

DISCLAIMER

The *Sewer Route Survey* has been prepared for the City of Cambridge Department of Public Works for the purpose of designing and constructing a sewer separation and stormwater management improvement project for the neighborhood between Whittemore Avenue and Massachusetts Avenue and along a portion of Alewife Brook Parkway. Use or reuse of this information for any other purpose is at the user's sole and exclusive risk and liability. These maps are provided for global information only and are protected by copyright laws.

This survey is not intended to be used for requests to revise FEMA maps or to determine if a property is within a specific flood zone, nor is it a comprehensive survey of this area. This survey was not done to delineate the flood plain or to validate FEMA maps. The survey data should be viewed as only additional background information that can be used when considering whether or not to hire an independent surveyor. These maps can not be used to support a FEMA request for a LOMR/LOMA or to determine if a property is within a specific flood zone.

PLEASE NOTE: The *Sewer Route Survey* plans are based upon National Geodetic Vertical Datum of 1929 (NGVD29). The Preliminary FEMA Flood Insurance Rate Maps are based upon North American Vertical Datum of 1988 (NAVD88). NAVD88 = NGVD29 – 0.8

SEWER ROUTE SURVEY CAMBRIDGE, MASSACHUSETTS

NOTES:

1) BENCH MARK INFORMATION:

BENCH MARK USED:
BENCHMARK 635: IN THE SOUTHEASTERN PART OF ARLINGTON NEAR THE ARLINGTON-CAMBRIDGE TOWN LINE, AT AN ARCH BRIDGE OVER ALEWIFE BROOK AT MASSACHUSETTS AVENUE. A MONEL RIVET SET IN THE NORTHEAST EDGE OF A GRANITE CAPSTONE, DIRECTLY OVER THE TOP OF THE NORTHEAST ARCH STONE. ELEVATION = 11.29 NGVD-29

TEMPORARY BENCH MARKS SET:

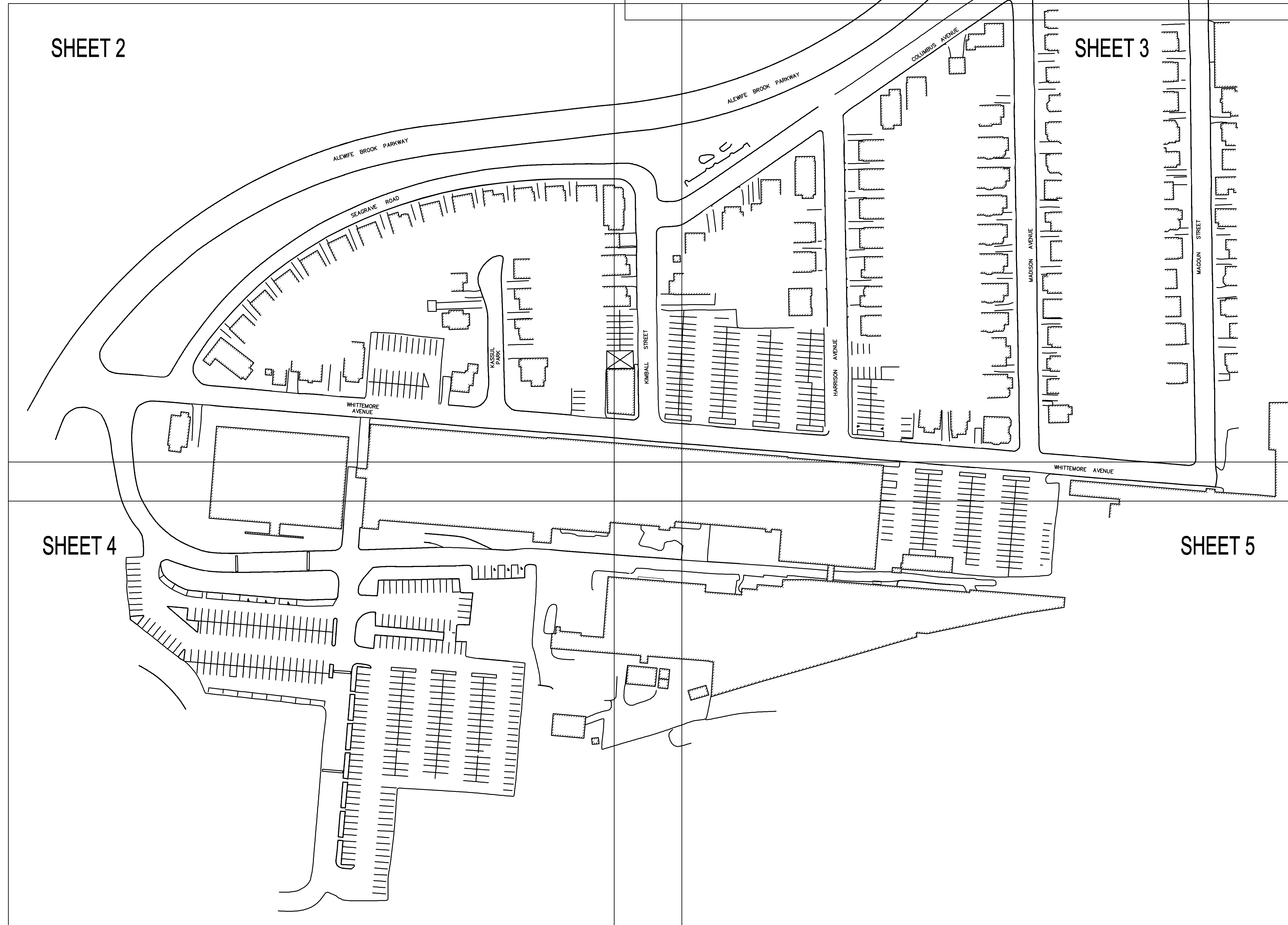
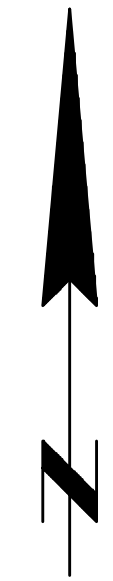
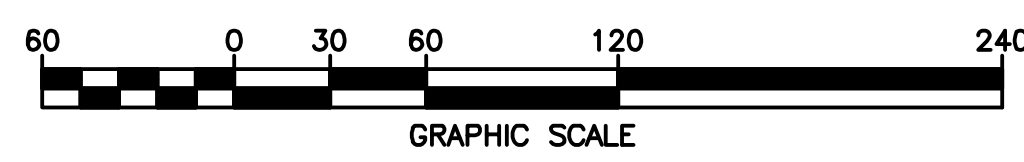
- TBM-C1: AN X-CUT SET IN THE FRONT CENTER BOLT OF A HYDRANT, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 10.64
- TBM-C2: AN X-CUT SET IN THE LEFT FRONT BOLT OF A HYDRANT, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 11.44
- TBM-C3: AN X-CUT SET IN THE LEFT REAR BOLT OF A HYDRANT, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 9.37
- TBM-C4: A SPIKE SET 1' UP IN A UTILITY POLE LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 7.31
- TBM-C5: AN X-CUT SET IN THE RIGHT FRONT BOLT OF A HYDRANT, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 8.27
- TBM-C6: AN X-CUT SET IN THE LEFT REAR BOLT OF A HYDRANT, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 11.40
- TBM-C7: AN X-CUT SET IN A BOLT OF A HYDRANT, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 10.22
- TBM-C8: AN X-CUT SET IN THE FRONT CENTER BOLT OF A HYDRANT, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 8.07
- TBM-C9: AN X-CUT SET IN THE FRONT CENTER BOLT OF A HYDRANT, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 10.52
- TBM-C10: AN X-CUT SET IN THE FRONT CENTER BOLT OF A HYDRANT, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 10.82
- TBM-C11: AN X-CUT SET IN THE FRONT CENTER BOLT OF A HYDRANT, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 13.54
- TBM-C12: RIGHT OUTER CORNER OF A CONCRETE PAD, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 8.63
- TBM-C13: AN X-CUT SET IN THE FRONT BOLT OF A HYDRANT, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 12.36
- TBM-C14: THE LEFT OUTER CORNER OF A COLUMN ON THE RIGHT SIDE OF AN ENTRANCE TO #1 ALEWIFE CENTER, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 9.80
- TBM-C15: RIGHT OUTER CORNER OF THE LOWEST BRICK STEP AT #24/26 COLUMBUS AVENUE, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 7.90
- TBM-C16: RIGHT OUTER CORNER OF THE LOWEST BRICK STEP AT #36 COLUMBUS AVENUE, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 6.00
- TBM-C17: RIGHT OUTER CORNER OF THE LOWEST BRICK STEP AT #13/14 SEAGRAVE AVENUE, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 6.85
- TBM-C18: RIGHT OUTER CORNER OF THE LOWEST STONE STEP AT #125/127 WHITTEMORE AVENUE, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 8.54
- TBM-C19: AN X-CUT SET IN THE LEFT FRONT BOLT OF A HYDRANT, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 11.39
- TBM-C20: LEFT OUTER CORNER OF THE LOWEST STONE STEP AT #62 WHITTEMORE AVENUE, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 9.24
- TBM-C21: AN X-CUT SET IN FRONT BOLT OF A HYDRANT, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 11.60
- TBM-C22: AN X-CUT SET IN RIGHT FRONT BOLT OF A HYDRANT, LOCATED AS SHOWN ON THIS PLAN. ELEVATION = 10.56

- 2) ELEVATIONS REFER TO NGVD-29.
- 3) UNLESS OTHERWISE NOTED, DETAILS ARE NOT TO SCALE.
- 4) PLANIMETRICS AND TOPOGRAPHY SHOWN HEREON PROVIDED BY EASTERN TOPOGRAPHICS AS OBTAINED FROM AERIAL PHOTOGRAPHY, PHOTOGRAPHED ON DECEMBER 18, 2008.
- 5) BUILDING CORNERS AS SHOWN REPRESENT ROOF LINES AS COLLECTED FROM AERIAL PHOTOGRAPHY.

DISCLAIMER
THE SEWER ROUTE SURVEY HAS BEEN PREPARED FOR THE CITY OF CAMBRIDGE DEPARTMENT OF PUBLIC WORKS FOR THE PURPOSE OF DESIGNING AND CONSTRUCTING A SEWER SEPARATION AND STORMWATER MANAGEMENT IMPROVEMENT PROJECT FOR THE NEIGHBORHOOD BETWEEN WHITTEMORE AVENUE AND MASSACHUSETTS AVENUE AND ALONG A PORTION OF ALEWIFE BROOK PARKWAY. USE OR REUSE OF THIS INFORMATION FOR ANY OTHER PURPOSE IS AT THE USER'S SOLE AND EXCLUSIVE RISK AND LIABILITY. THESE MAPS ARE PROVIDED FOR GLOBAL INFORMATION ONLY AND ARE PROTECTED BY COPYRIGHT LAWS.

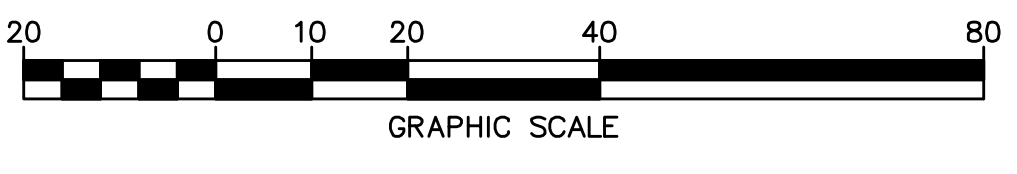
THIS SURVEY IS NOT INTENDED TO BE USED FOR REQUESTS TO REVISE FEMA MAPS OR TO DETERMINE IF A PROPERTY IS WITHIN A SPECIFIC FLOOD ZONE, NOR IS IT A COMPREHENSIVE SURVEY OF THIS AREA. THIS SURVEY WAS NOT DONE TO DELINEATE THE FLOOD PLAIN OR TO VALIDATE FEMA MAPS. THE SURVEY DATA SHOULD BE VIEWED AS ONLY ADDITIONAL BACKGROUND INFORMATION THAT CAN BE USED WHEN CONSIDERING WHETHER OR NOT TO HIRE AN INDEPENDENT SURVEYOR. THESE MAPS CAN NOT BE USED TO SUPPORT A FEMA REQUEST FOR A LOMR/LOMA OR TO DETERMINE IF A PROPERTY IS WITHIN A SPECIFIC FLOOD ZONE.

PLEASE NOTE: THE SEWER ROUTE SURVEY PLANS ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29). THE PRELIMINARY FEMA FLOOD INSURANCE RATE MAPS ARE BASED UPON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). IN THE CITY OF CAMBRIDGE AN ELEVATION IN NAVD88 IS APPROXIMATELY EQUAL TO AN ELEVATION IN NGVD29 MINUS (-) 0.8 FEET.



LEGEND:

⊙	CABLE TV MANHOLE
⊖	DRAIN MANHOLE
⊙	ELECTRIC MANHOLE
⊖	SEWER MANHOLE
⊙	TELEPHONE MANHOLE
⊖	WATER MANHOLE
⊙	MANHOLE
⊖	CATCH BASIN
⊙	CATCH BASIN-ROUND
⊖	GAS SHUT OFF
⊙	WATER SHUT OFF
⊖	SHUT OFF
⊙	HYDRANT
⊖	OBSERVATION WELL
⊙	UTILITY POLE
⊖	GUY POLE
⊙	LIGHT POLE
⊖	ELECTRIC PULL BOX (HANDHOLE)
⊙	FIRE ALARM
⊖	FIRE SIGNAL
⊙	TRAFFIC SIGNAL
⊖	TRAFFIC CONTROL BOX
⊙	SIGN
⊖	FLAGPOLE
⊙	PARKING METER
⊖	FUEL FILL
⊙	CLEANOUT
⊖	FLARED END SECTION
⊙	BOLLARD
⊖	MAIL BOX
⊙	TREE
⊖	SHRUB
⊙	BOTTOM ELEVATION
⊖	INVERT ELEVATION
R=	RIM ELEVATION
T=	TOP TRAP ELEVATION
S=	SUMP ELEVATION
T=	TOP ELEVATION
B=	BOTTOM ELEVATION
TH=	THRESHOLD ELEVATION
FF=	FINISHED FLOOR ELEVATION
TF=	TOP OF FOUNDATION ELEVATION
S=	SILL ELEVATION
F.O.D.	FULL OF DEBRIS
T.O.D.	TOP OF DEBRIS
T.O.W.	TOP OF WATER
N.V.P.	NO VISIBLE PIPES
TB	TOP OF BERM
BB	BOTTOM OF BERM
TS	TOP OF STEP
TC	TOP OF CURB
BC	BOTTOM OF CURB
FC	FLUSH CURB
BIT	BITUMINOUS
CONC.	CONCRETE
TBM	TEMPORARY BENCH MARK
P.V.	POST INDICATOR VALVE
CLF	CHAIN LINK FENCE
W.F.	WROUGHT IRON FENCE
REC.	RECORD
MWRA	MASSACHUSETTS WATER RESOURCES AUTHORITY
—	FENCE
—	GUARD RAIL
—	RETAINING WALL
—	VEGETATION
—	SEWER
—	DRAIN
—	COMBINED SEWER
—	WATER
—	GAS
—	GAS (ABANDONED)
—	ELECTRIC
—	MBTA
—	TELEPHONE
—	TELEPHONE (ABANDONED)
—	CABLE TELEVISION
—	OVERHEAD WIRES
—	GUY WIRE



NOTE: ELEVATIONS REFER TO NGVD-29.

PRELIMINARY

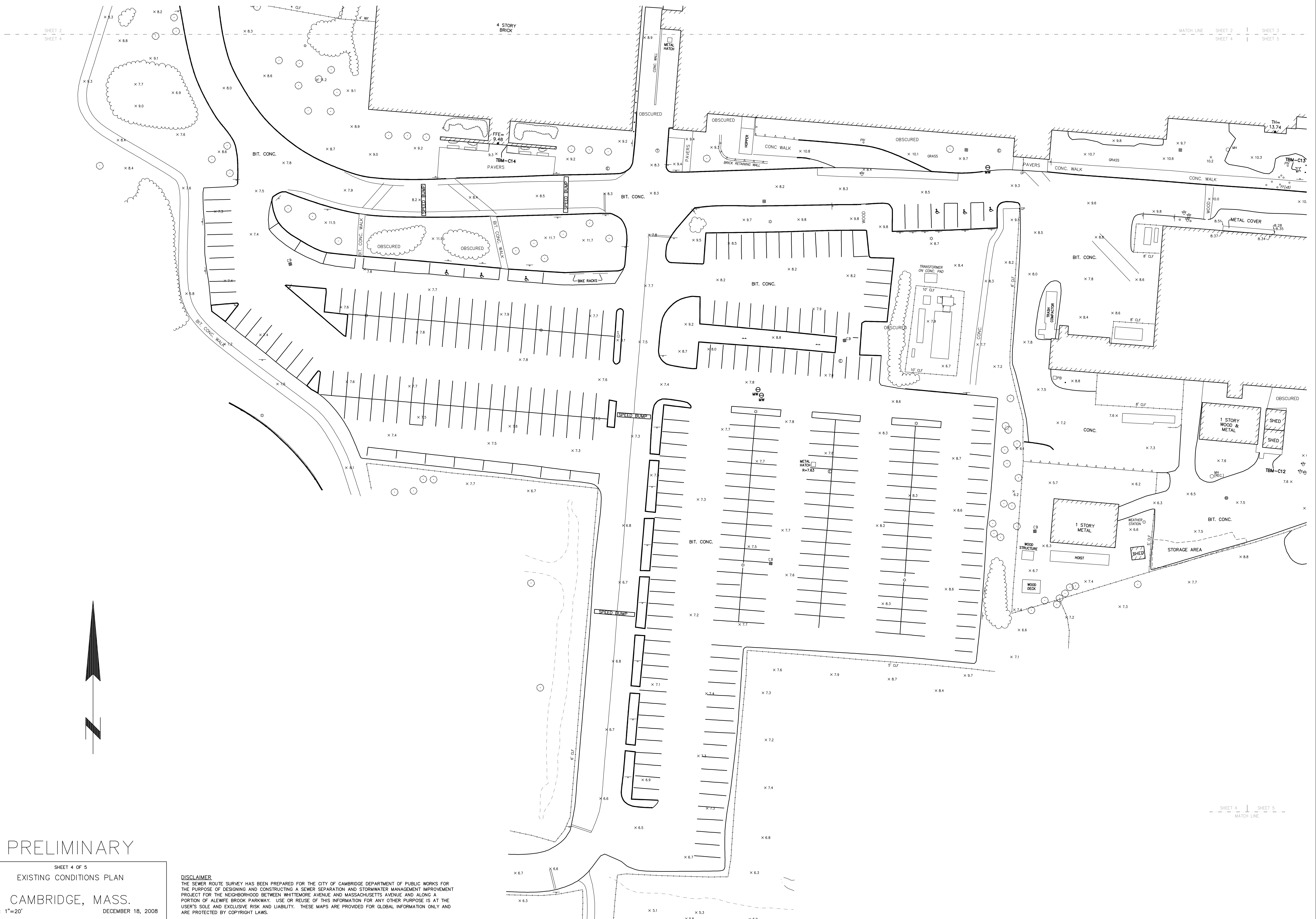
DISCLAIMER
 THIS SURVEY HAS BEEN PREPARED FOR THE CITY OF CAMBRIDGE DEPARTMENT OF PUBLIC WORKS FOR THE PURPOSE OF DESIGNING AND CONSTRUCTING A SEWER SEPARATION AND STORMWATER MANAGEMENT IMPROVEMENT PROJECT FOR THE NEIGHBORHOOD BETWEEN WHITEMORE AVENUE AND MASSACHUSETTS AVENUE AND ALONG A PORTION OF ALEWIFE BROOK PARKWAY. USE OR REUSE OF THIS INFORMATION FOR ANY OTHER PURPOSE IS AT THE USER'S SOLE AND EXCLUSIVE RISK AND LIABILITY. THESE MAPS ARE PROVIDED FOR GLOBAL INFORMATION ONLY AND ARE PROTECTED BY COPYRIGHT LAWS.

THIS SURVEY IS NOT INTENDED TO BE USED FOR REQUESTS TO REVISE FEMA MAPS OR TO DETERMINE IF A PROPERTY IS WITHIN A SPECIFIC FLOOD ZONE, NOR IS IT A COMPREHENSIVE SURVEY OF THIS AREA. THIS SURVEY WAS NOT DONE TO DELINEATE THE FLOOD PLAIN OR TO VALIDATE FEMA MAPS. THE SURVEY DATA SHOULD BE VIEWED AS ONLY ADDITIONAL BACKGROUND INFORMATION THAT CAN BE USED WHEN CONSIDERING WHETHER OR NOT TO HIRE AN INDEPENDENT SURVEYOR. THESE MAPS CAN NOT BE USED TO SUPPORT A FEMA REQUEST FOR A LOMR/LOMA OR TO DETERMINE IF A PROPERTY IS WITHIN A SPECIFIC FLOOD ZONE.

PLEASE NOTE: THE SEWER ROUTE SURVEY PLANS ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29). THE PRELIMINARY FEMA FLOOD INSURANCE RATE MAPS ARE BASED UPON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). IN THE CITY OF CAMBRIDGE AN ELEVATION IN NAVD88 IS APPROXIMATELY EQUAL TO AN ELEVATION IN NGVD29 MINUS (-) 0.8 FEET.



1, 2 & 3 STORY BRICK

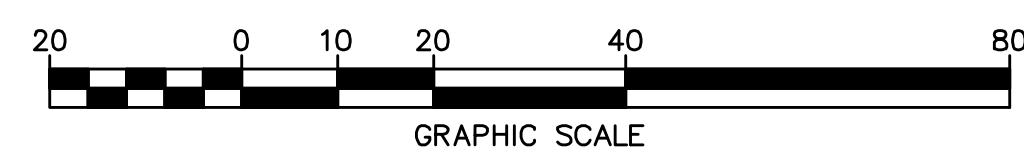


PRELIMINARY

SHEET 4 OF 5
EXISTING CONDITIONS PLAN

CAMBRIDGE, MASS.

SCALE: 1"=20' DECEMBER 18, 2008

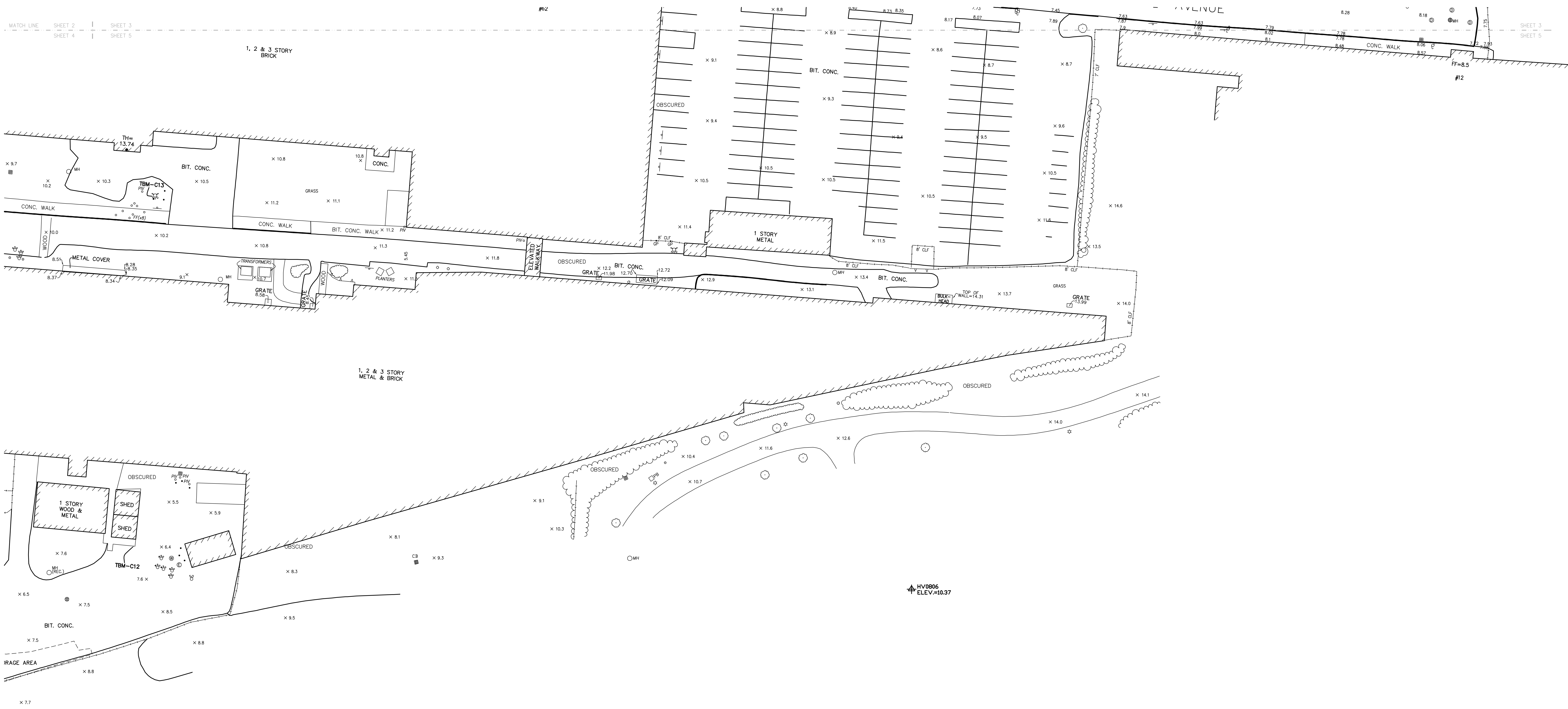


DISCLAIMER
THE SEWER ROUTE SURVEY HAS BEEN PREPARED FOR THE CITY OF CAMBRIDGE DEPARTMENT OF PUBLIC WORKS FOR THE PURPOSE OF DESIGNING AND CONSTRUCTING A SEWER SEPARATION AND STORMWATER MANAGEMENT IMPROVEMENT PROJECT FOR THE NEIGHBORHOOD BETWEEN WHITTEMORE AVENUE AND MASSACHUSETTS AVENUE AND ALONG A PORTION OF ALEWIFE BROOK PARKWAY. USE OR REUSE OF THIS INFORMATION FOR ANY OTHER PURPOSE IS AT THE USER'S SOLE AND EXCLUSIVE RISK AND LIABILITY. THESE MAPS ARE PROVIDED FOR GLOBAL INFORMATION ONLY AND ARE PROTECTED BY COPYRIGHT LAWS.

THIS SURVEY IS NOT INTENDED TO BE USED FOR REQUESTS TO REVISE FEMA MAPS OR TO DETERMINE IF A PROPERTY IS WITHIN A SPECIFIC FLOOD ZONE. NOR IS IT A COMPREHENSIVE SURVEY OF THIS AREA. THIS SURVEY WAS NOT DONE TO DELINEATE THE FLOOD PLAIN OR TO VALIDATE FEMA MAPS. THE SURVEY DATA SHOULD BE VIEWED AS ONLY ADDITIONAL BACKGROUND INFORMATION THAT CAN BE USED WHEN CONSIDERING WHETHER OR NOT TO HIRE AN INDEPENDENT SURVEYOR. THESE MAPS CAN NOT BE USED TO SUPPORT A FEMA REQUEST FOR A LOMR/LOMA OR TO DETERMINE IF A PROPERTY IS WITHIN A SPECIFIC FLOOD ZONE.

PLEASE NOTE: THE SEWER ROUTE SURVEY PLANS ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29). THE PRELIMINARY FEMA FLOOD INSURANCE RATE MAPS ARE BASED UPON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). IN THE CITY OF CAMBRIDGE AN ELEVATION IN NAVD88 IS APPROXIMATELY EQUAL TO AN ELEVATION IN NGVD29 MINUS (-) 0.8 FEET.

NOTE: ELEVATIONS REFER TO NGVD-29.



SHEET 4 | SHEET 5
MATCH LINE

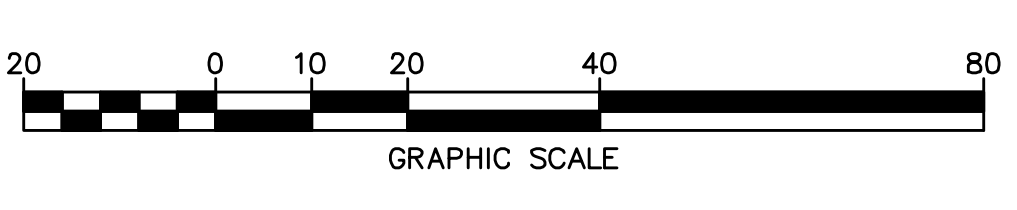
PRELIMINARY

SHEET 5 OF 5
EXISTING CONDITIONS PLAN
CAMBRIDGE, MASS.
SCALE: 1"=20'
DECEMBER 18, 2008

DISCLAIMER
THE SEWER ROUTE SURVEY HAS BEEN PREPARED FOR THE CITY OF CAMBRIDGE DEPARTMENT OF PUBLIC WORKS FOR THE PURPOSE OF DESIGNING AND CONSTRUCTING A SEWER SEPARATION AND STORMWATER MANAGEMENT IMPROVEMENT PROJECT FOR THE NEIGHBORHOOD BETWEEN WHITEMORE AVENUE AND MASSACHUSETTS AVENUE AND ALONG A PORTION OF ALEWIFE BROOK PARKWAY. USE OR REUSE OF THIS INFORMATION FOR ANY OTHER PURPOSE IS AT THE USER'S SOLE AND EXCLUSIVE RISK AND LIABILITY. THESE MAPS ARE PROVIDED FOR GLOBAL INFORMATION ONLY AND ARE PROTECTED BY COPYRIGHT LAWS.

THIS SURVEY IS NOT INTENDED TO BE USED FOR REQUESTS TO REVISE FEMA MAPS OR TO DETERMINE IF A PROPERTY IS WITHIN A SPECIFIC FLOOD ZONE, NOR IS IT A COMPREHENSIVE SURVEY OF THIS AREA. THIS SURVEY WAS NOT DONE TO DELINEATE THE FLOOD PLAIN OR TO VALIDATE FEMA MAPS. THE SURVEY DATA SHOULD BE VIEWED AS ONLY ADDITIONAL BACKGROUND INFORMATION THAT CAN BE USED WHEN CONSIDERING WHETHER OR NOT TO HIRE AN INDEPENDENT SURVEYOR. THESE MAPS CAN NOT BE USED TO SUPPORT A FEMA REQUEST FOR A LOMR/LOMA OR TO DETERMINE IF A PROPERTY IS WITHIN A SPECIFIC FLOOD ZONE.

PLEASE NOTE: THE SEWER ROUTE SURVEY PLANS ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29). THE PRELIMINARY FEMA FLOOD INSURANCE RATE MAPS ARE BASED UPON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). IN THE CITY OF CAMBRIDGE AN ELEVATION IN NAVD88 IS APPROXIMATELY EQUAL TO AN ELEVATION IN NGVD29 MINUS (-) 0.8 FEET



NOTE: ELEVATIONS REFER TO NGVD-29.