SUSAN ST. PIERRE | CONSULTING SERVICES

Memorandum

TO: ENF Distribution List **FROM:** Susan St. Pierre

DATE: 3/7/2016

RE: Cinemaworld Salem

Environmental Notification Form

Supplemental Information

Attached please find supplemental information regarding the Alternatives Analysis included in the Cinemaworld Salem Environmental Notification Form (ENF) previously transmitted to you on or about March 1, 2016. Also included is a revised page 2 of the ENF Form showing corrected sewer generation/water consumption calculations.

If you have any questions or concerns, or need further assistance please contact me at 781-439-2461. Thank you.

Cinemaworld Salem

Environmental Notification Form Supplemental Alternatives Analysis

Introduction

Four Project alternatives were evaluated for the redevelopment of the Project site including a No Build and three alternative site layouts (see Figures 1 through 4 and Table 1 below). As described in the Project Description attached to the ENF filing, the Project Site is 5.46 acres in size and includes a 40-foot wide public right of way, Cedar Road. The site is located on the south side of Highland Avenue (State Route 107), a four-lane major collector roadway. The site consists of two vacant residential structures and a former greenhouse building. The remainder of the site is vacant and partially disturbed and/or wooded. The site has not been in active use for several years. The site slopes downhill at an average grade of 4% from Highland Avenue to the south and west with areas of very steep slopes located along the southeast portion of the site (see Figure 1 Existing Conditions and Figure 5, Mass GIS Features Map).

Project Alternatives

The four Project alternatives evaluated for the redevelopment of the Project site are summarized in Table 1 below and described in the following paragraphs.

An alternative use for the Project site was not evaluated as the Proponents' development focus is limited to family entertainment centers.

Table 1 Alternative Site Layouts								
Alternative	Building Footprint (sf)	# of Parking Spaces	# Cinemas/ (# of seats)	# Bowling Lanes	Sewer Generation (gpd)	Water Consum. (gpd)	Estimated Av. Daily Traffic Generation	
No Build		15-	n/a	n/a				
1	84.800	353	12 (2,075)	22	11,925	13,117	3,104	
2	84,800	323	12 (2,075	22	11,925	13,117	3,104	
3 (Preferred Plan	74,360	383	10 (1,775)	16	10,200	11,220	2,536	

Note: the sewer and water calculations provided in original ENF form were miscalculated; the correct calculations are shown in Table 1 above and on the attached Revised ENF Form page 2.

1. No Build Alternative

The No Build Alternative would leave the site in its current unoccupied state (See Figure 1, Existing Conditions Plan). The City would not realize the number of new job opportunities or tax revenues that the Project would generate and the existing site buildings would continue to deteriorate.

2. Alternative Site Layout 1

Alternative Site Layout 1 was the initial layout plan that the architect developed in consultation with the property owner. The layout includes an 84,800 square foot building housing 12 theaters (with 2,075 seats); 22 bowling alleys, a 120 seat restaurant with bar/lounge, arcade and laser tag facilities, and 353 parking spaces.

As shown on the plan, the layout proposes the relocation of Cedar Road to the northeast portion of the site adjacent to the northerly property line. The street alignment follows the irregular shape of the parcel boundary. Parking was arranged adjacent to Highland Avenue and along the relocated Cedar Road. The building was proposed to be sited immediately adjacent to the southwesterly property line.

The location of Cedar Road proposed in this alternative was later determined to be inefficient by the Project Engineer due to its 90 degree angled layout. Furthermore, because Cedar Road is a public way, access to the abutting properties needs to be provided. The alignment of Cedar Road in this alternative terminates at a very steep portion of the site presenting a design challenge for providing adequate access to the abutting properties. The parking lot layout (dimensions of spaces and aisles) was also determined to be out of compliance with local dimensional requirements.

For these reasons, this Alternative was not pursued.

3. Alternative Site Layout 2

Alternative Site Layout 2 is similar to Alternative Site Layout 1 and the building program remains the same. This alternative also relocates Cedar Road but retains the current location of the Cedar Road curb cut in Highland Avenue and re-aligns the street through the center of the site providing better access at a lower elevation to the off-site portion of Cedar Road and the abutting properties.

Parking is provided along the northeast side of the street and along Highland Avenue. The parking and circulation in this alternative was determined to be more efficient than Alternative Site Layout 1. In addition, the number of parking spaces is reduced from the 353 parking spaces proposed in Alternative 1 to 323 spaces in order to comply with local dimensional requirements for streets, parking spaces and parking aisles. Similar to Alternative 1, the building is proposed to be sited immediately adjacent to the southwesterly property line.

Further site investigations revealed that large ledge outcrops located in the northeastern portion of the site would require over-blasting to create a suitable subsoil for on-site leaching of stormwater generated from

the parking lot proposed in this area. The area to the southwest which is lower than the northeastern portion of the site presented a more suitable location for stormwater drainage system placement. Finally, the placement of the building in the southwest corner of the site would require the installation of piles to provide adequate structural support for the building.

For these reasons, this Alternative was not pursued.

4. Alternative Site Layout 3, the Preferred Alternative

Alternative Site Layout 3 reduces the overall building footprint so that the building can be located in the northeasterly portion of the site. The building footprint is reduced almost 10,000 square feet from 84,800 square feet to 74,360 square feet and the program is adjusted by reducing the number of cinemas from 12 to 10 (from 2,075 seats to 1,775 seats) and the number of bowling lanes from 22 to 16. Positioning the building in this location allows a less costly option of pinning the foundation to ledge rather than installing piles as required in Alternatives 1 and 2. Additionally, this location increases the visibility of the building for patrons traveling northbound along Highland Avenue.

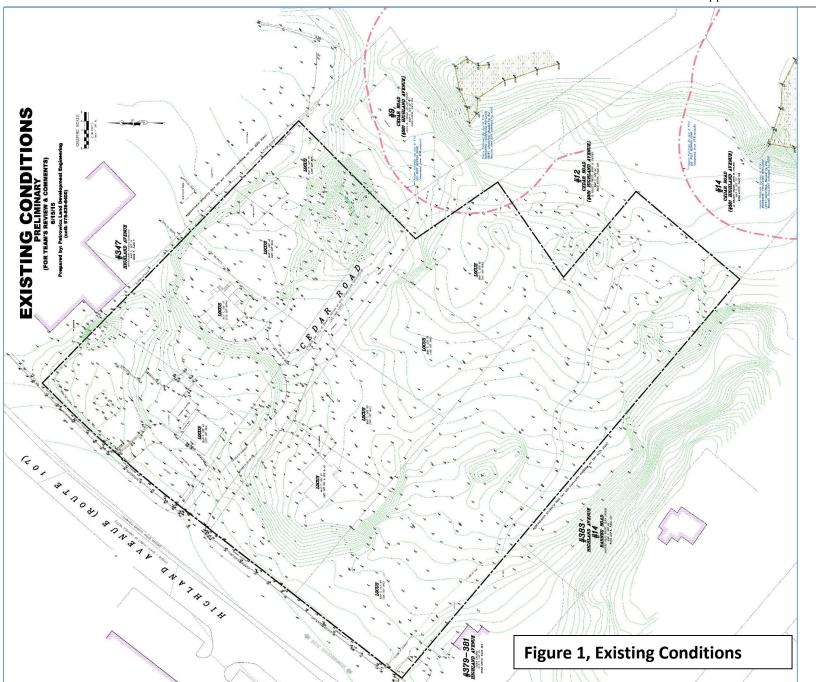
The number of parking spaces was increased to 383 vehicles which is 60 more than that proposed under Site Alternative Layout 2. The additional parking was provided to accommodate additional demand during peak use times (generally Friday and Saturday evenings) and to get closer to the number of spaces that would be required by the City zoning (443 spaces). Note that the Proponent intends on filing the Project with the City Planning Board as a Planned Unit Development. Under the Planned Unit Development provisions, the City can specify use and dimensional requirements that differ from underlying zoning requirements.

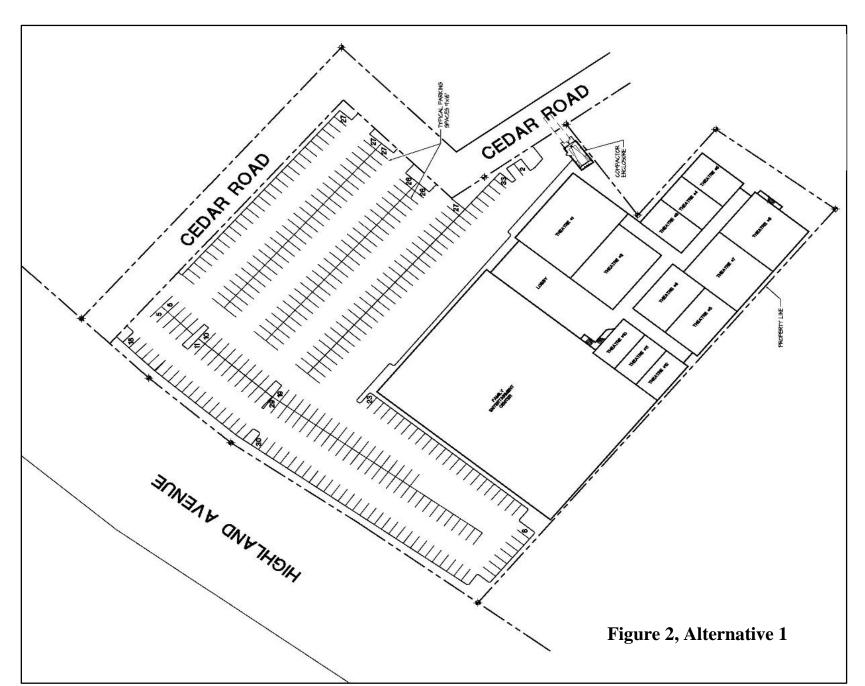
By situating the building in the northeastern portion of the site, this alternative allows Cedar Road to extend through the center of the site separating the building from the parking and circulation resulting in a consolidated parking layout and improved vehicular circulation design. Access to the off-site portion of Cedar Road and the abutting properties is improved with a longer and less steep grade.

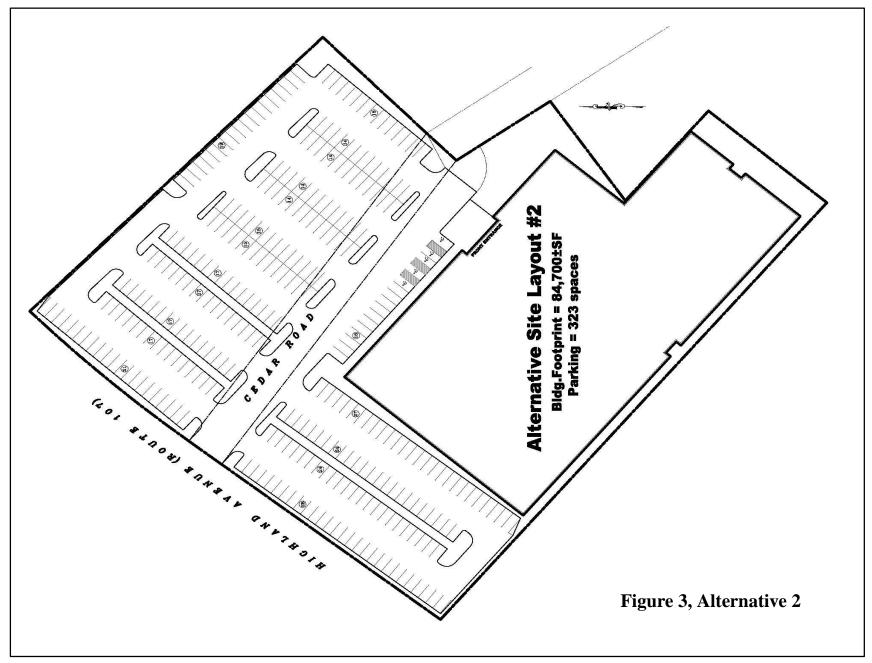
Finally, this alternative uses less water, generates less sewer, and lowers the average daily traffic by 568 vehicles as compared to the other alternatives. For these reasons, this alternative was selected as the Preferred Alternative.

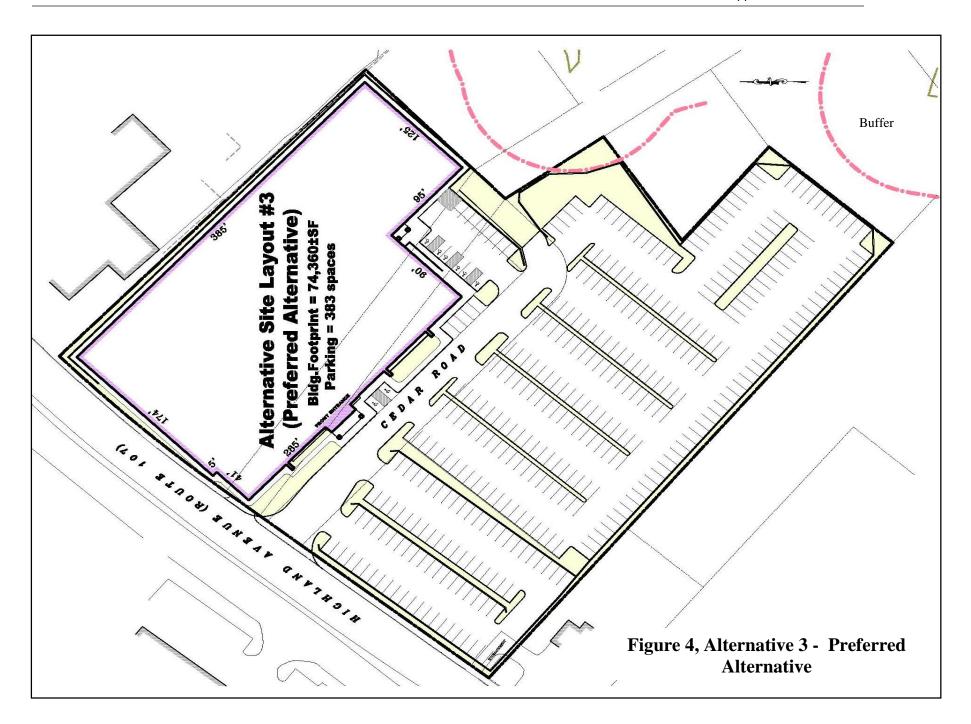
Revised ENF Form Page 2

Summary of Project Size	Existing	Change	Total			
& Environmental Impacts						
LAND						
Total site acreage	5.46					
New acres of land altered		3.36				
Acres of impervious area	0.56	4.32	4.88			
Square feet of new bordering vegetated wetlands alteration		0				
Square feet of new other wetland alteration		0				
Acres of new non-water dependent use of tidelands or waterways		0				
STRUCTURES						
Gross square footage	6,306	+74,295	80,601			
Number of housing units	2	-2	0			
Maximum height (feet)	25	+12	37 (plus a 7'parapet above cinema area)			
TRANSPORTATION			·			
Vehicle trips per day	0	2,536	2,536			
Parking spaces	15	+368	383			
WASTEWATER						
Water Use (Gallons per day)	0	+11,220	11,220			
Water withdrawal (GPD)						
Wastewater generation/treatment (GPD)	0	+10,200	10,200			
Length of water mains (miles)	0	40	40			
Length of sewer mains (miles)	0	0	0			
Has this project been filed with MEPA before? Yes (EEA #) ⊠No						
Has any project on this site been filed with MEPA before? Yes (EEA #)						









Cinemaworld Salem

