

Agency: Commerce, Community and Economic Development**Grants to Municipalities (AS 37.05.315)****Grant Recipient: Galena****Federal Tax ID: 920044587****Project Title:****Project Type: Remodel, Reconstruction and Upgrades**

Galena - Galena City School District Shop

State Funding Requested: \$1,106,090**House District: 6 / C**

One-Time Need

Brief Project Description:

Reconstruct school vocational education facility lost in the January 22, 2011 fire.

Funding Plan:

Total Project Cost: \$2,244,090

Funding Already Secured: (\$1,138,000)

FY2012 State Funding Request: (\$1,106,090)

Project Deficit: \$0

*Funding Details:**The school district expects to receive \$600,000 preliminary estimates, in fire insurance funds. Previous grant of 538,000 is available to apply to this project.***Detailed Project Description and Justification:**

The school district lost this 3400 square foot vocational education facility in a fire. This shop was built in 1999 for \$401,206 to serve one hundred high school students. Galena currently has a high school enrollemnt of two-hundred and twenty high school students and will plan to build a 6000 sq. ft. replacement facility for these classrooms. Final amounts for insurance funding and engineering estimates are pending but unavailable at this time because of the recent occurance of this tragic event.

Project Timeline:

Spring 2011 Secure insurance funding levels; present school board replacement choice, secure engineering and design to fit available funding.

Summer 2011 Perform construction to provide classroom space for fall of 2011.

Entity Responsible for the Ongoing Operation and Maintenance of this Project:

Assistant Superintendent Chris Reitan

Grant Recipient Contact Information:

Name: Chris Reitan
 Title: Superintendent-elect
 Address: Box 299
 Galena, Alaska 99741
 Phone Number: (907)656-1883
 Email: chris.reitan@galenanet.com

Total Project Snapshot Report

2011 Legislature

TPS Report 56177v1

Has this project been through a public review process at the local level and is it a community priority? Yes No

Project Title: Galena-Galena City School District Shop



Appropriations Amendment Request: TPS 56177

Project Description: Reconstruct school vocational facility lost in January 22, 2011 fire.

Funding Plan:

Total Project Cost	\$2,244,090
(Funding Already secured)	
Insurance estimate	600,000
07-DC-220 grant balance to apply to this project	538,000
FY2012 corrected state funding request	<u>\$1,106,090</u>

Attached is the Architectural (Architects Alaska Inc.) and Engineering (PDC Inc.) cost estimations and scope of work. Action to support this request was taken at the regular Galena City School Board Meeting held on February 16, 2011. The original request was submitted before the legislative posting deadline for \$600,000 prior to securing cost projections.

Project title: Galena City School District Shop
TPS number: 56177 Amended



Galena Vocational Education Facility Replacement

Proposed Remodel of existing site at the Galena Interior Learning Academy



Amendment Justification:

The Galena City School District lost their Vocational Education Lab shown above to fire on January 22, 2011. Estimates to replace this 3400 square feet pre-engineered building are presented at \$2,036,612 at today's prices. A more practical alternative for the school district is to remodel the above 6500 sq. ft. building which was left to the school district as the Air Force departed Galena. Renovation of this facility providing the same quality welding, woodworking, and small engines lab space presents cost estimates of \$2,244,090. Architectural/Engineering services are provided by Architects Alaska, Inc. Principal David Moore, AIA can be reached at 907-272-3567 in Anchorage.



III. RENOVATED BUILDING 1850 OPTION

SITE ASSUMPTIONS:

The assumption is that existing building on the Galena Interior Learning Academy (GILA) site will be renovated to accommodate the Vocational Shops. The existing building has access established to the building and is currently connected to site utilities including electrical service, water service, sewer service, and a central steam heating plant. The site development features would include:

5. New access walks and lighting for ADA accessibility.
6. A small amount of paved loading area.
7. A small exterior structure to house welding tanks.
8. The renovation may require some minor upgrade of the water, sewer, and steam services to the building to accommodate the project. The site utility needs would be:

- (Existing) 4" sanitary sewer
- (Existing) 6" water/fire water service
- 6" steam
- 3" condensate

9. A new electrical service is included in the cost estimate.

STRUCURAL ASSUMPTIONS:

The primary assumption of this report is that the existing pre-engineered steel structure of the building is adequately designed to accommodate the change in occupancy classification of the building to Educational Space. According to record drawings, the building is installed over a

foundation is adequate. It is assumed that some minor structural modification may be needed for items such as relocating or installing new doors and overhead door(s).

ARCHITECTURAL ASSUMPTIONS:

The architectural assumptions are based upon similar programmatic requirements as the new building options, with the following modifications:

11. The building is approximately twice the size of the new building option, therefore this option includes upgrade of the mechanical/electrical infrastructure for the new building, but assumes that approximately half of the building will be renovated for the shop program. The other half will have exterior building shell upgrades, but only minor architectural improvements, such as paint. This is done in order to have more accurate comparison between the two options.
12. Finished Spaces would include: Main Shop, storage, small office, and toilets.
13. The space would be used for educational purposes as a instructional Welding Shop and a instructional Woodworking Shop.
14. Approximately 10 welding stations would be required.
15. Work tables in support of the welding stations would be required.
16. A couple of large overhead doors would be required.
17. Improvements to the exterior building enclosure should be made to promote energy conservation.
18. The building would be classified as Educational, with quantities of stored hazardous materials under the allowable amounts defined in the Code for this occupancy classification.
19. A wood dust collection system would be required.
20. Adequate ventilation is required to support the welding stations and for the wood dust collection system.

Based upon the above architectural program requirements above, the architectural building elements would consist of the following:

9. The existing floor slab would remain.
10. According to record drawings, the existing exterior walls have an insulating value in the range of R-25 to R-30. This should be adequate for Galena. There are some areas that will require upgrade, including a continuous area around the top of the wall, where it meets the roof assembly.
11. The roof assembly appears to be poorly insulated and is more than 30 years old. We recommend removing the existing panels and installing new insulated metal roof panels with a recommend insulating value of R-50
12. New doors and window should be installed with insulating values of at least R-3.
13. An appropriate hard finish surface for a vocation shop, such as FRP should be added to the inside face of the exterior wall, which currently is gypsum wall board.
14. Because the building would be used for Educational purposes, it would require a sprinkler system.
15. Welding stations would be installed by the Contractor and are included in the cost analysis. Other non-fixed equipment is not included in the cost analysis.

16. Fixed woodworking stations would be required but provided, but moveable woodworking tools and equipment is not included in the cost analysis.

MECHANICAL ASSUMPTIONS:

1. Plumbing

- Male restroom: 2 urinals, 2 water closets, 2 lavs
- Women's restroom: 3 water closets, 2 lavs
- Hi/low drinking fountain.
- (2) Wash-up/utility sinks.
- Trench drain, 20 ft.
- Oil/water separator.
- 120 gal air compressor, 5 hp, dryer
 - o Distribution system.
 - o 4 hose reels.
 - o 8 other connection drops.
- (2) Emergency shower / eye wash stations.
- 120 gal indirect fired water heater (sized for emergency shower)

2. Heating

- Waste oil heater
- 12 overhead hydronic unit heaters
- Heating Plant
 - o 2,350 MBH steam to glycol, shell and tube HX
 - o 1/3-2/3 steam reducing station.
 - o (2) 135 gpm pumps
- (2) VFDs
 - o (Future pumps for wood shop not included)
 - o 200 gal expansion tank
 - o 55 gal glycol tank
 - o 4" air separator.
 - o 4" hydronic headers.

3. Ventilation

- Welding Filtration System
 - o Basis of design is a Torit TG-12 packages.
- 2 units at \$XXXXXXXX (Waiting on this number)
 - o 10 articulating arms or wall mounted intakes
 - o Distribution Ducting
- Wood Shop area
 - o Dust Collection System.

- 6,800 cfm make-up air unit (for the 1.5 cfm/sf for auto shop plus vehicle exhaust).
 - o VFD
 - o Hydronic pre-heat and heating coils, mixing box, 2" filters. No cooling.
 - o Distribution ducts, exposed.
 - o Located on mezzanine.
- 6,800 cfm General exhaust fan, inline centrifugal
 - o VFD
- (Exhaust, make-up, and ventilation systems for wood shop assumed included in future renovation)
- (2) 300 cfm bathroom exhaust fans.
- Six ceiling fans (fans for wood shop assumed future)

Fire Protection

- Relocation/Modifications to existing sprinkler system.
 - o Mains remain but all branches and heads replaced.
- Ordinary Hazard Group 1 design throughout.

ELECTRICAL ASSUMPTIONS:

4. A new 1200 amp, 208, 3 phase power service will be required.
5. Power distribution as appropriate to serve the shop areas.
6. Limited telecom systems for phone and computer for teaching station and office.

IV. CONCLUSIONS AND RECOMMENDATIONS

PROJECT COST VS. CONSTRUCTION COST:

The attached cost estimates in Appendix A and Appendix represent Construction Cost only and do not include such items as: (1) Furniture, Fixtures, and Equipment, (2) A/E design Fees, (3) Owner's Administrative Costs, and (4) Construction Contingency. To arrive at total project costs, add the following to the construction cost of each option:

- (1) An amount equal to 5% of Construction Cost to cover Furniture, Fixtures, and Equipment.
- (2) An amount equal to 10% of Construction Cost to cover A/E design fees.
- (3) An amount equal to 7% of Construction Cost to cover Owner administrative costs.
- (4) An amount equal to 5% of Construction Cost for the new building option and 10% of Construction Cost for the renovated building for a Construction Contingency. Note this is not the same as the contingency in the attached cost estimate, which represent the cost estimator's unknowns due to the fact that the design is not complete. This Construction Contingency is to cover unknown conditions on the site that might be encountered *during construction*. Both contingencies should be considered when

establishing the Project Budget. This procedure is consistent with Alaska Department of Education and Early Development (DEED) funding requirements.

RECOMMENDATIONS BASED UPON THIS REPORT

To be written after discussion with Galena City Schools.

V. APPENDIX A – NEW BUILDING OPTION COST ESTIMATE

SEE ATTACHED

VI. APPENDIX B – RENOVATED BUILDING OPTION COST ESTIMATE

SEE ATTACHED

END OF REPORT

Renovated Welding, Wood and Auto Shop
 Galena City Schools
 Galena, Alaska

Budget Cost Estimate
 Prepared for Architects Alaska
 February 16, 2011

Summary (Level 2)	Qty	Unit	Unit Cost	Total Cost	Div
01 - Sitemork	6,800	GSF	\$12.90	\$87,750	01
02 - Substructure	6,800	GSF	\$30.88	\$209,963	02
03 - Superstructure	6,800	GSF	\$11.86	\$80,625	03
04 - Exterior Closure	6,800	ESF	\$5.94	\$34,483	04
05 - Roof System	6,950	SF	\$34.71	\$241,264	05
06 - Interior Construction	6,800	GSF	\$15.71	\$106,800	06
07 - Conveying System	-	NONE	\$0.00	\$0	07
08 - Mechanical	6,800	GSF	\$145.28	\$987,936	08
09 - Electrical	6,800	GSF	\$55.19	\$375,270	09
10 - Equipment	6,800	GSF	\$17.65	\$120,000	10
11 - Special Construction	-	NONE	\$0.00	\$0	11
Total Estimated Cost	6,800	GSF	\$330.01	\$2,244,090	

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Summary (Level 3)	Qty	Unit	Unit	Subtotals	Total Cost	Unit Cost
01 - Sitemwork					\$87,750	\$12.90
011 - Special Site Preparation	6,800	GSF				
012 - Earthwork	-	NONE				
013 - Site Improvements	-	NONE				
014 - Site Structures	-	NONE				
Gas Bottle Storage	1	LS	\$7,500.00	\$7,500		
015 - Civil/Mechanical Utilities Steam/Condensate	150	LF	\$97.50	\$14,625		
016 - Site Electrical Main To Transformer - By Utility Transformer	500	KVA	\$105.00	\$52,500		
Feed To Building 1200A	50	LF	\$262.50	\$13,125		
017 - Offsite Work	-	NONE				
02 - Substructure	6,800	GSF			\$209,963	\$30.88
021 - Standard Foundation	-	NONE	\$18.23			
022 - Slab On Grade 6"	6,800	SF	\$25.50	\$173,400		
Allow For Cut/Patch	975	SF	\$37.50	\$36,563		
023 - Basement	-	NONE				
024 - Special Foundations	-	NONE				
03 - Superstructure	6,800	GSF			\$80,625	\$11.86
031 - Floor Construction	300	SF	\$52.50	\$15,750		
032 - Roof Construction						
Allow For Minor Structural Upgrades	6,950	SF	\$7.50	\$52,125		
033 - Stairs	1	EA	\$12,750.00	\$12,750		
04 - Exterior Closure	5,808	ESF			\$34,483	\$5.94
041 - Exterior Walls						
Insulate Above 12' (Furring, Insulation and GWE	1,848	SF	\$9.02	\$16,663		
FRP To Perimeter Wall To 8'	2,640	SF	\$6.75	\$17,820		
042 - Exterior Glazing	-	NONE				
043 - Exterior Doors	-	NONE				
044 - Exterior Accessories	-	NONE				

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Summary (Level 3)	Qty	Unit	Total Cost	Subtotals	Total Cost	Unit Cost
05 - Roof System	6,950	SF			\$241,264	\$34.71
051 - Pitched Roofs	6,950	SF				
Remove/Replace Roof Panels	-	NONE	\$34.71	\$241,264		
052 - Flat Roofs	-	NONE				
053 - Roof Accessories	-	NONE				
06 - Interior Construction	6,800	GSF			\$106,800	\$15.71
061 - Partitions/Soffits	1,000	SF	\$12.00	\$12,000		
062 - Special Partitions	-	NONE				
063 - Interior Doors	4	LV	\$3,300.00	\$13,200		
064 - Interior Finishes	6,800	SF	\$7.50	\$51,000		
065 - Interior Fixed Furnishings	6,800	SF	\$4.50	\$30,600		
07 - Conveying System					\$0	\$0.00
071 - Passenger Conveyor	-	NONE				
072 - Material Handling Systems	-	NONE				
08 - Mechanical	6,800	GSF			\$987,936	\$145.28
081 - Plumbing	16	FIX	\$2,700.00	\$43,200		
Fixtures	16	FIX	\$8,475.00	\$135,600		
Piping	16	FIX	\$3.00	\$20,400		
Equipment	6,800	SF	\$187.50	\$3,750		
Trench Drain	20	LF				
082 - HVAC	6,800	SF	\$45.00	\$306,000		
Heating 2350 MBH	25,000	CFM	\$6.00	\$150,000		
Ventilation	6,800	SF	\$13.02	\$88,536		
Air Distribution	6,800	SF	\$3.00	\$20,400		
083 - Fire Protection						
Minor Modifications						
084 - Special Mechanical Systems						
Oil Water Separator	1	EA	\$37,500.00	\$37,500		
Compressed Air System	1	EA	\$12,900.00	\$12,900		
Controls	6,800	SF	\$10.50	\$71,400		
Welding Filtration						
Tonit TG-12 Units	2	EA	\$22,500.00	\$45,000		
Articulating Arms Or Wall Intakes	10	EA	\$3,750.00	\$37,500		
Distribution Ductwork	875	LBS	\$18.00	\$15,750		

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Summary (Level 3)	Qty	Unit	Total Cost	Subtotals	Total Cost	Unit Cost
09 - Electrical						
091 - Supply & Distribution	6,800	GSF	\$21.00	\$142,800	\$375,270	\$55.19
1200A Service	6,800	SF	\$27,000.00	\$27,000		
Panelboards and Feeders	1	LS	\$8,700.00	\$8,700.00		
Motor Circuits	6	EA	\$0.90	\$6,120		
092 - Lighting	6,800	SF	\$12.00	\$81,600		
093 - Power	6,800	SF	\$3.38	\$22,950		
094 - Special Systems						
Fire Alarm	6,800	SF	\$4.50	\$30,600		
Communications	16	EA	\$750.00	\$12,000		
095 - Other Electrical Systems	-	NONE				
10 - Equipment					\$120,000	\$17.65
101 - Equipment						
Welding Booths	10	EA	\$3,750.00	\$37,500		
Dust Collection System	1	EA	\$82,500.00	\$82,500		
102 - Furnishings	-	NONE				
11 - Special Construction					\$0	\$0.00
111 - Special Construction	-	NONE				
112 - Special Demolition	-	NONE				