not more than 23-20' Drives.

Note: Lime application rate = 25#/S.Y.
Preheater Fines application rate = 35#/S.Y.

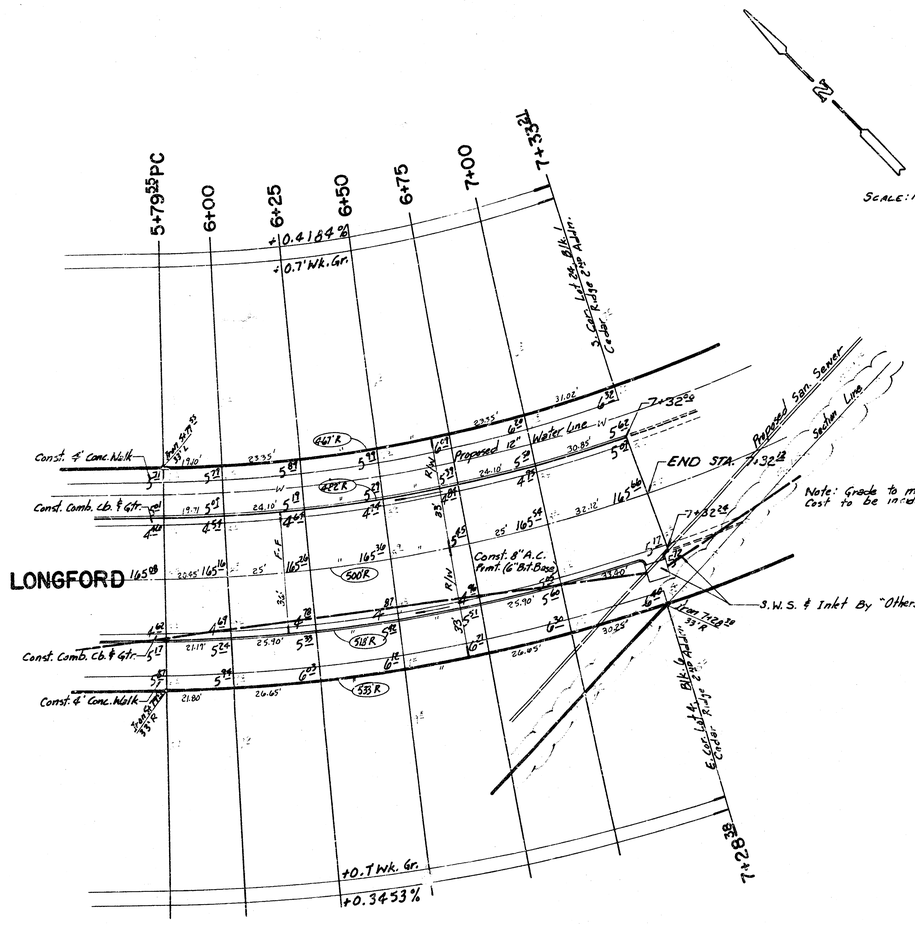
EARTHWORK

	EXCAVATION	COMP. FILL 90%
X-SECTION	5,669.1 C.Y.	58.9 C.Y.
10%	567.0 C.Y.	5.9 C.Y.
TOTAL	6,236.1 C.Y.	64.8 C.Y.

LONGFORD
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Δ = 17°28'10" R. = 500.00 T. = 76.82 L. = 152.45' L.C. = 151.86'

CURVE DATA BASED ON ℄ RAD. Δ/2 = 8°44'05"

STA.	ARC.	CHORD LENGTH ℄ OFF M.CR.	CHORD LENGTH ___ OFF ___ CB	DEFLECTION	TOTAL DEFLECTION
5+79.35 PC	—	—		0°00'00"	0°00'00"
6+00	20.65'	19.39'		1°10'18"	1°10'18"
6+25	25'	23.70'		1°25'57"	2°36'15"
6+50	"	"		1°25'56"	4°02'11"
6+75	"	"		1°25'57"	5°28'08"
7+00	25'	23.70'		1°25'57"	6°54'05"
7+32	32'	30.33'		1°49'60"	8°44'05"

Defl./Ft. = 3.43774 Min.

INTERSECTION QUANTITIES

___	S.Y. ___ " Concrete Pavement
155	S.Y. 8 " Asphaltic Conc. Pavement (6 " Bituminous Base)
20	S.Y. 3 " Bituminous Pave
96	L.F. Combined Curb & Gutter
___	L.F. Integral Curb
___	S.F. 4" Bituminous Ramp
___	S.F. 4" Walk
___	C.Y. Excavation
___	C.Y. Compacted Fill
___	Lbs. Reinforcing Steel
190	S.Y. Manipulation
3	Tons Lime or Cement
___	S.Y. V.G. ___" Concrete & ___" Asphaltic Concrete Base

Δ = 17°29'49" R. = 500.00 T. = 76.96' L. = 152.64' LC. = 152.10'

CURVE DATA BASED ON ℄ RAD. Δ/2 = 8°44'55"

STA.	ARC.	CHORD LENGTH ___ OFF ___ CB	CHORD LENGTH ℄ OFF S.CR.	DEFLECTION	TOTAL DEFLECTION
5+79.35 PC	—		—	0°00'00"	0°00'00"
6+00	20.65'		21.51'	1°10'18"	1°10'18"
6+25	25'		26.30'	1°25'57"	2°36'15"
6+50	"		"	1°25'56"	4°02'11"
6+75	"		"	1°25'57"	5°28'08"
7+00	25'		26.30'	1°25'57"	6°54'05"
7+32.38	32.06'		33.91'	1°49'60"	8°43'55"

Defl./Ft. = 3.43774 Min.

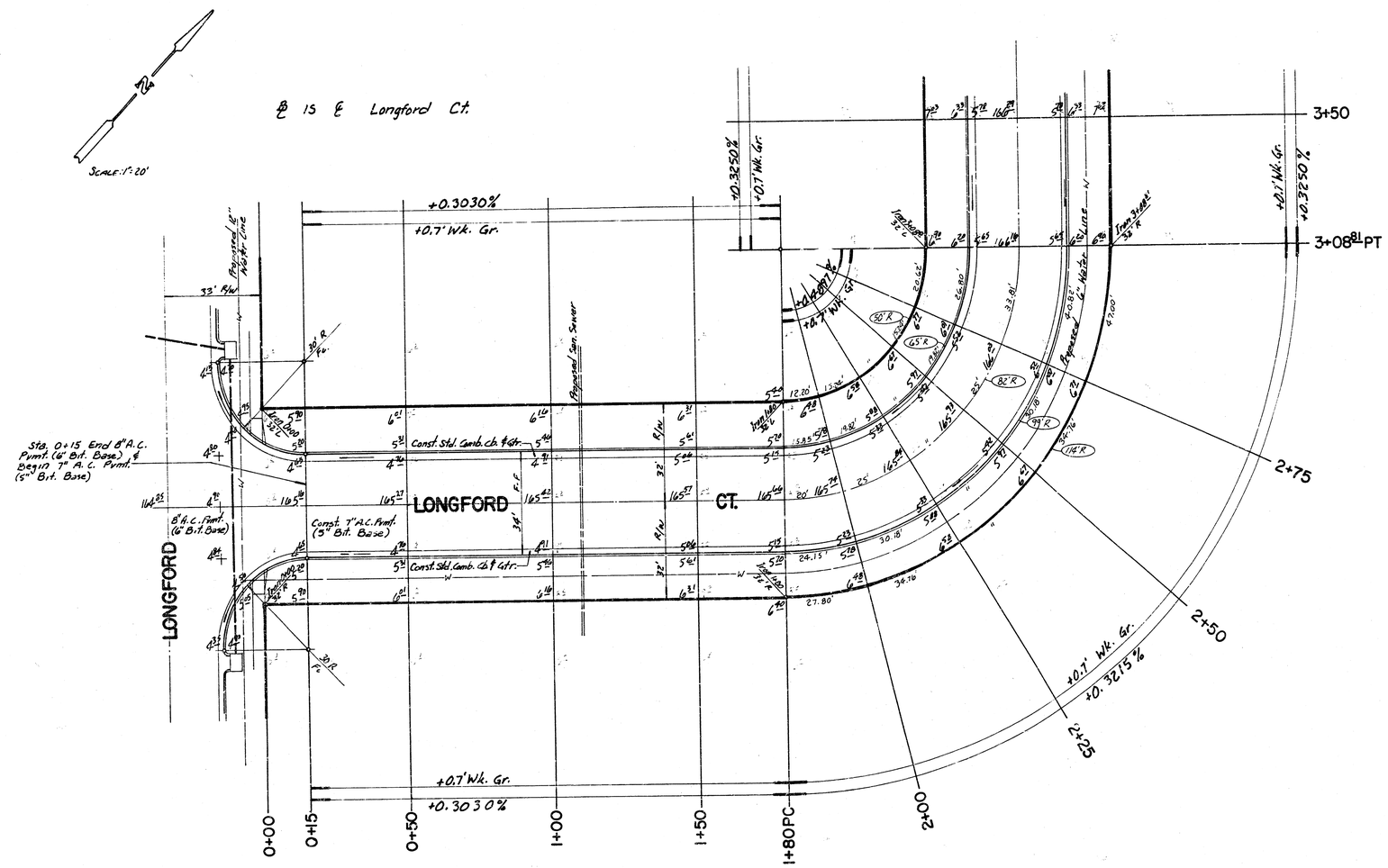
LONGFORD
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℄ is ℄ Longford Ct.

SCALE: 1" = 20'



Δ = 90°-00-00" R = 82.00' T = 82.00' L = 128.81' LC. = 115.97'

CURVE DATA GAS ℄ LONGFORD CT. 45°-00-00"

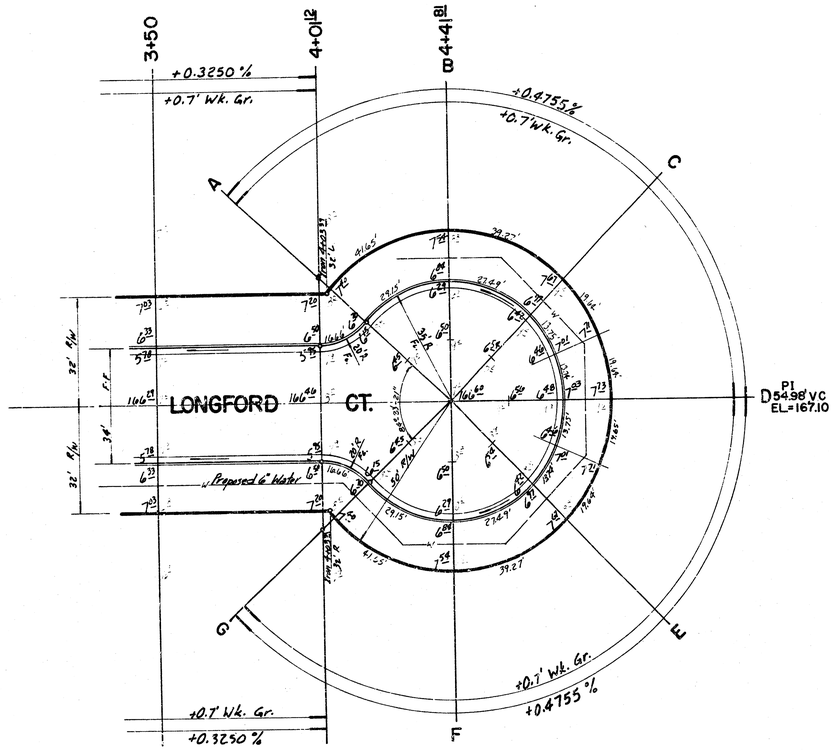
STA	℄	8" N	8" S		TOTAL DEFL.
1+80 PC	——	——	——	0°-00'-00"	0°-00'-00"
2+00	20'	13.87'	24.03'	6°-59'-12"	6°-59'-12"
2+25	25'	17.31'	32.50'	8°-44'-03"	15°-43'-15"
2+50	"	"	"	8°-44'-03"	24°-27'-18"
2+79	29'	17.31'	32.50'	8°-44'-05"	33°-11'-23"
3+08.81 PT	33.81'	23.36'	43.81'	11°-48'-37"	45°-00'-00"

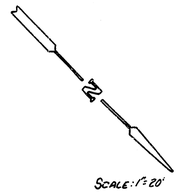
Defl./Ft. = 20.96111 Min.

LONGFORD CT.
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LONGFORD CT.
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Sheet No. 1 OF 2

Project No. _____

Form 192-066

MEASURED QUANTITIES FOR FINAL ESTIMATES ON PAVING

STREET NAME _____ FROM _____ TO _____ CONTRACTOR RITCHIE PAVING KIND OF PAVEMENT _____

Sta.	Width	Dist.	Av. Width	Area	Square Yards Pavement
SQ YDS 5" AC (2" BIT) BET R's					
L.OE	35.5				
0+17	29.5	9.1	34.7		
0+50	32.0	32.9	32.8		
1+32	32.0	682.75	32.0		
		2X18.21			
		1X186.15			
		= 64.0X10.0			
		32,144.46			2,493.5 SF
SQ YDS L.F.I.P. (BET R's)					
		2.67X1,382.59			
		= 410.1 SY.			
SQ YDS L.F.I.P. (BET R's)					
		1X22,441.46			
		3.17X1382.3			
		26,833.35			2,980.4 SY
TONS PHF (PROJ TOT)					
		CALC = 28# / = 14T			
		TICKETS = 74 TONS			

Sta.	End Area Fr Station	End Area Area	Dist.	Av. Area	Volume	Cubic Yards Excavation

SF 4" AC (DIRECT)

340	L.S. 473.6X40
300	L.S 184.1X40
300	R.S. 739.8X40
300	
300	CITY 4" = 220 SF
340	REMOVAL (AS PER ENGINEER
333	COMB C&G REM.= 19.5 LF
342	SY. PVMT REM.= 23 SY.
378	INT. CURB REM. = C
320	SAW 7+42.4 = 37.4 LF
320	SMALL TREES = 0
832	C.B HOOKUPS = 4
5,371 SF	(SEE PROJ. MEMO)

TOT. SF 4" W.C.P.

5,510.2 SF

CAL. CRI. # 2 ~ # 100.CC

Measured By	PFRM
Date	DEC 82
Book No.	12-T
Finaled By	TATE

	MAN HR.	PHF	WCR	3" BIT BASE	4" WALK	Square Yards 2" Pavement	Int. Cb.	C & G	6" Dr.	Cubic Yards Excavation	COMB 20" FILL	CHANGE ORDER 1	PVMT REM	CURB REM	S.T. REM	INT REM	SAW FT	C.B HU	JOB #
BET R's	2,002.4		0	410.1	5,371	2,493.5		1,382.3											
INTERC	180.0		157	23.0	220	155.0		34.0											
Totals	3,170.4	74	157	452.1	5,591	2,648.5		1,476.3		3,075.0	58.2	2,230 SY	23	20	0	0	37	4	100 23

Eng. Est.

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Sheet No. 2 OF 2

Project No.

MEASURED QUANTITIES FOR FINAL ESTIMATES ON PAVING

Form 192-066

STREET NAME ______ FROM ______ TO ______ CONTRACTOR RITCHIE PAVING KIND OF PAVEMENT 7"

Sta.	Width	Dist.	Av. Width	Area	Square Yards Pavement
SQ. YDS. 7"F.C. (5" BIT)		2X18.21			
0+00	30.0	401.1	30.0		
4+01	30.0	40.7 X 48.0			
		.5π (33.0)²			
	+	27.5 X 3.0 X .6730			
	+	27.2 X 2.8 X .6725			
	−	17.0 X 1.9 X .6737			
	−	17.3 X 1.9 X .6731			
		15,796.471			1,755.2 SY.
SQ. YDS. MANIP.					
		1 X 15,796.471			
		3.17 X 1,004.8			
		18,981.687			2,109.1 SY.
SQ. YDS. 2½ BIT. BASE					
		2.67 X 1,004.8 ÷ 9			298.1 SY.

	MANIP			2½" BIT BASE		Square Yards 7" Pavement F.C.	Int. Cb.	C & G	6" Dr.	Cubic Yards Excavation
Property										
City										
Totals	2,109.1			298.1		1,755.2		1,004.8		2533.3

Measured By	PARM
Date	D8082
Book No.	12-T
Finaled By	TATE

Eng. Est.

9/10

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TATE
DEC 82

STATEMENT OF COST

PROJ. NO. 412-76-245-81085-000-000-001

P.E. 171,692.73

FOR CONSTRUCTION OF: LONGFORD LANE & LONGFORD CT. IN CEDAR RIDGE 2ND

WORKING DAYS → OK

QUANTITIES PROP.	QUANTITIES CITY	QUANTITIES TOTAL	UNIT PRICE	CONSTRUCTION ITEM	COSTS 92% PROP.	COSTS 7% CITY	COSTS TOTAL
		2,649'	13.34'	SQ. YDS. 8" AG. PVMT. (6" BIT.)			35,337.66
		1,755'	12.71'	SQ. YDS. 7" AG. PVMT. (5" BIT.)			22,306.05
		438'	4.75'	SQ. YDS. 3" BIT. BASE			2,080.50
		298'	4.65'	SQ. YDS. 2½" BIT. BASE			1,385.70
		2,481'	6.19'	LIN. FT. COMB. CURB & GUTTER			15,357.39
		5,663'	1.25'	CU. YDS. EXCAVATION			7,086.25
5,271*	220*	5,591'	1.75'	SQ. FT. 4" WALK	9399.25	385.00	9,784.25
	157*	157'	3.00'	SQ. FT. W.C.R.		471.00	471.00
		59'	0.90'	CU. YDS. COMP. FILL (90%)			53.10
		5,280'	1.35'	SQ. YDS. MANIPULATION			7,128.00
		4'	50.00'	INLET HOOK-UPS			200.00
		0'	60.00'	SMALL TREE REMOVED			0.00
		37'	1.00'	SAWED JOINT (LIN. FT.)			37.00
		23'	3.50'	SQ. YDS. PAVM'T REMOVED			80.50
		20'	3.00'	LIN. FT. COMB C&G REMOVED			60.00
		0'	2.50'	LIN. FT. INTEGRAL CURB REM.			0.00
		74'	42.00'	TONS PRE-HEATER FINES			3,108.00
		1'	L.S.	CHANGE ORDER #1			2,200.00
		1	L.S.	CHANGE ORDER #2			100.00
				SUBTOTALS	98,294.31	8481.09	106,775.40
				ENGINEERING + INSP.	8842.20	758.45	9600.65
				ADMINISTRATION	1443.90	123.85	1567.75
				PUBLICATION	125.76	–	125.76
				ABSTRACTING	6.50	–	6.50
				CONSTRUCTION COST	108,712.67	9363.39	118,076.06
		6/83		TEMP. NOTE INT.	6535.21	560.57	7095.78
				TOTAL COST	$115,247.88	$9923.96	$125,171.84

FORM 192-202 MARCH 81

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