

Solar Energy Efficiency Project Report & Proposal

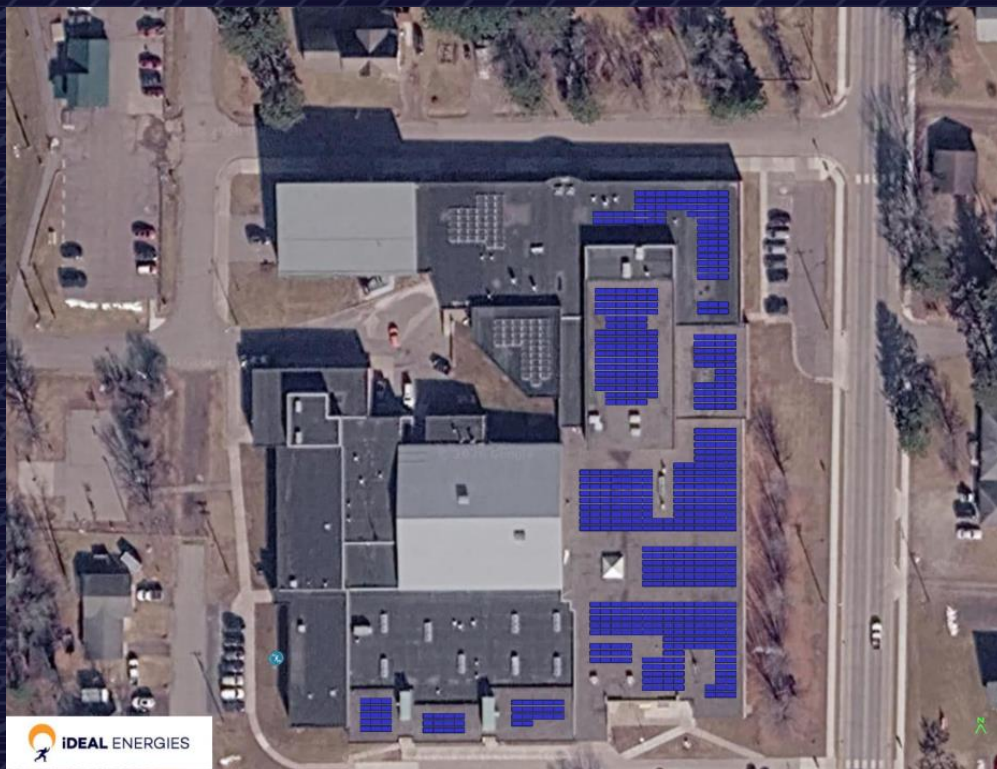


Prepared for: **Independent School District No. 698 –
Floodwood School District**

Site Name: **Floodwood Elementary**

Project: **347.550 kWDC System - Minnesota Power - Large Power & Lighting -
MN Power**

May 15, 2026



Executive Summary

iDEAL Energies (“iDEAL”) is pleased to present ISD 698 this Solar Energy Efficiency Report and Proposal (“Report”) for installing a 347.550 kWDC behind-the-meter solar array at Floodwood Elementary located at 115 W 4th Ave, Floodwood, MN 55736 in accordance with Minnesota’s Solar for Schools Program and Minn. Stat. § 471.345, Subd. 13.

The Report is intended to support Board approval of the project, submission of the Full Solar for Schools Grant Application, execution of the Guaranteed Energy Savings (“GES”) Contract documents, and completion of the safe harbor steps required to preserve the 40% federal elective payment before July 4, 2026.

With more than 700 behind-the-meter commercial solar systems installed across 28 utilities since 2010, iDEAL is Minnesota’s proven leader in commercial solar development and construction. To date, iDEAL has installed 280 solar arrays at Minnesota school districts and 91 projects using the Solar for Schools Program.

In February 2026, iDEAL’s administrative and engineering teams worked with District staff to identify potential sites best suited for solar and applied to the Department of Commerce for a Solar for Schools Grant. Based on current Program rules, project assumptions, and available federal elective payment, the Solar for Schools Grant and Direct Pay are expected to offset the project’s installation cost, subject to the payment and reimbursement schedule and carry costs shown in this Report.

Since submitting the Grant Application, iDEAL’s engineers have visited the site and have completed electrical engineering to confirm that the proposed 347.550 kWDC solar array is viable for the site and have performed preliminary structural work to confirm that the selected roof areas can support the solar loads. This Report summarizes the project opportunity, expected funding sources, payment and reimbursement timing, projected energy savings, net cashflow, and statutory compliance pathway.

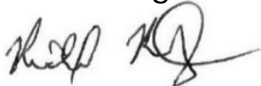
The District will temporarily carry certain project payments before receiving Grant reimbursement and the federal elective payment. The included cashflow and reimbursement schedule shows the timing of those payments, reimbursements, and estimated interest expense during the carry period. Even after accounting for the temporary carry, the project is projected to produce positive net cashflow over both the five-year contract/payment term and the 20-year statutory GES savings measurement period. The GES Contract includes a production adjustment mechanism and a written savings guarantee structured to support the Board’s required finding under Minn. Stat. § 471.345, Subd. 13.

We recommend Board approval now so the District can submit the Full Grant Application, execute the GES Contract documents, and safe harbor the 40% ITC before July 4, 2026. With District approval, iDEAL will complete the required safe harbor procurement and documentation, continue final engineering, apply for interconnection approval, construct and commission the solar array, and provide operations and maintenance for the first five years.

We appreciate your consideration and look forward to working with your team to complete this project for the District.

Respectfully,

iDEAL Energies



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Board Action Summary

Recommended Board Action

The District is being asked to authorize submission of the Full Solar for Schools Grant Application, approve entry into the GES Contract documents with iDEAL Energies, approve the safe harbor payment required to preserve the federal elective payment, and authorize District administration to execute related documents required to complete the project, secure the Grant, preserve the federal tax credit, complete utility interconnection, and proceed with construction.

Why Board Action Is Recommended

The project is expected to be funded through the Solar for Schools Grant, the federal elective payment, and project energy savings. The District will temporarily carry certain project payments before reimbursement, and this Report includes a payment and reimbursement schedule showing when those payments are expected to be reimbursed and the estimated interest expense during the carry period. The project is structured as a GES Contract under Minn. Stat. § 471.345, Subd. 13, which allows the District to proceed when the required report, notice, savings guarantee, bond, board findings, and Commerce filing requirements are satisfied.

Why the Board Should Approve the Project

The project allows the District to install a long-term energy asset with the installation cost expected to be offset by the Solar for Schools Grant and the federal elective payment.

- The District receives the benefit of reduced utility costs over the life of the solar array.
- The District uses a Solar for Schools program approved statutory procurement path designed for energy conservation measures using GES contracts.
- iDEAL provides turnkey development, engineering, procurement, construction, safe harbor documentation, interconnection support, and five years of operations and maintenance.

Approval now is important because the Full Solar for Schools Grant Application is due by July 2, 2026, and the project must be safe harbored before July 4, 2026, to preserve the expected federal tax credit value.



Recommended Board Findings

After reviewing this Report and Proposal prepared by iDEAL Energies, the Board should find that the proposed solar project is an energy conservation measure expected to reduce the District's energy or operating costs; that iDEAL Energies is a qualified provider experienced in the design, implementation, and installation of solar energy conservation measures; that the amount the District will spend on the recommended energy conservation measures is not likely to exceed the amount to be saved in energy and operating costs over 20 years from final installation; and that the GES Contract includes a written guarantee that the energy or operating cost savings will meet or exceed the costs of the system, as required by Minn. Stat. § 471.345, Subd. 13.

Proposed Board Motion

Motion to approve the solar energy project proposed by iDEAL Energies; authorize District administration to submit the Full Solar for Schools Grant Application; approve the District's entry into the Solar Array Purchase Agreement, Facility Lease Agreement, Power Purchase Agreement, and related safe harbor documents as a GES Contract under Minn. Stat. § 471.345, Subd. 13; authorize the required safe harbor payment to preserve the federal elective payment; authorize District administration to execute all related documents necessary to secure the Grant, preserve the federal tax credit, complete utility interconnection, and proceed with project construction; and direct District administration to submit the executed contract and required Report to the Commissioner of Commerce within 30 days after the contract's effective date.

Temporary Cash Carry and Reimbursement Timing

The District will make certain project payments before receiving reimbursement from the Solar for Schools Grant and before receiving the federal elective payment. The payment and reimbursement schedule included in this Report shows the expected timing of each payment, expected Grant reimbursement, expected Direct Pay receipt, and estimated interest expense during the carry period. Even after accounting for temporary financing costs, the project is projected to produce positive net cashflow over the five-year contract/payment term and the 20-year statutory GES savings measurement period.



GES Contract Compliance Summary

Minnesota law allows a school district to enter into a GES Contract with a qualified provider for an energy conservation measure that significantly reduces energy or operating costs. This Report is intended to serve as the qualified provider’s report by summarizing project costs, design and engineering costs, installation costs, maintenance and operating costs, debt-service or carry costs, and the expected reductions in energy or operating costs. The Board’s approval should be supported by the findings and motion above.

Requirement	How this Report addresses it
Qualified provider	iDEAL identifies its commercial solar experience, school experience, Solar for Schools experience, engineering capabilities, and in-house construction resources.
Energy conservation measure	The behind-the-meter solar array is expected to reduce electricity purchased from the utility and reduce operating costs.
Required provider report	This Report summarizes project scope, installation cost, engineering, maintenance, debt/carry costs, utility savings, cashflow, payment timing, and reimbursement timing.
20-year savings finding	The Board should find that the District’s expected net cashflow and operating cost reductions over 20 years are not likely to be less than the amount spent on the project.
Written savings guarantee	The GES Contract states that savings are guaranteed to the extent necessary to make payments for the Energy System.
Payments over time	The Power Purchase Agreement specifies a \$3,476 annual fixed power payment due for years 1 to 5, totaling \$17,380. Operations and maintenance is included and provided by iDEAL during the five-year contract/payment term.
Bond	The contract requires performance and payment bonds when the Installation Cost exceeds the applicable threshold.
Published notice	The District must publish notice before the board meeting identifying the proposed contract parties and purpose.
Commerce filing	A copy of the signed contract and report must be provided to the Commissioner of Commerce within 30 days after the effective date.



Risk and Mitigation Summary

Risk / Board Question	Mitigation / Response
Will the District need to advance cash?	Yes. The report includes a payment and reimbursement schedule showing expected Grant reimbursement, Direct Pay reimbursement timing, and estimated interest expense while carrying the debt.
What if Direct Pay is delayed?	The Payment and Reimbursement Schedule shows the expected receipt timing and carrying cost. iDEAL assists with Energy Credits Online registration and tax-credit documentation.
What if utility interconnection or construction is delayed?	Safe harboring before July 4, 2026, is intended to preserve the project's eligibility for the federal elective payment and provide schedule flexibility if construction or start-up extends beyond December 31, 2027.
What if production varies?	Annual solar production will vary due to weather and other factors. The GES Contract does not guarantee exact annual production or exact annual utility bill savings. However, the Power Purchase Agreement includes a production adjustment mechanism if the system produces less than 85% of expected annual production, and the broader GES structure supports the required statutory savings finding over the 20-year measurement period.
What if structural or roof conditions change?	iDEAL has completed preliminary engineering and has provided this Report covering the prescribed work necessary to deliver the Project. If unforeseen conditions arise, iDEAL will update the District, and work with Commerce to adjust the system's design, size, or Grant amount to account for any difference.
What if procurement or compliance is questioned?	The project is structured around the Solar for Schools requirements, Minnesota statutes requirements, safe harbor documentation, domestic content/FEOC compliance, bonding, and the GES statutory process.



Proposal Summary

This section summarizes the proposed solar energy conservation measure, project scope, funding sources, tax-credit assumptions, expected savings, and equipment configuration for Board review. The summary should be read together with the Board Action Summary, the GES Contract Compliance Summary, and the payment/reimbursement schedule that shows the District's temporary cash carry, expected reimbursements, and estimated interest expense.

Project Summary	
Solar Array Size:	347.550 kWDC 260.00 kWAC
kWh / kWDC:	1,125
Year 1 Solar Production:	390,994 / kWh
Year 1 Utility Bill Savings:	\$34,954
Utility:	Minnesota Power
Utility Rate Plan:	Large Power & Lighting - MN Power
Average Utility Rate:	\$0.089 / kWh
Utility Rate Escalator:	4.00% / Year
PPA Payments Years 1-5:	\$17,380

Site & Equipment Summary	
Building Service:	480/277 3ph
Interconnection:	Supply Side - Interior Equipment (Assumed)
Utility Meter #:	575694
Panel Degradation:	Panels: Silfab SIL-580XM+ - DCB (Dom Con) Phono PS590M8GFH-24/TNH 2.00%, 0.30% 1.00%, 0.40% year 1/2+
Inverters:	SolarEdge SE100k 480V3Ph Inverter (Dom Con) SolarEdge SE80k 480V3Ph Inverter (Dom Con)
Optimizers:	SolarEdge C651U Power Optimizer (Dom Con)
Racking:	Panel Claw (CFR+) (Dom Con) Aerocompact S Base
O&M Term / Fee:	5 years / Included
CO ₂ Offset (tons):	274 / 10,160 Year 1 / Lifetime

Price & Tax Summary	
Purchase Price:	\$747,276 \$2.15 / kWDC
ITC Rate:	40%
SFS Grant Amount:	<u>\$448,365</u>
ITC Amount:	\$298,910
Total Benefits:	\$747,275
Net Capital Investment:	Expected \$0 after Grant and Direct Pay reimbursement

Bonus ITC Summary	
10% Bonus ITC Domestic Content Points	
Points Required:	50-points for 2026
Panels:	12.4
Inverters:	24.8
Racking:	<u>13.9</u>
Total Points:	51.1
ITC Bonus:	Yes!



Solar for Schools Grant Program

SFS Program Summary

The Solar for Schools Grant program was established in 2022. This is the 9th round, and this round is expected to deplete all available Grant funds. The Round 9 Grant program funds from 70% to 90% of a solar array's cost depending on the District's ANTC/APU as follows:

School Type or Eligibility Category	Estimated Grant %
ANTC/APU ≤ \$5,000	90%
≤ \$9,250 ANTC/APU > \$5,000	80%
ANTC/APU > \$9,250	70%

Grant payments are paid based on the following tables provided in the SFS RFP documents.

System Size (kWDC)	Department Cost Basis (\$/WDC)	90% Grant	80% Grant	70% Grant
≤ 50	\$3.00	\$2.70	\$2.40	\$2.10
> 50 & ≤ 125	\$2.60	\$2.34	\$2.08	\$1.82
> 125 & ≤ 625	\$2.20	\$1.98	\$1.76	\$1.54
> 625 & ≤ 1250	\$1.80	\$1.62	\$1.44	\$1.26

The amounts in the tables overstate average installation costs in the State of Minnesota. The Solar for Schools Program RFP document provides that the "grant rates are based off cost basis rates for solar projects of that size. These rates were established after analyzing historically submitting Solar for Schools System costs along with other Department program and State-wide solar pricing data in combination with anticipated market fluctuations. These cost basis rates were set about 15 to 30 cents per watt higher than recent historical state and program solar price averages. Applicants are encouraged to use these cost bases as reference points to help them determine when it may be necessary to increase communications with their Developer to ensure there has been transparency and understanding for any project proposals which reached and/or exceed these cost basis rates."



Project Cost Summary

The installation cost provided in this Report is based on iDEAL's final design and is inclusive of all costs for the project as provided in this Report. The project specifies domestic parts required to achieve the 40% ITC and FEOC compliance which adds to the project cost. Notwithstanding the foregoing, the \$2.15 per DC Watt installation cost is still below the applicable Department cost basis shown in the Grant table and in line with average commercial solar installation costs in Minnesota.

The amount not funded by the Grant is expected to be offset by the federal elective payment, commonly referred to as Direct Pay, equal to 40% of the Project's eligible costs. The District will temporarily carry certain project payments before Grant reimbursement and Direct Pay receipt, and the related timing and interest expense are shown in the Payment and Reimbursement Schedule.

The Grants are under heavy demand, and applications are evaluated and awarded based on a points system that favors applicants that leverage the ITC to help pay for their projects so that the amount funded by the State of Minnesota is minimized.

Per Program RFP document, "due to time limitations of the solar tax credit, Full Grant Applications that have identified intent and budgeted for the solar tax credit are reviewed by the Department of Commerce on a first-come, first-served basis in the order in which they are received."

To minimize the District's net capital cost and maximize the chance of receiving a Grant award, iDEAL specified a project that leverages the 40% federal elective payment. In the Grant Application, iDEAL identified eligible and ineligible costs so the expected Grant and Direct Pay amounts can be matched to the project's installation cost and reimbursement schedule.

The Program also requires that the work performed is subject to prevailing wage rules, that a bond must be provided for the Project, online monitoring is provided, and that an education program is provided. iDEAL's Report and deliverables comply with these requirements.



Program Requirements & Application Steps

To apply for and receive a Solar for Schools Grant, the following requirements and steps must be followed:

School Type or Eligibility Category	Estimated Grant %
Energy consumption & bill evaluation; Helioscope; PV Watts; System Budget; program documents; Preliminary Engineering – select roofs, electrical and structural design, solar array sizing, preliminary engineering documents for Solar for Schools application	Completed - January-February, 2026
Consultation with CERTS	Completed – March 2026
Readiness Assessment	Submitted – March 2026
Education materials provided to District	Submitted – March 2026
Final Electrical Engineering documents	In progress – May 2026
Final Structural Engineering report	In progress – July 2026
Preliminary Grant Reservation	Due from MN DOC April 3, 2026 (late)
Full Grant Applications (Evaluated by MN DOC on first come first served basis)	In progress – Due ASAP after Grant Reservation notice or by July 2, 2026
Contracts (required to safe harbor)	In progress – After Board approval
Safe harbor the 40% ITC for the Project	Before July 4, 2026
Grant Application Approval & Grant Contract	August 2026
Utility Interconnection Application	September, 2026
Construction & Start-up	Summer / Fall 2027

After the Preliminary Grant Reservation is received, iDEAL will work with the District to assemble the final information required to submit the Full Grant Application to the Minnesota Department of Commerce for approval.

This Report also addresses and supports the District’s GES Contract requirements by summarizing the project’s expected costs, design and engineering scope, maintenance and operations treatment, debt/carry costs, energy savings, cashflow, and payment and reimbursement schedule.

The sections below provide the Board with the information needed to evaluate the project’s utility bill savings, 20-year net cashflow, and payment/reimbursement timing.



Utility Bill Savings Summary

Year	Electricity Produced (kWh/year)	Annual Savings (\$)	Cumulative Annual Savings (\$)
1	390,994	\$ 34,954	\$ 34,954
2	383,174	\$ 35,626	\$ 70,580
3	382,024	\$ 36,939	\$ 107,519
4	380,878	\$ 38,302	\$ 145,821
5	379,735	\$ 39,714	\$ 185,535
10	374,073	\$ 47,598	\$ 407,187
15	368,496	\$ 57,047	\$ 672,840
20	363,002	\$ 68,371	\$ 991,229
25	357,590	\$ 81,944	\$ 1,372,822
30	352,258	\$ 98,211	\$ 1,830,165
35	347,006	\$ 117,707	\$ 2,378,297
40	341,831	\$ 141,073	\$ 3,035,240

The solar array directly reduces the amount of electricity purchased from Minnesota Power and may also reduce demand-related charges or create applicable utility bill credits. These operating-cost reductions are a core part of the GES Contract analysis.

- Energy Expense Savings reflect the value of solar energy produced and consumed on-site, reducing the amount of electricity otherwise purchased from Minnesota Power.
- Annual Net Metering, where available, allows excess energy produced during a billing cycle to be credited toward future utility bills in accordance with the applicable utility tariff.



Project Cashflow Summary

System Purchase and Incentives

Operating & Purchase Expense

Utility Bill Savings

Annual Summary

Year	System Payment	Solar for Schools Grant	IRS Direct Payment	Financing	Total	Interest Expense*	5 Year PPA and O&M Services	Maintenance Expense & Inverter Replacement	Insurance Expense and Utility Fees	Total	Total	Total Cashflow	Total Cumulative Cashflow
Year 0	\$ (747,276)	\$ 448,365	\$ -	\$ 298,910	\$ -	\$ (9,191)	\$ -	\$ -	\$ -	\$ (9,191)	\$ -	\$ (9,191)	\$ (9,191)
Year 1	\$ -	\$ -	\$ 298,910	\$ (298,910)	\$ -	\$ (17,935)	\$ (3,476)	\$ -	\$ (700)	\$ (22,110)	\$ 34,954	\$ 12,844	\$ 3,653
Year 2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (3,476)	\$ -	\$ (714)	\$ (4,190)	\$ 35,626	\$ 31,436	\$ 35,089
Year 3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (3,476)	\$ -	\$ (728)	\$ (4,204)	\$ 36,939	\$ 32,736	\$ 67,825
Year 4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (3,476)	\$ -	\$ (743)	\$ (4,218)	\$ 38,302	\$ 34,083	\$ 101,908
Year 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (3,476)	\$ -	\$ (758)	\$ (4,233)	\$ 39,714	\$ 35,481	\$ 137,389
Year 6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (3,597)	\$ (773)	\$ (4,370)	\$ 41,179	\$ 36,809	\$ 174,198
Year 7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (3,723)	\$ (788)	\$ (4,511)	\$ 42,698	\$ 38,186	\$ 212,384
Year 8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (3,853)	\$ (804)	\$ (4,657)	\$ 44,272	\$ 39,615	\$ 251,999
Year 9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (3,988)	\$ (820)	\$ (4,808)	\$ 45,905	\$ 41,097	\$ 293,096
Year 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (4,128)	\$ (837)	\$ (4,964)	\$ 47,598	\$ 42,634	\$ 335,730
Year 11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (4,272)	\$ (853)	\$ (5,126)	\$ 49,353	\$ 44,228	\$ 379,958
Year 12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (4,422)	\$ (870)	\$ (5,292)	\$ 51,174	\$ 45,881	\$ 425,839
Year 13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (23,751)	\$ (888)	\$ (24,638)	\$ 53,061	\$ 28,423	\$ 454,262
Year 25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (31,344)	\$ (1,126)	\$ (32,470)	\$ 81,944	\$ 49,474	\$ 1,160,569
Year 26	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (7,158)	\$ (1,148)	\$ (8,306)	\$ 84,966	\$ 76,660	\$ 1,237,230
Year 27	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (7,408)	\$ (1,171)	\$ (8,579)	\$ 88,100	\$ 79,520	\$ 1,316,750
Year 28	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (7,667)	\$ (1,195)	\$ (8,862)	\$ 91,349	\$ 82,487	\$ 1,399,237
Year 29	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (7,936)	\$ (1,219)	\$ (9,154)	\$ 94,718	\$ 85,564	\$ 1,484,800
Year 30	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (8,213)	\$ (1,243)	\$ (9,456)	\$ 98,211	\$ 88,755	\$ 1,573,555
Year 31	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (8,501)	\$ (1,268)	\$ (9,769)	\$ 101,833	\$ 92,064	\$ 1,665,619
Year 37	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (42,819)	\$ (1,428)	\$ (44,247)	\$ 126,549	\$ 82,303	\$ 2,262,358
Year 38	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (10,816)	\$ (1,456)	\$ (12,272)	\$ 131,216	\$ 118,945	\$ 2,381,303
Year 39	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (11,194)	\$ (1,485)	\$ (12,679)	\$ 136,056	\$ 123,376	\$ 2,504,679
Year 40	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (11,586)	\$ (1,515)	\$ (13,101)	\$ 141,073	\$ 127,972	\$ 2,632,651
TOTAL	\$ (747,276)	\$ 448,365	\$ 298,910	\$ (0)	\$ (0)	\$ (27,126)	\$ (17,378)	\$ (315,808)	\$ (42,277)	\$ (402,589)	\$ 3,035,240		

* Interest rate assumed at 6%

The table above summarizes the project's expected net cashflow over the 20-year statutory GES savings measurement period.

- The project's installation cost is offset by the Solar for Schools Grant and the federal elective payment, subject to the payment and reimbursement timing shown in this Report.
- The District will temporarily carry certain project payments before reimbursement and Direct Pay receipt; the schedule includes estimated interest expense during the carry period.
- The GES Contract guarantee is based on net cashflow over the 20-year GES savings measurement period, including energy savings, Grant reimbursement, federal elective payment, nominal power payments, O&M treatment, and temporary carry costs.
- By approving the project and safe harboring before July 4, 2026, the District preserves the expected 40% federal elective payment and the schedule flexibility needed to complete the project.



Payment & Reimbursement Schedule

System Purchase and Incentives

Operating & Purchase Expense

Period	System Payment	Solar for Schools Grant	IRS Direct Payment	Line of Credit Draw (Paydown)	Total Cumulative Financing	Interest Expense*	Total Cumulative Cashflow
May-26	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Jun-26	\$ (44,837)	\$ -	\$ -	\$ 44,837	\$ 44,837	\$ (224)	\$ (224)
Jul-26	\$ -	\$ -	\$ -	\$ -	\$ 44,837	\$ (224)	\$ (448)
Aug-26	\$ -	\$ 44,837	\$ -	\$ (44,837)	\$ -	\$ -	\$ (448)
Sep-26	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (448)
Oct-26	\$ (328,801)	\$ -	\$ -	\$ 328,801	\$ 328,801	\$ (1,644)	\$ (2,092)
Nov-26	\$ -	\$ 328,801	\$ -	\$ (328,801)	\$ -	\$ -	\$ (2,092)
Dec-26	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (2,092)
Jan-27	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (2,092)
Feb-27	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (2,092)
Mar-27	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (2,092)
Apr-27	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (2,092)
May-27	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (2,092)
Jun-27	\$ (149,455)	\$ -	\$ -	\$ 149,455	\$ 149,455	\$ (747)	\$ (2,840)
Jul-27	\$ -	\$ 29,891	\$ -	\$ (29,891)	\$ 119,564	\$ (598)	\$ (3,437)
Aug-27	\$ -	\$ -	\$ -	\$ -	\$ 119,564	\$ (598)	\$ (4,035)
Sep-27	\$ -	\$ -	\$ -	\$ -	\$ 119,564	\$ (598)	\$ (4,633)
Oct - 27 - Startup	\$ (149,455)	\$ -	\$ -	\$ 149,455	\$ 269,019	\$ (1,345)	\$ (5,978)
Nov-27	\$ (74,728)	\$ -	\$ -	\$ 74,728	\$ 343,747	\$ (1,719)	\$ (7,697)
Dec-27	\$ -	\$ 44,837	\$ -	\$ (44,837)	\$ 298,910	\$ (1,495)	\$ (9,191)
Sep - 28 - Direct Pay Receipt	\$ -	\$ -	\$ 298,910	\$ (298,910)	\$ -	\$ (17,935)	\$ (27,126)
TOTAL	\$ (747,276)	\$ 448,365	\$ 298,910	\$ (0)	\$ -	\$ (27,126)	

* Interest rate assumed at 6%

The table above provides the project payment and reimbursement schedule, including expected project payments, expected Solar for Schools Grant reimbursements, expected federal elective payment timing, and estimated interest expense while the District carries the debt.

- The District will be reimbursed by the State of Minnesota for eligible payments after submitting reimbursement applications for payments made toward the system installation cost. The reimbursement timing is estimated in the schedule.
- The District will receive the federal elective payment, referred to as Direct Pay, after the Project is placed in service, IRS pre-filing registration is completed through Energy Credits Online, and the District files Form 990-T with Forms 3468 and 3800 for the applicable tax year.
- Because reimbursement timing and federal payment timing occur after certain project payments, the District should evaluate the temporary cash carry and interest expense shown in this report as part of its approval decision.



How to Secure the 40% ITC

Navigating the Commercial Solar ITC Landscape Post OBBB

iDEAL’s team has extensive experience navigating Tax Credits. We have managed tax equity funds for public banks for the last 15 years to help public, school, and nonprofit customers monetize the ITC. iDEAL leverages this expertise to develop sound strategies that secure and maximize tax incentives, improving the financial outcome for each Customer.

OBBB amended the Inflation Reduction Act (“IRA”) on July 4, 2025, so that Investment Tax Credit (“ITC”) is no longer available for any commercial project that is placed in service after December 31, 2027.

The IRS published a **Safe Harbor** document on August 15, 2025, establishing that a commercial project up to 1,500 kWAC that begins construction before July 4, 2026, remains eligible for the ITC, provided the project is placed in service before December 31, 2030. The Safe Harbor document clarifies that a project begins construction when at least 5% of the cost used for claiming the ITC is paid to purchase project equipment before July 4, 2026 (I.R.C. §48(a)(5); IRS Notice 2025-[XX]). The equipment must be delivered within 105 days of payment. iDEAL uses 6% as a safeguard to ensure the 5% minimum threshold is satisfied with a 20% safety margin. We manage all equipment purchasing and logistics on behalf of our Customers.

To assure that the Direct Payment tax credit is received for your solar project to pay for the portion not covered by the Grant, the project needs to be safe harbored before July 4th.

iDEAL’s proven process ensures that procurement, compliance, and documentation are provided seamlessly. Construction can then be completed on a timeline that is not rushed and can accommodate unforeseen delays in project schedule that could cause the project’s start-up to occur after December 31, 2027, losing the tax credit.

Safe Harbor Available	Begin Construction Date	Complete Project by Date	Domestic Content Points Required	FEOC Rules Apply
Yes	July 4, 2026	December 31, 2030	50	Yes



Safe Harbor Steps – How to Lock in the 40% ITC Now!

The steps required to comply with Safe Harbor requirements and lock in the 40% ITC before July 4th are outlined below:

Step 1

District approval to apply for the Full Grant Application and to enter into a GES contract with iDEAL.

Step 2

Sign GES contract and safe harbor agreements provided by iDEAL before June 15, 2026.

Step 3

*Pay the Safe Harbor payment [6% * \$747,276 = \$44,837].*

Step 4

Upon receipt of the Safe Harbor Payment and before July 4th, 2026, iDEAL will procure equipment to be delivered within 105 days of payment and will provide a bill of sale and a safe harbor compliance package documenting the Safe Harbor purchase.

Safe Harbor Steps to Be Completed Upon Board Approval and Payment

After Board approval and completion of the safe harbor steps, iDEAL will collaborate with the District to construct the project in 2027. The solar array must be placed in service by December 31, 2030.



Domestic Content Bonus & FEOC Compliance

10% ITC Domestic Content Bonus

The base ITC is 30%. A 10% Domestic Content Bonus is available for projects constructed that use a qualifying amount of domestically sourced equipment. Equipment qualifies as domestic based on a points scale provided in the IRS's Safe Harbor document.

Below is a summary of the Domestic Content points earned based on the equipment specified in this Proposal.

10% Bonus ITC Domestic Content Points	
Points Required	50-points for 2026
Panels	12.4
Inverters	24.8
Racking	<u>13.9</u>
Total Points	51.1
ITC Bonus	Yes!
ITC Project	40%
ITC Amount	\$298,910

10% ITC Bonus Eligibility Requirements

The equipment specified in this Report is structured to satisfy the 2026 50-point Domestic Content threshold, supporting eligibility for the 10% Domestic Content Bonus and a total expected 40% federal elective payment, subject to final documentation and applicable federal rules.



Foreign Entity of Concern (FEOC) Compliance

FEOC rules are federal foreign-sourcing restrictions that apply to solar projects that start construction after December 31, 2025, and the project includes material assistance from a prohibited foreign entity.

To comply, iDEAL screens equipment and counterparties for prohibited-foreign-entity exposure, structures procurement around the IRS's interim safe-harbor framework and calculates and documents the project's material-assistance cost ratio using current Treasury and IRS guidance.

iDEAL maintains the supplier, sourcing, and cost substantiation required to support a tax-credit filing.

FEOC Compliance Process Included

At iDEAL Energies, we manage these requirements end-to-end so that the District can confidently claim their ITC and receive their Direct Payment.



SFS Program Contracting Requirements

Program Requirements

The Solar for Schools Program RFP Document and Grant Contract provide options for complying with procurement requirements under the Solar for Schools Program and MN Statutes.

The Program RFP Document expressly provides that a GES Contract is an approved procurement method that complies with the Solar for Schools Program and Minnesota Statutes.

iDEAL has used a GES Contract under Minnesota Statutes § 471.345, Subd. 13, for more than 90 Solar for Schools projects completed since 2022.

As part of its 2026 program, iDEAL recommends using the same approach for the project and procurement compliance. The GES Contract includes a Purchase Agreement for the solar array, a five-year Facility Lease under which iDEAL operates and maintains the solar array for the District, and a Power Purchase Agreement where the District pays iDEAL an annual fee for the energy provided from the solar array and the operations and maintenance services.

The Power Purchase Agreement includes a provision stating that all payments, except obligations on termination of the contract before its expiration, are to be made over time, not to exceed 20 years from the date of final installation, and that savings are guaranteed to the extent necessary to make payments for the system.



GES Contract Procurement Compliance

Solar for Schools Program Requirements

The Solar for Schools Program RFP document and Grant Contract specify rules provide options for complying with procurement requirements under MN Statute and the Solar for Schools Program. A copy of the Solar for Schools Program documents and the Grant Contract are provided in the Appendix.

Procurement Requirements – Grant Contract

FOR PROJECTS WITH A GUARANTEED ENERGY SAVINGS CONTRACT

6. Contracting and Bidding Requirements

- 6.1 For projects that include entering a Guaranteed Energy Savings contract, as defined in [Minn. Stat. § 471.345, Subd. 13](#), or [Minn. Stat. § 123B.65](#), Grantees must follow the law.
- 6.2 For projects that include construction work, prevailing wage rules apply per [Minn. Stat. §§ 177.41 through 177.44](#). These rules require that the wages of laborers and workers should be comparable to wages paid for similar work in the community as a whole.
- 6.3 The Grantee and any subrecipients must not contract with vendors who are suspended or debarred by the State of Minnesota or the federal government: [Suspended and Debarred Vendors, Minnesota Office of State Procurement](#).
- 6.4 The Grantee must maintain written standards of conduct covering conflicts of interest and governing the actions of its employees engaged in the selection, award and administration of contracts.

Minn. Stat. § 471.345, Subd. 13 provides that a municipality (School District) can enter into a GES Contract for an energy conservation measure (solar project that reduces the District’s electrical operating costs) with a qualified provider (iDEAL) based on a report (this Report and Appendix) that provides an estimate of all costs of installations, modifications, or remodeling, including costs of design, engineering, installation, maintenance, repairs, or debt service, and estimates of the amounts by which energy or operating costs will be reduced (Utility Bill Savings and Cashflow Summaries).



GES Contract

iDEAL has used a GES Contract for more than 90 Solar for Schools projects completed since 2022. iDEAL's GES contract document includes a Purchase Agreement for the Solar Array, a Facility Lease under which iDEAL operates and maintains the solar array for the District at iDEAL's expense, and a Power Purchase Agreement under which the District makes an annual fixed power payment of \$3,476 per year totaling \$17,380 over the five-year period. This PPA cost is comparable to operations and maintenance costs that would otherwise be incurred by the District if iDEAL did not provide them for the five-year period.

This Report is intended to serve as the qualified provider report required by Minn. Stat. § 471.345, Subd. 13. It summarizes the estimated cost of the installation, design, engineering, maintenance, operations, payment timing, reimbursement timing, debt/carry costs, and the expected amounts by which energy or operating costs will be reduced.

For Board approval, the District should make an express finding that, after reviewing this Report, the amount the District is expected to spend on the recommended energy conservation measure is not likely to exceed the amount to be saved in energy and operating costs over 20 years from final installation. The District should also confirm that the GES Contract includes the written guarantee required by the statute.

Reconciliation of Production Variability and GES Guarantee

Solar production, utility rates, utility bill credits, and net metering credits may vary from projections for reasons outside the parties' control. The GES Contract does not guarantee that annual production or utility savings will exactly match projections. Instead, the project is structured so that the District's net project cashflow over the 20-year statutory GES savings measurement period, including energy savings, Solar for Schools Grant reimbursement, the federal elective payment, power payments, O&M treatment, equipment replacement assumptions, and temporary carry costs, is projected and guaranteed to meet or exceed the Energy System's cost to the extent required by Minn. Stat. § 471.345, Subd. 13.



The Power Purchase Agreement also includes a production adjustment mechanism if the system produces less than 85% of estimated annual production on an annual basis. This mechanism supports the broader GES structure by aligning the District's nominal power payments with minimum expected production performance.

Remaining Action Items

The remaining action items for complying with the Solar for Schools Program and Minn. Stat. § 471.345, Subd. 13, are:

- Publish notice before the School Board meeting identifying the District's intent to enter into a GES Contract with iDEAL, the proposed contract parties, and the contract purpose.
- Approve the recommended Board findings and authorize District administration to submit the Full Grant Application, execute the contract documents, and complete safe harbor steps.
- Execute the GES Contract documents and related safe harbor agreements.
- Pay the safe harbor payment so iDEAL can procure qualifying equipment before July 4, 2026, and provide the safe harbor documentation package.
- Submit a copy of the signed contract and this Report to the Commissioner of Commerce within 30 days after the contract's effective date.



iDEAL's Scope of Services

About iDEAL Energies

iDEAL provides a turnkey solution - from engineering and procurement through construction and long-term operations - designed to minimize risk and maximize financial return. With exclusive focus on commercial solar projects under 1.5 MWAC, we deliver systems that qualify for the 40% ITC that meet all technical, code, and warranty requirements. Facilities staff can rely on proven engineering and construction practices, and the District benefits from predictable utility bill savings.

Design, Electrical & Structural Engineering

iDEAL provides complete structural, civil and electrical engineering services to ensure every solar installation is safe, code-compliant, and optimized for long-term performance. Our structural engineers assess the building's load-bearing capacity, roof condition, and ability to support the solar array under local wind and snow load requirements. Simultaneously, our electrical engineers with input from our master electricians design the interconnection of the system to the building's electrical infrastructure, including the optimal placement and configuration of solar modules, inverters, wiring, and safety devices. All engineering work is performed in collaboration with our Facilities staff, ensuring the final design meets operational needs and maximizes performance, safety, and system longevity.

Utility Interconnection Approval

iDEAL manages all aspects of utility interconnection, including preparation and submission of required design documents to Minnesota Power. Our experienced interconnection team communicates directly with utility representatives to obtain interconnection approval and address any grid constraints.

ITC Procurement and Maximization

iDEAL's team has extensive experience navigating the Tax Credits and incentives. We have managed tax equity funds for public banks for the last 15 years helping businesses, non-profits, and public entities monetize tax credits and other incentives. iDEAL provides programs that



are designed to maximize results. We understand how important compliance is, we are detailed, and we deliver.

- Federal Investment Tax Credit (ITC): A 30% ITC on eligible system costs.
- Domestic Content 10% ITC Bonus: An additional 10% is available (for a total ITC of 40%) if U.S.-sourced steel, iron, and manufactured products meet IRS points thresholds. iDEAL actively tracks manufacturing developments and evolving IRS guidance to help Customers capitalize on this opportunity when eligible.

Solar for Schools Program Grant Procurement Services

Applying for a Solar for Schools Grant requires a significant amount of time and requires technical expertise to obtain the information required to apply and process the application. iDEAL provides its School customers with assistance in preparing and submitting Solar for Schools Program Readiness Assessment and Final Grant Application, along with the U.S. Department of Treasury Direct/Elective Pay Tax Credit filing package.

Solar for Schools Program Education Curriculum

iDEAL provides Solar for Schools education materials that introduce students to solar energy, project development, equipment, careers, and the real-world engineering and construction process behind a solar project. The curriculum can incorporate the District's solar array into classroom materials and student learning activities. The curriculum includes:

5th Grade Solar Exploration

Our Science-Based Learning Module engages students in the real work of STEM professionals to develop their understanding of solar energy, careers, teamwork, design, and real-world issues.

High School Solar Pathways

Our Solar Pathways Problem-Based Learning Module is designed to engage high-school students and teachers in a research-based learning journey exploring renewable energy. By centering on a standard, students can explore the complexities of science and society through multiple lenses and related academic standards.



Incentive Procurement and Maximization

iDEAL proactively identifies, applies for, and secures all available rebates and incentives that contribute to the financial viability of each solar project.

- Solar for Schools Grant: For Independent and Special School Districts, Tribal Contract Schools, Cooperative School Districts, Minnesota State Colleges and Universities
- Solar on Public Buildings Grant: For MN local units of government and Tribal Nations
- Renewable Energy Credits (RECs): Retained by the system owner and available for use in corporate sustainability reporting or voluntary carbon markets.

Equipment Procurement, Permits & Construction

Our turnkey process includes the procurement of high-quality, proven solar components selected for safety, durability, and manufacturer reliability. During the permitting phase, iDEAL prepares and submits all applications, coordinating with local building and electrical officials to ensure efficient review and approval. Once equipment is secured, it is staged at our warehouse to streamline project logistics. Our in-house construction team, Green2 Electric, performs the installation with precision and efficiency. Project Managers coordinate closely with District staff to schedule construction activities designed to minimize disruption to the school's operations.

System Start-Up

Upon completion of construction, iDEAL oversees all final inspections, including a utility witness test performed by Minnesota Power. This process verifies the system's readiness for interconnection and authorizes permanent operation. All coordination, scheduling, and permitting for system start-up are included in iDEAL's fixed project cost.



Project Completion and Documentation

At project close-out, iDEAL meets with project stakeholders to deliver a comprehensive handoff that includes system orientation, monitoring training, and detailed documentation.

Customers receive a complete digital operations manual that includes:

- Final invoices and financial summary
- Project agreements and certificates
- Contact list for iDEAL support
- As-built drawings (site plan and one-line diagram)
- Structural engineering and permitting documentation
- Warranty certificates for all system components
- Online monitoring login and training
- Guidance for interpreting solar-adjusted utility bills

Direct Pay – ITC Documentation and Registration

After Project Completion, iDEAL will provide the District with documentation required to obtain a pre-filing registration number through Energy Credits Online and will assist the District with obtaining its pre-filing registration number. iDEAL will also provide documentation required to substantiate the District's federal tax return filing to receive the Direct Payment funds.

Operations and Maintenance

To ensure your solar array performs as expected, iDEAL provides operations and maintenance services for the first five years of operation.

Post-Installation Media and Marketing

To support internal and external communication of project success, iDEAL can provide the following marketing deliverables upon project completion:

- High-quality drone video and photography of installed arrays
- Web-hosted 3D model of the solar system
- Performance highlights and marketing metrics
- Optional marketing support to assist with sustainability and PR initiatives



Project Assumptions & Considerations

Assumptions

This Proposal is based on the following conditions that we anticipate will be present at your site based on iDEAL's site visit and engineering performed as described in this Report. They are an integral part of this Proposal and included in the scope of work provided by iDEAL.

1. Building Service Voltage is 480/277 Volt.
2. Production meter, metering, and Reference Point of Applicability (RPA) will be established at the inverter's voltage.
3. AC interconnection Type: Supply Side - Interior Equipment (Assumed)
4. There is a common neutral available at the point of interconnection.
5. The electrical equipment is acceptable to accommodate the system and is up to code.
6. The Site's Utility meter and CT's are located outside.
7. Project receives utility interconnection approval.
8. The site can handle the solar array's structural load.
9. Structural design will utilize pre-engineered manufactured components specifically designed for solar installation. These components come with factory engineered certifications and a stamp from a Professional Engineer. Their report will specify whether mechanical attachments are required.
10. All solar and electrical equipment will be installed as designed.
11. Access will be provided to iDEAL so that its crane can be used to transport materials to and from the roof.
12. Includes standard Utility Application fees.
13. Solar array monitoring via the web-based monitoring system provided by the Inverter Manufacturer.
14. Project Specific Inclusions: The Contractor shall furnish all labor, supervision, equipment, tools, and related resources necessary to complete the solar project in accordance with the approved project design and applicable contract documents. The Contractor's scope of work shall include all required trenching, excavation, associated concrete work, and removal of brush as necessary to facilitate completion of the electrical installation. The Contractor shall restore affected landscaping, surfaces, and work areas disturbed by the Contractor's activities to their original condition, as reasonably necessary, and shall provide and install OSHA-compliant



safety systems where required for the performance of the work. All work included in this scope is based on performance during standard working hours and is reflected accordingly in this estimate. This proposal includes Electrical Professional Engineer (PE) re-certification of any customer-owned equipment that is modified in the field, if such re-certification is required. (1) After-hours shutdown including after-hours labor, and related coordination requirements are included in this scope.



Considerations

iDEAL has completed preliminary engineering and has provided this Report covering the prescribed work necessary to deliver the Project. If circumstances that arise that differ from the above require a change in scope, iDEAL will advise you and provide you a clear plan to address the issue. Should such changes result in an adjustment to the project cost, iDEAL will provide full transparency and work diligently to minimize any additional expenses, and work with the District and the MN Department of Commerce to adjust the system's design, size, or Grant amount to account for any difference. Possible changes in scope include, but are not limited to the following:

1. Any utility requirement to move the site's utility meter and/or CTs.
2. Customer requested deviations from the design.
3. Fees for any additional engineering studies or specialized equipment required by Minnesota Power to install the solar array to their grid.
4. Ballasted rooftop systems may require mechanical roof attachments. If required, iDEAL will provide and install them using a certified roofer.
5. Project Specific Exclusions: The scope of services provided in this Proposal does not include the following: This scope assumes no special roof access requirements are necessary. Additional slip sheets and customer-requested rooftop conduit bridges are also excluded unless specifically included elsewhere in this proposal.



Equipment Summary

At iDEAL, we believe that long-term solar performance begins with selecting the right equipment. We exclusively source products from Tier 1 manufacturers with proven records of reliability, durability, and financial strength. Every component we install including panels, inverters, racking systems, and monitoring platforms are selected to meet the highest standards of safety, performance, and warranty protection. We have provided an Appendix with this Proposal that provides information on the equipment we have proposed for your project described below.

Item	Type	Warranty
Panel	173 Silfab SIL-580XM+ - DCB (Dom Con)	30-year linear power warranty and a 25-year product warranty
	419 Phono PS590M8GFH-24/TNH	30-year linear performance warranty and a 15-year product warranty
Inverter	1 SolarEdge SE100k 480V3Ph Inverter (Dom Con)	12-year standard warranty, extendable to 20 years
	2 SolarEdge SE80k 480V3Ph Inverter (Dom Con)	12-year standard warranty, extendable to 20 years
Optimizer	592 SolarEdge C651U Power Optimizer (Dom Con)	25-Year Product Warranty
Racking	Panel Claw (CFR+) (Dom Con)	25-Year Product Warranty
	Aerocompact S Base	25 Year Product Warranty

iDEAL has deployed systems using components from industry leaders such as Jinko, QCell, SolarEdge, SMA, Unirac, and PanelClaw brands that are recognized globally for innovation, quality control, and long-term product reliability.

This commitment to quality means:

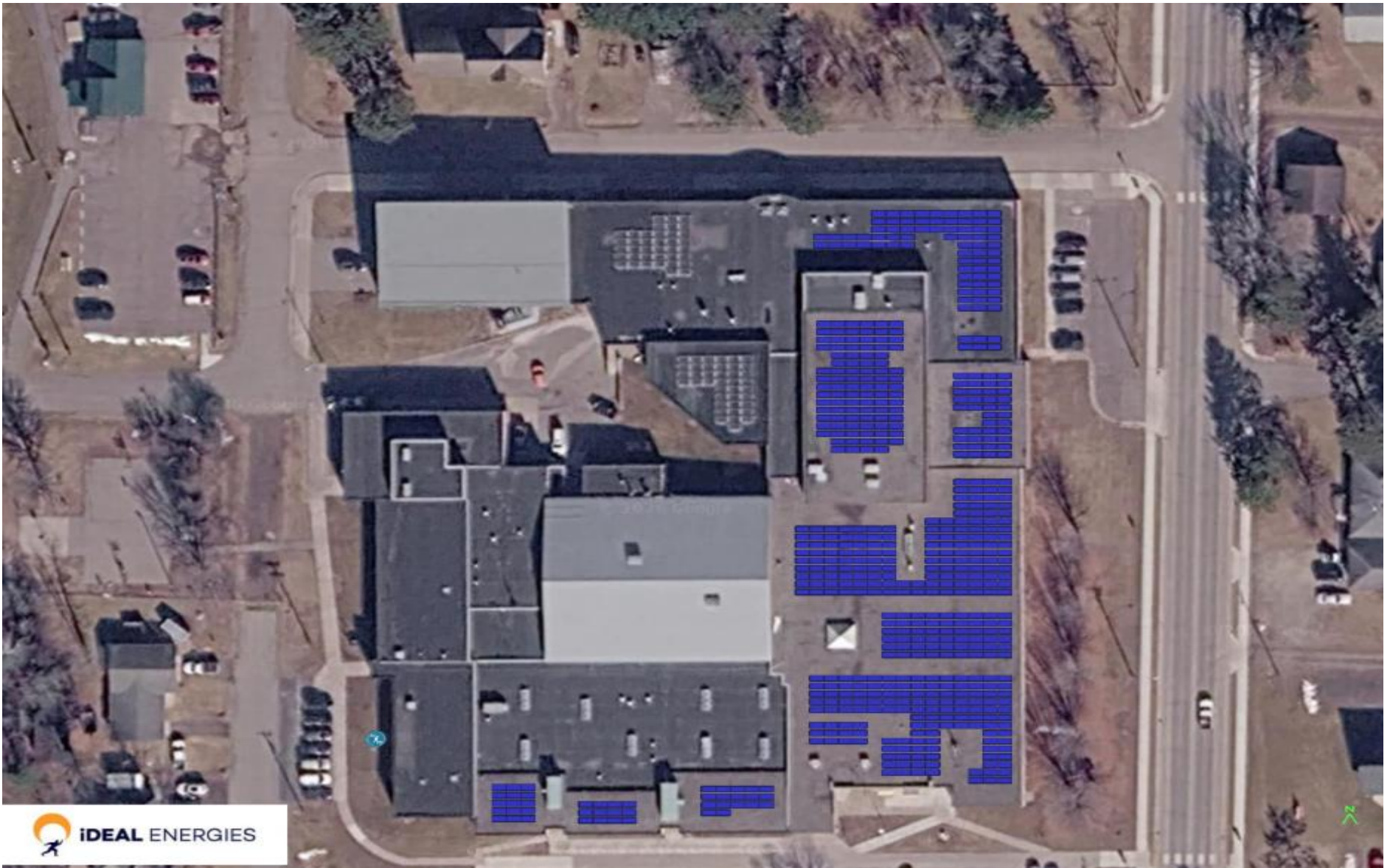
- Better long-term energy production
- Fewer warranty claims and maintenance issues
- Higher ROI and energy savings for our customers
- Confidence that your system will perform as expected for decades



Each project is engineered to meet site-specific requirements, and equipment is selected to optimize performance based on roof structure, electrical infrastructure, and environmental conditions. Whether it is high-efficiency bifacial panels, optimizers that enhance safety and output, or racking systems designed to protect your roof, iDEAL delivers systems that are built to last.

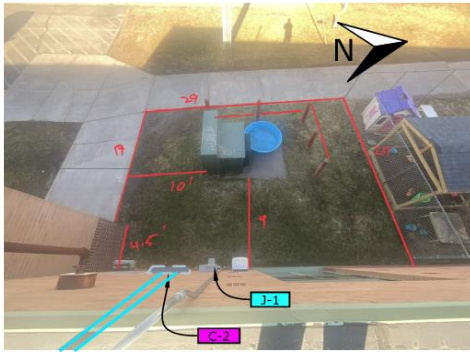


DC Equipment Layout



AC Equipment Elevations

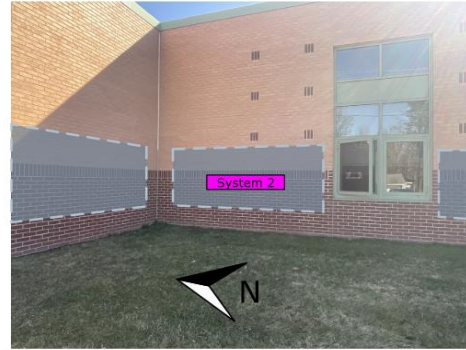
ISD 698 Floodwood Elementary Add-On (347.55 kW DC/260 kW AC)



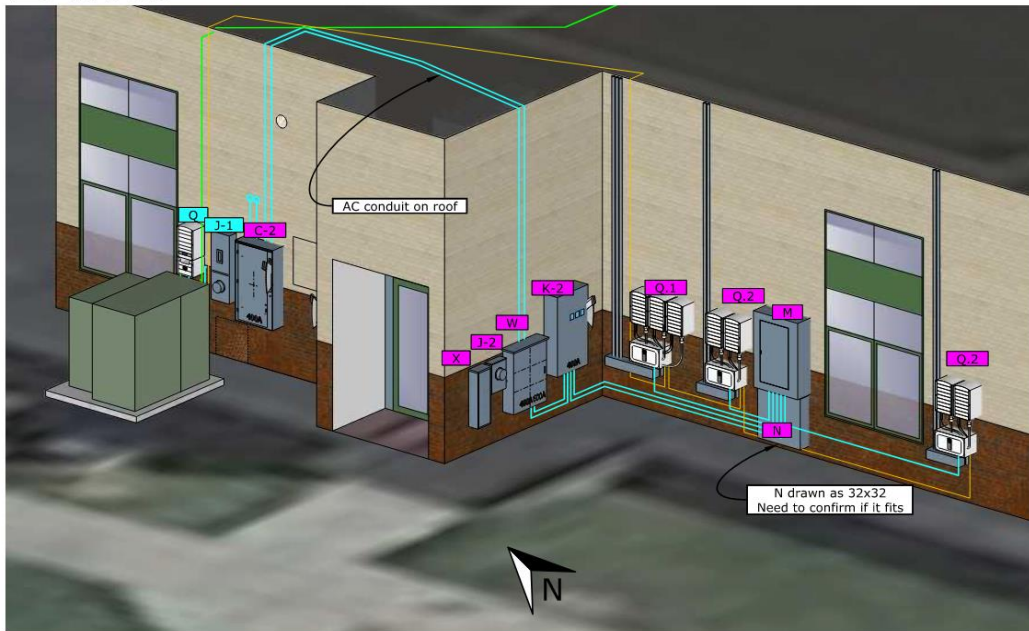
2 Equipment Detail
Not To Scale



3 Equipment Detail
Not To Scale



4 Equipment Detail
Not To Scale



1 Wall Option
Scale: 3/16" = 1'-0"

Key	
	DC conduit
	AC conduit
	Communications
	Transformer
	Parapets
	Gas lines
	J-box
	Grade
	GEC/Grounding
	GG
	Generator
	CT Compartment for Main Meter
	See Tag ID on E.402

Existing Equipment	
	Utility Transformer - 500KVA
	AA Existing main service meter (utility-owned, bi-directional)
	BB Existing switchgear
	CC Existing main service disconnect
	DD Existing Customer-Owned Transformer
	HH Transfer Switch
	GG Generator
	WW CT Compartment for Main Meter
Project-Specific Equipment	
	C Main PV Service AC Disconnect
	J PV Production Meter (Utility-Owned)
	K Utility AC Disconnect
	M PV AC Combiner Panel
	Q Inverter
	R Optimizers
	S Modules
	W CT/VT Cabinet

General Notes

- See G2E Electrical Best Practices document for company-standard details on wiring & concrete pads.
- See sheet E.402 for Tag IDs
- Some runs may be paralleled in multiple conduits. Not all lines may be shown on elevation sheets. Refer to Wire & Raceway on page E.402 for all conduit and conductor sizing.
- Field verify 3' setback from any gas regulator.
- See G.002 for IT plan

text update: 08/05/2024

PV Production Meter

- Standard procedure is that solar should be connected to the line (top) side.
- Per MN Power requirements, cold sequencing of meters must be possible. PV production meter "J" shall have disconnects upstream & downstream, located within 10' of each other.

See sheet E005 of G2E Electrical Best Practices for wiring details on meters.

IDEAL ENERGIES
GREEN ELECTRIC
IDEAL Energies/Green2Electric LLC.
8318 Pillsbury Ave South
Bloomington, MN 55420
612-928-5008
Electrical Contractor License
#EA791017

Template Rev. 04.2

SITE INFORMATION

Project Name
ISD 698 Floodwood Elementary Add-On

Utility Customer of Record
ISD 698

Installation Address
115 W 4th Ave
Floodwood MN, 55736

Building Svc. Voltage
480/277V, 3PH / 4W
Secondary Interconnection
Utility: Minnesota Power

SYSTEM INFORMATION

Proposed System #2
Application # N/A
Meter # xxxxxxxx
Total AC Size - 260 kW AC
Total DC Size - 347.55 kW DC
VAC/PH - 480/277; 3PH

DOCUMENT STATUS

Progress Print

REVISION

ISSUE: May 13, 2026

#	Date	Description	Initials
1a		App Set Review	
1		Utility Application	
1b		Construction Review	
2			
3			
4			
5			

0 1/2 1
If this bar does not measure 1" then drawing is not printed to full scale.

DESCRIPTION

Equipment Elevations

E.410

Sheet 16/21

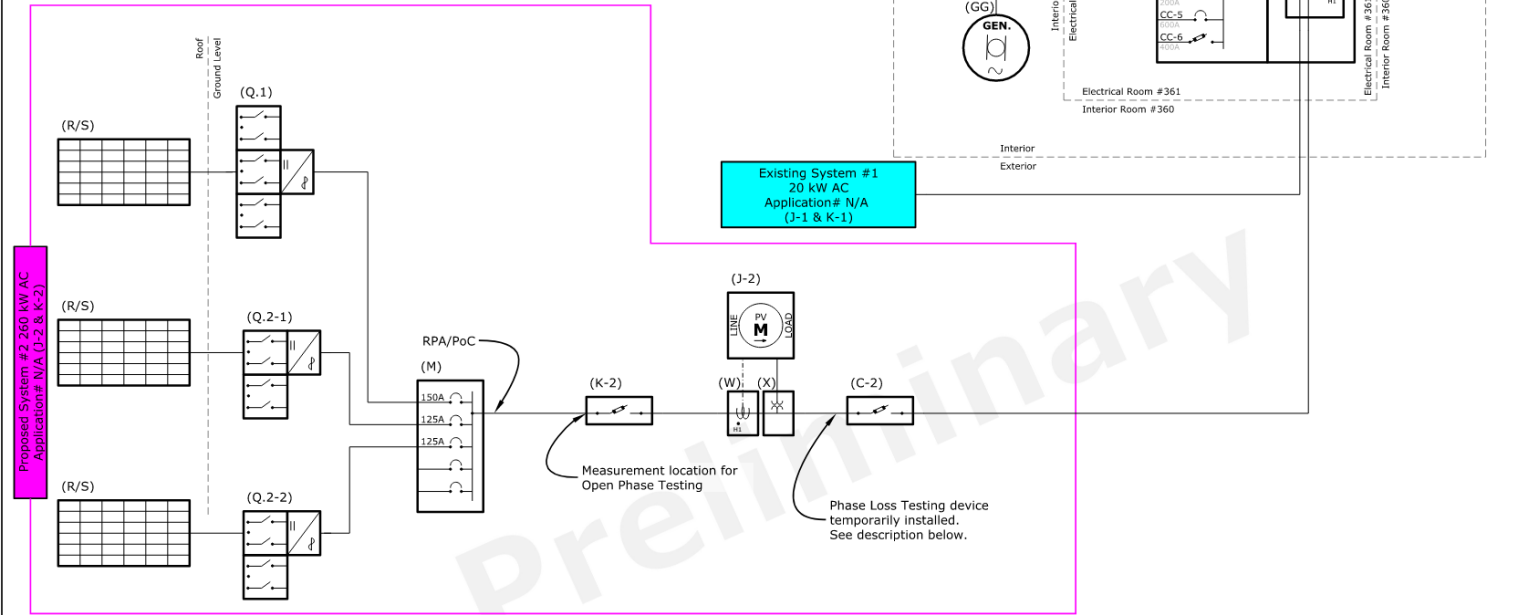


One-Line Electrical Diagram

ISD 698 Floodwood Elementary Add-On (347.55 kW DC/260 kW AC)

Proposed System #2			
Solar Size (AC)	260 kW AC	Array Tilt	10°
Solar Size (DC)	347.55 kW DC	Average Azimuth	180°
DC/AC Ratio	1.337	Set Inverter Power Factor	(1) 100kW (2) 80kW
Set Inverter Power Factor	0.98 Leading. See URP settings.	Set Inverter Active Power	

Equipment	Make/Model	Qty
Panels	Phono 590W	419
Panels	Silfab 580W	173
Inverters	Solar Edge SE100KUS	1
Inverters	Solar Edge SE80KUS	2



Proposed System #2 260 kW AC Application# N/A (J-2 & K-2)

Existing System #1
20 kW AC
Application# N/A
(J-1 & K-1)

General Notes
<ul style="list-style-type: none"> POI: Supply side at switchgear CT lugs Designed per NEC Standards. All wire will be field determined and compliant with NEC code requirements. See E.401 for equipment schedule See E.402 for AC wire & raceway schedule See E005 of G2E Electrical Best Practices for wiring of PV Production meter J

Utility Notes
<ul style="list-style-type: none"> Inverter settings shall comply with MN Power's Utility Required Profile. MN Power requires cold sequence disconnecting for PV Production Meter "J." Utility disconnect "K-2" and Service Disconnect "C-2" can be used as cold sequence disconnects for servicing production meter. Open phase test switching performed by MN Power during witness test.

Phase Loss Testing Device #3/4

This is a temporary device that will be used during the witness test to demonstrate the loss of a single-phase from the utility. See single line diagram for testing location.

DESCRIPTION
In order to perform the individual phase loss test required by the utility, we are using a non-fused disconnect (480Y/277V 3PH 4W).

PROCEDURE
The device is temporarily connected on each phase. All inverters and ground reference equipment will experience the phase loss.
A non-fused Disconnect is used to turn off phase "A". The inverter shuts down, verifying compliance with UL1741.
This process is repeated for phase "B" & "C".

IDEAL ENERGIES
GREEN/ELECTRIC
IDEAL Energies/Green2Electric LLC.
8318 Pillsbury Ave South
Bloomington, MN 55420
612-928-5008
Electrical Contractor License
#EA791017

SITE INFORMATION

Project Name
ISD 698 Floodwood Elementary Add-On

Utility Customer of Record
ISD 698

Installation Address
115 W 4th Ave
Floodwood MN, 55736

Building Svc. Voltage
480/277V, 3PH / 4W
Secondary Interconnection
Utility: Minnesota Power

SYSTEM INFORMATION

Proposed System #2
Application # N/A
Meter # xxxxxxxx
Total AC Size - 260 kW AC
Total DC Size - 347.55 kW DC
VAC/PH - 480/277; 3PH

DOCUMENT STATUS

Progress Print

REVISION

#	Date	Description	Initials
1a		App Set Review	
1		Utility Application	--
1b		Construction Review	--
2			
3			
4			
5			

0 1/2 1
If this bar does not measure 1" then drawing is not printed to full scale.

ENGINEER OF RECORD

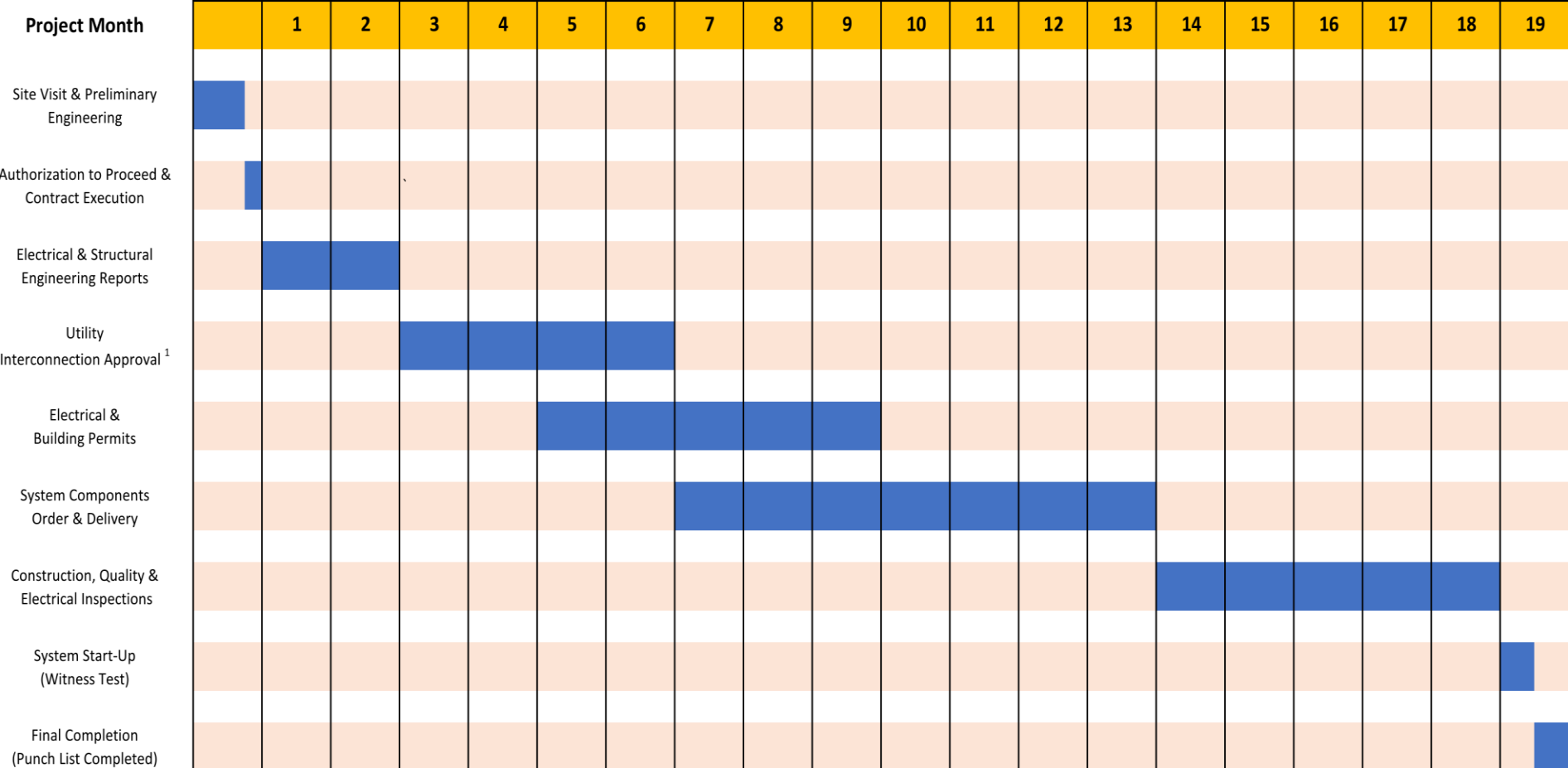
DESCRIPTION

Single Line Diagram

E.400



Project Schedule



The above sample project schedule represents the project over a continuous timeline based on standard time frames for utility approval, current equipment lead times, construction, and start-up. iDEAL will construct the project on a schedule that is convenient and timed correctly for Independent School District No. 698 - Floodwood School District and update the project schedule accordingly.

Note¹ Customer is required to sign a utility interconnection application after completion of engineering, and a uniform state-



About iDEAL

iDEAL is a Minnesota based premier commercial solar energy company with 700+ commercial PV solar systems currently in operation since our founding in 2010, and 50+ projects currently under development and construction. **We specialize exclusively in commercial behind-the-meter solar projects up to 1,500 kWAC that are owned by our Customers.**

iDEAL provides turnkey solar energy installations for multiple sectors including commercial businesses, schools, cities, counties, and non-profits. iDEAL's professional services and operations teams provide development, financial, incentive procurement, design, engineering, equipment procurement, construction, project management, and operations & maintenance services. iDEAL is a sole source with all the expertise and resources in-house that is uniquely positioned to deliver a seamless solar experience for our Customers.

We are dedicated to deploying renewable energy projects that help our Customers save on their electrical expenses and achieve their environmental and sustainability benchmarks and goals. Since 2010, we have developed, engineered, constructed, and financed >50% of the total number of behind-the-meter solar arrays for commercial Customers in Xcel Energy territory. We have also installed solar arrays in ~20 other utilities. Our in-house staff includes electrical, structural, civil, and chemical engineering, legal, finance, NABCEP PV Installation Professionals, drone pilots, designers, project managers, procurement, warehousing, master electricians, licensed electricians, operations, and other areas of expertise. All parties work closely together and are complemented by a fully integrated operations department to deliver our Customers a seamless experience with predictable and reliable results.

We operate and maintain solar arrays for our Customers to ensure optimal performance and maximum production over the long term. Our breadth of expertise and experience are unparalleled.

All work performed in Minnesota during the installation of a solar array will be performed by Green2 Electric (iDEAL's subsidiary electrical contracting company). Licensed electricians will perform all electrical work. Green2's team includes two licensed master electricians, multiple licensed journeymen and apprentices, and other field support personnel.

- Electrical Contractor License EA791017
- Russell Goetze – Master Electrician – License/Reg No. AM007901
- Robert Buskirk – Master Electrician – License/Reg No. AM680045



Sample Projects & References



Cretex RMS

Address: 8600 Evergreen Blvd. Coon Rapids, MN
 968.1 kWDC / 733.3 kWAC
 Start-up: December 2021
 Contact Name: John Braun
 Contact email: JBraun@machine.com
 Contact Tel: 763-783-5015



Morries JLR Richfield

Address: 1525 E 77th Street Richfield, MN
 265.65 kWDC / 200 kWAC
 Start-up: June 2020
 Contact Name: Phillip Branson
 Contact email: phillip.branson@morries.com
 Contact Tel: 952-797-1373



ISD 194 Lakeville Schools / North High School

Address: 19600 Ipava Ave Lakeville, MN
 924.55 kWDC / 700 kWAC
 Start-up: June 2020
 Contact Name: Bill Holmgren
 Contact email: holmgreb@ISD194.org
 Contact Tel: 952-232-2064



City St. Cloud, MN

Address: 525 60th Street St. Cloud, MN
 1760 kWDC / 1200 kWAC (under construction)
 354.2 kWDC / 250 kWAC
 Start-up: August 2020
 Contact Name: Tracy Hodel
 Contact email: tracy.hodel@ci.stcloud.mn.us
 Contact Tel: 320.420.1163



Rihm Kenworth

Address: 9400 Evergreen Boulevard
 373.2 kWDC / 300 kWAC
 Start-up: September 2022
 Contact Name: Jerome Barney
 Contact email: Jerome.barney@rihmfamilycompanies.com
 Contact Tel: 612-615-5358



Road Machinery & Supplies

Address: 12520 Quentin Ave S, Savage MN
 280.3 kWDC / 200 kWAC
 Start-up: July 2024
 Contact Name: Peter Anderson
 Contact email: panderson@rmseq.com
 Contact Tel: 952-895-7047



FAQs

What are the next steps?

The next step is for the School Board to approve submission of the Full Grant Application, authorize execution of the GES Contract documents, and authorize the safe harbor payment so iDEAL can complete the safe harbor steps before July 4, 2026, to preserve the 40% federal elective payment for the project.

What happens after safe harboring?

iDEAL will complete engineering and apply to the utility for interconnection approval. After interconnection approval, we will collaborate with you to finalize the installation schedule. iDEAL will provide all project management and administrative services, and all permitting, equipment procurement, scheduling, construction, quality, start-up, and operations. Our project managers will keep you informed every step of the way.

Will the solar installation affect my roof or its warranty?

No. iDEAL works directly with your roof manufacturer to maintain the roof warranty. We use manufacturer-approved materials and installation methods.

Will the system be approved for interconnection?

iDEAL handles all interconnection applications. We have reviewed utility bills and available utility requirements to make sure the system is designed correctly. We have coordinated with Minnesota Power regarding the pending application and designed the project for compliance with applicable interconnection requirements. We do not foresee any issues with receiving interconnection approval.

What kind of maintenance is required?

iDEAL provides a 5-year operations and maintenance program that includes real-time performance monitoring, semi-annual site visits, and warranty support to ensure your solar array operates optimally.

How do I know my system is operating optimally?

Your system includes an online monitoring platform that monitors the performance of panels and inverters and provides energy production. This information is used to compare with your production forecasts to ensure the amount of energy expected is produced. Over the last 10 years, iDEAL's systems actual energy production has exceeded their forecast amounts.

How long will my solar system last?

Systems are designed to produce energy for 40 years. All major components are covered by long-term warranties and are supported by iDEAL's operations and maintenance team.

