



# Identifying Efficiencies: A Study of HPD Supportive Housing Development Costs

## INTRODUCTION

In 2005, New York City committed to financing the construction of 3,125 new units of nonprofit-operated, permanent supportive housing by 2016, through a City-State partnership known as the New York/New York III Supportive Housing Agreement. In an effort to accelerate this development pipeline, the Supportive Housing Network of New York (“the Network”) is working with the New York City Department of Housing Preservation and Development (HPD) to identify measures to reduce the cost of constructing supportive housing residences. While additional capital, operating and service dollars are necessary to meet New York/New York III production goals, the supportive housing community can also identify ways to stretch available resources to develop more units more quickly.

This report is a summation of insights and recommendations from a broad base of stakeholders who build HPD-financed supportive housing. The report reflects the findings from three separate focus groups of nonprofit developers, architects and contractors, as well as extensive feedback from consultants, developers, contractors and architects who did not attend the focus group discussions. A list of the cost study participants can be found in Appendix A.

The report is divided into three sections: the first reviews the additional fixed costs unique to supportive housing construction; the second focuses on areas that afford opportunities for potential cost savings. A summary of the report's recommendations is available in the third section on page 12.



## PART A: INHERENT COST FACTORS

Supportive housing construction bears certain fixed costs inherent to the housing model that are absent or negligible in other affordable housing programs. The following section details these costs, which include: prevailing wage costs; physical requirements of supportive housing; the lack of buildable sites; an absence of economies of scale; the need to ensure attractive design to diminish community opposition; and building longevity.

### Prevailing Wage

More than any other affordable housing programs at HPD, residences financed by the Supportive Housing Loan Program (SHLP) rely heavily on federal HOME funding for their projects. HOME funding triggers federal prevailing wage requirements, increasing the overall cost of the projects.<sup>1</sup> A recent industry analysis found that buildings constructed under prevailing wage rules cost an estimated 25% more to build than comparable, non-prevailing wage construction projects.<sup>2</sup>

### Physical Requirements of the Supportive Housing Model

On a square foot basis, supportive housing costs more to build than other affordable housing. This is in large part due to the configuration of the buildings: supportive housing units are mostly small studio apartments. The abundance of studios increases the number of bathrooms and kitchens (and their expensive plumbing fixtures and tiles) per building. Larger one-bedroom units built for families have over 400 square feet of relatively inexpensive floor area, as compared to only 200 square feet per studio apartment. Typically, a 35,000 square-foot building can have 50 to 55 studios, compared to less than 30 one- and two-bedroom family units. Having 20, or 67%, fewer kitchens and bathrooms in a building will result in significantly lower construction costs. For example, electrical costs are much higher in a 35,000 square-foot building with 50 units versus 30 units, as each unit needs its own riser and electrical service requirements. The additional ris-

ers alone increase the cost of the building by \$40,000.

Even when compared to other buildings with studio units, supportive housing costs more on a per-unit basis because it requires additional program and office space for supportive services, property management and indoor and outdoor common areas. These spaces account for approximately 15-20% of the total usable square footage of a building, all of which is figured into the per-unit cost of the apartments. In addition, placement of offices can further impact project costs; e.g. locating staff offices in the basement requires build-out of a space that would otherwise remain unfinished.

Supportive housing developers also face significant costs within their project budgets that are minimal or nonexistent in other affordable housing: they must carry larger reserves as a hedge against potential losses in the event that rent subsidies or service contracts are reduced or suspended.

### Land Availability

According to research by the Federal Reserve Bank of New York, the price of vacant land zoned for residential use increased more than five-fold in the New York metropolitan area between 1999 and 2006.<sup>3</sup> This has had a disproportionate effect on nonprofit developers who do not have the deep pockets or credit availability that their for-profit competitors do.

The establishment of the New York Acquisition Fund by a consortium of HPD, banks and foundations provided a welcome new resource for this purpose, but it simply is not large enough to meet the demand. Since its inception five years ago, the Fund has financed the purchase of property for 12 out of the estimated 58 supportive housing projects that went into construction during that period, or 21%. While not every supportive housing developer applied for the acquisition funding, and agencies such as the Corporation for Supportive Housing provide some additional pre-development financing to the supportive housing community, a recent survey indicates that the demand for this funding is



high.<sup>4</sup> In this survey, over 60% of the actively developing supportive housing developers reported that insufficient acquisition and pre-development financing for supportive housing was a “significant” to “prohibitive” barrier in building more housing.

High land costs and limited acquisition funding compel nonprofit developers to seek out smaller and/or more challenging lots passed over by other developers. These less desirable sites may require costly actions to be feasible, like zoning changes, environmental remediation or additional foundation work. Extensive rezoning of large areas of the city in the past few years that limit building height and bulk, as well as building code changes increasing minimum unit size and other requirements, further impinge on the number of lots available to supportive housing developers.

### Economies of Scale

Although the size of supportive housing buildings have slowly increased over the years, the average supportive housing residence being built today is still significantly smaller than other HPD-funded affordable housing residences. Looking at a snapshot of recent HPD-funded affordable housing buildings compared to the recent portfolio of HPD-funded supportive housing buildings, the average square footage of the affordable housing buildings is 67% larger than the average square footage of the supportive housing residences (see Appendix B for details). Yet they carry the same fixed costs, meaning that supportive housing will cost more per square foot than bigger multi-family buildings that divide these costs by a significantly larger square foot denominator. Fixed costs include: project management, construction supervision, site se-

### Postgraduate Center for Mental Health’s Grand Concourse and Bedford Park Boulevard Project

Building on irregular lots has become the norm for nonprofit developers building in New York City. Without the financial resources to compete with private developers for increasingly scarce land, supportive housing and other nonprofit developers often find themselves working with sites that have a host of complications including: irregular shapes, proximity to MTA land, significant rock impediments and issues with adjacent properties. One such site on the Grand Concourse and Bedford Park Boulevard, designed by architect Jonathan Kirschenfeld for Postgraduate Center for Mental Health, offers a glimpse at the challenges facing supportive housing developers due to land availability.

Although the Grand Concourse is a corner lot, it is oddly shaped in that it gets increasingly narrow as the lot recedes from the street. This is further complicated by the presence of an MTA subway station adjacent to the property. The proximity of the property to the MTA triggered a full review of the project. During initial excavation, the contractor found cement pylons underground, which delayed the start of construction in order to assess if they had a structural purpose. Finally, the building design had to closely follow the lot lines in order to create sufficient units to make the project financially viable. The resulting proximity to neighboring buildings made it necessary to underpin the foundation, lowering it to protect the stability of existing buildings. Underpinning requires the permission of the adjacent property owners, and in this case, it resulted in extensive time, negotiations and legal costs.





curity, sanitary facilities, site electrical needs, elevator hoists and other construction costs. The cost of all of these items remains the same, regardless of the number of floors, units or total square footage in the building. Amortizing the price of land over fewer units also increases the per-unit development cost.

### Design Threshold

To win over neighbors concerned about the impact a supportive housing building might have on their community, developers must pay special attention to their residences' design and outward appearance. The need for supportive housing developers to obtain community approval necessitates designing buildings that look as good as market-rate housing, at the cost of affordable housing. This may include ensuring that the buildings have attractive façades, creating a backyard garden area to steer tenants away from congregating in front of buildings, or something as simple as avoiding unsightly air conditioner sleeves for each unit. In the face of frequent, often vociferous community opposition, a supportive housing residence needs to be one of the nicest buildings on the block or it will not get built at all.

### Designing for the Long Term

Given the amount of public and private investment required, supportive housing developers must build durable residences that will provide quality affordable housing to low-income tenants for decades. Tax credit regulations require buildings to remain affordable and in use for 15 years; government-backed mortgages and other conditions require at least 30 years. In practice, most supportive housing developers intend for their residences to be maintained as affordable housing in perpetuity. Investing in materials and systems that help reduce future operating expenses and postpone the need for costly, publicly-funded repairs requires smart design and capital investment on the front end of this long-term commitment. In particular, supportive housing developers must select quality finishes that assist tenants who may be developing basic living skills—like

apartment upkeep—to better maintain the inside of the building.

## PART B: ADJUSTABLE COST FACTORS

During conversations with providers, architects and contractors, there was widespread agreement that despite the inherently higher cost model of supportive housing, there are opportunities for reducing the cost of developing supportive housing. This section focuses on the development costs that the supportive housing experts agreed were more variable in nature and could potentially be reduced in an effort to build more with less.

### I. Continue to Improve Design and Construction Oversight

The supportive housing community recognizes the efforts HPD has undertaken over the past year to expedite the process by which it approves and pays for changes in building design, materials and remedial work that occur during construction. Leadership at HPD has paid special attention to improving the process by which work orders are changed, and to developing and implementing guidelines that increase transparency and accountability. In 2009, the Network organized meetings between HPD's Division of Architecture, Construction and Engineering (DACE) and providers to revise change order guidelines. With input from the group, HPD developed new workflows for cost proposal and change order submissions, revised the guidelines for the change order process, and established clear, reasonable timeframes for the division to review and respond to change orders (see Appendix C). A recent reorganization of the division is also expected to improve DACE operations.<sup>5</sup>

There are indications that these efforts have begun to improve the change order process. However, the impact of these changes has yet to alter attitudes about working with DACE, which is often cited as being less responsive and more arbitrary than its counterparts in other public agencies that finance affordable housing



development. Contractors, architects and developers consistently maintain that DACE will remain the primary cause of unnecessary cost overruns in supportive housing projects without substantial change in the way the division relates to its development partners.

Ways that DACE could greatly reduce development costs include:

**a. Implement and monitor a fair timeframe for processing change orders**

Currently, general contractors must cover the costs of change orders until requests for increased costs are approved. This slows down or even halts construction because they cannot continue to pay subcontractors for months on end while waiting for HPD to approve reimbursement for a change order. The cumulative delays pass on additional costs to developers, who must cover business loan interest, insurance and other carrying costs that can greatly

reduce developer fees. Delays in projects financed with tax credits can lead to investors imposing “downward adjuster” penalties that reduce the non-profit sponsor’s developer fees for missing the placed-in-service date of the new building. Having taken substantial and consistent financial losses as a result of these delays in past projects, some contractors have been said to build a 5% premium into their project bids to HPD to cover anticipated losses caused by DACE delays.

In June of 2009, DACE responded to this issue by adopting a stratified timeline for approving change orders based on the complexity of the cost proposal (i. e., 2-3 weeks for routine issues such as a change in finishes or tiles; 6-7 weeks for complicated issues like rock removal or redesign). Staff at DACE also agreed to provide source documentation to back up the division’s modifications to developers’ change

## **Fox Point: A Case Study**

In 2009 Palladia opened Fox Point, a family supportive housing residence in the Bronx for 48 formerly homeless, disabled and low-income households. Palladia’s experience developing Fox Point mirrors the recent experience of most other supportive housing developers in the City; they had construction oversight by multiple agencies, they encountered significant construction impediments that could have been detected with a fuller site-analysis, and they paid significant out-of-pocket expenses due to the change order process at DACE.

Their story underscores the need for appropriate construction oversight, fuller pre-screening of sites and the toll that arbitrary cost estimates take on a project.

Palladia’s Fox Point Residence is like most supportive housing buildings; it needed three government agencies to fund the capital costs of the building. The NYS Division of Housing Community and Renewal (DHCR) awarded federal tax credits worth over \$9 million in equity; the Homeless Housing Assistance Corporation awarded \$3.6 million in grants; and HPD awarded a \$1.15 million Preservation Participation Loan Program loan administered by the Supportive Housing Loan Program. Funding from these agencies resulted in Palladia, the architect, and contractor having to report to and receive close oversight from the tax credit syndicator, staff from the Dormitory Authority of the State of New York (DASNY) and HPD’s Division of Architecture, Construction and Engineering (DACE). And while HPD contributed only 8% of the total development cost for Fox Point, DACE had influence over every change order and funding decision over the course of the project.

*(continued)*



### **Fox Point: A Case Study**

The problem with DACE oversight began when the contractor encountered extensive rock formations in two locations that needed to be removed during the construction process at Fox Point. The first location complicated the foundation of the building, and the second one extended into the street, blocking access to the sewer system. In the first case, the project architect, syndicator and DASNY all accepted the price given by the contractor for excavation. But because DACE never accepted the price, the contractor is still negotiating for the discrepancy between what DACE says is allowable and the \$90,000 they paid their subcontractor. When they found the second rock formation, the contractor refused to guarantee the costs, threatening to stop the job until the developer agreed to pay the price submitted by the subcontractor for excavation. With this rock, DASNY and DACE wanted the work to be done first before they evaluated its cost. Faced with the risk of construction delays, a late opening and additional loss in development fees due to downward adjusters, Palladia promised the contractor and subcontractor that they would pay the lowest subcontractor bid amount of \$81,000. DASNY later said the excavation was worth \$45,000 and DACE said it was worth \$25,000. Because developers can only be paid the lowest amount approved by the construction oversight agency, Palladia stands to lose \$56,000. While the building has since been finished and has been open for over a year, this issue remains unresolved; DACE will not budge on the amount they believe the work is worth, even though there is sufficient money within the project contingency budget to pay for it.



Fox Point also ran into problems with arbitrary change order adjustments. DACE responded to a request for installation of an exhaust system for a micro-turbine unit, citing the reasonable cost at more than \$2,500 less than the proposed cost. While the development team submitted research to support the cost of the change order, DACE provided no evidence for the lower costs they proposed. In the end this, too, had to be paid for out of pocket.

orders. While some developers have experienced improvements, others report the new procedures are either not being adhered to at all or are unevenly applied (Appendix C illustrates the revised Change Order Process).

#### **b. Yield construction oversight on projects where there are multiple funders**

HPD could conserve resources and eliminate redundancies by developing a protocol for choosing one lead agency to monitor construction. For projects with bank financing where a bank engineer is present on site, HPD should use the bank's engineer to

monitor construction, which already occurs for most HPD New Construction Projects outside the Supportive Housing Loan Program. At a minimum, HPD should yield to state or federal agency oversight when city funding is a relatively small share such as a Resolution-A (a.k.a. Reso-A) project. Reducing conflicting and duplicative oversight would allow projects to move forward more smoothly and with less confusion over process.

#### **c. Give site representatives increased decision-making authority**

HPD site representatives' inability to make deci-



sions at the construction site is another source of costly project delays. Currently, HPD site representatives attend weekly construction meetings with developers, architects and contractors, but they do not have the autonomy to give pertinent reports to the group, or make recommendations or decisions for HPD. Rather, they must refer back to the main office for approvals on all decisions. While it is necessary to build in strong anti-corruption measures on construction sites, having decision-makers offsite and removed from the development team discussion slows down the development process. The State Homeless Housing Assistance Corporation (HHAC) and DASNY offer an alternative example, by allowing on-site decision-making and simply having every member of the development team—i.e. the architect, contractor and agency representative—sign off on changes to the work, up to a specified dollar amount.

**d. Institute a tiered approval process for change orders that allows onsite DACE representatives to make decisions below a specified cost threshold**

Another way to speed turnaround time on change orders would be to reduce the number going to DACE for review. The most expensive and time-consuming change orders are those that involve below-grade conditions (Section IV of this report includes specific steps HPD and developers can take to identify potential underground issues and minimize sub-grade change orders). For less expensive change orders, HPD could institute a tiered approval process similar to that used by the New York City Housing Authority (NYCHA), the Dormitory Authority of the State of New York (DASNY), or the NYS Office of Mental Health (OMH). This tiered process would allow the onsite DACE representative to approve change orders up to a certain amount (e.g., OMH or DASNY construction oversight accepts architects' recommendations for change orders up to \$25,000). Any change order over the threshold amount would continue to be approved by the central DACE office. This would both expedite change orders and incentivize con-

tractors to keep change orders under the threshold amount.

**e. Cite sources in change order determinations**

When a contractor requests a change order, the project architect reviews the proposal and conducts research to ensure the accuracy of the quantity of materials requested and cost of materials submitted. If a contractor has not submitted the right price, the architect negotiates with them before DACE receives the change order. If the architect and contractor consistently provide credible sources for their estimates, the DACE site representatives should only need to review the change order, just as their DASNY counterparts and bank engineers do.

When there are legitimate concerns about the estimates, DACE should use consistent and transparent sources when modifying the cost of change order requests. As part of their revised process, DACE committed to citing the sources they used in amending the change orders. Arbitrary changes, or changes that appear to be arbitrary, often lead to extended disputes and negotiations, further impeding development. According to the focus group participants, there does not seem to be any improvement in this area since the commitment was made last year. (See Appendix D for examples of DACE change order determinations that lack justification for rejecting the change order amount and fail to cite a source for the revised cost estimate.)

**f. Provide in-depth reviews during pre-development stage**

Stakeholders expressed a need for more accurate cost estimates during the pre-development stage either from more experienced HPD staff, or from outsourced cost estimators. Expert opinions received earlier in the process by more knowledgeable cost estimators would create an opportunity to “value engineer” before construction plans are finalized and substantial structural changes become financially untenable. Expensive building systems like heating, ventilation and air conditioning (HVAC),



as well as other high-cost items like tiles, flooring and fixtures, should be reviewed by experts earlier in the process to increase opportunities for greater cost savings. HPD can work with architects and engineers to establish standards for these systems, so that the trade-offs between cost, quality and long-term value are fully understood by all parties. Pricing the project early allows architects and contractors to address cost, scope and constructability issues which can lead to lower cost designs.

## II. Improve the Bidding Process

All three focus groups discussed at length how the current bidding process with SHLP projects creates artificially high bids. Since many of the cost study participants develop non-SHLP projects as well, they were aware that the majority of other government-funded housing programs allow negotiated bids, both inside and outside of HPD. The participants agreed that projects bid in this manner tend to have shorter construction periods, are completed closer to budget and are therefore less likely to go into default. The participants agreed that by allowing for more negotiation that is consistent and standardized and begins early on in the process, HPD could dramatically reduce the overall development costs of the projects.

Under the current competitive bid process, contractors submit bids to HPD based on an architect's drawings and specifications for the project. This brings contractors into the design process too late for them to use their expertise and experience to help architects and developers design lower-cost buildings. In particular, having contractors review drawings by structural and mechanical engineers during the design stage could help optimize the design, reduce the use of expensive materials like steel and lower the overall construction costs. The integrated design approach mandated by Enterprise Green Communities requires the participation of a development team that includes the developer, architect, engineers (LEED Professional), asset and property staff and a contractor. This method recognizes the importance of integrating various disciplines early in the design process, and supports the

idea of a negotiated bid process. The option to use a negotiated bidding process should be extended to all supportive housing projects.

A strict competitive bidding process was necessary when inexperienced supportive housing developers first started building in the 1980s and 1990s. But times have changed. Today, the 19 nonprofit developers with HPD-funded supportive housing buildings currently under construction have already built and are operating nearly 12,000 units between them. Because investors today demand it, less experienced and smaller providers seeking SHLP funds and tax credits are almost always paired with veteran supportive housing developers and/or experienced consultants. New York's supportive housing community boasts some of the most sophisticated affordable housing developers in the country; they should be allowed to choose between using a competitive or negotiated bid process.

## III. Continue to Streamline Prevailing Wage Administration

At the time of the report's focus groups, few of the participants were aware of the recent efforts HPD has made to improve its prevailing wage department. As a result, there was considerable discussion about how cumbersome and costly it is to build with HPD under prevailing wage rules. Specifically, contractors have long claimed that prevailing wage oversight at HPD adds enormous hidden costs to projects. They noted that inconsistent and burdensome monitoring policies, chronically late payments and an antiquated payment system have either turned good contractors away from bidding, or caused them to enter higher bids, taking into account that administrative delays may stop work and raise the overall construction cost of the project. The recent restructuring of the prevailing wage unit should make a substantial difference, but other efforts will be needed to bring down the current costs associated with prevailing wage administration at HPD. These efforts include:



**a. Educate the development community about the restructuring**

Contractors' bids will only come down after they have reason to believe that they will no longer face the delays and financial penalties under the old prevailing wage system. The restructuring goes a long way to resolve the bottlenecks that were costing contractors a lot of money; HPD needs to take credit for this and share with the development community how the changes at the agency will affect the construction process.

**b. Create a less cumbersome and more discriminating review process**

Contractors are required to submit regular reports to government funding agencies that oversee prevailing wage projects, detailing the employees working on a project for contractors and subcontractors to ensure that all laborers are being paid a prevailing wage. While other agencies develop a system for detecting possible prevailing wage violations, HPD combs through each contractor report indiscriminately. For example, HUD investigates prevailing wage projects when there is an issue such as if a head count taken on site does not correspond with a contractor's reporting or if a problem is reported by a worker. As contractors described it, HPD spends valuable time and resources investigating every single cancelled check to make sure the payment complies with prevailing wage requirements. HPD should create a less cumbersome review process with a mechanism for flagging items of concern for more extensive review. This would allow HPD to use limited resources more effectively to follow up on alleged complaints and violations.

**c. Develop and implement payment guidelines to ensure consistent payment schedules**

The prevailing wage unit lacks enough personnel who can process payments, with as few as two staff performing this function at present. Contractors recall when HPD processed their requisitions on a weekly basis; that time frame has now ballooned to four months or more. In one instance, the prevailing

wage division told a contractor—who was owed hundreds of thousands of dollars for a project completed more than two years prior—that they were so backed up, they could not even begin to review the documents necessary for processing the payment.

**d. Switch to an electronic system to expedite payment to contractors and developers**

The prevailing wage division uses an antiquated payment process that requires developers to physically pick up checks from HPD headquarters, with one of the aforementioned two eligible HPD staff having to be present to release the payment. By contrast, both the HHAC and the New York City Housing Development Corporation (HDC) have moved to electronic transfer payments. The cost study participants are hopeful that these two improvements to the payment process, combined with HPD's recent changes to the prevailing wage unit, will make it easier to comply with prevailing wage requirements.

**IV. Work with Developers to Fully Pre-Screen Sites**

Cost study participants discussed at length the cost benefit of completing a more thorough site investigation before commencing construction. As affordable land appropriate for development has become harder to find, providers are acquiring smaller and more challenging sites—often without doing a sufficient site analysis, to determine if their project is viable.

The cost of a geotechnical report ranges from \$10,000 to \$25,000. But the cost of not doing the necessary site analysis can be much higher. In a recent project, the developer did not identify soil contamination until after the foundation was in place, requiring them to undertake the difficult and expensive task of redesigning a basement ventilation system into an existing foundation. This problem halted the construction for months, as the developer waited for approval from the Department of Environmental Protection, costing the City twice as much as it would have if it had been incorporated into the original design. Another project paid over \$100,000 to remove mold caused by water



that infiltrated the basement concrete slab. Had the developer pursued a geotechnical survey instead of the three test pits done on site, they might have designed the building to deal with the level of ground water found after excavation.

The experts agreed that their HPD projects had far more of these issues because there was almost always less pre-screening done for HPD projects than for any of their other government-funded buildings. Two recommendations resulted:

**a. Create and fund a mechanism for site pre-screening**

At present, developers front the expenses for site analysis, often borrowing money for long periods of time. This encourages the nonprofit developers with limited cash and credit availability to pursue the least expensive site analysis possible.

The State Office of Mental Health (OMH) has a dedicated fund available to developers. This covers the cost of site analyses without asking nonprofits to front the money until closing. For HPD-funded projects, there is no such mechanism to pay for a site survey up front, rather providers pay the costs and are reimbursed by HPD after the closing. HPD should work with pre-development funders to make funding for these investigations more readily available. HPD could create a fund similar to that at OMH, giving the funds to the nonprofits most in need. As one expert suggested, HPD could also contract out an engineering firm that specializes in geotechnical surveys, getting a bulk rate in order to analyze all of the supportive housing properties.

**b. Require developers to do fuller analyses of site conditions**

With additional financing available to them, developers can conduct a more thorough analysis of the site when necessary to better understand sub-grade issues like rock conditions and water table levels. If HPD can pay at least some of these costs upfront, the agency could then require developers to conduct more extensive site surveys as necessary, in-

cluding borings and a geotechnical report, before a property is purchased or construction drawings are finalized. Analysis should include a complete feasibility study, digging test pits on neighboring properties to identify other sub-grade issues, making multiple borings (6 to 8 on average) or requesting a geotechnical survey. Developers need to do more to investigate underground conditions before deciding if a site is viable, and are more likely to do so if financing is available to cover the costs until closing.

**V. Revise the Design Guidelines**

As mentioned in Part A of this report, attention to good design is critical to community acceptance of the building and certain design elements are necessary for maintaining the health and stability of the tenants. Design guidelines should not be so rigid that all buildings look the same. At the same time, there is a consensus that current guidelines are outdated and that certain changes could reduce overall construction costs while maintaining high standards. The discussion begun in the Network's focus groups should be continued, but to get at true savings through design—without alienating good architects and sacrificing the quality of supportive housing—the stakeholders agreed that a group of architects, developers and contractors should work with HPD to revise the guidelines together.

**VI. Monitor Impact of “Green” Building Requirements**

Over the last few years supportive housing developers have been at the forefront of building energy-efficient buildings in the City. In most cases the added green design elements were funded by outside sources such as the New York State Energy Research and Development Authority (NYSERDA), Enterprise Community Partners and Reso-A funds, but these added features often increased standard construction costs as well. And while green design was encouraged by City and State housing agencies, giving developers better scoring for project proposals with these elements, it is now clear that these energy components demanded a more significant outlay of government subsidy than originally expected.



HPD's recent decision to incorporate the Enterprise Green Communities certification into their Low Income Housing Tax Credit (LIHTC) design guidelines should help bring down these costs and focus on green design elements that improve the overall buildings. The Enterprise standards should create a level playing field for all developers on specifically mandated requirements for energy efficiency, materials, water conservation, operations and management, leading to better constructed, higher performing buildings. Specifically, these standards contain an integrated design approach that requires bringing together the entire development team at the beginning of the project to discuss all aspects of building design including energy efficiency initiatives. With the entire development team working together from the project's infancy, we believe projects are more likely to come in on budget with fewer overruns. An Enterprise Green Communities Green Development Plan will also be effective in evaluating optional green elements funded by outside sources and in integrating those design elements, if they are cost-effective, into a higher performing building.

While Enterprise Green Communities' guidelines put in place certain green building requirements, there is still very little research on the short- or long-term cost-effectiveness of many energy efficiency measures and green building design elements. The development community is hopeful that studies like Deutsche Bank's Living Cities Building Energy Efficiency Data Report will help guide the City's efforts in keeping costs down while integrating sustainable design into communities. As these studies unfold, our recommendations include:

- a. Continue to participate in and promote the collection and evaluation of data to help quantify relative capital costs, and operational costs savings, of green design measures.
- b. Utilize building performance data to support the development of financial tools, such as the development of green design underwriting standards, to help fund energy efficient and sustainable designs in the future.

- c. Utilize Enterprise Green Communities' integrated design approach to incorporate green design goals by working with contractors and engineers early on in a project to evaluate cost-benefits, performance and budget impact. The integrated design team can also assess the cost-benefits of additional and optional green building elements.

### VII. Improve Collaboration with Other Agencies

Supportive housing development is often delayed by administrative barriers at other public or quasi-public agencies. Any assistance HPD could offer to improve the responsiveness of other City agencies like the Fire Department, the Department of Buildings (DOB) and private entities like Con Edison would be most welcome. By establishing liaisons, or simply increasing interagency communications between agencies, HPD could help expedite delays when they occur, e.g. delays in obtaining building permits, fire department inspections or certificates of occupancy. These common occurrences are setting back the development timeline and opening of the buildings by months. Stronger relationships with these agencies would also help when city-wide policy is being made that could have a direct effect on housing development. For example, DOB's revision of the City's building code in 2008 levied unnecessary and costly requirements on supportive housing residences that chose to build under the Use Group 3 category of community facilities. A closer working relationship between the two agencies and providers might have averted new rules that in effect reduce the allowable size of supportive housing residences and require institutional components at odds with the needs and preferences of supportive housing tenants.

### VIII. Foster Collaboration with the Development Community

Several focus group participants also suggested that HPD host a supportive housing symposium to bring together HPD program and design staff with the contractors, subcontractors, architects and developers building supportive housing. The immediate goal would be to work together to identify strategies for



building quality supportive housing for less. But the ultimate aim would be to change the nature of the relationship between DACE staff and developers. Fostering a sense of collegiality and partnership among stakeholders could, over time, lead to a host of procedural improvements that would decrease the costs of HPD's development process.

### **PART C: SUMMARY OF RECOMMENDATIONS**

In order to get New York/New York III development back on schedule, the City must increase the capital resources available to develop supportive housing. By working together, HPD and the supportive housing community can also reduce overall development costs, so we can build more with our current funding level. The following is a summary of the recommendations presented in the report.

#### **I. Continue to Improve Design and Construction Oversight**

- a.** Yield construction oversight on projects where there are multiple funders.
- b.** Give site representatives increased decision-making authority.
- c.** Institute a tiered approval process for change orders that allows onsite DACE representatives to make decisions below a specified cost threshold.
- d.** Cite sources in change order determinations.
- e.** Provide in-depth reviews during pre-development stage.

#### **II. Improve the Bidding Process by Increasing the Use of Negotiated Bids**

Allow for greater negotiation in the bidding process that is consistent and begins earlier in the process.

#### **III. Continue to Streamline Prevailing Wage Administration**

- a.** Continue efforts to improve reporting systems and restructuring the prevailing wage unit.
- b.** Create a less cumbersome and more discriminating review process.

- c.** Develop and implement payment guidelines to ensure consistent payment schedules.
- d.** Switch to an electronic system to expedite payment to contractors and developers.

#### **IV. Work with Developers to Fully Pre-Screen Sites**

- a.** Create and fund a mechanism for site pre-screening.
- b.** Require developers to do fuller analyses of site conditions.

#### **V. Revise the Design Guidelines**

Lead an expert team of supportive housing stakeholders in revising HPD's Design Guidelines.

#### **VI. Monitor Impact of "Green" Building Requirements**

- a.** Continue to participate in and promote the collection and evaluation of data.
- b.** Utilize building performance data to support the development of financial tools.
- c.** Utilize Enterprise Green Communities' integrated design approach to incorporate green design goals.

#### **VII. Improve Collaboration with Other Agencies**

Increase interagency support to reduce construction delays caused by other City agencies like the Fire Department, the Department of Buildings, and private entities like Con Edison.

#### **VIII. Foster Collaboration with the Development Community**

Coalesce HPD program and design staff, contractors and subcontractors, architects and developers to improve the dynamic between DACE staff and the rest of the development team.



Notes:

- <sup>1</sup> Under HOME the construction of 12 or more units triggers Davis-Bacon, the federal prevailing wage standards. For more detailed information visit: [http://www.hud.gov/offices/olr/olr\\_foa.cfm](http://www.hud.gov/offices/olr/olr_foa.cfm)
- <sup>2</sup> Citizens Housing & Planning Council, *Prevailing Wisdom, the Potential Impact of Prevailing Wages on Affordable Housing*, <http://www.chpcny.org/pubs/Prevailing%20Wisdom%20web%20version.pdf> (December 2008).
- <sup>3</sup> Federal Reserve Bank of New York. *The Price of Land in the New York Metropolitan Area*. [http://www.newyorkfed.org/research/current\\_issues/ci14-3.pdf](http://www.newyorkfed.org/research/current_issues/ci14-3.pdf). (April/May 2008).
- <sup>4</sup> Preliminary Findings from the Network Development Barrier Survey, <http://www.shnny.org/workshops.html>
- <sup>5</sup> Since the Network drafted the content of this paper, HPD has reorganized the structure and responsibilities of DACE (dividing the department into two units focused on architecture and engineering and construction oversight). However, issues related to the former responsibilities of DACE will still need to be addressed within this new management structure.

**The Network represents 200 nonprofit organizations that have created over 40,000 supportive apartments across New York State. Permanent, affordable housing linked to services, supportive housing helps low-income, homeless and disabled people gain independence and live healthy, fulfilling lives in the community. The Network brings providers together to share best practices and advocate for the creation of enough supportive housing to end homelessness among the most vulnerable New Yorkers.**

**Authors:**

**Nicholas Napolitano, Policy Analyst,  
Supportive Housing Network of New York**

**Nicole Branca, Director of Policy,  
Supportive Housing Network of New York.**

**Additional thanks to all the developers, architects, contractors  
and consultants who assisted on this project as well as  
Ariel Krasnow, Director of Green Housing Initiatives for the Network.**



## Appendix A: Cost Study Participants

### **Yves Ades**

Services for the UnderServed

### **Hercules Argyriou**

MEGA Contracting, Inc.

### **Christopher Benson**

The Lantern Group

### **Michael Berne**

CAMBA Housing Ventures

### **Sally Bernstein**

Palladia, Inc.

### **Joseph Biber**

Joseph Biber, Housing Consultant, Inc.

### **Nicole Branca**

Supportive Housing Network of New York

### **Martin Dunn**

Dunn Development Corp.

### **Stephanie Green**

West Side Federation for Senior and Supportive Housing

### **Amie Gross**

Amie Gross Architects

### **Cindy Harden**

Harden + Van Arnam Associates

### **David Hirsch**

Urban Architectural Initiatives

### **Ted Houghton**

Supportive Housing Network of New York

### **Jonathan Kirschenfeld**

Jonathan Kirschenfeld & Associates

### **Ariel Krasnow**

Supportive Housing Network of New York

### **Nick Lembo**

Monadnock Construction

### **Magnus Magnusson**

Magnusson Architecture and Planning

### **Joel Mounty**

Mountco Construction and Development Corp.

### **John Napolitano**

VIP Community Services

### **Nicholas Napolitano**

Supportive Housing Network of New York

### **Tony Shitemi**

Urban Architectural Initiatives

### **Chris Tsetsekas**

Artecon Construction and Development Corp.

### **Richard Vitto**

Oaklander, Coogan & Vitto Architects

### **Elissa Winzelberg**

Common Ground Community

## Appendix B: Size of Supportive Housing Compared to Other HPD Affordable Housing

Address	# of Units	Sq. Ft.
<b>HPD Funded Supportive Housing Opened Last 18 months (6/1/09 - 11/30/10)*</b>		
84-92 Mother Gaston Blvd, Brooklyn	50	30,375
31 Van Buren St., Brooklyn	42	22,757
2330 Bronx Park East, Bronx	68	39,782
455 East 148 St., Bronx	190	91,660
569 West 159 St., Manhattan	7	3,150
518-520 West 159 St., Manhattan	38	19,500
575 Fifth Ave., Brooklyn	49	34,809
1068 Franklin Ave., Bronx	79	32,028
2191 Washington Ave., Bronx	47	22,180
1421-1437 College Ave., Bronx	114	79,223
133 Pitt St., Manhattan	263	98,999
2516 Grand Ave., Bronx	57	30,144
<b>Average</b>	<b>84</b>	<b>42,051</b>
<b>HPD Affordable Housing (source: November 2010 lottery listing)**</b>		
61 Melrose St., Brooklyn	59	62,767
239 Melrose St., Brooklyn	4	6,875
348 Melrose St., Brooklyn	4	6,875
295-297 Jefferson St., Brooklyn	8	11,000
850 Jennings St., Bronx	103	114,409
753-761 East 214th St., Bronx	50	40,115
601 & 609 East 156th St., Bronx	123	148,834
756, 780, 800 & 820 St. Ann's Ave., Bronx	357	350,090
1632 Undercliff Ave., Bronx	40	38,480
1853 Anthony Ave., Bronx	27	35,310
1178 Anderson Ave., Bronx	17	22,785
311 W. 141st St., Manhattan	20	21,245
203-205 W. 119th St., Manhattan	36	37,453
2078-2080 Frederick Douglass Blvd., Manhattan	30	25,341
300 West 128th St., Manhattan	70	75,593
180 Broad St., Staten Island	105	89,468
460 Brielle Ave., Staten Island	96	109,531
<b>Average</b>	<b>68</b>	<b>70,363</b>
<b>Difference</b>	<b>16</b>	<b>-28,312</b>
<b>% Difference</b>	<b>19%</b>	<b>-67%</b>

\*Single unit supportive housing residences only

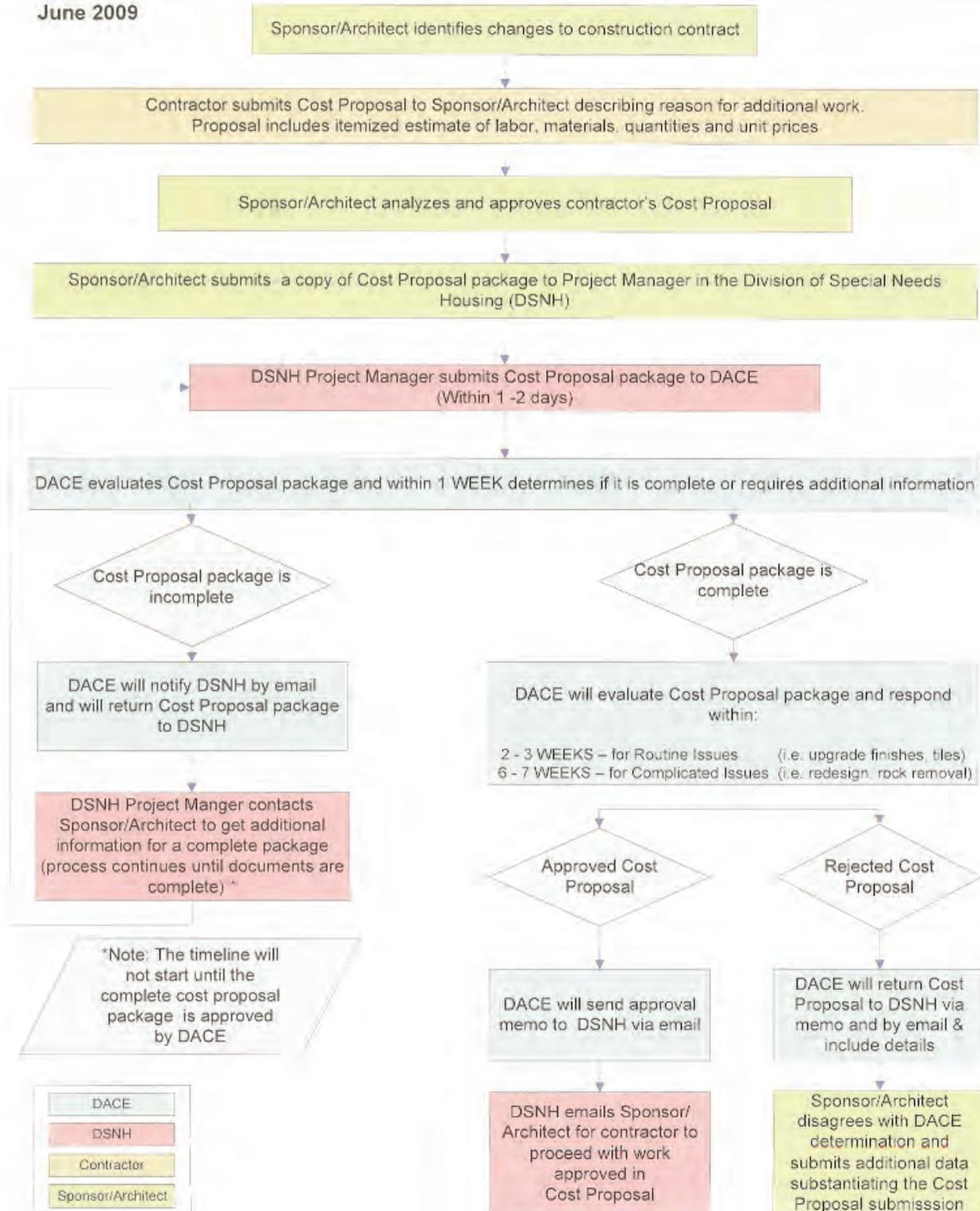
\*\*For all buildings that have square foot and unit information listed on the NYC Department of Buildings website.

# Appendix C: Revised HPD Change Order Process

## NYC HOUSING PRESERVATION AND DEVELOPMENT – SUPPORTIVE HOUSING PROGRAM

### COST PROPOSAL WORKFLOW

June 2009



CHANGE ORDER WORKFLOW

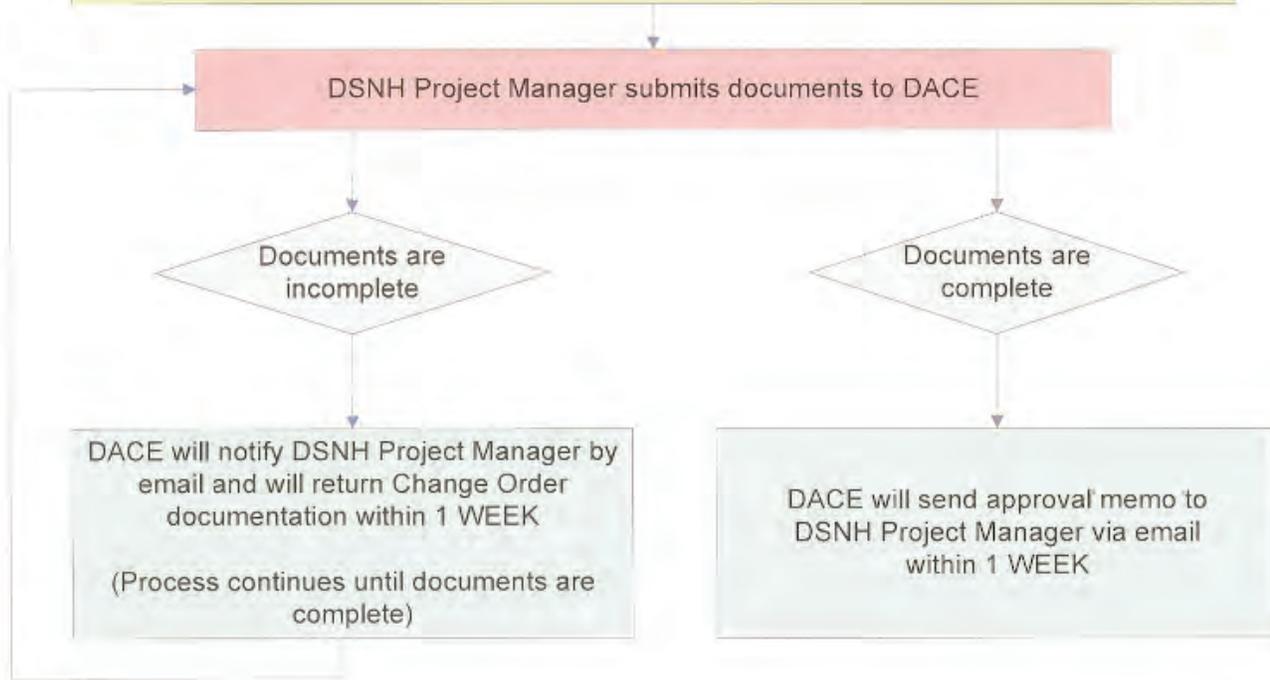
June 2009

Contractor Can Proceed with Work Approved in Cost Proposal

Sponsor/Architect submits Change Order submission to the DSNH Project Manager

The Change Order submission must include the following:

- Completed AIA Document G701 (Change Order)
- Cost Proposal Approval memo from DACE
- Cover letter from Sponsor/Architect requesting approval of the Change Order (which notes the cost proposal approval)
- Sponsor/Architect's current Cost Proposal and Change Order tracking sheet



## Appendix D: Examples of DACE Change Order Determination Letters Lacking Documentation



Department of  
Housing Preservation  
& Development  
nyc.gov/hpd

Division of Architecture  
and Engineering

### Departmental Memorandum

To:

From:

Date:

Re: Supportive Housing Loan Program  
Project Address:  
Contract No.  
Change Order No.      Cost Proposal No. 4  
Description:              Plumbing Revisions  
Contractor:  
Proposed Cost:            \$40,803.08  
Reasonable Cost:         \$37,390.95

---

#### DESIGN OMISSION

We have reviewed the attached Change Order Cost Proposal No. 4 submittal by \_\_\_\_\_, for the installation of two (2) sewer ejectors at Cellar including three (3) additional yard drains and one (1) 5" scupper box with leader from roof to cellar, at a proposed extra cost of \$40,803.08.

Although the contract drawings showed the sewer and storm lines to be underground, during construction, they were found to be above ground warranting several plumbing revisions including sewer ejector and pumps, to maintain acceptable ceiling height and clearance at doors within the cellar level.

Based on our evaluation of the submitted documents, we concur with the architect's general assessment and find the General Contractor's cost of \$40,803.08 to be excessive and a cost of \$37,390.95, which includes 10% overhead and profit, to be fair and reasonable for the work involved. We have allowed a cost of \$43,476.86 for all items related to revised plumbing drawings and a credit of (\$9,485.09) for items not installed or completed as per the revisions.

Kindly notify the Owner and Architect of our determination and have the Contractor submit a signed change order for processing.



Department of  
Housing Preservation  
& Development  
nyc.gov/hpd

Office of Housing Operations  
Division of Architecture,  
Construction and Engineering

## Departmental Memorandum

To:

From:

Date: February 18, 2010

Re: Supportive Housing Loan Program

Project Address:

Contract No.:

Change Order No.: Cost Proposal No. 28

Description: Additional door hardware

Contractor:

Proposed Cost: \$1,870.00

Reasonable Credit: \$1,677.50

---

We have reviewed the attached change order cost proposal No. 28 submitted by \_\_\_\_\_, for the installation of four (4) additional 'keyed' door hardware to the Staff Bathrooms on the first and cellar floor, including two (2) 'Detex' exit alarms at the Green Roof doors, at a proposed extra cost of \$1,870.00.

Based on our evaluation of the submitted documents, we concur with the architect's general assessment but find the contractor's cost of \$1,870.00 to be excessive and a cost of \$1,677.50, which includes 10% overhead and profit to be fair and reasonable for the work described. We have allowed a cost of \$800.00 for the Schlage storeroom lockset with Flair level keyed and Taco strike square, \$200.00 for Schlage conventional mortise cylinder, and \$525.00 for the Detex exit alarms.

Kindly notify the owner and architect of our determination and have the general contractor submit a signed change order for processing.

The approved extra cost presumes the availability of funds from the development contingency.

The recommendation is solely as to the cost of the proposed work.

This package is being forwarded for your approval.

MG/ms  
cc:



**the Network**  
Supportive Housing Network of NY

**247 W. 37<sup>th</sup> Street**  
**18<sup>th</sup> Floor**  
**New York, NY 10018**  
**Phone: 646.619.9640**  
**Fax: 646.237.8505**

**[www.shnny.org](http://www.shnny.org)**