Annual Report Submission

University of Maryland

Annual Report Submission for the year 2012 .

Report has been submitted 0 times.

PART I - ANNUAL STATISTICAL REPORT

SECTION A. INSTITUTIONAL CHARACTERISTICS

1. Program Contact Information

Institution Name:	University of Maryland
Academic Unit:	School of Architecture, Planning & Preservation
Address:	
	College Park, MD 20742-1411
Architecture Program Tel. No:	301.405.8000
Architecture Program School Fax No:	301.314.9583
Architecture Program School URL:	www.arch.umd.edu
NAAB Region:	Northeast

In order to modify your organization information please contact NAAB via E-mail at info@naab.org.

2. Institution Type: Using the definitions below, please select the appropriate Institution Type that matches that of your institution.

Public

3. Carnegie Classification

a. Basic Classification:
RU/VH: Research Universities (very high research activity)

b. Undergraduate Instructional Program:
A&S+Prof/HGC: Arts & sciences plus professions, high graduate coexistence

c. Graduate Instructional Program:
CompDoc/MedVet: Comprehensive doctoral with medical/veterinary

d. Size and Setting:
L4/R: Large four-year, primarily residential

4. Which regional accreditation agency accredits your institution?

Middle States Association of Colleges and Schools (MSACS)

5. In which ACSA region is the institution located?

Northeast

Questions 6, 7, and 8 regarding Contact Information.

6. Who has direct administrative responsibility for the architecture program?

Name	Brian Kelly, AIA
Title	Assoc. Professor, Director, Architecture Program
Office Phone Number	301-405-4592
Fax Number	301-314-9583
Email Address	bkelly@umd.edu

7. To whom should inquiries regarding this questionnaire be addressed?

Name	Brian Kelly, AIA
Title	Assoc. Professor, Director, Architecture Program
Office Phone Number	301-405-4592
Fax Number	301-314-9583
Email Address	bkelly@umd.edu

8. Who is the administrator responsible for verifying data (and completing IPEDS reports) at your institution?

Name	Pamela Phillips
Title	Associate Director, Office of Institutional Resear
Office Phone Number	301-405-5590
Fax Number	301-314-9443
Email Address	email monal@umd.edu

9. Institutional Test Scores

Please only include average scores for the tests your institution collects. For test scores your institution does not collect, leave the corresponding boxes blank

a. SAT

Critical Reading

25th percentile SAT score:	580
75th percentile SAT score:	680

Mathematics

25th percentile SAT score:	610
75th percentile SAT score:	720

Writing

25th percentile SAT score:	
75th percentile SAT score:	

b. ACT

25th percentile ACT score:	
75th percentile ACT score:	

c. GRE

Verbal: 530 (200-800)

Quantitative:	689	(200-800)
Analytical:	3.9	(0.0 – 6.0)

SECTION B. NAAB-ACCREDITED ARCHITECTURE PROGRAMS

1. Degree Programs

a. Which NAAB-accredited / candidate degree programs were offered during the last fiscal year?

Accredited

B. Architecture
M. Architecture X
D. Architecture

Candidate

B. Architecture
M. Architecture
D. Architecture

b. Did your institution offer any pre-professional architecture degree programs during the last fiscal year?

For pre-professional degrees, if you do not offer any of the ones listed below, please be sure to select "no" or else the system will consider this question left blank and an error message will occur upon submission.

Yes

Degree Type	Available?	Full Degree Title
Bachelor of Architectural Studies	No	
Bachelor of Arts	No	
Bachelor of Design	No	
Bachelor of Environmental Design	No	
Bachelor of Fine Arts	No	
Bachelor of Science	Yes	Bachelor of Science in Architecture
Other	No	

c. Did your institution offer any post-professional architecture degree programs during the last fiscal year?

Yes

Full Degree Title
Master of Science in Architecture

2. Does your institution have plans to initiate any new NAAB-accredited degree programs?

No

3. Does your institution have plans to discontinue any of its NAAB-accredited degree programs?

No

4. What academic year calendar type does your institution have?

2 Semesters or Trimester

5. Credit Hours for Completion for each program:

The degree programs listed in this section are dependent on your selection in Section B, Question 1a.

a. Indicate the total number of credit hours taken at your institution to earn each NAAB accredited/candidate degree offered by your institution.

M. Architecture undergraduate (five years, no baccalaureate degree awarded prior): 0

M. Architecture Pre-Professional (degree designed for candidates who have a pre-professional degree in architecture): 60

M. Architecture Non-Pre-Professional (degree designed for candidates who have an undergraduate degree in a discipline other than architecture): 109

b. By degree, what is the distribution of credit hours in the following: General Education, Professional, and Electives?

M. Architecture undergraduate (five years, no baccalaureate degree awarded prior)

General Education: 0

Professional: 0

Electives: 0

M. Architecture Pre-Professional (degree designed for candidates who have a pre-professional degree in architecture)

General Education: 0

Professional: 45

Electives: 15

M. Architecture Non-Pre-Professional (degree designed for candidates who have an undergraduate degree in a discipline other than architecture)

General Education: 0

Professional: 94

Electives: 15

6. Average credit hours per student per term by degree program:

M. Architecture undergraduate (five years, no baccalaureate degree awarded prior): 0

M. Architecture Pre-Professional (degree designed for candidates who have a pre-professional degree in architecture): 15

M. Architecture Non-Pre-Professional (degree designed for candidates who have an undergraduate degree in a discipline other than architecture): 16

7. Is your degree program(s) offered in whole, or in part, at more than one campus or location?

Exclude those locations where only 1 course is offered (e.g., an urban design center) and include any location where students can complete at least 45% of the curriculum.

No

City and State	Country	Credit Hours

SECTION C. TUITION, FEES AND FINANCIAL SUPPORT FOR STUDENTS IN NAAB-ACCREDITED PROGRAMS

1. Tuition is defined as "the amount of money charged to students for instructional services. Tuition may be charged per credit, per term, or per academic year."

For part-time tuition rates, include the cost per credit or course.

a. What were the tuition and fees for the NAAB-accredited degree program(s) for the last fiscal year?

M. Architecture

If this section is not applicable, please enter all zero's (0).

	Tuition	Fees
Full-Time Student		
In-State	15750	691
Out-of-State	33930	691
Part-Time Student		
In-State	8400	386
Out-of-State	18096	386

b. Does the institution offer discounted or differential tuition for a NAAB-accredited degree program?

No

c. Is a summer session required for any portion of your accredited degree program(s)?

No

If yes, indicate the additional tuition and fees for the summer program:

	Tuition	Fees
Full-Time Student		
In-State	0	0
Out-of-State	0	0
Part-Time Student		
In-State	0	0
Out-of-State	0	0

d. Does the institution offer discounted or differential tuition for summer courses for a NAAB-accredited degree program?

No

Additional Comments

Figures above reflect 2-semester annual tuition. Full-time based on 15 credit hour / semester load. Part-time based on 8 credit hour / semester load. In state tuition / credit hour $525.00 Out of state tuition / credit hour $1131.00 Source: http://www.umd.edu/bursar/t_grd1112.html

2. Financial Aid

What percentage of students received financial aid at both the institutional and architecture program levels (grants, loans, assistantships, scholarships, fellowships, tuition waivers, tuition discounts, veteran's benefits, employer aid [tuition reimbursement] and other monies [other than from relatives/friends] provided to students to meet expenses)?

	Percentages of students receiving aid	Average amount by types of aid

a. Institution		
Federal Grants	2	$9,397.00
State/Local Grants	1	$1,881.00
Institutional Grants	39	$17,742.00
Student Loans	34	$24,013.00
b. Architecture Program		
Federal Grants	0	$0.00
State/Local Grants	2	$1,650.00
Institutional Grants	80	$11,733.00
Student Loans	64	$21,689.00

3. Graduate Assistantships

What was the total number of graduate-level students employed on a part-time basis for the primary purpose of assisting in classroom or laboratory instruction or in the conduct of research during the last fiscal year (July 1 – June 30) within the NAAB-accredited programs offered by your institution?

Include the number of graduate-level students employed for the full fiscal year.

a. How many graduate assistantships were awarded during the last fiscal year?

69

b. What do graduate assistants receive?

Stipend?

Yes

Amount: $3,861.00

Tuition Remission?

No

If tuition, how much?

If credit hours, how many? 5

SECTION D. STUDENT CHARACTERISTICS FOR NAAB-ACCREDITED AND PREPROFESSIONAL PROGRAMS

1. First year students/entering students: Indicate the number of individuals who enrolled during the last fiscal year. Exclude readmitted students who were counted as enrolled in a prior year). Information about ethnicity must be based on self-identification information provided by the individual.

M. Architecture Total Entering Students: 27

M. Architecture

	Male		Female		TOTAL		GRAND
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	TOTAL
American Indian or Alaska Native	1	0	0	0	1	0	1
Asian	0	0	4	0	4	0	4
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0
Black or African American	0	0	1	0	1	0	1
Hispanic/Latino	1	0	0	0	1	0	1
White	0	0	0	0	0	0	0
Two or more races	0	0	1	0	1	0	1
Nonresident alien	1	0	1	0	2	0	2
Race and ethnicity unknown	8	0	9	0	17	0	17
TOTAL	11	0	16	0	27	0	27

Pre-Professional Total Entering Students: 39

Pre-Professional

	Male		Female		TOTAL		GRAND
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0
Asian	1	0	2	0	3	0	3
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0
Black or African American	3	0	1	0	4	0	4
Hispanic/Latino	2	0	5	0	7	0	7
White	9	0	13	0	22	0	22
Two or more races	1	0	0	0	1	0	1
Nonresident alien	0	0	1	0	1	0	1
Race and ethnicity unknown	1	0	0	0	1	0	1
TOTAL	17	0	22	0	39	0	39

2. Total undergraduate/graduate architecture enrollment in NAAB accredited program by race/ethnicity:

M. Architecture Total Enrollment: 78

M. Architecture

	Male		Female		TOTAL		GRAND
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	TOTAL
American Indian or Alaska Native	1	0	0	0	1	0	1
Asian	1	0	8	1	9	1	10
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0
Black or African American	0	0	2	0	2	0	2
Hispanic/Latino	4	0	2	0	6	0	6
White	25	1	23	0	48	1	49
Two or more races	1	0	3	0	4	0	4
Nonresident alien	2	0	4	0	6	0	6
Race and ethnicity unknown	0	0	0	0	0	0	0
TOTAL	34	1	42	1	76	2	78

Pre-Professional Total Enrollment: 195

Pre-Professional

	Male		Female		TOTAL		GRAND
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	TOTAL
American Indian or Alaska Native	0	0	1	0	1	0	1
Asian	7	0	13	0	20	0	20
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0
Black or African American	9	0	4	0	13	0	13
Hispanic/Latino	14	2	12	0	26	2	28
White	61	2	58	1	119	3	122
Two or more races	1	1	2	0	3	1	4
Nonresident alien	2	0	1	0	3	0	3
Race and ethnicity unknown	2	0	2	0	4	0	4
TOTAL	96	5	93	1	189	6	195

SECTION E. DEGREES AWARDED

1. What is the total number of NAAB-accredited degrees that were awarded in the last fiscal year?

M. Architecture

	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0
Asian	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0
Black or African American	1	0	1
Hispanic/Latino	1	3	4
White	6	9	15
Two or more races	0	0	0
Nonresident alien	0	1	1
Race and ethnicity unknown	1	1	2
TOTAL	9	14	23

Pre-Professional

	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0
Asian	1	6	7
Native Hawaiian or other Pacific Islander	0	0	0
Black or African American	0	1	1
Hispanic/Latino	2	1	3
White	18	10	28
Two or more races	1	0	1
Nonresident alien	0	0	0
Race and ethnicity unknown	0	0	0
TOTAL	22	18	40

2. Time to Completion:

M. Architecture undergraduate (five years, no baccalaureate degree awarded prior)

a. Time to completion equals the total number of semesters/quarters to complete the degree: 0

b. Percentage of students that graduate in “normal time to completion”: 0

M. Architecture Pre-Professional (degree designed for candidates who have a pre-professional degree in architecture)

a. Time to completion equals the total number of semesters/quarters to complete the degree: 4

b. Percentage of students that graduate in “normal time to completion”: 75

M. Architecture Non-Pre-Professional (degree designed for candidates who have an undergraduate degree in a discipline other than architecture)

a. Time to completion equals the total number of semesters/quarters to complete the degree: 7

b. Percentage of students that graduate in “normal time to completion”: 73

SECTION F. RESOURCES FOR NAAB-ACCREDITED PROGRAMS

1. Total number of cataloged titles in the architecture library collection

Main Campus: 33461

2. Total number of cataloged titles that have Library of Congress NA or Dewey 720-729

Main Campus: 28553

3. Total number of permanent workstations (studio desks) that can be assigned to students enrolled in design studios:

Main Campus: 266

4. Are your students required to have a laptop computer?

Yes

5. Please indicate which of the following learning resources are available to all students enrolled in NAAB-accredited degree program(s):

Resource Type	Available?
Shop	Yes
Computer Facilities (Lab)	Yes
Computer Output Facilities (Plotters, Specialized plotting)	Yes
Digital Fabrication Facilities	Yes
Wireless Network	Yes
Image Collection (Slide Library)	Yes
Photo Studio/Darkroom	No
Lecture Series	Yes
Gallery/Exhibits	Yes
Other	No

If other resources are available, please describe:

NA

6. Financial Resources

a. Total revenue from all sources (if you have more than one degree program, please include the financial resources for both programs combined): 2225473

b. Expenditures

i. Instruction: 1703008

ii. Capital: 325000

iii. Overhead: 0

c. Per Student Expenditure: What is the average per student expenditure for students enrolled in a NAAB-accredited degree program?

This is the total amount of goods and services, per student, used to produce the educational services provided by the NAAB-accredited program.

i. Instruction + Overhead / FTE Enrollment: 6238

SECTION G. HUMAN RESOURCE SUMMARY (Architecture Program)

1. Credit Hours Taught

(Please include the actual number of credit hours taught as a whole, broken down by faculty type, in the accredited program.)

i. Total credit hours taught by full-time faculty: 4667

ii. Total credit hours taught by part-time faculty: 240

iii. Total credit hours taught by adjunct faculty: 1638

2. Instructional Faculty

a. Full-time Instructional Faculty

Professor

	Tenured		Tenure-Track		Non-Tenure-Track		TOTAL		GRAND
	Male	Female	Male	Female	Male	Female	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	2	0	0	0	0	0	2	0	2
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	2	0	0	0	0	0	2	0	2

Associate Professor

	Tenured		Tenure-Track		Non-Tenure-Track		TOTAL		GRAND
	Male	Female	Male	Female	Male	Female	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	2	3	0	0	0	0	2	3	5
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	2	3	0	0	0	0	2	3	5

Assistant Professor

	Tenured		Tenure-Track		Non-Tenure-Track		TOTAL		GRAND
	Male	Female	Male	Female	Male	Female	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	1	0	0	0	0	0	1	0	1
Hispanic/Latino	1	0	0	0	0	0	1	0	1
White	2	0	0	0	0	0	2	0	2
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	1	0	0	0	0	0	1	0	1
TOTAL	5	0	0	0	0	0	5	0	5

Instructor

	Tenured		Tenure-Track		Non-Tenure-Track		TOTAL		GRAND
	Male	Female	Male	Female	Male	Female	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0

Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0

b. Part-Time Instructional Faculty

Professor

	Tenured		Tenure-Track		Non-Tenure-Track		TOTAL		GRAND
	Male	Female	Male	Female	Male	Female	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	1	1	0	0	0	0	1	1	2
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	1	1	0	0	0	0	1	1	2

Associate Professor

	Tenured		Tenure-Track		Non-Tenure-Track		TOTAL		GRAND
	Male	Female	Male	Female	Male	Female	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	0	1	0	0	0	0	0	1	1
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	1	0	0	0	0	0	1	1

Assistant Professor

	Tenured		Tenure-Track		Non-Tenure-Track		TOTAL		GRAND
	Male	Female	Male	Female	Male	Female	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0	0	0

Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0

Instructor

	Tenured		Tenure-Track		Non-Tenure-Track		TOTAL		GRAND
	Male	Female	Male	Female	Male	Female	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	0	0	0	0	1	0	1	0	1
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	1	0	1	0	1

c. Adjunct Faculty

Please fill out these tables completely, entering 0 for blanks. Please use whole, positive integers and do not include dollar signs ($) or commas. A person can only be counted in one group.

	Professor		Associate Professor		Assistant Professor		Instructor		TOTAL		GRAND
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	1	0	1	0	1
Hispanic/Latino	0	0	0	0	0	0	1	0	1	0	1
White	0	0	0	0	0	0	6	3	6	3	9
Two or more races	0	0	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	8	4	8	4	12
TOTAL	0	0	0	0	0	0	16	7	16	7	23

3. Faculty Credentials:

Include adjuncts only if the adjuncts are considered Professor, Associate Professor or Assistant Professor.

3. Faculty Credentials

	Professor		Associate Professor		Assistant Professor		TOTAL		GRAND
	Male	Female	Male	Female	Male	Female	Male	Female	TOTAL

D. Arch. (accredited)	0	0	0	0	0	0	0	0	0
M. Arch. (accredited)	0	0	1	2	0	3	1	5	6
B. Arch. (accredited)	0	0	0	0	0	0	0	0	0
Ph.D. in architecture	1	0	0	1	1	0	2	1	3
Ph.D. in other discipline	0	0	0	0	0	0	0	0	0
Post-professional graduate degree in architecture	2	0	1	1	1	0	4	1	5
Other degrees	0	0	0	0	0	0	0	0	0
Registered in U.S. Jurisdiction	2	0	1	3	0	0	3	3	6

4. Average annual salaries

Please fill out these tables completely, entering 0 for blanks. Please use whole, positive integers, and do not include dollar signs ($) or commas. A person can only be counted in one group.

	Number	Minimum	Average	Maximum	Univ. Average
Professor	2	101783	131472	161161	149878
Assoc. Prof.	5	73034	88474	115048	100836
Assist. Prof.	5	61000	68058	75000	86303
Instructor	0	0	0	0	0

2012 NAAB Annual Report
University of Maryland
School of Architecture, Planning, and Preservation

Institution:	University of Maryland
Unit:	School of Architecture, Planning, and Preservation
Administrator:	Brian Kelly, AIA, Director, Architecture Program
Date of last accreditation visit:	February 26 through March 2, 2011 (VTR Dated 2 March 2011)

CONDITION NOT MET:
A.4. Technical Documentation: *Ability* to make technically clear drawings, write outline specifications, and prepare models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

[X] Not Met

2011 Visiting Team Assessment: This criterion has not been met. The team found a lack of evidence of student ability meeting the outline specification writing portion of this criterion. Evidence meeting the remainder of this performance criterion was found in Tracks I and II in the required courses ARCH 600 Comprehensive Design Studio, ARCH 601 Topical Studio, and Arch 611 Advanced Architectural Technology Seminar.

> **2012 Architecture Program Report:** ARCH 611, Advanced Architecture Technology Seminar, which is a co-requisite of ARCH 600, Comprehensive Design Studio, now has this material fully integrated into coursework (See Appendix A). Though the *ability* to write outline specifications is measured under SPC A.4 Technical Documentation, the ARCH 600/611 faculty members have viewed the assignment as allied with developing a greater *understanding* of building materials (SPC B.12 Building Materials and Assemblies). Likewise, the exercise of developing an outline specification enables faculty members and students to develop a fundamental *understanding* of building cost estimating, which is covered in SPC B.7 Financial Considerations. This approach endeavors to make connections between SPC and is intended to improve overall student learning outcomes.

CAUSE OF CONCERN
A. Financial Resources (Condition I.2.4): Current financial resources are adequate; however, meetings with administrators revealed that the global economic downturn will generate university-wide budget reductions. A substantially reduced budget could adversely impact faculty and staff hires and the caliber of program offerings.

I.2.4 Financial Resources: An accredited degree program must demonstrate that it has access to appropriate institutional and financial resources to support student learning and achievement.

[X] Financial Resources are adequate for the program

2011 Visiting Team Assessment: This condition is met with concern. In the past several years, the Provost and the Dean have both charged the program a 1% recapture of funds in order to implement their own initiatives. These funds were then reallocated based on competitive proposals from different units across campus and from within the School. The Architecture program did obtain funds but not to the extent of the 2% which was taken away. Since the last visit and since the submittal of this APR, the program has seen a new dean, a new President and a new Provost; all have a different and more inclusive vision for the university and the school from the previous administration. The national economic situation has impacted the university's budget as well. The President of the university expressed his understanding that the process used in the past is not the best way to pull funds from the units to cover new initiatives given the future university-wide budget cuts. With the current budget situations, there is still concern over the program budget but the program faculty and director are more optimistic about program input and their ability to be more creative in solutions to which the upper administration may be amenable. The President does see the School of Architecture, Planning and Preservation as being strategically suited to work on some of the issues that he sees as critical to the university in partnership with others.

The APR provided the requested information which indicates appropriate financial resources to support the curricular program. The architecture program spends $397/credit hour and $9,635/student compared to $257/ credit hour and $5,092/student for Civil Engineering and $368/credit hour and $4,945/student for the College of Information Studies.

2012 Annual Report: As was noted in the 2011 Annual Report, programs within the School of Architecture, Planning, and Preservation are looking toward alternate funding sources and revenue generating ventures to supplement its State and University allocations.

In Academic Year 2011-12, there were no funds available for faculty or staff merit pay or cost of living increases. It is projected that a modest merit pay increase and COLA will be in place for 2012-13. Cuts to State of Maryland appropriations to the University in 2011-12 were modest and state-mandated furloughs have been eliminated.

The University's Winter Term (3-week session in January) and Summer Session both operate as for-profit ventures. Coursework continues to be developed in these sessions to augment offerings during the regular academic year (fall and spring semesters). A BIM skills course, offered in conjunction with a leading local firm (both during Winter Term and Summer Session), has successfully captured the attention of students entering the Comprehensive Design Studio as well as undergraduates seeking to develop skills for both the market place and eventual forays into graduate school. Summer Session offerings include a coursework in drawing and history of architecture.

The restructuring of University-wide undergraduate course offerings through the General Education initiative was responsible for bringing additional support to the

Architecture Program. Most notably the Architecture Program was awarded $13,500 to develop General Education coursework in Oral Communication that will be integrated with undergraduate studio courses beginning in the spring 2013 semester.

Education Abroad programs abroad programs also bring revenue to the program. A spring 2011 semester-long program at Kiplin Hall in North Yorkshire, UK generated significant funding that was channeled back to the Architecture Program. Likewise, programs to Paris, Scandinavia, and Turkey supplemented Program revenues.

The Dean has instituted a new internal budgetary process by which the Directors of the School's programs submit an annual instructional budget (including adjunct faculty salaries and anticipated TA/GA salaries). This budget along with a modest operating budget, portioned proportionately according to the program's size and particular needs, forms the basis for accomplishing our mission. The Dean then "banks" savings from faculty members on leave and other sources, to be managed by the Directors and used on projects that encourage inter-disciplinary collaboration and to advance the objectives of the School. In 2012 the Directors funded development of a School-wide General Education course, which will be launched in 2013. Likewise, programs benefited from the "bank" through grants for promotional materials, Video Conferencing Equipment, and funding for a Coordinator/Organizer of General Education who would be responsible for developing revenue generating educational and continuing educational venues. The budgetary process offers shared commitment to the wellbeing of all programs in the School and encourages programs to develop new initiatives that will be of benefit to all. The process offers a renewed sense of transparency so that each director

Since the initiation of the global financial crisis in 2008, endowments at many institutions have experienced challenges. The major endowments that provide enhancement and critical support to the Architecture Program have only had modest setbacks, and as of 2012 most seem to be on the rebound. These funds are regularly used for student scholarships, support for lecture series and gallery exhibitions, enhancement for coursework, and support for our Education Abroad offerings. The School's Development Officer has been working vigorously with the Dean and Directors to develop new avenues of external funding including establishing a newfound alumni awareness of the School's mission and aspirations.

CHANGES IN PROGRAM SINCE LAST NAAB VISIT:

2012 Annual Report: The School of Architecture, Planning, and Preservation hired a new faculty member at the Assistant Professor level to teach jointly in Architecture and Historic Preservation. This individual was educated as an architect, developed a specialization in historic preservation through practice and in her doctoral work at MIT. This colleague will teach courses in the history and

theory of architecture, historic preservation, and eventually in architectural design studio.

The Provost approved a strategic series of concurrent hires focused on the topic of Sustainability in the Built Environment (SBE). This position, referred to as a "Cluster Hire," will form an interdisciplinary research center comprised of a Professor in the A. James Clark School of Engineering, an Associate Professor in Architecture, and two Assistant Professors in the College of Architecture. The intention is to build upon emerging expertise in sustainability as evidenced by the University of Maryland's decade of collaborative interdisciplinary research and teaching that culminated in the 2011 winning entry to the U.S. Solar Decathlon, which was spearheaded by an Architecture Program Faculty member. This search will commence in the fall 2012 semester.

The Dean of the School of Architecture, Planning, and Preservation has approved a new search for an Assistant Professor. The search parameters will be formulated in the fall 2012 semester in hopes of advertising by spring 2013.

The Architecture Program Curriculum Committee (APCC) embarked on a broad curriculum study aimed at improving the integration of General Education requirements and pre-professional coursework in the undergraduate program. Ultimately the study will aim to devise effective ways to customize undergraduate experiences in order to permit efficient progress toward the professional degree, for those who wish to do so, as well as providing a strong design education for individuals who elect to enter careers other than architecture. Ultimately the study will likely propose new interfaces between the pre-professional and professional degree programs and possibly suggest some restructuring of content delivery within the accredited degree program. At this point in time, we are in the preliminary states of the study and do not anticipate any concrete changes prior to the 2013-14 academic year.

The Architecture Library is studying a merger with the Visual Resource Collection (VRC). The marriage between these two currently separate units, seems to be reasonable as both are experiencing mission shift due to emerging digital media and tighter budgetary conditions. Currently both units offer some duplicate services. A merger would consolidate the staffing, permit space reallocation for the VRC, and strengthen the information services provided by these units. An off-site storage and retrieval system will be utilized for some components of both collections that are currently underutilized in order to maximize the most efficient utilization the combined facility. A faculty advisory committee has been formed to explore the changing vision, mission, and ultimately the resources required for contemporary information services.

In 2012 the Dean initiated a series of projects to improve the physical environment within the Architecture Building. A new roof and skylight project was completed in 2012. A project to provide new electrical, lighting, display surfaces, seating, and workstations for the design studios is to be completed in the summer of 2013. By the beginning of the fall 2012 semester, the new electrical work and workstations were ready for student usage.

APPENDIX A

CONTENTS:

Arch 611 Fall 2011 Tuesdays and Tuesdays 4:30 to 6:00 pm

Carl Bovill 301-405-6305 bovill@umd.edu Powell Draper 301-405-6311 pdraper@umd.edu

Arch 611 is primarily a studio course where the student will learn by doing. The intent is to go beyond technical understanding of structures and environmental control systems, to being able to incorporate them into a design project that is being pursued in the companion studio course, Arch 600.

The class will meet in the studio and at times in Room 1105 for discussions.

Sep	1	Thursday	Overview of the class
	6	Tuesday	Daylighting
	8	Thursday	Structural systems
	12	*Monday*	*Precedents, site and program*
	13	Tuesday	Mechanical systems
	15	Thursday	Artificial Lighting
	19	*Monday*	*Precedents, long span, lateral bracing*
	20	Tuesday	Desk crits structural framing, mechanical, and lighting design
	22	Thursday	Desk crits structural framing, mechanical, and lighting design
	26	***Monday***	***Workshop One***
	27	Tuesday	Site visit
	29	Thursday	Review of framing plans, mechanical and lighting plans
	3	*Monday*	*Precedents, Sustainability*
Oct	4	Tuesday	Desk crits structural framing, mechanical, and lighting design
	6	Thursday	Desk crits structural framing, mechanical, and lighting design
	7	*Friday*	*Structural Engineers Consultant Visit*
	11	Tuesday	Desk crits structural framing, mechanical, and lighting design
	13	Thursday	Desk crits structural framing, mechanical, and lighting design
	17	***Monday***	***Workshop Two, ARUP DC, Mechanical/Electrical Consultants***
	18	Tuesday	Workshop Two postscript, Artificial Lighting
	20	Thursday	Desk crits structural framing, mechanical, and lighting design
	21	*Friday*	*Brick wall hands on demonstration*
	25	Tuesday	Desk crits structural framing, mechanical, and lighting design
	27	Thursday	Desk crits structural framing, mechanical, and lighting design
	31	***Monday***	***Workshop Three***
Nov	1	Tuesday	Introduction to Means square foot cost analysis
	3	Thursday	Desk crits Cost analysis
	7	Monday	Landscape Architect Consultant Visit
	8	Tuesday	Cost analysis due at the begining of class
	10	Thursday	Desk crits structural framing, mechanical, and lighting design
	11	***Friday***	***Office Workshop, ARUP New York, Structure and Façade***
	15	Tuesday	Desk crits structural framing, mechanical, and lighting design
	17	Thursday	Site visit

	21	*Monday*	*Consultant visit, Lighting*
	22	Tuesday	Desk crits structural framing, mechanical, and lighting design
	24	**Thursday**	**Thanksgiving**
	29	Tuesday	Outline Specification Assignment
Dec	1	Thursday	Desk crits structural framing, mechanical, and lighting design
	6	Tuesday	Desk crits structural framing, mechanical, and lighting design
	8	Thursday	
	9	***Friday***	***Arch 600/611 Final Review (2-6)***
	13	Tuesday	Last day of class: **Arch 611 Drawings due at 4:30 pm**

Drawing Format: Drawings will be on 11x17 sheets. Scale the drawings so plans and sections fill the page. This may be an arbitrary scale. Provide a graphic scale and dimensions. Turn in a photocopy of the originals so we can write on them and keep the final set.

Final Exam: The FINAL REVIEW is the final exam. All technical drawings must be on the wall during the review and will be turned in by 4:30pm on Tuesday December 13. The drawings shall be turned in as a paper copy and as an electronic copy. The nature of the electronic copy will be defined later.

Workshops: All technical drawings must be on the wall during the reviews and workshops and will be turned in at the beginning of Arch-611 class the next day.

Prerequisite: Arch 410, 411, 412, and 413
Corequisite: Arch 600

Recommended Texts
Text: Fundamentals of Building Construction, Materials and Methods, Third Edition, Edward Allen, John Wiley , 1999
Text: The Architect's Studio Companion, Fourth Edition, Edward Allen, John Wiley, 2002
Text: Building Construction Illustrated, Fourth Edition, Francis Ching, John Wiley, 2008

Grading: Grades will be given as we proceed through the semester.
The workshop one review will be worth 20 %
The workshop three review will be worth 30 %
The cost analysis will be worth 10 %
The final review will be worth 40%
All required drawings must be pinned up during the reviews and workshop and will be turned in the day after the pinup at the beginning of Arch 611 class time.

Academic Dishonesty: In Testudo, in the Schedule of Classes there is a category General Information. Clicking on this and then on Academic Dishonesty under Academic Information brings you to a thorough discussion of academic dishonesty.

Ownership of Work: Any design project, drawing or model that is submitted for academic credit is recognized by the University of Maryland and the School of Architecture to be the equivalent to a formal examination. Therefore, ***upon submission, all projects, drawings and/or models become the property of the School of Architecture***. Generally, University regulations require the professor to retain all final examinations for a period not less than one academic year. However, in practice, projects submitted to the School of Architecture are usually returned to the individual student for inclusion in their academic portfolio. The School of Architecture does reserve the right to retain certain projects for use in publicity, display, or other official uses. In addition, projects may be retained for archival reasons or in cases of grade disputes. In all cases, projects will be made available to the authors for photocopying.

Excused Absences: In May, the University Senate passed and President Loh signed a new policy for granting excused absences, which can be found at: http://www.president.umd.edu/policies/v100g.html . Under the policy, the University will accept as an excused absence a self-signed note from a student who has missed a single lecture, recitation, or laboratory, attesting to the date of the illness. The note must also contain an acknowledgement by the student that the information is true and correct and that providing false information is prohibited under Code of Student Conduct. The student is also obligated to make a reasonable attempt to inform the instructor of his/her illness in advance. If there are multiple nonconsecutive absences the same policy will apply. In general let me know what is happening and we can work through any problem. The five tests are defined as major scheduled grading events as defined in the policy.

Students with Disabilities: Students with disabilities should see the instructors so arrangements can be made to accommodate them.

Religious Holidays: Major due dates have been arranged to not violate known religious holidays. Please see the instructors if a religious holiday might interfere with the class.

University of Maryland **School of Architecture, Planning, and Preservation**
Fall 2011 **Professors Bovill and Draper**

ARCH 600 Comprehensive Design Studio
ARCH 611 Advanced Technology Course

Outline Specifications

Assignment: Starting with the Green Outline Specification Ideas handed out with this assignment; develop an outline specification for your project that describes the materials and fixtures that will be used in and on your building. Use the CSI format to organize the information. You may not have information for all of the categories listed below but try to be as complete as you can.

Division 01 General requirements
Division 02 Existing Conditions
Division 03 Concrete
Division 04 Masonry
Division 05 Metals
Division 06 Wood, Plastics, and Composites
Division 07 Thermal and Moisture Protection
Division 08 Openings
Division 09 Finishes
Division 10 Specialties
Division 11 Equipment
Division 11 Equipment
Division 13 Special Construction
Division 14 Conveying Equipment
Division 21 Fire Suppression
Division 22 Plumbing
Division 23 Heating, Ventilating and Air Conditioning
Division 23 Heating, Ventilating and Air Conditioning
Division 26 Electrical
Division 27 Communications
Division 28 Electronic Safety and Security
Division 31 Earthwork
Division 32 Exterior Improvements
Division 33 Utilities

Due at Final Review of the Comprehensive Design Studio Project

Rachel Carson Memorial Library

(Project Number FALL2011)

OUTLINE SPECIFICATION

DIVISION 01: GENERAL REQUIREMENTS

The site for the project is located in Silver Spring, MD. He project consists of a public branch library and general site work.

DIVISION 02: EXISTING CONDITIONS

022300 EARTHWORK

Project includes site clearing and grading; excavation for foundations; provide clean fill where required; protect trees indicated for preservation; remove debris from site; provide erosion control protection.

DIVISION 03: CONCRETE

033100 CONCRETE

Use 4,000 psi concrete with a maximum slump of 4". Contractor is responsible for providing the mix design. Use Grade 60 reinforcing steel (epoxy coated when required). Contractor is responsible for all concrete testing (strength, slump, and air content). Actual type and size of footing and foundation system used will be based on soil borings. Slab on grade floors.

DIVISION 04: MASONRY

042200 CONCRETE UNIT MASONRY

ASTM C90, normal weight, Type I, concrete masonry units. Mortar ASTM C270. Grout ASTM C476, 2000 psi. Reinforcing ASTM A615, Grade 60.

DIVISION 05: METALS

051200 STRUCTURAL STEEL - GENERAL

Structural steel frame (beams and columns) and miscellaneous members to conform to ASTM A992, 50 ksi. Bolts to conform to either ASTM A307 or A325. Painting to consist of 1-coat of rust-inhibitive primer.

DIVISION 06: WOOD, PLASTICS, & COMPOSITES

061000 ROUGH CARPENTRY

Wood furring, sheathing, and blocking for built in casework and nailers for the top of all roof-framing members; minimum 5/8-inch thick structural grade plywood for roof sheathing.

062000 FINISH CARPENTRY

Wood veneer finish casework, solid wood and/or plastic laminate counters, in AWI premium quality for the Information Desk, Sales Area, Library, and Staff Office. Solid wood standing and running trim.

DIVISION 07: THERMAL AND MOISTURE PROTECTION

072100 BUILDING INSULATION

2-1/2-inch thick (R-11+) extruded polystyrene board perimeter insulation at foundations. R-19 batt insulation for exterior walls. R-38 batt insulation in roofs.

072600 VAPOR RETARDERS

4 mil thick polyethylene under slab on grade and on walls where indicated.

074100 METAL ROOFING

2-inch high standing seam, Kynar 500 finished Galvalume metal roofing.

076000 FLASHING AND SHEET METAL

Galvanized sheet metal, painted where exposed.

077200 ROOF ACCESSORIES

Provide continuous metal gravity ridge and fascia ventilators.

079200 JOINT SEALANTS

Use silicone or polyurethane sealants in color to match adjacent surfaces.

DIVISION 8: OPENINGS

081100 METAL DOORS AND FRAMES

Hollow metal doors and frames at toilets, mechanical rooms, and emergency exits.

081400 WOOD DOORS

Provide paneled oak and glass entrance doors with oak frames. On interior, use oak wood veneer solid core wood doors with oak wood frames.

085213 METAL CLAD WOOD WINDOWS

Aluminum clad wood custom windows.

086200 UNIT SKYLIGHTS

Aluminum frame and laminated glass skylight.

087000 HARDWARE

Latch sets, hinges, stops, plates, pulls etc. in oil rubbed and oxidized satin bronze (BHMA 613 or US10B) finish. Use levers on all latch and lock sets, except at service or utility areas use spherical knobs. Master key all locks to the system in use at the park.

088000 GLAZING

Provide 1-inch sealed insulated glass, made up of 1/4-inch thick clear float glass with e2 coating on interior panes of South and East walls. Provide heat mirror glass units on North walls. Use tempered glass where required.

DIVISION 9: FINISHES

092216 NON-STRUCTURAL METAL FRAMING

Metal stud wall and ceiling framing.

092900 GYPSUM BOARD

Use 5/8" regular recycled gypsum wallboard on designated interior walls and on all ceilings. 5/8" water resistant gypsum board in wet areas. Use cementitious glass mesh mortar units on walls designated to have ceramic tile applied. Use Type X gypsum board on partitions requiring fire rating.

093013 CERAMIC TILE

Ceramic mosaic tile walls and quarry tile floors in Toilets (Public and Staff). Recycled content tiles from locally fabricated sources.

096500 RESILIENT FLOORING

Provide resilient flooring in utility, storage, and mechanical spaces.

096813 TILE CARPETING

Continuous filament, soil repellent, recycled material carpet tile with a pile weight of not less than 36 oz. per square yard in Offices, Exhibits, Multipurpose Room, and Library.

099100 PAINTING

Epoxy coatings in toilet rooms, alkyd enamel semi-gloss paints on scheduled walls and ceilings. Use clear stain on interior and exterior wood trim. Ceilings painted white. Meet LEED requirements for volatile organic compound content.

DIVISION 10: SPECIALITIES

101400 SIGNAGE

Signs for selected rooms.

102113 TOILET COMPARTMENTS

Floor mounted and overhead braced high-density solid polyethylene partitions with self-closing doors with latches and coat hooks.

102813 TOILET ACCESSORIES

Stainless steel (satin finish) recessed accessories including soap dispensers, towel dispensers, waste receptacles, toilet paper holders, grab bars, feminine napkin dispensers and disposals, and framed glass mirrors.

104400 FIRE PROTECTION SPECIALTIES
Manual extinguishing equipment located in accordance with NFPA 10.

107500 FLAGPOLE
Aluminum flagpole located near front entrance walk.

DIVISION 11: EQUIPMENT

1126000 UNIT KITCHENS
Unit kitchen in Staff Office.

DIVISION 12: FURNISHINGS

122100 WINDOW BLINDS
See plans for blind locations. Mecho-shade or equivalent.

125651 LIBRARY FURNITURE
Free standing shelving units, study carrels, armchairs, and task lights.

125916 SYSTEMS FURNITURE
Freestanding component systems furniture in offices.

126200 PORTABLE AUDIENCE SEATING
Stackable/ganging chairs and folding tables in Multipurpose Room, color and fabric as selected.

129333 TRASH AND LITTER RECEPTORS
Steel receptacle with top to prevent rain from entering trash bin, including plastic trash bin

DIVISION 13: SPECIAL CONSTRUCTION

Section not used.

DIVISION 14: CONVEYING EQUIPMENT

Section not used.

DIVISION 21: FIRE SUPPRESSION

211300 FIRE SUPPRESSION SPRINKLER SYSTEMS

Design, furnish, install, and test automatic wet pipe fire sprinkler and standpipe systems for the entire building, including attics, crawl spaces, and concealed spaces in accordance with NFPA 13.

DIVISION 22: PLUMBING

220500 COMMON WORK RESULTS FOR PLUMBING

Materials and methods common to all sections including pipe and equipment identification, seismic restraint systems, pipe hangers and anchors, equipment drives, etc.

220700 PLUMBING INSULATION

Pipe, equipment insulation.

221100 FACILITY WATER DISTRIBUTION

Service weight cast iron waste, vent, and sanitary sewer systems; Type L copper domestic cold and hot water supply systems; and all related equipment accessories and appurtenances.

221123 DOMESTIC WATER PUMPS

Pumping equipment for domestic hot water.

224200 COMMERCIAL PLUMBING FIXTURES

Low-flow type plumbing fixtures and related trim, fittings, and valves meeting ADA requirements. Use plumbing fixtures and fittings in accordance with NPS guidelines as follows:

Water Closets -	1.6 gallons per flush (max)
Urinals -	Waterless
Showerheads -	2.5 gpm (max) at 80 psi
Kitchenette Faucet -	2.2 gpm (max) at 60 psi
Lavatory Faucet (Public) -	0.5 gpm (max) at 60 psi
Lavatory Faucet (Staff) -	2.2 gpm (max) at 60 psi

Wall-hung water closets in the public restrooms. Electronic sensor operated flush valves and faucets in toilets. Freeze-proof drinking fountains located on the exterior of the building with operating mechanisms accessible from the interior of the building. Electric tank-type water heaters located near points-of-use.

DIVISION 23: HEATING, ENTILATING, AND AIR CONDITIONING

230713 DUCT INSULATION

External fiberglass blanket type thermal insulation with fiber-scrim-kraft facing and internal duct acoustical insulation for all supply and outside air ducts, plenums, and return air ducts passing through ambient air or unconditioned spaces.

232113 HYDRONIC PIPING

Complete and operable hydronic heating system using Type L copper piping.

235200 HEATING BOILERS

Modular, high efficiency, closed-combustion condensing type gas-fired boilers, flue gas vents, and vent terminations. AL29-4C stainless steel flue gas vents with sidewall vent terminations.

236000 CENTRAL COOLING EQUIPMENT

Provide packaged air conditioning equipment with indoor condensing units with centrifugal fans, suitable for ducted connections to exterior wall louvers. Provide coatings and fasteners suitable for providing longevity in a coastal environment. Provide ventilation air during all occupied hours.

233100 HVAC DUCTS AND CASINGS

Ductwork and appurtenances in connection with HVAC. Spiral-wound round ductwork in exposed ceiling areas; rectangular ductwork in concealed locations such as the mechanical equipment room, chases, or above finished ceilings.

233300 AIR DUCT ACCESSORIES

Duct accessories such as automatic control dampers, manual control dampers, balancing dampers, fire dampers, turning vanes, flexible duct connections, etc. Provide heavy-duty two-position dampers immediately behind all air inlet and outlet louvers to close off the louvers openings in a hurricane event.

233713 DIFFUSERS, REGISTERS, AND GRILLS

Registers, grilles, and diffusers in heating, ventilating, and air conditioning systems.

230593 TESTING, ADJUSTING, AND BALANCING OF HVAC SYSTEMS

Provide testing apparatus and instruments, and perform all procedures to test, adjust, and balance the various air, fluid, mechanical, and electrical systems associated with the heating, ventilating, and air conditioning systems to optimum performance.

DIVISION 25: INTERGRATED AUTOMATION

255000 INTEGRATED AUTOMATION FACILITY CONTROLS

Building automation and control system for windows, curtain walls, skylights, HVAC, and lighting.

255500 INTEGRATED AUTOMATION CONTROL OF HVAC

Provide complete electrical/electronic systems of automatic temperature control for the heating, ventilating, and air-conditioning systems in conjunction with the building automation system.

DIVISION 26: ELECTRICAL

260500 COMMON WORK RESULTS FOR ELECTRICAL

A. Conduit And Fittings: Rigid steel or intermediate metal conduits. Use compression type conduit fittings, but in trade sizes 3-inch and larger setscrew type connectors will be permitted. Where setscrew type connectors are installed, individual ground wires must be installed along with the circuit conductors.

B. Wiring: All copper 600-volt, type THW insulation except that all wiring running underground or in areas susceptible to moisture shall be rubber insulated type RHW. Wire sizes smaller than #6 AWG solid, sizes #6 and larger stranded. Wiring Devices: Receptacles 125-volt, 20-ampere specification grade comparable to Hubbell Cat. #5262, or approved equal, single phase, 3-wire, grounding type except as noted otherwise. Snap switches 125-volt, 15-ampere specification grade, silent type. Metal device plates.

262000 ELECTRICAL DISTRIBUTION

Run the new 120/208 volt, 3-phase 4-wire 60 hertz service to the high side of the transformer located on the east side of the Visitor Center and Museum. Locate electrical equipment serving site utilities in the electrical equipment room. Locate transformer on concrete pad behind a safety barrier.

262400 SWITCHBOARDS AND PANELBOARDS

Bolt-on type panelboards with ratings exceeding the connected loads and available fault current in accordance with applicable sections of the National Electric Code. Protect branch circuits serving exterior receptacles or circuits located in toilets, damp, or wet locations with ground fault circuit interrupters.

264100 FACILITY LIGHTNING PROTECTION

Provide lightning protection in accordance with Lightning Protection Institute Standard LPI 175, with concealed copper conductors including protection of trees adjacent to Visitor Center and Museum.

265100 INTERIOR LIGHTING

In compliance with IES, dimmable luminaires on light track in exhibit areas, indirect luminaires in Lobby, cove lighting in Multipurpose Room, task lighting in office areas, flush fluorescent in mechanical rooms and toilets, and both task and flush fluorescent in the Library. Use energy efficient compact fluorescent and T-5 fluorescent lamps where possible.

265600 EXTERIOR LIGHTING

Metal-halide building security and parking lot lighting with high cutoff luminaires to minimize light pollution and glare.

DIVISION 27: COMMUNICATIONS

270500 COMMON WORK RESULTS FOR COMMUNICATIONS

Existing overhead telephone lines will be relocated underground by the telephone company, using the same path and trench as the under-ground power. Provide an empty conduit system for the installation of telephone wiring and equipment by the telephone company. System to consist of all cabinets, pull and junction boxes, bullets, sleeves, fittings, etc. to form a complete

telephone system. Extend telephone conduit out to project limit and cap for extension by Telephone Company.

DIVISION 28: ELECTRONICS SAFTEY AND SECURITY

2183100 FIRE DETECTION AND ALARM

Supervised, non-coded, shunt-trip, non-interfering fire conduit, wire, control panels, cabinets, pull stations, automatic fire and smoke detection devices, etc., for an operating fire alarm and smoke detection system.

DIVISION 31: EARTHWORK

311400 CLEARING, GRUBBING, SELECTIVE THINNING AND TREE REMOVAL

Clear and grub stumps and undergrowth. Thin undergrowth and remove trees as directed. Dispose of debris.

312213 SITE AND ROADWAY EXCAVATION AND GRADING

Strip, stockpile and place topsoil. Excavate roadway, embankment, backfill, compact backfill, and place imported borrow. Compact subgrade and do finish grading.

312316 STRUCTURE EXCAVATION

General Site Preparation - Proof roll entire building site after clearing, grubbing, and stripping. Excavate for foundation and concrete slab-on-grade. After placement of foundation, backfill and compact excavated area utilizing original soil. Density testing will be the responsibility of the Contractor.

312333 TRENCHING AND BACKFILL

Provide trenching and backfilling for utilities

313716 RIPRAP

Furnish and place stone riprap for embankment protection and ends of storm drains.

DIVISION 32: EXTERIOR IMPROVEMENTS

320519 ENGINEERING FABRIC

Furnish and place engineering fabric, landscape fabric, and filter fabric on the subgrade of roads, parking lots, riprap, underdrains, downspouts.

321613 CONCRETE CURBS AND GUTTERS

Concrete and curbs in selected color.

321213 BITUMINOUS PRIME COAT AND TACK COAT

Treat aggregate base course and existing asphalt surfaces with bituminous material. Include blotting material if required.

321216 ASPHALT PAVING

Construct one or more bituminous surface courses, placed on a prepared base including all pavement transitions and curbs where required.

321236 BITUMINOUS SEAL COAT

Apply bituminous material as a seal coat to a prepared surface.

329213.18 HYDRO SEEDING, FERTILIZING, AND MULCHING

Seed, fertilize, and mulch landscaped areas, roadway shoulders, and steep slopes.

329223 SODDING

Sod lawn areas.

DIVISION 33: UTLITIES

331100 WATER DISTRIBUTION PIPING

Provide a water system including all accessories and piping from the well to the storage tank and then throughout the project. Include fire hydrants, road crossings, and connections to fire protection sprinkler systems.

333113 SEWAGE PIPING

Provide a gravity fed sewage treatment system including accessories, road crossings, and leaching fields.

334213 PIPE CULVERTS

Install new pipe culverts, and end sections.

334413 CONCRETE DROP INLETS AND CATCH BASINS

Construct concrete drop inlets and catch basins with metal grates.

334619 UNDERDRAINS

Install underdrains, pipe, granular filter material, and synthetic fabric.

DIVISION 34: TRANSPORTATION

Section not used.

DIVISION 35: WATERWAY AND MARINE CONSTRUCTION

Section not used.

DIVISION 40: PROCESS INTEGRATION

Section not used.

DIVISION 41: MATERIAL PROCESSING AND HANDLING EQUIPMENT

Section not used.

DIVISION 42: PROCESS HEATING, COOLING, AND DRYING EQUIPMENT

Section not used.

DIVISION 43: PROCESS GAS AND LIQUID HANDLING, PURIFICATION, AND STORAGE EQUIPMENT

Section not used.

DIVISION 44: POLLUTION CONTROL EQUIPMENT

Section not used.

DIVISION 45: INDUSTRY – SPECIFIC MANUFACTURING EQUIPMENT

Section not used.

DIVISION 48: ELECTRICAL POWER GENERATION

Section not used.

End of Outline Specifications

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Specification Outline

Division 01 General Requirements

Division 02 Existing Conditions

Division 03 Concrete

033100 CONCRETE

Use 4,000psi concrete with a maxiumum slump of 4". Contractor is responsible for providing the mix design. Use Grade 60 reinforcing steel (epoxy coated with required). Contractor is responsible for all concrete testing (strength, slump and air content). Actual type and size of footing and foundation system used will be based on soil borings. Slab on grade floors.

Division 04 Masonry

042129 TERRACOTTA MASONRY

The rainscreen terra cotta ceramic clay tile elements, and aluminum support system shall consist of NBK TERRART-LARGE double-leaf, through body color terra cotta clay tiles, NBK aluminum support system, zinc cast tile clips, and gaskets, NBK TERRART Baguettes and hardware, anchors, fastening devices, and accessories.

Division 05 Metals

051200 STRUCTURAL STEEL – GENERAL

Structural steel frame (beams and columns) and miscellaneous members to conform to ASTEM A992, 50 ksi. Bolts to conform to either ASTM A307 or A325. Painting to consist of 1-coat of rust-inhibitive primer.

Division 06 Wood, Plastics and Composites

061000 ROUGH CARPENTRY

Wood furring, sheathing, and blocking for built in casework and nailers for the top of all roof-framing members; minimum 5/8-inch thick structural grade plywood for roof sheathing.

062000 FINISH CARPENTRY

Wood veneer finish casework, solid wood and/or plastic laminate counters, in AWI premium quality for the Information Desk, Sales Area, Library, and Staff Office. Solid wood standing and running trim.

Division 07 Thermal and Moisture Protection

072100 BUILDING INSULATION

2-1/2-inch thick (R-11+) extruded polystyrene board perimeter insulation at foundations. R=19 batt insulation for exterior walls. R-38 batt insulation in roofs.

072600 VAPOR RETARDERS

4 mil thick polyethylene under slab on grade and on walls where indicated

074100 METAL ROOFING

2-inch high standing seam, Kynar 500 finished Galvalume metal roofing.

076000 FLASHING AND SHEET METAL

Galvanized sheet metal, painted where exposed.

Division 08 Openings

081100 METAL DOORS AND FRAMES

Hollow metal doors and frames at toilets, mechanical rooms, and emergency exits.

085213 METAL CLAD WOOD WINDOWS

Aluminum clad wood custom windows.

088000 GLAZING

Provide 1-inch sealed insulated glass, made up of 1/4-inch thick clear float glass with e2 coating on interior panes of South and East walls. Provide heat mirror glass units on North walls. Use tempered glass where required.

Division 09 Finishes

092216 NON-STRUCTURAL METAL FRAMING

Metal stud wall and ceiling framing.

092900 GYPSUM BOARD

Use 5/8" regular gypsum board on designated interior walls and on all ceilings. 5/8" water resistant gypsum board in wet areas. Use cementitious glass mesh mortar units on walls designated to have ceramic tile applied. Use Type X gypsum board on partitions requiring fire rating.

099100 PAINTING

Epoxy coatings in toilet rooms, alkyd enamel semi-gloss paints on scheduled walls and ceilings. Use clear stain on interior and exterior wood trim. Ceilings painted white. Meet state volatile organic compound requirements.

Division 10 Specialties

101400 SIGNAGE

Signs for selected rooms.

102113 TOILET COMPARTMENTS

Floor mounted and overhead braced high-density solid polyethylene partitions with self-closing doors with latches and coat hooks.

102813 TOILET ACCESSORIES

Stainless steel (satin finish) recessed accessories including soap dispensers, towel dispensers, waste receptacles, toilet paper holders, grab bars, feminine napkin dispensers and disposals, and framed glass mirrors.

104400 FIRE PROTECTION SPECIALTIES

Manual extinguishing equipment located in accordance with NFPA 10.

Division 11 Furnishings

125651 LIBRARY FURNITURE

Free standing shelving units, study carrels, armchairs, and task lights.

125916 SYSTEMS FURNITURE

Freestanding component systems furniture in offices.

126200 PORTABLE AUDIENCE SEATING

Stackable/ganging chairs and folding tables in Multipurpose Room, color and fabric as selected.

129333 TRASH AND LITTER RECEPTORS

Steel receptacle with top to prevent rain from entering trash bin, including plastic trash bin

Division 21 Fire Supression

211300 FIRE SUPPRESSION SPRINKLER SYSTEMS

Design, furnish, install, and test automatic wet pipe fire sprinkler and standpipe systems for the entire building, including attics, crawl spaces, and concealed spaces in accordance with NFPA 13.

Division 23: Heating, Entilating and Air Conditioning

230713 DUCT INSULATION

External fiberglass blanket type thermal insulation with fiber-scrim-kraft facing and internal duct acoustical insulation for all supply and outside air ducts, plenums, and return air ducts passing through ambient air or unconditioned spaces.

236000 CENTRAL COOLING EQUIPMENT

Provide packaged air conditioning equipment with indoor condensing units with centrifugal fans, suitable for ducted connections to exterior wall louvers. Provide coatings and fasteners suitable for providing longevity in a coastal environment. Provide ventilation air during all occupied hours.

233100 HVAC DUCTS AND CASINGS

Ductwork and appurtenances in connection with HVAC. Spiral-wound round ductwork in exposed ceiling areas; rectangular ductwork in concealed locations such as the mechanical equipment room, chases, or above finished ceilings.

Division 26 Electrical

262000 ELECTRICAL DISTRIBUTION

Run the new 120/208 volt, 3-phase 4-wire 60 hertz service to the high side of the transformer located on the east side of the Visitor Center and Museum. Locate electrical equipment serving site utilities in the electrical equipment room. Locate transformer on concrete pad behind a safety barrier.

Division 28 Electronics Saftey and Security

2183100 FIRE DETECTION AND ALARM

Supervised, non-coded, shunt-trip, non-interfering fire conduit, wire, control panels, cabinets, pull stations, automatic fire and smoke detection devices, etc., for an operating fire alarm and smoke detection system.