

Standard Survey 1864 - 1927
63 years

COUNCIL PROCEEDINGS

City of St. Paul

Re: Surveys & Monumentation

July 7, 1870

Of Committee on Streets and City Engineer, on report and recommendation of Committee of Ways and Means, recommending that the old land marks be protected.

Report that 200 monuments will be required for section, $\frac{1}{4}$ section and corners of additions.

Granite monuments will cost about \$6.00 each.

They recommend that provisions be made for assistant to perform the service.

Report of the Committee accepted and adopted.

June 7, 1864

By Ald Murray:

RESOLVED, That a Committee of three be appointed, who in connection with the City Engineer, shall report at the next meeting of the Council whether it is not advisable to cause to be placed suitable monuments at the corner of Additions, angle of streets and principal street crossings to judicate permanent surveys of the city. Adopted.

Yeas-Ald. Betz, Berkey, Dorniden, Finck, Gross, King, Livingston, Paine, Peckham, Putnam, Reed, Steele, Slichter, Wright and Mr. President.

October 12, 1864

Of Special Committee -- to whom was referred the matter of having monuments placed on the lines of the divisions and principal street crossings. Report by recommending that the City Surveyor be authorized to establish the lines and directions of streets, in accordance with the recorded plats, and such other evidence as may be deemed necessary, and place a sufficient number of corner monument stones along the lines of the leading streets, at their beginnings, endings, and some of their principal crossings, say Third Street, St. Anthony Street, Summit Avenue, Seventh Street and Fort Street Extension to the city limits; and perhaps another line parallel to the last named street, say in the neighborhood of 10th or 12th Streets, and on Broadway, Jackson, Wabasha, St. Peter, Ramsey, and such other streets as the Committee may deem advisable. Adopted.

February 9, 1871

Of City Surveyor, submitting a report of the granite monuments (landmarks) set in 1870, total 76, accompanying which was a map and schedule fully describing the location of said landmarks; also a copy of a bill to be presented to the Legislature for the protection of said monuments as landmarks. Accepted and referred to the committee on legislation.

February 17, 1871

The following communication from the City Surveyor was read, accepted, ordered, pointed, and referred to the Committee on Legislation:

ST. PAUL, MINN., Feb. 17, 1871

To the Honorable the President and Common Council of the City of St. Paul:

GENTLEMEN: I desire to briefly call your attention to the protest of Messrs. Boyle and VonMinden against the passage of a bill legalizing the monuments set during the past year, as permanent landmarks, and to set forth some of the facts in the case.

They do not claim any personal knowledge of the location of said monuments, and admit the positive benefit of permanently marking points correctly ascertained, &c.

In the first place, at my request, the committee on streets were appointed to superintend the location and setting of said monuments and to fully attend to all the details connected therewith. It was agreed upon by the committee to first set corners that were known and easily proven, and I was authorized and required to get the best possible authority in establishing the required corners, which I have done to the satisfaction of the committee who have thoroughly investigated the matter.

I have consulted Messrs. S.P. Folsom, J.T. Halsted and F. McCormick, (old surveyors who have surveyed and laid out most of the additions in the city) as well as many of the old landed proprietors, and the government surveys as the best authority so far as the monuments have been set. In Winslow's and Leach's Additions, where there has been a great deal of discrepancy in the lines of different surveyors, the monuments have only been set to mark the legal subdivisions of the section, with the view of making a complete survey and taking all the evidence obtainable before connecting the lines of streets and additions with the subdivision lines of the section, and it has been the sole purpose and aim of the committee and myself to correctly and equitably establish the corners, which we claim has been strictly carried out.

Messrs. B. and V. think that a committee of competent persons should be employed to ascertain the correctness of these monuments while I claim that they have thus far been established upon the most undisputable authority.

Competency in establishing old landmarks does not consist so much in high scientific engineering ability, as in the personal knowledge of the exact location or corners, and in many case, unprofessional citizens are better authority than even the engineers who are so fearful of disastrous legislation.

I have been engaged in surveying the city almost exclusively for nearly fifteen years, and have spent much valuable time each year in securing the position of the old corners, many of which are now removed. I have been willing and glad to give the public the benefit of these notes, and have endeavored so to fix those monuments as to do away with their "convenient pegs on which to rest innumerable lawsuits." It is the almost universal wish of the property holders that these corners be permanently established.

If the public is to be subjected to endless litigation from the use of rolling stones and loose pegs in locating property, to gratify the caprice and whims of surveyors, let the blame rest where it belongs.

Very respectfully,

D.L. CURTICE
City Surveyor

1885

ADDITIONS.

One Hundred and forty-two additions have been accepted by the Common Council during the year. The "boom" in the real estate market has resulted in the rush of real estate dealers and property owners to put their property into lots and throw them upon the market. A large number of mistakes on the plats have been corrected in my office. How many errors are made on the ground, we have no way of ascertaining. Several small ones have come to my notice, and one, of fifty feet, absolutely throwing one street entirely out of line with the street in the adjoining addition. We deplore the jogs and discrepancies of the surveys in streets, now the center of our business districts. It will require more careful supervision than I have felt authorized to give, to prevent the same blunders being perpetrated in our new additions.

Already, property is being platted in the new territory. The property is often sold in small divisions like ten acre lots. These purchases are then divided into city lots (sometimes in places where there are no streets laid out to connect with) for the sole purpose of making as many lots as possible and selling the same at once. There is a lack of a comprehensive plan. The charter requires all principal and important streets to be at least eighty feet wide, (Municipal Code, page 203, sec. 19.) but is at present a dead letter, and until the whole matter is carefully considered by the Common Council, and settled by the proper ordinances, there seems to be no remedy.

I would recommend that authority be given the City Engineer, to make a survey of the new territory, permanently establishing the government corners, where they exist, and reproducing them according to law where they do not exist, carefully measuring the lines and angles, putting in monuments every 660 feet on government lines; that these records be kept in the proper plat book in the office of the City Engineer, and that all additions be made to conform to these lines and measurements by the local surveyors. It will then be easy to verify the work upon the ground.

1886

MONUMENTS.

The work of preserving by permanent granite monuments all government corners and the block corners and the principal points of additions has been continued throughout the year, and there are at the present time two parties in the field attending to this important work.

We have now more than 1,000 monuments located and recorded in the Engineer's office, of which 200 have been set this year.

The field work has kept five and part of the time six parties constantly employed, laying out and superintending the regular contract work, making surveys and running levels. One of the most important surveys made, is an accurate location of the Mississippi River within the city limits, which has been done in a very thorough manner, connecting with all government lines and old plat surveys. This will be of great future value. Important surveys have also been made in the Fifth and Sixth wards, which I trust will finally settle long disputed lines. One hundred and four miles of levels have been run, principally in the Fifth and Sixth wards, -- but little as yet has been done in the Seventh ward, and northerly portions of the Fourth, Third and Second wards. Grades have been established on 40.9 miles of streets. For the detailed work, I would call your attention to tables "A" to "N," inclusive.

The question of this department taking immediate steps to preserve by monuments all government corners, both in the new territory annexed and the adjacent sections to the city limits, should I think receive immediate attention, as they are rapidly being destroyed; and I would suggest that additional force be put in the field at once, and devote their time exclusively to the work, until every point desired is re-established by accurate measurements and angles. If this was done, the department would have a map that would be invaluable as well as settling all disputes, that are constantly arising about the correct location of these points. I would also suggest that as soon as practicable, a standard of measure be established by the City, so that it can be used by all local surveyors, as a standard of comparison. It would be the means of securing uniformity of measurement, which is now far from the case, as every surveyor has a tape, which he assumes to be correct, but yet has nothing to verify it.

1887

PLATS.

There have been 220 plats of new additions to the City of St. Paul and re-arrangements of old additions recorded during the past year. These new additions contain 13,309 lots. Wherever a practical examination of the work has been made on the ground by the City Force, the errors that have been corrected show the need of a complete and comprehensive survey of each section of the city previous to the subdivisions. A surveyor laying out ten acres cannot afford to survey the entire section, and too often mistakes are made which will cause irregularities in the streets and be the source of future litigation.

SURVEYS.

One party and sometimes two have been kept at work during the entire year working up surveys. Exterior lines and subdivisions for 10-3/4 square miles have been surveyed and platted, locating government corners, additions and subdivision and block corners. Six hundred granite monuments have been set, establishing permanently the location of these points, and will be of great advantage for all future work. At the present rate it will take about five years to get the entire city limits as they now stand worked up in this manner. I hope during another season, however, to increase the force and push the work more rapidly.

1888

During the last three years a careful survey of the city has been carried on, going back to the government surveys, carefully subdividing each section and reproducing as far as practicable the old additions. It is a tedious and perplexing task, which will take several years to complete, but will be of inestimable value for future work.

1890

CITY SURVEYS.

Our city surveys have progressed very satisfactorily during the year. One field party has been engaged constantly on this work; the entire time of one draughtsman has been employed in platting up the surveys. About one year more will be required to complete the records.

Maps have been made on a scale of one inch to 100 feet, each map covering the work of half a government section. We now have 110 of these maps, each 5 feet by 3 feet, that size being found to be most convenient for reference and in handling.

The value of this work can hardly be appreciated except by those who are familiar with the loose way in which the early surveys of the additions to the city have been made, and the impossibility of correcting the errors at the time for lack of the very information which we are now getting.

Our maps are now being used by all local surveyors as the basis of their work; and we are able, by an inspection on the ground, to correct errors when the plats are brought in for examination.

No money consideration can express the value of this systematic work. Few cities have the difficulties of topography to contend with for accurate measurements that are experienced in St. Paul. The most complex questions of government subdivisions, old claims and erroneous descriptions in deeds complicate the work. We are gradually getting these matters straightened out, however, but it has been a slow and laborious task.

1892

CITY SURVEY.

The work on the city survey has continued during the year with occasional interruptions; the main lines of the survey have been about completed and platted on 120 sheets of a standard size of 3 feet by 5 feet, drawn to a scale of 100 feet to an inch, each sheet covering one-half section, according to government survey; 165 permanent monuments have been set, establishing important reference points.

1893

SURVEYS.

The surveys for standard maps have been continued. 40 new monuments have been set and 152 old ones have been reset on account of having been disturbed by street grading. Quite extensive surveys and maps, requiring considerable time and accurate work, have been prepared for the legal department in cases like the Broadway and levee suits; in fact, in a majority of the lawsuits against the City they require surveys and maps, the attendance of an engineer, and the assistance of the department in securing the necessary facts and witnesses.

1903

ENGINEERING DEPARTMENT.

The Engineering Department has charge of the surveys and engineering work of all departments of the City government, including Water Works and Parks, which are under direct control of special boards in other respects.

The appropriation for this department, including also the expenses of the building department, is limited by the City Charter to \$30,000. This is too small for the proper maintenance of two such important departments, and with the large amount of work on hand, the Engineering Department has been quite seriously crippled. In fact, work on surveys has been practically abandoned. This is liable to cause considerable confusion in the future, as monuments become lost and old land marks are obliterated. The total cost of the Engineering Department proper, for 1903, was \$24,715.83, distributed as follows:

Surveys and records	\$ 4,050.11
Construction	\$ 16,875.52
Maintenance	\$ 2,542.04
Departments	\$ 1,248.16

1904

FIELD WORK.

The field force has been fully occupied in making the necessary surveys for preliminary estimates of work ordered by the Common Council and in laying out and supervising such work as was finally ordered; also in making such surveys as were requested by other departments of the City government, as the Water Board, Park Board, etc. The number of small contracts scattered over a very large territory has made the work more difficult, and with the small number of field parties available, it has been found impossible to make any surveys for record in connection with our standard maps.

1908

The work of this Department is increasing every year. On account of the additional appropriation for the year 1908, we have been enabled to keep all the work of the Department and all of the official records up to date, but we have been able to accomplish but little in the way of surveys for permanent records. I hope, however, to accomplish more in this line the coming year.

1913

FIELD ENGINEERING AND SURVEYS.

Five field parties have been constantly engaged during the year under chiefs of parties R.H. Holterhoff, Charles Schuenemann, Ed. Symonds, R.R. Godfrey and E.R. Schafer. They have been engaged on preliminary surveys for improvement work which the Board of Public Works have been ordered to investigate and report on by the Common Council, laying out and supervision of construction work done by contract or City Force and miscellaneous surveys required by this office, the Legal Department, the Park Board, the Playgrounds Committee, and the Library Board.

Levels for profiles on proposed improvement work have been run on 46 miles of streets and 4 miles of alleys. Sewer levels have been run on 31 miles of streets. 34 miles of streets and 3 miles of alleys have been cross-sectioned for the purpose of calculating quantities and making grading estimates; cross-section and grade finishing stakes have been set on 10.5 miles of streets for contract grading work. 14 miles of streets have been cross-sectioned for curbing and boulevarding estimates.

1914

In 1849 when the village of St. Paul was incorporated, property ownership was based on claim lines. In 1853, the United States completed the subdivision of the territory now covered by the City, and since that time subdivision lines have been based on these township and section lines, excepting where claim lines existed.

Between the years 1885 and 1890, all of the section lines within the city limits were re-run with transit and steel tape, and all section and quarter section corners were marked with granite monuments. At the same time all streets were re-surveyed and monumented, so that a complete survey of the then existing laid out portion of the city's entire area was made and mapped on a scale of 100 feet to one inch.

All existing platting was shown on these maps with record distances, and also the re-surveyed distances with monuments. These maps were called Standard maps and were made on mounted eggshell, each map covering one mile east and west and one-half mile north and south. There is a total of 118 of these maps. They were public records and were used continually by outside surveyors, real estate men, etc., as well as by employees of the City Engineer's office. As they became badly worn, an attempt was made in 1902 and 1903 to trace them, but it was found impractical as so many of the lines had been obliterated by use and furthermore, a great many errors had been made in the filling-in, in the original platting. It was then decided to redraw them from the original notes on heavy, detail paper, trace these drawings and blue-print them; the blue-prints were to be used by the public and the original drawings to be preserved.

1927

During this year, a determined effort has been made to complete the standard city maps and other records which have been behind for a number of years. This work is proceeding with all possible speed and within the coming year should be well up. With the increase in the volume of records, this Department is becoming very cramped for filing and vault space and arrangements should be made to increase the filing capacity of our present vault, so that valuable records of this Department may be protected against fire or other loss.