HIGLEY UNIFIED SCHOOL DISTRICT NO. 60

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DISTRICT

GOVERNING BOARD MEETING AGENDA

Pursuant to A.R.S. § 38-431.01, notice is hereby given to members of the Higley Unified School District No. 60 Governing Board and to the general public that the Higley Unified School District No. 60 Governing Board will hold a Board Meeting.

The Governing Board reserves the right to move into executive session for legal advice with its attorneys for any item listed on the agenda, in person or by telephone, pursuant to A.R.S. § 38-431.03(A)(3).

Members of the Governing Board will attend either in person or by telephone conference call.

Regular Meeting
Tuesday, December 18, 2012
District Office – Governing Board Meeting Room
2935 S. Recker Road
Gilbert, Arizona 85295

5:30 P.M. Work Study Session

- CNG Buses – Josh Crosby
- Review Agenda Items

6:30 P.M. Regular Meeting

1.0 Call to Order
2.0 Roll Call
3.0 Moment of Silence
Pledge of Allegiance
4.0 Approval of Agenda

5.0 Music Performance
5.1 Musical Performance by Williams Field High School Band Students Under the Direction of Bob Edgar

6.0 Request to Speak to the Governing Board, A.R.S. § 38-431.01.G.

We value input from our constituents. This time has been set aside for anyone from the audience who wishes to address the Board. Please remember, this is not an appropriate venue to evaluate, discuss, or criticize district personnel.

Members of the Board may not discuss items that are not specifically identified on the agenda. Therefore, pursuant to A.R.S. § 38-431.01(G), action taken as a result of public comment will be limited to directing staff to study the matter, responding to any criticism or scheduling the matter for further consideration and decision at a later date. Please limit your remarks to three minutes.

GOING GREEN

HIGLEY UNIFIED SCHOOL DISTRICT

Exploring CNG as an alternative fuel for HUSD

Comparing CNG to existing Diesel and Unleaded Fuels

What Alternative Fuels are Available in Student Transportation?

* Compressed Natural Gas (CNG)
* Propane (LP)
* Electric
* Diesel Hybrid Electric
  * Not a viable option financially

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Our Current Fleet

* Our current fleet breaks down as follows:
  * Diesel Buses – 57 total (includes 8 retired buses)
    * 84 passenger – 20 buses
    * 72 passenger – 18 buses
    * 28 passenger Sped - 2 buses
    * 20 passenger Sped – 8 buses
    * 15 passenger Sped – 5 buses
    * 10 passenger Sped – 4 buses
  * Gasoline Buses – 5 total
    * 10 passenger Sped – 5 buses
  * Alternate Fuel Buses – 0 total
  * Support Fleet – 53 Gasoline vehicles

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Old CNG vs. New CNG

* In the late 90's there was a big CNG push for buses and it didn't go well. Existing engines were converted to CNG and they ran hot and had short life spans.
* Now engine manufactures are building CNG engines from the ground up. All previous issues are resolved.
* New CNG engines are proven reliable perform equal to the diesel counterparts.
* CNG engines require less frequent oil changes and last longer due to decreased carbon in the system.

Why not propane?

* Propane must be trucked in and stored on site
* Propane is over $2.00/ gallon
* Propane is more volatile
* Propane only produces 90,000 BTU's vs. 125,000 for CNG
* Seminole County, FL has propane buses and claimed no savings over diesel, and are now considering CNG.

Comparing CNG to Other Fuels

Why CNG?

* CNG vs. Propane
  * Safer – less volatile/ explosive.
  * Cheaper – cost per gallon 75% less
    Less maintenance required
    Infrastructure improvements are minimal
  * Convenient – We are sitting on a 24 inch, 500 PSI supply line
  * Greener – Less pollution/ smaller carbon footprint
  * Proven – Many large fleet operations/ years of experience
  * Incentivized – Incentives may be up coming
  * No on-site fuel storage

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Comparing CNG to Other Fuels

Why CNG?

* CNG vs. Diesel
  * Safer – less volatile/ explosive.
  * Cheaper – cost per gallon $0.56 vs. $3.68 (87.5% less)
    Less maintenance required
    Infrastructure improvements are minimal
  * Convenient – We are sitting on a 24 inch, 500 PSI supply line
  * Greener – Less pollution/ smaller carbon footprint
  * Proven – Many large fleet operations/ years of experience
  * No On-site fuel storage

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Comparing CNG to Other Fuels

Why CNG?

* CNG vs. Unleaded Gasoline
  * Safer – less volatile/ explosive.
  * Cheaper – cost per gallon $0.56 vs. $3.37 (85.1% less)
    Less maintenance required
    Infrastructure improvements are minimal
  * Convenient – We are sitting on a 24 inch, 500 PSI supply line
  * Greener – Less pollution/ smaller carbon footprint
  * Proven – Many large fleet operations/ years of experience
  * No on site fuel storage

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CNG is Green too!

* CNG vehicles produce 22% less greenhouse gas than diesel and 29% less than gasoline.
* Natural gas also emits very low levels of particulates and nitrogen oxides, thereby lowering the formulation of smog in the atmosphere.

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Is CNG Safe??

* CNG is safer than liquid fuel.
* Unlike liquid fuels that can pool on the ground in the event of an accident or leak, CNG dissipates harmlessly into the air.
* With a very narrow range of flammability to be combustible and nearly twice the ignition temperature of gasoline, it's also less likely to cause a fire.

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Initial Costs

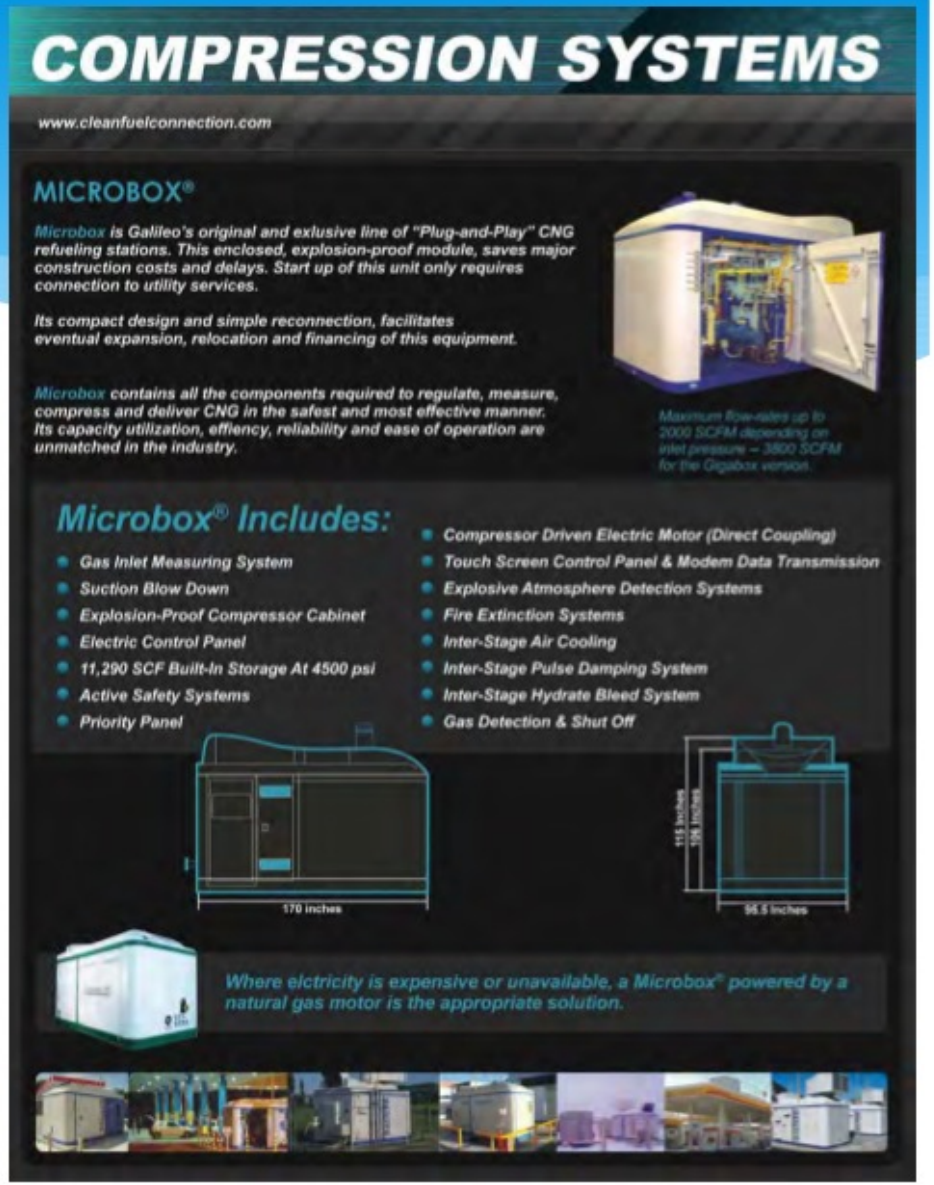
* CNG buses are priced roughly $30,000 more than their diesel counterparts
* A non-redundant CNG fuelling station sized to meet our needs into the future is roughly $514,000 plus site improvements
* Additional minor modifications to our shop would cost around $75,000

Rebates/Incentives

* $0.50 per GE rebate on CNG, if enacted would be retroactive to 1/1/2012- likely to pass
* Proposed $30,000 rebate on CNG vehicles over 26,001 lbs. (including school buses)- not currently enacted

Galleleo Infrastructure

* Additional Considerations:
  * Increased electrical usage
  * Monthly maintenance around $450/ month



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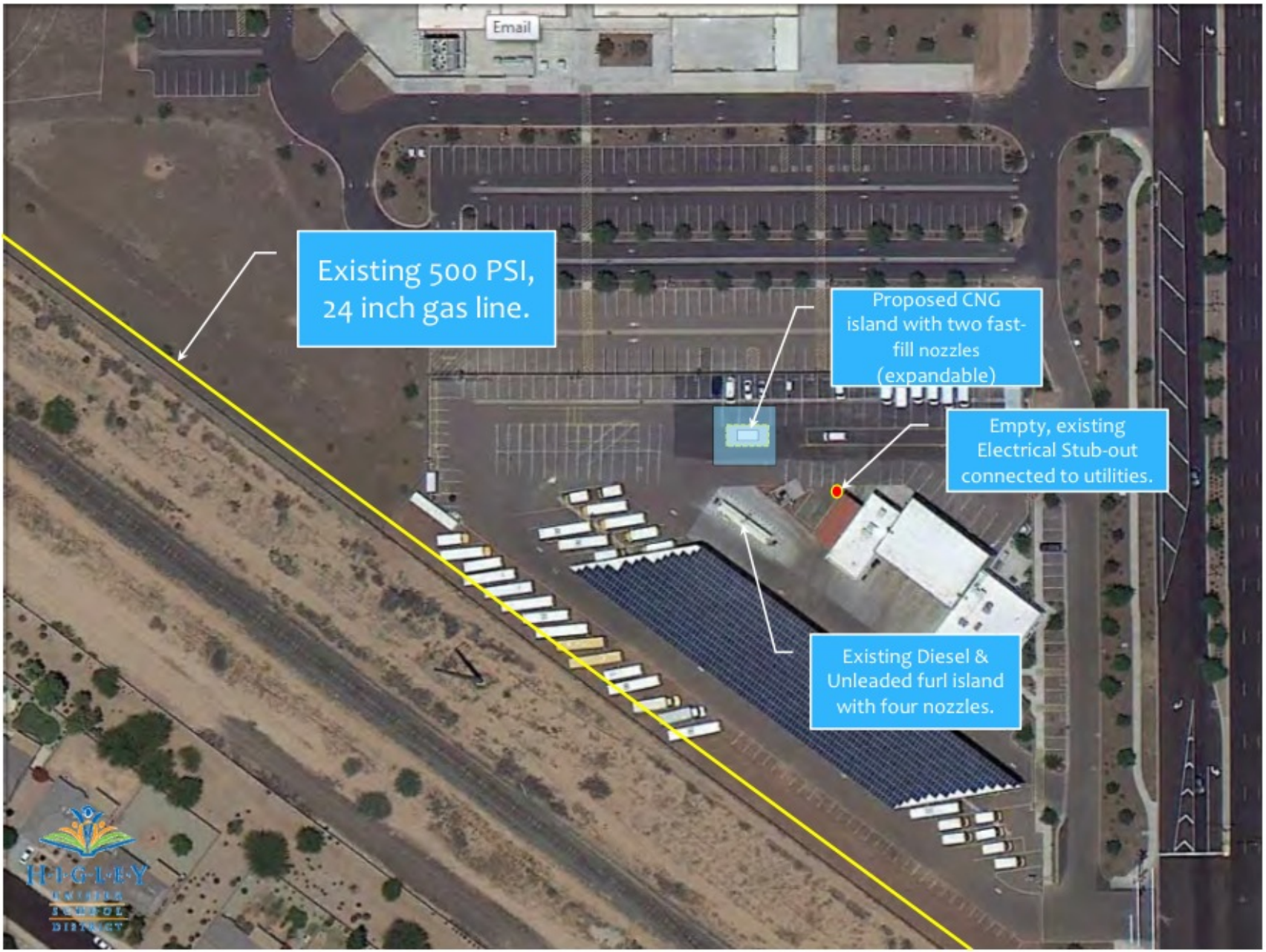
Email
Existing 500 PSI, 24 inch gas line.
Proposed CNG island with two fast-fill nozzles (expandable)
Empty, existing Electrical Stub-out connected to utilities.
Existing Diesel & Unleaded furl island with four nozzles.

Questions?