

Section 5 Infrastructure and Services

he infrastructure, utilities, and public services to be provided as part of the development of the Edenglen Specific Plan are discussed in this section.

5.1 <u>Circulation</u>

The circulation plan for Edenglen reinforces the concept of traditional neighborhood design. In addition to providing safe and efficient movement of vehicular traffic through the project, it also provides a safe environment for pedestrian movement and bicycle traffic reducing the reliance on the automobile as a means of travel. In addition, transit stops and bus turnouts will be provided as required by Omnitrans, along the Master Plan streets which bound the Edenglen community. *Exhibit 15, "Circulation Master Plan"* establishes the hierarchy and general location of roadways within Edenglen.

5.1.1 Streets

The Edenglen Specific Plan is bounded by four City of Ontario Master Plan streets which will provide access to and from the Project Site. Within the Project Site neighborhood streets of varying design will provide access and circulation through the community. Many of the neighborhoods will be served by private alleys located in the rear of residences in order to maintain a traditional, "architecture forward" streetscape for the community.

Milliken Avenue

Milliken Avenue abuts the Project Site on the east. Milliken Avenue is a designated Divided Arterial Parkway 1A Street. The City of Ontario segment will be 52 feet of paved area, the westerly 13-feet of an 18-foot raised median and a 15-foot parkway to include a 5-foot sidewalk separated from the street by a 10-foot landscaped area. An additional landscaped buffer of 35 feet in width will be provided between the sidewalk and the parking areas or building setback of adjacent land uses. The eastern half will be developed per County of Riverside standards. The right-of-way improvements required for Milliken Avenue are illustrated in *Exhibit 16*, "Master Plan Arterial Street Cross Sections". The developer(s) of the land use districts adjacent to Milliken Avenue will be responsible for the improvement of Milliken Avenue between Chino Avenue and Riverside Drive as required by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. Bus turnouts will be required along Milliken Avenue to the satisfaction of the City and Omnitrans.





Riverside Drive

Riverside Drive is a designated Standard Arterial and bounds the Project Site on the north. Riverside Drive has 80 feet of paved area including 7 feet of painted median and a 13-foot parkway, including a 5-foot sidewalk separated from the street by a 7-foot landscaped area. In addition to the dedicated right-of-way, a 23-foot wide landscaped buffer will be provided between the back of sidewalk and the residential community wall as well as along the frontage of the Community Commercial Land Use area. Riverside Drive is illustrated on *Exhibit 16, "Master Plan Arterial Street Cross Sections"*. The developer(s) of Edenglen will be responsible for all offsite improvements for the southerly half of the Riverside Drive right-of-way, for the entire project frontage from Mill Creek Avenue easterly to Milliken Avenue. Phasing of the improvements will be implemented as required by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. Bus turnouts will be required along Riverside Drive to the satisfaction of the City and Omnitrans.

Chino Avenue

Chino Avenue abuts the Project Site on the south. Chino Avenue is a designated Collector Street with an ultimate right-of-way of 88 feet with 64 feet of paved area and a 12-foot parkway on each side of the street, to include a 5-foot sidewalk separated from the street by a 7-foot landscaped area. Improvements to the north side of Chino Avenue, adjacent to the residential portion of the Project Site, include an additional 55-foot wide landscaped buffer area, which includes an SCE Easement. The right-of-way improvements required for Chino Avenue are illustrated in *Exhibit 17, "Master Plan Collector Street Cross Sections"*. The developer will be responsible for all offsite improvements for the northerly half of Chino Avenue, plus an additional 14-foot lane and 5-foot shoulder on the south half. The phasing of these improvements will be implemented as required by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the approved tentative maps for the project. Bus turnouts will be required along Chino Avenue to the satisfaction of the City and Omnitrans.

Mill Creek Avenue

Mill Creek Avenue abuts the Project Site on the west. Mill Creek Avenue is a designated Collector Street with an ultimate right-of-way of 88 feet, with 64 feet of paved area and a 12-foot parkway on each side of the street, to include a 5-foot sidewalk separated from the street by a 7-foot landscaped area. In addition a landscaped buffer of 18 feet in width will be provided between the back of the sidewalk and the residential community wall. The right-of-way improvements required for Mill Creek Avenue are illustrated in *Exhibit 17, "Master Plan Collector Street Cross Sections"*. The developer will be responsible for all offsite improvements for the easterly half of Mill Creek Avenue, plus an additional 14-foot lane and 5-foot shoulder on the west half. The phasing of these improvements will be implemented as required by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or the Conditions of Approval established on the tentative maps for the project.





Local Streets and Alleys

Public local streets within residential areas are designed to distribute vehicular traffic from the public arterial and collector streets adjacent to the Project Site into and through residential neighborhoods. Private alleys are proposed to provide rear access to residential units throughout Edenglen. Local streets and private alleys proposed for Edenglen are illustrated on *Exhibit 18, "Local Street Sections"*, *Exhibit 19, "Local Street and Private Alley Sections"*, and *Exhibit 20, "Alleys"* and discussed below:

Primary Entry Street

The Primary Entry Street leading from Riverside Drive into the residential project to the Park Loop Street will have a total right-of-way of 85 feet, with 36 feet of paved area, including an 8 foot parking lane for parallel parking on either side of the street. A 5 foot sidewalk will be provided on each side separated from the street by a 10 foot wide landscaped parkway. A 9.5-foot wide landscaped area will be provided between the back of the sidewalk and the residential lots. On-street parking shall be provided in each direction on the residential side of the Primary Entry Street.

Secondary Entry Street

A Secondary Entry Street will be developed from Mill Creek Avenue easterly into the residential area with a total right-of-way of 63 feet, with 36 feet of paved area, including an 8-foot parking lane on either side for parallel parking and 5-foot sidewalks on each side separated from the street by an 8½-foot wide landscaped parkway.

Park Loop Street

The Central Park Loop Street adjacent to the central park will be a one way street around the park with a total right-of-way of 40 feet, with 28 feet of paved area, including an 8-foot parking lane on the residential side for parallel parking and a 5-foot sidewalk separated from the street by a 7-foot parkway on one side of the street and park on the other. On-street parking is restricted to the residential side of the street. Angled parking may be provided near the recreation center on the park side of the street.

Neighborhood Streets

Local neighborhood streets with residential development on both sides of the street will have a 60-foot right-of-way, with 36 feet of paved area, including an 8-foot parking lane on either side for parallel parking and a 5-foot sidewalk separated from the street by a 7-foot landscaped parkway. Parking is provided on both sides of these streets except along single-loaded, Neighborhood Streets where parking is restricted to the residential side of the street. Local Neighborhood Streets with residential development on only one side will have a 44-foot right-of-way with 32 feet of paved travel area, including an 8-foot parking lane, and a 5-foot sidewalk separated from the street by a 7-foot parkway.





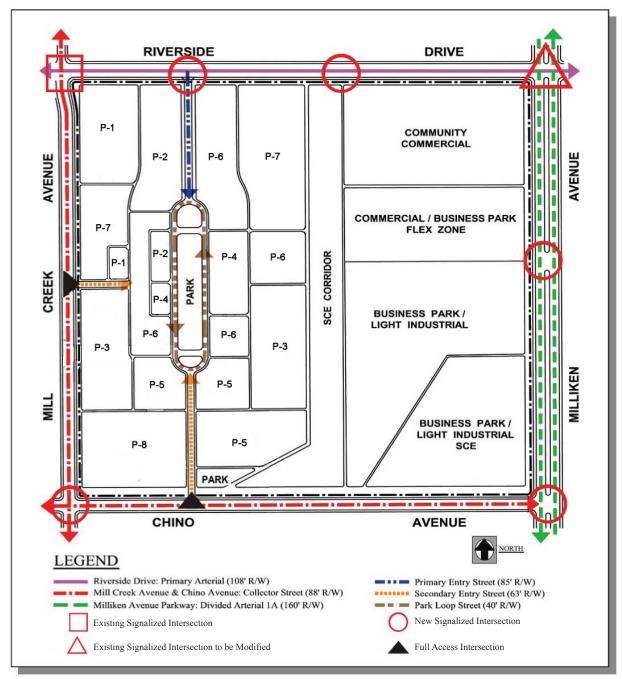
Alleys

Private alleys within the residential development will have a total right-of-way minimum of 20 feet. Total paved area and right-of-way will vary from 20 feet to 24 feet with a minimum garage to garage distance of 30 feet requiring either a 5-foot or 3-foot apron on each side of paved area, depending upon Fire Department requirements. Alleys with "dead end" conditions will be a maximum length of 150 feet as noted on Exhibit 20, "Alley". Final design of the alley is subject to approval of the City Engineer. Parking is prohibited along alleys. Tapers will be incorporated at the point where private alleys intersect with public streets.





Exhibit 15 - Circulation Master Plan



Note: All access points are conceptual and ultimate location will be determined at the development stage, in accordance with City of Ontario New Model Colony Access Guidelines, and subject to final approval of the City Engineer.





Exhibit 16 – Arterial Street Sections

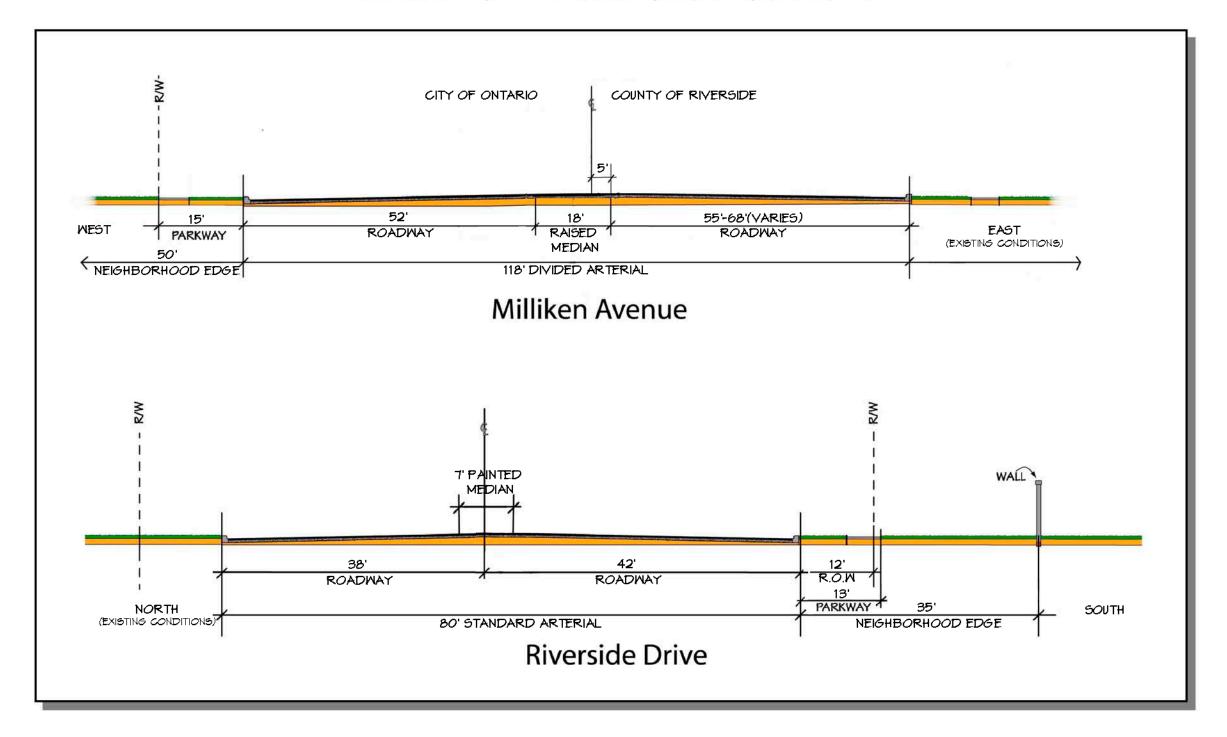






Exhibit 17 – Collector Street Sections

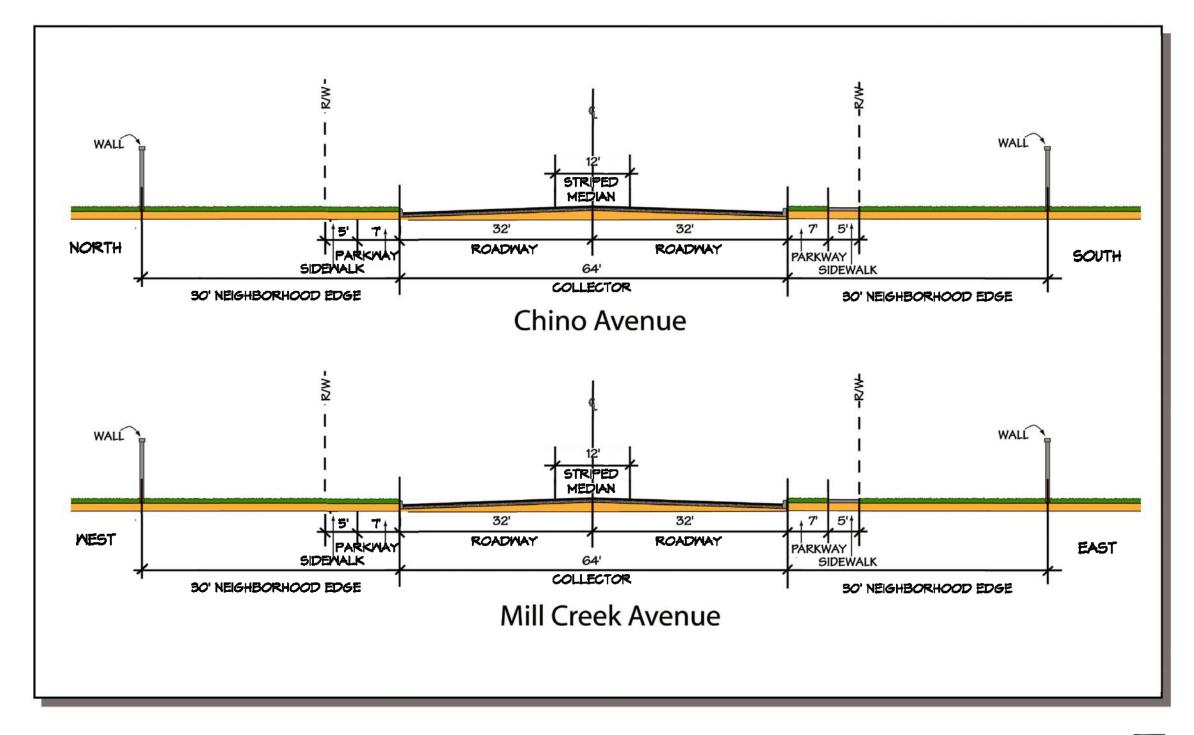
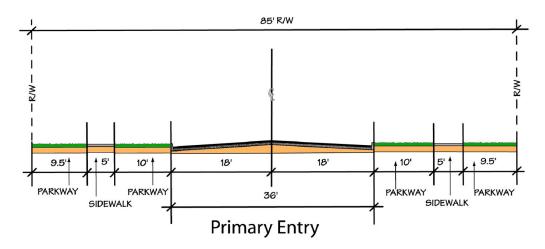
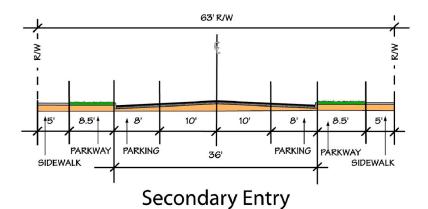


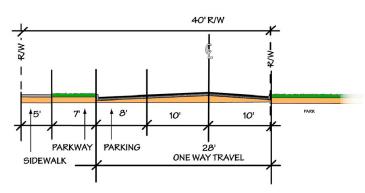




Exhibit 18 - Local Street Sections





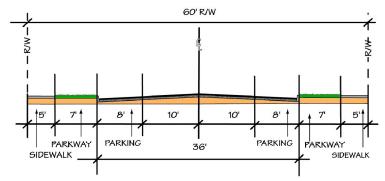


Park Loop Street

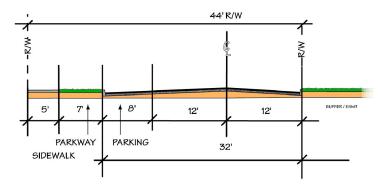




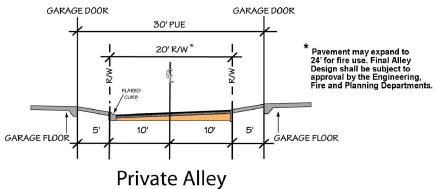
Exhibit 19 – Local Street and Private Alley Sections



Double Loaded Local Neighborhood Street



Single Loaded Neighborhood Street Adjacent to Buffer

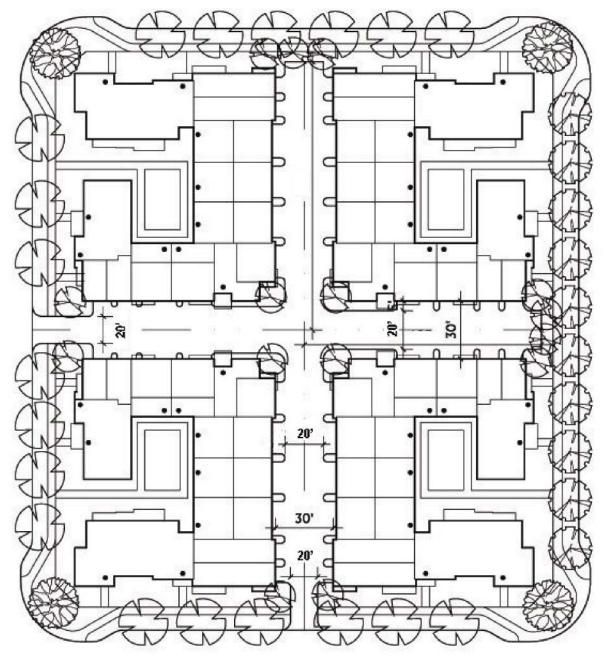


(On Street Parking Is Prohibited)





Exhibit 20 – Alley



Note: Alleys with "dead end" conditions may not exceed a maximum length of 150 feet.





5.1.2 Traffic Calming

Edenglen provides for traffic calming within residential neighborhoods to slow traffic and reduce traffic noise on streets contributing to safe and livable neighborhoods in which to walk, bike, and drive.

Traffic calming within Edenglen is designed to address the following:

- Reduction in traffic speeds.
- Reduction in traffic related noise.
- Reduction in cut-through traffic.
- A safe and pedestrian friendly circulation system to encourage walking.
- Allow for non-restricted access for emergency services vehicles such as police, fire, and ambulances.
- Reduction in radii of streets and elimination of knuckles.

Factors affecting traffic speeds are those that influence the driver's perception of the roadway such as:

- Type of adjacent development and distance of development from the roadway.
- Frequency of access points onto the roadway.
- Roadway alignment and curvature.
- Type and massing of landscaping adjacent to the roadway.
- Frequency of traffic control devices along the roadway.
- Narrowness of travel lanes.

The following traffic calming techniques will be implemented in the design of the roadways within Edenglen.

Primary Entry Street

The Primary Entry Street, within the Project Site, will be designed with a total 36-foot wide paved area curb-to-curb. On each side of the travel area will be a 10-foot wide landscaped parkway adjacent to the curb and a five foot wide sidewalk behind the landscaped parkway. A 9.5-foot wide landscaped lot will be provided between the sidewalk and residential lots.

Park Loop Street

A one-way loop street is planned around the central park. Traffic entering the park loop street will yield to traffic traveling within the park loop street similar in function to a traffic circle.





Local Neighborhood Street Design

Neighborhood streets within Edenglen are designed in a grid with landscaping on either side within parkways to add interest in the street encouraging drivers to slow their travel speed and observe their surroundings. Traffic speeds on local residential streets will be reduced by incorporating tapered intersections for local streets as illustrated in Exhibit 21, "Neighborhood Street Tapers".

Alleys

Typical private alleys within Edenglen will consist of 20 feet of paved travel area with 5-feet on each side to accommodate landscaping and/or driveways. Speeds for traffic entering the alleys and cut through traffic can be reduced by incorporating tapers at the entrance to these alleys. Final alley design shall be determined at the time of approval of tentative tract maps and subject to review and approval by the Engineering Department, Fire Department and Planning Department.

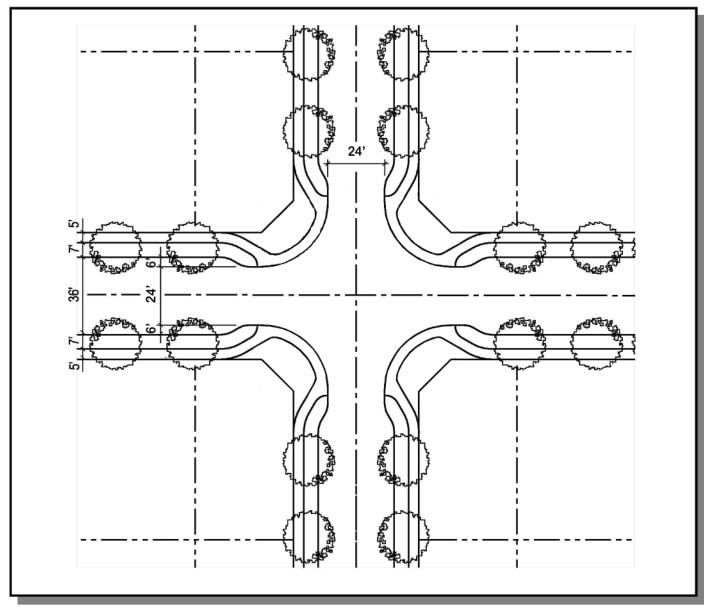
Landscaping

Landscaping adjacent to streets within the Project Site will combine the use of shade trees, shrubs, and groundcover adjacent to sidewalks to create a more intimate streetscape encouraging drivers to reduce driving speeds. The landscape concept for Edenglen is designed to contribute to a sense of the street system as a pedestrian protected area to promote slower traffic speeds.





Exhibit 21 - Neighborhood Street Chokers



Note: Choker locations shall be in accordance with the City of Ontario Choker Placement Guidelines and in accordance with City of Ontario Standards. Neighborhood street chokers and sidewalks shall be designed in accordance with the City of Ontario Standard Drawing Nos. 1110 and 1212.





5.1.3 Pedestrian Circulation

Off-street pedestrian circulation will be available throughout Edenglen by means of the interconnected, paved sidewalk system within the roadway right-of-way, separated from vehicular travel lanes by a landscaped parkway. Pedestrian access points crossing the Community Trail will be provided for the residents of Edenglen, linking residential areas with the commercial center to be developed in the future, east of the SCE Corridor. The Edenglen pedestrian system provides connectivity among residential neighborhoods to the central park, Colony High School, and the commercial center to be developed east of the residential area within the Specific Plan.

5.1.4 Bicycle Trails

Bicycle trails are an integral element to creating accessibility and mobility within Edenglen. A multi-purpose Community Trail will be constructed by the developer within the SCE Corridor between Riverside Drive and Chino Avenue. This Community Trail will provide a portion of the City's Master Planned Regional trail system proposed for SCE easements and corridors throughout the City. Bicycle circulation will be provided within the right-of-way of local residential streets within Edenglen to connect all residential neighborhoods to one another, with the Central Park and to Colony High School located west of the project site.

The Master Plan for pedestrian and bicycle circulation for Edenglen is illustrated on *Exhibit 22, "Pedestrian and Bicycle Circulation Plan"*.

5.2 POTABLE AND RECYCLED WATER MASTER PLAN

Domestic water will be provided by the City of Ontario. The New Model Colony Water Master Plan is currently being revised. The revised Draft Water Master Plan identifies new water facilities to include the 9.0 Million Gallon 1010'-2A Reservoir at the southeast corner of the I-10 freeway and Milliken Avenue, a 24 inch transmission main from the 1010'-2A Reservoir to Riverside Drive; one groundwater well, (the groundwater well will be located onsite as illustrated on *Exhibit 23*, "Conceptual Domestic Water Plan") and recycled water lines. Construction of the onsite and offsite Master Plan water service improvements shall be the responsibility of the developer(s) and is required prior to issuance of building permits for Edenglen. As mentioned above, the City is in the process of updating the Water Master Plan. Any changes resulting from the update will be incorporated into the Edenglen Domestic Water Master Plan.





5.2.1 Domestic Water

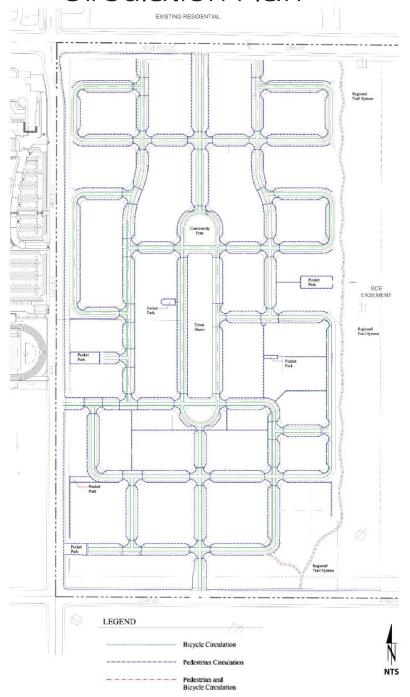
The project lies within the Phillips Street Pressure Zone, also known as the 1010' Zone. New domestic water mains to be constructed as part of the development of Edenglen will include an 18-inch main in Riverside Drive, between Mill Creek Avenue and Milliken Avenue; an 18-inch main in Mill Creek Avenue, connecting to the existing 16-inch water line at the southerly boundary of the high school and extending south to Chino Avenue; a 12-inch main in Chino Avenue, between Mill Creek Avenue and Milliken Avenue; and a 12-inch line in Milliken Avenue from Chino Avenue to Riverside Drive. Within the Project Site, a network of 8-inch water lines will be installed.

The Master Plan for pedestrian and bicycle circulation for Edenglen is illustrated on *Exhibit 23*, "Conceptual Domestic Water Plan".





Exhibit 22 - Pedestrian and Bicycle Circulation Plan



Note: All monumentation occurring at main and secondary entry points and any other location, particularly in public right-of-way, shall be placed in accordance with the City of Ontario Guidelines and subject to City Engineer approval.





5.2.2 Recycled Water System

New recycled water lines, in conformance with the City's Recycled Water Master Plan, will be constructed as part of the development of Edenglen. Inland Empire Utilities Agency (IEUA) will supply the recycled water from their facilities at Westwind Park, located north of Riverside Drive and east of the Cucamonga Creek Channel. The Master Plan Recycled Waterline, which will deliver recycled water to Edenglen per the draft Recycled Water Master Plan, to include a 30-inch main from Westwind Park to Riverside Drive, a 16-inch main from Riverside Drive to Haven Avenue and reducing to a 12-inch main from Haven Avenue to Mill Creek Avenue. The offsite improvements, adjacent to the site, will include an 8-inch recycled water line in Chino Avenue between Mill Creek Avenue and Milliken Avenue, in Milliken Avenue, from Riverside Drive to Chino Avenue, in Mill Creek Avenue from Riverside Drive to Chino Avenue and in Riverside Drive, from Mill Creek Avenue to Milliken Avenue. On-site recycled water lines will be installed as required by the City Engineer and/or by the forthcoming Recycled Water Master Plan (which will be adopted at a future date). The City's goal is to maximize the use of recycled water including but not limited to irrigation of parks, schools, street landscaping, recreational trails, common area residential landscaping and commercial/industrial landscaping.

There may be an interim period where recycled water supply does not have adequate pressure depending on the timing of development and construction of a regional booster station. If this is the case, the recycled water system will connect to the potable system initially, until such point that recycled water service is available.

The Master Plan for recycled water for Edenglen is illustrated on Exhibit 24, "Conceptual Recycled Water Plan".





Exhibit 24 - Conceptual Recycled Water Plan

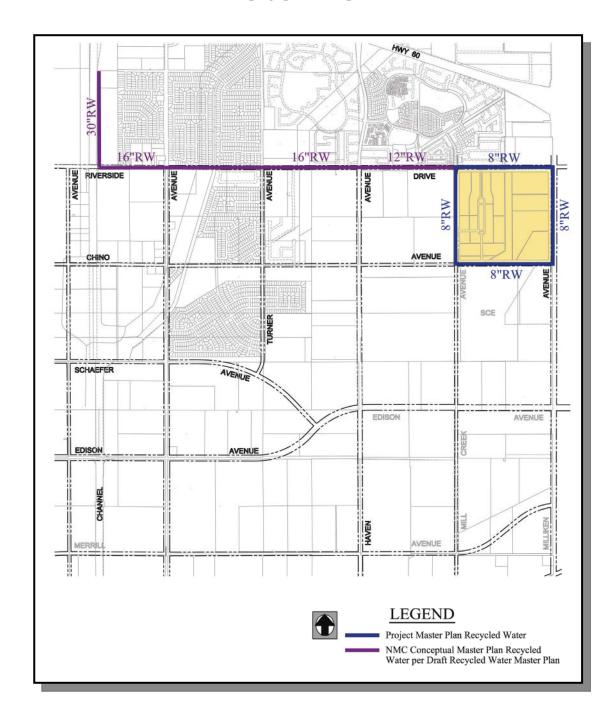
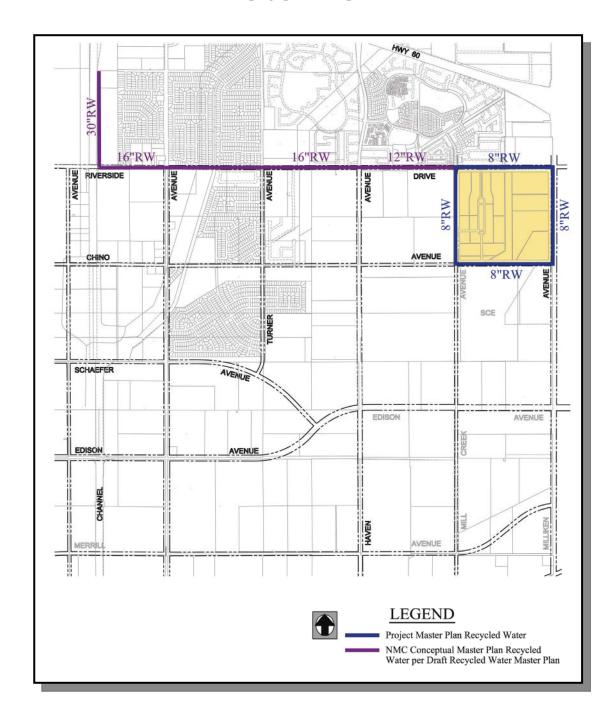






Exhibit 24 - Conceptual Recycled Water Plan







5.3 SEWER MASTER PLAN

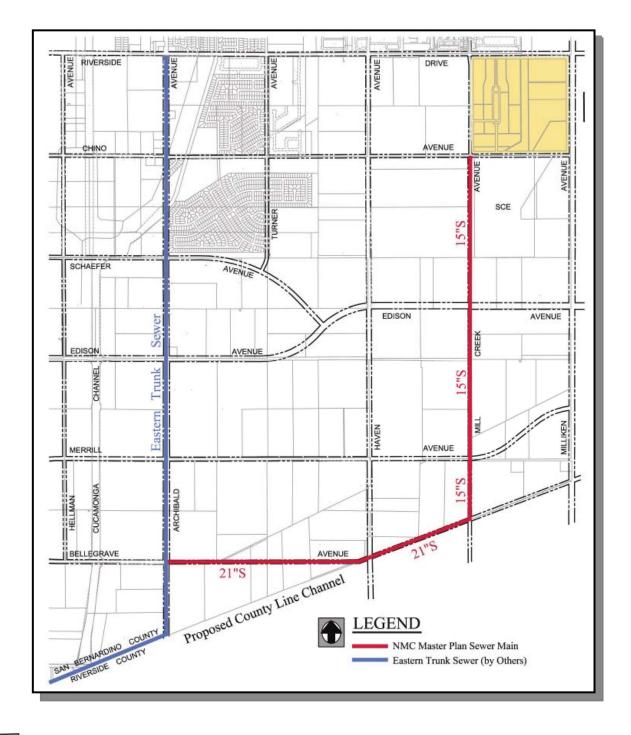
Sewer service for Edenglen will be provided by the City of Ontario. The City's Sewer Master Plan identifies ultimate sewer facilities extending from the southwesterly corner of the Project Site to the Eastern Trunk Sewer. These Master Planned facilities include a 15-inch sewer main extending from southwesterly corner of the Project Site, along Mill Creek Avenue to Bellegrave Avenue, and a 21-inch sewer main extending along Bellegrave Avenue westerly to the Master Planned Eastern Trunk Sewer. Completion of these Master Plan improvements is required to provide the ultimate sewer service to Edenglen. Within the Project site a network of 8-inch and 10-inch sewer lines will be installed.

The Sewer Master Plan for Edenglen is illustrated on Exhibit 25, "Conceptual Sewer Plan".





Exhibit 25 - Conceptual Sewer Plan







5.4 Drainage

The City's Storm Drain Master Plan identifies new storm drain facilities to serve the Project Site extending northerly from the County Line Channel within Mill Creek Avenue to Riverside Drive and easterly along Chino Avenue and Riverside Drive to the east side of the SCE easement. Completion of these Master Plan improvements will provide ultimate storm drain service to Edenglen.

That portion of the Master Planned line, which lies within Edenglen, will be constructed as a part of the development of the project. These improvements include a 54 inch storm drain in Mill Creek from Chino Avenue to Riverside Drive; a 48 inch storm drain in Riverside Drive from Mill Creek to the east side of the SCE Corridor (approximately ¼ mile); and a 60 inch storm drain in Chino Avenue from Mill Creek to the east side of the SCE Corridor. The developer of the residential portion of Edenglen will be responsible for the construction of these improvements.

Onsite storm drains will be constructed to convey the on site flows to the proposed Master Planned storm drain line in Chino Avenue.

Off site improvements will include the construction of the 66 inch Master Planned line from the southwesterly corner of the Project Site southerly in Mill Creek Avenue approximately one-half mile; where it will connect with a Master Planned line that in turn will connect with the proposed County Line Channel. Interim detention basin(s) will be constructed in the southerly portion of the Project Site, if permanent improvements have not been completed. The exact size and location of the interim basin(s) will be determined at the time of tentative map approval.

The Drainage Master Plan for Edenglen is illustrated on Exhibit 26, "Conceptual Storm Drain Plan".

5.4.1 National Pollution Discharge Elimination System Compliance (NPDES)

The grading and drainage of the Edenglen development shall be designed to detain, filter and treat surface runoff, in a manner and combination which is practical, to reach NPDES compliance, so as to minimize the detrimental effects of urbanization on the beneficial uses of receiving waters, including effects caused by increased pollutants and changes in hydrology. These effects may be minimized through the implementation of site designs that reduce runoff and pollutant transport by minimizing impervious surfaces and maximizing on-site infiltration, source control Best Management Practices (BMPs) and/or either on-site structural treatment control BMPs, or participation in regional or watershed-based structural treatment control BMPs.





Prior to the issuance of a grading or construction permit, the City requires the preparation of a Stormwater Pollution Prevention Plan (SWPPP) that conforms to the State Water Resources Control Board NPDES Permit No. CAS000002 (Waste Discharge Requirement Order No. 99-08-DWQ). Generally, the SWPPP specifies Best Management Practices (BMPs) that will prevent all construction-related pollutants from contacting stormwater and all products of erosion from moving off-site into receiving waters.

The NPDES program is administered by the State Water Resources Control Board (SWRCB) through the individual California Regional Water Quality Control Boards (RWQCB). General Construction Activity Storm Water NPDES permits for storm water discharges are administered by the RWQCB. Construction activities subject to this General Permit include clearing, grading, and disturbances to the ground such as stockpiling, or excavation that results in soil disturbances. Stormwater pollution prevention plans (SWPPP) are required for operation under a construction NPDES permit; these plans typically include both structural and non-structural Best Management Practices (BMPs) to reduce water quality impacts. Prior to operation under a grading permit, individual projects will be required to demonstrate compliance with NPDES construction activity stormwater permit requirements.

A number of Best Management Practices (BMPs) are available for application by the City to subsequent development projects within the specific plan area in order to reduce water pollution sources on developed sites to the maximum extent feasible. The incorporation of these BMPs is intended to reduce the level of contaminants present at the drainage system discharge points to acceptable levels. Source reduction techniques have proven to be the most cost-effective ways of avoiding or reducing water pollution from urban runoff.

The storm drain system and the BMPs applied by the City to individual development projects must conform to non-point stormwater pollution control standards related to the County's Municipal Stormwater Permit, under the NPDES program (Water Quality Order Number 90-136, NPDES CAS000200), as amended by the SWRCB's Statewide General Permit (WQ Order No. 92-08 DWQ) and General Construction Activities Storm Water Permit (WQ Order No. 99-08-DWQ).

In addition to the preparation of a SWPPP for construction-related activities, a Stormwater Quality Management Plan (SWQMP) is required for the proposed project that would include Best Management Practices (BMPs) for the short-term construction activities and the long-term operations associated with the various land uses that are proposed. Both the SWPPP and the SWQMP would include site design BMPs, source-control BMPs, and treatment control BMPs. BMPs will be selected from the California Stormwater Quality Association's Construction Handbook (CSQA Construction Handbook), which provides guidance on the selection and implementation of BMPs. Use of BMPs from the handbook is consistent with City's Municipal Code (\$6-6.505). The purpose of the CSQA Construction Handbook is to provide guidance suitable for use by a wide range of individuals involved in construction site water pollution control, which include the following: developers, engineers, contractors, tradesmen, subcontractors, and municipal agencies. Each user of the handbook is





responsible for working within their capabilities obtained through training and experience, and for seeking the advice and consultation of appropriate experts at all times. The CSQA Construction Handbook identifies the following six BMP categories:

- Erosion Control (EC);
- Sediment Control (SE);
- Wind Erosion Control (WE);
- Tracking Control (TR);
- Non-Stormwater Management (NS); and
- Waste Management and Materials Pollution Control (WM).

BMPs for erosion and sediment control are selected to meet the BMP objectives based on specific site conditions, construction activities, and cost. Various BMPs may be required at different times during the short-term construction period because activities are constantly changing the site conditions. Selection of erosion control BMPs should be based on minimizing disturbed areas, stabilizing disturbed areas, and protecting slopes and channels. Selection of sediment control BMPs should be based on retaining sediment on-site and controlling the site perimeter. Erosion and sediment control BMPs are listed in the EC, SE, WE, and TR categories.

BMPs for contractor activities may cause pollution if not properly managed. BMPs should be selected based on the contractor activities information collected in a SWPPP. The materials and BMP objectives for contractor activities are practicing good housekeeping and containing materials and waste. BMPs for contractor activities are selected from the TR, NS, and WM categories.

Long-Term Operational Impacts

Similar to short-term construction activities, long-term operations of the proposed project have the potential to release pollutants off-site and into receiving Waters of the U.S. that could potentially affect water quality. *Table 3, "Pollutants of Concern by Land Use"* identifies pollutants of concern by type of land use that have the potential to be generated on the project site.





Table 3 - Pollutants of Concern by Land Use

Land Use	General Pollutant Categories									
					Organic		Trash	Oxygen		
	Bacteria/	Heavy		Pesti-	Com-		and	Demanding	Oil &	
	Virus	Metals	Nutrients	cides	pounds	Sediments	Debris	Substances	Grease	
Detached	Е	N	Е	Е	N	Е	Е	Е	Е	
Residential	E	IN	E	E	IN	E	E	E	E 	
Attached	P	N	E	Е	N	Е	Е	P 1	P 2	
Residential										
Commercial and	P 3	P	р ³	P 1	Р ⁵	P 1	Е	P 1	Е	
Industrial	P	Р	Р	Р	P	Р	E	Р	E	
Parking Lots	P 6	Е	P 1	P 1	E 4	P ¹	Е	P 1	Е	
Streets	P ⁶	E	P 1	P 1	E 4	E	E	P 1	Е	

E = expected

P = potential

N = not expected

- ¹ Potential if landscaping is present on the project site.
- ² Potential if the uncovered parking is present on the project site.
- ³ Potential if land use includes animal waste.
- ⁴ Includes petroleum hydrocarbons.
- ⁵ Includes solvents.
- ⁶ Bacterial indicators are routinely included in pavement runoff.

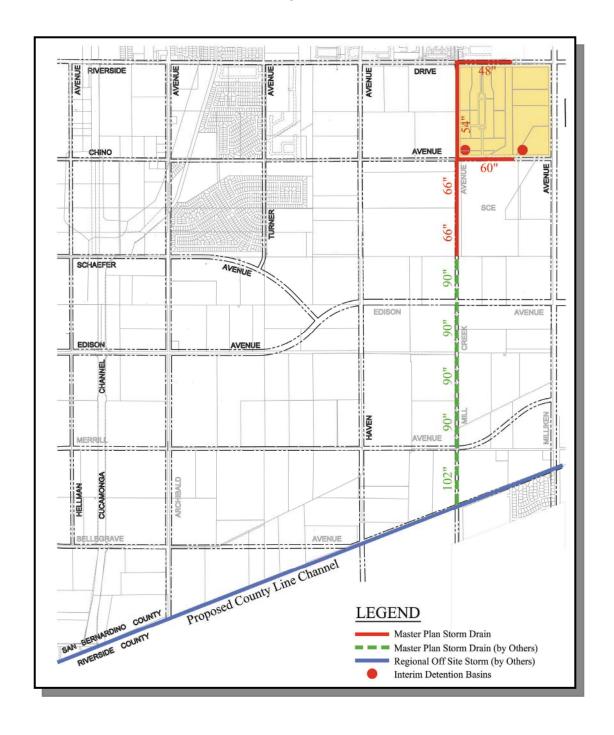
Source: County of San Bernardino, County Stormwater Program, Model Water Quality Management Plan Guidance, Table 2-1, June 2004

The SWQMP would also include site design BMPs, source-control BMPs, and treatment control BMPs.





Exhibit 26 - Conceptual Storm Drain Plan







5.5 SCHOOLS

The Mountain View School District serves the K-8 school age needs of Edenglen, while the Chaffey Joint Union High School District serves the 9-12 school age needs. Colony High School is immediately adjacent to the Project Site to the west, to serve the high school students generated living in the plan. Additional elementary and middle schools will be needed within the New Model Colony. An elementary school site has been identified in Planning Subarea 12 and a middle school site has been identified in Planning Subarea 6. The developer(s) of Edenglen will be required to pay school fees as required by State of California.

5.6 Public Utilities

5.6.1 Telephone

Verizon is the incumbent/existing telephone service provider to the Project Site. The City will provide fiber optics to the home that will enable telephone, voice mail and cable services, as well as video-on-demand. Proposed on-site facilities will be placed underground.

5.6.2 Natural Gas

The Gas Company will provide natural gas to the Project Site. Gas mains will be installed to the Project Site by the Gas Company as necessary.

5.6.3 Electricity

Southern California Edison will provide electricity to the Project Site from existing facilities in the vicinity of the Project Site. Proposed new facilities to serve the project will be owned and operated by the City of Ontario and located underground.

5.6.4 Telecommunications

The City of Ontario will be providing OntarioNet, a fiber-optic telecommunications system capable of providing advanced Internet/data services to all homes and businesses within the New Model Colony. OntarioNet will provide community related services including traffic management, on-line civic services, meter reading, educational services, and a variety of other community services. OntarioNet and the high-speed data services it provides will allow residents of the Edenglen Specific Plan to effectively telecommute to their jobs and in general provide a significant economic benefit to Ontario.

5.6.5 Solid Waste

The City of Ontario provides solid waste collection services for the City and will service the Project Site.





5.7 GRADING CONCEPT

The existing ground on the northerly quarter of the Project Site slopes southerly away from Riverside Drive at a 2.3% grade. The southerly three quarters of the Project Site slope southerly at approximately 1%. The grading concept for Edenglen is to work with the existing topography to maintain natural grade and elevations wherever possible. The grading operation for Edenglen will generally consist of the removal of any manure remaining from dairy operations, clearing and grubbing, demolition of existing structures, and moving of surface soils to construct building pads and streets. Additionally, where slope conditions are present, the property shall be located at the top of a slope. Dwelling units and structures adjacent to slope areas should be sited to:

- Use landscape plant materials as a backdrop; and
- Use structure to maximize concealment of cut slope.

If retaining walls are required, the following criteria shall be used:

- Exposed walls and fences facing roadways shall be no greater than 3 feet retaining below ground (9 foot total wall) in height, except as necessary for acoustical purposes to satisfy the intent of the noise ordinance.
- Where retaining walls or fences face roadways, they shall be built, when feasible, of decorative materials consistent with the wall theme of the neighborhood.

The conceptual grading plan for the residential portion of Edenglen, as illustrated in *Exhibit 27, "Conceptual Grading Plan"*, will provide for a balance of cut/fills for the site.

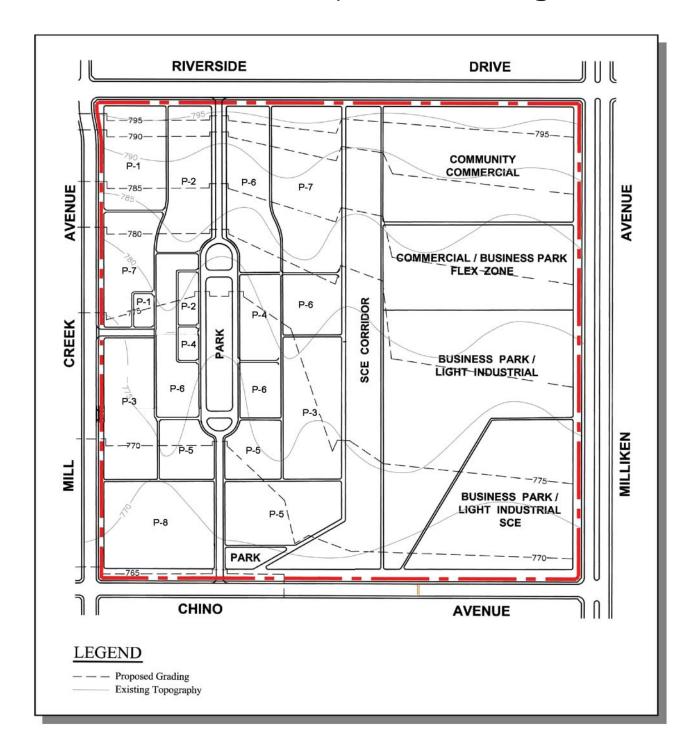
Grading plans for each tract in the Specific Plan area will be reviewed and approved by the by the City of Ontario Building, Planning, and Engineering Departments prior to the issuance of grading permits. All grading plans and activities will conform to the City grading ordinance and dust and erosion control requirements.

The conceptual grading plan for Edenglen is illustrated in Exhibit 27, "Conceptual Grading Plan".





Exhibit 27 - Conceptual Grading Plan







5.8 Phasing

Backbone infrastructure to serve all areas of Edenglen shall be installed by the developer(s) in accordance with the City's adopted Master Plan, for the New Model Colony and any approved amendments to it. Infill service mains will be installed/constructed in phases as development proceeds and conditioned by the City Engineer's office to support individual phases of development, which may require installation of offsite infrastructure improvements beyond a given phase boundary.

Residential Area

Grading and installation of infrastructure to serve the residential portion of Edenglen is anticipated to be completed as a single phase. Following completion of the initial phase of grading and infrastructure installation, the developer will construct models for each product type within each neighborhood and the central park planned for Edenglen. The timing for installation of infrastructure and utilities and the provision of public services for the residential development within Edenglen will be determined as part of the City's approval of tentative maps or development plans. Facilities will be constructed and services made available in a timely manner as development progresses.

Commercial and Business Park/Light Industrial Area

Infrastructure required to serve the commercial and business park/light industrial development areas will be installed by the developers of these areas. The timing for installation of infrastructure and utilities and the provision of public services for the commercial and business park/light industrial development within Edenglen will be determined as part of the City's approval of tentative maps or development plans. Facilities will be constructed and services made available in a timely manner as development progresses.

