Prepared for:  
ITS221 Project Management   
Helena College

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# Helena Community Solar Installation Project

## Work Breakdown Structure (WBS)

(Level 1 to Level 3 detail)

1. Project Initiation

1.1 Develop Project Charter

1.2 Identify Stakeholders

1.3 Assemble Project Team

1.4 Hold Kick-off Meeting

2. Project Planning

2.1 Develop Project Management Plan

2.2 Site Analysis and Selection

2.3 Permitting and Approvals

2.4 Risk Management Planning

2.5 Procurement Planning

3. Design & Engineering

3.1 System Design

3.2 Engineering Drawings

3.3 Review & Approval of Designs

4. Procurement

4.1 Vendor Selection

4.2 Procurement of Solar Panels

4.3 Procurement of Inverters & Equipment

4.4 Delivery of Materials to Site

5. Construction & Installation

5.1 Site Preparation

5.2 Foundation Installation

5.3 Mounting Structure Installation

5.4 Panel Installation

5.5 Electrical Wiring & Connections

5.6 Inverter Installation

5.7 Testing & Commissioning

6. Community Engagement & Training

6.1 Community Workshops

6.2 Regular Updates to Stakeholders

6.3 Handover Training for Operations

7. Project Closeout

7.1 Final Inspections

7.2 Documentation Handover

7.3 Project Review & Lessons Learned

7.4 Final Report Submission

Project Schedule

| **Task** | **Start Date** | **End Date** | **Duration** |
| --- | --- | --- | --- |
| Project Initiation | March 3 | March 14 | 2 weeks |
| Project Charter & Kickoff | March 3 | March 7 | 1 week |
| Stakeholder Identification | March 8 | March 14 | 1 week |
| Project Planning | March 17 | April 11 | 4 weeks |
| Site Analysis | March 17 | March 28 | 2 weeks |
| Permits & Approvals | March 24 | April 11 | 3 weeks |
| Procurement Planning | April 1 | April 11 | 2 weeks |
| Design & Engineering | April 14 | May 2 | 3 weeks |
| System Design | April 14 | April 25 | 2 weeks |
| Design Approval | April 28 | May 2 | 1 week |
| Procurement | May 5 | June 6 | 5 weeks |
| Vendor Selection | May 5 | May 9 | 1 week |
| Material Procurement | May 12 | May 30 | 3 weeks |
| Delivery to Site | June 2 | June 6 | 1 week |
| Construction & Installation | June 9 | August 22 | 11 weeks |
| Site Preparation | June 9 | June 20 | 2 weeks |
| Foundation Installation | June 23 | July 4 | 2 weeks |
| Mounting Structure | July 7 | July 18 | 2 weeks |
| Panel Installation | July 21 | August 1 | 2 weeks |
| Electrical & Inverter Setup | August 4 | August 15 | 2 weeks |
| Testing & Commissioning | August 18 | August 22 | 1 week |
| Community Engagement | Throughout | Throughout | Ongoing |
| Workshops & Updates | April | August | Monthly |
| Project Closeout | August 25 | September 5 | 2 weeks |
| Final Inspections | August 25 | August 29 | 1 week |
| Handover & Training | September 1 | September 5 | 1 week |