

City of Martinez

Downtown Infrastructure Planning & Design Study



DYETT & BHATIA
Urban and Regional Planners

February, 2011

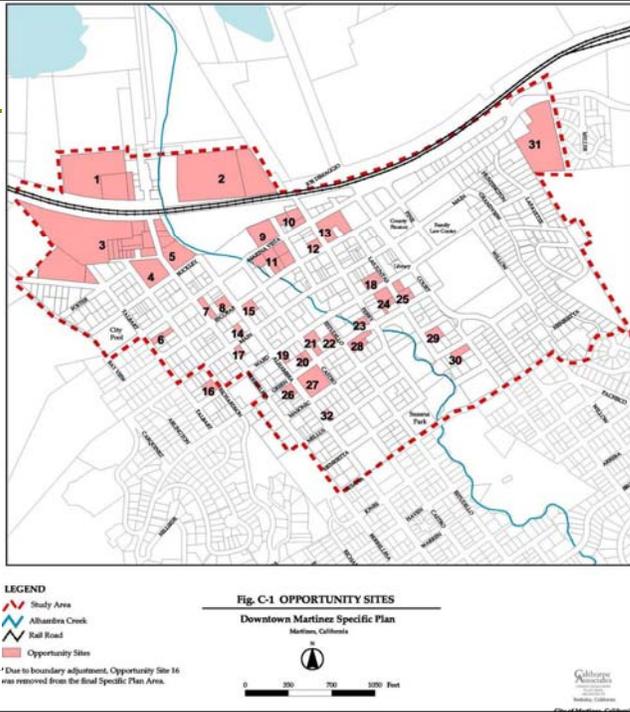
Study Goals

- Facilitate implementation of the City of Martinez Downtown Specific Plan (2006)
 - *Insufficient infrastructure was identified as a potential barrier to implementation*
- Understand how to address the issue of infrastructure in the Downtown
- This Study:
 - *Identifies improvements required to support development proposed in the Downtown Specific Plan*
 - *Develops a detailed list of specific upgrades that may be needed and costs of those upgrades*
 - *Identifies funding and financing options*
 - *Identifies green technology and energy efficiency approaches*

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Downtown Specific Plan

Opportunity Sites

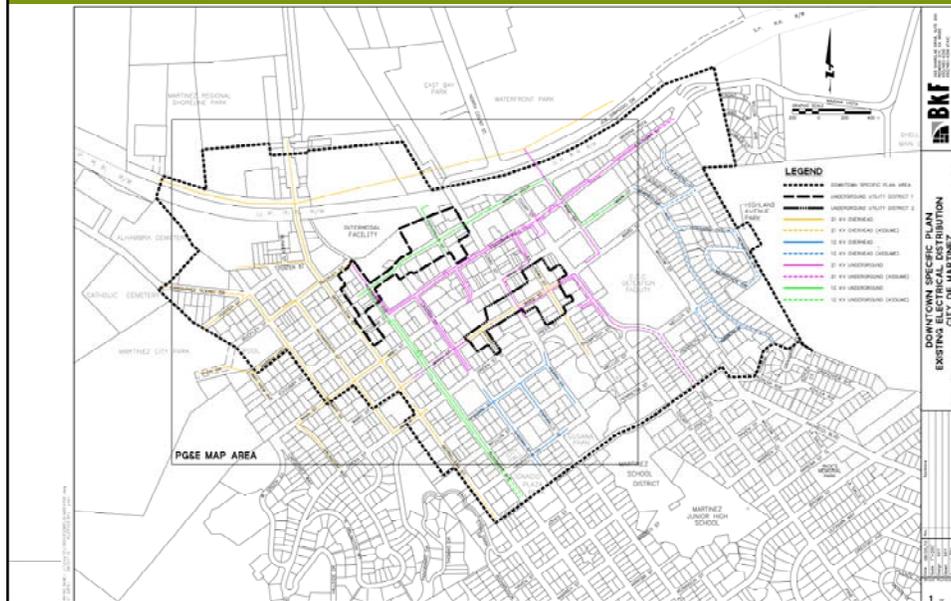


Downtown Specific Plan Buildout

Potential Development Scenario Summary

<i>Land Use</i>	<i>New Potential Development</i>	<i>Net Potential Development</i>
Single Family Residential	25 units	25 units
Townhomes	72 units	72 units
Multi-Family Residential	683 units	683 units
Residential Total	780 units	780 units
Commercial/ Retail	23,400	-35,100 square feet
Office	42,100	27,000 square feet
Industrial	0	-105,700 square feet
Non-Residential Total	65,500 square feet	-113, 800 square feet

Existing Electrical Distribution



Natural Gas & Electric Demand, Capacity & Adequacy

- Overall, natural gas and electric capacity is adequate
 - The change in electric and natural gas load is small relative to existing area load
 - Electric expected to increase by 10%, (302 KW)
 - Natural Gas expected to increase by 23%,(1,074 cubic feet per hour)
 - Existing delivery systems are sufficient to meet existing requirements and future development
 - Even when load does increase, PG&E has a utility obligation to invest in its delivery systems in order to provide adequate service

Natural Gas & Electric Improvements and Costs

- Site specific costs to developers may exist related to:
 - *Distribution Line Extensions (Rule 15)*
 - Applicant responsible for certain costs; some refunds available
 - Not expected due to infill nature of plan
 - *Service Extensions (Rule 16)*
 - All new service
 - Applicant responsible for specific work and components
 - Refunds offset costs in most cases (particularly for dense residential development)
 - *Undergrounding (Rule 20)*
 - City requires undergrounding of new electric distribution lines

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Natural Gas & Electric Improvements Financing

- No major funding requirements are identified
- Little need to upgrade gas and electric delivery systems beyond what PG&E has and is expected to continue to do
- Several undergrounding projects are completed, underway or planned
 - *The only areas in the Specific Plan area that still have overhead service are primarily residential and not high priority for undergrounding*
- Rule 16 rebates provide a significant source of funding for obtaining new electric and gas service
 - *Rule 16 rebates are expected to at least cover connection and perhaps contribute to other undergrounding requirements as they might develop*

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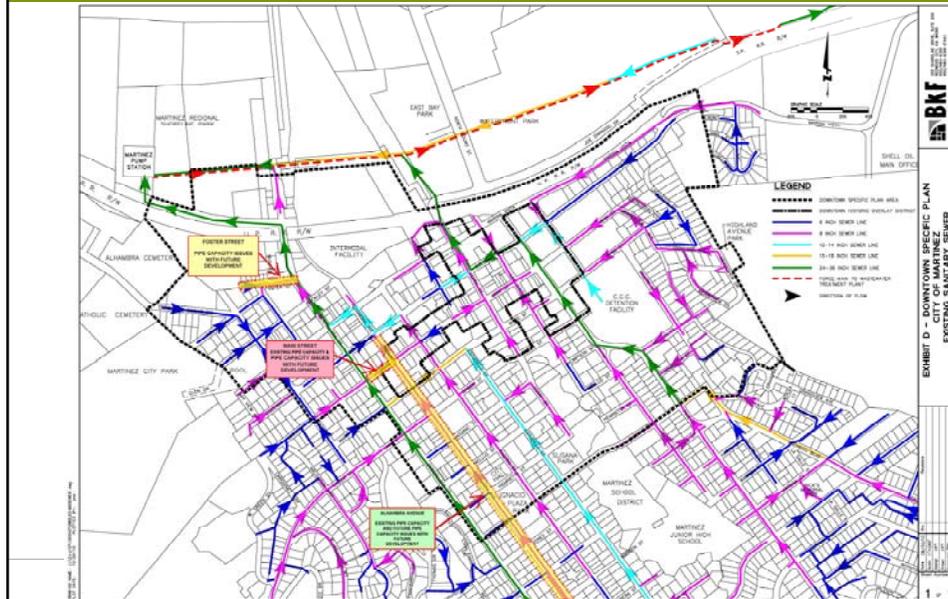
Natural Gas & Electric Green Technology and Energy Efficiency

- Energy Conservation & Efficiency
- On-Site Production
- Renewable energy generation technologies such as solar and wind
- Combined heat and power (CHP)
- Policy Samples
 - *City of Martinez Climate Action Plan*
 - *California Air Pollution Control Officers Association (CAPCOA)*
 - *City of Emeryville General Plan*
 - *City of San Jose Draft General Plan Update*
- Other Resources
 - *Leadership in Energy and Environmental Design (LEED)*
<http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1970>
 - *California Center for Sustainable Energy (CCSE)*
<https://energycenter.org/>

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Sanitary Sewer

Sanitary Sewer Capacity Issues



Sanitary Sewer Improvements and Costs

- Main Street between Berrellesa Street and Alhambra Avenue
 - \$43,300
- Foster Street between Richardson and Berrellesa streets
 - \$59,500
- Alhambra Avenue between Escobar and Susana streets
 - \$316,400

Sanitary Sewer Improvements Financing

- Two cases where the City/CCCSD would need to facilitate infrastructure improvements to implement the Downtown Specific Plan:
 - *To promote development prior to the Alhambra Avenue Trunks expansion (planned for 2017)*
 - Improvements on Main Street
 - Improvements on Alhambra Avenue between Escobar and Susana streets
 - *To promote development on Opportunity Site 3, if development requires use of sewer infrastructure on Foster Street*
- It may be appropriate for the developer to bear the initial costs
- A reimbursement program would reduce the cost and risk to the developer
- The City may also fund the improvements following the establishment of an assessment district or infrastructure financing district

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Sanitary Sewer Green Technology and Energy Efficiency

- Could relieve pipe capacity issues that currently exist within portions of the sewer infrastructure
- Would not eliminate the need for upgrades
- Two different design practices:
 - *Water conservation measures, such as water conserving or waterless plumbing fixtures*
 - *Wastewater treatment on-site for reuse for non-potable water demands such as irrigation and toilet flushing*
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