

# ASSEMBLING DESIGN AND CONSTRUCTION TEAM TO BUILD AFFORDABLE RENTAL HOUSING

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# Tim Welch Consulting Inc.



## Team of Six+:

- Affordable housing development and planning approvals
- Housing and homelessness policy, research and program evaluation
- Affordable home-ownership (Creating Homes)
- Social housing redevelopment and regeneration

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Over 700 units in the past 9 years in 20 developments in southern Ontario



# Policy Context



Increasing need for affordable and supportive housing in Guelph-Wellington:

- 10-Year Housing & Homelessness Plan
- 5-year Affordable and Social Housing Strategy
- 1,242 households on the waiting list for social housing as of December 31, 2014

# Housing Market

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## Lowest vacancy rate in Ontario – 1.2%

➤ one bedroom rent - **\$898**

▣ minimum wage \$11.25 per hour - \$1,575 per month (35 hours), affords **\$473** per month

▣ Seniors basic pension \$1350, afford **\$405** per month

▣ Social assistance

■ Single person **\$376**

■ Single person disabled **\$479**

# Checklist for Early Stages

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1. Identify site
2. Identify target market
3. Identify Partners and what tasks each will undertake or provide
4. Create business plan with capital and operating budget
5. Assemble development team
6. Secure financial resources

# Assembling a Development Team

- Early players: Appraiser, Environmental and Geotechnical Engineers, Surveyor
- Architect – (engineers, landscape architect)
- Construction Manager
- Development Consultant/Project Manager
- Quantity Surveyor
- Mortgage financier

# Role of Early Players

- To ensure the land is suitable for development
- Analysis to ensure the architect has information to complete full architectural drawings
- Various technical studies for planning approvals that need to be completed to satisfy the municipality – also need to inform architect/contractor:
  - Geotechnical study
  - Environmental Phase 1, possible 2 and supplemental
  - Topographic survey
  - Functional Servicing Report
  - Municipality will list what is required at pre-consult meeting



# Project Team



- Note that professional members come with their own expertise, role, technical language and regulatory framework.
- Team brings together the vision and what's achievable given financial and site constraints.
- Need high level of communication to reach a common understanding of each other's role.

# Role of Architect

- Key Design professional
  - ▣ Needs to understand your program of who you are going to house and the needs of those residents (Accessibility/seniors)
  - ▣ Needs to understand energy efficiency/environmental priorities
  - ▣ Needs to understand your site/limitations
  - ▣ NEEDS TO UNDERSTAND YOUR BUDGET!

# Role of Architect

- Selection process –
  - ▣ Select architect known to non-profit board
  - ▣ 3 - 4 quotes in limited proposal call; or
  - ▣ Advertised proposal call (i.e. Bidding)
- Will want to interview – get references/visit their buildings
- Experience in multi-residential and non-profit sector
- Ideal if Architect hires civil, structural, mechanical/electrical engineers + landscape architect – one contract

# Architect – early discussions

Listen to board members, property manager  
and future residents (SHOW)



# Architect contract

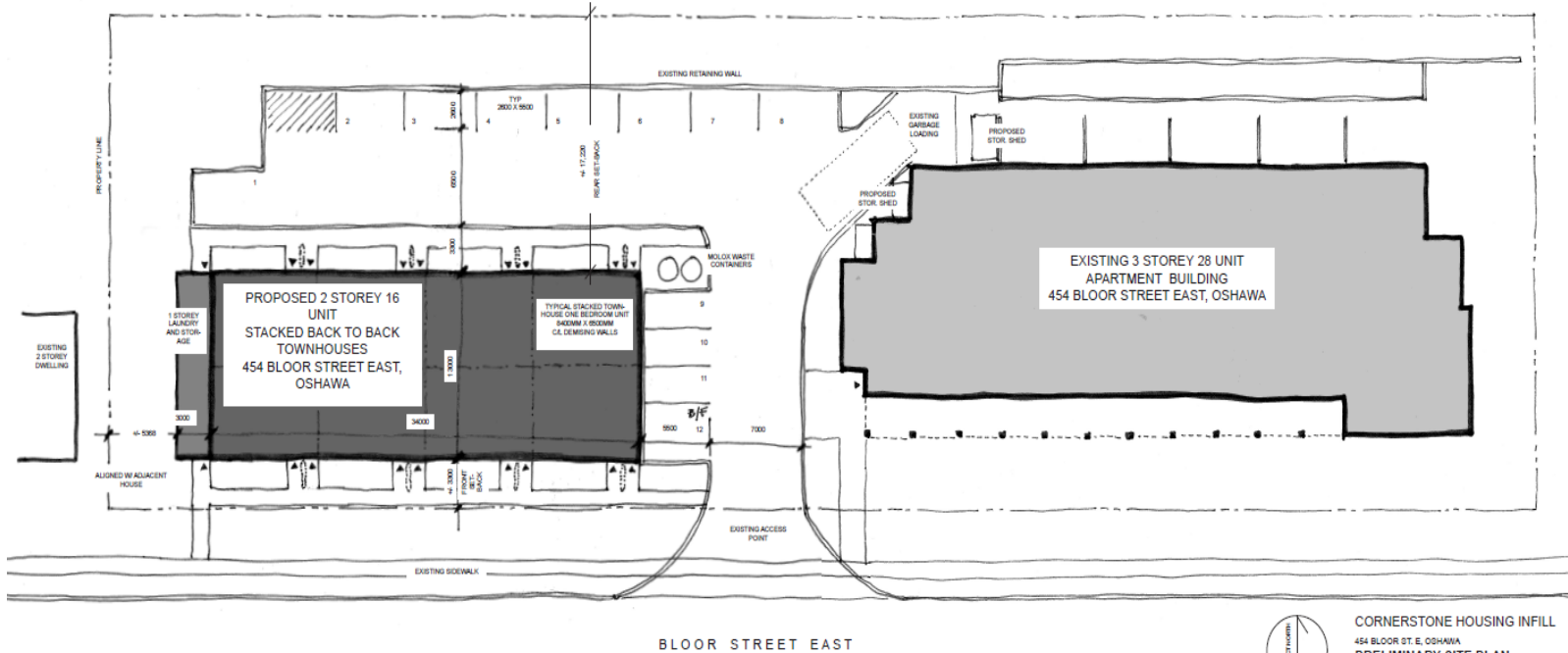
- Typically a standard Ontario Association of Architects contract – be clear what work is agreed to – review the “checked boxes” and ask what is not covered and why (or understand additional costs for the work)
- Fees typically on a percentage scale
- Clarify if a small change in building size will affect fee
- Typical extras will be appearing at re-zoning, OMB, clarify if costs for major revisions in drawings

# Role of Architect: Stages of Work

Conceptual work (once site confirmed)

- low cost or pro bono
- can be used as a basis for pre-consultation with municipal planning and/or for your business plan
  - ▣ Provider sets out mix of units, apt building vs townhouse, parking needs, common space
- also important as a basis of square footage needed in your budget calculations

# Concept for an addition



CORNERSTONE HOUSING INFILL  
454 BLOOR ST. E, OSHAWA  
PRELIMINARY SITE PLAN, 1:200

# Site Plan





# Colour Rendering!



# Stages of Work: Detailed Design

- More detailed work up of both the building – hallways, stairwells, interior layouts of units – as well as site of property
- Provider input needed on details of heating system, storage space, common meeting rooms, garbage rooms, type of garbage system/pick-up, exact number of parking spaces etc.
- Can be basis for rezoning/maybe site plan
- Could be the basis for contractors to provide “Class D” estimates

# Architect and Sub-consultants

- Most often architect responsible for engineering sub-consultants
- If not, more administration necessary on the part of the proponent
- Get clear understanding of what work is covered by sub-consultants contract including revisions to design work
  - ▣ Challenge if municipality asks for late changes i.e. Innerkip

# Stages of Work: Full Building Drawings

- All building design professionals participate and architect draws and co-ordinates
- Undertake once full financing in place
- Basis for submitting for building permit
- Basis for getting either full tendering or sub-trade tendering
- Importance of review for “no gaps” to minimize change orders

# Stages of Work: Construction Review

- Architect attends construction site meetings
- Reviews /inspects work for compliance with drawings (will be additional separate engineer inspections for foundations etc.)
- Reviews change requests/change orders
- Typically reviews draw requests from contractor
- Acts as housing providers technical “eyes” during construction

# Stages of Work: Completion

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- Deficiency review
- Certify substantial completion
- Follow up on outstanding quality/deficiencies repair

# Contractor

- Options:
  - ▣ full tender,
  - ▣ construction management (can be modified)
  - ▣ design build
- Different construction contracts (CCDC)
- Most financial institutions want fixed price contract for a non-profit/co-op



# Contractor

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- Experience in multi-residential and preferably work with non-profit sector
  - Willingness to do site visit/estimate
- RFP (Bidding) or 3-4 quotes
- Ensure you understand what is included in their price for comparison. Prepare checklist of what's in/out.
- Check references/visit their buildings



# Full Tender

- With full drawings, contractors will provide a total fixed price
  - ▣ Can be wide range in results depending on sub-trades used and “hunger” of contractor
  - ▣ Concern over “unknown” contractor with low bid in full tender
- If gaps in drawings, can result in change orders from pricing
- Some change orders initiated by housing provider

# Design Build



- Design and construction are contracted to a single company who complete for a fixed price (excluding soil conditions).
- Less work for the proponent but less specific control as contract can allow substitutions
- Proponent typically doesn't benefit from any savings
- Be clear on what's included in the price

# Construction Management

- CM fee fixed (fee for co-ordinating the construction – typically a percentage)
- Different construction contract options (CCDC)
- Owner, architect and general contractor work together to get best price on cost of work – “value engineering”
- Beneficial with architect and contractor who have worked together previously

# Construction Manager

- Owner can benefit from any cost savings but also increases
- For Non-Profits, prudent to lock into price once sub-trade costing complete
- Typically a CCDC2 contract – financial institutions are comfortable with this.
- Can still be some change orders, often related to soil conditions
- Keep at least a 3% contingency even with a fixed price

# Plan Cash Flow



- Standard contracts – payment required within 20 to 30 days of draw request
- IAH funding – once meet milestone will need 2 to 3 weeks for processing and transfer of funds
- Mortgage Financing – 2 to 3 weeks for processing

# Quantity Surveyor/Cost Consultant

- A professional with comprehensive knowledge of construction, construction methods and accounting
- Measures the value expended of your construction project
- A QS report needed for financing/CMHC insured mortgage

# Design Issues

- Consider size and type of units
- If providing housing for one-person households may want some two-bedroom units to accommodate e.g. parent regaining custody of children.
- One bedroom open concept helps
- Bachelor units/SRO/Bedsitting appropriate

# Design Features

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- Common space
  - ▣ How frequently will it be used
  - ▣ Is there an alternative space to rent nearby?
  - ▣ Can it be realistically rented out for additional revenue?
- Accessibility



# Energy Efficiency features



- Limited capital budget
- Examine payback period of features
- Ability to access any additional funds to offset?

# Accessibility

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- Accessibility for Ontarians with Disabilities Act (AODA) – customer service, participation in community life, built environment, etc.
- Minimum Standards for Accessibility in the Ontario Building Code
- Building “visitability”
- How many units fully modified?

# What to Expect in Terms of Costs



- Architectural Services
- Contractor
- Development Consultant
- Environmental Consultants

# Further Questions?



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