Epsilon
ASSOCIATES INC.

October 15, 2015

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Secretary Matthew A. Beaton
Executive Office of Energy & Environmental Affairs
Attn: Holly Johnson, MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

Subject: Notice of Project Change
MGM Springfield, EEA #15033

Dear Secretary Beaton:

On behalf of Blue Tarp reDevelopment LLC, enclosed please find a Notice of Project Change (NPC) for the MGM Springfield project in Springfield, Massachusetts.

Please notice the NPC in the *Environmental Monitor* to be published on October 19, 2015. The public comment period will extend through November 9, 2015, and the Certificate will issue on November 18, 2015.

By copy of this letter, I am advising recipients of the NPC that written comments may be filed during the comment period, sent to the address above.

Copies of the NPC, including paper copies, may be obtained from Epsilon Associates at (978) 897-7100, or via e-mail at csnowdon@epsilonassociates.com.

Thank you for your attention to this matter.

Sincerely,
EPSILON ASSOCIATES, INC.

Talya Moked
Project Planner

Enclosure

cc: Circulation List

Notice of Project Change

Submitted Pursuant to the Massachusetts Environmental Policy Act

EEA# 15033

MGM Springfield

Submitted to:
Executive Office of Energy and Environmental Affairs
MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

Prepared by:
Epsilon Associates, Inc.
3 Clock Tower Place, Suite 250
Maynard, MA 01754

Submitted by:
Blue Tarp reDevelopment, LLC ("MGM Springfield")
1414 Main Street, Suite 1140
Springfield, MA 01144

In association with:
Davenport Companies
TEC, Inc.
Allen & Major Associates, Inc.
Brown Rudnick, LLP

October 15, 2015

Epsilon ASSOCIATES INC.

Notice of Project Change

Submitted Pursuant to the Massachusetts Environmental Policy Act

EEA# 15033

MGM Springfield

Submitted to:
Executive Office of Energy and Environmental Affairs
MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

Submitted by:
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1414 Main Street, Suite 1140
Springfield, MA 0114

Prepared by:
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3 Clock Tower Place, Suite 250
Maynard, MA 01754

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October 15, 2015

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Table of Contents

Notice of Project Change Form

Commonwealth of Massachusetts

Executive Office of Energy and Environmental Affairs ■ MEPA Office

For Office Use Only ***Executive Office of Environmental Affairs***
MEPA Analyst:
Phone: 617-626-

Notice of Project Change

The information requested on this form must be completed to begin MEPA Review of a NPC in accordance with the provisions of the Massachusetts Environmental Policy Act and its implementing regulations (see 301 CMR 11.10(1)).

EEA #15033		
Project Name: MGM Springfield		
Street Address: Main Street		
Municipality: Springfield	Watershed: Connecticut River	
Universal Transverse Mercator Coordinates: **UTM Zone 18, 699569E, 4663629N**	Latitude: 42° 5' 57.7854" Longitude: -72° 35' 11.6376"	
Estimated commencement date: Fall 2015	Estimated completion date: September 2018	
Project Type: Multi-use	Status of project design: 30 %complete	
Proponent: Blue Tarp reDevelopment, LLC ("MGM Springfield")		
Street Address: 1414 Main Street, Suite 1140		
Municipality: Springfield	State: MA	Zip Code: 01144
Name of Contact Person: Corinne Snowden		
Firm/Agency: Epsilon Associates, Inc.	Street Address: 3 Clock Tower Place, Suite 250	
Municipality: Maynard	State: MA	Zip Code: 01754
Phone: (978) 897-7100	Fax: (978) 897-0099	E-mail: csnowdon@epsilonassociates.com

With this Notice of Project Change, are you requesting:

a Single EIR? (see 301 CMR 11.06(8)) ☐Yes ☒No
a Special Review Procedure? (see 301CMR 11.09) ☐Yes ☒No
a Waiver of mandatory EIR? (see 301 CMR 11.11) ☐Yes ☒No
a Phase I Waiver? (see 301 CMR 11.11) ☐Yes ☒No

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?

301 CMR 11.03(5)(b)4.a – New discharge or expansion of discharge to a sewer system of 100,000 or more gpd;
301 CMR 11.03(6)(a)6 – Generation of 3,000 or more New adt;
301 CMR 11.03(6)(a)7 – Construction of 1,000 or more New parking spaces at a single location;
301 CMR 11.03(6)(b)13 – New adt of 2,000 or more on roadways providing access to a single location;
301 CMR 11.03(6)(b)14 – Generation of 1,000 or more New adt on roadways providing access to a single location and construction of 150 or more New parking spaces at a single location;
301 CMR 11.03(6)(b)15 – Construction of 300 or more New parking spaces at a single location;
301 CMR 11.03(6)(b)2.b - Cut five or more living public shade trees of 14 or more inches in diameter at breast height;

301 CMR 11.03(10)(b)1 – Demolition of all or any exterior part of any Historic Structure 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.

Which State Agency Permits will the project require?
Massachusetts Gaming Commission – Gaming License
Massachusetts Department of Transportation – Highway Access Permit
Department of Environmental Protection – Sewer Connection Permit
Department of Environmental Protection – Construction Dewatering Permit
Department of Public Safety – Storage Permit

Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres: none

PROJECT INFORMATION

In 25 words or less, what is the project change? The project change involves . . .
The hotel has been relocated and redesigned, the housing units have been moved off-site, and the parking garage has been reduced by one level.

See full project change description beginning on page 3.

Date of publication of availability of the ENF in the Environmental Monitor: (Date: March 20, 2013)

Was an EIR required? ☒Yes ☐No; if yes,
was a Draft EIR filed? ☒Yes (Date:December 16, 2013) ☐No
was a Final EIR filed? ☒Yes (Date: November 6, 2014) ☐No
was a Single EIR filed? ☐Yes (Date:) ☒No

Have other NPCs been filed? ☐Yes (Date(s):) ☒No

If this is a NPC solely for lapse of time (see 301 CMR 11.10(2)) proceed directly to **ATTACHMENTS & SIGNATURES**.

PERMITS / FINANCIAL ASSISTANCE / LAND TRANSFER
List or describe all new or modified state permits, financial assistance, or land transfers not previously reviewed: **dd w/ list of State Agency Actions (e.g., Agency Project, Financial Assistance, Land Transfer, List of Permits)**

Are you requesting a finding that this project change is insignificant? A change in a Project is ordinarily insignificant if it results solely in an increase in square footage, linear footage, height, depth or other relevant measures of the physical dimensions of the Project of less than 10% over estimates previously reviewed, provided the increase does not meet or exceed any review thresholds. A change in a Project is also ordinarily insignificant if it results solely in an increase in impacts of less than 25% of the level specified in any review threshold, provided that cumulative impacts of the Project do not meet or exceed any review thresholds that were not previously met or exceeded. (see 301 CMR 11.10(6)) ☐**Yes** ☒**No; if yes, provide an explanation of this request in the Project Change Description below.**

FOR PROJECTS SUBJECT TO AN EIR

If the project requires the submission of an EIR, are you requesting that a Scope in a previously issued Certificate be rescinded?
☐**Yes** ☒**No; if yes, provide an explanation of this request**_____.

If the project requires the submission of an EIR, are you requesting a change to a Scope in a previously issued Certificate?
☐**Yes** ☒**No; if yes, provide an explanation of this request**_____.

SUMMARY OF PROJECT CHANGE PARAMETERS AND IMPACTS

Summary of Project Size & Environmental Impacts	Previously reviewed	Net Change	Currently Proposed
LAND			
Total site acreage	15.6	-1.6	14
Acres of land altered	15.6	-1.6	14
Acres of impervious area	13.7	0	13.7
Square feet of bordering vegetated wetlands alteration	N/A	N/A	N/A
Square feet of other wetland alteration	N/A	N/A	N/A
Acres of non-water dependent use of tidelands or waterways	N/A	N/A	N/A
STRUCTURES			
Gross square footage	881,691	-122,534	759,157
Number of housing units	54	*	54
Maximum height (in feet)	274	-172	102
TRANSPORTATION			
Vehicle trips per day	22,268	-1,135	21,133
Parking spaces	3,762	-387	3,375
WATER/WASTEWATER			
Gallons/day (GPD) of water use	244,130	-18,888	225,242
GPD water withdrawal	N/A	N/A	N/A
GPD wastewater generation/ treatment	221,937	-14,319	207,618
Length of water/sewer mains (in miles)	0	0	0

* The dimension change for residential will result in a net change to the Project's existing location but not a net change to the overall Project size for the purposes of MEPA or the Proponent's commitments under its Host Community Agreement due to these units being developed offsite within one half mile of the project. The residential units were analyzed as part of the MEPA review and referenced in all filings and certificates. The residential units were not, however, included within the boundaries of the licensed gaming establishment by the Massachusetts Gaming Commission under MGM Springfield's conditional license approval. See Attachment 6. Residential programing is not required as a condition of licensure under the provisions of the Gaming Act, c. 23K of the General Laws. The proposed offsite residential programing will not be licensed by the Massachusetts Gaming Commission. Therefore, construction of the residential units in these areas, while still subject to MEPA review as part of the Project will not require any further State action by the Commission.

Does the project change involve any new or modified:

1. conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97? ☐**Yes** ☒**No**
2. release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction? ☐**Yes** ☒**No**
3. impacts on Rare Species**?** ☐**Yes** ☒**No**
4. demolition of all or part of any structure, site or district listed in the State Register of

Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?
☒**Yes** ☐**No**

5. impact upon an Area of Critical Environmental Concern? ☐**Yes** ☒**No**

If you answered 'Yes' to any of these 5 questions, explain below:

PROJECT CHANGE DESCRIPTION (attach additional pages as necessary). The project change description should include:

(a) a brief description of the project as most recently reviewed

(b) a description of material changes to the project as previously reviewed,

(c) if applicable, the significance of the proposed changes, with specific reference to the factors listed 301 CMR 11.10(6), and

(d) measures that the project is taking to avoid damage to the environment or to minimize and mitigate unavoidable environmental impacts. If the change will involve modification of any previously issued Section 61 Finding, include a draft of the modified Section 61 Finding (or it will be required in a Supplemental EIR).

ATTACHMENTS & SIGNATURES

Attachments:
1. Secretary's most recent Certificate on this project
2. Plan showing most recent previously-reviewed proposed build condition
3. Plan showing currently proposed build condition
4. Original U.S.G.S. map or good quality color copy (8-1/2 x 11 inches or larger) indicating the project location and boundaries
5. List of all agencies and persons to whom the proponent circulated the NPC, in accordance with 301 CMR 11.10(7)
6. MGM Gaming Establishment Boundaries
7. Updated Trip Generation and Parking Demand Generation Calculations

Signatures:

10/15/15 Michael C. Mathis	10/15/15 T Moked
Date / Signature of Responsible Officer or Proponent	Date / Signature of person preparing NPC (if different from above)

Michael C. Mathis	Talya Moked
Name (print or type)	Name (print or type)
Blue Tarp re-Development, LLC	Epsilon Associates
Firm/Agency	Firm/Agency
1414 Main Street, Suite 1140	3 Clock Tower Place, Suite 250
Street	Street
Springfield, MA 01144	Maynard, MA 01754
Municipality/State/Zip	Municipality/State/Zip
(413) 273-5000	(978) 897-7100
Phone	Phone

Notice of Project Change Narrative

MEPA NOTICE OF PROJECT CHANGE FOR MGM SPRINGFIELD

Introduction

Blue Tarp reDevelopment, LLC dba MGM Springfield (the Proponent) is filing this Notice of Project Change pursuant to the Massachusetts Environmental Policy Act (MEPA) Regulations at 310 CMR 11.10(1) to inform the Secretary of the Executive Office of Energy and Environmental Affairs (EEA) of minor programmatic and design changes being proposed to the MGM Springfield Project (EEA # 15033). The changes being proposed are minor changes to the programmed uses and their location within the Project's buildings. The Massachusetts Gaming Commission has also approved a revised opening date of September 2018 for the Project. The changes do not create any new environmental impacts and the Proponent is committed to complete the mitigation measures previously proposed in the Draft and Final EIR's. For these reasons, the Proponent believes the changes do not warrant any further MEPA review[1].

MEPA History

In accordance with the Massachusetts Environmental Policy Act (MEPA), the Proponent filed an Environmental Notification Form (ENF) for the Project with the Secretary of Energy and Environmental Affairs (the Secretary) on March 15, 2013. The comment period was voluntarily extended four weeks beyond the required twenty days to allow a fuller opportunity for public and agency review and comment. On May 24, 2013, the Secretary issued a Certificate on the ENF, outlining the Scope for the Project's Environmental Impact Report (EIR). The Draft Environmental Impact Report (DEIR) was filed on December 16, 2013, and on February 7, 2014 the Secretary issued a Certificate on the DEIR. The Final Environmental Impact Report (FEIR) was filed on November 6, 2014 and the Secretary issued a Certificate on the FEIR on December 31, 2014 finding that the FEIR adequately and properly complied with MEPA, thus concluding the MEPA process at that time (See Attachment 1).

Project Description as Previously Proposed

The MGM Springfield Project consists of a multi-use development anchored by an MGM casino that will serve as a significant economic catalyst for the City of Springfield and the surrounding area. The Project will consist of two separate "blocks" of development, referred to as the "Casino Block" and the "Retail Block." The approximately 739,012 sf Casino Block included a hotel, 3,821 casino gaming positions, retail and restaurant uses, convention space, office space, and 54 residential apartments.

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[1] The proposed design changes must be approved by the Massachusetts Gaming Commission pursuant to its regulations including 205 CMR 120 and 205 CMR 135 and by the City of Springfield under the Host Community Agreement between the City of Springfield and the Proponent.

The Retail Block consisted of an approximately 142,679 sf multi-use facility that will include multiple retail tenants, restaurants, an event plaza, office space, a radio station, a multi-screen cinema, and bowling alley. The retail spaces will open to the street in an effort to invigorate the surrounding streetscape and create a vibrant urban environment for the City and its residents. Not including parking, the Project's gross total area was approximately 881,691 sf. The Project also included approximately 3,762 parking spaces on site located in an eight-story parking garage and an additional 54 parking spaces locating within a surface lot in the Retail Block.

The FEIR Site Plan is included as Attachment 2.

For purposes of construction period impacts, the FEIR included a construction schedule identifying major elements of the project with an anticipated final construction stage concluding in September of 2017. The FEIR also identified the need for coordination with MassDOT's Project to replace the I-91 Viaduct through downtown Springfield (MassDOT Project #607731). The FIER cited the Viaduct Project commencing in the Spring of 2015 and reaching substantial completion in August of 2017.

Description of Project Changes

The changes proposed are minor and will not result in any increase in environmental impacts and will not require any additional state actions or changes to any required state permits. They consist of the following elements:

- **Relocation of the residential units:** Potential off-site locations within Downtown Springfield are being explored for the relocation of approximately 54 residential units that were previously located on the corner of Main Street and Howard Street. The residential units, while a commitment under the Springfield Host Community Agreement, were specifically excluded from the boundaries of the licensed gaming establishment by the Massachusetts Gaming Commission under MGM Springfield's conditional license approval. A copy of Exhibit B of MGM Springfield's Decision Awarding a License to Operate a Category 1 Gaming Establishment in Region B is presented in Attachment 6. The Proponent is in discussions with local property owners to select existing building(s) that will be renovated into residential space. Once the Proponent determines the residential location(s), local and state historic commissions will be consulted as necessary if historic resources will be impacted. The off-site residential units will be located within the area highlighted in Figure 1.

- **Relocation and redesign of the hotel:** The FEIR included a 25-story glass skinned hotel adjacent to the western corner of the casino along State Street. The redesigned, six-story hotel will have the same number of rooms, but has been relocated to Main Street where the residential units were previously located. Locating the hotel entrance on Main Street will provide increased opportunities for

patrons of MGM Springfield to visit local businesses along Main Street. The hotel will be designed to respect the architectural and historic context of Downtown Springfield.

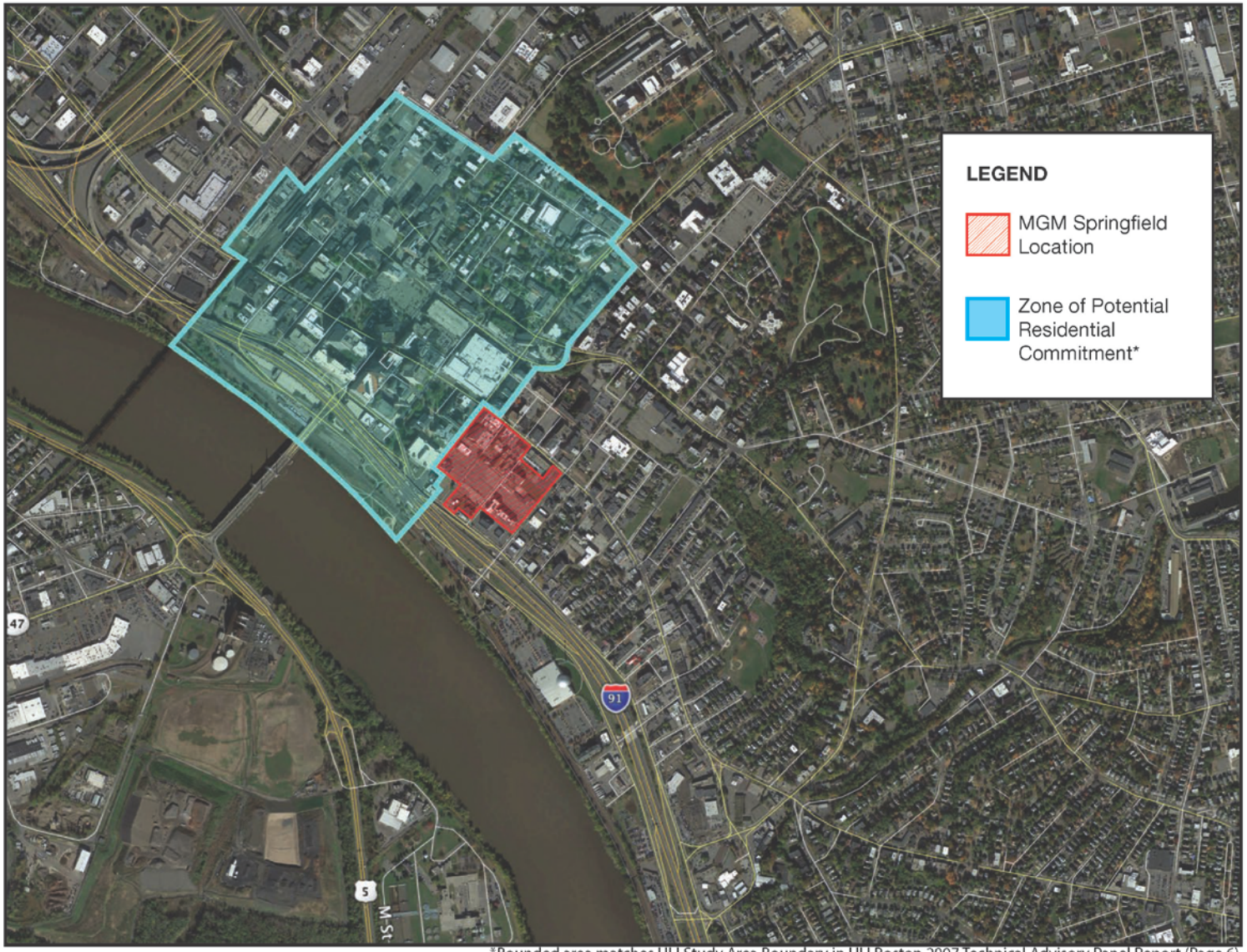
- **Reduction in gaming positions and back-of-house:** Although the square footage of the gaming space remains fairly consistent with the site plan contained within the FEIR, the number of gaming positions has been reduced by approximately 164 positions and the back-of-house space has been reduced by approximately 68,000 sf within the casino block to accommodate the redesign and relocation of the hotel.

- **Reduction in Armory Retail Block development:** The size of several uses within the Armory Retail Block will be reduced as compared to the site plan contained within the FEIR, including an approximately 26,800 sf reduction in retail space, an approximately 8,200 sf reduction in the size of the bowling alley, and an approximately 10,400 sf reduction in the size of the cinema. These reductions will be partially offset by an increase in food and beverage space and the addition of an approximately 1,300 sf arcade within the Armory Retail Block.

- **Reduction in parking garage size:** The parking garage has been reduced by one level to a seven-story parking garage. This results in a reduction of approximately 387 parking spaces.

- **Revised Opening Date:** On August 6, 2015, the Massachusetts Gaming Commission reviewed and approved a revised opening date for the Project of September 2018 based in part on the continuing necessity to coordinate the Project with the MassDOT Viaduct Project. The Viaduct Project contract was subsequently awarded to JW White and the original timeline for the MassDOT Project has been extended as follows: (i) the contractual deadline for full beneficial use for the Viaduct Project is August 6, 2018; (ii) the contractor's proposed completion date to take full advantage of all available incentives is December 14, 2017; and (iii) the contract may be completed as late as 2019 under an un-accelerated schedule. Based on the new MassDOT project schedule, the potential impact on the short and long-term success of the MGM Springfield project as well as the need for certainty around an opening date, the Proponent proposed a new opening date of September 2018 that was approved by the Massachusetts Gaming Commission.

The remainder of the Project program remains similar to the FEIR Project. Table 1 below presents a comparison. An updated site plan is presented in Attachment 3.



*Bounded area matches ULI Study Area Boundary in ULI Boston 2007 Technical Advisory Panel Report (Page 6)

MGM Springfield **Springfield, Massachusetts**

Epsilon ASSOCIATES INC.

Figure 1

Zone of Potential Residential Sites

Table 1 Project Program Comparison

Project Element	FEIR Dimension	Updated Dimension	Change
Casino Block			
Hotel	177,351	151,861	-25,490 sf
Gaming	126,701	126,262	-439 sf
Retail	7,682	15,204	+7,522 sf
Food and Beverage	48,131	34,184	-13,947 sf
Convention	45,859	43,705	-2,154 sf
Residential	64,800 / 54 units	65,000[2]	+200
Operations	268,488	200,605	-67,883 sf
Casino Block Total	**739,012**	**636,821**	**-102,191 sf**
Retail Block			
Retail	42,854	16,046	-26,808 sf
Bowling	17,810	9,618	-8,192 sf
Food and	20,115	24,962	+4,847 sf
Cinema	47,900	37,465	-10,435 sf
Office	12,000	12,000	0 sf
Operations	2,000	18,495	+16,495 sf
Church Relocation	0	2,489[3]	+2,489 sf
Arcade	0	1,261	+1,261 sf
Retail Block Total	**142,679**	**122,336**	**-20,343 sf**
Total Gross Area	**881,691**	**759,157**	**-122,534 sf**
Parking	3,762 garage spaces	3,375 garage spaces	-387 spaces

[2] The dimension change for residential will result in a net change to the Project's existing location but not a net change to the overall Project size for the purposes of MEPA or the Proponent's commitments under its Host Community Agreement due to these units being developed offsite within one half mile of the project. The residential units were analyzed as part of the MEPA review and referenced in all filings and certificates. The residential units were not, however, included within the boundaries of the licensed gaming establishment by the Massachusetts Gaming Commission under MGM Springfield's conditional license approval. See Attachment 6. Residential programing is not required as a condition of licensure under the provisions of the Gaming Act, c. 23K of the General Laws. The proposed offsite residential programing will not be licensed by the Massachusetts Gaming Commission. Therefore, construction of the residential units in these areas, while still subject to MEPA review as part of the Project will not require any further State action by the Commission.

[3] The relocated church is assumed to be occupied by restaurant space.

Measures to Minimize Environmental Impacts

The proposed changes will not alter environmental impacts. The FEIR included a thorough discussion of the Project's proposed mitigation measures and Draft Section 61 Findings, which the Proponent remains wholly committed to. The Proponent is implementing a comprehensive program of measures to mitigate traffic impacts, greenhouse gas, stormwater, and water and sewer demand. Each of these is addressed briefly below.

Transportation

The proposed changes will not result in changes in transportation impacts, as described below.

Trip Generation

The minor reduction in certain program elements understandably results in a lower trip generation potential for the Project. The number of gaming positions and retail areas, which generate the greatest number of new trips, has been reduced in the casino and Armory Square blocks as shown in Table 2.

Table 2 Trip Generation Comparison

Time Period	FEIR New Primary Trip Estimate	NPC New Primary Trip Estimate	Net Change in Primary Trips
Friday Daily	19,673	18,570	-1,103 (-5.6%)
Friday Evening Peak Hour			
Enter	730	687	-43 (-5.9%)
Exit	560	517	-43 (-7.7%)
Total	1,290	1,204	-86 (-5.0%)
Saturday Daily	21,925	20,824	-1,101 (-5.0%)
Saturday Midday Peak Hour			
Enter	740	689	-51 (-6.9%)
Exit	572	526	-46 (-8.0%)
Total	1,312	1,215	-97 (-7.4%)

As shown above, the daily and peak period trip generation has been reduced by approximately five to eight percent based on the new development program. The trip rates used within this NPC remain consistent with those previously endorsed by MassDOT during their review of the DEIR and FEIR. The detailed trip generation calculations are included in Attachment 7.

The residential development program of the Project is moving to an off-site location(s) near MGM Springfield. The 54 apartment units will likely be developed in more than one renovated building within approximately one-half mile of the Project site. The Proponent has an agreement to purchase 195 State Street for reuse for up to 35 units. This is a building that was formerly used as school district offices. Knowing that the total peak hour

trip generation for the residential development is approximately 20 peak hour trips, there will be no measureable traffic impacts associated with this change since it is a change to a less intensive use. To provide the most conservative (worst case) estimate of the trips to be generated by the Project, trips generated by the proposed apartment units were included in the trip generation estimate summarized in Table 2. Following the Proponent's review of the zoning regulations for the prospective site(s), an appropriate parking supply will be supplied on each site or through formal arrangements for shared parking in adjacent surface lots. There is also sufficient parking supply on the MGM Springfield site to provide alternative arrangements for parking.

Site Plan Modifications

The following describes the adjustments to the proposed MGM Springfield site plan and access/egress configuration as compared to the site plan that was submitted to the MEPA office as part of the FEIR review process. Accommodations for truck, bus, passenger van, valet, and self-parking vehicles have each been described separately. The minor traffic distribution changes associated with these modifications on the traffic volumes along Bliss Street, Howard Street, and Union Street are described in the Trip Distribution section of this document.

Truck and Bus Access / Egress

As part of the previously proposed site plan, access for delivery trucks was proposed via a new full-access/egress driveway on Union Street approximately 430 feet northeast of East Columbus Avenue. A 140-foot long left-turn lane was proposed on Union Street at this driveway to accommodate trucks waiting to turn into the driveway. Loading/unloading of trucks was proposed to occur in the basement level of the MGM Springfield parking garage.

As part of the original site plan, buses were proposed to enter the MGM Springfield parking garage via the truck driveway on Union Street and load/unload in the designated bus parking area on the ground floor of the parking garage. Buses would then circulate through the parking garage and exit back onto Union Street via the truck driveway.

As currently proposed, trucks would continue to enter and exit the MGM Springfield parking garage via a full-access/egress, truck driveway on Union Street, which would be shifted approximately 65 feet closer to East Columbus Avenue as compared to the prior site plan. Buses would no longer share this driveway with trucks and would be shifted to a new drop-off area on MGM Way as described below. The left-turn lane on Union Street at the truck driveway will be 100 feet long, which will be adequate to safely accommodate two trucks waiting to enter the driveway. Based on the expected truck operations described, it is highly unlikely that more than two such vehicles would be entering the site at the same time. The left turn lane has been designed to maintain an efficient traffic operation for Union Street eastbound by providing queuing area for trucks even though it does not necessarily warrant this improvement.

The modifications to the site plan described above will slightly decrease traffic entering and exiting the truck driveway on Union Street due to the shift of the bus access / egress to MGM Way. However, given the number of projected trucks and buses visiting the site per day, this modification results in a negligible change in traffic volumes. This is described further in the Trip Distribution section of this memo.

In an effort to improve the customer experience for those using mass transit via charter bus, MGM Springfield has relocated the bus depot from the periphery of the site near Howard Street to a new location directly in front of the casino doors along MGM Way. Three new saw-toothed bus bays are provided in the pedestrian-friendly area on the east side of MGM Way. This site plan change is expected to increase the attractiveness of multi-modal transportation. The increase in bus trips along Bliss Street and MGM Way is expected to have a negligible impact given the Project's overall drop in trip generation and the limited number of bus trips generated by the Project. MGM is currently investigating opportunities for off-site staging for buses that discharge passengers at the MGM Springfield bus drop-off area and wait at an off-site location for a coordinated pick-up time.

Passenger Van Parking and Limousine Staging

The previously reviewed site plan accommodated passenger van parking on the ground floor of the parking garage between two rows of bus parking. Access and egress for passenger vans was previously proposed via the shared truck/bus driveway on Union Street.

In order to accommodate truck loading/unloading on the ground floor of the parking garage, the passenger van parking has been relocated to an area between Bliss Street and Howard Street on either side of the central plant. Access to the limousine staging and van parking area to the north of the central plant is provided via the main parking garage entrance on Bliss Street and egress is provided via a connection to Howard Street. Access to and egress from the van parking area south of the central plant is provided via a connection to Howard Street. These modifications remove large vans from Union Street and will have substantially similar traffic volumes when compared to the DEIR/FEIR site plan given the limited number of passenger van trips occurring during the peak hours.

Valet Parking

With the previously reviewed site plan, the casino valet parking was proposed to be accessed via a full-access/egress driveway on Bliss Street slightly offset from MGM Way. The casino valet pick-up and drop-off area was proposed on the ground floor of the parking garage immediately adjacent the casino entrance. The hotel valet parking was proposed to be accessed via an entrance only driveway on MGM Way opposite Bliss Street and an exit only driveway onto MGM Way between Bliss and State Streets. Vehicles parked with valet service would have been accommodated in the basement level of the parking garage.

With the elimination of the basement level, the valet parking area has been shifted to the first floor of the parking garage. The valet pick-up and drop-off will occur in the same area as previously proposed for the casino valet, including the valet function associated with the redesigned hotel.

The ramp to the valet parking has been eliminated and access/egress for the valet parking area has been shifted slightly east along Bliss Street to align with MGM Way and provide a more standard four-way intersection.

The minor modifications to the site plan described above will not impact traffic entering and exiting any of the proposed site driveways on Bliss Street, Union Street, or Howard Street as the valet parking access and egress will remain essentially unchanged

Self Parking Garage

The site plan included within the FEIR showed casino self-parking on the second and higher levels of the MGM Springfield parking garage. Access into the garage was proposed via a single entrance on Bliss Street approximately 250 feet east of East Columbus Avenue. The entrance ramp was proposed to accommodate two entering lanes in order to allow traffic to flow freely into the garage from either direction on Bliss Street. Egress from the self-parking garage was proposed via a single two-lane ramp from the upper levels of the garage down to the lower level. The right-most lane was proposed to loop through the ground level to provide connections to Howard Street and Union Street for traffic destined toward I-91 South and West Columbus Avenue. The left-most lane was proposed to exit onto Bliss Street at the main self-park driveway for alternate access to I-91 North and I-291.

To accommodate the changes to the ground floor of the garage and eliminate the basement level, the main driveway for the self-parking garage will remain on Bliss Street but has been shifted approximately 50 feet closer to East Columbus Avenue to fit between the proposed columns rows. The garage entrance will still accommodate two entrance lanes to allow traffic to flow efficiently into the garage without impacting traffic on East Columbus Avenue. This driveway will continue to serve as the only entrance into the self-parking area of the garage.

Egress from the self-parking garage will still be accommodated via connections to Union Street, Howard Street, and Bliss Street; however the location of the proposed connections will shift slightly within the parking garage. As part of the previous plan, all traffic exiting the self-parking area would utilize a single ramp down to the ground level and make a decision on which exit driveway to utilize at the bottom of the ramp. With the proposed site plan, a secondary ramp has been proposed from the second level of the garage out to Union Street. To accommodate this revision, wayfinding signage will be posted within the upper levels of the garage to direct patrons destined for I-91 South and West Columbus Avenue toward this exit ramp to Union Street. Traffic exiting the self-parking area to Bliss Street or Howard Street would still continue down the main exit ramp out of the garage and

make a decision at the bottom of the ramp as to which exit to choose. The left-most lane on the down-ramp would provide a connection to Howard Street, while the right-most lane would continue to the main self-park driveway on Bliss Street. This provides a better opportunity to distribute traffic within the garage rather than draw all exiting patrons closer to the Bliss Street access point.

As the currently proposed site plan will continue to provide a similar access and egress configuration for self-parking vehicles within the MGM Springfield parking garage as compared to the previously reviewed plan, the modifications described above are anticipated to result in only minor changes to traffic volumes on Bliss Street, Howard Street, and Union Street.

The following modifications to the site plan will adjust the distribution of traffic exiting each of the site driveways:

- Bus and passenger van exiting traffic has been shifted from Union Street to Bliss Street and Howard Street. Fewer than 5 exiting bus and passenger van trips are anticipated to occur during the Friday evening and Saturday midday peak hours. Therefore, this site plan modification is expected to have a negligible impact on traffic volumes exiting the site.

- With the previously reviewed site plan, traffic exiting the self-parking garage toward Howard Street would travel down the main garage exit ramp and make all free-flowing right-turns exiting the garage to Howard Street. With the currently proposed plan, these vehicles will continue to use the main garage exit ramp, but will need to yield at the bottom of the ramp to traffic entering the garage in order to make a left-turn through the garage toward Howard Street. The potential delay and conflict that may result from this modification is likely to result in some redistribution of traffic that was formerly anticipated to exit via Howard Street to use the Union Street and Bliss Street driveways. However, the five to eight percent reduction in the overall trip generation negates the potential increases along Bliss Street associated with this change.

- The exit ramp to Union Street will be accessible from the second floor of the MGM Springfield parking garage and will require a route through the second floor of the garage to access the ramp. As a result, the majority of exiting traffic is likely to utilize the main ramp toward Bliss Street. Wayfinding signage will be posted within the garage to direct patrons destined for I-91 South to utilize the Union Street exit ramp. Therefore, patrons that were anticipated to utilize the Howard Street egress toward I-91 South with the previously reviewed plan will be redistributed to the Union Street ramp with the currently proposed site plan. The 6 to 10 percent reduction in the overall site-generated trips created by the proposed site plan modifications will negate any trips redistributed from the Howard Street egress to the Union Street ramp to access I-91 South, resulting in negligible changes in traffic

volumes exiting the MGM Springfield garage toward Union Street. This minor change in traffic volumes is not expected to measurably impact traffic operations at intersections along Union Street.

- Approximately one-third of the remaining trips that were formerly anticipated to utilize the Howard Street egress with the previously reviewed site plan will continue using this egress with the currently proposed site plan. The remaining two thirds will exit the garage via the main driveway onto Bliss Street toward East Columbus Avenue. This will result in a decrease in vehicle trips on East Columbus Avenue between Howard and Bliss Streets of 107 to 111 vehicle trips, and an increase in traffic exiting Bliss Street onto East Columbus Avenue of 78 vehicle trips during the Friday evening and Saturday midday peak hours as compared to the previous plan. As the increase on Bliss Street will be all right-turns and the volume of East Columbus Avenue will decrease by a greater volume, the changes in traffic volumes are not expected to result in significant changes to the operations of the East Columbus Avenue / Bliss Street intersection because the overall traffic volumes remain consistent.

Based on the insignificant changes in the configuration of the proposed site driveways, coupled with the decrease in trip generation, there is no need to update the quantitative capacity analysis of the intersections in the vicinity of the Project.

Off-Site Transportation Mitigation & Road Safety Audits

Although the trip generation characteristics of the site are lower than originally projected in the DEIR and FEIR, the Proponent is not reducing its commitment for off-site transportation mitigation. Therefore, the infrastructure improvements and operational requirements outlined within the FEIR Certificate remain intact. The MGM design team, MassDOT, City staff, and other independent consultants and stakeholders will be conducting Road Safety Audits in eight different areas in late October and early November. As requested by MassDOT, several elements of the easily implemented recommendations may be added to the mitigation requirements that will ultimately be included into MassDOT's Section 61 Finding. Other elements associated with the MGM's commitment to enhance MassDOT's Intelligent Transportation System (ITS) infrastructure along the Route 5 corridor are being defined as part of this Finding. This includes supplemental highway message board, cameras, and/or communications that will assist MassDOT in notifying the motoring public of future traffic conditions.

Parking Demand

Section 3.9.3 of the FEIR contained a detailed analysis of the parking demand anticipated to be generated by the MGM Springfield Project for each hour of the day and each day of the week to assess whether the proposed parking supply would be adequate to accommodate the peak parking demand. The parking demand characteristics for the casino patrons,

casino employees, hotel, apartments, daycare center, and Armory Square were each calculated separately for each hour and superimposed upon one another to identify the total peak parking demand for the entire site. A similar analysis was conducted for the updated building program, which indicates that the peak parking demand generated by the MGM Springfield Project with the revised site plan would be 2,928 spaces on a Friday and 3,107 spaces on a Saturday. Table 3 below provides a comparison of the parking demand generated by the prior site plan included in the FEIR and the current site plan included in this NPC. The detailed parking demand generation calculations are included in Attachment 6. As shown in Table 3, the site plan revisions will result in a net decrease in parking demand generated by the MGM Springfield Project of 173 spaces during the Friday peak and 162 spaces during the Saturday peak hours.

Table 3 Parking Demand Generation Comparison

	MGM Springfield Parking Demand (in spaces)		
Time Period	FEIR Parking Demand	NPC Parking Demand	Net Change in Parking Demand
Friday Peak Hour	3,101	2,943	-158 (-5.1%)
Saturday Peak Hour	3,269	3,127	-142 (-4.3%)

In addition to a net reduction in parking demand, the revised site plan also proposes a net reduction in parking supply within the parking garage of approximately 387 parking spaces by removing one of the floors. This reduction in parking supply is consistent with the reduction in parking demand anticipated for the Project, as demonstrated in Table 3. A total of 3,437 parking spaces will be provided on site. Therefore, the proposed parking supply will be adequate to accommodate the peak parking demand, while allowing a minimum of an additional 310 parking spaces to remain available for use by existing land uses in the surrounding area that may be displaced by the Project.

As described in Section 3.9.1 of the FEIR, the former land uses located on the MGM site and within the surrounding area just prior to commencement of demolition activities generated a peak parking demand of 700 parking spaces within parking lots that will be eliminated as part of the MGM Springfield Project. These businesses experience their peak parking demand on Monday through Friday between 8:00 AM and 5:00 PM, during which time the casino experiences limited activity. As a result, parking spaces will be available within the MGM Springfield parking garage during the day for use by the surrounding businesses.

During the day when surrounding businesses experience their peak parking demand of 700 spaces, the MGM Springfield facility is expected to generate a maximum parking demand of approximately 2,336 parking spaces. Superimposing the peak parking demand of the Project and the existing businesses results in a total peak parking demand of 3,036 parking spaces. This represents approximately 88.3 percent occupancy of the proposed parking

supply on the site. Based on information contained within the Institute of Transportation Engineers (ITE) publication *Parking Generation, 4th Edition,* drivers typically perceive a parking lot to be full when approximately 90 percent of the park spaces are full. Therefore, the parking garage has been sized appropriately to ensure that the parking supply can accommodate the peak parking demand without causing excess recirculation of vehicles to find open parking spaces.

Greenhouse Gas

The Proponent remains committed to achieving the same level of GHG reductions described in the FEIR. MGM Springfield continues to evaluate energy projects, including geothermal and solar applications. As the design progresses, the final determination of PV extent will depend on construction and interconnection costs, but the design strategy of achieving at least 10% of MGM Springfield's annual electricity needs via a combination of on-site solar and RECs is not anticipated to change.

All candidate PV areas will be constructed as "solar-ready." Specifically, roof areas not significantly shaded, and not designated for other uses (mechanical equipment, green roof, etc.) will be constructed such that they can support the loads and include space for conduit runs and electrical gear such as inverters and meters.

Water Supply and Wastewater

As discussed in the FEIR, water conservation methods to reduce the Project's effects on the Springfield Water and Sewer Commission's water distribution system may include:

- Rainwater reuse for landscape irrigation;
- Weather-based irrigation controllers;
- Installation of drip irrigation systems;
- Drought tolerant plants;
- Low-flow urinals;
- Low-flow water closets (1.1 gallons per flush (gpf) for liquids and 1.6 gpf for solids);
- Metering faucets (fitted with 0.5 gallon per minute (gpm) aerators with 15 seconds run time); and
- Education and training programs.

The water conservation measures identified above will minimize the Project's wastewater generation. Low Impact Development techniques will be implemented to minimize the volume of stormwater runoff, which will in turn reduce impacts on the wastewater collection and treatment systems.

As a result of the updated program, water use is anticipated to decrease by approximately 18,888 gallons per day (gpd) to approximately 225,242 gpd. Wastewater generation will decrease by approximately 14,319 gpd for a total generation of 207,618 gpd. See Table 4 below for detail calculations.

Table 4 Proposed Water Use and Wastewater Generation

Use	Square Footage	Program	Unit	Gallons Per Day (GPD)*	Total (GPD) Wastewater Demand	Total (GPD) Water Demand
Retail	31,250		per 1000 sq. ft.	50	1,563	1,719
Warehouse Area						
Dock	9,059	7 Persons	per person	15	105	115
Back of House	156,920	970 Persons	per person	15	14,550	16,005
Warehouse	9,201	10 Persons	per person	15	150	165
Central Plant	14,788	4 Persons	per person	15	60	66
Cinema	37,465	750 Seats	per seat	5	3,750	4,125
Daycare	6,000	95 Persons	per person	10	950	1,045
Bowling	9,501	10 Lanes	per lane	100	1,000	1,100
Restaurant	56,216	2,165 Seats	per seat	35	75,775	80,215
Convention/ Function Hall	29,128	1,450 Seats	per seat	15	21,750	23,925
Casino	126,262	3,657 Seats	per seat	15	54,855	60,341
Hotel						
Hotel	148,322	251 Rooms	per room	110	27,610	30,371
Spa / Fitness	5,955	55 Persons	per person	100	5,500	6,050
				TOTAL:	**207,618**	**225,242**

Stormwater

As discussed in the FEIR, the Project will reduce the amount of impervious area on the site. Appropriate Best Management Practices and Low Impact Development concepts will be used to mitigate the stormwater impacts from the proposed development.

Historic Resources

The Proponent will utilize full preservation, partial preservation, and relocation of historic properties within the Project site to eliminate, minimize, or mitigate adverse impacts. The Proponent has had ongoing consultation with the Massachusetts Historical Commission (MHC) regarding project impacts to historic properties. The MHC, in its review of the DEIR and supporting materials, determined that the Project includes demolition of part or all of State Register Properties, which constitutes adverse effects through destruction or alteration of all or part of the buildings. The MHC consulted with the Massachusetts Gaming Commission (MGC) and Proponent regarding the potential adverse effects of the Project to the State Register Properties, examined alternatives, and concluded that there are no prudent and feasible measures or alternatives which would eliminate the need for the demolition or partial demolition of State Register Properties. It was agreed that the parties would enter into a Memorandum of Agreement (MOA) outlining measures to eliminate, minimize, and/or mitigate the adverse Project impacts. The MHC has determined to accept the adverse effects of the Project on the State Register Properties in accordance with the satisfactory implementation of the terms and stipulations of the MOA. The Springfield Historical Commission (SHC), City of Springfield, and Springfield Preservation Trust (Concurring Parties) were invited to participate in the consultation and to concur with the MOA.

The draft MOA has been revised in response to comments from the MHC and SHC. The most recent version of the MOA, accompanied by additional information describing changes to the Project program, was submitted to the MHC on September 24, 2015. The Proponent anticipates ongoing consultation with the MHC, MGC, and Concurring Parties to finalize the MOA.

Attachment 1

Secretary's Certificate on the 2014 Final Environmental Impact Report

The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Deval L. Patrick
GOVERNOR

Maeve Vallely Bartlett
SECRETARY

Tel: (617) 626-1000
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December 31, 2014

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
FINAL 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	: November 24, 2014

As Secretary of Energy and Environmental Affairs, I hereby determine that the Final Environmental Impact Report (FEIR) 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).

Project Description

As described in the FEIR, the project consists of a 881,691 gross square foot (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 14.5-acre site in downtown Springfield. On November 6, 2014 the Proponent was awarded 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 (the Gaming Act), which authorizes the Massachusetts Gaming Commission (MGC) for Region B of the Commonwealth.[1] As required by the Gaming Act, a Host Community Agreement between the

[1] 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.

City of Springfield and the Proponent was signed on May 14, 2013 and approved by the residents of Springfield on July 15, 2013.

The FEIR stated 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 (739,012 sf) and the Retail Block (142,679 sf).[2]

The Casino Block includes the following: 126,701 sf of casino gaming facilities with 3,821 gaming positions; a 250-room hotel (177,351 sf); 45,859 sf of convention space; 7,682 sf of retail space; 48,131 sf of restaurant space; 268,488 sf of casino-related back of house/operational space and 54 apartments (1-3 bedroom units; 64,800 sf).

The Retail Block includes a retail and entertainment center ('Armory Square'), an eight-story parking structure to provide 3,762 parking spaces, and a surface parking lot with 54 spaces. It will include a 17,810-sf bowling alley, 42,854 sf of retail space, 20,115 sf of restaurant space, a 47,900-sf multi-screen cinema, an event plaza, 12,000 sf of office space and 2,000 sf of back of house/operational space.

The project is estimated to generate 19,010 visitors per day on a weekday (Monday - Thursday) and 26,640 visitors per day on a weekend day (Friday – Sunday). The redevelopment includes a combination of new construction, redevelopment of existing buildings, retention of existing infrastructure and facilities, and demolition. 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.

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

[2] As noted in the FEIR, this Casino Block square footage is a correction from the DEIR that incorrectly stated the square footage at 501,708 sf. The DEIR figure omitted a majority of back of house space and did not impact the transportation analysis.

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. Impervious surfaces, compared to existing conditions, will be reduced by 1.8 acres. The project will generate a total of 24,851 average daily vehicle trips (adt) on a Friday and 27,590 adt on a Saturday. 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 244,130 gallons per day (GPD) and wastewater generation is estimated at 221,937 GPD. A total of 3,816 parking spaces (structured and surface) are provided.

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 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 thresholds:[3]

- 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));

[3] 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 landheld for natural resources purposes and, therefore, does not exceed this threshold.

- 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 an Underground Injection Control (UIC) (BRP WS-06) 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).

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 may be subject to review pursuant to the National Environmental Policy Act (NEPA), Section 4(f), and 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 Discontinuance, and an Application for Re-Zoning. The Proponent has entered into a Host Community Agreement (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.

Changes Since the Filing of the Draft EIR

The FEIR identified the following modifications to the project since the filing of the DEIR:

- The gas station and convenience store, previously located on Lot 14, have been removed from the project. The other elements of the project program remain the same;
- Pedestrian connections and site circulation have been refined to provide clear connections between on-site features, surrounding businesses, and the adjacent sidewalk network;
- A vehicle turning circle has been added at the Main Street end of Howard Street;
- Elimination of a previously proposed 12-foot turning lane along East Columbus Avenue between Howard and Bliss Street; and
- Architectural design modifications are proposed in response to consultation with the Springfield Historic Commission (SHC). The façade of 73 State Street will be preserved as originally proposed; elements of the building lobby will be preserved and used elsewhere in the project. The street-side portion of the 95 State Street façade will be preserved and reused, while the remaining portions of the office tower will be removed.

Surrounding Community Agreements

The Proponent also entered into Surrounding Community Agreements (SCAs) consistent with the MGC regulations (205 CMR 125.00). The communities that were deemed "Surrounding Communities" per the MGC's regulations were: Agawam, Chicopee, East Longmeadow, Holyoke, Longmeadow, Ludlow, West Springfield, and Wilbraham. The communities of Longmeadow and West Springfield participated in an arbitration process to determine the most appropriate settlement agreement; this process was completed in April 2014 and the Proponent has finalized all required SCAs. Per the SCAs, physical mitigation improvements previously proposed by the Proponent in the Towns of Longmeadow and West Springfield will no longer be undertaken by MGM Springfield.

The SCA processes identified the following payments:

Community	Upfront Payment	Annual Payment	Terms
West Springfield	$665,000, plus legal and consulting expenses of $129,000	$425,000 (average plus annual consumer price index adjustment)	Duration of operations
Longmeadow	$850,000, plus legal and consulting expenses of $143,000	$275,000 (plus 2.5% escalator)	15 years (with mutual right to reopen for negotiation upon license renewal)
Agawam	$125,000	$150,000	15 years with waiver of right to reopen
Chicopee	$125,000	$150,000	15 years with waiver of right to reopen
East Longmeadow	$50,000	$100,000	15 years with waiver of right to reopen
Wilbraham	$50,000	$100,000	15 years with waiver of right to reopen
Ludlow	$50,000	$100,000	15 years with waiver of right to reopen
Holyoke	$50,000	$85,000	15 years with waiver of right to reopen

Review of the FEIR

Project Description and Permitting

The FEIR included a description of the project and supporting narrative and graphics in response to the scope issued in the Certificate on the DEIR. The FEIR identified local, State and federal permitting requirements. The FEIR provided responses to comments received on the DEIR and identified measures proposed to avoid, minimize, and mitigate Damage to the Environment.

The FEIR provided additional information on the block between Hubbard Avenue, Willow Street, Union Street, and Main Street. This parcel is a possible site for the relocation of the French Congregational Church and the proposed 3,000-sf daycare facility. The Proponent indicated that these project elements are accessory to the casino, with the proposed church location at the corner of Union and Willow Street and the daycare located at the corner of Hubbard Avenue and Willow Street. According to the FEIR, the location for the church was reviewed by the SHC and the SHC did not raise any objections to this location. The Main Street side of the block is preliminarily proposed as a 6,000-8,000-sf retail building with a rear parking lot; however, programming is contingent upon the church relocation and zoning requirements associated with the daycare facility.

Traffic and Transportation

The FEIR included an updated transportation study prepared in conformance with the MassDOT/EEA *Transportation Impact Assessment Guidelines*. The MassDOT comment letter noted that the FEIR adequately addressed its comments raised in the DEIR and included satisfactory mitigation measures for impacts to State roadways. Comments submitted by the City of Springfield identify concerns related to pedestrian signal phasing, bicycle accommodations, operations along Main Street and Union Street. As indicated below, additional analysis or design will be necessary in conjunction with State, local and potentially federal permitting requirements for impacts to roadways within the study area. Implementation of the final traffic mitigation program may require amendments to existing agreements, such as the HCA with the City of Springfield, to accurately reflect the final project design. The Proponent should continue to work with MassDOT, the City of Springfield, the PVPC, PVTA, abutting landowners and communities with a SCA through project design, permitting and construction commencement to avoid, minimize and mitigate project-related traffic and transportation impacts. The Proponent should use the comment letters provided on the FEIR to guide these coordination efforts.

This FEIR included a supplemental analysis that included an assessment of the following intersections:

- West Street (US Route 20)/Riverside Road/Basset Boat Company Driveway [City of Springfield];
- Burnett Road/New Lombard Road [City of Chicopee]; and
- Converse Street/Laurel Street [Town of Longmeadow].

The FEIR described existing conditions at each of these intersections, including roadway geometrics and signal equipment, traffic volumes, intersection operations, and intersection safety. Future traffic volumes for the 2024 No-Build and 2024 Build Condition were estimated with consideration for projected background growth volumes and in a manner consistent with the methodology use in the DEIR. The FEIR presented the results of levels of service (LOS) and queue length analyses (average and 95th percentile) for the supplemental intersections. This intersection analysis used *Highway Capacity Manual (HCM) 2000* software, while LOS in rotaries were determined using a procedure described in Sidra Intersection v.5.1 software. The supplemental traffic analysis concluded the following:

- West Street (US Route 20)/Riverside Road/Basset Boat Company Driveway [City of Springfield] – all movements in this intersection are anticipated to operate at LOS C or better in the 2024 No-Build and 2024 Build Condition. No project-related mitigation is proposed.
- Burnett Road/New Lombard Road [City of Chicopee] - all movements in this intersection are anticipated to operate at LOS C or better in the 2024 No-Build and 2024 Build Condition. No project-related mitigation is proposed.

- Converse Street/Laurel Street [Town of Longmeadow] – The Laurel Street southbound approach is expected to continue to operate at degraded LOS (LOS F) in the 2024 No-Build and 2024 Build Conditions. The project is not anticipated to add additional traffic volumes to the Laurel Street southbound approach and is anticipated to contribute less than one percent of all intersection traffic in the 2024 Build Condition. Therefore, no project-related mitigation is proposed at this location.

The FEIR included a queue storage evaluation of the average and 95th percentile queues for all study area intersections under the 2024 No-Build, 2024 Build, and 2024 Build with Mitigation Conditions. This evaluation included a comparison of all queues with the available queue storage distances. These data were use to determine if additional mitigation measures are required in the 2024 Build Condition. The Proponent will be required to work with MassDOT during and post permitting to optimize traffic operations and manage access along some project corridors. Potential modifications proposed by MassDOT to further improve traffic operations include:

- Providing right-turn lanes into the site to facilitate turning and through traffic on Union Street (these are projected to operate at LOS B);
- Implementing potential signal timing improvements and coordination at the Riverside Street/West Street and Plainfield Street/Avocado Street intersections, subject to further evaluation;
- Providing two through lanes and a right-turn lane for the Union Street westbound approach at the Union Street segment under the I-91 overpass; and
- Ensuring that the proposed queue detector on the I-91 southbound ramp off-ramp would pre-empt the Hall of Fame Avenue southbound movement and the Union Street eastbound movement simultaneously to prevent traffic from backing up on the I-91 southbound ramp.

The FEIR included detailed conceptual plans for all proposed improvements, including bicycle and pedestrian improvements, verifying the feasibility of constructing such improvements. These plans clearly showed 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, as applicable. The FEIR included detailed and updated pedestrian and bicycle plans that clearly identified paths and location of infrastructure (including bicycle parking) and connections. All off-site roadway improvements will be constructed consistent with Complete Streets principles to the maximum extent reasonable and practicable. The FEIR discussed the project's consistency with these principles and summarized proposed "complete streets" improvements.

Construction period traffic impacts and traffic and parking management mitigation measures are addressed later in this Certificate.

Sensitivity Analyses

The FEIR included a sensitivity analysis for study area intersections in the Town of Longmeadow to evaluate potential traffic-related impacts of the project utilizing alternative trip generation and distribution assertions developed by the peer review letter generated by Greenman-Pedersen, Inc. (GPI) on behalf of the PVPC. This sensitivity analysis was conducted for the study area intersections presented in the DEIR and the additional intersections included in the FEIR:

- Longmeadow Street (US Route 5)/Forest Glen Road/Western Drive;
- Longmeadow Street (US Route 5)/Converse Street/Englewood Drive; and
- Converse Street/Laurel Street.

The sensitivity analysis evaluated the impact of the following assertions:

1. Trip generation rates for casino gaming and casino employees should be increased by 20 percent; and
2. Overall trip generation distribution along Longmeadow Street should be increased from 3.0 percent to 3.5 percent of total site-generated traffic.

The FEIR confirmed the use of the Friday PM peak hour as the "critical" analysis period for the US Route 5 corridor through the completion of automatic traffic recorder (ATR) counts along Longmeadow Street south of Forest Glen Road and manual Turning Movement Counts (TMCs). To conduct the sensitivity analysis, the GPI-recommended site-generated traffic volumes for the project were superimposed utilizing the GPI-projected trip distribution upon the No-Build traffic networks to reflect the 2024 Build Condition. The FEIR included the results of the sensitivity capacity and queue analysis for the study area intersections in tabular format, supported by a descriptive narrative explaining the results in additional detail. The FEIR concluded that the introduction of additional site-generated traffic along Longmeadow Street and Converse Street, using GPI assertions, would have a negligible impact on the results of the traffic analysis provided in the DEIR.

The FEIR also included a sensitivity analysis for study area intersections in the Town of West Springfield to evaluate potential traffic-related impacts of the project utilizing the GPI assertions associated with alternative trip generation and distribution. This sensitivity analysis was conducted for the following study area intersections presented in the DEIR:

- Memorial Avenue (Route 147)/Union Street/Union Street Extension;
- Memorial Avenue (Route 147)/Bresnahan Street/Century Plaza Driveway;
- Memorial Rotary;
- Park Street (US Route 20)/Elm Street;
- Park Street (US Route 20)/Main Street;
- Park Avenue (US Route 20)/Elm Street/Union Street;
- Park Avenue (US Route 20)/Main Street; and

- North End Rotary.

The sensitivity analysis evaluated the impact of the following assertions:

1. Trip generation rates for casino gaming and casino employees should be increased by 20 percent;
2. Overall trip distribution across the Memorial Bridge should be increased from 3.0 percent to 6.0 percent of the overall site-generated traffic; and
3. Overall trip distribution across the North End Bridge should be decreased from 5.0 percent to 3.0 percent of total site-generated traffic.

To conduct the sensitivity analysis, the GPI-recommended site-generated traffic volumes for the project were superimposed utilizing the GPI-projected trip distribution upon the No-Build traffic networks to reflect the 2024 Build Condition. The FEIR included the results of the sensitivity capacity and queue analysis for the study area intersections in tabular format, supported by a descriptive narrative explaining the results in additional detail. The FEIR concluded a reduction of site-generated traffic, as compared to the DEIR, across the North End Bridge, using GPI assumptions, would improve traffic operations at this location. Furthermore, the FEIR concluded that the introduction of additional site-generated traffic across Memorial Avenue, using GPI assertions, would have a negligible impact on the results of the traffic analysis provided in the DEIR. The FEIR acknowledged the poor LOS (LOS F) associated with the Memorial Rotary in the 2024 No-Build and 2024 Build Condition (using both DEIR and GPI methodologies). According to the FEIR, MassDOT plans to construct improvements at the Memorial Rotary in Summer 2015, prior to opening of the MGM Springfield project. Improvements to the North End Rotary are currently under construction by MassDOT on an accelerated construction schedule in order to ensure work is completed prior to the commencement of the I-91 Viaduct Deck Replacement project (scheduled to commence in Spring 2015). These rotary improvements are anticipated to improve safety and are not expected to have a measurable impact on traffic operations.

The FEIR also evaluated the potential impact on project-related traffic if proposed MassDOT infrastructure projects are not constructed prior to the opening of MGM Springfield. In particular, the FEIR focused on MassDOT Project #606599, which consists of improvements at the Burnett Road/I-90 Interchange 6/I-291 signalized intersection. The proposed improvements, including signal upgrades, construction of a third left-turn lane existing I-90 onto Burnett Road/I-291, and additional channelized right-turn lane from I-291 northbound onto I-90, and an additional through lane on Burnett Road southbound is anticipated to commence in the spring of 2017. Plans to convert I-90 to open road all-electronic tolling (AET) will alter queuing trends on the I-90 westbound approach to the intersection of Burnett Road/I-90 Interchange 6/I-291 in Chicopee. AET is expected to be active by July 2016; however, toll booth structures may remain until the spring of 2017. Both of these MassDOT infrastructure projects are expected to be constructed prior to the opening of MGM Springfield. These improvements were incorporated into the 2024 No-Build and Build analyses in the DEIR's traffic study.

The FEIR concluded that based on existing intersection geometry at Burnett Road/I-90 Interchange 6/I-291, the left-turn exiting the I-90 ramps is expected to operate at degraded LOS in the 2024 No-Build and 2024 Build Conditions during the Friday evening peak period. Pending the construction of MassDOT Project #606599 improvements, signal timing optimization should be implemented to mitigate project-related impacts and result in all movements at the intersection operating at levels consistent with the 2024 No-Build Condition.

Additional Operational and Intersection Analyses

As directed by MassDOT, the FEIR included an evaluation of potential mitigation measures at the Plainfield Street (Route 20) and I-91 northbound ramps intersection. The traffic analysis indicated that 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 noted that the crash rate at this location is higher than the district and state averages. Project-related traffic is expected to increase traffic volumes on the I-91 northbound off-ramp by 3.5 percent. In the FEIR the Proponent proposed to provide interim lane configuration mitigation to the intersection prior to any long-term corridor improvements along Plainfield Street that MassDOT and the City of Springfield may consider in the future. A sensitivity and queue analysis was conducted to demonstrate that proposed mitigation measures will reduce delay and queues on the I-91 northbound off-ramp. These interim improvements are detailed in the mitigation section of the Certificate.

The FEIR included an evaluation comparing traffic operations associated with a five-lane versus a four-lane cross-section of Union Street under the I-91 overpass. The Proponent met with MassDOT and the City of Springfield and presented the results of this analysis prior to submission of the FEIR. The FEIR included graphics depicting proposed and existing roadway widths, lane assignments and width, bike accommodations and adjacent shared-use areas for each cross-section. MassDOT conducted a capacity and queue analysis for each cross-section in the 2024 and 2034 Build with Mitigation scenarios. The results of this analysis indicated that the traffic generated by the project would be accommodated efficiently with either a four-lane or five-lane cross-section on Union Street under the I-91 overpass (i.e., overall intersection LOS C or better). The five-lane cross-section limits bicycle accommodations to a narrow shoulder; however, MassDOT recommended the implementation of the five-lane cross-section as it provides additional storage to accommodate the double left-turn from Hall of Fame Avenue to Union Street. I strongly encourage the Proponent and MassDOT to weigh the potential benefits of the four-lane cross-section with a full bicycle lane in the final selection of alternatives, as this amenity is consistent with project mode-share shift goals. Furthermore, I note the comment letter from Pride Stores LLC indicating that previous attempts to mitigate traffic in this location were not advanced due to potential conflicts with an existing Traffic Control Agreement (TCA) between MassDOT and the City of Springfield. It is unclear from the FEIR how the proposed cross-section modifications will continue to meet the TCA or if a new agreement is required. This additional permitting and review step should be considered when determining the cross-section submitted for approval by MassDOT and the City of Springfield.

The FEIR did not include a simulation model of the I-91/Route 5 interchange. The FEIR noted that the Proponent met with the City of Springfield and MassDOT to discuss project impacts on the I-91 viaduct and the status of future roadway improvement projects along I-91 in Springfield and Longmeadow. An I-91 Long-Term Improvements Study is currently being prepared on behalf of MassDOT. MassDOT indicated at this meeting that a simulation model of the I-91 corridor should be prepared by the PVPC as part of an ongoing corridor study on I-91 between Exits 1 and 5. I note the comment from PVPC indicating that a traffic simulation model is not currently proposed as part of its Unified Planning Work Program for this section of I-91. The PVPC indicates its preference for this simulation modeling work to be integrated into the MassDOT study, or undertaken by the Proponent. It is unclear from the FEIR and comment letters if such modeling is necessary to inform the proposed mitigation program for the project. The Proponent, MassDOT and the PVPC should discuss this issue in advance of the preparation of 25 percent transportation design plans to determine the study's need and the entity responsible for its completion.

Intersection Safety Analysis

At the request of MassDOT, the Proponent reviewed the crash history for all study area intersections to assess where crash rates exceed State and district-wide averages, where intersections are eligible for the Highway Safety Improvement Program (HSIP), and where intersections appear on the MassDOT Top 200 Crash Locations listing. According to the FEIR, MassDOT guidelines require a Road Safety Audit (RSA) to be conducted where HSIP-eligible or statewide Top 200 crash clusters are present within the study area of a transportation improvement project, prior to commencing or finalizing a 25 percent design and Functional Design Report (FDR). MassDOT's comments on the DEIR also indicated that RSAs should be prepared for other high crash rate locations in the study area that will receive significant volumes of project-related traffic. Those intersections that will be subject to an RSA as part of the 25 percent design process for improvements are listed in the mitigation portion of this Certificate. MassDOT indicated that as of the submission of the FEIR, crash data has been updated to reflect 2012 data. The Proponent should review all identified high crash locations in Springfield and surrounding communities and update the list of intersections in order for MassDOT to revise the locations where RSA's will be required. During permitting, MassDOT will make recommendations on mitigation measures to be implemented by the Proponent upon completion of the RSAs and revise the draft Section 61 Finding accordingly.

The FEIR indicated that the project no longer includes widening East Columbus Avenue between Bliss Street and Howard Street to accommodate an additional lane for motorists decelerating onto Bliss Street as they enter the site. The conceptual improvement plans included in the FEIR have been modified to provide a sweeping, channelized right-turn lane from East Columbus Avenue onto Bliss Street in place of the standard deceleration lane that was positioned parallel to East Columbus Avenue. The channelized right-turn lane will allow vehicles to depart East Columbus Avenue onto Bliss Street at a transitional rate of speed, reducing delay to following vehicles, and eliminating the need for a full deceleration lane. The capacity and queue analysis included in the FEIR demonstrates that the proposed channelized

right-turn lane will provide similar operations when compared to the previously proposed standard deceleration lane and can accommodate site-generated traffic.

Roadway Jurisdiction and Functional Classification

The FEIR indicated that off-site improvements are proposed on roadways owned and maintained by both MassDOT and the City of Springfield. The FEIR included graphics depicting the jurisdiction and functional classification of study area roadways. According to the FEIR, traffic control modifications to highway ramps typically require review and approval by the FHWA through a Project Framework Document. The project includes the following improvements to interstate highway ramps:

- Installation of queue detection on the I-91 Exit 6 southbound off-ramp; and
- Reconstruction of the end of the existing vehicle barrier between the off-ramp and West Columbus Avenue to improve sight lines.

The FEIR states that these improvements are not anticipated to require submission of a Project Framework Document because they do not include a change in lane use of traffic control on the interstate off-ramp. Several of the roadways within the study area are also part of the National Highway System (NHS). The project includes improvements to several NHS-designated roadways to enhance pedestrian and bicycle access and incorporate safety measures. These improvements may require design exception requests (DER) related to lane and shoulder widths, but are expected to be classified as 3R (Resurfacing, Restoration, and Rehabilitation) projects that have no significant geometric changes or widening. The FEIR described potential design exceptions based upon the conceptual mitigation plans at the following intersections:

- Main Street – lane width and shoulder width;
- State Street (east of Main Street) – shoulder width;
- State Street (west of Main Street) – lane width and shoulder width;
- West Columbus Avenue (between Memorial Bridge/Boland Way and Union Street) – shoulder width;
- Memorial Bridge – lane width and shoulder width;
- Plainfield Street – shoulder width; and
- Plainfield Street Bridge – shoulder width, pedestrian accommodations, bicycle accommodations.

In addition to ramp modifications, FHWA and NEPA review will be required for improvement projects proposed on roadways that are part of the NHS where a design exception is required, whether it lies within City or State jurisdictional limits. The FEIR included a commitment by the Proponent to work with MassDOT during the 25 percent design stage to review proposed mitigation concepts and determine the extent of subsequent federal environmental permitting requirements. The project team will prepare DERs and Categorical Exclusion forms associated with NEPA permitting for review and approval by MassDOT and the City of Springfield.

Abutter Site Circulation

The FEIR summarized potential traffic circulation impacts associated with the construction and operation of the MGM Springfield project on three abutters: the Colvest Property, Red Rose Pizzeria, and the Bacon & Wilson Property. Specifically, the discontinuation of Howard Street and Bliss Street will alter existing access patterns to these sites. The FEIR described existing access/egress driveways for each site, proposed changes to access/egress (e.g., changes to allowed turning movements, etc.), and comparative travel distance changes due to modified access and egress points.

I received several comments from abutting property owners immediately adjacent to the project site. As a result of the discontinuation of Howard Street and Bliss Street, as well as the construction of new access and egress points for the project, existing operations (e.g., entry and exit points, delivery or trash pick up access, etc.) at these adjacent sites will be altered. I strongly encourage the Proponent to establish a dialogue with each abutter to clarify potential project-related impacts, proposed mitigation measures, and seek to remedy additional impacts to the extent the Proponent is legally obligated to do so. The Proponent should continue to evaluate design or operational measures to ameliorate project-related impacts to abutting properties, including but not limited to, design treatments to reduce the visual impact of the garage, confirmation of the constructability of the garage from entirely within the Proponent's property, mitigation measures to reduce noise, vibration or emissions associated with the proposed central plant, maintenance of safe pedestrian access, and enhanced communication protocols during the construction period. I note the specific concerns expressed by Colvest/East Columbus, LLC regarding potential conflicts with traffic exiting this property's driveway to the through lane onto Union Street due to the addition of the westbound right-turn only lane and the potential for cut-through traffic exiting the project garage onto Howard Street. The Proponent should specifically review these concerns with respective abutters and the City of Springfield prior to finalizing the project's mitigation plan to determine if there are additional opportunities to mitigate potential impacts.

Bicycle and Pedestrian Infrastructure

The FEIR included graphics and a supporting narrative that described existing bicycle and pedestrian infrastructure within the study area, noting width, condition, signage, ADA-compliance, push buttons, bicycle detection capabilities, etc. The Proponent will implement a series of bicycle and pedestrian infrastructure improvements to enhance existing and future operations and to improve the safety of study area roadways and intersections for pedestrians and bicyclists. The Proponent will install way-finding signage at key entry points within Downtown Springfield and along primary MGM Springfield access/egress corridors to facilitate pedestrian and bicycle use. The project will also enhance bicycle and pedestrian access to the Connecticut River Walk and Bikeway by providing improved railroad crossing signage and striping along the at-grade bikeway access point along West Columbus Avenue (opposite State Street) and adding way-finding signage and improved lighting under the I-91 viaduct at State Street and Union Street. Proposed improvements must be reviewed and approved by the City of Springfield. For

those improvements located on NHS-roadways additional review and approval by MassDOT will be required.

Proposed pedestrian improvements include:

- Installation of updated MUTCD-compliant pedestrian signal equipment (i.e, push buttons and signage, countdown signal housings, audible warning devices (where necessary);
- Modification or retrofitting of accessible wheelchair ramps to achieve compliance with ADA standards (i.e., installing tactile warning devices, providing sufficient ramp openings, and providing adequate ramp slope);
- Reconstruction of sidewalks (widening where possible) and providing additional amenities such as benches, pedestrian-level lighting, landscaping, and other streetscape improvements;
- Upgrades to mid-block crossing locations along the site frontage (i.e., new crosswalks, pedestrian flashing signals, refuge islands, etc.); and
- Modification of the existing pedestrian crossing across East Columbus Avenue north of the intersection with State Street to eliminate pedestrian/vehicle conflicts.

The Proponent should review the comments provided by the City of Springfield regarding proposed pedestrian signal equipment, pedestrian crossing phasing, and sight lines, and modify design plans as necessary to ensure proposed mitigation measures adequately enhance the pedestrian environment in the study area. I strongly encourage the Proponent to implement MassDOT's request to provide highway lighting at each crosswalk at the North End Rotary for consistency with the proposed mitigation at the Memorial Bridge Rotary as a pedestrian safety measure.

Proposed bicycle improvements include:

- Installation of bicycle pavement marking and signage (i.e., bicycle lanes, "sharrows" and "share the road" bicycle signage, bicycle boxes, etc.);
- Provision of secure, covered bicycle racks with storage for up to 28 bicycles within the Armory Square block and near major project entryways (State Street and Union Street);
- Provision of approximately 24 secure, weather-protected, long-term bicycle parking (for employees and residents) spaces at designated locations in the MGM Springfield parking garage;
- Installation of way-finding signage at key entry points within Downtown Springfield and along primary MGM Springfield access/egress corridors; and
- Implementation of a bicycle share program with a total of 16 bicycles for use by MGM employees, patrons and residents. This system will include a U-lock to allow users to secure the bicycle at a destination location without an electronic locking system.

The Proponent should review the comments provided by the City of Springfield regarding bicycle accommodations along the Main Street and Union Street corridors and modify plans as necessary subsequent to consultation with the City to maximize safe bicycle accessibility in the study area. It is unclear in the FEIR how the proposed number of bicycle parking spaces was determined. Given the bicycle mode share goals for the project (notably 4 percent of casino employee trips by bicycle), it appears that additional bicycle parking may be warranted. The Proponent should reevaluate the volume of proposed secure bicycle parking spaces in the final design.

The FEIR provided additional details and graphics depicting proposed pedestrian connections and circulation routes through the MGM Springfield site itself. The FEIR described interior pedestrian connections to the casino/hotel block and Armory Square from the MGM Springfield parking garage, access to the casino/hotel block from adjoining streets and Armory Square, and Armory Square to the casino/hotel block, parking garage, and the Union Street and Main Street sidewalk network and Pioneer Valley Transit Authority (PVTA) bus system. The project includes two main casino entries on Main Street, a hotel entry off State Street, and an entry from Armory Plaza. Office, retail, and restaurant facilities facing the surrounding streets will have entry points from both the casino and the street to allow access without entering the casino. A wide pedestrian walkway is proposed to fully encircle the casino floor to allow for internal connections between the casino, garage, retail, restaurants, Armory Square and adjacent streets without requiring access through the casino. Way-finding signage will be provided throughout the project site and within the parking garage, casino/hotel block and Armory Square to direct patrons to major on-site features (e.g., casino entrances, Armory Square, DaVinci Park, parking garage, bicycle parking, bus drop-off/pick-up, etc.), the surrounding street system (including PVTA bus stops and MGM trolley stops), and area attractions (e.g., Basketball Hall of Fame, Connecticut River Park and Bikeway, Union Station, etc.).

The FEIR also discussed exterior pedestrian connections from the MGM Springfield parking garage (which will offer free parking to surrounding area businesses) to the adjacent street system. The FEIR described walking routes to the State Street/Springfield District Courthouse area, Main Street and Red Rose Pizzeria, and Union Street. Each route presented included travel through the casino block to maximize length of time traveling through covered or weather-protected areas. Alternate routes are also provided along the sidewalk network along Main Street, State Street, Bliss Street, and Union Street.

Public Transportation

The project site is easily accessed by existing PVTA bus routes. The FEIR summarized the proposed service changes, to be undertaken by the PVTA as a result of its Comprehensive Service Analysis completed in June 2014, on bus routes most directly serving the project site and Downtown Springfield. Generally, these changes are either anticipated to have minimal impact on service to the project site, or increase trip frequency. For the two routes proposed for discontinuance (Routes 8 and 13), existing or future crosstown bus service is expected to service similar areas, but may require passenger transfers. As noted in the FEIR, the Proponent has no

expectation that the PVTA would initially provide service outside current operations for patrons or employees.

The project includes consolidating bus stops along Main Street between State Street and Union Street to provide a single bus stop on each side of Main Street. A bus stop will be provided on the southerly side of Main Street just west of Howard Street and on the northerly side of Main Street just east of Peabody Lane. The FEIR included conceptual plans depicting proposed bus stop locations and their relationship to overall improvements on Main Street, including bicycle and pedestrian amenities, on-street parking, and traffic signal improvements. I encourage the Proponent to expand the proposed bus stops from 80 to 150 feet in length to allow for future articulated bus access or to allow more than one bus to stop at a time along these busier routes without impeding traffic flow. Final design, location and approval of bus stop locations will be completed in coordination with the City of Springfield, the PVTA, and other approving entities as necessary. The Proponent has committed to the following:

- Fund the design and construction of bus stops on Main Street;
- Perform maintenance of the amenities installed at these stops, including regular cleaning and snow removal;
- Install a shelter for weather protection and seating at the bus stops;
- Install signage identifying routes and schedules of PVTA bus service;
- Install additional seating, trash barrels and other street furniture as agreed upon in the final design process; and
- Install signage within MGM Springfield to direct transit users to the proposed bus stops.

I encourage the Proponent to provide an enclosed waiting area within the project site to provide a centralized location for transportation information and access to public and private transportation services.

The Proponent will also initiate and fund the implementation of a Trolley Service/Downtown Circulator. The FEIR described the preliminary details of this service, to be funded by the Proponent and provided by PVTA under contract. The Proponent and the PVTA should continue to work cooperatively to finalize the terms of an agreement for this mitigation measure. Service will be offered free of charge to employees, patrons, and visitors of MGM and Downtown Springfield. The FEIR included a graphic of a conceptual preferred route and outlined the following proposed routing and hours of operation:

- MGM will provide funds to PVTA to operate two existing PVTA public trolley-style buses to provide public transportation;
- Trolleys will operate on up to 20 minute headways at peak times;
- MGM shall reimburse PVTA for costs associated with operating the trolleys on a negotiated basis, with costs generally determined based on PVTA hourly operating expenses based on agreed upon operating hours;
- The trolleys will be owned and operated by PVTA;

- MGM will pay for the cost of retrofitting/accessorizing the trolleys as may be required or desirable for use;
- The trolley will run for approximately six hours per day;
- Trolleys may be made available by request for service outside of regular schedule and off route at a predetermined negotiated rate;
- MGM will continue to negotiate with other Downtown destinations to participate in the initiation of service;
- Hours or days of operation may change even in the initial period by mutual agreement;
- PVTA will work with MGM to allow advertising on the trolleys for MGM Springfield and other area destinations; and
- The exact route and stops will be agreed upon and will be located within the Downtown corridor in the City of Springfield connecting Springfield Union Station, the City's Museums, MGM Springfield and the Basketball Hall of Fame.

The FEIR noted that as currently planned, the Trolley Service/Downtown Circulator agreement will take effect upon the start-up of the trolley operations and would remain in effect for one year. After the first year, the service would be reevaluated, taking into consideration ridership and service, with the terms of the agreement subject to review and potential renewal on a recurring basis.

The FEIR included a comprehensive assessment of potential project-induced demand on future PVTA paratransit and senior dial-a-ride services. These services are provided to older adults (60+) and persons with disabilities. The assessment included a description of existing services (ridership, cost, operational hours, etc.), outlined an estimated demand methodology, and a review of demand based on other paratransit systems serving casinos (MGM Grand Detroit, Rivers Casino Pittsburgh, and Harrah's Joliet). The FEIR included a demand estimate for both ADA paratransit customers and senior services customers. A low and high demand range for ADA paratranist and senior services for the project was estimated using data associated with the River Casino Pittsburgh (ridership) and the MGM Grand Detroit (senior services trip distribution). The projected low end of the range estimated 279 new PVTA ADA paratransit trips and 4,209 new PVTA senior services trips annually. The high end of the range estimated 615 new PVTA ADA paratransit trips and 5,043 new PVTA senior services trips annually. According to the FEIR, PVTA's current fixed operation cost scenario with comingled ADA paratransit trips and senior service trips, new ADA paratransit trips can only be served if an equal number of senior trips are denied.

To avoid the displacement of senior trips, and to continue to allow the PVTA to meet its regulatory obligation to provide ADA paratransit service, MGM will reimburse the PVTA for the cost of providing ADA paratransit trips to the project. Based on the analysis presented in the FEIR, this is estimated to cost between $7,965 and $17,558 per year. The FEIR also acknowledges the potential budgetary implications of increased demand for senior dial-a-ride services; a service that the PVTA is not obligated to provide. The FEIR identified potential alternatives that could be explored by the Proponent and the PVTA to develop service alternatives to address potential increases in demand. These include:

- Implement a limit on senior trips to MGM Springfield. This could be done in conjunction with a cashless fare policy for dial-a-ride services, with "tickets" for the MGM site made available in limited supply, and on-site monitoring;
- Divert senior casino trips away from dial-a-ride services and contract with PVTA's current service provider or other carrier to operate group field trips from various Councils on Aging (COAs) to the casino on specific days;
- Contract with an operator other than PVTA's current paratransit and dial-a-ride service provider at a lower per-trip rate for senior casino trips; and
- Work with a private inter-city bus carrier to offer casino/transportation packages with seniors.

The Proponent has committed to continue to work with the PVTA to finalize an agreement codifying the proposed transportation improvement mitigation measures proposed in the FEIR, providing additional detail based upon advancement of project design.

Parking

The FEIR included an analysis of existing and proposed public parking supply and demand for the project and the Downtown Springfield area. Currently, within the project site there are a total of 905 parking spaces: 186-for fee structured parking spaces in the 16 Bliss Street Garage, 673 for-fee surface lot parking spaces, and 46 on-street parking spaces (Bliss Street and Howard Street). These spaces will be displaced due to project construction. Additionally, approximately 64 on-street parking spaces along Main Street and State Street along the site frontage may be temporarily closed during the construction period.

The FEIR also evaluated parking availability in the I-91 North and South Garages, located north of the project site, which also serve as a public parking resource for courthouse-related parking and patron/employee parking for other land uses in the South End neighborhood. According to the FEIR, at full capacity the I-91 North Garage can accommodate 1,098 vehicles and the I-91 South Garage can accommodate 670 vehicles. As discussed later in this Certificate, MassDOT's I-91 viaduct replacement project, which will overlap with the MGM Springfield construction period, will include the temporary closure of 450 parking spaces (200 of which are already closed) on the upper decks of these garages throughout the duration of the I-91 viaduct project.

Existing parking demand counts were performed from 11:00 AM to 5:00 PM on a Friday to capture peak parking demand for the courthouse and surrounding businesses (utilization of these lots by these users would be low on Saturdays and Sundays when casino operations would be heavier). Peak parking demand for on-site parking facilities occurs between 11:00 AM and 11:30 AM at 72 percent total occupancy (700 occupied spaces). Peak parking demand for the I-91 South Garage was observed during the same peak period at 430 spaces. As noted above, 200 of the 670 spaces in the I-91 South Garage have already been closed, reducing supply to 470 spaces. The I-91 South Garage available parking supply meets the 11:00 AM to 11:30 AM peak

demand period and with 40 additional spaces may be available for overflow or displaced parking from the MGM Springfield site.

Construction period parking management is detailed in the Construction Period section of this Certificate.

The FEIR discussed future parking demand and parking management services associated with project operations. The results of the analysis presented in the DEIR identified a peak parking demand generated by the MGM Springfield site at 3,101 spaces on a Friday and 3,269 spaces on a Saturday. A total of 3,816 spaces will be provided on-site. The proposed parking supply is anticipated to be adequate to accommodate the peak parking demand with an additional 547 parking spaces available for existing land uses in the surrounding area. While the parking demand study indicated that existing surrounding uses generate a peak parking demand of 700 spaces, the timing of this peak demand does not coincide with periods of heavy demand at the MGM Springfield project. During periods of peak parking demand for surrounding uses, parking demand associated with the project is estimated at 2,707 spaces, resulting in an estimated available parking supply of 1,109 spaces, well in excess of the 700 space peak demand by surrounding land uses.

The Proponent will offer free parking within the MGM Springfield garage to surrounding area businesses to offset the parking that will be displaced by the project. To offset potential revenue losses to the Springfield Parking Authority (SPA) as a result of this benefit, the Proponent will monitor the impacts of the SPA's revenue following the opening of the project and provide funding to the SPA to offset related loss of revenue. Several comments noted the potential conflict between offering free parking to casino/hotel/retail block guests and meeting the project's mode share goals for non-car travel to and from the site, particularly the 16 percent transit mode share for casino/hotel employees. Free parking will likely discourage alternative modes of transit unless these alternative modes can be incentivized. I strongly encourage the Proponent to consider how the proposed parking fee structure may impact project-related traffic trips and mode-share and options for limiting free on-site parking. The Proponent should note that the results of future monitoring might indicate that a critical path to reducing SOV trips is to charge market-rate parking for guests.

The Proponent will also use Intelligent Transportation Systems (ITS) to direct patrons to other SPA lots in the event the MGM Springfield parking lot becomes full. In the event that monitoring efforts indicate that peak parking demand is exceeding or nearing the capacity of the garage, the Proponent will coordinate with the SPA to provide employee parking within one or more of the SPA parking lots that can provide an excess of 935 parking spaces, and if necessary, provide a shuttle service to transport employees to the site as a means to ensure sufficient on-site parking for patrons and surrounding land uses.

The project includes valet parking at designated drop-off areas for both the hotel and the casino. A total of 371 parking spaces within the MGM Springfield parking garage, on the basement and ground floor levels, will be designated for valet parking only. A charter bus drop-off area with parking for up to 22 buses will be provided on the ground floor of the MGM

Springfield parking garage. The Proponent is continuing to work with owners of other public and private parking lots in the area to accommodate any overflow charter bus parking that may occur during events or peak periods. A total of 90 preferential parking spaces, located on the second level of the garage near employee entrances to the casino and Armory Square, will be designated for use by employees and residents participating in carpool or rideshare programs or who use hybrid vehicles. Finally, the Proponent has designated a total of 190 preferred spaces or electric vehicles (EV) spaces, along with approximately 50 charging stations, to be provided along the outside of levels 2, 3 and 4, of the MGM Springfield parking garage near entryways, elevators, and staircases. EV charging stations will also be provided in the valet parking area on the basement level. Signage will be provided directing drivers to EV parking and charging stations.

Transportation Demand Management

The FEIR summarized the components of the TDM program to reduce SOV trips and promote multi-modal transit options by employees and patrons. These measures are listed in the mitigation section of this Certificate.

The Proponent established the following mode share targets, by land use, assuming implementation of the TDM program.

Mode	Casino/Hotel Patrons	Casino/Hotel Employees	Residential	Armory Retail	Armory Office
SOV[a]	85.5%	67.0%	95.0%	95.0%	79.5%
Carpool/Rideshare[a]	N/A[a]	13.0%	0.0%	N/A[a]	15.5%
Public Transit	2.0%	16.0%	4.0%	4.0%	4.0%
Pedestrian/Bicycle	0.5%	4.0%	1.0%	1.0%	1.0%
Taxi	2.0%	-	-	-	-
Charter Bus	10.0%	-	-	-	-

[a] For Casino/Hotel Patron and Armory Retail trips, all vehicle trips were assumed to be double-occupant vehicle trips.

A Transportation Coordinator will be responsible for developing additional TDM measures should the monitoring program identify any unanticipated or unmitigated project-specific impacts. Should the monitoring program identify such impacts, additional improvements will be identified and implemented to mitigate the project-specific impacts.

Monitoring

The project general contractor will prepare a Transportation Monitoring Program (TMP) for review and approval by the City and MassDOT. The TMP is intended to monitor traffic operations, parking occupancy, public transportation utilization, and pedestrian/bicycle use throughout the construction period and for a period of five years following completion of the project. The TMP's intent is to monitor project impacts to ensure consistency with the

projections of the DEIR and FEIR, evaluate the effectiveness of the TDM program in meeting mode share targets, and assess the need for additional mitigation measures. As part of the TMP, the Proponent will provide traffic count information to the MassDOT District 2 office, the City of Springfield, the Pioneer Valley Planning Commission (PVPC) and MassRIDES to assist in signal timing adjustments, as necessary, and tracking trips. As recommended by MassDEP, I encourage the Proponent to consider a review of TMP efficacy after the five year mark, and, if found effective, continue annual monitoring as appropriate. The components of the proposed TMP are included in the Mitigation section of this Certificate.

SCAs Look-Back Provision

The FEIR also noted that in addition to the monitoring program described above, the Proponent's executed SCA's include a "look-back" provision to assess the impacts of the project on surrounding infrastructure and identify appropriate additional mitigation and/or funding to offset the impacts. The SCA's require the following as part of the Look-Back scope:

- Set study scope to focus on specific potential impacts with offset for specific positive impacts;
- Perform and complete a baseline study between two and five months after licensure. This independent baseline study will assess the existing conditions related to economic development, traffic, crime, housing, and other potentially impacted characteristics, both positive and negative, directly attributable to the project;
- Commence a 1st Year Look-Back study fifteen months from Grand Opening;
- Commence a 5th Year Look-Back study five years and three months from Grand Opening;
- The Proponent will select the Third Party to conduct the study with the consent of a majority of the communities with SCAs;
- Look-Back impacts in excess of $500,000 must be identified in the 1st Year Look-Back study;
- Disputes with respect to Look-Back liability addressed through JAMS, Inc. arbitration; and
- Priority for satisfaction of Look-Back liability: (i) community-specific portion from annual payments; (ii) state mitigation funds; (iii) other mitigation funding; (iv) MGM.

The baseline, 1st-year and 5th-year traffic studies are expected to consider the following:

- Review of project-wide trip generation data based on driveway counts in comparison to the Proponent's trip generation estimates prepared during the DEIR/FEIR review process;
- Key municipally-owned and maintained intersections identified collaboratively between the Proponent, PVPC, and the municipality;
- TMC counts at each location during at least two seasonal period during the following peak periods:
    - Weekday morning peak hours (7-9 AM);

  - Weekday evening peak hours (5-8 PM); and
  - Saturday midday peak hours (11 AM – 2 PM).
- ATR data at limited locations to assess a week-long period for use in adjusting day-of-week trends;
- Review of seasonal adjustment characteristics;
- Review of other development projects that are introduced following the baseline study;
- Application of an annual growth rate based on regional growth characteristics prepared by PVPC;
- Review of deviations from the projected versus actual traffic conditions, and any associated local factors; and
- Review of potential supplemental funding, or projects, to address a pro rata share of traffic impacts above the original trip projections at each location.

The final scope of the look-back approach, including the roadways for evaluation, will be developed in coordination with each respective community, PVPC, the Proponent, and each entity's consultants.

Greenhouse Gas Emissions

In accordance with the Gaming Act, the project will be required to meet or exceed the Stretch Energy Code (Stretch Code), have the project certified at the Gold Level or higher under the GBC's LEED program, procure or generate on-site at least ten percent of its annual electricity consumption from renewable sources, and develop an ongoing plan to monitor all major sources of energy consumption and undertake regular efforts to maintain and improve energy efficiency in building systems. The Proponent has a unique opportunity to set a high standard for energy efficiency gaming and casino resort design. I strongly encourage the Proponent to continue to explore feasible energy efficiency measures for incorporation into the final design to meet and exceed MGC requirements and support the Commonwealth's GHG reduction goals.

The FEIR did not include an updated GHG stationary source analysis using the IECC 2012 and ASHRAE 90.1-2010 as the project Base Case as suggested by the Certificate on the DEIR. In compliance with the GHG Policy, the Proponent used the IECC 2009 and ASHRAE 90.1-2007 codes for the Base Case, as these were the codes in place at the time the Environmental Notification Form (ENF) was filed. The Proponents justified this Base Case code selection as providing consistency with the GHG Policy, the analysis presented in the DEIR, LEED certification requirements, and the current Stretch Code.[4] Numerous projects within the

[4] A revised Stretch Code (SCII) is anticipated for release in mid-2015 to correspond with the adoption of IECC 2012 (ASHRAE 90.1-2010) as the Building Code. 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). However, as the SCII has yet to be released, the previous version remains in effect, requiring a 20 percent reduction in energy use compared to the IECC 2009 (ASHRAE 90.1-2007) code.

Commonwealth have demonstrated the ability to meet the projected requirements of the proposed new Stretch Code. I encourage the Proponent to review the selection of final building systems and other energy efficiency measures with consideration for these more stringent energy efficiency parameters.

The FEIR included an expanded analysis of combined heat and power (CHP) systems to include a system with a larger capacity than those studied in the DEIR. Specifically, the FEIR analyzed a four 100-kW engine with 100-ton absorption chiller (Option 6). The Proponent has committed to include a CHP system that is technically and economically feasible in the final project design. I encourage the Proponent to install as substantial a CHP system as feasible given this commitment to CHP. The current design includes a 200 kW CHP system. The FEIR indicated that the final system sizing would be determined in the final design phase, optimized based on the final calculation of available thermal and electrical loads and subsequent to a review of interconnection logistics with the utility and availability of utility incentives for the proposed system.

Energy modeling performed in the DEIR estimated the electrical load attributable to gaming machines at 510 kilowatts (8 watts per square foot). The FEIR indicated that the Proponent expects a 10-30 percent improvement in energy use could be achieved based upon use of gaming machines with LED lighting, LED/OLED screens, and higher efficiency power supplies. Energy use will be a criterion in the selection and purchase of gaming machines.

The solar photovoltaic (PV) study performed in the DEIR concluded the top of the parking garage and the podium associated with the hotel are the best locations for PV installation. The FEIR estimated the average annual energy production from the podium PV system at 246.54 MWh per year and the parking structure PV system at 807.91 MWh per year. Total CO_2 offsets from these systems are estimated at 379.1 tons per year (tpy). The Proponent will construct each roof as "solar ready" where PV installation is technically feasible (i.e., not shadowed, not used for mechanical space, etc.) and include space for conduit runs and electrical gear such as inverters and meters. The proposed PV system will generate approximately 1,054 MWh per year on-site, an estimated 5.5 percent of the overall project's projected annual electricity use of 19,502 MWh. Consistent with MGC requirements, the Proponent will purchase renewable energy credits (RECs) such that at least ten percent of the facility's annual electricity consumption is from on-site or off-site renewable energy sources. Based upon estimated electrical generation from the on-site PV systems, the Proponent expects to purchase 896 RECs per year (one REC equals one MWh generated by a renewable energy source).

A ground source heat pump is proposed for the daycare center as part of the strategy to create a Net Zero structure. This system will result in a minimal CO_2 savings of 0.5 tpy. These limited reductions are due to the additional electricity to pump this renewable source of thermal energy. Space constraints limit the application of ground source heat pumps for other project-related uses, but a review of this technology will be conducted during final design, and implemented if technologically and economically feasible.

The Proponent will include language in all tenant guidelines and leases mandating that tenant fit-out include installation of equipment with standards consistent with the requirements established for the initial construction, or compliance with future energy codes if they exceed the initial requirements.

Total stationary source emissions reductions were tabulated in the FEIR. The project Base Case is estimated to generate 10,845 tpy of CO_2 emissions. Implementation of energy-saving and sustainability mitigation measures is estimated to reduce project-related stationary source CO_2 emissions by 2,356 tpy (or 21 percent) to 8,489 tpy. These estimates do not include the potential CO_2 reductions associated with proposed on-site and off-site renewable energy commitment (i.e., on-site PV, CHP and REC purchases). If these sources, as presented in the FEIR, are included in the final project, additional GHG reductions will be achieved. These additional reductions, assuming the renewable energy commitment is met through GHG-free sources, and using source energy, is approximately 30 percent (or 4,676 tpy from the Base Case).

The FEIR included an updated mobile source GHG emissions analysis to reflect the impacts associated with additional intersections and presented an additional case (Case 1 – 2024 Build without TDM measures). Mobile emissions data were obtained from the mesoscale analysis using MOBILE 6.2 and SYNCHRO modeling software. The following cases were analyzed:

- Case 1 – represents the difference between the 2024 No Build case and the baseline 2024 Build case (i.e., traffic associated with the addition of the project to the area without any Proponent-proposed mitigation, including TDM and/or roadway improvements);
- Case 2 – represents the difference between the 2024 No Build case and the 2024 Build case with TDM; and
- Case 3 – represents the difference between the 2024 No Build case and the 2024 Build with Mitigation case (i.e., implementation of TDM measures, traffic signal timing and phasing improvements, and off-site roadway improvements).

The results on this analysis estimate project-related mobile source CO_2 emissions at 9,795 tpy (Case 1). The 2024 Build with Mitigation case (Case 3) reduces project-related mobile source emissions to 9,078 tpy, a reduction of 717 tpy, or seven percent.

The Proponent has not finalized plans for fleet vehicle usage on-site. The Proponent intends to use compressed natural gas (CNG) fleet vehicles in lieu of traditional diesel-powered vehicles. According to the FEIR, the use of CNG provides local air quality benefits over diesel use, along with some GHG benefits. I encourage the Proponent to consider the use of electric vehicles for smaller fleet vehicles (e.g., security, landscaping).

The Proponent will comply with the MassDEP's commercial food waste disposal ban regulations implemented on October 1, 2014. The Project will develop a facility-wide food waste source-separated organics (SSO) recycling program that addresses all food service operations in the casino, hotel and food and beverage outlets. The project will implement BMPs

consistent with MassDEP guidelines and provide dedicated storage for food waste and include some refrigerated storage (as appropriate). The Proponent will seek a long-term contract for off-site anaerobic digestion of food waste.

Total estimated project-related CO_2 emissions from combined stationary and mobile source emissions are 17,567 tpy, a 3,073 tpy (or 15 percent) reduction from the Base Case.

Climate Resiliency

Climate change-induced increases in storm intensity, duration, and frequency should be considered by the Proponent when designing the facility and back-up generator systems. The project includes generators with local fuel storage sized to accommodate the demand from emergency lighting, building life safety systems, partial building heating, security systems, some refrigerated food storage, and some receptacles for cell phone charging. Conversations with the Proponent indicate that the casino is located proximate to an existing City of Springfield shelter location at the Convention Center. The Proponent should continue to work with the City of Springfield and the MassMutual Center to coordinate shelter plans, determine additional shelter capacity requirements based on casino and hotel guests, and identify resources available at either facility to meet City needs during potential short-duration or longer-duration emergencies due to storms. Final design of the backup power system should include an evaluation of options to use natural gas instead of, or in addition to, a diesel-powered system to mitigate for potential shortages of diesel fuel during an extended emergency period.

Water Supply and Wastewater

The FEIR included a table summarizing estimated water use and wastewater generation, by building use, based on MassDEP Title 5 regulations (310 CMR 15.00). The FEIR included a proposed conditions plan for water and wastewater infrastructure, noting that additional design detail will be required by the Springfield Water and Sewer Commission (SWSC) prior to finalizing the design for permit approval. The Proponent has continued to meet with the SWSC between the filing of the DEIR and the FEIR, with additional data collection completed and submitted for review. These efforts include research on the existing water and sewer infrastructure (i.e., age, type of material, and leak history) and completion of Closed Circuit Television (CCT) inspections. These data have informed the proposed commitments by the Proponent to mitigate project-related impacts through the replacement of SWSC water and sewer mains.

The FEIR included an assessment of peak rates of water demand and wastewater generation. Peak water demand was estimated at 366,196 gpd, using a peaking factor of 1.5 per the US Fire Administration's Water Supply Systems and Evaluation Methods. According to the FEIR, based on discussions with the SWSC, there is sufficient water supply to meet project-related peak demands. Peak wastewater demand was estimated at 1,242,846 gpd, using a peaking factor of 5.6 as provided by NEIWPCC's TR-16. Similar to peak water demand, the FEIR noted that the SWSC indicated that ample sewer capacity is available within the sewer system and that no on-site storage of wastewater is proposed.

The SWSC has recommended that the proposed sewer discharges be directed into the Main Street system to minimize flows to the CSO regulator 15A. According to SWSC's CSO Long Term Control Plan (LTCP), construction of the Union to Clinton Relief Conduit is proposed between 2025-2029 to reduce CSO volumes. To ensure compliance with the LTCP and to minimize flows to CSO regulator 15A, drainage from the site will be connected to the existing system within Union Street and East Columbus Boulevard, while the sewer will connect into Main Street. To further limit discharges to the CSO, the Proponent will implement mitigation measures consistent with the Massachusetts Water Conservation Standards (MWCS), including water conservation and reuse measures and low impact development (LID) and stormwater Best Management Practices (BMPs) to reduce project-related flows to the system.

Revisions to the MassDEP wastewater regulations (314 CMR 7.00 and 314 CMR 12.00) in April 2014 eliminated the requirement for a MassDEP Sewer Connection Permit. Wastewater discharges associated with the project will be subject to review and approval by the local sewer authority. The Proponent will be required to comply with the SWSC plan for controlling infiltration and inflow (I/I) to reduce stormwater runoff into combined sewers. The Proponent should continue to coordinate with the SWSC to ensure these local permitting requirements and performance standards are met prior to finalization of infrastructure design.

It is anticipated that all of the retained stormwater will meet the project's irrigation demand during the months of May through September. Municipal make-up water may be required if historic monthly rainfall volumes are not realized.

The FEIR did not specifically address water conservation measures for the industrial commercial uses, such as the laundry and food services. As the project design is completed, I strongly encourage the Proponent to investigate technologies to minimize water use and wastewater generation associated with food preparation and dishwashing and on-site laundry services, and hotel shower fixtures to further reduce project-related water and wastewater impacts.

Historic Resources

The FEIR included an analysis of existing conditions (including structural integrity) and feasibility for reuse, within the project programming and design goals, for each historic building. The FEIR identified a total of 12 historic properties on-site, four of which are listed in the State and National Registers of Historic Places (WCA Boarding House, French Congregational Church, State Armory, and United Electric Company Building); three listed in the State Register of Historic Places (Young Women's Christian Association (YWCA), Massachusetts Mutual Life Insurance Building, and Edisonia Theater Block); two properties listed in the *Inventory of Historic and Archaeological Assets of the Commonwealth* (Howard Street Primary School and Union House/Chandler Hotel); and three properties identified as being of historic interest (35 Howard Street apartment building, 79 State Street office building, and 95 State Street office building).

Each of these buildings was analyzed to determine if retention and adaptive reuse, partial demolition, or relocation would be feasible alternatives to complete demolition. This analysis considered: the overall condition of the building to be preserved as a standalone building within the project; ability to reuse the building, or parts of it, in its current condition as part of the project; ability to reuse the building if upgraded or modified for inclusion in the project; ability to reuse the façade as part of the project exterior (and demolish the remaining portion of the building); and, ability to relocate the building outside the project site and maintain existing uses or support new uses.

The FEIR indicates that all portions of buildings retained as part of the development will need to meet the MGC requirements to be LEED certified at Gold level or higher, as well as meet current building and energy code provisions, as appropriate for their designated new uses.

Subsequent to completion of the analysis, the Proponent proposed the following treatment for the historic structures on-site:

- Massachusetts Mutual Life Insurance Building – this building will be retained and renovated to LEED Gold standards and continue to be used for office purposes. The building's façade and entry points will remain, building systems will be upgraded, the façade will be inspected, repaired and cleaned and windows and the roof will be replaced, as needed.
- State Armory – this building comprised of three sections, a head house, middle section, and drill shed, will be partially preserved. The drill shed was damaged in the 2011 tornado and demolished. The project proposes to preserve the head house and remove the middle section to accommodate public amenities, becoming the main public feature in the project's pedestrian plaza, amenities/recreation zone, and adjacent public park. The project will restore and repoint the exterior masonry, replace windows to match the original configuration, install a new roof, new utilities and an elevator in the head house.
- United Electric Company Building – this building is located at the site of the proposed hotel tower. The project proposes to retain the limestone building façade for use as the hotel frontage on State Street. The existing canopy, entry stairs, entry doors, and vestibule will be retained and incorporated into the hotel design as an entry point. The project team is continuing to study the building interior, with current plans to retain and reuse some architectural elements within the first floor lobby. The stained glass dome with decorative railing and marble elements of the lobby may be removed, stored and reused within the hotel or the project.
- Union House – Chandler Hotel – the building is in poor condition and it was concluded that the interior couldn't be reused for any development purpose. The analysis also concluded that the poor structural condition prohibits it from being relocated. The preservation and incorporation of the building's elevation and façade into the project is ongoing.
- 95 State Street office building – the building consists of a three-story podium facing State Street with an 11-story office tower to the rear. The podium is located in the

proposed hotel footprint and the tower portion of the building is located in the proposed casino and food court footprint. The project proposes to retain the three-story podium and first structural bay of the building and potentially the lobby. The project will upgrade building systems, inspect, repair and clean the façade, replace the windows and roof (as needed), replace the sidewalk slab, and repair the supporting steel beams beneath the sidewalk. The analysis of the feasibility of retaining the 11-story office tower (all or a portion thereof) is ongoing.

- French Congregational Church – this building was restored subsequent to damage from the 2011 tornado and is located in the center of the casino development. The project proposes to relocate the building two blocks southeast to Union Street. Relocation may require the building to be divided into sections for transport and the masonry tower may need to be replicated as it may not be suitable for relocation due to its slender shape. The building will be renovated to LEED Platinum standards and reused as a daycare center.
- YWCA – this building is located in the center of the development parcel, in fair condition, and the façade exhibits damage from the 2011 tornado. The building is taller than the proposed project buildings and extends beyond the proposed building façade into the planned Howard Street plaza. The analysis proposes the removal of the building, with its character emulated in the new façade elements of the casino.
- 79 State Street office building – this building is located in the footprint of the hotel tower and casino. The façade has been modified over time and is in fair to poor condition. The FEIR indicates that use of this building would not be consistent with project programming and retention of the façade is not feasible. The project proposes to carry the façade treatments of the United Electric Building across the hotel façade at this location to unify the streetscape.
- Edisonia Theater Block – This two-story former movie theater has been altered from its original form. The façade is damaged, shows signs of structural damage, and is not structurally able to support development proposed for upper floors. Its location affects the development's primary entry, residential building, restaurants, casino, and back of house service areas in the basement. The building will be demolished and replaced with a new building and façade of similar proportion, with residential properties above.
- WCA Boarding House – this building is in fair condition and located in the middle of the project parcel. Because the analysis concluded that it is a poor candidate for relocation, the building is proposed for demolition.
- Howards Street Primary School – this building was substantially damaged in the 2011 tornado and subsequently closed and condemned. The building is proposed for demolition. Selective salvage of interior wood components is being considered, but is contingent upon the structural integrity of the building to allow safe access;
- 35 Howard Street apartment building – this building was substantially damaged in the 2011 tornado, condemned, and subsequently demolished in 2013.

The Proponent forwarded a copy of the analysis - *MGM Springfield, Historical Commission Progress Update of Recommendations* (June 2014) - to MHC and SHC in advance

of filing the FEIR per the direction of the Certificate on the DEIR. The MHC provided a letter dated October 30, 2014 indicating that the proposed project has the potential to affect historic resources and initiated the consultation process pursuant to 950 CMR 71.07(3). Properties that will be adversely affected per the MHC regulations include: the United Electric Company Building, the Edisonia Theatre Block, the WCA Boarding House, the French Congregational Church, the YWCA Building, the State Armory, the Union House-Chandler Hotel, and the Howard Street Primary School. The Proponent should continue to work through MHC's consultation process and consult with MHC, the MGC, SHC, the Springfield Preservation Trust, and interested members of the public to explore alternatives to eliminate, minimize, or mitigate potential adverse effects of the proposed demolitions and alterations of all or part of the aforementioned buildings. The Proponent anticipates entering into a Memorandum of Agreement (MOA) with the MHC and MGC that outlines measures to avoid, minimize, or mitigate adverse project impacts.

If consultations with MHC result in changes to the project design, the Proponent should consult with the MEPA Office to determine whether additional MEPA review would be warranted.

Construction Period Impacts

The FEIR included an updated construction schedule identifying construction periods associated with major elements of the project, preliminary task durations and concurrent on-site and off-site construction components for which the Proponent has responsibility. As noted previously, the project construction period will overlap with MassDOT's project to replace the I-91 viaduct through downtown Springfield (MassDOT Project #607731). This project consists of replacing the deck on both the northbound and southbound barrels between Exit 6 and the I-291 interchange ramps. The I-91 viaduct project will require lane shifts and closures along the I-91 mainline and closure of Exit 6 (Union Street) and Exit 7 (State Street), resulting in numerous detours during the construction period. According to the FEIR, the I-91 viaduct project design has been completed and is currently in the bid phase, with an expected contract award date in February 2015. The I-91 viaduct project is anticipated to commence construction in Spring 2015 and reach substantial completion in August 2017. The MGM Springfield project is anticipated to begin in Winter 2015 and continue through Fall 2017. The FEIR acknowledges the requirement for careful coordination of the two projects to minimize construction period traffic-related impacts within the study area. The FEIR included graphics depicting the anticipated roadway and exit closures, and corresponding detour routes, proposed in conjunction with the I-90 viaduct project. The Proponent and its contractor will coordinate with MassDOT and their contractor throughout the entire construction process to minimize impacts to surrounding transportation infrastructure. MassDOT and the Proponent plan to incorporate language into respective contracts requiring bi-weekly construction coordination meetings to evaluate traffic detours, parking demands, major trucking needs, and other related items.

The FEIR included a discussion of the proposed MGM Springfield construction period, consisting of four basic stages:

- Stage 1 (January 2015 to May 2015; 5 months) – demolition of existing buildings on-site and removal of materials from the site. Existing parking will be displaced to other locations. Parking for MGM Springfield construction employees will be provided on-site.
- Stage 2 (May 2015 to February 2016; 9 months) – excavation and preparation of site for construction. Parking for MGM Springfield construction employees will be provided at off-site parking locations.
- Stage 3 (March 2016 to December 2016; 9 months) – construction of the parking garage and building superstructure. During the first half of this stage, until the parking garage is open (May 2016), construction employees will be accommodated in off-site satellite parking lots.
- Stage 4 (January 2017 to September 2017; 9 months) – building finishing and fit-out. Parking for MGM construction workers and surrounding land uses will be provided in the garage.

The FEIR included conceptual temporary traffic control plans (TTCPs) for various phases of on-site construction. The FEIR include illustrative TTCPs for Union Street, State Street, and Main Street, and included graphics depicting potential traffic pattern modifications and pedestrian/bicycle accommodations during various construction stages. Pedestrian access, with ADA/AAB accessible ramps, will be maintained, but limited to one side of the street opposite the work zone. Short-term road closures at off-peak times may be required for final paving, pavement marking application and major utility construction including trunk-line improvements and service connections. Detours will be mapped out on the TTCPs showing routes and signage and will be prepared during the design process. These plans will be refined as the project design advances and require review and approval from the Springfield Department of Public Works (DPW) and MassDOT. The plans will comply with MUTCD Standards and depict the work zone, advance warning signs, barrel and barrier placement, temporary pavement markings, and vehicular and pedestrian detours.

During the construction of the I-91 Viaduct Deck Replacement and MGM Springfield projects, the Proponent proposes using traffic-monitoring cameras located along I-90, I-91, and I-291 in the area surrounding the MGM Springfield site to monitor traffic conditions along these major highways and use the ITS message boards to direct drivers toward appropriate travel routes to avoid delays and alert drivers of traffic incidents and construction detours. The Proponent is committed to installing additional cameras and message boards along Route 5 in West Springfield and Agawam to efficiently direct traffic over the North End, Memorial, and South End Bridges. Furthermore, there are no variable message signs (VMS) located along Route 5 to assist in directing traffic. These devices will be installed during Stage 1 to facilitate monitoring and management of traffic throughout the remainder of the MGM Springfield and I-91 Viaduct Deck Replacement construction.

Project-related truck trips will vary throughout the construction period. The FEIR indicated that it would likely average 60 trips over the course of the day. The I-91 viaduct project will limit potential haul routes for MGM Springfield-bound construction vehicles. The

Proponent has begun preliminary discussions with the City of Springfield and MassDOT to identify these truck routes. The FEIR included graphics depicting proposed truck routes to and from the east of the site, to and from the north and west of the site, and to and from the south of the site. Construction contracts will restrict truck traffic to the approved routes unless a specific exception is approved by the City of Springfield.

The FEIR noted that weekend, extended hours and second and third shift activities will be performed in a manner that will minimize impacts as necessary to meet permitting restrictions. Some activities, such as delivery of large construction equipment, will be performed during off-hours and scheduled to avoid and/or minimize impacts to vehicular and pedestrian traffic and noise generation. Activities such as excavation, pile driving and steel erection will only be conducted during permitted hours. The contractor will prepare and disseminate a schedule of upcoming work every two weeks and monthly schedule updates describing progress and projected activity for the next month. This information will be posted to the project website for real-time access by project stakeholders.

The Proponent will implement noise and vibration impact mitigation measures during the construction period. These measures are detailed in the Mitigation section of this Certificate. The Proponent will comply with City of Springfield and MassDEP guidelines regarding environmental mitigation during the construction period. The FEIR indicates that the Proponent will evaluate the Commonwealth's Clean Air Construction Initiative (CACI) as a construction period mitigation measure to reduce air quality impacts from certain categories of construction vehicles. Because the project site is within a densely populated area, I strongly encourage the Proponent to require the use of emission control devices, or similar equipment in consistent with the CACI, by any selected contractor for the project to minimize construction-period emissions.

Construction Period Parking

Portions of the upper decks of the I-91 North and South Garages operated by the SPA will be closed during construction of the I-91 viaduct project. Agreements between the SPA and MassDOT allow the closure of a maximum of 450 spaces on the upper floors, reducing overall garage parking supply from 1,768 spaces to 1,318 during the I-91 viaduct construction period. Parking utilization counts indicated a current peak parking demand at these facilities of 1,379 spaces on a typical weekend. Therefore, the I-91 viaduct project has the potential to displace up to 61 vehicles to other parking lots in the surrounding area.

The FEIR estimated a total of 350-400 full-time employees will be required for construction of the I-91 viaduct project, with a maximum number of 200 workers per shift. MassDOT has arranged for construction employee parking within the Trolley Car Lot. This lot can accommodate parking for up to 700 vehicles, a sufficient amount to accommodate all 400 construction employees while allowing for overlap in shift changes. MGM Springfield's parking garage is anticipated to be open during Stage 4 of its construction, which will overlap with the last nine months of the I-91 viaduct project. During this time, MassDOT construction employees can be accommodated within the MGM Garage.

The approximately 700 vehicles that use on-street and off-street parking spaces on the MGM Springfield site will be displaced to other parking facilities in the Downtown area during Stages 1-3 of the MGM Springfield project. According to the FEIR, approximately 121 of these vehicles will be accommodated in a parking lot (Zorsi Lot) located on the northeast corner of Main Street and Union Street for District Courthouse parking.[5]

The SPA conducted an inventory of SPA parking lots and identified an additional 935 available parking spaces in various SPA-operated parking facilities in Downtown Springfield to accommodate the remaining estimated 579 displaced vehicles and the 61 displaced parking spaces at the I-91 North Lot and I-91 South Lot garages during the I-91 viaduct project.[6] Private parking facilities are also available as a parking option. The Proponent will operate a free shuttle service that will circulate between the SPA lots and the area surrounding the site to provide access to businesses. This shuttle service will not stop at the I-91 South Garage, Zorzi Lot or Civic Center Lot, as these are all in close proximity to businesses and the District Courthouse.

The number of construction workers will vary based upon the project phase and level of activity. Construction worker traffic trips are anticipated to occur outside of peak traffic periods with jobsite personnel allowed to park in designated areas in the construction site at no cost. No construction or personal vehicle parking will be allowed on adjacent city streets. This will be enforced through the terms to be incorporated into a parking plan subject to the City of Springfield's review and approval. Parking requirements and encouragement of public transportation use by construction workers will be incorporated into each subcontract.

During peak construction activity for MGM Springfield, up to 500 construction employees will be on-site during the largest shift. Some of these employees will be accommodated in off-site satellite parking locations. An excess capacity of 106 parking spaces in SPA-owned lots will be available for use by MGM Springfield construction workers in Stages 2 and 3 of construction. Additional MGM Springfield construction worker parking will be provided in privately-owned lots within the Downtown Springfield. The Proponent is consulting with these facilities, including ProPark, to determine the feasibility and fees associated with providing construction period employee parking. The FEIR also identified the Basketball Hall of Fame as a site that could accommodate overflow parking from the MGM Springfield Site or MGM Springfield construction employee parking. The Proponent indicated that it will continue to coordinate with the SPA, City of Springfield, the Basketball Hall of Fame, and other private parking lot owners to identify suitable locations for off-site construction employee parking. The Proponent will operate an employee parking shuttle to transport construction workers between off-site satellite parking lots and the MGM Springfield site during Stages 2 and 3 of MGM Springfield construction. This shuttle will be operated at appropriate times and headways to

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[5] The Zorzi lot is bounded by Main Street, Union Street, Hubbard Avenue and Willard Street and is the future location of the former French Congregational Church.

[6] Apremont Lot (15 spaces); Civic Center Lot (263 spaces); Columbus Lot (125 spaces); Dwight Lot (59 spaces); I-91 North Lot (149 spaces); I-91 South Lot (40 spaces); Morgan Lot (36 spaces); Taylor Lot (148 spaces); Winter Worthington Lot (100 spaces).

accommodate employee shift changes. Depending upon parking location(s) identified for satellite employee parking, the employee parking shuttle may be combined with the parking shuttle for displaced surrounding land users.

Mitigation and Section 61 Findings

The FEIR included draft Section 61 Findings for use by State Agencies. These draft Section 61 Findings should be revised in response to this Certificate and provided to State Agencies to assist in the permitting process and issuance of final Section 61 Findings. The FEIR identified each mitigation measure, the responsible party, and the timing of implementation. The following mitigation measures have been proposed in accordance with the project:

Traffic and Transportation

The FEIR included a summary outlining proposed traffic and transportation mitigation measures. Final mitigation measures will be determined in accordance with MassDOT, the City of Springfield and other stakeholders (as necessary) based upon potential revisions in response to comments received in the FEIR and preparation of permitting documents. Mitigation measures listed below are drawn from Table A and other sections of the proposed Section 61 Findings and the FEIR.

Signal Timing Optimization (Prior to MGM Springfield Opening $20,000)

- Dwight Street/I-291 WB Ramps,
- 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

Union Street Corridor Improvements (West Columbus Avenue to Main Street) – (Prior to MGM Springfield Opening, $950,000)

- Widen sidewalks along site frontage,
- Complete pavement mill and overlay on Union Street between Main Street and West Columbus Avenue,
- Construct trolley stop adjacent to Armory Square,
- Widen and restripe roadway along site frontage,
- Upgrade accessible wheelchair ramps,
- Install vehicular / pedestrian / bicycle wayfinding signs,
- Install mid-block crosswalk, pedestrian flasher assembly, and raised median island east of MGM Bus Driveway,
- Install bicycle "sharrows" and share-the-road signage,
- Reconstruct Union Street under I-91 Overpass to 5-Lane cross-section,
- Modify vehicular and pedestrian signal phasing scheme at Union Street / East and West Columbus intersections,

- Upgrade vehicular and pedestrian traffic signal equipment and infrastructure at corridor intersections where necessary, and
- Optimize traffic signal timings, clearance intervals, signal coordination, and offset timings at corridor intersections.

State Street Corridor Improvements (West Columbus Avenue to St. James Avenue)
(Prior to MGM Springfield Opening, $1,110,000)

- Widen sidewalks along site frontage,
- Construct trolley stop adjacent to MGM Springfield,
- Restripe State Street along site frontage,
- Stripe intersection tracking markings across intersection of State Street/Main Street,
- Complete pavement mill and overlay State Street between Dwight Street and East Columbus Avenue,
- Upgrade accessible wheelchair ramps at:
    - State Street/Main Street
    - State Street/East Columbus Avenue
    - State Street/West Columbus Avenue
- Install vehicular/pedestrian/bicycle wayfinding signs,
- Install mid-block crosswalk, pedestrian flasher assembly, and raised median island west of MGM Drive,
- Install bicycle "sharrows" and share-the-road signage, Install bike boxes, shift stop lines, and recalculated clearance intervals at intersections along State Street,
- Modify pedestrian crossing across East Columbus Avenue north of State Street intersection,
- Construct pedestrian refuge island along St. James Avenue approach to State Street,
- Upgrade pedestrian traffic signal equipment only at:
    - State Street/Chestnut Street/Maple Street
    - State Street/Dwight Street/Maple Street
    - State Street/Main Street
- Upgrade vehicular and pedestrian traffic signal equipment and infrastructure at:
    - State Street/East Columbus Avenue
    - State Street/West Columbus Avenue
- Modify traffic signal phasing at intersection of State Street/Main Street, and
- Optimize traffic signal timings, clearance intervals, signal coordination, and offset timings at corridor intersections.

Main Street Corridor Improvements (Mill Street to Frank B. Murray Street) (Prior to MGM Springfield Opening, $440,000)

- Widen sidewalks along site frontage,
- Relocate PVTA bus stops along Main Street,

- Complete a pavement mill and overlay Main Street between State Street and Union Street,
- Restripe Main Street between State Street and Union Street,
- Stripe intersection tracking markings across intersection of Main Street/Boland Way/Harrison Avenue,
- Upgrade accessible wheelchair ramps at:
    - Main Street/Union Street
    - Main Street/State Street
- Install vehicular/pedestrian/ bicycle wayfinding signs,
- Install mid-block crosswalk north of Howard Street,
- Install bicycle "sharrows" and share-the-road signage between Mill Street and Union Street,
- Install bike lane northbound and bicycle "sharrows" southbound with share-the-road signage along Main Street between Union Street and Lyman Street,
- Install bike boxes, shift stop lines, and recalculated clearance intervals at intersections with Boland Way and State Street,
- Install new parking regulation signs along Main Street between State Street and Union Street,
- Upgrade pedestrian traffic signal equipment only at:
    - Main Street/Falcons Way/Court Street
    - Main Street/Boland Way/Harrison Avenue
    - Main Street/Worthington Street
- Optimize traffic signal timings, clearance intervals, signal coordination, and offset timings at corridor intersections.

Lyman Street Corridor (Main Street to Dwight Street) (Prior to MGM Springfield Opening $30,000)

- Restripe Lyman Street between Main Street and Dwight Street
- Install bicycle lanes and wayfinding signage

East and West Columbus Avenues at Boland Way Improvements (Prior to MGM Springfield Opening, $490,000)

- Install vehicular/pedestrian/bicycle wayfinding signs,
- Restripe Boland Way eastbound between East Columbus Avenue and West Columbus Avenue to include 5-foot bike lane,
- Stripe intersection tracking markings across intersection of West Columbus Avenue / Boland Way / Memorial Bridge,
- Install "sharrows" along Boland Way between East Columbus Avenue and Main Street and along Boland Way westbound between East Columbus Avenue and West Columbus Avenue,
- Upgrade accessible wheelchair ramps at:
    - East Columbus Avenue/Boland Way

  - West Columbus Avenue/Boland Way/Memorial Bridge
- Upgrade vehicular and pedestrian traffic signal equipment at:
  - East Columbus Avenue/Boland Way
  - West Columbus Avenue/Boland Way/Memorial Bridge
- Optimize traffic signal timings, clearance intervals, signal coordination, and offset timings at corridor intersections.

East and West Columbus Avenue Corridors Improvements (Boland Way to Union Street) (Prior to MGM Springfield Opening, $250,000)

- Install vehicular/pedestrian/bicycle wayfinding signs,
- Restripe West Columbus Avenue southbound approach and Memorial Bridge receiving lanes,
- Complete pavement mill and overlay East Columbus Avenue between Union Street and State Street, and
- Restripe West Columbus Avenue between Boland Way and Union Street.

Memorial Bridge (Prior to MGM Springfield Opening, $570,000)

- Restripe Memorial Bridge cross-section and install bike lanes,
- Remove scored concrete median,
- Reconstruct gaps along former scored concrete median with bituminous asphalt pavement, and
- Complete pavement mill and overlay Memorial Bridge.

Plainfield Street (Prior to MGM Springfield Opening, $280,000)

- Restriping the Plainfield Street westbound approach from the existing two through lanes to provide a single through lane and a channelized right-turn lane onto the I-91 NB On-Ramp,
- Restriping Plainfield Street westbound to provide one through travel lane between the I-91 NB On-Ramp and I-91 NB Off-Ramp,
- Restriping the terminus of the I-91 NB Off-Ramp to enter Plainfield Street, west of the intersection, into its own travel lane. This would create a de facto free, unopposed movement exiting the I-91 NB Off-Ramp,
- Construct new sidewalk along Plainfield Street north of US Route 20,
- Remove existing offset sidewalk between the newly constructed sidewalk connections,
- Install new crosswalk with flashing warning assembly and ADA-compliant accessible ramps immediately east of I-91 Ramps,
- Install "No Pedestrian Crossing" signage at locations along the northerly side of Plainfield Street at the I-91 Ramps and Birnie Avenue, and
- Construct accessible wheelchair ramps, install new pedestrian countdown indications and push buttons at Plainfield Street (US Route 20)/West Street (US Route 20)/Plainfield Street/ Avocado Street intersection.

Intelligent Transportation System Enhancements (Prior to MGM Springfield Opening, $500,000)
To improve operations and safety along I-91 and I-291, the Proponent has committed to work with MassDOT to deploy variable message signs along I-91 and I-291 to notify motorists of traffic conditions in the Downtown area. These would be used to inform the public of the following:

- Detour routes to follow when a traffic incident, construction, or traffic congestion warrants diversion of vehicles to an alternative route,
- Alternative routes to use during special events to avoid traffic congestion or locate appropriate and convenient parking, and
- Location of available parking in the Downtown area and routes for access.

- The Proponent will work with the PVTA to draft a document that captures all public transportation agreements and commitments on the project, including final details on various components of the proposed transportation mitigation program:

  - Commitment to fund ADA paratransit trips that serve the MGM Springfield site;
  - Provision of trolley/circulator service, at no fare, to be operated by PVTA. The final agreement will clarify the trolley route, stops, and hours of operation;
  - Improvements to bus stops on Main Street, including passenger amenities;
  - Ongoing commitment to maintain bus stops, including snow removal;
  - Working with PVTA and other stakeholders on ways to manage/provide/serve seniors using the current Dial-a-Ride or other alternate means for travel to MGM Springfield;
  - Targeting a transit mode share for employees;
  - Promotion of PVTA passes to MGM employees;
  - Provision of transit information for all users, including prominent placement of information about PVTA service;
  - Implementing onsite PVTA pass and fare sales;
  - Granting preferential shifts to employees who take public transportation, so they can utilize existing service;
  - Committing to regularly review service levels and demand for MGM Springfield with PVTA, and adjust service as necessary;
  - Providing a robust Transportation Demand Management (TDM) program for employees to discourage single occupancy vehicle (SOV) travel and encouraging alternate transportation, including PVTA service; and
  - Completing annual monitoring of transportation usage, with a goal of reaching target mode shares.

- Upon site occupancy, the Proponent will work with the PVTA to assess actual changes to transit demand and identify corresponding mitigation, as warranted.

- Fund and implement a TDM program consisting of the following elements:

- Transit Measures
  - Coordinate with PVTA to periodically review bus service directly serving the site and overall service;
  - Open trolley service for no fare on scheduled service days 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 transit schedules and information about program services;
  - Provide improved bus stops with passenger amenities (weather protection, seating, real time information, customer information) near the site;
  - Provide ongoing maintenance of bus stop facilities and amenities installed as part of the Project;
  - Provide preferential shift selection to employees using transit services, and align shifts to the extent possible with PVTA transit service;
  - Provide on-site transit pass sales and offer pre-tax pass sales for employees that enroll in the program;
  - As part of employment application process, ask prospective employees about likely use of public transportation; and
  - Provide a forum for employees to give customer feedback on transit service for Transportation Coordinator to share with PVTA to target improvements in service. Feedback form can be incorporated in company commute website.

- Pedestrian and Bicycle Measures
  - Update and retrofit pedestrian signal equipment at study area intersections surrounding the site and along Main Street between Union Station and the site;
  - Provide striping improvements for bicycle lanes or sharrows along with corresponding bike signs;
  - Provide pedestrian and bicycle wayfinding signage throughout Downtown Springfield on roadways providing direct access to the site. This includes coordinating with retailers, employers, and property managers to distribute bicycle and pedestrian route maps to casino, hotel, and retail patrons, employees, and residents;
  - 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 bicycle share program;
  - Provide showers for employees who commute by walking or biking;
  - Include a repair station near the bike cages and/or advertised visits by a local mechanic;

- Provide on-site bicycle education classes such as basic maintenance and repairs, rules of the road and winter cycling;
- Canvas employees to identify potential "bicycle captains" and inexperienced cyclists that would be willing to participate in a Bike Buddy Program;
- 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; and
- "CommuteFit" and "Workout to Work" incentive programs allow participants to log miles each month walked or bicycled to work. The Proponent will work with NuRide to implement these as part of work wellness program with incentivized participation.

- Parking Measures
  - Provide a reduced valet rate for vehicles with three or more patrons;
  - Provide preferential parking for rideshare, carpool, and hybrid vehicles. Employers, property managers, or the Transportation Coordinator would distribute parking passes or tags provided by MassRIDES to employees and residents participating in recognized rideshare or carpool programs at no cost to the employees or residents. These passes would allow employees and residents to park in reserved spaces dedicated for rideshare and carpool participants that will be strategically located in convenient locations within the parking structure;
  - Provide charging stations for electric vehicles, which will be located near the doorways on each floor of the parking structure;
  - Implement an intelligent parking system to direct drivers to open parking spaces or nearby facilities controlled by the Springfield Parking Authority;
  - Employee parking "buy out" program, which will provide a financial incentive for employees to use alternative modes of transportation; and
  - Promote TDM programs alongside sale and delivery of parking information for employees and visitors. This could include a website and traditional print media such as fliers in garages, posters in parking garage and stairwells.
- Other Measures
  - Appoint a Transportation Coordinator on-site to oversee, implement, monitor, and evaluate TDM measures, employed or funded by the Proponent. Responsibilities include:
    - Posting and distributing announcements;
    - Holding promotional events to encourage ridesharing, using public transit, bicycling, and walking;
    - Monitoring the program and assisting in the evaluation;
    - Providing transit schedules and information about program services;

- Coordinating on-site sales of transit passes;
- Managing transit subsidy or discount programs for employees;
- Coordinating rideshare and carpool programs and coordinating preferential parking for participants;
- Coordinating with PVTA and MassRIDES to implement TDM programs and improve transit mode share; and
- Collecting and reviewing transportation data and employee surveys and coordinating with transportation consultant for review of post-occupancy conditions and 'look back' intersection studies.

▪ Partner with MassRIDES to implement and monitor TDM measures;
▪ Offer preferential shifts to employees using transit to align with PVTA service;
▪ Register employees with NuRIDE to encourage ride-sharing and "green" trips;
▪ Provide Car Sharing (Zip Car or equivalent) for resident and employee use with convenient spaces located within the parking structure;
▪ Encourage vanpool and carpooling participation through marketing, events and vanpool formation meetings;
▪ Offer pre-tax payment option for employee vanpool fares;
▪ Offer employees a guaranteed ride home program through participation with NuRide;
▪ Provide and update a monthly Commuter Bulletin;
▪ Provide real-time traffic/weather information;
▪ Team up with local partners and provide lunchtime tours to help employees discover local amenities and attractions;
▪ Promote safe commuting by all modes through a multi-modal safety awareness campaign. Increase awareness of multi-modal user needs with printed, online or interactive information as developed;
▪ Implement electronic sign-up for TDM programs to support creation of a database of participants to track program effectiveness and costs;
▪ Facilitate events through coordination with MassRIDES and PVTA; and
▪ Establish a monitoring system to evaluate TDM goals.

- The TDM program will be modified, as necessary, contingent upon the outcome of the proposed transportation monitoring program, to ensure mode share estimates presented in the FEIR are met.

- Conduct RSAs as part of the 25 percent design process for intersection improvements at the following locations:[7]
  - Dwight Street/Interstate 291 southbound ramps;
  - Mill Street/Locust Street/Belmont Avenue/Fort Pleasant Avenue;

[7] As noted previously, MassDOT has recently issued updated crash data for 2012. The Proponent will review study area intersections to enable MassDOT to determine if additional intersectons will require RSAs prior to completion of 25 percent design plans.

- State Street between Main Street and Chestnut Street;
- State Street between Walnut Street and St. James Street;
- Union Street between West Columbus Avenue and Main Street;
- Main Street/West Columbus Avenue/East Columbus Avenue/Longhill Street; and
- Plainfield Street (US Route 20) between I-91 northbound Exit 9 ramps and the North End Bridge.

- Construct off-site roadway improvements consistent with "Complete Streets" principles to the extent reasonable and practicable. These improvements include:
  - Reconstruct existing curb cut ramps to bring them into compliance with ADA and AAB regulations;
  - Reconstruct pedestrian traffic signals to bring them into compliance with the most recent version of the Manual on Uniform Transportation Control Devices (MUTCD);
  - Bicycle and pedestrian accommodations where feasible such as, "bike boxes" at all signalized intersections to reduce bicycle/vehicle conflicts, new PVTA bus stops and reconfiguration of on-street parking to provide additional safety measurements for pedestrians and bicyclists.
- Complete a Traffic Monitoring Plan (TMP) with an evaluation of the following:
  - Traffic operations at key study area intersection and roadways surrounding the project.
    - Collect the following traffic impact-related data:
      - Manual Turning Movement Counts (TMCs) during the Friday evening (4:00 to 7:00 PM) and Saturday midday (11:00 AM to 2:00 PM) peak periods at the following intersections:
        - All MGM Springfield and Armory Square driveways;
        - State Street at Main Street;
        - State Street at East Columbus Avenue;
        - State Street at West Columbus Avenue;
        - Union Street at Main Street;
        - Union Street at East Columbus Avenue;
        - Union Street at West Columbus Avenue;
        - Interstate 291 southbound Exit 2B Off-Ramp at Dwight Street;
        - I-91 Exit 7 On-and Off-Ramp Intersections with East and West Columbus Avenues;
        - East Columbus Avenue/Boland Way;
        - West Columbus Avenue/Boland Way/Memorial Bridge;
        - Main Street/Harrison Street;
        - Sumner Avenue/Belmont Street/Dickinson Street; and
        - State Street/Federal Street/Walnut Street.
      - Automatic Traffic Recorder (ATC) data for a continuous week-long period at the following locations:
        - State Street east of East Columbus Avenue;
        - Union Street east of East Columbus Avenue;
        - Main Street north of Howard Street;

- East Columbus Avenue north of Howard Street;
- West Columbus Avenue between State Street and Union Street;
- Interstate 91 southbound Exit 6 Off-ramp;
- Interstate 91 northbound Exit 6 Off-ramp;
- Interstate 291 southbound Exit 2B Off-ramp;
- North End Bridge;
- South End Bridge; and
- Memorial Bridge

- Compare the site-generated vehicle trips collected in the TMCs at the site driveways with the site-generated vehicle trips estimate included in the DEIR;
- Compare the TMCs with those projected in the DEIR to determine whether the total vehicles entering each intersection exceeds the volumes projected and whether trip distribution patterns generally concur with those project in the DEIR;
- Perform a capacity and queuing analysis to evaluate the traffic operations at the study area intersections and compare to the projections in the DEIR;
- Assess whether additional improvements are necessary at any of the study area intersections and identify measures to improve operations and reduce traffic volumes.
  - The need for mitigation will be conditioned upon exceeding total projected traffic generation through an intersection by more than ten percent or of exceeding the projected overall intersection delay by more than 20 percent.
  - The need for additional TDM measures will be conditioned upon exceeding the total projected traffic generation volume by more than five percent.

- Adequacy of the constructed parking supply;
  - Collect parking utilization counts during the Friday and Saturday peak parking demand periods between 12:00 and 9:00 PM and a weekday morning (non-Friday) between 7:00 AM and 12 PM to assess adequacy of parking supply.
    - Separate parking counts will be conducted in the self-parking garage, hotel and casino valet parking areas and tour bus parking, and Armory Square parking areas.
    - Separate counts will be conducted of utilization of preferential carpool, alternative-fueled vehicle, and EV charging station spaces.
  - Assess whether the constructed parking supply is adequate based upon the observed parking demand.
  - Assess the need for additional TDM measures to improve use of preferential parking or EV charging stations, including increasing the number of these types of spaces to provide additional capacity.
- Effectiveness of TDM measures.
  - Prepare a report on the progress and effectiveness of each TDM measure including narrative and quantitative data;

  - Collect boarding and alighting counts at the PVTA bus stops located along Main Street, Dwight Street, and Chestnut Street in the immediate vicinity of the site;
  - Collect boarding and alighting counts at the proposed trolley stops;
  - Conduct an annual commuter survey for employees to determine mode split (transit, pedestrian, bicycle) and evaluate opportunities to expand or adjust TDM measures.
- Complete "look-back" studies in accordance with the SCA's. The final scope of the look-back approach, including the roadways for evaluation, will be developed in coordination with each respective community, PVPC, the Proponent, and each entity's consultants.
- Work with MassDOT during and post permitting to optimize traffic operations and manage access along some project corridors (notably Main Street and Union Street).

Air Quality

- Implement a TDM program to mitigate the projected emissions increase between the 2024 No Build and 2024 Build conditions (7 percent increase in volatile organic compounds (VOCs) and a 5 percent increase in nitrogen oxides (NO_x)).
- Install on-site stationary sources of potential air pollutants, including the proposed CHP system in accordance with MassDEP's Environmental Results Program (ERP) or air quality permitting regulations, as applicable.

Greenhouse Gas Emissions

- In accordance with the Gaming Act, the project will be required to meet or exceed the following sustainable design and/or energy efficiency requirements:
  - Compliance with the Stretch Code;
  - Certifiable at the Gold Level or higher under the GBC's LEED program;
  - Procure through the purchase of RECs or generate on-site at least ten percent of its annual electricity consumption from renewable sources; and
  - Develop an ongoing plan to monitor all major sources of energy consumption and undertake regular efforts to maintain and improve energy efficiency in building systems.
- Project buildings will incorporate the following elements, or measures achieving similar energy use reductions, into the final Project design:
  - High efficiency water cooled chillers
  - Water side economizers
  - Air side economizers
  - Variable air volume systems
  - Variable speed pumping
  - Variable speed cooling tower fans
  - Demand controlled kitchen exhaust (with tenant participation)
  - Increased air filtration

  - High performance building envelope
  - Green roof
  - High-albedo roofs
  - Premium electric motors
  - Energy recovery ventilation
  - Demand controlled ventilation (in garage, and where the occupant density exceeds 40 persons per thousand square feet)
  - Room occupancy sensors for lighting (and HVAC in hotel rooms)
  - Daylighting (where possible)
  - Reduced lighting power density (below ASHRAE guidelines) (except residential and guest room spaces)
  - High performance lighting
  - Low-flow fixtures
  - Energy star appliances
  - Energy management system
  - Inspections and air sealing
  - Enhanced refrigerant management
  - Regional building materials
  - Low-VOC adhesives, sealants, paints, carpets, and wood (where feasible)
- Incorporation of an approximately 200 kW CHP system, and review of options to increase the CHP size during final design;
- Incorporation of onsite solar PV systems, with sizes and locations to be determined during final design. Preliminary analysis identified an estimated average annual energy production from the podium PV system at 246.54 MWh per year and the parking structure PV system at 807.91 MWh per year. Total CO_2 offsets from these potential systems are estimated at 379.1 tons per year (tpy);
- Roof areas not significantly shaded and not designated for other uses will be constructed "solar-ready" such that they can support the live loads and include space for conduit runs and electrical gear such as inverters and meters;
- Use refrigerants with lower global warming potentials for freezer and refrigerator spaces.
- Conduct annual energy use surveys using information collected by the energy management system.
- Include energy efficiency standards as criterion in the selection and purchase of electronic gaming machines.
- Review in the final project design costs and benefits of the following project elements and consider inclusion:

  - Chillers with improved full-load efficiency;
  - Oversized cooling towers that can supply condenser water to the chiller condensers at a temperature $\leq$ 75 degrees F for 95 percent of the operating hours per year;
  - Advanced elevators (machine room-less, permanent magnet gearless with efficient drives) and advanced escalators;

- Improvements to the building envelope and lighting power densities;
- Electronically commutated motors for terminal units; and
- Solar hot water to support specific end uses.

- Implement traffic-related strategies to reduce emissions from vehicles as outlined in the traffic mitigation section, including providing electric vehicle charging stations and designated parking spaces for alternatively fueled vehicles within the parking garage consistent with patron demand.

- Provide a self-certification document to the MEPA Office that is signed by an appropriate professional (e.g., engineer, architect, transportation planner, general contractor) and indicates that all of the required mitigation measures, or their equivalent, have been completed for each phase. The certification will be supported by plans that clearly illustrate what type of GHG mitigation measures have been incorporated into the Project. For those measures that are operational in nature, the Proponent will provide an updated plan identifying the measures, the schedule for implementation, and a description of how progress towards achieving the measures will be obtained.

- Implement roadway and intersection improvements to improve traffic operations, reduce idling times for study area vehicle trips, and promote mode shifts away from SOVs;

- Fund and implement the TDM program outlined above.

Historic Resources

- Develop a Memorandum of Agreement among the MHC, MGC and the Proponent to specify measures to minimize and mitigate impacts. These measures may include, but are not limited to:
    - Photographic documentation of the buildings prior to demolition;
    - Salvage and reuse of architectural elements within the Project; and
    - Interpretive signage and displays providing information about the history of the Project area.

Water and Wastewater

- Replacement of the twin 12-inch water mains in Main Street with one 16-inch water main;
- Replacement of a 10-inch sewer main within Union Street with a 12-inch sewer main;
- Replacement of a 24-inch water main in Union Street;
- Replacement of a 12-inch vitrified clay sewer main and upgrade hot water mains in Howard and Bliss Streets where the roadway ROW will remain;

- Work with the SWSC and the City of Springfield to identify and mitigate potential impacts on abutting properties. This may include the installation of backflow preventers on service laterals to prevent a surcharge condition during heavy rainfall events;
- Execution of a Memorandum of Understanding (MOU) with the SWSC to memorialize water and sewer infrastructure commitments including maintenance, inspections, monitoring, reporting, and continued communication;
- Implementation of the following water conservation and reuse measures (overseen by a designated Water Conservation Manager):

    - Rainwater reuse for irrigation;
    - Consider rainwater reuse for HVAC cooling tower.
    - Weather-based irrigation controllers;
    - Installation of drip irrigation systems;
    - Drought-tolerant plants/groundcover;
    - Installation of low-flow urinals;
    - Installation of dual-flush water closets (1.1/1.6 gallons per flush (gpf));
    - Installation of metering faucets with 0.5 gallons per minute (gpm) aerators with 15 seconds run time) and;
    - Education and training programs.

Stormwater

- The project will be designed and constructed consistent with MassDEP Stormwater Management Standards. The stormwater management system will reduce peak rates of runoff at each design point and provide treatment to improve water quality of discharge, compared to existing conditions.
- Implementation of stormwater BMPs and LID techniques, including, but not limited to: deep sump catch basins, infiltration systems, hydro-dynamic (proprietary) separators, rainwater capture, 2.2 acres of green roofs, and adherence to a specific maintenance schedule;
- Elimination of 1.3 acres of impervious areas on-site;
- Registration of the stormwater system's infiltration system in accordance with the MassDEP Underground Injection Control (UIC) program.
- 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.

Hazardous Materials

- Prior to building demolition or renovation, hazardous building materials will be abated or removed in accordance with applicable regulations.
- Consistent with the requirements of the Activity and Use Limitation (AUL) (RTN 1-12379), located at 38-50 Howard Street, 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 identified Massachusetts Contingency Plan (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 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).
- A Licensed Site Professional (LSP) will be engaged to manage the MCP-submittal process and manage potential construction-period waste, soil and groundwater remediation in accordance with the MCP.

Construction Period

- Coordinate with MassDOT and its construction contractor on a regular basis throughout the entire construction process to minimize impacts on the surrounding transportation infrastructure due to the simultaneous construction of the project and the I-91 Viaduct Deck Replacement project. The Proponent and MassDOT will incorporate language into each respective construction contract to define a need for bi-weekly construction coordination meetings to evaluate traffic detours, parking demands, major trucking needs, and other related items;

- Develop and implement a construction period traffic management plan, subject to review and approval by the City and State. Prepared and implement Temporary Traffic Control Plans (TTCP) for construction of improvements near the MGM Project site including signage, traffic cones, drums, and other traffic control measures to facilitate vehicle traffic near the work zone. These plans will be refined as the project advances to the 25% design stage and will require review and approval by the City of Springfield DPW and MassDOT District 2 staff.

- Establish truck traffic routes, with consideration for road closures or detours as part of the I-91 viaduct project, in collaboration with MassDOT, the City of Springfield, and PVPC.

- Implement a construction period parking plan for the City of Springfield's review and approval, which shall include the general contractor's plans and protocols for enforcing the prohibition on construction personnel parking personal vehicles on streets in the adjacent neighborhood. Terms and conditions to maximize protection of the neighborhoods related to workforce parking will be written into each subcontract and

reviewed with each worker during a mandatory orientation. Terms and conditions encouraging public transportation use will be included in each subcontract.

- Coordinate with the Springfield Parking Authority, City of Springfield, and owners of private parking facilities throughout downtown Springfield to identify locations to accommodate construction employee parking, as well as parking for uses displaced from the site during construction.

- Publish an updated schedule of upcoming work every two weeks and disseminate to affected parties in local neighborhoods. In addition, the general contractor will publish monthly schedule updates describing progress as well as projected activity for the next month. This information will be available on a Project website which will allow neighbors real-time access to the most up-to-date construction information;

- Comply with the City of Springfield Noise Ordinance;

- Conduct activities such as excavation, pile-driving, and steel erection only during permitted hours;

- Use appropriate mufflers on all equipment and provide ongoing maintenance of intake and exhaust mufflers;

- Replace specific construction operations and techniques with less noisy ones, where feasible;

- Select the quietest of alternative items of equipment, where feasible;

- Locate noisy equipment at locations that protect sensitive receptors (by shielding or distance);

- Conduct precondition surveys and vibration monitoring to document initial site conditions followed by vibration monitoring throughout the construction period;

- Establish vibration limits and performance criteria in the Construction Management Plan and require mitigation measures by contractor if adverse impacts occur during construction.

- Conduct below-grade work under the supervision of a geotechnical engineer to observe and document construction procedures, monitor vibration, and anticipate or facilitate mitigation measures, as necessary.

- Comply with MassDEP's anti-idling regulations;

- Establish a goal of 100 percent diversion of construction waste.

Conclusion

Based on a review of the FEIR, comment letters and consultation with State Agencies, I find that the FEIR adequately and properly complies with MEPA and its implementing regulations. Outstanding issues can be addressed during State and local permitting. The Proponent and State Agencies should forward copies of the final Section 61 Findings to the MEPA Office for publication in accordance with 301 CMR 11.12.

December 31, 2014
Date

Maeve Vallely Bartlett

Comments received:

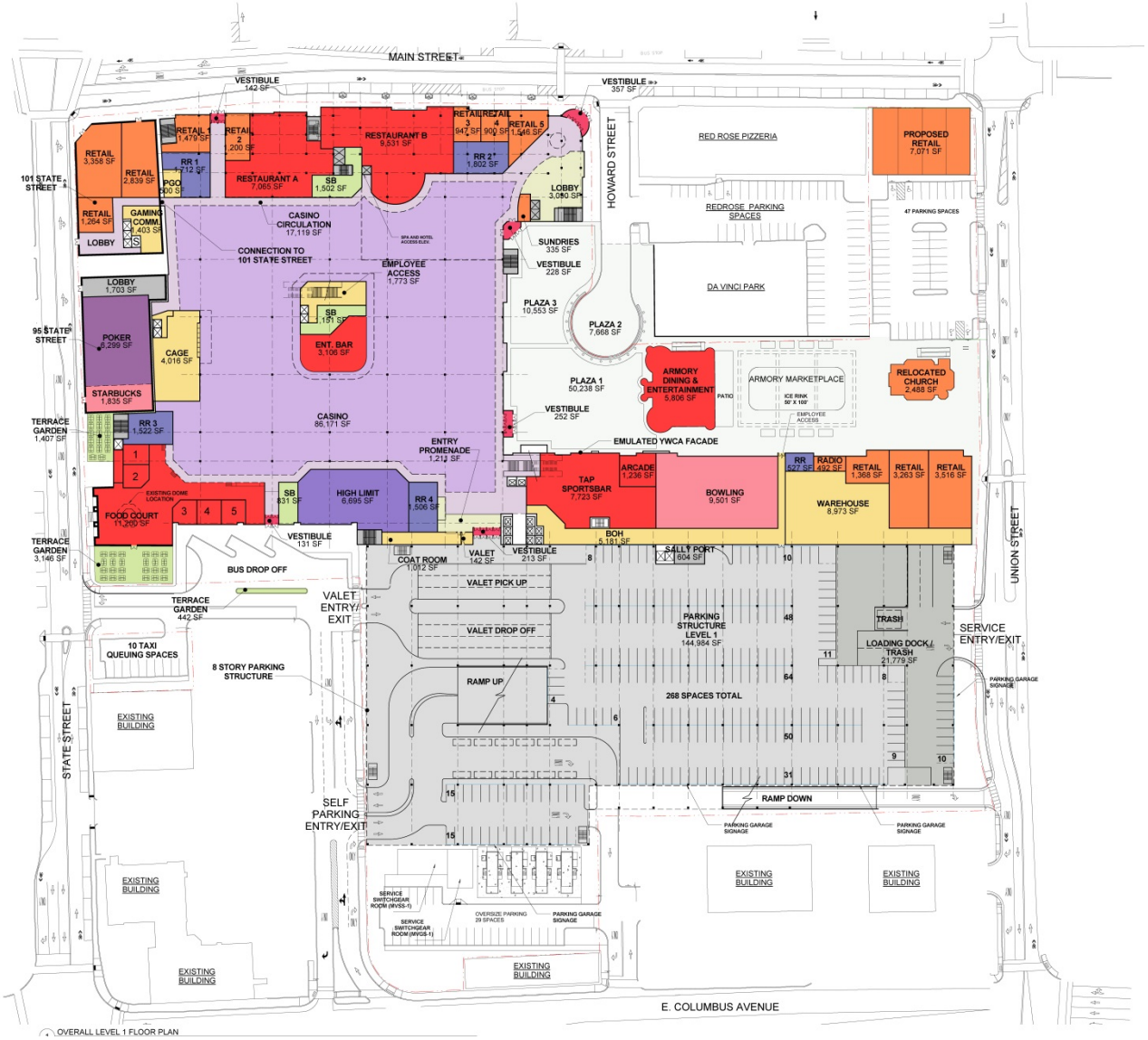
11/23/2014	Gerald Dudarme
11/24/2014	Ryan M. Kmetz
11/24/2014	Jay Minkarah
11/24/2014	Desiree Rock
11/28/2014	Marilyn Beardslee
12/01/2014	M. Aluqdait
12/01/2014	Claudia Orcutt
12/04/2014	Massachusetts Historical Commission
12/04/2014	Preservation Massachusetts
12/04/2014	Springfield Preservation Trust
12/15/2014	Jon Gardner
12/17/2014	Rev. Jonathan C. Tetherly
12/22/2014	Massachusetts Historical Commission (2nd letter) – with attachments from William Devlin (2 letters), David Hosford, Allen Agnitti, Patty Cabey, James Boone, Preservation Massachusetts (2 letters), Springfield Historical Commission (2 letters)
12/22/2014	Law Offices of Eric I. Michelman
12/22/2014	Briarwood Thirteen, LLC
12/22/2014	Mayor Dominic J. Sarno, City of Springfield
12/23/2014	Pioneer Valley Planning Commission
12/23/2014	Colvest/East Columbus, LLC
12/23/2014	Red Rose Pizzeria
12/23/2014	Courthouse Park Associates
12/23/2014	Pride Stores LLC
12/23/2014	Brianne Zulkiewicz
12/24/2014	Town of West Springfield
12/09/2014	Bill Devlin

MVB/HSJ/hsj

Attachments 2 - 5

2 FEIR Proposed Site Plan
3 Current Proposed Site Plan
4 USGS Locus Map
5 Circulation List

MGM Springfield **Springfield, Massachusetts**



OVERALL LEVEL 1 FLOOR PLAN

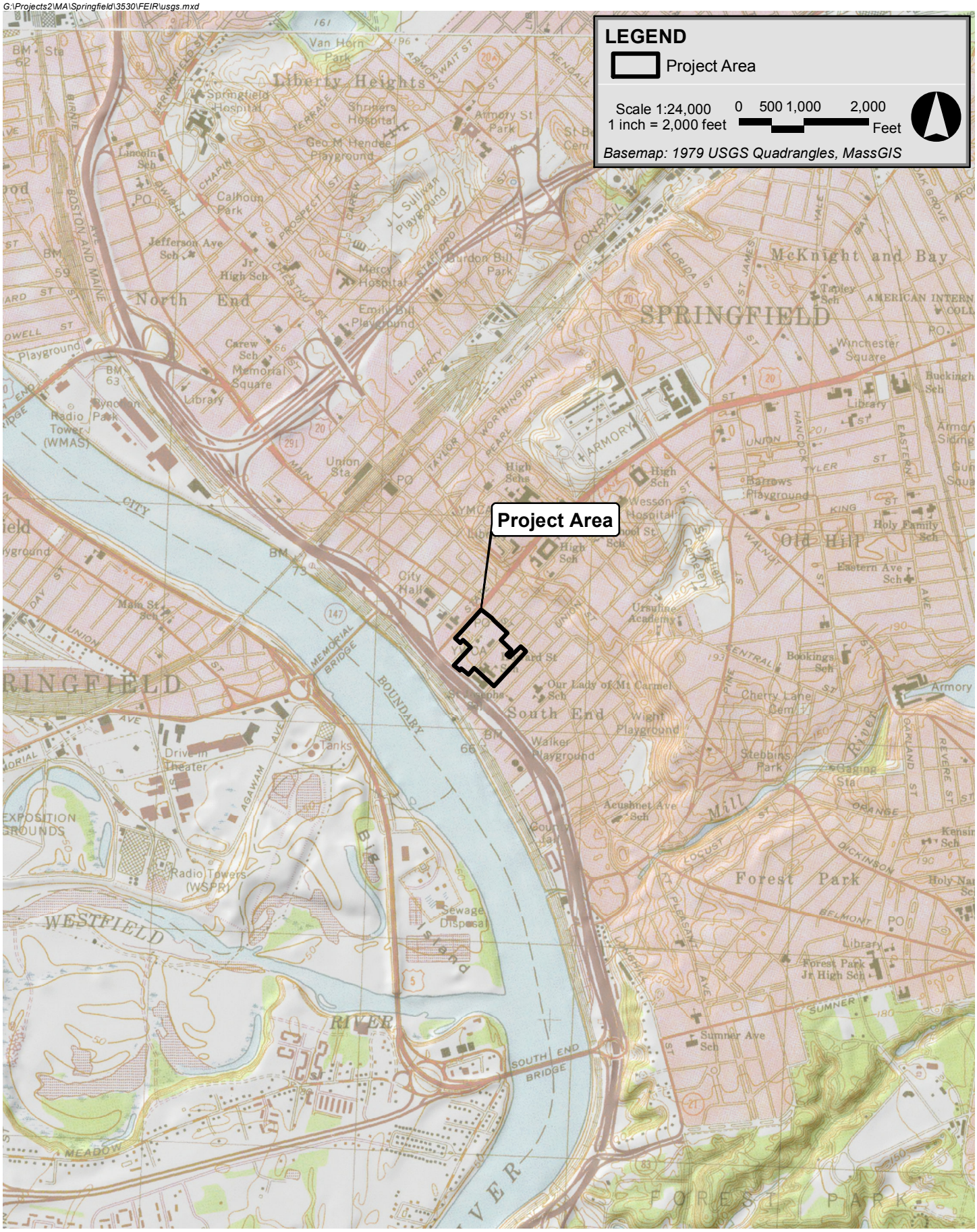
MGM Springfield **Springfield, Massachusetts**

Epsilon ASSOCIATES INC.

Attachment 3

Currently Proposed Site Plan

G:\Projects2\MA\Springfield\3530\FEIR\usgs.mxd



MGM Springfield **Springfield, Massachusetts**

Epsilon ASSOCIATES INC.

Attachment 4
USGS Locus Map

ATTACHMENT 5 CIRCULATION LIST

Executive Office of Energy and Environmental Affairs
Attn: MEPA Office
100 Cambridge Street, 9th Floor
Boston, MA 02114

Massachusetts Department of Environmental Protection
Commissioner's Office
Attn: MEPA Coordinator
One Winter Street
Boston, MA 02108

Massachusetts Department of Environmental Protection
Western Regional Office
Attn: MEPA Coordinator
436 Dwight Street
Springfield, MA 01103

Massachusetts Department of Environmental Protection
Attn: Sewer Connection
One Winter Street
Boston, MA 02108

Massachusetts Department of Housing and Community Development
100 Cambridge Street, Suite 300
Boston, MA 02114

Massachusetts Department of Public Safety
One Ashburton Place, Room 1301
Boston, MA 02108

Massachusetts Department of Transportation
Attn: Environmental Reviewer
Public/Private Development Unit
10 Park Plaza, Suite 4160
Boston, MA 02116

Massachusetts Department of Transportation Highway Department
District #2
Attn: MEPA Coordinator
811 North King Street
Northampton, MA 01060

Natural Heritage & Endangered Species Program
MA Division of Fisheries & Wildlife
100 Hartwell St., Suite 230
West Boylston, MA 01583

Massachusetts Gaming Commission
84 State Street, 10th Floor
Boston, MA 02109

Massachusetts Historical Commission
Attn: Environmental Reviewer
The MA Archives Building
220 Morrissey Boulevard
Boston, MA 02125

Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Pioneer Valley Transit Authority
2808 Main Street
Springfield, MA 01107

Pioneer Valley Planning Commission
60 Congress Street, Floor 1
Springfield, MA 01104

Springfield City Council
Springfield City Hall
36 Court Street
Springfield, MA 01103

Springfield Conservation Commission
70 Tapley Street
Springfield, MA 01104

ATTACHMENT 5 CIRCULATION LIST (CONTINUED)

Springfield Historic Commission
70 Tapley Street
Springfield, MA 01104

Springfield Office of Planning and
Economic Development
70 Tapley Street
Springfield, MA 01104

Town of Longmeadow
Attn: Town Manager
20 Williams Street
Longmeadow, MA 01106

Town of West Springfield
Office of the Mayor
26 Central Street, suite 23
West Springfield, MA 01089

City of Chicopee
Department of Planning and
Development
City Hall Annex- 274 Front Street
Chicopee, MA 01013

Connecticut River Watershed Council
15 Bank Row
Greenfield, MA 01301

Mass Audubon
Advocacy Department
Six Beacon Street, Suite 1025
Boston, MA 02108

Preservation Massachusetts
Old City Hall
45 School Street
Boston, MA 02108

Springfield Preservation Trust
74 Walnut Street
Springfield, MA 01105

Walk Boston
Old City Hall- 45 School Street
Boston, MA 02108

Briarwood Thirteen, LLC
174 South Boulevard – 2nd Floor
West Springfield, MA 01089

The Colvest Group
Peter LaPointe
1259 East Columbus Avenue, Suite 201
Springfield, MA 01105

Courthouse Park Associates, Inc
33 State Street
Springfield, MA 01103

Red Rose Pizzeria
1060 Main Street
Springfield, MA 01103

Pride Stores, LLC
Attn: Robert Bolduc
246 Cottage Street
Springfield, MA 01104

Ted Steger
35 Warwick Street
Longmeadow, MA 01106

Margaret A. Ashe
23 Magnolia Terrace
Springfield, MA 01108

Marilyn Beardslee
2marilynb@comcast.net

James A. Boone
97 Florida Street
Springfield, MA 01109

Ellen Berry
6 Crescent Hill
Springfield, MA 01105

ATTACHMENT 5 CIRCULATION LIST (CONTINUED)

Timothy Cummings
72 Firglade Avenue
Springfield, MA 01108

Aluq Dart
P.O. Box 4533
Springfield, MA 01101

Bill Devlin
bjdevlin@aol.com

Pamela Howland
Old Window Workshop
83 Mill Street
Springfield, MA 01108

Jon Gardner
Jon.gardner24@gmail.com

Ryan Kmetz
kmetzrm@gmail.com

Bill Malloy
223 Forest Park Avenue
Springfield, MA 01108

Robert McCarroll
96 Elliot Street
Springfield, MA 01105

Jay Minkarah
45 Willow Street, #211
Springfield, MA 01103

Denise Moccia
4 Lafayette Street
Springfield, MA 01109

Claudia Orcutt
Claudia.orcutt@jed.state.ma.us

Desiree Rock
Desireerock35@gmail.com

Jon Tetherly
29 Arlington Street
Chicopee, MA 01020

Brianne Zulkiewicz
308 Skeele Street
Chicopee, MA 01013Chicopee Public Library
449 Front Street
Chicopee, MA 01013

Hubbard Memorial Library
24 Center Street
Ludlow, MA 01056

Wilbraham Library
25 Crane Park Drive
Wilbraham, MA 01095

East Longmeadow Library
60 Center Square
East Longmeadow, MA 01028
Storrs Library
693 Longmeadow Street
Longmeadow, MA 01106

Agawam Library
75 Cooper Street
Agawam, MA 01001

West Springfield Public Library
200 Park Street
West Springfield, MA 01089

Attachment 6

MGM Gaming Establishment Boundaries

Blue Tarp reDevelopment (MGM Springfield) gaming establishment

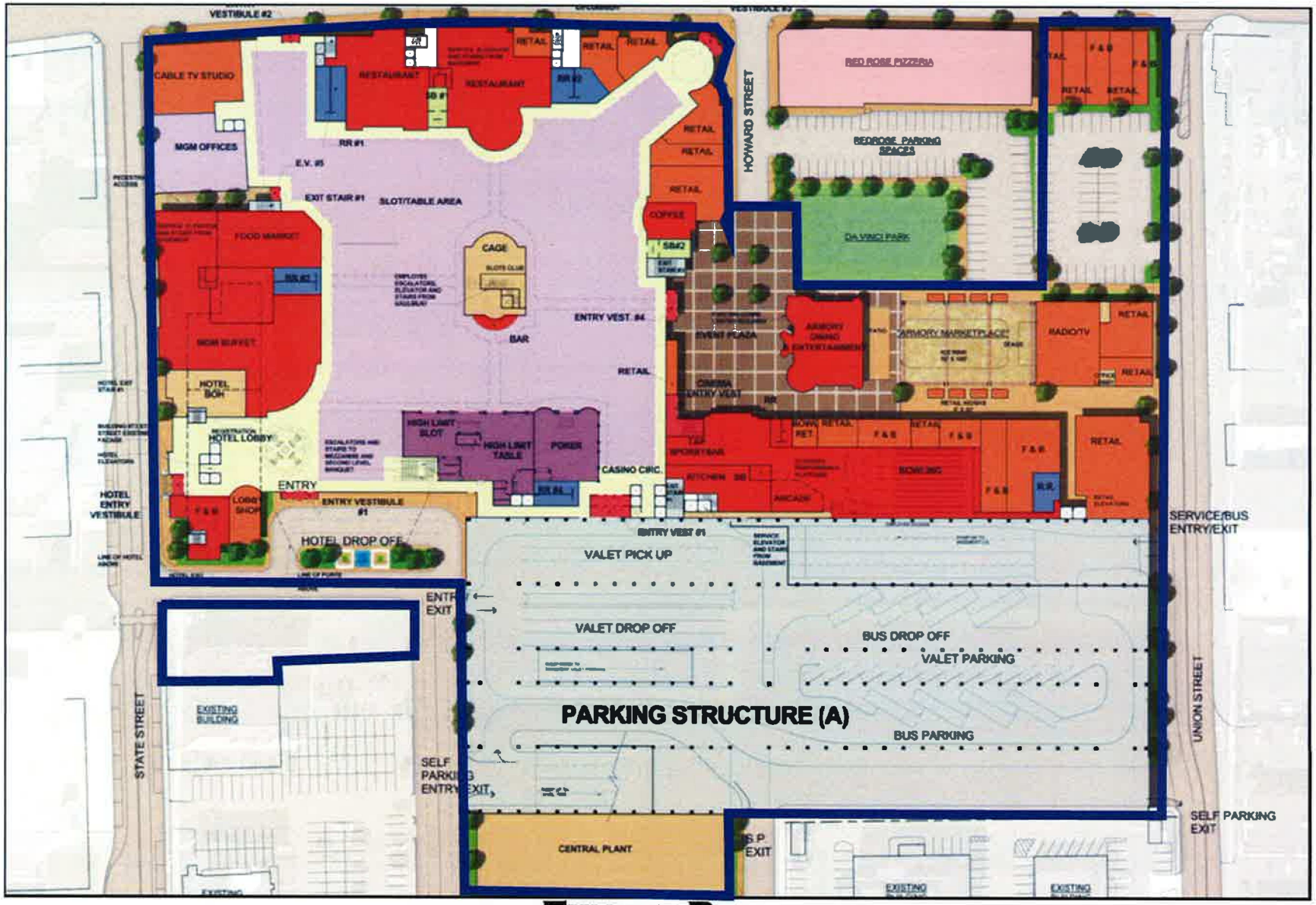


EXHIBIT B

(BOUNDARY INCLUDES ALL VERTICAL SPACE ABOVE AND BELOW)

Blue Tarp reDevelopment (MGM Springfield) gaming establishment

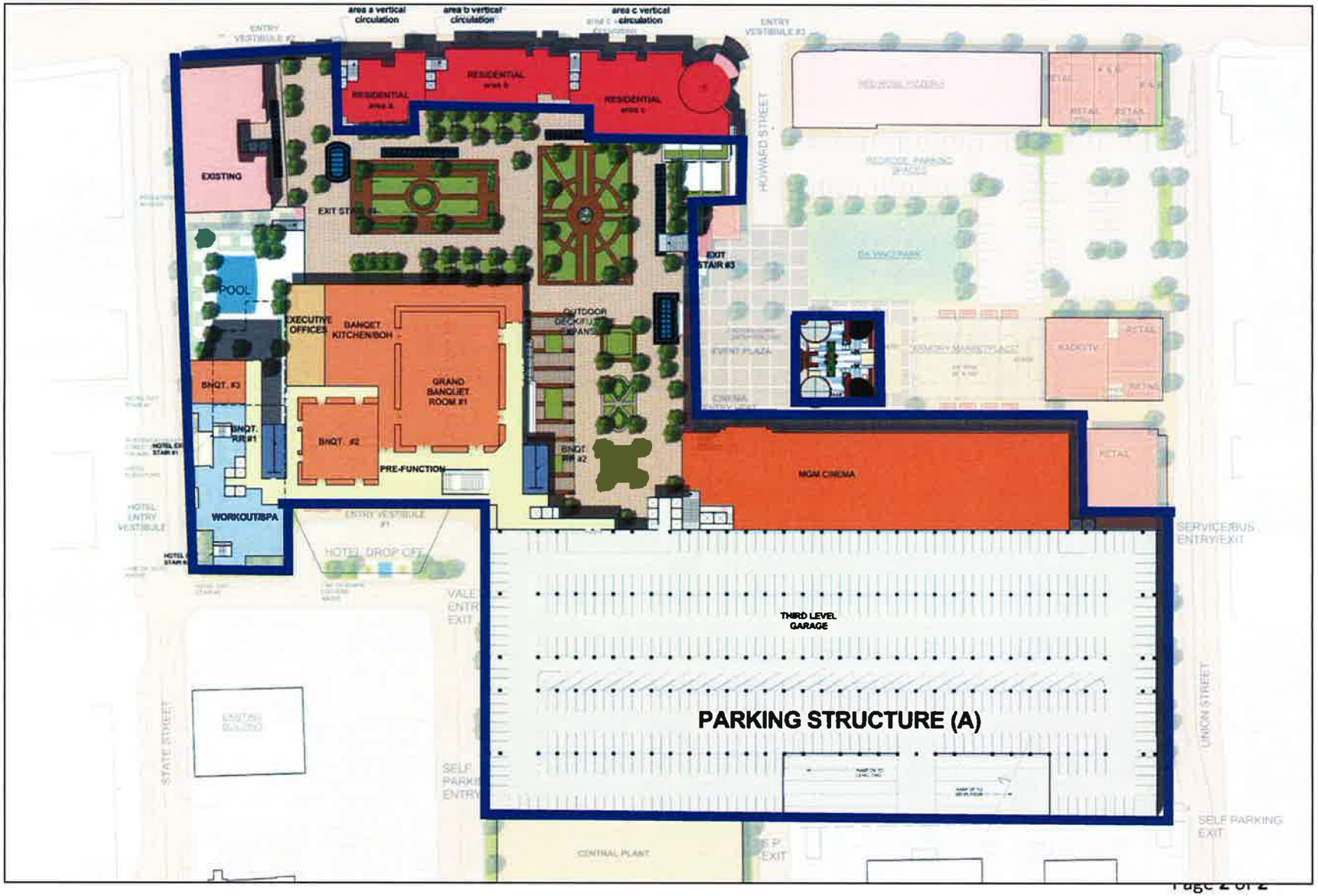


EXHIBIT B

(BOUNDARY INCLUDES ALL VERTICAL SPACE ABOVE AND BELOW)

Attachment 7

Updated Trip Generation and Parking Demand Generation Calculations

Site Generated Trip Assessment - Full Build

Project: MGM Resorts Development - Springfield, Massachusetts
Date: October 7, 2015
Analyst: TEC, Inc. / Rebecca L. Brown, P.E., PTOE
Source: Institute of Transportation Engineers - Trip Generation - 9th Ed.

PROPOSED DEVELOPMENT

Armory Square Wedding Chapel (LUC 560 - Church)

Units: 0.00 kSF

	Total Trips		Total	% Distribution		Total Trips		Multi-Use		Transit		Total New	Total New	# Passby Trips		# Primary Trips	
	Avg. Rates	Fitted Curve	New Trips	IN	OUT	IN	OUT	IN	OUT	IN	OUT	Pass-by Trips	Primary Trips	IN	OUT	IN	OUT
Weekday Daily	0		0	50%	50%	0	0	0	0	0	0	0	0	0	0	0	0
Friday PM PH	0		0	48%	52%	0	0	0	0	0	0	0	0	0	0	0	0
Saturday Daily	0		0	50%	50%	0	0	0	0	0	0	0	0	0	0	0	0
Sat Midday PH	0		0	71%	29%	0	0	0	0	0	0	0	0	0	0	0	0

Armory Square Bowling Alley (LUC 437 - Bowling Alley)

Units: 9.62 kSF

	Total Trips		Total	% Distribution		Total Trips		Multi-Use		Transit		Total New	Total New	# Passby Trips		# Primary Trips	
	Avg. Rates	Fitted Curve	New Trips	IN	OUT	IN	OUT	IN	OUT	IN	OUT	Pass-by Trips	Primary Trips	IN	OUT	IN	OUT
Weekday Daily	321		321	50%	50%	161	160	45	48	6	6	0	216	0	0	110	106
Friday PM PH	16		16	61%	39%	10	6	2	1	0	0	0	13	0	0	8	5
Saturday Daily	172		172	50%	50%	86	86	24	26	3	3	0	116	0	0	59	57
Sat Midday PH	23		23	39%	61%	9	14	3	4	0	1	0	15	0	0	6	9

Armory Square Multi-Plex Cinema (LUC 445 - Multiplex Movie Theater)

Units: 750 Seats

	Total Trips		Total	% Distribution		Total Trips		Multi-Use		Transit		Total New	Total New	# Passby Trips		# Primary Trips	
	Avg. Rates	Fitted Curve	New Trips	IN	OUT	IN	OUT	IN	OUT	IN	OUT	Pass-by Trips	Primary Trips	IN	OUT	IN	OUT
Weekday Daily	964		964	50%	50%	482	482	135	145	17	17	0	650	0	0	330	320
Friday PM PH	75		75	60%	40%	45	30	9	6	2	1	0	57	0	0	34	23
Saturday Daily	867		867	50%	50%	434	433	122	130	16	15	0	584	0	0	296	288
Sat Midday PH	68		68	72%	28%	49	19	15	5	2	1	0	45	0	0	32	13

Armory Square Restaurant (LUC 932 - High Tunover Restaurant)

Units: 39.45 KSF

	Total Trips		Total	% Distribution		Total Trips		Multi-Use		Transit		Total New	Total New	# Passby Trips		# Primary Trips	
	Avg. Rates	Fitted Curve	New Trips	IN	OUT	IN	OUT	IN	OUT	IN	OUT	Pass-by Trips	Primary Trips	IN	OUT	IN	OUT
Weekday Daily	5016		5016	50%	50%	2508	2508	702	753	90	88	0	3383	0	0	1716	1667
Friday PM PH	389		389	60%	40%	233	156	46	31	9	6	0	297	0	0	178	119
Saturday Daily	6248		6248	50%	50%	3124	3124	875	937	112	109	0	4215	0	0	2137	2078
Sat Midday PH	555		555	53%	47%	294	261	90	75	10	9	0	371	0	0	194	177

Armory Square Office / Radio Station (LUC 710 - General Office)

Units: 12.00 KSF

	Total Trips		Total	% Distribution		Total Trips		Multi-Use		Transit		Total New	Total New	# Passby Trips		# Primary Trips	
	Avg. Rates	Fitted Curve	New Trips	IN	OUT	IN	OUT	IN	OUT	IN	OUT	Pass-by Trips	Primary Trips	IN	OUT	IN	OUT
Weekday Daily	132		132	50%	50%	66	66	18	20	2	2	0	90	0	0	46	44
Friday PM PH	18		18	17%	83%	3	15	1	3	0	1	0	13	0	0	2	11
Saturday Daily	30		30	50%	50%	15	15	4	5	1	1	0	19	0	0	10	9
Sat Midday PH	5		5	54%	46%	3	2	1	1	0	0	0	3	0	0	2	1

Armory Square Retail (LUC 820 - Shopping Center)

Units: 17.31 KSF

	Total Trips		Total	% Distribution		Total Trips		Multi-Use		Transit		Total New	Total New	# Passby Trips		# Primary Trips	
	Avg. Rates	Fitted Curve	New Trips	IN	OUT	IN	OUT	IN	OUT	IN	OUT	Pass-by Trips	Primary Trips	IN	OUT	IN	OUT
Weekday Daily	739		739	50%	50%	370	369	104	110	13	13	0	499	0	0	253	246
Friday PM PH	64		64	48%	52%	31	33	6	7	1	1	0	49	0	0	24	25
Saturday Daily	865		865	50%	50%	433	432	121	129	16	15	0	584	0	0	296	288
Sat Midday PH	83		83	52%	48%	43	40	13	12	2	1	0	55	0	0	28	27

TOTAL Armory Square Development

Units:

	Total Trips		Total	% Distribution		Total Trips		Multi-Use		Transit		Total New	Total New	# Passby Trips		# Primary Trips	
	Avg. Rates	Fitted Curve	New Trips	IN	OUT	IN	OUT	IN	OUT	IN	OUT	Pass-by Trips	Primary Trips	IN	OUT	IN	OUT
Weekday Daily			7172			3587	3585	1004	1076	128	126	0	4838	0	0	2455	2383
Friday PM PH			562			322	240	64	48	12	9	0	429	0	0	246	183
Saturday Daily			8182			4092	4090	1146	1227	148	143	0	5518	0	0	2798	2720
Sat Midday PH			734			398	336	122	97	14	12	0	489	0	0	262	227

5% *Transit Trip Credit (assumed)*

0% *Passby rate for LUC 820 (MassDOT Standard)*

Apartment (ITE LUC 220)

Units: 54 Units

	Total Trips		Total	% Distribution		Total Trips		Multi-Use		Transit		Total New	Total New	# Passby Trips		# Primary Trips	
	Avg. Rates	Fitted Curve	New Trips	IN	OUT	IN	OUT	IN	OUT	IN	OUT	Pass-by Trips	Primary Trips	IN	OUT	IN	OUT
Weekday Daily	359	451	451	50%	50%	226	225	0	0	11	11	0	429	0	0	215	214
Friday PM PH	33	47	47	65%	35%	31	16	0	0	2	1	0	44	0	0	29	15
Saturday Daily	345	168	345	50%	50%	173	172	0	0	9	9	0	327	0	0	164	163
Sat Midday PH	28	41	41	50%	50%	21	20	0	0	1	1	0	39	0	0	20	19

5% *Transit Trip Credit (assumed)*

Hotel (Emperical Data from MGM Detroit)

Units: 251 Rooms

	Total Trips		Total	% Distribution		Total Trips		Multi-Use		Transit		Total New	Total New	# Passby Trips		# Primary Trips	
	Avg. Rates	Fitted Curve	New Trips	IN	OUT	IN	OUT	IN	OUT	IN	OUT	Pass-by Trips	Primary Trips	IN	OUT	IN	OUT
Weekday Daily			715			386	329					0	715	0	0	386	329
Friday PM PH			37			24	13					0	37	0	0	24	13
Saturday Daily			946			547	399					0	946	0	0	547	399
Sat Midday PH			45			35	10					0	45	0	0	35	10

Casino Employee (Emperical Data from MGM Detroit)

Units: 3,657 Positions

	Total Trips		Total	% Distribution		Total Trips		Multi-Use		Transit		Total New	Total New	# Passby Trips		# Primary Trips	
	Avg. Rates	Fitted Curve	New Trips	IN	OUT	IN	OUT	IN	OUT	IN	OUT	Pass-by Trips	Primary Trips	IN	OUT	IN	OUT
Weekday Daily			2794			1458	1336					0	2794	0	0	1458	1336
Friday PM PH			124			48	76					0	124	0	0	48	76
Saturday Daily			2685			1340	1345					0	2685	0	0	1340	1345
Sat Midday PH			166			102	64					0	166	0	0	102	64

Casino Patrons (Emperical Data from MGM Detroit)

Units: 3,657 Positions

	Total Trips		Total	% Distribution		Total Trips		Multi-Use		Transit		Total New	Total New	# Passby Trips		# Primary Trips	
	Avg. Rates	Fitted Curve	New Trips	IN	OUT	IN	OUT	IN	OUT	IN	OUT	Pass-by Trips	Primary Trips	IN	OUT	IN	OUT
Weekday Daily			11874			6175	5699	1076	1004			0	9794	0	0	5099	4695
Friday PM PH			682			388	294	48	64			0	570	0	0	340	230
Saturday Daily			13721			7048	6673	1227	1146			0	11348	0	0	5821	5527
Sat Midday PH			695			367	328	97	122			0	476	0	0	270	206

Net Increase:		***Total New Trips***		***Total Trips In***	***Total Trips Out***	***Total Multi-Use Trips In***	***Total Multi-Use Trips Out***	***Total Transit Trips In***	***Total Transit Trips Out***	***Total Pass-by Trips***	***Total New Primary Trips***	***Total Passby Trips In***	***Total Passby Trips Out***	***Total Primary Trips In***	***Total Primary Trips Out***
Weekday Daily		***23006***		***11832***	***11174***	***2080***	***2080***	***139***	***137***	***0***	***18570***	***0***	***0***	***9613***	***8957***
Friday PM PH		***1452***		***813***	***639***	***112***	***112***	***14***	***10***	***0***	***1204***	***0***	***0***	***687***	***517***
Saturday Daily		***25879***		***13200***	***12679***	***2373***	***2373***	***157***	***152***	***0***	***20824***	***0***	***0***	***10670***	***10154***
Sat Midday PH		***1681***		***923***	***758***	***219***	***219***	***15***	***13***	***0***	***1215***	***0***	***0***	***689***	***526***

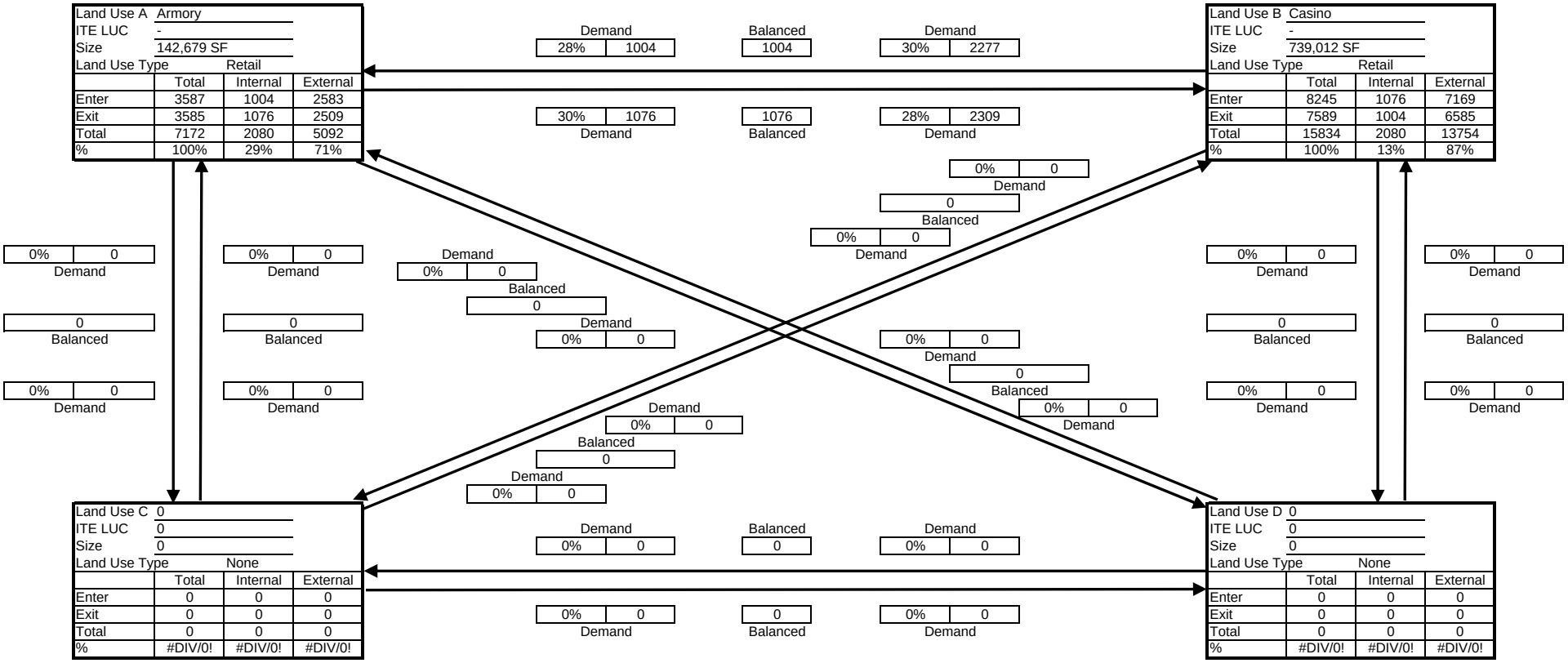
*Assumes no Shared Trips between Retail and Hotel

**Assumes 5% Transit Trip Credit

Multi-Use Trip Generation Calculation

Analyst: TEC, Inc. / Rebecca Bro
Date: 10/7/2015

Project Name: MGM Springfield Resort Developr
Time Period: Weekday Daily

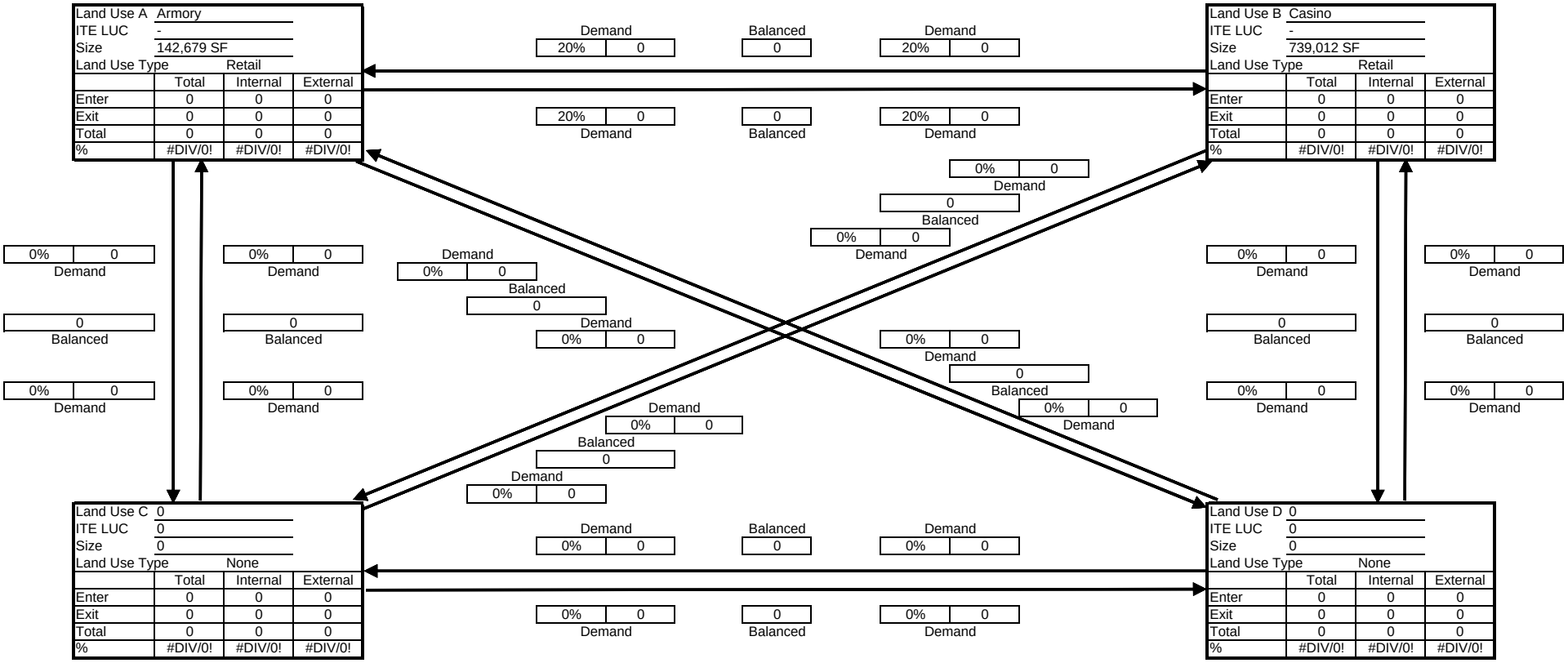


Net External Trips for Multi-Use Development						
Land Use	A	B	C	D	Total	
Enter	2583	7169	0	0	9752	
Exit	2509	6585	0	0	9094	
Total External Trips	**5092**	**13754**	**0**	**0**	**18846**	***Internal Capture***
Single-Use Trip Gen. Est.	7172	15834	0	0	23006	**18%**
Net Internal Trips	**2080**	**2080**	**0**	**0**	**4160**	

Multi-Use Trip Generation Calculation

Analyst: TEC, Inc. / Rebecca Bro
Date: 10/7/2015

Project Name: MGM Springfield Resort Developr
Time Period: Weekday AM Peak Hour



Net External Trips for Multi-Use Development						
Land Use	A	B	C	D	Total	
Enter	0	0	0	0	0	
Exit	0	0	0	0	0	
Total External Trips	**0**	**0**	**0**	**0**	**0**	***Internal Capture***
Single-Use Trip Gen. Est.	0	0	0	0	0	**#DIV/0!**
Net Internal Trips	**0**	**0**	**0**	**0**	**0**	

Multi-Use Trip Generation Calculation

Analyst: TEC, Inc. / Rebecca Bro
Date: 10/7/2015

Project Name: MGM Springfield Resort Developr
Time Period: Weekday PM Peak Hour

Land Use A Armory
ITE LUC -
Size 142,679 SF
Land Use Type Retail

	Total	Internal	External
Enter	322	64	258
Exit	240	48	192
Total	562	112	450
%	100%	20%	80%

Land Use B Casino
ITE LUC -
Size 739,012 SF
Land Use Type Retail

	Total	Internal	External
Enter	399	48	351
Exit	491	64	427
Total	890	112	778
%	100%	13%	87%

Land Use C 0
ITE LUC 0
Size 0
Land Use Type None

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	#DIV/0!	#DIV/0!	#DIV/0!

Land Use D 0
ITE LUC 0
Size 0
Land Use Type None

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	#DIV/0!	#DIV/0!	#DIV/0!

A – B (upper): Demand 20% 64; Balanced 64; Demand 20% 98
A – B (lower): 20% 48 Demand; 48 Balanced; 20% 80 Demand

B – C: 0% 0 Demand; 0 Balanced; 0% 0 Demand
A – D: Demand 0% 0; Balanced 0; Demand 0% 0
A – D (lower): 0% 0 Demand; 0 Balanced; 0% 0 Demand
C – B (lower): Demand 0% 0; Balanced 0; Demand 0% 0

A – C (left): 0% 0 Demand; 0 Balanced; 0% 0 Demand
A – C (right): 0% 0 Demand; 0 Balanced; 0% 0 Demand
B – D (left): 0% 0 Demand; 0 Balanced; 0% 0 Demand
B – D (right): 0% 0 Demand; 0 Balanced; 0% 0 Demand

C – D (upper): Demand 0% 0; Balanced 0; Demand 0% 0
C – D (lower): 0% 0 Demand; 0 Balanced; 0% 0 Demand

Net External Trips for Multi-Use Development						
Land Use	A	B	C	D	Total	
Enter	258	351	0	0	609	
Exit	192	427	0	0	619	
Total External Trips	**450**	**778**	**0**	**0**	**1228**	***Internal Capture***
Single-Use Trip Gen. Est.	562	890	0	0	1452	**15%**
Net Internal Trips	**112**	**112**	**0**	**0**	**224**	

Multi-Use Trip Generation Calculation

Analyst: TEC, Inc. / Rebecca Bro
Date: 10/7/2015

Project Name: MGM Springfield Resort Developr
Time Period: Saturday Daily

Land Use A: Armory
ITE LUC: -
Size: 142,679 SF
Land Use Type: Retail

	Total	Internal	External
Enter	4092	1146	2946
Exit	4090	1227	2863
Total	8182	2373	5809
%	100%	29%	71%

Land Use B: Casino
ITE LUC: -
Size: 739,012 SF
Land Use Type: Retail

	Total	Internal	External
Enter	9108	1227	7881
Exit	8589	1146	7443
Total	17697	2373	15324
%	100%	13%	87%

A–B interaction:
Demand 28% 1146 | Balanced 1146 | Demand 30% 2577
Demand 30% 1227 | Balanced 1227 | Demand 28% 2550

B–C interaction: Demand 0% 0 | Balanced 0 | Demand 0% 0
A–D interaction: Demand 0% 0 | Balanced 0 | Demand 0% 0
A–D interaction: Demand 0% 0 | Balanced 0 | Demand 0% 0
B–C interaction: Demand 0% 0 | Balanced 0 | Demand 0% 0

A–C interaction: Demand 0% 0 | Balanced 0 | Demand 0% 0
A–C interaction: Demand 0% 0 | Balanced 0 | Demand 0% 0
B–D interaction: Demand 0% 0 | Balanced 0 | Demand 0% 0
B–D interaction: Demand 0% 0 | Balanced 0 | Demand 0% 0

Land Use C: 0
ITE LUC: 0
Size: 0
Land Use Type: None

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	#DIV/0!	#DIV/0!	#DIV/0!

Land Use D: 0
ITE LUC: 0
Size: 0
Land Use Type: None

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	#DIV/0!	#DIV/0!	#DIV/0!

C–D interaction:
Demand 0% 0 | Balanced 0 | Demand 0% 0
Demand 0% 0 | Balanced 0 | Demand 0% 0

Net External Trips for Multi-Use Development

Land Use	A	B	C	D	Total	
Enter	2946	7881	0	0	10827	
Exit	2863	7443	0	0	10306	
Total External Trips	**5809**	**15324**	**0**	**0**	**21133**	***Internal Capture***
Single-Use Trip Gen. Est.	8182	17697	0	0	25879	**18%**
Net Internal Trips	**2373**	**2373**	**0**	**0**	**4746**	

Multi-Use Trip Generation Calculation

Analyst: TEC, Inc. / Rebecca Bro
Date: 10/7/2015

Project Name: MGM Springfield Resort Developr
Time Period: Saturday Midday

Land Use A: Armory
ITE LUC: -
Size: 142,679 SF
Land Use Type: Retail

	Total	Internal	External
Enter	398	122	276
Exit	336	97	239
Total	734	219	515
%	100%	30%	70%

Land Use B: Casino
ITE LUC: -
Size: 739,012 SF
Land Use Type: Retail

	Total	Internal	External
Enter	525	97	428
Exit	422	122	300
Total	947	219	728
%	100%	23%	77%

Demand 31% 123 | Balanced 122 | Demand 29% 122

29% 97 Demand | 97 Balanced | 31% 163 Demand

0% 0 Demand | 0 Balanced | 0% 0 Demand

0% 0 Demand | 0 Balanced | 0% 0 Demand

0% 0 Demand | 0 Balanced | 0% 0 Demand

Demand 0% 0 | Balanced 0 | Demand 0% 0

0% 0 Demand | 0 Balanced | 0% 0 Demand

0% 0 Demand | 0 Balanced | 0% 0 Demand

0% 0 Demand | 0 Balanced | 0% 0 Demand

Demand 0% 0 | Balanced 0 | Demand 0% 0

0% 0 Demand | 0 Balanced | 0% 0 Demand

Land Use C: 0
ITE LUC: 0
Size: 0
Land Use Type: None

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	#DIV/0!	#DIV/0!	#DIV/0!

Demand 0% 0 | Balanced 0 | Demand 0% 0

0% 0 Demand | 0 Balanced | 0% 0 Demand

Land Use D: 0
ITE LUC: 0
Size: 0
Land Use Type: None

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	#DIV/0!	#DIV/0!	#DIV/0!

Net External Trips for Multi-Use Development

Land Use	A	B	C	D	Total
Enter	276	428	0	0	704
Exit	239	300	0	0	539
Total External Trips	**515**	**728**	**0**	**0**	**1243**
Single-Use Trip Gen. Est.	734	947	0	0	1681
Net Internal Trips	**219**	**219**	**0**	**0**	**438**

Internal Capture
26%

Parking Demand Assessment - MGM Springfield

Project: MGM Resort / Casino Sprinfield, MA
Date: 10/6/15
Analyst: TEC, Inc. / Rebecca L. Brown, PE, PTOE
Source: Empirical Data from MGM Grand Detroit

Parking Demand - Time of Day Distribution

	Friday			Saturday		
Time	Casino Patrons	Casino Employees	Total Casino	Casino Patrons	Casino Employees	Total Casino
12:00 AM	1048	343	1391	1459	444	1903
1:00 AM	849	331	1180	1265	413	1678
2:00 AM	636	307	943	1013	377	1390
3:00 AM	473	287	760	722	341	1063
4:00 AM	340	268	608	513	318	831
5:00 AM	286	273	559	391	298	689
6:00 AM	277	279	556	361	285	646
7:00 AM	346	349	695	411	331	742
8:00 AM	463	405	868	507	376	883
9:00 AM	625	467	1092	622	413	1035
10:00 AM	772	521	1293	735	441	1176
11:00 AM	936	552	1488	890	443	1333
12:00 PM	1073	575	1648	1048	458	1506
1:00 PM	1119	587	1706	1185	482	1667
2:00 PM	1207	624	1831	1319	516	1835
3:00 PM	1236	611	1847	1444	523	1967
4:00 PM	1273	608	1881	1544	532	2076
5:00 PM	1389	575	1964	1654	527	2181
6:00 PM	1488	563	2051	1739	538	2277
7:00 PM	1581	582	2163	1794	563	2357
8:00 PM	1666	581	2247	1792	567	2359
9:00 PM	1673	586	2259	1760	561	2321
10:00 PM	1651	550	2201	1808	545	2353
11:00 PM	1603	498	2101	1787	486	2273

Note:
Casino Patrons parking demand assumes a 3-hour stay per patron. Parking demand is equivalent to arriving trips for 3 hours prior to Time.
Casino Employees parking demand assumes an 8-hour shift. Parking demand is equivalent to arriving trips for 8 hours prior to Time.

Parking Demand Assessment - MGM Springfield

Project: MGM Resort / Casino Sprinfield, MA
Date: 10/6/15
Analyst: TEC, Inc. / Rebecca Brown, P.E., PTOE
Source: Institute of Transportation Engineers - Parking Generation - 4th Ed.

ITE Land Use Code (LUC) 310 - Hotel

Land Use: Hotel
LUC: 310
Size 251 Rooms

Average Peak Period Parking Demand

Weekday:	0.89	vehicles per room	X	251	Rooms =	**223**	**vehicles**
Saturday:	1.20	vehicles per room	X	251	Rooms =	**301**	**vehicles**

Parking Demand - Time of Day Distribution

	Weekday		Saturday	
Time	Percent of Peak	Demand	Percent of Peak**	Demand
12:00 AM	94%	210	94%	283
1:00 AM	92%	205	92%	277
2:00 AM	89%	198	89%	268
3:00 AM	87%	194	87%	262
4:00 AM	84%	187	84%	253
5:00 AM	82%	183	82%	247
6:00 AM	79%	176	79%	238
7:00 AM	77%	172	77%	232
8:00 AM	100%	223	100%	301
9:00 AM	96%	214	96%	289
10:00 AM	55%	123	55%	166
11:00 AM	52%	116	52%	157
12:00 PM	60%	134	60%	181
1:00 PM	60%	134	60%	181
2:00 PM	55%	123	55%	166
3:00 PM	52%	116	52%	157
4:00 PM	53%	118	53%	160
5:00 PM	58%	129	58%	175
6:00 PM	62%	138	62%	187
7:00 PM	66%	147	66%	199
8:00 PM	68%	152	68%	205
9:00 PM	85%	190	85%	256
10:00 PM	87%	194	87%	262
11:00 PM	97%	216	97%	292

Note:
*Parking Demand based off average peak period parking demand in suburban areas.
No data provided in ITE Parking Generation; percentages assumed by interpolation.
**No data provided for Saturday in ITE Parking Generation for these time periods; percentages assumed.

Parking Demand Assessment - MGM Springfield

Project: MGM Resort / Casino Sprinfield, MA
Date: 10/6/15
Analyst: TEC, Inc. / Douglas S. Halpert, E.I.T
Source: Institute of Transportation Engineers - Parking Generation - 4th Ed.

ITE Land Use Code (LUC) 221 - Low/Mid-Rise Apartment

Land Use: Low/Mid-Rise Apartments
LUC: 221
Size 54 Units

Average Peak Period Parking Demand

Weekday:	1.20 vehicles per unit	X	54 Units =	**65**	**vehicles**
Saturday:	1.03 vehicles per unit	X	54 Units =	**56**	**vehicles**

Parking Demand - Time of Day Distribution

	Weekday		Saturday	
Time	Percent of Peak	Demand	Percent of Peak	Demand
12:00 AM	100%	65	95%	53
1:00 AM	100%	65	95%	53
2:00 AM	100%	65	95%	53
3:00 AM	100%	65	95%	53
4:00 AM	100%	65	95%	53
5:00 AM	96%	62	100%	56
6:00 AM	92%	60	98%	55
7:00 AM	74%	48	94%	53
8:00 AM	64%	42	89%	50
9:00 AM	34%	22	59%	33
10:00 AM	32%	21	71%	40
11:00 AM	31%	20	67%	38
12:00 PM	30%	20	66%	37
1:00 PM	31%	20	64%	36
2:00 PM	33%	21	64%	36
3:00 PM	37%	24	69%	39
4:00 PM	44%	29	73%	41
5:00 PM	59%	38	78%	44
6:00 PM	69%	45	80%	45
7:00 PM	66%	43	83%	46
8:00 PM	75%	49	84%	47
9:00 PM	77%	50	87%	49
10:00 PM	92%	60	89%	50
11:00 PM	94%	61	95%	53

Note:
No data provided for LUC 221 in ITE Parking Generation for these time periods; percentages obtained from LUC 224 (Rental Townhouse).

Parking Demand Assessment - MGM Springfield

Project: MGM Resort / Casino Sprinfield, MA
Date: September 17, 2013
Analyst: TEC, Inc. / Douglas S. Halpert, E.I.T
Source: Institute of Transportation Engineers - Parking Generation - 4th Ed.

Land Use: Bowling
LUC: 437
Size 10 Lanes

85th Percentile Peak Period Parking Demand

Weekday:

$$\frac{\text{Non-Friday Weekday Urban Parking Demand}}{\text{Non-Friday Suburban Parking Demand}} = \frac{\text{Friday Urban Parking Demand}}{\text{Friday Suburban Parking Demand}}$$

$$\frac{3.78}{4.62} = \frac{(Y)}{5.58} \qquad Y = 4.57$$

Saturday:

$$\frac{\text{Non-Friday Weekday Urban Parking Demand}}{\text{Non-Friday Suburban Parking Demand}} = \frac{\text{Saturday Urban Parking Demand}}{\text{Saturday Suburban Parking Demand}}$$

$$\frac{3.78}{4.62} = \frac{(Y)}{4.28} \qquad Y = 3.5$$

Weekday: 4.57 vehicles per lane X 10 SF = **46** **vehicles**
Saturday: 3.50 vehicles per lane X 10 SF = **35** **vehicles**

Parking Demand - Time of Day Distribution

Time	Weekday		Saturday	
	Percent of Peak	Demand	Percent of Peak	Demand
12:00 AM	0%	0	0%	0
1:00 AM	0%	0	0%	0
2:00 AM	0%	0	0%	0
3:00 AM	0%	0	0%	0
4:00 AM	0%	0	0%	0
5:00 AM	0%	0	0%	0
6:00 AM	0%	0	0%	0
7:00 AM	0%	0	0%	0
8:00 AM	0%	0	0%	0
9:00 AM	0%	0	0%	0
10:00 AM	10%	5	10%	4
11:00 AM	10%	5	10%	4
12:00 PM	25%	12	25%	9
1:00 PM	25%	12	25%	9
2:00 PM	30%	14	30%	11
3:00 PM	35%	16	35%	12
4:00 PM	40%	18	40%	14
5:00 PM	51%	23	51%	18
6:00 PM	83%	38	83%	29
7:00 PM	99%	46	99%	35
8:00 PM	100%	46	100%	35
9:00 PM	81%	37	81%	28
10:00 PM	75%	35	75%	26
11:00 PM	50%	23	50%	18

Notes:

No data provided for Saturday in ITE Parking Generation for these time periods; percentages assumed.

No data provided in ITE Parking Generation for these time periods; percentages assumed.

Parking Demand Assessment - MGM Springfield

Project: MGM Resort / Casino Sprinfield, MA
Date: September 17, 2013
Analyst: TEC, Inc. / Douglas S. Halpert, E.I.T
Source: Institute of Transportation Engineers - Parking Generation - 4th Ed.

Land Use: Multiplex Movie Theater
LUC: 445 / 444
Size 750 Seats

85th Percentile Peak Period Parking Demand
Weekday: ITE LUC 445 Friday Peak Parking Demand
Weekday: 0.20 vehicles per seat X 750 seats = **150** **vehicles**
Saturday: ITE LUC 444 Saturday Peak Parking Demand
Saturday: 0.23 vehicles per seat X 750 seats = **173** **vehicles**

Parking Demand - Time of Day Distribution

	Weekday		Saturday	
Time	Percent of Peak	Demand	Percent of Peak	Demand
12:00 AM	40%	60	40%	69
1:00 AM	20%	30	20%	35
2:00 AM	0%	0	0%	0
3:00 AM	0%	0	0%	0
4:00 AM	0%	0	0%	0
5:00 AM	0%	0	0%	0
6:00 AM	0%	0	0%	0
7:00 AM	0%	0	0%	0
8:00 AM	0%	0	0%	0
9:00 AM	0%	0	0%	0
10:00 AM	19%	29	20%	35
11:00 AM	76%	114	20%	35
12:00 PM	72%	108	20%	35
1:00 PM	100%	150	45%	78
2:00 PM	100%	150	55%	95
3:00 PM	96%	144	55%	95
4:00 PM	99%	149	55%	95
5:00 PM	98%	147	60%	104
6:00 PM	81%	122	60%	104
7:00 PM	90%	135	80%	138
8:00 PM	97%	146	100%	173
9:00 PM	95%	143	100%	173
10:00 PM	61%	92	80%	138
11:00 PM	54%	81	65%	112
Note:				
Weekday percentages from ITE Parking Generation for LUC 445 for Friday.				
Saturday percentages from ITE Parking Generation, 4th Edition for LUC 444				

Parking Demand Assessment - MGM Springfield

Project: MGM Resort / Casino Sprinfield, MA
Date: September 17, 2013
Analyst: TEC, Inc. / Douglas S. Halpert, E.I.T
Source: Institute of Transportation Engineers - Parking Generation - 4th Ed.

ITE Land Use Code (LUC) 701 - Office Building

Land Use: Office Building
LUC: 701
Size 12,000 SF

85th Percentile Peak Period Parking Demand

Weekday: 2.98 vehicles per 1,000 SF X 12,000 SF = **36** **vehicles**

Saturday:

$$\frac{\text{ITE LUC 710 Saturday Trip Generation Rate}}{\text{ITE LUC 710 Weekday Trip Generation Rate}} = \frac{\text{Saturday Urban Parking Demand}}{\text{Weekday Urban Parking Demand}}$$

$$\frac{2.46}{11.03} = \frac{(Y)}{2.98} \qquad Y = 0.66$$

Weekday: 2.98 vehicles per 1,000 SF X 12,000 SF = **36** **vehicles**
Saturday: 0.66 vehicles per 1,000 SF X 12,000 SF = **8** **vehicles**

Parking Demand - Time of Day Distribution

Time	Weekday		Saturday	
	Percent of Peak	Demand	Percent of Peak	Demand
12:00 AM	0%	0	0%	0
1:00 AM	0%	0	0%	0
2:00 AM	0%	0	0%	0
3:00 AM	0%	0	0%	0
4:00 AM	0%	0	0%	0
5:00 AM	0%	0	0%	0
6:00 AM	10%	4	10%	1
7:00 AM	19%	7	19%	2
8:00 AM	64%	23	64%	5
9:00 AM	91%	33	91%	7
10:00 AM	99%	36	99%	8
11:00 AM	99%	36	99%	8
12:00 PM	98%	35	98%	8
1:00 PM	96%	35	96%	8
2:00 PM	100%	36	100%	8
3:00 PM	99%	36	99%	8
4:00 PM	90%	32	90%	7
5:00 PM	58%	21	58%	5
6:00 PM	25%	9	25%	2
7:00 PM	10%	4	10%	1
8:00 PM	0%	0	0%	0
9:00 PM	0%	0	0%	0
10:00 PM	0%	0	0%	0
11:00 PM	0%	0	0%	0

Note:
No data provided in ITE Parking Generation for urban locations; percentages are from suburban locations.
No data provided in ITE Parking Generation for Saturday; percentages are from Weekday.

Parking Demand Assessment - MGM Springfield

Project: MGM Resort / Casino Sprinfield, MA
Date: September 17, 2013
Analyst: TEC, Inc. / Douglas S. Halpert, E.I.T
Source: Institute of Transportation Engineers - Parking Generation - 4th Ed.

ITE Land Use Code (LUC) 820 - Shopping Center

Land Use: Shopping Center
LUC: 820
Size 17,307 SF

Average Peak Period Parking Demand

Friday (Non-December):	2.94	vehicles per 1,000 SF	X	17,307	SF =	**51**	**vehicles**
Saturday (Non-December):	2.87	vehicles per 1,000 SF	X	17,307	SF =	**50**	**vehicles**

Parking Demand - Time of Day Distribution

	Friday		Saturday	
Time	Percent of Peak	Demand	Percent of Peak	Demand
12:00 AM	0%	0	0%	0
1:00 AM	0%	0	0%	0
2:00 AM	0%	0	0%	0
3:00 AM	0%	0	0%	0
4:00 AM	0%	0	0%	0
5:00 AM	0%	0	0%	0
6:00 AM	0%	0	0%	0
7:00 AM	5%	3	13%	7
8:00 AM	18%	9	27%	14
9:00 AM	38%	19	60%	30
10:00 AM	63%	32	75%	38
11:00 AM	79%	40	90%	45
12:00 PM	100%	51	100%	50
1:00 PM	92%	47	100%	50
2:00 PM	83%	42	98%	49
3:00 PM	76%	39	91%	46
4:00 PM	70%	36	76%	38
5:00 PM	73%	37	67%	34
6:00 PM	77%	39	72%	36
7:00 PM	92%	47	51%	26
8:00 PM	89%	45	52%	26
9:00 PM	42%	21	44%	22
10:00 PM	29%	15	29%	15
11:00 PM	0%	0	0%	0

Note: Non-December percentages
No data available in ITE Parking Generation for Friday; percentages are from Non-Friday Weekday
No data available in ITE Parking Generation for Friday; percentages are from Saturday

Parking Demand Assessment - MGM Springfield

Project: MGM Resort / Casino Sprinfield, MA
Date: September 17, 2013
Analyst: TEC, Inc. / Douglas S. Halpert, E.I.T
Source: Institute of Transportation Engineers - Parking Generation - 4th Ed.

Land Use: High-Turnover Restaurant with Bar or Lounge
LUC: 932
Size 39,451 SF

Average Peak Period Parking Demand**

Weekday:

$$\frac{\text{Family Rest. Weekday Urban Parking Demand}}{\text{Family Rest. Weekday Suburban Parking Demand}} = \frac{\text{Rest. w/Bar Weekday Urban Parking Demand}}{\text{Rest. w/Bar Weekday Suburban Parking Demand}}$$

$$\frac{5.55}{10.60} = \frac{(Y)}{13.30} \qquad Y = 6.96$$

Saturday:

$$\frac{\text{Family Rest. Weekday Urban Parking Demand}}{\text{Family Rest. Weekday Suburban Parking Demand}} = \frac{\text{Rest. w/Bar Saturday Urban Parking Demand}}{\text{Rest. w/Bar Saturday Suburban Parking Demand}}$$

$$\frac{5.55}{10.60} = \frac{(Y)}{16.30} \qquad Y = 8.53$$

Weekday: 6.96 vehicles per 1,000 SF X 39,451 SF = **275 vehicles**
Saturday: 8.53 vehicles per 1,000 SF X 39,451 SF = **337 vehicles**

Parking Demand - Time of Day Distribution

	Weekday		Saturday	
Time	Percent of Peak	Demand	Percent of Peak	Demand
12:00 AM	0%	0	0%	0
1:00 AM	0%	0	0%	0
2:00 AM	0%	0	0%	0
3:00 AM	0%	0	0%	0
4:00 AM	0%	0	0%	0
5:00 AM	0%	0	0%	0
6:00 AM	0%	0	0%	0
7:00 AM	0%	0	0%	0
8:00 AM	0%	0	0%	0
9:00 AM	5%	14	5%	17
10:00 AM	7%	19	7%	24
11:00 AM	16%	44	20%	67
12:00 PM	49%	135	41%	138
1:00 PM	39%	107	53%	179
2:00 PM	27%	74	46%	155
3:00 PM	19%	52	38%	128
4:00 PM	22%	61	63%	212
5:00 PM	60%	165	80%	270
6:00 PM	94%	259	100%	337
7:00 PM	100%	275	93%	313
8:00 PM	81%	223	70%	236
9:00 PM	84%	231	33%	111
10:00 PM	48%	132	40%	135
11:00 PM	44%	121	53%	179

Note:
No data provided for restaurant w/bar or lounge. Data is from family restaurant

**Average rates were utilized as the ratios of suburban to urban rates results in a higher parking demand than using 85th Percentile rates.

Parking Demand Assessment - MGM Springfield

Project: MGM Resort / Casino Sprinfield, MA
Date: October 10, 2013
Analyst: TEC, Inc. / Rebecca L. Brown, PE, PTOE
Source: Institute of Transportation Engineers - Parking Generation - 4th Ed.

	Weekday Parking Demand										Saturday Parking Demand									
Time	Casino	Hotel	Apartments	Bowling	Cinema	Office	Retail	Restaurant	Daycare	**Total**	Casino	Hotel	Apartments	Bowling	Cinema	Office	Retail	Restaurant	Daycare	**Total**
12:00 AM	1391	210	65	0	60	0	0	0	12	**1738**	1903	283	53	0	69	0	0	0	12	**2320**
1:00 AM	1180	205	65	0	30	0	0	0	12	**1492**	1678	277	53	0	35	0	0	0	12	**2055**
2:00 AM	943	198	65	0	0	0	0	0	12	**1218**	1390	268	53	0	0	0	0	0	12	**1723**
3:00 AM	760	194	65	0	0	0	0	0	12	**1031**	1063	262	53	0	0	0	0	0	12	**1390**
4:00 AM	608	187	65	0	0	0	0	0	12	**872**	831	253	53	0	0	0	0	0	12	**1149**
5:00 AM	559	183	62	0	0	0	0	0	12	**816**	689	247	56	0	0	0	0	0	12	**1004**
6:00 AM	556	176	60	0	0	4	0	0	12	**808**	646	238	55	0	0	1	0	0	12	**952**
7:00 AM	695	172	48	0	0	7	3	0	12	**937**	742	232	53	0	0	2	7	0	12	**1048**
8:00 AM	868	223	42	0	0	23	9	0	12	**1177**	883	301	50	0	0	5	14	0	12	**1265**
9:00 AM	1092	214	22	0	0	33	19	14	12	**1406**	1035	289	33	0	0	7	30	17	12	**1423**
10:00 AM	1293	123	21	5	29	36	32	19	12	**1570**	1176	166	40	4	35	8	38	24	12	**1503**
11:00 AM	1488	116	20	5	114	36	40	44	12	**1875**	1333	157	38	4	35	8	45	67	12	**1699**
12:00 PM	1648	134	20	12	108	35	51	135	12	**2155**	1506	181	37	9	35	8	50	138	12	**1976**
1:00 PM	1706	134	20	12	150	35	47	107	12	**2223**	1667	181	36	9	78	8	50	179	12	**2220**
2:00 PM	1831	123	21	14	150	36	42	74	12	**2303**	1835	166	36	11	95	8	49	155	12	**2367**
3:00 PM	1847	116	24	16	144	36	39	52	12	**2286**	1967	157	39	12	95	8	46	128	12	**2464**
4:00 PM	1881	118	29	18	149	32	36	61	12	**2336**	2076	160	41	14	95	7	38	212	12	**2655**
5:00 PM	1964	129	38	23	147	21	37	165	12	**2536**	2181	175	44	18	104	5	34	270	12	**2843**
6:00 PM	2051	138	45	38	122	9	39	259	12	**2713**	2277	187	45	29	104	2	36	337	12	**3029**
7:00 PM	2163	147	43	46	135	4	47	275	12	**2872**	2357	199	46	35	138	1	26	313	12	**3127**
8:00 PM	2247	152	49	46	146	0	45	223	12	**2920**	2359	205	47	35	173	0	26	236	12	**3093**
9:00 PM	2259	190	50	37	143	0	21	231	12	**2943**	2321	256	49	28	173	0	22	111	12	**2972**
10:00 PM	2201	194	60	35	92	0	15	132	12	**2741**	2353	262	50	26	138	0	15	135	12	**2991**
11:00 PM	2101	216	61	23	81	0	0	121	12	**2615**	2273	292	53	18	112	0	0	179	12	**2939**

Weekday Parking Demand:	**2943**
Saturday Parking Demand:	**3127**

Parking Demand Assessment - MGM Springfield

Project: MGM Resort / Casino Sprinfield, MA
Date: October 10, 2013
Analyst: TEC, Inc. / Rebecca L. Brown, PE, PTOE
Source: Institute of Transportation Engineers - Parking Generation - 4th Ed.

	Weekday Parking Demand			
Time	MGM Springfield	Existing Off-Street	Existing On-Street	**Total**
11:00 AM	1875	599	101	**2575**
12:00 PM	2155	515	91	**2761**
1:00 PM	2223	446	80	**2749**
2:00 PM	2303	456	94	**2853**
3:00 PM	2286	455	73	**2814**
4:00 PM	2336	334	78	**2748**
5:00 PM	2536	215	66	**2817**
6:00 PM	2713	95	54	**2862**

Weekday Parking Demand:	**2862**