

4.14 PUBLIC UTILITIES

4.14.1 INTRODUCTION

This section describes existing and proposed water distribution, wastewater, stormwater, electricity, natural gas, communication, and solid-waste disposal systems associated with the proposed project. (Water supply is addressed separately in Section 4.13 of this EIR.) Potential impacts on these utilities were identified by comparing existing service capacity and facilities with anticipated future demand associated with project implementation. Much of the information provided in this section is taken from a Phase II site assessment report for the Northern California Youth Correctional Center (NCYCC) prepared in June 2008 by Kimley-Horn and Associates, Inc. (Kimley-Horn 2008) included as Appendix I of this DEIR

4.14.2 ENVIRONMENTAL SETTING

This section describes the utilities and service systems that currently serve the NCYCC and evaluates the potential effects of the proposed project on these services and utilities. This section covers water distribution, wastewater treatment and disposal, electricity and natural gas, and solid waste.

WATER DISTRIBUTION

The water supply infrastructure for the NCYCC consists of four well houses, a 10-inch supply line, chemical feed pumps for chlorination, three 0.25-million-gallon storage tanks, and two booster pump stations. Each well house includes a sand separator, and is estimated to have a maximum flow rate of approximately 1,400 gallons per minute (gpm). Each booster pump station contains two duty pumps with electric motors, one fire pump with a natural-gas motor, and a hydropneumatic tank. The combined capacity of the booster pump stations is 9,700 gpm. Water is delivered to the existing distribution system from both booster pump stations. Booster pump station no. 1 delivers water directly to all existing NCYCC facilities except the N.A. Chaderjian YCF at a pressure of 70 psi. The second booster pump station delivers water directly to the N.A. Chaderjian YCF at a pressure of approximately 100 psi, and indirectly to the other NCYCC facilities through a pressure reducing valve. (Kimley-Horn 2008:22). See Exhibit 4.14-1 for the existing and proposed water distribution systems.

Recent sampling of well water has found elevated levels of iron, manganese, and the following volatile organic compounds: tetrachloroethylene, trichloroethylene, dichloroethylene, and dichlororethane. Although iron and manganese levels have dropped below secondary maximum contaminant levels, some samples containing volatile organic compounds exceed their respective maximum contaminant levels. The Austin Road Landfill located to the South of the NCYCC is a suspected source of the groundwater contamination, however there have been no conclusive studies at this time that have proven this. (See Section 4.10 “Hazards and Hazardous Materials” for more information related to groundwater contamination).

WASTEWATER

The existing NCYCC campus is served by a gravity collection system which transmits flow to a sewer pump station located at the center of the campus. See Exhibit 4.14-2 for the existing and proposed sanitary sewer systems. The pumping station consists of three vertical turbine pumps and two grinders which discharge sewage to a 20-inch-diameter gravity main that is owned by the City of Stockton. (Kimley-Horn 2008:9). The City’s Regional Wastewater Control Facility (RWCF) provides wastewater treatment and disposal services to the NCYCC. Based on its tentative permit under the National Pollutant Discharge Elimination System (NPDES), the RWCF has current permitted capacity to treat 55 million gallons per day (mgd) of wastewater (average dry-weather flow). The facility currently treats 31.7 mgd. The RWCF treats effluent to a tertiary level, then discharges treated effluent to the San Joaquin River (Central Valley RWQCB 2008).

The 20-inch trunk sewer line that currently carries discharge to the RWCF has a maximum capacity of 2,400 gallons per minute (gpm) when flowing 90% full. (Kimley-Horn 2008:11). The NCYCC is operating under a 50-year contractual agreement with the City (industrial wastewater discharge permit) to discharge wastewater into the RWCF from the NCYCC. The original agreement was contingent on the NCYCC facility installing a sewage meter to verify discharge quantities and a bar screen to remove large solids. The current terms of the permit allow for a maximum 0.80 mgd or 1,400 gpm of peak instantaneous flow (City of Stockton 1973).

The NCYCC facility is obligated to comply with the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-0003-DWQ). The purpose of these waste discharge requirements is to decrease the risks to public health and the environment associated with sanitary-sewer overflows, by requiring state agencies that own or operate a wastewater pipeline greater than 1 mile long to develop and implement a specific sewer system management plan (Kimley-Horn 2008:14).

STORMWATER

The NCYCC's storm drain system is served by a main 42-inch line that conveys stormwater to a sump and pump station (Pump Station No. 1) near the center of the NCYCC campus. The pump station consists of four pumps that discharge stormwater collected from the NCYCC and the Richard A. McGee Correctional Training Center Annex into a concrete-lined channel, which drains into a 9-acre detention basin located south of the site, just north of North Fork South Littlejohns Creek (Littlejohns Creek) (Kimley-Horn and Associates, Inc. 2008:32, 34) (see Exhibit 4.14-3). The detention basin has a volume of between 25 and 67 acre feet (af) (to be determined by survey) and contains two pumps (Pump Station No. 2) for discharge into Littlejohns Creek. NCYCC staff members state that pumping into the creek has not been required recently, and there is no verification that the NCYCC has ever had to pump stormwater to the creek. See Exhibit 4.14-4 for further details about the proposed stormwater drainage system.

An unlined agricultural drainage channel is located within the project site, north of the O. H. Close and Karl Holton Youth Correctional Facilities. This unlined channel collects runoff from surrounding agricultural land and does not combine with runoff associated with the developed areas of the NCYCC. It is under the jurisdiction of the San Joaquin County Flood Control District (Kimley-Horn 2008:33).

See Section 4.6, "Hydrology and Water Quality," for more information on the capacity of the drainage system.

Capacity of Existing Drainage Facilities

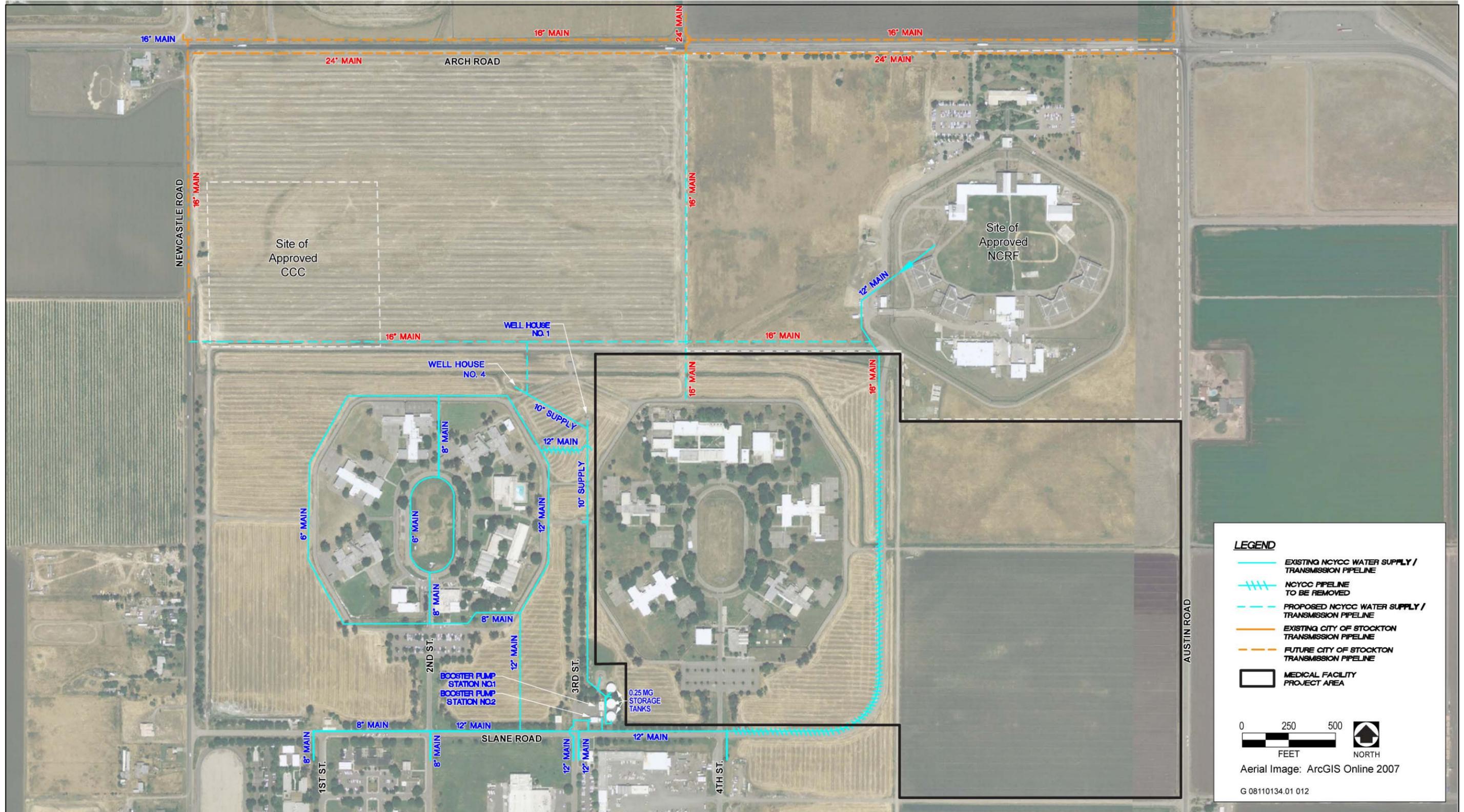
The existing capacity of several of the NCYCC's drainage facilities was estimated and compared to the results from the hydrologic analysis.

42-Inch Storm Drain Trunk

Information for the 42-inch storm drain trunk was taken from "as-built" construction drawings for the structure as shown on plans from the California Department of General Services, Office of Architecture and Construction, dated December 24, 1964. The slope of the 42-inch trunk is 0.0010 feet per foot (vertical feet divided by horizontal feet) and the material of the trunk line was assumed to be reinforced concrete pipe. The full flow capacity of the 42-inch trunk line was determined to be 31.8 cubic feet per second using Manning's Equation.

Pump Station No. 1

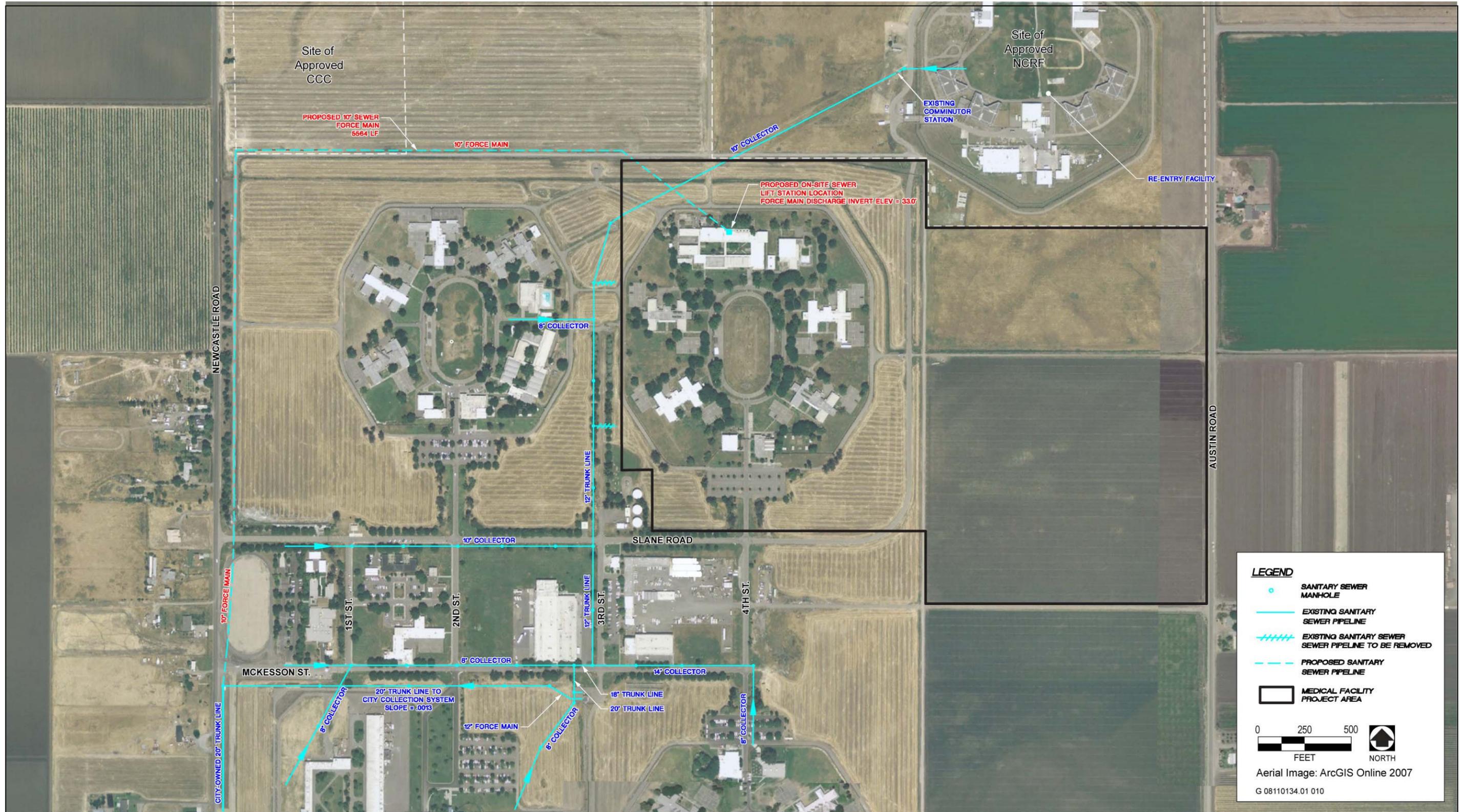
The existing stormwater pump station contains (3) 40 horsepower pumps each with an estimated capacity of 7,500 gpm, and a single 15 horsepower pump with an estimated capacity of approximately 2700 gpm. The total existing pump station capacity is estimated at approximately 25,200 gpm.



Source: Kimley-Horn 2008

Existing and Proposed Water Distribution Systems

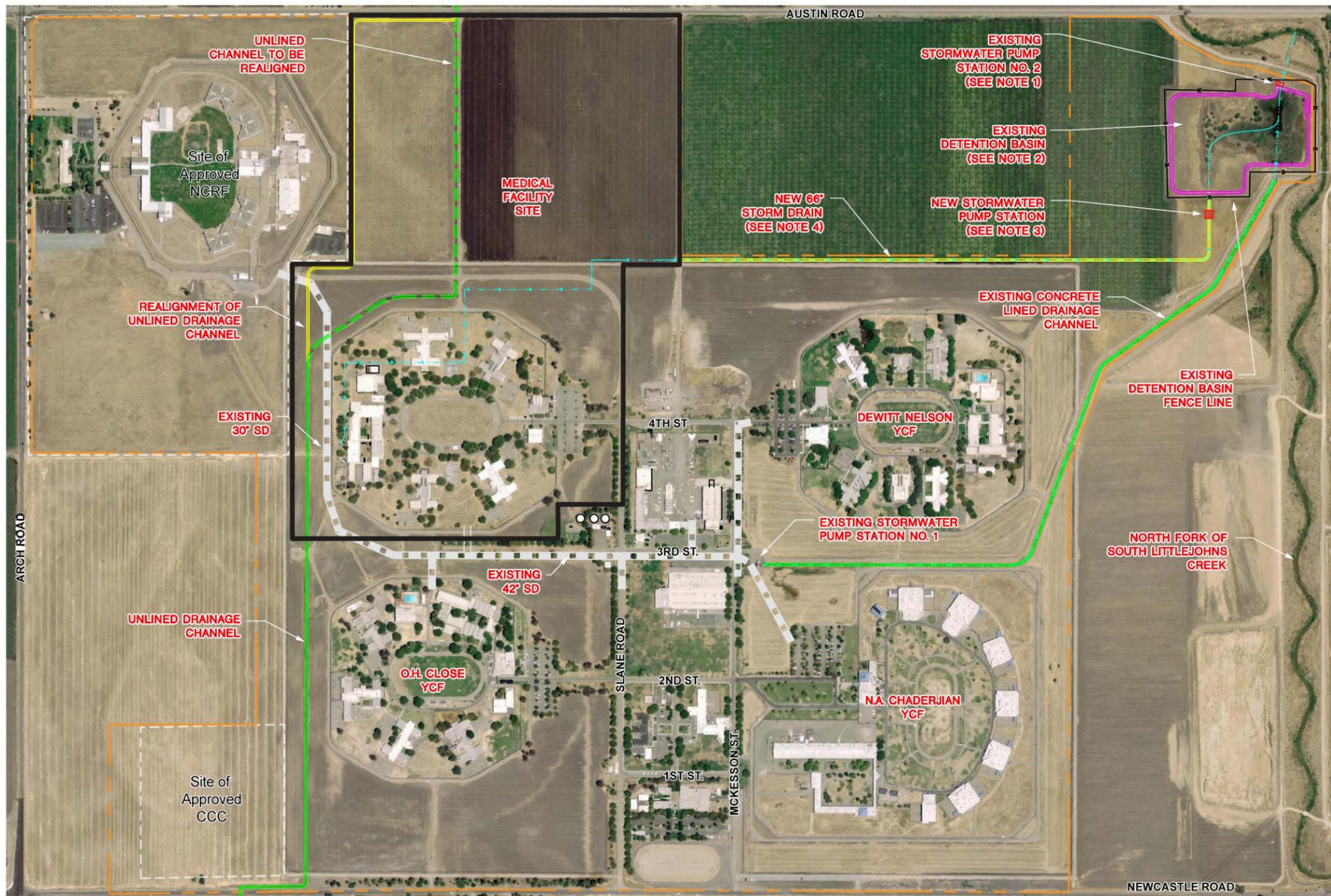
Exhibit 4.14-1



Source: Kimley-Horn 2008

Existing and Proposed Sanitary Sewer Systems

Exhibit 4.14-2

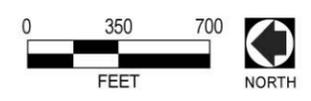


LEGEND

-  STORMWATER DRAINAGE PATH
-  STORM DRAIN
-  TITLE REPORT PARCEL BOUNDARY
-  POTENTIAL MEDICAL FACILITY SITE

NOTES

1. EXISTING STORM DRAIN PUMP STATION 2 WILL NOT BE ALTERED, AND THEREFORE THE MAXIMUM DISCHARGE RATE TO THE CREEK WILL REMAIN UNCHANGED.
2. EXISTING DETENTION BASIN TO BE SURVEYED AND ITS STORAGE CAPACITY VERIFIED. MINOR IMPROVEMENTS WITHIN THE EXISTING FENCE LINE MAY BE REQUIRED TO ATTAIN THE REQUIRED STORAGE.
3. NEW STORMWATER PUMP STATION – ESTIMATED FOOTPRINT 2,500 SQUARE FEET, PEAK PUMPING RATE AT 100 CUBIC FEET PER SECOND.
4. PROPERTY LINE TO THE NORTH OF PROPOSED ALIGNMENT TO BE SURVEYED TO VERIFY ADEQUATE SPACE TO LOCATE NEW 66" STORM DRAIN OUTSIDE OF EXISTING NCYCC FENCE LINE.

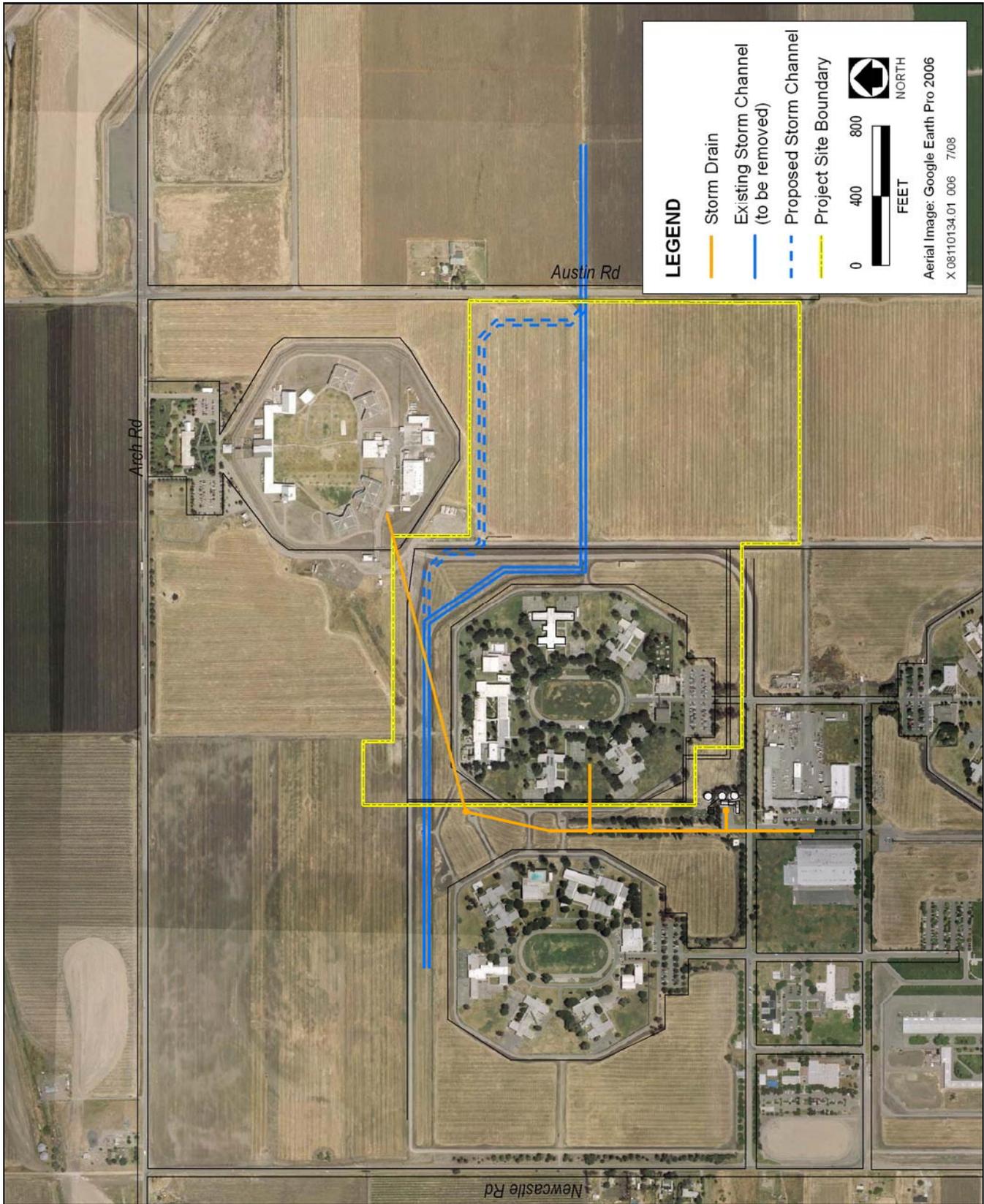


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Source: Kimley-Horn 2008

Stormwater Pump Stations and Detention/Retention Basin

Exhibit 4.14-3



Source: Kimley-Horn 2008

Proposed Diversion of Existing Channel

Exhibit 4.14-4

Concrete-Lined Channel

Pump Station No. 1 discharges into the upstream end of a concrete-lined channel that conveys runoff to the retention/detention basin situated southeast of the NCYCC. Information for the concrete-lined channel was taken from “as-built” construction drawings for the channel as shown on plans from the California Department of General Services, Office of Architecture and Construction, dated July 29, 1965. The full flow capacity of the concrete-lined channel was determined to be 241.6 cubic feet per second using Manning’s Equation.

Detention Basin

A preliminary analysis was performed to generally evaluate the adequacy of the existing detention basin to store stormwater from the existing NCYCC site and from the site if the proposed medical facility were constructed. According to original construction plans, the detention basin measures 400 feet wide by 375 feet across (approximately 3.5 acres). The most shallow elevation point within the basin is at an elevation of approximately 27.5 feet according to the original construction plans. The concrete lined channel that conveys stormwater from pump station no. 1 into the basin has a bank elevation near the pump station of approximately 36.5 feet according to the original construction plans. During large storms, the detention basin will begin to store water, which may cause a backwater effect on the concrete lined channel. An elevation of 35 feet is assumed to be the maximum allowable elevation in the reservoir, so as not to cause overtopping of the concrete lined channel during large storms. The operational depth of the basin was conservatively assumed to be 7.5 feet, to account for the fact that sedimentation has probably occurred within the basin over time. Using that assumption, the basin (as shown on the original construction plans) storage volume is estimated at 25.8 acre-feet.

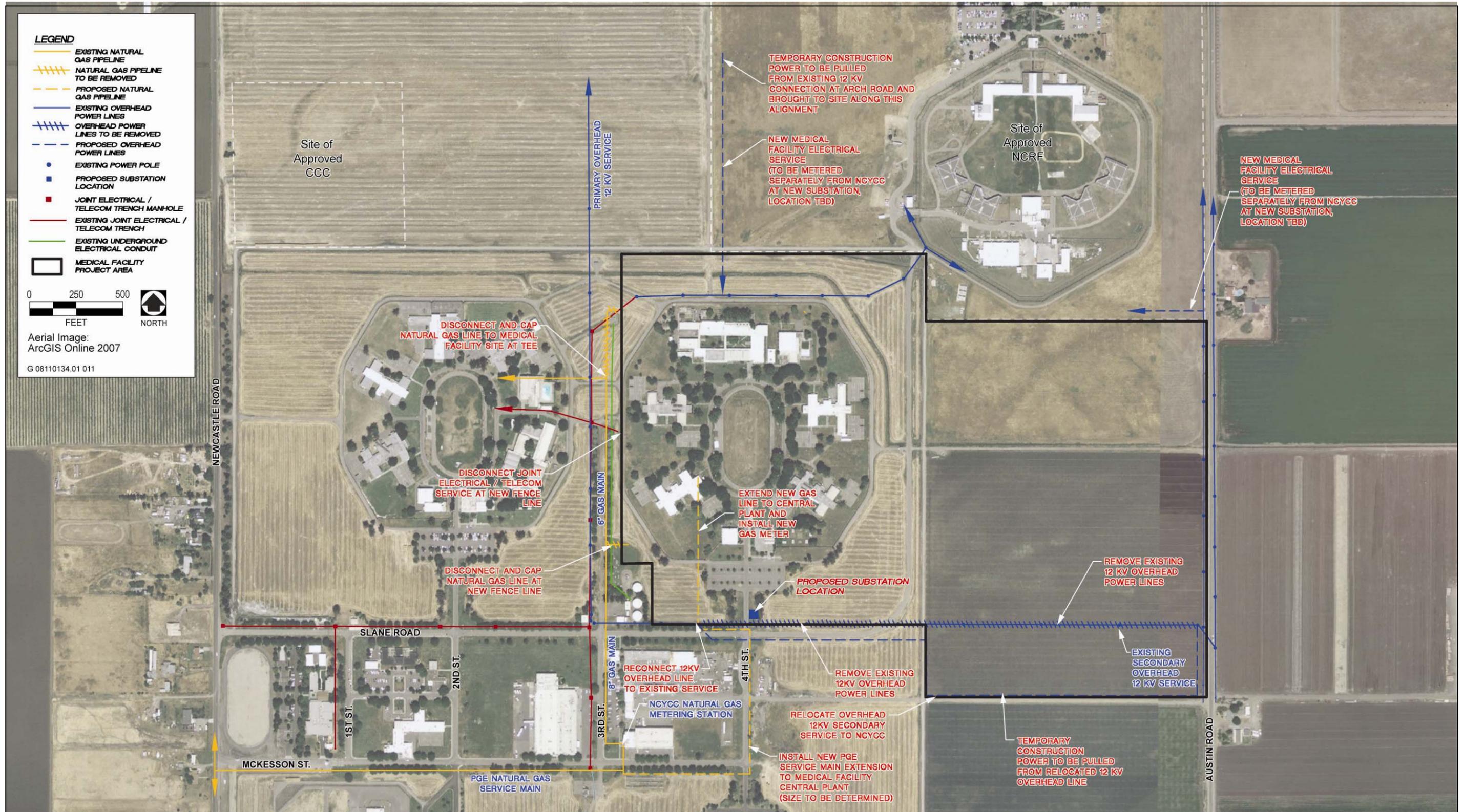
Aerial photographs and initial investigation of the detention pond revealed that the pond was actually built far larger than the construction plans show. The basin may actually have been built as large as 9.0 acres. The depth of the enlarged portion of the basin is unknown. If the depth of the added area of the basin is equivalent to the depth shown on the construction plans, the basin’s operating volume could be as large as 67.5 acre-feet. A survey of the basin is underway to accurately determine the detention basin’s as-built area and volume.

The detention basin can discharge water to Littlejohns creek through a pump station (no. 2) located at the east end of the basin. The pump station has two pumps with a total estimated capacity of approximately 12,000 gpm. The proposed project will not result in any alteration to pump station no. 2, and will therefore not result in an increased discharge rate of stormwater to the creek under any design storm event up to the 100-year storm. NCYCC staff state that pumping into the creek has not been required within the recent past. A NPDES permit does not exist for discharge, although pumps are tested regularly to ensure that they are functioning properly (CPR 2008:33).

Please refer to Section 4.6, “Hydrology and Water Quality,” for more detailed information about project site drainage and stormwater facilities as they pertain to stormwater quality and flood risk.

ELECTRICITY

Pacific Gas and Electric Company (PG&E) is the electrical service provider for Stockton. PG&E delivers approximately 81,923 million kilowatt-hours (kWh) of electricity to its 13 million customers throughout its 70,000-square-mile service area in northern and central California. PG&E provides electricity to the project site through two overhead power lines that enter the NCYCC from the north and south. The primary power source, a 12-kilovolt (kV) line, is derived from the Werner PG&E substation and a 12-kV line standby power source derived from the Norman PG&E substation. Both electrical lines connect to the 15-kV electrical switchgear house located in the center of the NCYCC campus (Kimley-Horn 2008:46). Please see Exhibit 4.14-5 for further details about the existing and proposed electrical systems. All construction and maintenance activities for electrical service and facilities are the responsibility of PG&E.



Source: Kimley-Horn 2008

Existing and Proposed Electrical and Gas Systems

Exhibit 4.14-5

NATURAL GAS

PG&E is the natural-gas service provider for Stockton. Approximately 887 million cubic feet per day of natural gas is delivered to Stockton through portions of PG&E's 43,000-mile natural-gas pipeline system. A PG&E natural-gas service line enters the NCYCC facility from Newcastle Road and connects to the metered natural-gas pressure regulating station, housed in the steam plant, near the center of the NCYCC campus. A liquid-petroleum-gas standby fuel system is connected to the natural-gas pressure regulating station in the event that the PG&E natural-gas service is interrupted (Kimley-Horn 2008:49). Please see Exhibit 4.14-5 for further details about the existing and proposed gas lines.

All construction and maintenance activities for natural gas facilities are the responsibility of PG&E.

SOLID WASTE

The NCYCC generates approximately one truckload of solid waste per day. NCYCC collects its own solid waste conveys it to the Forward (Austin Road) Landfill (Vote, pers. comm., 2008). The landfill is estimated to reach its capacity of 51 million cubic yards in 2020. Forward Landfill is permitted to accept agricultural waste, asbestos, ash, construction/demolition waste, contaminated soil, friable asbestos, green materials, industrial and mixed municipal waste, sludge (biosolids), tires, and shredded waste (CIWMB 2008).

4.14.3 REGULATORY CONSIDERATIONS

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

No federal plans, policies, regulations, or laws relating to utilities and energy are applicable to the proposed project.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

Statewide General Waste Discharge Requirements

The Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-0003-DWQ) established by the State Water Resources Control Board (SWRCB) apply to state agencies that own and operate more than 1 mile of pipe that collects and conveys untreated or partially treated wastewater to a publicly owned treatment facility. These waste discharge requirements, intended to reduce sanitary-sewer overflows, require agencies to develop and certify a sewer system management plan, sections of which must be submitted to the SWRCB.

California Solid Waste Management Act

The California Waste Management Act of 1989 required state, county, and local governments to substantially decrease the volume of waste disposed at landfills by the year 2000.

Energy Efficiency Standards

Title 24, Part 6 of the California Building Code establishes energy efficiency standards for new construction (new buildings, additions, alterations, nonresidential buildings, and repairs). These standards were established in 1978 in response to a legislative mandate to reduce California's energy consumption and are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. New standards were adopted in 2005 as mandated by Assembly Bill (AB) 970 (Chapter 904.04 (2), Statutes of 2005) to reduce California's electricity demand. The new standards went into effect on October 1, 2005. The 2005 building energy efficiency standards were developed in response to AB 970 and Senate Bill 5X (PRC 25402.5 (3) (c)). The updated standards were adopted by the California Energy Commission in November 2003 (CEC 2008).

LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

San Joaquin County General Plan 2010

The following objectives and policies in the *San Joaquin County General Plan 2010* relating to utilities and energy are applicable to the proposed project.

Water Distribution

- ▶ **Objective 1:** To maintain an adequate and safe water supply for County users.
 - **Policy 1:** The availability of a long term, reliable potable water supply shall be a primary determinant in the planning of areas for growth.
 - **Policy 3:** Public water systems shall be provided by an existing public or quasi-public agency, or by a new district if no public agency in the community or other area planned for a public system is empowered to provide water supply services.
 - **Policy 5:** The need for water system improvements shall be reduced by encouraging new development to incorporate water conservation measures into their projects.
 - **Policy 6:** Water supplies serving new development shall meet State water quality standards. If necessary, water shall be treated to meet these standards.

Wastewater

- ▶ **Objective 1:** To ensure adequate wastewater treatment and the safe disposal of liquid waste.
 - **Policy 7:** Wastewater treatment systems shall meet the requirements and standards of the operating agency and the County.

Utility Corridors

- ▶ **Objective 1:** To protect the public and the natural environment from possible hazards associated with utility corridors.
- ▶ **Objective 3:** To protect land uses from the placement of utility corridors across property at inappropriate locations.
 - **Policy 3:** Utility distribution and transmission facilities for all new development in urban communities shall be placed underground.
 - **Policy 4:** The County shall encourage the use of existing transmission corridors for new lines, except in the case of electrical transmission lines over 500 kV, which for safety reasons shall be separated from existing corridors by at least 500 yards.

City of Stockton General Plan 2035

The following goals and policies in the *City of Stockton General Plan 2035* relating to utilities and energy are applicable to the proposed project.

Water Storage

- **Policy 2.1:** The City shall continue to implement water conservation programs that save significant amounts of water at a reasonable cost.

Wastewater

- ▶ **Goal 3:** To ensure adequate collection, treatment, and safe disposal of wastewater
 - **Policy 3.4:** The City shall ensure through the development review process that public facilities and infrastructure are designed and constructed to meet ultimate capacity needs, pursuant to a master plan, to avoid the need for future replacement to achieve upsizing. For facilities subject to incremental upsizing, initial design shall include adequate land area and any other elements not easily expanded in the future.

Stormwater

- **Policy 4.4:** The City shall define drainage service areas and encourage and support the use of regional stormwater facilities, including stormwater detention and stormwater quality basins within these service areas.

Solid Waste

- ▶ **Goal 5:** To ensure the safe and efficient disposal or recycling of solid and hazardous waste.
 - **Policy 5.1:** The City shall promote the maximum feasible use of solid waste reduction, recycling, and composting of wastes and strive to reduce commercial and industrial waste on an annual basis.
 - **Policy 5.2:** The City shall continue to require recycling in public and private operations to reduce demand for solid waste disposal capacity.
 - **Policy 5.6:** The City shall require the recycling of construction debris.
 - **Policy 5.7:** The City shall ensure that all new development has appropriate provisions for solid waste storage, handling, and collection pickup.

Electricity and Natural Gas

- **Policy 6.2:** The City shall coordinate with gas and electricity service providers to locate and design gas and electric systems to minimize environmental and other impacts to existing and future residents.

Wastewater Permit

On June 10, 1964, the NCYCC entered into a 50-year agreement with the City of Stockton to discharge wastewater into the City's RWCF. The permit, which was amended on June 13th, 1973, allows for a maximum discharge of 0.80 mgd or 1,400 gpm of peak instantaneous flow.

City of Stockton Draft 2007 Water Master Plan

The *City of Stockton Draft 2007 Water Master Plan* requires that the City maintain water storage at the combined volume of 25% of the maximum daily demand, fire flow storage per the California Fire code, and the average daily demand of emergency storage.

4.14.4 IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

In accordance with Appendix G of the State *CEQA Guidelines*, an impact of the proposed project related to utilities and service systems would be considered significant if the project would:

- ▶ exceed wastewater treatment requirements of the applicable regional water quality control board (RWQCB);
- ▶ require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- ▶ require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which would cause significant environmental effects;
- ▶ result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- ▶ generate waste materials that would exceed the permitted capacity of local landfills; or
- ▶ violate federal, state, or local statutes and regulations related to solid waste.

In addition, an impact of the proposed project related to utilities and service systems would be considered significant if project implementation would create demand for electrical or natural-gas service that would require the construction of facility improvements that could cause significant environmental impacts.

ISSUES NOT DISCUSSED FURTHER

The project site does not include an on-site wastewater treatment facility, and therefore cannot cause an adverse impact on the wastewater treatment requirements of the Central Valley RWQCB. Therefore, this issue will not be discussed further. Section 4.13, "Water Supply," addresses issues related to water supply.

PROJECT IMPACTS AND MITIGATION MEASURES

IMPACT **Potential Increase in Demand for Electricity Requiring Construction of Facility Improvements.** *The UTIL-1* *proposed project would increase demand for electricity enough to require PG&E to construct improvements to its existing PG&E facilities, but such construction would occur in existing utility easements and the resulting environmental effects would not be significant. (Less than significant)*

Implementation of the proposed project would result in an increase in demand for electricity at the NCYCC facility. Although the demand has not been fully determined, two recent reports suggest that it could be up to 19 megawatts (MW). As specifics of the project have solidified, more accurate estimates of electrical demand have been made ranging between 9 and 12 MW (Vander Vorste, pers. comm., 2008). The specific amount of electricity needed to operate the medical facility will be known once project design has been completed.

CPR is coordinating with PG&E, the electricity service provider, regarding the demand for 9 to 19 MW of power (Vander Vorste, pers. comm., 2008). PG&E submitted a letter on the Notice of Preparation (NOP) (included in Appendix A) for this EIR that indicates that in order to serve the new electric demand generated by the proposed project, an electric substation (currently proposed on the project site), as well as the extension of 115 kilovolt (kV) transmission lines from the proposed on-site substation along several identified alternative routes (all located along existing PG&E rights-of-way). PG&E indicated (Stewart pers. comm. 2008) that while the project may

require some expansion of the existing rights-of-way for safety purposes (due to the higher voltage lines), maintenance and other ground-disturbing activities associated with the lines would not change as a result of hanging the higher voltage lines and expanding the existing rights-of-way; no ground disturbance would be needed. Therefore, the impact is considered less than significant.

Mitigation Measure(s) for Impact UTIL-1:

No significant impacts would occur, so no mitigation measures are required.

IMPACT UTIL-2 Potential Increase in Demand for Natural Gas Requiring Construction of Facility Improvements. *The proposed project would increase demand for natural gas enough to require PG&E to install on-site facilities, but off-site improvements to existing PG&E facilities would not be required. (Less than significant)*

Implementation of the proposed project would result in an increase in demand for natural gas. Construction plans include cutting, capping, then reconnecting the existing 6-inch high-pressure natural-gas line and 4-inch gas line that serve the project area. Upsizing of the gas lines would not be required because the existing infrastructure would meet future gas demand (Kimley-Horn 2008:49). An impact associated with increased demand for natural gas would be considered significant if off-site improvements were required to meet the added demand and those construction activities would result in significant impacts on the environment. Because no off-site improvements would be needed to satisfy the additional demand for natural gas, no significant impacts on the environment would occur. Therefore, this impact would be less than significant.

Mitigation Measure(s) for Impact UTIL-2:

No significant impacts would occur, so no mitigation measures are required.

IMPACT UTIL-3 Potential Increase in Demand for Wastewater Treatment Exceeding Available Treatment Capacity at the Stockton RWCF. *The proposed project could generate wastewater flow rates that exceed the current wastewater treatment agreement between NCYCC and the City of Stockton. However, the wastewater treatment plant has sufficient capacity to accommodate project flows, so no improvement to the plant would be needed as a result of the project. (Less than significant)*

Collected wastewater flows from the NCYCC would continue to be transported to the Stockton RWCF for treatment and disposal. The agreement between the City and the NCYCC allows for 0.80 mgd maximum daily flow and 1,400 gpm peak instantaneous flow. This agreement will expire in 2014.

The Handbook of Environmental Engineering Calculations, 2000 was referenced to develop a standard sewer demand per bed for the proposed project. This design guide specifies typical sewer flow rates of 250 gpd per bed space for hospitals and 125 gpd per bed space for institutions other than hospitals including nursing homes. The proposed medical facility is expected to include a mix of approximately 40% medical use and 60% institutional use. A detailed list of water-consuming appurtenances to be used at the facility and expected use rates associated with those appurtenances will not be available until more detailed facility design has been completed. The planning level estimates derived from the Handbook of Environmental Engineering Calculations do not account for the implementation of water conservation measures, such as the use of flush-o-meters with timers, which have been found to reduce water usage between 15% and 30% at many facilities according to CDCR research. The medical facility project is expected to implement water conservation. An assumed water conservation rate of 15% was used to develop the final estimate of 150 gallons per day per bed.

With 1,734 proposed beds, the proposed medical facility is expected to generate an average of approximately 260,000 gallons per day of sewage. Recent sewer flow data was obtained from Rick Jaime (2008), chief of plant operations at the NCYCC. Average daily sewer flow from the existing NCYCC and CTCA is currently

approximately 140,000 gallons per day. With the addition of the proposed project, the total daily sewer flow will be approximately 400,000 gallons per day, which is below the permitted 800,000 gallon per day maximum.

The existing NCYCC sewer pump station is designed to discharge to the City's 20" trunk sewer at a maximum flow rate at or near the permitted maximum rate. The proposed medical facility peak sewer flow rate may be in excess of the permitted maximum. However, sewer flow from the proposed project will be delivered to the City's sewer collection system through a new on-site sewer pump station. The pump station will include a wet well or temporary sewage storage facility that will attenuate peak sewage flows. The sewer pump station will be designed so as to limit pumping rates to the City system to the permitted maximum flow, and will use automatic controls that will only allow pumping when the NCYCC facility is not pumping. This control scheme will prevent both pump stations from operating at the same time, and potentially violating the existing permitted maximum flow rate of 1,400 gallons per minute.

An impact associated with wastewater treatment facilities would be considered significant if the construction of a new facility or improvements to existing facilities required for a project would result in significant environmental effects. If the City can accept an increase in wastewater flow, then impacts of the proposed project would be considered less than significant. As described above, the City's RWCF has capacity to treat 55 mgd of effluent and currently treats 31.7 mgd, suggesting the facility has available capacity to accommodate flows from the project. Nevertheless, the proposed project may result in the need for a new agreement between the NCYCC and the City. Although a new agreement may be needed, the project would not result in physical changes to the RWCF. Therefore, this impact would be less than significant.

Mitigation Measure(s) for Impact UTIL-3:

No significant impacts would occur, so no mitigation measures are required.

IMPACT UTIL-4 Potential Need for Stormwater Drainage Facility Construction or Expansion that Would Cause Significant Environmental Effects. *The proposed project would increase impervious surfaces on the project site, which would increase the rate of stormwater runoff. The existing detention/retention basin on the project site would be expanded to accommodate the increased runoff and prevent an increase in the amount of discharge into the adjacent creek. Therefore, the proposed project would not result in the need for other new or expanded stormwater drainage facilities. (Less than significant)*

The project site consists of both developed and agricultural land. Stormwater generated from neighboring agricultural areas that currently flows through an unlined drainage canal within the project boundary would be re-routed on-site to the north of the proposed medical facility through a San Joaquin County Flood Control District Watercourse Encroachment permit. Kimley-Horn (2008) analyzed the current capacity of the existing NCYCC drainage system, and have determined that the system does not have the capacity to adequately convey the 10-year or 100-year storm under existing conditions, and also cannot support additional runoff generated by the medical facility project. Therefore, based on flow calculations for the 100-year storm event, the proposed project includes upgrades to the existing drainage system. A new 66-inch drainage line and stormwater pump station to serve the proposed project would be installed. The existing detention basin is currently being analyzed to ensure it can accommodate increased runoff from the project site, and could be expanded to prevent increased flows from entering Littlejohns Creek. Because these facilities would be designed to detain increased flows and would not result in increased discharge into the creek, the proposed project would not require any additional expansion of local or regional drainage systems. As a result, this impact would be less than significant. (Impacts of expanding the detention basin are evaluated in Section 4.7, "Biological Resources.")

Mitigation Measure(s) for Impact UTIL-4:

No significant impacts would occur, so no mitigation measures are required.

IMPACT UTIL-5 **Potential for Increased Generation of Solid Waste.** *Although the proposed project would increase generation of solid waste, both during construction and operation, the nearby landfill is expected to have capacity to accept the increased solid waste. (Less than significant)*

It is estimated that approximately 22,000 yd³ of vegetation and other spoils would be hauled off-site during project construction. When operational, the proposed project is anticipated to generate a total volume of 787 cubic yards (yd³) of waste per week. This estimate includes 441 yd³ of general waste, 47 yd³ of non-compacted waste, 149 yd³ of weekly recyclable waste, 118 yd³ of weekly regulated medical waste, and 31 yd³ of vendor specialty waste (i.e. sharps, confidential papers, hazardous wastes, etc. that require removal by an outside vendor). Solid waste pick-up would be expected to occur between six and eight times per week. General solid waste would be transported to Forward Landfill south of the site. The 118 yd³ of medical waste would be treated and compacted on-site and would then be disposed of with the general solid waste at Forward Landfill. This medical waste volume does not include sharps. The project would generate fewer than 20 yd³ of sharps per week, which would be picked up under contract two times per week by a local medical waste handler and destroyed at their facility.

With a permitted capacity of more than 51 million cubic yards through 2020 and a remaining capacity of more than 40 million cubic yards as of June 2002 (CIWMB 2008), the landfill would be able to accommodate the project's construction and long-term disposal needs. Project construction and operation would not cause existing regional landfill capacity to be exceeded.

In addition, the proposed project would include a waste reduction program that includes development of an environmentally sensitive purchasing policy that includes waste reduction, utilization of reprocessible items where economically feasible, and the development of a comprehensive recycling program. Therefore, this impact would be less than significant.

Mitigation Measure(s) for Impact UTIL-5:

No significant impacts would occur, so no mitigation measures are required.

IMPACT UTIL-6 **Potential Need for New Water Infrastructure.** *The proposed project would not require construction of a new water distribution system beyond what is currently planned by the City of Stockton. (Less than significant)*

The proposed project would require an increase in the water distribution infrastructure within the project site. The City plans to complete an extension of the distribution line to the Opus Logistic Center, currently under development north of the project site, by the end of 2008 (Kimley-Horn 2008:24). The proposed project would connect to the distribution line on Arch Road and would loop the system by extending a new distribution line down Newcastle Road. Because extensions to the City's water infrastructure are planned without the project and are already under way, this impact would be less than significant.

Mitigation Measure(s) for Impact UTIL-6:

No significant impacts would occur, so no mitigation measures are required.