

Affordable Housing Commission Minutes

February 17, 2026 at Noon
City Administration Building – Council Chambers

In attendance: Mary Abel, Zack Dye, Mollie Fitzgerald, Maria Modayil, Shay Myers, Solveig Spjeldnes, Polly Sumney, Megan Vogel

Absent: Meghan Jennings, Amy Lipka, Alan Swank

Guests: Stefano Alva, Rob Delach

Link to YouTube recording of meeting: <https://www.youtube.com/watch?v=YNm8LeLtlxc>

1. **Introduction** – Chair Shay Myers started the meeting at 12:06 p.m. and read the AHC mission.
2. **Establish Quorum** – Quorum met.
3. **Disposition of Minutes** – Shay acknowledged that some members had difficulty receiving the minutes. Mary Abel abstained from voting on the minutes because she did not receive the minutes. Zack Dye moved to approve the minutes. Mollie seconded. All other members present in favor and the motion passed. Minutes for January accepted.
4. **Vitruvian (Speaker: Stefano Alva, Director of Operations at Vitruvian- 3D Printed Housing)**

Stefano leads the efforts in Athens. Brought advanced construction and manufacturing machinery, leveraged the machinery to train local workforce and enabled them to complete projects in Athens County. Full presentation “Durable Housing that builds Community” attached along with the minutes. Use of innovative technology (including robotics), advanced machinery to train a local workforce who can then be employed in projects in the local community to address affordable housing. Two core goals of Vitruvian: 1. Providing affordable housing to the community, 2. Providing local workforce development opportunities.

Impact of the workforce: As of the end of 2025, 27 high school students trained on concrete 3D printing and received a state-recognized credential that counts as graduation requirement for the state of Ohio (because the training requirement was created in partnership with the Brick layers of local 23 and international masonry institute). The 27 students were from the New Lexington high school. Currently have 106 members on their training platform which includes 5 schools in the area including Nelsonville York. Stefano shared some first-hand stories of students who went through the trade program and have progressed into future employment/academic opportunities. Opportunities to impact the local community positively and hopes to have an expanded training program to train individuals in 30 days on 3D printing technology and meaningfully contribute to a construction project by learning the entire building process. Goal to train individuals for 30 days and then hire them to the local construction projects. The intention is to complete housing projects in 90 days.

Features/technologies that have been used and taught through Vitruvian(technologies that can be stacked and complement the 3D concrete printing, are durable and easy to train):

- I. Frost protected shallow foundations (slabs, put insulation in the foundation without going into the frost line and reduce the amount of concrete needed by about 50%- direct impact on the cost of the foundations),
- II. Concrete 3D printed walls (can be done on-site or in the shop, concrete is fire-resistant, hurricane proof, flood proof– durability and ability to withstand the elements/ test of time),
- III. More living space per wall built (home comes in a 40X8 trailer which is about 320 sq.ft of living area but if in a circle can give more than double living space- 736 sq. ft vs. square 576 sq. ft),
- IV. Integrated 1-day roof installation (metal insulated panels– learned from homes in Chauncey– uses metal sheathing followed by EPS foam and then metal sheathing, which allows roofs to be installed in a day, 8-hour training program),
- V. Metal studs as an alternative to wood (moisture proof dimensional stability, naturally fire resistant and enables for rapid installation),
- VI. Optimized thermal envelope (insulation used and how they are stacked– poured foam vs. spray foam, more affordable),
- VII. Centralized mechanical core (putting bathroom, kitchen, and HVAC together allows for simplifying the electrical and plumbing wiring– appreciated by the local plumbers and electricians as well)
- VIII. Diverse interior wall options (alternatives to dry wall- PVC panels in HVAC rooms, fluted wall panels using local wood– pre-finished that only requires drilling).

Overall, Vitruvian allows for delivering housing in 90 days, has built floor plans that are compatible to the Welcome Ohio requirements and would like feedback on the Commission's experience. Goal for Vitruvian is to use better building materials including fire-resistant materials that last generations that allows for wealth building in families/communities– housing that is an asset vs. a liability without repairs. These homes are at par with traditional builds and with it being built by the community, it could last longer than the alternatives. Estimate \$250/ sq. ft for future construction.

Mary Abel asked if Vitruvian is working with Tri-County Adult Career Center, Stefano responded that Vitruvian just signed an MoU about a week and half ago. Mary also asked how someone interested in Vitruvian's services could get in contact and Stefano responded that direct outreach is best and that individuals can use their contact information. Stefano added that they are completing the two homes in Chauncey and are open to business and thinks that this presentation with the Commission is a first step to advertising to the public.

Polly Sumney asked about process photos and actual photos that are not renderings or mixed with renderings. Stefano responded that Jesus Pagan, Ohio University professor in engineering took some 360 camera shots and is processing the data of how the construction site progressed. Using VR headsets, it would show progress of the construction.

Solveig reported that she had toured Vitruvian's facility about a year and half ago and was impressed. Solveig did ask if Stefano had talked to Code Enforcement of Andrew Chiki about the Welcome Home Ohio program in further detail. Stefano responded that he has not talked to anyone in too much detail but was aware that Habitat put in a proposal for the Welcome Home Ohio project. Stefano further stated that the floor plan that has been created meets the requirements of Welcome Home Ohio and that it can be built for \$200,000 which is about \$20,000 less than what the house can be sold for. This would ensure that the cost of building is

less and that the money can be recycled so that more homes can be built– one of the tools for comprehensive solutions for affordable housing.

Mollie commented that she appreciated the local workforce development especially robotics and manufacturing with local talent. Mollie also asked if Athens City Schools had expressed any interest. Stefano responded that he has been in conversations with the superintendent and there are some challenges with navigating the different school systems in relation to concerns about duplication if credentials are provided at a different school system.

Shay inquired further about the frost protected foundations and asked if they were cast in place or 3D printed. Shay clarified that the 3D components. Shay questioned the choice of spray foam as an insulation selection for non-insulated walls as this is a failure prone insulation. Shay pointed out this as a weak point in the presentation and that from his experience as an architect/building technology, is one of the risky insulations to use not just structurally but is also toxic and off gas. Shay urged that Vitruvian reconsider this choice of spray foam insulation. Stefano is open to having more conversations with Shay about this and other elements of the 3D printing technology/building assembly. Shay highlighted the benefits of Vitruvian's innovative technologies, its workforce development model, and encouraged working with local craftspeople who may not be tapped into for their unique trade knowledge of the region, building materials/products as a way to retain wealth in the region. Stefano recognizes this need, has employed local talent for the Chauncey builds, and highlighted the challenges he has recognized with the coordination aspect.

Mollie concluded that this Commission was a good group for this presentation and that as new opportunities arise that the members of this Commission as well as others are aware of Vitruvian's work and that they employ local talent.

5. City Update – Meghan Jennings (City Planning), Alan Swank (City Council), & Shay Myers (Board of Zoning Appeals)

Alan and Meghan are both unavailable today and therefore, there were no updates from them.

Shay reported on behalf of the Board of Zoning of Appeals. One of the cases related to a gap that currently exists around accessory dwelling units (ADUs). This was an existing garage with a dwelling unit above. The owners had to appeal to the Board of Zoning for a variance to use this. Currently according to the City, there is no definition for ADUs and so if there are two detached dwellings on a property, they are both considered principal structures. The City is working on this as part of the comprehensive plan but Shay thinks this should be addressed quicker and the City should be proactive.

6. Area Housing Development/Construction projects

Ridges

Solveig reported that the Ridges group met, and although it was anticipated that the necessary paperwork to completely transfer the land to the University was anticipated to be done by now, it would be the Q3-4 of this year- the construction and land use can not start until this step is completed. Mollie mentioned that there were no funding sources identified for the construction yet. Solveig responded that Building 24 will be turned into a luxury condo building with 6 units– there are some individuals who have expressed interest and may privately finance this.

Solveig continued that senior housing may be prioritized first because of the need. Amy Lipka (who is not present today) is coordinating a group along with Chris Knisely, Susan Urano, and Solveig to better understand needs. Focus group data from about two years ago also exists. Some things could happen in parallel. There has been a slow down in the process for housing for individuals with disabilities and 317 Board projects– some shared glitches and red tape that is being navigated. Their next meeting is in August but their meetings have not been advertised very well.

Athens County Accessible Housing CRA progress

County Planner Connor LaVelle and County Commissioner Chris Chmiel have been working on a Community Reinvestment Area (CRA), which is a tax incentive for accessible housing. Timeline is TBD but hope that this is a tool for the unincorporated county (City would have to adopt its own version of the incentive to impact projects within the City). This version of the CRA is focusing on accessible housing and may be working on another CRA focusing on sustainable and energy efficient structures– another tool to incentivize efficient, durable, resilient structures than the typical buildings currently available in the area.

Mollie commented that if the City was to adopt a CRA, they could be more flexible encompassing all kinds of housing including commercial and industrial uses. She thinks that the proposed CRA is prescriptive– thoughts she has already shared with Connor and Commissioner Chmiel. Mollie recommends that the CRA is all-encompassing and considers projects on a case-by-case basis.

Solveig suggested that the Commission come up with draft language/ordinances that can be taken to the City Council. Mollie responded that she has the draft legislation and ordinances that are needed. Mollie further added that the footprint for the CRA could be the entire City limits or it could be a certain area. Mollie suggested that the Ridges should be a CRA. Solveig said that Alan Swank, who is the Chair of the Planning Committee on City Council could be interested in this. Shay would like Commissioner Chmiel and Connor to present to the Commission on the CRA proposal/ criteria.

7. Committee Updates

Nominating Committee: None

New Development Committee: None

8. Pew Charitable Trust article- Rank-order survey results

Megan V. reported on the results from the survey (see below, also sent via email to Commission members). Megan would like the Commission to discuss what is already being done so as to inform the Commission on next steps. Shay pointed out that there are discrepancies on what already happens and perhaps inefficiencies in the system– the City does not have a digital platform that citizens can track progress.

Mollie suggested that Meghan prepare a 15-20 minute presentation to inform the Commission what is already being done, what is going to be on the Comprehensive Plan, and what cannot be done. Solveig endorsed this idea and would like to support these priorities moving forward. Mollie would like to also know from Meghan what may not move forward or would not have support to proceed. Solveig added that ADUs have been part of the East side neighborhood for

several years and probably exists in other parts of the City. She believes that ADUs are important for first-time homeowners and for seniors to live in the community along with intergenerational living which enriches communities. Shay contributed that his company has designed several ADUs (not in Athens because it is not legal here) and the intergenerational component is the most common use case so individuals can age in place, or subdivide property so they can still afford to live in the community.

Top priorities (by lowest average rank, where 1 = highest priority):

1. **Allowing accessory dwelling units (ADUs)** — avg rank 4.73, median 4, 2 first-choice votes, 4 top-3 votes
2. **Allowing apartments by-right near transit** — avg 5.00, median 4, 0 first-choice, 5 top-3 (*broad upper-tier support even without #1 votes*)
3. **Converting commercial buildings to apartments** — avg 5.55, median 5, 4 first-choice (*the most #1 votes*), 4 top-3

Middle tier:

- **Adopting preapproved plans** — avg 5.73, median 6, 1 first-choice, 4 top-3
- **Allowing apartments on commercially zoned land** — avg 5.91, median 4, 0 first-choice, 4 top-3
- **Reducing minimum lot sizes (starter homes)** — avg 5.91, median 5, 1 first-choice, 3 top-3
- **Addressing parking mandates** — avg 6.00, median 6, 1 first-choice, 3 top-3
- **Digital permitting** — avg 6.55, median 6, 1 first-choice, 2 top-3
- **Clarity on off-site construction (modular/manufactured)** — avg 7.27, median 8, 0 first-choice, 2 top-3

Lowest priorities:

- **Pre-submission reviews** — avg 9.36, median 11, 4 bottom-3
- **Administrative (vs. conditional) approvals** — avg 9.91, median 10, 3 bottom-3
- **Other** — avg 10.27, median 14, 7 bottom-3 (*polarizing*)
- **Third-party inspections & plan review** — avg 11.09, median 11, 5 bottom-3
- **Phased approval** — avg 11.73, median 12, 7 bottom-3 (*consistently deprioritized*)

7. Committee Reports Contd...

Neighborhood Revitalization Committee- Neighborhood Associations

Solveig provided updates. The Westside Community Association (WCA) has been preparing for a Spring cleanup during the University's April Earth Day events. Solveig thinks that shared experiences such as this would help neighbors "be more neighborly".

Rob Delach from the audience provided an update and said that the WCA group has approved the neighborhood revitalization committee and their first step is to get a committee of minimum 5, maximum 9 volunteers. Solveig updated that the committee now has 8. This project is a proposal from Habitat, it is a 5 year project, has a Steering Committee and has processes to gather information from the community and would then use grants to use towards projects that help the neighborhood- lighting, infrastructure, cleanup. Solveig hopes that this is a model that can be used broadly to Southeast Ohio and beyond.

Neighborhood Revitalization Committee- Rental Inspection Processes Survey

Solveig reported about the Rental Inspections Processes subcommittee has finalized two surveys– one for landlord and property manager and another one for renters/tenants. Surveys have been vetted through several attorneys including LASCO and other landlords. The surveys are being created on Qualtrics. Solveig thanked Rob for the landlord database of 527 landlords with an email– they will be emailed separately. For the tenant survey, these will be distributed through multiple means including in classrooms, neighborhood associations, newspapers, etc. Solveig has sent the Commission members the press release that will be published by the newspapers on Friday. Solveig has also received more information from the City that will be analyzed. Solveig is not aware when the new Director of Code will be starting. Solveig mentioned that those living at the Athens Metropolitan Housing Authority and Kershaw Green will not participate in the survey as they have a different inspection process.

Communication/ Education Ad-Hoc Committee- no updates

9. Concluding Remarks: None

10. Motion to Adjourn

Mollie moved to adjourn at 1:03 p.m. All in favor.

Minutes completed by Maria Modayil, Secretary, Affordable Housing Commission.



Durable Housing That Builds Community

By stacking concrete 3D printing, composite manufacturing, and smart design, we're changing how housing is built.

Our approach delivers long-lasting structures, efficient construction, and meaningful workforce opportunities, proving that quality, speed, and community impact can coexist.

Built by Local Crews

Crew Training

4-person team trained in less than 1 month on integrated construction systems and specialized techniques.

Systems & Interior

~60 days for complete mechanical installation, interior finishing, and appliance placement.

1

2

3

4

Foundation & Structure

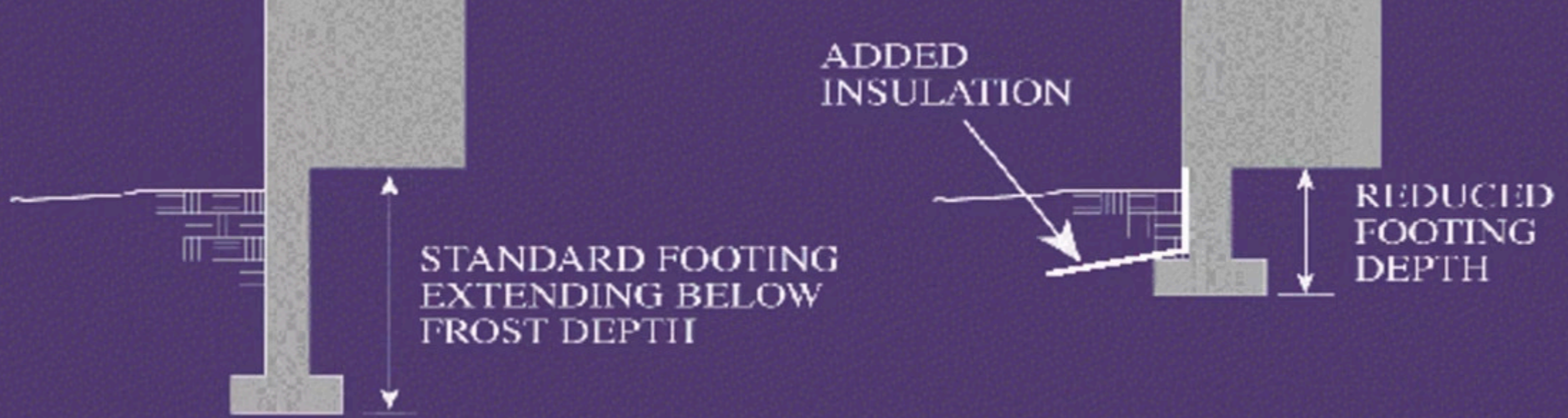
~30 days for foundation installation, concrete curing, and primary structural assembly.

Turnkey Delivery

~90 total days from groundbreaking to move-in ready home.

This approach creates local skilled jobs, delivers direct economic benefit to the community, and builds lasting technical capacity beyond the project.





FOUNDATION

Foundation: FPSF vs. 32" Deep Footer + Slab

Frost-Protected Shallow Foundations (FPSF) deliver superior performance in cold climates while reducing material costs and construction complexity compared to traditional deep footer systems.

Less Material, Same Strength

FPSF uses insulation, not depth, to manage frost, cutting concrete and excavation by ~40–60% compared to deep footers.

Faster, Simpler Construction

One monolithic pour with fewer trades and steps vs. multiple pours, CMU walls, and longer schedules.

Built for Cold Climates

Continuous insulation and no masonry joints reduce freeze–thaw cracking and improve long-term durability.



 3D CONCRETE PRINTING

Permanent, Disaster-Resilient Structure

Concrete Walls

Factory Made or Built On-Site

Reinforced concrete exterior walls are 3D-printed either off-site or on-site, using digital design and advanced engineering to deliver precision, integrated utilities, and superior strength and durability compared to wood framing.

Fire Resistant

Hurricane Resistant

Flood Resistant

More Living Space per Wall Built

As layouts move from rectangular to square to circular, the same amount of linear feet of walls begin to enclose more and more usable living space.

“What living area can 96 linear feet of wall provide?”

320 sqft

40×8 Rectangle

576 sqft

24×24 Square

736 sqft

96 ft perimeter circle



Integrated 1-day Roof Installation



Our roof system replaces traditional multi-step construction with a single, fully integrated assembly.

- Sloped walls create roof pitch
- Integrated metal beams replace traditional trusses and support insulated metal roof panels
- A single integrated roof panel replaces traditional metal sheathing, insulation layers, and interior drywall.
- Full structural roof and finished interior ceiling installed in one day
- Cuts weeks off the schedule and delivers immediate weather protection



 INTERIOR SYSTEMS

Metal Studs Built to Last

Interior walls represent a critical but often overlooked opportunity for durability improvement. Our metal stud framing system with panelized wall finishes replaces traditional wood studs and field-applied drywall with a superior alternative engineered for longevity and precision.



Moisture Proof

Steel framing does not absorb water, eliminating rot and mold growth risks that plague wood construction.



Dimensionally Stable

Metal studs remain perfectly straight and true, never warping, twisting, or shrinking like dimensional lumber.



Fire Resistant

Non-combustible steel framing significantly improves fire safety compared to wood stud walls.



Rapid Installation

Panelized finish systems install in days instead of the weeks required for traditional drywall finishing.




Optimized Thermal Envelope

An integrated building envelope strategy matches insulation to each assembly, creating a continuous air and thermal barrier that improves efficiency, manages moisture, and enhances long-term durability.

01
3D-Printed Concrete Wall Cavities
Poured closed-cell foam fills the designed voids within printed concrete panels,

02
Metal Insulated Roof Panels
Expanded polystyrene (EPS) foam core integrates insulation with the roof system.

03
Non-Printed Exterior Walls
EPS Foam and/or Rockwool enables bridging between

 SYSTEMS DESIGN

Centralized Mechanical Core

HVAC, water heating, electrical distribution, and plumbing are centralized to improve efficiency, and simplify long-term maintenance.



Ducted Mini-Split HVAC



Tankless Hot Water



Fully Equipped Kitchen & Laundry



Diverse Interior Wall Options

We provide multiple finishing options so that owners have a wider set of choices



PVC Panels

Waterproof and durable, ideal for HVAC and storage rooms



Teak Fluted Wall Panels

Used for contemporary and textured accents



Shiplap Paneling

Classic shiplap for quaint accents with a coastal feel.



Cedar Wood Panels

Providing natural aroma and pest resistance



Faster, Stronger, Community-Built

Traditional construction approaches force impossible tradeoffs between speed, durability, affordability, and community impact. Our integrated system proves these tradeoffs are unnecessary when construction is reimaged from first principles.

Accelerated Timeline

Utilities-on-site to Key-on-hand in 90 days

Generational Durability

Disaster-resistant materials that last generations

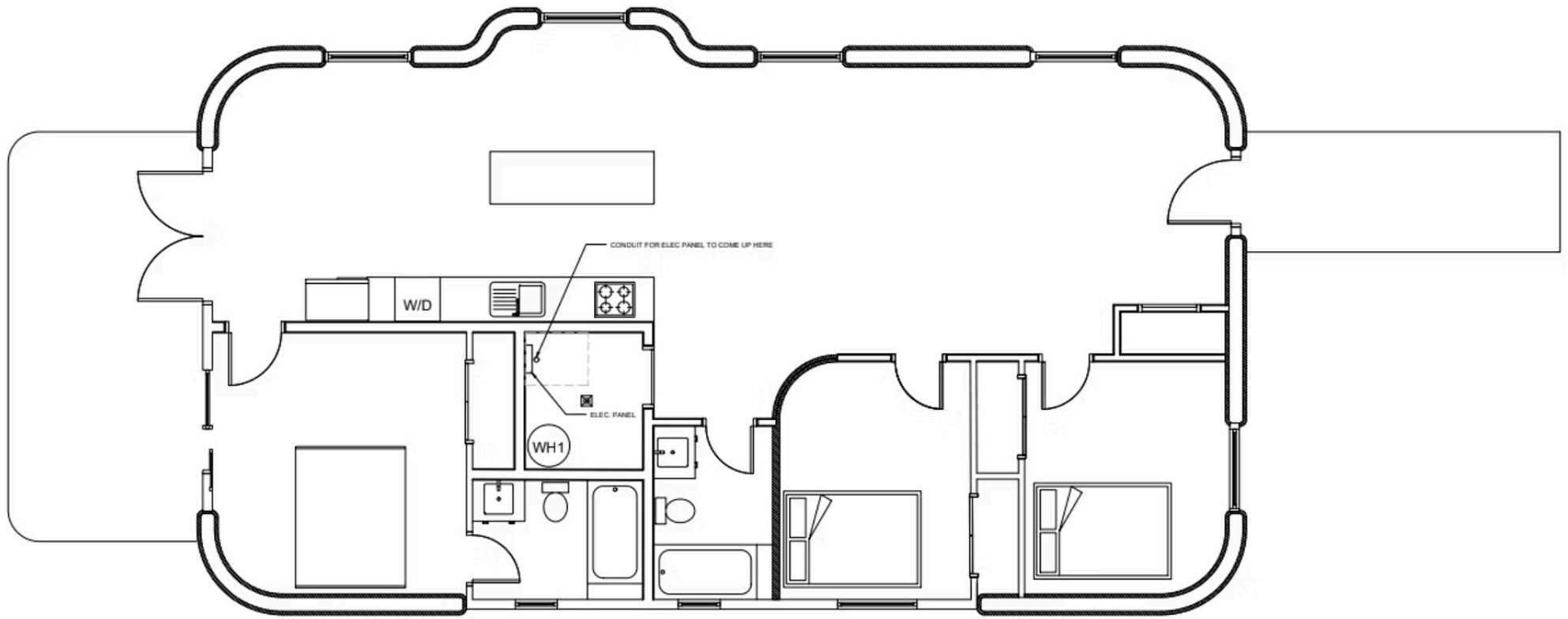
True Affordability

\$250/square foot for fully functional home designs

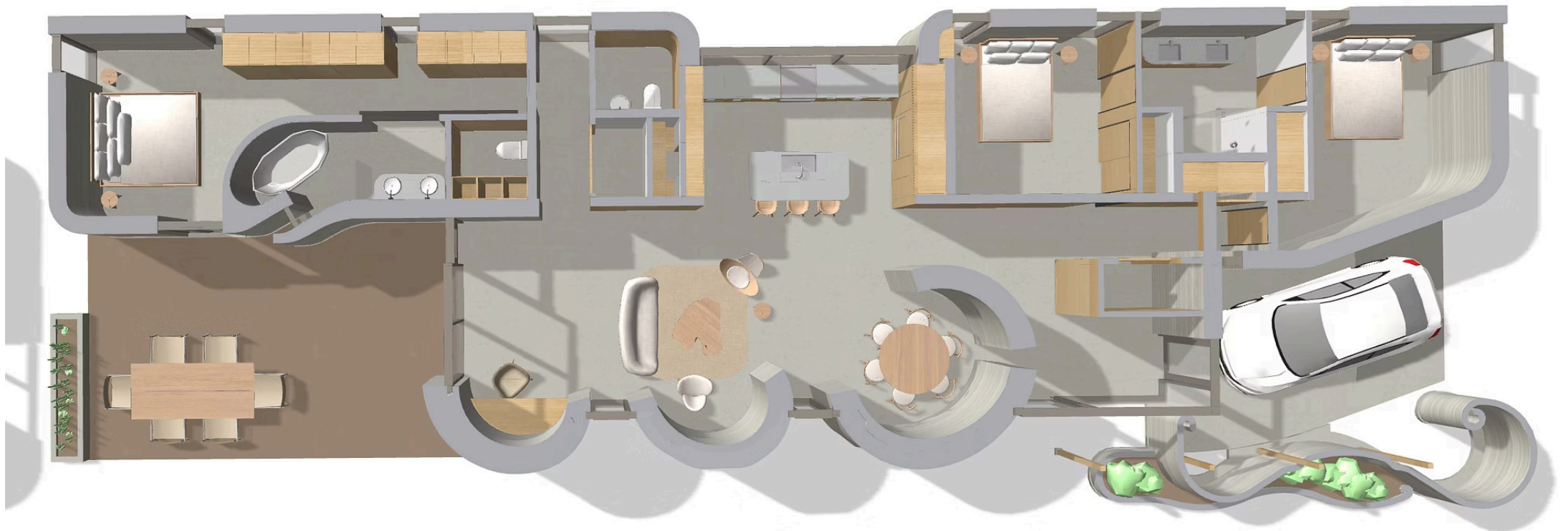
Workforce Development

Create local jobs for the community

Inspiration - 3DCP + American Farmhouse

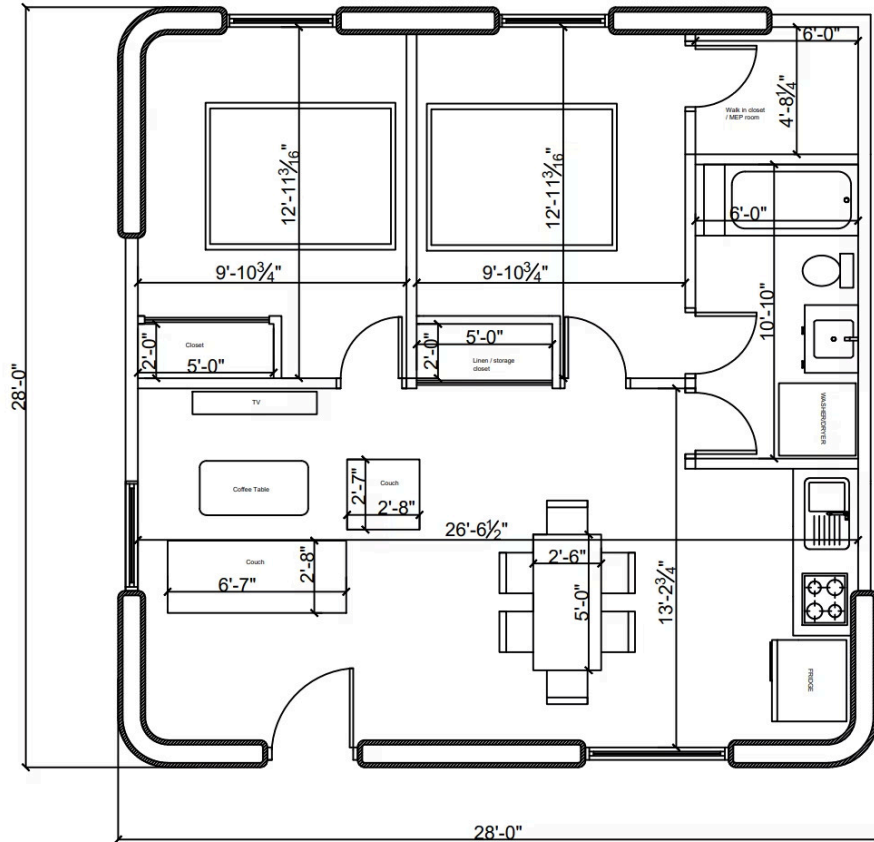


Inspiration - 3DCP + MCM



Inspiration - 3DCP + Industrial Flat

Welcome Home Ohio Efficient and Compliant Floorplan



Inspiration – 3DCP + Organic Contemporary

