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CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
DRAFT ENVIRONMENTAL IMPACT REPORT

PROJECT NAME : MGM Springfield
PROJECT MUNICIPALITY : Springfield
PROJECT WATERSHED : Connecticut River
EEA NUMBER : 15033
PROJECT PROPONENT : Blue Tarp Redevelopment LLC
DATE NOTICED IN MONITOR : December 18, 2013

As Secretary of Energy and Environmental Affairs, I hereby determine that the Draft Environmental Impact Report (DEIR) submitted on this project **adequately and properly** complies with the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62I) and with its implementing regulations (301 CMR 11.00). The Proponent must prepare and submit for review a Final Environmental Impact Report (FEIR) in response to the Scope provided in this Certificate.

Project Description

As described in the DEIR, the project consists of a 881,691 sf mixed-use redevelopment consisting of a casino, a retail and entertainment center, a hotel, apartments, and a daycare center. It is proposed on a 15.6-acre site in downtown Springfield. The Proponent is seeking a Category 1 gaming license pursuant to Chapter 194 of the Acts of 2011: An Act Establishing Expanded Gaming in the Commonwealth and M.G.L. Chapter 23K, Section 19, as amended by Section 16 of the Expanded Gaming Act, which authorizes the Massachusetts Gaming Commission (MGC) to license three casinos. The Act identifies three regions of the state - Region A (Suffolk, Middlesex, Essex, Norfolk and Worcester counties), Region B (Hampshire, Hampden, Franklin and Berkshire counties) and Region C (Bristol, Plymouth, Nantucket, Dukes and Barnstable counties). This project is located in Region B.

The DEIR indicates that the redevelopment is designed to take advantage of the existing transportation infrastructure and to integrate the uses into the existing urban fabric by providing access at the street level and design of streetscape elements including shade trees, street furniture, planters, enhanced lighting, street banners, gathering spaces and landscaping. It consists of two primary areas – the Casino Block (501,108 sf) and the Retail Block (159,397 sf).

The Casino Block includes the following: 126,701 sf of casino gaming facilities with 3,821 gaming positions, a 250-room hotel; 55,584 sf of convention space; 7,682 sf of retail space; 48,131 sf of restaurant space; 9,437 sf of office space and 54 apartments (1-3 bedroom units).

The Retail Block includes a retail and entertainment center (‘Armory Square’) and an eight-story parking structure to provide 3,740 parking spaces. It will include a bowling alley, retail space, restaurant space, multi-screen cinema, event plaza, office space and a radio station.

The redevelopment includes a combination of new construction, redevelopment of existing buildings, retention of existing infrastructure and facilities, and demolition. Demolition includes the WCA boarding house on Bliss Street, the Howard Street Primary School and the Howard Street apartment building. The project includes construction of access drives, extensive landscaping, construction of a new stormwater management system and other associated infrastructure. Vehicular access to and circulation within the site is proposed via State Street, Union Street and East Columbus Avenue.

The DEIR identifies several project changes resulting from evolution of the design and ongoing coordination with State Agencies, the City of Springfield and other stakeholders. The Proponent and the City of Springfield signed a Host Community Agreement (HCA), which was approved by Springfield voters through a referendum on July 16, 2013. The DEIR describes the HCA and includes a copy of the agreement. It includes an initial payment of \$15 million to the City and will provide up to \$25 million annually. Payments include, but are not limited to, property tax payments, community impact payments, community development grants and park improvements. It includes a requirement that the project construction be completed within 33-months of the issuance of a Gaming License and requires the establishment of a Casino Advisory Committee.

The DEIR identifies changes in project uses and square footage. The project has eliminated a proposal to change the use of the Leonardo DaVinci Park. Instead, the Proponent will provide funds to City to design and construct park improvements, relocate playground equipment and fund annual park maintenance costs. Off-site open space improvements, including the construction of a recreational boating dock in a section of the Connecticut Riverwalk and Bikeway, have been eliminated from the project. The Proponent will provide a \$1 million grant to the City for improvements to Riverfront Park.

The construction period for the entire project is estimated at 27 months and construction of the casino is approximately 18 months. The Proponent estimates that its investment in this project is worth \$800 million dollars.

Project Site

The 15.6-acre site is located in downtown Springfield and is comprised of several city blocks. It includes nine acres of surface parking, 4.2 acres of buildings and 1.8 acres of paved surfaces and sidewalks. It is bounded by Main Street to the northeast, Union Street to the southeast, East Columbus Avenue and Interstate 91 (I-91) to the southwest and State Street to the northwest. The site includes portions of Bliss Street and Howard Street. The Connecticut River and associated parkland is located to the west of the site and I-91. The site contains vacant lots and several buildings that include office, retail and residential uses. Many of the buildings were damaged by the tornado that struck Springfield in 2011. A number of buildings within the site are listed on the State and National Registers of Historic Places, the State Register of Historic Places and/or in the Inventory of Historic and Archeological Assets of the Commonwealth. The site is located within ½ mile of Union Station and the Springfield Bus Terminal and is served by several bus routes.

Environmental Impacts

Potential environmental impacts are associated with land alteration, traffic, water supply and wastewater generation, waste site clean-up, and generation of Greenhouse Gas (GHG) emissions. The DEIR provides an updated estimate of environmental impacts based on the current project proposal and associated uses. The overall project has been reduced from 926,900 sf to 881,691 sf, a reduction of 45,209 sf. Impervious surfaces, compared to existing conditions, will be reduced by 1.8 acres (previously 1.3 acres). The project will generate a total of 24,851 average daily vehicle trips (adt) on a Friday (compared to 27,640 identified in the ENF) and 27,590 adt on a Saturday (compared to 29,860 identified in the ENF). When adjusted for mode share, vehicle trips are estimated at 19,673 adt on a weekday and 21,925 adt on a Saturday. Water demand is estimated at 246,646 gallons per day (GPD) and wastewater generation is estimated at 224,224 GPD. The number of parking spaces has been reduced by 1,060 to 3,740.

Measures to avoid, minimize and mitigate environmental impacts include redevelopment of an existing site in close proximity to transit, roadway and signal improvements (including off-site improvements), implementation of a Transportation Demand Management (TDM) program to limit single-occupancy-vehicle (SOV) trips, improved bicycle and pedestrian access, and the construction of a new stormwater management system. The project includes measures to reduce the project's GHG emissions. The project is designed to be certifiable by the U.S. Green Building Council's (GBC) Leadership in Energy and Environmental Design (LEED) at the Gold level. It will include a Combined Heat and Power (CHP) unit to increase efficiency, a rainwater reuse system and financial support to support transit use.

Permitting and Jurisdiction

This project is subject to MEPA review and requires the preparation of a mandatory EIR pursuant to 301 CMR 11.03(6)(a)(6) and (6)(a)(7) because it requires a State Agency Action and it will generate 3,000 or more unadjusted new adt on roadways providing access to a single

location and it includes construction of 1,000 or more new parking spaces at a single location (301 CMR 11.03(6)(a)(7)).

In addition, the project exceeds the following ENF thresholds¹:

- Construction, widening, or maintenance of a roadway or its right-of-way that will cut five or more living public shade trees of 14 or more inches in diameter at breast height (301 CMR 11.03(6)(b)(2)(b));
- Destruction of all or any part of any Historic Structure site listed in or located in any Historic District listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth (301 CMR 11.03(10)(b)(1));
- New discharge or expansion in discharge to a sewer system of 100,000 or more GPD (301 CMR 11.03(5)(b)(4(a)); and,
- Approval in accordance with M.G.L. c. 121B of a new urban renewal plan or a major modification of an existing urban renewal plan (301 CMR 11.03 (1)(b)(7)).

The project requires a Gaming License from the MGC. The project requires a Sewer Connection Permit and a Construction Site Dewatering Permit from the Massachusetts Department of Environmental Protection (MassDEP). It may also require Air Quality Permits from MassDEP for certain project components or equipment, such as the proposed CHP unit. It requires a Vehicular Access Permit from the Massachusetts Department of Transportation (MassDOT). In addition, it requires approval from the Department of Housing & Community Development (DHCD) for an urban renewal plan or urban redevelopment project pursuant to M.G.L. c. 121A or 121B. The project is subject to review by the Massachusetts Historical Commission (MHC). The project is subject to the EEA Greenhouse Gas (GHG) Emissions Policy and Protocol (the GHG Policy).

The project requires a National Pollutant Discharge Elimination System (NPDES) Construction General Permit from the United States Environmental Protection Agency (EPA) and a Determination of No Hazard to Air Navigation from the Federal Aviation Administration (FAA).

Changes to the project have eliminated the requirement to obtain a Chapter 91 (c.91) Waterways License and a Section 401 Water Quality Certification (WQC) from MassDEP. The changes also have eliminated requirements to obtain an Order of Conditions from the Springfield Conservation Commission and a Section 404 Clean Water Act Permit from the United States Army Corps of Engineers (USACOE). The project may require approval from the Federal Highway Administration (FHWA) for modifications to the highway system (I-91) and/or for work on the National Highway System (NHS). If it does require FHWA approvals, the project

¹ The Certificate on the ENF indicated that the project included conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97 (301 CMR 11.03 (1)(b)(3)). As currently proposed, the project no longer proposes conversion of land held for natural resources purposes and, therefore, does not exceed this threshold.

may be subject to the National Environmental Policy Act (NEPA) and review pursuant to Section 106 of the National Historic Preservation Act (NHPA).

Also, the project requires multiple permits and approvals from the City of Springfield, including a Road and Curb Cut Permit, Public Way Discontinue, and Application for Re-Zoning. The Proponent has entered into a HCA with the City of Springfield, which was approved by Springfield voters. The Proponent will enter into a Surrounding Community Agreement with one or more surrounding municipalities.

Because the Proponent is not requesting State Financial Assistance, MEPA jurisdiction is limited to the subject matter of required or potentially required permits; however, the subject matter of the Gaming License confers broad scope jurisdiction and extends to all aspects of the project that may cause Damage to the Environment, as defined by the MEPA regulations.

REVIEW OF THE DRAFT ENVIRONMENTAL IMPACT REPORT

The DEIR includes a detailed project description, identifies changes to the project since the filing of the ENF, an alternatives analysis, identification of baseline environmental conditions, identification of potential impacts and associated technical analysis, and identification of measures to avoid, minimize and mitigate impacts. It provides existing and proposed condition plans. The DEIR includes a traffic study, a mesoscale analysis, a Stormwater Management Report and a summary of the Phase 1A Environmental Impact Assessment (EIA).

Alternatives Analysis

The DEIR includes an alternatives analysis consisting of a comparison of impacts associated with the Preferred Alternative, Mixed Use Alternative, Brimfield Alternative and a No-Build Alternative. It identifies the impacts of each alternative on land alteration, creation of impervious area, impacts to wetland resource areas, traffic generation, parking, water use, and wastewater.

The Mixed Use Alternative substitutes the casino use with retail and restaurant uses, including 278,841 sf of retail space, 130,883 sf of restaurant space, and 45,525 sf of common areas. Consistent with the Preferred Alternative, it includes a 250-room hotel and 54 residential apartment units. The DEIR indicates that this alternative would have greater impacts on the surrounding transportation infrastructure because it would generate at least twice the number of new vehicle trips (up to 43,261 adt) than the Preferred Alternative, depending on the particular uses developed. In addition, the Mixed-Use alternative would result in a greater percentage of trips on local roadways as the type of development would typically generate a large proportion of trips from Springfield and adjacent communities than the Preferred Alternative.

The Brimfield Alternative consists of a destination resort casino on an undeveloped 150-acre site located in Brimfield, Massachusetts. The Proponent evaluated this site for the casino but chose to shift the development from an undeveloped site in a rural location with limited public

transportation services to redevelopment in an urban center. This alternative would require 58 acres of land alteration, including clearing of land, creation of 44 acres of impervious area, and up to 5,000 sf of alteration to wetland resource areas. The site is located near I-90 but has no direct access. Construction of direct access to I-90 would require approvals from MassDOT and FHWA.

State Agencies do not request additional analysis of alternatives or express significant concerns with the project site. The project is consistent with Executive Order 384 Planning for Growth and the Commonwealth's Sustainable Design Principles as it proposes redevelopment of an urban site that has excellent proximity to transit and regional highways. PVPC indicates that the project is generally consistent with *Valley Vision*, the Regional Land Use Plan for the Pioneer Valley region, and note that it is located within an area identified as a "Priority Development Area Suitable for Smart Growth Development" as well as an "Area Suitable for Transit-Oriented Development (TOD)." Additional analysis of alternative sites is not required; however, the FEIR should include the analysis of historic buildings and, based on the findings of this analysis, evaluate alternative site designs that could avoid, minimize and mitigate impacts to historic resources.

Traffic and Transportation

The project will generate a significant level of traffic within the City of Springfield and the region. Trip generation is estimated at 19,673 adt on a Friday and 21,925 adt on a Saturday. Peak hour trips are estimated at 1,290 during the Friday evening peak and 1,312 during the Saturday midday peak. The DEIR describes how access will be provided to the site, includes a revised Traffic Impact Assessment (TIA), assesses the project's impact on traffic growth and operations, identifies roadway improvements, provides a TDM program to minimize single occupancy vehicle (SOV) trips and encourage use of alternative transportation, and identifies other measures to avoid, minimize and mitigate traffic impacts.

The majority of comments received on the DEIR are associated with traffic and transportation issues. Comments from MassDOT indicate that the DEIR provides a comprehensive assessment of the transportation impacts of the project based on a thorough analysis of existing and proposed conditions. The comments indicate that MassDOT concurs with most of the transportation findings in the DEIR and is generally satisfied with the proposed mitigation commitments. The letter identifies a number of issues that should be addressed in the FEIR. In addition, it notes the possibility that the project will require FHWA review and recommends the Proponent consult with FHWA.

Comments from PVPC, the City of Chicopee, the Town of West Springfield and the Town of Longmeadow identify some concerns with the traffic analysis and with the proposed approach to development of mitigation with surrounding communities. These commenters emphasize that necessary mitigation should be evaluated and constructed prior to occupation of the project. In addition, comments from existing businesses directly adjacent to the site (Red Rose Pizzeria, Colvest and Courthouse Square) express concern with the project's impacts on existing facilities, in particular traffic impacts.

Primary access to the site is proposed via a full access and egress driveway along East Columbus Avenue, located at the present location of Bliss Street. An exit driveway will be located along East Columbus Avenue at the current location of Howard Street. Secondary access will be provided on State Street and Union Street. Service vehicles and buses will be accommodated at separate driveways on Union Street. An exclusive left-turn lane is proposed on Union Street to accommodate heavy vehicles turning into the facility. Deliveries and bus traffic are expected to occur principally outside the traditional peak hours for the adjacent streets.

Access to the Armory Square parking areas will be provided via three full access and egress driveways along Union Street and Main Street. The primary parking supply will be provided within a multi-story parking garage located in the southwest corner of the site adjacent East Columbus Avenue and the Colvest property.

Patrons will access the casino, hotel, and retail parking facility from State Street, Union Street, and East Columbus Avenue. Patrons exiting the facility and destined for points to the south along Interstate 91 have the option to use State Street to access West Columbus Avenue. They will also have the ability to exit the parking facility and turn right onto Union Street (westbound only), proceed under the Interstate 91 bridge, and turn left onto the Interstate 91 southbound on-ramp.

Public transit access will be provided along Main Street and will include bus stops between State Street and Union Street. The ENF provides a pedestrian access plan that identifies numerous pedestrian access connections to the project site from bordering streets and sidewalks and on-site parking areas.

The DEIR includes a revised TIA prepared in conformance with the *EEA/MassDOT Guidelines for EIR/Environmental Impact Statement (EIS) Traffic Impact Assessments*. The TIA includes an expanded Study Area (Figure 5.2-1) that extends into Longmeadow, Chicopee and West Springfield. The DEIR indicates that the Proponent has consulted with MassDOT, PVPC, the Pioneer Valley Transit Authority (PVRTA), and communities located within the Study Area regarding the data and analysis provided in the DEIR. The TIAS uses a ten-year horizon period (2024) for the majority of the study. A 20-year horizon is used for analysis of proposed roadway improvements that affect elements of the NHS.

As required, the analysis includes consideration of recent roadway improvements (e.g. State Street corridor and Agawam Rotary projects) and projects that are in the planning or construction phases (e.g. I-91 Corridor Study (Exits 1 to 5), Intelligent Transportation System (ITS) Improvement project, Rt5/Rt57 improvements, Memorial Rotary improvements, I-90/Burnett Road/I-291 in Chicopee, I-90 electronic tolling, Rt159 in Agawam, and Rt 5 Corridor Study in Longmeadow).

Trip generation estimates were developed for each of the land use categories associated with the project. As directed by MassDOT, trip generation data from several other casinos, including Sugarhouse Casino in Philadelphia and Detroit Mohegan Sun and Foxwoods in Connecticut, as well as trip rates identified in environmental reviews of other proposed casinos that are undergoing MEPA review were used to develop a trip generation rate for the casino. The MGM

Grand Casino Detroit site was determined to be the most analogous to the proposed MGM Springfield casino in terms of surrounding demographics, location, size, and other amenities provided such as retail, restaurants, hotel, and convention center. Trip generation counts using Automatic Traffic Recorders (ATR) were collected at the MGM Grand Casino Detroit.

Land uses within the Armory Square Retail block, including residences, were assigned trip generation rates based on standard trip rates published in the Institute of Transportation Engineers (ITE) publication, Trip Generation, 9th Edition. These include Bowling Alley (LUC 437), Multiplex Movie Theater (LUC 445), General Office (LUC 710), Shopping Center (LUC 820), High-Turnover (Sit-Down) Restaurant (LUC 932), Apartment (LUC-220) and Daycare Center (LUC 565).

Shared trips and internal capture rates were applied to trips between the Armory retail block and the Casino Block, but they were not applied within the different casino uses because of the use of empirical trip data to develop casino trip rates. A transit trip credit of five percent was applied to the Armory Square and residential trips. The MGM Grand Detroit provides similar transit access as the proposed MGM Springfield; however, data collected did not include an accounting of transit trips so no additional transit trip credit was applied to the casino trip generation rates nor was any credit taken for pass-by trips.

The trip generation rates for the study casinos ranged from 0.20 to 0.42 trips per gaming station, with an average of 0.29 trips per gaming station during the weekday (Friday) evening peak hour. The trip generation rates ranged from 0.25 to 0.45 trips per gaming station, with an average of 0.32 trips per gaming station during the Saturday evening peak hour. Trip generation rates for MGM Springfield are projected as 0.34 trips per gaming position during the Friday evening peak hour and the Saturday evening peak hour. The rates identified in the DEIR for the (former) Suffolk Downs Casino include 0.31 trips per gaming position during the Friday evening peak and 0.32 trips per gaming position during the Saturday midday peak.

Mode share for casino and hotel patrons and employees was based on "footfall" data obtained from the MGM Grand Casino in Detroit while mode share for the Armory retail uses was based on ITE handbook.

The majority of trips to the project site are assigned to the north along I-91 and I-291 and the south along I-91. Directional distribution of trips was developed using a detailed gravity model. Distribution of casino employee trips was based on US Census Bureau 2000 Journey-to-Work data for City of Springfield. Distribution of casino and hotel patron trips to and from the Project site was based on a detailed gravity model using economic marketing data supplied by MGM Resorts International and supplemented by US Census 2010 population data. They were adjusted to account for appropriate factors such as population, travel time and proximity to other potential casinos. Distribution of trips to and from the Armory Square retail block was based on a gravity model using US Census 2010 population data for municipalities within a 20-mile driving radius of the Project site.

The traffic impact and access study describes both Existing (2012), No-Build (2024), Build with Mitigation (2024) conditions. It provides an operational analysis for intersections and

interchanges for the morning peak hour, the Friday peak hour and the Saturday midday peak hour conditions. It provides a capacity analysis and a summary of average and 95th percentile vehicle queues for each intersection. It presents a merge and diverge for each ramp junction and weaving analysis for all the interchanges located in the Study Area. Traffic signal warrant analysis, conducted according to the Manual of Uniform Traffic Control Devices (MUCTCD), is included in the traffic study. The 2024 No-Build Scenario documents the operating conditions independent of the proposed Project, including existing traffic and new traffic resulting from background growth. A 0.5 percent per year compounded annual background traffic growth rate was used to account for potential future traffic growth and the study assumes full occupancy of the adjacent Colvest/East Columbus LLC site. Site-generated traffic volumes and trip distribution were superimposed upon the 2024 No-Build traffic networks to reflect the 2024 Build conditions.

Those intersections that are under MassDOT jurisdiction or are part of the NHS and for which roadway improvements are proposed were also projected to the year 2034. These intersections include: State Street/St. James Avenue/Oak Street, State Street/Federal Street/Walnut Street, Main Street/State Street, State Street/Chestnut Street/Maple Street, State Street/Dwight Street, East Columbus Avenue/Boland Way, West Columbus Avenue/Memorial Bridge/Boland Way, State Street/East Columbus Avenue, State Street/West Columbus Avenue, Union Street/East Columbus Avenue, and Union Street / West Columbus Avenue.

Traffic analysis identifies significant constraints at several intersections under 2024 No-Build and Build Conditions and identifies intersections where LOS will degrade due to the project. Roadway and signalization improvements are proposed at affected intersections within the Study Area to establish acceptable levels under the 2024 Build Conditions. Proposed improvements for primary project corridors and locations are summarized below. Roadway mitigation is not limited to these improvements; the DEIR includes a more exhaustive list of proposed roadway mitigation.

State Street Corridor: Restripe State Street between Main Street and the MGM Drive to provide a westbound exclusive 10-foot left-turn lane into MGM Drive; install pedestrian flasher assembly at the reconstructed mid-block crosswalk immediately west of MGM Drive; Construct ADA-compliant wheelchair ramps and a pedestrian refuge island at the reconstructed crossing; and, install shared lane marking “sharrows” and bicycle shared lane signage along State Street from West Columbus Avenue.

West and East Columbus Avenue Corridor: Widen East Columbus Avenue between Howard Street and Bliss Street to provide a 12-foot acceleration and deceleration lane; install way-finding and lane use signage along West and East Columbus Avenues to direct drivers towards the Interstate 91 and MGM Springfield access points; widen Union Street along the Project site frontage to provide an exclusive left-turn lane on Union Street eastbound; enhance the pedestrian environment by providing widened sidewalks along the site frontage; restripe Union Street within the existing curb lines to provide two westbound travel lanes and one eastbound travel lane near the intersection with East Columbus Avenue; install a mid-block crosswalk and raised median island with pedestrian refuge just east of

Bus Driveway, construct ADA-compliant wheelchair ramps at the crossing and consider installation of a pedestrian flasher assembly at this crosswalk; install shared lane marking (sharrows) and bicycle shared lane signage along Union Street from West Columbus Avenue to Main Street.

Main Street Corridor: Relocate and improve PVRTA bus stops to provide proper bus stop lengths and bus shelters along Main Street between Union Street and State Street; install a new crosswalk at the relocated bus stop on Main Street just north of Howard Street with ADA-compliant ramps and MUTCD-compliant signage; restripe Main Street between State Street and Union Street to designate parking lanes, bus stops, and travel lanes, including striping sharrow lane markings; consider installation of bicycle lanes along this section of Main Street; and install new parking regulation signs along Main Street between State Street and Main Street to clearly designate proposed parking regulations.

Union Street Corridor: Widen Union Street along the site frontage to provide an exclusive left-turn lane on Union Street eastbound entering the various site driveways to the bus parking and Armory Square; provide widened sidewalks along the site frontage; restripe Union Street within the existing curb lines to provide two westbound travel lanes and one eastbound travel lane near the intersection with East Columbus Avenue; install a trolley stop and shelter on the northerly side of Union Street adjacent to Armory Square; install a mid-block crosswalk and raised median island with pedestrian refuge just east of MGM Bus Driveway, construct ADA-compliant wheelchair ramps at the crossing and consider installation of a pedestrian flasher assembly at this crosswalk; install shared lane markings (sharrows) and bicycle shared lane signage along Union Street from West Columbus Avenue to Main Street.

Rotaries: The North End and Memorial Rotaries are currently striped to provide a single circulating travel lane through the rotaries, although the rotaries are wide enough to accommodate two circulating lanes and some approaches provide two entrance lanes. Due to the lack of clear striping and signage, the rotaries operate inefficiently with a high occurrence of collisions. To improve safety and operations of the North End and Memorial Rotaries, signing and striping modifications are proposed to better define lane usage through the rotaries. No modifications are proposed to existing curb lines.

The operations analysis indicates that the project will not degrade operations of I-91 and I-291. The DEIR indicates that the Proponent will work with MassDOT to deploy variable message signs along I-91 and I-291 to notify motorists of traffic conditions including detours, alternative routes during special events and availability of parking. I note that many comments were provided regarding the analysis of the I-291/Route 5 corridor and the advisability of re-analyzing operations within that area and considering additional mitigation.

Mitigation at some intersections is limited to traffic signal timings, coordination and offset timings, and clearance interval timing modifications to optimize intersection operations. These include: Dwight Street/Interstate 291 SB Ramps, Main Street/Harrison Avenue/Boland Way, East Columbus Avenue/West Columbus Avenue/Main Street/Longhill Street, Mill Street/Locust Street/Belmont Avenue/Fort Pleasant Avenue, Belmont Avenue/Sumner Avenue/Dickinson

Street/Lenox Street, Park Avenue/Union Street (West Springfield), Memorial Avenue / Union Street (West Springfield), and Longmeadow Street (US Route 5)/Forest Glen Road/Western Drive (Longmeadow).

The DEIR includes an assessment of crash rates at each study area intersection and compares them to the state and district averages. This information is provided in a tabular format. The DEIR identifies the following projects that are proposed specifically to address safety issues:

East Columbus Avenue/State Street: Introduce video detection on all approaches for both vehicles and bicycles; install vehicle and bicycle wayfinding and lane use signage on East Columbus Avenue northbound approach to direct drivers toward I-91; modify the existing pedestrian crossing across East Columbus Avenue north of the intersection; eliminate crosswalk on East Columbus Avenue and provide proper signage and fencing to direct pedestrians to the signalized crosswalk at State Street. upgrade wheelchair ramps to comply with ADA standards; and retrofit existing traffic signal with MUTCD-compliant pedestrian push buttons.

West Columbus Avenue/State Street: Install vehicle and bicycle wayfinding signage to direct drivers to local attractions and the Connecticut River Bikeway; introduce video detection on all approaches for both vehicles and bicycles; upgrade wheelchair ramps to comply with ADA standards; and retrofit existing traffic signal with MUTCD-compliant pedestrian push buttons.

Main Street/Union Street: introduce video detection on all approaches for both vehicles and bicycles and retrofit existing traffic signal with MUTCD-compliant pedestrian push buttons.

If traffic monitoring determines that it is warranted, the Proponent and the City of Springfield will optimize traffic signal timings, coordination and offset timings, and clearance interval timings at these three intersections. The DEIR does not describe how improvements at these specific intersections were developed. The FEIR should identify all study area intersections where crash rates exceed the state and district rates, identify proposed mitigation for each or, where mitigation is not proposed, provide an explanation.

Transportation Demand Management

The DEIR includes an extensive TDM program to reduce vehicular trips and encourage the use of alternative transportation. Comments regarding the TDM Program applaud the Proponent's effort to provide a comprehensive, multi-modal approach. Comments also identify opportunities to strengthen the program and request additional information be provided in the FEIR such as providing targeted and effective incentives to encourage transit use and high occupancy vehicles, either in the form of financial incentives or priority treatments, and providing specificity regarding the commitments. The TDM program is comprehensive; however, many of the commitments are quite general. Additional specificity is required to clarify commitments and facilitate tracking of implementation, (e.g. identify bike parking on site plan, identify number of EV charging stations, etc.). A summary of the TDM Program is listed below.

Transit Measures

- Locate development close to PVTA bus and Amtrak services, including Union Station
- Coordinate with PVTA to maintain bus service directly to the site and align shifts and PVTA schedules
- Provide trolley service between the Project site, Union Station, and local attractions such as: Basketball Hall of Fame and Quadrangle Museum Zone
- Promote the use of public transportation and coordinate with PVTA to provide information on the availability of service to employees and patrons
- Provide improved bus stops with passenger amenities (weather protection, seating, real time information, customer information) near the site
- Provide preferential shift selection to employees using transit services.

Pedestrian and Bicycle Treatments

- Update and retrofit pedestrian signal equipment at study area intersections surrounding the site
- Provide striping improvements for bicycle lanes or sharrows along Main Street (between Union Station and the Project site) and State Street (between West Columbus Street and St. James Avenue) with complementary bike signs
- Provide ADA improvements at wheelchair ramps near the site
- Provide enhanced connectivity to the Connecticut River Walk and Bikeway
- Provide secure, weather protected, long-term bicycle parking (for employees and residents) at designated locations within the site
- Provide bicycle racks for short-term users at several locations on-site;
- Provide bicycles and equipment for employees
- Implement a bicycle share program
- Provide showers for employees who commute by walking or biking
- Reconstruct sidewalks along streets surrounding the site that are affected by construction activities to improve access
- Construct mid-block crossing with pedestrian warning device on State Street to service the pedestrian traffic between the Project parking structure and the adjacent courthouse
- Construct mid-block crossing with raised median island on Union Street to service pedestrian traffic to land uses along southerly side of Union Street

Parking Measures

- Provide a reduced valet rate for vehicles with three or more patrons
- Provide preferential parking for rideshare, carpool, and hybrid vehicles
- Provide charging stations for electric vehicles (EVs)
- Implement an intelligent parking system to direct drivers to open parking spaces or nearby facilities controlled by the Springfield Parking Authority

Other Measures:

- Provide a full-time Transportation Coordinator on-site, employed or funded by the Proponent
- Partner with MassRIDES to implement and monitor TDM measures
- Register employees with NuRIDE to encourage ride-sharing

- Provide Car Sharing (Zip Car or equivalent) for resident and employee use with convenient spaces located within the parking structure;
- Encourage vanpool and carpooling programs
- Offer employees a guaranteed ride home program
- Provide and update a monthly Commuter Bulletin
- Facilitate events through coordination with MassRIDES and PVRTA
- Provide a monitoring system to evaluate TDM goals

Public Transportation

The Certificate on the ENF indicated that public transportation should be a core component of the mitigation program and noted the opportunity to fully integrate this project with the existing transit network. The DEIR includes an analysis of existing and future conditions of transit services within the Study Area. As requested, the DEIR evaluates the effect of the project on transit service, including on-time performance and scheduling and concludes that the project should not adversely affect existing transit service.

The DEIR describes the PVRTA Comprehensive Service Analysis (CSA) process which will provide a detailed evaluation of PVRTA bus service and present ways to redesign it to more closely meet the needs of its host communities and riders. It also describes PVRTA's efforts to address gaps in service on Sundays and holidays. The Proponent has made commitments to support PVRTA operations, improve transit infrastructure and introduce a new trolley service.

There are currently two inbound and two outbound stops on Main Street. Four bus routes travel on Main Street and use these stops (G1, G2, G5, and G8) at frequencies of up to ten buses per hour. The stops on Main Street, and the entire frontage, will be altered, especially on the casino Project side of Main Street, as streets, and driveways are removed. It indicates that current stops are substandard lengths and will be improved in coordination with PVRTA and the City of Springfield. Bus stops will be proposed adjacent to crosswalks to allow easy, safe and convenient pedestrian access on Main Street, will be located on sidewalks with a minimum 10-foot width, and will include passenger amenities (signage, sheltered waiting areas, seating, passenger information).

The provision of trolley service will provide convenient transit access within the downtown while promoting tourism in Springfield. The DEIR indicates that the trolley service will use rubber-tired vehicles and will provide connections between Union Station and downtown visitor attractions, including MGM Springfield. It identifies a preliminary route developed by PVRTA and PVPC. No ridership analysis or projections were completed for the trolley service, nor is a fare structure addressed. The transportation analysis does identify ridership associated with this service or assign any credit for trolley trips.

The DEIR also describes the planned renovation of Springfield's Union Station into a regional transportation center that will be the hub for PVRTA's Springfield service, intercity bus service (i.e. Peter Pan and Greyhound) and will be the northern terminus for the Springfield–New Haven High Speed Commuter Rail service, which is expected to start service in 2016.

Many commentors note the opportunity this project provides to strengthen connections between Union Station, downtown and Springfield's tourist destinations.

Comments from PVPC discuss the informal commitments agreed to with the Proponent and indicates that a written commitment will be developed. PVPC indicates that the trolley agreement under discussion assumed that it would be a free service and would provide service at least every 30 minutes on Friday, Saturday and Sunday. In addition their comments request that the Proponent address the cost of providing paratransit service to the project site.

Pedestrian and Bicycle Access and Safety

The project includes measures to support pedestrian and bicycle access and safety as a means of minimizing vehicle trips to the site, to integrate the project into the urban fabric of Springfield and to encourage patrons to visit other tourist destinations and frequent local businesses. The DEIR includes a commitment to improving pedestrian access and amenities along the site frontage, including reconstruction of the sidewalks along East Columbus Avenue, Main Street, State Street, and Union Street to widen sidewalks where feasible and provide additional pedestrian amenities such as benches, pedestrian level lighting, landscaping, and other streetscape improvements. The project will improve connections will be made to the Connecticut River Walk and Bikeway, the Basketball Hall of Fame, and other parks along the Connecticut River. The DEIR includes conceptual circulation plans to identify bicycle and pedestrian access.

Comments on pedestrian and bicycle issues acknowledge the Proponent's commitment to support non-vehicular access to and around the site, request additional information regarding certain aspects of the plans and request more detailed plans for the FEIR. The FEIR should include more detailed plans that clearly identify paths and location of infrastructure (including bicycle parking) and connections. Comments from WalkBoston highlight the project's to create new pedestrian activity and become the basis for walking throughout the downtown Springfield area. By locating restaurants at the street edges along Main and State Streets, and the Armory Square retail and entertainment complex adjacent to the casino, the project design will provide pedestrian attraction and entertainment along the streets that edge the project site. Walk Boston comments acknowledge the Proponent's willingness to consider improvements to the project and identify measures that will enhance the development of pedestrian access to and within the site, as well as incorporate safe access into off-site roadway improvements.

Improvements to the Connecticut River Walk and Bikeway will include improved railroad crossing signage and striping at the at-grade access point along West Columbus Avenue opposite State Street. In addition, bicycle and pedestrian way-finding signage in the vicinity of the site and installation of lighting under the I-91 viaduct at State Street and Union Street to benefit pedestrians and cyclists will encourage patrons and employees to walk and bike.

Bicycle lane markings (sharrows) and signage will be installed along the State Street, Main Street, and Union Street corridors to enhance bicycle access to the site and downtown. The DEIR indicates that the Proponent will consult with the City regarding provision of dedicated bicycle lanes along Main Street fronting the site. Bicycle racks will be provided within the Armory Square block and near major entryways. The DEIR indicates that most racks will be located in

secure, covered areas located near major casino, retail, office, and residential doorways to provide additional convenience for patrons. It indicates that secure, weather protected, long-term bicycle parking (for employees and residents) will be provided at designated locations within the site. The Proponent will provide bicycle equipment such as helmets and bicycle locks to employees and residents at free or discounted prices to further encourage bicycle travel to and from the site. In addition, the DEIR indicates that the Proponent will work with the City of Springfield to evaluate creation of a bicycle share program similar to the Hubway system in Boston, which rents bicycles conveniently at bicycle kiosks.

The Proponent will distribute bicycle and pedestrian route maps to casino, hotel, and retail patrons, employees, and residents that illustrate walking and bicycling routes to popular destinations, and identify designated bicycle and multi-use paths. The Proponent may partner with WalkBoston to develop the maps.

Parking

The parking garage will provide be divided into separate parking areas for self-parking, valet parking, and charter and tour bus parking. Casino and hotel valet parking will consist of approximately 371 parking spaces on the basement level with a drop-off and pick-up area on the ground level. Charter and tour bus parking will consist of 22 bus parking spaces on the ground level of the garage with a separate entrance and exit driveway on Union Street. Self-parking will consist of 3,369 parking spaces on the second through eighth levels of the garage, with access provided via an entrance driveway on Bliss Street and exit driveways on Union Street, East Columbus Avenue, and Bliss Street. Approximately 44 additional surface parking spaces will be available for visitors to Armory Square. These spaces are limited to 30-minute parking. A separate 7-space surface parking lot will be provided to serve the proposed retail building on East Columbus Avenue. A drop-off area with four parking spaces will be provided on Hubbard Avenue for the daycare center and a separate 11-space lot is provided off of Willow Street for daycare center employees.

As required, the DEIR includes a parking demand analysis and identifies assumptions and data sources. It indicates that peak parking demand will be 3,101 spaces on a Friday and 3,269 spaces on a Saturday. A total of 3,806 parking spaces will be provided on the site. It demonstrates that the proposed parking supply will be adequate to accommodate the peak parking demand, while providing an additional 537 parking spaces for use by existing land uses in the area. Employee parking is proposed in the garage and is accounted for in the analysis. Parking will be free for all users.

The DEIR includes commitments to provide preferred parking for hybrid or alternatively-fueled vehicles, carpool or vanpools, and EV charging stations for employees and patrons. The DEIR indicates that, during the initial opening of the casino, employees may be shuttled from an off-site parking lot in Springfield. The DEIR does not include an analysis of parking policies to minimize parking demand and automobile use, such as fees for parking, parking cash-out policies, and other demand-reduction measures for employees.

Transportation Monitoring Program

The DEIR describes a Traffic Monitoring Program (TMP), which is intended to monitor traffic operations, parking occupancy, public transportation utilization, and pedestrian and bicycle use throughout construction and for a period of time following occupancy of the site. The DEIR includes a commitment to monitor during construction, six months after issuance of the casino occupancy permit, semi-annually for a period of two years following occupancy and annually for an additional five years (seven years total). Data and reports will be provided to the MassDOT District 2 office, the City of Springfield, PVPC and MassRIDES.

The DEIR includes a study area for the TMP, identifies the type/duration of data (TMCs, ATR, parking utilization, transit boarding/alighting counts, employee surveys) that will be collected, identifies analysis requirements, and identifies specific triggers for providing additional mitigation, including TDM mitigation. The need for mitigation will be conditioned upon exceeding the total projected site-generated traffic through an intersection by more than 10 percent or exceeding the projected overall intersection delay by more than 20 percent.

The need for additional TDM measures to reduce vehicle trips will be conditioned upon exceeding the total project traffic volume by more than 5%. The TMP does not include specific mode share goals to track the effectiveness of the TDM Program. The DEIR indicates that a monitoring program will be facilitated and managed by the Transportation Coordinator and MassRIDES and indicates that goals will be established for transit mode share, walking, biking, use of rideshare and carpool programs, and other TDM programs. In addition to the TMP, the Transportation Coordinator will implement an evaluation program to determine whether the goals of the program are being met and for modifying the programs or implementing additional programs to meet the goals.

The DEIR indicates that, as part of a separate review process with adjacent municipalities, a framework for a "look back" methodology is being developed to monitor and assess needs for mitigation in or near the gateways to the adjacent municipalities. The DEIR indicates that FEIR will include a description of this methodology. I note that comments from municipalities have identified significant concerns with this proposed approach.

Construction Period Traffic Management

The DEIR includes a commitment to prepare traffic management plans for the construction period for use by contractors. The DEIR indicates that the plans will depict the work zone, include advance warning signs, barrel and barrier placement, temporary pavement markings, and vehicular and pedestrian detours. Main Street, State Street and Union Street will remain open to through traffic with minimum 11-foot lanes at most times during construction. The roadways will maintain two-way traffic flow whenever feasible and require temporary lane closures as necessary. The DEIR does not specifically identify construction routes, haul zones or location of construction worker parking.

Air Quality

The DEIR includes an assessment of regional air quality and a mesoscale analysis. The air quality analysis provided in the DEIR demonstrates that all background concentrations are below the National Ambient Air Quality Standards (NAAQS).

The project triggers the MassDEP review threshold requiring an air quality mesoscale analysis to determine if the project will be consistent with the Massachusetts State Implementation Plan (SIP). The purpose of the mesoscale analysis is to determine whether and to what extent the proposed project will increase the amount of volatile organic compounds (VOCs) and nitrogen oxides (NO_x) emissions in the project area. The analysis is also used to develop the GHG mobile source analysis and demonstrate compliance with GHG Policy requirements.

The analysis indicates that total emissions decrease from Existing conditions to 2024 No Build conditions. This is attributable to anticipated improvements in vehicle engine and emissions technologies. It indicates that emissions increase between the 2024 No Build and 2024 Build conditions, consists of a 7% increase in VOC and a 5% increase in NO_x emissions. Proposed mitigation demonstrates a modest reduction in these increases. Because project emissions increase between the No Build and the Build conditions, the Proponent is required to develop a TDM Program, which is described in the previous section.

Most of the stationary sources associated with the project (e.g., boilers and engines) will not require air quality permits or they will be subject to the MassDEP Environmental Results Program (ERP). Larger sources (such as CHP) could require an air quality permit. As currently designed, the CHP will be subject the ERP for non-emergency engines greater than 50 kW. ERP requirements will include certification regarding emission standards, recordkeeping, and compliance with the MassDEP noise policy.

Greenhouse Gas Emissions

The DEIR included a GHG analysis consistent with the MEPA GHG Policy. The Policy requires projects to quantify carbon dioxide (CO₂) emissions and identify measures to avoid, minimize or mitigate such emissions. The analysis quantifies the direct and indirect CO₂ emissions associated with the project's energy use (stationary sources) and transportation-related emissions (mobile sources). The GHG analysis evaluated CO₂ emissions for two alternatives as required by the Policy including 1) a Base Case compliant with ASHRAE 90.1-2007, Appendix G and 2) a Preferred Alternative compliant with the Stretch Energy Code (SCI).² The analysis

² The current Stretch Energy Code (SCI) requires energy efficiencies of 20 percent better than American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 90.1-2007. The SCI requires modeling of base and proposed cases based on the methodology as is defined in ASHRAE 90.1 2007-Appendix G. The Board of Building Regulations and Standards (BBRS) recently adopted International Energy Conservation Code (IECC) 2012, which will be fully effective on July 1, 2014. Accordingly, a revised Stretch Code (SCII) is expected to be proposed by the BBRS, SCII is anticipated to require energy use in new large buildings to be 12 to 15 percent below the baseline of IECC 2012 (ASHRAE 90.1-2010). The Proponent intends to obtain building permits before July

used the eQUEST v.3.64 modeling software to perform the GHG analysis. Mobile GHG emissions were estimated using the standard methodology in the EEA/MassDOT Guidelines for EIR/EIS Traffic Impact Assessments, results from the mesoscale analysis, and MOBILE6.2 CO₂ emission factors. Potential project-related mobile GHG emissions were compared between the 2024 No-Build, 2024 Build, and the 2024 Mitigated Build conditions.

Comments from DOER acknowledge the Proponent's efforts to address GHG emissions and commend the project on the quality of the data and discussion included in its submittal. These comments identify areas and aspects of the design that may present opportunities for further reductions in both energy usage and GHG emissions and suggest measures and/or approaches for consideration in achieving further reductions in energy and source GHG emissions.

I note that the City of Springfield is a designated Green Community. As such, the City has adopted the Commonwealth of Massachusetts' Stretch Energy Code. Therefore, the project will be required to meet the applicable version of the Stretch Code in effect at the time of construction. The Stretch Code increases the energy efficiency code requirements for new construction (both residential and commercial) and for major residential renovations or additions in municipalities that adopt it. Projects may meet the Stretch Code requirement of 20-percent better energy efficiency than the State's base energy code by either meeting the standard of 20-percent better than ASHRAE 90.1-2007, or by using a prescriptive energy code. Compliance with the Stretch Code requires that the project achieve a minimum percent overall reduction in annual energy use; therefore, the percentages of energy use may differ from overall GHG emissions reductions. Overall, the GHG analysis concludes that the project will meet the anticipated energy use reduction requirements of the SCI. The Proponent has committed to construct the facility to achieve Leadership in Energy and Environmental Design (LEED) Gold Certification or higher.

Direct stationary source CO₂ emissions included those emissions from the facility itself, such as boilers, heaters, and internal combustion engines. Indirect stationary source CO₂ emissions were derived from the consumption of electricity, heat or other cooling from off-site sources, such as electrical utility or district heating and cooling systems. Direct mobile source CO₂ emissions are those associated with fleet vehicles (maintenance, security, shuttle buses, etc.) Indirect mobile CO₂ emissions included those emissions associated with vehicle use by employees, vendors, customers and others.

The DEIR included a summary of modeling inputs (e.g., R-values, U-values, efficiencies, lighting power density, etc.) for energy efficiency measures modeled such as equipment, walls, ceilings, windows, lighting, HVAC units, etc. for both the Base Case and Preferred Alternative based upon the conceptual design. The DEIR described design mitigation measures modeled in the GHG analysis and proposed for adoption by the Proponent to meet the Stretch Code requirements. The DEIR identified each type of potential mitigation measure and whether they

2014 using the current (8th edition) of the Massachusetts Building Code and as afforded by the GHG Policy, has selected the current Building Code (and related SCI) for the Base Case in the analysis.

were proposed for implementation, to be studied at a later design phase, or not feasible for each building.

To support analysis of the overall energy efficiency of the project, the DEIR includes a summary comparison of Energy Use Index (EUI) estimates for each proposed function (e.g., casino, hotel, retail, etc.) between the modeled Base Case and the Preferred Alternative. The estimated EUIs for the Preferred Alternatives indicate reductions in annual building site energy per square foot of conditioned space for each project use component. The DEIR noted the challenges of finding an accurate representation of casino EUIs based upon the surveys completed in conjunction with the Energy Information Administration's (EIA) Commercial Buildings Energy Consumption Survey (CBECS). Casinos operate 24 hours a day, seven days a week with a large based load of electrical use for the gaming machines and air conditioning for the gaming space. The EUIs presented in the DEIR indicate a lower EUI for the Preferred Alternative casino use in comparison to the Base Case modeled in eQUEST.

Key energy efficiency measures include the construction of high performance building shells; installation of lower U-value windows with glazing designed to balance and optimize daylighting, heat loss, and solar heat gain performance; consideration of building orientation in the design of building exteriors on a façade-by-façade basis for optimal configuration of glazing area and opaque walls; use of light-colored roofs and/or green roofs; installation of high-efficiency HVAC systems (high-efficiency chillers, air and water side economizers, fan coil units, heat recovery ventilation units, and high-efficiency condensing boilers); use of demand controlled ventilation (DCV) and variable frequency drive (VFD) fans; use of high-efficiency (light-emitting diode (LED) or fluorescent) interior and exterior lighting with reduced lighting intensity (as appropriate); installation of energy-efficient elevators and escalators; and installation of an energy management system. The DEIR also indicates that the daycare center is being designed as a Net Zero energy use building.

The proposed project includes low-flow water fixtures that use, at a minimum, 30 percent less potable water than the estimated water use baseline. A high-efficiency irrigation system (if necessary) will be used in conjunction with drought-tolerant, indigenous plants to reduce irrigation water demand. A goal of 50 percent reduction in potable water use for irrigation purposes was outlined in the DEIR. The DEIR also identified goals for the use of recycled-content materials, diversion of construction waste to local landfills, adoption and implementation of a Construction Waste Management Plan, and incorporating recycling programs and areas into project design and operation.

According to the DEIR, the project includes leasing space to tenants, whom will be responsible for individual fit-out of their leased space. Tenants will be required to obtain City of Springfield building permits for fit-out and comply with the Stretch Code in effect at the time tenant fit-out occurs. To ensure that tenant fit-out is consistent with the energy efficiency and GHG reduction measures constructed and under the control of the Proponent, the Proponent will implement measures to educate and create incentives for tenants to adopt energy efficiency/renewable generation measures. The Proponent will provide tenants during fit-out copies of the LEED Guide to support meeting LEED Gold status and will develop a Tenant Manual that will be used as the basis for all third-party lease agreements.

As noted previously, electronic gaming machines (EGM's) and the 24/7 operation of a casino results in large electrical plug loads. The DEIR indicated that the Proponent has been tracking recent upgrades to EGMs including the use of LED lighting, high-efficiency power supplies, thermal air flow management, and use of materials with no mercury or lead. The Proponent continues to investigate products to reduce the energy demand associated with EGMs.

The DEIR includes an assessment of energy generation sources to lower project-related GHG emissions. The DEIR evaluated five potential combined heat and power (CHP)/cogeneration system scenarios to generate electricity and hot water. According to the DEIR, the size of the system is based on the project's domestic hot water (DHW) load of the building. The project's hotel and residential uses have sufficient diurnal DHW demand to support a 100-kw or 200-kw CHP unit. The DEIR summarizes additional measures to increase the project's thermal load but concludes that they are impractical. It also describes the importance of right-sizing CHP to avoid losses in energy efficiency. Based upon this analysis, the project includes a 200kW CHP system and a commitment to review whether the CHP system can be increased as the project design advances. The CHP system will consist of two 100-kw reciprocating engines firing on natural gas.

The DEIR indicates that, based on geologic studies, the project site appears suitable for ground source heat pumps. Ground source heat pumps are proposed for the daycare design. It is unclear if ground source heat pumps can be incorporated into other project elements. The DEIR indicates the Proponent will continue to evaluate the use of ground source heat pumps as the project design advances.

The DEIR includes a solar photovoltaic (PV) system analysis. It quantifies the amount of power that could be generated from the installation of PV panels on each available project roof space. An accompanying shadow study indicates that some areas are less feasible due to building shadows or size. The PV study used the National Renewable Energy Laboratory's (NREL) PV Watts 2 model to estimate a maximum PV output of 1.4-MW of DC-rate PV solar panels, generating up to 975 megawatt hours (MWh) per year of AC electricity. The actual amount of area dedicated to PV panels will be lower due to the need to place mechanical equipment on the building roofs and the inclusion of green roofs in certain areas. Large-scale solar hot water systems were dismissed as they would consist of the same DHW loads served by the CHP system. However, the Proponent will review the feasibility of solar hot water on a small-scale basis to support specific food service hot water needs as design is advanced.

The DEIR indicates that the anticipated food waste generated by the project is insufficient for the implementation of an on-site anaerobic digestion system. The DEIR estimates that the project will generate less than 450 tons per year (tpy) of solid waste from food and beverage facilities (not all of which will be food waste). The DEIR indicates that the facilities will include systems to separate food waste to support transfer of waste to an off-site anaerobic digestion facility if one is developed in the region.

The DEIR includes a commitment to procure or generate at least ten percent of the facility's annual electrical consumption from qualified renewable energy sources. While the DEIR

identifies solar PV and ground source heat pumps as means to meet this goal, the Proponent indicates that Renewable Energy Credits (RECs) may be purchased to meet this goal.

The DEIR presents the results of the energy modeling, including consideration for use of a 200kW CHP system. The modeling results indicate that the Preferred Alternative will require approximately 20.7 percent less energy use than the Base Case, indicating a performance capable of meeting the anticipated requirements of the Stretch Code. Total estimated stationary source GHG emissions for the Preferred Alternative are estimated at 9,084 tpy, a 2,538 tpy reduction from the Base Case total of 11,622 tpy (a 21.8 percent overall project reduction).

Mobile source emissions were analyzed using the U.S. EPA MOBILE 6.2 Mobile Source Emission Factor Model. Average vehicle idling times were based on delay times reported in the SYNCHRO intersection modeling output reports prepared as part of the traffic study. Mobile source analysis traffic (volumes, delays, speeds) and emission factor data were developed for: i) the 2024 No-Build Case, ii) the 2024 Build Case, and iii) the 2024 Mitigated Build Case. The 2024 Build Case with Mitigation includes intersection signal timing modifications. No credit was taken for the anticipated reduction in trips and vehicle miles traveled (VMT) associated with the TDM program. Under the 2024 Build Case, the project will contribute an estimated 9,890 tpy of CO₂. The mobile emissions analysis estimated that under the 2024 Mitigated Build Case, CO₂ emissions attributable to the project subsequent to the implementation of the proposed traffic mitigation measures would be reduced by 359 tpy, for a project total contribution of 9,531 tpy, or a 4.0 percent reduction.

The total estimated GHG emissions (stationary and mobile sources) presented in the DEIR for the Preferred Alternative are estimated at 18,615 tpy, a 2,898 tpy reduction from the Base Case total of 21,512 tpy (a 11 percent overall project reduction).

Water Supply

Potable water will be provided by the Springfield Water and Sewer Commission (SWSC) through existing water distribution infrastructure within the site and in adjacent rights-of-way. The project will increase water use from 33,602 GPD to 246,646 GPD of water, an increase of 213,044 GPD. The DEIR identifies existing infrastructure and connections. It includes a letter from the SWSC, dated August 28, 2013, confirming that adequate supply and water distribution capacity is available to meet *average* water demand. The SWSC maintains a Water Management Act (WMA) registration of 39.1 million GPD for withdrawals from the Westfield River basin.

The Proponent will replace the 24-inch main on Union Street and consolidate two mains on Main Street into a single main. The DEIR indicates that the replacement work may occur during the demolition phase of the project and be coordinated with work in the adjacent rights-of-way for termination of existing utility services. The replacement mains will be constructed to meet the SWSC design and construction standards, and will be incorporated into the municipal system upon completion. The DEIR indicates that the Proponent will continue to work with the SWSC to address any concerns regarding maximum day and peak hour demands.

The project will include measures to reduce water demand. It will include low flow urinals, low flow water closets (1.1 gallons per flush (gpf) for liquids and 1.6 gpf for solids), and metering faucets (0.5 gallon per minute (gpm) aerators with 15 seconds run time). It will include strategies outlined in the Handbook of Water Use and Conservation (Amy Vickers, 2001) to address water demand associated with industrial, commercial and institutional uses such as strategies for food and drink preparation, operation of commercial dishwashers, and food and garbage disposals. The DEIR does not provide specific water conservation measures for industrial, commercial or institutional uses, including the hotel.

The project will include a rainwater reuse system consisting of several large capacity cisterns that store clean rooftop runoff. A state-of-the-art irrigation and pumping system will be used for irrigation and air handling cooling water. Each cistern will be sized to provide one half-inch of irrigation water per week. Landscaping will include drought tolerant plantings and groundcover.

Wastewater

Existing wastewater demand will increase from 30,547 GPD to 224,224 GPD, an increase of 193,677 GPD. Wastewater will be discharged to the Springfield Regional Wastewater Treatment Facility (SRWTF) for treatment and discharge. The DEIR includes a plan that depicts existing infrastructure. It does not include a proposed conditions plan that depicts on-site infrastructure and connections. It indicates that all of the on-site infrastructure will be privately owned and that the project does not propose replacement of any off-site sewer mains. The project will not require construction of a pump station. Water conservation methods described in the previous section will also reduce wastewater generation.

Combined Sewer Overflows (CSOs) are located within each of the streets surrounding the site. These include an 18-inch combined sewer main in State Street, a 60-inch combined sewer main in Main Street, a 60-inch by 80-inch combined sewer main within Union Street, and a 48-inch sewer interceptor in East Columbus Avenue. A 12-inch combined sewer main is located in Howard Street and Bliss Street. All existing uses have direct connections to adjacent sewer mains. These CSOs discharge into the Connecticut River Interceptor, a 48-inch pipe within East Columbus Avenue, which conveys stormwater and wastewater to the SRWTF under normal flow conditions. During certain storm events, overflow relief points within the collection system discharge untreated wastewater and stormwater directly into the Connecticut River. The SWSC is operating under an Administrative Consent Order (ACO) from the EPA to abate wet weather discharges and is in the process of updating its Long Term CSO Control Plan.

The SRWTF has a design capacity of 8.4 MGD and currently receives an average flow of 7.6 MGD. The DEIR includes a letter from the SWSC, dated August 28, 2013, indicating that adequate capacity is available to collect and treat the *average* wastewater generation; however, the letter indicates that several sanitary connections and, potentially, on-site storage will be necessary to reduce peak wastewater flow under certain storm events where system surcharging occurs. The DEIR indicates that the Proponent will provide infiltration/inflow (I/I) offsets.

Historic Resources

The project involves a combination of new construction, redevelopment of existing buildings, retention of existing infrastructure and facilities, and demolition. Included within the project site are four properties listed on the State and National Registers for Historic Places, three properties listed in the State Register of Historic Places and four properties included in the Inventory of Historic and Archeological Resources of the Commonwealth. As described by the Proponent, a number of these historic buildings will be retained, renovated and reused within the project site or relocated to a nearby off-site location. Buildings identified for demolition include the WCA Boarding House building located on Bliss Street, the Howard Street Primary School located on Howard Street and an apartment building also located on Howard Street have been identified for demolition.

The project requires review by the Massachusetts Historical Commission (MHC) pursuant to 950 CMR 71.00. If the project requires approvals from FHWA it will be subject to review under Section 106 of the National Historic Preservation Act (NHPA) (36 CFR 800). If it is subject to Section 106 review, MHC will review the project as the State Historic Preservation Officer (SHPO).

The Proponent committed to complete an analysis of the conditions, including structural integrity, of each of the historic buildings located on the project site and to determine feasibility for reuse in the project development program; however, the study was not completed prior to the filing of the DEIR. The DEIR indicates that the study is underway and will be completed in 2014. The DEIR does not provide any initial findings of the study, does not specifically address impacts associated with the proposed project, and does not identify specific measures to avoid, minimize and mitigate impacts. The construction period section references removal of ledge and blasting. In addition to confirming whether construction is likely to include these activities, the FEIR should identify potential impacts to historic structures during construction, including impacts of blasting and vibration on foundations and structures.

Comments from MHC note that the project, as proposed, includes the demolition of several listed historic structures and, therefore, would constitute an adverse effect pursuant to 36 CFR 800.5(a)(2)(i) and 950 CMR 71.05(a). In addition, MHC comments include copies of letters provided received from residents expressing concern regarding the project's impacts on historic resources.

Solid Waste and Hazardous Materials

The DEIR indicates that the project area contains five locations where releases of oil or hazardous materials have occurred for which environmental remediation work has been completed pursuant to the Massachusetts Contingency Plan (MCP) M.G.L. Chapter 21E. It identifies the Phase 1 ESA activities and outlines Phase 2 measures.

An Activity and Use Limitation (AUL) has been established for one of the sites (RTN 1-12379), located at 38 - 50 Howard Street. It restricts residential use without the installation of a vapor barrier beneath the building. Consistent with the requirements of the AUL, this portion of

the project site has been designed to accommodate the development of the main floor and basement offices of the casino building.

Construction activities within the MCP disposal sites will include an environmental monitoring plan to monitor potential impacts to neighboring properties. The environmental monitoring plan will set dust action levels and volatile organic compound (VOC) ambient air monitoring requirements for the Project. Air monitoring with dust meters and a photoionization detector will be a key component of the environmental monitoring plan included within the Release Abatement Measure (RAM).

Wetlands and Waterways

As currently proposed, the project will not directly impact wetlands or waterways. The project is located on an existing developed site and will minimize impervious surfaces by 1.8 acres compared to existing conditions. In addition, the project includes a 2.22 acre green roof on the casino and a rainwater reuse system. The project no longer includes the proposed off-site open space improvements within the Connecticut Riverwalk and Bikeway and, therefore, the associated wetlands and waterways impacts have been limited.

The Proponent will provide a \$1 million grant to the City for improvements to Riverfront Park but the DEIR does not specifically identify how the City will use the funds. To the extent that the City's proposed improvements are subject to MEPA review, the City will be responsible for submitting a Environmental Notification Form (ENF) for the project. No further information is required on wetlands or waterways issues in the FEIR.

The DEIR includes a Stormwater Management Plan (Appendix E) that demonstrates how project will be designed consistent with MassDEP Stormwater Management Standards. The DEIR indicates the project will include a comprehensive approach to stormwater management and treatment that includes source control, pretreatment and an Operations & Management Plan. The stormwater management system will reduce peak rates of runoff at each design point, compared to existing conditions. In addition, it provide treatment to improve water quality of discharge compared to existing conditions. It will include deep sump catch basins, infiltration systems, and hydro-dynamic (proprietary) separators.

In addition, the Proponent will draft and execute a Memorandum of Understanding (MOU) with the SWSC to memorialize their stormwater management agreements and commitments including maintenance, inspections, monitoring, reporting and continued communication.

Conversion of Article 97 Land

As described in the ENF, the project would have included conversion of approximately 0.4 acres of Article 97 land (Leonardo Da Vinci Park). This project element has been eliminated and, instead, the Proponent will provide funds to City to design and construct improvements, relocate playground equipment and fund annual park maintenance costs.

Construction Period

The DEIR includes a discussion of construction phasing, identifies potential impacts associated with construction activities (including but not limited to noise, vibration, dust, and traffic flow disruptions) and proposes measures to avoid or eliminate these impacts including: equipment maintenance to minimize unnecessary noise; compliance with applicable codes for blasting use and prohibition on use of perchlorate-containing explosives; diesel equipment retrofits; participation in MassDEP's Clean Construction Equipment Initiative; limits on truck idling; site housekeeping, such as covered loads, street sweeping, water use for dust control and interim stabilization of surfaces not being worked; groundwater monitoring during any dewatering activities; waste separation, reclamation and recycling; and truck traffic management. The DEIR provides a general commitment to these measures. More detailed information is necessary on a number of these commitments including a traffic management plan (for site work and roadway improvements), identification of haul routes, location of construction worker parking areas or satellite parking areas, identification of blasting or ledge removal, specific measures to address noise and vibration during construction, in particular impacts on existing structures and historic resources, and a description of the diesel retrofit plan and participation in the Clean Construction Equipment Initiative.

Conclusion

Based on a review of the DEIR, the Scope for the DEIR, consultation with State Agencies and review of comment letters, I have determined that the DEIR adequately and properly complies with MEPA and its implementing regulations. The Scope below identifies additional analysis and information that should be provided in the FEIR.

SCOPE FOR THE FINAL ENVIRONMENTAL IMPACT REPORT

The FEIR should follow Section 11.07 of the MEPA regulations for outline and content, as modified by this Scope.

Project Description and Permitting

The FEIR should provide additional information regarding specific program elements. Project plans should include the entire site (including the site adjacent to Main Street and Hubbard Avenue) and clearly identify land uses and associated square footage. It should clarify whether a gas station and convenience store are proposed as part of the project. To the extent that this use requires other State Permits, they should be identified in the FEIR. In addition, it should provide more information regarding parcels located on the block adjacent to Union Street, Main Street and Hubbard Avenue.

Traffic and Transportation

The DEIR provides a comprehensive assessment of the transportation impacts of the project based on a thorough analysis of existing and proposed condition. It identifies commitments to transportation improvements to mitigate project-related traffic impacts and describes plans for roadway, traffic and safety improvements. Comments from MassDOT indicate its concurrence with most of the transportation findings in the DEIR and indicate that MassDOT is generally satisfied with the proposed mitigation commitments. The letter identifies a number of issues that should be addressed in the FEIR including additional analysis of traffic operations in some locations, additional analysis of safety issues and mitigation, and additional analysis of proposed mitigation. In addition, MassDOT comments note that some project elements will require review and approval from FHWA and may require NEPA review. The functional classification of roadways and all pertinent permitting and/or approvals should be addressed in more detail in the FEIR.

I note that comments from PVPC and from municipalities question the methodology and assumptions of the traffic analysis, including the trip generation methodology. These comments are not consistent with MassDOT recommendations and comments. MassDOT has been involved in review of proposed casinos throughout the state and its comments indicate that, for the most part, the methodology is consistent with direction provided by MassDOT during consultation with the Proponent.

Comments from the Town of Longmeadow, Town of West Springfield and City of Chicopee, express reservations regarding the proposed “look-back” approach to roadway mitigation for communities that may be affected by project-generated traffic. The FEIR should respond to traffic issues identified in these letters and indicate whether it is considering alternative approaches to addressing these communities concerns. Comments from direct abutters to the site identify significant concerns with traffic impacts and effectiveness of proposed mitigation. The FEIR should clearly identify how access to these existing uses will be maintained, should include this access on site circulation plans and should include provide clear and direct responses to the issues identified in comment letters.

The FEIR should include additional analysis of traffic operations and, to the extent that the analysis demonstrates that it is warranted, identify mitigation for the following locations:

Longmeadow Street (Rt 5)/Forest Glen Road. The Town of Longmeadow has requested additional analysis Longmeadow Street (Rt 5) at Forest Glen Road, Longmeadow Street at Converse Street and Converse Street at Laurel Street. MassDOT comments note that this intersection could impact the ramps at I-91, Interchange 1 and that use of the Friday peak for analysis of this intersection may underestimate impacts. I encourage the Proponent to consult with MassDOT, PVPC, the City of Springfield and the Town of Longmeadow regarding the benefits of employing a simulation model to evaluate impacts and potential mitigation for the I-91/Rt 5 interchanges.

I-91 Ramps and Plainfield Street. This intersection will operate at LOS F during the 2024 No-Build and Build conditions, with significant queuing on the I-91 northbound Exit 9 off-

ramp. MassDOT comments note that approximately 5% of project traffic will pass through this intersection and that the crash rate is higher than the district and state averages.

West Street (US 20) and Riverside Road (Springfield). MassDOT requests that this intersection at the North End Bridge be evaluated because of its close proximity to the West Street/Plainfield Street intersection.

The FEIR should include a queue storage evaluation as requested by MassDOT. The streets around the project site have a number of closely spaced signalized and unsignalized intersections and there are several locations where the 95th percentile queue may exceed available storage capacity. In particular, MassDOT identifies concern regarding systemwide deficiencies impacting operations at the Union Street intersections with East and West Columbus Avenue and the intersections of West Columbus Avenue with Memorial Bridge and Boland Way. The FEIR should include a comparison of all queues with the available queue storage distances to determine where they may impact critical traffic operations and warrant additional mitigation.

MassDOT identifies the following locations where mitigation requires additional analysis and may require changes. These include:

East Columbus Avenue/Union Street/I-91 Northbound ramps. The FEIR should include more detailed information to support evaluation of the five-lane cross-section versus a four-lane cross-section. The information should support MassDOT evaluation of its consistency with the Complete Streets design standards. More detailed conceptual plans should be provided to MassDOT prior to filing the FEIR.

South Bridge Rotary and Memorial Bridge Rotary. MassDOT is considering improvements to these rotaries as part of the I-91 Viaduct Project. MassDOT indicates that, if the casino project advances prior to completion of the MassDOT project, the Proponent should commit to implementing these improvements, based on MassDOT designs, prior to site occupancy. Other commentors have requested that parties responsible for this mitigation should be clearly identified.

Comments from PVPC request that the alternative analysis that is being advanced by MassDOT for I-91 be addressed in the FEIR to assist in long range planning efforts. These comments note that the study limits have not been established and it is not clear whether the Route 5 corridor that flows into the I-91 ramp system will be included. In addition, PVPC identifies several locations that should be added to the study area for the TMP.

The FEIR should include sufficiently detailed conceptual plans (preferably 80-scale) for all proposed improvements, including bicycle improvements, to verify the feasibility of constructing such improvements. The plans should clearly show the proposed lane widths and offsets, layout lines and jurisdictions, land uses (including access drives), existing and proposed traffic signals, and wetland resource areas adjacent to areas where improvements are proposed. Proposed traffic signals must include a signal warrant analysis conducted according to the MUCTCD. Proposed measures within the State highway layout, as well as internal circulation, must be consistent with a Complete Streets design approach that provides adequate and safe accommodation for all

roadway users, including pedestrians, bicyclists, and public transit riders. To the extent that Complete Streets design criteria cannot be met, the Proponent should provide a justification and should work with the MassDOT Highway Division to obtain a design waiver.

The DEIR includes a comparison of crash rates to state and district averages and identifies several locations where these rates exceed state and district averages. The FEIR should clearly identify locations where the state and district rates are exceeded, evaluate measures to improve safety and clearly identify proposed mitigation. Comments from MassDOT indicates that Road Safety Audits (RSAs) must be prepared for locations where roadway improvements are proposed. The comments also indicate that RSAs should be prepared for high crash locations in the Study Area that will receive significant volumes of casino traffic.

The FEIR should include a revised TDM program that provides more specificity on incentive programs that will attract employees and patrons to use transit at levels identified in the traffic study. Comments from MassDOT, MassDEP, PVPC and others identify opportunities to strengthen the program and identify additional information that should be provided in the FEIR, including: providing targeted and effective incentives to encourage transit use, high occupancy vehicle use and reduce parking demand, either in the form of financial incentives (such as transit subsidies, parking cash out, fee-based parking) or priority treatments; evaluate employee demand distribution based on the nature of work shifts and additional analysis of shift scheduling to support high transit mode shares; provide specificity regarding the commitments (e.g. identify bike parking on site plan, identify number of EV charging stations, number of spaces for rideshare vehicles etc.); and specify aggressive mode share targets in the TMP.

The FEIR should include an update on the status and content of consultations with PVRTA and, if a formal agreement has been reached, include its provisions. It should identify the Proponent's commitments to support the PVRTA including operating subsidies, maintenance and infrastructure. The FEIR should include a conceptual trolley route, identify schedule and frequency of service, and identify fare schedule (if fares will be charged). It should also indicate the type of trolley technology being considered and demonstrate that the Proponent and PVRTA are considering efficient and clean vehicle technologies. PVPC and PVRTA note that the DEIR presents an opportunity to consolidate bus stops along the Main Street frontage of the site. The DEIR identifies two bus stops on both the northern and southern sides of Main Street. PVRTA officials believe that ridership could be better served by relying on a single stop on the northern and southern sides of Main Street.

Comments on pedestrian and bicycle issues acknowledge the Proponent's commitment to support non-vehicular access to and around the site, request additional information regarding certain aspects of the plans and request more detailed plans for the FEIR. Comments from MassDOT and MassDEP indicate that focus of pedestrian improvements should include additional intersections within walking distance of the site. In particular, the FEIR should indicate how safe and convenient bicycle and pedestrian access can be provided between the site and Union Station. MassDOT calls for a more detailed pedestrian plan and a bike plan that identifies existing infrastructure, highlight proposed improvements, and clearly identify how the project will fill gaps in access and improve safety. MassDOT, MassDEP and PVPC request

additional information and specificity regarding the establishment of a bikeshare program, which should be provided in the FEIR.

Comments from Walk Boston comments note positive consultations with the Proponent and indicate that many of their suggestions are included in the DEIR. It identifies some areas that that would benefit from additional analysis. It identifies an opportunity to provide a diagonal pedestrian crossing at the intersection of Main and State Streets, where a direct connection to the Mass Mutual Convention Center may be desirable, recommends that particular attention be paid to narrower sidewalks to maintain a walk zone of at least 5-feet without obstructions and includes recommendations for wayfinding signs, such as including walking times rather than distances, and specific locations where signage may be critical.

The FEIR should include more detailed and updated pedestrian and bicycle plans that clearly identify paths and location of infrastructure (including bicycle parking) and connections. They should be provided at an appropriate scale (i.e. 80-scale) and demonstrate the feasibility of constructing physical improvements. The FEIR should include a revised TMP that incorporates specific mode share targets for tracking and evaluation of the effectiveness of the TDM program and efforts to encourage transit, bike and walking trips to the site. The FEIR should provide responses to comments received on the TMP and indicate what recommendations have been incorporated into the TMP.

Greenhouse Gas Emissions

The Proponent has a unique opportunity to set a high standard for energy efficiency gaming and casino resort design. The FEIR should provide additional analysis and clarification of the Proponent's proposed GHG reduction measures that establish a strong commitment to meeting the GHG reduction goals of the Commonwealth.

The FEIR should include an updated GHG stationary source analysis prepared in accordance with the GHG Policy. While I acknowledge that the Proponent has met the requirements of the MEPA GHG Policy by selecting a Base Case building code consistent with that in effect at the time of the EENF submission; however, I strongly encourage the Proponent to reconsider and use the IECC 2012 and ASHRAE 90.1-2010 as the project Base Case. The BBRIS recently adopted IECC 2012, which goes into effect on July 1, 2014. Accordingly, a revised Stretch Code (SCII) is expected to be proposed by the BBRIS. SCII is anticipated to require energy use in new large buildings to be 12 to 15 percent below the baseline of IECC 2012 (ASHRAE 90.1-2010). It is unclear from the project timeline presented in the DEIR if a substantial portion of the project's building permits will be issued under the current building code and SCI. The DEIR noted that tenant fit-outs will likely occur after July 1, 2014 and will be required to comply with SCII. Reconsideration of the project Base Case may allow for a more accurate representation of anticipated energy savings and GHG reductions that those presented in the DEIR.

The FEIR should provide responses and supporting documentation to address the comments submitted by DOER. The FEIR should indicate whether recommendations will be incorporated into the project or address why the recommendations are not applicable or infeasible. The DEIR indicates that the Proponent will continue to evaluate the size of the CHP unit as design

advances. The FEIR should include additional analysis of an increased capacity CHP system based on the recommendations in the DOER comment letter. If the resulting analysis is favorable, I encourage the Proponent to incorporate a larger system as a mitigation measure. The FEIR should continue to explore additional means to reduce project-related GHG emissions based upon suggestions provided in the DOER comment letter to achieve additional GHG reduction measures beyond those calculated in the DEIR. In particular, the FEIR should identify the anticipated electrical load attributable to gaming machines and assess the level of emissions reductions that could be achieved through the purchase of high-efficiency machines. The FEIR should clarify the Proponent's commitment to purchasing energy-efficient gaming machines and identify potential minimum energy efficiency criteria for inclusion in purchasing guidelines.

The FEIR should provide additional analysis regarding the proposed installation of solar PV systems on the project's roof space. At a minimum, the FEIR should include a commitment to construct every roof as "solar-ready". The FEIR should clarify those rooftop areas that will be dedicated to mechanical space, green-roofs, or PV systems. The FEIR should summarize these allocations in terms of use square footage and include graphics identifying the proposed location of each use. The Proponent has made a commitment to meet at least ten percent of its projected electricity requirements through on-site generation or the purchase of RECs from off-site sources. The FEIR should include a calculation of the anticipated energy demand, and related GHG emissions, associated with ground source heat pumps, PV and RECs.

The FEIR should include a commitment to a specific Construction Waste Management goal, and establish similar goals as part of ongoing casino operations. While the DEIR noted that an on-site anaerobic digestion facility is not practicable, the FEIR should demonstrate how the Proponent will comply with MassDEP's commercial food waste disposal ban regulations.

The FEIR should confirm that the modeling of elements specifically delegated to the tenant fit-out process are consistent with those that will be mandated as minimum requirements in the Tenant Manual and lease agreements. This will ensure the accuracy of modeling based on actual future tenant usage. The FEIR should clarify the anticipated water demand associated with on-site irrigation. While the DEIR notes a goal of reducing potable water use by 50 percent in association with irrigation, it is unclear how this goal will be met. The FEIR should evaluate the use of rainwater collection to meet the demand, with a calculation of storage requirements and storage feasibility on-site.

While the Proponent will implement enhanced refrigerant management practices, I strongly encourage the Proponent to commit in the FEIR to the use of refrigerants with lower global warming potentials for freezer and refrigerator spaces within the facility as an additional mitigation measure.

The GHG analysis indicates that project-related traffic will increase CO₂ emissions by 9,889.7 tpy. The location of the project in close proximity to transit and I-91 provides significant opportunities for reducing mobile source GHG emissions. While the Proponent has made beneficial commitments to implement signal timing improvements and a TDM program, additional analysis is necessary in the FEIR. I expect the FEIR to demonstrate that mobile source GHG emissions are avoided, minimized and mitigated to the maximum extent feasible through

establishment of aggressive mode share goals supported by: investments in transit infrastructure and strong user incentives (e.g. transit subsidies), right-sized parking supply, safe and convenient access and services for bicyclists and pedestrians, and a robust TDM program with clearly defined goals and monitoring that can be incorporated into the project's Transportation Monitoring Plan.

The DEIR indicates that the Proponent has not decided whether the project will include vehicles and that associated GHG impacts and mitigation options will be reviewed as design progresses. If fleet vehicles are proposed, the FEIR should include an assessment of direct GHG emissions based upon estimated vehicle types, associated VMT, fuel type, with supporting data to justify these assumptions. Potential fleet vehicle emission mitigation measures include the use of electric and CNG fleet vehicles, optimized routing, driver education to reduce unnecessary idling.

Water Supply and Wastewater

The FEIR should include proposed conditions plans that clearly identify installation of on and off-site infrastructure and water supply and wastewater connections. It should identify a schedule for proposed installation and connections. It should include peak rates of water demand and wastewater generation, as well as a breakdown of water demand associated with different uses. It should indicate if on-site storage will be incorporated into the site design to mitigate peak wastewater flows and any other mitigation to address potential impacts associated with peak flows such as back flow preventers for adjacent properties. The FEIR should include an update on its consultations with SWSC.

To minimize flows to CSO regulator 15B, MassDEP recommends that the Proponent consider directing site stormwater to the 60-inch by 80-inch combined sewer located downstream of regulator 15B. The FEIR should address this recommendation.

The DEIR identifies several water conservation measures that may be incorporated into the project and identifies a guidance document for water conservation strategies. The FEIR should identify specific water conservation measures that will be incorporated into the project for industrial and commercial uses, including the hotel. These uses provide significant and numerous opportunities to reduce daily water demand including the use of low-flow fixtures, modifications or the use of BMPs associated with laundry and food services, and guest education.

Historic Resources

As noted previously, the DEIR did not provide updated information regarding historic resources and the analysis of the conditions of each of the historic buildings is underway, but has not been completed. The FEIR must include an analysis of the project's impacts on historic resources and a description of how the project is designed to avoid, minimize and mitigate impacts. The study's conclusions regarding the viability of adaptive reuse could have an impact on the overall design and/or operation of the project.

The Proponent should provide MHC with a copy of the analysis prior to the filing the FEIR to assist MHC in evaluating potential impacts. The FEIR should include the analysis, a summary of the findings and a description of how the project will avoid or mitigate any project-related adverse effects to these buildings. I strongly encourage the Proponent to consult with the MEPA Office and MHC regarding the findings of the study prior to submitting the FEIR for review. I note that the failure to demonstrate in the FEIR that the project avoids, minimizes and mitigates historic resources to the maximum extent feasible may result in additional MEPA review.

Construction Period Impacts

The FEIR should include an updated construction schedule that clearly identifies construction periods associated with major elements of the project (e.g. demolition, construction of Casino Block, construction of Retail Block). The DEIR provides a general commitment to construction period mitigation measures. More detailed information is necessary on a number of these commitments including a traffic management plan (for site work and roadway improvements), identification of haul routes, location of construction worker parking areas or satellite parking areas, identification of blasting or ledge removal, specific measures to address noise and vibration during construction, in particular impacts on existing structures and historic resources, and description of the diesel retrofit plan and participation in the Clean Construction Equipment Initiative. The FEIR should include an updated section on construction period impacts, describe construction phasing and provide specific mitigation commitments.

Mitigation

The FEIR should include an updated and revised chapter that summarizes proposed mitigation measures and provides individual Section 61 Findings for each State Agency that will issue permits for the project (i.e., MassDEP, MassDOT permits, etc.). The FEIR should contain clear commitments to implement these mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and a schedule for implementation. The FEIR should clearly indicate which mitigation measures will be constructed or implemented based upon project phasing, either tying mitigation commitments to overall project square footage or traffic/wastewater demand or thresholds, to ensure that measures are in place to mitigate the anticipated impact associated with each development phase.

To ensure that all GHG emissions reduction measures proposed are actually constructed or performed, I require the Proponent to provide a self-certification to the MEPA Office indicating that all of the required mitigation measures, or their equivalent, have been completed. Alternatively, the Proponent may certify that equivalent emissions reduction measures that collectively are designed to reduce GHG emissions by the same percentage as the measures outlined in the FEIR, based on the same modeling assumptions, have been adopted. The certification should be supported by plans that clearly illustrate where GHG mitigation measures have been incorporated. For those measures that are operational in nature (i.e. TDM, recycling) the Proponent should provide an updated plan identifying the measures, the schedule for implementation and how progress towards achieving the measures will be obtained. The commitment to provide this self-certification in the manner outlined above should be incorporated into the draft Section 61 Findings included in the FEIR.

Response to Comments

The FEIR should contain a copy of this Certificate and a copy of each comment letter received. In order to ensure that the issues raised by commenters are addressed, the FEIR should include direct responses to comments to the extent that they are within MEPA jurisdiction. This directive is not intended to, and shall not be construed to enlarge the scope of the DEIR beyond what has been expressly identified in this certificate.

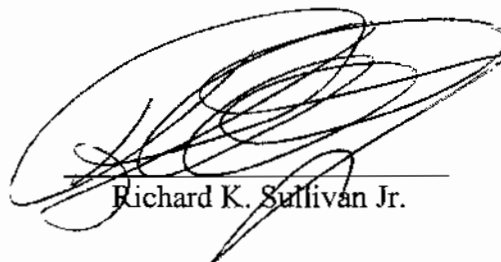
Circulation

In accordance with Section 11.16 of the MEPA Regulations and as modified by this Certificate, the Proponent should circulate a hard copy of the FEIR to each State and City agency from which the Proponent will seek permits or approvals and to each of the surrounding municipalities that submitted comments. I also request that the Proponent provide hard copies of the FEIR to the MEPA review coordinator at the Department of Energy Resources. The Proponent must circulate a copy of the FEIR to all other parties that submitted individual written comments.

The Proponent may circulate copies of the FEIR to these other parties in CD-ROM format, although the Proponent should make available a reasonable number of hard copies, to accommodate those without convenient access to a computer to be distributed upon request on a first come, first served basis. The Proponent should send a letter accompanying the CD-ROM indicating that hard copies are available upon request, noting relevant comment deadlines, and appropriate addresses for submission of comments. I recommend that the DEIR be posted in an online format either through the City of Springfield website, or on a dedicated Proponent-affiliated website. In addition, a copy of the FEIR should be made available for public review at the Chicopee, Ludlow, Wilbraham, East Longmeadow, Longmeadow, Agawam and West Springfield public libraries.

February 7, 2014

Date



Richard K. Sullivan Jr.

Comments received:

- 2/3/14 Department of Energy Resources (DOER)
- 2/4/14 Massachusetts Department of Environmental Protection /Western Regional Office (MassDEP/WERO)
- 1/31/14 Massachusetts Department of Transportation (MassDOT)

1/14/14 Massachusetts Historical Commission (MHC)
2/7/14 Massachusetts Historical Commission (second letter)
1/17/04 City of Chicopee, Department of Planning and Development
1/30/14 Town of Longmeadow
1/27/14 Town of West Springfield
1/30/14 Connecticut River Watershed Council
1/29/13 Pioneer Valley Planning Commission (PVPC)
1/28/14 Pioneer Valley Transportation Authority (PVRTA)
1/31/14 Mass Audubon
1/31/14 WalkBoston
1/16/14 Beals Associates on behalf of Courthouse Park Associates
1/16/14 Beals Associates on behalf of Red Rose Pizzeria
1/27/14 Beals Associates on behalf of Colvest/East Columbus, LLC
1/30/14 Robert Bolduc, Pride Stores, LLC
1/30/14 Ted Steger

RKS/CDB/cdb