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Green Medical Campus

10 Years Post Occupancy



2018 TRIECA

Kevin Biehn, RLA, CPESC, LEED AP BD+C
kbiehn@eorinc.com





water

WATERSHEDS + WATER RESOURCES



ecology

**ECOSYSTEM RESTORATION, CONSERVATION +
MONITORING**



community

CIVIL ENGINEERING + LANDSCAPE ARCHITECTURE



context

LOCATION

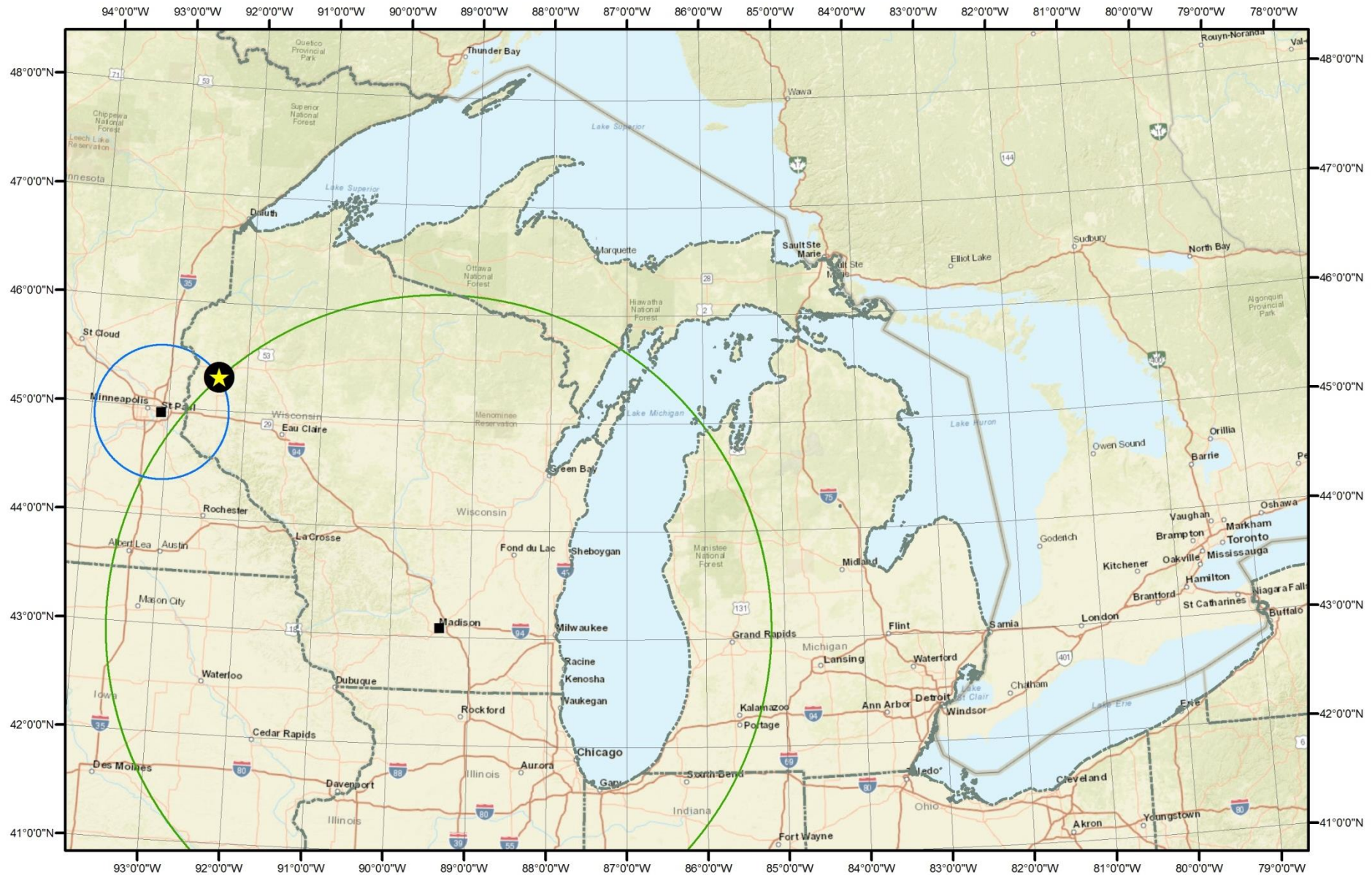
SITE CONDITIONS

DESIGN + IMPLEMENTATION

STACKED FUNCTION

ACCEPTANCE OF LID

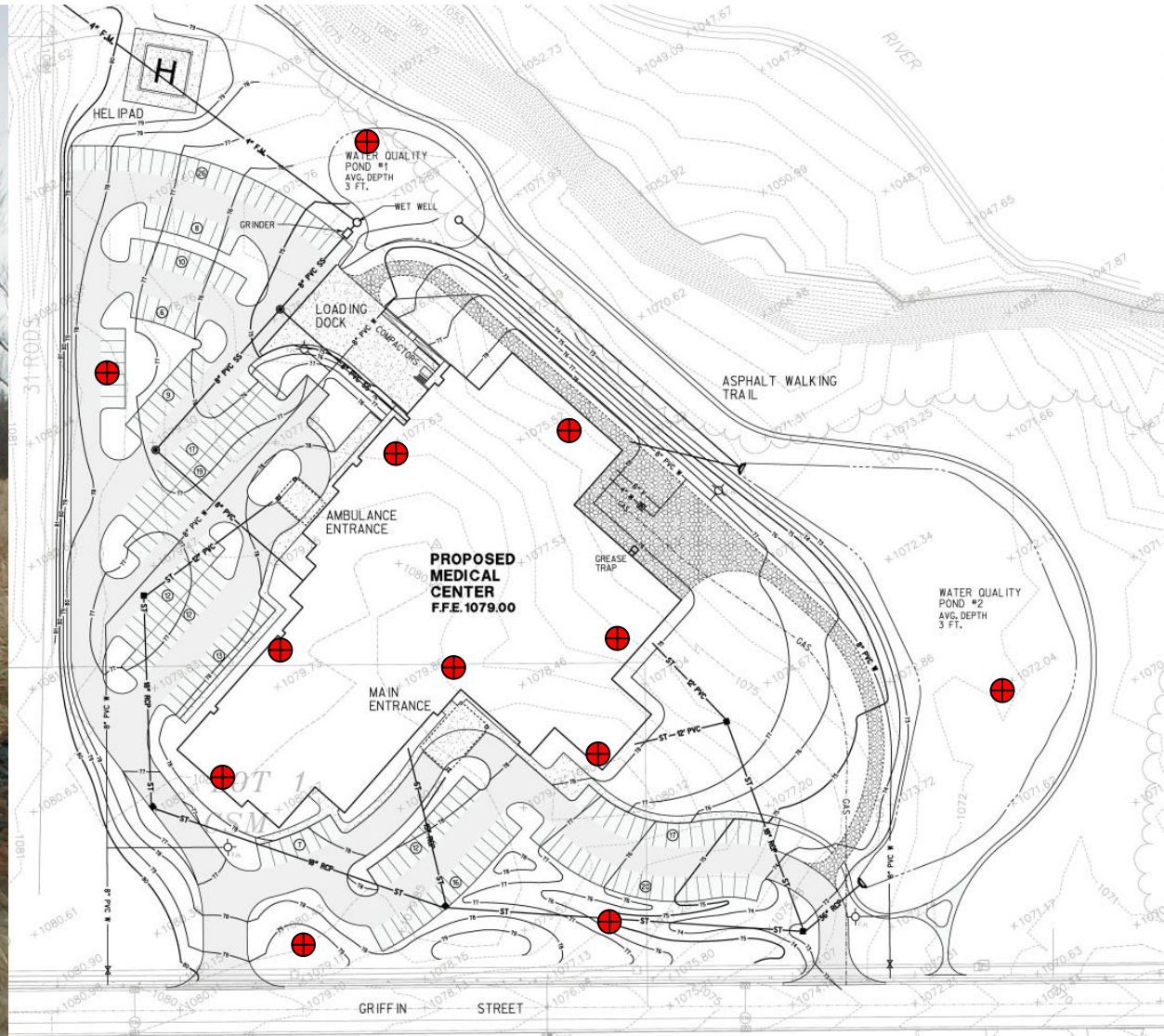
Context



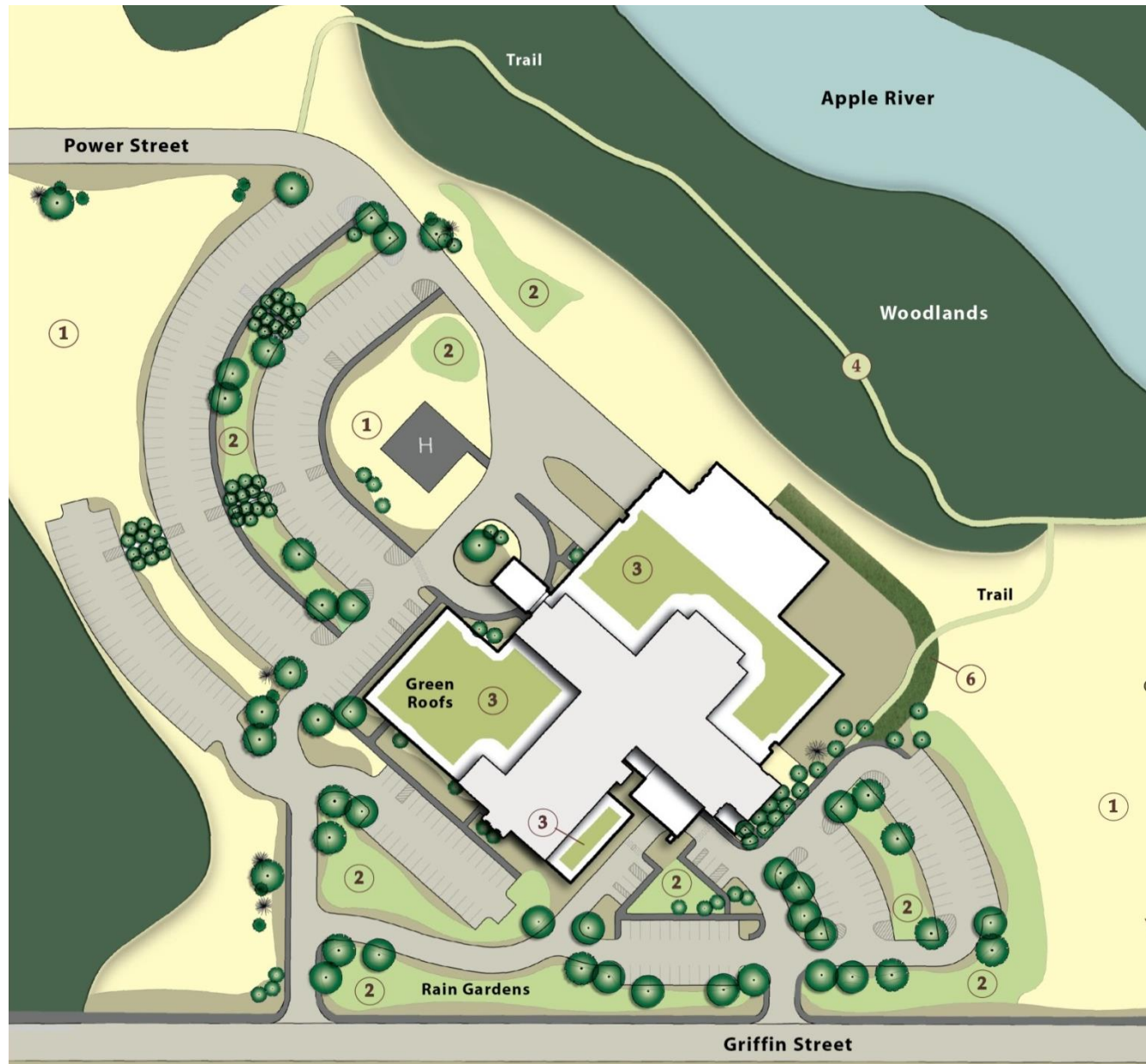
Context



Context



Context



Context



Context



Context





Rain Garden Café

A photograph of the interior of a building, focusing on a large, yellow, three-dimensional sign that reads "Rain Garden Café". The sign is mounted on a white ceiling with a grid of acoustic tiles. Below the sign, there are wooden beams and a wooden ceiling structure. In the background, there are large windows letting in natural light.



post occupancy evaluation

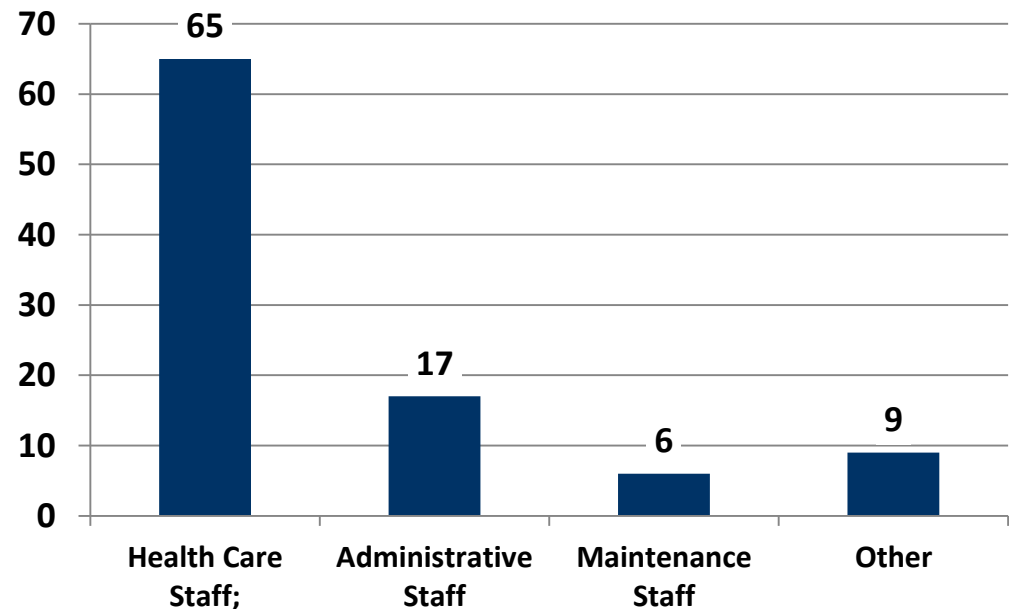
- ***Survey***
 - ***Online***
 - ***Staff interviews***
- ***Stormwater monitoring***
- ***Site assessment***

Post-Occupancy Evaluation

On-line Survey

- 80% response rate
- Perspective by association

Survey Respondents



Amery Regional Medical Center Sustainable Landscape Survey

1. I am familiar with of the Medical Center's sustainable landscape components, such as the green roof, raingardens and porous pavement.

Strongly Disagree Disagree Neutral Agree Strongly Agree

2. I believe these components are providing habitat and protecting the adjacent Apple River.

Strongly Disagree Disagree Neutral Agree Strongly Agree

3. I frequently use the Medical Center grounds and the trail system.

Strongly Disagree Disagree Neutral Agree Strongly Agree

4. The landscape is aesthetically pleasing.

Strongly Disagree Disagree Neutral Agree Strongly Agree

5. The landscape attracts employees and/or patients to the Medical Center.

Post-Occupancy Evaluation

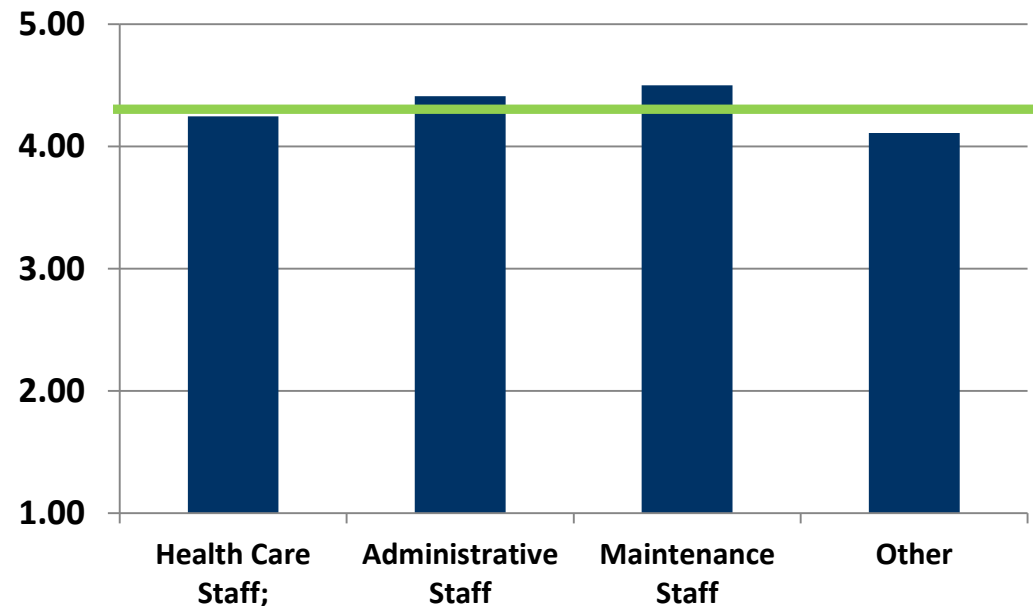


Question #1: familiarity

- Well informed
- Raingardens and green roof most frequently cited
- No mention of porous

Survey Respondents

Avg: 4.28



Post-Occupancy Evaluation

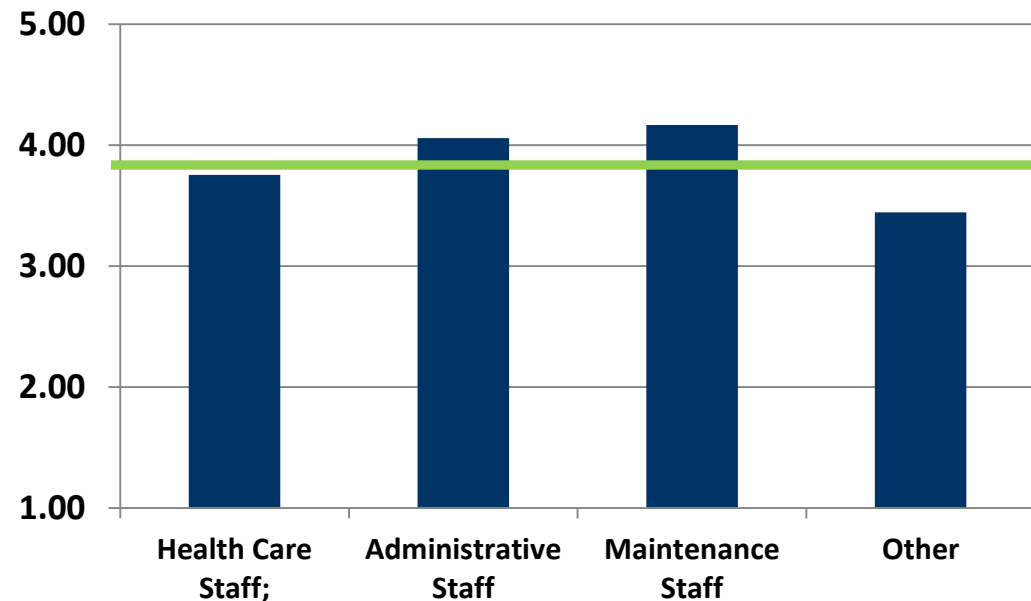


Question #2: **value** (habitat and protection of river)

- Positive
- Kool-Aid trend
- Hope

Survey Respondents

Avg: 3.8



Post-Occupancy Evaluation

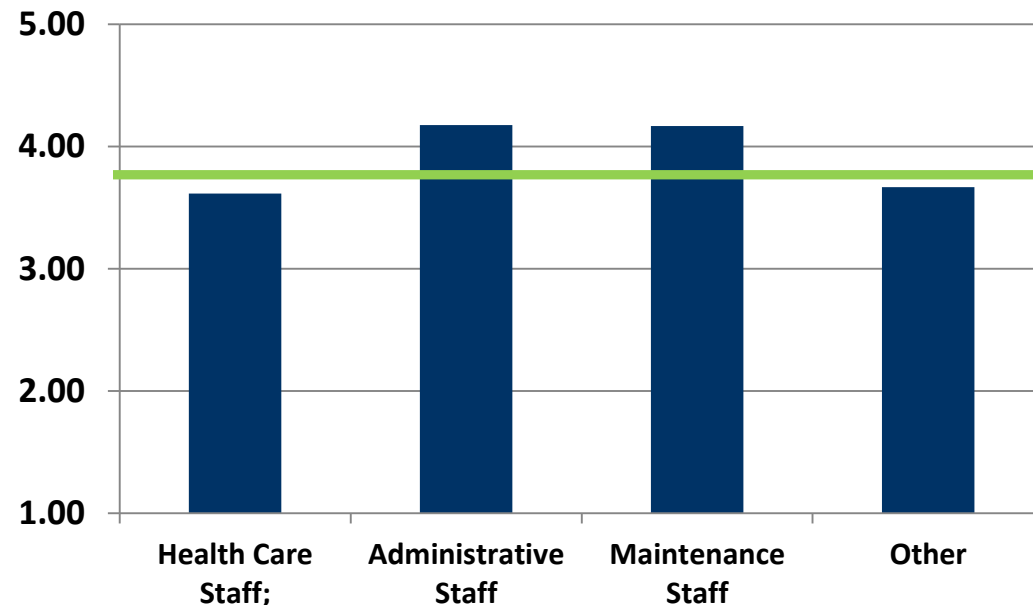


Question #4: **aesthetics** (habitat and protection of river)

- Love or dislike
- Lost some people as site matured
- Green Roof

Survey Respondents

Avg: 3.75



Post-Occupancy Evaluation



Requires < Maintenance

Question #6: native landscapes

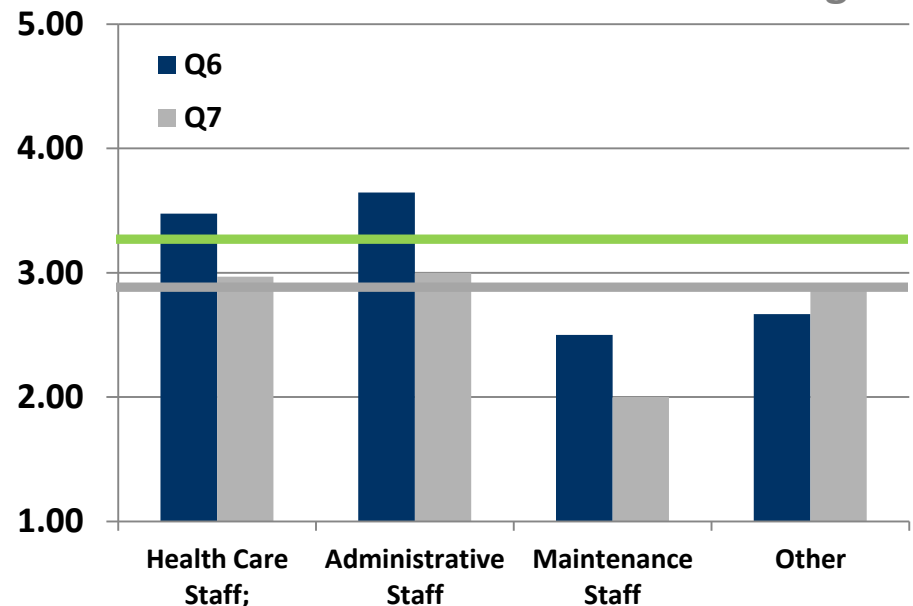
Question #7: ARMC

- Slight belief
- More than expected
- Establishment period
- Landscape vs green roof

Survey Respondents

Avg: 3.37

Avg: 2.91



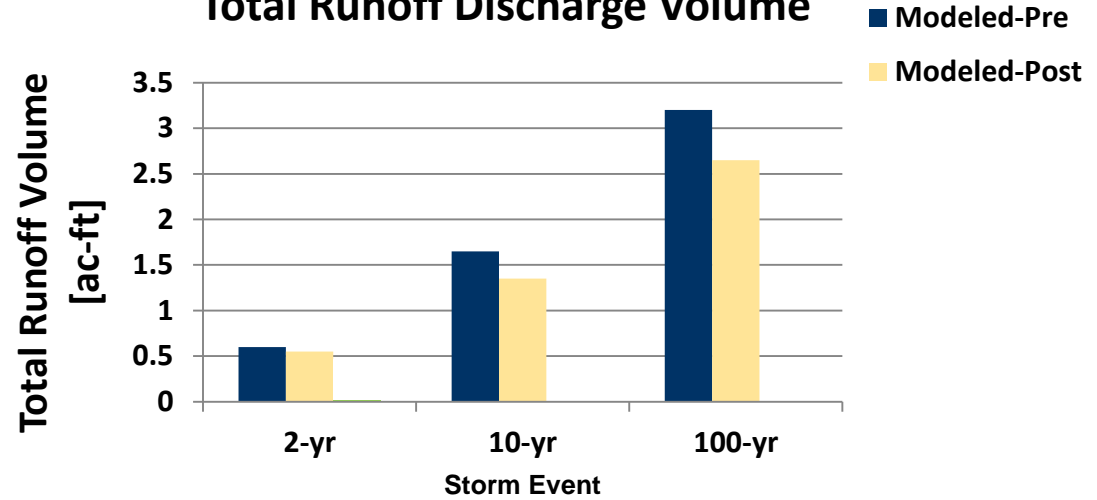


stormwater management
MODELED & MONITORED

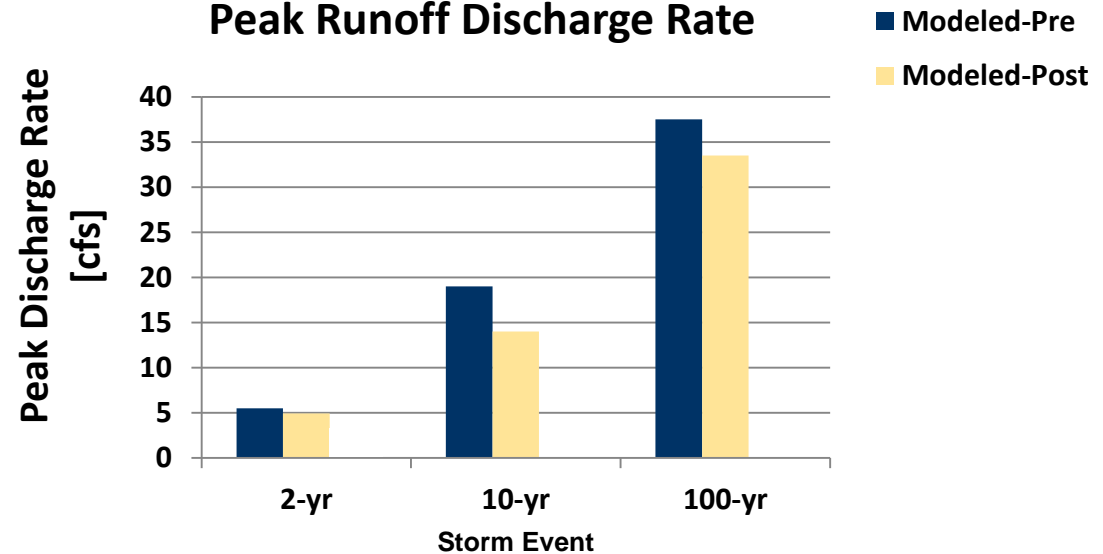
Stormwater Mgmt.



Total Runoff Discharge Volume



Peak Runoff Discharge Rate





lessons learned

MAINTENANCE PERCEPTIONS

GREEN ROOF

LANDSCAPE DESIGN

GARNERING & SHARING RESULTS



maintenance perceptions

- Not over-sell
 - Cost comparisons
- Difference in maintenance
 - Weeding more apparent and memorable than mowing
- Actually costing more?
- Understanding expectations
 - Owner often won't know/understand until they get into it
 - Benefits to hearing it from precedent



green roof

- Modular System
 - Irrigation
 - Maturity (aesthetics & weediness)
 - Edge
 - moisture & temperature
 - stormwater & energy
- Compounding problem
 - Periphery
 - Roof penetrations
 - 4" depth

“What is it worth to ARMC?”

Priceless, there is someone using the site every daylight minute of every day....”



garnering & sharing results

- How & when success is measured
- Education
 - Greater pride and acceptance when user understands more facets
 - Reiterate LID commitments and returns

Green Medical Campus

10 Years Post Occupancy



owner

HEALTH PARTNERS (FORMERLY ARMC)

architect

GRESHAM SMITH & PARTNERS

contractor

KRAUS-ANDERSON

civil + landscape

EMMONS & OLIVIER RESOURCES

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