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Martha's Vineyard Commission

DRI # 587 World Revival Church MVC Staff Report – 12/9/05 Note: New information is in bold type.

1. **DESCRIPTION**

- **1.1 Applicant:** Ronei Rezende (Pastor; World Revival Church), Jamie Weissman and Darren Reubens (Architects/Agents)
- **1.2 Project Location:** Edgartown Vineyard Haven Road, Oak Bluffs Map 56 Lot 13.1 (1.5 acres)
- 1.3 Proposal: To construct a new church
- **1.4 Zoning:** R3 60,000 square feet minimum lot size
- **1.5 Surrounding Land Uses:** Woods, rural residential, funeral home, Free Masons Lodge. Not far from High School and large garden center.
- 1.6 Project History: The congregation has been meeting in the Masons Hall. They want their own church and have plans to build one on Map 56 Lot 13.1. They received a Building Permit from Oak Bluffs last year and proceeded to clear the lot. Funding was held up due to renovations at a sister church in Boston and the building permit expired in the meantime. When they went to renew the building permit they were referred to the MVC.
- 1.7 Project Summary: The applicant has revised the project somewhat during the DRI process. The plan now is to construct a new church on Edgartown Vineyard Haven Road that seats 200 with a 5,500 sf footprint and 74 parking spaces.

2. ADMINISTRATIVE SUMMARY

- 2.1 DRI Referral: Oak Bluffs Interim Building Inspector.
- **2.2 DRI Trigger:** 3.601 Any development which proposes the creation of a ... place of assembly ... of 2,000 square feet or more and which is designed to serve the residents of more than one town.
- **2.3 Pre-Application meeting with staff**: May 19, 2005
- 2.4 LUPC: June 13, 2005, August 29, 2005
- **2.5** Site visits: August 29, 2005
- **2.6 Public Hearing:** November 3, 2005

3. PLANNING CONCERNS

3.1 <u>Some Key Issues</u>

- How large should the Church/Community Center Building be?
- How much of the lot should be dedicated to development?
- How much of the lot should be preserved/restored to vegetation?
- What if the traffic and wastewater numbers are much higher than expected?

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3.2 Environment

- **Vegetation:** The site was woods that have been almost completely removed.
- Habitat: The site is on a major island road but it is on a stretch that was wooded.
- **Water:** The project will have Town water.

• Wastewater / Stormwater:

The site is located at an elevation of about 70 to 80 feet. The soil on site is Carver loamy coarse sand on slopes of 3 to 8 percent. Carver soil has a large capacity to rapidly infiltrate water. Groundwater is expected at a depth of 70 feet (plus/minus) below grade. There should be no physical constraints on disposal of wastewater or stormwater due to the soil type and site elevation.

The site is within the Sengekontacket Pond watershed. This Pond is a nitrogen sensitive coastal pond. The nitrogen load limits for Sengekontacket have not been established as rigorously as those for other ponds. The limits are based on tide range and pond volume information collected by Arthur Gaines, WHOI. The guidance limits are 5.1 kilograms per acre per year for the highest water quality and 15.3 kilos per acre per year for average water quality.

Nitrogen Loading:

The Applicant has proposed to use a Bioclere denitrification system for wastewater treatment. These systems are capable of producing an effluent at or below 19 milligrams per liter. Our nitrogen loading estimates are based on the average annual effluent being at this concentration. This will require on-going maintenance and testing to assure the system is operating at the required treatment level. Staff suggests that the MVC require quarterly testing until 4 tests meet or beat the 19-ppm requirement at which time the applicant can move to annual testing with the proviso that, if an annual test exceeds 19 ppm, the quarterly testing requirement begins again. A certified lab should do the testing with results provided to the Board of Health and the MVC. A maintenance contract should be kept in place with the company or a certified wastewater plant operator.

This estimate is based on wastewater flow at 1.5 gallons/seat for 200 seats with the lower estimate based on services 3 times per week and the highest based on 5 per week. The kitchen flow is based on 500 gallons per use with the lowest loading from use 3 times per week and the highest based on use 5 times per week. Wastewater will be denitrified with a Bioclere type system. Stormwater loading is based on the reduced building size (1000 square foot reduction to 5500 square feet) and an impermeable parking/ drive area of 27,400 square feet. The loading is as follows:

Source	Lowest N load	Highest N load
	kg/ac/yr	kg/ac/yr
Seats	2.25	3.74
Kitchen	3.74	6.23
Office	0.11	0.11
Roof	0.27	0.27
Parking Lot & drive	0.91	0.91
Total	7.2	11.3

NOTE: Nitrogen from landscaping is not included in this loading estimate. An area of 9,000 square feet fertilized 3 times/year at standard rates would add 2.0 kilograms to the total.

Stormwater:

Stormwater carries nitrogen from acid rain and from accumulation of organic sources on roof and parking areas. The parking surface will be gravel that will retain more of the runoff than would a paved area. The runoff from the parking area will be infiltrated in an Infiltrator system in a gravel-filled trench around the perimeter of the lot. Roof water will be infiltrated in dry basins.

The roof is 5,500 square feet in area and will contribute 0.41 kilograms of nitrogen per year from the acid rain content. The 28,400 square foot parking lot will add another 1.41 kilograms of nitrogen per year.

Summary:

The total nitrogen load is estimated to be 11.3 kilograms per year or 7.2 kilograms per acre per year.

3.3 <u>Transportation</u>

- Access: Edgartown-Vineyard Haven Road
- **Parking:** Revised plans for the property show 74 parking spaces.

Traffic:

- Currently the Church meets during the off peak hours and the impact of the traffic on the road network can be minimized if they continue to meet during those hours.
- The study estimates the project to generate 300 daily one-way trips with 120 peak hour trips based on the manual counts done at the site driveway.
- The comparison of the analysis of "No-Build" (2010) and "Build" scenario indicates that the
 - "Blinking Light Intersection" will continue to operate at LOS F during Weekday AM and PM peak hours and Saturday midday peak hour for both "No-Build" and "Build" scenarios.
 - Edg-VH Road/County Road intersection will deteriorate from LOS E to LOS F during AM and PM peak hours and Saturday peak hour from 2010 "No-Build" scenario to "Build" scenario.
 - The intersection of the site driveway with the Edg-VH Road will operate with acceptable LOS C.

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- There was no accident analysis done at any of the study intersections but a review of Mass Highway Crash Data seems to indicate that the Blinker Intersection is experiencing higher than average for District 5 and the Edg-VH Road/County Road intersection has accident rates below the District 5 average.
- The sight distances at the driveway are adequate.
- No analysis was done for impacts of special events such as marriages or festivals.
- The proposal has reduced parking spaces from 84 to 74, which would make it at 0.37 spaces per seat. The report estimates about 120 trips for the build out scenario (peak church gathering) and the parking provided by the project doesn't meet the demand. The report identifies potential options for overflow parking on adjoining properties.
- Parking space reduction to 74 spaces has reduced the square footage of the parking area from 14,290 sf to 12,600 sf.
- The church will use the following three methods to reduce car use:
 - Promote car-pooling using its network of members.
 - Subsidize the cost of purchase of VTA bus passes by members.
 - Create a fund that would allow people to contribute to financially assist those members less able to afford bus passes.
- The entry driveway has been relocated closer to the abutter's property and is now curved to reduce visibility of the parking lot from the road. The church would be agreeable to making this a shared entry when the abutter develops his property in the future.
- Circulation through the parking lot remains one-way, counter-clockwise, around the building.

3.4 Economic Development

• **Affordable Housing:** Religious and Town organizations are generally waived from the affordable housing policy.

3.5 Scenic Values

Streetscape:

- The site is within the Island Roads DCPC. The site has been cleared with only a 50' buffer along the road remaining.
- The impact on scenic values along this semi-rural road is an important consideration.
- Low shrubs proposed along the parking lot would largely screen cars from the view from the road.

Building Design:

• This would be a one-story, pre-fabricated metal structure with wood shingle siding and cathedral ceilings.

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- Revised plans for the building show a pre-engineered steel building with a footprint of 5,500 square feet, a roof height of 23' 8".
- The length of the building has been reduced by 40 feet; the community room has been reduced by 10'; the entry area by 10'. The "wings" have been removed from front façade to reduce the perceived width of the building.
- The size of the sanctuary has not changed.
- The roof of the community room will be perpendicular to that of the sanctuary, in order to visually break up the length of the building.
- The entrance will be on the two sides instead of the front. The roof structure that extended over the entrance has been eliminated.
- The building will be very well insulated to retain heat in the winter and keep the building cool in the summer. They will install fans but do not intend to install air conditioners.
- There will be minimal exterior lighting. Exterior lights will be low down-lights low (3' off ground).

• Site Layout and Landscaping

- According to the architect's calculations the total amount of vegetated open space has been increased to 29, 230 square feet; 46% of lot the area. The area of the building has been reduced to 8% of the site area, that of the driveways and walkways to 27%, and 19% for parking.
- \circ $\;$ There will be a brick walkway around the building.
- The area along the front will be replanted with white pine, spruce and cedar as well as other indigenous plants placed by a certified landscape planter.

Site Design Comparison:

	World Revival Church	Jehovah's Witnesses	Vyd Assembly of God
Acres	1.5 acres	2.2 acres	1.57 acres
Bldg. Footprint s.f.	6,500 s.f.	4,180 s.f.	2,480 s.f.
Seats	200	150	185
Parking Spaces	84	62	70

3.6 Local Impact/Abutters

• The site is within the Island Roads DCPC.

4. CORRESPONDENCE

4.1 Town Officials: None yet

4.2 Public: None yet