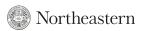
NORTHEASTERN UNIVERSITY AGREEMENT BETWEEN OWNER AND ARCHITECT/ENGINEER

AGREE	EMENT made as of the	day of	in the Year of _	·
Betwe	en the Owner:	360 Hu	astern University ntington Avenue , Massachusetts 02115	
	ne Architect/Engineer: and address)			
		TABLE	E OF CONTENTS	
BASIC	DEFINITIONS			
TERM	S AND CONDITIONS OF AG	REEMENT BET	OF CONTENTS VEEN OWNER AND ARCHITECT/ENGINEER ND RESPONSIBILITIES N OF THE CONSTRUCTION CONTRACT SIC SERVICES	
ARTIC	LE 1: ARCHITECT/ENGINEE	R'S SERVICES A	AND RESPONSIBILITIES	
	SCHEMATIC DESIGN PHADESIGN DEVELOPMENT IS CONSTRUCTION DOCUMED BIDDING OR NEGOTIATION OF THE PROJECT REPRESENTATION ADDITIONAL SERVICES REGULATORY REVIEW TIME LE 2: THE OWNER'S RESPONSE SERVICES OF THE OWNER'S RESPONSE SERVICES OF THE OWNER'S RESPONSE OF THE OWNER'S RE	PHASE JENTS PHASE ON STAGE ADMINISTRATIO ON BEYOND BA		TION CONTRACT
2 1	DEFINITION			
3.1 3.2	DEFINITION RESPONSIBILITY FOR COI	NSTRUCTION CO	OST	
ARTIC	LE 4: DIRECT PERSONNEL I	EXPENSE		



DEFINITION

4.1

ARTICLE 5: REIMBURSABLE EXPENSES

5.1 DEFINITION

ARTICLE 6: PAYMENT TO THE ARCHITECT/ENGINEER

- 6.1 PAYMENT ON ACCOUNT OF BASIC SERVICES
- 6.2 PAYMENT ON ACCOUNT OF ADDITIONAL SERVICES
- 6.3 BUYER INITIATED PAYMENTS

ARTICLE 7: ARCHITECT/ENGINEER'S SUBMISSION OF ACCOUNTING RECORDS

ARTICLE 8: OWNERSHIP AND USE OF DOCUMENTS

ARTICLE 9: TERMINATION OF AGREEMENT

ARTICLE 10: MISCELLANEOUS PROVISIONS

ARTICLE 11: SUCCESSORS AND ASSIGNS

ARTICLE 12: EXTENT OF AGREEMENT

ARTICLE 13: BASIS OF COMPENSATION

13.1 COMPENSATION FOR BASIC SERVICES

ARTICLE 14: OTHER CONDITIONS OR SERVICES

14.1 REVISIONS TO OTHER ARTICLES AND MISCELLANEOUS CONDITIONS

EXHIBITS

BASIC DEFINITIONS

- (1) The term "Agreement" means the agreement entered into hereunder and all other referenced attachments hereto, as the same may be amended from time to time in accordance with the terms provided in Paragraph 1.5.15.
- (2) The term "Architect/Engineer" shall mean the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Architect/Engineer" shall mean or include the Architect/Engineer's authorized representative.
- (3) The term "AV" shall mean equipment that produces a sound and a visual component for the production or use of digital media for presentations, etc. digital projectors, flat screens, sound systems, etc.



- (4) The term "CAD" shall be defined as the use of computer technology to aid in the design and particularly the drafting (technical drawing and engineering drawing) of a part or product, including entire buildings. It is both a visual (or drawing) and symbol-based method of communication whose conventions are particular to a specific technical field. The file standards shall be in accordance with Exhibit 1 and any other reasonable requirements of Owner.
- (5) The term "Contract Documents" shall mean the documents described in Section 14.2 of this Agreement, subject to additions, modifications, and deletions made in accordance with the provisions of this Agreement.
- (6) The term "Contractor" shall mean the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Contractor" means the Contractor or the Contractor's authorized representative. The "Contractor" shall mean or include the "Construction Manager" when Construction Manager ("CM") agreements are used.
- (7) The term "Commonwealth" means the Commonwealth of Massachusetts and its political subdivisions or agents where the context so requires.
- (8) The term "<u>Drawings</u>" shall mean the graphic and pictorial portions of the Contract Documents in whatever form, including but not limited to in electronic format, wherever located and whenever issued, showing the design, location and dimensions of the work, generally including plans, elevations, sections, details, schedules and diagrams.
- (9) The term "General Conditions" shall mean the Northeastern University General Conditions for Construction.
- (10) The terms "Owner," or "Northeastern," or "University" shall be defined as Northeastern University through the Vice President of Facilities or his/her designee as may be appointed as the Owner's authorized representative.
- (11) The term "<u>Project</u>" is the total construction of the work to be performed under the Contract Documents.
- (12) The term "Project User Committee" shall mean the Owner's internal clients for each Project as identified by the Owner's authorized representative.
- (13) The term "Site" or "Project Site" means the geographical location of the Project as more fully described in the Contract Documents.
- (14) The term "Specifications" is defined as that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards and workmanship for the work, and performance of related services.
- (15) The term "Substantial Completion" is defined as the state in the progress of the work when the work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the work for its intended use and only minor items which can be completed without substantial interference with the Owner's use of the work remaining to be completed.



- (16) The term "<u>Task Order</u>" is an agreement between the Owner and the Architect/Engineer for specific scope of services, budget and schedule for certain tasks (see Exhibit 2).
- (17) The term "<u>Telecommunications</u>" shall mean all information systems belonging to Northeastern University to include the network systems, hardware, software, telephone and website capabilities.
- (18) Unless the context clearly intends to the contrary, the terms used in this Agreement that are not specifically defined herein shall have the same meaning as their common usage in the construction industry.





The Owner and The Architect/Engineer Agree As Set Forth Below.

TERMS AND CONDITIONS OF AGREEMENT

BETWEEN OWNER AND ARCHITECT/ENGINEER

ARTICLE 1: ARCHITECT/ENGINEER'S SERVICES AND RESPONSIBILITIES

TASK ORDER PROCESS - (EXHIBIT 2)

The parties acknowledge the need for a flexible procedure to facilitate the timeliest response for professional services. The parties agree that the exact scope of services to be performed by the Architect/Engineer shall depend upon events that develop throughout the term of this Agreement. Therefore, the parties agree to execute the scope of services with Task Orders, which the Architect/Engineer shall prepare and submit to the Owner for its review and approval. The Architect/Engineer agrees to cooperate with the Owner in the preparation of detailed, consecutively numbered Task Orders in accordance with the Guidelines for the Preparation of Task Orders attached hereto.

Task Orders are intended to be discrete working documents that will provide, in summary form, the background and factual context within which a particular Task element or series of Task elements shall be completed by the Architect/Engineer. Each Task Order shall include a detailed scope of services, level of effort, schedule, and related costs.

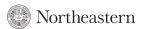
In the event of a conflict between a particular provision(s) of any Task Order and a provision(s) of this Agreement, the provision(s) of this Agreement shall be deemed to take precedence with one exception: the provisions of a Task Order shall take precedence over BASIC SERVICES, below, of this Agreement with respect to the exact scope of services to be provided under the Task Order. A Task Order may be amended by the parties by a written instrument referencing the identification number and date of the original Task Order that is being amended. An amendment to a Task Order shall be prepared by the parties jointly and signed by their authorized representatives. All CAD and other digital services shall be in accordance with Exhibit 1 and any other reasonable requirements of Owner.

BASIC SERVICES

The Architect/Engineer's Basic Services consist of those services described in Paragraphs 1.1 through 1.5 and 1.8 and shall include normal structural, mechanical and electrical, AV, Telecommunications, engineering services as well as those services included in Article 14 as part of Basic Services. The Architect/Engineer, as part of the Basic Service, shall consult with the Owner and provide such CAD services as may be required by the Owner. The Architect/Engineer's Basic Services shall include all the CAD services reasonably required for the performance of its work, as well as Project note-taking until the first meeting with the General Contractor and services required beyond those shall be provided as an Additional Service when requested by the Owner in writing.

1.1 CONCEPT AND SCHEMATIC DESIGN PHASES

1.1.1 The Architect/Engineer shall assist the Owner in developing the building program and review the program to ascertain the requirements of the Project and shall review the understanding of such requirements with the Owner.



- 1.1.2 The Architect/Engineer shall provide a preliminary evaluation of the program and the Project budget and schedule requirements, each in terms of the other, subject to the limitations set forth in Paragraph 3.2.1. The Architect/Engineer shall assist the Owner in the determination of the detailed Project budget and schedule that shall include Construction Cost, furnishings, equipment, interiors and fees. The Owner may provide the Architect/Engineer with a list of University Standard Materials and Equipment and the Architect/Engineer shall use the list as a guide to assist with the development of the Project budget and schedule.
- 1.1.3 The Architect/Engineer shall, on a regular basis, in a timely and sequential manner, review the Owner alternative approaches to design and construction of the Project. Such regular reviews shall include, but shall not be limited to, the potential effects of the selections of the certain design options and their financial impact, as well as their impact to other available design options. The Architect/Engineer shall inform the Owner of critical dates that decisions on design options must be made, and the Owner shall be responsible for providing those decisions.
- 1.1.4 Based on the mutually agreed upon Program, as developed by the Owner and the Project User Committee in conjunction with the Architect/Engineer, the Architect/Engineer shall prepare, for review and approval by the Owner and the Project User Committee, Concept or Schematic Design Documents, as applicable, consisting of drawings and other documents illustrating the scale and relationship of Project components. The Architect/Engineer shall work with the Owner and the Owner's authorized representative to ensure that the University's program is incorporated in the design. At no time shall the Architect/Engineer take direction from the members of the Project User Committee.
- 1.1.5 The Architect/Engineer shall either (a) prepare a construction cost estimate based on current area, volume or other unit costs or (b) assist the Owner's consultants who will prepare a construction cost estimate based on current area, volume or other unit costs. If the Architect/Engineer assists the Owner's consultants pursuant to this section 1.1.5, the Architect/Engineer shall convey to the Owner's consultants the necessary data to allow the consultants to develop an accurate Statement of Probable Construction Cost, and shall review the Statement of Probable Cost with the Owner and the Owner's consultants and assist the Owner in making decisions on the Project scope and specific components within the Project.
- 1.1.6 The Architect/Engineer shall assist the Owner with the Value Engineering process as deemed necessary by the Owner. Such Value Engineering shall include review of components and systems within the Project by the Owner, the Architect/Engineer and the Owner's consultants, and the selection of these components and systems to be modified or deleted from the Project to allow the Project to be constructed within budget and schedule while maximizing the Owner's desired program. The Architect/Engineer will be required to review the benefit of such modifications, the impact on the design, the impact to the Owner's program and advise the Owner of the potential benefits and detriments of such modifications.

1.2 DESIGN DEVELOPMENT PHASE

1.2.1 Based on the approved Schematic Design Documents and any adjustments authorized by the Owner, after consultation with the Architect/Engineer, in the Program or Project budget, the Architect/Engineer shall prepare, for approval by the Owner and review by the Project User Committee, Design Development Documents consisting of the drawings and other documents to fix and describe the size and character of the entire Project as to architectural/engineering, structural, mechanical and

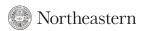


electrical systems, telecommunications, AV materials and such other elements as may be appropriate or may be required by the Owner.

- 1.2.2 The Architect/Engineer shall assist the Owner's consultants who will prepare for the Owner a detailed Statement of the Probable Construction Cost. The Architect/Engineer shall convey to the Owner's consultants, the necessary data to allow the consultants to develop an accurate Statement of Probable Construction Cost. The Architect/Engineer shall review the Statement of Probable Construction Cost with the Owner and the Owner's Consultants and assist the Owner in making decisions on the Project's scope and specific components within the Project.
- 1.2.3 The Architect/Engineer shall assist the Owner with the Value Engineering process as deemed necessary by the Owner. Such Value Engineering shall include the review of components and systems within the Project by the Owner, the Architect/Engineer and the Owner's consultants, and the selection of these components and systems to be modified or deleted from the Project to allow the Project to be constructed within budget while maximizing the Owner's desired program. The Architect/Engineer will be required to review the benefit of such modifications, the impact on the design, the impact to the Owner's program and advise the Owner of the potential benefits and detriments of such modifications.
- 1.2.4 Based upon the Statement of Probable Construction Cost prepared by the Owner's Consultants and the Value Engineering Process, the Owner and the Architect/Engineer shall establish a Fixed Limit of Construction at the conclusion of the Design Development Phase. This Fixed Limit of Construction shall be commemorated by a letter from the Architect/Engineer to the Owner.

1.3 CONSTRUCTION DOCUMENTS PHASE

- 1.3.1 Based on the approved Design Development Documents and any further adjustments in the scope or quality of the Project or in the Project budget authorized by the Owner, the Architect/Engineer shall prepare, for review and approval by the Owner, coordinated Construction Documents consisting of drawings and specifications setting forth in detail the requirements for the construction of the Project.
- 1.3.2 The Architect/Engineer shall assist the Owner, in accordance with the rates set forth in "Schedule B," in the preparation of the necessary bidding information, bidding forms, the Conditions of the Contract, revisions to the approved Materials and Equipment List and the form of Agreement between Owner and Contractor.
- 1.3.3 The Architect/Engineer shall, when the Construction Documents are eighty percent (80%) complete, assist the Owner's consultants who will prepare for the Owner a detailed Statement of the Probable Construction Cost. The Architect/Engineer shall convey to the Owner's consultants the necessary data to allow the consultants to develop an accurate Statement of Probable Construction Cost. The Architect/Engineer shall review the Statement of Probable Construction Cost with the Owner and the Owner's Consultants and assist the Owner in making decisions on the Project scope and specific components within the Project.
- 1.3.4 The Architect/Engineer shall assist the Owner with the Value Engineering process as deemed necessary by the Owner. Such Value Engineering shall include the review of components and systems within the project by the Owner, the Architect/Engineer and the Owner's consultants, and the selection of these components and systems to be modified or deleted from the Project to allow the Project to be constructed within budget while maximizing the Owner's desired program. The Architect/Engineer will



be required to review the benefit of such modifications, the impact on the design, the impact to the Owner's program and advise the Owner on potential benefits and detriments of such modifications.

1.4 BIDDING OR NEGOTIATION PHASE

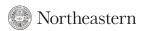
1.4.1 In accordance with the rates set forth in the attached "Schedule B," the Architect/Engineer, following the Owner's approval of the Construction Documents and the latest Statement of Probable Construction Cost, shall, at the direction of the Owner, assist in awarding and preparing a contract for construction.

1.5 CONSTRUCTION PHASE – ADMINISTRATION OF THE CONSTRUCTION CONTRACT

- 1.5.1 The Construction Phase will commence with the award of the Contract of Construction and together with the Architect/Engineer's obligation to provide Basic Services under this Agreement, will terminate sixty (60) days after the final approved Certificate of Payment has been issued, unless an earlier termination has been agreed to by the parties.
- 1.5.2 Unless otherwise provided in this Agreement and incorporated in the Contract Documents, the Architect/Engineer shall provide administration of the Contract for Construction as set forth below and in the General Conditions of the Contract for Construction, provided that the Architect/Engineer's role during the Construction Phase of the Project is described in those General Conditions in a manner consistent with the role of the Architect/Engineer set forth in this Agreement.
- 1.5.3 The Architect/Engineer shall be a representative of the Owner during the Construction Phase, and shall regularly advise and consult with the Owner. The Architect/Engineer shall have authority to act on behalf of the Owner only to the extent provided in the Contract Documents, unless otherwise modified by written instrument in accordance with Paragraph 1.5.15.
- 1.5.4 The Architect/Engineer shall visit the site at intervals appropriate to the stage of construction, in accordance with the applicable Task Order prepared in accordance with "Exhibit 2," or as otherwise agreed by the Architect/Engineer in writing to become generally familiar with the progress and quality of the work and for the purpose of determining whether, in general, the Project, when completed, will comply with the requirements of the Contract Documents. The Architect/Engineer agrees to attend weekly job site meetings to determine if the Project is proceeding in accordance with the Contract Documents. On the basis of such on-site observations as an architect/engineer, the Architect/Engineer shall keep the Owner informed of the progress and quality of the work on the Project, and use its best efforts to guard the Owner against defects and deficiencies in the work of the Contractor. If the Architect/Engineer becomes aware of any fault or defect in the Project or non-conformance with the Contract Documents, he shall give prompt written notice thereof to the Owner and Contractor.
- 1.5.5 The Architect/Engineer shall not have control or charge of and shall not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Project, for the acts or omissions of the Contractor, subcontractors or any other persons performing any of the work on the Project, or for the failure of any of them to carry out the work in accordance with the Contract Documents. The limitation of the Architect/Engineer's liability shall not apply to the extent that the failure of the other parties to properly perform their aspects of the work would not have occurred if the Architect/Engineer had properly performed its obligations hereunder.

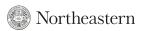


- 1.5.6 The Architect/Engineer shall, at all times, have access to the Project wherever it is in preparation or in progress.
- 1.5.7 The Architect/Engineer shall review the Contractor's Applications for Payment and advise the Owner as to matters which are consistent with the Architect/Engineer's observations and actual knowledge of the Contractor's work.
- 1.5.8 The issuance of a Certificate of Payment shall constitute a representation by the Architect/Engineer to the Owner, based on the Architect/Engineer's observations at the site as provided in Paragraph 1.5.4 and on the data comprising the Contractor's Application for Payment, that the work has progressed to the point indicated; that, to the best of the Architect/Engineer's knowledge, information and belief, the quality of the work is in accordance with the Contract Documents subject to an evaluation of the work for conformance with the Contract Documents upon Substantial Completion, to the results of any subsequent tests required by or performed under the Contract Documents, to minor deviations from the Contract Documents correctable prior to completion, and to any specific qualifications stated in the Certificate of Payment. The Certificate of Payment shall not be a representation that the Architect/Engineer has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the work, (2) reviewed construction means, methods, techniques, sequences or procedures, (3) ascertained how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.
- 1.5.9 The Architect/Engineer, subject to the concurrence of the Owner, shall be the interpreter of the requirements of the Contract Documents, and in consultation with the Owner, the judge of the performance thereunder by the Contractor. When requested by the Owner, the Architect/Engineer shall render interpretations necessary for the proper execution or progress of the work with reasonable promptness on written request of either the Owner or the Contractor, but in no event later than fifteen (15) days after receipt of any request for interpretation by the Owner or Contractor, so as not to delay the progress of the work, on all claims, disputes and other matters in question between the Owner and Contractor relating to the execution or progress of the work or the interpretation of the Contract Documents.
- 1.5.10 Interpretations and decisions of the Architect/Engineer shall be consistent with the intent of and reasonably inferable from the Contract Documents and shall be in written or in graphic form.
- 1.5.11 The Architect/Engineer shall have direct authority to reject work which does not conform to the Contract Documents. Whenever, in the Architect/Engineer's reasonable opinion, it is necessary or advisable for the implementation of the intent of the Contract Documents, the Architect/Engineer will have authority to require special inspection or testing of the work in accordance with the provisions of the Contract Documents, whether or not such work be then fabricated, installed or completed.
- 1.5.12 The Architect/Engineer shall review and approve or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Project Data and Samples, but only for conformance with the design concept of the work and with the information given in the Contract Documents. Such review, approval or other appropriate action must be taken within a reasonable time frame as required for a timely progress of the work. Such time frame shall be communicated by the General Contractor in advance and as agreed to by the Architect/Engineer. The time frame shall be set so not to delay the schedule developed by the General Contractor as approved by the Architect/Engineer. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other



details such as dimensions and quantities or for substantiating instructions for installment or performance for equipment or systems designed by the Contractor, all of which remain the primary responsibility of the Contractor, to the extent required by the Contract Documents. When professional certification of performance characteristics of materials, systems, or equipment is required by the Contract Documents, the Architect/Engineer shall be entitled to rely upon such certification to establish that the materials, systems or equipment will meet the performance criteria required by the Contract Documents.

- 1.5.13 The Architect/Engineer shall review and comment on Potential Change Orders and prepare, as directed by the Owner, Change Orders for the Owner's approval and execution in accordance with the Contract Documents. The Architect/Engineer shall have authority to order minor changes in the work not involving an adjustment in the Contract Sum or an extension of the Contract Time which are not inconsistent with the intent of the Contract Documents.
- 1.5.14 The Architect/Engineer shall conduct inspections to determine the Dates of Substantial Completion and Final Completion of the Project, shall receive and forward to the Owner, for the Owner's review, written warranties and related documents required by the Contract Documents and assembled by the Contractor and shall issue a final Certificate for Payment subject to approval of the Owner.
- 1.5.15 The extent of duties, responsibilities and limitations of authority, as requested by the Owner and the Architect/Engineer as the Owner's representative during construction, shall not be modified or extended without written consent of the Owner and the Architect/Engineer.
- 1.5.16 The Architect/Engineer shall prepare a set of reproducible record drawings showing significant changes in the work made during construction based on marked-up prints, CAD As-Builts, drawings and other data furnished by the Contractor to the Architect/Engineer. All such deliverables shall be in accordance with Exhibit 1 and any other reasonable requirements of Owner.
- 1.5.17 Owner and Architect understand that services under this Agreement may be provided with respect to several projects. In the event services are provided by Architect/Engineer with respect to a project having a contract price of \$3,000,000 and more (and not involving four or fewer units of housing) which is executed on or after November 8, 2010, Architect/Engineer agrees to perform its services hereunder in a manner that allows the Owner to comply with its obligations under Massachusetts General Laws Chapter 149, section 29E as effective from and after November 8, 2010 and as thereafter may be amended. In particular, Architect/Engineer agrees that it will approve or reject each monthly Application for Payment within fifteen (15) days of the submission by the Contractor and within the same time period, provide the Owner with a written statement, certified as being made in good faith, stating the factual and contractual basis for any rejection, in whole or in part, of amounts requested by the Contractor on the Application for Payment. Similarly, within fifteen (15) days after the receipt of any request by the Contractor for an increase in the contract price, the Architect/Engineer shall approve or reject such request, in whole or in part, and, within the same time period, shall provide the Owner with a written statement, certified as being made in good faith, stating the factual and contractual basis for any rejection, in whole or in part, of the amounts requested by the Contractor. Architect/Engineer agrees to indemnify and hold Owner harmless from and against any and all damages, including attorneys' fees, Owner may incur as a result of the failure of the Architect/Engineer to fulfill its obligations under this subparagraph.



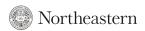
1.6 PROJECT REPRESENTATION BEYOND BASIC SERVICES

- 1.6.1 If the Owner and the Architect/Engineer agree that more extensive representation at the site than is described in Paragraph 1.5 shall be provided, the Architect/Engineer shall, at the Owner's request, provide one or more Project Representatives to assist the Architect/Engineer in carrying out such responsibilities at the site. Project Representatives shall be considered an extension of the services provided under Basic Services resulting in the modification of "Schedule B" and shall not be considered an Additional Service for the purpose of compensation to the Architect/Engineer.
- 1.6.2 Such Project Representatives shall be selected, employed and directed by the Architect/Engineer, and the Architect shall be compensated by a modification of "Schedule A" and a proportionate adjustment to the Architect/Engineer's fee set forth in an exhibit appended to this Agreement, which shall describe the duties, responsibilities and limitations of authority of such Project Representatives.
- 1.6.3 Through the observations by such Project Representatives, the Architect/Engineer shall use its best efforts to provide protection for the Owner against defects and deficiencies in the work, but the furnishings of such project representation shall not modify the rights, responsibilities or obligations of the Architect/Engineer as described in Paragraph 1.5.4.

1.7 ADDITIONAL SERVICES

The following Services are not included in Basic Services. They shall be provided as an Additional Service, if authorized and confirmed in writing in advance by the Owner, and they shall be paid for by the Owner as provided in this Agreement, in addition to the compensation for Basic Services. The Owner, after consultation with Architect/Engineer, may adjust the budget in accordance with the applicable Task Order prepared in accordance with "Exhibit 2," to include a Service listed below as part of the Basic Services, provided the budget is not adjusted to exceed the Total Projected Budget.

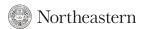
- 1.7.1 Providing financial feasibility or other special services or studies. Such other special services or studies shall include new or unique methods of construction not encountered or anticipated in projects of similar size and scope.
- 1.7.2 Providing planning surveys, site evaluations, environmental studies or comparative studies of prospective sites, and preparing special surveys, studies and submissions required for approvals of governmental authorities or others having jurisdiction over the Project except provided for in Paragraph 1.3.4.
- 1.7.3 Providing services relative to future facilities, systems and equipment which are not intended to be constructed during the Construction Phase.
- 1.7.4 Preparing documents of alternate, separate or sequential bids or providing extra services in connection with bidding, negotiation or construction prior to the completion of the Construction Phase, when requested by the Owner, except as provided in Paragraph 1.3.4.
- 1.7.5 Providing services in connection with and coordination of the work of separate consultants retained by the Owner, other than those relating to CAD, telecommunications, AV services.



- 1.7.6 Providing services for planning retail tenant or rental spaces.
- 1.7.7 Making revisions in Drawings, Specifications or other documents when such revisions are inconsistent with written approval or instructions previously given by the Owner, or required by the enactment or revision of codes, laws or regulations subsequent to the preparation of such documents or are due to other causes not within the control of the Architect/Engineer.
- 1.7.8 Providing consultation concerning replacement of any work damaged by fire or other cause during construction, and any furnishing services as may be required in connection with the replacement of such work.
- 1.7.9 Providing services made necessary by a material default of the Contractor, its subcontractors or the Owner's sub-contractors, or by major defects or deficiencies in the work of the Contractor, its subcontractors or the Owner's sub-contractors, or by failure of performance of either the Owner or Contractor, its sub-contractors or the Owner's sub-contractors, under the Contract for Construction causing a significant delay to the Project. The Architect/Engineer shall not be entitled to fees of additional services for the correction of defects or deficiencies due to failure of performance by the Architect/Engineer under this Agreement.
- 1.7.10 Providing extensive assistance in the utilization of any equipment or system such as initial startup or testing, adjusting and balancing, preparation of operation and maintenance manuals, training personnel for operation and maintenance, and consultation during operation.
- 1.7.11 Providing services forty-five (45) days after the termination of the Construction Phase, as provided for under Section 1.5.1.
- 1.7.12 Preparing to serve or serving as an expert witness in connection with any public hearing, arbitration proceeding or legal proceeding.
- 1.7.13 Providing services of consultants for other than architectural, structural, mechanical, electrical, Telecommunications, AV, engineering services for the Project.
- 1.7.14 Providing Services related to the selection of furniture size, style, materials or colors. The Architect/Engineer shall, however, as a part of Basic Services, be available to assist the Owner with the coordination of the furniture and its delivery.

1.8 REGULATORY REVIEW

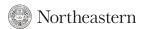
- 1.8.1 The Architect/Engineer shall assist the Owner in the preparation of all necessary Plans and other Documents and material which may be needed to permit the Owner to obtain all needed approvals from the City of Boston and its Subordinate Departments and from other Governmental authorities having jurisdiction over the Project. The Architect/Engineer's time requirement in obtaining such approvals, shall be limited in to the time detailed in accordance with the applicable Task Order prepared in accordance with "Exhibit 2," for this phase of the work. In the event of any changes, the Owner can authorize changes as needed for the applicable Task Order prepared in accordance with "Exhibit 2," as agreed to by both the Owner and the Architect/Engineer and as defined in Paragraph 1.9.2.
- 1.9 TIME



- The Architect/Engineer shall perform Basic and Additional Services as expeditiously as is consistent with professional skill and care and the orderly progress of the work. The Architect/Engineer has submitted and the Owner has approved a schedule, attached hereto and identified as the applicable Task Order prepared in accordance with "Exhibit 2," for the performance of the Architect/Engineer's services, complete with the time budgeted, in each phase of the work, for individuals involved with the performance of the work. This "Schedule C" shall be adjusted, by mutual agreement by the Owner and the Architect/Engineer as required as the Project proceeds. The schedule includes allowances for periods of time required for the Owner's review and approval of submissions and for approvals of authorities having jurisdiction over the Project. This schedule shall not, except for reasonable cause, be exceeded by the Architect/Engineer. The Architect/Engineer shall at reasonable intervals and with each invoice, inform the Owner in writing of the percentage of completion of each phase and a current status as to the budgeted time available for completion of that phase. The Architect/Engineer shall use its best efforts to develop alternatives to the schedule approved in the event that the budgets are expected to be exceeded in any phase of the work. Budgeted time during a phase of the Project which is unused shall be available during later phases and budgets exceeded shall be corrected by using time allowed in later phases, unless such adjustments are not practicable or are agreed to by the Owner as an additional service.
- 1.9.2 The Owner shall establish and maintain an Architectural/Engineering Contingency to be used, at the sole discretion of the Owner, in the event of unscheduled difficulties during each Phase of the work except for the Construction Documents Phase. During the Construction Documents Phase the Owner's only responsibility to supplement the hours allocated in the applicable Task Order prepared in accordance with "Exhibit 2," shall be in the event changes during the course of the Construction Documents Phase greatly exceed a reasonable expectation of what the changes would be during a similar project of similar scope. The use of Architectural/Engineering Contingency shall include, but shall not be limited to, excessive meetings which have not been budgeted by the Architect/Engineer in the applicable Task Order prepared in accordance with "Exhibit 2," and difficulties encountered in the Construction Administration phase.

ARTICLE 2: THE OWNER'S RESPONSIBILITIES

- 2.1 The Owner shall provide information regarding requirements for the Project including to enable the development of a detailed project program, which shall set forth the Owner's design objectives, constraints and criteria, including space requirements and relationships, flexibility and expendability, special equipment and systems and site requirements. The Owner shall meet with the Architect/Engineer with information relating to the Owner's design objectives.
- 2.2 The Owner, with the assistance of the Architect/Engineer, shall provide a budget for the Project which shall include contingencies for bidding, changes in the work during construction, and other costs which are the responsibility of the Owner, including those described in this Article 2 and Paragraph 3.1.2.
- 2.3 The Owner shall designate a representative authorized to act on the Owner's behalf with respect to the Project. The appointed representative shall be fully vested to act on the Owner's behalf in all matters relating to the Project. The Owner or such authorized representative shall examine the documents submitted by the Architect/Engineer and shall render decisions and approvals pertaining thereto within a reasonable time, to avoid unreasonable delay in the progress of the Architect/Engineer's services. The Architect/Engineer shall use its best efforts to provide the Owner



with a reasonable amount of time for necessary approvals and shall indicate the required deadline for the approval.

- 2.4 The Owner shall furnish a legal description and certified land survey of the site, giving as applicable, grades and lines of streets, alleys, pavements and adjoining property; rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, boundaries and contours of the site; locations, dimensions and complete data pertaining to existing building; other improvements and trees; and full information concerning available service and utility lines both public and private, above and below grade, including inverts and depths.
- 2.5 The Owner shall furnish the services of soil engineers, geotechnical surveys or other consultants when such services are deemed necessary by the Architect/Engineer and the Owner. Such services may include test boring, test, pits, soil bearing values, percolation tests, air and water pollution tests, ground corrosion and resistivity tests, including necessary operations of determining subsoil, air and water conditions, with reports and appropriate professional recommendations, when the Owner determines that such services are necessary.
- 2.6 The Owner shall furnish structural, mechanical, chemical and other laboratory tests, inspections and reports as required by law or the Contract Documents. The Owner shall also furnish peer review as required by applicable codes
- 2.7 The Owner shall furnish all legal, accounting and insurance counseling services as may be necessary at any time for the Project, including such auditing services as the Owner may require to verify the Contractor's Applications for payment or to ascertain how or for what purposes the Contractor uses monies paid by or on behalf of the Owner.
- 2.8 The Services, information, surveys and reports required by Paragraphs 2.4 through 2.7, inclusive shall be furnished at the Owner's expense, and the Architect/Engineer shall be entitled to rely upon the accuracy and completeness thereof.
- 2.9 The Owner shall furnish required information and services and shall render approvals of decisions as expeditiously as necessary for the orderly progress of the Architect/Engineer's services and of the work.

ARTICLE 3: CONSTRUCTION COST

3.1 DEFINITION

- 3.1.1 The Construction Cost, shall be the combined total cost to the Owner of all elements of the Project as designed or specified by the Architect/Engineer and as bid, during each phase, by the lowest qualified bidder.
- 3.1.2 The Construction Cost shall include at current market rates, including a reasonable allowance for overhead and profit, the cost of labor and materials furnished by the Owner or any equipment which has been designed, specifies, selected, or specifically provided for by the Architect/Engineer.
- 3.1.3 The Construction Cost does not include the compensation of the Architect/Engineer and the Architect/Engineer's consultants, the cost of the land, rights-of-way or other costs which are the responsibility of the Owner as provided in Article 2.



3.2 RESPONSIBILITY FOR CONSTRUCTION COST

- 3.2.1 Evaluations of the Owner's Project budget, Statements of Probable Construction Cost and Detailed Estimates of Construction Cost, are the responsibility of the Architect/Engineer. The Architect/Engineer shall be responsible for providing coordinated plans and documents as may be required by, or requested by the Owner during the development of the Project Budget, Statements of Probable Construction Cost and Detailed Estimates of Construction Costs.
- 3.2.2 A fixed limit of Construction Cost shall be established as a condition of the Agreement. When such a fixed limit has been established, the Architect/Engineer shall be permitted to include in the fixed limit reasonable, contingencies for design, bidding and price escalation, to determine what materials, equipment, component systems and types of construction are to be included in the Contract Documents, to make reasonable adjustments in the scope of the Project and to include in the Contract Documents alternate bids to adjust the Construction Cost to the fixed limit. Fixed limits, if any, shall be increased in the amount of an increase in the Contract Sum occurring after execution of the Contract for Construction except as caused solely by the Architect/Engineer.
- 3.2.3 If the Bidding or Negotiation Phase has not commenced three months from the scheduled date as indicated on the applicable Task Order prepared in accordance with "Exhibit 2," any Project budget or fixed limit of Construction Cost shall be adjusted to reflect any change in the general level of prices in the construction industry between the date of submission of the Construction Documents to the Owner and the date on which proposals are sought.
- 3.2.4 If the Project budget or fixed limit of Construction Cost (adjusted as provided in Paragraph 3.2.3) is exceeded by the lowest bona fide bid or negotiated proposal, the Owner shall have the option of one or more of the following:
 - (.1) give written approval of an increase in such fixed limit,
 - (.2) authorize rebidding or renegotiating of the Project within a reasonable time,
 - (.3) cooperate in revising the Project scope and quality as required to reduce the Construction Cost.

In the event the Project is phased, such that the bidding of certain components of the work are separated from the bidding of other components of the work, the Owner and Architect/Engineer shall agree on a single Fixed Limit of Construction Cost prior to the release of the first bid package, and after the phases all have been bid, they shall be combined to determine how the Construction Cost relates to the established Fixed Limit.

ARTICLE 4: DIRECT PERSONNEL EXPENSE

4.1 DEFINITION

Direct Personnel Expense is defined as the direct salaries of all the Architect/Engineer's personnel engaged on the Project, expressed on an hourly basis, prior to deductions for employment taxes and employee-paid benefits of all personnel. Direct Personnel Expense specifically excludes; overtime hours



worked by salaried employees and mandatory and customary fringe benefits and employee benefits such as employer paid insurance, sick leave, holidays, vacation, pensions, and special compensation granted to employees such as bonuses or profit sharing distributions, unless authorized as a cost by the Owner. In addition, Architect/Engineers' employees who are billable to more than one project shall only be billable to the Owner for the actual hours worked on the Project in a given week to arrive at a total allowable hours for the purposes of calculating the Architect/Engineer's compensation for that employee. The Architect/Engineer has provided the Owner with a full list of all personnel titles and the hourly wage of each person which is attached hereto as "Schedule B".

ARTICLE 5: REIMBURSABLE EXPENSES

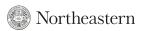
5.1 DEFINITION

Reimbursable Expenses are in addition to the Compensation for Basic and Additional Services and include actual expenditures made by the Architect/Engineer, the Architect/Engineer's employees and consultants in the interest of the Project for the expenses listed as set forth in the applicable Task Order prepared in accordance with "Exhibit 2." For purposes of this Agreement, the applicable Task Order prepared in accordance with "Exhibit 2," shall be completed within _____ days of the execution hereof and upon such completion by the parties as evidenced by the signature thereon of each such party, Exhibit 2 is hereby attached hereto and incorporated herein by this reference. In the absence of such applicable Task Order prepared in accordance with "Exhibit 2," the administration of matters or milestones described herein which are dependent upon a completed Task Order prepared in accordance with "Exhibit 2" shall be as mutually agreed upon in writing by the parties.

ARTICLE 6: PAYMENT TO THE ARCHITECT/ENGINEER

6.1 PAYMENTS ON ACCOUNT OF BASIC SERVICES

- 6.1.1 Payments for Basic Services shall be made monthly and shall be in proportion to services performed within each phase of services, on the basis set forth in Article 13. Invoices for Basic Services and Reimbursable expenses shall be paid within thirty-five (35) days after presentation of a proper Architect/Engineer's statement of services rendered for expenses incurred, or in accordance with the payment terms negotiated between the Architect/Engineer and American Express under the BIP program, as defined herein, whichever period is shorter. If the parties cannot, in good faith, agree on a proper statement of the Architect/Engineer's services, the amount due shall not be due and payable until such time as the parties mutually agree upon an amount. Interest at a rate of one percent (1%) per annum above the federal funds discount rate in effect on the date that the payment is due will be paid on all amounts past due based on an approvable invoice.
- 6.1.2 If and to the extent that the Contract Time initially established in the Contract for Construction is exceeded or extended for more than sixty (60) days through no fault of the Architect/Engineer, compensation for any basic services required for such extended period of administration of the Construction Contract shall be adjusted to reflect changes to the Architect/Engineer's actual costs, except where inconsistent with the applicable Task Order prepared in accordance with "Exhibit 2."
- 6.1.3 All payments relating to this Project made prior to the execution of this Agreement, excluding reimbursable expenses, will be credited toward fees charged under Paragraph 13.1.1 of this Agreement, except where inconsistent with the applicable Task Order prepared in accordance with "Exhibit 2."



6.2 PAYMENTS ON ACCOUNT OF ADDITIONAL SERVICES

6.2.1 Payments on account of the Architect/Engineer's Additional services as defined in Paragraph 1.7 and for Reimbursable Expenses as defined in Article 5 shall be made thirty-five (35) days after presentation of the proper Architect/Engineer's statement of services rendered or expenses incurred, along with supporting data, or in accordance with the payment terms negotiated between the Architect/Engineer and American Express under the BIP program, as defined herein, whichever period is shorter. Interest at a rate of one percent (1%) per annum above the federal funds discount rate in effect on the date that the payment is due will be paid on all amounts past due based on an approvable invoice.

6.3 BUYER INITIATED PAYMENTS

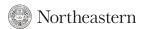
Architect/Engineer agrees that all invoices to Owner under this Agreement shall be payable through American Express Buyer Initiated Payments ("BIP") in accordance with the Architect/Engineer's separately executed agreement with American Express.

ARTICLE 7: ARCHITECT/ENGINEER'S SUBMISSION OF ACCOUNTING RECORDS

- 7.1 Records of Basic Services, Reimbursable Expenses and expenses pertaining to Additional services and services performed on the basis of a Multiple of Direct Personnel Expense shall be kept on the basis of generally accepted accounting principles and shall be made available to the Owner and the Owner's authorized representative when requested.
- 7.2 The Architect/Engineer shall cooperate with the Owner in the developing reports acceptable to the Owner's accounting staff.

ARTICLE 8: OWNERSHIP AND USE OF DOCUMENTS

- 8.1 Submission or distribution to meet official regulatory requirements, or for other purposes in connection with the Project, is not to be construed as publication in derogation of the Architect/Engineer's rights.
- 8.2 The Architect/Engineer, upon completion of the Project, shall provide to the Owner electronic copies of all CAD, BIM, Modeling, rendering or similar product files used in the design of the Project or the production of working drawings, should such products be utilized by the Architect/Engineer. All such deliverables shall be in accordance with Exhibit 1 and any other reasonable requirements of Owner.
- 8.3 The Architect/Engineer shall retain all ownership and use rights with respect to the Drawings and Specifications. The Owner shall be permitted to retain copies, including reproducible copies of the Drawings and Specifications for information and reference in connection with the Owner's use and Occupancy of the Project. The Owner shall have an irrevocable and perpetual non-exclusive royalty free license to re-print, distribute in print or electronic format any of the design work, including but not limited to, photographs of the Project for any purpose which shall survive the termination of this Agreement. If the Agreement is terminated, the Architect/Engineer consents to the Owner's employment of a replacement architect/engineer and grants to the Owner and such replacement architect/engineer a license to use of the Drawings and Specifications and concepts developed by the

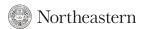


Architect/Engineer or portions thereof to complete the Project. Neither the Owner nor any of its consultants nor the replacement architect/engineer shall be liable for any changes made to the Drawings or Specifications, provided however, the Architect/Engineer shall have no liability for any changes to the Drawings or Specifications arising from Owner's changes to and use of the Drawings or Specifications on work for which the Architect/Engineer is not retained (including completion of the design of the Project by others). The Architect/Engineer hereby certifies and warrants that the design work is the original work of the Architect/Engineer. To the fullest extent permitted by law, the Architect/Engineer agrees to indemnify, defend, and hold harmless the Owner and its trustees, officers, employees, and representatives against any and all claims, losses or expenses, including but not limited to, attorney's fees, judgments, settlements, awards, and Court costs arising from any claim of infringement of any copyright or violation of proprietary interests in the design asserted by any third party. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which the Owner would otherwise enjoy as a party to this Agreement.

8.4 The Architect/Engineer shall not produce a substantially similar design for another educational institution in Massachusetts without the Owner's prior written consent.

ARTICLE 9: TERMINATION OF AGREEMENT

- 9.1 This Agreement may be terminated by either party upon seven (7) days written notice should the other party fail substantially to perform in accordance with its terms through no fault of the party initiating the termination. Upon receipt of such notice of termination, the notified party shall have seven (7) days to cure such failure to substantially perform, and if such failure is not corrected, this Agreement shall be terminated automatically upon the expiration of the seven (7) day period.
- This Agreement may be terminated by the Owner upon at least seven (7) days written notice to the Architect/Engineer in the event that the Project is permanently abandoned.
- 9.3 In the event of termination, not the fault of the Architect/Engineer, the Architect/Engineer shall be compensated for all services performed to termination date, together with Reimbursable Expenses then due and all Termination Expenses as defined in Paragraph 9.4, unless the provisions of section 6.1.1 shall apply.
- 9.4 Termination Expenses include expenses directly attributable to termination for which the Architect/Engineer is not otherwise compensated.
- 9.5 The Owner may, without cause, order the Architect/Engineer in writing to suspend, delay or interrupt the work, in whole or in part, for such period of time as the Owner may determine. An adjustment shall be made for increases in the cost of performance of the Agreement, including profit on the increased cost of performance, caused by suspension, delay or interruption. No adjustment shall be made to the extent:
 - (.1) that performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Architect/Engineer is responsible; or
 - (.2) that an equitable adjustment is made or denied under another provision of this Agreement.



Adjustments made in the cost of performance may have a mutually agreed fixed or percentage fee.

ARTICLE 10: MISCELLANEOUS PROVISIONS

- 10.1 This Agreement shall be governed by the laws of the Commonwealth of Massachusetts, exclusive of its choice of law principles.
- 10.2 Terms in this Agreement shall have the same meaning as those in the General Conditions of the Contract for Construction provided that the Architect/Engineer's role during the construction phase of the Project is described in those General Conditions in a manner consistent with the role of the Architect/Engineer set forth in this Agreement.
- As between the parties to this Agreement: as to all acts or failures to act by either party to this Agreement, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued, in any and all events, not later than the relevant Date of Substantial Completion of work, and as to any acts or failures to act occurring after the relevant Date of Substantial Completion, not later than thirty days after the date of issuance of the final Certificate for Payment.
- 10.4 The Owner and the Architect/Engineer waive all rights against each other to the extent that the Owner and Architect/Engineer are each covered by Insurance, therefore, and to the extent that Insurance will not be invalidated by this waiver for damages caused by perils covered by Insurance.
- 10.5 Unless otherwise provided in this Agreement, the Architect/Engineer and Architect/Engineer's Consultants shall have no responsibility for the discovery, presence, handling, removal or disposal of or exposure of persons to hazardous materials in any form at the Project site, including, but not limited to, asbestos, asbestos products, polychlorinated biphenyl (PCB) or other toxic substances.
- 10.6 This Agreement shall not be construed against the party preparing it, and this Agreement shall be construed without regard to the identity of the party who prepared it as if the parties hereto had jointly prepared this Agreement, and it shall be deemed their joint work product. Any uncertainty or ambiguity shall not be interpreted against any one party, and any rule of construction that a document is to be construed against the drafting party shall not be applicable
- 10.7 If any provision of this Agreement is held to be illegal, invalid or unenforceable under present or future laws, such provision shall be fully severable and all remaining provisions fully enforceable.
- 10.8 The Architect/Engineer shall maintain records at the Project site in an orderly manner. These records may include correspondence, Contract Documents, Change Orders, Construction Change Directives, reports of site meetings, Shop Drawings, Product Data and similar submittals, supplementary drawings, and Applications for Payment, and names, addresses and telephone numbers of the Contractor, Subcontractors, Owner's separate contractors, and principal material suppliers.
- 10.9 The Architect/Engineer shall maintain a log of activities at the Project site, including weather conditions, nature and location of work being performed, verbal instructions and interpretations given to the Contractor and specific observations.
- 10.10 The Architect/Engineer shall be responsible for its own safety at the site and the safety of the Architect/Engineer's employees. To the fullest extent permitted by law, the Architect/Engineer will indemnify and save harmless the Owner, its trustees, officers, employees and representatives



("Indemnitees") from and against any and all claims threatened or asserted for any damage or injury of any kind or nature whatsoever (including death) to the Architect/Engineer or its employees, which claims result from, arise out of, or occur in connection with the execution of the Project. The Architect/Engineer agrees to, and does hereby assume on behalf of the Indemnitees, the defense of any action at law or in equity which may be brought against the Indemnitees by reason of such claims and will pay on behalf of the Indemnitees upon its demand, the amount of any judgment, settlement, or award that may be entered against the Indemnitees or any expense incurred by the Indemnitees for which the insurer of the Architect/Engineer does not admit coverage, including attorney's fees and Court costs. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which the Indemnitees would otherwise enjoy as a party to this Agreement.

10.11 MINORITY, WOMEN, AND SMALL LOCAL BUSINESS UTILIZATION

The Architect/Engineer shall make good faith efforts to achieve combined subcontracting goals for this contract of 12% of the total contract value utilizing minority and women owned business enterprises, as well as small local business enterprises ("MBEs," "WBEs," and "SLBEs" respectively).

For the purposes of these participation goals, MBEs and WBEs shall be defined as companies with certified MBE and/or WBE status with the Commonwealth of Massachusetts' Supplier Diversity Office's "Directory of Certified Businesses" or with the Greater New England Minority Supplier Development Council.

SLBEs shall be defined as companies: (1) whose primary office is located within the City of Boston (as confirmed by ZIP Code), and (2) with fewer than 500 employees and less than \$7,000,000 in annual sales).

The Architect/Engineer may propose using M/W/SLBEs that do not hold the above certifications, provided that any such proposed M/WBE must provide a self-certification for the University's review, and any such proposed SLBE must provide a self-certification regarding their annual sales, for the University's review. The University may, in its sole discretion, accept such self-certification(s) and permit the Contractor to count such participation toward the project goals.

The attached Schedule D is hereby made a part of this Agreement. The Architect/Engineer shall substantiate its M/W/SLBE participation schedule included on Schedule D-1 by submitting a Schedule D-2 or D-3 with each of its invoices.

10.12 E-BUILDER CONTRACT ADMINISTRATION

- 10.12.1 Project Management Communications: The Contractor and Architect/Engineer shall use the web based project management communications tool, E-Builder® ASP software, and protocols included in that software (the "Software") during the Project, or such successor software tools as required by the University for the purposes stated in this Section 10.12. The use of project management communications as herein described does not replace or change any contractual responsibilities of the participants.
- 10.12.2 Training: Architect/Engineer shall require its Project personnel to attend and participate in Software training sessions at the cost of the University. Project personnel may not be given access to the Software without agreeing to a specified terms of use for the Software.



10.12.3 Authorized Users: All Project personnel of the Architect/Engineer shall, based on their roles, be given access and right to use the Software solely in accordance with the University's procedures relating to the Software to fulfill certain of Architect/Engineer's reporting, billing, and notice requirements under the Contract Documents, including, but not limited to the following:

10.12.3.1	RFI, Request for Information response
10.12.3.2	Submittals review, including record numbering by drawing and specification section
10.12.3.3	Transmittals, including record of documents and materials delivered in hard copy
10.12.3.4	Meeting Minutes
10.12.3.5	Review Comments
10.12.3.6	A/E Field Observation Reports
10.12.3.7	Payment Application Review
10.12.3.8	Construction Photographs
10.12.3.9	Drawings
10.12.3.10	Supplemental Sketches
10.12.3.11	Schedules
10.12.3.12	Specifications
10.12.3.13	Punch list
10.12.3.14	Commissioning Issues
10.12.3.15	UTSW CIP Inspection Reports
10.12.3.16	Proposal Request, Proposed Change and Architectural Supplemental
	Instructions

10.12.4 Record Keeping:

- 10.12.4.1 The Owner and its representatives, the Contractor and its representatives, the Architect/Engineer and its consultants, and the Contractor and its sub-contractors and suppliers at every tier shall respond to documents received in electronic form on the web site, and consider them as if received in paper document form.
- 10.12.4.2 The Owner and its representatives, the Contractor and its representatives, the Architect/Engineer and its consultants, and the Contractor and its sub-contractors and suppliers at every tier reserves the right to and shall reply or respond by transmissions in electronic form on the web site to documents actually received in paper document form.
- 10.12.4.3 The Owner and its representatives, the Contractor and its representatives, the Architect/Engineer and its consultants, and the Contractor and its sub-contractors and suppliers at every tier reserves the right to and shall copy any paper document into electronic form and make same available on the web site.

10.13 CONFIDENTIAL INFORMATION



Architect/Engineer acknowledges that in connection with this Agreement and the services performed by Architect/Engineer under this Agreement, the Owner may provide, and the Architect/Engineer may acquire and make use of, certain confidential information of the Owner relating to the performance of the services, which may include, but is not limited to, this Agreement, reports, methods of operation, trade secrets, training materials, policies, protocols, and procedures (administrative, research, and clinical), budgeting, staffing needs, databases, student-related information, faculty lists marketing research, equipment capabilities, fee schedules, and other proprietary, business, financial and other information connected with or related to the Owner that is not generally known to the public (collectively, "Confidential Information").

Except as otherwise required by applicable law, during the term of this Agreement and for a period of three (3) years thereafter, Architect/Engineer shall not use such Confidential Information except in connection with the performance of the services, or divulge the Confidential Information to any third party, unless the Owner consents in writing to such use or divulgence or such disclosure is required by law. In the event the Architect/Engineer receives a request or demand from a third party for the disclosure of Confidential Information, Architect/Engineer shall promptly (within two (2) business days after receipt of such request or demand) provide written notice to the Owner of such request or demand, including a copy of any written document of such request or demand.

Architect/Engineer agrees to protect and safeguard from and against unauthorized access, use or disclosure the Confidential Information of the Owner in the same manner that it protects the confidentiality of its own proprietary and confidential information of like kind (but in no event using less than reasonable care).

Upon expiration or termination of this Agreement, Architect/Engineer shall not take nor retain, without prior written consent from the Owner, any Confidential Information or copies thereof in any form or medium of any kind. Upon the expiration or termination of this Agreement or otherwise upon the request of the Owner, all Confidential Information received by Architect/Engineer shall be promptly returned to the Owner or, upon request of the Owner, destroyed with such destruction confirmed in a form reasonably satisfactory to Owner by Architect/Engineer. Without limiting other possible remedies for the breach of these covenants relating to Confidential Information, the parties agree that injunctive or other equitable relief shall be available to enforce any and all of these covenants, such relief to be without the necessity of posting a bond, cash or otherwise.

ARTICLE 11: SUCCESSORS AND ASSIGNS

11.1 This Agreement is personal to the parties hereto and may not be assigned by either party without prior written consent of the other party. Neither the Owner nor the Architect/Engineer shall assign, sublet or transfer interest in this Agreement without the written consent of the other. Except that the Owner may assign this Contract or any portion thereof to its Construction lender without the consent of the Architect/Engineer, but shall give the Architect/Engineer written notice of any such assignment. Any change of Ownership or principals of the Architect/Engineer in excess of forty percent (40%) shall be considered an assignment under this Agreement and would require the written consent of the other party under this section.

ARTICLE 12: EXTENT OF AGREEMENT

12.1 This Agreement represents the entire and integrated agreement between the Owner and the Architect/Engineer and supersedes all prior negotiations, representations or agreements. This



Agreement may be amended only by written instrument signed by both the Owner and the Architect/Engineer.

ARTICLE 13: BASIS OF COMPENSATION

The Owner shall compensate the Architect/Engineer for the Scope of Services provided, in accordance with Article 6, Payments to the Architect/Engineer and the other Terms and Conditions of the Agreement. Services provided by the Architect/Engineer prior to a defined Project scope shall be compensated according to "Schedule B." Thereafter, compensation to the Architect/Engineer shall be made in accordance with the applicable Task Order prepared in accordance with "Exhibit 2."

13.1 COMPENSATION FOR BASIC SERVICES

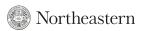
13.1.1 For Basic Services, as described in Paragraphs 1.1 through 1.5, and other services included in Article 14 as part of Basic Services, Basic Compensation shall be computed as follows:

The cost of the work shall be in accordance with the attached "Schedule B" (Rate Sheet) and the applicable Task Order prepared in accordance with "Exhibit 2," which may be amended from time to time as agreed. Budgeted time in one phase may be allocated to another phase by the Owner or by the Architect/Engineer, if approved by the Owner, if such reallocation becomes necessary during the Project.

- 13.1.2 Direct Payroll Expense is defined as the hourly rate, which includes federal and states taxes plus employers paid benefits, which includes employer's tax burden, health benefits and vacation, but excludes employer's profit sharing plans and defined in Paragraph 4.1.
- 13.1.3 The Fee is defined as the Architect/Engineer's overhead, which includes office space, utilities, and equipment costs, etc. plus the Architect/Engineer's profit, which is the normal profit margins that may be shown on the annual financial statement.
- 13.1.4 The Architect/Engineer's sub-consultants, as detailed in the applicable Task Order prepared in accordance with "Exhibit 2," shall be paid according to the costs as proposed and any increases in costs to any sub-consultants shall require the Owner's prior written approval. The Architect/Engineer will report all costs associated with the sub-consultants and manage the costs according to "Schedule B."
- 13.1.5 The Architect/Engineer shall invoice monthly according to Article 6 for Basic Services and Additional Services as outlined in "Schedule B."

13.2 COMPENSATION FOR ADDITIONAL SERVICES

- 13.2.1 The Architect/Engineer shall be compensated for Additional Services, as described in Paragraph 1.7, prior to a defined project scope using the rates detailed in "Schedule B" and approved by the Owner prior to any Additional Service performed. Thereafter, the Architect/Engineer shall be compensated in accordance with "Schedule C." The compensation rates set forth in "Schedule B" shall remain in effect unless a change in the rate structure is approved by the Owner.
- 13.2.2 The Architect/Engineer's sub-consultants shall be compensated for Additional Services as outlined in the applicable Task Order prepared in accordance with "Exhibit 2," and Paragraph 13.1.4 and approved by the Owner prior to the Additional Service performed.



ARTICLE 14: OTHER CONDITIONS OR SERVICES

14.1 REVISIONS TO OTHER ARTICLES AND MISCELLANEOUS CONDITIONS

- 14.1.1 The Architect/Engineer shall keep the Owner and Construction Manager informed of any changes in requirements or changes in construction material, systems or equipment as the Drawings and Specifications are developed.
- 14.1.2 Insurance shall be provided by the Architect/Engineer and Consultants according to the "Basic Insurance Requirements" set forth in the attached "Schedule A.".
- 14.1.3 The Architect/Engineer shall assist the Construction Manager in reviewing the Drawings and Specifications with appropriate regulatory agencies for their compliance with all applicable building codes, governmental laws, rules, ordinances, statutes and regulations and for modifying the Drawings and Specifications accordingly. The Architect/Engineer shall exercise reasonable care in the preparation of the Final Design and Specifications of the Project so as to achieve compliance with all acceptable building codes, governmental laws, rules, ordinances, statutes, and regulations. The Architect/Engineer shall be reimbursed in accordance with the applicable Task Order prepared in accordance with "Exhibit 2," for modifications necessitated by changes to code implemented after the completion of the Construction Documents, unless the Architect/Engineer should have had knowledge that the code change was being implemented.
- 14.1.4 The Architect/Engineer agrees that, at no additional cost to the Owner, the Architect/Engineer will execute such documents and certificates as may reasonably be required by any lender providing funds for construction or permanent financing of the Project so long as the same are consistent with the responsibilities of the Architect/Engineer hereunder. In addition, if required by any such lender, the Architect/Engineer shall consent to an assignment of this contract to such lender as additional security for its loan on such terms as such lender may reasonable require.
- 14.1.5 The Architect/Engineer shall perform its obligations hereunder expeditiously so that the Construction Documents Phase shall be complete no later than the dates indicated on the applicable Task Order prepared in accordance with "Exhibit 2," as amended. Thereafter, the Architect/Engineer shall expeditiously perform its obligations hereunder in order that appropriate bidding or negotiation may be completed in a time consistent with limits therefor established under the contract with the Construction Manager or Contractor. The Architect/Engineer shall not be responsible for any delays due to causes beyond its control.
- 14.1.6 The Architect/Engineer shall perform without expense to the Owner such professional design services as shall be required to correct or remedy any negligent act, error or omission of the Architect/Engineer.
- 14.1.7 The Architect/Engineer shall use its best efforts in maintaining the same principal personnel on the Project for the term of this contract. The Architect/Engineer shall assign one principal member of the Architect/Engineer's firm to be the Project representative to the Owner, and as such, the principal shall dedicate a reasonable amount of time to the work during each phase of the work. Changes due to principal personnel must be approved by the Owner in writing prior to such changes being made.
- 14.1.8 The Architect/Engineer warrants that the work performed hereunder shall be performed by persons duly licensed by the Commonwealth and applicable governmental authorities to practice



architecture/engineering. The Architect/Engineer shall present the Owner with evidence of licensure and shall promptly notify the Owner in the event that any such licenses have been either suspended or revoked.

14.2 CONTRACT DOCUMENTS

The Contract Documents shall consist of:

1. This Agreement and any Amendments, Riders, Schedules or Addenda attached thereto.

Each of these documents is incorporated herein by this reference as if set forth in full, and shall constitute a part of this Agreement. In the event of any conflict in the obligations pursuant to the above Contract Documents, control shall be determined in the order in which each is listed above.

EXHIBITS AND SCHEDULES

The following Exhibits and Schedules are fully incorporated into this Agreement

Exhibit 1 – Northeastern University Requirements for Closeout Deliverables

Exhibit 2 – Guidelines for Preparation of Task Orders

Schedule A – Basic Insurance Requirements

Schedule B – Rate Sheet

Schedule C - Workplan/Budget

Schedule D – M/P/W/SLBE Participation Plan and Certification Forms

[The remainder of this page is blank. The following page is the signature page.]



IN WITNESS WHEREOF, the parties hereby execute this Agreement Between Owner and Architect/Engineer as of the day and year first written above.

OWNER	ARCHITECT/ENGINEER
Ву:	Ву:
Date	Date
Attest	Attest



NORTHEASTERN UNIVERSITY REQUIREMENTS FOR CLOSEOUT DELIVERABLES

STANDARDS FOR PRODUCTION AND FORMAT

Facilities Archive / Project Controls | Northeastern University | 360 Huntington Ave, Boston <u>facilitiesarchive@northeastern.edu</u> | 617/756-4622

TABLE OF CONTENTS

INTRODUCTION	2
DELIVERABLES	2
1. REQUIRED DOCUMENTS TYPES	2
AS-BUILT DRAWINGS	3
OPERATION AND MAINTENANCE MANUALS	3
WARRANTIES	4
SPECIFICATIONS	
FINAL COMMISSIONING REPORTS	
REGULATORY APPROVALS	
LAND SURVEY	
ENVIRONMENTAL REPORTS	-
CAD DRAWINGS	
2. FILE FORMAT	
Version	
GENERAL PRODUCTION	5
TITLE BLOCK REQUIREMENTS	5
SHEET IDENTIFICATION REQUIREMENTS	5
FONTS AND TEXT STYLES	5
EXTERNAL REFERENCE FILES (XREFS)	6
MODEL AND PAPER SPACE GUIDELINES	6
USE DISCLAIMER REQUIREMENT	6
LAYERING	6
GENERAL LAYERING GUIDELINE	
ENTITY PROPERTIES	
LAYER NAME FORMAT	
DRAWING VIEW LAYER NAMES	ξ.
ANNOTATION LAYER	2
SHEET IDENTIFFICATION	10
3. GENERAL REQUIREMENTS	
SHEET IDENTIFICATION	10
S. I.E. I.	
IMAGE FILE CREATION	11
4. OVERVIEW	10
TIFF IMAGE REQUIREMENTS	11
BUILDING INFORMATION STANDARDS (BIM)	12
SUBMITTING ELECTRONIC PROJECT DELIVERABLES	13
UPLOADING FILES TO E-BUILDER FOLDERS	
OTHER METHODS	
APPENDICES	14

Version 1 2016 Page **1** of **18**

INTRODUCTION

This document is a resource for project managers, architects, engineers, and contractors working on Northeastern University construction and renovation projects. The purpose of this document is to convey the requirements for project closeout documentation, and provide standards for creating and delivering documentation at the close of Northeastern University projects. Section 1 outlines the required document types due at closeout, and sections 2 through 6 describe standards for the creation and delivery of project deliverables.

Acknowledged that Northeastern University construction and renovation project deliverables may vary depending on size and type of work. For instance, some projects may not produce drawings in any format, or require regulatory approvals. However, all architects, engineers, and contractors must submit applicable deliverables as described within this document.

These requirements ensure that Northeastern University receives an accurate record of final project work, and also promotes a standard for consistency that ensures the long-term value and accessibility of construction project deliverables. Architects, Engineers, and Contractors must deliver required documentation (where applicable), and adhere to the standards described herein. If received documentation does not comply with the following standards, final payment may be delayed until documents conform to requirements.

There are 4 checklist templates to assist with deliverable submissions. Templates A-C provide summary lists of deliverable types, and standards for format. Appendix D must be completed and submitted with project drawing sets.

These guidelines are in accordance with the latest version of *U.S. National CAD Standards* and the *AIA CAD Layer Guidelines*, and Northeastern University guidelines, *Guidelines for Capital Project Design & Implementation*, and *NU MEP Design Standards*.

DELIVERABLES

- Upload closeout to the appropriate folders in e-Builder, and/or deliver to the Northeastern University project manager.
- Complete and submit the Drawing Index (Appendix D) with all drawing sets.

1. Required Document Types

1.1. As-built and Record Drawings

1.1.1. Definitions:

As-Built: Definition for as-built drawings may differ depending on organization, but
 Northeastern University defines as-built drawings as drawings that are prepared at the end

Version 1 2016 Page **2** of **18**

- of a construction project by the contractor. These are drawings / plans that show the work, as actually installed.
- Record Drawings: Record drawings are prepared by the architect and reflect on-site changes
 the contractor noted in the as-built drawings. They are often compiled as a set of on-site
 changes made for the owner per owner/architect contract. (see contract Northeastern
 University Agreement Between Owner and Architect / Engineer)

1.1.2. Requirements

- All drawings should be stamped and signed showing actual construction; drawings shall not show alternatives or different options. Mark drawings as "as-built."
- Submit each drawing separately as single sheet.
- Submit 3 sets of drawings in total, 1 set of CAD files, and 1 set of PDF files, and one set
 of TIFFF files.

1.1.3. General Production

- Drawings will be reviewed upon submission, and if all required documentation is not received, and/or submitted per requirements, project will not closeout and final payment will be delayed until documentation is received and approved.
- The Project Architect / Engineer should work with the contractor regarding the project CAD drawings; either to utilize these CAD files to produce as-built drawings, or pay the contractor to produce the project as-built CAD files. (see contract Northeastern University Agreement Between Owner and Architect / Engineer, Section 1.5.16)
- For Northeastern University in-house designed projects, coordinate with the Northeastern University project manager to determine if Northeastern University will produce the CAD as-built and if so then what allowance will be given for this from the contractor.
- For more details, see Exhibit One titled *Record Document Field Data* from the *Northeastern University Agreement Between Owner and Architect / Engineer*

1.2. Operations and Maintenance Manuals (O&Ms)

1.2.1. Definition

An Operations and Maintenance Manual contains the information required for the operation, maintenance, decommissioning and demolition of a building.

Version 1 2016 Page **3** of **18**

1.2.2. Requirements

- O&M manuals should be organized in separate sections for each related equipment.
- Each manual must contain: title page, table of contents, product data supplemented by text and/or drawings; warranties, bond and service contract issued.
- All O&Ms should include phone lists of subcontractors, suppliers, manufacturers' and representatives.
- Include a description of each unit and related component parts, including name of manufacturer, model number, serial number, and equipment tag number.
- Provide manufacturer information, maintenance procedures, and servicing schedule(s).
- Submit O&Ms in both hardcopy and PDF formats.
- PDF version must be organized in the same manner as the hardcopy.

1.3. Warranties

Include warranties in O&Ms, and/or submit as separate document(s).

1.4. Specifications

1.4.1. Definition

Specifications are defined as detailed written descriptions of materials, equipment, systems, and required workmanship and other qualitative information pertaining to the work.

1.4.2. Requirements

- If specifications are submitted as a book, organize specifications following the latest
 <u>Construction Specifications Institute (CSI)</u> format and indexing.
- If specifications are submitted as a drawing, follow sheet identification standards described in section 3.

1.5. Final Commissioning Report

Submit Final Commissioning Report, if applicable, in PDF.

1.6. Regulatory Approvals

- For full list of possible regulatory approvals, see Appendix A
 - Submit regulatory approvals, as applicable, in PDF.
 - o Asbestos / DEP Permits
 - Building Permits
 - Certificate of Inspection

Version 1 2016 Page **4** of **18**

- o Assembly Permits
- Occupancy Permits

1.7. Land Survey

If a land survey was done, submit in TIFF and PDF formats.

1.8. Environmental Reports

 If soil or other environmental reports were done, submit all geotechnical reports in TIFF and PDF format.

CAD DRAWINGS

2. File Format Preparation

2.1. Version

 AutoCAD™ versions 2004 or higher are acceptable file formats for as-built project drawings. All drawings prepared for Northeastern University must be submitted in .dwg format.

2.2. General Production

- CAD files containing multiple drawing sheets must be broken down into separate drawings containing single sheets.
- All CAD drawings shall be purged of empty, unused, or non-essential drawing data prior to submittal. This includes all unused layers, linetypes, blocks, fonts and entities.
- All CAD drawing models should be drafted at full scale in architectural units, such that one drawing unit equals one inch.

2.3. Title Block Requirements

- Electronic drawing files must contain only one drawing and one title block per file.
- Title block information must include the following information:
 - A/E/C consultant responsible for producing the drawings should be clearly identified.
 - o Project Name assigned by Northeastern University
 - o Project Number assigned by Northeastern University
 - o Building name of the building as per Northeastern University naming convention

Version 1 2016 Page **5** of **18**

2.4. Sheet Identification Requirements

- Drawing Title describes the drawing content
- Sheet identification –follow the Sheet Identification Requirements in section 3
- Date date of the drawing at final revision, as-built
- North Arrow showing orientation of drawing

2.5. Fonts and Text Styles

- Use only native CAD fonts, linetypes, and hatch patterns.
- Do not use custom fonts, linetypes, and hatch patterns, including any provided by 3rd party.
- Only use TrueType fonts such as Arial, Courier New, Times New Roman.
- Postscript fonts shall not be used.

2.6. External Reference Files (XREFs)

- Northeastern University will <u>not</u> accept CAD drawing submissions that reference external reference files (XREFS).
- All XREFS must be "bound" to the final drawing

2.7. Model and Paper Space Guidelines

- Place title blocks, schedules and general notes at full-scale in paper space whenever possible.
- Label scaled viewports with the appropriate scale in model space.
- Do not place or draw model-related blocks, tags and objects in paper space.
- Draw all model space objects at full scale.
- Scale objects using paper space viewports zoom viewports to the appropriate scale.

2.8. Use Disclaimer Requirement

All final as-built drawings / plans must include the following disclaimer:
 "Warning: This document may contain sensitive and/or proprietary information and
 therefore must be treated as a confidential document. Acceptance of this document
 constitutes an agreement that this document and the information contained herein shall
 be maintained and transmitted in a confidential manner. No part of this document shall
 be reproduced, released or distributed without the express written permission of
 Northeastern University and any distribution to non-Northeastern University entities or
 persons must be subject to a written confidentiality agreement."

Version 1 2016 Page **6** of **18**

2.9. Layering

2.9.1. General Layering Guidelines

- Use only the latest version of US National CAD Standard layer names.
- Use the minimum number of layers necessary to adequately separate entities in each drawing, and should not contain extraneous, redundant, or overly detailed layer names.
- Purge each drawing of unused layers prior to submittal. The drawing file should contain
 only those layers necessary for displaying and plotting the information and drawing
 entities contained in each drawing. To ensure that subsequent prints made from each
 CAD drawing match the original, unused or unnecessary layers must be purged from the
 drawing prior to delivery.
- The layer name format is organized as a hierarchy. This hierarchical structure allows for detailed levels of description as desired. Layer names consist of distinct data fields separated from one another by dashes.

2.9.2. Entity Properties

- Entity colors must be defined by layer, not by entity.
- Blocks must be created on layer 0 (zero).
- All attributes must be created on layer 0 (zero).

2.10. Layer Name Format

 Northeastern University follows a naming schema that is organized as a hierarchy. Layer names are defined using characters identifying disciplines, major and minor groups, and modifiers.

Al	WALL	1	FULL	-	DIMS	ı	N
Discipline	Major		Minor		Minor		Status
Designator(s)	Group		Group		Group		

Discipline Designator indicates the category of subject matter contained on the specified layer or file name. The Discipline Designator is a one or two-character field. The first character is the discipline character, and the second character is an optional modifier.

	1 LEVEL DISCIPLINE DESIGNATORS				
G	General	Р	Plumbing		
Н	Hazardous Materials	D	Process		
V	Survey / Mapping	М	Mechanical		
В	Geotechnical	E	Electrical		
С	Civil	W	Distributed Energy		

Version 1 2016 Page **7** of **18**

L	Landscape	Т	Telecommunications
S	Structural	R	Resource
Α	Architectural	Х	Other Disciplines
1	Interiors	Z	Contract / Shop Drawings
Q	Equipment	0	Operations
F	Fire Protection		

The optional second character is used to further define the discipline character. For example, AI-WALL *Architectural Interior, Wall*

For a complete list of 2 level Discipline Designators, refer to the latest version *US National CAD Standards*.

Major Group is a four-character field that identifies a major building system. Major
Group field codes are logically grouped with discipline designators. However, any
Major Group may be used with prescribed Discipline Designator. For example, A-Wall or
I-Wall.

For complete list of Major Groups, refer to the latest version of *US National CAD Standards*.

 Minor Group is a four-character field used to further define the Major Group. For example, A-WALL-FULL Architectural, Wall, Full

For complete list of Minor Groups, refer to the latest version of US National CAD Standards.

Status field is an optional single-character field that identifies the data contained on the layer according to the status or construction phase of the work. Since drawings submitted at closeout are as-built, this field should be used to distinguish new construction from existing or phases of work that must be differentiated. For example, A-WALL-FULL-N Architectural, Wall, Full, New Work

STATUS FIELD CODES		
Α	Abandoned	
D	Existing to demolish	
E	Existing to remain	
F	Future work	
М	Items to be moved	
N	New work	
Т	Temporary work	
Χ	Not in contract	
1-9	Phase numbers	

Version 1 2016 Page **8** of **18**

2.11. Drawing View Layer Names

 DETL, ELEV, and SECT are specialized codes used for layers that are organized primarily by drawing type, rather than by major building system. These field codes may also be used as Minor Group field codes to modify a major building system.

□□ indicate discipline and optional modifier

LAYER NAME	DESCRIPTION
□ SECT-MCUT	material cut by section
□ -DETL-MBND	material beyond cut
□ -DETL-PATT	textures and hatch patterns
□ -ELEV-IDEN	component identification numbers
-ELEV-OTLN	outline of object drawn

2.12. Annotation Layer

 Annotation consists of text, dimensions, notes, sheet borders, detail references and other elements on CAD drawings that do not represent physical aspects of a building.
 Use of the Major Group ANNO allows all annotation to be placed in a defined group of layers.

The Layer Names shown below provide examples for the use of Minor Group field codes for annotation.

indicate discipline and optional modifier

LAYER NAME	DESCRIPTION
□ -ANNO	Annotation
□ -ANNO-DIMS	Dimensions
□ ANNO-IDEN	Identification tags
□ ANNO-KEYN	Keynotes
□ - ANNO-LABL	Labels
□ ANNO-LEGN	Legends, symbol keys
ANNO -MARK	Markers, break marks, leaders
ANNO-NOTE	Notes
□ ANNO-REVC	Revision clouds
□ ANNO-REVS	Revisions
ANNO-SCHD	Schedules
□ - ANNO-SYMB	Reference symbols
□ - ANNO-TEXT	Text
□ - ANNO-TABL	Data tables
□ - ANNO-TITL	Drawing or detail titles
□ - ANNO-TTLB	Border and title block

Version 1 2016 Page **9** of **18**

SHEET IDENTIFFICATION

3. General Requirements

 Each sheet must have a corresponding image and .dwg file. The sheet and the digital files must all follow the same naming convention.

3.2 Sheet Identification

 The sheet identification format contains four alphanumeric characters in a specific sequence. The sheet identifier consists of three components: the discipline designator, the sheet type designator, and the sheet sequence number.
 Example SF-302

Α	Α		N	N	N
S	F	1	3	0	2
Discipline			Sheet	Sheet	t .
Designator(s)			Type	Sequ	ence
			Designator	Numl	ber(s)

- The **Discipline Designator** indicates the category of subject matter contained on the specified layer or file name. The Discipline Designator is an alpha one or two-character field. The first character is the discipline character, and the second character is an optional modifier. See section 2.2 for list.
- The Sheet Type Designator is a single numerical character that identifies the sheet type.
 All sheet types may apply to all discipline designators. It is not necessary to use all the sheet types for a project or within a discipline.

	SHEET TYPE DESIGNATORS					
0	General (symbols legend, notes, etc.)					
1	Plans (horizontal views and combination Plan & Profile)					
2	Elevations and Profiles (vertical views)					
3	Sections (sectional views, wall sections)					
4	Large-Scale Views (Scaled up reproductions of plans,					
	elevations, Δ or sections that are not details)					
5	Details					
6	Schedules and Diagrams					
7	User Defined (for types that do not fall in other categories,					
	including typical detail sheets)					
8	User Defined (for types that do not fall in other categories)					
9	3D Representations (isometrics, perspectives, photographs)					

Version 1 2016 Page **10** of **18**

The Sheet Sequence Number is a two-digit number that identifies each sheet in a series
of the same discipline and sheet type. Sequence numbering starts with 01; sheet
number 00 is not permitted. The first sheet of each series is numbered 01, followed
by 02 through 99.

IMAGE FILE CREATION

4. Overview

- All image files must match in scale and content so that CAD = PDF = TIFF
- Ensure the drawings adhere to the guidelines presented in this document, including:
 - o Title Block Requirements in section 2.3
 - Sheet Identification Requirements in section 2.4
 - o Use Disclaimer Requirement in section 2.8
- Include a drawing index (see appendix D) containing filenames and sheet numbers for each submittal. This ensures the completeness of the drawing set and assists in archival procedures.
- Name each file with the following convention: the sheet number first, followed by the title of the drawing. (Example: A-1 First Floor Plan)

4.1. TIFF Image Creation Requirements

- Produce TIFFs using LZW lossless data compression. This ensures that the original data of each image will be perfectly reconstructed.
- Resolution: Create TIFF images using a resolution of 300ppi at original size. Ideally a 24x36 drawing should have a pixel ratio of 7200 x 10800.
- **Bit depth:** Use 8-bit depth for color and grayscale TIFF images.

4.2. TIFF Image Creation

- Create a TIFF from CAD, AUTODESK® AUTOCAD® recommends:
 - At the Command prompt, enter TIFFOUT.
 - o In the Create Raster File dialog box, select a folder and enter a file name. Click Save.
 - The .Tiff extension is appended to the file name.
 - Select the objects you want to save.

Create a TIFF from PDF

- Click on File > Export to... > Image > TIFF
- o Save as TIFF

Version 1 2016 Page **11** of **18**

BUILDING INFORMATION MODEL (BIM) STANDARDS

5. Overview

Northeastern University does not prescribe a project execution plan for BIM, however, if models are produced for a Northeastern University project, it should be submitted at project closeout with other deliverables. BIM standards continue to evolve, and while no one standard can be applied to all types of projects, there are basic standards to ensure consistency of project deliverables.

5.1. Guidelines

- Submit all BIM models as Revit file format.
- The U.S. National CAD Standards-V6 recommends the following:
 - o All model files within a project should share the same coordinate system.
 - o All model files within a project should share coordinated units and unit tolerance.
 - All model files within a project should share the same basic level names and vertical reference datum.
 - Model(s) should be free of any unused or unnecessary views, links, references, or temporary content. All links or references should maintain portability and reusability (i.e. use relative paths and avoid embedding or binding content).
 - Model(s) should be free of any erroneous and/or duplicate geometry that cause errors in quantities (i.e. two identical chairs placed in the exact same location in the model may appear fine but will be an error in quantities). This also applies to content in aggregate where quantities should not be duplicated when derived from a collection of models that represent the building.
 - Model(s) should be free of excessive warnings or errors identified by the BIM software.
 Exceptions should be documented and distributed with model(s).
 - One composite model per building should be provided. Separate model files (i.e. discipline specific or separated by level, etc.) are insufficient when BIM is a deliverable.
 A holistic composite model is necessary even if the composite model is only used as a container for links and/or references (i.e. a means of packaging all related files for delivery).
 - Contract (Construction) Documents should be derived from the model(s). Avoid drafting 2D lines for modeled data but rather use 2D linework to embellish the model when necessary to convey intent. Sections and Details and other enlarged and more detailed views should utilize model content to the greatest extent possible.

Version 1 2016 Page **12** of **18**

SUBMITTING ELECTRONIC PROJECT DELIVERABLES

6. Uploading Files to e-Builder Folders (preferred method)

- All electronic drawing files must be accompanied with a drawing index (Appendix D).
- Northeastern University utilizes the project management system, "e-Builder," to deliver capital projects for Northeastern University clients and its use is required of all vendors that provide services for capital projects.

Electronic project deliverables are to be uploaded into e-Builder as follows:

- Upload files into Documents > 07 Construction Closeout folder
 - Upload drawings into Documents > 07 Construction Closeout > 01 As-Builts folder
 - Upload Certificate(s) of Occupancy into Documents > 07 Construction Closeout > 02
 Certificate of Occupancy folder
 - Upload specifications, final commissioning report, certificate of inspection(s), land surveys, and geotechnical reports into the Documents > 07 Construction Closeout > 03 Close-Out Documents.
 - Upload O&Ms into Documents > 07 Construction Closeout > 04 Operating Manuals folder.
 - If warranties are not included in the O&M manual, upload warranties into the Documents > 07 Construction Closeout > 05 Warranties folder.
- Permits may be uploaded into Documents > 06 Construction > 06 Permits.

6.1. Other Methods for Submitting Files

- All electronic drawing files must be accompanied with a drawing index (Appendix D).
- Project closeout electronic files may be emailed to <u>FacilitiesArchive@Northeastern</u>
 University.edu
- Project closeout electronic files may be loaded onto portable storage device and delivered to Northeastern University project manager.

Version 1 2016 Page **13** of **18**

APPENDICES

- A. Regulatory Approvals Checklist
- B. Deliverables Checklist
- C. Quality Assurance Checklist
- D. Drawing Index



A. REGULATORY APPROVAL CHECKLIST

Boston Redevelopment Authority – BRA

	Letter of Intent
	Project Notification
	Boston Zoning Commission Approval
	Boston Civic Design Commission Approval
	BRA Board Approval
	Cooperation Agreement
	Certificate of Compliance for ISD
	Certificate of Consistency for ISD
	Project Impact Report
	Article 32 Groundwater Conservation
Boston Transportation	on Department – BTD Transportation Access Plan Agreement (TAPA)
Mass Environment P	Protection Agency - Mass DEP- Chapter 91 Waterfront
IVIGOS ETIVITOTITICITE I	Total on Tigeria, India at a chapter of twaternone
П	Application
П	Permit
Mass Historical Com	mission – MHC
	Design Review/ Letter of Approval
	2 co.g Herich, Letter of Approval

□ Variance documents

Mass Architectural Access Board – MAAB

Version 1 2016 Page **15** of **18**

B. DELIVERABLES CHECKLIST

REQUIRED DOCUMENTS

As-built drawings
□ PDF
☐ CAD
☐ TIFF
Operations and Maintenance Manuals (O&Ms)
□ PDF
☐ Hardcopy
Warranties
□ PDF
Specifications
□ PDF – as book
☐ TIFF, PDF, CAD — as drawing
Final Commissioning Report, as applicable
□ PDF
Regulatory Approvals, all as applicable
□ PDF
Land Survey, as applicable
☐ TIFF, PDF
Environmental Reports, as applicable
☐ PDF – as document
☐ TIFF, PDF — as drawing

Version 1 2016 Page **16** of **18**

B. QUALITY ASSURANCE CHECKLIST

ARCHITECTURAL DRAWINGS

☐ Format / Production Requirements [section 4]
☐ Title Block Requirements [section 2.3.]
☐ Sheet Identification Requirements [section 2.4.]
☐ Use Disclaimer Requirement [2.8.]
CAD PRODUCTION
☐ Multiple drawing sheets broken into separate drawings [section 2.2.]
☐ Fonts and Text Styles [section 2.5.]
☐ External Reference Files (XREFS) [section 2.6.]
☐ Model Space and Paper Requirements [section 2.7]
☐ Layering [section 2.9.]
SUBMITTING ELECTRONIC PROJECT DELIVERABLES
☐ e-Builder [section 6]

Version 1 2016 Page **17** of **18**

C. DRAWING INDEX TEMPLATE

Drawing Index Template is located in e-Builder:

 $\label{localization} \mbox{Documents} \ \ \mbox{Project Closeout Drawing Index} \ \mbox{Template}$

To have a template emailed to you, email facilitiesarchive@notheastern.edu

10	nave a temp	blace emailed to you, email	<u>racintiesarcinve@notneaste</u>	m.euu		
NU Proje	ct Name			4		
NU Proje	ct					
Number						
Firm						
				Chec	ck (X) all for delivered	mats
Item#	Sheet #	Drawing Title	E-File Name	PDF	TIFF	DWG
1 of 35	A-1	Floor Plan	A-1 Floor Plan	X	X	X
			·			
	7					
NU Proje	ct Name: N	lame of the project consi	stent with name assigned	in e-Build	der	
NU Proje	ct Number:	: e-Builder number assigr	ned to project			
Firm: Na	me of your	business / organization				
Item #: It	emized tota	al number of drawings in	set, example, 2 of 40, or	7 of 10		
Sheet #:	the sheet ic	lentification number on t	the drawing, example, A-1	or <i>MD-0</i>	9	
Drawing	Title: the d	escription of drawing giv	en as title, example, <i>Floor</i>	Plan or V	Vall Sections	<u> </u>
E-File Na	me: the title	e given to the file of corr	esponding drawing, exam	ple, A-1 F	loor Plan	
Formats:	check (x) a	II formats that are being	submitted			

Version 1 2016 Page **18** of **18**

EXHIBIT 2 GUIDELINES FOR PREPARATION OF TASK ORDERS

Task Orders are intended to be discrete documents that will provide, in detail, the background and factual context within which a particular scope of work, work element or series of work elements will be completed by the Architect/Engineer. Task Orders shall be construed to be in addition to, supplementary to and consistent with the provisions of the text of the Agreement. The following guidelines shall be followed in preparing Task Orders for review and approval by the Authority.

1. SAMPLE FORMAT

Task Orders shall be prepared by the Architect/Engineer and submitted to the Authority for review and approval in strict accordance with the sample form attached. Task Orders shall only be numbered sequentially and the Architect/Engineer shall not create its own Task Order format. The Task Order shall be submitted on the Architect/Engineer's letterhead.

2. DETAILED COST BREAKDOWN

The Architect/Engineer shall attach a detailed cost breakdown in the form of a level-of-effort matrix which clearly identifies tasks, personnel, manhours and labor rates in the format provided on Schedule C. Reimbursable Expenses shall be described within the level of effort matrix. Furthermore, the level of effort matrix shall include a breakdown of costs for each and every sub-consultant or vendor.

3. TASK ORDER AMENDMENTS

Task Orders may be amended utilizing the same Task Order format. Each amendment shall operate as a separate document and shall not require a review of the original Task Order in order to understand the details of the amendment. Each amendment shall clearly identify what element of the original Task Order has been modified and what, if any, schedule or monetary impacts have resulted from such modifications. If the amendment will increase the overall amount of the Task Order, the Task Order amendment must include a level of effort matrix for the increased amount, as described above.

4. TASK ORDER CLOSEOUT

Upon completion of Task or completion of services for a particular Task Order, the Architect/Engineer is required to close out the Task Order by completing a Task Order Close-Out Form. The Architect/Engineer shall complete and sign the Task Order Close-Out Form and submit it to the Owner for its review and approval. The form identifies what Task and monies have been authorized and paid to date including any amendments. Once a Task Order Close-Out Form is signed by the Owner, the Task Order shall be considered closed and no other services may be performed or billed against the particular Task Order. Task Order Close-Out Forms can be obtained from the Project Manager. The Architect/Engineer should ensure that a separate Task Order Close-Out Form is completed for every Task Order executed under the Agreement.

[COMPANY LETTERHEAD]

1. COMPENSATION

In accordance with the provisions of the Agreement between Northeastern University and ______, the Architect/Engineer, dated as of ______, the Architect/Engineer is authorized to perform services as described in this Task Order for an amount of \$XXX. Such amount is further broken down as follows:

A not-to-exceed amount of \$ 0 A lump-sum amount of \$ 0

THIS TASK ORDER TOTAL \$ 0

2. EFFECTIVE DATE

This Task Order is effective beginning XXX until XXX.

3. SUMMARY DESCRIPTION, GOALS, AND OBJECTIVES

[Insert summary description, goals, and objectives of the Task Order here.]

4. SCOPE OF WORK

The specific scope of work to be accomplished under this Task Order will be in accordance with the following:

- SCOPE ELEMENT 1
- Etc.

5. SCHEDULE

The work shall proceed in accordance with the following Schedule of Milestones and Deliverables:

- MILESTONE 1 and DATE
- Etc.

6. ASSUMPTIONS

- Project will conform to Northeastern University Guidelines for Capital Project Design & Implementation and MEP Design Standards:
 - o <u>http://www.northeastern.edu/facilities/46-2/operations/nu-guidelines-for-capital-project-design-implementation/</u>
 - o <u>http://www.northeastern.edu/facilities/46-2/design-and-construction/northeastern-university-design-standards/</u>
- [Insert any additional assumptions.]

7. PAYMENT SCHEDULE

Compensation will be paid in accordance with the executed Northeastern University Agreement between Owner and Architect.

8. ATTACHMENTS

The following Attachments form part of this Task Order:

- Schedule C work plan detailing staffing breakdown, reimbursables, and consultants
- [Include any other attachments]

9. AUTHORIZATION

Approved By:		
	Architect/Engineer	Date
Recommended By:_		
•	Owner / Project Manager	Date
Recommended By: _		
Recommended by: _	Owner / Associate Vice President – Design and Construction	Date
Approved By:		
	Owner /	Date

SCHEDULE A - NORTHEASTERN UNIVERSITY INSURANCE REQUIREMENTS CERTIFICATE OF INSURANCE REQUIREMENTS

Minimum Insurance Coverages and Requirements

The Contractor, Architect, Engineer, or other Consultant (hereinafter the "Contractor")/ shall obtain and maintain the minimum insurance coverages set forth below. By requiring such minimum insurance, Northeastern University shall not be deemed or construed to have assessed the risk that may be applicable to Contractor under the contract of which this Schedule A is a part (hereinafter the "Contract"). Contractor shall assess its own risks and if it deems appropriate and/or prudent, maintain higher limits and/or broader coverages. The Contractor is not relieved of any liability or other obligations assumed or pursuant to the Contract by reason of its failure to obtain or maintain insurance in sufficient amounts, duration, or types. The insurance coverages stated below do not replace any surety (performance, payment or maintenance) bonds as required by contract.

Coverages (The provisions shown in italics should be included when exposures warrant.)

- 1. Commercial General Liability Coverage to include:
 - Premises and Operations
 - Explosion, Collapse and Underground Hazards
 - Personal/Advertising Injury
 - Products/Completed Operations
 - Liability assumed under an Insured Contract (including defense costs assumed under contract)
 - Broad Form Property Damage
 - Independent Contractors
 - Limited Pollution Liability Extension Endorsement ISO CG 2415 (10-01) or equivalent
 - Pollution Exclusion Limitation Endorsement Overspray
 - Designated Construction Project(s) General Aggregate Limit, ISO CG 2503 (1997 Edition) or equivalent
- 2. Automobile Liability including all
 - Owned, Non-Owned & Hired Vehicles
 - Personal Injury Protection
 - If the contractor/vendor is transporting any hazardous materials, a Pollution Liability Broadened Coverage for Autos endorsement must be added to the Business Automobile Policy by ISO endorsement CA 9948 3/06 or its equivalent and MCS-90.

Required for contractors / vendors where they transport NU property, transport NU employees, students or invitees; or use of a vehicle is integral to the performance of the contract or if the vehicle will be used on NU premises.

- 3. Workers Compensation
 - Statutory Benefits (Coverage A) including applicable coverage such as USL&H or FELA as applicable to the project or work
 - Employers Liability (Coverage B)
- 4. Umbrella/Excess Liability: Contractor is required to have an Umbrella/Excess Liability policy that extends over the Contractor's General Liability, Automobile Liability, and Employer's/ Workers

Compensation Liability policies. Any Contractor that is required to maintain General Liability, Auto Liability, and Employers/Workers Compensation Liability insurance who does not meet the minimum University requirements for these coverages may elect to obtain an Umbrella or Excess policy in an amount that brings the overall limit to the indicated University minimum requirement for each coverage in lieu of increasing each underlying policy limit

- 5. Professional Liability (including Design Build Errors & Omissions) Whenever the work under this contract includes Professional Liability, Contractor shall maintain professional liability covering wrongful acts, errors and/or omissions of (Contractor) for damage sustained by reason of or in the course of operations under this contract.
- 6. Valuable Papers and Records Insurance This coverage is required if the Contract is a "Northeastern University Agreement Between Owner and Architect/Engineer" to cover restoration of plans, drawings, computations, field notes, and other data pertinent to this contract shall be carried in the amount of \$2,000,000
- 7. Contractors Pollution Liability Northeastern University may require this coverage whenever work under this contract involves an environmental exposure. This coverage is to include sudden and gradual coverage for third-party liability including defense costs and completed operations.

\$20,000,000

Limits Required

Contractor shall carry the following limits of liability:

COMMERCIAL GENERAL LIABILITY

•	General Aggregate	\$2,000,000
•	Products/Completed Operations Aggregate	\$2,000,000
•	Each Occurrence Limit	\$1,000,000
•	Personal/Advertising Injury	\$1,000,000
•	Fire Damage (Any One Fire)	\$250,000
•	Medical Payments (Any One Person)	\$5,000

AUTOMOBILE LIABILITY:

•	Bodily Injury/Property Damage (Combined Single Limit):	\$1,000,000
•	If the vehicle being used has a Gross Vehicle Weight Rating of Class	
	6-8 / US DOT rating of "Heavy Duty" (19,501+ lbs.):	\$2,000,000
•	For any vehicle being used can carry multiple persons (including driver):	
	o 5 – 10 persons:	\$5,000,000
	o 10 - 20 persons:	\$10,000,000

WORKERS COMPENSATION

o 20 or more persons:

•	Coverage A (Workers Compensation)		Statutory
•	Coverage B (Employers Liability)		\$100,000/\$100,000/\$500,000

UMBRELLA LIABILITY

•	Each Occurrence Limit	\$1,000,000
•	General Aggregate Limit	\$1,000,000
•	Products/Completed Operations Aggregate	\$1,000,000

Contracts for boiler/chiller installations, cleaning/janitorial, debris removal, hazardous materials removal, electrical work, elevator work, environmental remediation, exterior work (facades, roofs, concrete work), plumbers, roof tanks, and/or scaffolding, require the following Umbrella Liability limits:

•	Each Occurrence Limit	\$5,000,000
	General Aggregate Limit	\$5,000,000
	Products/Completed Operations Aggregate	\$5,000,000

PROFESSIONAL LIABILITY (if required) - Aggregate

•	Architect: Interior or Landscaping Design Services:	\$1,000,000
•	Architect: Structural Integrity Audits:	\$5,000,000
•	Architect: Building Structural Design:	\$10,000,000
•	Engineer:	\$1,000,000

CONTRACTORS POLLUTION LIABILITY (if required)

• Painting, cleaning, janitorial:

Per Loss: \$1,000,000Aggregate: \$2,000,000

- Large-scale painting contracts (as identified/directed in writing by Owner); asbestos abatement
 - o Per Loss: \$5,000,000
 - o Aggregate \$10,000,000



GENERAL REQUIREMENTS FOR ALL INSURERS

Northeastern University requires that all insurers:

- 1. Be licensed or approved to do business within the Commonwealth of Massachusetts or within the state in which the project is to be performed.
- 2. Write required insurance on an occurrence basis, provided however that Professional Liability and Pollution Liability are acceptable written on a claims-made basis.
- 3. Write policies on a primary basis, non-contributory with any other insurance coverages and/or self-insurance carried by Northeastern University; include a Waiver of Subrogation Clause; and not be renewed, cancelled or materially changed or altered unless thirty (30) days advance written notice via certified mail is provided to Northeastern University.
- 4. Name Northeastern University and its Board of Trustees, officers and employees, agents and volunteers, as well as any third parties, if requested in writing by Northeastern University, as "Additional Insureds" on general liability, umbrella/excess liability, environmental liability and other policies as specified by the contract Using ISO Form CG 2010 10/01 and CG2037 10/01 or equivalent.

Further, all policies shall:

- 1. Required insurance coverages shall be maintained throughout the term of this contract, and any claims-made coverages shall be maintained for a period of six (6) years after the date of completion of the project.
- 2. Possess a minimum A.M. Best's Insurance Guide rating of A VII. A.M. Best rating is composed of two parts: the letter denotes the company's level (see chart below) and the Roman numeral denotes financial size.

Level	Category
A++	Superior
A+	Superior
A	Excellent
A-	Excellent
B++	Very Good
B+	Good
B-	Good
C++	Fair
C+	Fair
C	Marginal
C-	Marginal
D	Below minimum standards

3. Not have an aggregate impairment that would bring the coverage below the minimum required limits as stated above.

The level assigned to a company is an indicator of the company's ability to meet obligations over a long period of time. Financial Size is measured by Roman numerals ranging from Class I (the smallest) to Class XV (the largest). Financial size provides an indication of the amount of reserves or policyholders' surplus the company reported as liabilities. The amount of the policyholders' surplus determines the amount of insurance the company may prudently underwrite.

Schedule B
Rate Schedule for Architectural and Consulting Services

Position	Name	DPE	OHP %	Rate
Principle in-charge				\$ -
Project Architect				\$ -
Drafting				\$ -
Other				\$ -
Other				\$ -
Other				\$ -
Other				\$ -
Other				\$ -

Percent mark-up on Reimbursables		
Percent mark-up on Consultants		



Project Budget for Architectural and Consulting Services

Only fill in line items that have been numbered 1-21 on the left

## Name	chitectural Basic Services		Cor	ceptual De	esign			Sch	nematic Des	ign			Desi	gn Develop	ment		_	Consti	uction Dog	uments			Constru	ction Admi	inistration		To
Horse Floor Floo		A	В	С	D	E	A	В	С	D	E	A	В	C	D	E	A	В	C	D	E	A	В	С	D	E	
Fig.					B*1.C	D*A				B*1.C	D*A				B*1.C	D*A				B*1.C	D*A				B*1.C	D*A	
Fig.		Hours	DPE	OHP %	Rate	Total	Hours	DPE	OHP %	Rate	Total	Hours	DPE	OHP %	Rate	Total	Hours	DPE	OHP %	Rate	Total	Hours	DPE	OHP %	Rate	Total	
## Nome ## 17 2																											\$ 1,
Fig.	ff #1 Name		7		S -			7				1	7 2100					-			_			1		S -	S
FE	iff #2				s -	\$ -				\$ -	\$ -				\$ -	\$ -				S -	š -				s -	s -	S
Feb	iff #3				s -	\$ -	1			\$ -	\$ -			.	s -	\$ -				\$ -	\$ -	-	— ——		s -	s -	s
Fig.	iff #4				\$ -	\$ -				\$ -	\$ -				\$ -	Š			T	\$ -	\$ -	-			\$ -	\$ -	s
Fig.	iff #5				s -	\$ -				\$ -	\$ -				\$ -	\$ -				\$ -	\$ -				S -	\$ -	\$
Fig.	iff #6				\$ -	\$ -				\$ -	\$ -				\$ -	\$ -				s -	\$ -				\$ -	\$ -	\$
Social Residence Social Resi	iff #7				\$ -	\$ -				\$ -	\$ -				\$ -	\$ -				\$ -	\$ -				\$ -	\$ -	\$
Social Residence Social Resi	iff #8				S -	\$ -				\$ -	S -				S -	\$ -				\$ -	\$ -				\$ -	\$ -	\$
S	btotal	-				\$ -	-				\$ -	-				\$ -					\$ -	-				S -	S
wo mbursable Allowance Amount																						•					
Industriable Allowance Anomal response to the processing equipments File of the processing equipment File of the processing equipments File of the processing equipment File	b-total Basic Services					\$ -					\$ -					\$ -					\$ -					\$ -	\$
Industriable Allowance Anomal response to the processing equipments File of the processing equipment File of the processing equipments File of the processing equipment File	_													,													
rk up on Reinhursahle Percentage quantum punch O's S Percentage quantum punch						i					i				_											_	7
S		Damardana		00/		¢	Demonstrate		00/		¢	D days	_	00/		¢	Description		00/		¢.	Demonstra		00/		6	-
		Percentage	pls insert your%)	0%		-	Percentage (pls insert your%)	0%		-	Percentage	(pls insert your%)	0%			Percentage	pls insert your%)	0%			Percentage	(pls insert your%)	0%	2	_	
S S S S S S S S S S	b-Total Keimbursable					\$ -					5 -					\$ -					\$ -					2 -	\$
Schematic Persistent Schematic Design Schemat						\$ -					\$ -					\$ -					\$ -					\$ -	\$
Total Tota	tal Architectural Services Cost					\$ -					\$ -			4		\$ -					\$ -					\$ -	\$
Second S	tal Architectural Services Cost		Cor	centual De	esion	\$ -		Sel	nematic Des	ion	\$ -		Desi	on Develon	ment	\$ -		Const	ruction Doc	ruments	\$ -		Constru	ction Admi	inistration	\$ -	
S	al Architectural Services Cost		Cor	ceptual De	esign	Ť		Sch	nematic Des	ign			Desi	gn Develop	ment	Ť		Constr	ruction Doo	cuments			Constru	ction Admi	inistration		
S	al Architectural Services Cost		Cor	iceptual De	esign	Total		Sch	nematic Des	ign	Total		Desi	gn Develop	ment	Total		Consti	ruction Doc	cuments	Total		Constru	ction Admi	inistration	Total	
Marked	al Architectural Services Cost our nsultant Services nsultant #1		Cor	ceptual De	esign	Total		Sel	nematic Des	ign	Total		Desi	gn Develop	ment	Total		Constr	ruction Doo	cuments	Total		Constru	ction Admi	inistration	Total	
S	tal Architectural Services Cost four nsultant Services nsultant #1 mbursable Allowance		Cor	ceptual De	esign	Total \$ - \$		Sch	nematic Des	ign	Total \$ - \$ -		Desi	gn Develop	ment	Total \$ - \$		Constr	ruction Doo	cuments	Total \$ - \$ -		Constru	ction Admi	inistration	Total \$ -	
S S S S S S S S S S	tal Architectural Services Cost Four Insultant Services Insultant #1 Insultant #2 Insultant #2		Cor	ceptual De	esign	Total \$ - \$ - \$		Sch	nematic Des	ign	Total \$ - \$ -		Desi	gn Develop	ment	Total \$ - \$ - \$		Constr	ruction Doo	cuments	Total \$ - \$ - \$ -		Constru	ction Admi	inistration	Total \$ -	\$ \$ \$ \$
S	tal Architectural Services Cost Sour Insultant Services Insultant #1 Imbursable Allowance Insultant #2 Imbursable Allowance		Cor	ceptual De	esign	Total \$ - \$ - \$ - \$ -		Sch	nematic Des	ign	Total \$ - \$ -		Desi	gn Develop	ment	Total \$ - \$ - \$ - \$ -		Constr	ruction Doo	cuments	Total \$ - \$ - \$ - \$ - \$ -		Constru	ction Admi	inistration	Total \$ - \$ - \$ - \$ -	
Multivable Allowance	Three tal Architectural Services Cost Four insultant Services insultant #1 imbursable Allowance insultant #2 imbursable Allowance insultant #3 imbursable Allowance		Сог	aceptual De	esign	Total \$ - \$ - \$ - \$ - \$ - \$		Sch	nematic Des	ign	Total \$ - \$ -		Desi	gn Develop	ment	Total \$ - \$ - \$ - \$ - \$ - \$		Constr	ruction Doo	ruments	Total \$ - \$ - \$ - \$ - \$ - \$ -		Constru	ction Admi	nistration	Total \$ - \$ - \$ - \$ -	
S	tal Architectural Services Cost Four Insultant Services Insultant #1 Inimbursable Allowance Insultant #2 Insultant #3 Insultant #3 Insultant #3 Insultant #3 Insultant #3 Insultant #3		Cor	aceptual De	esign	Total \$ - \$ - \$ - \$ - \$ - \$ -		Set	nematic Des	ign	Total \$ - \$ - \$ - \$ - \$ -		Desi	gn Develop	ment	Total \$ - \$ - \$ - \$ - \$ - \$ \$ -		Constr	ruction Doo	cuments	Total \$ - \$ - \$ - \$ - \$ -		Constru	ction Admi	inistration	Total \$ - \$ - \$ - \$ -	
Multipage	tal Architectural Services Cost Sour Insultant Services Insultant #1 Imbursable Allowance Insultant #2 Imbursable Allowance Insultant #3 Imbursable Allowance Insultant #4 Imbursable Allowance Insultant #4		Cor	aceptual De	esign	Total S - S - S - S - S - S - S -		Sci	nematic Des	ign	Total \$ - \$ - \$ - \$ - \$ -		Desi	gn Develop	ment	Total \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -		Consti	ruction Doo	cuments	Total \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -		Constru	ction Admi	inistration	Total \$ - \$ - \$ - \$ - \$ - \$ -	
-total Consultant Services S - S - S - S - S - S - S - S - S - S	our insultant Services insultant #1 inbursable Allowance insultant #2 inbursable Allowance insultant #3 inbursable Allowance insultant #4 inbursable Allowance insultant #4 inbursable Allowance insultant #4 inbursable Allowance insultant #4 inbursable Allowance		Сон	eceptual De	esign	Total \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$		Sch	nematic Des	ign	Total \$ - \$ - \$ - \$ - \$ -		Desi	gn Develop	ment	Total \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -		Const	ruction Doo	ruments	Total \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -		Constru	ction Admi	inistration	Total \$ - \$ - \$ - \$ - \$ - \$ -	
ive hitect Mark up on Consultants Percentage (pla insert your%) 0% \$ - \$ S - \$ S ix	tal Architectural Services Cost Four Insultant #1 Imbursable Allowance Insultant #2 Imbursable Allowance Insultant #3 Imbursable Allowance Insultant #4 Imbursable Allowance Insultant #4 Imbursable Allowance Insultant #4 Imbursable Allowance Insultant #5 Imbursable Allowance Insultant #5 Imbursable Allowance Insultant #5 Imbursable Allowance Insultant #5 Imbursable Allowance Imbursabl		Cor	aceptual De	esign	Total \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$		Sch	nematic Des	ign	Total \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -		Desi	gn Develop	ment	Total \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -		Constr	ruction Doo	ruments	Total \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -		Constru	ction Admi	inistration	Total \$ - \$ - \$ - \$ - \$ - \$ -	
thitect Mark up on Consultants Percentage (pla innert your%) 0% \$ - Percentage (pla i	tal Architectural Services Cost Sour Insultant #1 Imbursable Allowance Insultant #2 Imbursable Allowance Insultant #3 Imbursable Allowance Insultant #4 Imbursable Allowance Insultant #4 Imbursable Allowance Insultant #4 Imbursable Allowance Insultant #5 Imbursable Allowance Insultant #5 Imbursable Allowance Imbursable Allowance Imbursable Allowance		Cor	oceptual De	esign	Total \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$		Set	nematic Des	ign	Total \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -		Desi	gn Develop	ment	Total \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$		Const	ruction Doc	ruments	Total \$		Constru	ction Admi	inistration	Total \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	
ix	al Architectural Services Cost our assultant Services assultant #1 mbursable Allowance assultant #2 mbursable Allowance assultant #3 mbursable Allowance ssultant #4 mbursable Allowance ssultant #4 mbursable Allowance ssultant #5 mbursable Allowance ssultant #5 mbursable Allowance		Cor	ceptual De	esign	Total \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$		Sch	nematic Des	ign	Total \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -		Desi	gn Develop	ment	Total \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$		Constr	ruction Doc	cuments	Total \$		Constru	ction Admi	inistration	Total \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	
	tal Architectural Services Cost Four Insultant #1 Indurable Allowance Insultant #2 Insultant #3 Indurable Allowance Insultant #4 Indurable Allowance Insultant #4 Indurable Allowance Insultant #4 Indurable Allowance Insultant #5 Indurable Allowance Insultant #5 Indurable Allowance Insultant #5 Indurable Allowance Insultant #5 Indurable Allowance Indurable Indurable Indurable Indurable Indurable Indurabl					Total S - S - S - S - S - S - S - S - S - S					Total S - S - S - S - S - S - S - S - S - S				ment	Total S - S - S - S - S - S - S - S - S - S			ruction Doo	ruments	Total \$ -					Total S - S - S - S - S - S - S - S - S - S -	
a consuman with Arcinicctura mark up	tal Architectural Services Cost four insultant #1 insultant #2 insultant #2 insultant #2 insultant #3 insultant #4 insultant #4 insultant #4 insultant #4 insultant #5 insultant #5 insultant #6 insul	Percentage				Total S - S - S - S - S - S - S - S - S - S	Percentage				Total S - S - S - S - S - S - S - S - S - S	Percentage			ment	Total S - S - S - S - S - S - S - S - S - S	Percentage		O%	ruments	Total \$ -	Percentage				Total S - S - S - S - S - S - S - S - S - S -	
	tal Architectural Services Cost Four Insultant Services Insultant Services Insultant #1 Insultant #2 Insultant #3 Insultant #4 Insultant #4 Insultant #5 Insultant #5 Insultant #5 Insultant #5 Insultant #6 Insulta					Total S - S - S - S - S - S - S - S - S - S	Percentage				Total \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	Percentage				Total \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	Percentage		uction Doc	cuments	Total \$ \$ \$ \$ \$ \$ \$ \$	Percentage				Total S - S - S - S - S - S - S - S - S - S -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$

Total A&E Project Costs

OHP is based on a % of DPE

Schedule D

D-1: SCHEDULE FOR PARTICIPATION BY MINORITY/WOMEN/SMALL-LOCAL BUSINESS ENTERPRISES

This Schedule D-1 must be submitted to Northeastern University within five (5) business days of the Bidder's receipt of its notice of bid award. Failure to submit within the required time may result in cancellation of the bid award. BIDDER CERTIFICATION: The Bidder agrees that if awarded the contract it will expend at least the amount of the contract set forth below for M/W/SLBE participation. For purposes of this commitment, the MBE and WBE designation means that a business has been certified by SDO as an MBE or WBE. The Bidder must indicate the M/WBE firms it intends to utilize on the project as follows (attach additional sheets if necessary): Company Name & MBE, WBE or SLBE Scope(s) of Work Supply or Labor Total Dollar Value of Contract M/W/SLBE Goal: \$ Total Dollar Value of WBE Commitment: \$	NU Project Number: NU Project Name: Bidder:				
The Bidder agrees that if awarded the contract it will expend at least the amount of the contract set forth below for M/W/SLBE participation. For purposes of this commitment, the MBE and WBE designation means that a business has been certified by SDO as an MBE or WBE. The Bidder must indicate the M/WBE firms it intends to utilize on the project as follows (attach additional sheets if necessary): Company Name & MBE, WBE Or SLBE Scope(s) of Work Supply or Labor Total Dollar Value of Contract	receipt of its notice of b				
Address or SLBE Scope(s) of Work Supply or Labor Of Contract M/W/SLBE Goal: \$ Total Dollar Value of MBE Commitment: \$	The Bidder agrees that it M/W/SLBE participation has been certified by SD the project as follows (at	f awarded the con. For purposes to as an MBE of tach additional	of this commitment, the ME r WBE. The Bidder must inc	BE and WBE designation	means that a business it intends to utilize on
M/W/SLBE Goal: \$ Total Dollar Value of MBE Commitment: \$			Scope(s) of Work	Supply or Labor	
Total Dollar Value of WBE Commitment: \$	Tiddl ess	OI SEDE	Scope(s) of Work	Supply of Lubbi	Greontract
Total Dollar Value of WBE Commitment: \$					
Total Dollar Value of WBE Commitment: \$				4	
including the names of all M/W/SLBEs the Bidder contacted prior to its bid submission and the dates of such contact. The undersigned hereby certifies that he/she has read the terms and conditions of the contract with regard to M/W/SLBE participation and is authorized to bind the Bidder to the commitment set forth above. Name of Firm	M/W/SLBE Goal: \$	_	Total Dollar Value of	WBE Commitment: \$_	%
M/W/SLBE participation and is authorized to bind the Bidder to the commitment set forth above. Name of Firm Business Address Print Name Authorized Signature Title	including the names of a	_			
M/W/SLBE participation and is authorized to bind the Bidder to the commitment set forth above. Name of Firm Business Address Print Name Authorized Signature Title					
M/W/SLBE participation and is authorized to bind the Bidder to the commitment set forth above. Name of Firm Business Address Print Name Authorized Signature Title					
Name of Firm Business Address Print Name Authorized Signature Title					
Print NameAuthorized Signature Title		n and is authoriz	zed to bind the Bidder to the		ove.
Title					
	Business Address Print Name				

Schedule D

D-2: Minority/Women/Small Local Business Enterprise (M/W/SLBE) **Progress Payment Certification**

PROGRESS REPORT & CERTIFICATION

Schedule D-2 must be submitted with each of the Architect/Engineer's invoices.

The Architect/Engineer subcontracting.	must use a separate Schedi	ule D-2 for each M/W/SLBE	with which it is
Invoice No.:	Invoice Date:	Period T	o:
NU Project No:		Subcontract Start Date:	
NU Project Name:		Subcontract Est. Date of	
J		Completion:	
Architect/Engineer:		M/W/SLBE Contractor:	
Prime Contract		M/WBE Cert. Date:	
Amount (adjusted):		SLBE ZIP Code:	
 Amount Paid This Total Amount Pai Balance Due to M Comments	d to Date:		
		· · · · · · · · · · · · · · · · · · ·	
supplied herein is corre M/W/SLBE Contractor its work to any other fir ARCHITECT/ENGIN	ct and complete. For contract performed its work with its m.	s of perjury I hereby certify that cts including labor, I hereby ce own employees and did not su	rtify that the
(Signature) (Printed Name) (Title)			
(Date)			

Schedule D

D-3: Minority/Women/Small Local Business Enterprise (M/W/SLBE) Final Payment Certification

FINAL REPORT & CERTIFICATION

The Architect/Engineer must use a separate Schedule D-3 for each M/W/SLBE with which it is subcontracting. Period To: Invoice No.: _____ Invoice Date: Subcontract Start Date: NU Project No: NU Project Name: Subcontract Est. Date of Completion: M/W/SLBE Contractor: Architect/Engineer Manager: M/WBE Cert. Date: Prime Contract Amount (adjusted): SLBE ZIP Code: **Contracting Details:** 1. M/W/SLBE Subcontract Amt.: 2. Amount Paid This Period: 3. Total Amount Paid to Date: 4. Balance Due to M/W/SLBE: **Comments CONTRACTOR CERTIFICATION**: Under the pains and penalties of perjury I hereby certify that the information supplied herein is correct and complete. For contracts including labor, I hereby certify that the M/W/SLBE Contractor performed its work with its own employees and did not subcontract or assign its work to any other firm. ARCHITECT/ENGINEER: (Signature) (Printed Name) (Title)

(Date)