Team 06: The Calvin Drain Trust
Presentation Overview

• Team Overview
• Project Background
• KE Apartments
• Commuter Lot
• Seminary Pond
• Design Norms
• Conclusion
• Acknowledgements
Team Members

Kat Wever, Aaron Venema, Mike DeWeerd, Matt Schanck
Project Background

• Reduce Runoff on Calvin’s Campus
• Increase Irrigation Capacity on Campus
• Integrate Calvin’s Master Plan
Project Background

• Zone 1: Calvin Ecosystem Preserve
• Zone 2: Knollcrest East (KE) Apartments
• Zone 3: Commuter Lot
• Zone 4: Seminary Pond
• Zone 5: North Pond
Project Definition - KE Apartments

• Goals
  • Contain 2-year 24 hour storm
  • Provide Irrigation for East Side of Campus
## Project Solution: KE Apartments

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<thead>
<tr>
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<th>Cost</th>
<th>Design Life</th>
<th>Expanability</th>
<th>Containment</th>
<th>Ease of Installation</th>
<th>Uptake</th>
<th>Water Accessibility</th>
<th>Structural Integrity</th>
<th>Negative Impact</th>
<th>Cover Requirements</th>
<th>Client Approval</th>
<th>Piping Change</th>
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### Weighted Totals
- Cudo Cube: 123
- Concrete Tank: 152
- Rainstore: 84
Project Solution - KE Apartments

Cost: $700,000
Project Definition- Commuter Lot

• Goals
  • Contain 2-year 24 hour storm
  • Provide Irrigation for Burton Entrance of Campus
Project Solution - Commuter Lot

• Runoff Volume: 410,000 Gallons
• Storm Chamber Storage System
• Cost: $600,000
Project Solution - Commuter Lot

Team Overview
Project Background
KE Apartments
Commuter Lot
Seminary Pond
Design Norms
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Acknowledgements
Project Definition - Seminary Pond

• Goals
  • Reduce Sediments Entering Plaster Creek
Project Solution: Seminary Pond

- Detention Pond
- Meandering Bioswale with Check Dams
- Cost: $70,000
Project Solution: Seminary Pond
Project Solution: Seminary Pond
Design Norms

- Sustainability
- Trust
- Caring
Conclusion

• Goals:
  • Reduce Runoff on Calvin’s Campus
  • Irrigation System on Campus
  • Integrate Calvin’s Master Plan
Acknowledgements

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- Mike Herrema - Head Irrigation Specialist, Cornerstone University
Questions?