Tillamook Bay Community College

Facilities Master Plan

4.30.2020

Revised 5.14.2021

TILLAMOOK BAY COMMUNITY COLLEGE

FFA Architecture +Interiors

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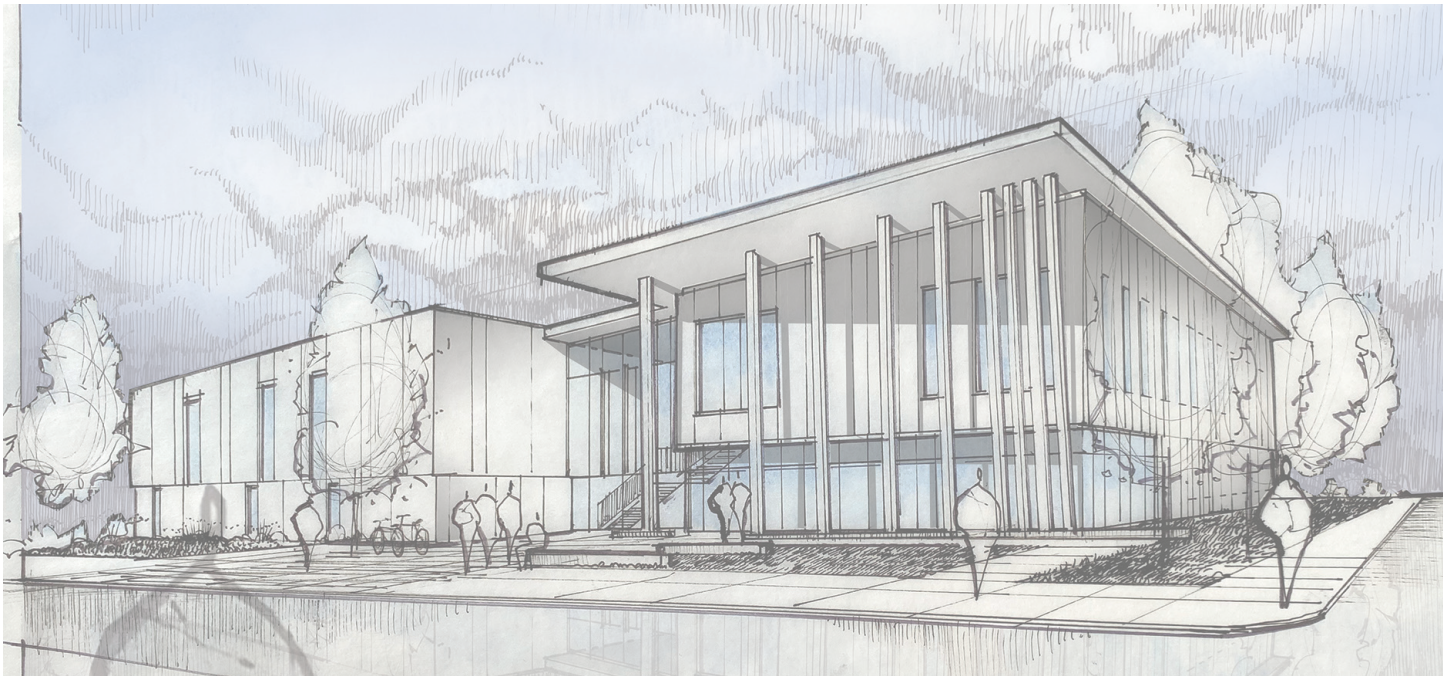
Participants



FFA Design Concept Sketch

Participants

Tillamook Bay Community College Stakeholders

Ross Tomlin, President

Pat Ryan, Director of Facilities, H.R., and Safety

Teresa Rivenes, Vice President of Instruction

JoAnn Critelli, Community Ed Coordinator

Kyra Williams, Vice President of Finance

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Sherl Neu, IT Director

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Heidi Luquette, Executive Director of Advancement Foundation

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Masyn Phoenix, Library Director

Brooke Bennett, Program Coordinator

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Candi Merrill, Executive Assistant to the College President and Board of Education

Design Team

FFA Architecture and Interiors, Inc. (FFA)

Troy Ainsworth, Project Principal

Edward Running, Project Manager / Design Lead

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Andrew Loia, Designer

Kathleen Strigle, Designer

Lynn Hilbert, Cost Estimation / Specifications Manager

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Executive Summary

Introduction

Tillamook Bay Community College (TBCC) has been a vital part of Tillamook County for over 40 years. We are the only provider of higher education in the County and provide access to certificates and Associate of Applied Science degrees; transfer college credit, continuing education, and non-credit courses that support workforce training. Adult basic skills, English as a Second Language and GED preparation courses are also important components of our programming. We have continued to grow in part by actively listening to the needs of the community and seeking out ways to enhance relationships and collaborate on opportunities with business, industry, educators, and others to support the educational and economic needs of the Tillamook community. The community supported the building of the main campus on Third Street in Tillamook in 2010 and the facility has served the college and the community well for the past 10 years. However, the College has witnessed exceptional growth over the past few years in students, staff, and community collaboration. This growth has put a strain on our ability to serve our community within our current infrastructure.

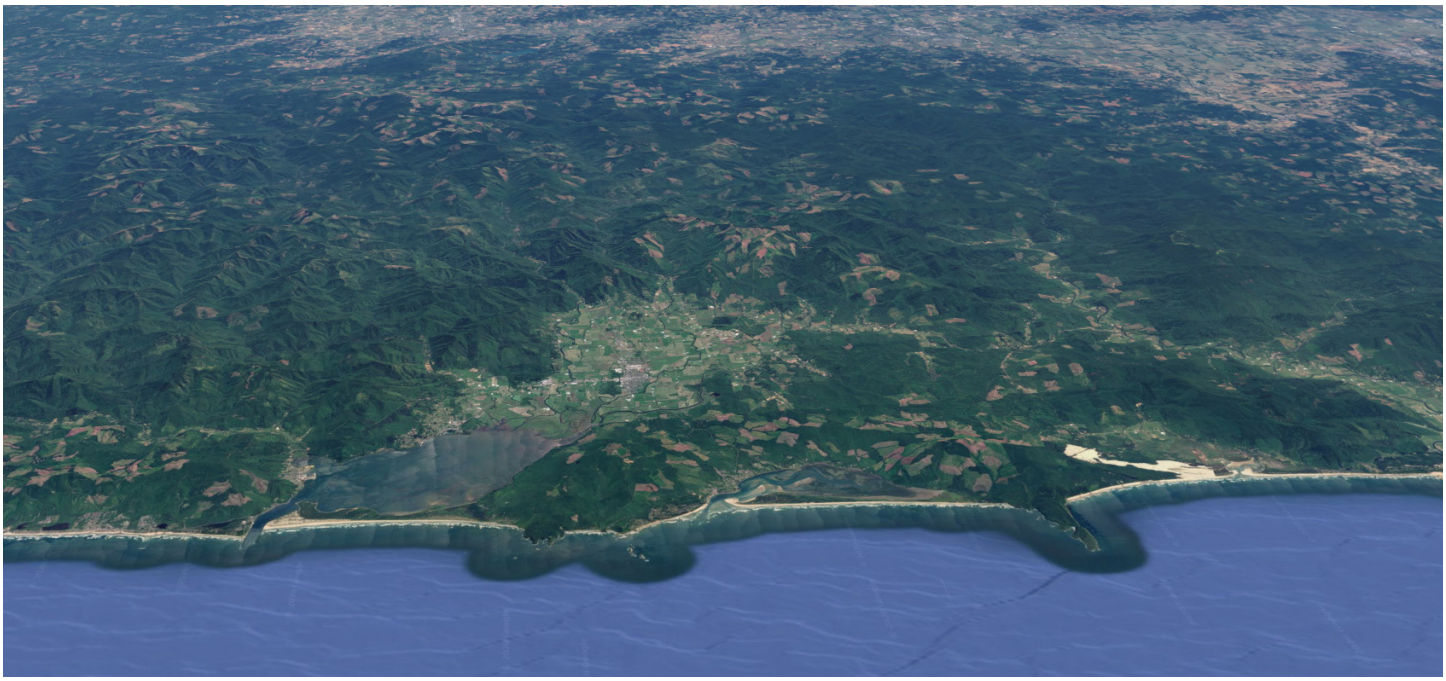
The situation prompted the initiation of a Facilities Master Planning process to determine the space needs required to meet the educational and community demands not only now but projected for the next 20 years. The last Facilities Master Plan for TBCC was developed in 2014 as it worked to develop the plans for the Partners in Rural Innovation Building across the street from the main campus. This building opened in 2017, and TBCC shares the space with four organizations including the Oregon State University Extension office. The success of the facility has been phenomenal, and it too is now at capacity. Today, TBCC has developed a plan designed to carry the college forward into the future. This plan will address the current urgent capacity issues and situate the college for the future to best meet the needs of our community.

Mission Statement

Tillamook Bay Community College creates bridges to opportunity by providing quality education that serves the needs of a diverse community.

Vision

Tillamook Bay Community College is a local leader in educational excellence and innovation, community advancement, and economic success.



An aerial view of the unique topography off Tillamook Bay

Values

Tillamook Bay Community College values and promotes student success through academic excellence and resourceful teamwork in an environment that is personal and friendly.

Student Success
TBCC values being keenly receptive and intentionally responsive to students and fully supports achievement of their goals.

Academic Excellence
TBCC values rigorous, relevant education and training for students and the community.

Resourceful Teamwork
TBCC values collaboration, effective communication, and the wise use of resources to accomplish our mission.

Personal and Friendly
TBCC values and demonstrates genuine concern and respect for each other, communities we serve, and our students while helping each achieve their potential.

College Core Themes

1. Educational Excellence (EE)
Students are provided with the opportunity to succeed in an equitable, inclusive, and supportive environment that enhances individual and professional growth, through academic, personal, and professional development.

2. Economic Success (ES)
The College contributes to the economic growth and development of students, community residents, and the entire region, while also practicing good stewardship of college resources.

3. Leadership, Partnership, and Community Engagement (LPCE)
The college and its students, staff, and faculty serve as educational and community leaders through professional development, skill building, or partnership with local businesses and school districts, post-secondary institutions, the TBCC Foundation, and governmental and social services organizations.

Project Vision

Background

Tillamook Forest

Founded in 1981, Tillamook Bay Community College (TBCC) has served the greater Tillamook community for over 40 years. The College gained its independent regional accreditation in 2014 followed by continued growth in both numbers of students and faculty in recent years. As student headcount and course offerings increased, TBCC recognized its current facilities were reaching capacity. A new vision for its future along with a plan for expanding its campus were necessary. TBCC enlisted a consultant and held a series of community engagement forums to collect feedback from the Tillamook community. The TBCC faculty and staff then met and reviewed their program and facility requirements. The information collected through these meetings became the basis for this Facilities Master Planning process.

Planning Process

The purpose of this Facilities Master Planning process was to assess TBCC's current program offerings, operations, and facilities along with the College's aspirational goals and needs for the coming years. The goal of this effort was to create a comprehensive vision for TBCC's future that carefully considered the role the College will play as a resource to its greater community.

The process involved meetings with key stakeholders to better understand how they currently use their spaces, how they perform their roles, how different departments collaborate, how students are served, and how each of these elements could be strengthened.

Future development must carefully account for new programs and the educational spaces they need, additional faculty and staff resources, creation of more flexible student spaces, and connecting to the Tillamook community with a shared resource, a large event space. Given the use and spatial programmatic needs, an additional building area will be required beyond what TBCC currently has.

Planning for expansion necessitates understanding the context of the site, the fabric of the existing building, the institutional culture, and educational offerings, along with realistic assumptions about project budget.

A successful plan for the future will efficiently utilize space within the existing building and on the site to preserve financial resources while adding the greatest value to TBCC. Expanding the campus with a new building should be done in a way that strengthens the concept of the campus as an educational and public amenity.

This Facilities Master Plan includes development strategies, design principles and concepts, as well as a spatial program assessment generated during this process that will serve as a strong basis for TBCC's future decision making.

Development Strategies

- Provide local access to learning that meets the needs of students, families, businesses, and the greater community.
- Provide facilities that are an accessible, valuable community resource.
- Expand campus to meet future projected enrollment and faculty growth.
- Renovate the existing Main Campus Building and constructing a new building just south of the main campus.
- Create new space for the Industrial Technology programs by purchasing and renovating an existing building.
- Create state-of-the-art high tech labs and classrooms to expand and grow healthcare programs and partnerships.
- Create a career advising and student success center in the renovated main campus building.
- Create a community resource event space for town meetings, College graduations, conferences, and community gatherings. Harness partnerships with local organizations as stakeholders.
- Continue to engage with Community Stakeholders to best understand their needs and ever-changing market forces in the regional economy.

Design Principals

- Create a welcoming environment.
- Increase accessibility, equity, and inclusivity.
- Enhance student engagement and amenities on campus.
- Provide for flexibility by creating spaces that may serve more than one function.
- Prioritize safety and security in the design or redesign of spaces.
- Integrate a range of sustainability strategies to accomplish LEED (Leader in Design and Environmental Design) Silver certification.
- Incorporate local materials and natural regional references into building design.
- Build on the success of the existing buildings and infrastructure to create a true campus feel to the TBCC Main Campus.

Site Context

- Tillamook County has a population of 27,000 and TBCC serves over 2,285 students per year with an FTE (Full Time Equivalent) of 478 students in 2018-2019.
- The current TBCC Main Campus site is 4.3 acres.
- The Main Campus Building, a 42,000 sf classroom and office building, opened in January, 2010.

- The Partners for Rural Innovation Building opened in 2017 across the street from the Main TBCC Campus.
- A Maintenance Facilities Garage was constructed on the parcel directly South of the Main Campus Building in 2011.
- A water pump station that is owned by the Fairview Water District is adjacent to the current Maintenance Facilities Garage. It is likely that this building will be required to remain in its current location.
- The College has a shared use agreement with the Tillamook County Fairgrounds, for 99 years, to meet any expanded parking needs.

Project Assumptions

- The construction of the new building and renovation of the existing Main Campus Building will be phased. It is recommended that the new building be constructed first and occupied during the renovation of the existing building.
- The current Facilities Maintenance Garage will be demolished in its current location and programmatic requirements incorporated into the new building.
- New parking will encroach on the existing water easement on the east side of the site.
- New swale(s) will be required to treat run-off from impervious areas onsite.
- The existing Fairview Water District owned pump house will likely remain in its current location.
- Building form and character will be consistent with the College design principles.
- For the purpose of this study, the team was directed to use the site survey and documentation done for the main campus building constructed in 2010.

Center for Industrial Technology

The old Mechtronics Building, which was an automotive repair business for over 25 years in Tillamook, located on Third St. across from the main campus, was purchased by the College in November 2020. It will house the Manufacturing and Industrial Technology and Welding Technology programs and will be renamed the Center for Industrial Technology. The space will be renovated to become a hands on lab with state of the art equipment and is expected to be open for classes in spring 2022. This purchase is the first step in this new Facilities Master Plan for TBCC to expand the campus to support Career-Technical Education and workforce development needs identified by the community.

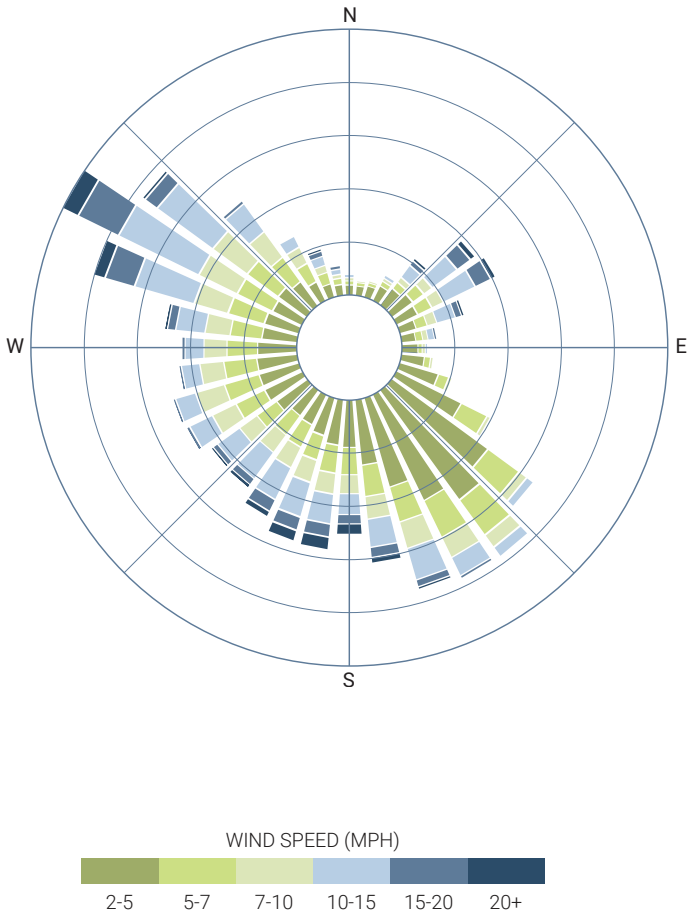
Future home of the Center for Industrial Technology

Site Analysis

Climate Trends

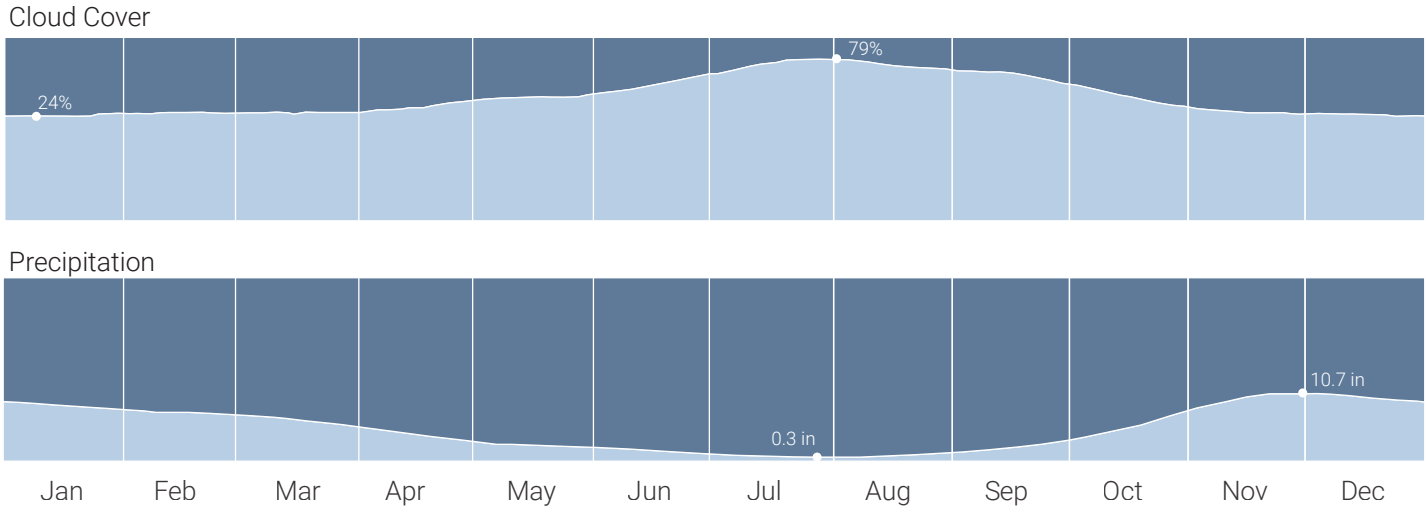
Climate trends such as wind and precipitation help determine advantageous siting of the building and its entries. It is best to locate entries away from harsh wind gusts and to consider the amount of rainfall in planning roof overhangs and covered walkways. These patterns also suggest which sustainability strategies may work well for the site. Too much cloud cover and ample wind may suggest wind turbines will be more efficient than solar photovoltaics as a renewable energy source.

The climate in Tillamook has a high annual rainfall. Durable materials and building awnings will allow the building to be longer lasting and provide cover for occupants. Prevailing winds during the summer months are generally from the northwest. Window openings should be located along these facades to capture breezes for natural ventilation.



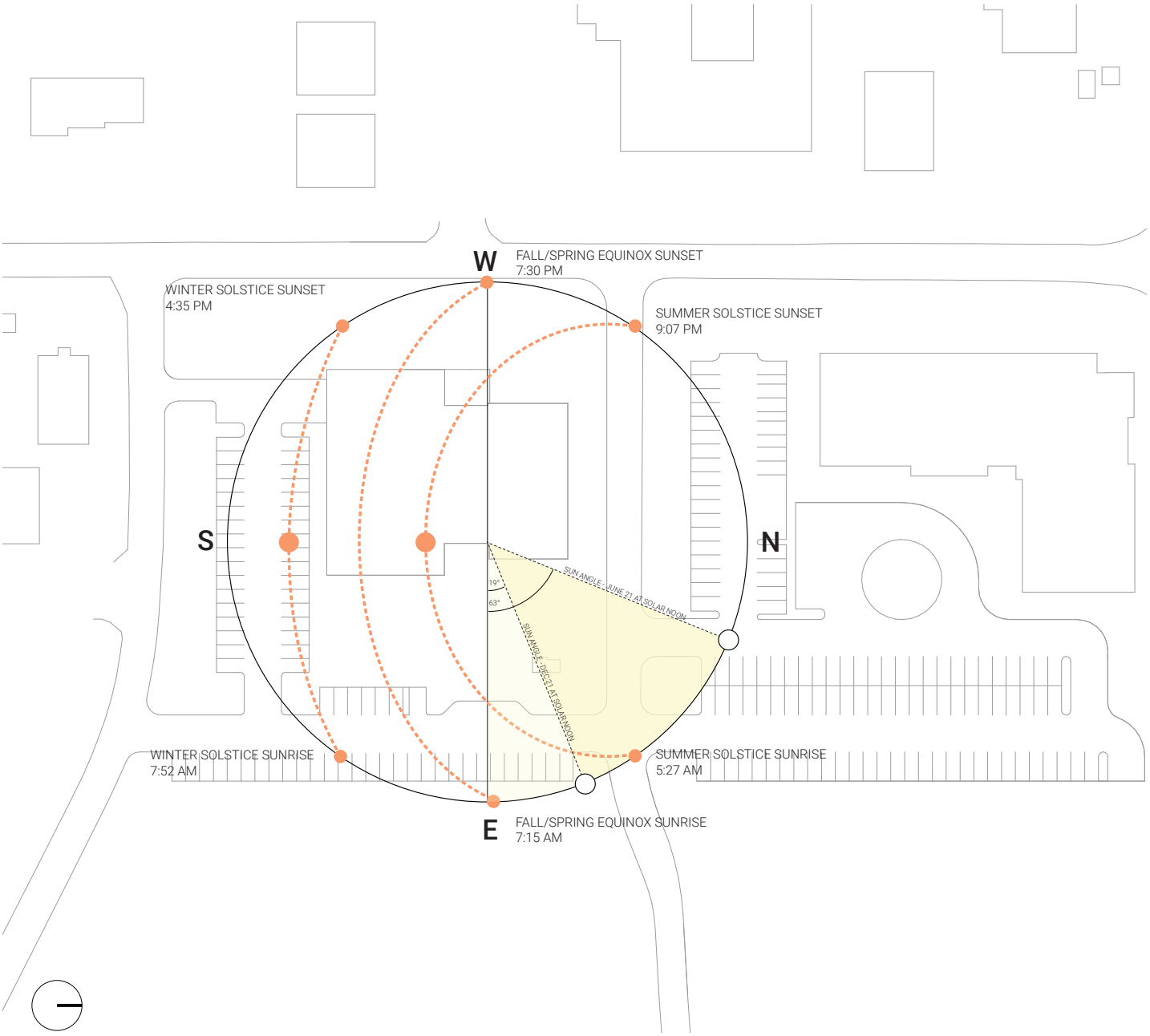
Above: Annual Wind Rose for Tillamook, OR
Right: Sun Path and Sun Angles for Tillamook, OR

Annual Climate Trends



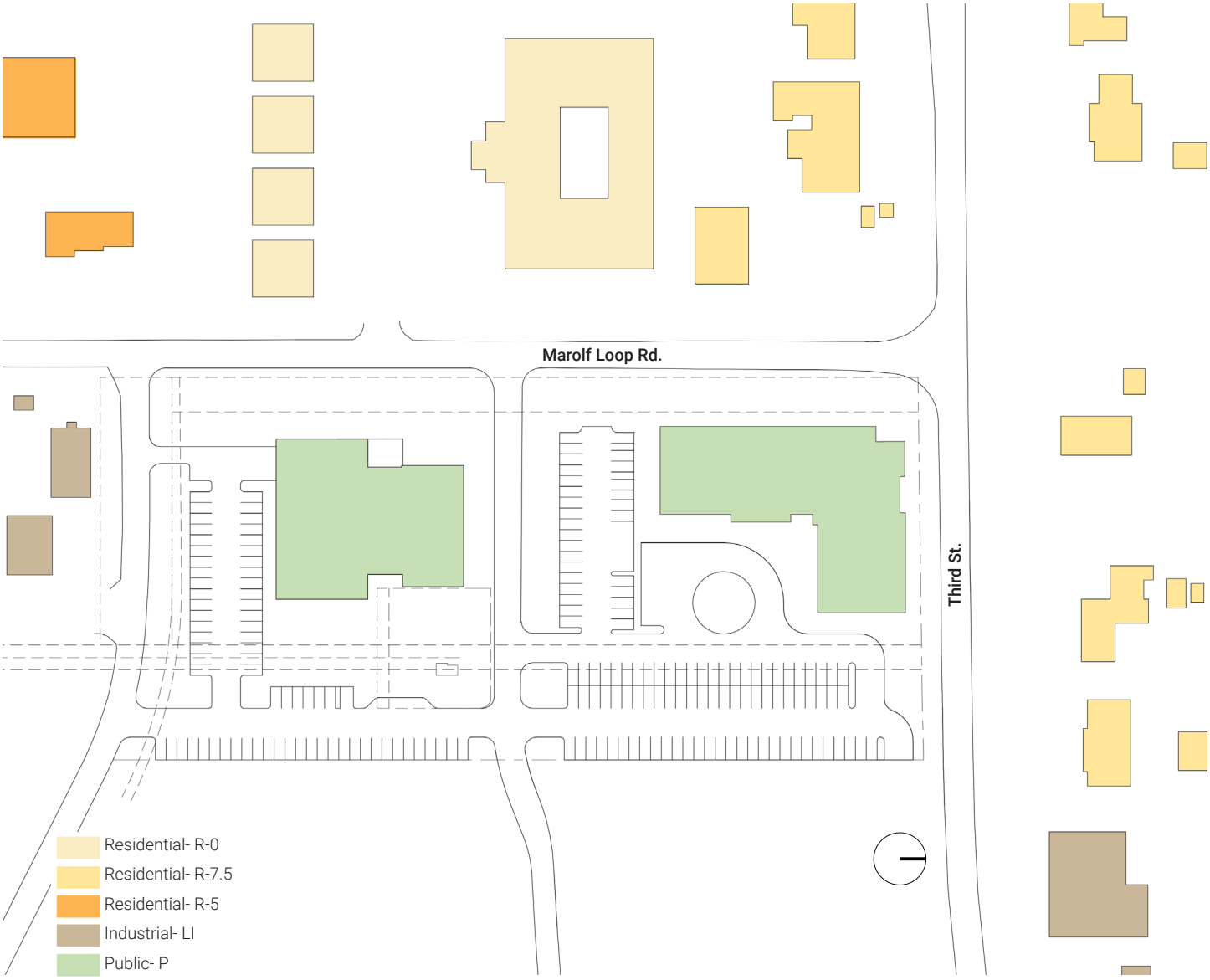
Solar Access

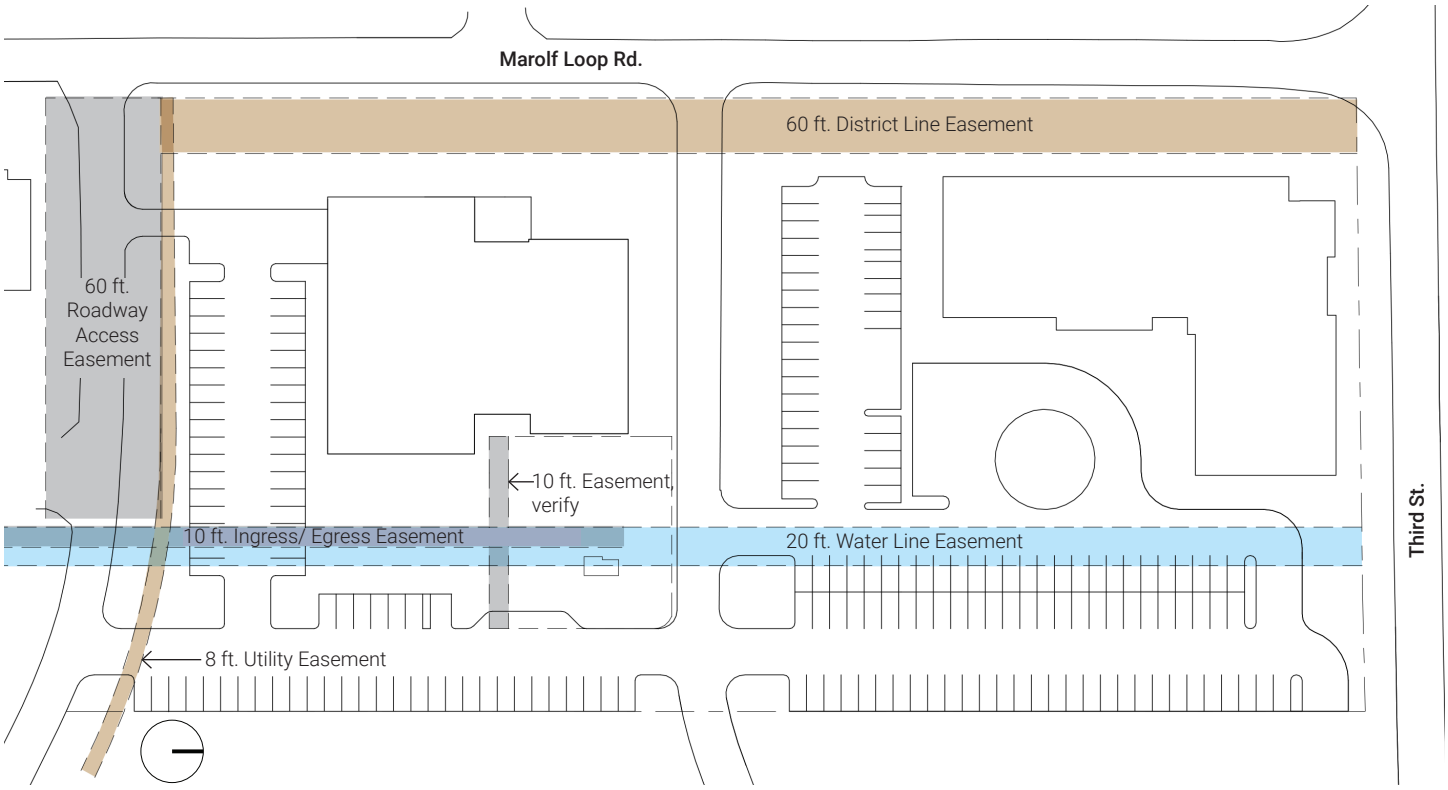
The sun path diagram below shows the way in which the sun moves across the site from sunrise to sunset at key times of the year - the summer and winter solstices, the extremes, and at the Spring and Fall Equinoxes. The angle of the sun is higher in the sky during the summer and lower during the winter. During the summer, heat from the sun entering a building must be mitigated. Knowing the sun angle, allows for planning window heights and sunshades to minimize these heat loads, especially along the south and west facades.



Zoning

- Project is within the Public (P) Zone. Zoning in the Public Zone is governed by Chapter 153.019 of the 2019 Tillamook Zoning Ordinance.
- Colleges and Convention Centers are Permitted Uses in the Public Zone.
- There are no Height Restrictions or Lot Requirements.
- Buildings and entrances should be oriented toward the street for pedestrian circulation, safety and crime prevention.
- Parking areas should be located to the side or rear of buildings to reduce interruption of pedestrian circulation.
- Permanent solid waste containers shall be screened from public view.
- Buildings to have address numbers oriented toward the street for clear identification.
- New development is subject to the Site Development Standards and requires a Site Plan Review that is a Land Use Review process.





- Off street parking for colleges and universities is based on a combination of the number of classrooms and/or the number of students. Total count should be verified at time of design and preliminary site planning. One loading space is required for new uses with a floor area of 10,000-30,000 sf.
- Public developments should provide an amount of landscaping that equals 15% of the buildable area.

Easements

- There is an existing 20 ft. wide water easement that runs north-south through the site.
- A 60 ft. wide utility easement runs along the south perimeter of the site.
- The existing pump house, owned by Fairview Water District, sits on an 85 ft. by 100 ft. parcel that has a 10 ft. wide easement for ingress/ egress along the its full south perimeter. The conditions and stipulations of this parcel and associated easement should be verified prior to any development.

Wetlands

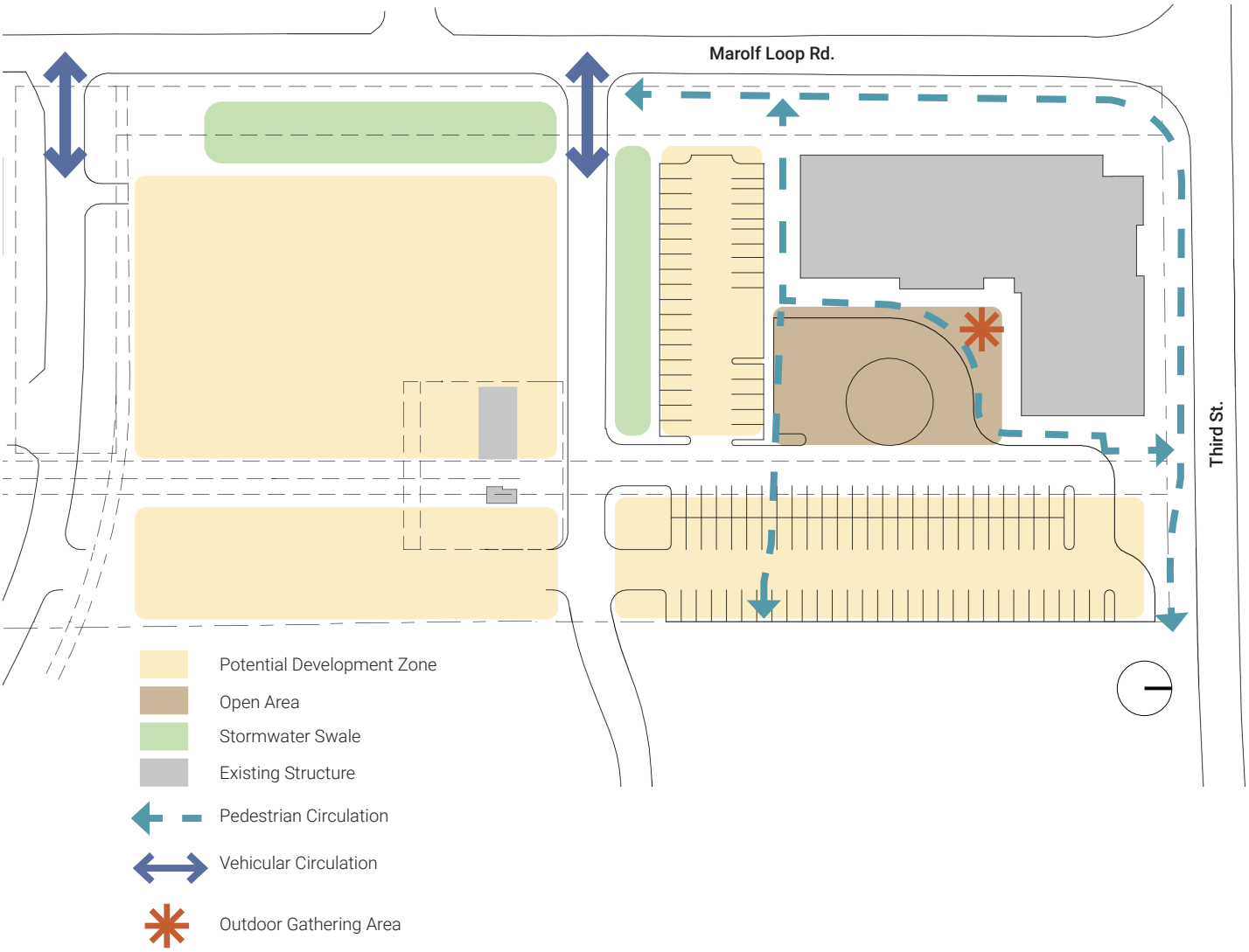
- Per Preliminary Phase II Study dated 27 August 2014, all wetlands have been mitigated on College property.

Building Code

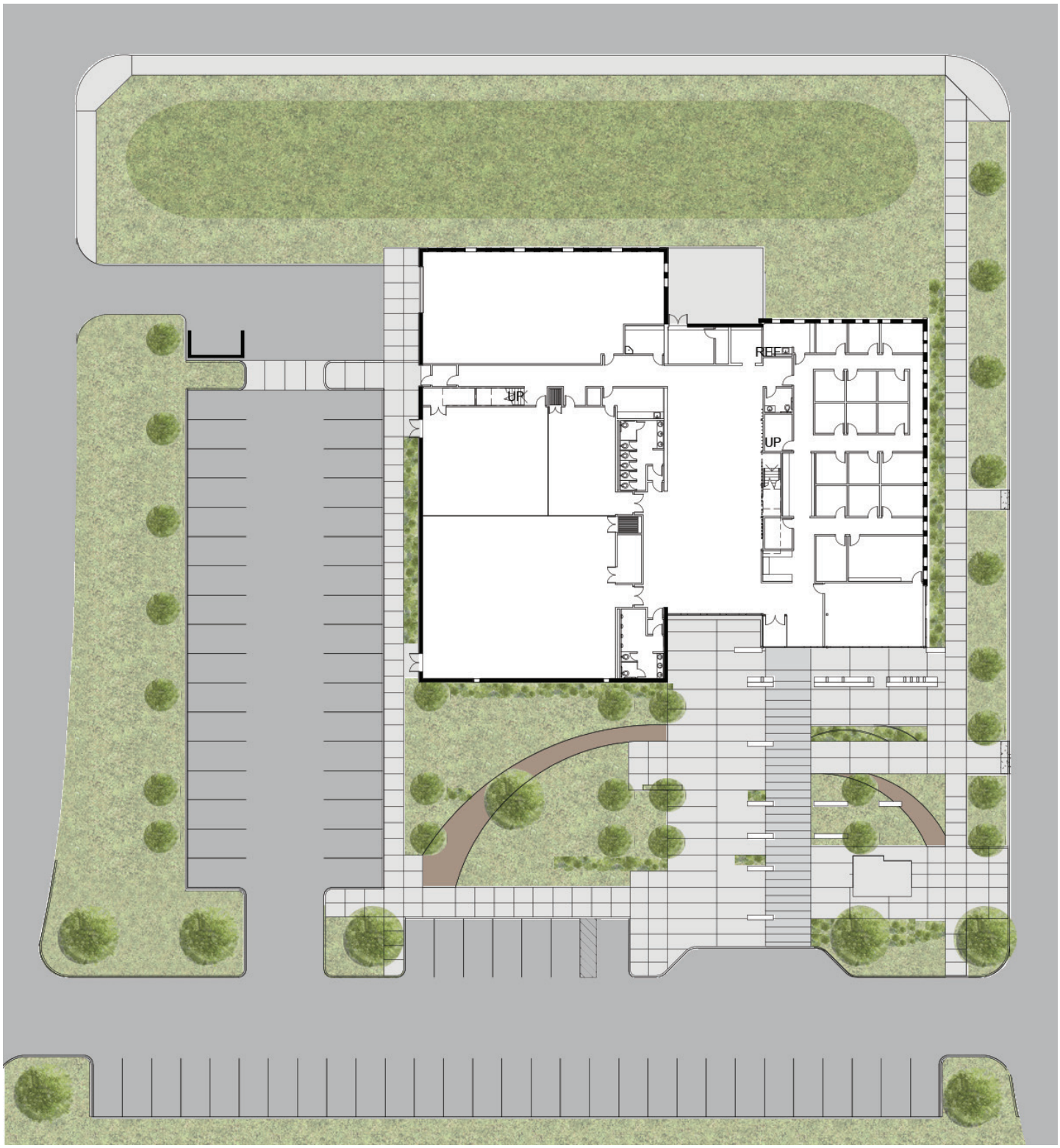
- Applicable Codes
  - 2019 Oregon Structural Specialty Code
  - 2019 Oregon Zero Energy Ready Commercial Code
  - 2019 Oregon Mechanical Specialty Code
  - 2017 Oregon Electrical Specialty Code
  - 2017 Oregon Plumbing Specialty Code
- The existing building is Type V-B construction with an NFPA (National Fire Protection Association) 13 sprinkler system.
- It is assumed the new building will be Type V-B construction with an NFPA 13 sprinkler system. The building will be mixed occupancy of Assembly and Business groups and require rated occupancy separation between these.

Site Utilization

Given the existing conditions- roadways, driveways, pedestrian circulation, parking areas, on-site natural features, easements and regulatory parameters, and climate trends- there are particular areas on the site that are most appropriate for siting a new building and areas best for parking and public plazas. This diagram highlights one approach to utilizing the site to its greatest potential and efficiency.



Concept Site Plan



Phase One: New Building

Design Concept

Background

This Facility Master Plan has two significant features. Phase One is to establish a new academic building along with the development of the south parcel of land owned by the College. Phase Two will be dedicated to the renovation of the main existing academic building to accommodate the changing needs of the college and community.

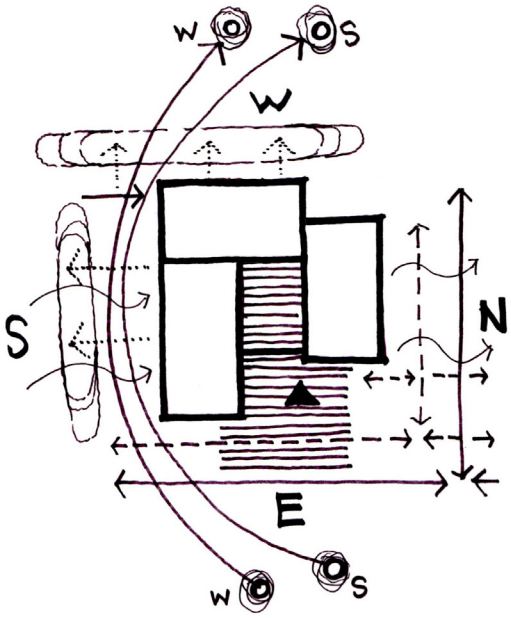
Concept Drivers

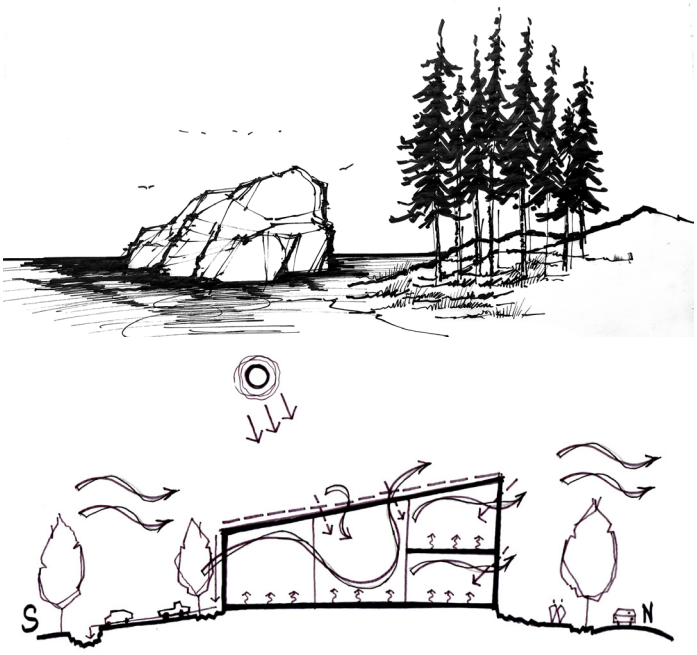
The design team leveraged geographic features, natural metaphors, regional vernacular, and sustainable solutions along with the existing campus context to inform the architectural composition and aesthetic approach. In using these place making strategies the intent is to create an addition to this campus that is an appropriate, harmonious, and welcoming space for all people.

Approach

The new building is organized into three distinct zones oriented in an east-west configuration. Each area follows a simple structural grid module for efficient construction and future flexibility. The simple frame system allows spaces within to be adapted and renovated over time as needs change.

The building bar at the north is mainly dedicated to the formal functions of the academic building. Level One is devoted to an office suite that will be used by the Office of the President, Office of Advancement, TBCC Foundation, Institutional Effectiveness, and Human Resources. There will also be a large open space at the west end of the north bar dedicated to additional office space needs that can be further developed after construction is complete. Level Two is dedicated to a mix of high tech lab space for healthcare program expansion, including a new Associate Degree Nursing classroom. The lab space in this north bar will include a medical assisting/ phlebotomy lab, and a simulation lab that can be used by all the healthcare programs. There will also be office spaces for





healthcare program faculty, along with a storage space for the labs that can be accessed from either lab or the hallway. A range of informal learning spaces surround the edge of the hallway supports student cohorts to learn and collaborate together. There is also a space for adjunct faculty to allow for ease of interaction and privacy with students and other staff.

Level One of the south bar of the building is a large multipurpose community space that can be transformed by folding movable partition walls that can subdivide the space into two general classrooms or be opened to form one continuous large space. In the large configuration, the room may serve as a large space for interactive gathering events. A small catering kitchen is located in a corner to facilitate events along with dedicated storage and an I.T. hub. This multipurpose room is an amenity for the College and can be used as a community resource for the public. On the west end of Level One will be a large open space dedicated to Facility Operations. On Level Two of the south bar, there will be a classroom/lab space for the EMT classes, including a mock Ambulance for simulation work, along with a large general purpose classroom that can be subdivided into two smaller classrooms.

Between these two dedicated program building components is a flexible double height lobby space that will regularly function as an informal learning space for students and staff. During large events, it will also serve as the transition space for the multipurpose community space.

The site development will include 71 new parking spaces, additional access points for through traffic and a dedicated service drive providing access to the facility operations area and community space entry. A new storm water bio swale, located to the south of the building, will facilitate on-site water drainage. The main entry of new building, located on the east side, will be bound by a large plaza to welcome the public and serve as an informal gathering space when community events spill out of the community space. New pedestrian pathways create safe links from the existing building to the new building and parking.

New Building

The numeric program to the right identifies the space requirements for the new building.

The chart is organized with the program areas listed in the left-hand column, followed by general room size requirements, room quantities, and square footage of the proposed work.

STUDENT SPACES

	Description	Proposed No. Units	Size (W/L/H) ft	Unit SF	Proposed Subtotal SF
A0	Primary Public Spaces + Support				
A1	Lobby	1	30'-0" x 70'-0"	2,100	2,100
A2	Reception	1	10'-0" x 10'-0"	100	100
A3	Student Lounge- small	2	10'-0" x 15'-0"	150	300
A4	Student Lounge- large	1	30'-0" x 35'-0"	1,050	1,050
A5	Facilities	1	75'-0" x 35'-0"	2,625	2,625
A6	Electrical Room	1	12'-6" x 16'-0"	200	200
A7	Mechanical Room- Large	1	15'-0" x 55'-0"	825	825
A8	Mechanical Room- Small	1	20'-0" x 10'-0"	200	200
A9	MDF	1	10'-0" x 10'-0"	100	100
A10	IDF	1	6'-0" x 4'-6"	27	27
A11	Janitors Closet	2	10'-0" x 8'-0"	80	160
A12	Restrooms- Multiuser	4	15'-0" x 18'-0"	270	1,080
A13	Restrooms- Single User Gender Neutral	1	8'-0" x 8'-0"	64	64
	Total- All Public/ Support Areas SF				8,831

B0	Learning Spaces				
B1	General Purpose/ RN Classroom- 16 seat	1	22'-0" x 34'-0"	748	748
B2	General Purpose Classroom- 48 seat	1	32'-0" x 45'-0"	1,440	1,440
	SUBTOTAL- General Purpose				2,188
B3	Nursing Program- EMT Classroom	1	32'-0" x 30'-0"	960	960
B4	Nursing Program- MA and Phlebotomy Classroom	1	28'-6" x 34'-0"	969	969
B5	Nursing Program- RN Simulation Lab	1	28'-6" x 34'-0"	969	969
B6	Nursing Program- RN Lab/Classrm Storage	1	23'-0" x 12'-0"	276	276
	SUBTOTAL- Nursing Program				3,174
	Total- All Learning Areas SF				5,362

STAFF SPACES

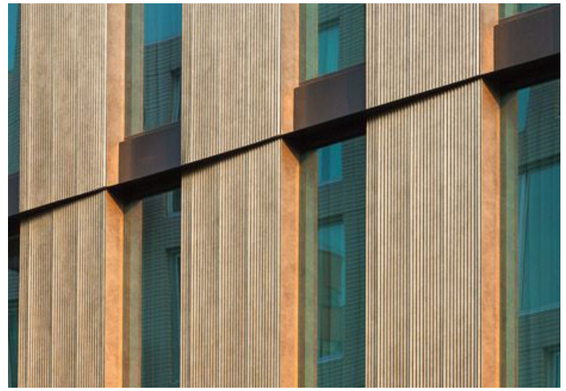
No.	Description	No. Units	Size (W/L/H) ft	Unit SF	Proposed SF
C0	President/Foundation/Institutional Effectiveness/ HR Office & Faculty Office				
C1	President's Office	1	15'-0" x 24'-0"	360	360
C2	Development Director Office	1	10'-0" x 15'-0"	150	150
C3	Foundation Advancement Office	1	10'-0" x 15'-0"	150	150
C4	Grant Writer Office	1	10'-0" x 10'-0"	100	100
C5	Institutional Effectiveness Office	1	10'-0" x 10'-0"	100	100
C6	Institutional Effectiveness Director Office	1	10'-0" x 15'-0"	150	150
C7	H.R. Director Office	1	10'-0" x 15'-0"	150	150
C8	H.R. Office	1	10'-0" x 10'-0"	100	100
C9	Marketing Office	1	10'-0" x 10'-0"	100	100
C10	Office Storage	1	10'-0" x 12'-0"	120	120
C11	Work Area	1	4'-0" x 20'-0"	80	80
C12	Staff Room	1	10'-0" x 16'-0"	160	160
C13	Board Room	1	20'-0" x 34'-0"	680	680
C14	Faculty Offices	8	10'-0" x 10'-0"	100	800
C15	Office- Large	1	10'-0" x 15'-0"	150	150
C16	Adjunct Office	1	16'-0" x 15'-0"	240	240
C17	Nursing Faculty Offices	4	10'-0" x 10'-0"	100	400
	Total- All Staff Areas SF				3,990

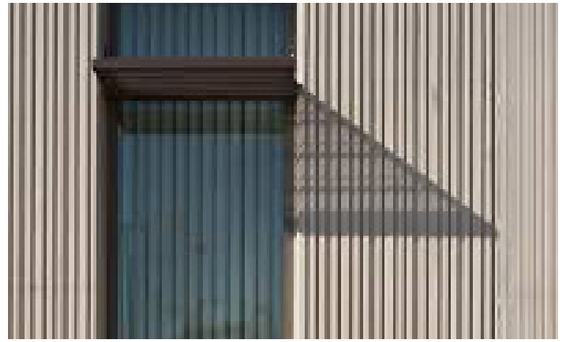
COMMUNITY SPACES

No.	Description	No. Units	Size (W/L/H) ft	Unit SF	Proposed SF
D0	Community Event Space				
D1	Event Room- Divisable into Smaller Rooms	1	60'-0" x 85'-0"	5,100	5,100
D2	Event Room Storage	1	10'-0" x 15'-0"	150	150
D3	Catering	1	10'-0" x 15'-0"	150	150
	Total Support Structure SF				5,400

No.	Description	Proposed SF
	Existing Building Totals	
G1	Subtotal Student Spaces	1,444
G2	Subtotal Staff Spaces	4,415
G5	Subtotal Net Programmed Area	5,860
G8	Building Efficiency Factor (20%)	1,172
	Total Gross Classroom Bldg. Square Footage	7,031

Exterior rendering of New TBCC Building





Materials Palette from top to bottom:
Fiber Cement Panel, Metal Panel, Tilt Up Concrete

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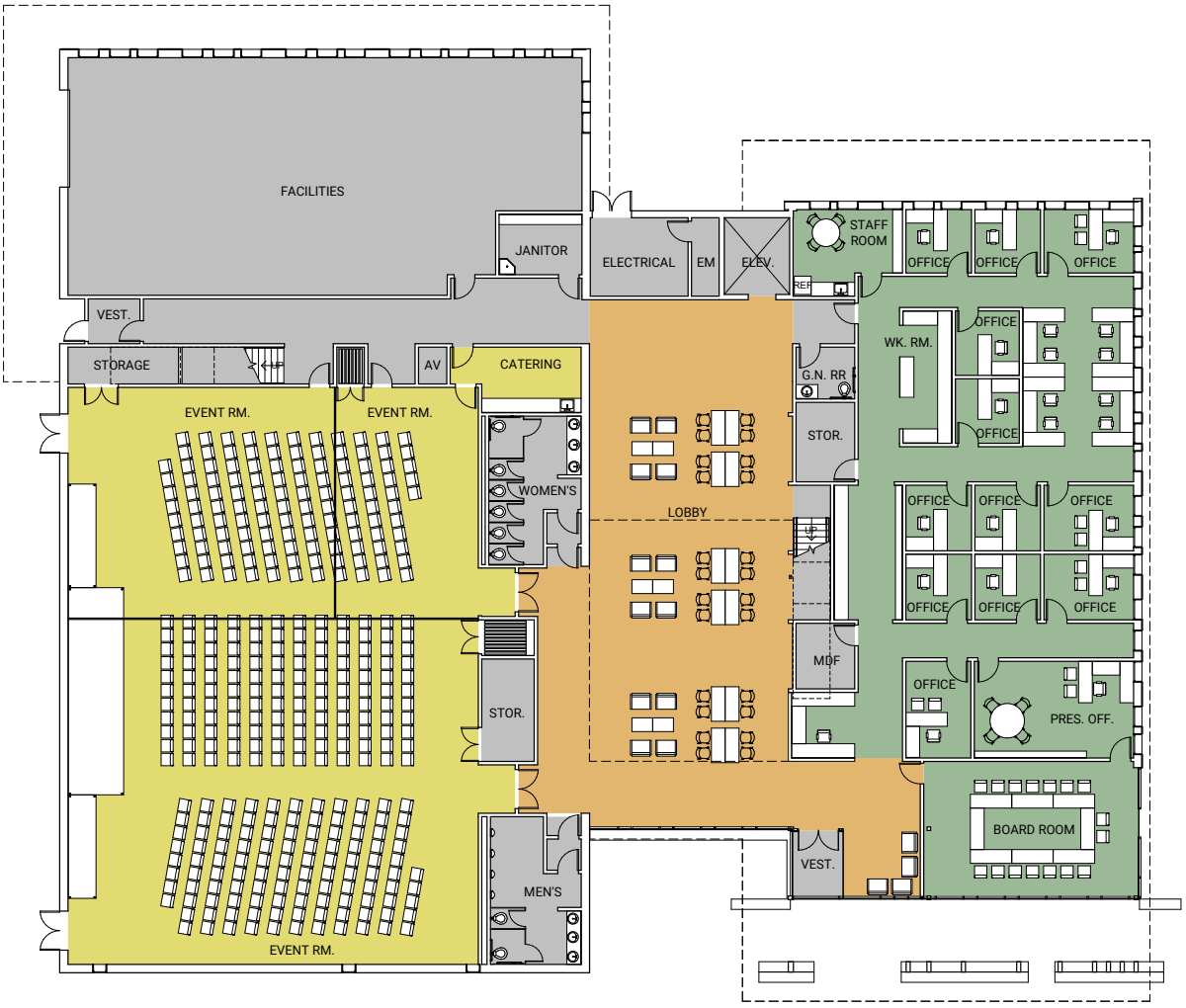
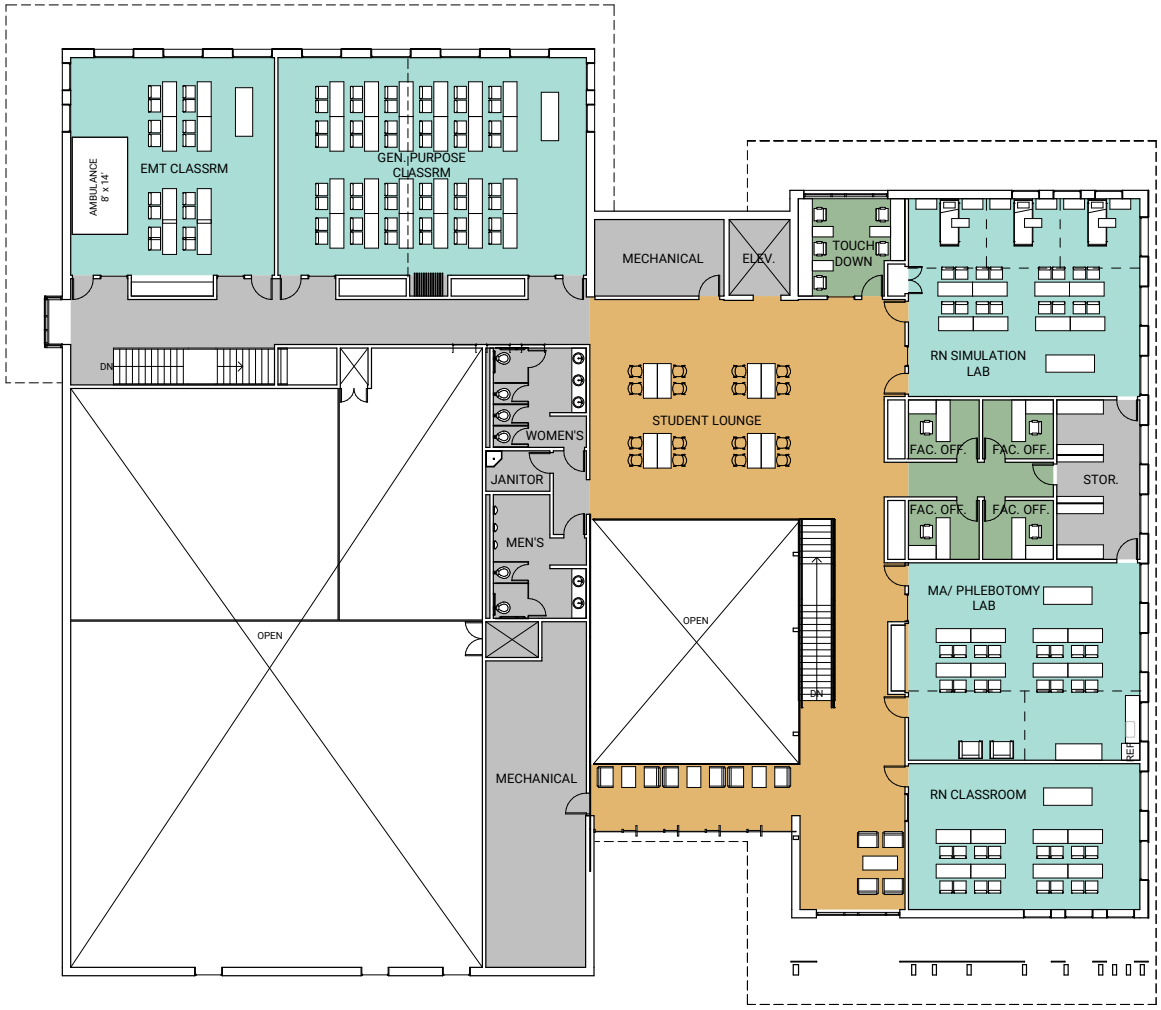
New Building

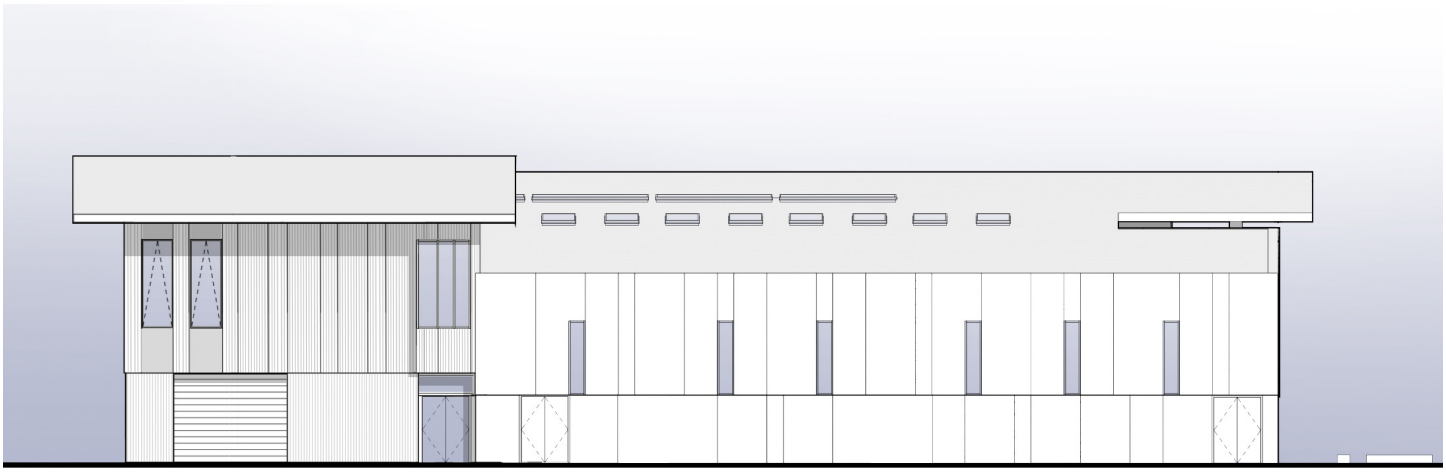
Design Concept



level 1

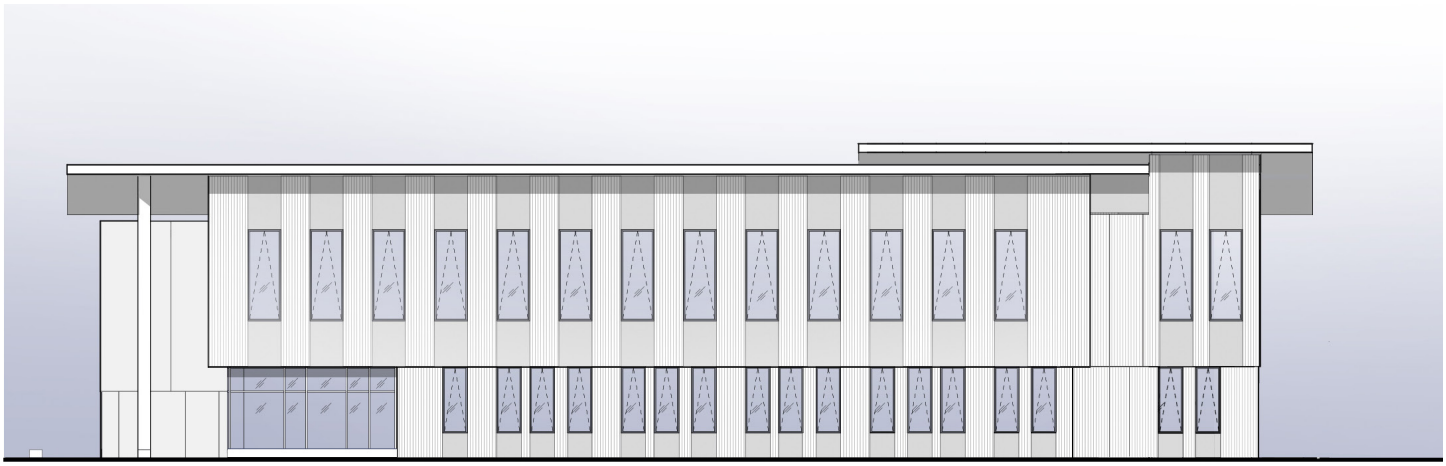

EMT CLASSRM
AMBULANCE 8' x 14'
GEN. PURPOSE CLASSRM
MECHANICAL
ELEV.
TOUCH DOWN
RN SIMULATION LAB
DN
STUDENT LOUNGE
WOMEN'S
FAC. OFF.
FAC. OFF.
STOR.
JANITOR
FAC. OFF.
FAC. OFF.
MEN'S
MA/ PHLEBOTOMY LAB
OPEN
OPEN
DN
REF
MECHANICAL
RN CLASSROOM

level 2



south elevation

west elevation



north elevation

east elevation

Interior rendering of New TBCC Building from the lobby looking toward the entry plaza

Materials Palette:
Cross laminated timber ceiling, glulam columns and beams, with concealed connections for warmth a local resource that celebrates Tillamook's history in the timber industry

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Phase Two: Renovation

The prime objective of the renovation to the existing building is to reinvent areas of the building to create better connections with faculty, staff, and students with the aim of achieving more efficiency and greater student success. The student services area will be transformed to be a more open and interactive space creating a career advising and student success center. An expanded food pantry will be added giving the ability to serve students at a higher level. Redesigned flexible student spaces will allow students to work together and congregate.

At the heart of the building, a new reception desk located in the main lobby will welcome visitors and serve as a one-stop location to direct people and provide information.

On level two the office suite, dedicated to faculty, will extend into the location of the current Board Room. This will include an interactive central conference room that will also function as a small classroom surrounded by seven new offices and a break/work room area. Along the corridor, huddle study rooms will be located to provide more dedicated space for interactive meetings. A Tutoring Studio and additional study rooms will be directly connected to the Library resource area. With the increase and upgrade of additional classrooms in the new building three classrooms will be converted to be a new office suite for instruction to enhance the ability for connection points for the students. Although these three classrooms will be re-purposed, it is important to note this valuable space will not be lost. TBCC will gain classrooms through the conversion of the computer lab and other reconfiguring to improve space use.

Existing Building

The numeric program to the right identifies the space requirements for the existing building renovation.

The chart is organized with the program areas listed in the left-hand column, followed by general room size requirements, room quantities, and square footage of the proposed work.

STUDENT SPACES

	Description	Proposed No. Units	Size (W/L/H) ft	Unit SF	Proposed Subtotal SF
	Primary Public Spaces + Support				
A1	Reception	1	9'- 8" x 14'- 0"	135	135
A2	Student Lounge/ Waiting Area	1	6'-10" x 21'-10"	149	149
A3	Wellness Room- Level 2	1	9'- 2" x 14'- 4"	131	131
A4	Student Study Rooms	3	9'- 0" x 10'- 0"	90	270
A5	Gender Neutral RR	1	8'- 0" x 12'-10"	103	103
A6	Food Pantry	1	10'- 4" x 22'- 10"	236	236
	Learning Spaces				
B1	Tutoring Studio	1	17'- 6" x 24'- 0"	420	420
	Subtotal				**1,444**

STAFF SPACES

No.	Description	No. Units	Size (W/L/H) ft	Unit SF	Proposed SF
	Business Office				
D1	Office	1	9'- 8" x 11'-10"	114	114
D2	Shipping/ Receiving Storage	1	11'- 0" x 11'- 10"	130	130
D3	Store	1	2'- 0" x 9'- 6"	19	19
	Subtotal				**263**
	Student Services Office				
D7	Office	2	9'- 0" x 10'- 0"	90	180
D8	Office	1	10'- 0" x 14'- 6"	145	145
D9	Student Open Workstations/ Touch Down Area	1	12'- 4" x 28'- 10"	365	365
D10	Work Room	1	12'- 0" x 14'- 9"	177	177
D11	Quiet Room	1	8'- 6" x 9'- 6"	81	81
D12	Huddle Room- Level 1	1	10'-0" x 12'-0"	120	120
D13	Storage	1	8'-6" x 12'-0"	102	102
	Subtotal				**1,170**
	Instruction Office				
D14	Vice President of Instruction	1	10'-0" x 23'-6"	235	235
D15	Dean's Office	2	11'-6" x 14'-0"	161	322
D16	Office	7	9'-0" x 9'-6"	86	599
D17	Waiting Area	1	9'-0" x 10'-0"	90	90
D18	Work Room	1	9'-0" x 15'-0"	135	135
	Subtotal				**1,381**
	Faculty Office				
D19	Office	7	9'- 0" x 9'- 6"	86	599
D20	Work Room	1	10'- 0" x 15'- 8"	157	157
D21	Break Room	1	13'- 9" x 15'- 8"	215	215
D22	Conference Room	1	17'- 6" x 24'- 0"	420	420
	Total- All Staff Areas SF				**1,391**
	Library				
D23	Office	1	9'- 0" x 9'- 6"	86	86
D24	Work Room	1	9'- 2" x 13'- 8"	125	125
	Subtotal				**211**

No.	Description	Proposed SF
	Existing Building Totals	
G1	Subtotal Student Spaces	1,444
G2	Subtotal Staff Spaces	4,415
G5	**Subtotal Net Programmed Area**	**5,860**
G8	Building Efficiency Factor (20%)	1,172
	Total Gross Classroom Bldg. Square Footage	**7,031**

Existing Building

Design Concept

AREA LEGEND

- Office New
- Student Space- New
- Support-New

level 1

AREA LEGEND

- Classroom- New
- Office New
- Student Space- New
- Support-New

level 2


TILLAMOOK BAY
COMMUNITY COLLEGE
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CHANGE YOUR LIFE.

Schedules

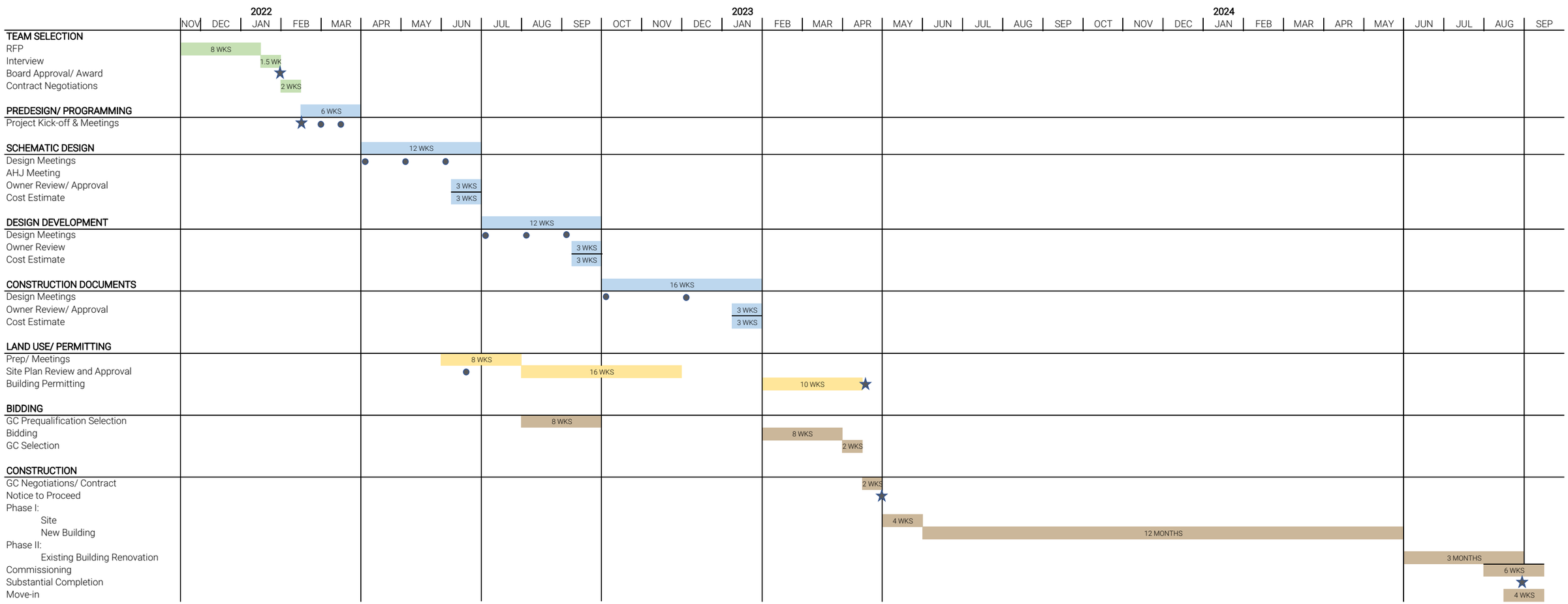
Design / Bid / Build (DBB)

This project delivery method consists of hiring an architectural and engineering (A/E) design team to program and design the project. The A/E team guides the owner through the design process, manages jurisdictional approvals, and drafts a complete construction document package consisting of drawings and specifications that a contractor will then use to competitively bid the project.

A pre-qualification process allows public institutions to narrow their choice in contractors allowed to bid on the project. Bidding commonly occurs once the construction documents are complete and, in some cases, after a building permit has been obtained. Once bidding is complete, and a Contractor is selected, they will begin construction.

The main advantage of this delivery method is that it encourages competitive bids and may result in the lowest total construction cost.

The risks associated with this method may include a longer project delivery timeline since contractor is brought on later in the process. Contractor selection is based on lowest bid rather than qualifications. There may be more Change Orders since bidders do not collaborate with the A/E team early in the design process.



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Construction Manager / General Contractor (CMGC)

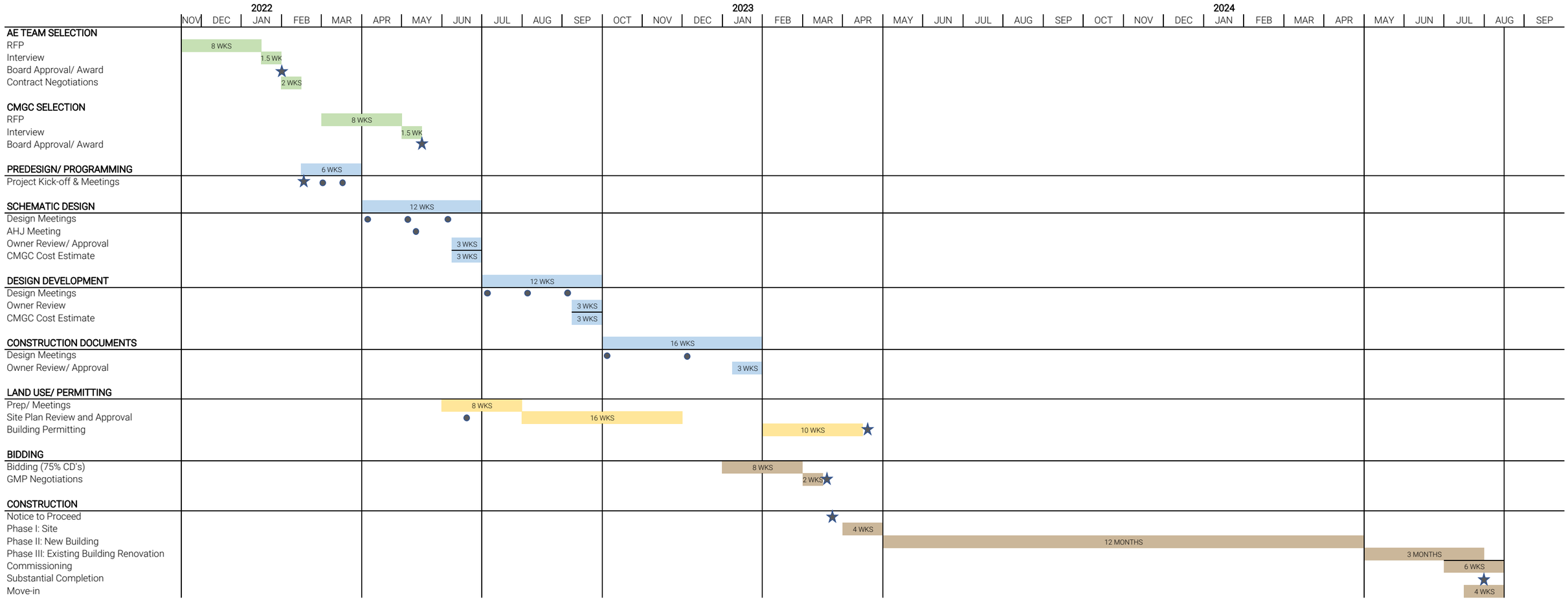
This project delivery method consists of hiring an architectural and engineering (A/E) design team to program and design the project. The A/E team guides the owner through the design process, manages jurisdictional approvals, and drafts a complete construction document package.

Early in the design process, a Construction Manager General Contractor (CMGC) is selected to engage with the A/E team and Owner. Their services include providing cost estimating, project phasing, and working through design and constructibility issues with the team prior to construction.

Rather than a competitive bid between multiple contractors, the selected CMGC will open the project to their subcontractors who will then bid on particular systems. The CMGC will then establish a GMP, or Guaranteed Maximum Price for the project.

Some of the advantages of this delivery method are that it allows for CMCG selection based on qualifications, encourages collaboration, allows for cost checks throughout design, and ensures the contractor has institutional knowledge of the project. Commonly this is thought to reduce the number of Change Orders. This method may also reduce the overall project delivery timeline since the CMGC is already on board.

Some of the disadvantages to this method are that there are additional costs for the CMGC's services during the design process, the GMP accounting process may be less transparent than a competitively bid structure, and it may encourage less competitive bidding, overall.



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Support Information

Outline Specifications

Division 0 - Contracting

- Survey
- Geotechnical Investigations & Report
- Environmental Impact/ Hazardous Materials Survey

Division 1 - General Requirements

- Owner Furnished Items: Furniture, artwork, non-code compliant interior and exterior signage, IT server equipment
- 1.5% for Green Energy Technology: Owner to coordinate filing requirements to State of Oregon
- 1% for Art: Owner to coordinate filing requirements to State of Oregon
- LEED Silver Certification
- Special Inspections Testing: Owner shall provide independent third-party inspection and testing services

Division 2 - Existing Conditions

- Demolition: Selective demolition of existing site and building elements required for development of new work.

Division 3 - Concrete

- Walkways/Sidewalks: Where indicated on plans; 4-inch thick cast-in-place slab, broom finish
- Floor Slab: 6-inch thick slab-on-grade over vapor barrier and perimeter insulation, polished finish typical, sealed finish at back-of-house areas; 2-inch topping slab over CLT floor deck
- Foundations: 12-inch thick cast-in-place continuous footing, 6-inch thick perimeter stem wall

Division 5 - Metals

- Light Gauge Metal Framing: Exterior walls- 6” metal studs at 16” o.c.. Interior partitions- 3-5/8” studs at 16” o.c.
- Metal Stairs and Railings: Steel channel stringers with pre-cast concrete treads, closed steel risers, painted steel pipe handrail, painted steel guardrail, pickets, and stanchions.

Division 6 - Woods, Plastics, Composites

- Provide wood products from FSC Sources where available
- Plywood and composite wood products to have no added urea formaldehyde
- Use pressure treated wood products where in contact with concrete or in areas where wood decay is a concern

- Wood Columns, Beams: Doug Fir, sanded and finished
- Glue-Laminated Columns/ Beams: Doug Fir, Architectural Grade, sanded and finished
- Floor/ Roof Deck: Cross Laminated Timber
- Sheathing: Plywood
- Interior Architectural Woodwork: AWI custom grade casework, wood substrate, plastic laminate finish on wall, base cabinets and countertops.
- Resilient Base: 4-inch rubber
- Wood Base: 6-inch solid white maple with clear sealant
- Wood Windowsills: Solid white maple with clear sealant
- FRP: to be provided at all Janitor's closets indicated on plans, 4 ft height

Division 7 - Thermal and Moisture Protection

- Waterproofing: Cold-fluid applied at sub-grade locations
- Damproofing: Thickened slab edge locations
- Water Resistant Barrier
- Rigid Insulation: XPS 3-inch (R-14.6) at slab-on-grade, poly-iso 6-inch minimum (R-30) tapered insulation at roof, poly-iso 2.5-inch (R-7.5) thick at walls, Vapor Barrier
- Batt Insulation: Fiberglass 6-inch (R-13)
- Acoustic Insulation: Fiberglass 3.5-inch batt insulation
- Joint Sealants: Silicone at wet areas and ceramic tile; latex at general use, interior applications, and acoustically rated transitions; urethane at exterior applications and dissimilar materials
- Sheet Metal Flashings and Trim: Pre-finished metal with galvanized zinc coating and at gutters, downspouts, collector heads, copings, and exposed flashings. Galvanized counter-flashings and reglets. Self-adhered rubberized asphalt flexible flashings.
- Firestopping: At all penetrations in fire-rated partitions and floor assemblies.
- Roofing: Structural Standing Seam Metal, prefinished
- Siding: Fiber reinforced concrete panel system

Division 8 - Openings

- Storefronts: Double-glazed, thermally broken, with anodized finish
- Exterior Entry Doors: Aluminum with full relite to match storefronts
- Exterior Service Doors: Hollow metal primed for field painting
- Overhead Sectional Doors: Insulated steel sectional door with vision panels
- Interior Doors: Solid core wood doors, prefinished, clear sealant
- Louvers: Fixed extruded prefinished aluminum
- Door Frames: Fully welded hollow metal with finish to match adjacent wall finish
- Door Hardware: Includes but not limited to electric strikes, electro-magnetic locks, exit devices, lock-sets, hinges, cylinders and card readers. Comply with existing TBCC keying system for all hardware. Components to be stainless steel.
- Keycard Lock Access: Card readers to be installed at all building entrances, readers at exterior doors to be hard-wired, readers to be connected to emergency power at all building entrances

Divison 9 - Finishes

- Required STC Ratings:
- Floor/ Ceiling Assemblies 55-59
- Room/ Room Assemblies 50-54
- Room/ Corridor Assemblies 50-54
- Wall Finishes: Single layer of Gypsum Board, typical. Double layer of Gypsum Board with resilient channel for walls requiring STC 50.
- Paints and Coatings: Low or zero VOC paints required. Traffic rated coatings for parking striping and curb paint. Clear finish for all exposed structural columns, beams and decking.
- Tile: Ceramic tile and porcelain tile at floors and/or walls
- Resilient Flooring: Linoleum sheet flooring, 4-inch Rubber Base
- Tile Carpeting
- Acoustic Ceilings: Exposed grid acoustic panel system
- Acoustic Panels: Fabric wrapped glass fiber board panels

Division 10 - Specialties

- Signage: All signage to comply with TBCC standards. Interior code required signage and room identification signage to be wall mounted plastic panels with welded

raised letters, Braille per ADA.

- Markerboards: Framed 4 ft. x 12 ft. laminate porcelain-enamel markerboard with pen tray
- Tackable Wall Systems: 4 ft. x 8 ft. cork tack-boards
- Toilet Accessories: Stainless steel ADA grab bars, seat cover dispensers, toilet tissue holders, napkin disposal, coat hooks, soap dispensers, paper towel/ waste receptacle, standard framed mirrors, baby changing stations, mop rack.
- Toilet partitions: 1" thick solid HDPE plastic panels, floor mounted with headrail.
- Operable Partition: Manually operated, STC-50 min.
- Wall Protection: Stainless steel, extruded one-piece, surface mount with adhesive, clear finish, 4 ft. height.
- Fire Extinguisher Cabinets: Satin stainless-steel w/ clear plastic window and fire extinguisher
- Electronic Messaging Signage: Digital by owner
- Electronic Markerboards (Smart Boards)

Division 11 - Equipment

- Appliances: Energy Star Rated microwave, refrigerator, dishwasher where indicated on drawings
- Projection Screens: Surface mounted, manual operation front projected screen

Division 12 - Furnishings

- Window Treatments: Manual roller shades, 3% openness
- Window Treatments: Motorized roller shades, 3% openness
- Walk-off Mats: Located at building entrance vestibules

Division 14 - Conveying Equipment

- Elevator: Holeless, 2-stop hydraulic passenger elevator, sized for gurney, with building announcement speaker, emergency phone, and keycard access. Cab finishes to include stainless steel doors and frames, carpet flooring, vandal resistant stainless steel and plastic laminate wall panels, single piece brushed stainless steel handrails, and standard ceiling with recessed LED fixture.

Division 21 - Fire Suppression

- Automatic sprinkler system throughout building per NFPA 13
- Smoke Detection system throughout building
- Fire Alarm System throughout building

Division 22 - Plumbing

- Fixtures: All sinks, lavatories, toilets, faucets, mop sinks, and other plumbing fixtures to match existing campus standards.
- Hose Bibs

Division 23 - Mechanical

- HVAC system: VRF or Heat Pumps similar to current TBCC Buildings
- Ceiling Fans

Division 26 - Electrical

- Power: Assume 480Y/277V (for mechanical/ motors and lighting respectively), three phase AC power service. New exterior above grade pad-mounted transformer. Metal-clad aluminum cable for all concealed branch circuit wiring and exposed jacketed for unfinished crawl spaces and attics.
- Lighting: LED linear direct/indirect pendant mounted fixtures and LED accent fixtures
- Lighting Controls: Assume dual technology, wall/ ceiling/switch located occupancy sensor and photo sensor controlled lighting in interior space
- Exterior Light poles: Pole lighting in site parking areas, Dark Sky compliant LED fixture
- Exterior Building Lighting: Egress and security

Division 27 - Communications

- IT: All pathways, conduit, back boxes, cabling, IT room racking/frames, and associated equipment
- Clocks: GPS synchronized wireless, with transmitter

Division 28 - Security

- Door Access and Control: Includes security management system client workstation, intelligent system controller, input/output control modules, and associated soft/hardware and service. All devices to be hardwired. Main system to incorporate central battery inverter for emergency power.
- Security Camera Devices

Division 31 - Earthwork

- Erosion and Sediment Control: Control and containment of erosion and sediment materials, protection of catch basins, stabilization of site entrances, rock entries, wheel wash basins, sediment control measures, sediment fencing placement, tree protection and tree protection fencing.
- Earthwork and Site Prep: Site clearing, removal of vegetation, concrete, asphalt, topsoil, non-engineered fill, surface and subsurface improvements to native soil.
- Earth moving: Excavating and backfilling for buildings and structures, excavating and backfilling for utility trenches, preparing sub-grades, drainage course for concrete slabs-on-grade, sub-base and base-course for concrete walk and pavements, sub-base and base-course for asphalt paving, drainage fill for stormwater facilities

Division 32 - Exterior Improvements

- Asphalt Paving: All asphalt paving to meeting City of Tillamook Standard Specifications.
- Concrete Paving: All concrete pavement shall meet City of Tillamook Standard Specifications. Driveways, roadways, parking lots, curbs and gutters, and sidewalks. Concrete paving joint sealants to be cold and/or hot applied.
- Site Furnishings: Bicycle Racks, Cast-in-place concrete benches, trash receptacles
- Wheel Stops: Pre-cast concrete, (1) at each parking stall, secured with steel dowel
- Landscaping: Concrete Pavers Flatwork, Groundcovers, Shrubs, Water Detention Areas (Swale), Irrigation

Division 33 - Utilities

- Water Utility Distribution Piping and Products: Domestic water service, fire service, fire hydrants, fire department connections, backflow assemblies. Water meters furnished by utility.
- Fire Connection: Fire flow shall be determined for development requirements.
- Sanitary Distribution Piping: Gravity flow, non-pressure sanitary sewer outside the building with the following components: pipe and fittings, non-pressure couplings, cleanouts and manholes.
- Storm Distribution Piping: Includes gravity flow non-pressure storm drainage outside the building with the following components: pipe and fittings, trench drains, manholes, cleanouts, non-pressure transition couplings, catch basins, stormwater inlets, and pipe outlets.
- Subdrainage: Perforated wall pipe and fittings, geotextile filter fabric, and drainage panels for retaining walls, foundations, footings

Cost Estimate

COST ESTIMATE SUMMARY

Existing Building	$	1,284,444.00
Site-work	$	746,524.88
New Building	$	14,868,729.06
	$	**16,899,697.94**
Escalation @ 5% per year, year 1	$	844,984.90
	$	17,744,682.84
Escalation @ 5% per year, year 2	$	887,234.14
	$	18,631,916.98
Escalation @ 5% per year, year 3	$	931,595.85
	$	19,563,512.83
Soft Costs @ 30%	$	5,869,053.85
PROJECT BUDGET	**$**	**25,432,566.68**

COST ESTIMATE SUMMARY- RENOVATION

Existing Building	$	1,284,444.00
	$	**1,284,444.00**
Escalation @ 5% per year, year 1	$	64,222.20
	$	1,348,666.20
Escalation @ 5% per year, year 2	$	67,433.31
	$	1,416,099.51
Escalation @ 5% per year, year 3	$	70,804.98
	$	1,486,904.49
Soft Costs @ 30%	$	446,071.35
PROJECT BUDGET	**$**	**1,932,975.83**

COST ESTIMATE SUMMARY- NEW BUILDING

New Building	$	14,868,729.06
	$	**14,868,729.06**
Escalation @ 5% per year, year 1	$	743,436.45
	$	15,612,165.51
Escalation @ 5% per year, year 2	$	780,608.28
	$	16,392,773.79
Escalation @ 5% per year, year 3	$	819,638.69
	$	17,212,412.48
Soft Costs @ 30%	$	5,163,723.74
PROJECT BUDGET	**$**	**22,376,136.22**

COST ESTIMATE SUMMARY- SITE WORK

Site-work	$	746,524.88
	$	**746,524.88**
Escalation @ 5% per year, year 1	$	37,326.24
	$	783,851.12
Escalation @ 5% per year, year 2	$	39,192.56
	$	823,043.68
Escalation @ 5% per year, year 3	$	41,152.18
	$	864,195.86
Soft Costs @ 30%	$	259,258.76
PROJECT BUDGET	**$**	**1,123,454.62**

EXISTING BUILDING RENOVATION

1st FLOOR					
Demo: Floor	7000 sf	$ 1.00	$ 7,000.00		
Demo: Ceiling (salvage)	7000 sf	$ 0.75	$ 5,250.00		
Demo: Walls	7000 sf	$ 3.00	$ 21,000.00		
Demo: Electrical	7000 sf	$ 0.50	$ 3,500.00		
Demo: Mechanical	7000 sf	$ 0.50	$ 3,500.00		
Disposal	7000 sf	$ 1.00	$ 7,000.00		
Walls (paint, trim)	150 lf	$ 100.00	$ 15,000.00		
Doors/frames	9 ea	$ 3,000.00	$ 27,000.00		
Flooring (+ base)	7000 sf	$ 9.00	$ 63,000.00		
Ceiling (reuse salvage)	7000 sf	$ 6.00	$ 42,000.00		
Electrical (reuse lights)	7000 sf	$ 7.00	$ 49,000.00		
Mechanical	7000 sf	$ 5.00	$ 35,000.00		
Misc.	7000 sf	$ 10.00	$ 70,000.00		
			$ 348,250.00	$ 116.08	
Contingency	40 %		$ 139,300.00		
			$ 487,550.00	$ 162.52	
Contractor O&P	20 %		$ 97,510.00		
			$ 585,060.00	$ 195.02	

2nd FLOOR					
Demo: Floor	6000 sf	$ 1.00	$ 6,000.00		
Demo: Ceiling (salvage)	6000 sf	$ 0.75	$ 4,500.00		
Demo: Walls	6000 sf	$ 3.00	$ 18,000.00		
Demo: Electrical	6000 sf	$ 0.25	$ 1,500.00		
Demo: Mechanical	6000 sf	$ 0.25	$ 1,500.00		
Disposal	6000 sf	$ 0.50	$ 3,000.00		
Walls (paint, trim)	680 lf	$ 100.00	$ 68,000.00		
Doors/frames	28 ea	$ 3,000.00	$ 84,000.00		
Flooring (+ base)	6200 sf	$ 9.00	$ 55,800.00		
Ceiling (reuse salvage)	6000 sf	$ 6.00	$ 36,000.00		
Electrical (reuse lights)	6000 sf	$ 7.00	$ 42,000.00		
Mechanical	6000 sf	$ 5.00	$ 30,000.00		
Plumbing:	3 ea	$ 2,000.00	$ 6,000.00		
Misc.	6000 sf	$ 10.00	$ 60,000.00		
			$ 416,300.00	$ 69.38	
Contingency	40 %		$ 166,520.00		
			$ 582,820.00	$ 97.14	
Contractor O&P	20 %		$ 116,564.00		
			$ 699,384.00	$ 116.56	
TOTAL			**$ 1,284,444.00**		

SITE WORK: w/O&P

(E) Fac. Building Demo	2500 sf	$	1.00	$	2,500.00
Site Demo and disposal (WAG)	24003 sf	$	0.35	$	8,401.05
Site Utilities	49820 sf	$	2.00	$	99,640.00
Landscaped Areas: Seeding and trees	14889 sf	$	3.00	$	44,667.00
Concrete Walkways/ Sidewalks:	8772 sf	$	9.00	$	78,948.00
Plaza with Concrete Pavers:	5882 sf	$	12.00	$	70,584.00
Asphalt Paving	26973 sf	$	6.00	$	161,838.00
				$	466,578.05
Contingency	40 %			$	186,631.22
				$	653,209.27
Contractor O&P	20 %			$	93,315.61
TOTAL				$	746,524.88

NEW BUILDING

Procurement	$6.05 sf	1.2%	$	180,049.86	
General Conditions	$47.08 sf	9.4%	$	1,400,152.42	
Existing Conditions		0.0%	$	-	
Concrete	$33.49 sf	6.7%	$	995,993.45	
Masonry	sf	0.0%	$	-	see *2
Metals	$77.46 sf	15.5%	$	2,303,790.88	
Woods	$5.10 sf	1.0%	$	151,665.53	*1
Thermal/Moisture	$71.61 sf	14.3%	$	2,129,672.08	*2
Openings	$53.53 sf	10.7%	$	1,592,064.39	
Finishes	$28.56 sf	5.7%	$	849,411.68	
Specialty	$3.30 sf	0.7%	$	98,286.04	
Equipment	$2.48 sf	0.5%	$	73,714.53	
Furnishings	$2.18 sf	0.4%	$	64,817.95	
Conveying	$5.13 sf	1.0%	$	152,512.82	
Fire Suppression	$5.57 sf	1.1%	$	165,645.87	
Plumbing	$21.45 sf	4.3%	$	638,011.97	
HVAC	$65.00 sf	13.0%	$	1,933,100.00	
Electrical	$59.69 sf	11.9%	$	1,775,079.77	
Communications	$9.93 sf	2.0%	$	295,281.77	
Safety/Security	$2.34 sf	0.5%	$	69,478.06	
TOTAL	$499.96 sf	100.0%	$	14,868,729.06	

*1 Use of MPP or CLT will require realocating monies from Div. 5 to Div. 6.
*2 Includes: allowance for exterior skin options (metal, masonry, siding, etc.) TBD.
*3 Includes: allowances for site clearing and prep.; major utility development, connection and installation;

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TILLAMOOK BAY COMMUNITY COLLEGE

FFA Architecture + Interiors