

**R. R. Sgarro**  
Manager-Nuclear Regulatory Affairs

**PPL Bell Bend, LLC**  
38 Bomboy Lane, Suite 2  
Berwick, PA 18603  
Tel. 570.802.8102 FAX 570.802.8119  
[rrsgarro@pplweb.com](mailto:rrsgarro@pplweb.com)



October 27, 2010

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**BELL BEND NUCLEAR POWER PLANT  
BBNPP PLOT PLAN CHANGE COLA  
SUPPLEMENT, PART 3 (ER); SECTION 2.1  
AND PARTIAL RESPONSE TO STO 2.1-1  
BNP-2010-227                      Docket No. 52-039**

- References: 1) BNP-2010-175, T. L. Harpster (PPL Bell Bend, LLC) to U.S. NRC, "July 2010 BBNPP Schedule Update," dated July 16, 2010
- 2) BNP-2010-155, R. R. Sgarro (PPL Bell Bend, LLC) to U.S. NRC, "Submittal of BBNPP RAI Schedule Information," dated August 4, 2010
- 3) BNP-2010-246, R. R. Sgarro (PPL Bell Bend, LLC) to U.S. NRC, "BBNPP Plot Plan Change Supplement Schedule Update," dated September 28, 2010
- 4) BNP-2009-217, R.R. Sgarro (PPL Bell Bend, LLC) to U.S. NRC, "Response to Environmental Requests for Additional Information, Second Submittal," dated August 10, 2009
- 5) BNP-2009-313, R.R. Sgarro (PPL Bell Bend, LLC) to U.S. NRC, "Response to Environmental Requests for Additional Information, Sixth Submittal," dated October 19, 2009
- 6) BNP-2010-108, R.R. Sgarro (PPL Bell Bend, LLC) to U.S. NRC, "Response to Environmental RAI's: Schedule Update," dated April 30, 2010

In References 1 and 2, PPL Bell Bend, LLC (PPL) provided the NRC with schedule information related to the intended revision of the Bell Bend Nuclear Power Plant (BBNPP) footprint within the existing project boundary which has been characterized as the Plot Plan Change (PPC). As the NRC staff is aware, the plant footprint relocation will result in changes to the Combined License Application (COLA) and potentially to new and previously responded to Requests for Additional Information (RAIs). PPL declassified this docketed schedule information from regulatory commitment status in Reference 3, with an agreement to update the staff via weekly teleconferences as the project moves forward.

PPL has committed to provide the NRC with COLA supplements, consisting of revised COLA Sections and associated RAI responses/revisions, as they are developed. These COLA supplements will only include the changes related to that particular section of the COLA and will not include all conforming COLA changes. Conforming changes for each supplement necessary for other COLA sections will be integrated into the respective COLA supplements

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and provided in accordance with the schedule, unless the supplement has already been submitted. In the latter case, the COLA will be updated through the normal internal change process. The revised COLA supplements will also include all other approved changes since the submittal of Revision 2. All COLA supplements and other approved changes will ultimately be incorporated into the next full COLA revision.

Enclosure 1 provides the revised BBNPP COLA Supplement, Part 3 (Environmental Report), Section 2.1, Revision 2a. The revised BBNPP COLA section supersedes previously submitted information in its entirety. No departures and/or exemptions to this BBNPP COLA section have been revised as a result of the PPC.

Enclosure 2 provides revised responses to NRC RAI STO 2.1-2 and RAI TE 2.4-1 which refer directly to the enclosed COLA section. These responses supersede the previous responses (Reference 4 and Reference 5, respectively) in their entirety. The following revised RAI responses are included with this submittal:

RAI No.  
STO 2.1-2  
TE 2.4-1

No other previously submitted NRC RAI responses refer directly to the enclosed COLA section.

Enclosure 3 provides a partial response to NRC RAI STO 2.1-1 (Reference 6), a black & white version of ER Figure 2.1-1. The balance of the response to RAI STO 2.1-1, a black & white version of ER Figure 2.4-7, will be submitted with the ER Section 2.4 submittal.

The following RAI partial response is included with this submittal:

RAI No.  
STO 2.1-1 (partial response)

No other previously submitted NRC RAI responses were found to directly refer to the enclosed COLA section.

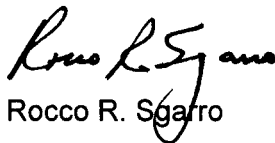
The only new regulatory commitment is to include the revised COLA section (Enclosure 1) in the next COLA revision.

If you have any questions, please contact the undersigned at 570.802.8102.

*I declare under penalty of perjury that the foregoing is true and correct.*

Executed on October 27, 2010

Respectfully,

  
Rocco R. Sgarro

RRS/kw

- Enclosures:
1. Revised BBNPP COLA Part 3 (ER); Chapter 2.1, Revision 2a
  2. Updated Responses to RAI STO 2.1-2 and RAI TE 2.4-1 for COLA Part 3 (ER), Chapter 2.1
  3. Partial Response to RAI STO 2.1-1 for COLA Part 3 (ER), Chapter 2.1 - includes CD with ER Figure 2.1-1

cc: (w/o Enclosures)

Mr. Michael Canova  
Project Manager  
U.S. Nuclear Regulatory Commission  
11555 Rockville Pike  
Rockville, MD 20852

Mr. William Dean  
Regional Administrator  
U.S. Nuclear Regulatory Commission  
Region I  
475 Allendale Road  
King of Prussia, PA 19406-1415

Ms. Stacey Imboden  
Project Manager  
U.S. Nuclear Regulatory Commission  
11555 Rockville Pike  
Rockville, MD 20852

Dr. Donald Palmrose  
Senior Project Manager  
U.S. Nuclear Regulatory Commission  
11555 Rockville Pike  
Rockville, MD 20852



Enclosure 1

Revised BBNPP COLA Part 3 (ER), Chapter 2.1, Revision 2a

## 2.1 STATION LOCATION

The proposed new nuclear power plant, Bell Bend Nuclear Power Plant (BBNPP), ~~will~~ (BBNPP), ~~will be~~ located west of the existing nuclear power plant, Susquehanna Steam Electric Station (SSES) Units 1 and 2 in Salem Township, Luzerne County, Pennsylvania. The site boundaries ~~areas are as~~ shown in Figure 2.1-1.

The BBNPP site is approximately 5 miles (8 km) northeast of the Borough of Berwick, Pennsylvania. It is adjacent to U.S. Route 11. The site is 1.5 mi (2.4 km) to the north and west of the north branch of the Susquehanna River.

The site is approximately 115 miles north west of Philadelphia, Pennsylvania. The North American Datum of 1983 (NAD 83) Geodetic coordinates of the center of the BBNPP Containment Building are latitude 41° 05' 42" ~~21"~~ North and longitude 76° 09' 54" ~~57"~~ West. The NAD 83 Universal Transverse Mercator (UTM) coordinates for the center of the BBNPP Containment Building are the UTM Zone 18N (78W to 72W), North ~~4,549,017~~ 4,549,316 and East ~~402,157~~ 402,075.

The 50 mi (80 km) region around the BBNPP site is shown in Figure 2.1-2 while the ~~86 mi (13.10~~ 86 mi (13.10 km) vicinity is shown in Figure 2.1-3. A high oblique aerial photograph of the BBNPP site is shown in Figure 2.1-4. See Figure 2.1-5 for the area uses during construction.

Figure 2.1-1— BBNPP Site and Proposed New Plant Layout

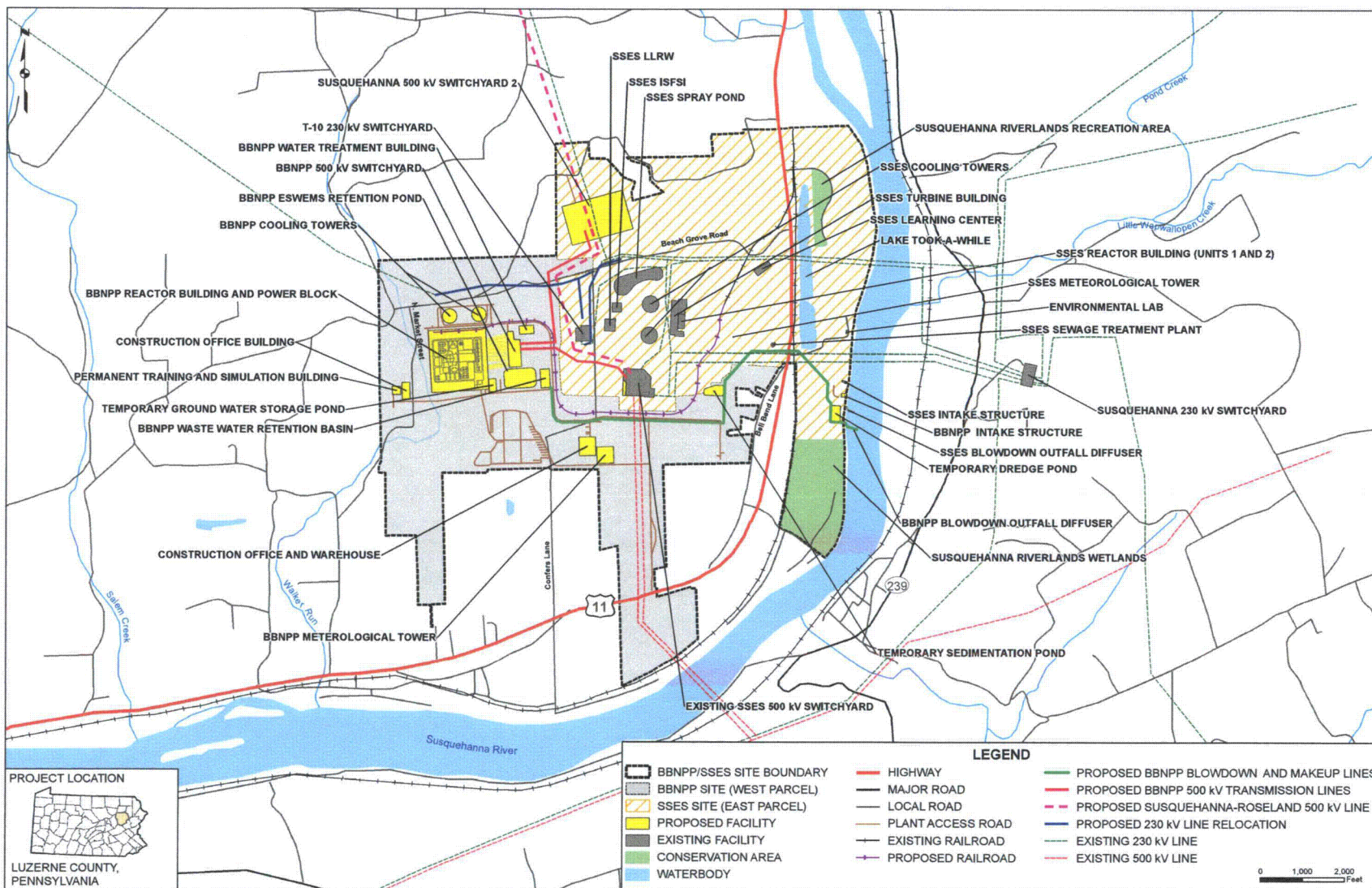




Figure 2.1-2— BBNPP Site 50 Mile (80 km) Region

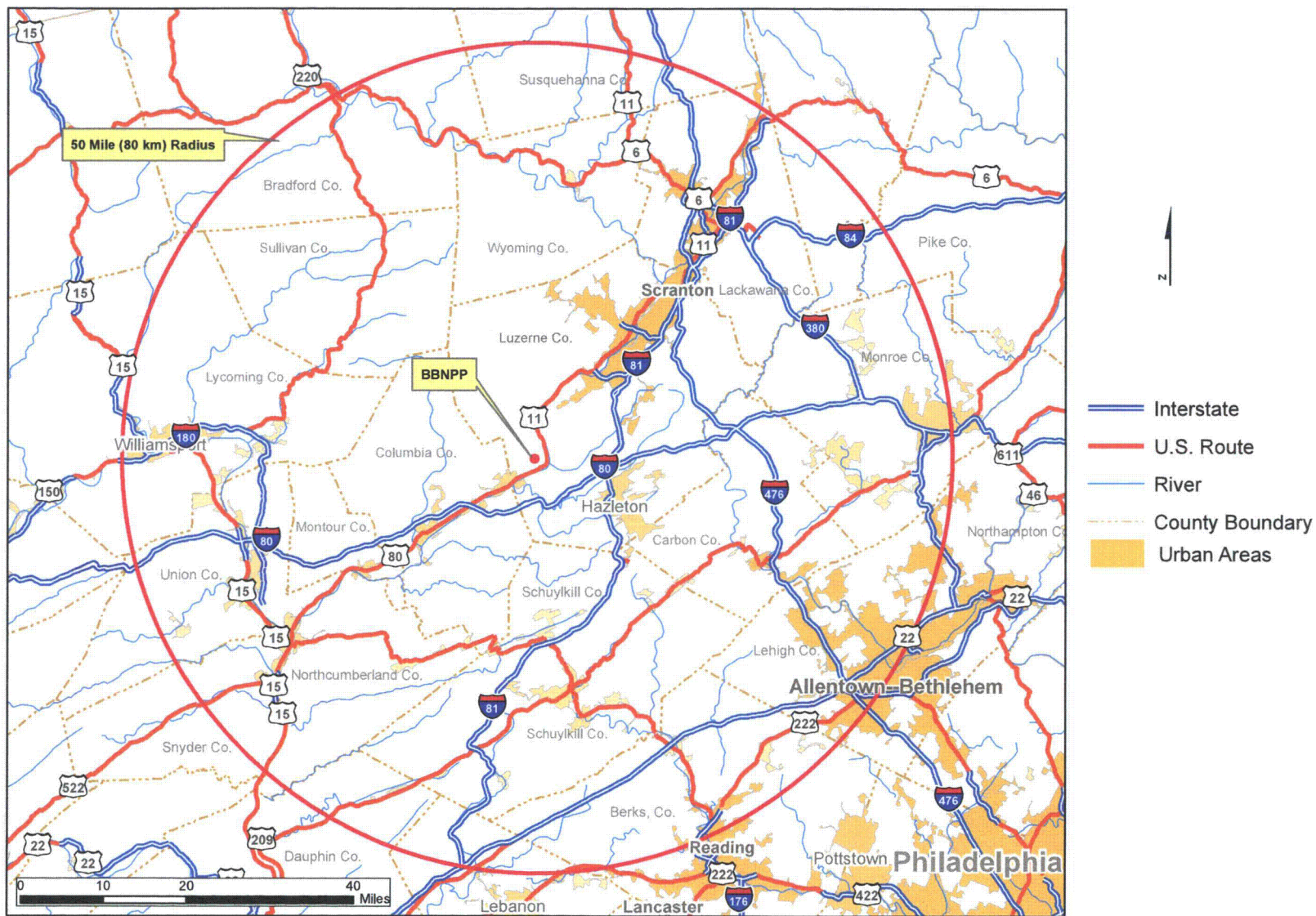


Figure 2.1-3— BBNPP Site 86 mi (137 km) Region

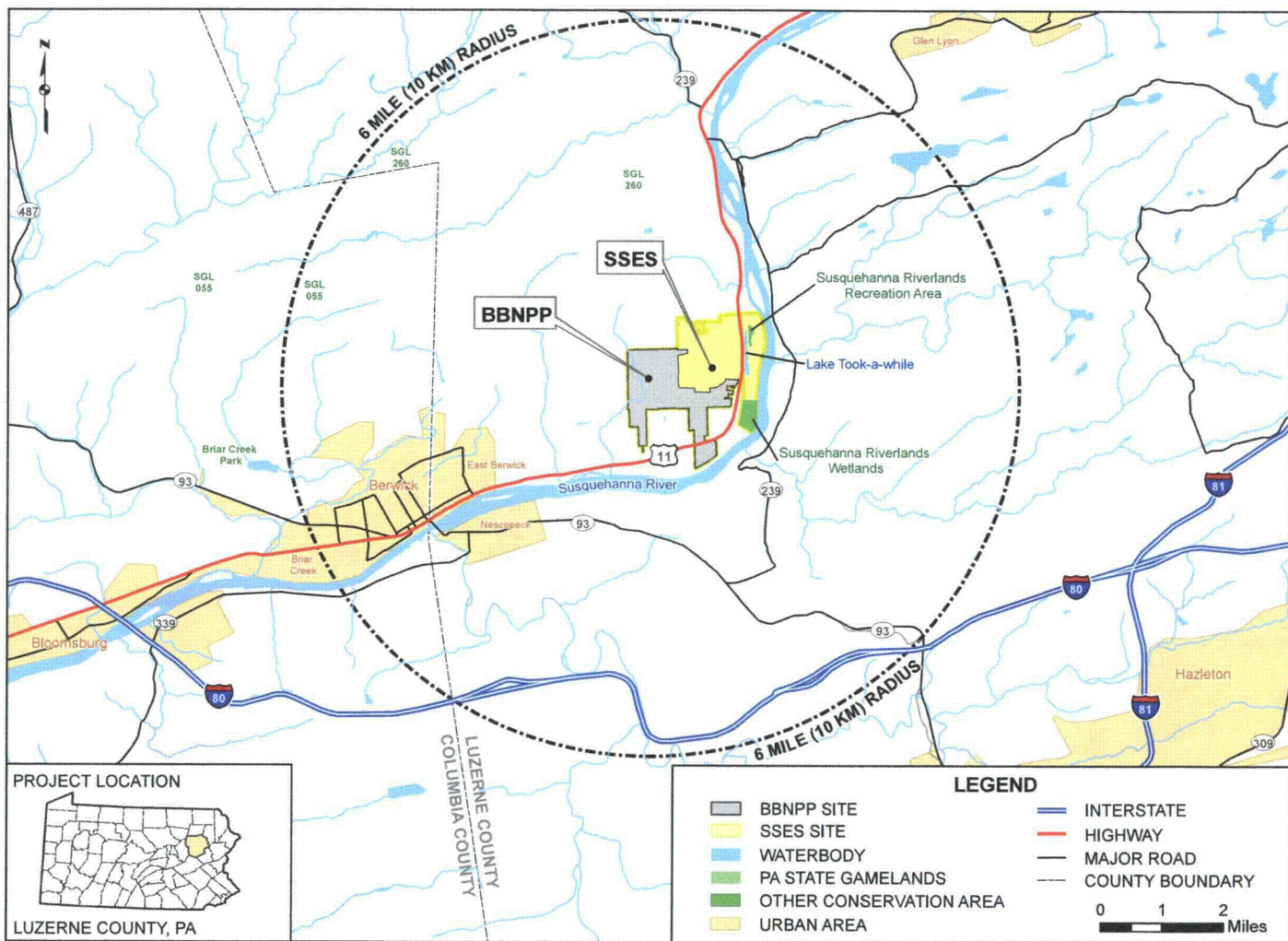




Figure 2.1-4— Oblique Aerial Photo Showing BBNPP Project Area

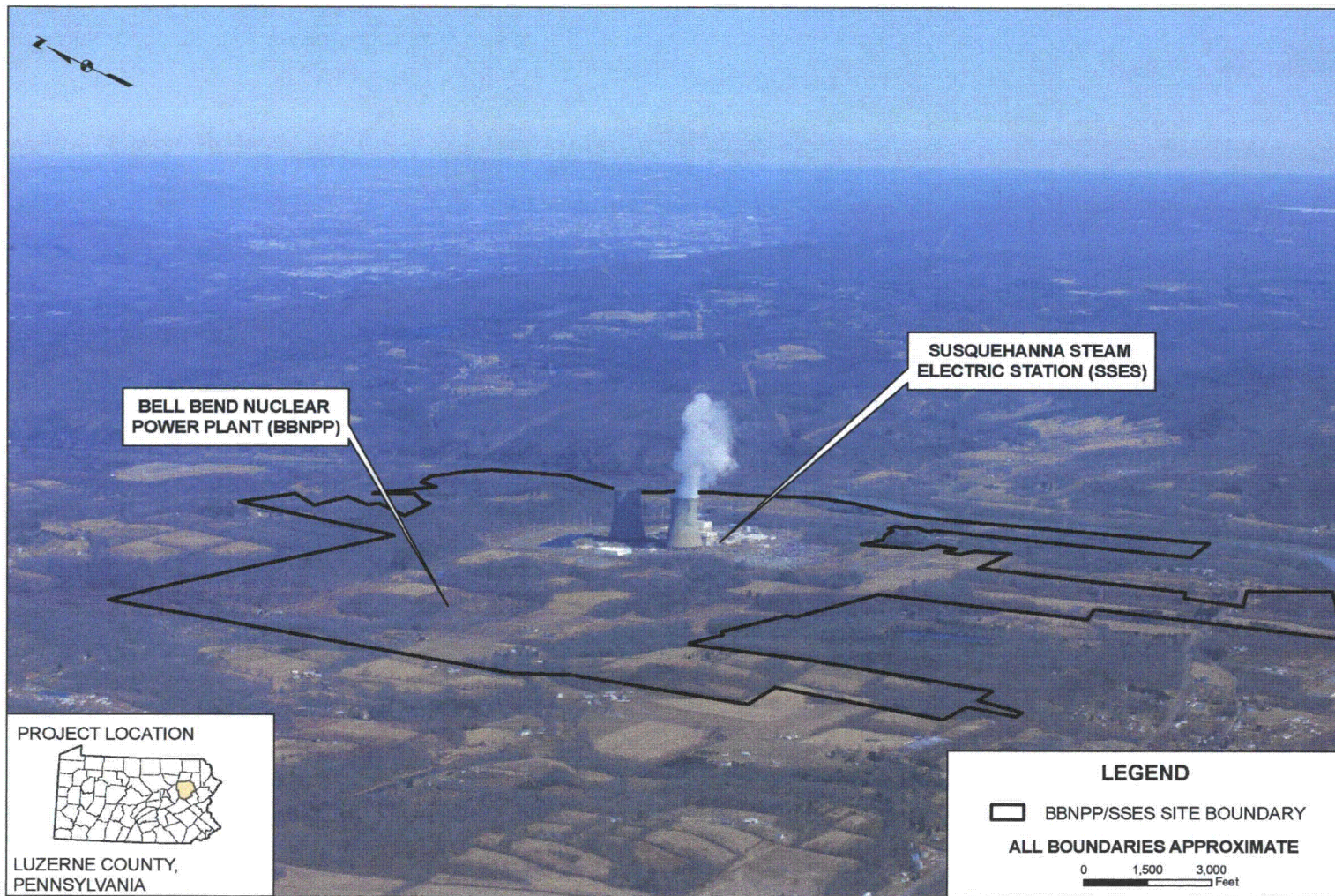
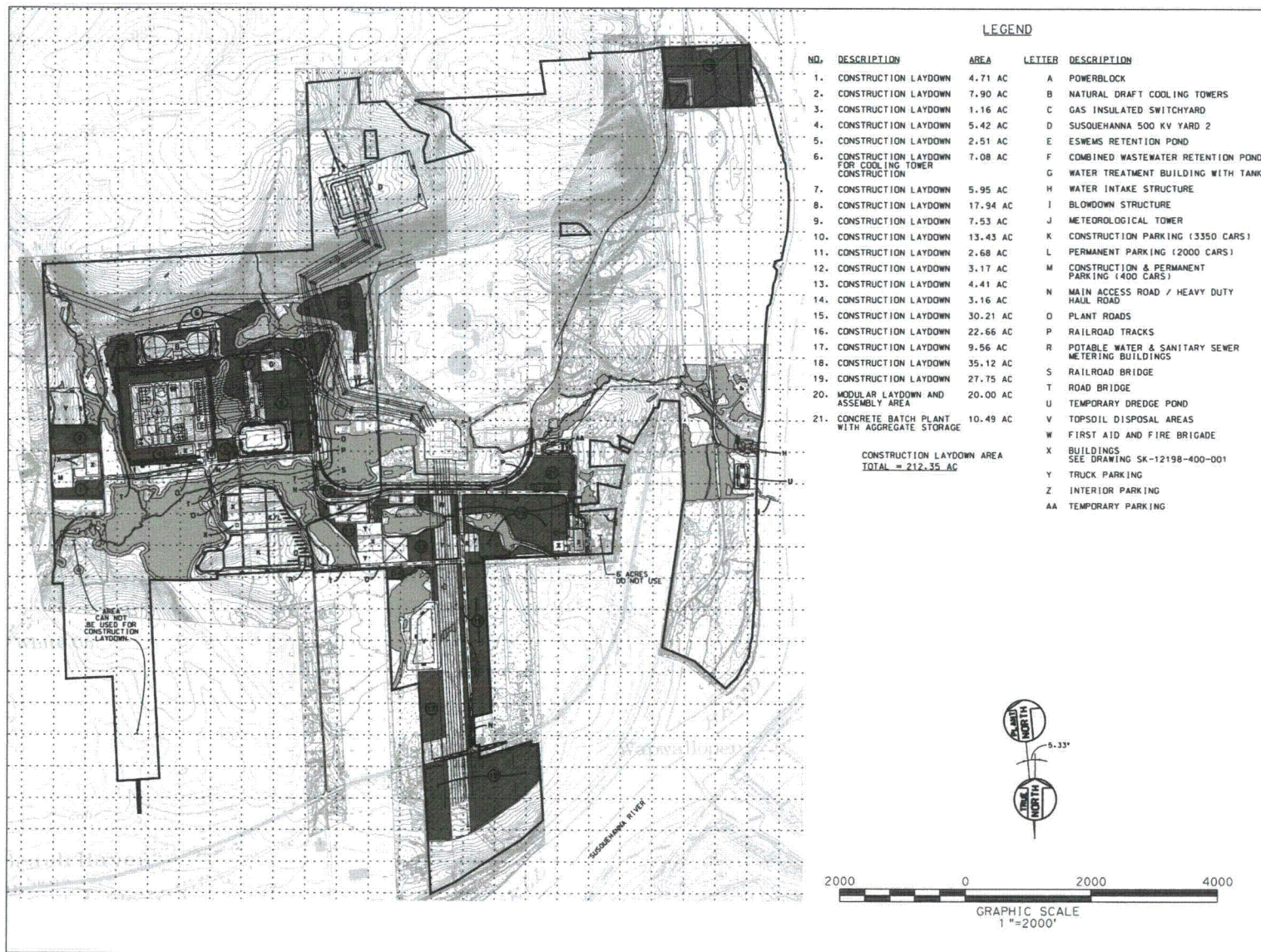




Figure 2.1-5— Area Uses During Construction



Enclosure 2

Updated Responses to RAI STO 2.1-2 and RAI TE 2.4-1  
for COLA Part 3 (ER), Chapter 2.1



**RAI STO 2.1-2****ESRP 2.1**

**Summary:** *Provide a revised site map clearly showing the boundaries of the east and west parcels referred to on Page 2-6 or the ER.*

**Full Text (Supporting Information):** None.

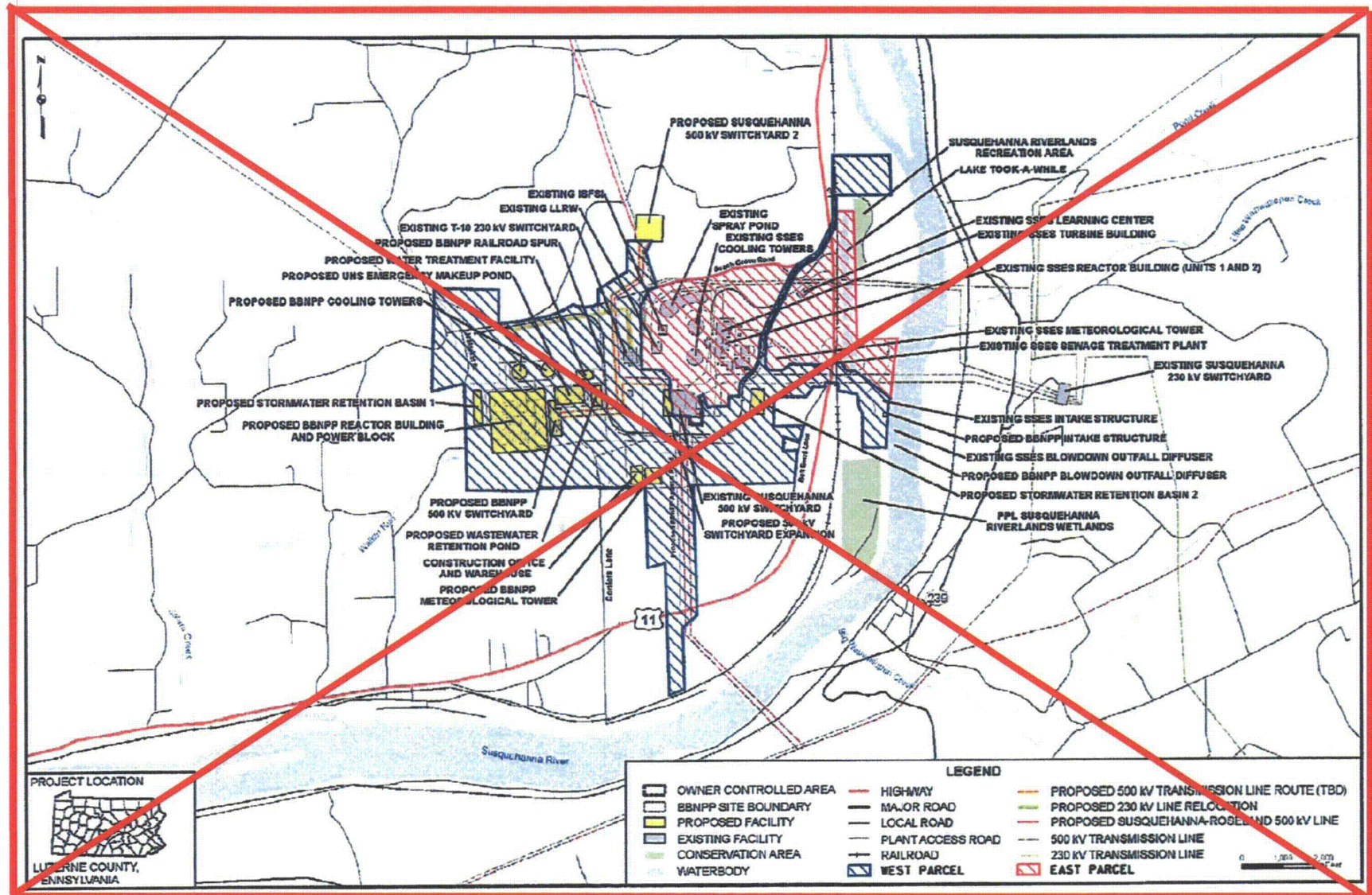
**Response:**

A revision to Figure 2.1-1 "BBNPP Site and Proposed New Plant Layout" is attached. The revised figure identifies the areas referred to as the East Parcel and the West Parcel.

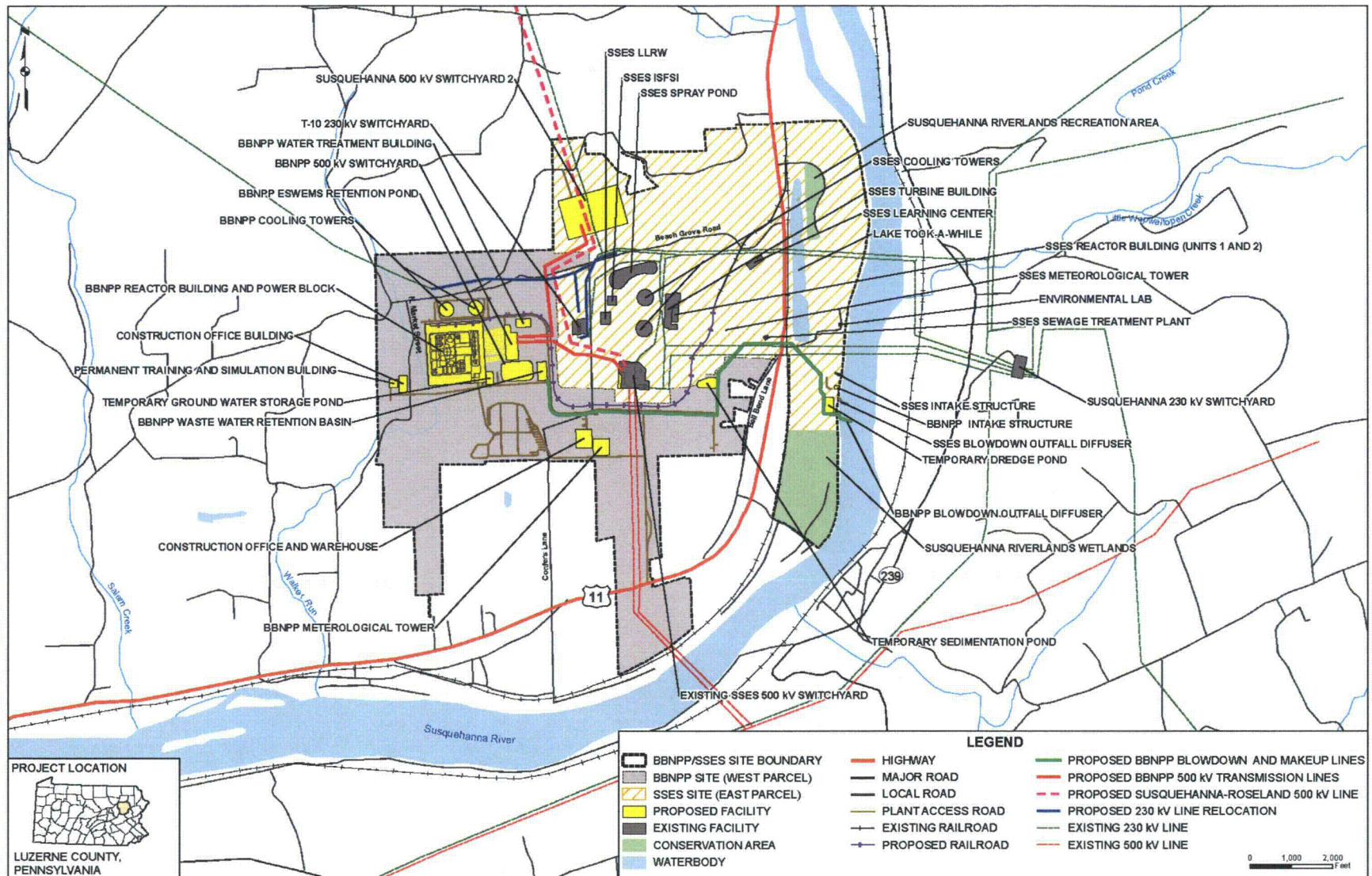
**COLA Impact:**

BBNPP COLA ER Figure 2.1-1 will be revised, as follows:

Figure 2.1-1—BBNPP Site and Proposed New Plant Layout







**RAI TE 2.4-1****ESRP 2.2.1**

**Summary:** *Identify the location of all lay-down areas in Figure 2.1-1, BBNPP Site and Proposed New Plant Layout, or provide a new figure to show the location of these features.*

**Full Text (Supporting Information):** None.

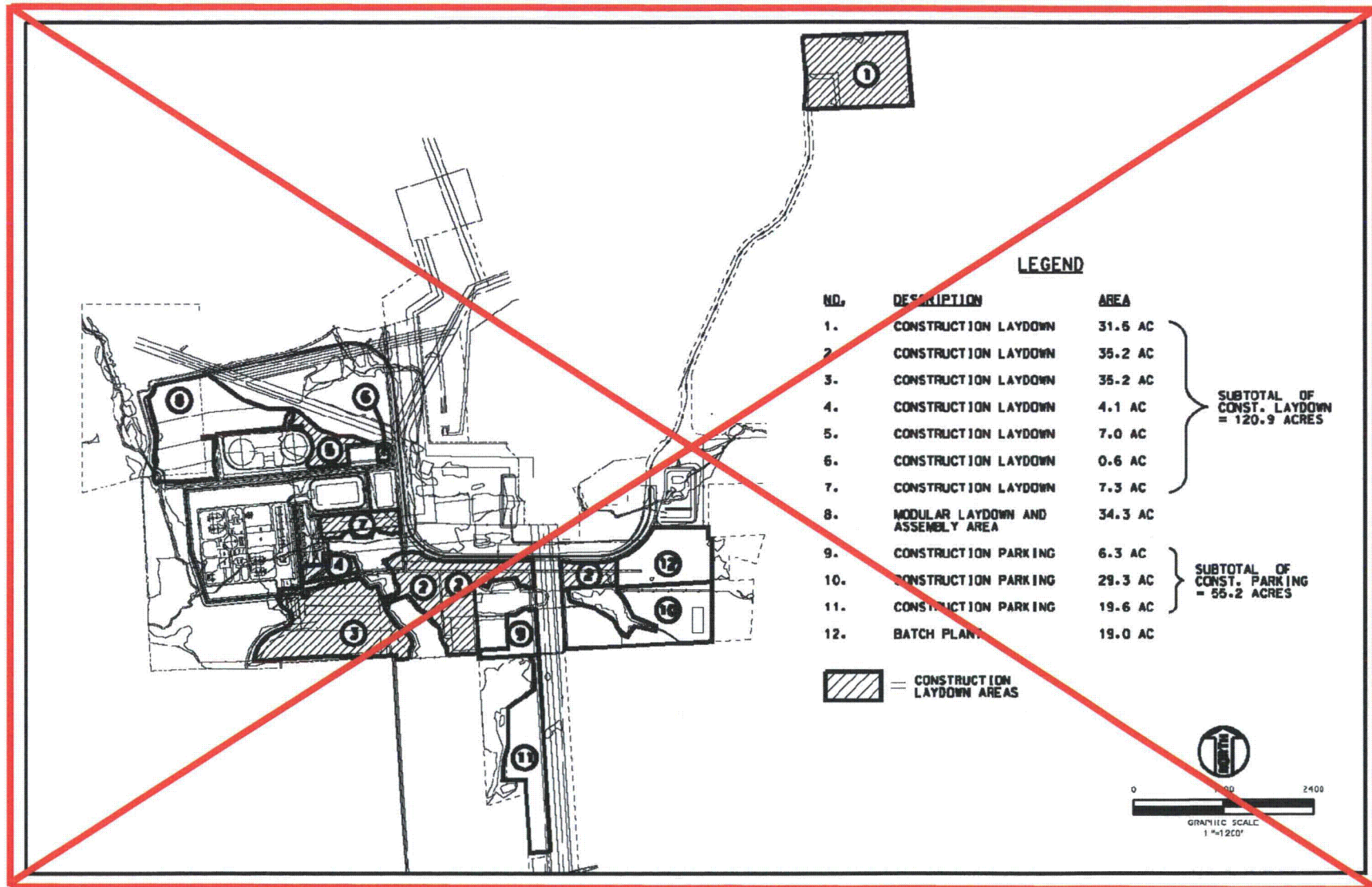
**Response:**

A new Figure 2.1-5, "Area Uses During Construction" was prepared to answer this question as a result of the plot plan change.

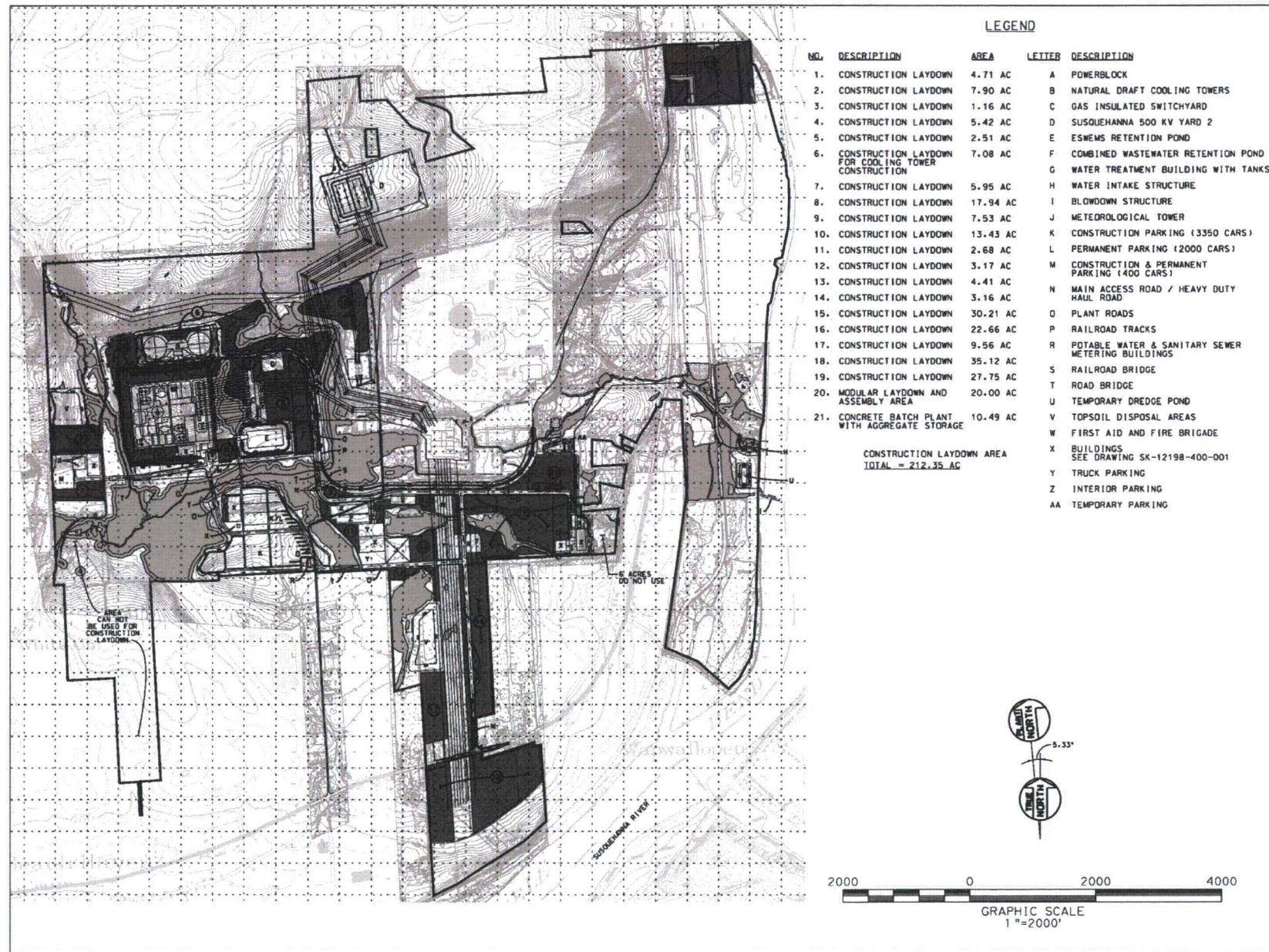
**COLA Impact:**

BBNPP COLA ER Figure 2.1-5 will be revised, as follows:

Figure 2.1-5—Area Uses During Construction







Enclosure 3

Partial Response to RAI STO 2.1-1  
for COLA Part 3 (ER), Chapter 2.1 -  
includes CD with ER Figure 2.1-1

**STO 2.1-1 (Partial Response)****ESRP 2.2, 2.4, 2.5, and 4.3**

**Summary:** *Provide all Geographic Information System (GIS) and/or CAD data/databases used to support the ER analysis and results including existing and proposed conditions as appropriate. The data should generally include, but are not limited to:*

- *All existing and proposed site infrastructure data (roads, buildings, intake/discharge pipelines, transmission lines, utility right-of-ways/transmission corridors, power blocks, switchyards, pipeline corridors, cooling and retention ponds, dams, canals, rail lines, monitoring/instrument stations, etc.)*
- *Data related to preconstruction activities (associated with the construction of cooling ponds, haul roads, dredging, and other aspects of infrastructure necessary to support the construction of the BBNPP that will result in a discharge of dredged or fill material into Waters of the United States (i.e. requiring a Department of the Army Section 404/Section 10 permit).*
- *Location data (official property boundary, official unit point location, exclusion area boundary, and other relevant boundaries on-site or regionally)*
- *All surface and groundwater hydrologic data (watershed/subbasin boundaries, stream/river channels, springs, sinkholes, flood boundaries, reservoir boundary, site stormwater drainage, levees, hydrogeologic study boundaries, aquifers, potentiometric contours, well locations, surface water monitoring sites, etc.)*
- *All terrestrial and aquatic ecological data (wetlands, ponds, terrestrial and aquatic sampling sites, wildlife/habitat areas, land use/land cover, and threatened and endangered species locations). Data on wetland type and acreage amount.*
- *Terrain and bathymetric data (LiDAR, contours, river cross sections, bathymetric point samples, etc.)*
- *Socioeconomic data (sector data at various radii, census blocks with attribute data including low income and minority data, State/county park recreational area boundaries, trails, water trails, wildlife management units, traffic count data, commuter routes, etc.)*
- *Geology and soils data (site and vicinity data, faults, folds, seismic activity, etc.)*
- *Alternative (candidate) site data (point locations, proposed site boundary, proposed infrastructure, etc.).*

**Full Text:** PNNL has developed a GIS tool to assist in the conduct of impact assessments and to create figures where necessary. Databases used by the applicant are typically requested for addition to this GIS tool.

**Response:**

This partial response provides a black & white version of ER Figure 2.1-1 (see Figure 1).

**COLA Impact:**

The BBNPP COLA will not be revised as a result of this response.



Figure 1. BBNPP Site and Proposed New Plant Layout

