

## [DOCUMENT NO. XV.]

**BOARD OF ALDERMEN,**

JANUARY 23, 1832.

*The following Petition was presented and directed  
to be printed for the use of the Members.*

J. MORTON, *Clerk.*

To the honourable the Common Council of the city of  
New-York, the memorial of the undersigned Inhabitants of  
the Eleventh Ward,

## RESPECTFULLY REPRESENT,

That a large portion of the property of said Ward for seven  
years last past has laid unimproved, by reason of the plan of  
regulation heretofore adopted by your honorable body for  
said property, being at least too expensive to be attempted  
by the proprietors, if not utterly impracticable.

That your Memorialists are now satisfied, that if the said  
regulation were practicable and were accomplished, the  
property upon Avenue D. and elsewhere would be seriously  
incommoded by the floods of water proceeding from the  
1st, 2d and 3d Avenues, as is now experienced in North,  
Rivington and Stanton streets.

Your Memorialists therefore respectfully request, that  
this subject may be taken into the serious consideration

of your honorable body, and that able engineers may be employed to devise some practicable plan of regulation for said property, that shall bring it into use, and enhance thereby the general value of the property of that Ward. And your Memorialists will ever pray, &c.

*New-York, January 9, 1832.*

E. Weeks,	corner Avenue D and Tenth-street.
R. H. Seely,	108 Avenue D.
Charles Reese,	
Alfred A. Weeks,	Dry Dock.
W. W. Dibblee,	do.
Stephen Thorn,	do.
William Thayer,	do.
John Knickerbocker,	do.
N. Bliss,	Thirteenth-street.
William S. Fancher,	Tenth-street.
Peter Gorman,	do.
N. Huntley,	10 Avenue D.
Silas Corwin,	309 North-street
Luff S. Rhoads,	Eighth-street.
Francis H. Palmer,	Tenth-street.
George A. Jennings,	124 Cannon-street.
Christopher Long,	Eleventh street.
James Throop,	cor. Stanton and Lewis.
Charles Clark,	5 Third street.
Benjamin Austin,	Fifth street.
John H. Waterbery,	Avenue D. and Fifth street.
James Ostrander,	Tenth street.
John Mc Elroy,	Fifth street.
James Burns,	51 Avenue D.
David Bayless,	Fourth street.
Samuel Thurston,	82 Avenue D.
John Heaney,	Dry Dock.
Benjamin Mc Dole,	Avenue D.
Michael Caraghan,	105 Columbia street.

H. Burbanks,	Dry Dock.
Hiram Simmons,	Avenue D.
John Leviness,	foot of Rivington street.
Dennis Heaney,	10th street.
William Baker,	166 Eldridge street.
Isaac Venderveer,	100 Avenue D.
D. Z. Wickes,	106 do.
G. W. Fisher,	104 do.
John Minturn,	106 do.
Thomas Pope,	110 do.
Francis Tully,	104 do.
Oliver Bedell,	108 do.
Thomas Johnson,	Seventh-street.
John Blakely,	Avenue D.
Samuel S. Taff,	corner Lewis and Eighth-streets.
Thomas Bateman,	corner Lewis and Eighth-streets.
William Stewart,	corner Lewis and Seventh-streets.
John Newcomb,	343 Third street.
Simon Vanarsdalen,	62 Avenue D.
George W. Smith,	48 Sheriff-street.
Edward Thomas,	Seventh-street.
Charles W. Taller,	Fifth street.
Samuel Sutherland,	Seventh-street.
William Greens,	Avenue D and Fifty-ninth-street.
Alexander Spencer,	Fifty-eighth-street.
Samuel Lyon,	73 Lewis-street.
Jason Gerad,	400 Fourth-street.
Dennis O'Neal,	49 Avenue D.
John O'Neal,	155 Lewis-street.
William Willis,	Fifth-street.
John D. Barton,	164 Lewis-street.
John Williamson,	Fifth-street.
Augustus Knight,	do.
William Shephard,	corner Avenue D and Sixth-street.
Charles Curtiss,	corner Avenue D and Fifth-street.
Gardner Fickett,	corner Avenue D and Fourth-street.
James Fickett,	65 Avenue D.
Jonathan Prider,	393 Fourth-street.
Matthias Corwin,	384 Sixth-street.
Benjamin Yates,	40 Avenue D.

Thomas Broad,	Avenue D
John Hyatt,	do.
Nathaniel Vail,	do.
Robert McVoy,	102 Avenue D.
Stephen Shepherd,	do.
James Steir,	102 do.
Hart Fickett,	do.
William Frost,	371 Seventh-street.
Thomas Chandler,	do.
Francis B. Fitch,	94 Avenue D.
William Merritt,	Tenth-street.
Nelson Williamson,	Fifth-street.
Andrew Jennings,	Dry Dock.
Abram Disbrow,	do.
Elias Willit,	Third street.
Bernard McCosker,	102 Avenue D.
Thomas Demilt,	274 Rivington-street.
Benjamin Henderson,	Dry Dock.
Ezra K. Dod,	Avenue D.
John Newman,	Twelfth-street.
William Preston,	Eleventh-street.
Abraham Myers,	do.
David Ayers,	391 Fourth-street.
Samuel Lyon,	73 Lewis street.
Daniel Leonard,	Seventh street.
William Blair,	401 Fourth-street.
Michael Mulhern,	Lewis-street.
Thomas Oldham,	185 Lewis-street.
Samuel Coster,	187 do.
Samuel Coster,	do.
William Coster,	do.
John Muldoon,	153 do.
Charles Overton,	388 Third-street.
Timothy Perry,	396 Third-street.
Archibald McMullen,	corner North and Lewis-streets.
Rinaldo Gage,	do. do.
John O'Neil,	310 North-street.
Edmund Snow,	137 Lewis-street.
George Harmon,	corner Lewis and Sixth-streets.
Daniel B. Wines,	corner Avenue D and Third-street.



F. B. Downs,	corner Avenue D and Third-street.
F. A. Lockwood,	8 Avenue D.
John Lockwood,	do.
John Dickson,	Fifth-street, near Avenue D.
John Tice,	Avenue C.
James Kelso,	do.
William Ross,	9 do.
Joel Kelly,	cor. North-st. and Avenue C.
William Kipp,	Avenue C and Third-street.
B. Fanning,	cor. Pitt and North-streets.
Joshua Weekes,	8 Avenue C.
Robert Lane,	do.
Thomas Lyon,	15 Avenue C.
George Titus,	232 Second-street.
John McKay,	207 Second-street.
William Bradford,	10 Avenue C.
Daniel Owen,	11 Avenue C.
William Collins,	1 Avenue C.
Alexander Leaird,	118 Willett-street.
John Donaldson,	208 North-street.
Owen Casseday,	Second-street.
E. Smith,	204 North-street.
Henry Green,	191 North-street.
William P. Clark,	Suffolk-street.
John Reynolds,	No. 172 North-st. cor. Avenue B.
Patrick McBarron,	cor. Avenue B and Second-street.
John McBarron,	do. do.
Walter Smith,	cor. North and Clinton-streets.
John Downing,	163 North-street.
James Phelan,	178 First-street.
John Gardner,	do.
S. D. Barnes,	147 North-street.
William Reynolds,	145 Suffolk-street.
Benjamin Austin,	corner North and Norfolk-street.
Charles T. Williams, Grocer,	corner North & Norfolk-streets.
James Callager,	155 North-street.
Abraham Lyon,	152 First-street.
Allan McKenzie, Grocer,	150 do.
John Martling,	144 Suffolk-street.
Daniel Peters,	146 First-street.

Abraham Van Nostrand,	215 Second-street.
John Atkins,	205 Second-street.
Peter D. Braisted,	1 Avenue A.
Asa H. Phelps,	165 Essex-street.
Stephen G. Wood,	144 Norfolk street.
John Vogel,	Rivington-street.
Abraham Dosey,	131 Stanton-street.
John Bleecker,	100 North-street.
Isaac Sherman,	213 North-street.
Richard Persiany,	1 Avenue C.
Elijah Smack,	124 Attorney-street.
Joseph Sharot,	corner North and Ludlow-streets.
James J. Sharot,	cor. First-st. and First Avenue.
John A. See,	5 First Avenue.
James R. Page,	25 North, corner Chrystie-street.
Frederic Horton,	33 First-street.
Gilbert Hunt,	25 North, corner Chrystie-street.
Matthew Marsh,	19 Second-street.
John Triglar,	15 Stanton-street.
William Granger,	217 Bowery.
Martin Ficken,	1 Stanton-street.
Isaac Sarles,	1 do.
Nathaniel Smith,	19 Second-street.
Richard Allen,	253 Bowery.
John Farrington,	Bowery.
Robert Montgomery,	143 First-street.
William Harding,	Fifth-street.
William Cramsey,	1 Second street.
William Darragh,	2 do.
Abram Hust,	335 Bowery.
Archibald J. Calhoun,	337 do.
John Pitts,	337 do.
Henry Palmer,	corner Bowery and Seventh-street.
George W. Brown,	corner Bowery and Third-street.
Henry C. Spring,	353 Bowery.
William Palmer,	near Bowery.
Ephraim Pardee,	corner Bowery and Fourth-street.
Henry Marshall,	365 Bowery.
J. Duprieu,	20 Fifth-street.
Samuel Larned,	365 Bowery.
James Crumbie,	375 Bowery.
N. H. Curtis,	corner Bowery and Fifth-street.

Warren Curtis,	do.	do.
George K. Walters,		No. 3 Third Avenue.
Hiram Slote,	corner Third Avenue and Sixth-street.	
Daniel Edwards,	do.	do.
William Patten,		Bowery.
Benjamin Lewin,		Third Avenue.
Pierre Hall,	corner Third Avenue and Eighth-street.	
Albert Palmer,		Third Avenue and Ninth-street.
Luther A. Underwood,		119 Stanton-street.
William Froment,		29½ First-street.
H. Kattenhon,		25 Stanton-street.
Owen Tally,	corner Thirteenth-street and Avenue A.	
M. M. Mapes,		10 Clinton-street.
Lewis Decker,		157 North-street.
Jacob Hyer,		140 Stanton-street.
Thomas C. Ackerman,		39 do.
Peter Hanratty,		268 do.
P. Fletcher,		Tenth-street.
William S. Brown,		Columbia-street.
James Chase,		Stanton-street.
John McDunef,		246 Stanton-street.
Hervey Kimball,		Avenue D.
Caleb Concklin,	corner Bowery and Stanton-street.	
John Odell,	corner Bowery and Rivington-street.	
Jacob Myers,		10 Rivington-street.
John Walsh,		18 do.
James Walsh,		do.
Michael Kenny,		do.
O. Noxan,		do.
J. J. Doremus,		22 do.
William Yellott,		26 do.
John Swift,		Chrystie-street.
Stephen McCabe,		185 Chrystie-street.
Peter Cunningham,	corner Stanton and Allen-streets.	
B. F. Hurlburt,		Rivington-street.
Jacob Tompkins,		do.
Patrick Campbell,	corner Stanton and Sheriff-streets.	
Nathan Phillips,		123 Sheriff-street.
Stephen Hendrickson,		11 Clinton-street.
William Hielder,	corner Sheriff and Stanton-streets.	



Benjamin Speage,	Third-street.
Nathaniel Van Winkle,	168 Ludlow-street.
Sewall Fisk,	corner Stanton and Ridge-streets.
Isaac Brown,	123 Sheriff-street.
John W. Fulaer,	corner Stanton and Sheriff streets.
David Ludlam,	corner Willett and Stanton streets.
James M. Nespil,	do.
William H. Strung,	115 Willett-street.
Charles O'Brine,	do.
John Conway,	236 Stanton street.
William Little,	235 Stanton street.
James Smith,	219 Stanton-street.
Edward Penny, Jr.	corner Stanton and Pitt streets.
Christian Kramer,	109 Pitt street.
Richard Totten,	18 Avenue C.
Edward Dunn,	218 Stanton-street.
Isaac N. Merrit,	202 Stanton-street.
Michael H. Potter,	214 do.
Nehemiah Peck,	200 do.
Henry Peck,	do.
Peter Torboss,	53 Avenue A.
Francis Hanratty,	390 Stanton-street.
Samuel Hull,	177 Lewis-street.
George Fordham,	Goerck-street.
Archibald Gray,	82 Willett-street.
William Green,	corner North and Attorney streets.
Hyatt Lyon,	15 Clinton-street.
Benjamin B. Pope,	Rivington and Columbia-streets.
Charles S. Pitts,	Columbia and Rivington-streets.
James Knapp,	Rivington and Columbia streets.
James Bennet,	Rivington and Willet-streets.
Philip Doogan,	Rivington and Willet-streets.
M. A. Coit,	96 Willet-street.
H. Delaplaine,	96 Willet-street.
James Leo,	233 Stanton-street.
John Murray,	233 Stanton-street.
John Decoose,	222 Rivington street.
Joseph Fortier,	204 Rivington-street.
J. Driner,	204 Rivington-street.
Jacob Bishop,	216 Rivington-street.



James Duff,	148 Rivington-street.
Darling Whitney,	184 Stanton-street.
Peter McCosker,	169 Stanton-street.
Henry Weightman,	395 Chrystie-street.
Charles W. Baker,	132 Rivington-street.
Samuel Downs,	115 Stanton-street.
James Halsey,	Stanton-street.
William Foger,	61 Suffolk-street.
W. Van Deusen,	corner Norfolk and Stanton-streets.
Garret Dempsey,	123 Stanton-street.
Silvanus Bedell,	corner Essex and Stanton-street.
William Clark,	140 First-street.
James Vanderbeck,	166 Essex-street.
Charles T. Perry,	119 Stanton-street.
Andrew Lake,	124 Norfolk-street.
David Lake,	153 Essex-street.
John Courter,	15 Essex-street.
W. D. Beck,	96 Rivington street.
W. B. McLean,	376 Seventh-street-
Charles Starkey,	corner Ninth and Bowery.
Thomas Huntington,	Ninth-street and Third Avenue.
Harmon Talley,	Third Avenue.
John T. Demarest,	Third Avenue.
John D. Shiel,	Third Avenue.
Samuel Scott,	Third Avenue.
John Tomey,	Eleventh-street.
James C. Jenkins,	Eleventh-street and Bowery.
J. W. Rogers,	corner Bowery and Tenth-street.
Denny Chapman,	corner Bowery and Ninth-street.
Isaac Mosher,	corner Bowery and Eighth-street.
Elias Hunt,	corner Bowery and Seventh-street.
Jacob Chase,	Third Avenue.
Martin Chase,	do.
Gerard Bushnell,	Bowery and Third Avenue.
Matthew Martin,	Avenue D.
Clark Perry,	Tenth-street.
John Oysterman,	378 Fifth-street.
John K. Whipple,	North near Suffolk-street.
Benjamin Perry,	Dry Dock.

John Paar,	Tenth-street.
James Hunt,	do.
William Trellnemen,	do.
Ransom Simmons,	do.
Samuel S. Scofield,	Avenue D.
James Rogers,	Tenth-street.
James Perry,	do.
Thomas Mingus,	do.
Thomas Lendsay,	do.
Thomas Cullimare,	do.
John Robinson,	do.
John Rolinson,	do.
John Brady,	do.
Aaron Hurley,	do.
Dugald McAulay,	do.
A. C. Bullas,	do.
John C. Finch,	Eleventh street.
E. W. Petri,	Dry Dock Bank.
S. B. Townsend,	
W. L. Townsend,	Eleventh-street.
William Crocket,	Seventh street.
Frederick Waterhouse,	30 Avenue D.
William Herrick,	258 North-street.
Elihu Russell,	62 Avenue D.
Richard Knapp,	68 Avenue D.
Nehemiah Knapp,	corner Rivington and Cannon-streets.
J. Thomes,	Fifth-street.
H. Williamson,	Fifteenth-street.
William Mange,	30 Avenue D.
William Crocket,	Seventh street.
Samuel Glading,	Lewis-street.
Samuel Hunt,	Sixth-street.
Nicholas Hill,	80 Avenue D.
Samuel Scott,	do.
James Fennell,	do.
John Harris,	do.

343 Names of actual Residents in the Eleventh Ward.

*To the Gentlemen of the Committees of Aldermen  
on Roads, Canals and Streets.*

GENTLEMEN,—At your request I have placed on paper my views of the subject of Stuyvesant Meadows, made in conformity to the principles of a Resolution directing the Street Commissioner's Department to prepare and report to the Board of Aldermen, a "plan for improving the ground called 'Stuyvesant Meadows' and the lands adjacent thereto," and based upon a survey and model of a plan submitted by Mr. Edward Doughty, City Surveyor, and my own opinion of that plan.

The Street Commissioner begs leave

RESPECTFULLY TO REPORT,

That after having examined the lands in question, and made himself acquainted with the various surveys heretofore made, as well as the laws and ordinances, relative thereto, he has approached the consideration of the subject, with much solicitude, to discover a plan, that will reconcile conflicting opinions and promote the public good; and at the same time satisfy the just and reasonable claims of the proprietors of these grounds.

The regulation which may be finally adopted, under the present resolution of the Board, not only establishes the value and character, of this section of the city, but will in a certain degree control the regulation of the whole body of low ground, lying south of Twenty-third-street; and when it is considered, that these sections embrace more than 5,000 lots of ground, and can give shelter and sustain a population of nearly 50,000 souls, it is obvious that the subject is of momentous import to the whole city.

In adopting a plan of regulation, the paramount consideration is, unquestionably, *the health of the city*. To it, every minor consideration should yield; but that satisfied, regard in the next place should unquestionably be had to the rights



of the proprietors of the land. They are entitled to the use and enjoyment of their property, and any regulation, suspending, or paralyzing the improvement of it, will be deemed unjust to them, as well as injurious to the city at large.

By an examination of the ordinances and laws, relating to this subject, it appears, that at an early period, it engaged the attention of the State legislature. On the 10th of April, 1823, an act was passed authorizing the Corporation of the city to appoint three Commissioners, to survey the whole section, from North-street to 34th-street, and to report a plan to them. In that law, it was specially provided, that, "if the plan so reported was not approved by the Corporation, the subject should *be referred back to the same Commissioners, or to new Commissioners, to be revised and corrected.*" The Corporation not having absolute control of it.

Under this law Messrs. Swift, Adrian, and Renwick, were appointed Commissioners, and in 1825 they made a detailed Report, accompanied with ample maps, drawings, &c. &c. of the whole grounds.

The plan which they recommended was a system of small sewers running through all the cross streets, from Fourth-street northwardly, and the avenues.

They proceeded with great caution and deliberation, as appears by documents in the Street Commissioner's office, and their report exhibits unequivocal evidence, that their best talents had been called into action.

The established reputation of these gentlemen, the care and consideration, they had bestowed upon the subject, produced a strong sensation in the public mind, and inspired confidence, and under this confidence, many of our most enterprising citizens, turned their attention to this part of the city, and made large investments of capital,—erected various establishments, such as dry dock rail ways, ship yards, steam saw mills, and blocks of dwellings were built, and rented to good tenants, and cartmen, mechanics, and laborers all found employment.

Notwithstanding these favorable indications, the plan submitted by the Commissioners did not meet with general



approbation; a portion of the proprietors remonstrated against the introduction of sewers, and as appears by documents, there were two parties formed.

Under these embarrassing circumstances, the Corporation directed another plan to be prepared, and Edward Doughty, Esq., City Surveyor, accordingly on the 11th Sept. 1826, presented one. It consisted of three open canals, instead of sewers. This idea found its advocates and opponents.

A third plan was then brought forward, viz. to carry the water on an inclined plane over the surface; and the Corporation, by an ordinance of July 16th, 1827, adopted this plan, to carry the water on a descent from the 3d Avenue or Bowery Road, to an imaginary street in the river, 400 to 600 feet from the natural shore, to where there is about 26 feet water, which street has been called Tompkins-street, and the plan known as the *high filling plan*.

This measure was regarded (as it appears) by many of the proprietors, as ruinous to their property, and was most strenuously opposed by them. They urged that a large body of the lots, would not pay for filling them; that many of the proprietors who had improved would be ruined, in short that the property would become sacrificed.

Under this ordinance, measures were taken to fill up and regulate Avenue D. and to fill Third and Fifth streets, and part of Sixth and Seventh streets. These streets, although probably originally brought to the height of the ordinance regulation, are no doubt settled in part below that level, (except Avenue D. which has been paved,) and will yet require additional filling; and the expense of filling streets alone, as far as it is done, has been \$88,679 06, of which there is yet uncollected \$57,910 93, and the city treasury is now in advance, on account of the labor directed to be done by the Corporation, the sum last mentioned; although every effort has been made to collect it, hitherto it has proved unsuccessful. Some of the largest proprietors (as I learn) refuse to pay at all, and have expressed a determination, to contest the right and power of the Corporation to deprive them of their property in this manner. Some have

abandoned their lots rather than pay for filling the street alone. Others (as is said) have conveyed them to non-residents of the state.

The cost of filling the lots, must of course be added to that of filling the street, and Mr. Doughty has given me the cost and quantity of filling in three different points upon the high filling:—

1. To fill a lot and proportion of street and intersections, at a point half way between 1st Avenue and Avenue A. on Seventh street, will cost a 15 cents per load, . . . . . \$1631 10
2. To fill a lot on Seventh-street, and the street and intersections between Avenue A. & B. at 15 cents, will cost . . . . . 1236 15
3. To fill a lot &c. &c. on Seventh-street between C. & D. at 15 cents, will cost . . . . . 1156 75

It is obvious from the above statement, that the lots will be rendered of no value at this cost of filling them; and should the proprietors abandon them, they cannot remain many years longer in their present situation, and the expense of filling them *may* become a tax upon the whole city.

It may be well here to remark, that the Street Commissioner has understood that the Assessors of the Eleventh Ward do not assess many of the centre blocks of the Meadows as of any value, considering them, under the present existing ordinance, as valueless. The same blocks were formerly assessed before the present high filling plan, as of value, (see note.)

If a plan of a sewer or sewers was adopted, some of the proprietors of the high ground would be liable to a pro-rata charge for their construction, and hence they advocate the high filling; while on the other hand it is contended by the proprietors of the low ground, that the high filling is required, not more to accommodate the low grounds, than the high; that the low grounds are made to receive the surplus

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Note.—By the Assessor's Books, or tax book of the ward for 1831, there appears about 900 lots put down as of no value.

water of the high ground, and that moreover, some small part of the water of the high ground, originally sought a different channel, but has been diverted from its natural course, and made to pass over the low ground in a different direction, by these regulations.

They contend that they perceive no difference in principle, between the expense of a sewer to carry off water, and the expense of high filling for the same purpose; and that if the Supreme Court decided in one case, that all ground relieved by a sewer should contribute toward the expense of it, the same principle will compel a similar decision in high filling.

The Street Commissioner expresses no opinion upon these conflicting views, but deems it proper to mention them, as shewing the feeling of both sides in this case.

Upon the present plan of high filling, two great questions present themselves for consideration.

1st. Is it expedient if practicable?

2d. Is it practicable?

On these points the Street Commissioner submits the following facts and considerations:—

It is well known that our showers are sometimes so heavy, and powerful, that even our short streets, in the lower part of the city, on those parts of the streets near the river, are temporarily flooded, and inconvenience and injury done by filling cellars. If then, the evil of accumulated waters be occasionally felt, in the lower parts of the city where the descent is in part rapid and streets short, what is it reasonable to infer must be the inconvenience in situations where the descent is gentle and the streets long? Fifth-street is more than 5,300 feet long from the Third Avenue to the shore of the River. The average rate of descent by the high filling is three-fourths of an inch in ten feet, being the minimum rate of descent allowed. The reasonable inference is, that in heavy showers and long continued rains, the lower parts of these long streets will be inundated, and the Street Commissioner believes this inference is justified, by experience of the overflowing the whole street, and side



walks, as he has understood, in Rivington, Stanton, and other streets. Those streets are regulated upon the plan of the inclined plane, from the Bowery to the River; they are about 5,500 feet in length, and, it is said, that great inconvenience and injury is felt in those streets by the water, and no doubt disease is sometimes produced thereby.

The next head of inquiry is, Is the plan practicable?

In order to avoid misunderstanding, the Street Commissioner will take the liberty to explain, precisely, his meaning of the word "*practicable*" as applied to this subject. The meaning which the Street Commissioner wishes the Committee to understand, by this word *practicable*, is, *can it be filled at a price that will justify the expense*. It will not be denied that money can command earth, to fill the Meadows, upon any plan, *provided any price is paid for it*, and the present inquiry does not reach the *possibility* of doing it, but the *practicability* of doing it, at a price which the improvement when made will justify. With this explanation, the Street Commissioner submits the following statement and calculations.

In pursuance of a resolution of the Corporation, in October 1826, the then Street Commissioner, was directed to estimate and report the number of loads of earth necessary to regulate that part of the city, comprehended between North and Fourteenth streets and Bowery and East River, specifying the quantity of filling required under the plan of Swift, Adrian and Renwick's report, and the quantity under Doughty's Report, and the quantity to carry the water from the Bowery, over the surface, to the River.

Under this resolution he reported, that on

Renwick, Swift and Adrian's plan, it would require . . . . .	8,000,000 loads.
On Mr. Doughty's plan, as then reported,	4,500,000
And on the high filling plan, . . . . .	14,500,000

(See Report.)

By a subsequent calculation made by Mr. Doughty, at the special request of the Street Commissioner, in January, 1832, he states that, to the *present shore* of the East River,



on the east, and from Second-street to half way between 14th and 15th streets and to the Third Avenue, it will require to fill to the high filling plan . . . . .	16,678 960 loads.
Deduct the surplus earth within the same district, . . . . .	<u>1,451,348</u>
Leaving deficiency of . . . . .	15,227,612

And here the Street Commissioner begs leave to call the attention of the Committee to the circumstance, that both the above estimates only carry the filling to the *present shore* of the River, and both entirely omit all filling required from the present shore out to Tompkins-street in 26 feet depth of water.

This quantity has not been accurately estimated, but it may be safely put down as at least 2,600,000 loads between Third and Fourteenth streets. The quantity needed being established, the next enquiry is, from what source can it be supplied? and these may be classed under the following heads,—1st the offscouring of the city—2d the avails of cellars—3d. the surplus earth within practicable distance in this city—4th. the hills of Long Island.

As to the 1st. inquiry has been made of Mr. Bloodgood what number of loads of dirt or substance he had annually, which he could not dispose of any better than carrying it there? he estimates it at 100,000 loads. But as the city is constantly increasing, and the quantity will necessarily increase, the annual amount may possibly upon an average for ten years be 120,000 loads, or in ten years 1,200,000 loads.

2d. By a calculation of Mr. Doughty taken from a report made in the Board of Assistants, there are 6894 lots vacant south of 21st street from North to East River, and which may within 10 years be occupied by dwelling houses. Mr. Doughty has expressed the opinion (in which the St. Commissioner concurs) that the earth from not more than one quarter of the cellars for these dwellings, can or will ever reach the meadows. The earth from cellars beyond

21st street will all be required to fill the low ground north of 15th street and in the neighbourhood of 21st street.

Allow then that each cellar is 25 by 40 and 6 feet deep, the number of loads which they will furnish in 10 years from this fourth part will be 1,137,018. The Street Commissioner deems it proper to suggest here, that this resource implies that all the upland property as far as 21st street, must be improved and built upon before this quantity can be made available, and that the regulation of the lots on the meadows must proceed gradually from year to year, and step by step, with the building on the high ground. Upon the high filling plan this would be impracticable, and the filling in this way would probably make reservoirs of stagnant water, similar to some now to be seen on the meadows, and produce or engender pestilence and disease.

3d. It appears by Mr. Doughty's survey that the surplus earth as before stated at 1,451,348 loads, has already been deducted from the quantity required for filling, and that all north of 14th street and far as 34th street will yield no surplus earth beyond what will be required in the immediate neighbourhood, and none can be counted upon for the meadows from this district; and north of 34th street the expense would be beyond what the case would warrant.

4th. The hills from Long Island. Upon this subject the Street Commissioner has not been able to rely as on his other calculations, upon public documents. But he has procured the best information within his reach, from persons who have brought earth from there, and the information of one or two of the very intelligent city surveyors, one of whom has measured the hill where earth has been taken from.— (This hill it appears is now monopolized by a Mr. Bliss) and in the judgment of the most intelligent men, the quantity which can be furnished there, within reasonable distance of the shore, is far less than will be wanted to fill according to the corporation plan; and judging from the best opinion of others, added to the experience of the St. Commissioner, on the cost of removing earth, it ought not to be set down at less than fifteen cents per load; and the Street

Commissioner is not satisfied that contracts to any great amount could be made at that price with responsible men ; and not exceeding 6,000,000 loads ought to be counted upon as certain from that hill at this cost.

The next enquiry to which the street commissioner has turned his attention, is upon the subject of a sewer, and the practicability of a plan of regulation as represented by a model, now in the office, made by direction of Mr. Doughty, and is supposed to be referred to in the resolution of the Board.

On the subject of Sewers great diversity of opinion exists, in most cases where they have been adopted in this city, they have been found or believed injurious to the property in the streets through which they run, and perhaps partially so in some of the adjacent streets ; beyond these their influence has not, it is believed, been felt. Whether the evil is occasioned by the improper mode in which the sewers have been constructed, or by *the improper uses which have been permitted to be made of them*, or whether the system is intrinsically bad, the street commissioner is not prepared to say from his own experience.

It is certain that they are in universal use in London, Paris, and all other large cities and towns of any size in Europe, and from the information which has been obtained from the proper authorities in Philadelphia and Boston (which information will be appended to this report) they are there in general use, and thought indispensable to the cleanliness and health of both those cities.

The Sewer in the Sixth Avenue does not appear to depress the value of property about Washington Parade, and judging from the best reflections of his own judgment, and the experience of other cities, the Street Commissioner does come to the conclusion that a Sewer, properly constructed and properly attended to, may be made to prove beneficial in many cases instead of injurious ; and that the hostility to them, if they were very detrimental to property, would come first from the owners of the lands on the streets through which they were proposed to run.



According to the plan as proposed by the model of Mr. Doughty, a sewer is to be placed in Avenue C, extending from Sixth-street to the north side of Fourteenth-street, 2147 feet long, with a descent of not less than three inches in each 100 feet. By Mr. Doughty's calculation, the whole quantity of earth to fill the same district of ground, as referred to in the high filling, will be 10,727,643 loads.

Deduct upon this plan the quantity of earth found above this now proposed regulation, - - - - - 1,862,106 loads.

Deficiency, - - - - - 8,865,537

The Street Commissioner will now place before the Board, a comparative view of the cost of each plan.

*High Filling Plan as before stated.*

Whole amount wanted, 16,678,960 loads.

Then 1,451,348 loads surplus at 4 cents, \$58,053 92

15,227,612 from Long-Island or some other place, which we will

say cost 15, 2,284,141 80

Total 16,678,960 \$2,342,195 72

cost of regulating upon this plan, as the least sum to be reasonably expected.

*Mr. Doughty's Plan, with Sewer in Avenue C.*

Whole amount wanted 10,727,643 loads.

Of this, 1,862,106 loads of surplus or ground,

at 4 cents, \$74,484 24

8,865,537 supposed to be brought from

Long-Island, at 15 cents, 1,329,830 55

10,727,643

Cost of sewer as estimated with culverts at streets and fixtures, &c. - - - 33,652 00

Breaking up some pavements and relaying them (say) - - - - - 4,000 00

Cost according to Sewer Plan, - - - \$1,441,966 79

Difference, - - - - - \$900,228 93



Making a difference of nine hundred thousand two hundred twenty-eight dollars ninety-three cents.

A third plan has been suggested, and comes recommended by some very important considerations.

It is to assume for public use, a large plot of ground, embracing either four or eight blocks, to be a hollow or depressed square, and elevated just enough to carry off the water which falls on it into a sewer.

The effect of this plan would be, to give some little relief to the owners of the blocks adjoining, and on other parts of the meadow, and by the establishment, of a square to promote the beauty of that part of the city, and enhance the value of the remaining part of the meadows.

Whether this square should embrace four or eight blocks, and in what proportions the proprietors of the adjacent lots and the public, should be assessed to defray the expense, are considerations which the Street Commissioner submits to the wisdom of the Common Council.

Upon as careful a review of the whole subject, as the time and means of information within his reach afford, the Street Commissioner is deeply impressed with the conviction, that even on the lowest possible plan of regulation, the subject offers very great difficulties, and its accomplishment will require many years; and the Street Commissioner will declare frankly his opinion, that the friends of the high filling plan are in error, as to the great and all-important point of *where all this immense quantity of earth can be obtained at a reasonable expense.*

The Street Commissioner is impelled, from the whole review of the case, to recommend the plan according to the model of Mr. Doughty, in the Street Commissioner's Office, and he presumes the members of the Board are some of them familiar with this plan, without written explanations. Its general design is to produce a regulation on the meadows between Sixth and Fourteenth streets, very similar to that which has been adopted with so great advantage on the Sixth Avenue, to wit, a sewer in Avenue C, which shall receive the waters from near the Third Avenue on one side, and from toward Avenue D, on the other side.

Upon this plan, it is proposed that the ground shall be so much raised at Avenue C, which is the lowest point, so as to admit of good cellars at least six feet deep, and on every other part of the meadows the filling will augment in height as it recedes from the sewer. In point of health, the Street Commissioner can discover no reason to suppose that this district would not be in every respect as unexceptionable, as other parts of the city, and the health of this part, by having the slope more rapid, will be favourable for a residence.

The Street Commissioner has by inquiry, compared the value of property on the east side, in the Eleventh and Thirteenth Wards, with that part on the North River side in the Ninth Ward, and even that part in the vicinity of the sewer in this Ward, and he finds that this comparison shows a depression in the value of property on the east side of the city, which can only be reasonably accounted for by the present state of these meadows; and the Street Commissioner must frankly declare his opinion, that unless the present existing plan of regulation is changed, this district of the city will for a long period to come, remain unimproved and unsightly, generating disease and sickness, and depressing the value of property now regulated, within several hundred feet of it; and finally, the high filling will be abandoned, for the very plain reason, that every year that it is delayed, makes it more expensive, and the earth more difficult to procure.

All which is respectfully submitted,

BENJAMIN WRIGHT,

Street Commissioner.

*January 20th, 1832.*

I fully agree with the Street Commissioner on the facts and opinions contained in the preceding Report.

GEO. B. SMITH,

Assist. Street Commissioner.

*Note.*—The Street Commissioner thinks it proper that the Committee should understand, that the quantities stated as required in this Report, do not include any filling north of half way between Fourteenth and Fifteenth-streets; and that if the present plan of the city is to be adhered to strictly,

and the space of low ground and water between Fifteenth-street and Twenty-third-street out to Tompkins-street is to be filled, it will require about fifteen or sixteen million of loads for that part only, in addition to all before estimated.

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*Mayor's Office, Philadelphia, Dec. 26, 1831.*

DEAR SIR,

IN reply to your favor of the 21st instant, I have availed myself of the experience of our City Surveyor, whose letter I enclose. The sewers are planned under his direction, and he has had much experience on the subject.

To his remarks generally I would add, that the level surface of our city plot renders sewers under ground in many places indispensable to us, and has, with other reasons, induced their uniform adoption, where water is to be carried off any considerable distance.

We certainly enjoy great advantages from them, and where the stench traps are regularly and frequently cleansed out, the effluvia from the entrances to the sewers are seldom complained of. They have not proved so offensive as was at first expected. During the last season, the arch of one of our large sewers gave way. This occurred at the confluences of two smaller ones, and immediately succeeding a very heavy rain. It was supposed to have resulted from the concussion of air arising from the quantity of water propelled at one spot, the large sewer being on tide water. Air holes have since been adopted at that place. This hint may be useful. I shall take pleasure in giving any information in my power, and am very respectfully yours,

(Signed) B. W. RICHARDS.

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*Philadelphia, December 24, 1831.*

TO B. W. RICHARDS, ESQ.

*Sir,*—In reply to your note of the 22d inst. respecting the nature and advantages of Common Sewers, I offer the following remarks:—

Common Sewers are indispensably necessary in all large cities, to prevent the accumulation of too great a quantity of water on the surface of the streets, by which they would otherwise be rendered impassable, the footways overflow, and much damage sustained by the adjoining property. It



is found that the less the quantity of water allowed to pass above ground, the more durable are the pavements, the less the expense to cleanse and repair them, and the health of the inhabitants preserved from the effects of the putrid filth that is thus carried off.

Common Sewers are easily constructed, they are not expensive, and are very durable. One of about five feet diameter, placed about three feet below the surface, will cost about three dollars per foot of its length, unless the foundation should require to be secured with stone or timber, (this seldom happens.) The best shape is a perfect circle, for which the oval may be substituted where more capacity is required, without sinking too deep and reducing the descent.

Water passes in a Sewer with less descent than is required in the gutters of streets, the current being made compact, a less surface is presented for friction, and the small quantity of filth of a solid kind that can pass into them (if properly constructed) offers but little obstruction, and none is occasioned from frost or ice. The uses of Common Sewers has greatly increased in this city within the last fifteen years. The mode of constructing them is better understood, the difficulties and objections that existed are overcome and removed, one of the greatest of which was the escape of noxious effluvia at the openings for receiving the water; that is now obviated by a simple contrivance called a *stench trap*, the same in principle long used in *water closets*.

The exact extent of surface the drainage of which a sewer of given capacity and descent is sufficient to carry off, has not been ascertained in this country. In this city we have sewers five feet diameter, and a descent of two inches in the hundred feet, that carry off with ease the drainage of one million and a quarter square feet of surface. I believe they could carry off half as much more with safety.

Hitherto the City Councils have generally refused to allow openings to be made into the common sewers having a direct communication with factories and private dwellings. This, I think, is a mistaken policy, arising from an apprehension that too much filth of a gross kind would be passed into them; all which might be prevented by constructing proper *stench traps* between the main sewer and the factory or other building to be accommodated; these *stench traps* to be at all times under the immediate supervision and control of the City Commissioners.

I am very respectfully yours, &c.

SAMUEL HAINS.