UWC-USA

Projects in the President's Extraordinary Expenditure Request

October 7, 2022

Overview

Three Projects:

	Description	Estimated Cost
Castle L1 Project	Renovate guest wing to consolidate admin offices on L1	$1M (2021)
Oval Field Project	Convert grass field to more attractive, sustainable and functional space	$2.5M+ (2022)
Water Infrastructure Project	Repair/replace key elements to improve water conservation/resilience	$450K+ to $2.2M+ (2019)
Total		**$4M+ to $5.7M+**

Overview

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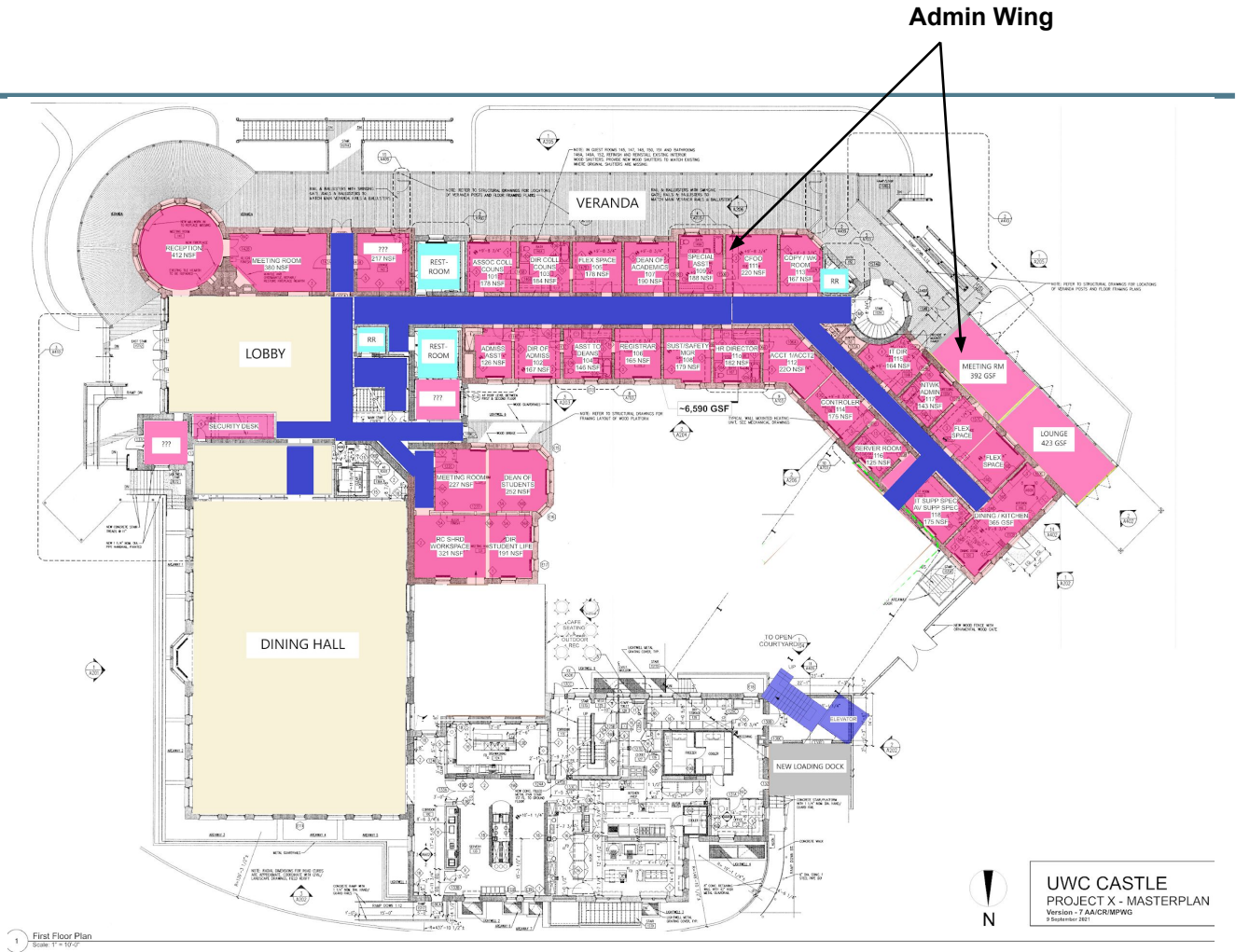
Castle L1

Conceptual Sketch: Renovating Guest Wing as Admin Offices

Level 1

- Lobby (tan)
- Dining (tan)
- Admin spaces - sample layout (pink)
- Restrooms (aqua)
- Circulation and stair (blue)



Castle L1

Exterior views of Castle L1

Current guest wing

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Castle L1

Only Interior Work in Castle Estimated (Oct 2021)			
	Cost per SF: $100 - $175		
FIRST FLOOR	**Total SF**	**COST**	**NOTES**
	6,458	$773,000.00	South Wing Offices, South Wing Employee Lounge, Central Student Life Suite
Add -			
Soft Costs:	20% for MEP,ARCH, CIVIL - DESIGN & CA		
NMGRT:	8.395800%		

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Castle L1

Benefits of implementing this project:

- Consolidation of the school administration into one building that will facilitate staff interaction, culture-building and collaboration.
- Creates a natural focal point to receive visitors to campus at the signature building designed to receive guests with offices, meeting rooms and dining facilities all in close proximity on the same floor.
- Early, visible start to campus transformation and campaign.
- Opens new possibilities for alternative uses for the Old Stone Hotel.
- Increases utilization of the Castle building that has not been fully utilized since the initial renovations.

Oval Field

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Oval Field

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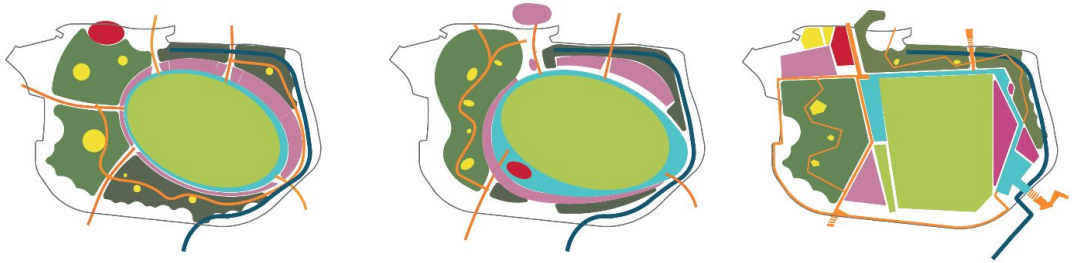
Oval Field

Conceptual Sketch II:
The Oval within the Oval

Diverse programming (sampling of ideas)

1) Activity field
2) Exercise loop
3) Cultural pavilions
4) Outdoor classroom
5) Emphasizes 3 natures:
   - Wild nature (habitats)
   - Agricultural nature (food forest)
   - Ornamental nature (aesthetics)
6) Aligns with 7 goals of landscape plan

Oval Field



	CONCEPT I			CONCEPT II			CONCEPT III			
Item	ft²	Cost	Total	ft²	Cost	Total	ft²	Cost	Total	Comment
Soccer / Lawn	72,500	$5.50	$398,750.00	77,000	$5.50	$423,500.00	82,000	$5.50	$451,000.00	Drip Irrigated
Food Forest	50,000	$0.75	$37,500.00	46,000	$0.75	$34,500.00	41,000	$0.75	$30,750.00	Passive Irrigation
Forested Area	36,000	$0.50	$18,000.00	24,500	$0.50	$12,250.00	25,000	$0.50	$12,500.00	No irrigation
Pollinator Garden	20,000	$1.50	$30,000.00	22,500	$1.50	$33,750.00	32,500	$1.50	$48,750.00	Drip irrigated
Activity Loop	10,000	$15.00	$150,000.00	18,000	$15.00	$270,000.00	16,000	$15.00	$240,000.00	Stone Finished
Connections	6,000	$6.50	$39,000.00	9,000	$6.50	$58,500.00	7,500	$6.50	$48,750.00	Concrete
Paths	6,000	$3.50	$21,000.00	1,800	$3.50	$6,300.00	2,500	$3.50	$8,750.00	DG
Bioswale	11,000	$5.50	$60,500.00	11,000	$5.50	$60,500.00	9,800	$5.50	$53,900.00	Stone/Planting
Cultural Pavilions	6,000	$25.00	$150,000.00	6,000	$25.00	$150,000.00	2,500	$25.00	$62,500.00	Stone /Decks
Covered Pavillion	2,500	$50.00	$125,000.00	2,500	$50.00	$125,000.00	3,500	$50.00	$175,000.00	Wood or Metal Roof
Seat Walls	1,250	$50.00	$62,500.00	1,150	$50.00	$57,500.00	300	$50.00	$15,000.00	2 foot high
Retention Walls	250	$85.00	$21,250.00	485	$85.00	$41,225.00	210	$85.00	$17,850.00	5 Foot High
Storm Chamber (100'x60')	6,000	$9.00	$54,000.00	6,000	$9.00	$54,000.00	6,000	$9.00	$54,000.00	100,000 gal
Site Lighting	NA		$155,000.00	NA		$155,000.00	NA		$155,000.00	26 poles + 50 steplights
	Sub-total		$1,322,500.00	Sub-total		$1,482,025.00	Sub-total		$1,373,750.00	
	Contingency	20%	$264,500.00	Contingency	20%	$296,405.00	Contingency	20%	$274,750.00	
	O+P	28%	$444,360.00	O+P	28%	$497,960.40	O+P	28%	$461,580.00	
	Design	15%	$238,050.00	Design	15%	$266,764.50	Design	15%	$247,275.00	
	Total		$2,269,410.00	Total		$2,543,154.90	Total		$2,357,355.00	

Oval Field

Benefits of implementing this project:

- Early, visible start to campus transformation and campaign and would advance our goal of carbon neutral campus (carbon sequestration), water conservation and a more sustainable landscape.
- Highly visible demonstration of our commitment to peace and a sustainable world and reception to campus and our “Basecamp for the World”.
- Multi-use area incorporating:
    - A more sustainable, compact area for athletics shared with the community;
    - Provides a living outdoor classroom, including a food forest, where students can learn about the interconnectedness of political, social, economic, and environmental problems;
    - An immersive experience to strengthen and develop innovative strategies suited to real-world challenges like the threat to our environment.

Water Infrastructure

Aluminum shell covering the reservoir.

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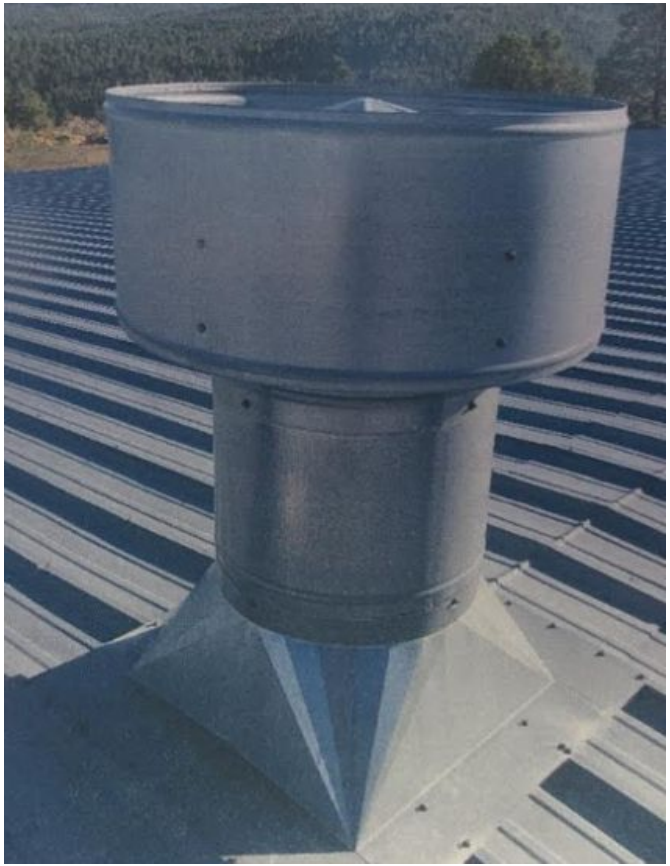
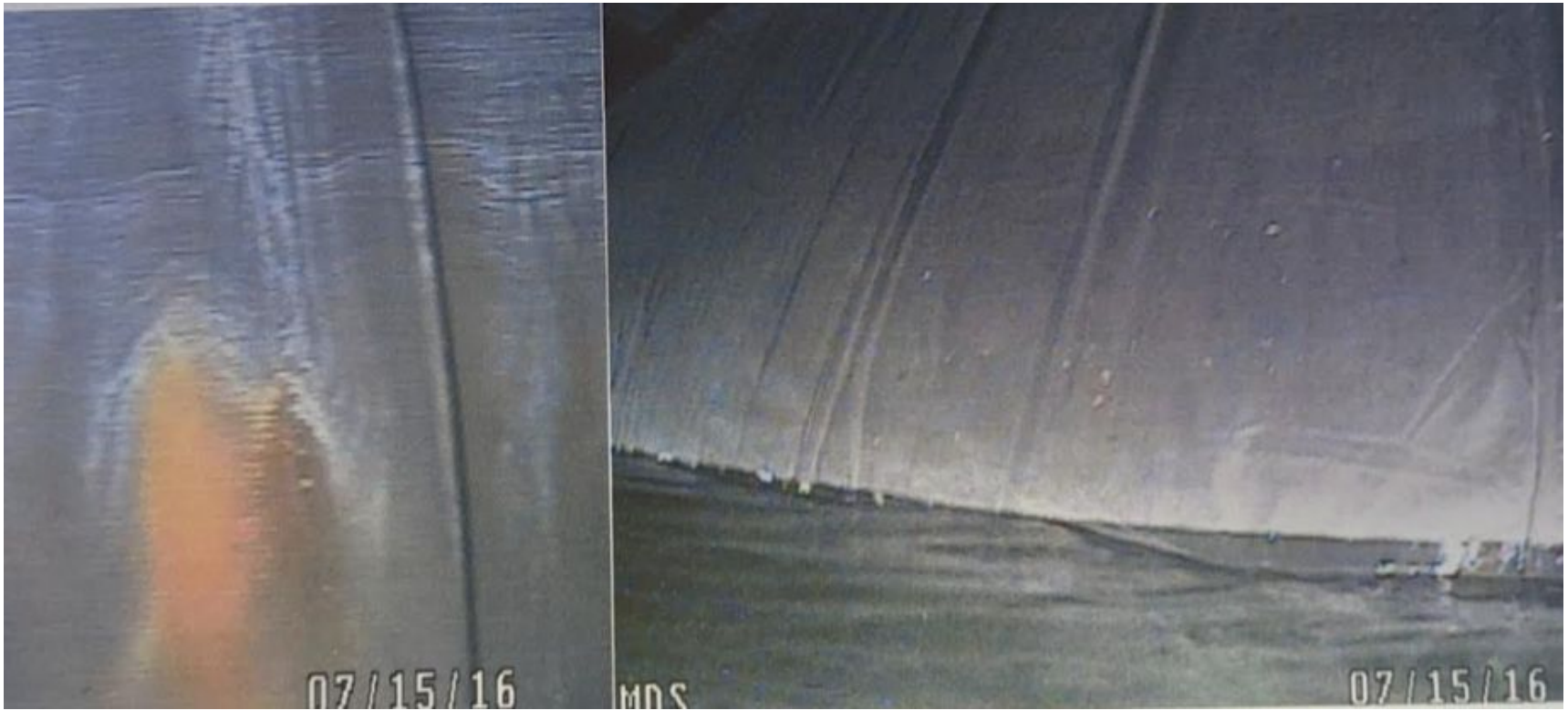
Water Infrastructure



Exterior (L) and interior (R) of aluminum roof

Water Infrastructure



Corrosion on reservoir liner (L) and water lapping on liner (R)

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Water Infrastructure

Corrosion on intake line (L) and on outtake line (R)

Water Infrastructure

Main intake line /
Central distribution

West distribution

East distribution

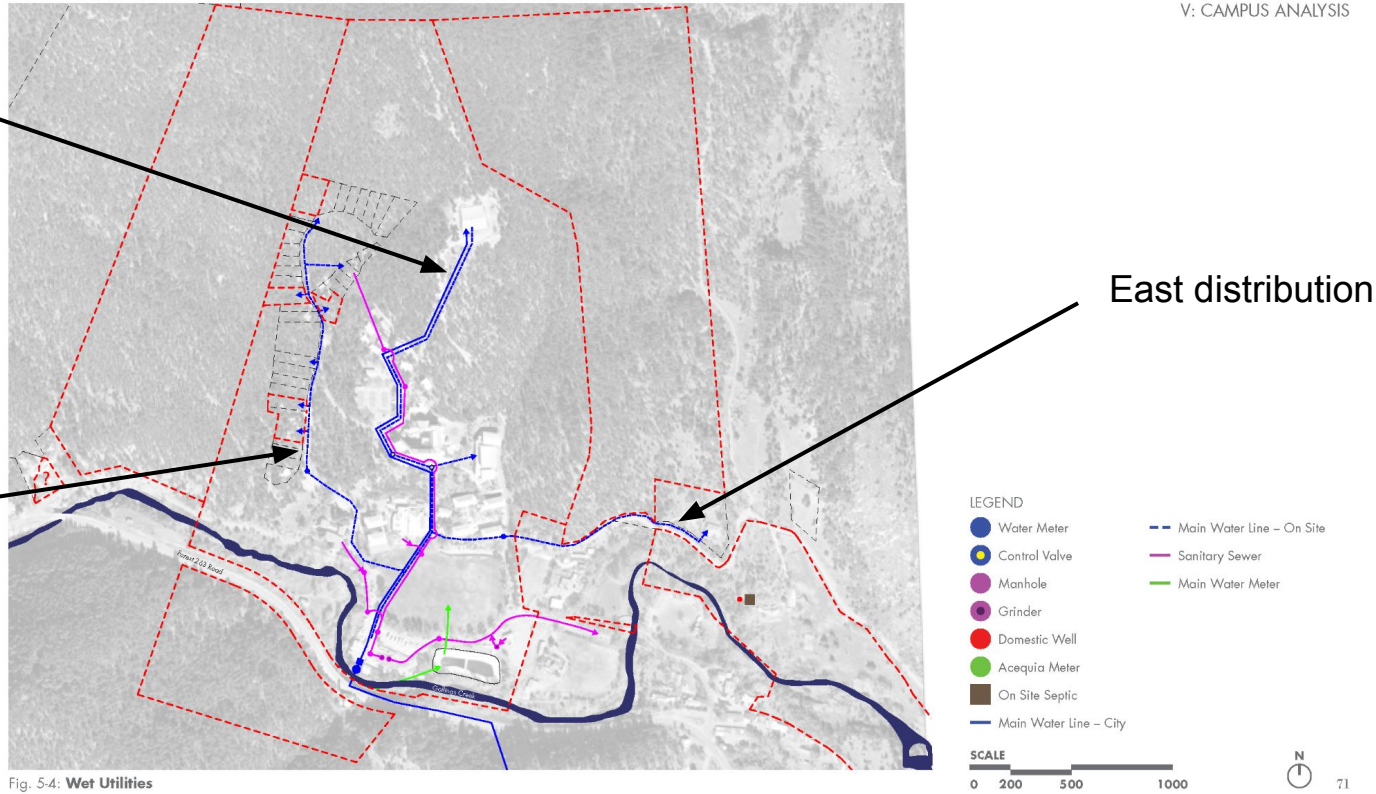

Fig. 5-4: **Wet Utilities**

Water Infrastructure

1. **Water quality**

    a. Concerns
        i. Low levels of chlorine treatment by city; requires optimal performance or own system
        ii. Integrity of reservoir structure

    b. Recommendations
        i. Add sample port at intake
        ii. Re-install of backflow preventer
        iii. Acquire larger chemical feed pump so we can adequately treat water after intake
        iv. Install frost-free hydrant after treatment so we can properly test water quality
        v. Secure reservoir from pest intrusion
        vi. Protect interior structural elements from corrosion
        vii. Increase safety for access/monitoring

Water Infrastructure

2. Water use/loss/distribution

a. Concerns
   i. Condition of aging reservoir/tank - leak?
   ii. Inability to accurately determine water use

b. Recommendation
   i. Conduct full inspection of reservoir/tank and lining
      1. Consider repairs
      2. Consider replacement
      3. Consider adding secondary reservoir/tank in order to take original one offline for needed repairs or replacement
   ii. Install meters at 3 outtake lines (west, central, east)

Water Infrastructure

3. **Costs (preliminary estimates from 2019 data)**

   a. 3 water meters = $40K - $50K

   b. Reservoir/tank repair
      i. Roof : Repair = $250K - $300K vs. New = $400K.
      ii. Liner: Repair = $50K - $100K vs. New = $200K

   c. New 1 million gallon reservoir/tank (based on information drawn from the Steel Tank Institute and Steel Plate Fabricators Association)
      i. Welded steel ground tank = $630K; 100 year life span
      ii. Bolted steel tank = $1.1M; 50 year life span
      iii. Concrete tank = $2.1M; 60 year life span.

4. **Timeline - TBD**

Water Infrastructure

Benefits of implementing this project:

- Partially addresses existential threat to campus and obligation to provide water to surrounding community.
- Does not address continuity of local water supply issues.
- Addresses key potential concern for campus/community relationship (effective water utilization).
- Advances goals for water conservation and a more sustainable campus community aligned with sustainability goals.
- Requires a plan to establish short term and long term infrastructure needs and TCO (water system maintenance and management).