

Tobyhana Army Depot

Small Installation Due Diligence

Portfolio & Asset Management

31 January 2008

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I. Recommendation

The Team recommends that the Residential Communities Initiative (RCI) Partner at the nearby United States Military Academy (USMA) be approached to gauge interest in including the housing at Tobyhanna Army Depot (TYAD) in the privatization project at West Point, NY. The recommended development scope would consist of constructing two new homes and renovating 40 existing homes during a four-year Initial Development Period (IDP). Various stages of renovation for all homes would be conducted during the term of a 50-year ground lease.

II. Installation Overview

Tobyhanna Army Depot (TYAD) is an Army installation under the general jurisdiction of the Department of the Army, US Army Installation Management Command (IMCOM), Northeast Regional Office, US Army Garrison.

TYAD is the largest, full-service electronics maintenance facility in the Department of Defense (DoD). The mission of TYAD is to operate a communications and electronics, avionics and missile guidance and control maintenance depot. The depot provides for the maintenance, issue and disposal of assigned commodities for the DoD and other customers. The depot strives for total sustainment, including design, manufacture, repair and overhaul of electronics systems, telephones, electro-optics, night vision and anti-intrusion devices, airborne surveillance equipment, navigational instruments, electronic warfare and guidance and control systems for tactical missiles.

The Army has maintained a continuous presence at Tobyhanna since 1912 when the site was used as a field artillery training camp. Before opening as an Army depot on February 1, 1953, the site was also used as a Civilian Conservation Corps (CCC) camp, artillery training site for West Point cadets and as a World War II prisoner of war camp and storage point for gliders used in the D-Day landings at Normandy in 1944.

TYAD is located in northeastern Pennsylvania in the Pocono section of the Appalachian Plateau, roughly 75 miles west of New York City. The depot itself occupies 1,296 acres in the northwest portion of Monroe County. The city of Scranton is located 28 miles to the northwest and the city of Stroudsburg is 20 miles to the southeast. TYAD is bordered to the north by Tobyhanna State Park and to the northwest by Gouldboro State Park.

Housing Inventory

The current housing inventory at TYAD includes 40 townhouses built in 1996 and two single-family homes built in 1953 and 1959. The 40 townhouses received renovations in 1996 which included new roofing, tile and cabinets. At the time, two of the 40 townhouses were renovated to the Americans with Disabilities Act (ADA) standards. Based on the current condition of the 40 townhouses, they would likely require minor or medium renovations during the IDP. One of the single-family homes is designated for the Commanding Officer. The second single-family home is currently occupied by the installation's chaplain, although the home is not specifically designated for the chaplain. The chaplain's quarters received a 1996 renovation similar in scope to the townhouses. The Commanding Officer's home received only a new roof. The

renovations required by the Commanding Officer's home are estimated to cost approximately \$150,000, which approaches the cost of replacement.

The 2007 HMA for TYAD states a housing requirement of 41 homes in 2012. In recent years, there has been strong demand for housing at Tobyhanna. Prior to FY06, TYAD's occupancy rate averaged 95.0%. Recent deployments have dropped the occupancy rate to between 80 and 90.0%. This demand has stemmed from the lack of affordable off-post housing due to relatively low BAH rates. TYAD is located in a resort area, not far from New York City and the area has recently become a popular location for those commuting into New York City. These characteristics make it challenging for Soldiers to live in the local economy with their current BAH. Any Service Member with a duty station within 60 miles of TYAD is eligible to live on-post. No preference is given to Army Service Members.

Only three Soldiers are assigned to TYAD, the Commanding Officer, Sergeant Major and installation Chaplain. The remaining residents are either assigned to tenant facilities on-post or are drawn from other duty locations in the area. While the active duty population is small, the civilian population consists of more than 5,000 people, making TYAD the largest employer in the region.

III. Planning, Occupancy and Financial Constraints

Land Availability

Army Family housing currently accounts for 16.4 acres on the installation. The housing consists of 40 townhouses and two single-family dwellings with attached private garages and storage units. All housing is located in the Community Area of the installation. The 2007 HMA for TYAD calls for an end state of 41 homes and this requirement can be met using the land currently set aside for family housing. If a need for additional family housing were to arise, 70% of the land at TYAD is considered “open space” with specific areas designated for family housing including a plot adjacent to the existing family housing. In addition to this designated area, there is a plot of government-owned land located across from TYAD where additional homes were formerly located. These homes were demolished in 2005.

Environmental Constraints

The primary manmade constraints at TYAD that must be examined and possibly mitigated include: hazardous materials, air quality, potable water supply, hazardous waste and ERP/AOC sites. Although most lead based paint and asbestos have been remediated, several units still have to be treated.

Archeological Constraints

There are no known archeological constraints at TYAD.

Impact on Local Services and Infrastructure

The HMA does not call for a significant change in the number of homes at TYAD, therefore, key resources such as utilities, school availability, fire and police, services, traffic, roads and general community infrastructure would not be significantly impacted in any appreciable manner.

Local Market Considerations

In recent years, there has been strong demand for housing at Tobyhanna, stemming from the lack of affordable off-post housing due to insufficient Basic Allowance for Housing (BAH) rates. TYAD is located in a resort area, not far from New York City, making it challenging for Soldiers to live in the local economy with their current BAH. Any Service Member with a duty station within 60 miles of TYAD is eligible to live on-post. Only three Soldiers are assigned to TYAD; the Commanding Officer, the Command Sergeant Major and the installation Chaplain. The remaining residents are either assigned to tenant facilities on-post or are drawn from other duty locations in the

area. While the active duty population is small, the civilian population consists of approximately 5,000 people, making TYAD the largest employer in the region.

IV. Options Considered

A. Recommendation

Option 1. Combination with Existing Privatization Project

The small number of homes and the resulting high cost of operating these homes in isolation leads to the conclusion that housing at TYAD should be combined with an existing RCI project in order to capitalize on construction and development efficiencies and reduce overhead.

1. Key Facts and Assumptions

- a. The scope for this alternative would consist of replacing two single-family homes and renovating 40 single-family homes during the four-year Initial Development Period (IDP), which would begin in 2009. All 42 homes will be renovated at least once during the 50-year life of the project with most being renovated a second time. This scope would satisfy the current end-state requirements as projected by the most recent Housing Market Analysis (HMA), yielding a projected surplus of one home. The recommended approach results in an end-state of 42 homes versus the HMA requirement of 41 because it is anticipated that the two replacement homes will accommodate the Commanding Officer and the Chaplain or the Command Sergeant Major. The remaining 40 townhouses are multi-plex homes that do not allow for the demolition of one unit.
- b. Construction and renovation costs are based upon input from the installation, the nearby Scranton market and reconciled with estimates and actual data from nearby and/or similar-sized RCI projects.
- c. This scope of work would cost approximately \$4.0 Million in 2009 dollars:

	IDP	SDP	Total
Development Scope			
New Homes	2	0	2
Demolition	0	0	0
Renovated Homes	40	74*	114
No Work	0	5	5
Total Costs Summary (2009\$)			
New Homes	434,000	0	434,000
Renovated Homes	740,000	2,699,036	3,439,036
No Work	0	0	0
Total Costs (2009\$)	1,174,000	2,699,036	3,873,036
Cost per Home (2009\$)			
New Homes	217,000	0	217,000
Renovated Homes	18,500	36,473	30,167
No Work	0	0	0
Development Scope per End State Home Per Year (2009\$)	6,988	1,397	1,844
* Some homes will be renovated twice during the SDP.			

2. Life Cycle Cost Comparison

a. For comparison purposes, the MILCON alternative used in this analysis exactly duplicates the recommended development scope for Tobyhanna Army Depot as a stand-alone privatization project and assumes that the homes will not be demolished at the end of the 50-year project term. The analysis also assumes that Army Family Housing operations will be fully funded.

b. Results of Comparison:

Alternative	NPV
1. MILCON	\$18.8M
2. Privatization	\$16.4M
Life Cycle Cost Avoidance	\$2.4M
Differential	12.6% in favor of privatization

The privatization alternative is the most economical method for the government to follow. It allows for completion of the project objectives while requiring a smaller overall investment of capital over the length of the project.

In addition to being more economical, the privatization alternative provides a better way to improve the quality of life for Soldiers, as the private sector can leverage funds and thus complete the project objectives in a shorter period of time than can be achieved under MILCON.

Sources and Uses – TYAD Stand-Alone Privatization(Reduced Scope)			
	IDP	SDP	Total Project
Debt	\$1,606,906	-	\$1,606,906
Equity	\$48,207	-	\$48,207
Interest Income	\$130,505	\$2,469,946	\$2,600,450
Cash Flow After Debt Service	\$95,618	\$8,448,645	\$8,544,264
Released Funds	-	(\$48,207)	(\$48,207)
Total Sources	\$1,881,236	\$10,870,384	\$12,751,619
Development Costs	\$1,682,510	\$10,805,245	\$12,487,755
Transition Expenses	\$100,000	-	\$100,000
Financing Costs / Reserves	\$82,241	-	\$82,241
Total Uses	\$1,864,750	\$10,805,245	\$12,669,996
Sources Over Uses/(Under Uses)	\$16,485	\$65,138	\$81,624
Sources and Uses – West Point and TYAD Combination			
	IDP	SDP	Total Project
Debt	\$144,188,975	-	\$144,188,975
Equity	\$23,300,000	-	\$23,300,000
Interest Income	\$8,856,476	\$31,054,266	\$39,910,742
Cash Flow After Debt Service	\$31,543,171	\$766,940,700	\$798,483,871
Released Funds	-	-	-
Total Sources	\$207,888,621	\$797,994,966	\$1,005,883,587
Development Costs	\$199,881,684	\$695,129,493	\$895,011,177
Transition Expenses	\$3,300,000	-	\$3,300,000
Financing Costs / Reserves	\$4,110,411	-	\$4,110,411
Total Uses	\$207,292,095	\$695,129,493	\$902,421,588
Sources Over Uses/(Under Uses)	\$596,526	\$102,865,473	\$103,461,999

B. Other Options Considered

Option 2. Stand-Alone Privatization (Full Scope)

This option contemplates an ideal scope of work that would occur during a four-year IDP. This scope would include medium renovations for 40 units and the demolition and reconstruction of two units as well as demolition and reconstruction of the remaining units during the SDP. This scenario is not financially viable since the total costs would amount to \$33.5 million, with only \$10.1 million available for funding. The main factor behind the financial challenges associated with this option is that the Net Operating Income (NOI) combined with a maximum debt contribution would not support the costs required for construction, renovation, and management.

Option 3. Stand-Alone Privatization (Reduced Scope)

Stand-alone privatization with the recommended development scope is financially feasible, but the low rate of return for the project as a stand-alone is likely to exclude it from serious consideration by any legitimate developer partner.

Option 4. Status Quo / MILCON

Continued operation as-is must be considered a viable alternative. With so few homes it may be difficult to attract strong development and property management interest. It is possible that the fees required by private entities may be prohibitive to large cost savings.

Option 5. Off-Post Leasing Program (OPLP)

While financial feasible, due to the recent popularity of the local market this option would be expensive to implement. Additionally, the existence of the on-post housing and the fact that the housing is in good condition makes this option undesirable.

Option 6. Eliminate Housing

This is not feasible due to the existence of well maintained units on-post and demand for on-post housing. In addition, it is feasible for the Army to continue to manage housing operations.

V. Decision Matrix / Determining Factors

The Due Diligence Team has established that an RCI partnership is financially feasible at TYAD. Although a stand-alone partnership is theoretically possible with the recommended development scope, the low rate of return on such a project is likely to exclude it from serious consideration by any legitimate developer partner. Therefore, the most favorable course of action for TYAD would be to combine with an existing RCI project in order to capitalize on construction and development efficiencies and reduce overhead. . For the same reason, it should be noted that if the project were to be combined with a nearby RCI program it would likely represent a burden to the project and therefore may not be well-received.

<u>Summary of Alternatives</u>	<u>Recommendation</u>	<u>Feasible</u>	<u>Desirable</u>
Stand-Alone Privatization (Full Scope)		No	No
Stand-Alone Privatization (Reduced Scope)		Yes	No
Combination with Existing Privatization Project	X	Yes	Yes
Off-Post Leasing Program		Yes	No
Status Quo / MILCON		Yes	No
Eliminate Housing		No	No
Alternative Privatization Vehicles		N/A	N/A

Appendix A: Pro Forma Assumptions Report

GENERAL ASSUMPTIONS

Inflation Rates

The pro forma assumes an annual increase in revenues and expenses of 2.0%. The revenue assumption is based on guidance from the Department of the Army that future BAH increases will be modest, and the expense assumption is based on the historic change in the Consumer Price Index (CPI) in the Northeast Urban region. Based on data obtained from the Bureau of Labor Statistics, the overall growth of the Northeast Urban region CPI has averaged approximately 2.8% per annum over the past decade (1997 through 2006). In order to maintain conservative assumptions, revenues and expenses inflate at 2.0% throughout the model. Given the significant increase in the cost of certain building materials in recent years, however, the development cost inflation rate used in the model is 3.0%.

Rental Revenue

The Project's Gross Potential Revenue is calculated by multiplying the number of homes on-line (i.e. those not undergoing renovation/reconstruction) by the occupying Service Members' Basic Allowance for Housing (BAH). This number is then adjusted for a vacancy and credit loss factor, in addition to the resident's utility allowance (after the completion of the initial development period), to arrive at the Net Rental Revenue number. The monthly BAH is determined annually based on a survey of local housing, utility and renter's insurance costs for each Service Member's pay grade. While computed by the Office of the Secretary of Defense – Compensation and subject to annual congressional approval, BAH is essentially a risk-free revenue stream because it is a Government entitlement to military Service Members. However, annual increases in BAH are not ensured.

Because of Tobyhanna's relatively small size, Service Members from any pay-grade band may occupy any of the available homes with the exception of the command quarters, which is reserved for the installation commander.

Based on these projected rank distributions and the recently-announced BAH rates, the pro forma indicates that the weighted average monthly BAH for Tobyhanna is \$1,098 in 2008. Weighted average BAH will inflate 2.0% to \$1,120 at transfer in 2009 and will continue to rise at 2.0% per annum.

Vacancy and Credit Loss

Prior to FY06, Tobyhanna's occupancy rates averaged 95.0%. Due to deployments the installation has experienced occupancy rates closer to 90.0% more recently. For the purposes of this assessment, the project is assuming standard occupancy (90.0% during IDP, 95.0% SDP). It should be noted, however, that there is a risk associated with occupancy at this installation due to the low number of assigned Service Members.

OPERATING EXPENSES

The main sources used to estimate operating expenses at Tobyhanna Army Depot were the installation's historical expenditures, IREM Income and Expense Analysis, local market data, and Jones Lang LaSalle's in-house experience. Estimates for operating expenses are typically based on the most conservative assessment, and all estimates in the pro forma are considered the most realistic projection of future expenses. Project start year (2009) values are recorded in the chart below.

Operating Expense Assumptions		
Total Utilities	\$1,861	per home
Solid Waste Management and Recycling	\$177	per home
Maintenance and Repair	\$2,601	per home
Insurance	\$364	per home
Mgmt Fee (% of Net rental income)	3.00%	
Capital Expenses	\$260	per home
Salaries and Personnel	\$2,601	per home
Administration	\$208	per home
Community Life	\$50	per home
Police and Fire Reimbursement	\$105	per home
Subordinate to Debt Service		
Incentive Mgmt Fee (% of Net Rental Income)	2.00%	

Utilities

None of the utilities at Tobyhanna Army Depot have been privatized. The data provided by the installation housing office is based on overall charges received by the housing office. Three data points were identified for determining potential utility expenses: the current and historical utility expenses per home on-post and IREM (Allentown, Bethlehem) data. The most realistic data point was determined to be the historic costs, which was also the most conservative estimate. For FY2007, the total utility cost per home was approximately \$1,789. Assuming 3.0% inflation per year yields an estimate of \$1,861 for FY2009. Although the renovation of existing homes

should allow for more efficient heating of the homes (homes do not have air conditioning), to remain conservative, no efficiencies were assumed in this model.

Insurance

The pro forma model assumes \$364 per home per year for project insurance, based on local market data as well as local market conditions and previous experience with RCI projects.

Maintenance and Repair

The maintenance and repair costs are based on the past operations expenses funded through the 1920 account, net of those costs that are typically funded through Capital Repair and Replacement accounts and any indirect reimbursements to the Directorate of Public Works (DPW) or the Directorate of Contracting. The resulting maintenance and repair costs for Tobyhanna were reduced to reflect the efficiencies that will be gained through the structure of the Project. These efficiencies include shared overhead, salary and expense realization through property management fees versus direct costs, and reduced administrative costs and profits due to a legal versus government contractual relationship. This revised assumption is consistent with past projects at comparable installations.

The Maintenance and Repair assumption in 2009 dollars for Tobyhanna is \$2,601 per home per year.

Solid Waste Management

Tobyhanna's solid waste management is handled by a DPW contract for the installation. Tobyhanna is charged \$5.62 per cubic yard and each home is estimated to use approximately 30 cubic yards year. It is expected that this is the most cost efficient method and this will continue under a proposed privatized project.

Capital Expense

Capital Expense reflects amounts set aside annually and kept in reserve to fund periodic maintenance costs above the scope of day-to-day maintenance and repair. Projects such as repairing weather related damage or replacement of windows and doors would fall into this category, as would the replacement of appliances, HVAC systems, and new roofs. Financing institutions typically require such a payment ranging between \$250 and \$350 per home per year. Jones Lang LaSalle has utilized the assumption of \$250 per year for the pro forma in order to remain consistent with past RCI projects.

Salaries and Personnel and Administration

TYAD currently spends approximately \$105K annually (1 full time housing mgr and 1 half time associate.) on salaries and an additional \$10K on related personnel expenses. Based on comparisons with similar-sized projects at Picatinny Arsenal and Fort

Hamilton, the pro forma assumes that Salaries and Personnel expenses at Tobyhanna after privatization will be 90.0% of what the current contract is paying for the services, or \$2,601 per home per year when factoring 3.0% inflation. On a per home basis, this cost is higher than at most other installations because the small size of the installation does not allow for economies of scale. Administration costs are assumed to be the RCI standard of \$208 per home per year.

Community Life

This operating expense item captures the cost of resident programs, resident relations, and operation and maintenance (excluding utilities) of community amenities. Based on prior RCI due diligence engagements and RCI portfolio data, the pro forma assumes an annual cost of \$50 per unit for this expense.

Management Fee

The Management Fee compensates the Project's property manager for handling the overall management and day-to-day operations of the privatized family housing community. Based on fees being paid at already privatized RCI installations the estimate used in the pro forma model is 5.0%.

During the CDMP collaborations, a significant portion of this fee will be designated as incentive-based and paid commensurate with resident satisfaction. However the pro forma assumes an RCI-standard 2.0%, and that it will be paid in full every month. In reality, the incentive fee will be subject to debt service availability as well as the aforementioned subjective assessments.

Police & Fire Reimbursement

Currently, Army Family Housing at Tobyhanna does not reimburse the installations for fire or police protection. Once privatized using an MHPI structure, the operating company managing the housing inventory would be required per under DoD policy to pay for fire and police services. Based on a weighted average of recently transferred projects into the RCI portfolio, an assumption of \$105 per unit per year was assumed in the pro forma.

DEVELOPMENT COSTS

Data obtained from external private sector sources, RS Means, and previous RCI projects have been analyzed to determine appropriate estimates for new construction, renovation, conversion, and demolition of homes on the installation. It is assumed that similar private sector quality standards are reflected in new construction as well as reconstruction and renovation.

New Construction

A brief summary of cost estimates for TYAD family housing based on RS Means is represented below in 2009 dollars:

Grade Range	Rank	Home Type	Cost Per Home	Square Footage	Planned Homes	Total Cost
All	E01 - O05	Single-family (3BDR)	\$193,800	1,700	0	\$0
All	E01 - O06	Single-family (4BDR)	\$216,600	1,900	1	\$216,600
GFOQ	O6+	Single-family (4BDR)	\$239,400	2,100	1	\$239,400
	Total / Average		\$216,600	1,900	2	\$456,000
Average New Construction						
Cost						\$228,000
Weighted Average SF						2000
Cost/SF						\$114
					PSF	Total
Average New Construction Cost Assuming 10% "volume" discount from builder					\$102.60	\$194,940
Average New Construction Cost Assuming 15% "volume" discount from builder					\$96.90	\$184,110
<i>(All data in 2009 dollars)</i>						

The pro forma assumes \$228,000 as the average hard cost of building a new home at Tobyhanna during the first year of the project.

Davis Bacon Effects

The Jones Lang LaSalle team consulted local builders and developers as well as personnel in charge of contracting on-post, inquiring about Davis Bacon and its effects on the cost of labor. It was determined that there would not be a substantial impact on the project costs due to Davis Bacon. To remain consistent with its conservative assumptions, the Jones Lang LaSalle team modeled a 3.0% increase in total construction and renovation costs to reflect Davis Bacon wages.

Renovation

The renovation costs are based on other comparable Army installation costs, interviews with installation staff, review of current renovation costs under the existing maintenance contract, and an analysis of the specific costs of known renovation components.

Demolition

The pro forma assumes \$9,000 for the average demolition cost per home. This estimate is consistent with current RCI projects.

FINANCIAL ASSUMPTIONS

Scoring

The project assumes no government investment.

Income/Property Tax

Jones Lang LaSalle has assumed that because of the Army's position as a limited partner in the Project, the Project will not be subject to any taxes.

Loan Information

The Private First Mortgage interest rate is assumed to be 7.0%. The interest rates on debt provided for previous RCI projects have been on swap rates on the 30-year Treasury Bond plus credit enhancement and a risk premium in the range of 75-100 basis points. While 7.0% is considered a reasonable assumption as of this writing, it should be noted that interest rates have been volatile over the previous 12 months. The interest rate currently in the pro forma may not be applicable at the time of deal closing.

Equity Contributions

Development Partner equity is assumed to be \$48,207, or approximately 3.0% of the private debt amount. Experience at other RCI projects has shown this amount to be large enough to provide developers "skin in the game" but small enough to avoid unduly "taxing" the project with a high weighted average cost of capital.

Appendix B: Pro Forma

Appendix C: Maps and Other Documentation

See Due Diligence Binder

Appendix D: Contacts

SPECIALTY	LAST	FIRST	PHONE	E-MAIL
Depot Commander, COL	Alberto	Ronald	570-895-7201	ron.alberto@us.army.mil
Deputy Commander	Zardecki	Frank	570-895-7201	frank.zardecki@us.army.mil
Director of Public Works	Shirey	Herb	570-895-7603	herb.shirey@us.army.mil
Housing Manager	Simko	Frank	570-895-7970	frank.simko@us.army.mil