Remove exist. manhole.

Comb. inlet manhole type A-5 Spec. by others. Flow 18" R.C.P. out = 107.40. T.C. = 111.19±.

Constr. std. 2'x5' brick inlet. Flow 15" R.C.P. out = 108.50. T.C. = 112.00.

Sta. 3+80, Constr. reinf. conc. manhole. Flow 15" R.C.P. IN = 107.16. Flow 15" R.C.P. OUT = 107.16.

Scale 1" = 20'

N

Comb. Inlet Manhole Type A-5 Special by others.

Sta. 0+00 ± Concrete Manhole by others with 8" stub East. Flow 18" R.C.P. In = 105.77.

Curb Inlet Type A-5 Special by others. T.C. = 111.36±. Flow 18" R.C.P. out = 105.97.

Constr. two std. brick manholes type A and 8" cast iron pipe siphon on exist. 8" sanitary sewer. See details sht. no. 7.

Constr. std. 2'x5' brick inlet. Flow 15" R.C.P. out = 112.00. T.C. = 112.00±.

--EXCAVATED MATERIAL--
Excavation from storm sewer project to remain on site, to be used as fill for paving project. Excess material to be removed by the paving contractor.

Note: This project is to be coordinated with the paving and drainage projects on Second Street from Minnesota Ave. to Grove St. in such a manner that vehicular access will be provided at all times to the portions of Ash St., Madison Ave., and Spruce St. lying between First St. and Second St.

B.M. #90 Chiseled "+" on east end of S.E. wingwall of bridge over canal on First St. City Datum = 111.69. I-35W Datum = 1299.35.

B.M. 113.43 S.E. corner conc. porch to house at 2118 E. First St.

Plan Scale 1" = 20'
Profile Scale Horz. 1" = 20'
Vert. 1" = 4'

115
105

Sta. 0+00 ± Conc. Manhole by others with 8" stub East

60" R.C.P. by others

Bottom of proposed pavement

Top of exist. pavement

proposed rim 111.75±

Sta. 3+80, Constr. reinf. conc. manhole.

Approx. location 8" sewer

380 L.F. 54" R.C.P. @ 0.3%

20 L.F. 48" R.C.P. @ 0.5%

0+00 Flow Out = 102.76
Flow In = 102.91

0+50 Flow = 102.92

1+00 Flow = 103.07

1+50 Flow = 103.22

2+00 Flow = 103.37

2+50 Flow = 103.52

3+00 Flow = 103.67

3+50 Flow = 103.82

3+80 Flow Out = 103.91
Flow In = 104.41

4+00 Flow = 104.47

As Built Per Plan 11-12-73

INCIDENTAL DRAINAGE - FIRST STREET
E. L. ASH TO W. L. GROVE
PROJ. NO. DAKD572051

DEC. 1972

1/4

ROLAND E. SCHRODER — 6311 — KANSAS — REGISTERED PROFESSIONAL ENGINEER

LARRY W. LAUREN — 6363 — KANSAS — REGISTERED PROFESSIONAL ENGINEER

Constr. std. 2'x5' brick inlet. Flow 15" R.C.P. out = 109.25. T.C. = 112.75.

42 L.F. 15" R.C.P.

Constr. std. 2'x5' brick inlet. Flow 15" R.C.P. in = 108.85. Flow 15" R.C.P. out = 108.75. T.C. = 112.75±.

30 L.F. 15" R.C.P.

Constr. std. 2'x5' brick inlet. Flow 15" R.C.P. in = 108.95. Flow 18" R.C.P. out = 108.35. T.C. = 112.70±.

32 L.F. 18" R.C.P.

Sta. 7+60. Constr. reinf. conc. manhole. Flow 18" R.C.P. IN. = 108.05. Flow 15" R.C.P. S. = 107.00.

Constr. std. 2'x5' brick inlet. Flow 15" R.C.P. out = 109.20. T.C. = 112.70.

Constr. 10 L.F. reinf. conc. encasement on exist. 8" sanitary sewer.

Constr. 10 L.F. reinf. conc. encasement on exist. 8" sanitary sewer.

8" Sanitary Sewer

20' Alley

2" Water

First Street

Spruce Street

98" R.C.P.

42.5°

Triangle

B.M. 113.66 S.E. corner conc. porch to house at 2210 E. First St.

Scale 1"=20'

N

Plan Scale 1"=20'
Profile Scale Horz. 1"=20'
Vert. 1"=4'

Bottom of proposed pavement

Top of exist. pavement

115

105

proposed elev. 112.95

Approx. location 8" sewer.

360 L.F. 48" R.C.P. @ 0.5%

240 L.F. 48" R.C.P. @ 0.3%

4+00 Flow=104.51

4+50 Flow=104.76

5+00 Flow=105.01

5+50 Flow=105.26

6+00 Flow=105.51

6+50 Flow=105.76

7+00 Flow=106.01

7+50 Flow=106.26

7+60 Flow=106.31

8+00 Flow=106.45

8+50 Flow=106.70

Ex. manhole 8.5

Ex. manhole 8.8

Ex. manhole 8.8

INCIDENTAL DRAINAGE - FIRST STREET
E. L. ASH TO W. L. GROVE
PROJ. NO. DAKD57205I

2/4

Note: Grates shall be removed from inlets to be abandoned and the inlets are to be filled with sand. Reinf. 8" conc. pavement is to then be const. on top of sand fill.

N

Scale 1"=20'

Abandon grate inlets and plug pipes.

Remove exist. inlet and plug pipe.

Constr. std. 2'x5' brick inlet. Flow 15" R.C.P. out = 110.50. T.C. = 114.32±.

20 L.F. 15" R.C.P.

10 L.F. 15" R.C.P.

Sta. 11+28.7 Constr. reinf. conc. manhole with 48" stub east. Flow 15" R.C.P. N. = 110.10. Flow 15" R.C.P. S. = 110.10.

Constr. std. 2'x5' brick inlet. Flow 15" R.C.P. out = 110.30. T.C. = 114.22±.

Remove exist. inlet and plug pipe. Reconstruct curb and gutter as required.

Saw existing pavement remove and replace.

Plug 6" storm sewer connection to sanitary sewer or manhole.

B.M. 114.44 "D" cut ⊕ intersection of back of walks on S.E. corner of First & Grove.

First Street

Grove

15' Alley

Siphon Details

℄ First Street

29'

Exist 8" sanitary sewer.

12.4 L.F. 8" Cast Iron pipe with plain ends.

6.0± L.F. 8" Clay Pipe with bells placed downstream.

8"-22.5° Cast Iron bend with mechanical joint and plain end. Install plain end upstream.

54" R.C.P.

6.0± L.F. 8" Clay Pipe with bells placed upstream.

8"-22.5° Cast Iron bend with mechanical joint and plain end. Install plain end downstream.

Note: Sanitary sewer siphon to be encased with reinf. conc. encasement. Lump sum bid price to include all costs of furnishing materials and constructing complete siphon including reinf. conc. encasement. Brick manholes will be paid for separately.

Plan Scale 1"=2'
Profile Scale Horz. 1"=2'
Vert. 1"=2'

Plan Scale 1"=20'
Profile Scale Hor. 1"=20'
Vert. 1"=4'

Bottom of 48" stub at 107.83

Top of 1st lift manhole 114.32

Sta. 11+26 Constr. reinf. conc. manhole. Flow 15" R.C.P. out = 107.91

Proposed rim to match exist. pav't

115

105

Approx. location 36" sewer

126 L.F. 48" R.C.P. @ 0.3%

Future 48" R.C.P. @ 0.3%

10+00 Flow = 107.03

10+50 Flow = 107.18

11+00 Flow = 107.33

11+26 Flow = 107.41

℄ First Street

29'

110

100

New Pavement

Remove exist. 8" clay pipe as required.

54" R.C.P.

Exist. 8" Clay Pipe @ 0.3%

12.4 L.F. 8" Cast Iron pipe with plain ends.

8"-22.5° Cast Iron bend with mechanical joint and plain end.

8"-22.5° Cast Iron bend with mechanical joint and plain end.

6.0± L.F. 8" Clay Pipe.

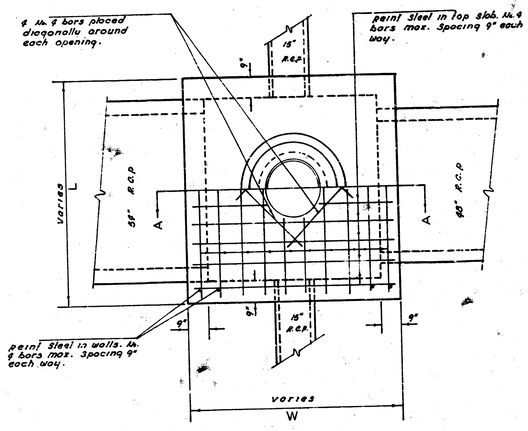
6.0± L.F. 8" Clay Pipe.

Flow In = 103.95
Flow Out = 103.85

Flow In = 103.90
Flow Out = 103.86

INCIDENTAL DRAINAGE - FIRST STREET
E. L. ASH TO W. L. GROVE
PROJ. NO. D[illegible]XD572051

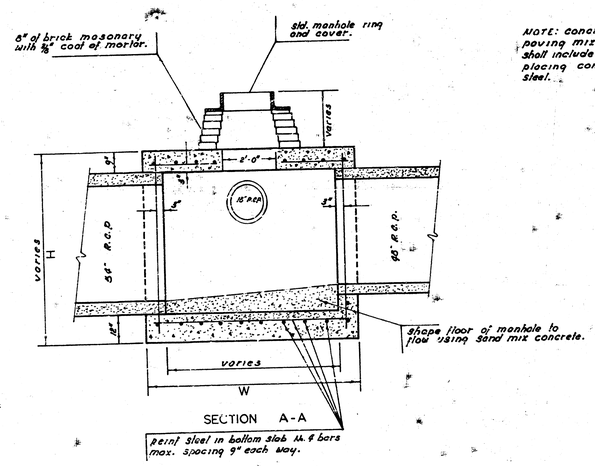
3/4



PLAN

pipe sizes shown are typical for manhole Sta 3+80 only.

REINF CONC MANHOLE SCHEDULE			
Station	Heigth	Length	Width
3+80	7'-3"	7'-0"	7'-0"
7+60	6'-7"	6'-6"	6'-6"
11+86	6'-7"	6'-6"	6'-6"



SECTION A-A

reinf steel in bottom slab #4 4 bars max. spacing 9" each way.

NOTE: concrete for the manholes shall be 6 sack paving mix. the bid price for reinf. conc manholes shall include the cost of excavation, furnishing and placing concrete, bricks, cover plates, and reinf. steel.

INCIDENTAL DRAINAGE - FIRST STREET
E. L. ASH TO W. L. GROVE
PROJ. NO. DAKD572051

4/4

11 8 1 (18)

NOTE: SIDEWALK REMOVAL AND RECONSTRUCTION SHALL BE AS DETERMINED BY THE FIELD ENGINEER.

FIRST STREET
E. L. ASH TO W. L. GROVE
PROJ. NO. DAKM57205
CITY OF WICHITA, KANSAS
R. W. LINN, CITY ENGINEER

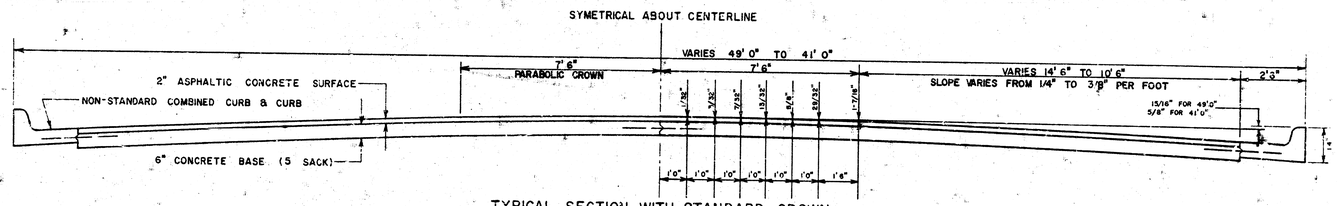
Note: This project is to be coordinated with the paving and drainage projects on Second Street from Minnesota Ave. to Grove St. in such a manner that vehicular access will be provided at all times to the portions of Ash St., Madison Ave., and Spruce St. lying between First St. and Second St.

Earthwork

Excavation = 836.7 C.Y.
+10% = 83.7 C.Y.
Total = 920.4 C.Y.

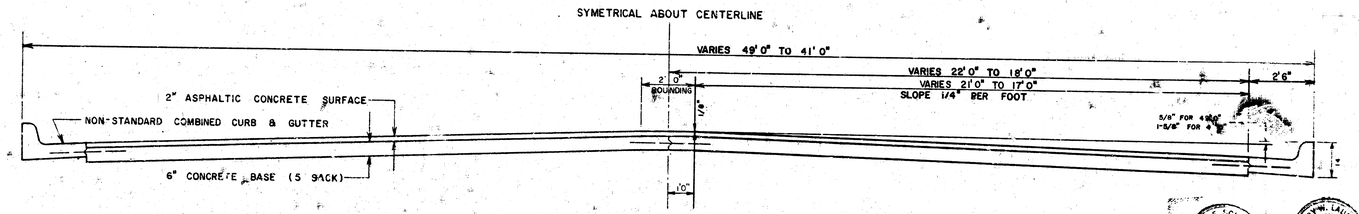
Compacted Fill = 4.4 C.Y.
+10% = 0.4 C.Y.
Total = 4.8 C.Y.

714.8 C.Y. Net

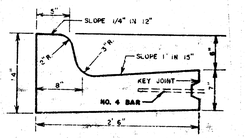


TYPICAL SECTION WITH STANDARD CROWN
STA. 0+75 TO STA. 3+80

TOP 6" OF PAVEMENT SUBGRADE TO BE TREATED WITH LIME.



TYPICAL SECTION WITH ALTERNATE CROWN
STA. 0+75 TO STA. 3+80



DETAIL OF NON-STANDARD COMBINED CURB & GUTTER

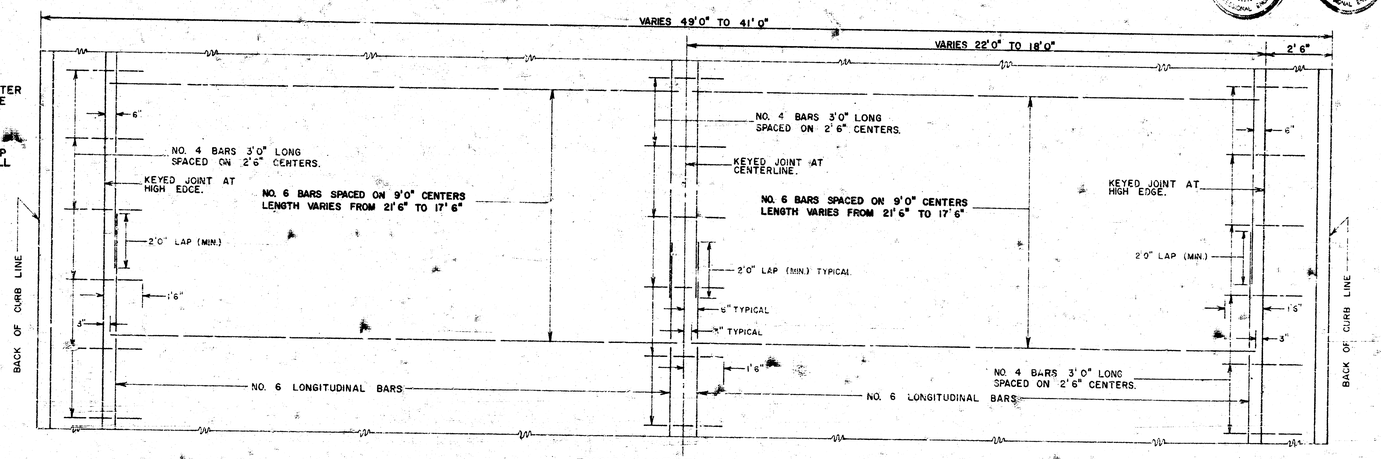
GENERAL NOTES

CONTRACTION JOINTS MAY BE CONSTRUCTED IN COMBINED CURB AND GUTTER BY SAWING WITH AN APPROVED CONCRETE SAW. THE SAW CUT SHALL EXTEND 2-1/2" BELOW THE SURFACE OF THE GUTTER AND CURB. SAWED CONTRACTION JOINTS SHALL HAVE A MAXIMUM SPACING OF 10' AND BE FILLED WITH A SPECIFIED JOINT FILLER, SUCH THAT THE JOINT IN THE GUTTER SECTION WILL BE COMPLETELY FILLED.

SEE SHEET NO. 3 FOR OTHER NOTES AND RAMP DRIVE DETAILS. SEE SHEET NO. 5 FOR RETAINING WALL AND STEP DETAILS.

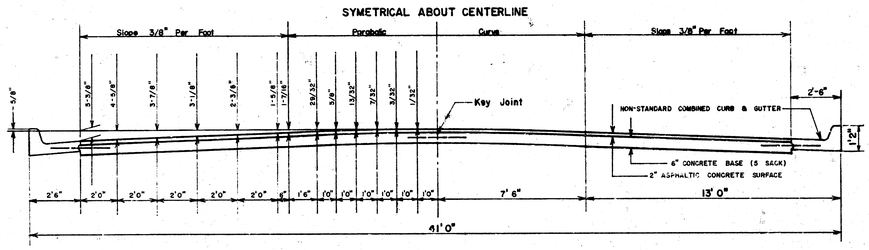
PAVEMENT GRADES SHOWN ON PLANS ARE FOR STANDARD CROWN.

NOTE: Excavation from storm sewer project will remain on site to be used as fill for paving project. Excess material to be removed by paving contractor.

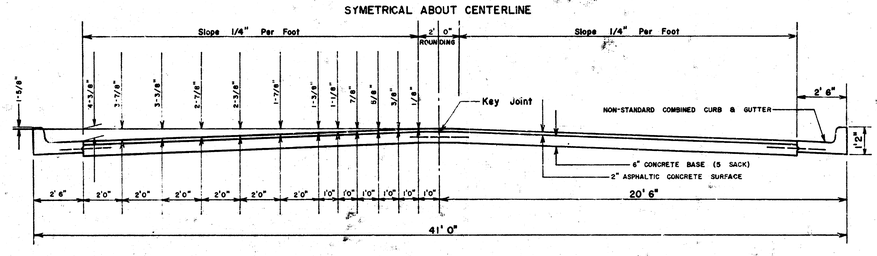


TYPICAL STEEL PATTERN

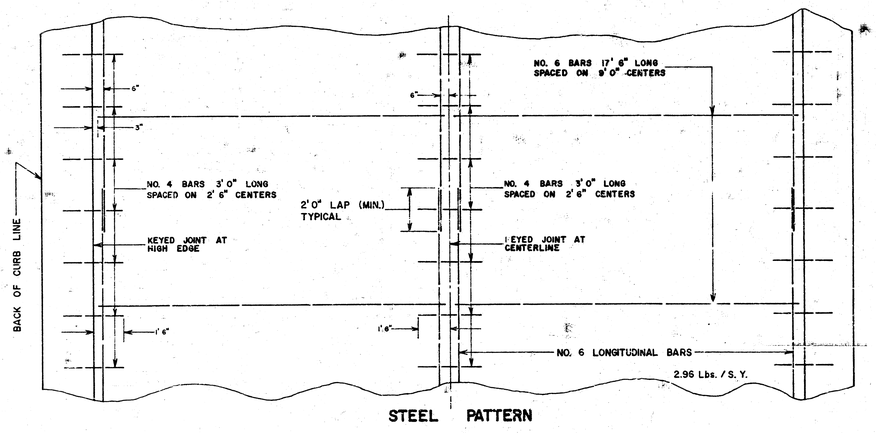
FIRST STREET
E. L. ASH TO W. L. GROVE
ASPHALT PAVEMENT
PROJ. NO. DAKM572051



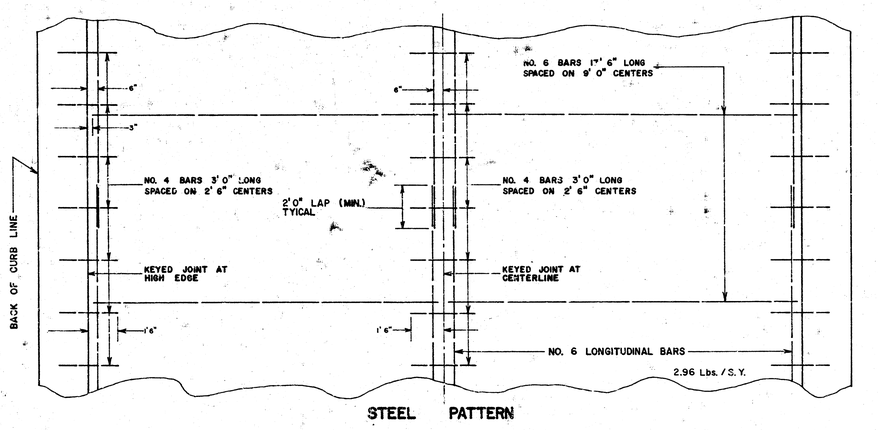
TYPICAL SECTION WITH STANDARD CROWN



TYPICAL SECTION WITH ALTERNATE CROWN



STEEL PATTERN



STEEL PATTERN

TYPICAL SECTIONS of 40' ASPHALTIC CONCRETE PAVEMENT
STA. 3+80 TO STA. 11+34.4

2/8

Surv. Kopp
Plan. Schneider
Est. Schneider
Checked

Ramp Drive Detail
Between Sta. 0+80 & 2+60

Back of drive may be raised or lowered 0.1 Ft. from walk elevation.

5' Varies 30' Max. 5'

Varies

Key Joint.

Back of curb.

Taper curb from full height to no curb in 5'0".

N

Scale 1"=20'

Constr. 135 L.F.± ret. wall.

Remove exist. ret. wall. Constr. 95 L.F.± ret. wall.

Set Walk to Grades Shown

+0.2131%

+0.2333%

+0.2337%

Remove exist. ret. wall. Constr. 195 L.F.± ret. wall.

Legend
Denotes inlet location

General Notes

Field engineer to take ties to and replace all mons. Field engineer to take cross-sections after all pavement drives and walk has been removed. Contractor to grade and level dirt after removal of pavement drives and walk to facilitate cross-sectioning and this grading & leveling shall be considered as subsidiary to the project. Subgrade for walk constructed adjacent to the pavement shall be compacted to the same density requirements as specified for pavement subgrade. Broken concrete and other non-combustible debris shall be disposed of at a time and dump site that is acceptable to the Superintendent of Public Works Maintenance, City of Wichita. All salvable material shall be disposed of as directed by the engineer. Paving contractor to construct sidewalk as part of this project. All lines of removal that do not terminate at end of a joint shall be sawed. Field engineer to inspect all exist. manhole lids and rings to determine which need to be replaced. New manhole lids & rings may be furnished by the City of Wichita Maintenance Department.

B.M. #90 Chiseled "+" on east end of S.E. wingwall of bridge over canal on First St. City Datum = 111.67. I-35W Datum = 1279.35.

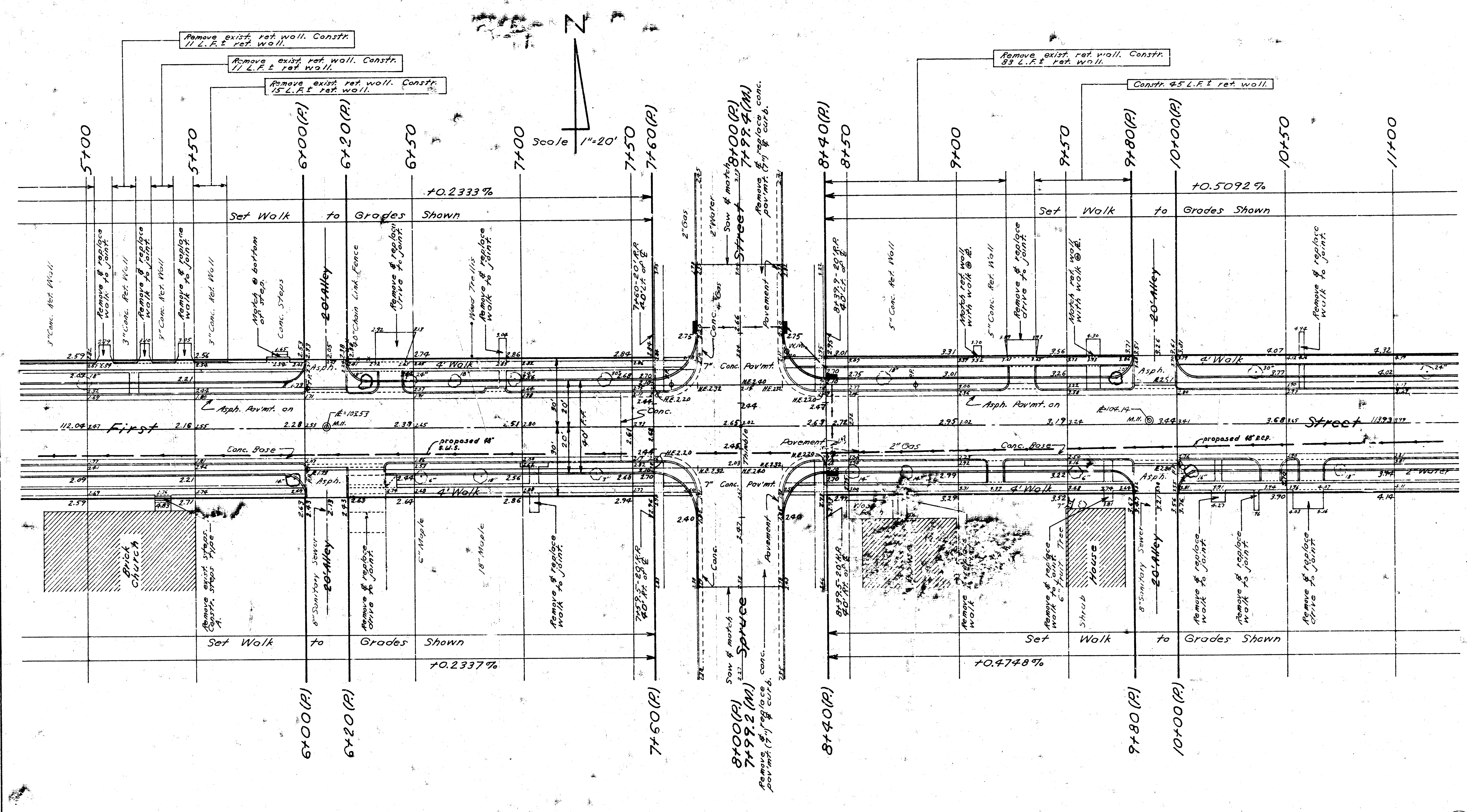
Note: Any new drive locations shown on plans are tentative and must be approved by property owners. All alley entrances are to be paved with 7" conc. pavement.

B.M. 113.93 S.E. corner conc. porch to house at 2118 E. First St.

DEC. 1972

FIRST STREET
E. L. ASH TO W. L. GROVE
PROJ. NO. DAKM57205I

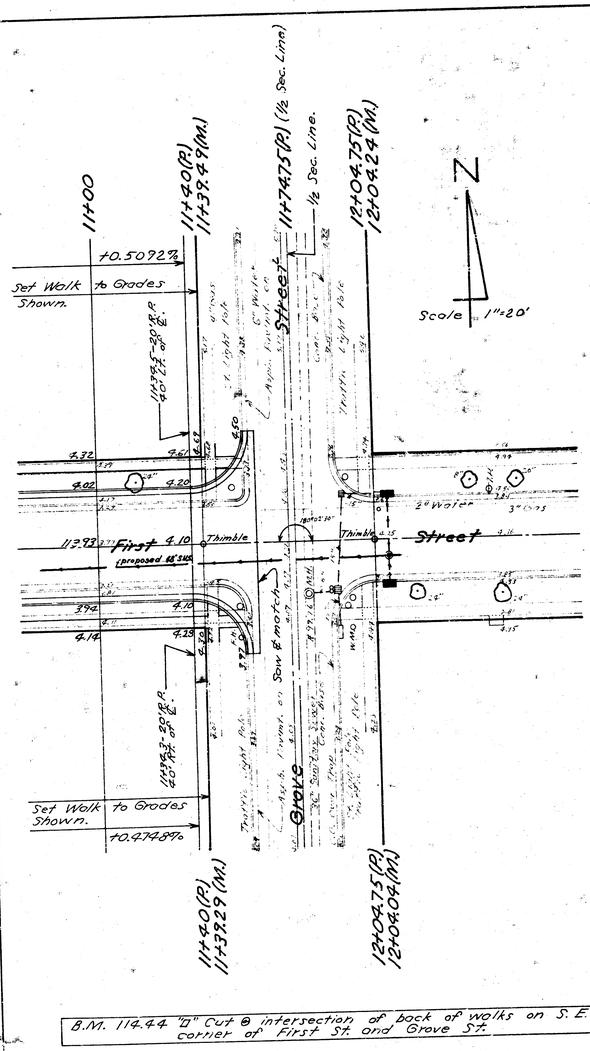
3/8



B.M. 113.66 S.E. corner conc. porch to house at 2210 E. First St.

FIRST STREET
E. L. ASH TO W. L. GROVE
PROJ. NO. DAKM572051

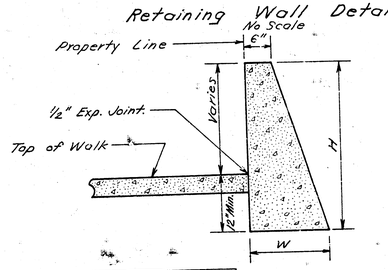
4/8



B.M. 1114.44 "D" Cut @ intersection of back of walks on S.E. corner of First St. and Grove St.

Retaining Wall Detail

No Scale



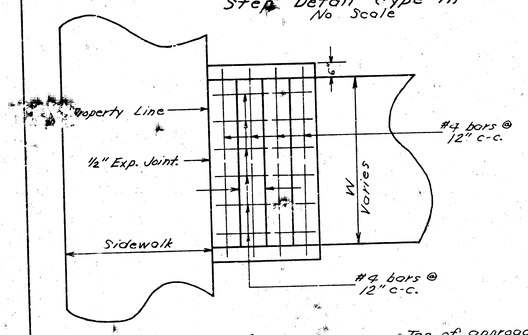
Class	H
I	1'6" to 2'0"
II	2'0" to 2'6"
III	2'6" to 3'0"

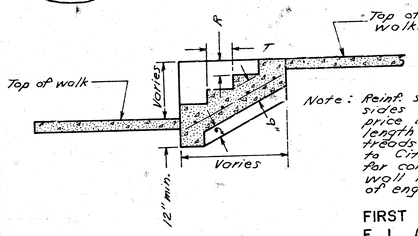
H	W	C.Y. of Conc. per ft.
1'6"	10"	0.0370
1'9"	11"	0.0459
2'0"	13"	0.0586
2'3"	15"	0.0729
2'6"	17"	0.0887
2'9"	18½"	0.1040
3'0"	20"	0.1204

Note: Bevel all exposed edges ¾". Taper ends of retaining walls from full height to walk elevation at all locations where retaining walls are constructed adjacent to drives or walks, except where the drives or walks have curbs or retaining walls along the sides. Entire length of tapered section to be included in pay length of retaining wall. Concrete to conform to City of Wichita specifications for concrete pavement.

Step Detail (Type A)

No Scale





R	T
4"	19"
4¼"	17⅞"
4½"	16⅝"
4¾"	15¾"
5"	15"
5¼"	14⅜"
5½"	13¾"
5¾"	13⅛"
6"	12⅜"
6¼"	12⅛"
6½"	11⅜"
6¾"	11¼"
7"	10¾"
7½"	10⅜"
7½"	10"
7¾"	9⅜"
8"	9¼"

Note: Reinf. steel and retaining wall ohng sides of step to be included in price bid for lin. ft. of step. Pay length of steps equals number of treads x "W". Concrete to conform to City of Wichita specifications for concrete pavement. Retaining wall may be deleted with approval of engineer.

FIRST STREET
E. L. ASH TO W. L. GROVE
PROJ. NO. DAKM57-2051

5/8