



City of Cambridge

IN CITY COUNCIL

August 4, 1980

ORDERED:

That the Cambridge City Council herewith authorizes the Public Works Department to grant permission to Massachusetts Institute of Technology to undertake street work in Carleton Street in the area of the new M.I.T. construction (HSTM/HS Building). The construction in this area is to include the installation of sewer and water lines, new steam and condensate lines with associated manholes, and electric and telephone duct banks with manholes. The new 8-inch water main to be constructed on Carleton Street is to be extended approximately 10 feet more toward Deacon Street to clear the new fire line and domestic service into the building, and should have a minimum clearance of 12 inches between it and other utilities. The roadway surface is to be restored to the approval of the Superintendent of Streets.

All work to be performed shall be in conformance with conditions set forth in the City Ordinances and shall be approved by the Commissioner of Public Works, all as described in drawings U-1, U-2, U-3 and to M.I.T. Chilled Water Mains as shown on drawings 103-CH-1A, 103-CH-2A, 103-CH-4A, and 103-CH-5A, all as approved by and on file with the City Engineer.

In City Council August 4, 1980.

Adopted by a yea and nay vote:-

Yeas 8; Nays 0; Absent 1.

Attest:- Paul E. Healy, City Clerk.

A true copy;

ATTEST:-

A handwritten signature in cursive script that reads "Paul E. Healy".

This order was approved by the City Engineer on September 18, 1980



City of Cambridge

IN CITY COUNCIL

August 4, 1980

ORDERED:

That the Cambridge City Council herewith authorizes the Public Works Department to grant permission to Massachusetts Institute of Technology to undertake street work in Carleton Street in the area of the new M.I.T. construction (HSTM/HS Building). The construction in this area is to include the installation of sewer and water lines, new steam and condensate lines with associated manholes, and electric and telephone duct banks with manholes. The new 8-inch water main to be constructed on Carleton Street is to be extended approximately 10 feet more toward Deacon Street to clear the new fire line and domestic service into the building, and should have a minimum clearance of 12 inches between it and other utilities. The roadway surface is to be restored to the approval of the Superintendent of Streets.

All work to be performed shall be in conformance with conditions set forth in the City Ordinances and shall be approved by the Commissioner of Public Works, all as described in drawings U-1, U-2, U-3 and to M.I.T. Chilled Water Mains as shown on drawings 103-CH-1A, 103-CH-2A, 103-CH-4A, and 103-CH-5A, all as approved by and on file with the City Engineer.

In City Council August 4, 1980.

Adopted by a yea and nay vote:-

Yeas 8; Nays 0; Absent 1.

Attest:- Paul E. Healy, City Clerk.

A true copy;

ATTEST:-

A handwritten signature in cursive script, reading "Paul E. Healy".

This order was approved by the City Engineer on September 18, 1980



City of Cambridge

IN CITY COUNCIL

August 4, 1980

ORDERED:

That the Cambridge City Council herewith authorizes the Public Works Department to grant permission to Massachusetts Institute of Technology to undertake street work in Carleton Street in the area of the new M.I.T. construction (HSTM/HS Building). The construction in this area is to include the installation of sewer and water lines, new steam and condensate lines with associated manholes, and electric and telephone duct banks with manholes. The new 8-inch water main to be constructed on Carleton Street is to be extended approximately 10 feet more toward Deacon Street to clear the new fire line and domestic service into the building, and should have a minimum clearance of 12 inches between it and other utilities. The roadway surface is to be restored to the approval of the Superintendent of Streets.

All work to be performed shall be in conformance with conditions set forth in the City Ordinances and shall be approved by the Commissioner of Public Works, all as described in drawings U-1, U-2, U-3 and to M.I.T. Chilled Water Mains as shown on drawings 103-CH-1A, 103-CH-2A, 103-CH-4A, and 103-CH-5A, all as approved by and on file with the City Engineer.

In City Council August 4, 1980.
Adopted by a yea and nay vote:-
Yeas 8; Nays 0; Absent 1.
Attest:- Paul E. Healy, City Clerk.

A true copy;

ATTEST:-

A handwritten signature in cursive script that reads "Paul E. Healy".

This order was approved by the City Engineer on September 18, 1980

City of Cambridge

MASSACHUSETTS

Agenda # 21 Street work related to the In City Council August 4 1980
MIT Utility Distribution Systems
and Chilled Water Mains.

	YEA	NAY	ABSENT	PRESENT
Mr. Kevin P. Crane	✓			
Mr. Thomas W. Danehy	✓			
Ms. Saundra Graham	✓			
Mr. Leonard J. Russell			✓	
Mr. David E. Sullivan	✓			
Mr. Walter J. Sullivan	✓			
Mr. Alfred Vellucci	✓			
Mr. David A. Wylie	✓			
Mayor Francis H. Duehay	✓			
	8	0	1	



CITY OF CAMBRIDGE

CITY HALL, CAMBRIDGE, MASSACHUSETTS 02139 • (617) 498-9017

OFFICE OF
THE CITY CLERK

August 6, 1980

Mr. James Rice
City Engineer
147 Hampshire Street
Cambridge, MA 02140

Dear Mr. Rice:

Enclosed you will find a copy of a draft order for chilled water mains construction for Massachusetts Institute of Technology.

Would you kindly indicate your approval and recommendations on this proposed construction and return to this office as soon as possible.

I have enclosed also the maps which outline this construction.

Your kind attention in this matter will be greatly appreciated.

Very truly yours,

Paul E. Healy, City Clerk.

PEH/dl

Encs. Draft of order and Maps.

September 18, 1980

*City Engr Jim Rice indicates his
approval of order as drafted.
Send copy to Mr. G. J. Walter
M.H.C.*



City of Cambridge

DRAFT

IN CITY COUNCIL

August 4, 1980

ORDERED:

That the Cambridge City Council herewith authorizes the Public Works Department to grant permission to Massachusetts Institute of Technology to undertake street work in Carleton Street in the area of the new M.I.T. construction (HSTM/HS Building). The construction in this area is to include the installation of sewer and water lines, new steam and condensate lines with associated manholes, and electric and telephone duct banks with manholes. The new 8-inch water main to be constructed on Carleton Street is to be extended approximately 10 feet more toward Deacon Street to clear the new fire line and domestic service into the building, and should have a minimum clearance of 12 inches between it and other utilities. The roadway surface is to be restored to the approval of the Superintendent of Streets.

All work to be performed shall be in conformance with conditions set forth in the City Ordinances and shall be approved by the Commissioner of Public Works, all as described in drawings U-1, U-2, U-3 and to M.I.T. Chilled Water Mains as shown on drawings 103-CH-1A, 103-CH-2A, 103-CH-4A, and 103-CH-5A, all as approved by and on file with the City Engineer.

In City Council August 4, 1980.
Adopted by a yea and nay vote:-
Yeas 8; Nays 0; Absent 1.
Attest:- Paul E. Healy, City Clerk.

A true copy;

ATTEST:-



Massachusetts Institute of Technology
Department of Physical Plant
77 Massachusetts Avenue
Cambridge, Massachusetts 02139

July 8, 1980

City of Cambridge
147 Hampshire Street
Cambridge, MA 02139

Attention: John J. Cusack, Jr.

Subject: East Campus Utility Distribution Systems

Dear Mr. Cusack:

The purpose of this letter is to obtain your comments on and/or approval of work proposed to be installed in Carleton Street in the area of current new M.I.T. construction (HSTM/HS Building). A layout of sewers and water lines to serve the new construction was submitted to you earlier in the year by Cosentini Associates, the Engineers for that construction, and you responded to that submittal by letter of January 31, 1980. The suggestions of that letter have since been orally discussed and resolved with you by M.I.T. and the layout revised in accordance with those discussions. The drawings covering the sewer work are SU/01, Revision 3, dated June 6, 1980, and SU/02, Revision 2, dated June 6, 1980, prepared by Cosentini Associates for Gruzen and Partners Mitchell/Giurgola. Two prints each of these drawings are attached for your information and records.

An additional set of drawings has been prepared by Cosentini Associates for work in Carleton Street which includes the water line mentioned above, and also shows proposed steam and condensate lines with associated manholes, and electric and telephone duct banks with manholes. These are drawings U-1, U-2 and U-3 all dated June 6, 1980 and two prints each of these are also attached.

The new water line in Carleton Street is shown as 8" size and extending from Amherst Street northward in Carleton Street only a sufficient distance to serve the new M.I.T. building. This is a change from the 12" size line extending from Amherst Street to Main Street suggested in your letter of January 31, 1980, and was made, subsequent to your letter, as a result of discussions between M.I.T. and the City on mutual participation in the cost of the 12" line.

July 8, 1980

The proposed steam and condensate lines will be located in the west side of the street and will be installed in separate Ric-Wil conduits provided with cathodic corrosion protection of sacrificial anode type. Two new manholes will be constructed in Carleton Street and one new manhole in the sidewalk on the south side of Amherst Street intercepting the existing steam and condensate mains.

Proposed electric and telephone duct banks will originate at existing manholes at the juncture of Amherst and Carleton Streets and will run under the sidewalk on the west side of Carleton Street. One new set of manholes will be constructed in Carleton Street from which the new M.I.T. HSTM/HS Building under construction on the west side of Carleton Street will be served. Service will also be provided from this set of manholes via new duct banks crossing Carleton Street to existing M.I.T. buildings on the east side of Carleton Street.

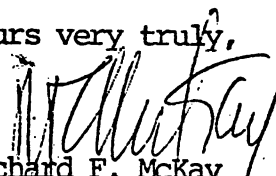
The requirement in your letter of January 31, 1980 of a new 24" size connecting link between the existing 18" X 22" storm sewer in Carleton Street and the existing 24" X 24" storm sewer in Ames Street has been discussed and resolved with you to the conclusion that this link may be omitted.

We presume that locating these utilities in the street will require the approval of the City Council, however, we wish to have your comments before submitting the drawings to the Council.

We recognize that the timing of this submittal to you may be unfortunate, but it is quite essential for our purposes that these utilities be installed before winter and we would appreciate your giving this submittal your attention at the earliest possible moment. In anticipation of your general approval of the design we have selected a contractor to do the work of providing the steam, condensate, and water lines, and the electric and telephone ducts and have authorized him to purchase materials. The Ric-Wil conduit for the steam and condensate lines has been purchased.

We shall be happy to assist you in any way in reviewing these drawings and stand ready to discuss them with you at your convenience.

Yours very truly,


Richard F. McKay
Manager, Central
Utilities Plant

RFM/jeg
Attachments

cc: P. F. Barrett
W. R. Dickson
H. Gechjian
H. P. Portnoy
T. E. Shepherd, Jr.
J. P. Dwyer-Cosentini Associates
P. Heimlich-Gruzen & Partners



CITY OF CAMBRIDGE

147 HAMPSHIRE ST., CAMBRIDGE, MASSACHUSETTS 02139

PUBLIC WORKS DEPARTMENT

Conrad C. Fagone
Commissioner
31 July 1980

Mr. Richard F. McKay, Manager
Central Utilities Plant
Massachusetts Institute of Technology
Department of Physical Plant
77 Massachusetts Avenue
Cambridge, MA 02139

Reference: EAST CAMPUS UTILITY DISTRIBUTION SYSTEMS

Dear Mr. McKay:

In response to your July 8 letter concerning the East Campus utility distribution systems, the PWD offers the following comments and recommendations:

SU/01, dated: 6-6-80

- a) The new drain manholes (DMH) in Carleton Street should be situated as close as possible to the existing City storm drain.

SU/02, dated: 6-6-80

- a) same as comment for SU/01
- b) The proposed catch basin structures do not have any sump area to trap grit and other debris before entering the storm drainage systems. The necessity of using sumps on all catch basins can be avoided if the runoff in each small drainage area flows through a cleanout manhole with a sump prior to discharge into the City drainage system.

U-1, dated: 6-6-80

- a) The new 8-inch water main in Carleton St. should be extended about 10-ft. more toward Deacon St. to clear the new fire line and domestic service into the building. This will make it easier to extend the 8-inch line in the future.

U-1, dated: 6-6-80 (cont.)

- b) The new 8-inch water main should have a minimum clearance of 12-inches between it and other utilities.
- c) The restoration of the roadway surfaces particularly in Carleton Street will be difficult to accomplish because of the large number of pavement cuts and trench excavations. All of the street restoration work will be subject to approval of Street Superintendent Robert McElroy; and for this reason it is suggested that your utilities contractors meet with Mr. McElroy prior to construction. The City standard trench detail is enclosed for forwarding to your contractors.

U-2, dated: 6-6-80

- a) no comments

U-3, dated: 6-6-80

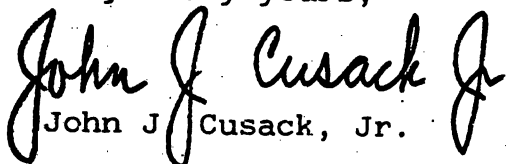
- a) The profile of the steam service line indicates several crossings of City water mains and storm drains with small clearances. The minimum clearance dimensions should be 12-inches of water main crossings and 8-inches at storm drain crossings, included the three new 18-inch drains to be installed by M.I.T.

GENERAL COMMENTS

- 1) A pre-construction meeting between Key personnel of your contractors and PWD staff members, such as Street Superintendent, Sewer Foreman and Water Foreman, should be scheduled to coordinate the utility installation and street restoration efforts.
- 2) PWD should receive record drawings of all work upon completion.
- 3) Contact the Traffic & Parking Dept. in the near future to coordinate temporary street closings and detours, during construction.

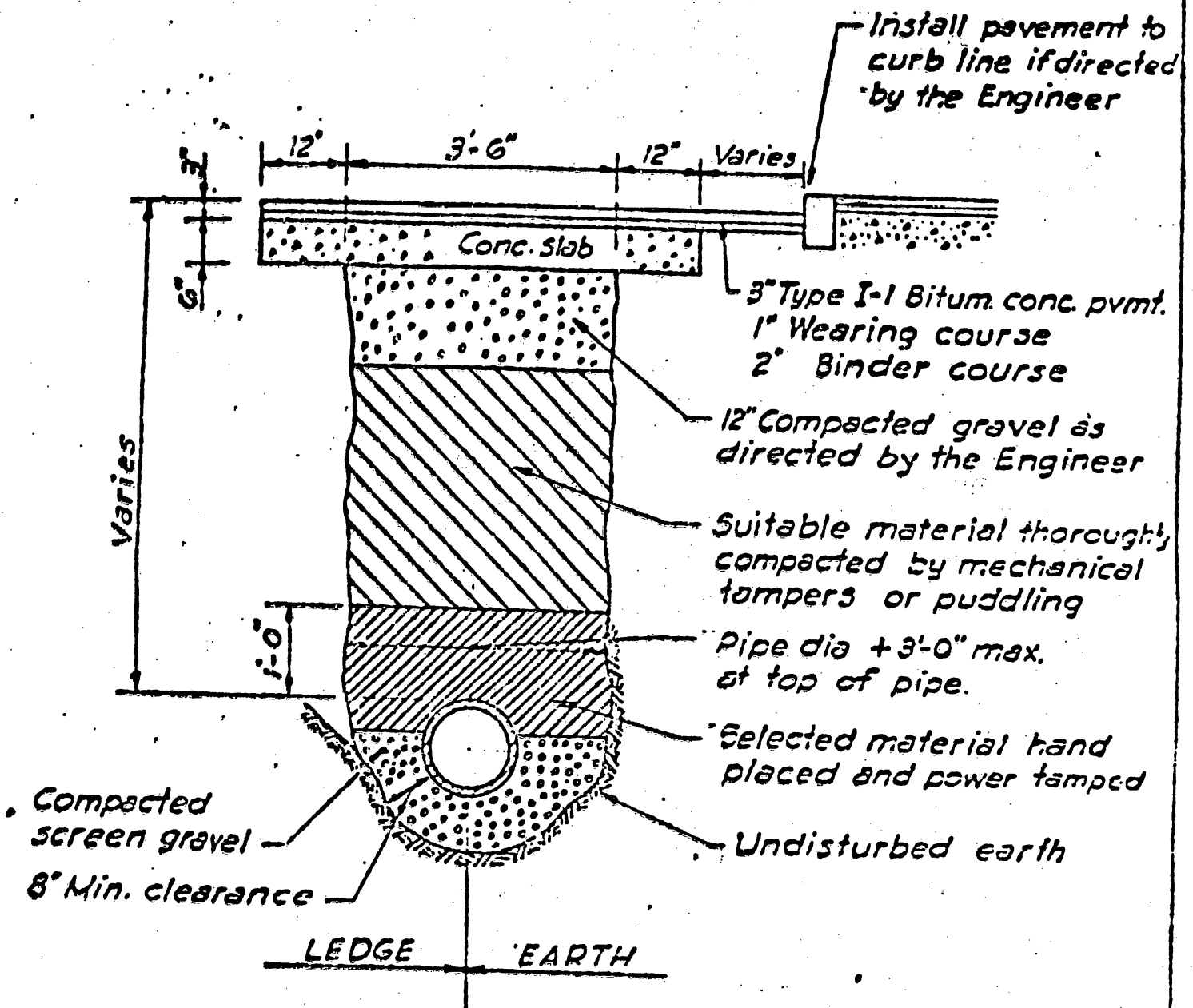
If there are any other questions, please call.

Very truly yours,


John J. Cusack, Jr.

Enclosure

cc: Conrad C. Fagone, Commissioner PWD
James Gardner, M.I.T.
Robert McElroy, Street Superintendent PWD



TYPICAL TRENCH DETAIL
N.T.S.



WILLIAM R. DICKSON
VICE PRESIDENT, OPERATIONS

CAMBRIDGE, MASSACHUSETTS 02139
ROOM 4-110 (617) 253-3935

July 31, 1980

Mr. Conrad C. Fagone, Commissioner
Public Works Department
City of Cambridge
147 Hampshire Street
Cambridge, MA 02139

Dear Mr. Fagone:

Subject: Expansion of Utility Distribution Systems

On July 8 and July 11, 1980, Mr. Richard McKay, Manager of our Central Utilities Plant, forwarded material pertaining to the above referenced subject to Mr. John Cusack, the City Engineer, for his review. (Copies attached.) Mr. Cusack's replies dated July 30 and July 31, 1980 make certain recommendations concerning the proposed work. (Copies attached.)

This is to advise you that we will incorporate all of the recommendations made by Mr. Cusack in the actual work as finally installed. We plan to submit a request for formal approval to the City Manager on Friday, August 1, 1980, with the hope that he will forward same to the City Council for consideration at their meeting on August 4, 1980. As you can understand, we are anxious to accomplish this work during the remaining months of the summer when activity in this area of Cambridge is lighter than at most other times of the year.

In view of our willingness to incorporate all of the recommendations made by Mr. Cusack, we would appreciate your endorsement by signing this letter in the space provided so that the manager will know that the Public Works Department concurs with our proposals.

Mr. Conrad C. Fagone

2.

July 31, 1980

As always we are most appreciative of the guidance offered by you and your staff.

Very truly yours,

William R. Dickson

William R. Dickson

WRD:nml
Attachments

Conrad C. Fagone
Conrad C. Fagone

8/1/80
Date



CITY OF CAMBRIDGE

147 HAMPSHIRE ST., CAMBRIDGE, MASSACHUSETTS 02139

PUBLIC WORKS DEPARTMENT

Conrad C. Fagone

Commissioner

30 July 1980

Mr. Richard F. McKay, Manager
Central Utilities Plant
Massachusetts Institute of Technology
Department of Physical Plant
77 Massachusetts Avenue
Cambridge, MA 02139

Reference: WEST CAMPUS CHILLED WATER MAINS

Dear Mr. McKay:

In response to your July 11 letter concerning the chilled water mains to the West Campus, the Public Works Department offers the following comments and recommendations:

CH-1A

- a) The utility plan for Mass. Avenue fails to show an existing 15-inch sanitary sewer on the east side of the R.O.W. that crosses the street near the proposed location of the M.I.T. chilled water lines. This sewer discharges into the existing 15-inch sanitary sewer located on the west side of Mass. Ave., as indicated on the enclosed City Sewer Plan No. 3. The new chilled water lines crossing Mass. Avenue should not be situated directly over this existing 15-inch sanitary sewer. City Water Plan D-7 has also been enclosed for your information.
- b) A 6-inch concrete slab under the bituminous concrete pavement in trench areas is required at Mass. Avenue and Vassar Street (see attached detail).
- c) Minimum clearances between the chilled water lines and City utilities are 12-inches at water mains and 8-inches for storm drains and sanitary sewers.

CH-2A & CH-4A: no comments

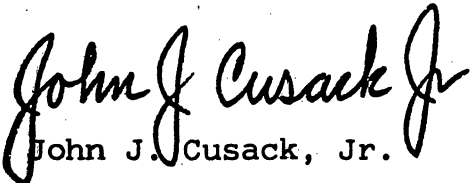
CH-5A

- a) The specification on the butterfly valves does not indicate the size of the operating nut. The standard size on City water system valves is 1-3/4 - inch; if M.I.T. specifies 2-inch nuts, it will minimize confusion for both parties later.

30 July 1980
Richard F. McKay
Page 2

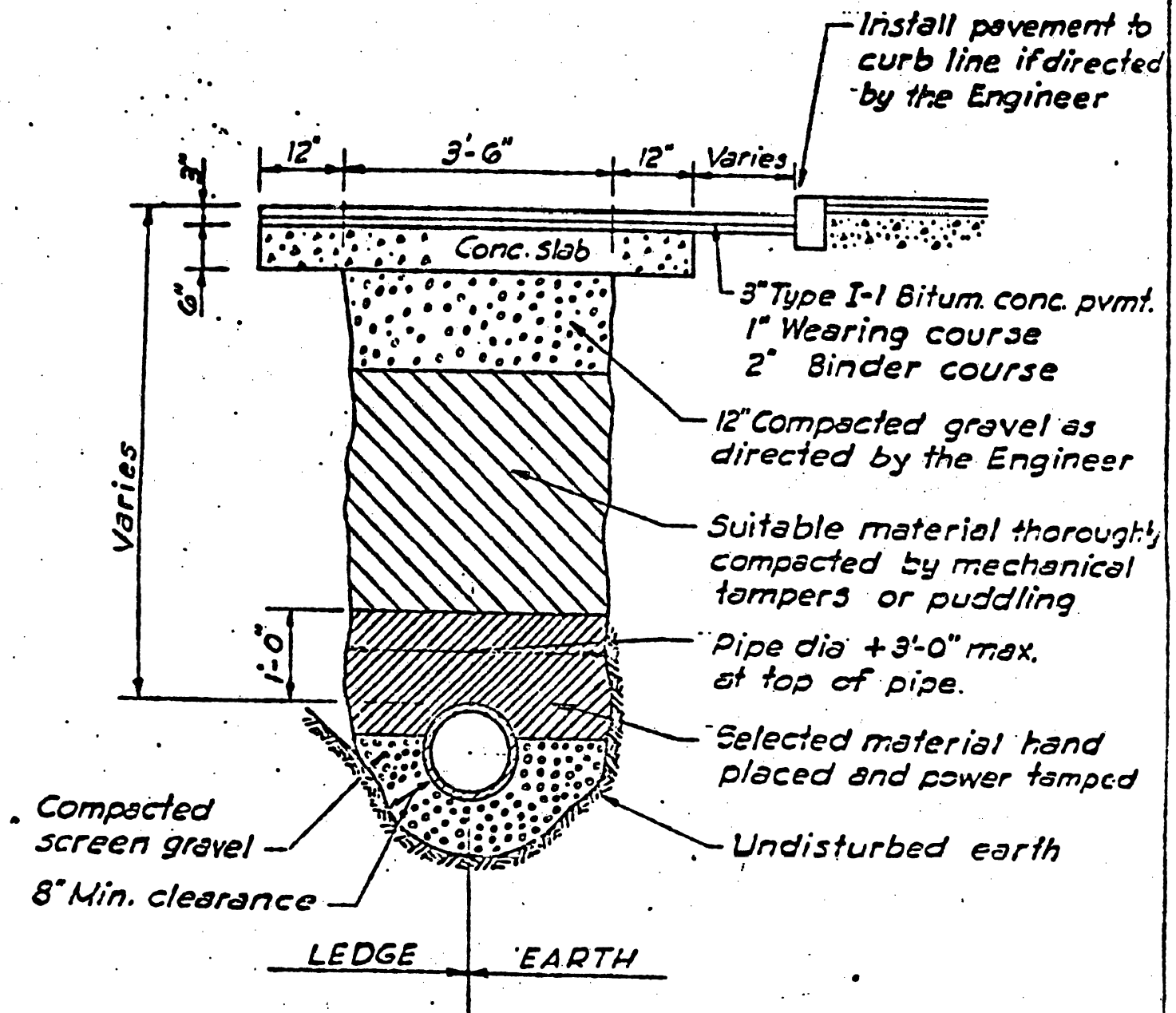
Please send record drawings of this project to the Public Works
Department upon completion.

Very truly yours,


John J. Cusack, Jr.

JJC:s
Enclosure

cc: Conrad C. Fagone, Commissioner P.W.D.
James Gardner, M.I.T.



TYPICAL TRENCH DETAIL

N.T.S.

1011

Massachusetts Institute of Technology
Department of Physical Plant
77 Massachusetts Avenue
Cambridge, Massachusetts 02139

July 11, 1980

City of Cambridge
147 Hampshire Street
Cambridge, MA 02139

Attention: Mr. John J. Cusack, Jr.

Subject: Chilled Water Mains to West Campus

Dear Mr. Cusack:

The M.I.T. Central Utilities Plant on Vassar Street supplies chilled water for air conditioning to the main campus east of Massachusetts Avenue. It is now planned to provide chilled water mains from the Central Utilities Plant to the campus west of Massachusetts Avenue to serve the new Athletic Center presently under construction. The new mains will also supply chilled water to existing buildings on the west side of Massachusetts Avenue to permit retirement of old and obsolete water chilling machines.

The new mains must cross Massachusetts Avenue and Vassar Street to accomplish this and we enclose two sets of the drawings listed below showing the design, routing and street crossings of the new mains. There will be two lines, each 12" size, one for supply and one for return. The lines will be standard weight steel pipe with welded joints and will be coated with coal tar enamel. A cathodic corrosion protection system of sacrificial anode type will be provided for the piping.

Mr. John J. Cusack, Jr.

-2-

July 11, 1980

We would appreciate receiving your approval of these street crossings at your earliest convenience. It is our understanding that these crossings will require approval of the City Council and we wish to have your comments before submitting the drawings to the Council. Chilled water will be required at the Athletic Center in the fall of this year and, therefore, we have selected a contractor to do this work and are ordering the necessary material.

The drawings applying to this work are as follows:


103C-CH-1A-Chilled Water Mains-West Campus Layout

103C-CH-2A-Chilled Water Mains-West Campus-Details-Sh.1

103C-CH-4A-Bldgs. & Railroad Plan-West of Mass. Ave.

103C-CH-5A-Chilled Water Mains-West Campus-Details-Sh.3

Very truly yours,


Richard F. McKay
Manager, Central
Utilities Plant

RFM/jeg
Attachments

cc: P. F. Barrett
W. R. Dickson
H. P. Portnoy
T. E. Shepherd, Jr.
H. Gilman



CITY OF CAMBRIDGE

CAMBRIDGE, MASSACHUSETTS 02139
Tel. 498-9011

EXECUTIVE DEPARTMENT
JAMES L. SULLIVAN
City Manager

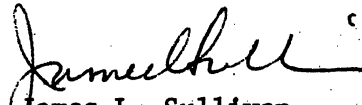
June 30, 1980

To the Honorable, the City Council:

Permission is hereby requested for Massachusetts Institute of Technology to undertake street work for the extension of M. I. T.'s chilled water system as shown on drawings CHWD-3 through 6 (dated May 27, 1980) which have been reviewed by and are on file with the City Engineer and the City Clerk. All necessary approvals have been received and the street work would be in accordance with conditions set forth in City Ordinances and such other conditions the Superintendent of Streets may deem proper. Enclosed please find copy of communications pertaining to this project.

Passage of the enclosed order is recommended.

Very truly yours,


James L. Sullivan
City Manager

JLS/mbf
Encs. 3



City of Cambridge

IN CITY COUNCIL

June 30, 1980

ORDERED:

That the Cambridge City Council hereby grants permission to Massachusetts Institute of Technology to undertake street work for the extension of M. I. T.'s chilled water system as per drawings CHWD-3 through 6 on file with City Engineer and City Clerk.



Massachusetts Institute of Technology
Department of Physical Plant
77 Massachusetts Avenue
Cambridge, Massachusetts 02139

June 26, 1980

Mr. Conrad C. Fagone, Commissioner
Public Works Department
City of Cambridge
147 Hampshire Street
Cambridge, MA 02139

Dear Mr. Fagone:

Subject: Chilled Water Distribution System
East Campus Chilled Water Plant

On May 13, 1980, Mr. Richard McKay, Manager of the Central Utilities Plant, forwarded drawings CHWD 3 through 6 to Mr. John Cusack, the City Engineer, for his review. (Copy attached.) Mr. Cusack replied on June 16, 1980 wherein he made several recommendations concerning the proposed work. (Copy attached.)

This is to advise you that we will incorporate all of the recommendations made by Mr. Cusack in the actual work as finally installed. Mr. Cusack also advised us that we would have to seek the approval of the City Council in order to install this utility in the City streets. Accordingly, we plan to submit our request to the City Manager on Friday, June 27, 1980, with the hope that he will forward same to the Council for consideration at their meeting on June 30, 1980. As you can understand, we are anxious to accomplish this work during the remaining months of the summer when activity in this area of Cambridge is lighter than at most other times of the year.

In view of our willingness to incorporate all of the recommendations made by Mr. Cusack, we would appreciate your endorsement by signing this letter in the space provided below so that the manager will know that the Public Works Department concurs with our proposal.

Mr. Conrad C. Fagone

2.

June 26, 1980

As always we are most appreciative of the guidance offered by you and your staff.

Very truly yours,

William R. Dickson

William R. Dickson
Director of Physical Plant

Attachments

Conrad C. Fagone

Conrad C. Fagone

6/27/80

Date

CITY OF CAMBRIDGE

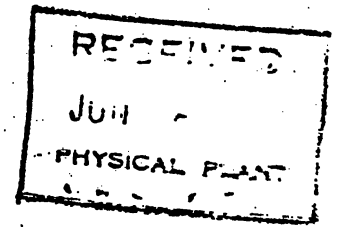
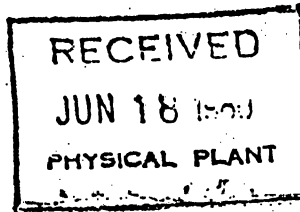
147 HAMPSHIRE ST., CAMBRIDGE, MASSACHUSETTS 02139

C WORKS DEPARTMENT

Conrad C. Fagone
Commissioner

16 June 80

Mr. Richard F. McKay, Manager
Central Utilities Plant
Massachusetts Institute of Technology
Department of Physical Plant
77 Massachusetts Avenue
Cambridge, MA 02139



Chilled Water Distribution System East Campus Chilled Water Plant

Dear Mr. McKay:

In response to your May-13 letter concerning the distribution piping arrangement indicated on drawings CHWD 3 thru 6, the PWD offers the following comments and recommendations:

1. The chilled water lines crossing above the four existing over-under storm drain/sanitary sewer (SD/SS) structure should be encased in reinforced concrete to prevent the collapse of the chilled water lines due to traffic loads or differential soil settling adjacent to the SD/SS structures. The reinforced concrete encasement should be at least 6-inches thick around the chilled water lines and should extend at least 3-ft. beyond both vertical sides of the SD/SS structure.
2. The roadway construction standards of the City for all pipe line installation require a 6-inch cement concrete slab over the trench beneath the bituminous concrete pavement as indicated on the attached detail.
3. In those locations where the M.I.T. chilled water lines cross over the City SD/SS structures, the small clearance between the concrete base of the roadway and the concrete encased chilled water lines may present construction problems. For this reason your consultant, Syska & Hennessy Inc. may prefer to evaluate the option of designing the reinforced concrete encasement as part of the roadway slab rather than as a beam.

Mr. Richard F. McKay
M.I.T.

16 June 80

4. It is our understanding that the purpose of the chilled water system is for the air conditioning of various campus buildings, and it will not be used in the winter months. Eventhough the new chilled water lines can be drained inside of campus building E-40, the large number of vertical bends in the lines make it unlikely that complete dewatering of the lines can be accomplished; and that freezing may occur, particularly in the four locations where the chilled water lines cross over the SD/SS structures. Because of this potential freezing problem it is our recommendation that all portions of the chilled water lines above the frost line be insulated.

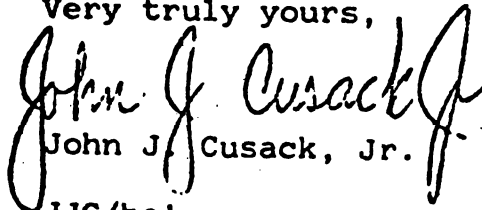
In addition to the comments pertaining to the chilled water system, it is suggested that your office should review the plans for water supply and fire protection lines with Water Department Superintendent John Seites. Utilizing the existing mains in Amherst Street (8-inch for supply and 12-inch for fire) will improve the flow capabilities of both systems, but there are several design questions on the fire protection line in need of clarification.

Specifically, on drawing CHWD-6, the water services detail section "L-L" does not indicate the depth of cover above the fire protection line, where it crosses over the SD/SS structure. If there is less than 4-ft. of cover material there, the recommendations cited above for the construction of chilled water lines apply to this fire protection line as well. The necessity of insulating the fire protection line where it is installed above the frost line is even more critical here, because this line is a dead main with no flow under pressure most of the time.

As discussed previously, M.I.T. must obtain approval from the City Council to install a private utility in City streets.

If there are any questions or additional information required, please call.

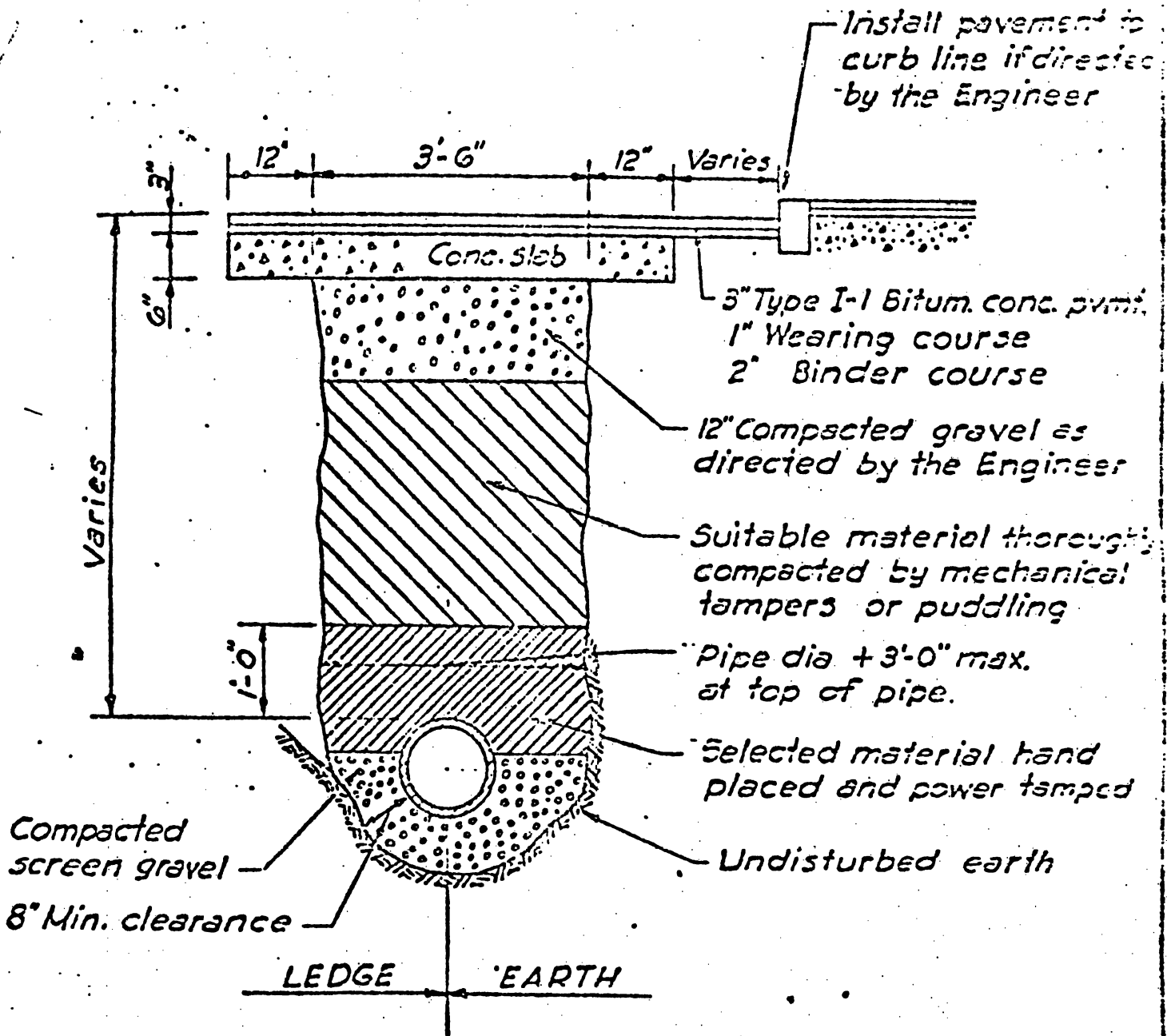
Very truly yours,



John J. Cusack, Jr.

JJC/ho'
Enclosure

cc: Conrad C. Fagone, Ccmmissioner PWD
John H. Seites, Superintendent CWD
Jeremiah Lucey, Sewer Division Foreman
James Gardner, M.I.T.



TYPICAL TRENCH DETAIL

N.T.S.



CITY OF CAMBRIDGE

CAMBRIDGE, MASSACHUSETTS 02139
Tel. 498-9011

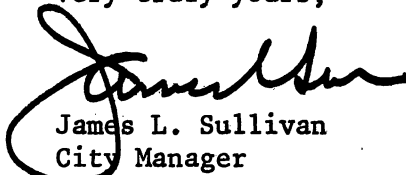
EXECUTIVE DEPARTMENT
JAMES L. SULLIVAN
City Manager

August 4, 1980

To the Honorable, the City Council:

Permission is hereby requested for Massachusetts Institute of Technology to undertake street work related to the M.I.T. Utility Distribution Systems as shown on drawings U-1, U-2, and U-3 and to M.I.T. chilled water mains as shown on drawings 103-CH-1A, 103-CH-2A, 103-CH-4A, and 103-CH-5A which have been reviewed by and are on file with the City Engineer. All necessary approvals have been received and the street work would be in accordance with conditions set forth in City Ordinances and such other conditions the Superintendent of Streets may deem proper.

Very truly yours,



James L. Sullivan
City Manager

JLS/mbf

Request from MIT for Street Work related
to the MIT Utility Distribution Systems
and chilled water mains.

Order as drafted
approved by the
City Engineer 9/18/80
copies to - C. Mgr. Council
office
Walter Milne
9/18/80 (ad)

In City Council,

August 4, 1980

Order adopted

8-01

Review ALL MAPS
AND REQUEST, CORRESPONDENCE
TO CITY ENGINEER FOR
DESCRIPTION AND THEN
ORDER WILL BE DRAFTED