

Public Works staff report for the retaining wall at 332 Jessamine Ave. (between Westminster St. and Mississippi St).



04.20.2016

Aerial photo with property lines



Current wall condition

Loss of mortar joints



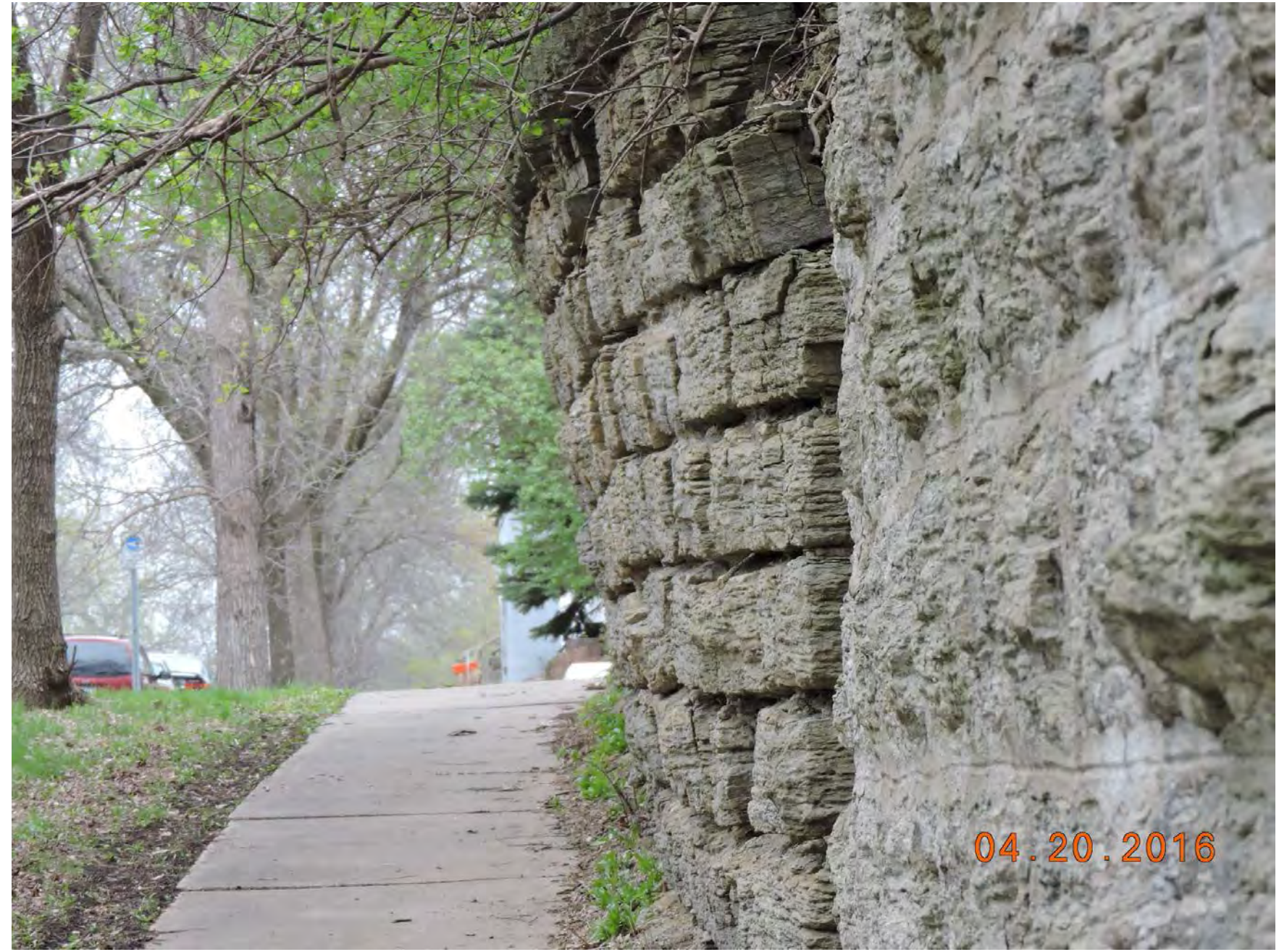
Delamination of limestone face



Bowing and tipping



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No records of a permit for wall construction has been found in City records, or historical records.

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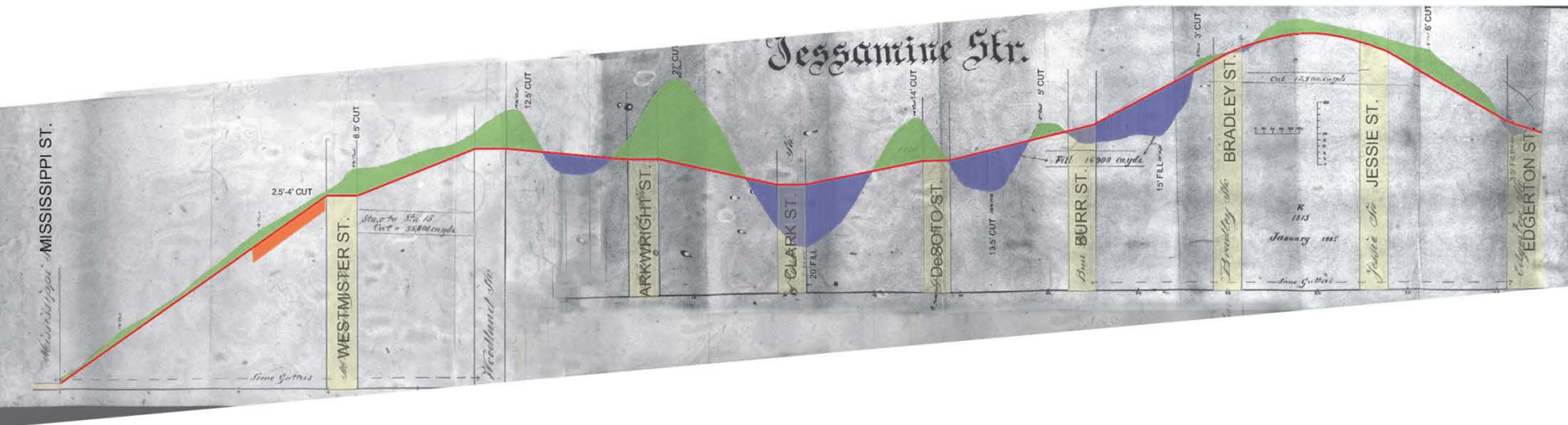
Public Works has located records of the original construction of Jessamine Ave. Circa 1887.

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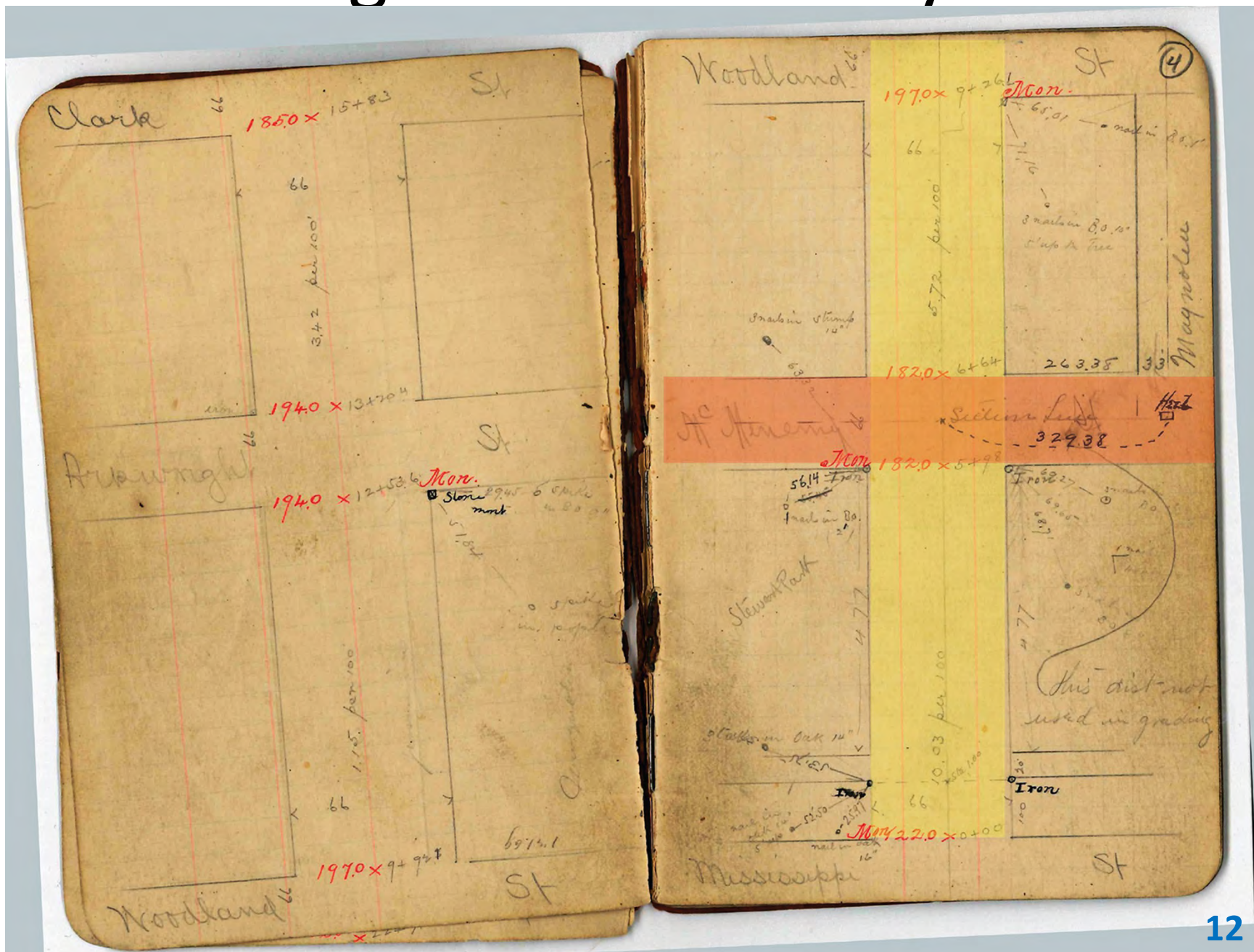
Public Works has located records of the original construction of Jessamine Ave. Circa 1887

- 1) Original 1887 Contract, plan and Specifications
- 2) Original 1887 road survey

Original grading plan

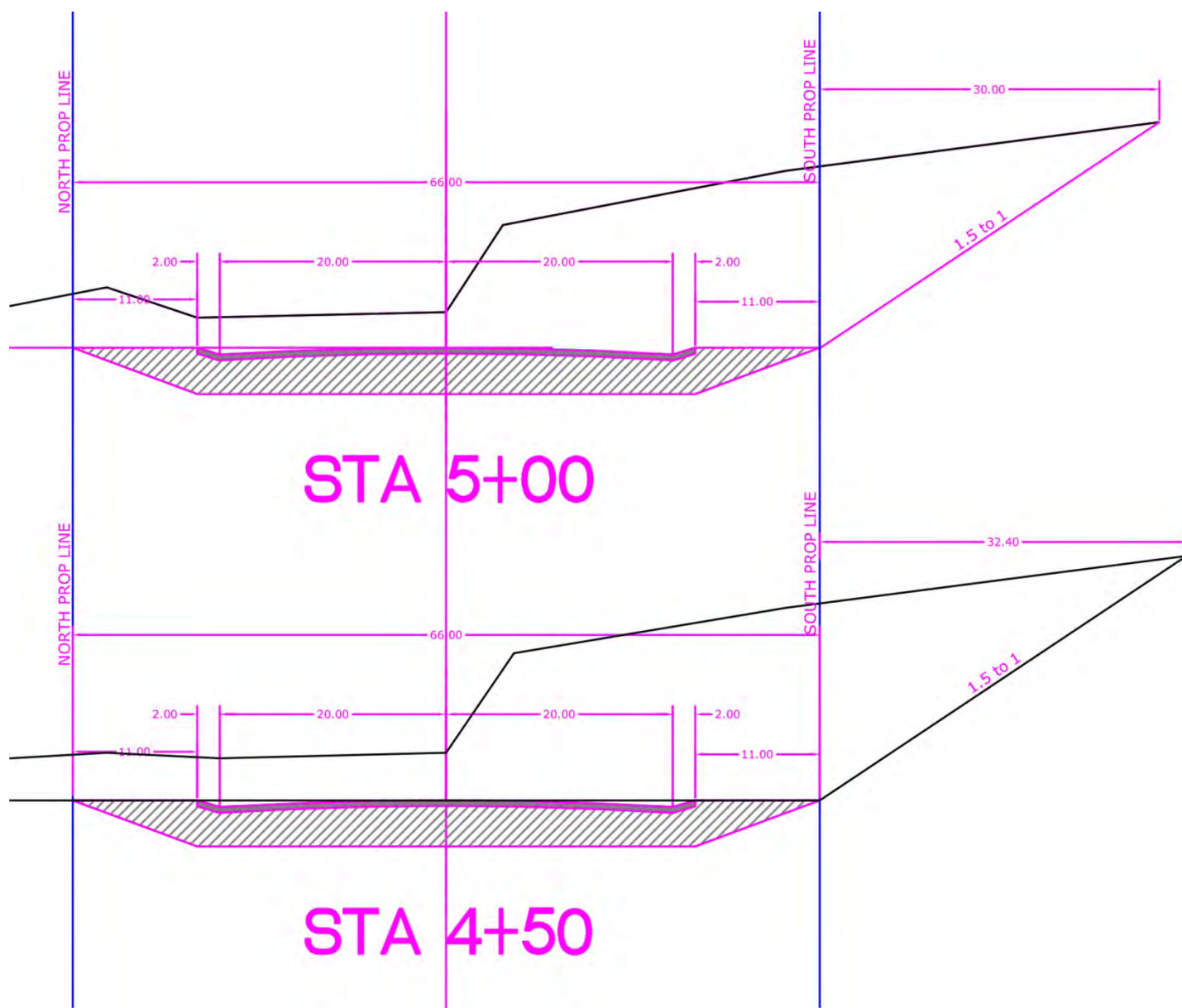


Original 1887 survey

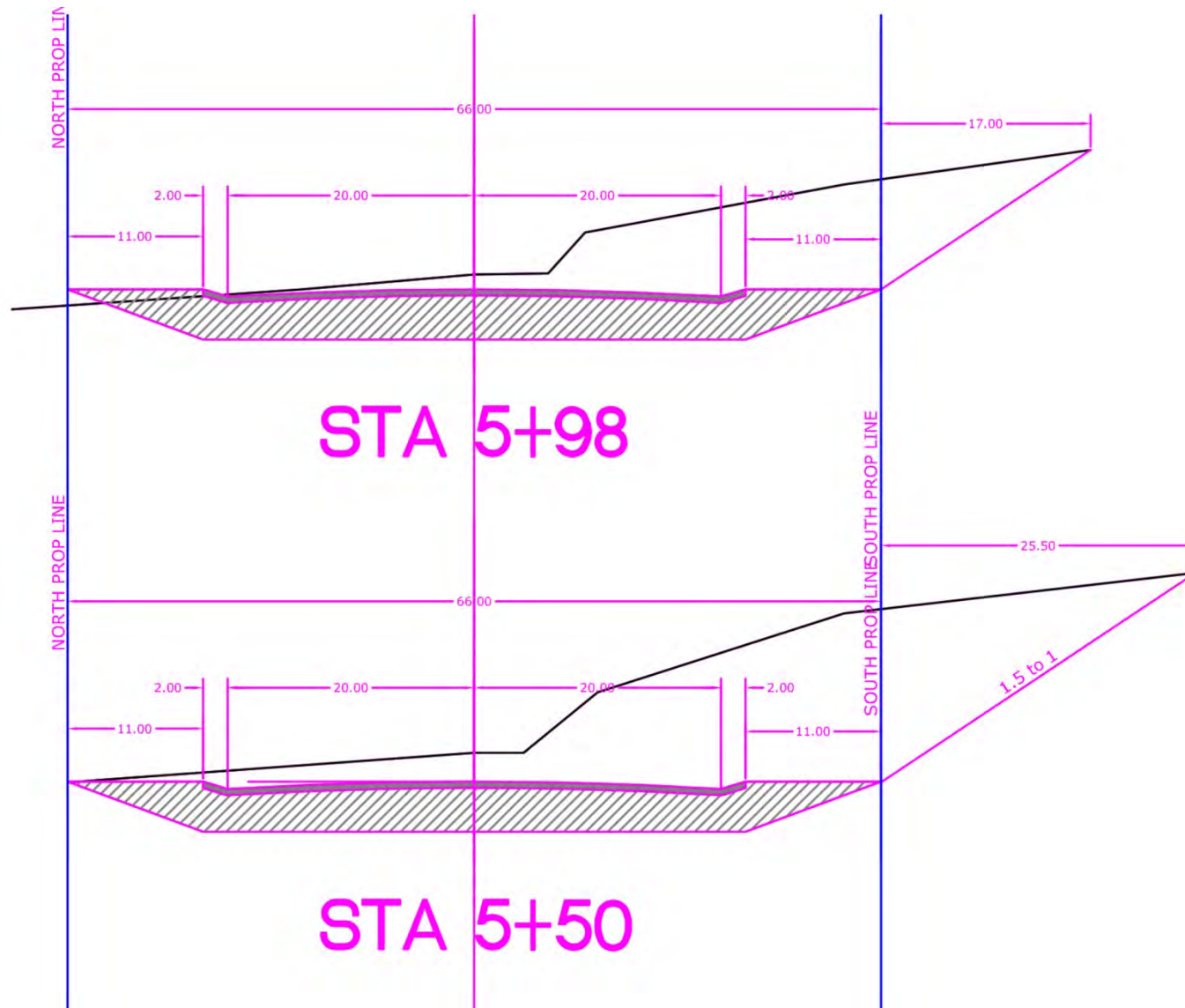


Original 1887 survey

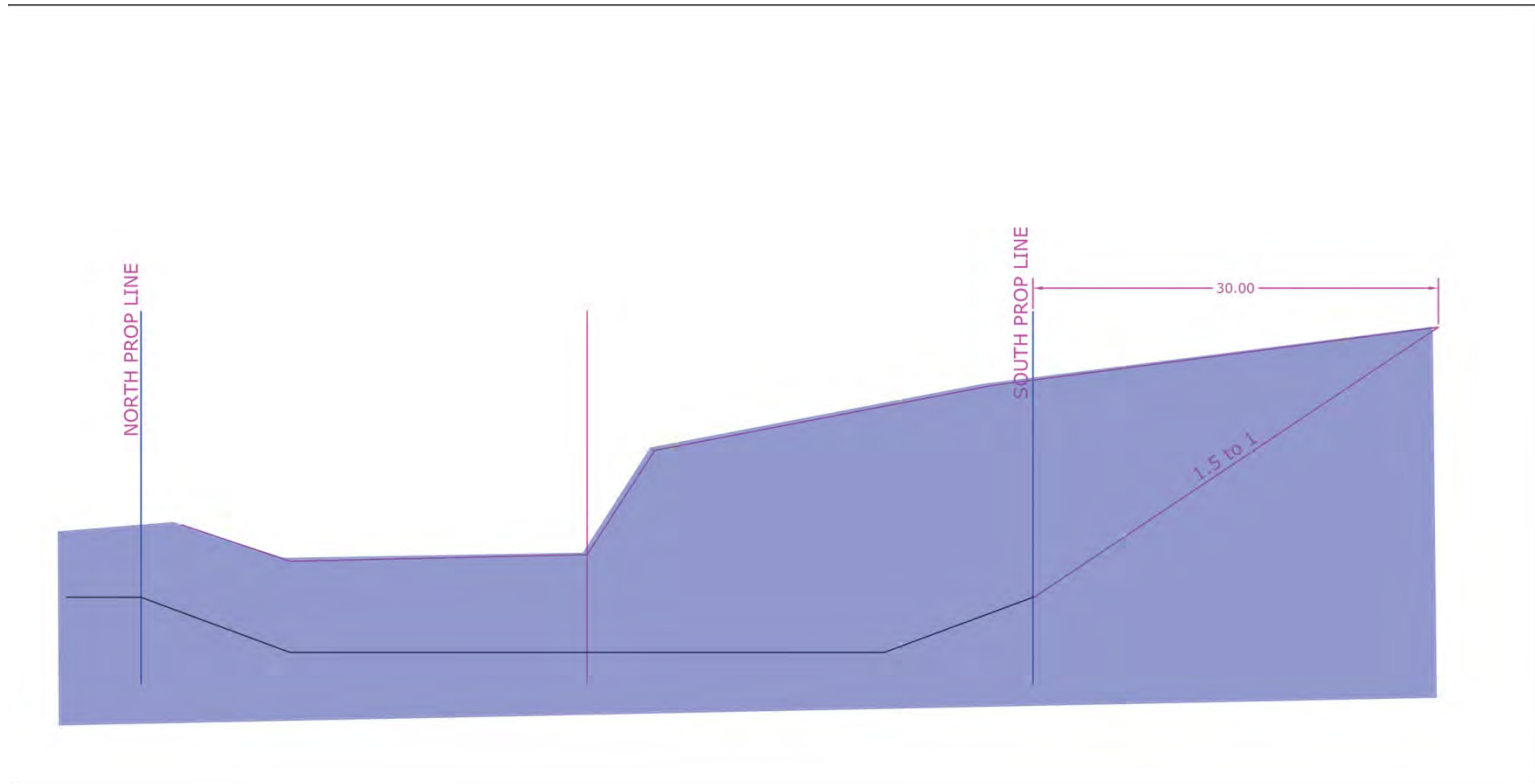
Sta	Grade	Elev	Remarks	L.	C	R. ⑥
4+50	167.13	171.3		$\frac{+3.7}{38.5} + \frac{5.2}{30} + \frac{4.2}{20}$	+4.2	$\frac{+13.}{6} + \frac{+17.0}{30} + \frac{+21.6}{65.4}$
+5+00	172.15	175.3		$\frac{+3.7}{38.5} + \frac{5.4}{30} + \frac{4.2}{22}$	+3.2	$\frac{+10.9}{5} + \frac{+15.7}{30} + \frac{+20.}{63}$
+50	177.16	179.5		$\frac{0.0}{33}$	+2.4	$\frac{+2.4}{4} + \frac{+7.3}{10} + \frac{+13.7}{30} + \frac{+17.}{58.5}$
+98	182.0 181.5	183.2	W line of Mc Murray St	$\frac{-3.}{37.5} + \frac{0.0}{14}$	+1.2	$\frac{+1.3}{6} + \frac{+4.6}{9} + \frac{+8.5}{30} + \frac{+11.3}{50}$
+6+25	182.0	185.5		$\frac{-0.7}{34} + \frac{0.0}{22}$	+3.5	$\frac{+5.9}{20} + \frac{8.3}{45.4}$
+40	182.0	189.0		$\frac{+4.6}{39.9} + \frac{+6.9}{20}$	+7.0	$\frac{+5.1}{2} + \frac{+6.}{24} + \frac{+8.3}{26} + \frac{+10.6}{48.9}$
+64	182.0 183.5	190.5	E ✓	$\frac{+6.5}{42.7} + \frac{+8.3}{20}$	+8.5	$\frac{+7.5}{12} + \frac{+9.5}{30} + \frac{+11.}{49.5}$
+7+00	184.06	191.0	✓ 59.5 11.7 46.1 14.0 34.2	$\frac{+4.5}{39.7} + \frac{+7.}{20}$	+7.0	$\frac{+7.7}{20} + \frac{+10}{48.0}$
+50	186.92	192.6	✓	$\frac{+2.2}{36.3} + \frac{+4.2}{20}$	+5.7	$\frac{+7.2}{20} + \frac{+9.6}{44.4}$
+8+00	189.78	195.3	✓	$\frac{0.0}{33} + \frac{+2.8}{20}$	+5.5	$\frac{+5.3}{20} + \frac{+5.}{40.5}$
+50	192.64	197.4		$\frac{+0.1}{33.1} + \frac{+1.7}{20}$	+4.8	$\frac{+6.7}{20} + \frac{+7.7}{44.5}$
+9+00	195.50	199.5	✓	$\frac{-1.6}{35.4} + \frac{0.0}{26}$	+4.	$\frac{+6.3}{20} + \frac{+8.3}{48.4}$



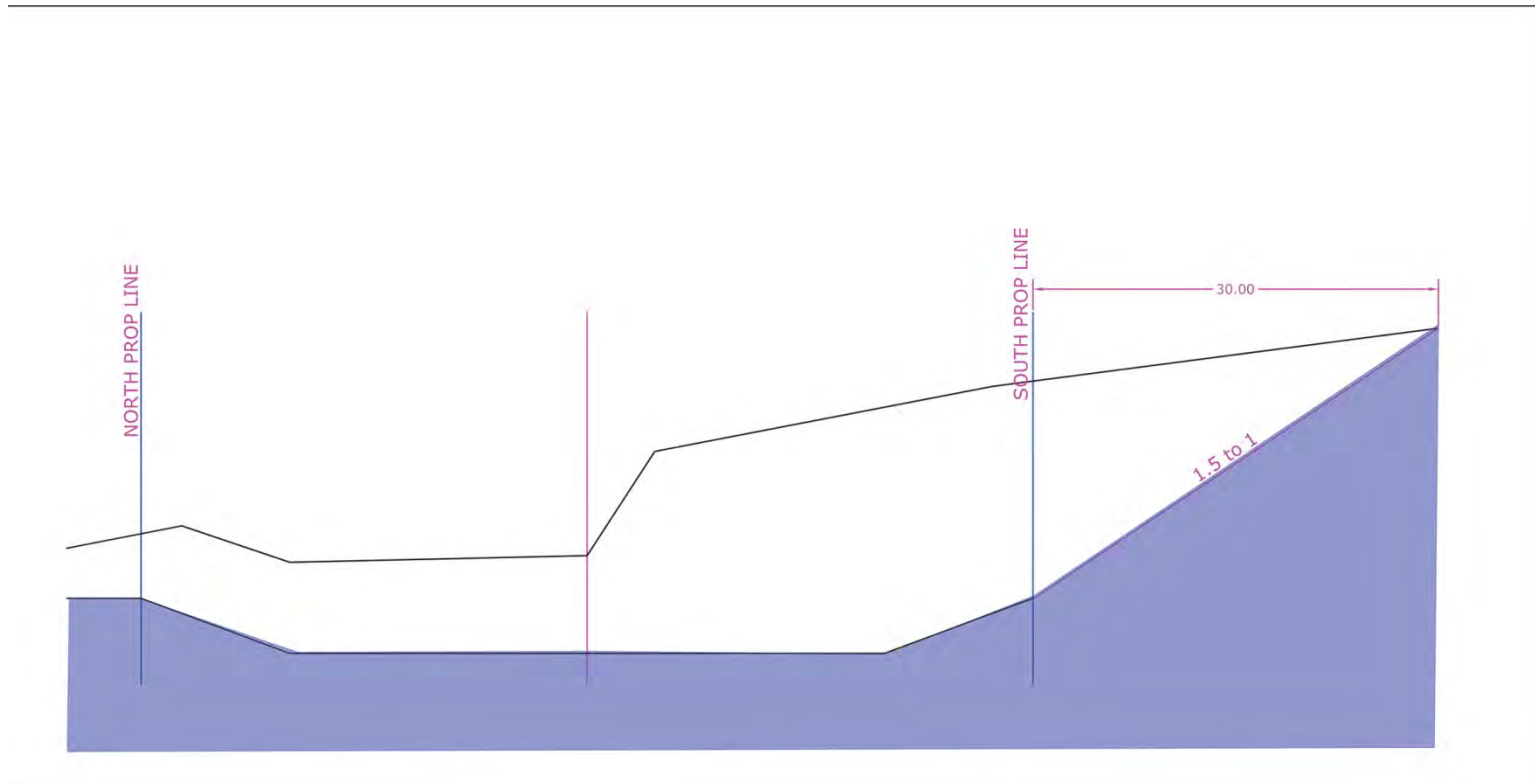
Road construction cross-sections 14



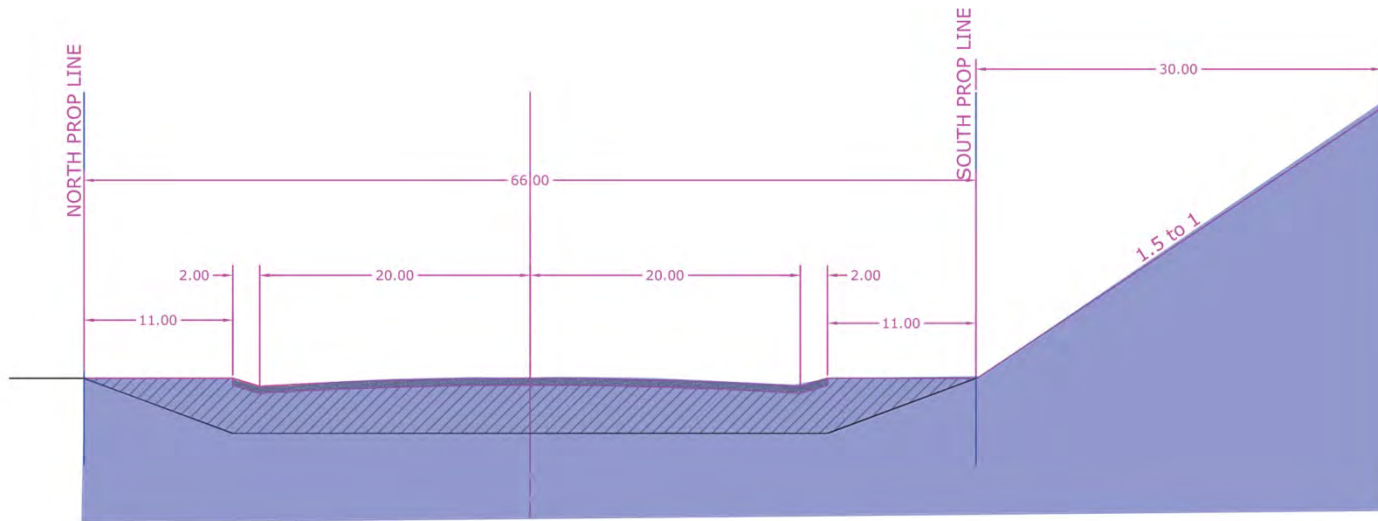
Road construction cross-sections 15



Road construction cross-sections



Road construction cross-sections



Road construction cross-sections

Original
1887
Jessamine
construction
contract.

Office
No 385
DEPARTMENT OF PUBLIC WORKS.
CITY OF SAINT PAUL

SPECIFICATIONS FOR THE IMPROVEMENT OF

Jessamine Street
from
Mississippi Street
to
Edgerton Street

GRADING

The street shall be graded to its full width, with slopes of one and one-half to one, except where otherwise ordered, and finished with roadway, gutters and sidewalk levels as shown by plan.

The approaches on cross streets and alleys, ~~except~~

shall be connected with a roadway of not less than 20 feet in the former case, and the full width in the latter, and side slopes of one and one-half to one, with grades of not more than 12 feet in one hundred, and less if required for drainage or for material necessary to make the embankment.

385

Original 1887 Jessamine construction contract.

The contractor shall furnish all material required for embankment and surfacing not found on the line of the street.

The contractor shall replace at line and grade, all sidewalks and fences disturbed by him in the prosecution of his work, and leave them in as good condition as found. He shall, in no case disturb any shade tree, except by special order of the Engineer, and setting out and marking stakes shall not be considered such order.

SURFACING.

The top nine inches of all the roadway shall consist of the best material found on the line of the improvement, from which shall be removed all stones larger than two inches in diameter. In case a sufficient amount of material to form a solid, substantial roadway, cannot be found on the line of the improvement, the contractor shall procure a covering of loam, nine inches deep, to supply the deficiency.

GUTTERS.

Paved gutters shall be built as shown on the plan, of sound quarried stone set on edge, said stone to be not less than nine inches in depth and one foot in length, not less than four inches nor more than six inches in thickness, the ends and face squared with a hammer; the joints closely fitted, the spaces completely filled with sand and the whole well rammed.

Current slope condition west of the walls.



04.20.2016

Public Works Staff findings

- 1) The wall is constructed almost entirely on private property, with the east front face of wall extending 0.1 feet on to City right of way and the west end of the wall entirely on private property.
- 2) There is no known construction permit for this wall, and a construction date can not be determined.
- 3) The wall was not constructed under the original 1887 road construction contract.
- 4) The road construction resulted in 1.5 to 1 out slopes.
- 5) A 1.5 to 1 slope does not require additional lateral support.
- 6) A wall at this location was not necessitated by the 1887 City contract for the construction of Jessamine Ave.

Questions?