



TUHSD Project Updates

Solar PV, BESS, and EVSE Project

February 2023

Site-by-site Financial Analysis

(With 100% Bond Reimbursement)

Site	System Size (kWp DC)	PV EPC Installed Cost (\$/Watt)	Energy Consumption Offset ³ (Year 1)	Estimated Capital Cost ^{1,2} (\$)	Bond Reimbursement (100%)	Annual Average Nominal Net Savings ^{1,4} (\$)	Lifetime NPV Savings ¹ (\$, 2023)	IRR (%)
Tamalpais HS	255	\$5.11	30%	(\$1,300,000)	\$1,300,000	\$116,000	\$2,120,000	38%
Archie Williams HS	420	\$4.65	77%	(\$1,950,000)	\$1,950,000	\$157,000	\$2,850,000	36%
<u>Scenario #1:</u> Redwood HS + San Andreas HS (> 1 MW AC)	785 (+705 existing)	\$5.58	100%	(\$4,380,000)	\$4,380,000	\$354,000	\$6,440,000	36%
<u>Scenario #2:</u> Redwood HS + San Andreas HS (< 1 MW AC)	464 (+705 existing)	\$6.10	86%	(\$2,830,000)	\$2,830,000	\$251,000	\$4,590,000	38%
<u>Scenario #3:</u> Redwood HS (and San Andreas HS as a separate site, see below)	464 (+705 existing)	\$6.10	90%	(\$3,334,000)	\$3,334,000	\$289,000	\$5,230,000	37%
San Andreas HS	64	\$7.82						
TOTAL SCENARIO #1	1,529	\$5.34	82%	(\$8,165,000)	\$8,165,000	\$665,000	\$12,050,000	37%
TOTAL SCENARIO #1 (without San Andreas)	1,465	\$5.23	81%	(\$7,660,000)	\$7,660,000	\$627,000	\$11,410,000	37%

¹ Individual costs and savings assume portfolio pricing and may not be achievable on each individual site basis

² Costs do not include an estimated 5% in soft costs (such as transformer upgrades)

³ Offset percentages include existing solar PV (while the other table info includes just the new solar PV)

⁴ These amounts are averages of the net energy savings per year (which includes PV-related O&M, insurance, inverter replacement, etc.). It is worth noting that savings generally increase over time, so these figures are not necessarily representative of the Year-1 savings.



VENDOR EVALUATION

Vendor Evaluation Summary Ranking

Cash Proposal Ranking

Criteria	Pct of Score
1 Lifetime Savings, Price Adjustment	45
2 Project Experience, Qualifications, Safety Plan, and Financial Stabi	15
3 System Design, Components, and Schedule	25
4 Performance Guarantee	10
5 Contract Exceptions and Overall RFP	5
Overall Ranking	

RFP Ranking Matrix

Centrica	Engie	Syserco
Base	Base	Base
3	2	1
3	1	2
2	1	3
3	1	2
3	1	2
3	1	2

**Interviews were conducted on January 25, 2023*

Summary Comparative Financials

		Centrica	Engie	Syserco
Scenario 1	System Size (kWp)	1,450	1,450	1,500
	Yield (kWh/kWp)	1,570	1,480	1,430
	Cash Price (\$)	\$10.8 M	\$10.4 M	\$9.1 M
	Cash Price (\$/Wp)	\$7.45	\$7.13	\$6.08
	Net Cash Price (\$)	\$7.5 M	\$7.3 M	\$6.4 M
Scenario 2	System Size (kWp)	1,090	1,110	1,140
	Yield (kWh/kWp)	1,570	1,470	1,440
	Cash Price (\$)	\$8.3 M	\$8.6 M	\$7.9 M
	Cash Price (\$/Wp)	\$7.58	\$7.72	\$6.92
	Net Cash Price (\$)	\$5.8 M	\$6.0 M	\$5.5 M
	O&M Price, Yr-1 (\$)	\$93,000	\$18,000	\$34,000
	PeGu Price, Yr-1 (\$)	\$2,000	\$5,000	\$30,000
	EVSE Price (\$)	\$1,071,000	\$341,000	\$349,000
	EVSE Ongoing Price, Yr-1 (\$)	\$0	\$93,000	\$0

**All Proposal Pricing is inclusive of the Geotechnical Report's findings*

**The Net Cash Price for both scenarios above include San Andreas HS and EVSE Price*

Summary Comparative Financials

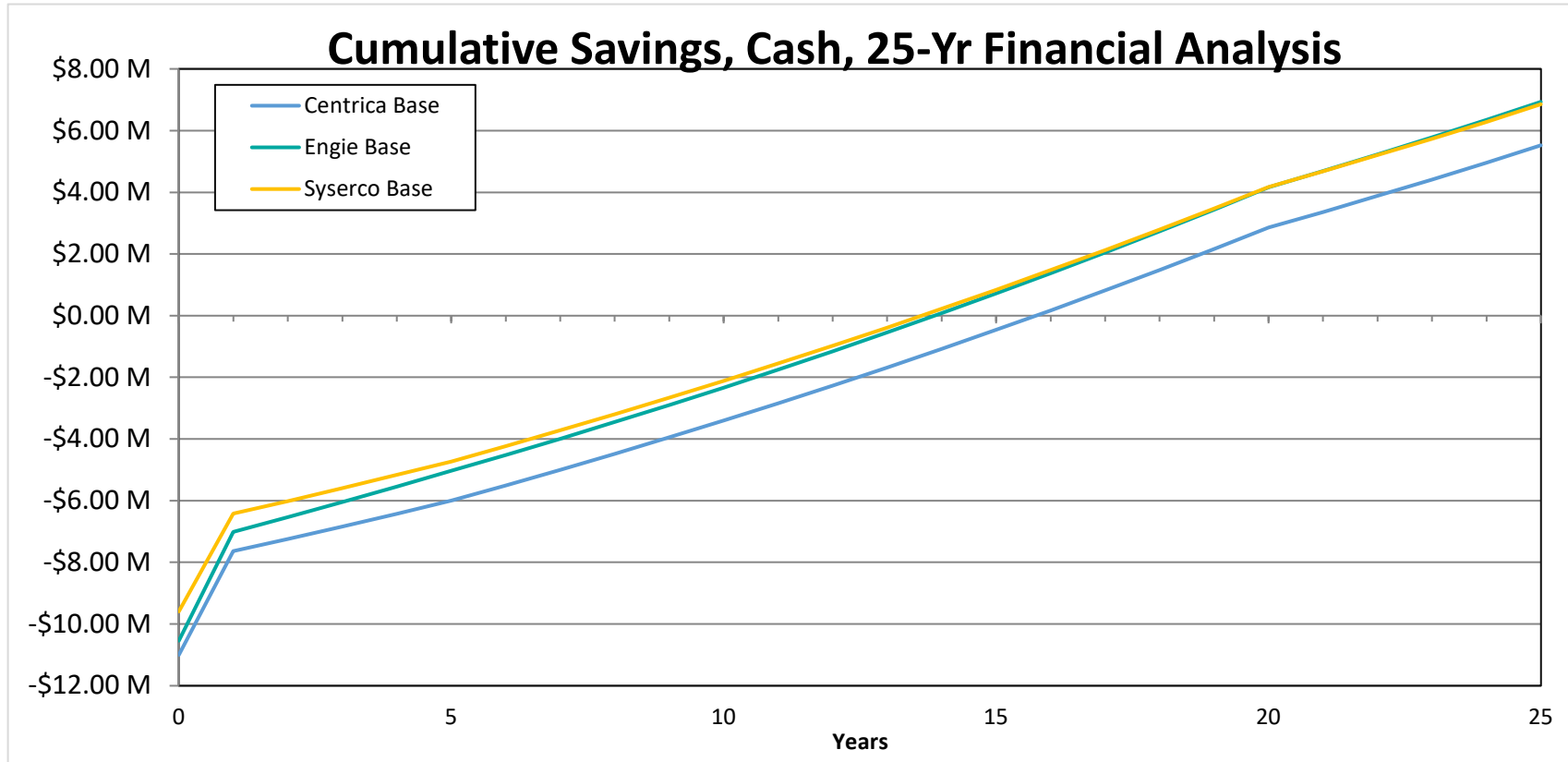
Scenario #1

		Centrica	Engie	Syserco
No GO Fund Reimbursement	Lifetime Savings, Nominal	\$5.74 M	\$7.1 M	\$7.25 M
	Net Present Value (2% DR)	\$2.38 M	\$3.6 M	\$3.89 M
100% GO Fund Reimbursement	Lifetime Savings, Nominal	\$13.11 M	\$14.71 M	\$13.95 M
	Net Present Value (2% DR)	\$9.62 M	\$11.07 M	\$10.46 M

**ENGIE had the 2nd highest NPV if the District does not pursue the GO Bond funding. However, ENGIE is solidly in 1st place if the District secures the bond funding.*

Updated Cash Flow Chart

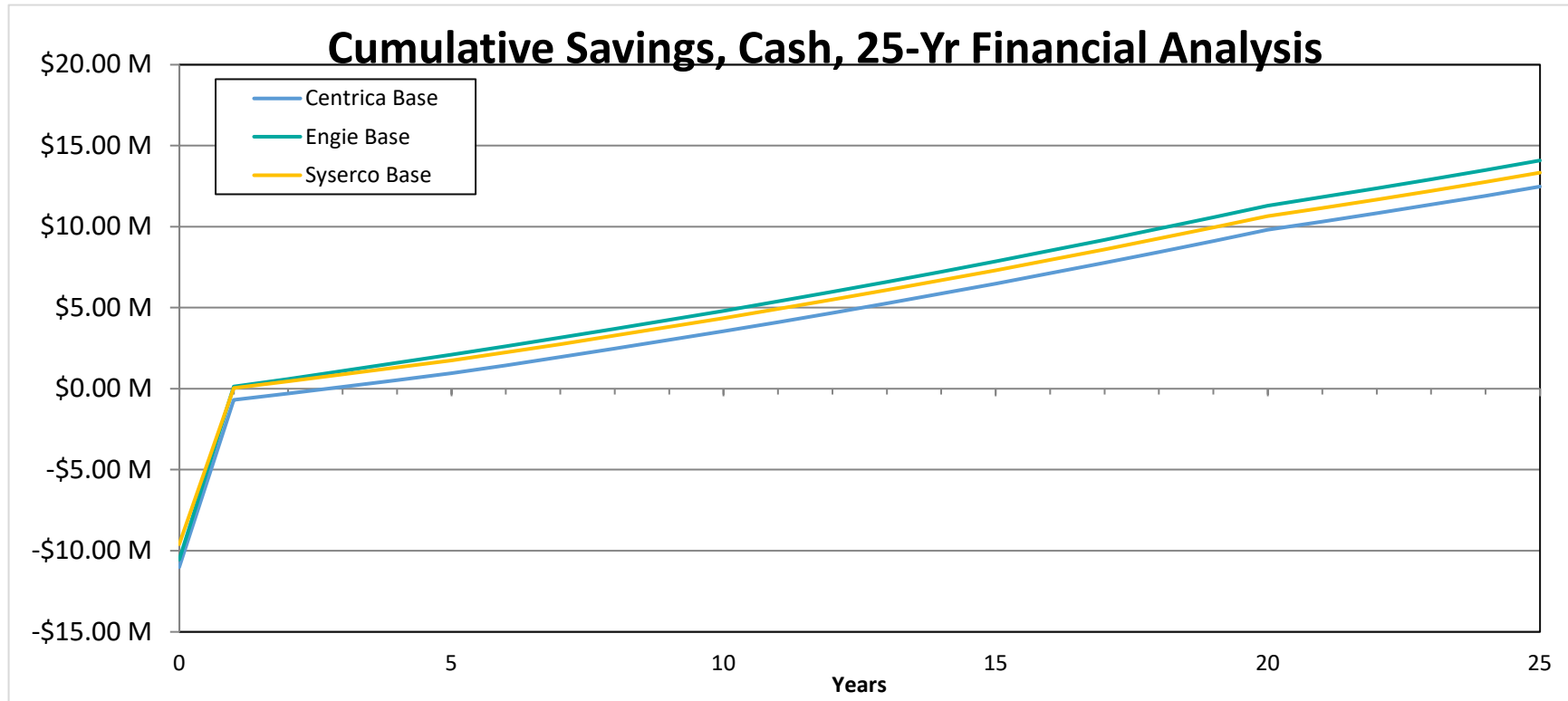
No GO Bond Reimbursement – Scenario #1



**With ENGIE, the cumulative savings over the lifetime of the project are about \$7.1M to TUHSD*

Updated Cash Flow Chart

100% GO Bond Reimbursement – Scenario #1



**With ENGIE, the cumulative savings over the lifetime of the project are about \$14.7M to TUHSD*



UPDATED FINANCIALS

INVESTMENT TAX CREDIT (ITC) EXPLANATION

- The ITC was extended by the Inflation Reduction Act (IRA) in 2022 to encompass non-taxable entities. Qualified projects can realize a percentage of the total project cost as a tax refund or tax credit.
 - Eligible costs include, but are not limited to, the initial Capital Expenditures, softs costs (such as consulting fees), interconnection upgrade costs, geotechnical surveying, etc.
- This project qualifies for a 30% ITC, which means that the District can receive a 30% refund of the Total Gross Project Costs.
 - Additionally, if Engie procures materials from domestic sources, the project would be eligible for an additional 10% ITC refund (resulting in a 40% cumulative refund). However, there is no guarantee at this time that Engie will be procuring Domestic Content.

INVESTMENT TAX CREDIT TIMELINE

Before EOY 2023:

Projects Achieve Permission to Operate (PTO) - meaning they are interconnected and generating power

Q3 2024:

IRS Will Issue Tax Refunds to the District for 30% of Project Costs

Q1-Q2 2024:

District Files Taxes for 2023 and Claims Tax Credit(s)
(even though the District is a non-taxable entity)

Note: This timeline assumes that the sites achieve PTO in FY2023. The ITC Refund operates on both a site-by-site and project-specific basis, so for example, if one site or some of the EV charging stations are delayed until 2024, the corresponding ITC tax refund wouldn't be available until 2025 (the project(s) at that site would have to be filed in the District's 2024 Taxes).

Updated Project Pricing: Engie

Scenario #1

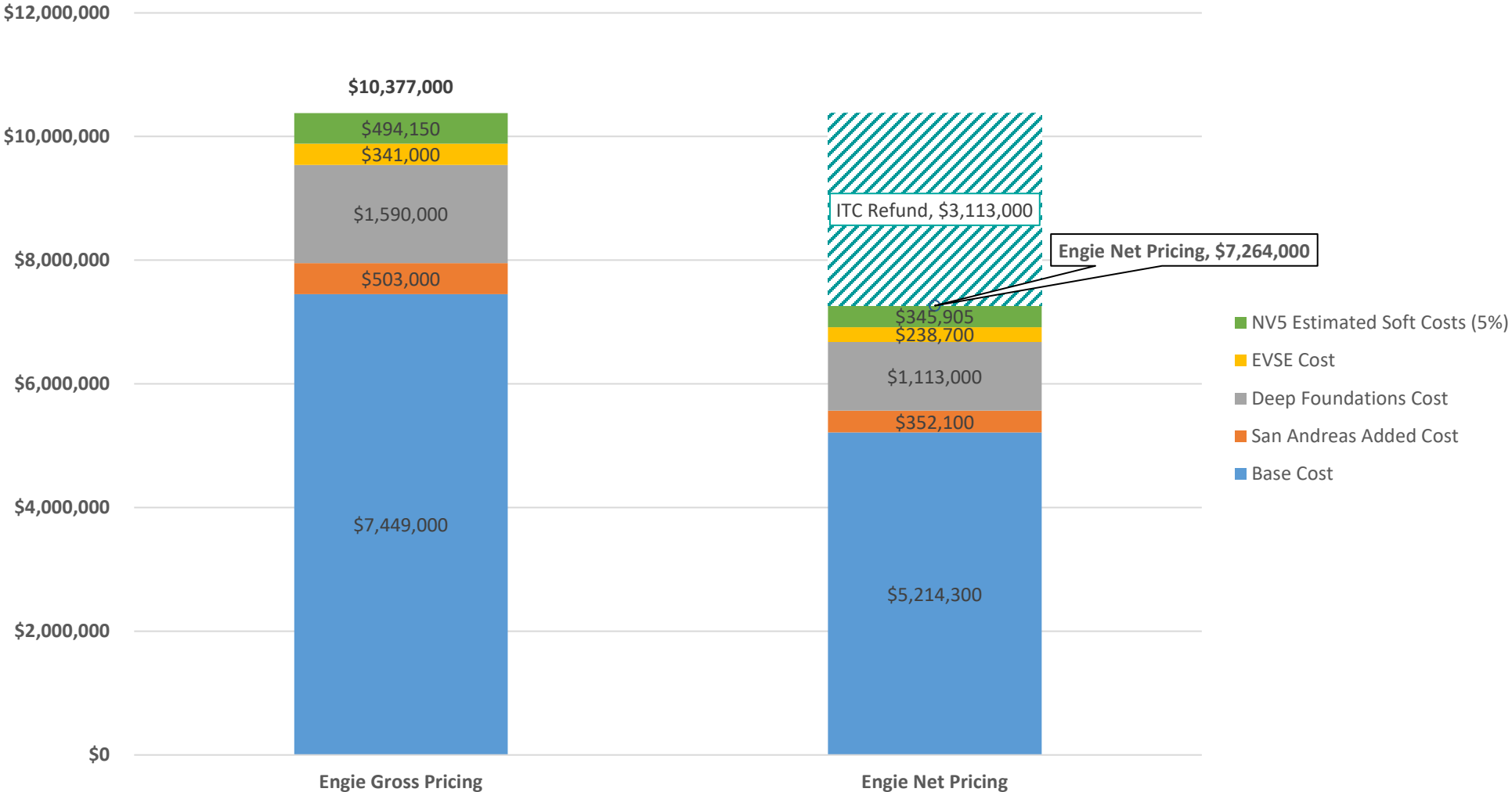
<u>Line Items</u>	<u>Engie Gross Pricing</u>	<u>Engie Net Pricing ²</u>
Base Cost	\$7,449,000	\$5,214,000
San Andreas Added Cost	\$503,000	\$352,000
Deep Foundations Cost ¹	\$1,590,000	\$1,113,000
EVSE Cost	\$341,000	\$239,000
NV5 Estimated Soft Costs (5%)	\$494,000	\$346,000
Total Costs	\$10,377,000	\$7,264,000

¹ NV5's initial cost estimates did not account for the deep foundations since the Geotechnical Report was not available at that time.

² Engie's Net Pricing is calculated using the 30% ITC tax refund.

Updated Project Pricing: Engie

Scenario #1



LEASE-LEASEBACK FINANCING OPTION

- The District initially allocated approximately \$7.6M for the solar project
- The total gross price before incentives is approximately \$10.4M which includes added costs for deep foundations, EVSE, and soft costs (consultant fees, utility upgrades, etc.)
- The District may be able to finance the difference of approximately \$2.8M using lease-leaseback financing for one of the sites (e.g., Tamalpais High School).
 - It would provide funds to cover additional project costs until the District receives the 30% ITC Tax Refund
 - When ITC payment is received, District would “lease back” the project from the financing party
 - Lease-leaseback financing would be structured with the option to pay the remaining principal in 2024 or 2025, depending on when the solar project becomes operational.
 - The interest rate would likely be 10-13%



CONTRACTING

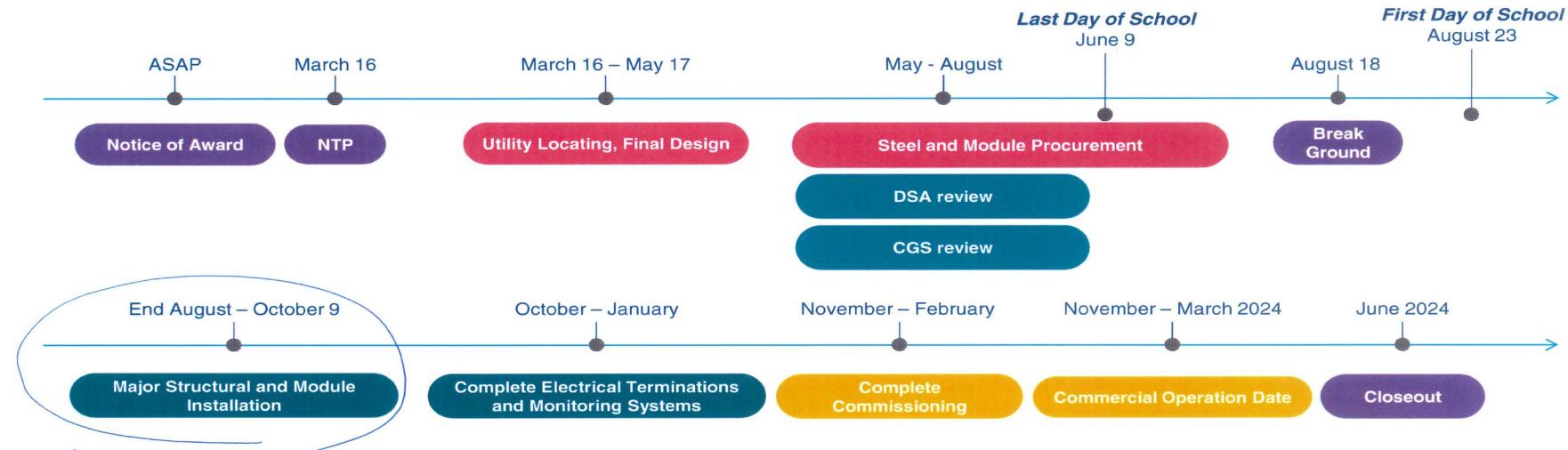
CONTRACTING TIMELINE



ENGIE PROPOSED PROJECT SCHEDULE

Project Schedule

Addresses Questions:
3, 11, 12, 13, 14, 15



Notes:

- Proposed schedule subject to change based on TUHSD and ENGIE active participation/collaboration. For example, ENGIE agreed to begin design work at risk upon notice of award, which would reduce the time between NTP and Procurement.
- ENGIE to utilize Miller Pacific Geotech Report and use Miller Pacific moving forward



NEXT STEPS

Next Steps

1. Finalize Contract Negotiations with Top-Ranked Vendor (Engie)*
2. February 28th Board Meeting
 - a) Board considers approval of contract
 - b) California Government Code 4217 Board Resolution
 - i. The GC 4217 allows public agencies almost complete free reign to “develop energy conservation, cogeneration, and alternate energy supply sources... [so long as they] are in the best interests of the public agency”¹
3. Design*
4. Implementation, Procurement, and Construction*
5. Commissioning and Closeout

* *Go/no-go decision points*