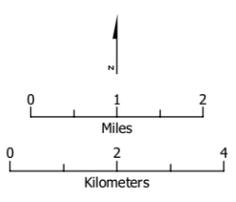
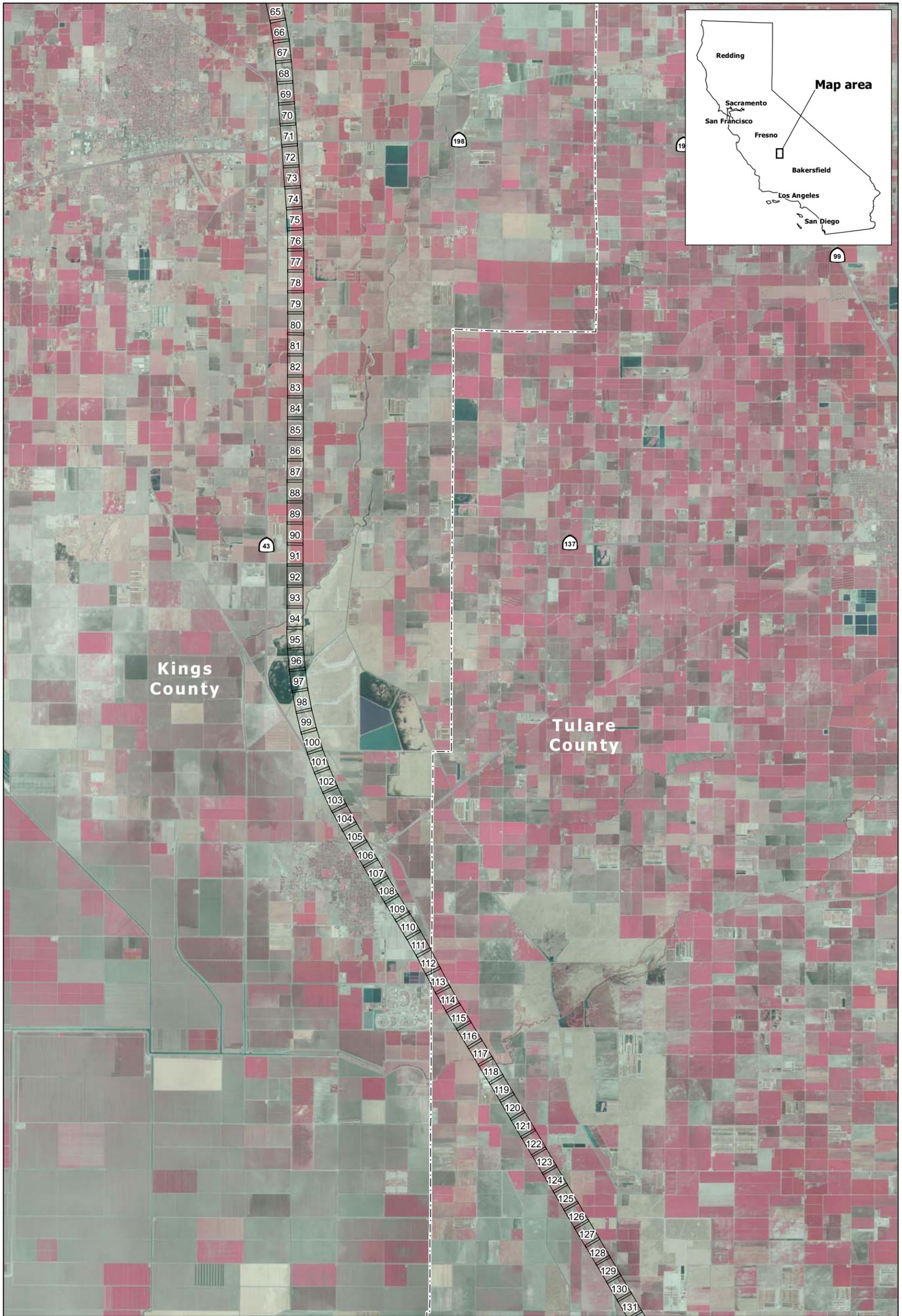


PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED
 Source: URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005

November 23, 2010

-  Sheet extent
-  County boundary
-  Highway

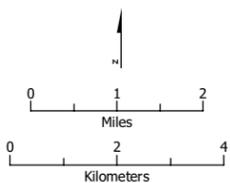


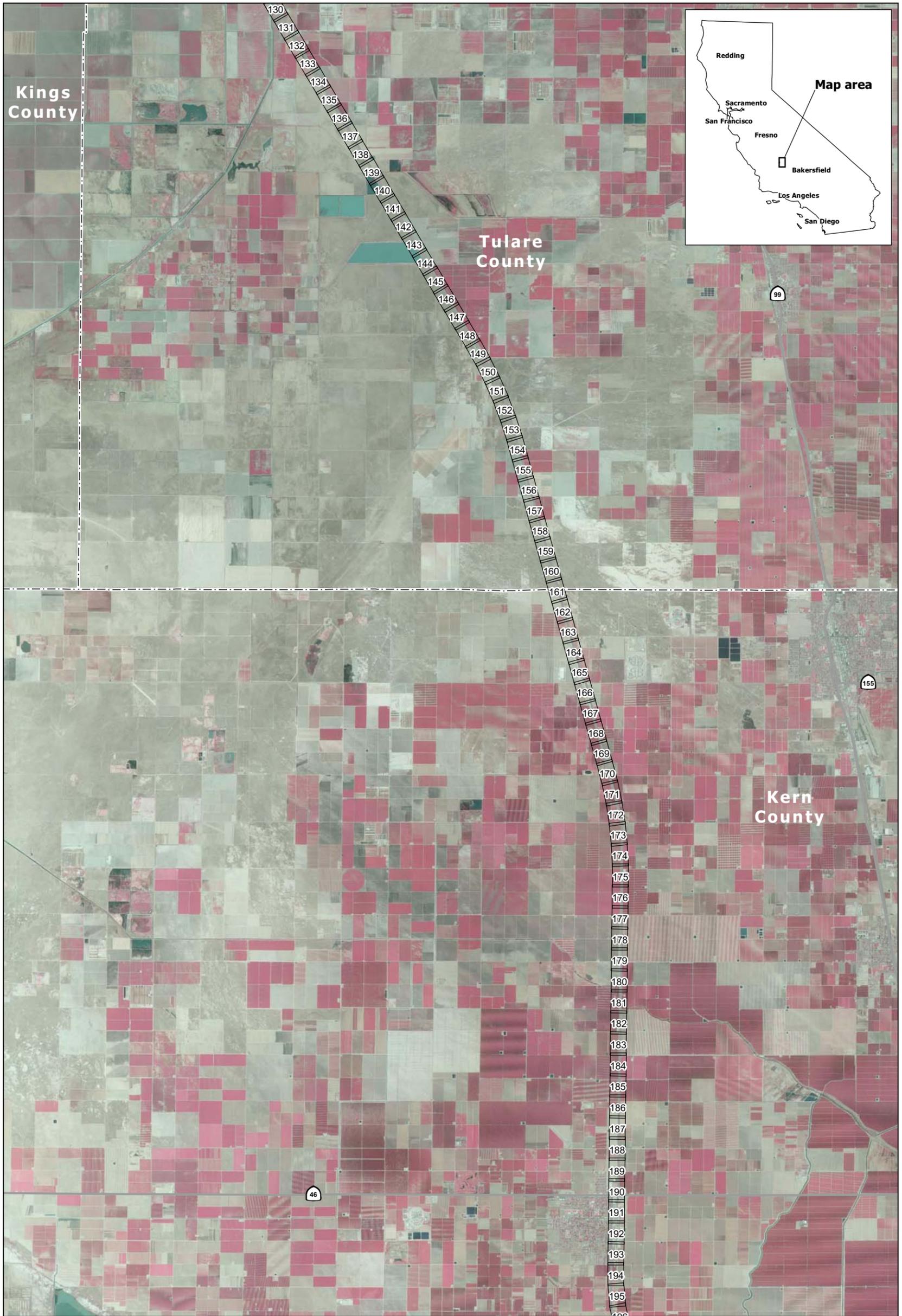


PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED
 Source: URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005

November 23, 2010

-  Sheet extent
-  County boundary
-  Highway

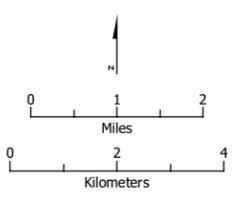


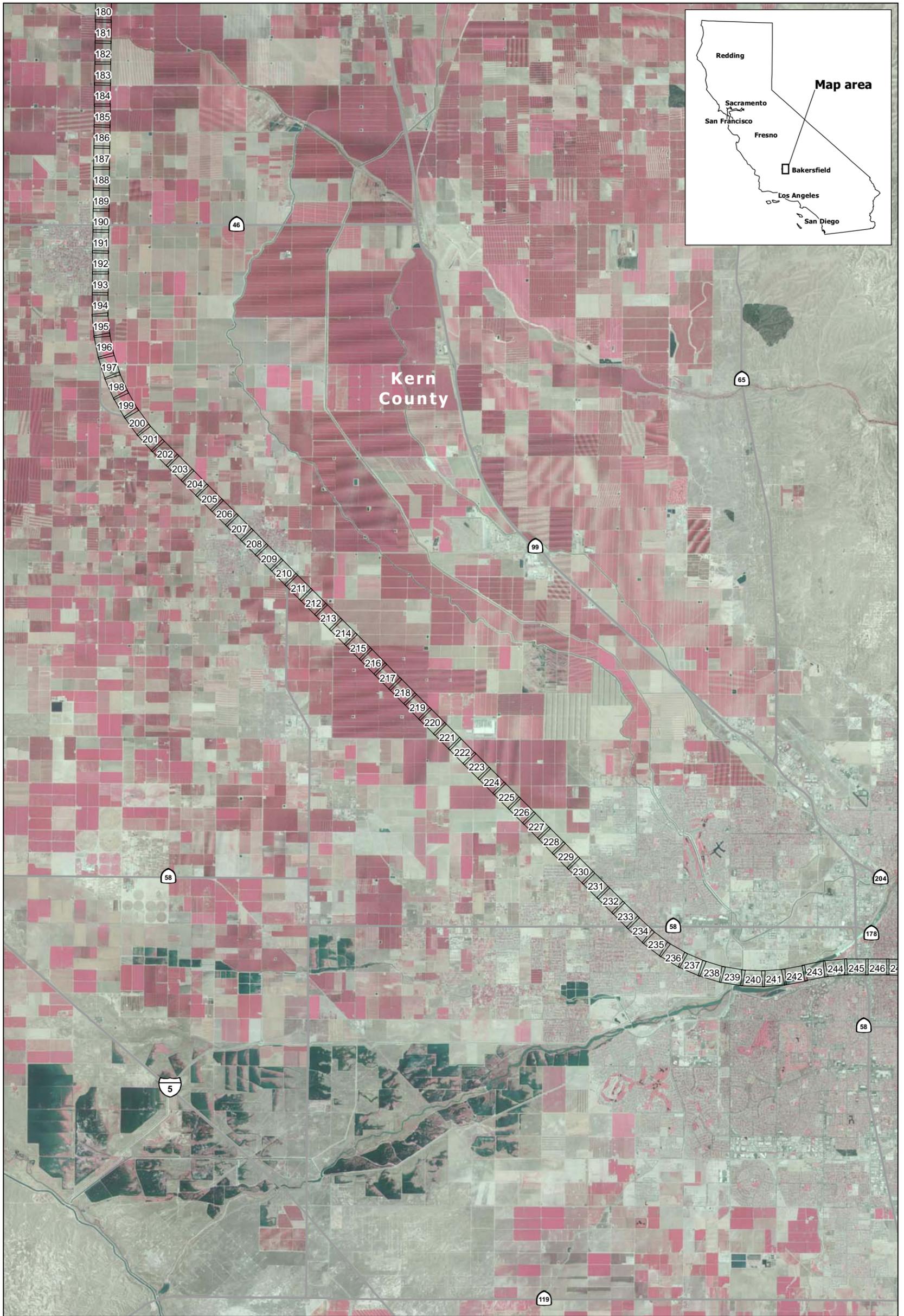


PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED
 Source: URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005

November 23, 2010

-  Sheet extent
-  County boundary
-  Highway

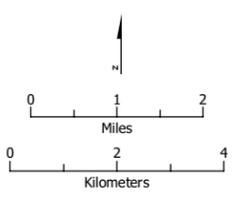


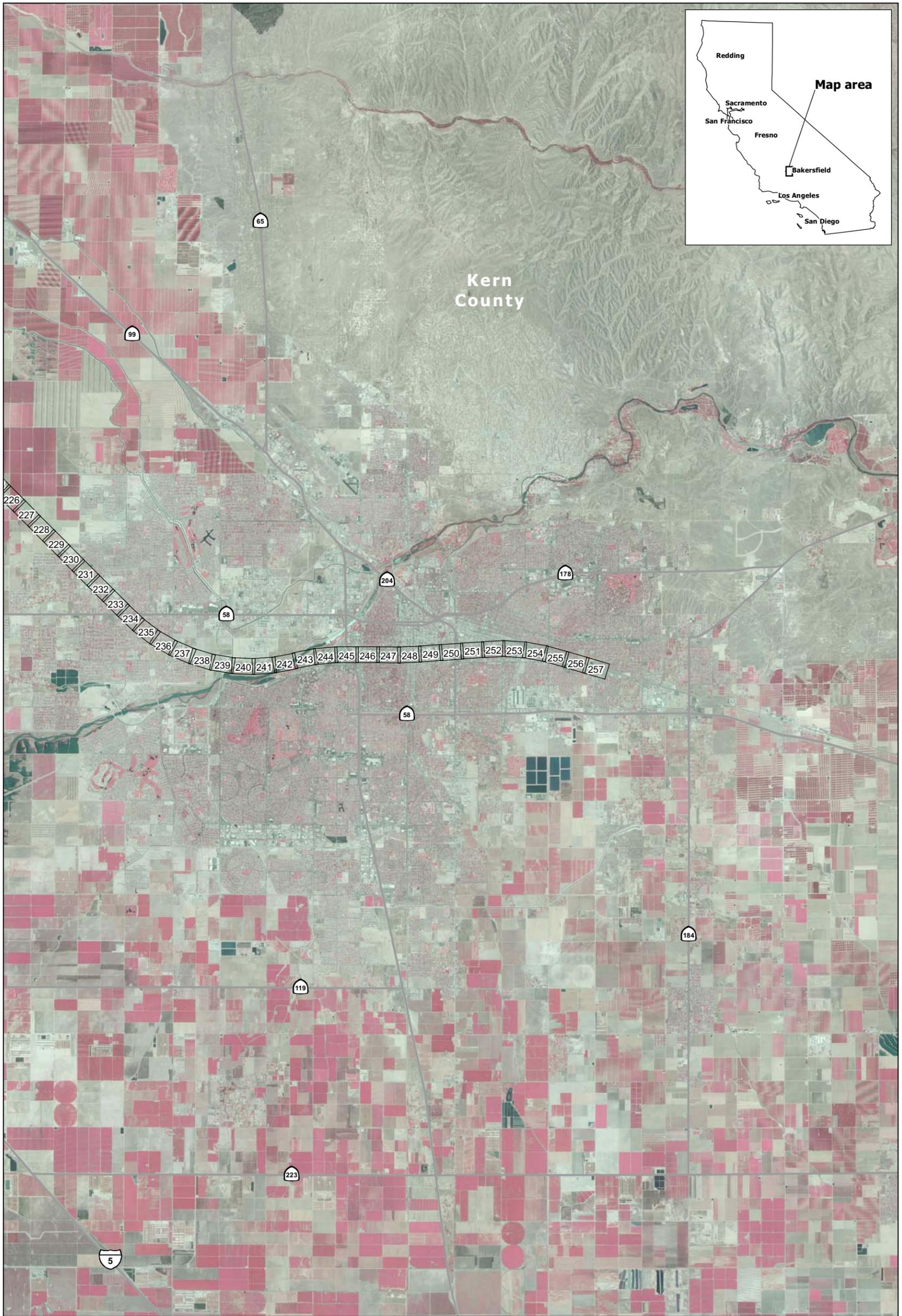


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 Source: URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005

November 23, 2010

-  Sheet extent
-  County boundary
-  Highway

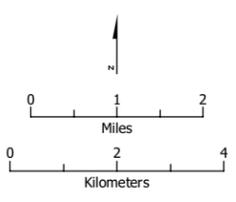




PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED
 Source: URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005

November 23, 2010

-  Sheet extent
-  County boundary
-  Highway





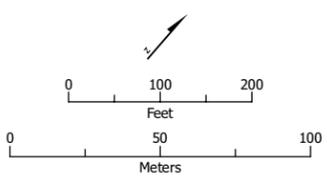
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 1**

Estimated special aquatic resources located within the BNSF alternative alignment area



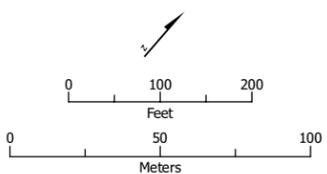
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

Appendix E-1a Sheet 2

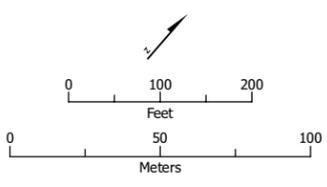
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 3**

Estimated special aquatic resources located within the BNSF alternative alignment area



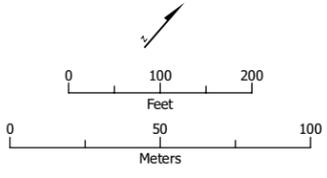
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 4**

Estimated special aquatic resources located within the BNSF alternative alignment area



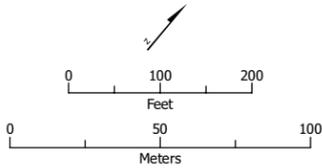
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 5**

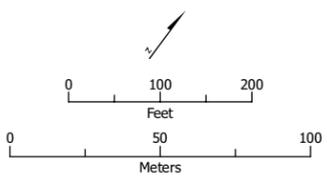
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 6**

Estimated special aquatic resources located within the BNSF alternative alignment area



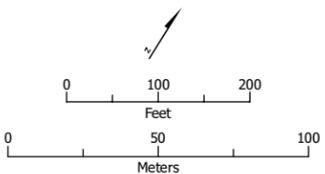
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 7**

Estimated special aquatic resources located within the BNSF alternative alignment area



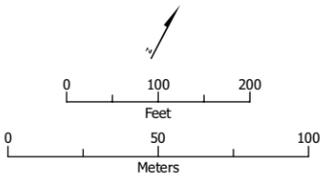
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

Appendix E-1a Sheet 8

Estimated special aquatic resources located within the BNSF alternative alignment area



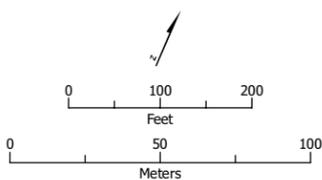
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 9**

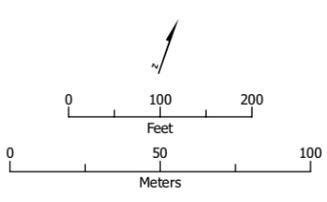
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

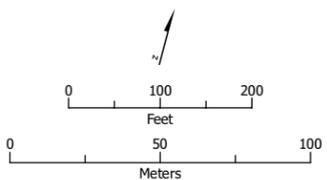
Appendix E-1a
Sheet 10
 Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

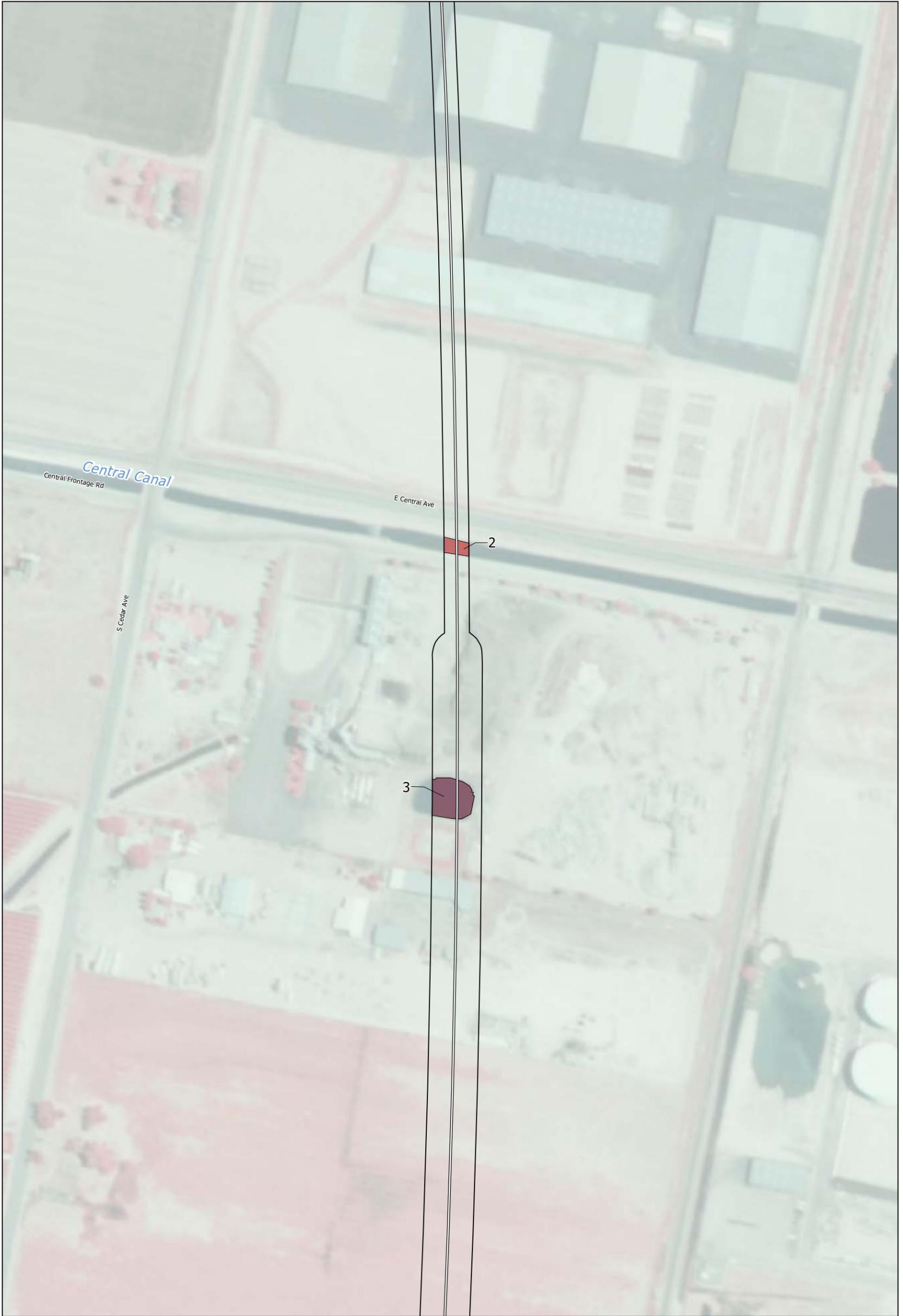


- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 11**

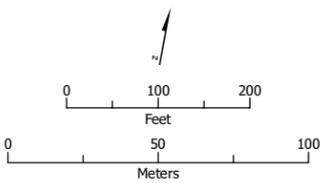
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 12**

Estimated special aquatic resources located within the BNSF alternative alignment area



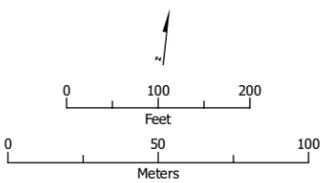
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 13**

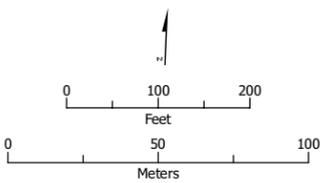
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 14**

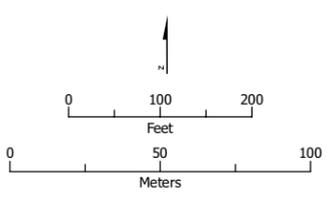
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

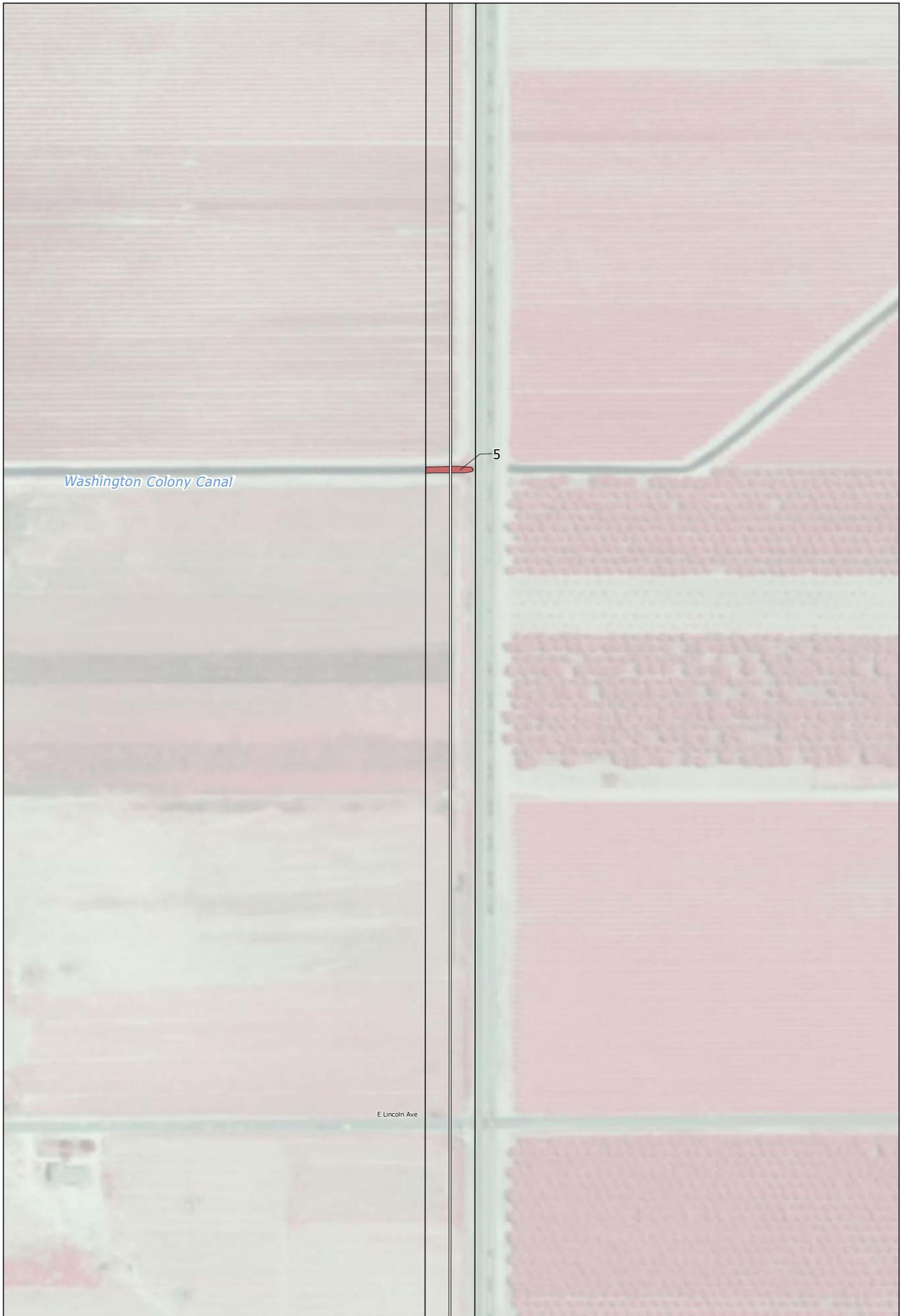


- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 15**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

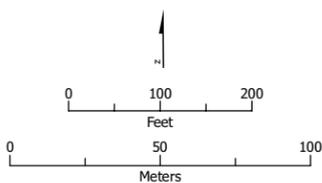
December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
 Sheet 16**

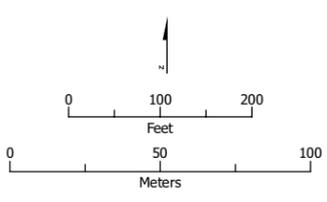
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

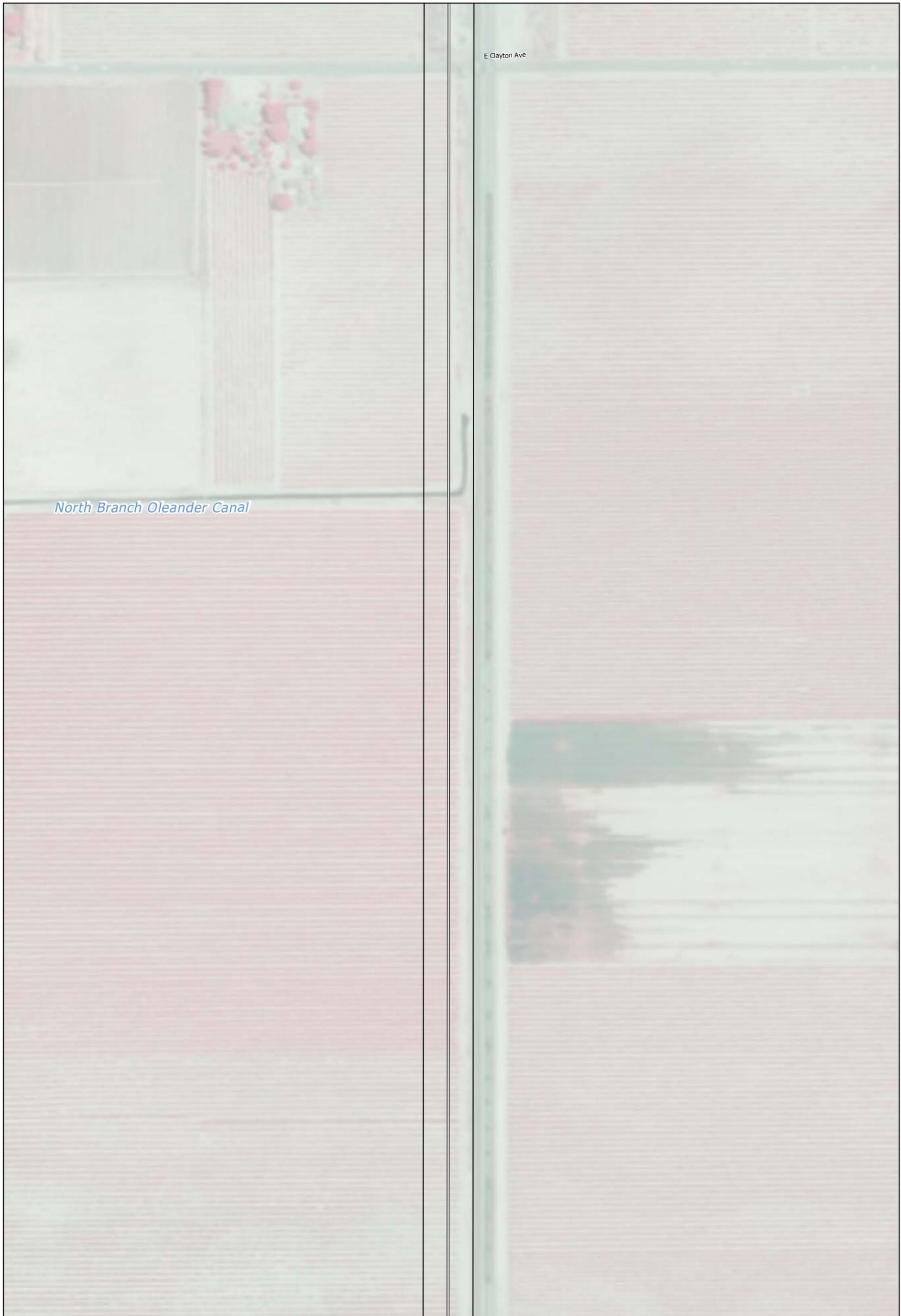
Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

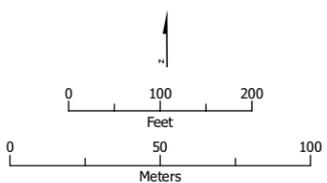
Appendix E-1a
Sheet 17
 Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



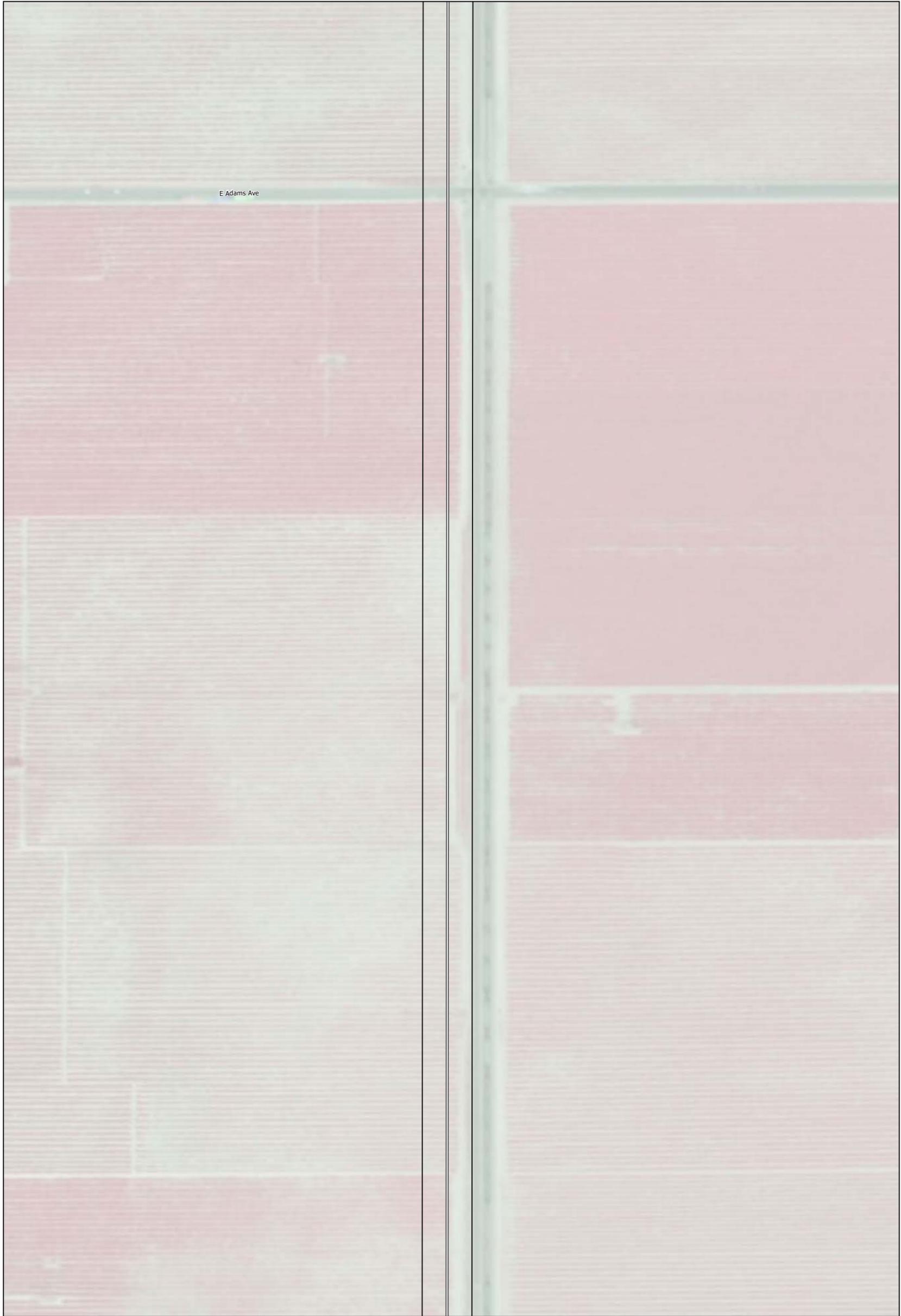
Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 18**

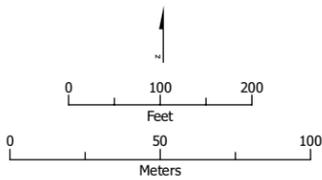
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 19**

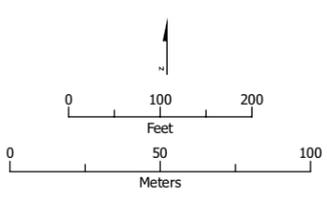
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

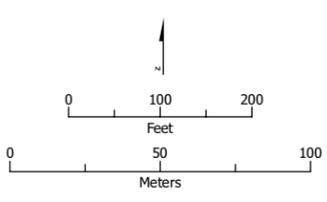
- BNSF alternative
- BNSF corridor study area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

Appendix E-1a
Sheet 21
 Estimated special aquatic resources located within the BNSF alternative alignment area



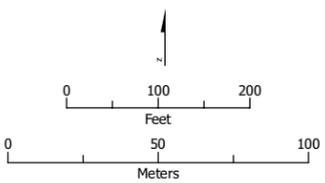
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November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 22**

Estimated special aquatic resources located within the BNSF alternative alignment area



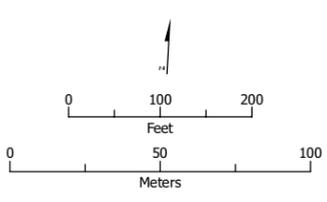
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Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 23**

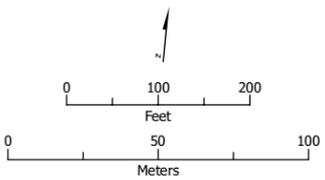
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 24**

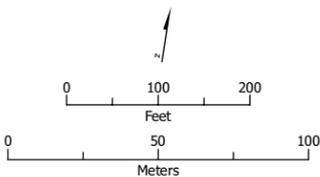
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 25**

Estimated special aquatic resources located within the BNSF alternative alignment area



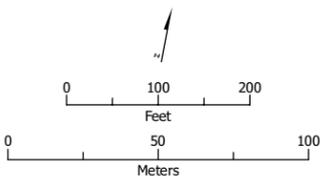
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 26**

Estimated special aquatic resources located within the BNSF alternative alignment area



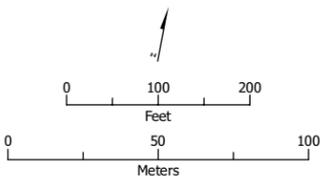
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 27**

Estimated special aquatic resources located within the BNSF alternative alignment area



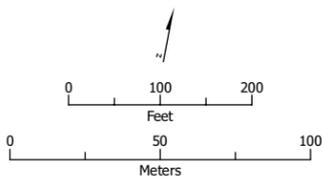
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 28**

Estimated special aquatic resources located within the BNSF alternative alignment area



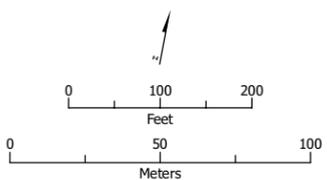
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 29**

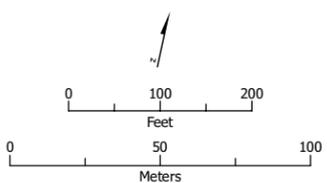
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 30**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

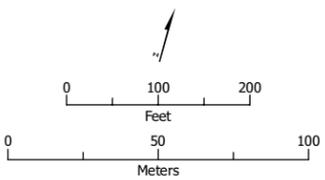
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

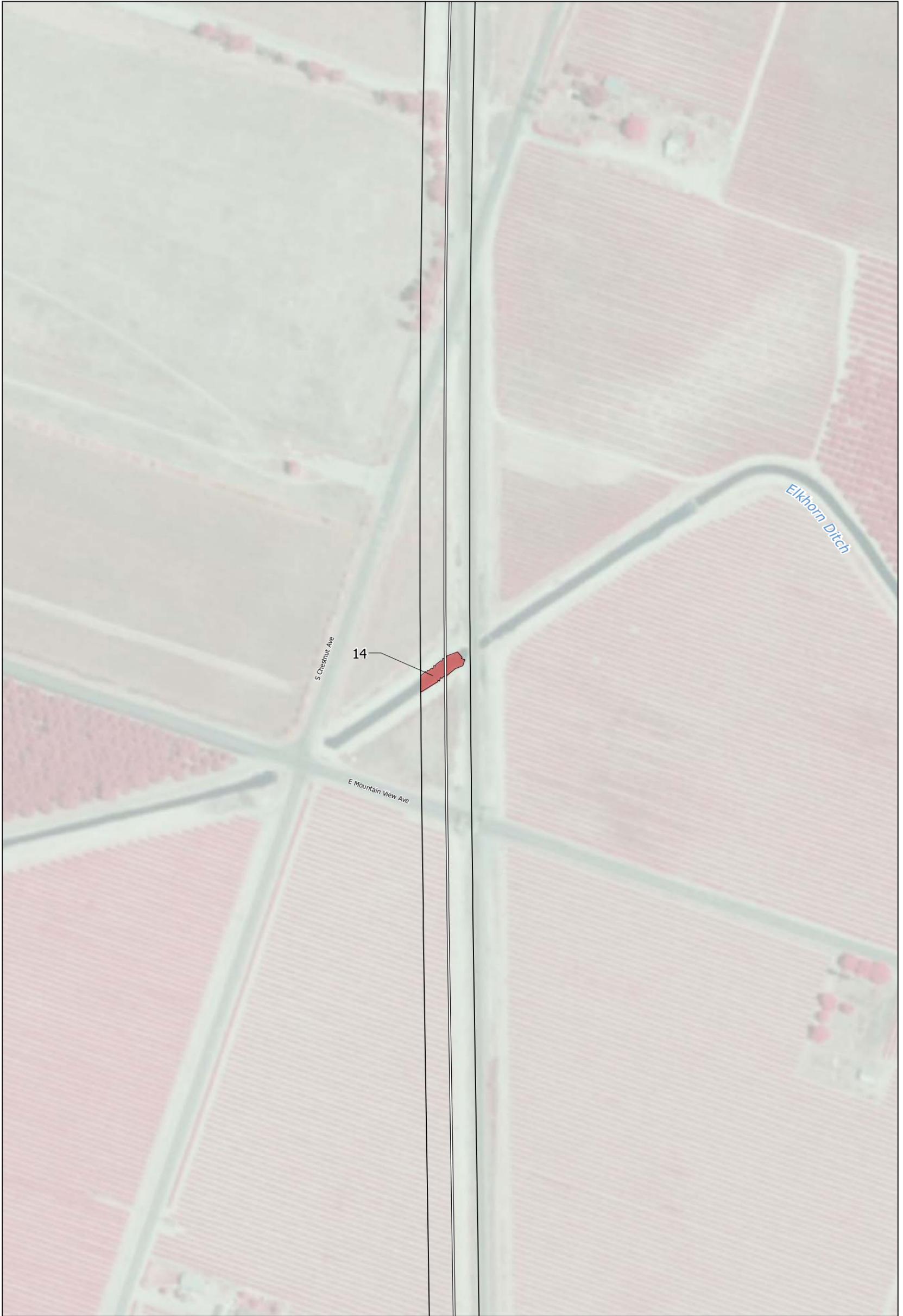
- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 31**

Estimated special aquatic resources located within the BNSF alternative alignment area



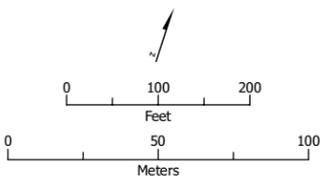
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

December 17, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 32**

Estimated special aquatic resources located within the BNSF alternative alignment area



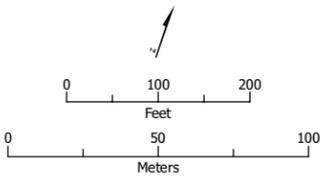
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 33**

Estimated special aquatic resources located within the BNSF alternative alignment area



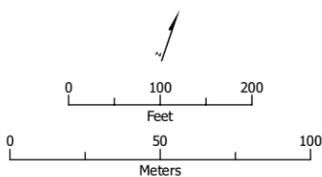
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 34**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

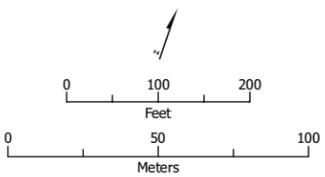
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 35**

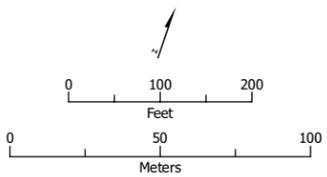
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 36**

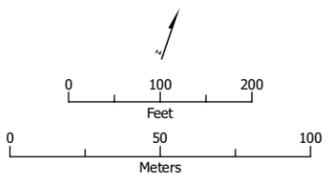
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 37**

Estimated special aquatic resources located within the BNSF alternative alignment area



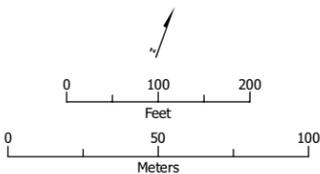
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 38**

Estimated special aquatic resources located within the BNSF alternative alignment area



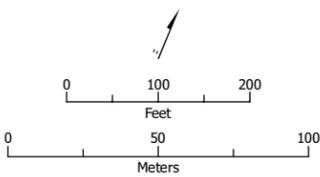
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 39**

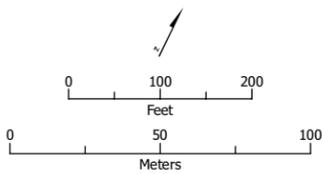
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 40**

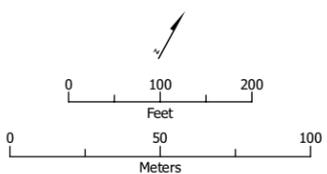
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 41**

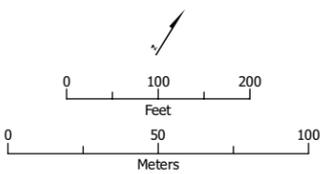
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 42**

Estimated special aquatic resources located within the BNSF alternative alignment area



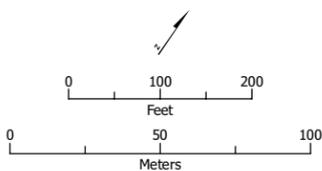
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 43**

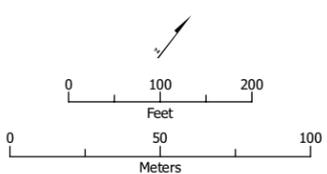
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 44**

Estimated special aquatic resources located within the BNSF alternative alignment area



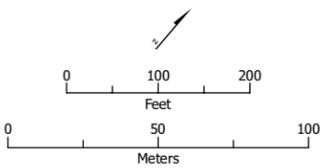
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



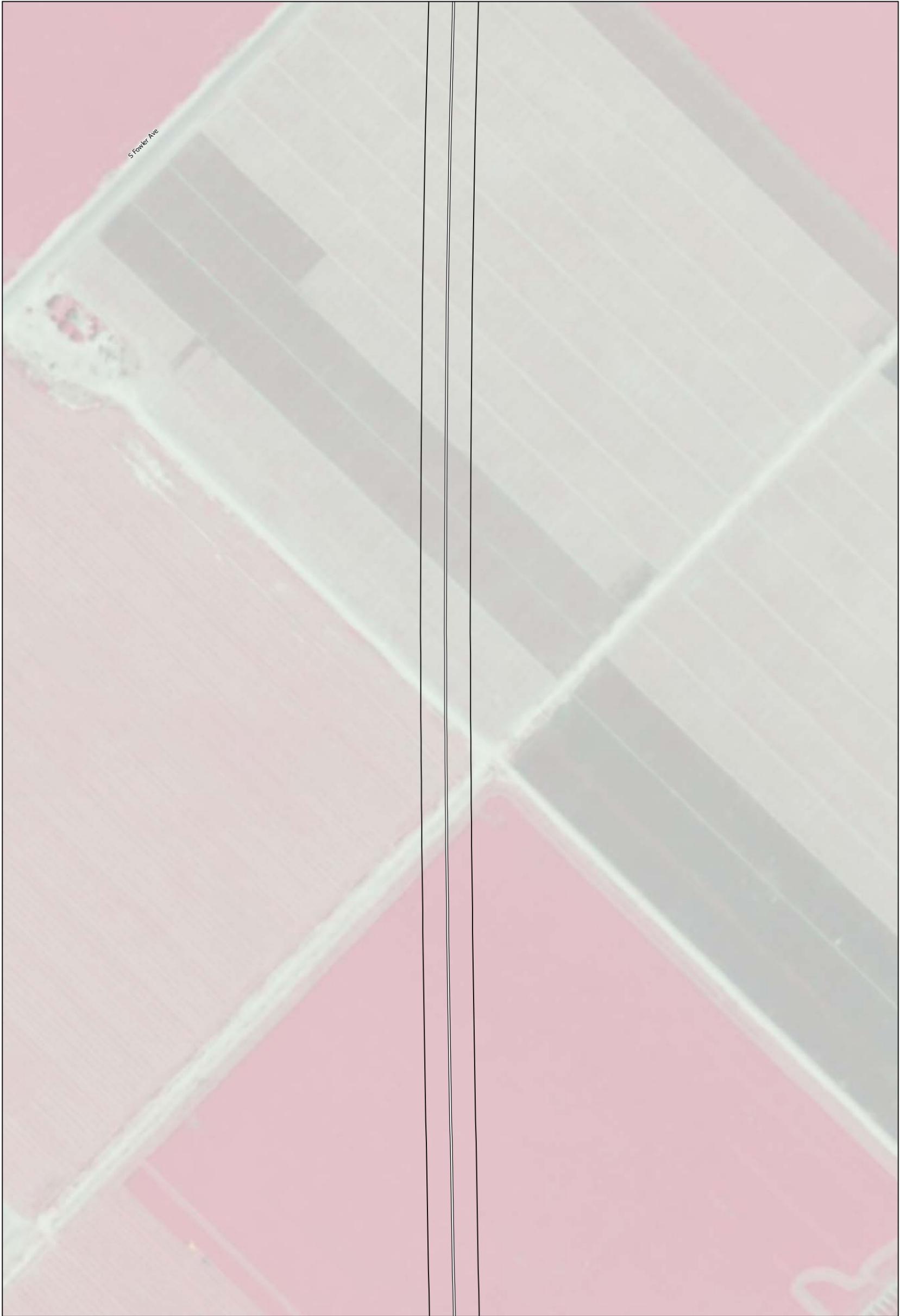
Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 45**

Estimated special aquatic resources located within the BNSF alternative alignment area



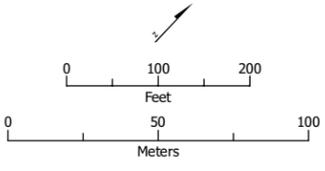
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

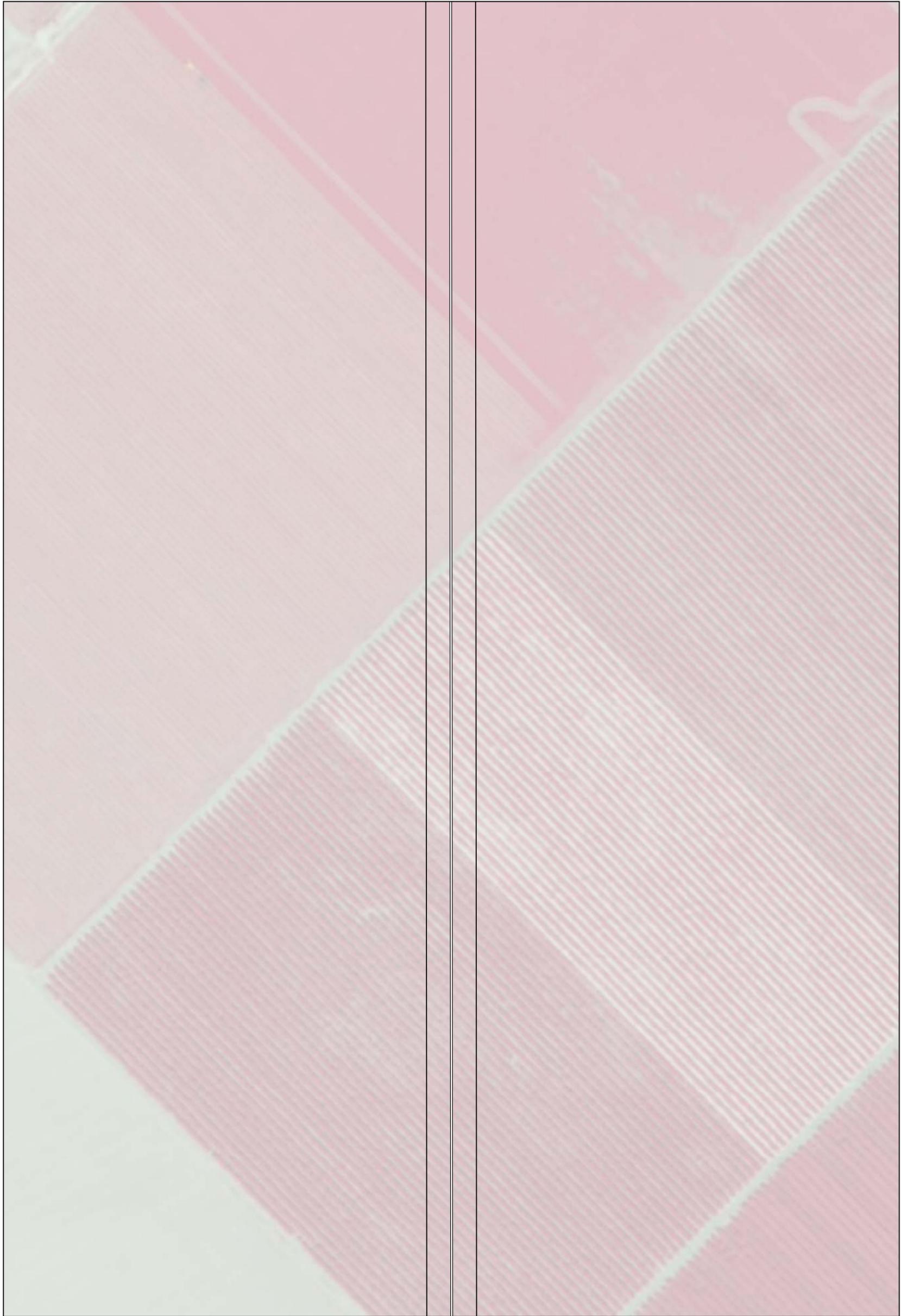


- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 46**

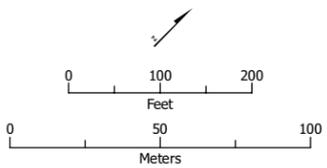
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



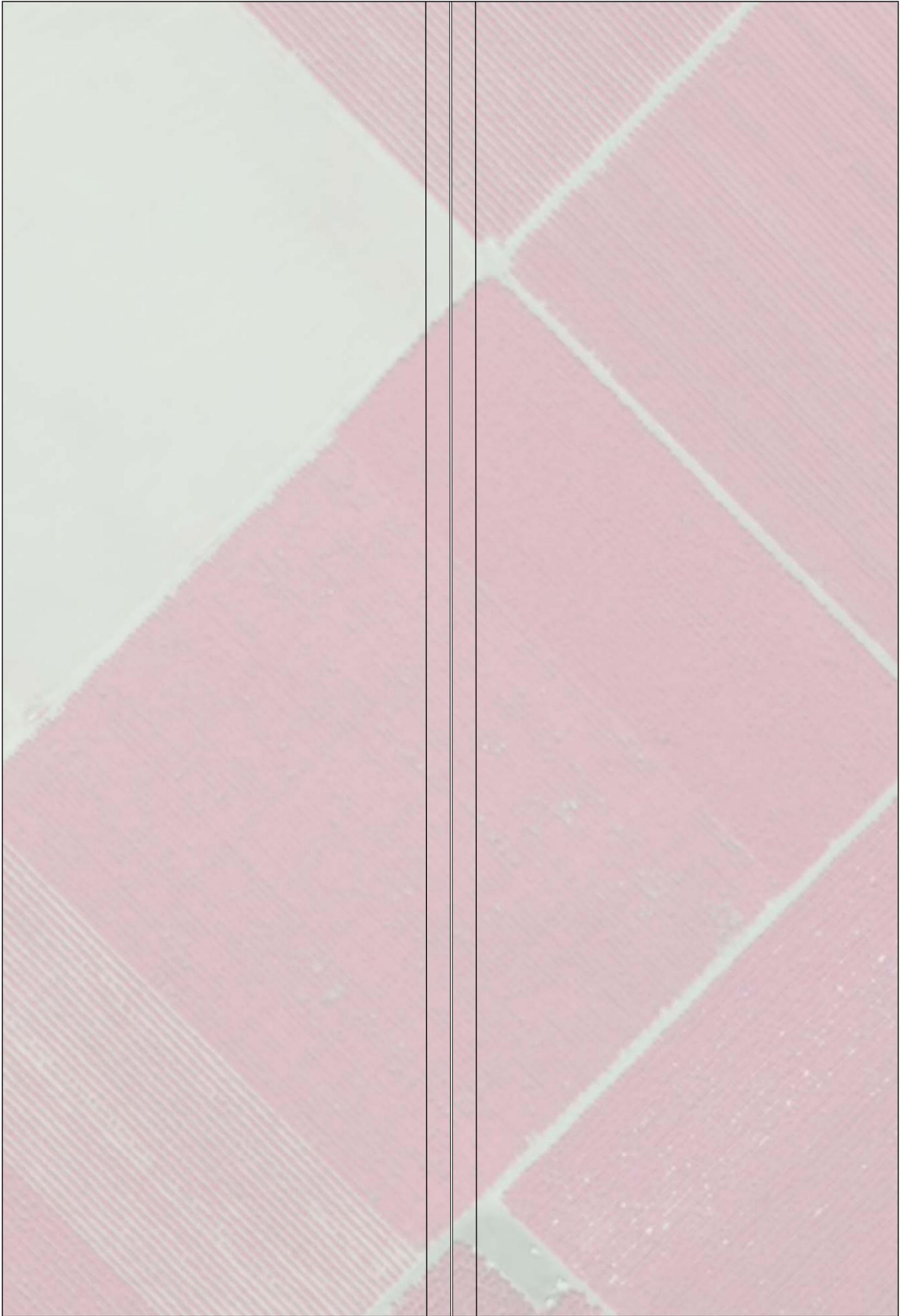
Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 47**

Estimated special aquatic resources located within the BNSF alternative alignment area



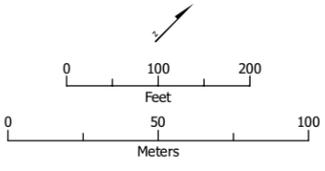
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

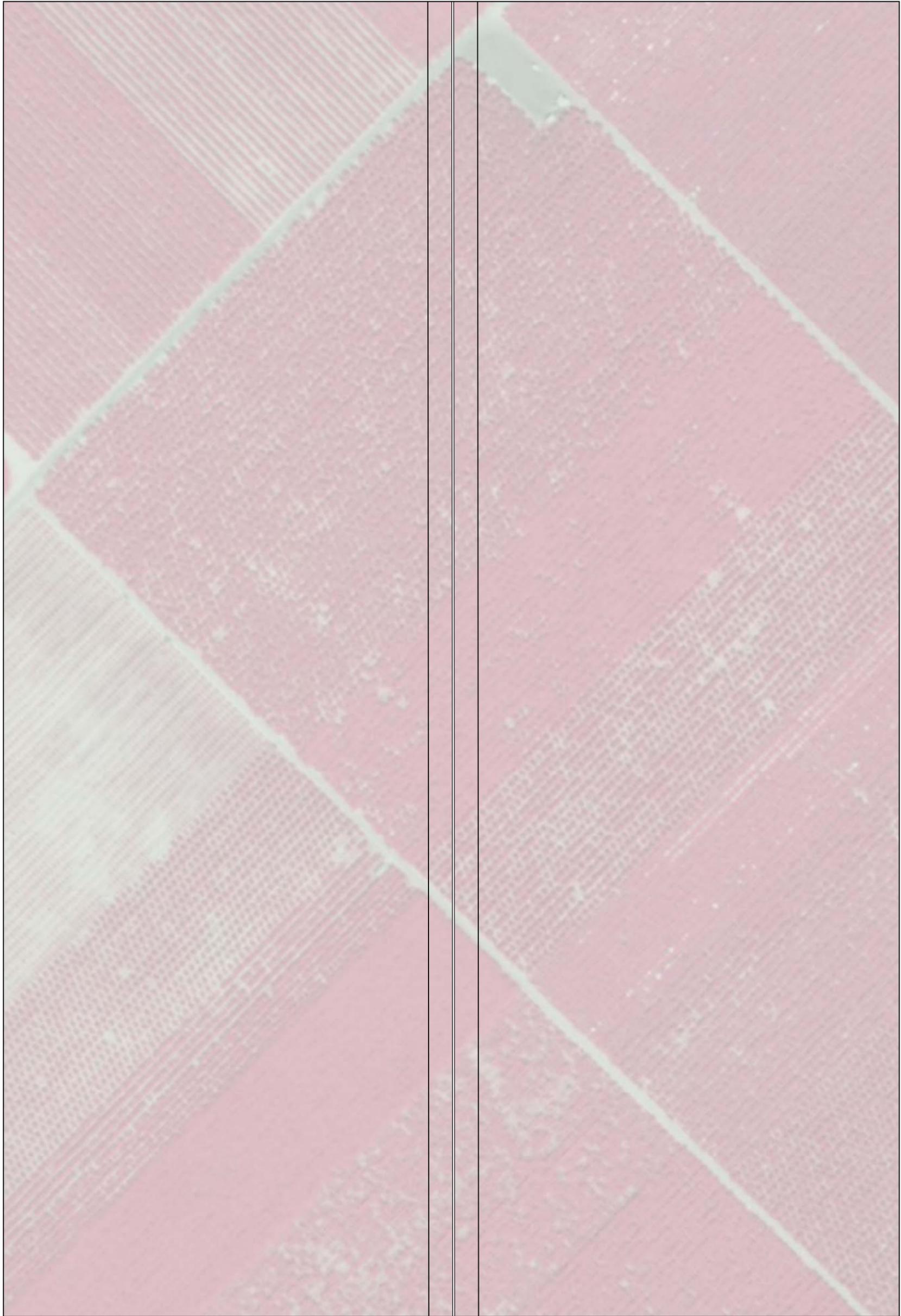


- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 48**

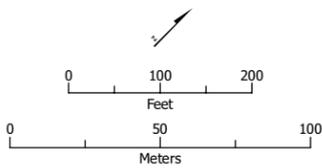
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 49**

Estimated special aquatic resources located within the BNSF alternative alignment area



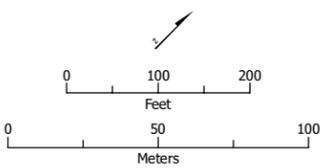
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 50**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

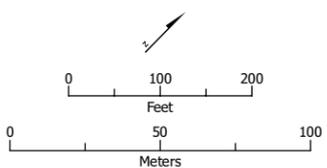
December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 51**

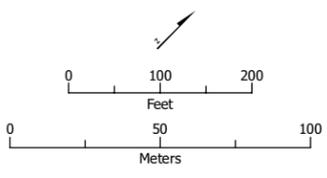
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 52**

Estimated special aquatic resources located within the BNSF alternative alignment area



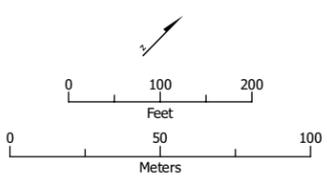
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

December 17, 2010



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 53**

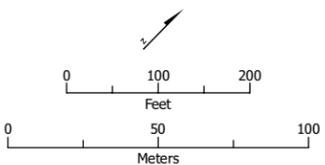
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 54**

Estimated special aquatic resources located within the BNSF alternative alignment area



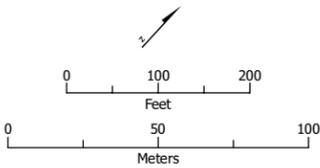
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

December 17, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

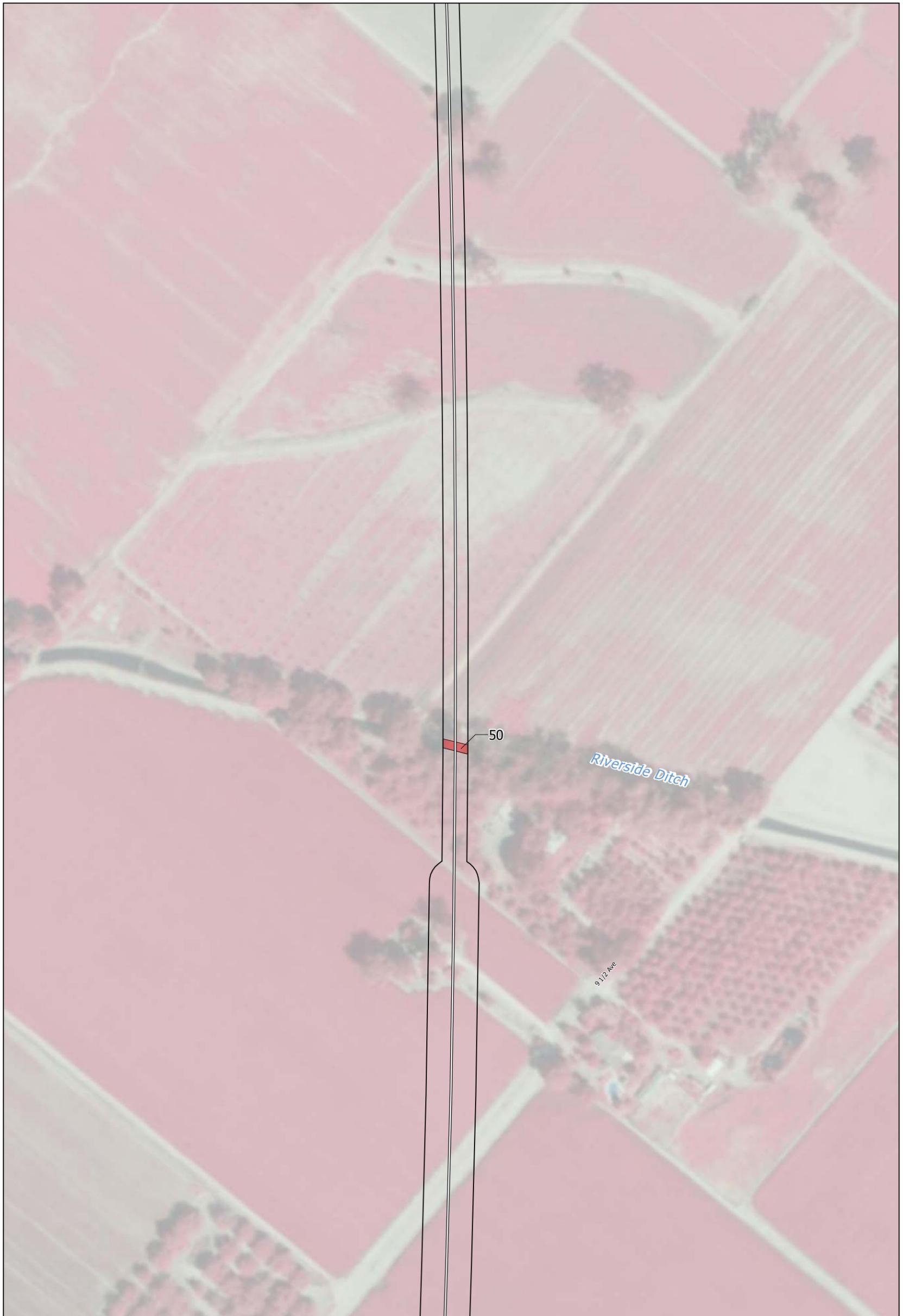


- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 55**

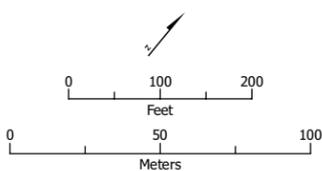
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 56**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

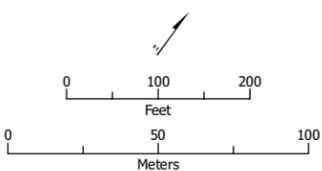
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 57**

Estimated special aquatic resources located within the BNSF alternative alignment area



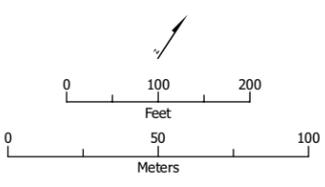
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 58**

Estimated special aquatic resources located within the BNSF alternative alignment area



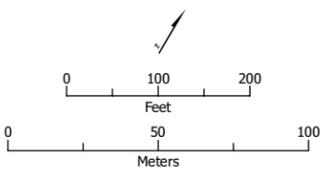
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 59**

Estimated special aquatic resources located within the BNSF alternative alignment area



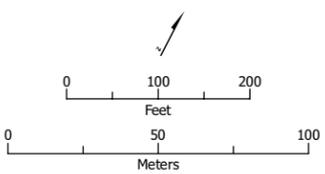
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 60**

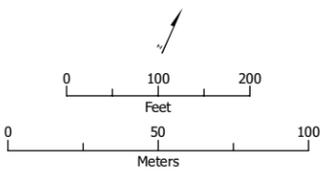
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 61**

Estimated special aquatic resources located within the BNSF alternative alignment area



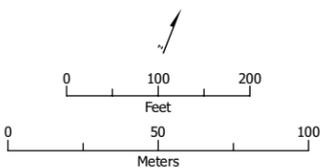
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 62**

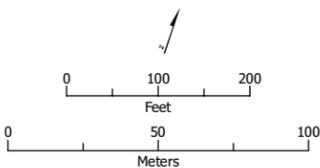
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 63**

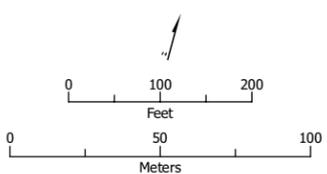
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 64**

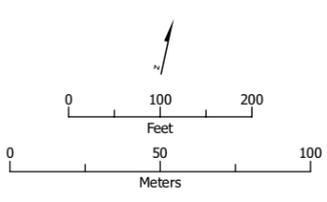
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

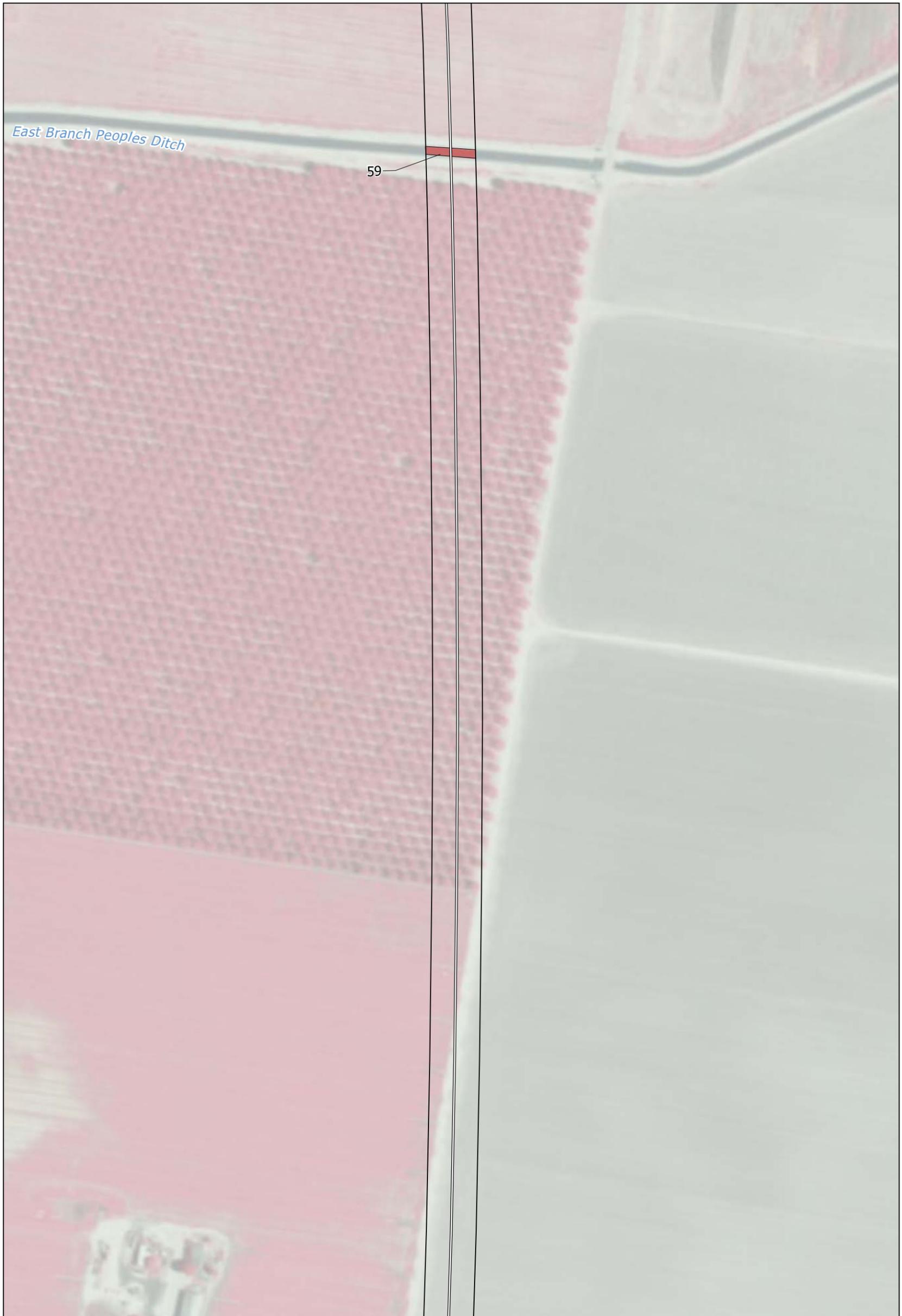


- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 65**

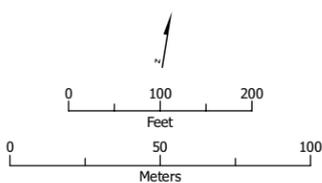
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 66**

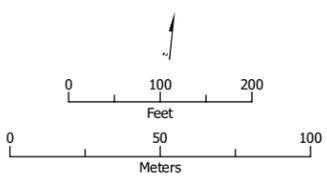
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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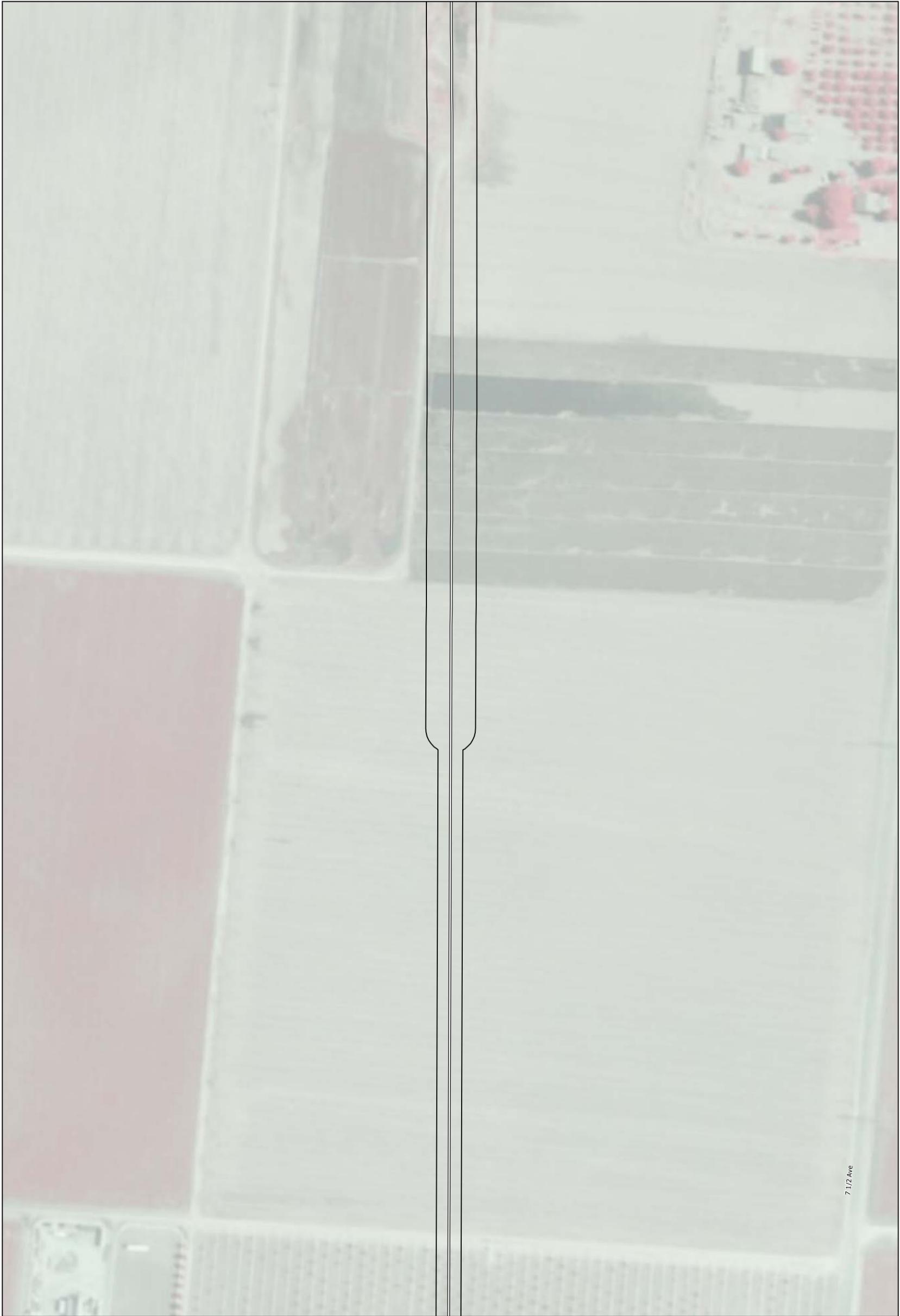


- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 67**

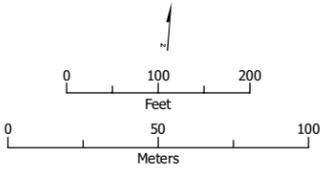
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 68**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

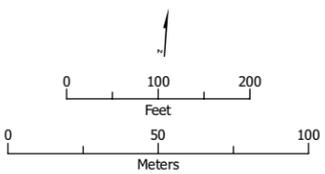
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 69**

Estimated special aquatic resources located within the BNSF alternative alignment area



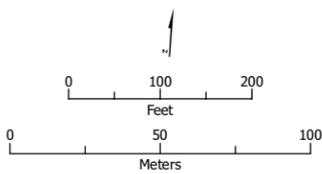
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 70**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

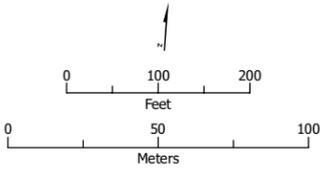
Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
 Sheet 71**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED
 Data source: Special aquatic resources - URS, 2010

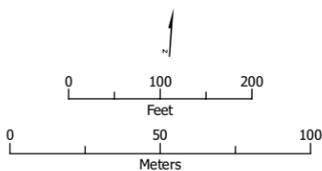
November 29, 2010

Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
 Sheet 72**

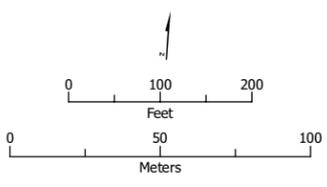
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 73**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

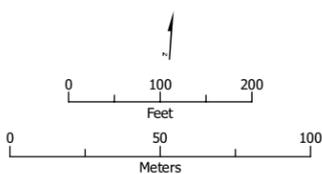
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 74**

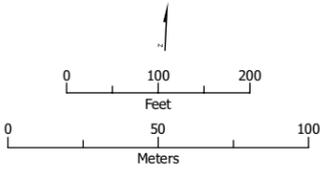
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 75**

Estimated special aquatic resources located within the BNSF alternative alignment area



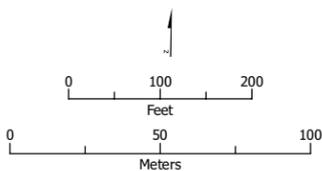
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

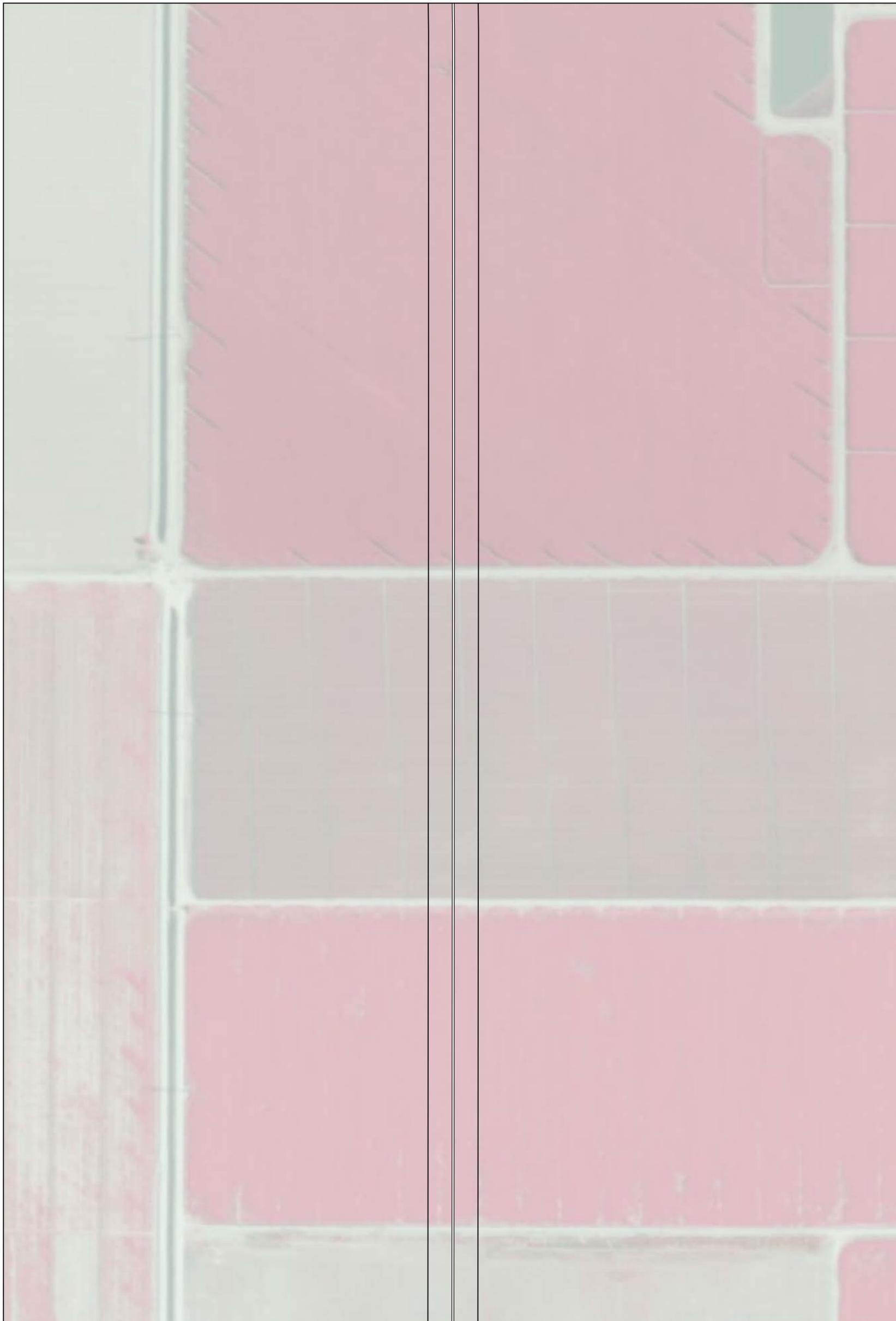
- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
 Sheet 76**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

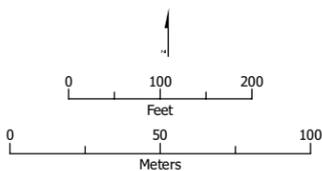
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

**Special aquatic resources
with feature number**

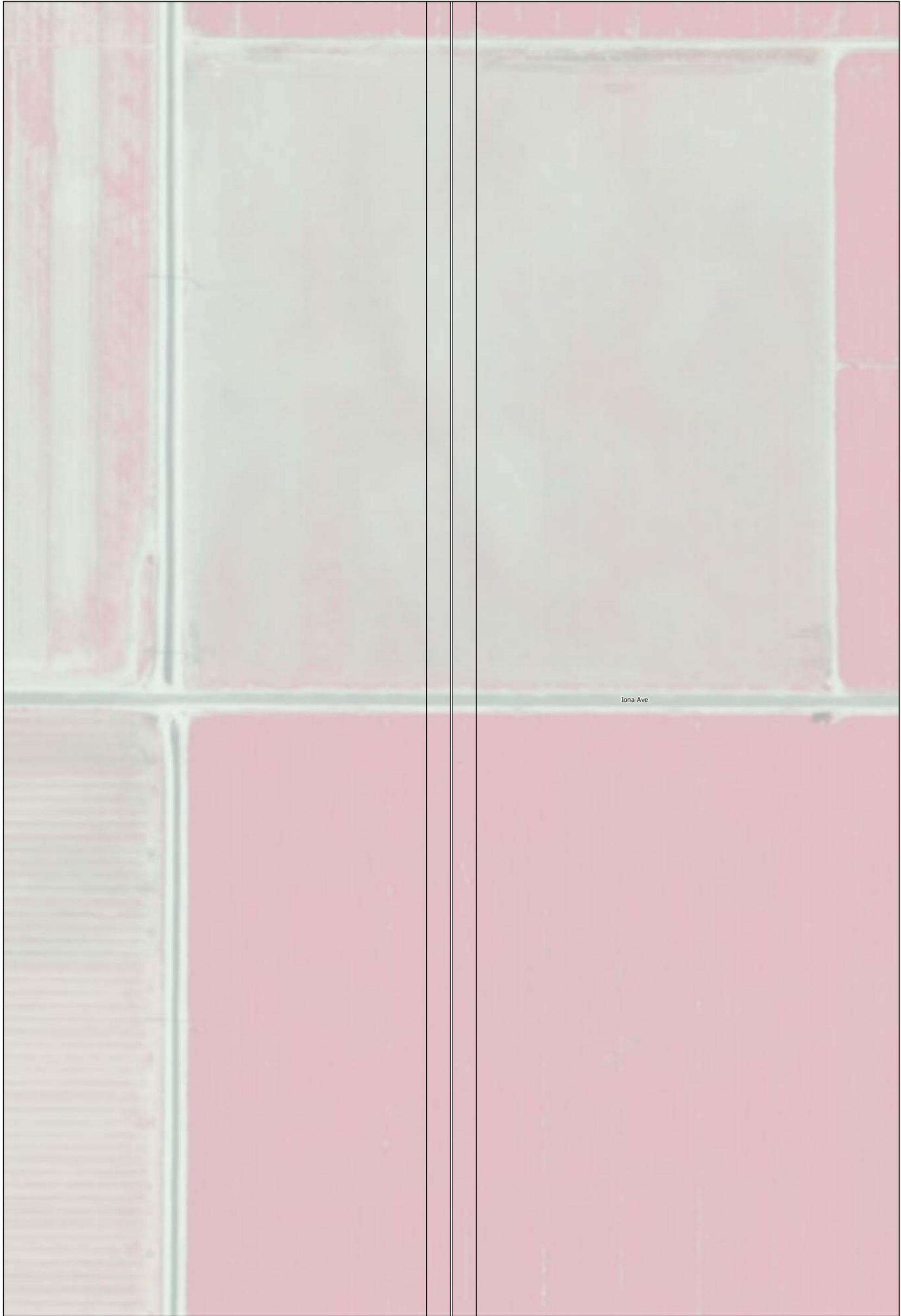
- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 77**

Estimated special aquatic resources located
within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

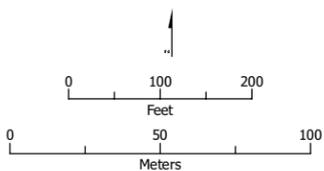
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

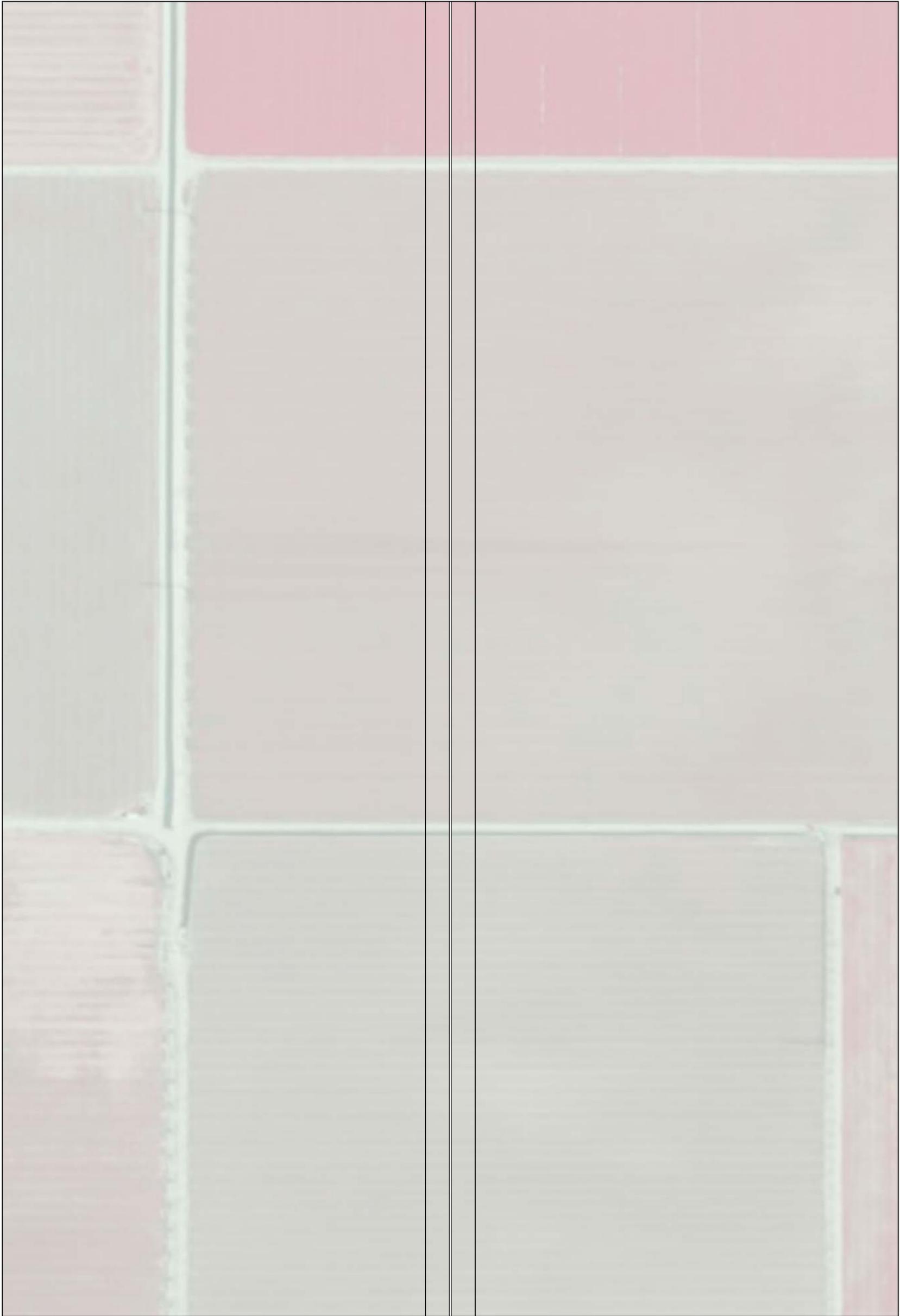
- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 78**

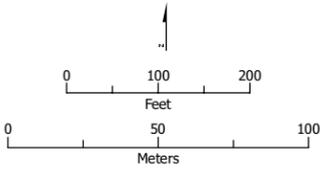
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

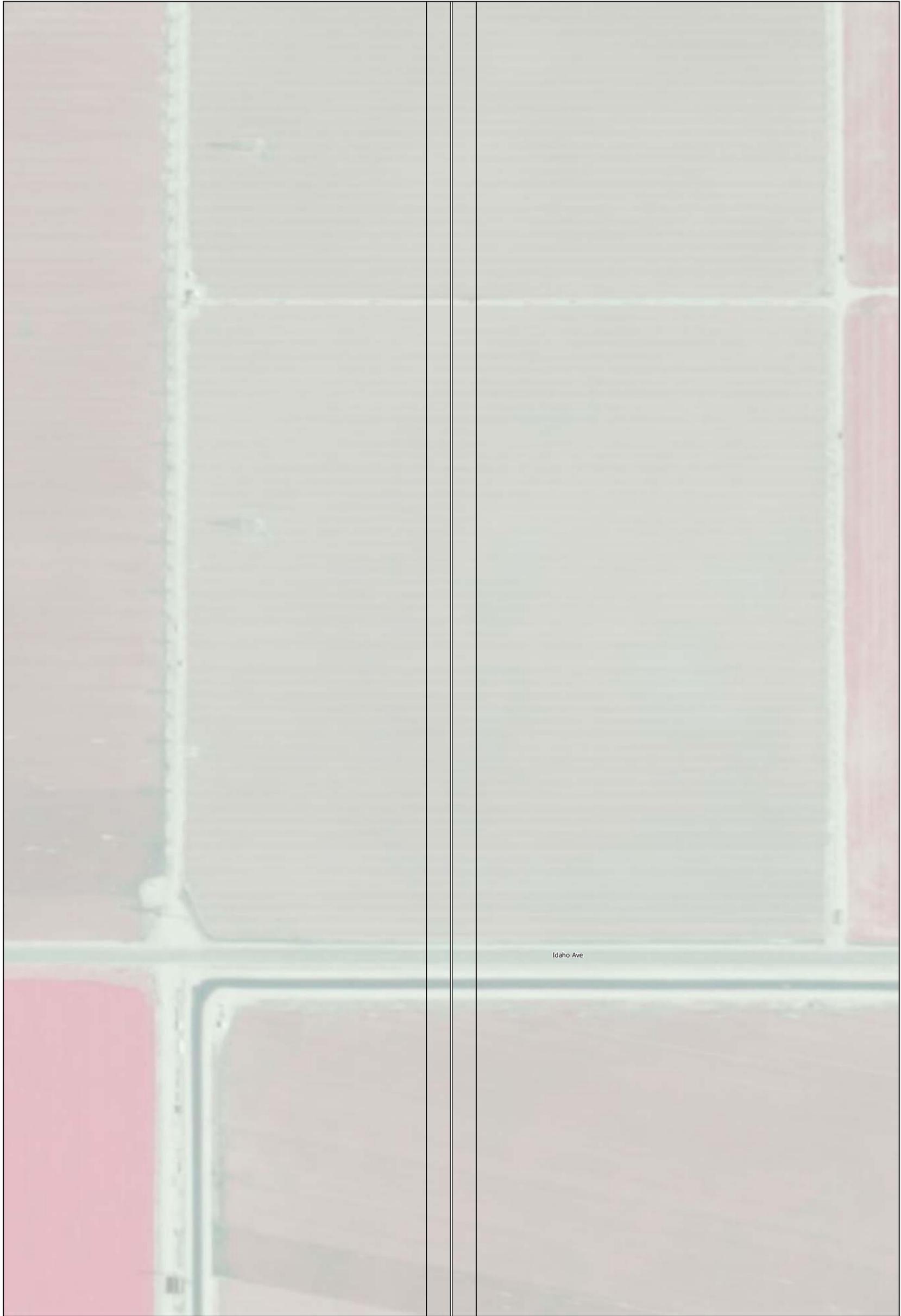


- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 79**

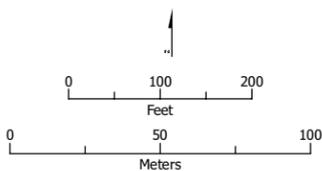
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



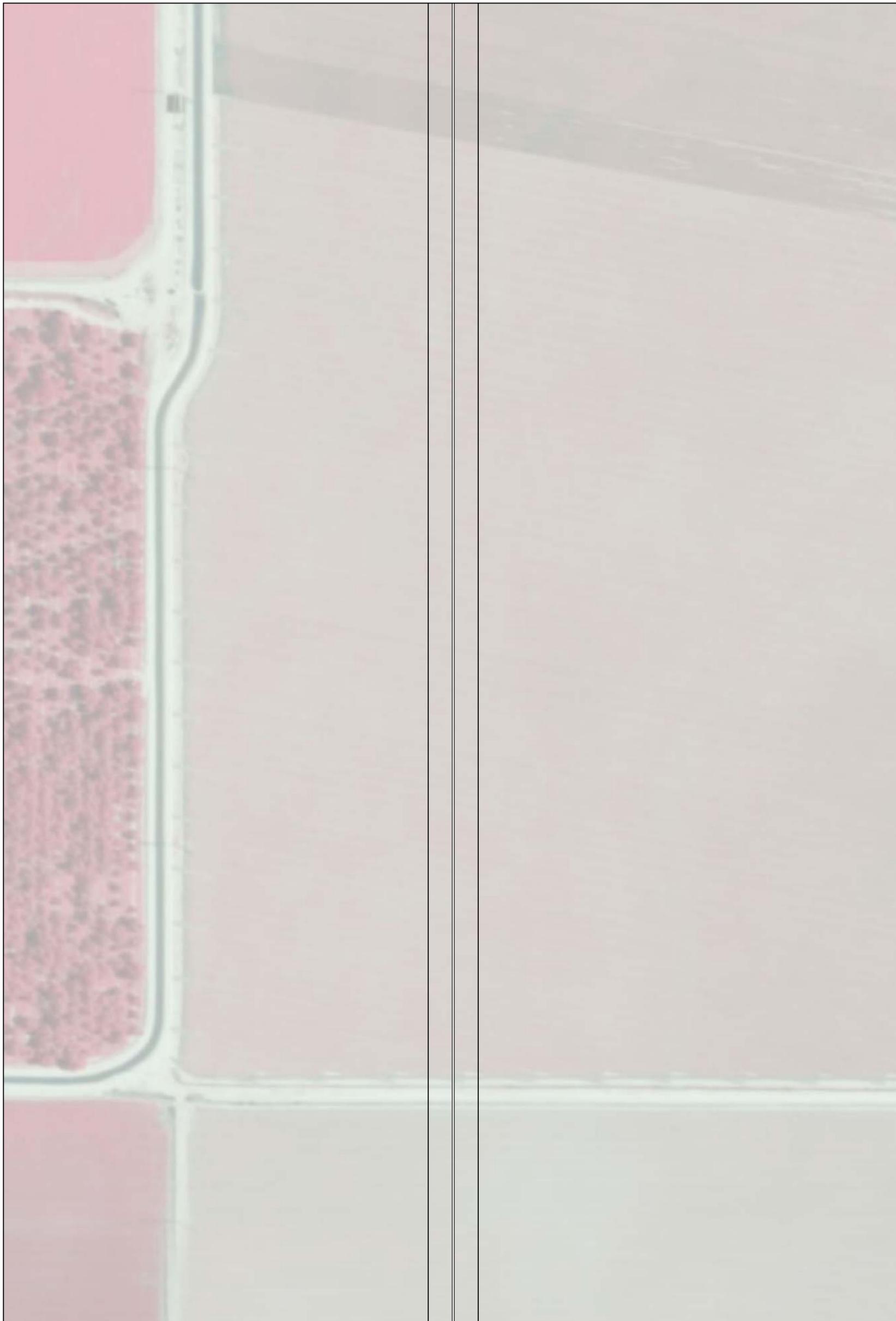
Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 80**

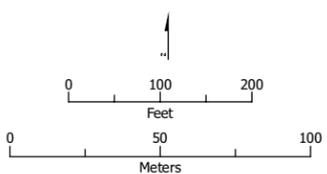
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

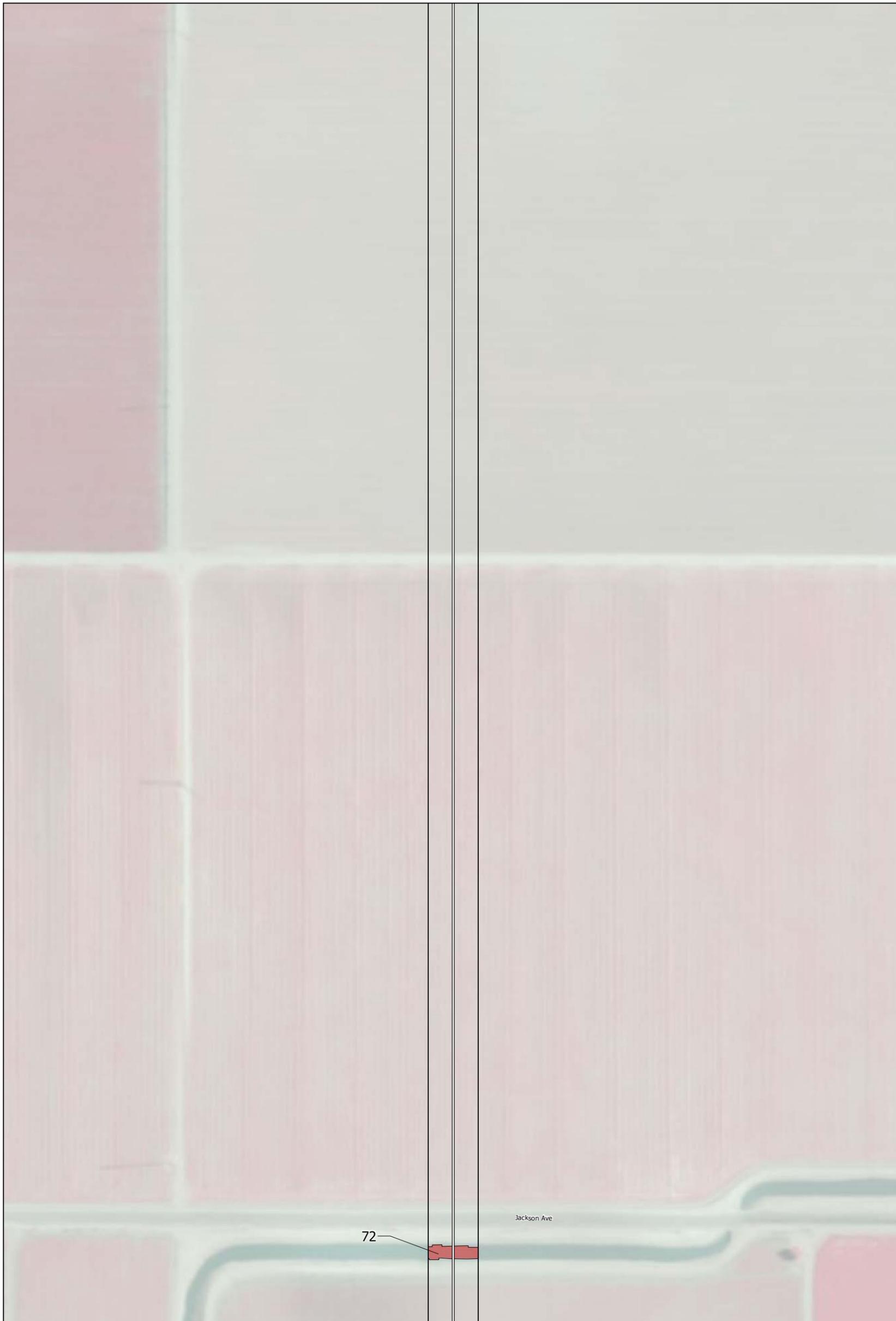


- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 81**

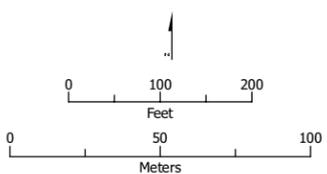
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 82**

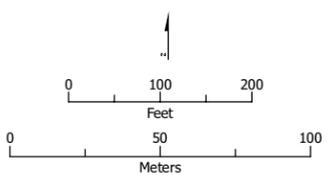
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

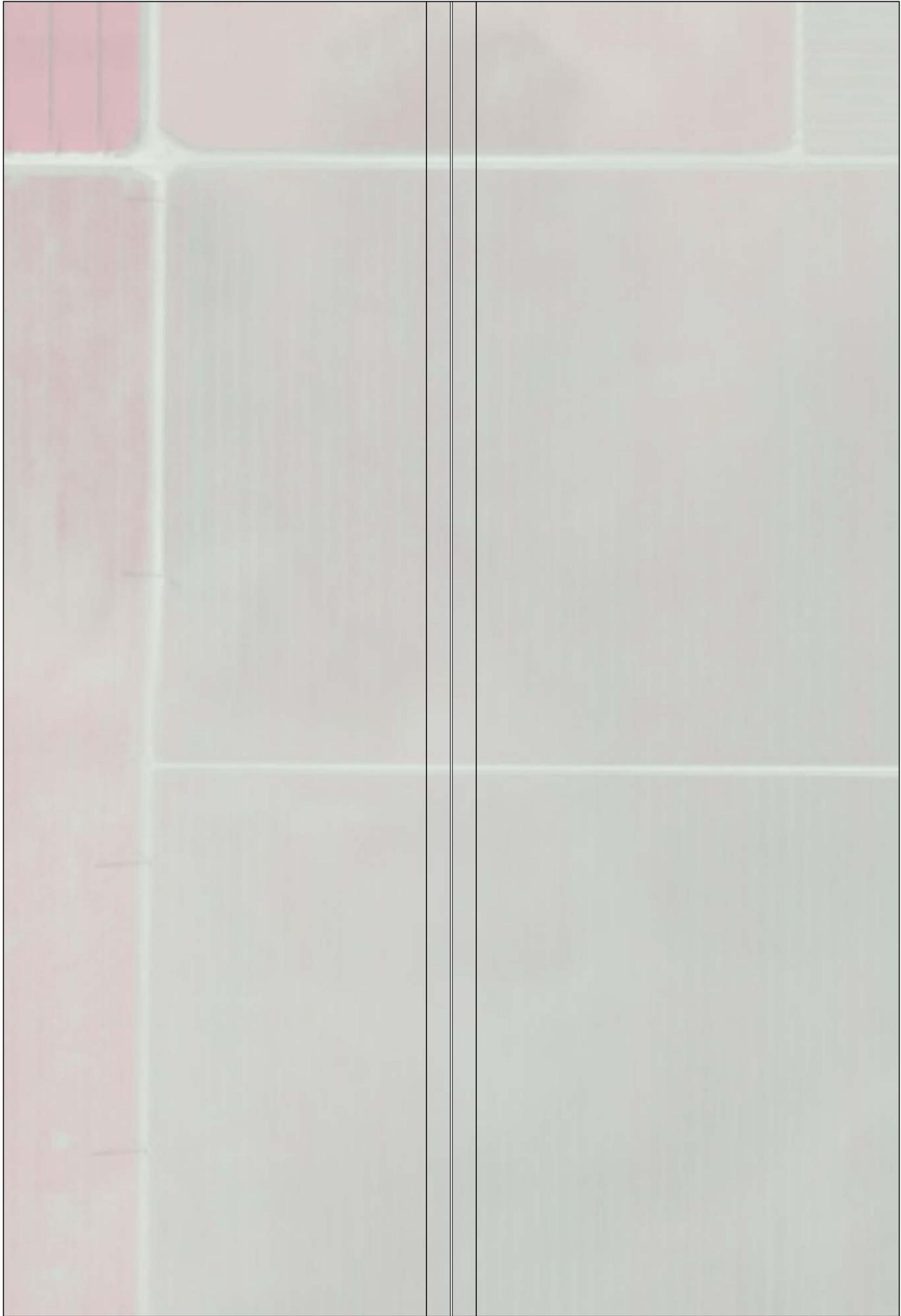


- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 83**

Estimated special aquatic resources located within the BNSF alternative alignment area



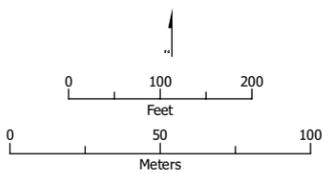
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



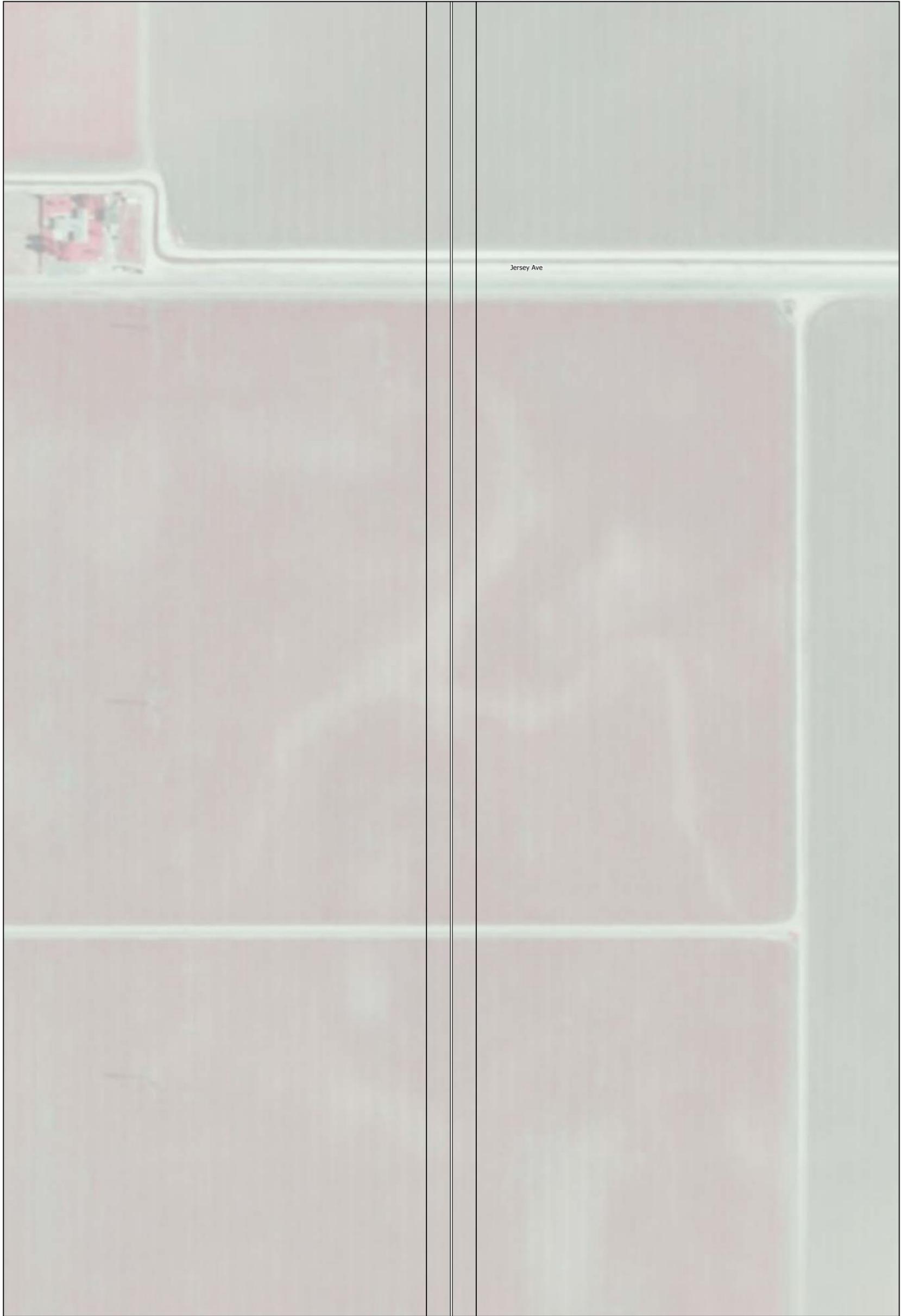
Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 84**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

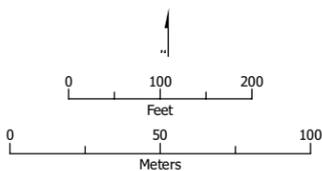
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

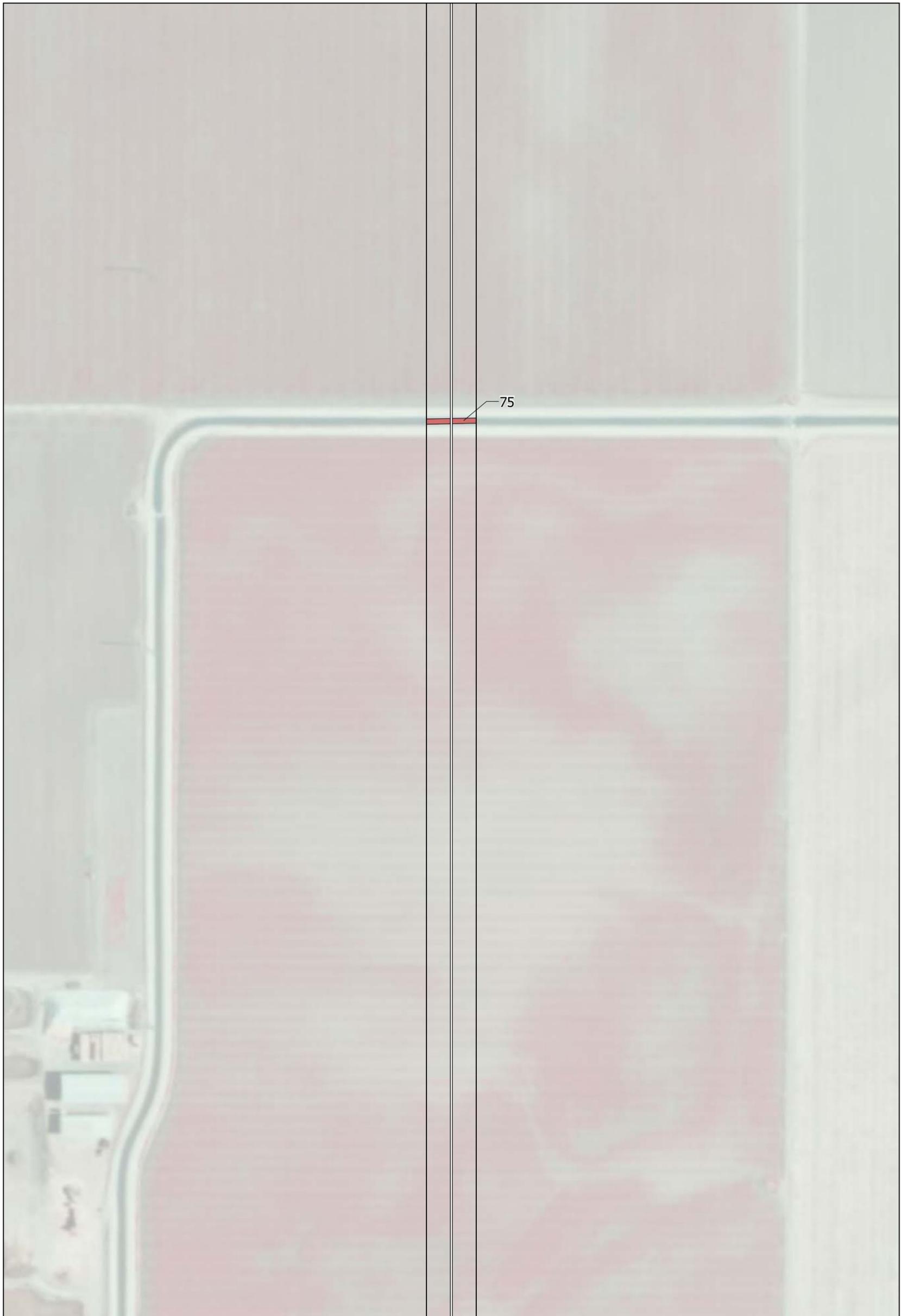
- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 85**

Estimated special aquatic resources located within the BNSF alternative alignment area



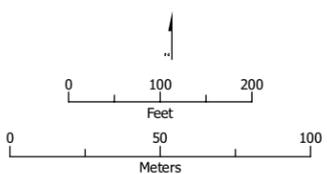
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 86**

Estimated special aquatic resources located within the BNSF alternative alignment area



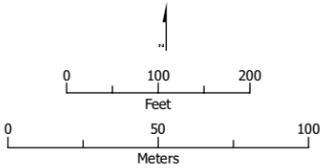
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 87**

Estimated special aquatic resources located within the BNSF alternative alignment area

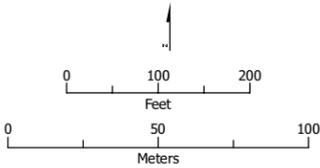


PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



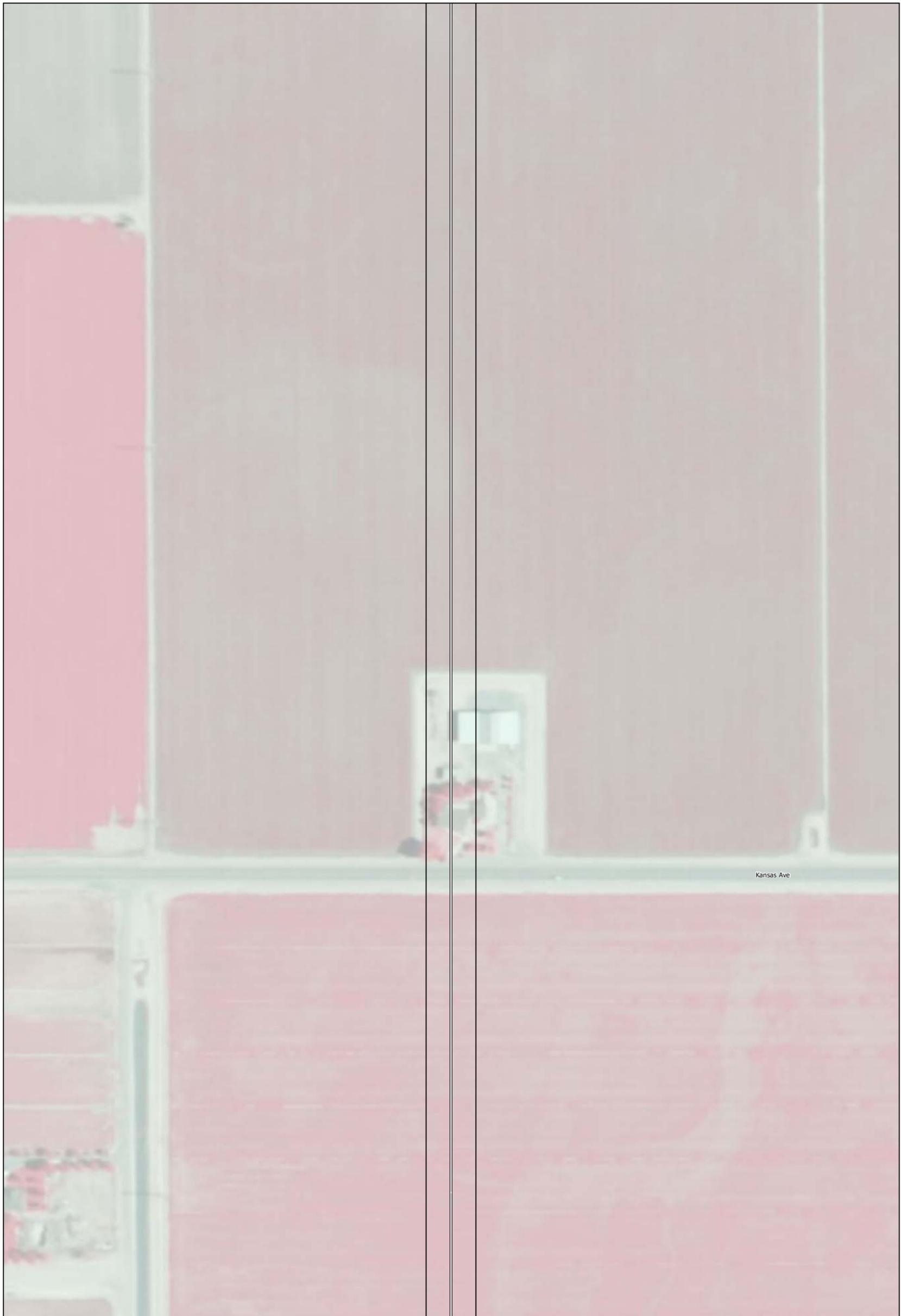
Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 88**

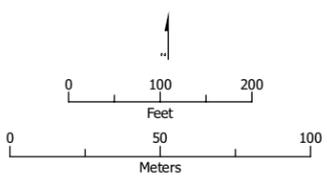
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

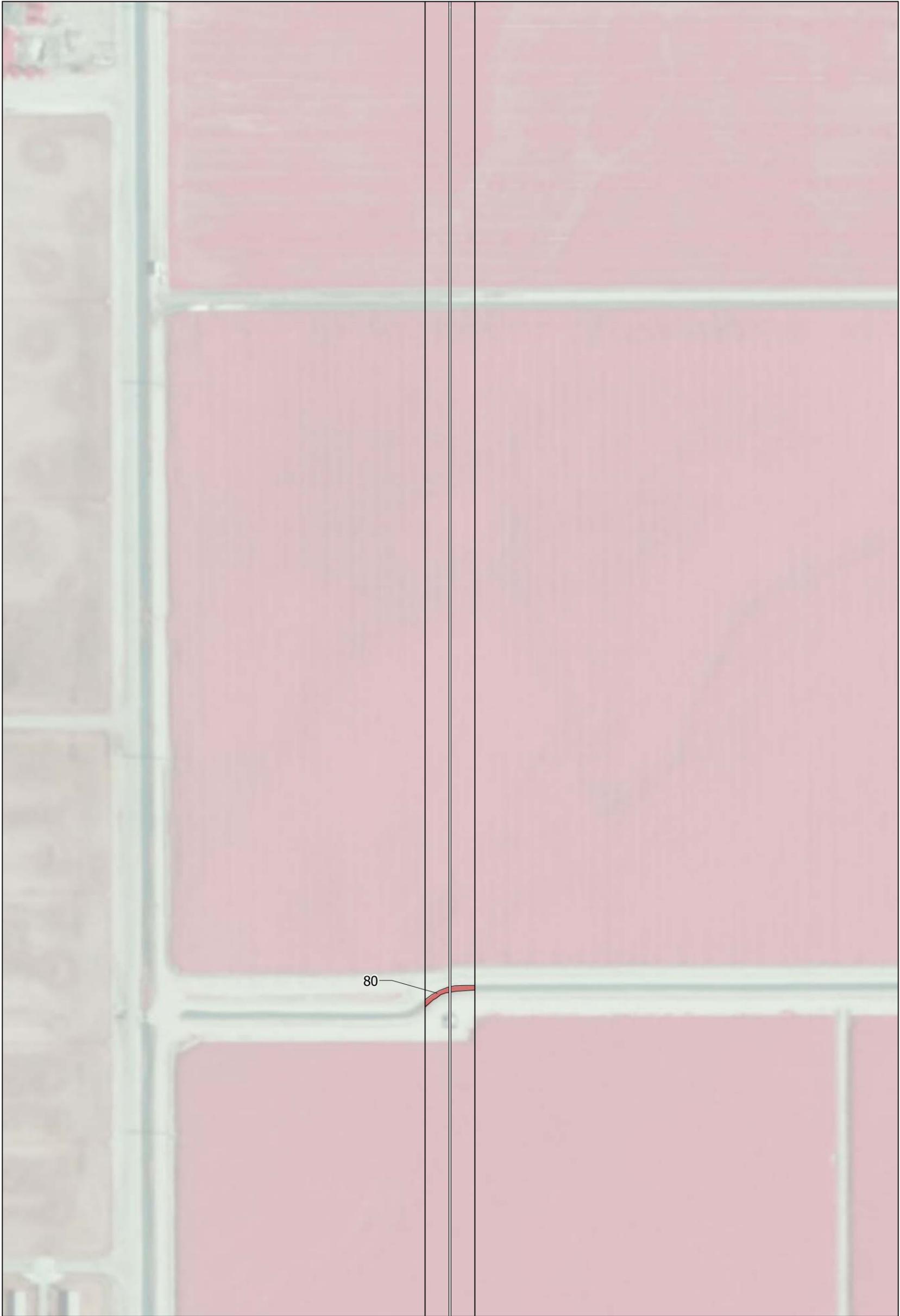


- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 89**

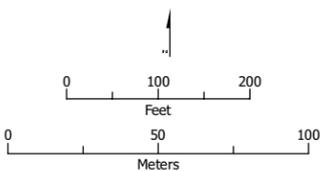
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



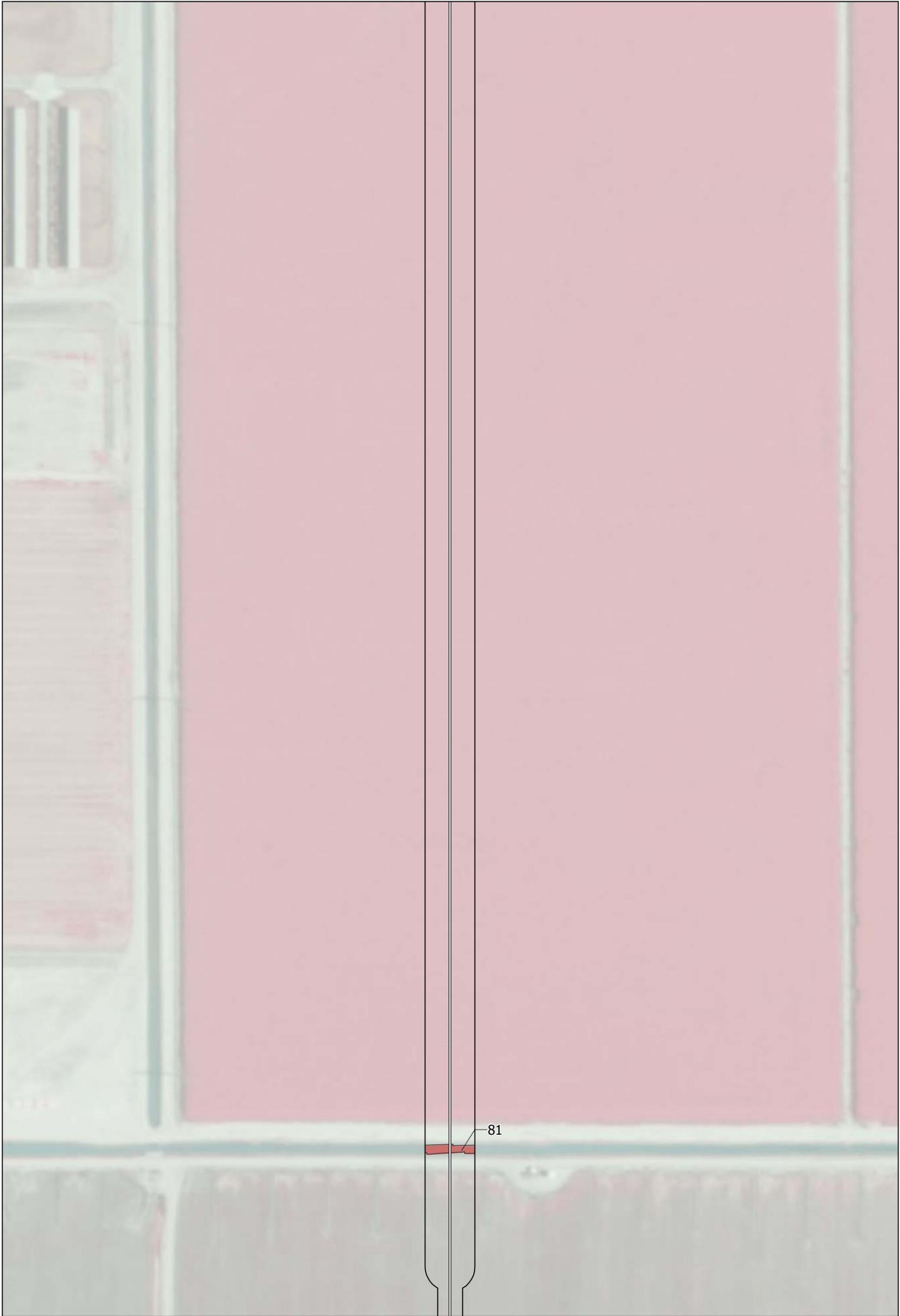
Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 90**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

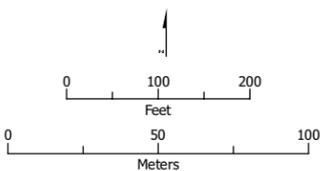
November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

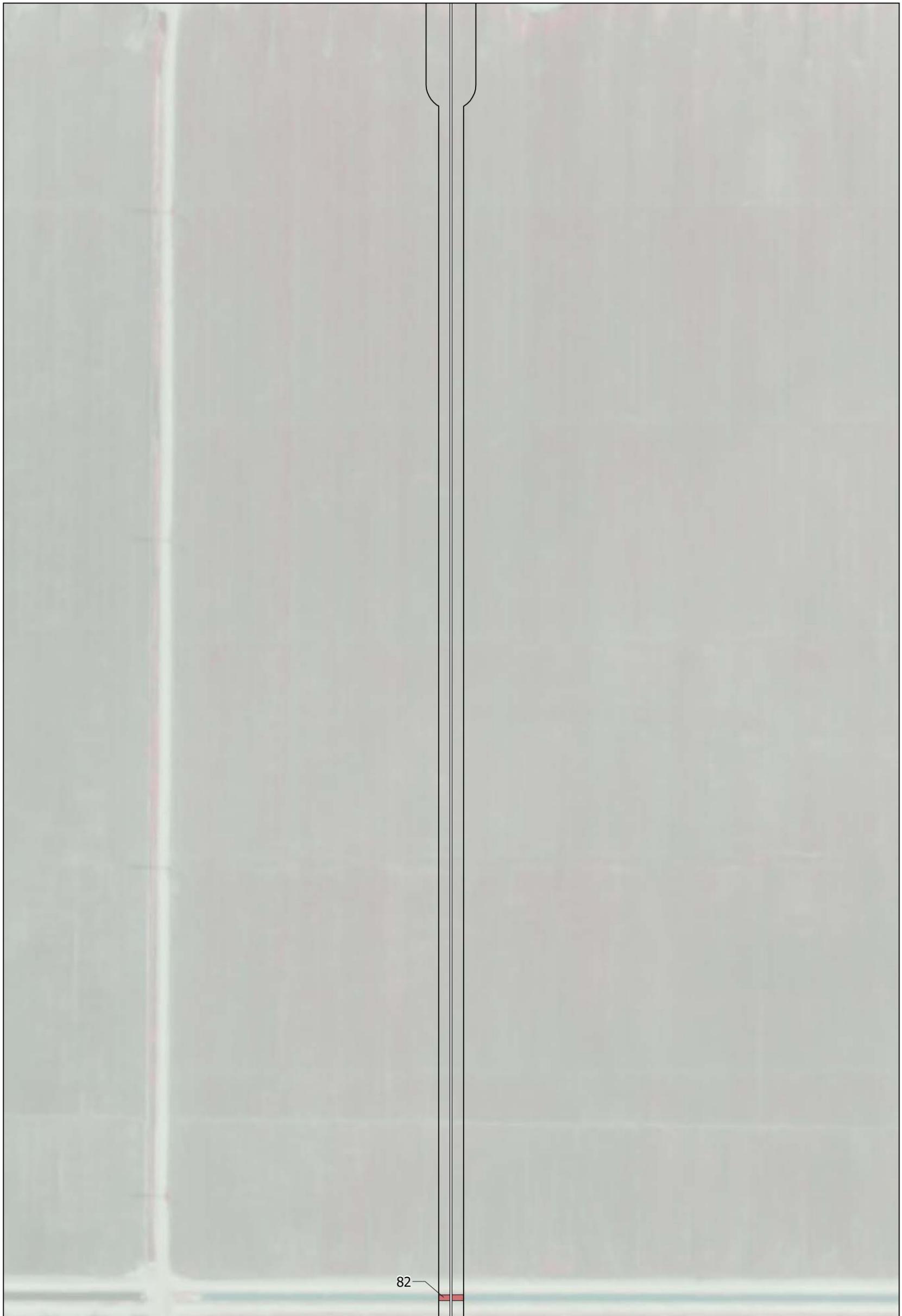
- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
 Sheet 91**

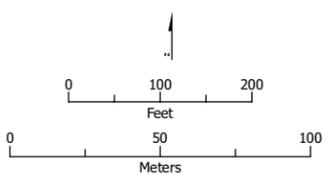
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 92**

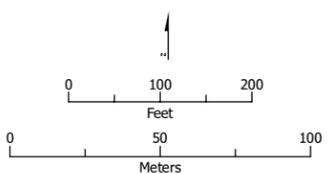
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 93**

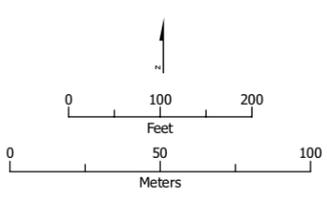
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

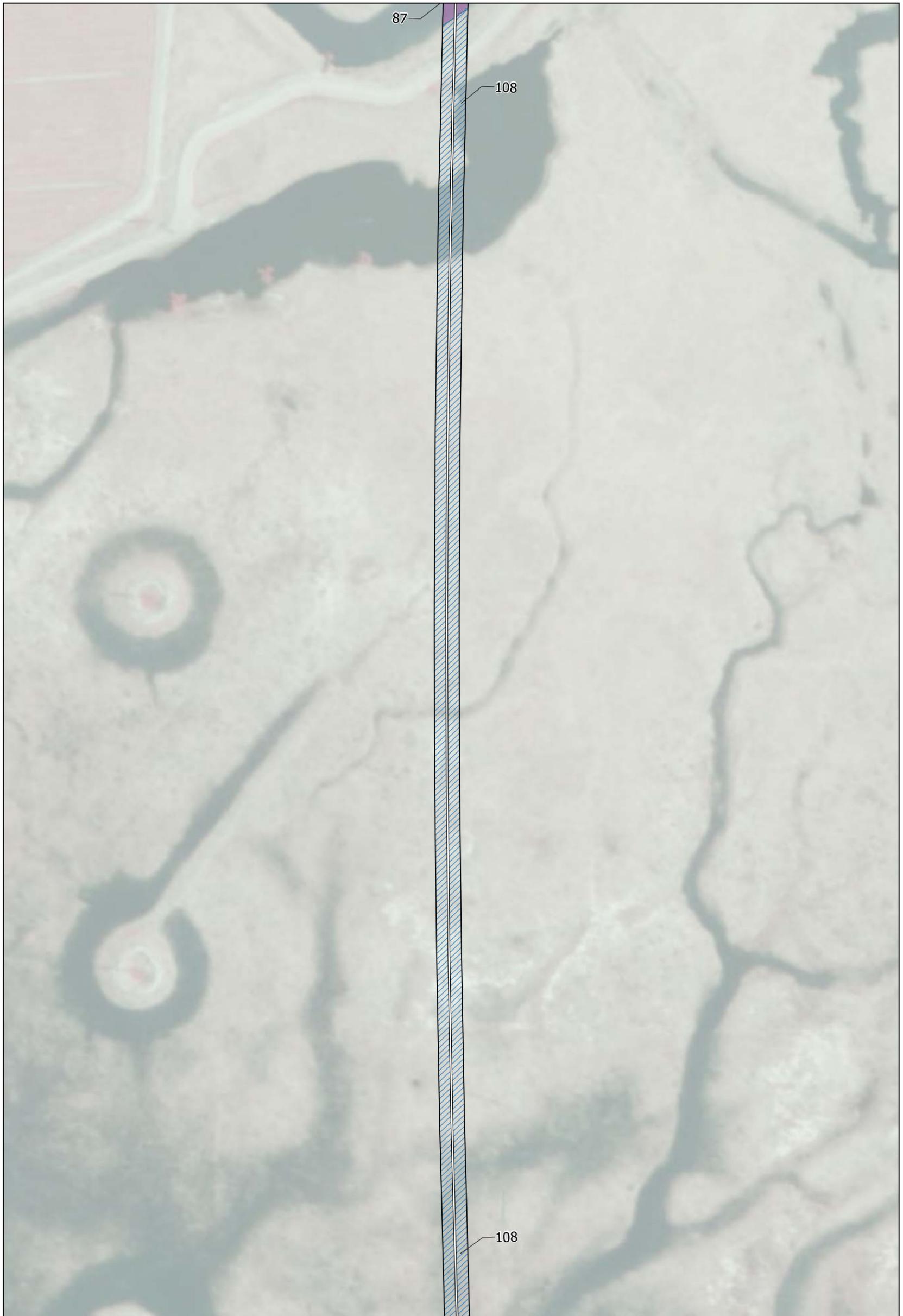


- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 94**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

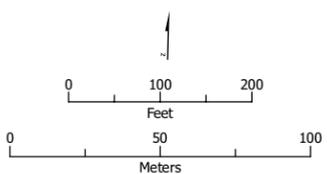
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

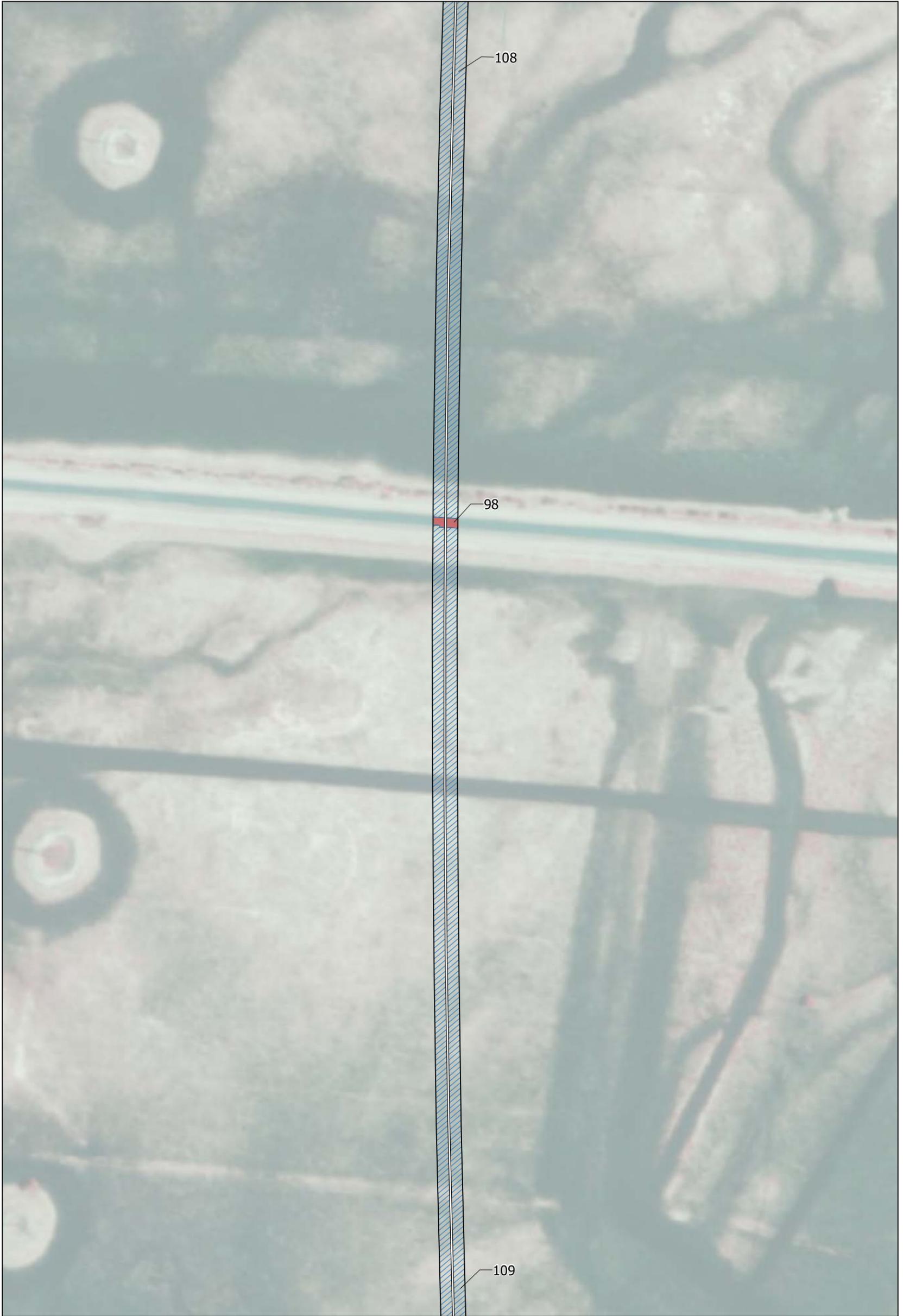
- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 95**

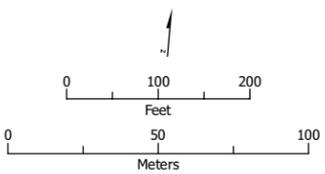
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



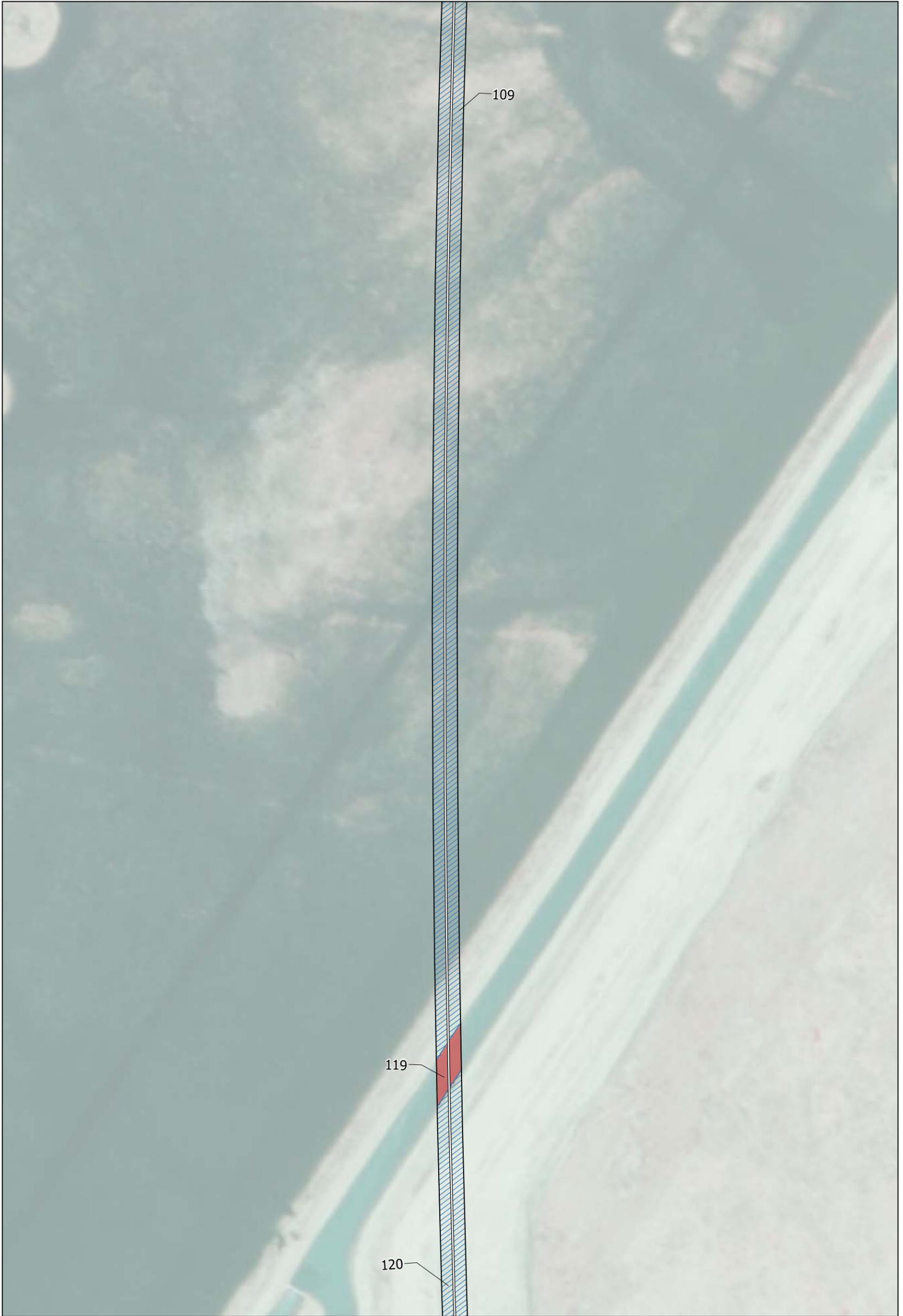
Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 96**

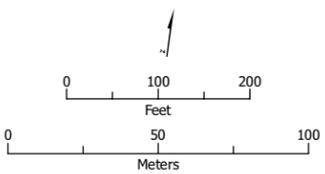
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



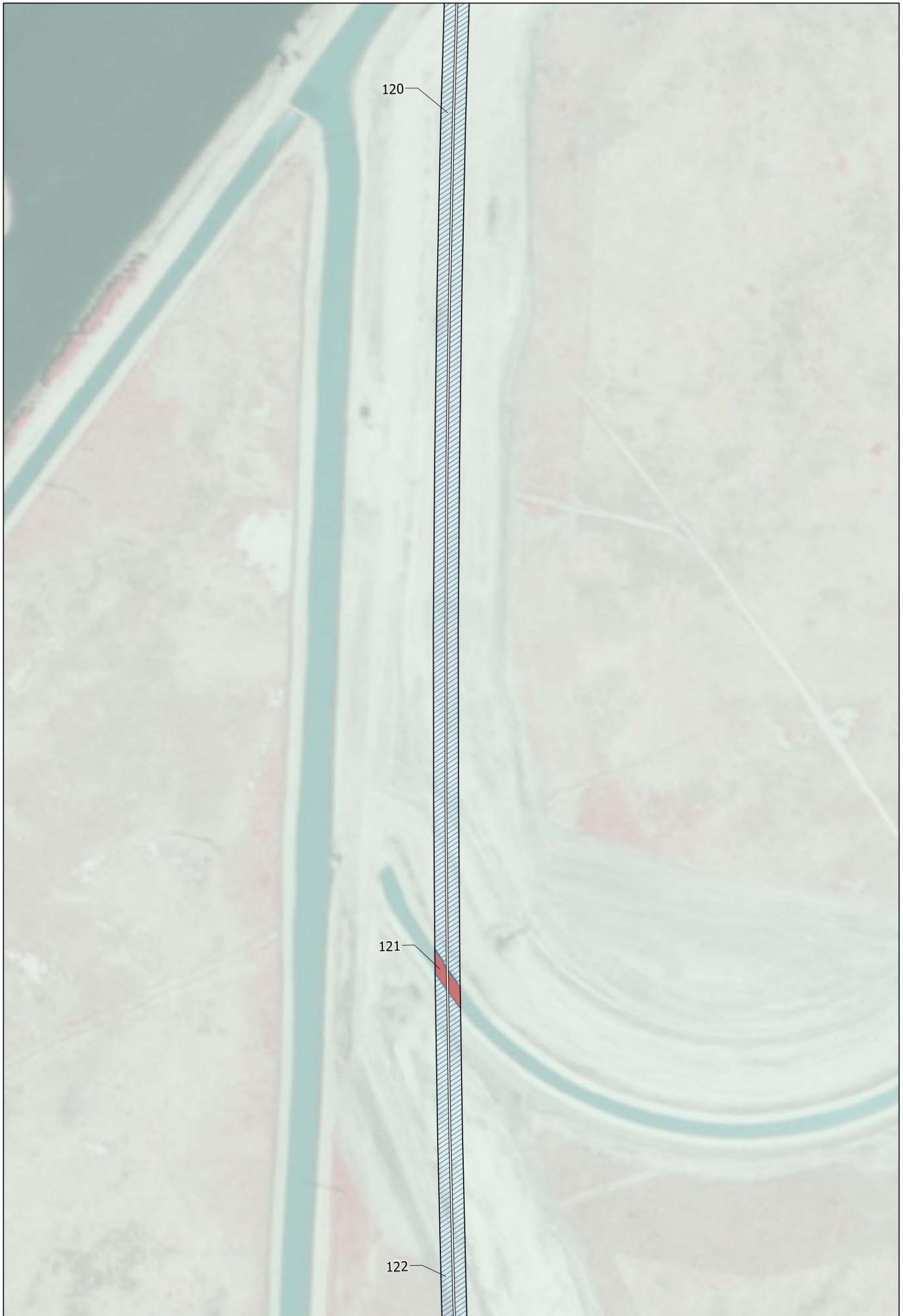
Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 97**

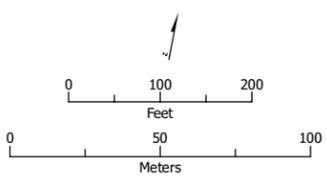
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

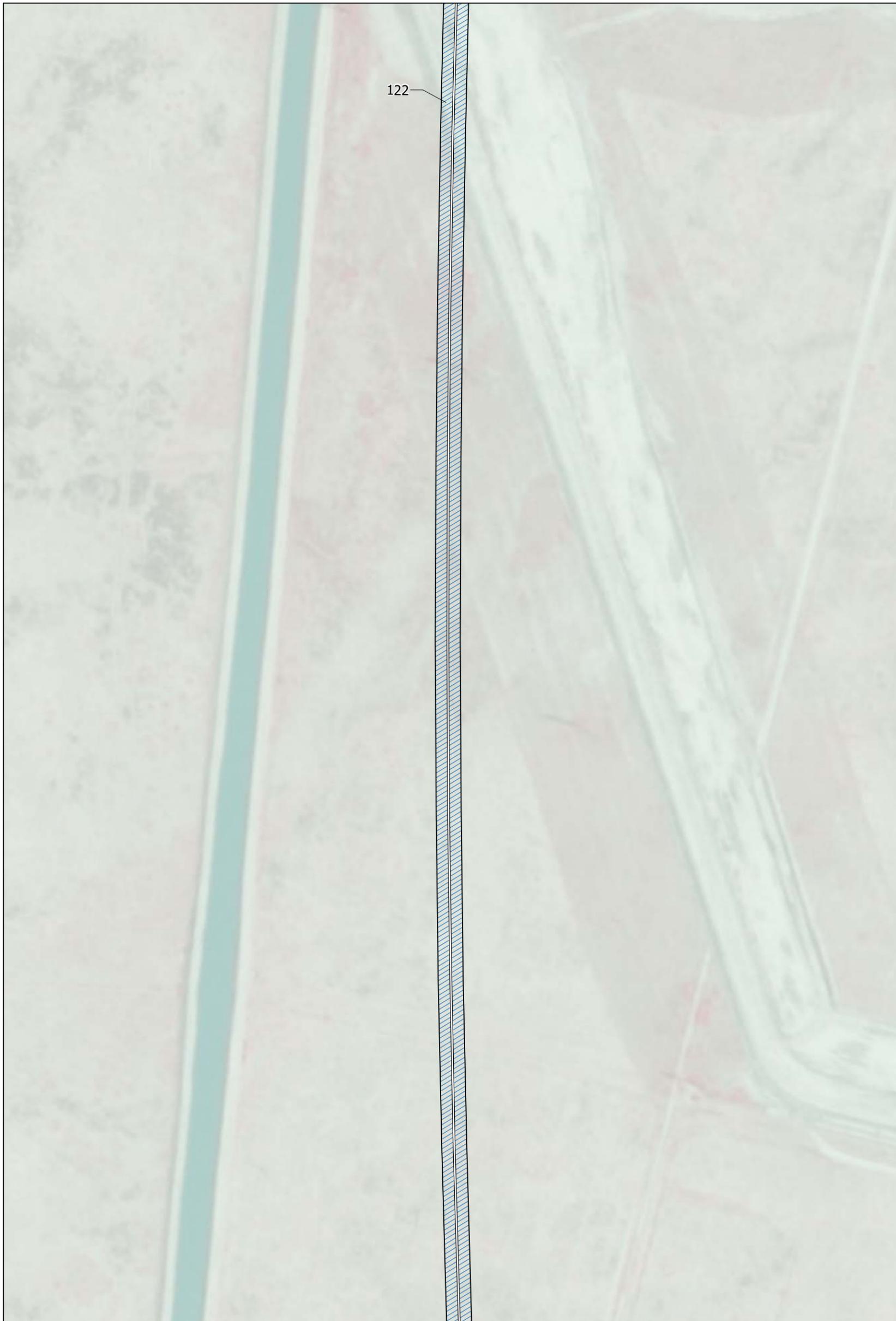


- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 98**

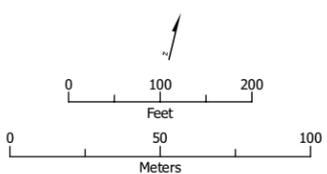
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 99**

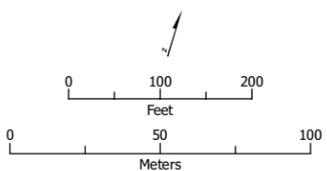
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 100**

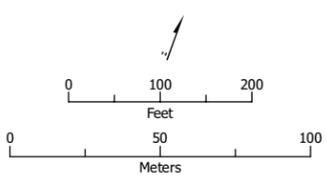
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 101**

Estimated special aquatic resources located within the BNSF alternative alignment area



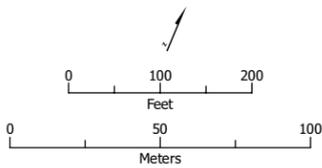
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 102**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

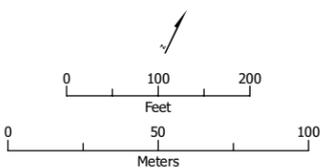
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 103**

Estimated special aquatic resources located within the BNSF alternative alignment area



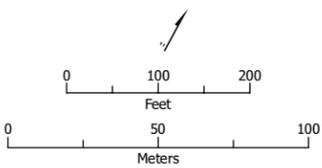
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 104**

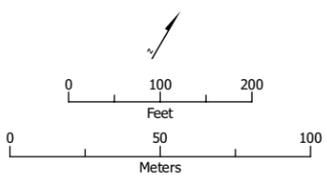
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 105**

Estimated special aquatic resources located within the BNSF alternative alignment area

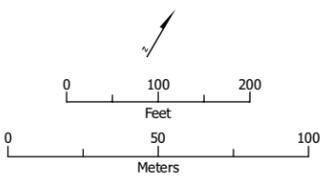


PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

December 17, 2010

**Appendix E-1a
Sheet 106**

Estimated special aquatic resources located within the BNSF alternative alignment area

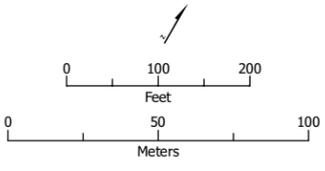


PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

November 29, 2010

**Appendix E-1a
Sheet 107**

Estimated special aquatic resources located within the BNSF alternative alignment area



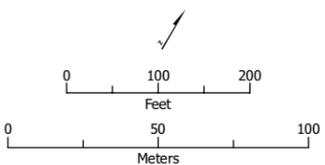
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 108**

Estimated special aquatic resources located within the BNSF alternative alignment area



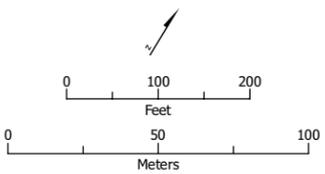
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

December 17, 2010



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 109**

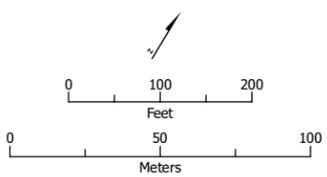
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 110**

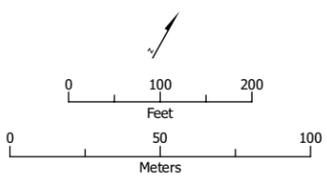
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

Appendix E-1a
Sheet 111
 Estimated special aquatic resources located within the BNSF alternative alignment area



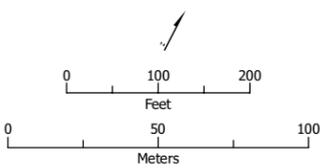
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 112**

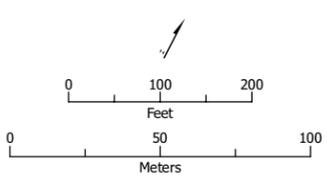
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 113**

Estimated special aquatic resources located within the BNSF alternative alignment area



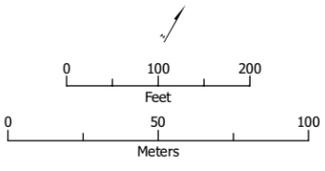
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

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- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 114**

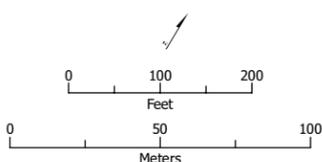
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 115**

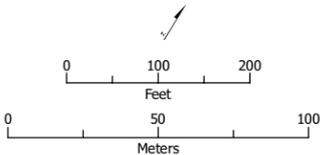
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 116**

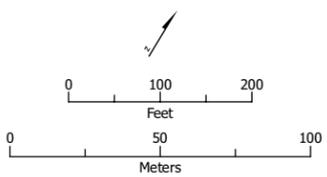
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 117**

Estimated special aquatic resources located within the BNSF alternative alignment area

RD 24



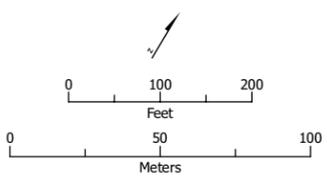
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
 Sheet 118**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

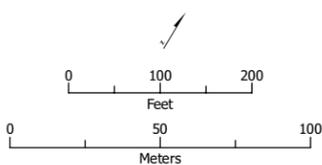
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 119**

Estimated special aquatic resources located within the BNSF alternative alignment area

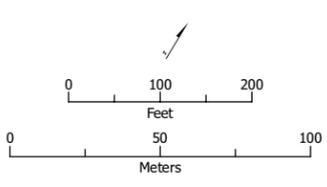


PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

Ref. 132

November 29, 2010

**Appendix E-1a
Sheet 120**

Estimated special aquatic resources located within the BNSF alternative alignment area



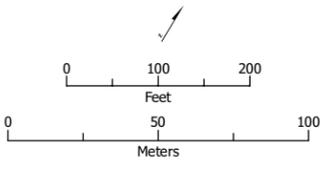
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 121**

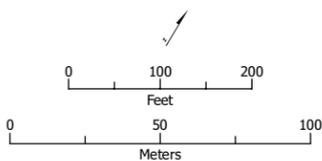
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 122**

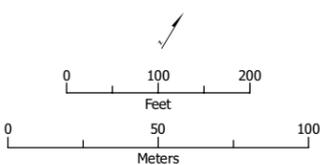
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 123**

Estimated special aquatic resources located within the BNSF alternative alignment area



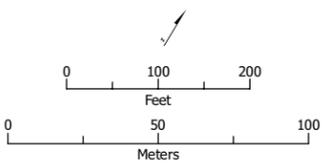
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 124**

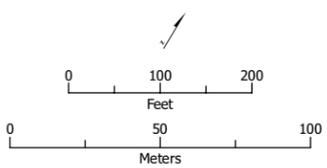
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 125**

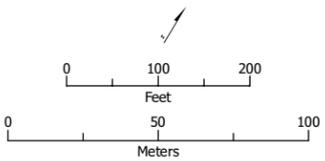
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 126**

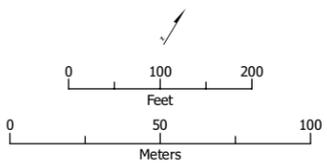
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



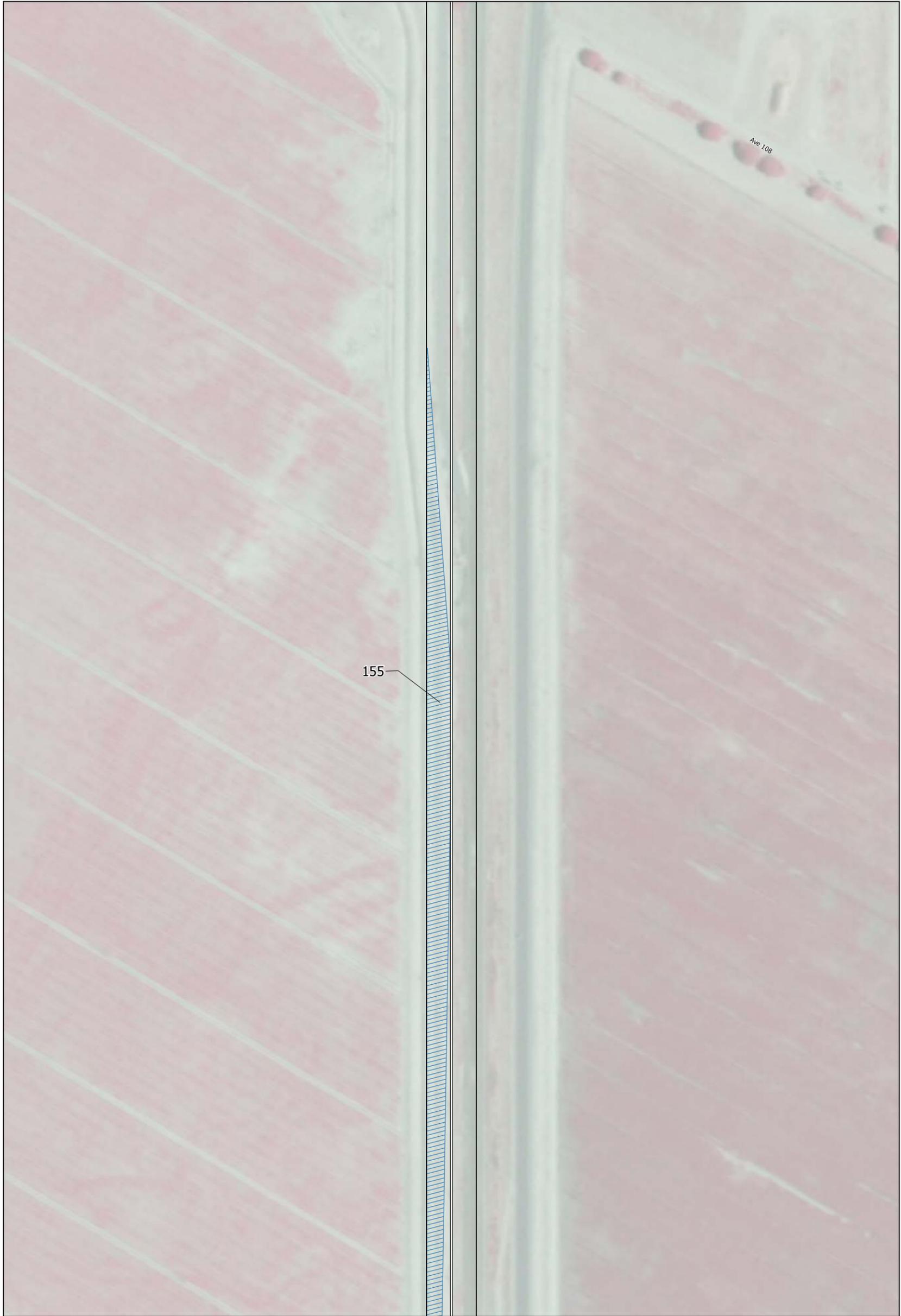
Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 127**

Estimated special aquatic resources located within the BNSF alternative alignment area



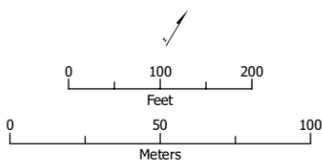
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 128**

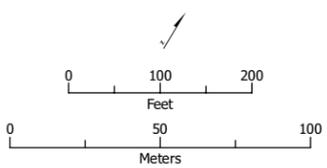
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 129**

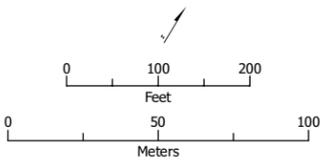
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 130**

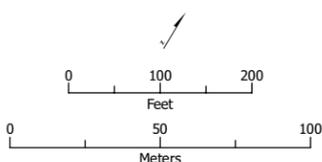
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 131**

Estimated special aquatic resources located within the BNSF alternative alignment area



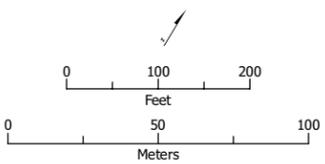
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 132**

Estimated special aquatic resources located within the BNSF alternative alignment area



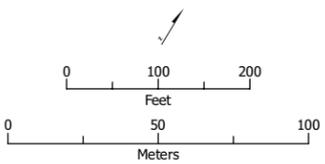
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 133**

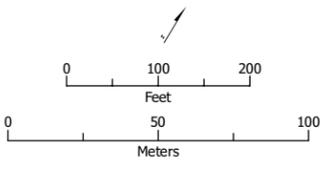
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

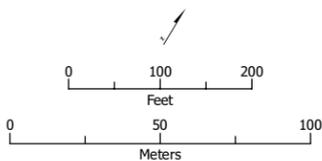
Appendix E-1a
Sheet 134
 Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 135**

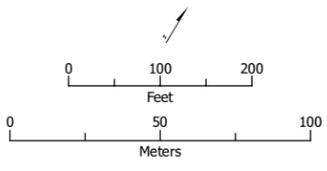
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 136**

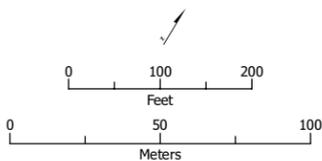
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 137**

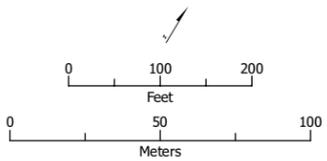
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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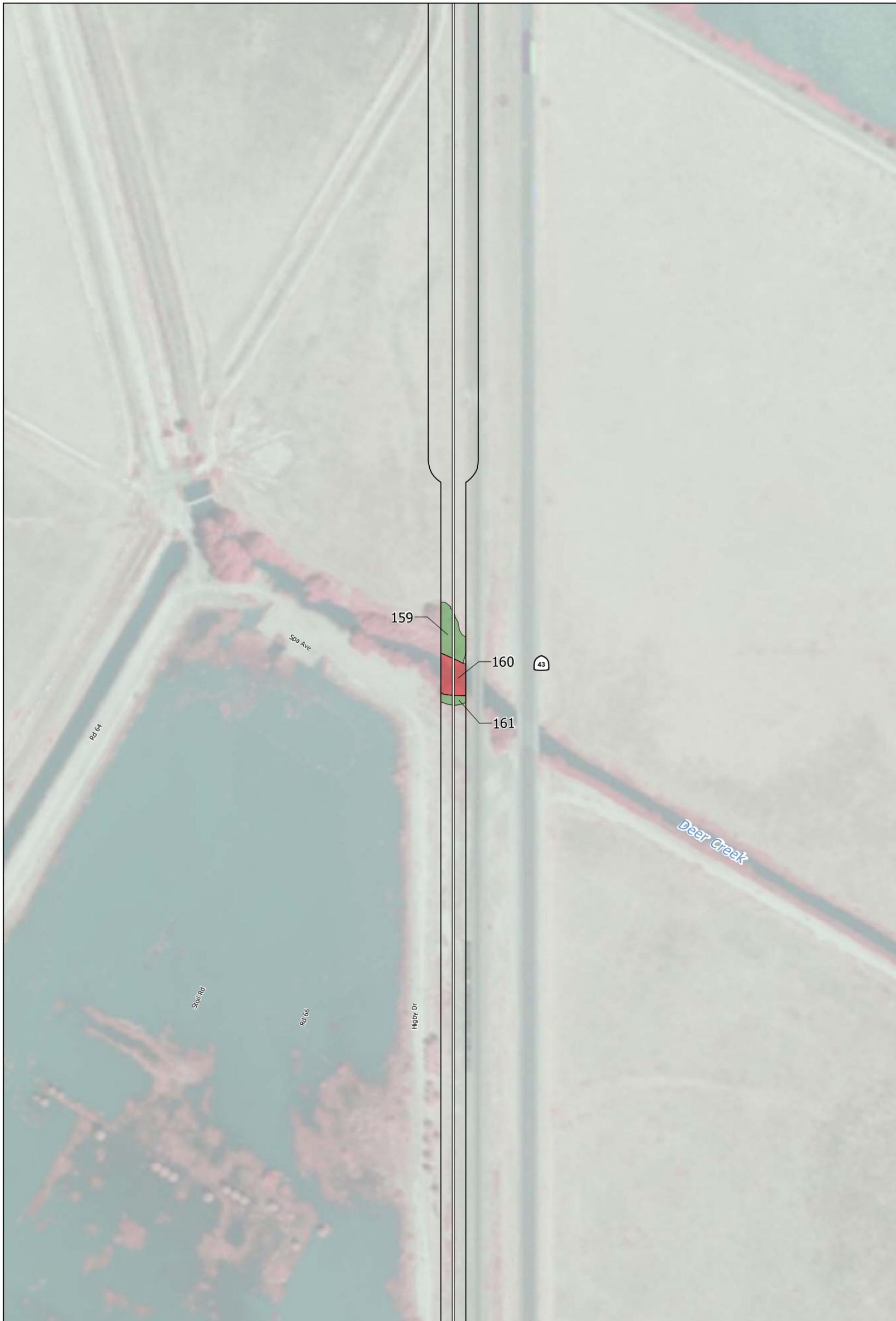
Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 138**

Estimated special aquatic resources located within the BNSF alternative alignment area



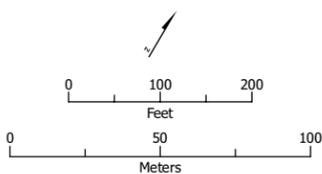
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

December 17, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 139**

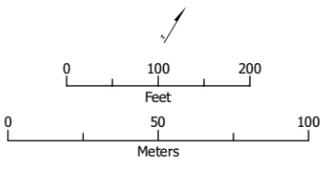
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 140**

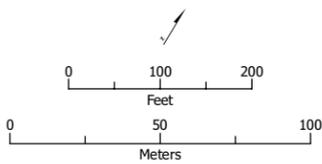
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 141**

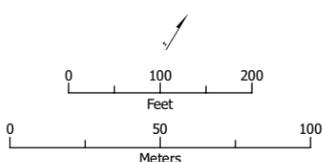
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 142**

Estimated special aquatic resources located within the BNSF alternative alignment area



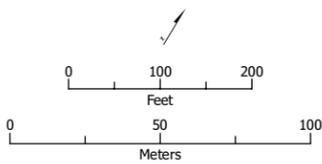
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 143**

Estimated special aquatic resources located within the BNSF alternative alignment area



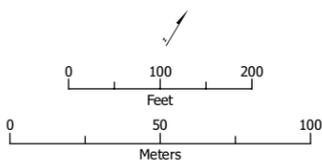
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 144**

Estimated special aquatic resources located within the BNSF alternative alignment area



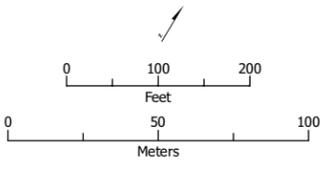
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

Appendix E-1a Sheet 145

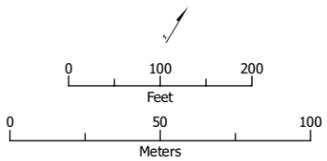
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 146**

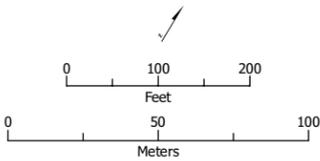
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

Appendix E-1a Sheet 147

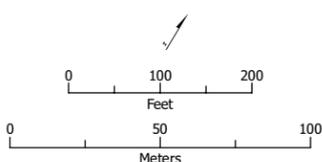
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 148**

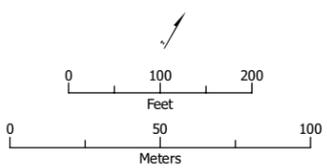
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 149**

Estimated special aquatic resources located within the BNSF alternative alignment area



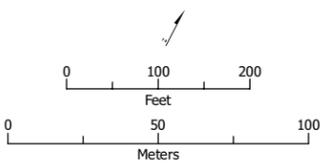
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 150**

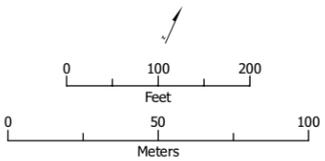
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 151**

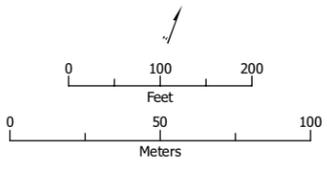
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
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- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 152**

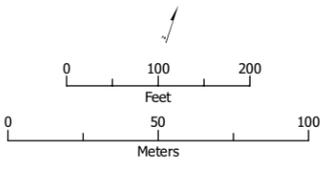
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
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- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 153**

Estimated special aquatic resources located within the BNSF alternative alignment area



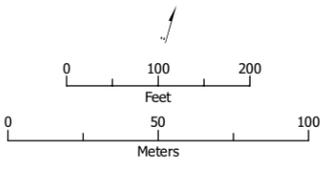
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

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- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 154**

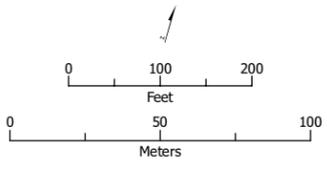
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

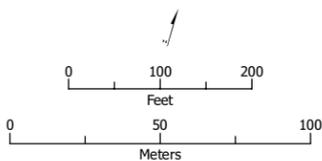
- BNSF alternative
- BNSF corridor study area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



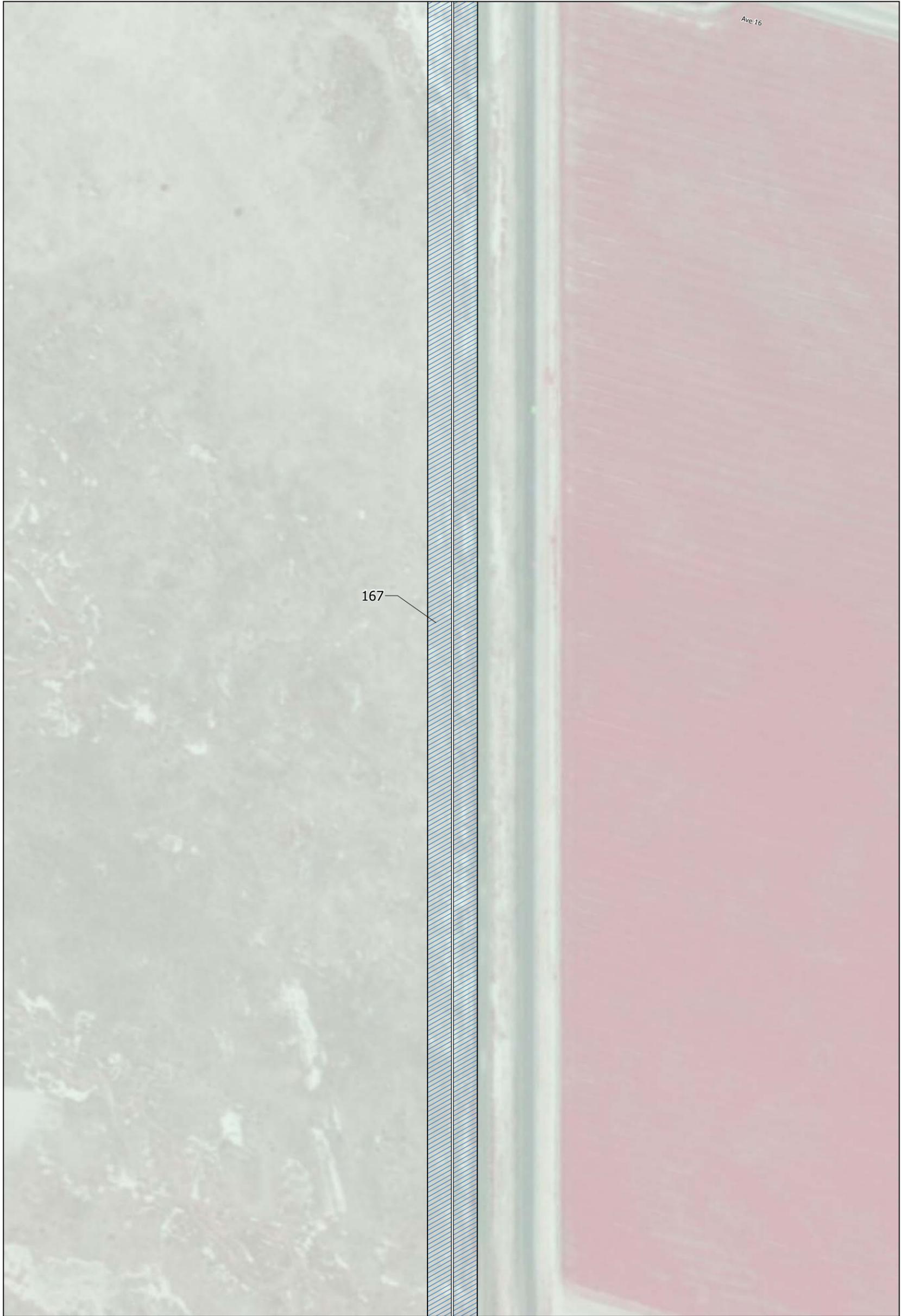
Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 156**

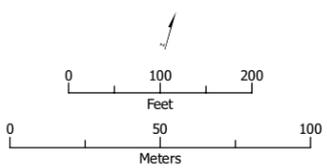
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 157**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

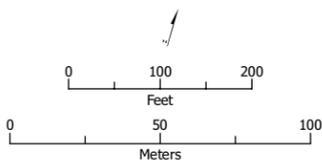
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

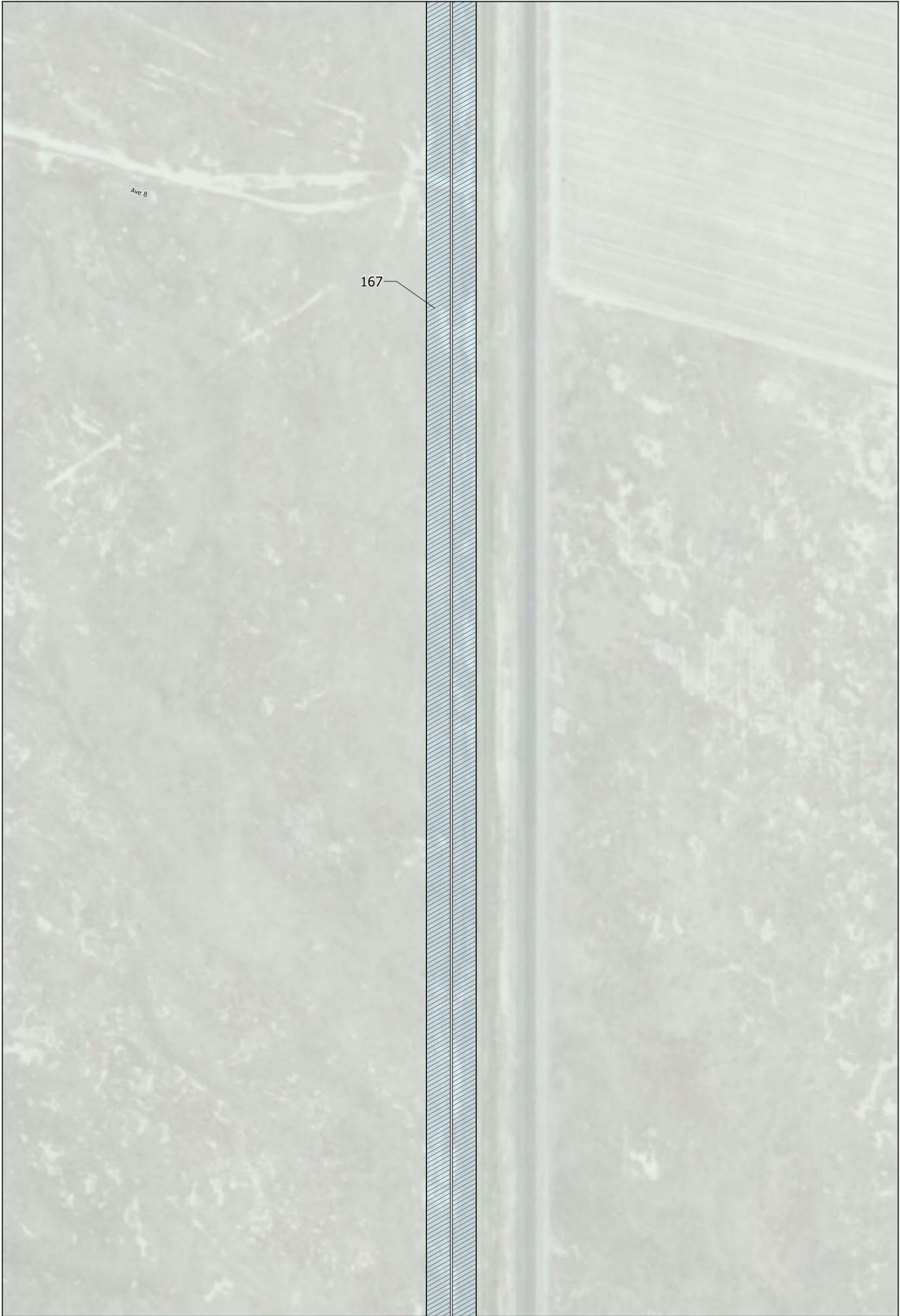
- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 158**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

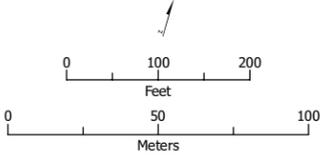
November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



Appendix E-1a Sheet 159

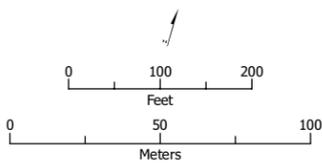
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 160**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

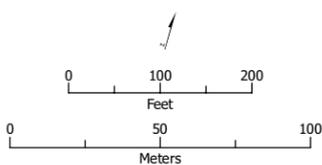
November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
 Sheet 161**

Estimated special aquatic resources located within the BNSF alternative alignment area



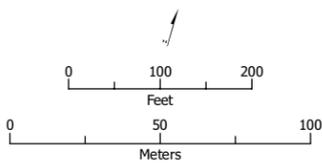
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 162**

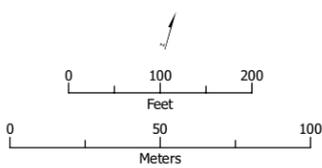
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 163**

Estimated special aquatic resources located within the BNSF alternative alignment area



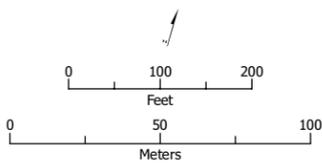
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 164**

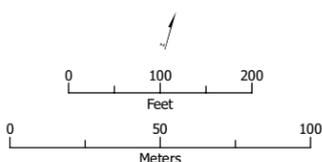
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 165**

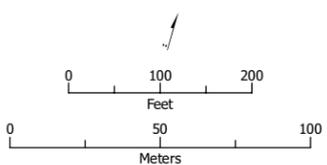
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 166**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

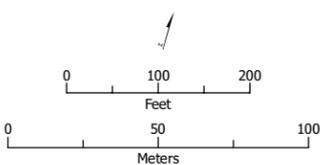
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 167**

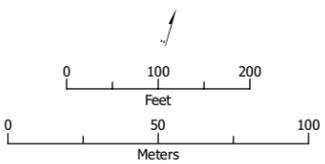
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 168**

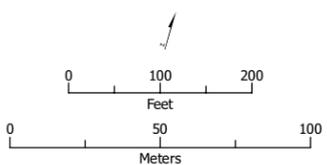
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 169**

Estimated special aquatic resources located within the BNSF alternative alignment area



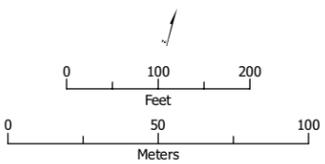
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



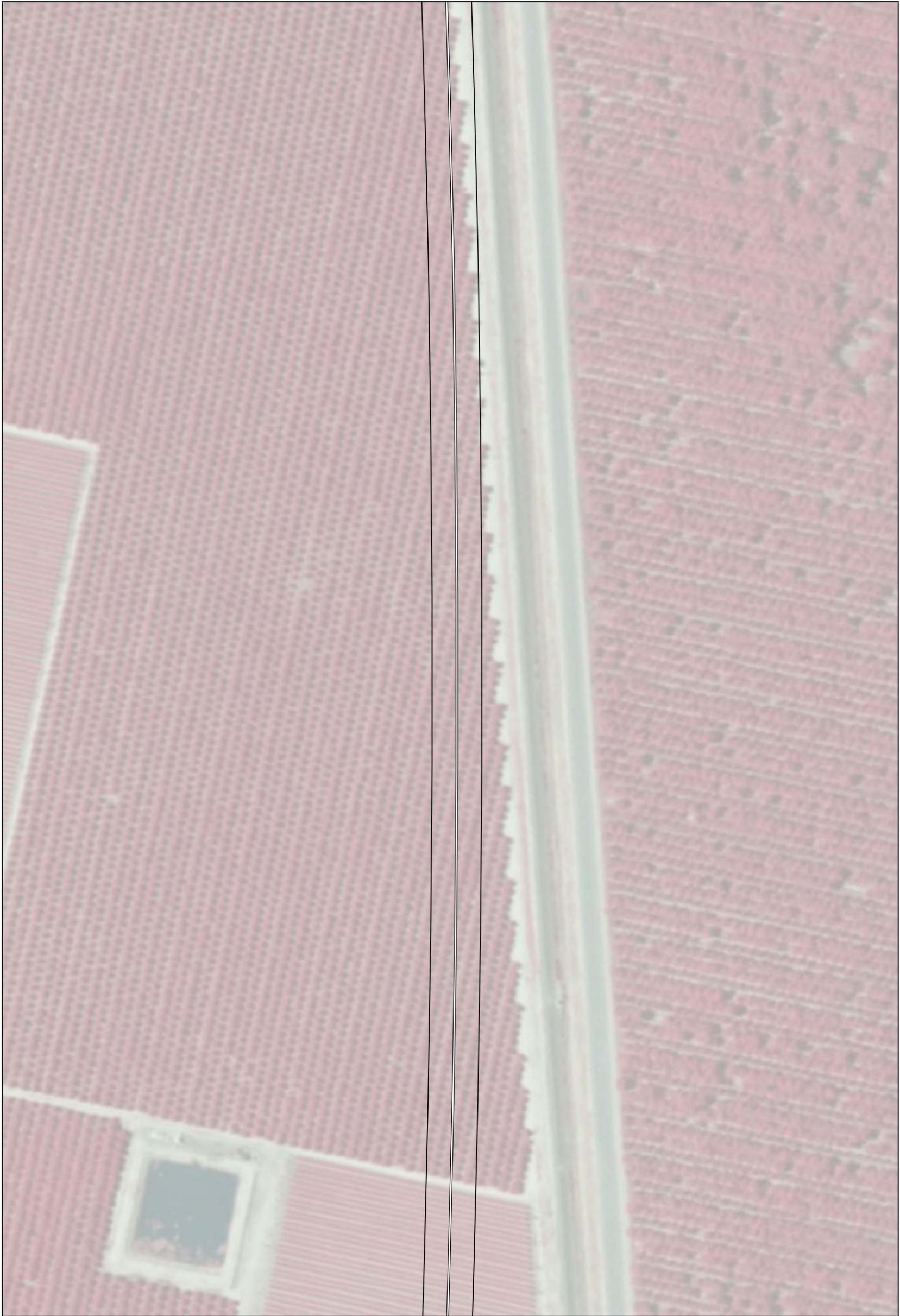
Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 170**

Estimated special aquatic resources located within the BNSF alternative alignment area



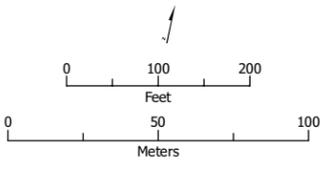
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 171**

Estimated special aquatic resources located within the BNSF alternative alignment area



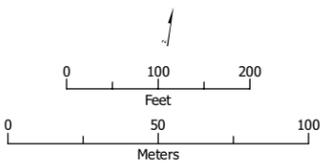
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 172**

Estimated special aquatic resources located within the BNSF alternative alignment area



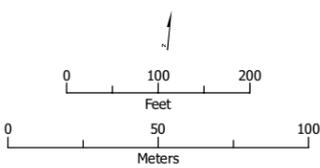
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 173**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

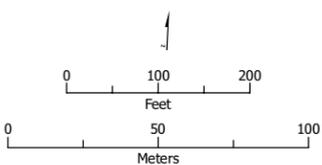
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 174**

Estimated special aquatic resources located within the BNSF alternative alignment area



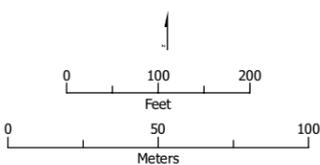
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



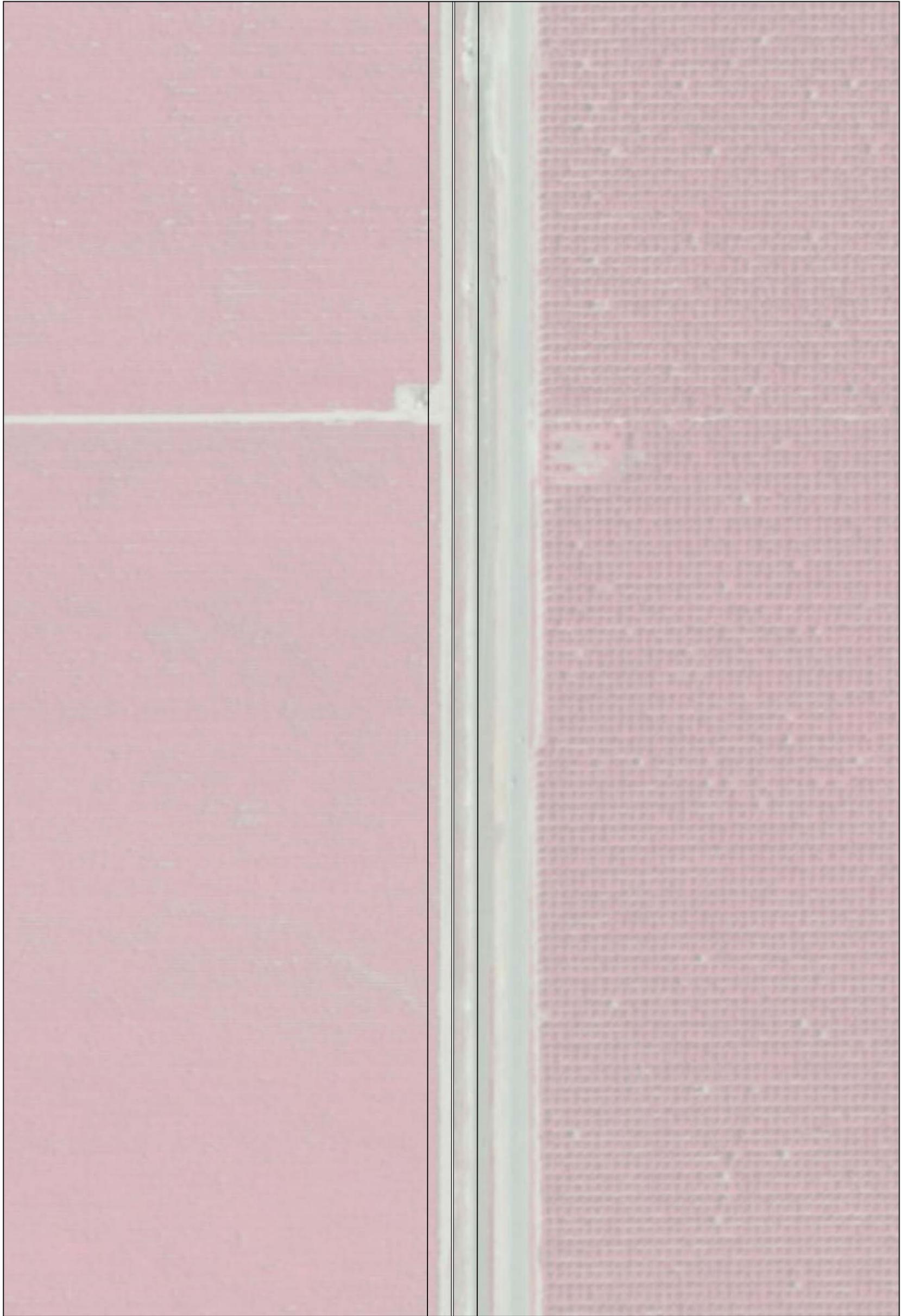
Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 175**

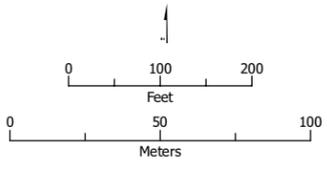
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

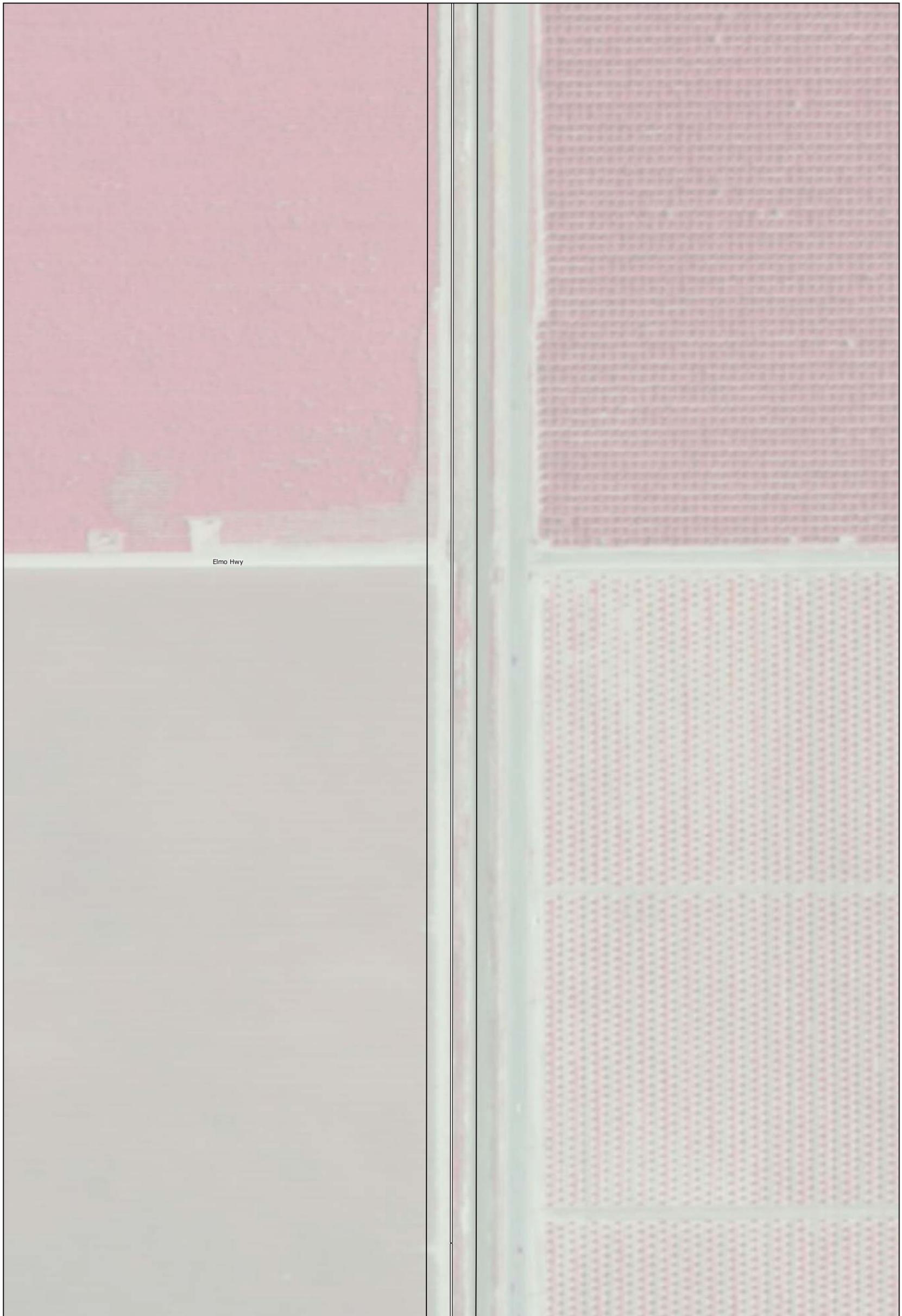
November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

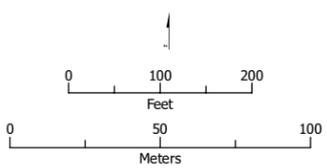
- BNSF alternative
- BNSF corridor study area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
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Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 177**

Estimated special aquatic resources located within the BNSF alternative alignment area



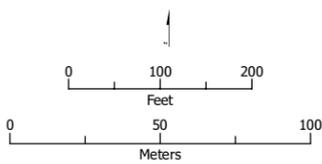
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 178**

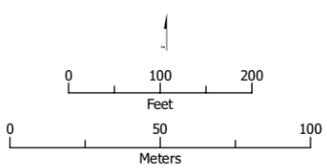
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- █ Canal/Ditch
- █ Retention/Detention basin
- █ Riparian
- █ Riverine
- █ Seasonal wetland
- █ Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 179**

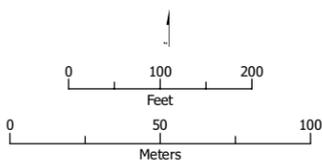
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



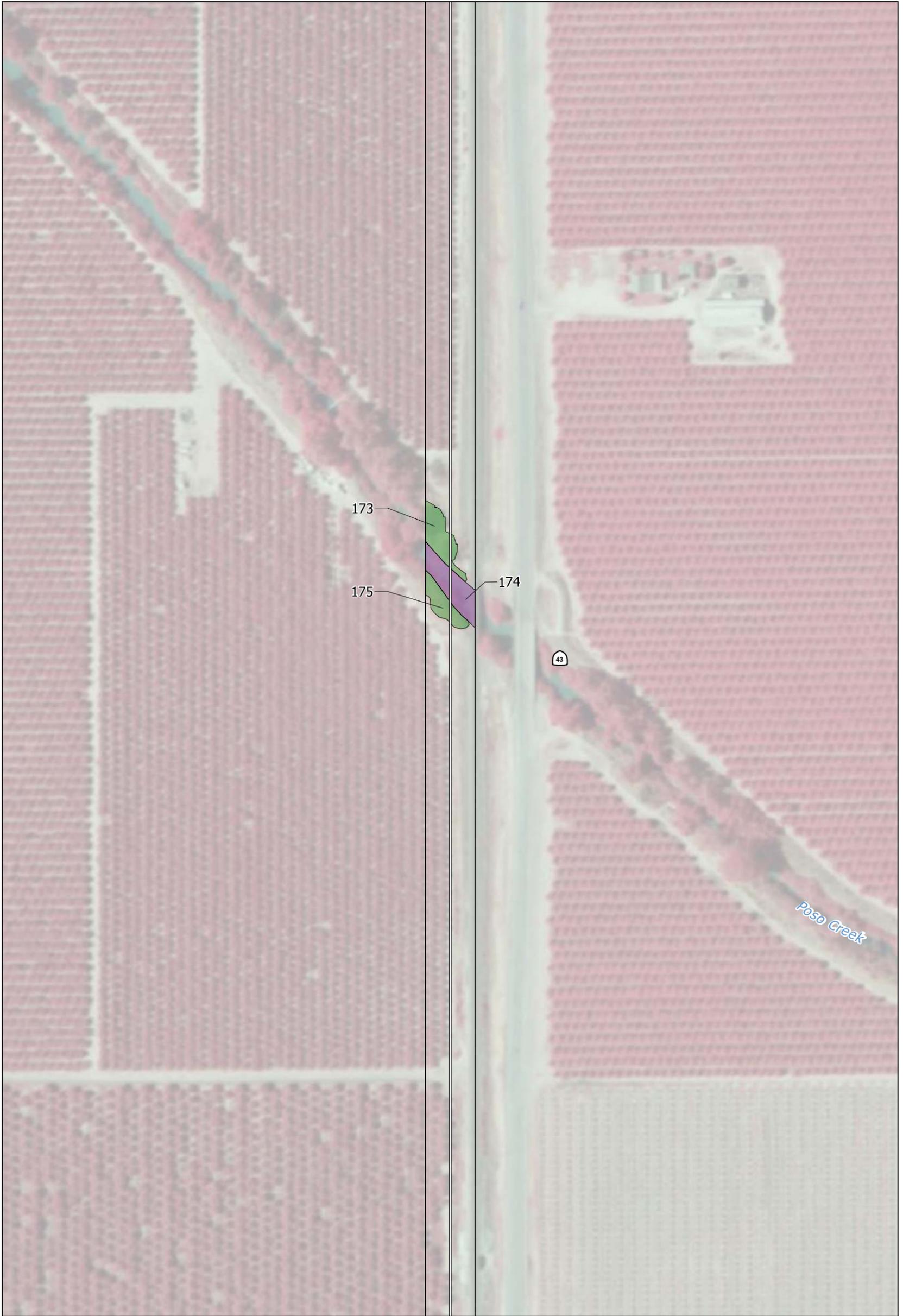
Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 180**

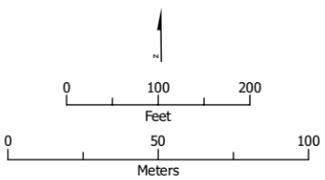
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 181**

Estimated special aquatic resources located within the BNSF alternative alignment area



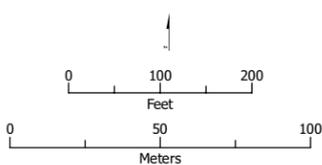
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



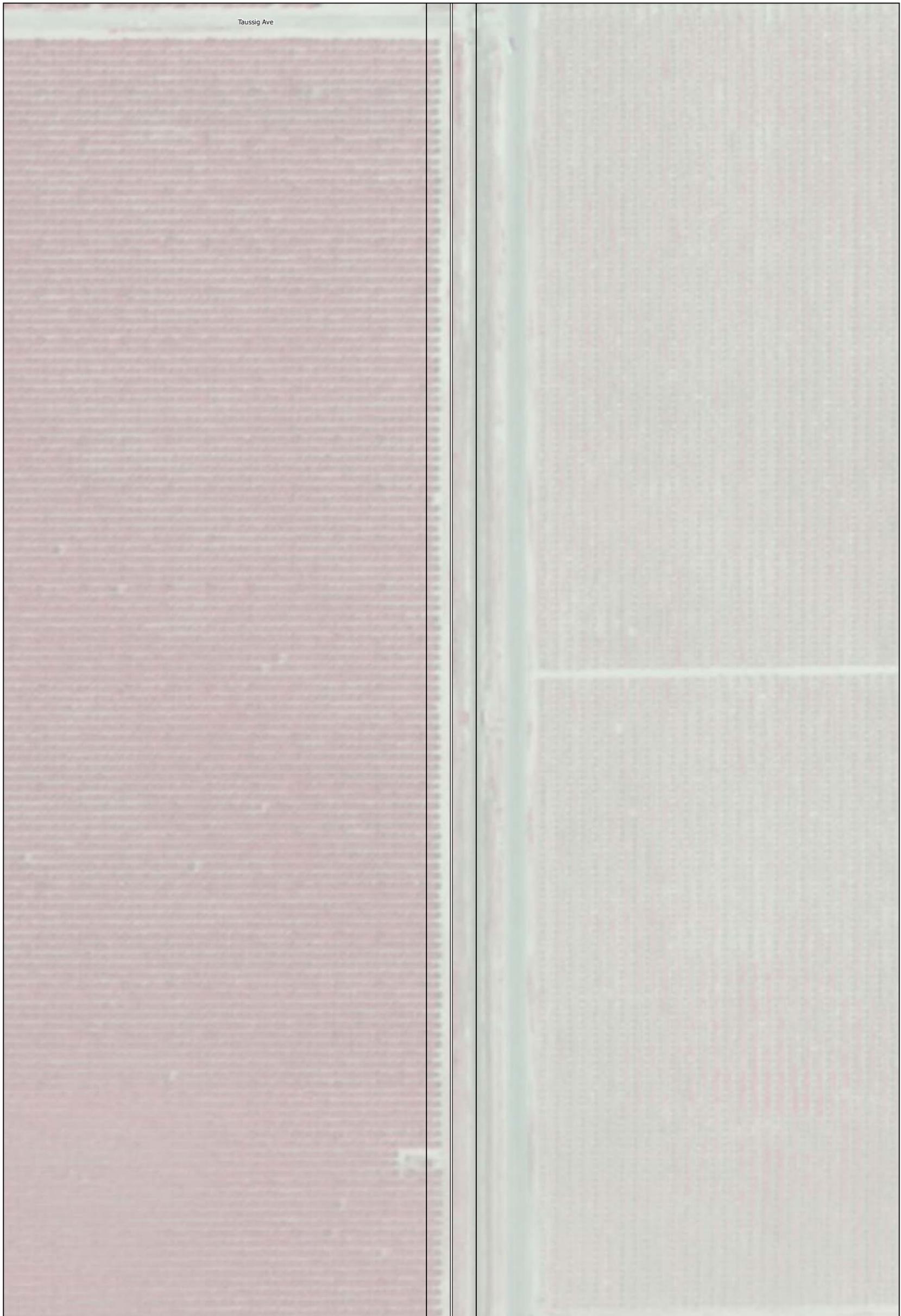
Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 182**

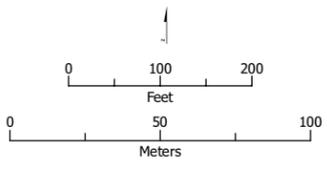
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 183**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

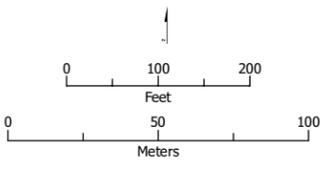
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

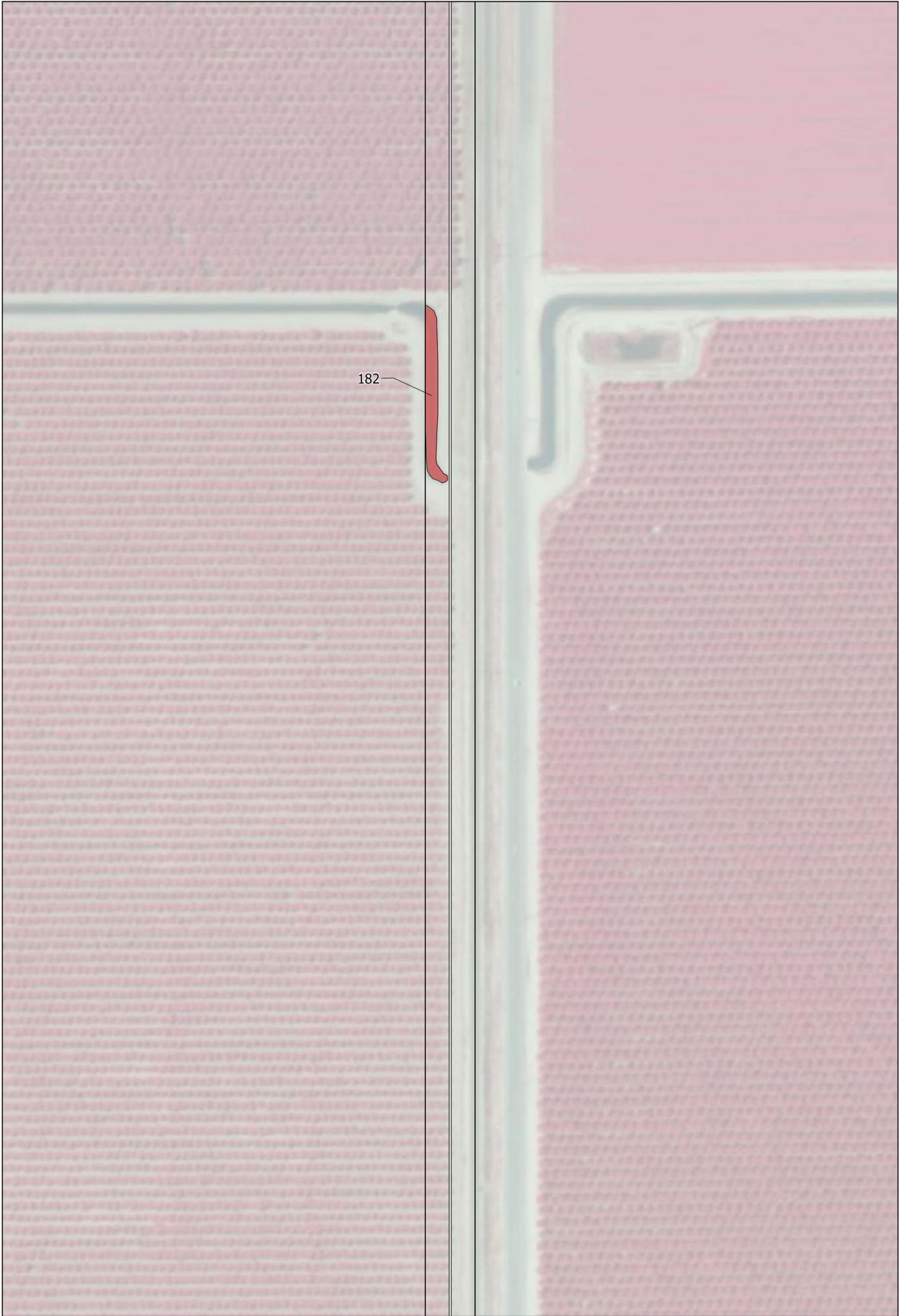
- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



Appendix E-1a Sheet 184

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

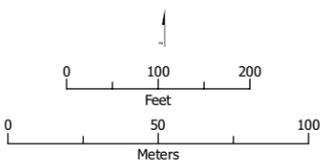
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

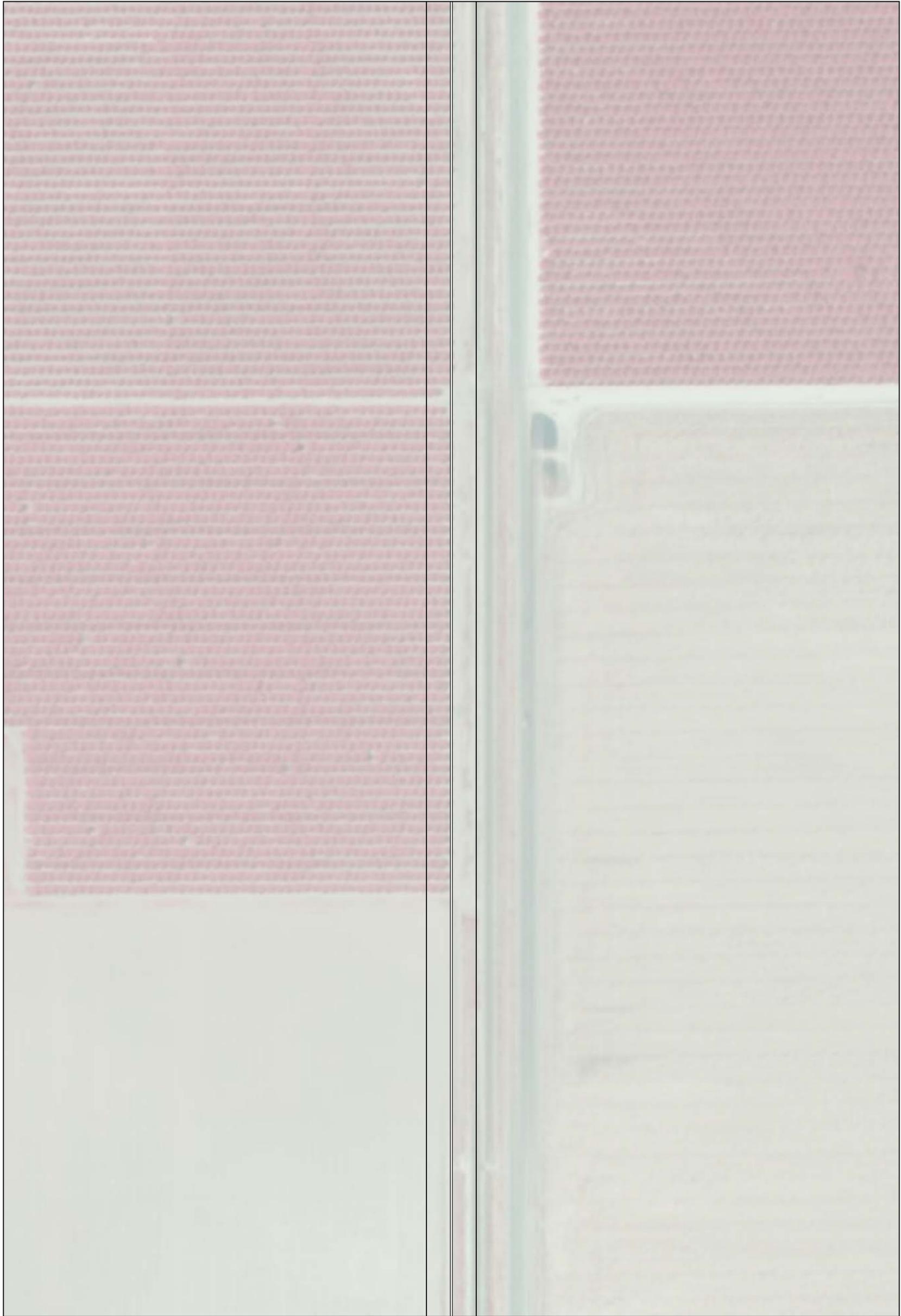
- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 185**

Estimated special aquatic resources located within the BNSF alternative alignment area



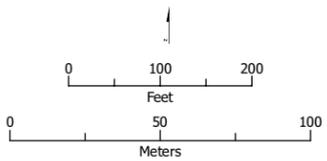
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 186**

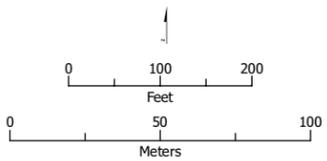
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



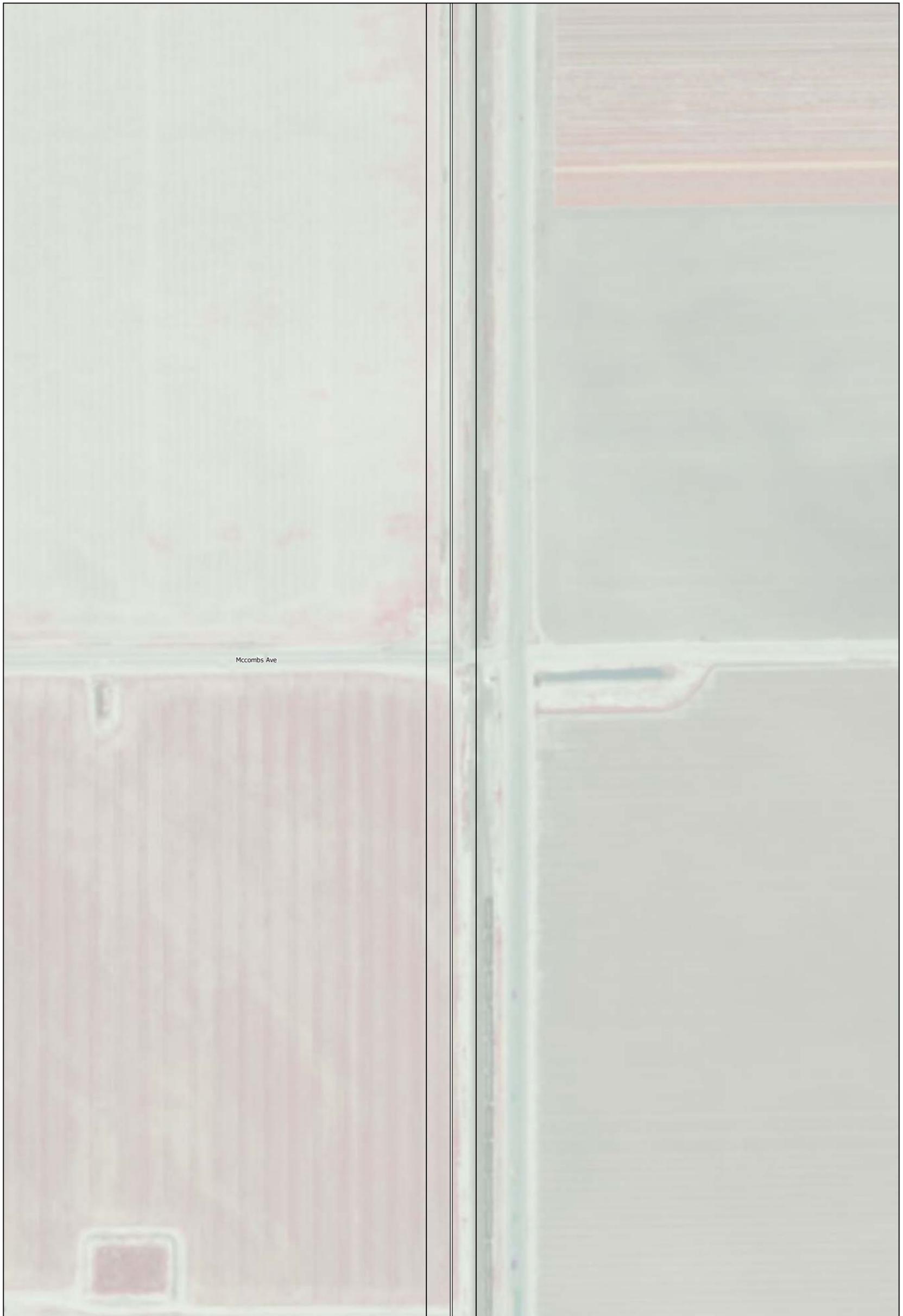
Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 187**

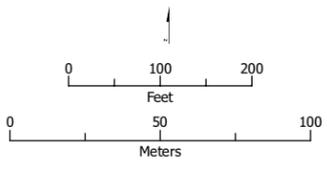
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 188**

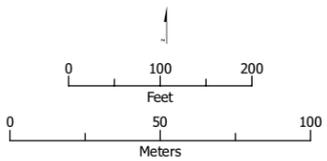
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 189**

Estimated special aquatic resources located within the BNSF alternative alignment area



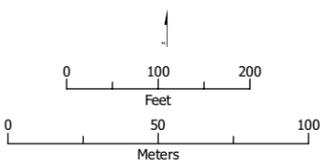
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 190**

Estimated special aquatic resources located within the BNSF alternative alignment area



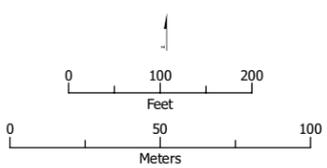
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 191**

Estimated special aquatic resources located within the BNSF alternative alignment area



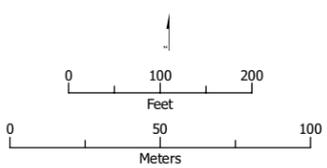
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

Appendix E-1a Sheet 192

Estimated special aquatic resources located within the BNSF alternative alignment area

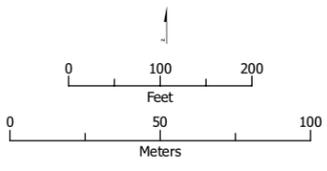


PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 193**

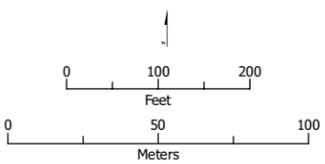
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 194**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

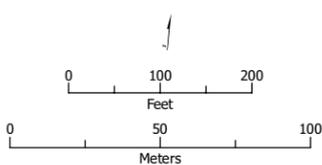
November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



Appendix E-1a Sheet 195

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

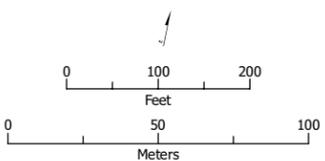
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 196**

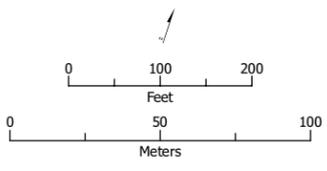
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 197**

Estimated special aquatic resources located within the BNSF alternative alignment area



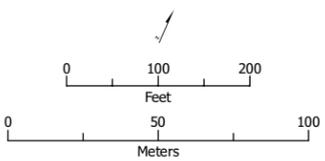
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 198**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

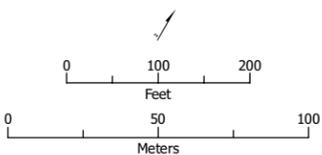
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

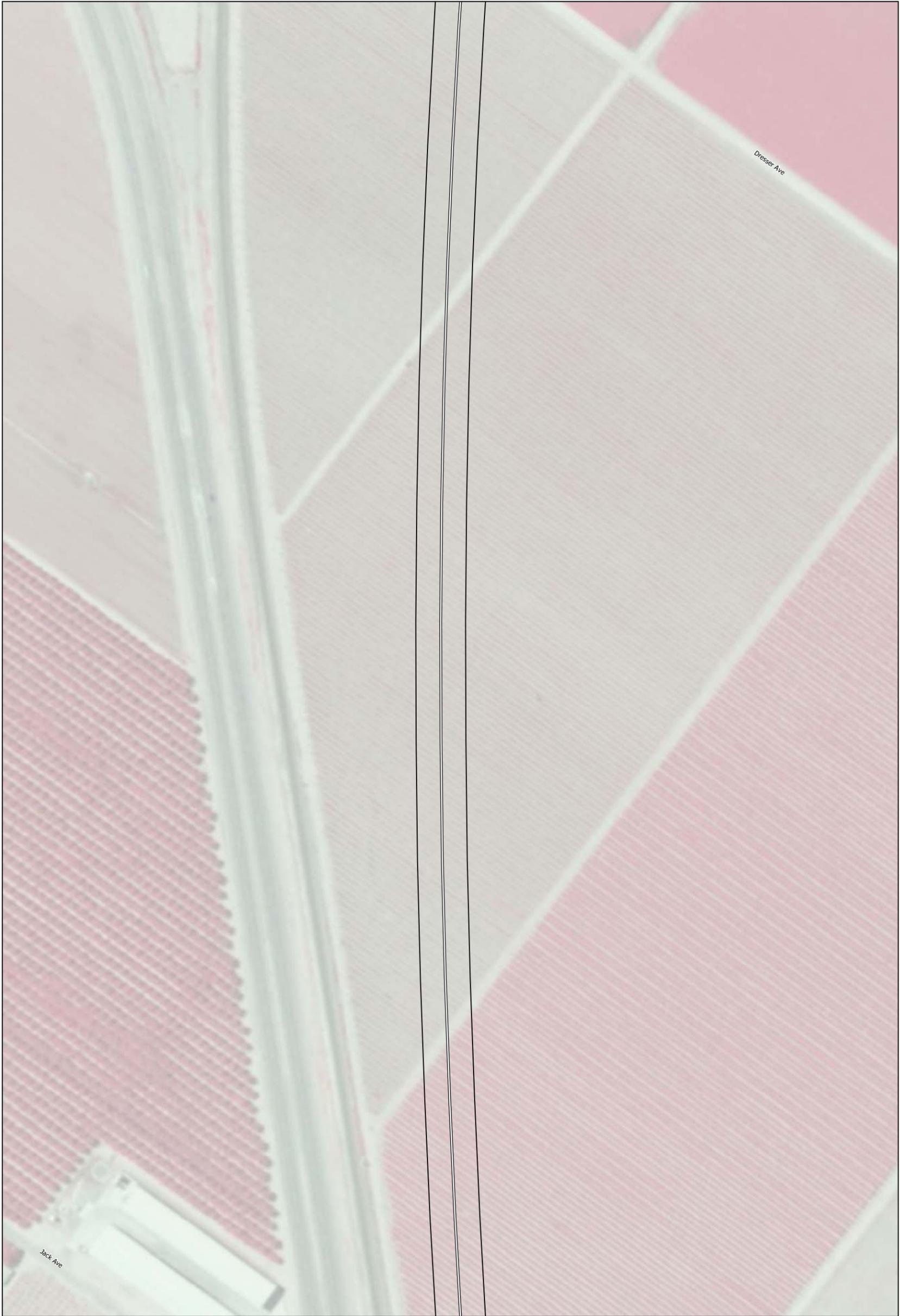
- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 199**

Estimated special aquatic resources located within the BNSF alternative alignment area



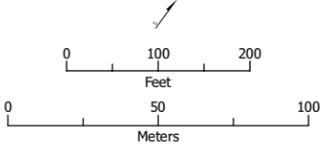
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 200**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

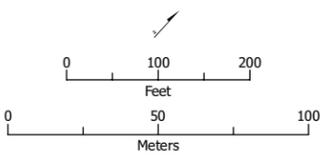
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

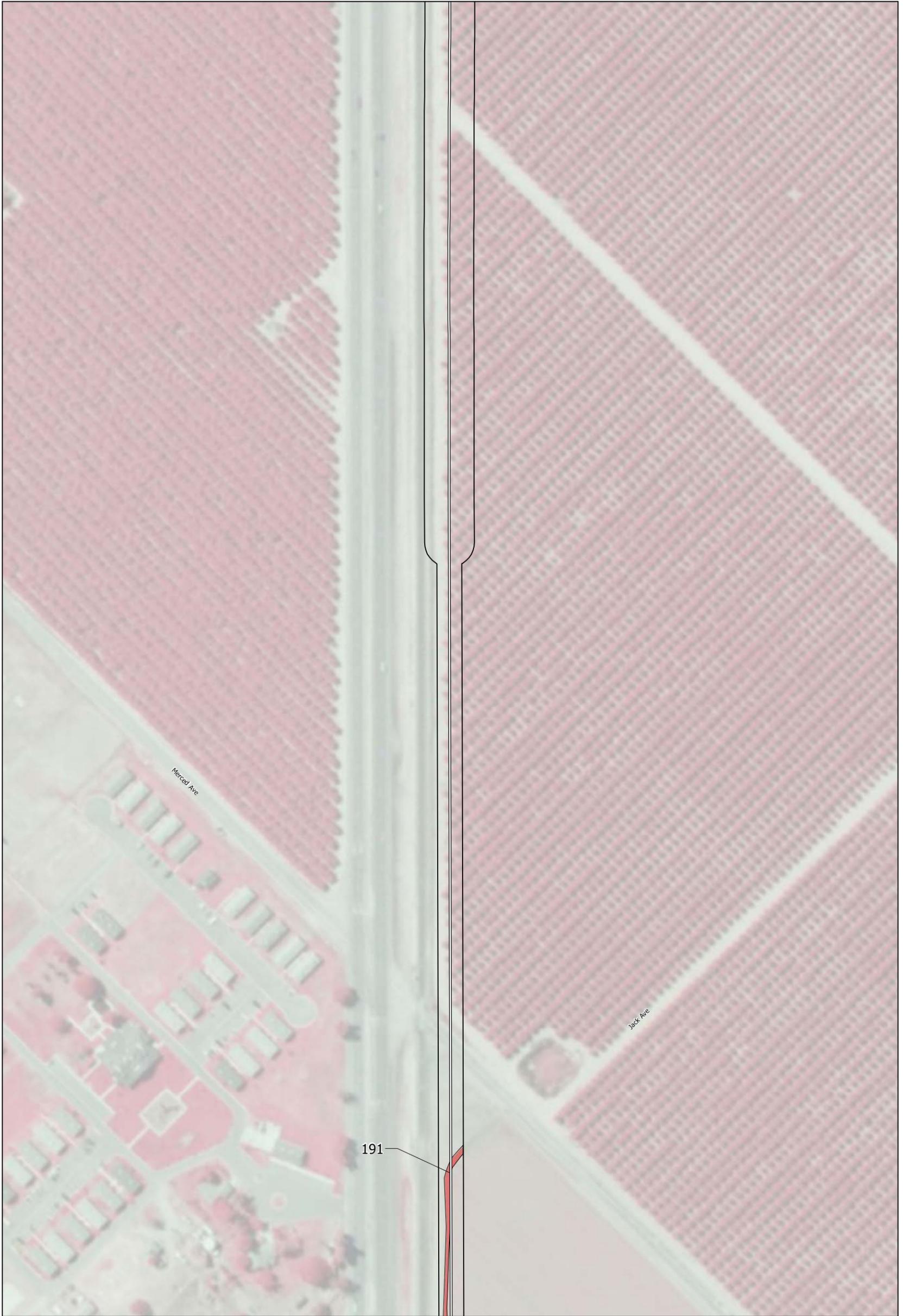
- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 201**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

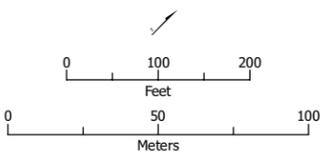
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 202**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

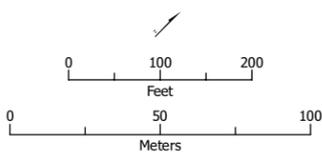
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

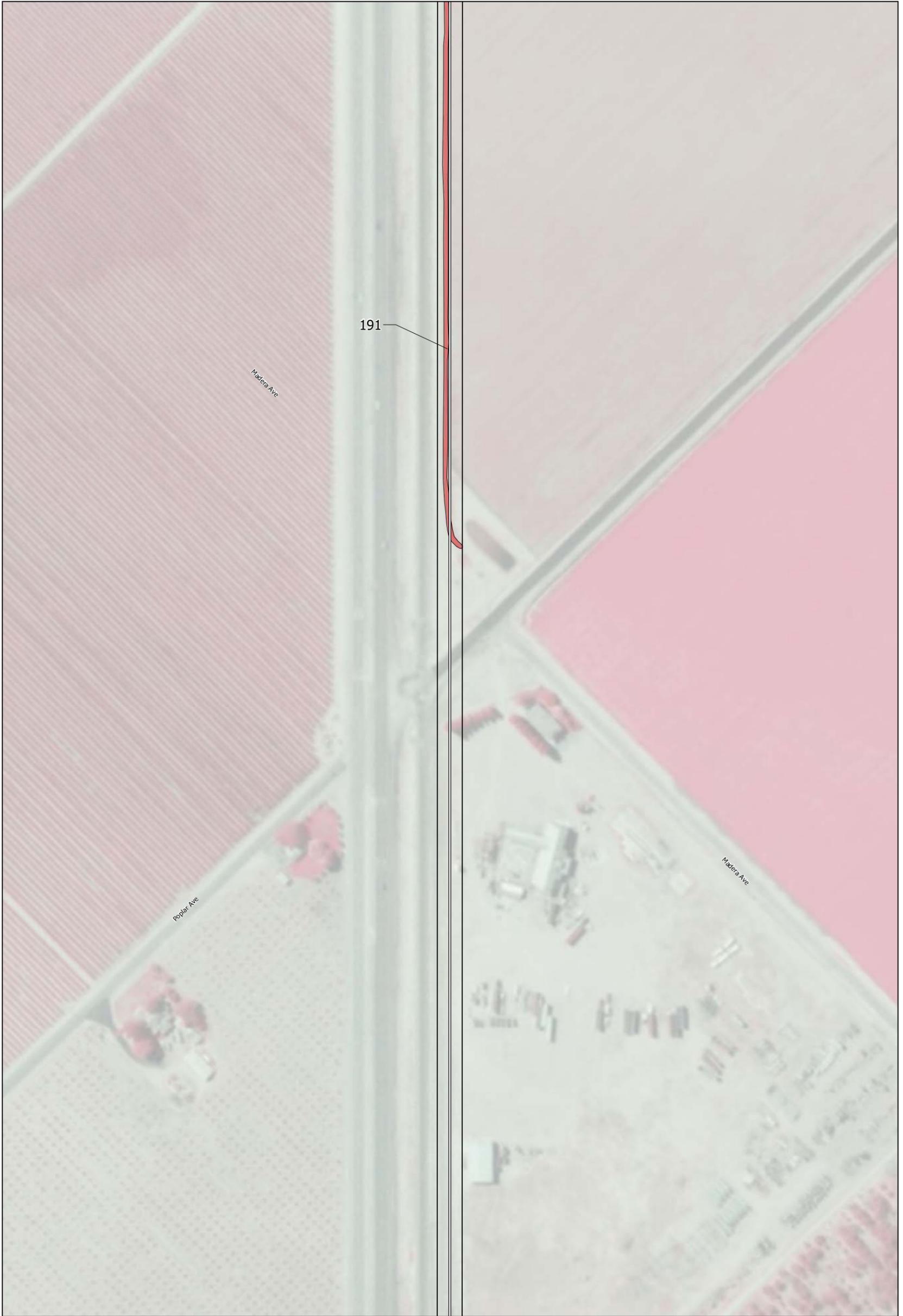
- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 203**

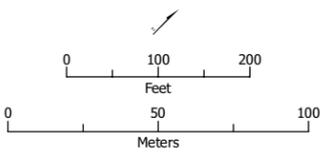
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 204**

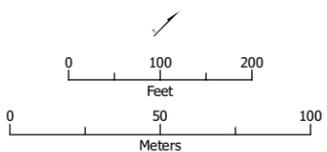
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 205**

Estimated special aquatic resources located within the BNSF alternative alignment area



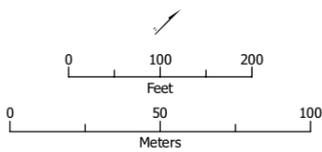
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 206**

Estimated special aquatic resources located within the BNSF alternative alignment area



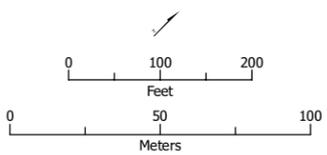
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 207**

Estimated special aquatic resources located within the BNSF alternative alignment area



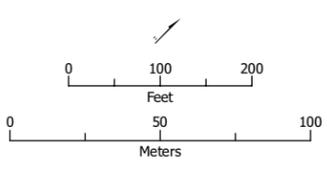
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 208**

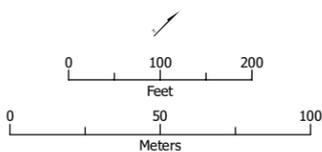
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 209**

Estimated special aquatic resources located within the BNSF alternative alignment area



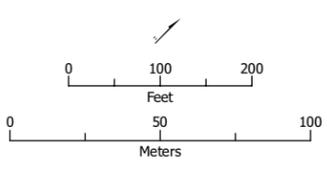
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 210**

Estimated special aquatic resources located within the BNSF alternative alignment area



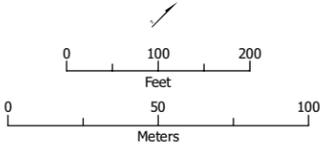
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

Appendix E-1a Sheet 211

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

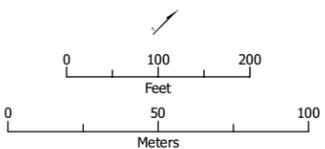
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 212**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

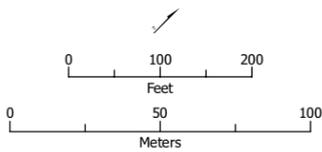
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 213**

Estimated special aquatic resources located within the BNSF alternative alignment area



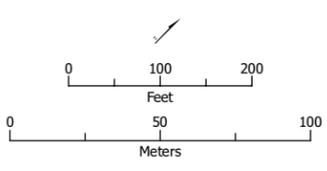
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 214**

Estimated special aquatic resources located within the BNSF alternative alignment area



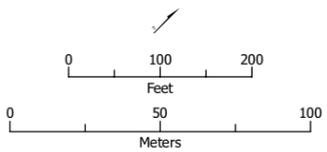
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



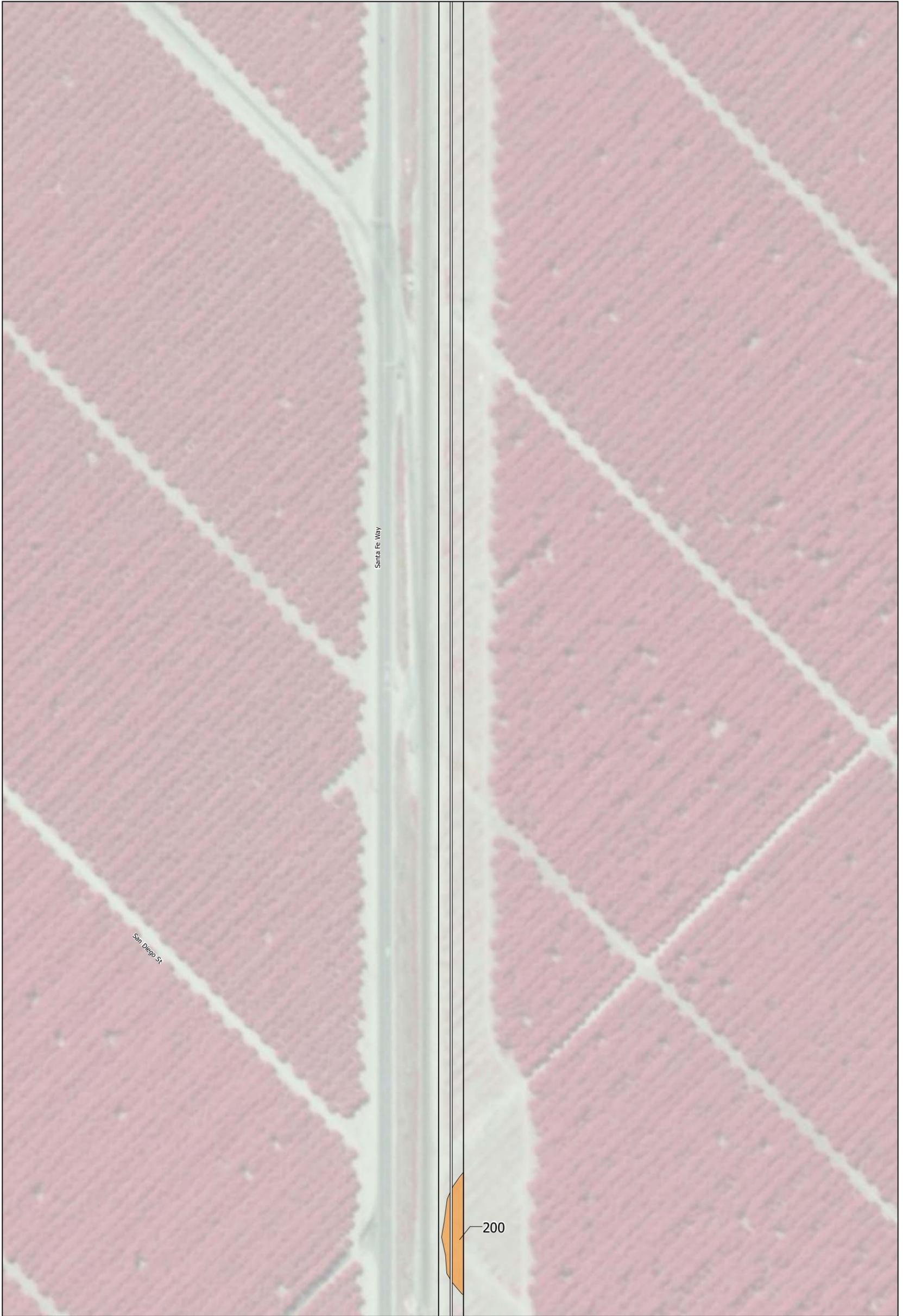
Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 215**

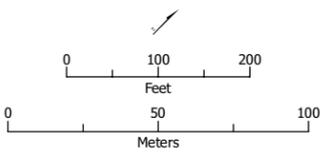
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

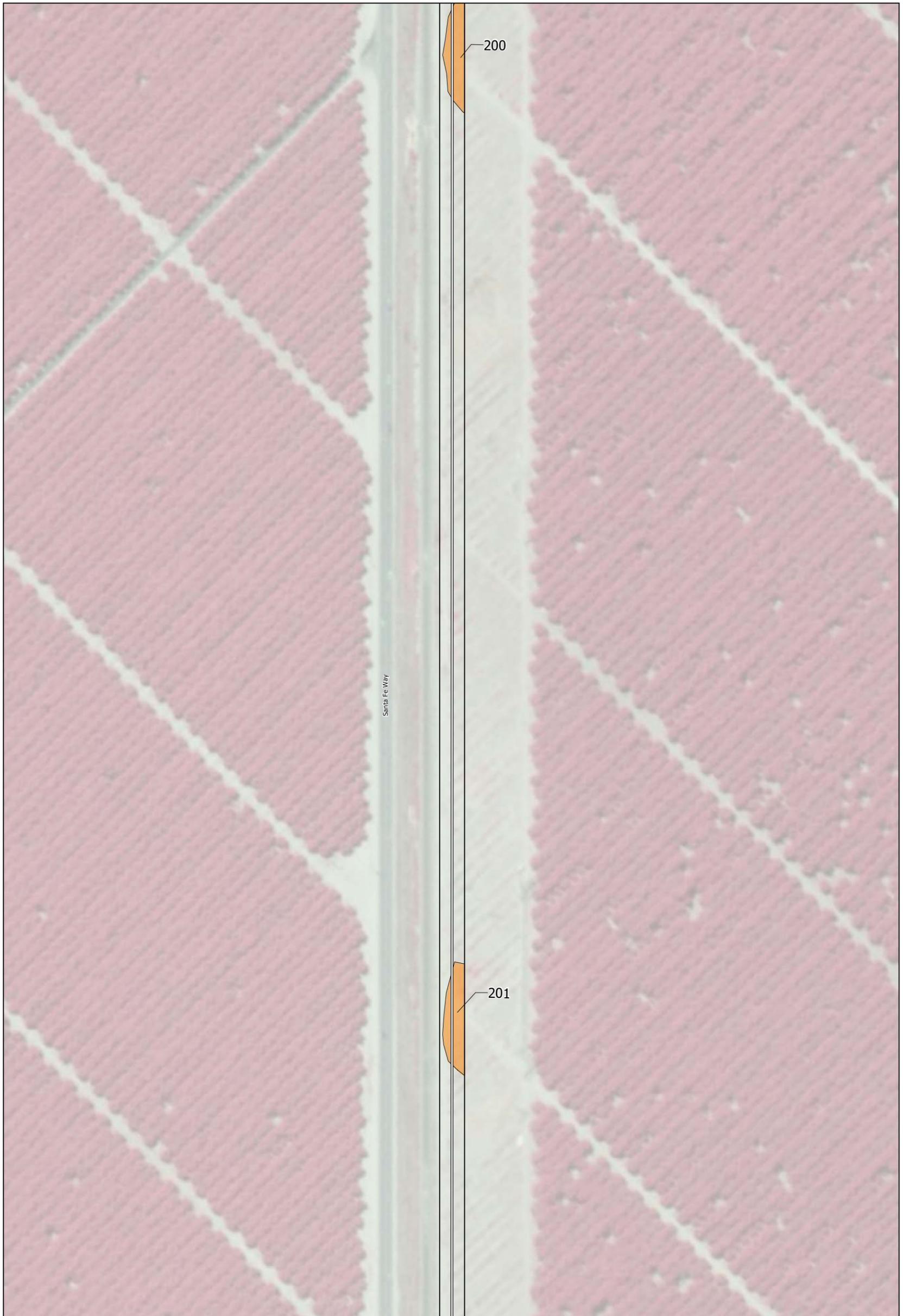


- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 216**

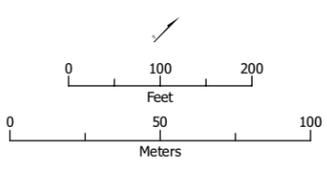
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

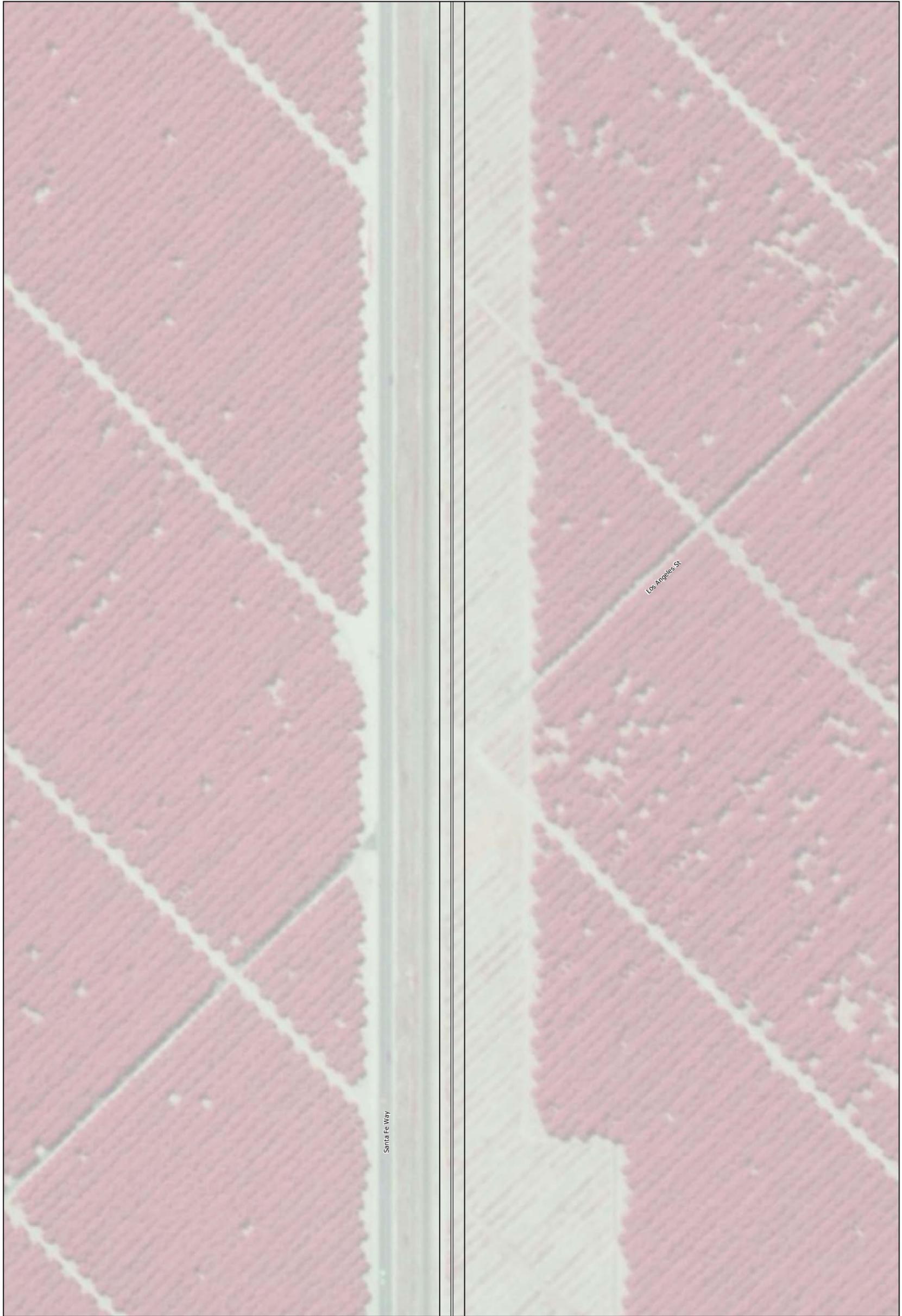


- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 217**

Estimated special aquatic resources located within the BNSF alternative alignment area



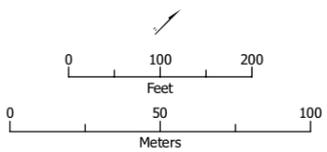
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



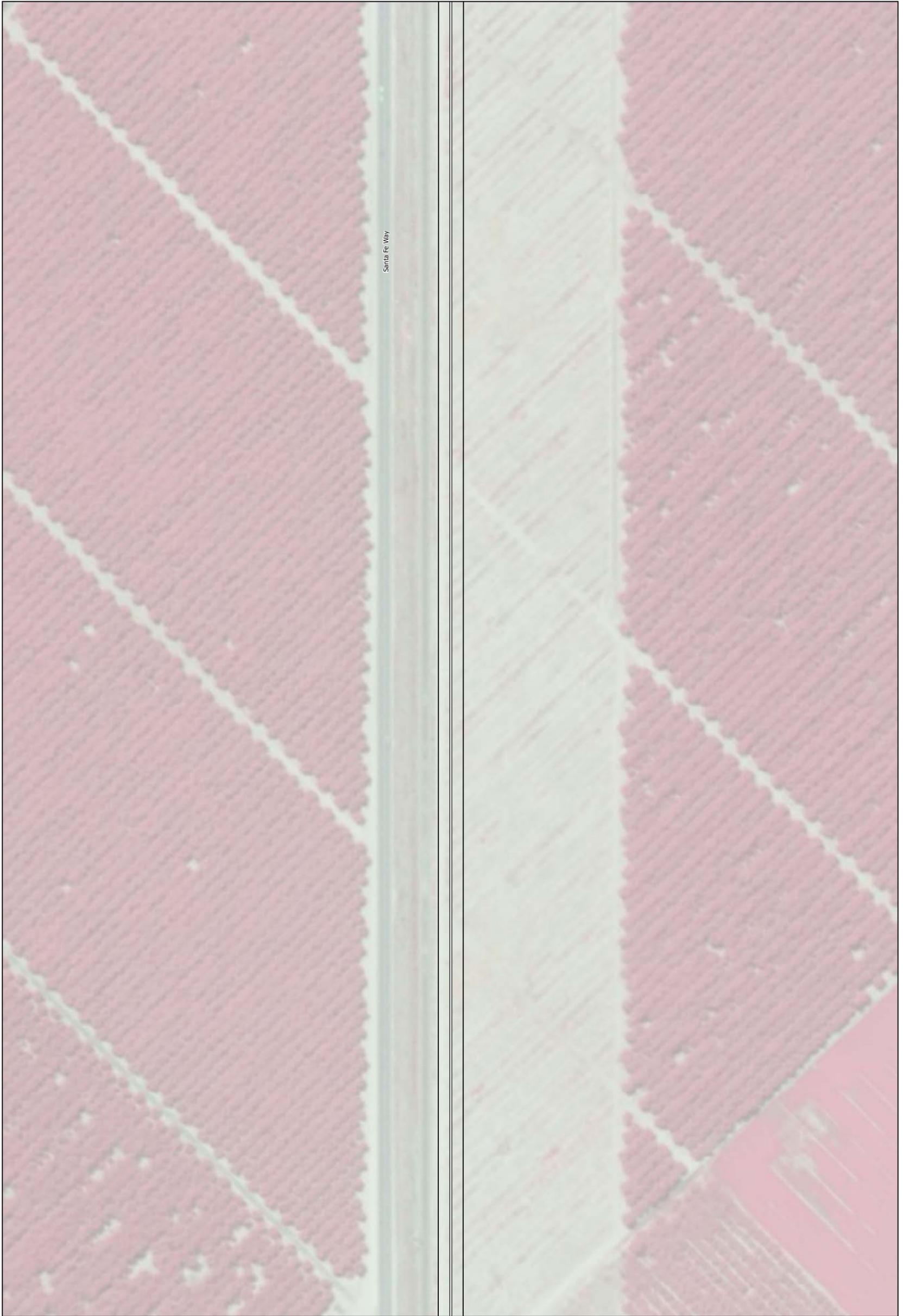
Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 218**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

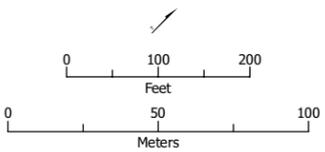
November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
 Sheet 219**

Estimated special aquatic resources located within the BNSF alternative alignment area

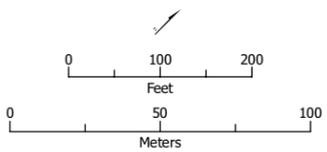


PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED
 Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 220**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

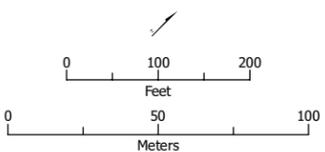
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 221**

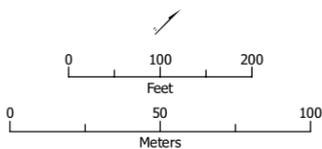
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 222**

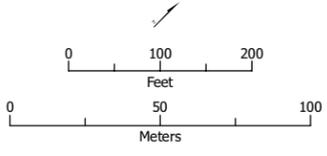
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

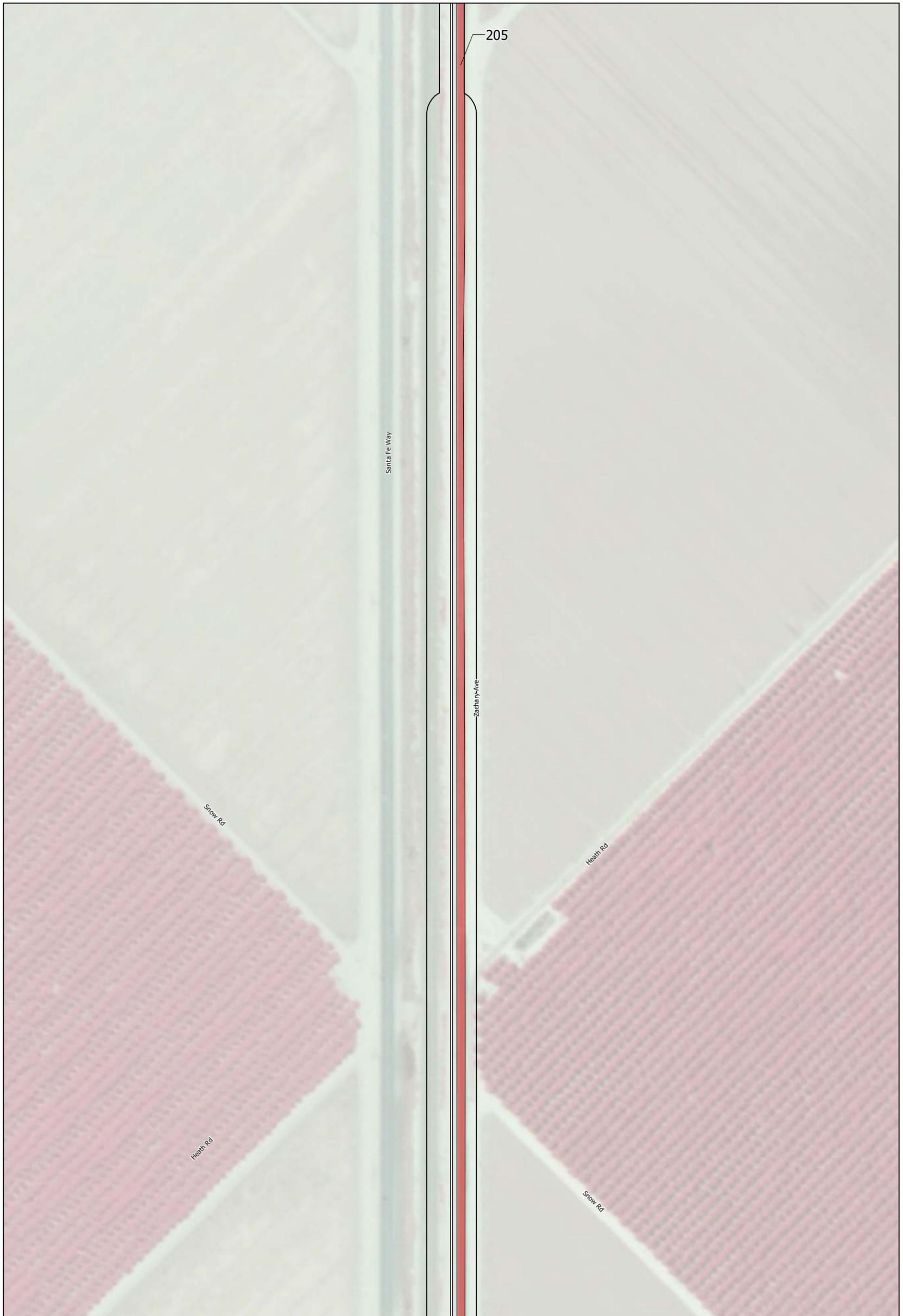


- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 223**

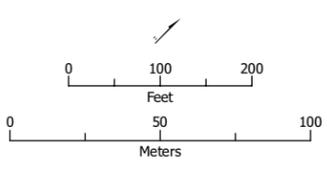
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

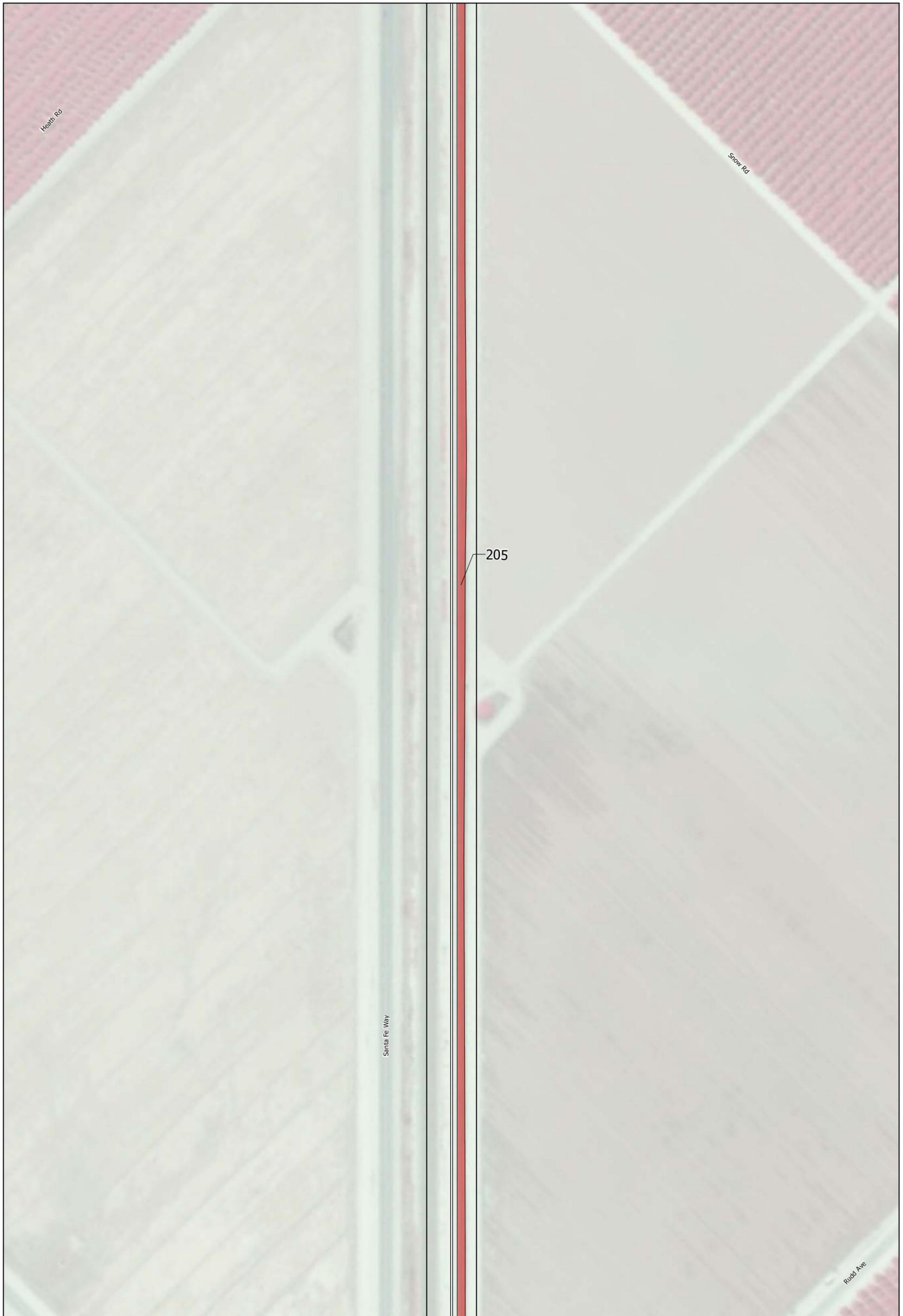


- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 224**

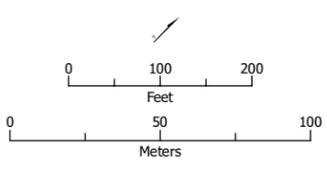
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

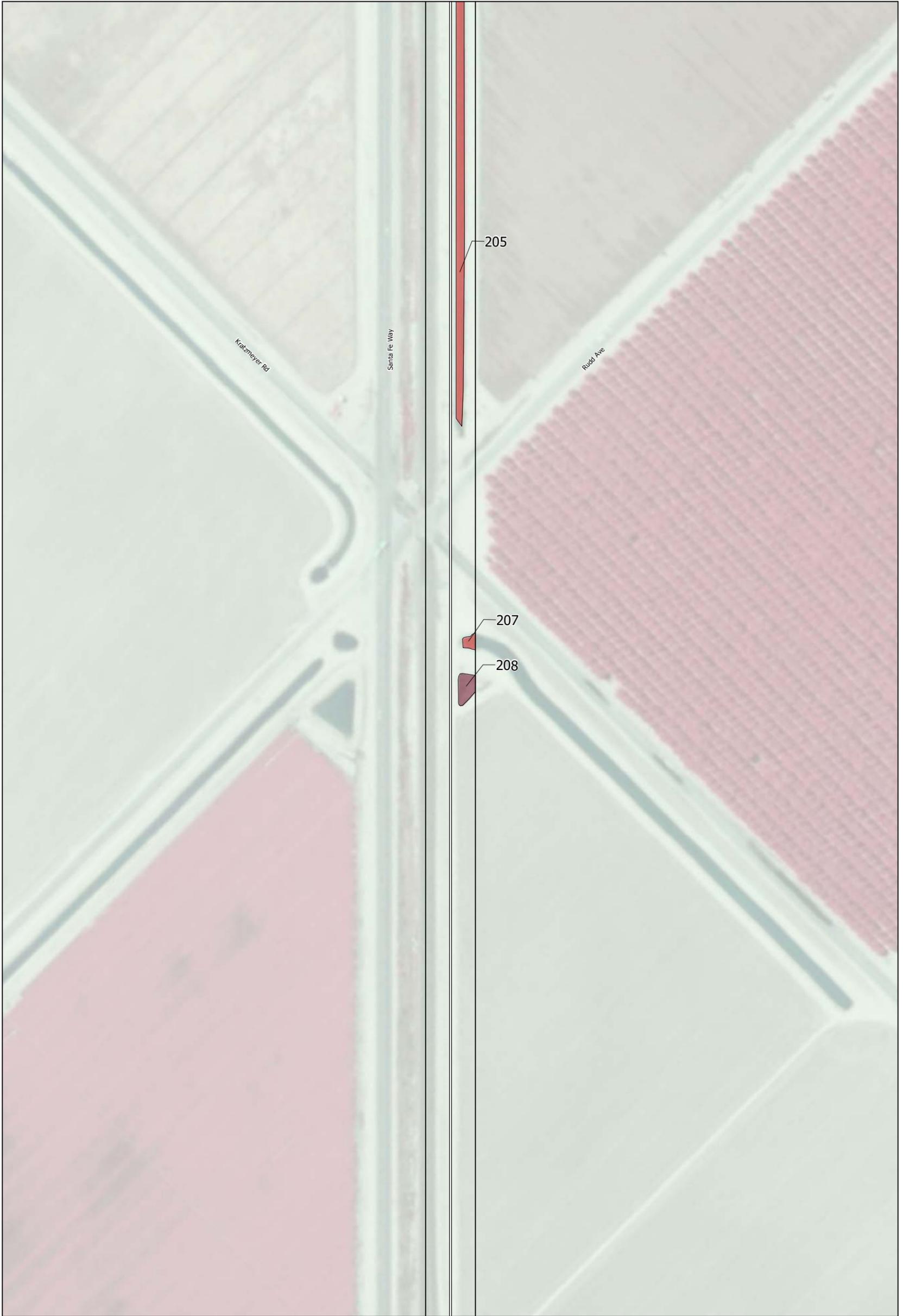
Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

Appendix E-1a
Sheet 225
 Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

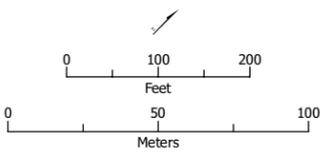
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 226**

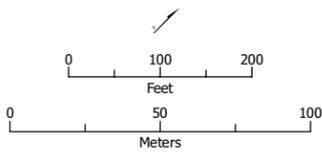
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 227**

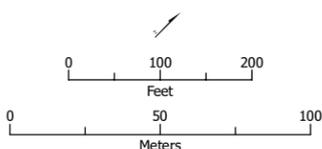
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 228**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

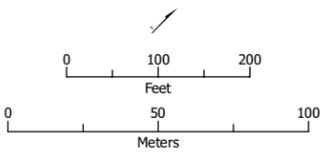
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 229**

Estimated special aquatic resources located within the BNSF alternative alignment area



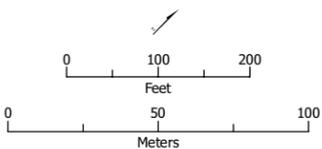
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 230**

Estimated special aquatic resources located within the BNSF alternative alignment area



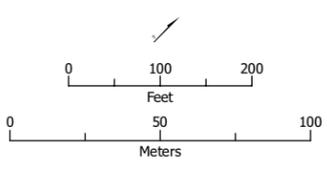
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 231**

Estimated special aquatic resources located within the BNSF alternative alignment area



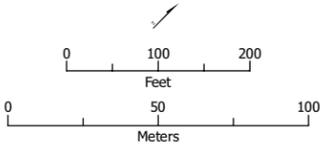
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

Appendix E-1a Sheet 232

Estimated special aquatic resources located within the BNSF alternative alignment area



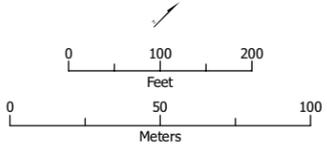
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 233**

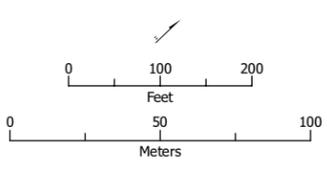
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 234**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

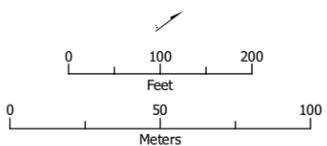
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

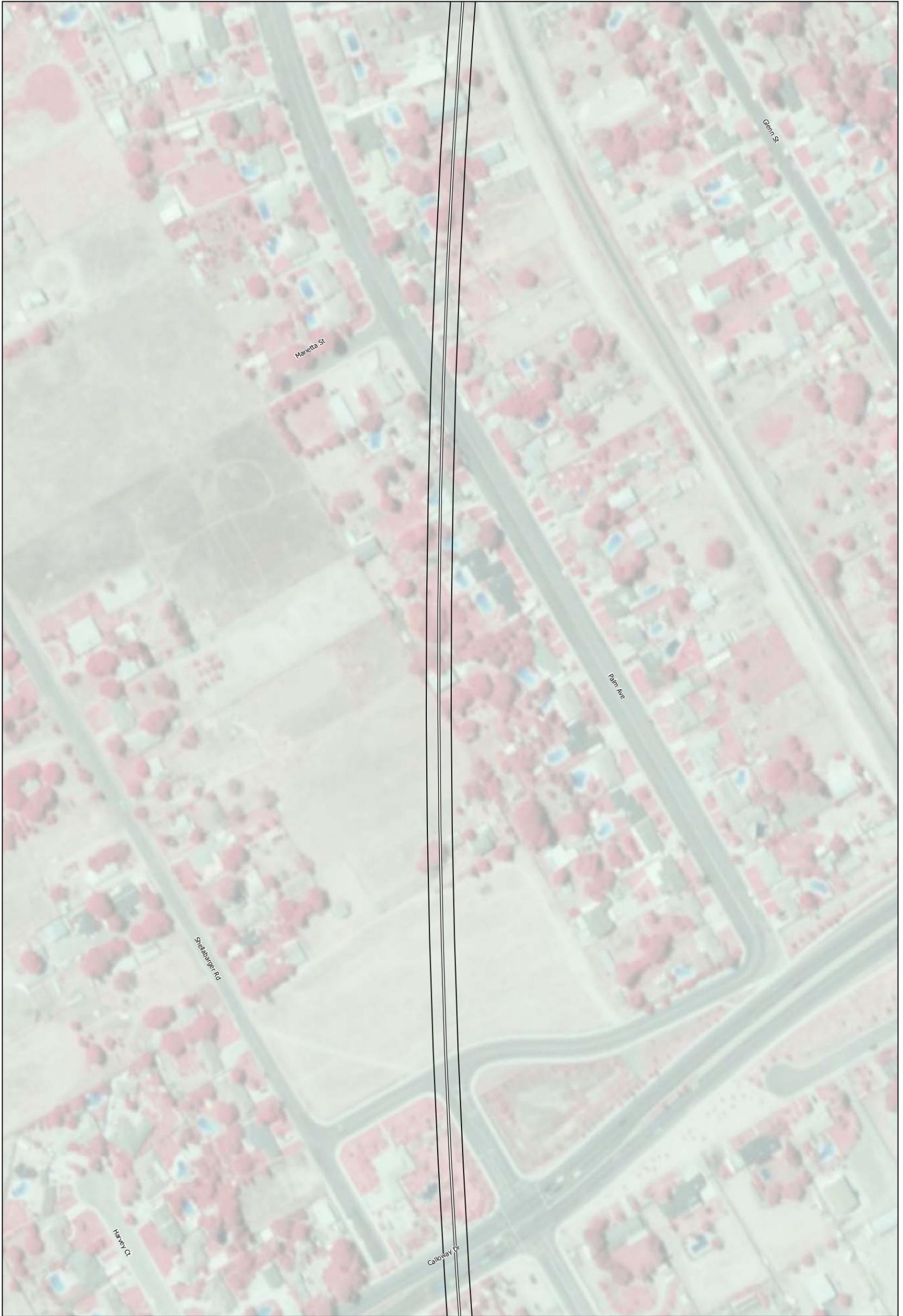
- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 235**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010

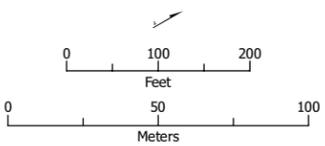
Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 236**

Estimated special aquatic resources located within the BNSF alternative alignment area



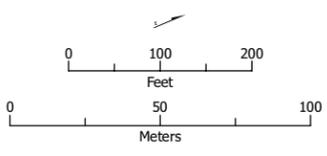
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
 Sheet 237**

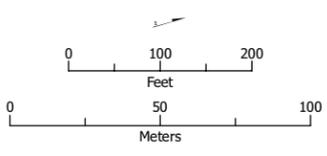
Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 238**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

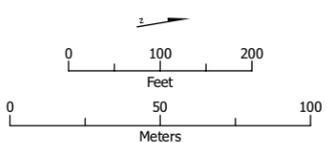
December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



Appendix E-1a Sheet 239

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

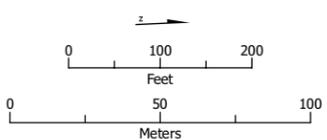
December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 240**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

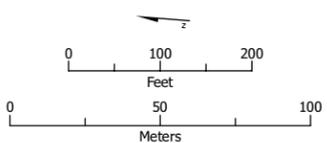
December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
 Sheet 241**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

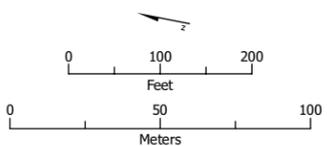
December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
 Sheet 242**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

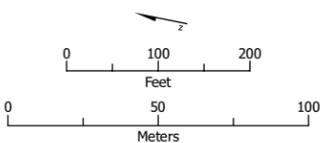
December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
 Sheet 243**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

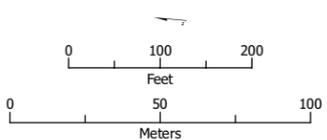
November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
Sheet 244**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

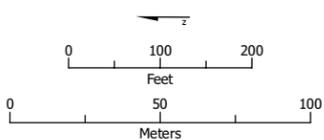
December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
 Sheet 245**

Estimated special aquatic resources located within the BNSF alternative alignment area

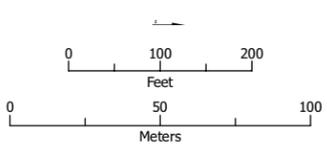


PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

November 29, 2010

**Appendix E-1a
Sheet 246**

Estimated special aquatic resources located within the BNSF alternative alignment area



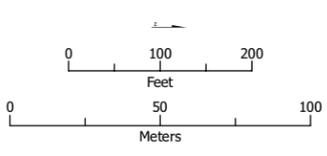
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
 Sheet 247**
 Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

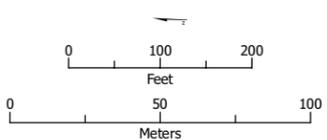
*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



Appendix E-1a Sheet 248

Estimated special aquatic resources located within the BNSF alternative alignment area



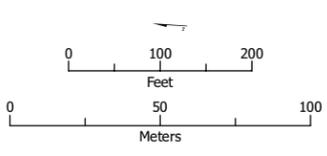
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 249**

Estimated special aquatic resources located within the BNSF alternative alignment area



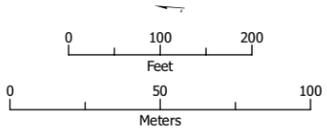
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
Sheet 250**

Estimated special aquatic resources located within the BNSF alternative alignment area

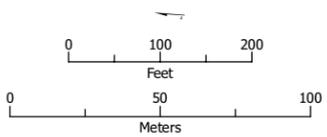


PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED
 Data source: Special aquatic resources - URS, 2010

Imagery source: USDA NAIP, color infrared, 2005

*This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

November 29, 2010



Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area

**Appendix E-1a
 Sheet 251**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

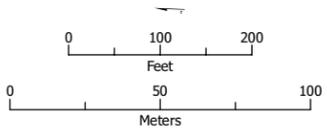
November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



Appendix E-1a Sheet 252

Estimated special aquatic resources located within the BNSF alternative alignment area



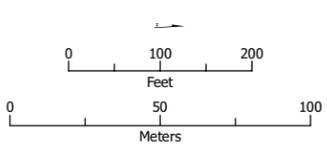
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
 Sheet 253**
 Estimated special aquatic resources located within the BNSF alternative alignment area



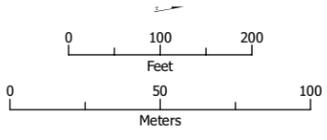
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
 Sheet 254**
 Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

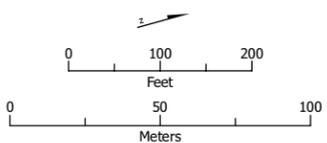
December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
 Sheet 255**

Estimated special aquatic resources located within the BNSF alternative alignment area



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

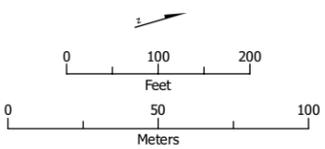
December 17, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

Special aquatic resources with feature number

- Canal/Ditch
- Retention/Detention basin
- Riparian
- Riverine
- Seasonal wetland
- Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



**Appendix E-1a
 Sheet 256**

Estimated special aquatic resources located within the BNSF alternative alignment area



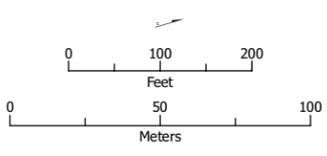
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED

November 29, 2010

Data source: Special aquatic resources - URS, 2010
 Imagery source: USDA NAIP, color infrared, 2005
 *This map shows vernal pool complexes as provided by Holland (2009). Vernal pool area reported in the document was derived through application of an empirically derived coefficient (0.22) to the total area of Holland vernal pool complexes.

- Special aquatic resources with feature number**
- Canal/Ditch
 - Retention/Detention basin
 - Riparian
 - Riverine
 - Seasonal wetland
 - Vernal pool complex (Holland, 2009)*

- BNSF alternative
- BNSF corridor study area



Appendix E-1a
Sheet 257
 Estimated special aquatic resources located within the BNSF alternative alignment area