

BENSON POLYTECHNIC H.S. MPC #11 / MARCH 23, 2017

AGENDA /

6:00- 6:20

Update

5 min

Project Update - Portland Public Schools

+ Industry Outreach Update

+ Student Engagement Update

+ Educational Specification Update

5 min

Brief Recap - Scheme K

10 min

Design Refinement - Scheme L

6:20 - 7:45

Design Refinement (Small Group Activity)

45 min

Scheme L Review

20 min

Report Back

+ Whats working (+), what needs improvement (Δ)

20 min

MPC Group Discussion

7:45 - 8:00

Wrap-Up

5 min

Subcommittee Report

5 min

Public Comment

5 min

Closing Thoughts & Next Steps

PROJECT UPDATE / PORTLAND PUBLIC SCHOOLS

TASKS SINCE LAST MPC

- + Consolidated connections list
- + CTE Advisory Committee survey released

TASKS THROUGH MAY BOND

- + Expand survey reach to other partners
- + Garner input for Ed Spec development

AFTER BOND, IF "APPROVED"

- + Coordinated industry outreach
- + Focused review of educational specifications with industry partners as details are developed



"Continue to emerge our students in design and design oriented technologies"

PROJECT UPDATE / STUDENT ENGAGEMENT

TASKS SINCE LAST MPC

- + Gathered Benson Tech student input through NW Youth Careers Expo

"I love having the freedom to build what I want"
-Benson Student

TASKS THROUGH MAY BOND

- + Student information gathering at lunch:
April 4th and 5th
- + Facebook Survey



AFTER BOND, IF "APPROVED"

- + Student focus groups
- + Identify student projects, integrate into design process



"We need more windows.... and cooling"
-Benson Student

TASKS SINCE LAST MPC

- + Equipment survey and program scenarios reviewed with teachers
- + Scenario plans updated

TASKS THROUGH MAY BOND

- + Room data sheets and program summary draft to be issued to MPC for review in April

AFTER BOND, IF "APPROVED"

- + Continued input from industry partners
- + Development of systems integration and details
- + Reconciliation of systems with budget



PROJECT UPDATE / EDUCATIONAL SPECIFICATIONS

Program Area Analysis (DRAFT)

Based on current development of Benson Tech Focus Option Ed Spec for 1,700 Students

	Benson Tech Existing	Benson Tech Proposed	PPS Ed Spec Comp. HS
General Education Classrooms	16,599	25,000	48,180
Science Labs	7,048	11,700	16,500
Fine & Performing Arts	19,930	19,930	21,350
Career Preparation / CTE			6,000
Applied Art	1,757	3,110	
Architectural Design	3,365	4,300	
Automotive & Aviation	28,101	21,300	
Computer Engineering	3,658	4,725	
Construction	8,177	9,350	
Construction: Math Technology	2,287	5,000	
Digital Media	6,706	7,160	
Electrical	9,803	9,900	
Engineering	3,029	4,850	
Health Occupations	7,802	11,700	
Manufacturing	23,401	23,285	
Radio	5,182	6,094	
Other Programs			
Robotics	1,382	1,400	
After School Programs	984	1,200	
Athletics (Including P.E.)	55,172	43,765	35,580
Education Support	51,844	47,870	67,400
Smaller Instruction Spaces		1,200	5,000
SPED	2,210	5,610	5,900
Community Partners	19,150	1,200	1,200
Wrap-Around Service Providers	1,758	3,558	4,700
Subtotal	272,644	279,357	205,910
Net to Gross Ratio	95,655 (35%)	96,643 (35%)	74,128
Total	368,299	376,000*	280,038
Number of Students	1,050	1,700	1,700

*Final area to be determined with information being gathered from MPC, Benson Tech staff, administration, and equipment surveys through May 2017.

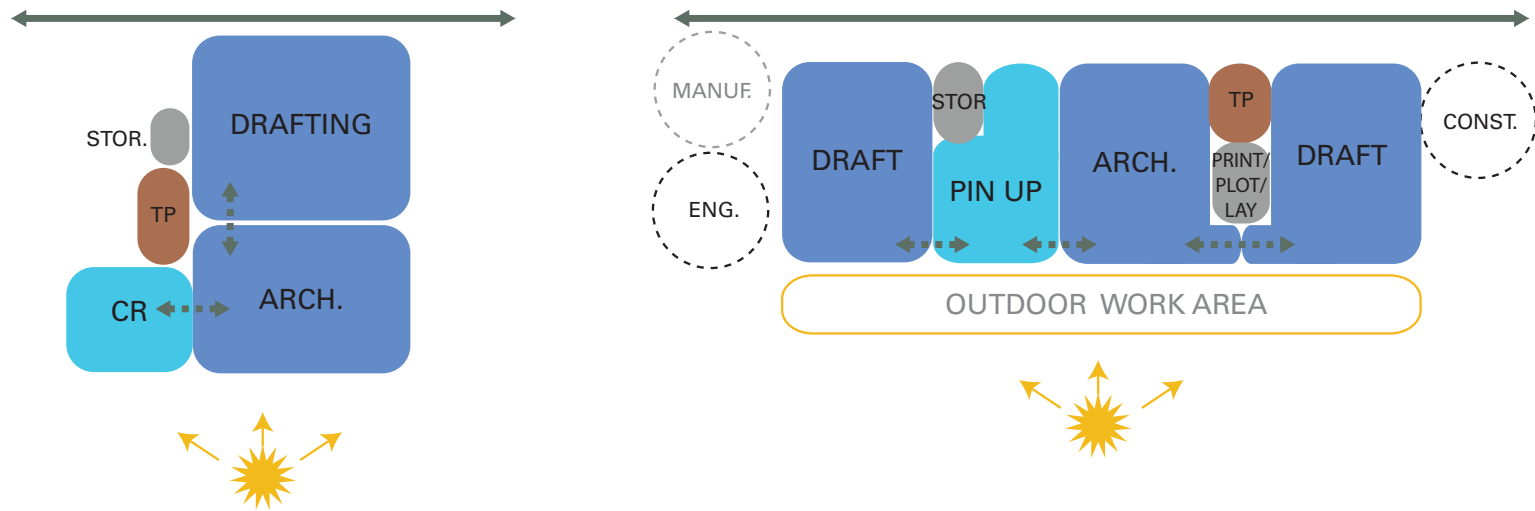
BENSON POLYTECHNIC HIGH SCHOOL / MPC #11 (2017.03.23)



PROJECT UPDATE / EDUCATIONAL SPECIFICATIONS - ARCHITECTURE CTE PROGRAM

EXISTING: +/- 3,400 SF

PROPOSED: +/- 4,800 SF



EXISTING DRAFTING ROOM: +/-1,500 SF

PROPOSED DRAFTING ROOM: +/- 950 SF

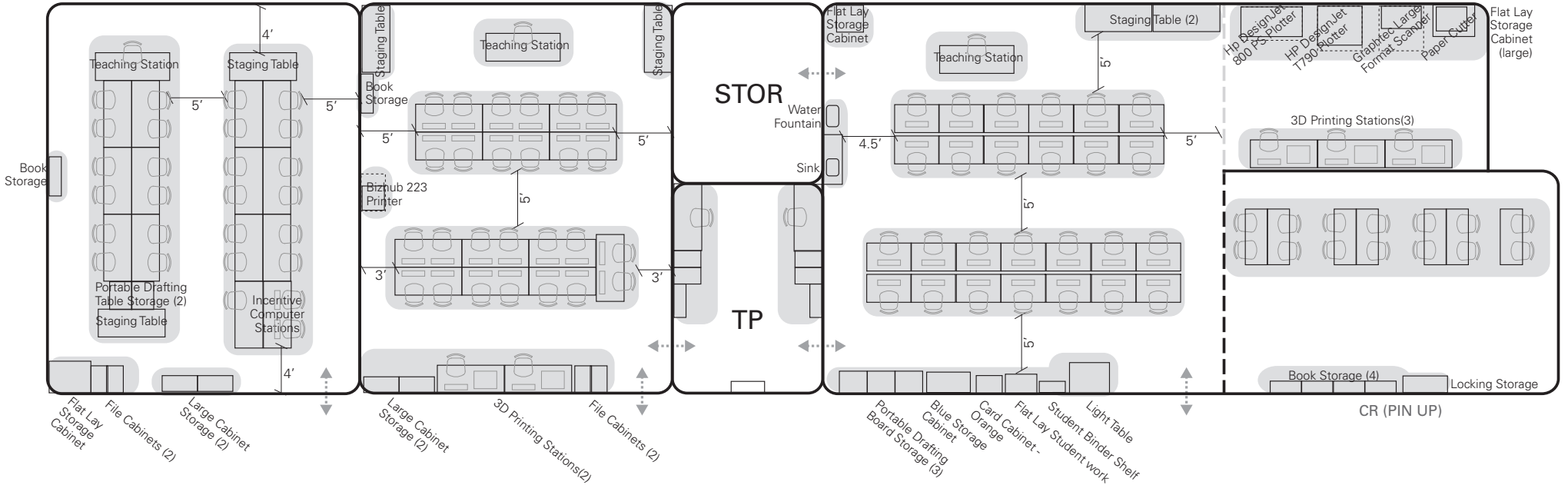
PROPOSED SOPH COMPUTER LAB: +/- 950 SF

EXISTING ARCHITECTURE ROOM: +/-1,150 SF

PROPOSED ARCHITECTURE ROOM: +/- 2,025 SF

PRINT/PLOT/LAYOUT

& STORAGE



PROJECT UPDATE / EDUCATIONAL SPECIFICATIONS

PROGRAM DATA SHEET

ACTIVITY AREA: Architecture

DESCRIPTION: Freshman Drafting Room

Brief Instructional Objectives:

- Instruction in Drafting Basics using drafting boards. Computers for research, exploration of AutoCAD and Sketch-up.

Users of this Activity Area:

- Freshman

Activities Conducted in this Space:

- Small and medium group instruction;
- Display of material such as student work;
- Storing books, learning materials;
- Hand Drafting
- Small computer area (2 computers)

Activities that should be IMMEDIATELY ADJACENT to this Activity Area:

- Architecture computer lab, pin up room

Activities that should be NEAR this Activity Area:

- Teacher Office/Preparation/Storage, Labs, Student Toilets and Student lockers.
- Construction, Engineering, Manufacturing

Number of Teachers: 1

Number of Students:.....25 students/class

Number of Aides (or Volunteers):.....0

Desired Floor Area 1,000

SPECIFIC ENVIRONMENTAL CHARACTERISTICS:

Acoustics: • Typical acoustical requirements appropriate to classrooms.

Lighting: • Natural light.
• General Room Lighting: artificial light with multiple switching options for energy conservation and note taking during screen viewing.
• Task Lighting: marker board presentation work.

Power/Communications: • 2 Computers
Plumbing: • Sink for cleaning equipment
• Drinking fountain

HVAC/Mechanical: •

Doors and Hardware: •

Interior and Exterior •

Windows: •

Ceiling Height: •

FINISHES:

Floor/Base: • Concrete preferred

Walls: • Gypsum wall board/ paint.

Ceiling: • Suspended acoustical ceiling.
• Gypsum board hard ceiling/ paint, (at limited areas, for example, soffits)

SPECIALTIES:

Casework: • Lockable storage cabinets with adjustable shelves: 4 @ 84" tall, 42" wide, 18" deep
• Lockable storage cabinets with adjustable shelves: 1 @ 84" tall, 42" wide, 24" deep

White Boards: • Magnetic marker boards on two walls

Tack Boards: • Yes

Display Case: •

Other: •

Items to be Stored in this Space: • Textbooks, office supplies
• Additional learning materials
• Student portfolios
• Student files

BRIEF RECAP / SCHEME K

DESIGN REFINEMENT / MPC #10 REVIEW

DESIGN ACTION ITEMS - SCHEME K

1. Refine clarity of circulation and access to daylight for every space:
 - + Explore a connection of the North and South wings with a bridge on the East edge.
2. Explore the Commons proportion and shape:
 - + Push the Commons North to create a more cohesive core with views from the second floor and better access to daylight for classrooms around the courtyard.
 - + Create a stronger connection to the south field access. Address concerns over trash and service deliveries at that location.
3. Landscape:
 - + Provide two driveways in the CTE courtyard to create a fluid path of in and out car circulation.
4. Enhance vertical connections with two-story circulation spaces and/or learning spaces.



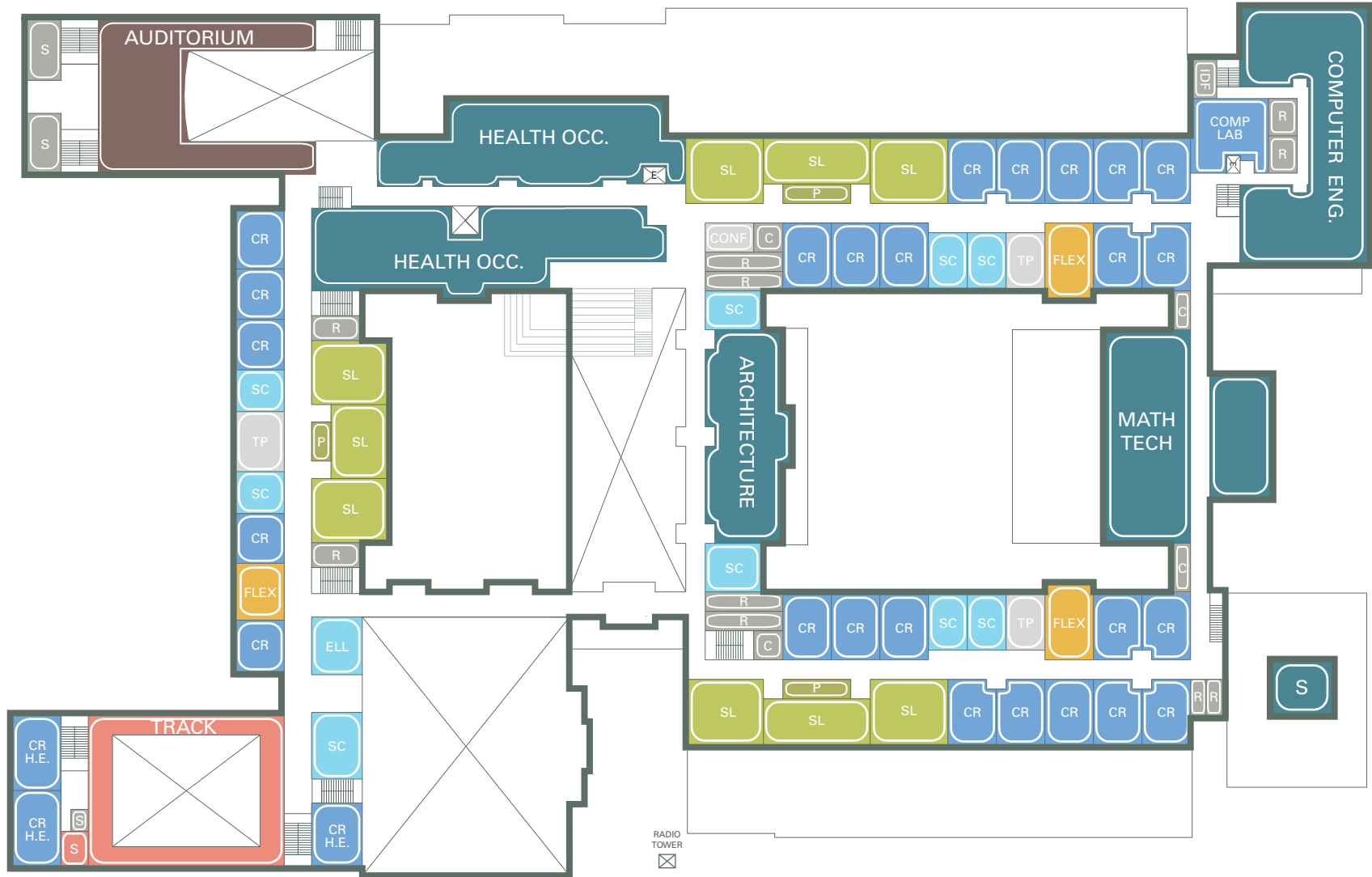
OTHER INPUT?

DESIGN REFINEMENT / SCHEME L

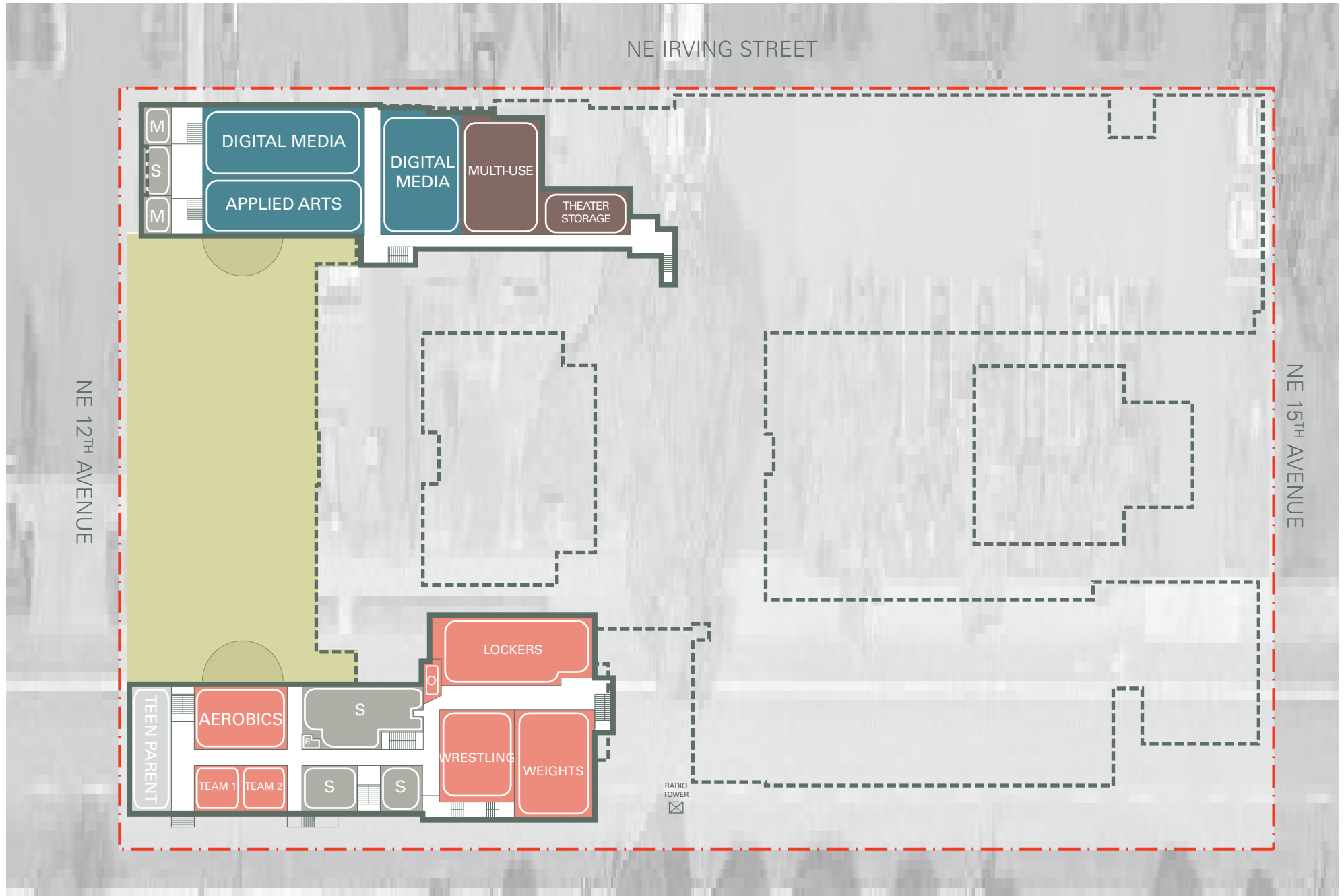
SCHEME L / GROUND FLOOR



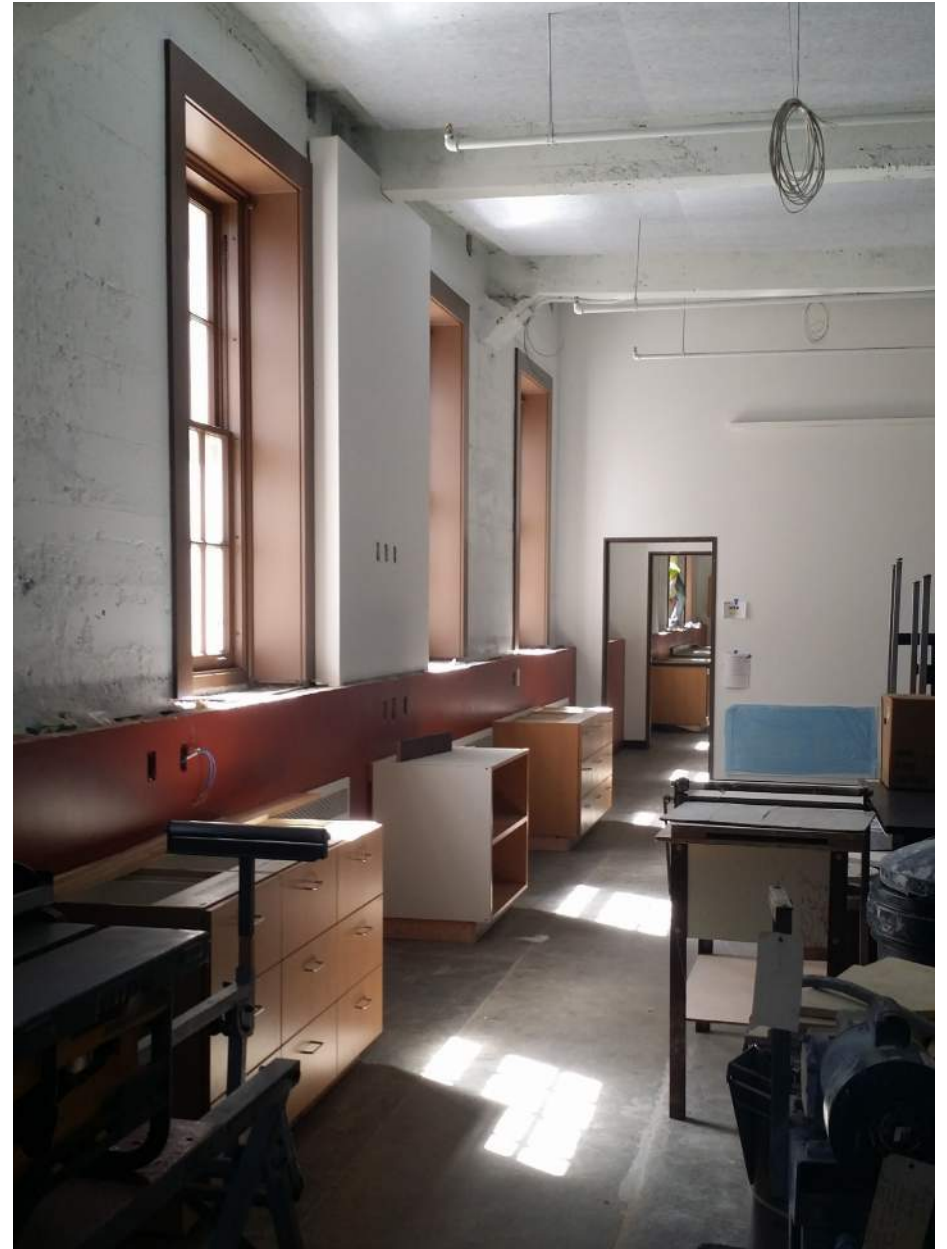
SCHEME L / SECOND FLOOR



SCHEME L / LOWER GROUND FLOOR



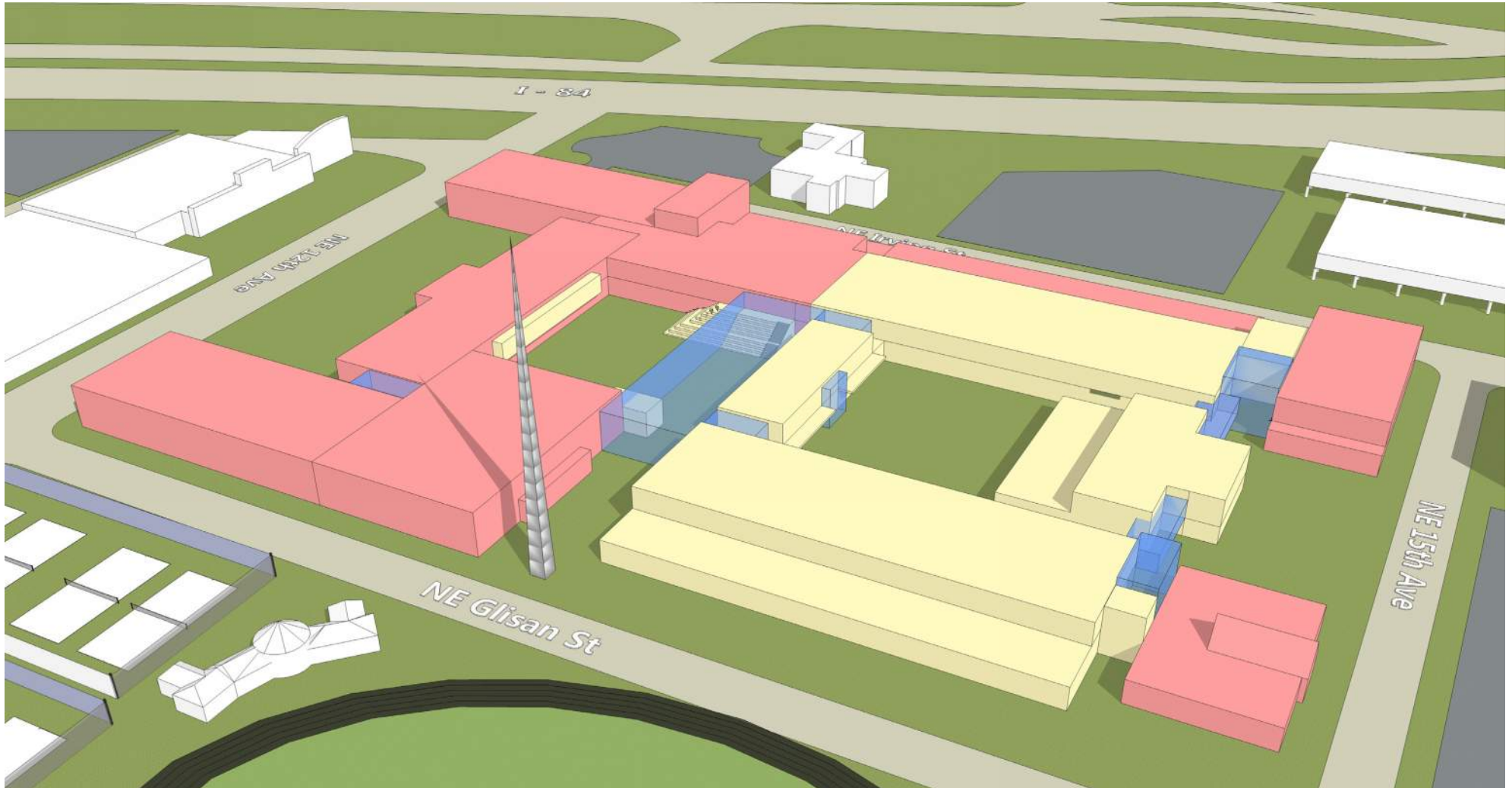
LOWER GROUND FLOOR / DAYLIGHTING STRATEGIES



LOWER GROUND FLOOR / DAYLIGHTING STRATEGIES



SCHEME L / 3D MASSING



BUDGET ANALYSIS / SCHEME EVOLUTIONS

CONSTRUCTION BUDGET

\$122 Million

PROJECT BUDGET

\$202 Million

STUDENT DESIGN CAPACITY

1,700

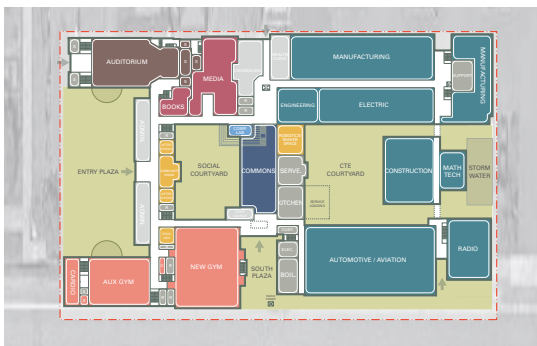
TARGET BUILDING AREA

+/- 368,000 SF



SCHEMES E-F

385,000 SF x \$333/SF = \$128 Million Estimate



SCHEME L

376,000 SF x \$335/SF = \$125.9 Million Estimate

SMALL GROUP DISCUSSION / 45 MINUTES

REPORT BACK (+/ Δ) / 20 MINUTES

LARGE GROUP DISCUSSION / 20 MINUTES

SUBCOMMITTEE REPORT / 5 MINUTES

PUBLIC COMMENT / 5 MINUTES

CLOSING THOUGHTS & NEXT STEPS / 5 MINUTES

THANK YOU. / NEXT MPC: THURSDAY, MAY 4, 2017 AT 6:00PM