



# MASSACHUSETTS GENERAL HOSPITAL

MATTHEW J. DECKER  
STRUCTURAL OPTION  
THE BUILDING FOR THE THIRD CENTURY

## DESIGN AND CONSTRUCTION TEAM

|                       |   |
|-----------------------|---|
| OWNER:                | MASSACHUSETTS GENERAL HOSPITAL                          |
| GENERAL CONTRACTOR:   | TURNER CONSTRUCTION COMPANY                             |
| CONSTRUCTION MANAGER: | TURNER CONSTRUCTION COMPANY                             |
| ARCHITECT:            | NBBJ  |
| LANDSCAPE ARCHITECT:  | MICHAEL VAN VALKENBURGH                                 |
| MEP ENGINEERS:        | THOMPSON CONSULTANTS, INC.<br>ENGINEERED SOLUTIONS INC. |
| STRUCTURAL ENGINEER:  | MCMAMARA/ SALVIA, INC.                                  |
| CIVIL ENGINEER:       | VANASSE HANGEN BRUTLIN INC.                             |

## STATISTICS

|                     |                        |
|---------------------|------------------------|
| LOCATION:           | BOSTON, MASSACHUSETTS  |
| BUILDING SIZE:      | 530,000 SQUARE FEET    |
| CONSTRUCTION DATES: | APRIL 2007 - JUNE 2011 |
| DELIVERY METHOD:    | DESIGN - BID - BUILD   |

## CONSTRUCTION MANAGEMENT

THE BUILDING PRESENTS SOME INTERESTING CONSTRUCTION PROBLEMS WITH A TIGHT STAGING AREA, REQUIRED FUNCTION OF THE ADJOINING BUILDINGS, AND HOSPITAL CARE. THIS PROJECT STARTED WITH DEMOLITION OF EXISTING BUILDINGS AND MUST WORK THROUGH HARSH WINTERS

## ARCHITECTURE

THE B3C PROJECT ON THE MGH CAMPUS IS DESIGNED TO LOOK INTO THE FUTURE OF HEALTHCARE FACILITIES. PATIENT WELLNESS IS INTEGRATED INTO ALL ASPECTS OF THE BUILDING. VIEWS ARE PLENTIFUL THROUGH THE MOSTLY GLASS FACADE AND AUGMENTED WITH AN INDOOR ATRIUM. THE BUILDING IS ALSO DESIGNED TO MAKE LESS OF AN IMPACT ON THE ENVIRONMENT THROUGH LEED CONSIDERATIONS. A MODULAR GREEN ROOF COVERS THE EPDM MEMBRANE ATOP THE BUILDING.

## STRUCTURAL

THE STRUCTURE OF THE BUILDING SITS UPON 32 CAISSONS WITH DEPTH FROM 8FT TO 44FT, GRADE BEAMS, AND LBES. THE SUBSTRUCTURE IS CONCRETE THE SUPERSTRUCTURE IS STEEL WITH W-SHAPES AND CASTILATED BEAMS SUPPORTING METAL DECK AND PRECASE CONCRETE PLANKS.

## MECHANICAL ELECTRICAL PLUBMING

THE MEP SYSTEMS OF THE BUILDING RUN MOSTLY THROUGH THE MECHANICAL MEZZANINE ON THE FIFTH FLOOR OF THE BUILDING. THE AIR HANDELERS ARE ON THIS FLOOR AND THE EMERGENCY BACKUP POWER. THE PLUMBING IN THE BUILDING IS EXTENSIVE TO ACCOMODATE EACH ROOM'S NEEDS.

