Via Electronic Mail
December 3, 2019

To: Truro Zoning Board of Appeals
c/o Jeffrey Ribeiro, Town Planner

Re: Cape Cod Commission Staff Comments
“Cloverleaf” 40B/ Comprehensive Permit Application, 22 Highland Road, Truro
Community Housing Resource, Inc./ Ted Malone

cc: Kevin Grunwald, Truro CCC representative
Harold Mitchell, CCC Chair
Elizabeth Taylor, Chair, CCC Committee on Planning and Regulation

Pursuant to Section 13(j) of the Cape Cod Commission Act, the Cape Cod Commission (herein, “Commission” or “CCC”) is considered a “Local Board” for purposes of MGL Ch. 40B, ss. 20-23. Accordingly, the Commission provides, through its staff and in its capacity as a Local Board, the following review comments to the ZBA on the above-referenced matter.

The Commission staff commends the Town on its local planning process for the project to date, which process has shaped the project to its benefit. The project site is a former portion of the Route 6 layout, which was conveyed by the Commonwealth to the town for affordable housing purposes. The Town crafted the RFP for the project reflecting those concerns and priorities identified during the local planning process; the applicant’s bid and successive project design in turn reflect those local concerns and priorities.

AFFORDABLE HOUSING
There continues to be an acute need for affordable housing in all towns on Cape Cod, particularly those on the Outer Cape, and for affordable rental units especially. Only 2.3% of Truro’s existing housing stock is considered affordable.

The Cape Cod Commission Act and Cape Cod Regional Policy Plan look to preserve the social diversity of the region by promoting the development of affordable housing for low- and moderate-income people.
The project meets these concerns. The applicant proposes to construct 40 rental units in a mix of unit and building types. Of the 40 units, 45% are proposed one-bedroom units; 35% are proposed two-bedroom units; and 20% are proposed three-bedroom units. 27 of 40 will be deed restricted as affordable (21 at or below 60% AMI; 6 at or below 80% AMI. This proposal well exceeds Ch. 40B’s 20-25% minimum affordability requirement and would nearly double the number of existing affordable units in the town. In addition, 6 units will be restricted as “workforce” housing at or below 110% AMI.

**TRANSPORTATION**

The project site is well-located within proximity to the regional roadway network via Route 6 and to existing Cape Cod Regional Transit Authority (CCRTA) transit service. There is no significant crash history on Highland Road in the vicinity of the proposed site. Based on the CCC traffic count database, the estimated 2018 Annual Average Daily Traffic (AADT) on Highland Road (west of the proposed site) is 2,000 vehicles per day while the Summer ADT is 2,700 vehicles per day. The AADT for Route 6 (south of Highland Road) is 14,500 vehicles per day while in the Summer the ADT is 19,000 vehicles per day.

Based on the Institute of Transportation Engineers (ITE) Trip Generation Handbook, 10th edition, Land Use Code 220 (Multi-Family Housing Low Rise), the project is expected to generate approximately 262 daily vehicle trips, 24 vehicle trips (7 entering, 17 exiting) during the weekday morning peak hour and 28 vehicle trips (17 entering, 11 exiting) during the weekday evening peak hour.

CCC Transportation Staff strongly encourage the applicant to partner with the Town of Truro, MassDOT, and the CCRTA to provide an ADA-compliant sidewalk connecting the site from the proposed site drive to the existing bus stop/shelter on Highland Road (approx. 350 feet west of the site). This is a great opportunity for the applicant to reduce potential traffic impacts associated with the project, given the availability of existing transit service in proximity to the site. Consideration of street lighting sufficient to ensure safe passage should be discussed along with the sidewalk.

Note, that the project site drive onto Highland Road as well as the proposed rear gated access drive onto Route 6 will require a MassDOT Access Permit/s.

Finally, as a related community design issue, several of the proposed buildings are relatively close to the Route 6 ROW. While there is currently a significant naturally vegetated buffer between the proposed buildings and the Route 6 roadway itself, should that area of the ROW be developed or altered in the future (such as with a sidewalk, bicycle or multi-use path), it is possible those buildings could be more greatly exposed to Route 6. The applicant could consider adding supplemental landscaping in this part of the project site now or later in the case of such eventuality, or might come to agreement with MassDOT and the Town that in such case, ROW work would include retaining or supplementing vegetative screening sufficient to buffer the development from Route 6.

**WATER RESOURCES**

The Cape Cod Regional Policy Plan contains certain goals and objectives that aim to protect and preserve a variety of regionally significant water resources: freshwater resources (such as
ponds); marine resources (such as estuaries and embayments); and drinking water resources (such as wells and areas that contribute to wells).

More specifically, the Cape Cod Commission has a long standing policy that aims to limit project site-wide nitrogen loading to a concentration of 5 mg/L or less in order to protect and preserve the drinking water quality of supply wells and areas that contribute to them: these areas include public drinking water supplies, private wells, and the sole source Cape Cod Aquifer in general. Included in the concentration limit are those controllable sources of nitrogen typically associated with development: wastewater, stormwater and turf fertilization.

The project site is in a sub-watershed that directly discharges to Cape Cod Bay, and thus is not considered an impaired area requiring limits on estuarine nitrogen inputs.

The site is not located in a Wellhead Protection Area or Potential Public Water Supply Area relative to public water supply wells. However, non-community public water supply wells are located to the west, south, and northeast of the project site; and private residential wells are located to the southwest and northeast. The southern corner of the project site does extend into the Interim Wellhead Protection Area for the Mamarazzi Restaurant non-community supply well.

The project is proposed to be served by a Title V compliant septic system. Based on a preliminary calculation performed by Commissions staff, the project’s sitewide nitrogen loading concentration (based on a proposed design flow for 70 bedrooms and 7700 gallons per day) would be nearly 19 mg/L. Groundwater flow at the site appears to be generally to the west / southwest, but without local water table measurements it is not possible to more precisely determine the direction of groundwater flow or likely path of septic system effluent.

Though there is currently no municipal water service to the site, municipal water service is proposed to be extended to the site to serve the project. Design has been completed to extend municipal water to the project site and grant funds have been obtained to fund the water main extension (the Town has recently been awarded a MassWorks grant).

The project site is bordered to the north and southeast by private residences, and there are five single family homes within 300 feet of the project location. As there are several non-community supply wells and private wells potentially located directly downgradient from the proposed septic system at distances ranging roughly from 500 to 1,000 feet, the proposed development could potentially pose some risk to these water supplies. As feasible, a way to mitigate this potential risk would be to serve these downgradient properties with the extended municipal water supply. The applicant could also consider incorporating treatment into the project’s septic system design to reduce its overall nitrogen load.

The applicant should also consider addressing the quality of the project’s stormwater. Such water quality treatment and enhanced stormwater best management practices would, among other things, reduce nitrogen inputs to drinking water resources. Because the site already requires substantial earthwork and grading, there are likely opportunities to re-design some of the landscaped areas to provide water quality treatment for stormwater runoff rather than managing it simply through infiltration. The current stormwater system does manage roof runoff through direct infiltration, which is encouraged in the Regional Policy Plan, but does not otherwise appear to provide any water quality treatment capacity for runoff from parking and road surfaces at the site. Strategies that could be employed to achieve this include the use of
bioretention practices such as vegetated swales, filter strips, and rain gardens (which could all be incorporated into the landscape design).

Commission staff notes that the applicant has proposed a landscaping of native plantings and groundcovers that will require little if any nitrogen fertilizer applications to maintain in a healthy state.

A Phase I Environmental Site Assessment was performed on the project site which did not identify any Recognized Environmental Conditions (RECs) or Suspect Conditions. Additionally, the site is located approximately 1-mile upgradient of the former North Truro Naval Air Station, and historic aerial photos of the area do not appear to show any previous development on the site.

NATURAL RESOURCES

- There are no mapped wetlands or vernal pools on or near the site;
- The site is not within the FEMA floodplain;
- The site abuts the Cape Cod National Seashore;
- The site is within mapped priority habitat for eastern box turtle under MESA. NHESP has determined that a “take” can be avoided with implementation of an approved turtle protection plan;
- The project involves significant alteration of existing natural site grade, contours and vegetation. To minimize impacts to on-site and surrounding open space and wildlife and plant habitat areas during construction, the applicant should develop and implement, among other things, the following work plans and protocols:
  - Erosion and sediment control plan;
  - Soils management plan – Soils should be stored and reused on site as much as possible to avoid excessive movement of soils and truck trips;
  - Given the extent of existing tree cover on the site, the number of trees proposed to be removed, the potential for birds to be nesting in those trees, and the proximity of the site to the CCNS, tree removal should avoid the spring/summer breeding bird season;
  - Invasive species management plan- measures should be taken (such as planting native species as proposed) to prevent introducing invasive species onto the site especially given the proximity to the CCNS;
  - To the extent feasible, the applicant should consider burying and co-locating underground utilities proposed to serve the site.

COMMUNITY DESIGN

The project proposes 40 units of new housing on 3.9 acres in a context-sensitive design that includes 13 buildings of various size and form, all clustered around a central green space. The project is in an area with a rural character and the design responds by providing a meandering access road that limits views into the development and maintains the natural vegetated character of the roadway. Most of the proposed buildings are modest in size (the largest of the proposed buildings is located to the rear of the site) and take varying forms, generally responding to the surrounding context with traditional building design features: varied, appropriately-pitched roofs; articulated facades; and the use of natural siding materials.