



SAN FRANCISCO PLANNING DEPARTMENT

MEMO

DATE: August 13, 2014
TO: San Francisco Planning Commission
FROM: Elizabeth Purl, San Francisco Planning Department
CC: Response to Comments Distribution List
RE: Erratum #2 for the Moscone Expansion Project EIR,
Case No. 2013.0154E; Certification Hearing August 14, 2014

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This is an erratum to the Environmental Impact Report (EIR) for the Moscone Expansion Project. The purpose of the erratum is to correct the quantification of Theoretically Available Annual Sunlight and annual square foot hours of shadow presented in Section IV.B of the Draft EIR. The Final EIR consists of the Draft EIR in combination with the Comments and Responses document; these corrections will be incorporated into the Final EIR.

The erratum, shown below, is reflected in ~~bold strikethrough~~ for deleted text and **bold double underline** for new text; it is presented in the format as it would appear in the Comments and Responses document. The information provided in the erratum does not constitute significant new information requiring recirculation of the Draft EIR prior to certification because the correction does not affect the basis of the impact conclusions presented in the shadow analysis.

ERRATUM

As stated on EIR page IV.B-6, the quantified shadow analysis consisted of calculating the amount of shadow coverage resulting from existing buildings at 15-minute intervals on one day per week, for six months of the year. The shadow coverage at the 15-minute intervals was averaged to calculate hourly shadow coverage (in shadow foot hours, or square foot hours of shadow; each shadow foot hour represents the equivalent of one square foot of shadow for a duration of one hour). The hourly totals for each day were added and resulting numbers extrapolated to weekly totals through averaging with the preceding week's total. Because the sun's path from January through June essentially mirrors its path from July through December, the six months' shadow foot hour totals were doubled to return a yearly total.¹ This extrapolation from hourly totals to an annual total requires multiplying the hourly totals by a factor of approximately 13.5.

Because of a computational error, the last step (multiplying by approximately 13.5) was not included in the calculations in the Draft EIR. For each open space quantitatively analyzed in Section IV.B, the numerical calculations of Theoretically Available Annual Sunlight ("TAAS"), existing annual shadow square foot hours, and net additional annual shadow square foot hours cast by the proposed project were erroneous. Because the error applied to all annual calculations, the correction applies consistently across all annual values in the Section. However, the correction does not affect the percentages of net new shadow and graphical figures displaying net new shadow. In other words, the reported percent increase in shadow as

¹ This is the same methodology used by the Planning Department to calculate shadow and establish the Section 295 (Proposition K) baseline shadow coverage for other San Francisco parks.

a percentage of the TAAS and as a percentage of the existing shadow condition was reported correctly for each open space area because the relative proportion of all numerical calculations remain the same. (All shadow area calculations increase by a factor of approximately 13.5.) The TAAS calculations were not used as the basis for the impact conclusion presented in the analysis, but rather were presented for informational purposes. The conclusion was based on the potential for increased shadow, as depicted in Figures IV.B-2 through IV.B-4 in the Draft EIR and Figure IV.B-5 in the Responses to Comments, to affect use of the Children's Garden and other open space areas on and near the proposed project site. Thus, the EIR impact conclusion related to shadow effects (Impact WS-3) remains unchanged and would be less than significant.

1. EIR page IV.B-14, second and third paragraph, has been revised as follows:

The Esplanade has ~~52,116,661.63~~ 703,649,620.83 square foot hours of Theoretically Available Annual Sunlight ("TAAS"), which is the amount of sunlight theoretically available on the open space, annually, if there were no shadows from existing or proposed buildings, structures, or vegetation. Under existing conditions, the Esplanade is sunny during the day throughout the year, with shade present mainly in the early morning and in the late afternoon. The existing shadow on the Esplanade comprises ~~17,873,421.40~~ 241,316,836.34 square foot hours annually, or 34.30 percent of TAAS.

The proposed project would add ~~791,421.23~~ 10,685,322.21 square foot hours of shadow to the open space, which would be a 1.52 percent increase in shadow as a percentage of TAAS, to 35.8 percent. This would represent a 4.43 percent increase in shadow as compared to existing conditions. New shadow would have the potential to affect the open space primarily during the early morning hours and then decrease throughout the day. By mid- to late-afternoon, the project would cast nominal net new shadow on the open space. Net new shadow would be most prevalent from one hour after sunrise (sunrise +1 hour) to about 9:00 a.m., in the late fall and early winter months, when the shadow would fall on the central, grassy portion of the Esplanade, effectively leaving only the portion of the Esplanade adjacent to Mission Street unshaded (see Figure IV.B-2).¹⁰

2. EIR page IV.B-15, second and third paragraph, has been revised as follows:

The East Garden has ~~6,204,489.57~~ 83,769,499.22 square foot hours of TAAS. The open space is generally partially sunny during the day throughout the year under existing conditions. Shade from surrounding buildings is present until mid-morning and returns in mid-afternoon. During the late fall and early winter months, about half of the plaza is always shaded during daytime hours. The existing shadow on the East Garden comprises ~~2,910,103.24~~ 39,290,569.54 square foot hours annually, or 46.90 percent of TAAS.

The proposed project would add ~~1,457.39~~ 19,676.83 square foot hours of shadow to the open space, which would be a 0.02 percent increase (2 hundredths of 1 percent) in

shadow as a percentage of TAAS.¹⁴ This would represent a 0.05 percent increase in shadow as compared to existing conditions. This incremental net new shadow would fall on the East Garden in the late fall and early winter months, approximately from early November through early February, from sunrise +1 hour to up to one hour thereafter. Given that almost the entirety of the East Garden is already shaded during these hours, the net new shadow would not be noticeable and would not affect the use of this open space.

3. EIR page IV.B-16, first and second paragraph, has been revised as follows:

Howard Street Plaza has ~~2,255,958.74~~ 30,458,676.55 square foot hours of TAAS. Under existing conditions, this plaza is sunny during the day throughout the year, and often totally unshaded during the midday hours. Shade is present mainly in the early morning and in the late afternoon. The existing shadow on the plaza comprises ~~643,751.94~~ 8,691,574.87 square foot hours annually, or 28.54 percent of TAAS.

The proposed project would add ~~303,933.95~~ 4,103,544.39 square foot hours of shadow to the open space, which would be a 13.47 percent increase in shadow as a percentage of TAAS. This would represent a 47.21 percent increase in shadow as compared to existing conditions. In the late spring and early summer months, incremental net new shadow would fall on the plaza in the mid- to late-afternoon hours, from about 3:30 to one hour before sunset (sunset -1 hour), cast eastward from the Moscone North expansion onto the westernmost portion of the plaza, which could affect the use of this area at that time. The extent of shadow is small (4 square feet at 3:30 on the summer solstice), but the square footage is more extensive before and after the solstice. This shadow would occur earlier in the day and cover a larger area in the spring and late summer/early fall months (see Figure IV.B-4). In addition, net new shadow would be cast in the early morning hours, from sunrise +1 hour to approximately 9:45 a.m., on the fall and spring equinox. This new shadow would be cast by the Moscone South/Esplanade expansion, shading the steps, pedestrian ramp, and wide sidewalk, potentially affecting their use during these times.

4. EIR page IV.B-17, second and third paragraph, has been revised as follows:

The Children's Garden has ~~27,955,192.43~~ 377,435,161.45 square foot hours of TAAS. Although adjacent buildings cast shadow around the perimeter of the garden, it is generally sunny during the day throughout the year, with shade present mainly in the early morning and in the late afternoon. During the late fall and early winter months, under existing conditions about half of the Children's Garden is always shaded during daytime hours due to shadow cast by surrounding buildings. The existing shadow on the gardens comprises ~~10,473,925.40~~ 141,413,022.50 square foot hours annually, or 37.47 percent of TAAS.

The proposed project would add ~~875,468.24~~ 11,820,077.47 square foot hours of shadow to the open space, which would be a 3.13 percent increase in shadow as a percentage of

TAAS.¹⁵ This would represent an 8.36 percent increase in shadow as compared to existing conditions. New shadow would fall on the Children's Garden throughout the year and throughout the day, although to only a minimal extent until mid-afternoon hours. In late spring and early summer months, shadow would have the greatest potential effect, given that it would fall on the open space from the mid-afternoon (about 3:00 p.m.) through evening hours (sunset -1 hour). At those times, net new shadow would be cast eastward and southeastward from the expanded Moscone South building to the portion of the Children's Garden east of the amphitheater (see Figure IV.B-3).

5. EIR page IV.B-19, second-to-last paragraph, through EIR page IV.B-20, first paragraph, has been revised as follows:

Under existing conditions, Moscone Plaza has ~~2,073,471.66~~ 27,994,838.09 square foot hours of TAAS. Due to the proximity and height of existing buildings, the open space is generally shaded during the day throughout the year, except during the early afternoon hours (approximately 12:00 p.m. to 3:30 p.m.), when it is partially shaded. The existing shadow on the plaza comprises ~~1,504,302.23~~ 20,310,238.64 square foot hours annually, or 72.55 percent of TAAS.

The proposed project would add ~~133,136.97~~ 1,797,540.14 square foot hours of shadow to the open space, which would be a 6.42 percent increase in shadow as a percentage of TAAS. This would represent an 8.85 percent increase in shadow as compared to existing conditions. During the late spring and early summer months, incremental new shadow would fall on the plaza in the late afternoon and early evening hours (from about 5:00 p.m. to sunset -1 hour) (see Figure IV.B-3). This net new shadow would increase in duration and extent during the late summer and mid-spring months. At the fall and spring equinoxes, the project would cast net new shadow from about 2:00 p.m. to sunset -1 hour (see Figure IV.B-4). In the late fall/early winter months, the project would cast net new shadow from about 1:15 p.m. to sunset -1 hour, with the greatest extent of net new shadow occurring in mid-afternoon (around 3:00) (see Figure IV.B-2). Net new shadow would fall on the eastern portion of the plaza, closest to Third Street.

The revisions to the EIR pursuant to these errata will be made in the Final EIR that is published following certification.