5. Infrastructure and Services

5.0 Infrastructure and Services

The infrastructure, utilities, and public services to be provided to support development of the Subarea 29 Specific Plan are discussed in this section.

5.1 Circulation

The circulation plan for the Specific Plan area will provide efficient movement of vehicular traffic throughout the project as well as an environment for pedestrian circulation and bicycle traffic, reducing the reliance on the automobile as a means of travel. The plan reinforces the concept of traditional neighborhood design with a grid street pattern and traffic calming measures. The ***Master Circulation Plan, Exhibit 11*** illustrates the roadway system planned for the Specific Plan area, as well as new backbone street traffic signals.

The project site will be served by a system of new arterial roadways to be improved per the requirements of the City Council Approved 2010 The Ontario Plan (TOP), General Plan, the 2012 Master Plan of Streets and Highways, and through proposed new local streets to be constructed as part of project development. Improvements will be constructed to Archibald Ave., Haven Ave., and Eucalyptus Ave. adjacent to the site and elsewhere to accommodate traffic increases as specified in the traffic impact analysis and as required by the City. Proposed Merrill Ave. will be fully developed through the site to provide access to and from the project.

Within the development area, local collector roadways and local interior streets will provide for efficient movement of vehicles and pedestrians through the project. The developer will be required to submit a parking analysis to the City of Ontario to ensure the proposal is in conformance with the City's Parking Code for residential developments.

5.1.1 Streets

The developer(s) of the Subarea 29 Specific Plan area will be responsible for all offsite improvements for the entire project frontage or as otherwise indicated. 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. Additionally, bus turnouts within the Specific Plan area may be required to be constructed to the satisfaction of the City of Ontario and Omnitrans.

The minimum design speeds to be used for centerline curve radii, superelevation, corner sight distance, vertical and horizontal alignment, and sight distance, etc. are listed:

Eucalyptus Ave.	45 m.p.h.
Merrill Ave.	45 m.p.h.
Haven Avenue	45 m.p.h.
Archibald Ave.	50 m.p.h.

The traffic study prepared for the Subarea 29 Specific Plan will verify the need for additional rights-of-way at critical intersections in order to accommodate additional left and right turn lanes.

On-street parking is prohibited on all master planned roadways, except that section of Merrill Ave. along the neighborhood parks.

Any walls and/or fencing exceeding 3 feet in height proposed within the 10-foot street (interior street) side yard setback area shall be setback a minimum of 5-feet from side yard property line. The 5-foot setback area shall be landscaped and maintained by the home owner and/or HOA.

Archibald Ave.

Per the City's 2012 Master Plan of Streets and Highways, Archibald Ave. is designated as a Principal Arterial. The Street Sections for Archibald Ave. are per the approved Archibald Ave. Street Improvement Plans. Per this plan set, Archibald Ave. has a 165-foot right-of-way (north of Merrill Ave. to Edison Ave) and a 160-foot right-of-way (south of Merrill Ave. to the County Line). Archibald Ave. will provide north/south access along the western portion of the Specific Plan. Per The Ontario Plan (TOP) Figure M-3: Multipurpose Trails and Bikeway Corridor Plan, Archibald Ave. is to include an off-street multipurpose trail. Access to this street via driveways from residential units and on-street parking will be prohibited. Improvements to Archibald Ave. are illustrated on ***Exhibit 12, Arterial Street Sections, Archibald Ave. and Archibald Ave. (East Side).***

Merrill Ave. (Minor Arterial Street)

Merrill Ave. is designated as a Minor Arterial street with a 108-foot right-of-way and will provide east/west access through the Specific Plan. Access to this street via driveways from residential units and on-street parking will be prohibited (on-street parking along the Neighborhood Parks will be allowed). Improvements to Merrill Ave. are illustrated on ***Exhibit 12, Arterial Street Sections Merrill Ave. and Merrill Ave. (North Side).***

Per TOP Figure M-3: Multipurpose Trails and Bikeway Corridor Plan, Merrill Ave. is to include a class II (on-street striped and signed bike lanes) bicycle system and an off-street multipurpose trail.

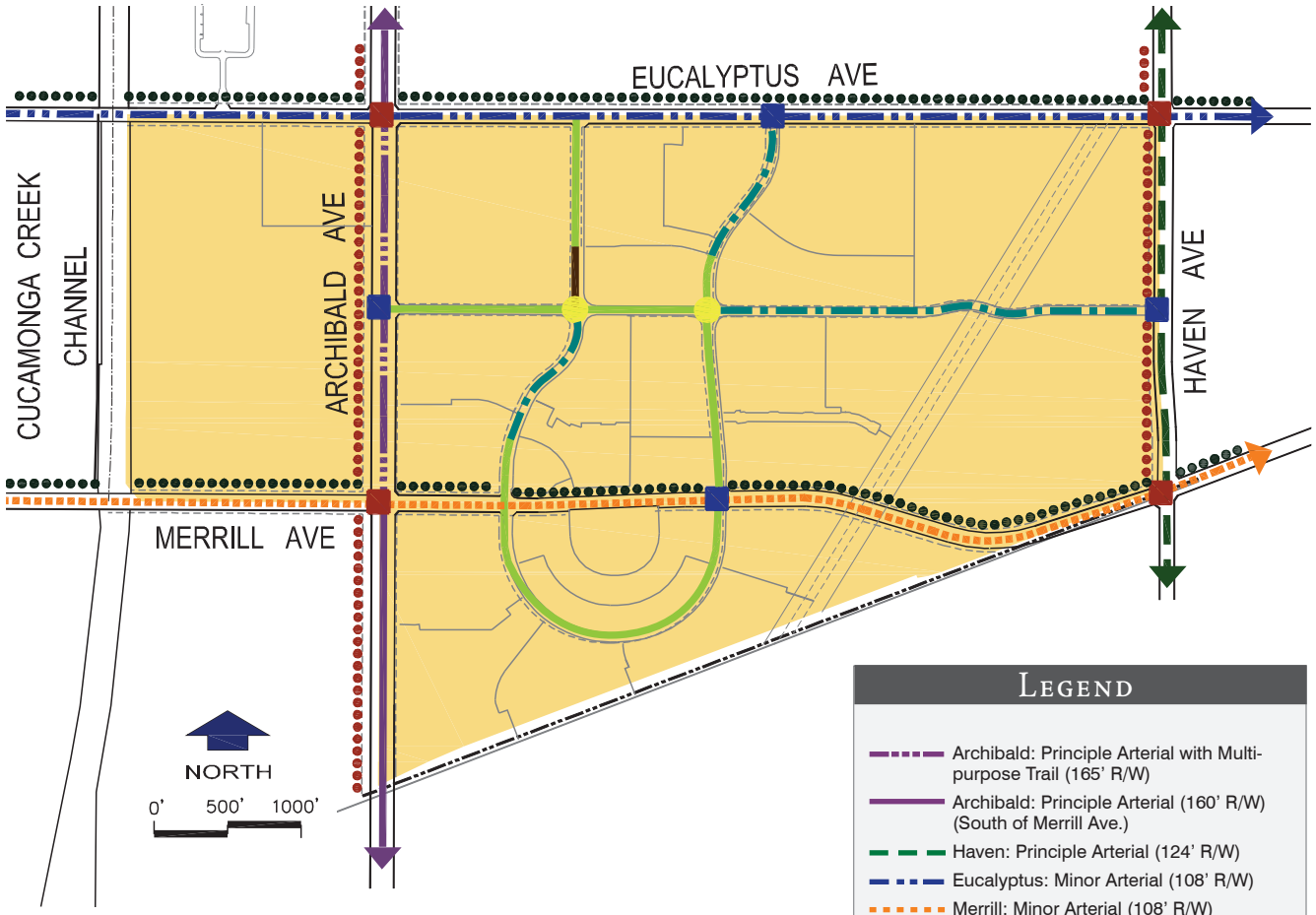
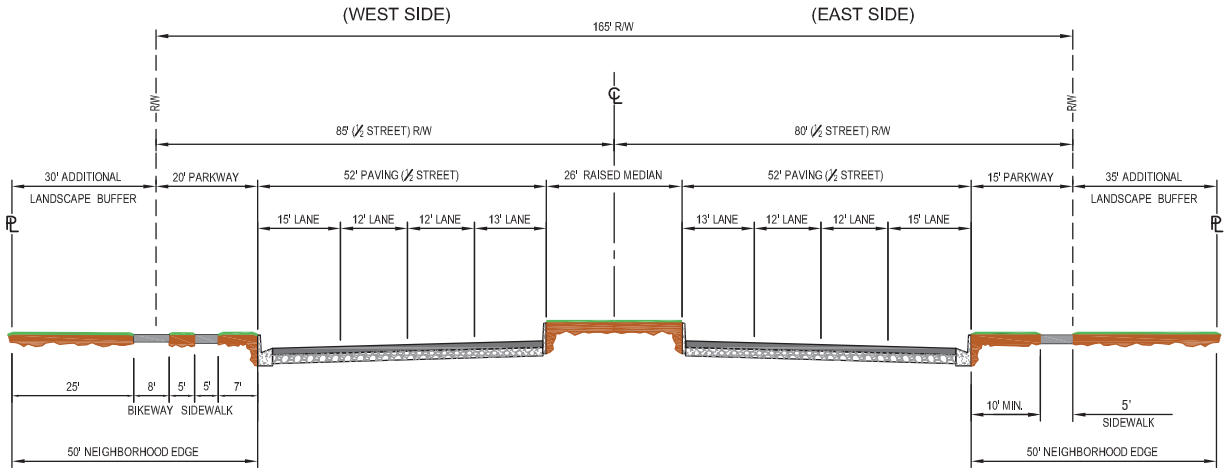
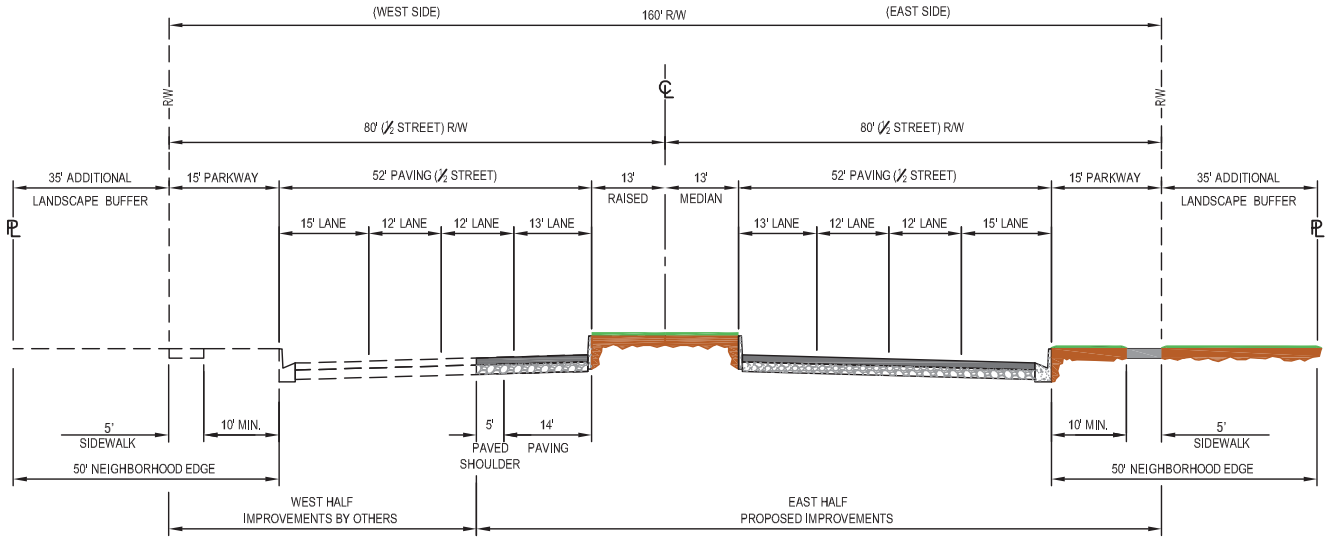


Exhibit 11— Master Circulation Plan



Archibald Ave.

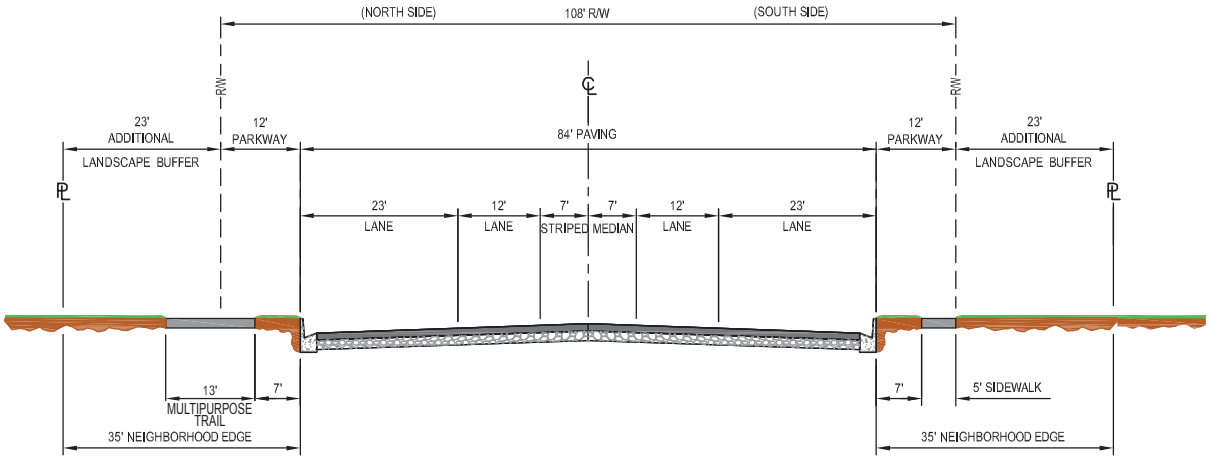
Divided Principal Arterial With Bikeway
South of Eucalyptus Avenue to Merrill
(On-Street Parking is Prohibited)
N.T.S.



Archibald Ave. (East Side)

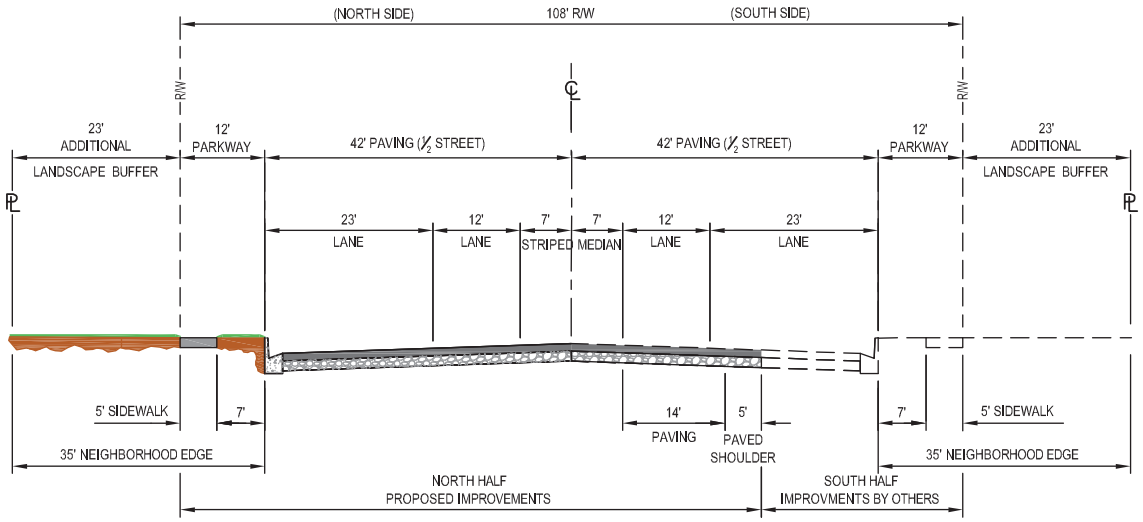
Principal Arterial
South of Merrill
(On-Street Parking is Prohibited)
N.T.S.

Exhibit 12— Arterial Street Sections



Merrill Ave.

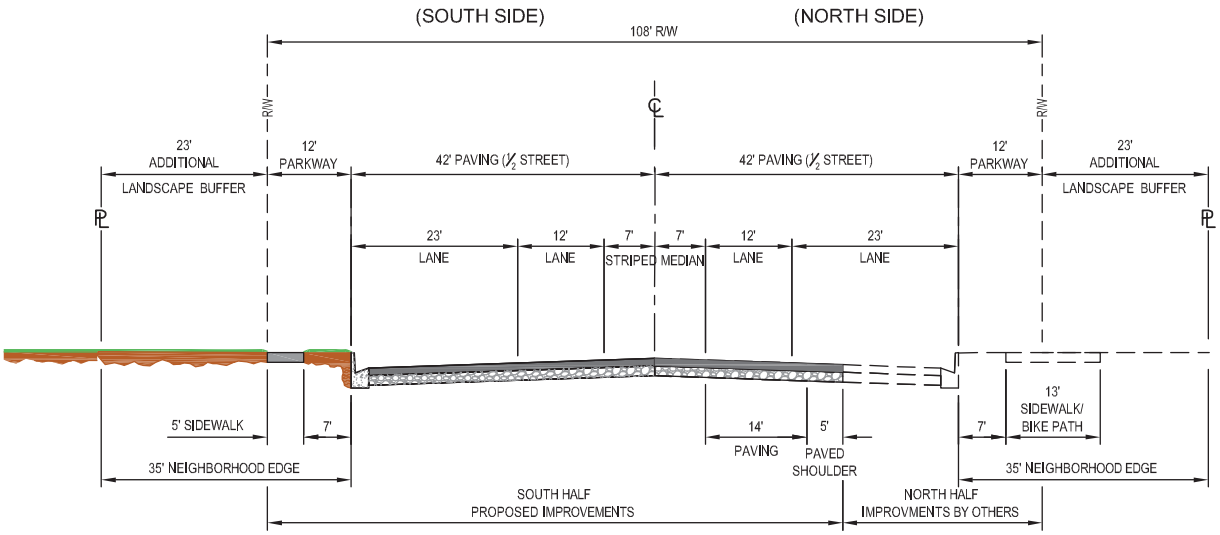
Collector
(On-Street Parking is Permitted along the Neighborhood Parks)
N.T.S.



Merrill Ave. (North Side)

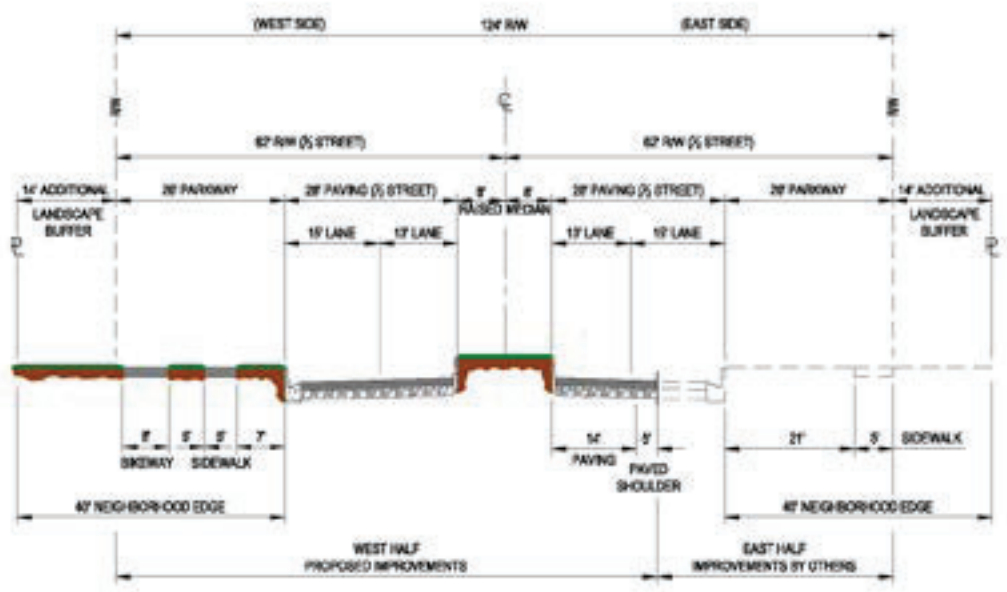
Collector
West of Archibald Avenue to the Cucamonga Creek Channel
(On-Street Parking is Prohibited)
N.T.S.
Note: "Multipurpose Trail" Indicates a Combined Bikeway / Sidewalk Use

Exhibit 12— Arterial Street Sections



Eucalyptus Ave. (South Side)

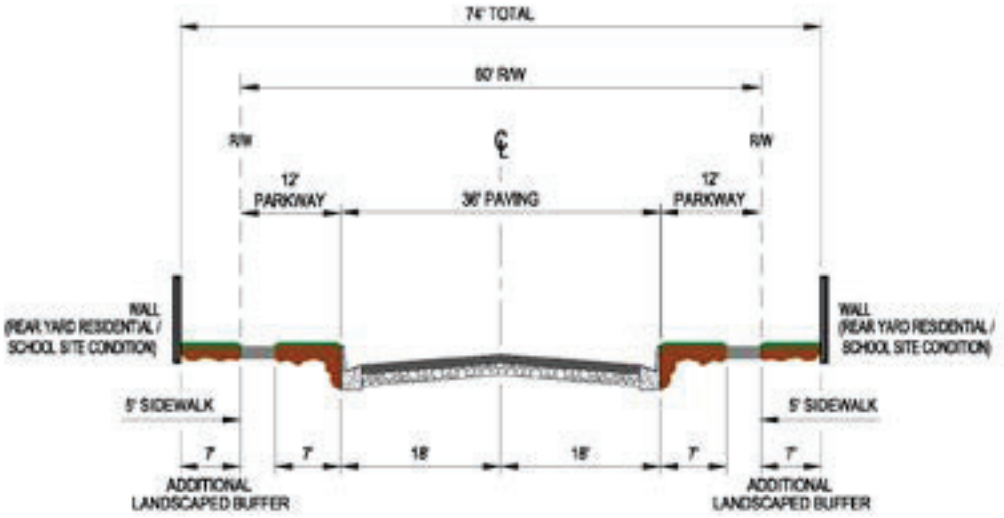
Collector
(On-Street Parking is Prohibited)
N.T.S.



Haven Ave. (West Side)

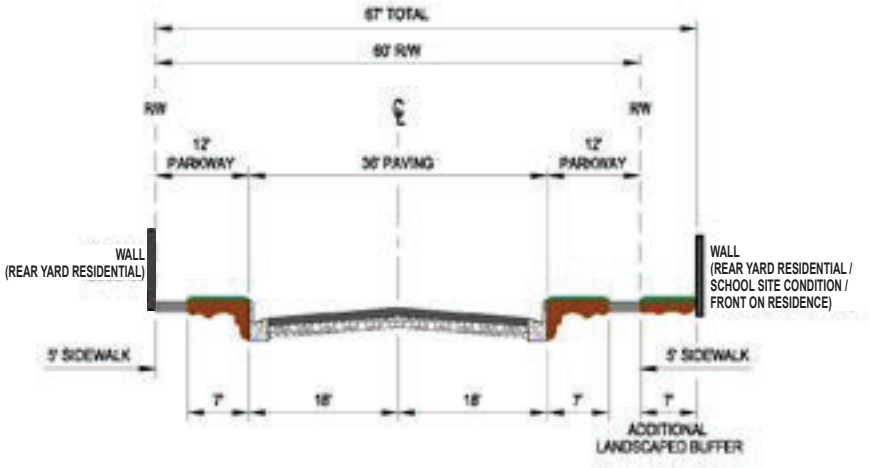
Principal Arterial
(On-Street Parking is Prohibited)
N.T.S.

Exhibit 12— Arterial Street Sections



Local Street

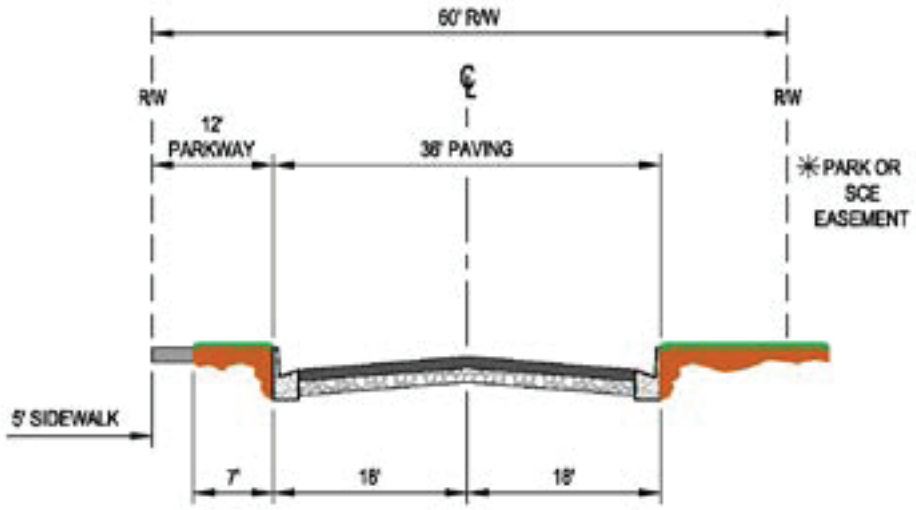
(60′ R/W with 14′ Total Additional Landscaped Buffer)
On-Street Parking is Allowed
N.T.S.



Local Street

(60′ R/W with 7′ Additional Landscaped Buffer)
On-Street Parking is Allowed
N.T.S.

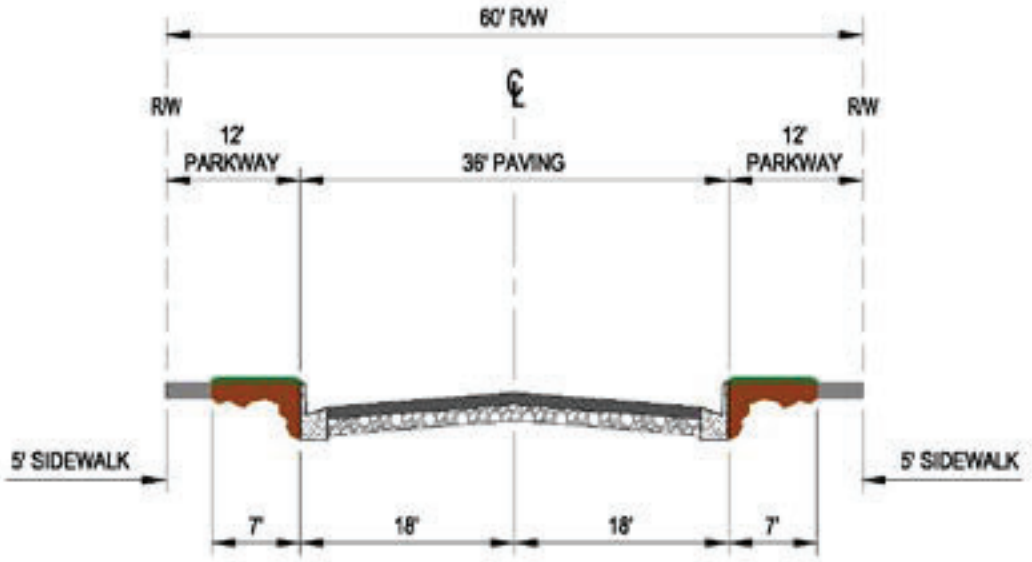
Exhibit 12a— Local Street Sections



Local Street & Cul-de-sac Street Along Park/SCE Easement

(60′ R/W)
On-Street Parking is Allowed
N.T.S.
***5′ sidewalk/paseo to be placed within the park/SCE Easement**
(Location and widths to be determined by the city)

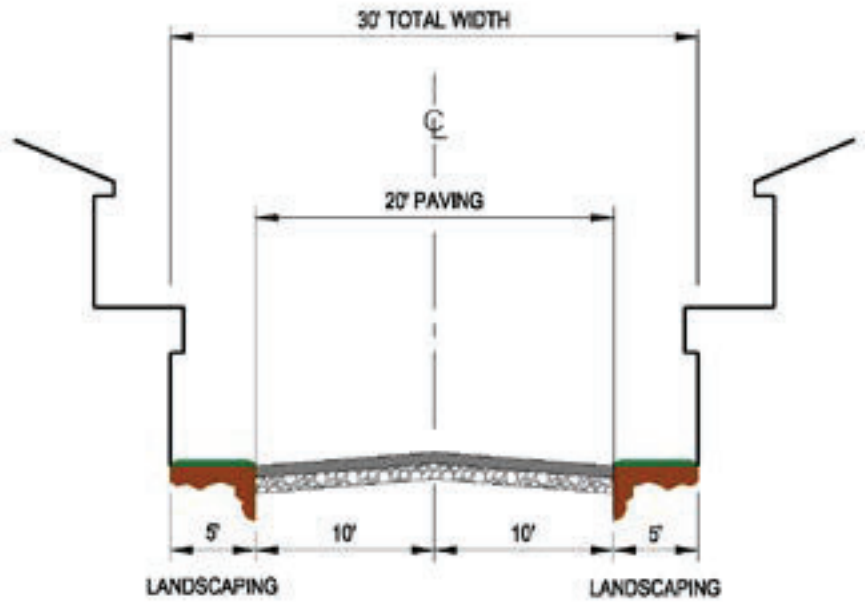
Exhibit 12a— Local Street Sections



Local Street & Cul-De-Sac Street

(60′ R/W)
On-Street Parking is Allowed
N.T.S.

Exhibit 12a— Local Street Sections



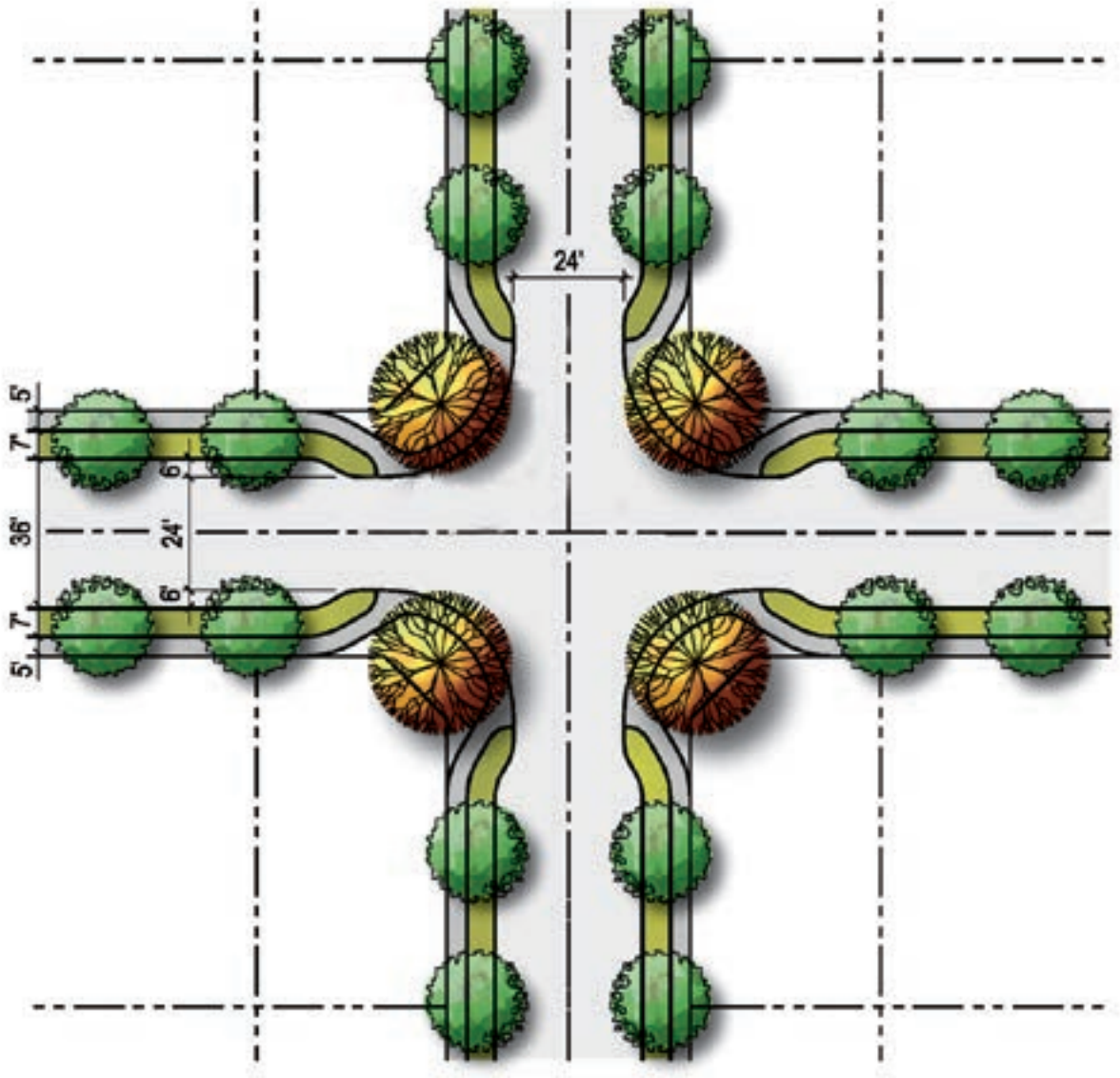
Lanes (Private Alleys)

20′ Paved Section/30′ Width to Garage
N.T.S.

NOTE: Where emergency access lanes are to be used within the residential development, a 24-foot paved section with 3-foot Minimum.* Landscaping will be utilized (30-feet total)

***Measurement taken from inside of curb**

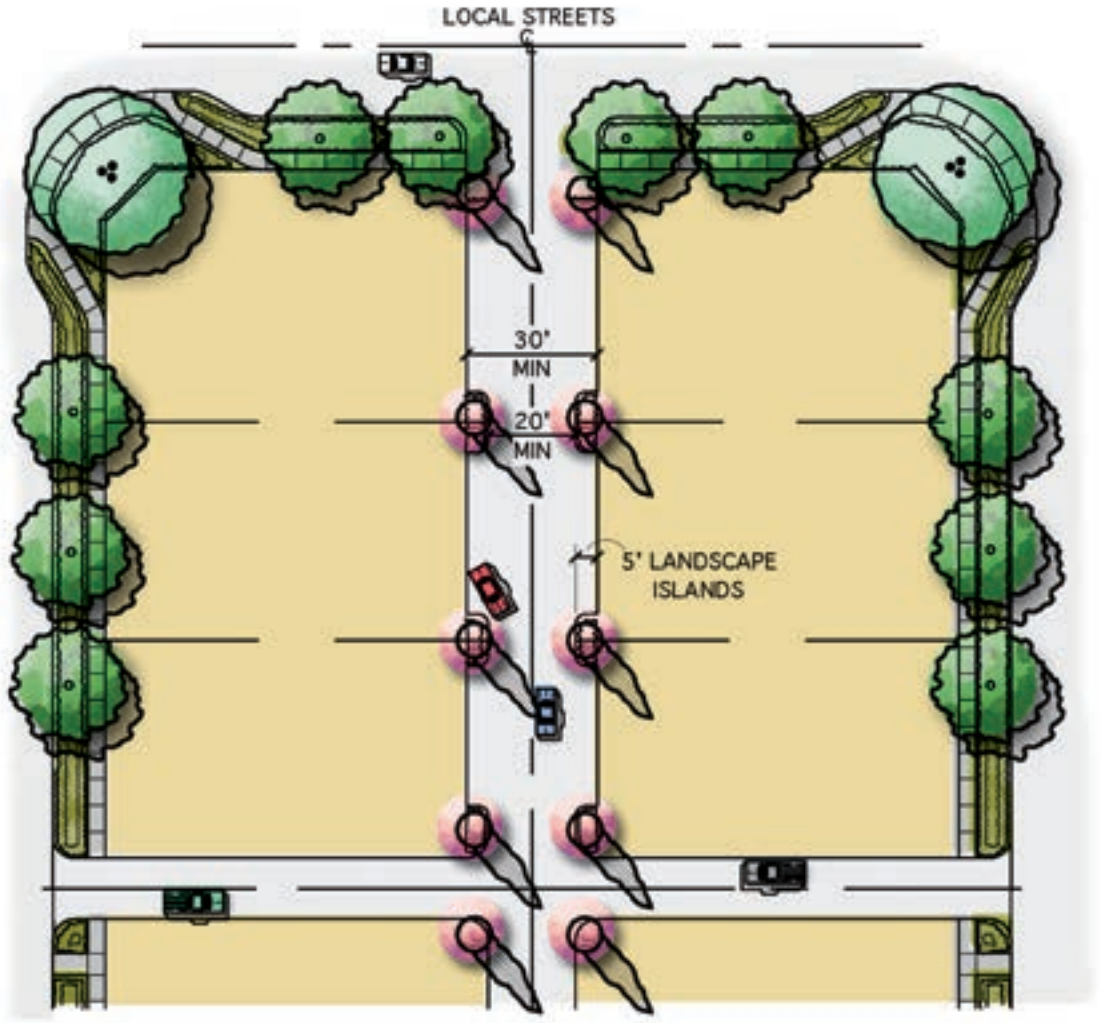
Exhibit 12b— Lane (Private Alley) Sections



N.T.S.

Note: Refer to the City of Ontario Standard Drawing for Local Street Chokers.

Exhibit 12c—Neighborhood Street Chokers



N.T.S.

Exhibit 12d— Lane (Private Alley)

Eucalyptus Ave. (Minor Arterial Street)

The Minor Arterial roadway, Eucalyptus Ave., abuts the project site on the north. Eucalyptus Ave. will be improved as a half-street along the project's northern boundary (from the Cucamonga Creek Channel to Haven Ave.). Improvements to be constructed to Eucalyptus Ave. will include the south half-street and parkway improvements of the 108-foot right-of-way, as well as the additional neighborhood edge landscaped buffer. These improvements include 42 feet of pavement, including two (2) lanes for eastbound traffic, a 12-foot landscaped parkway, which includes a 5-foot sidewalk separated from the street by a 7-foot landscaped buffer; as well as 23 feet of additional landscaped buffer (35-foot total neighborhood edge), provided from the street right-of-way extending to the property line. Additionally, north side improvements to Eucalyptus Ave. include a 7-foot painted median, a 14-foot paved lane and 5 feet of graded shoulder. ***Exhibit 12, Eucalyptus Ave. (South Side)***, illustrates the half-street improvements for Eucalyptus Ave. The Project Level EIR will determine the need for constructing additional lanes for westbound traffic.

Per TOP Figure M-3: Multipurpose Trails and Bikeway Corridor Plan, Eucalyptus Ave. is to include a class II (on-street striped and signed bike lanes) bicycle system and an off-street multipurpose trail.

Haven Ave.

Haven Ave. is designated as a Principle Arterial with 124-foot right-of-way. Haven Ave and will provide north/south access along the eastern boundary of the Specific Plan. Access to this street via driveways from residential units and on-street parking will be prohibited. Improvements to Haven Ave. are illustrated on ***Exhibit 12, Arterial Street Sections, Haven Ave. (West Side)***.

Refer to ***Exhibit 13, Pedestrian and Bicycle Circulation Plan***, which illustrates all pedestrian and multipurose trails in Park Place.

Primary Local Streets

Primary Local Streets include a 60-foot right-of-way and provide for circulation between the varying Planning Areas within the Specific Plan. Refer to ***Exhibit 12a, Local Street Sections, Primary Local/Interior Street and Cul-De-Sac Street***, which illustrates these improvements. Varying additional landscaped buffers are provided along the Primary Street where specific conditions apply, as detailed below. Development conditions, where walls are proposed on either side of the roadway will include seven (7) feet of additional landscaped buffers between the rights-of-way and the proposed walls. Refer to ***Exhibit 12a, Local Street Sections, Primary Local Street (60′ R/W with 14′ Total Additional Landscaped Buffer)***, which illustrates this condition. Development conditions where a wall is proposed on one (1) side of the roadway will include seven (7) feet of additional landscaped buffers between the right-of-way and the proposed wall. ***Exhibit 12a, Local Street Sections: Primary Local Street (60' R/W with 7' Total Additional Landscaped Buffer)*** illustrates this condition.

Local Streets

Local Streets include a 60-foot right-of-way and provide for circulation within the residential planning areas of the project site. Exhibit 12a, Local Street Sections: Primary Local/Interior Street & Cul-De-Sac Street, illustrates these improvements. Where any local street is adjacent to a park, paseo area, or paseo link, the street parkway will be included as park/paseo area/acreage. ***Exhibit 12a, Local Street Sections, Primary Local/Interior Street & Cul-De-Sac Street*** along Park/SCE Easement, illustrates these improvements.

Lanes

Private lanes are to be utilized within the residential development. These lanes will be private, but will offer a public utility easement along the paved section. Where private lanes are utilized for non-emergency access a 20-foot minimum paved section with 5-foot minimum (measurement taken from inside of curb) landscaping on each side will be used as illustrated on ***Exhibit 12b, Lane (Private Alley) Sections***. Where emergency access lanes or public utility easements are proposed within the residential development, a 24-foot minimum paved section with 3-foot minimum landscaping (measurement taken from inside of curb) on each side will be utilized.

Motorcourts

Motorcourts shall be scaled and developed consistent with the development standards of the typical product plotting diagram of the applicable residential product (Motorcourt Cluster A, B, C); see Section 7.5.2 for home type criteria.

5.1.2 Traffic Calming

The Specific Plan area provides for traffic calming within residential neighborhoods to slow traffic and reduce traffic noise on streets contributing to livable neighborhoods in which to walk, bike, and drive.

Traffic calming within the Specific Plan is designed to address the following:

- Reduction in traffic speeds;
- Reduction in traffic related noise;
- Reduction in "cut-through" traffic within residential neighborhoods;
- A secure pedestrian friendly circulation system to encourage walking;

- Allowance for non-restricted access for emergency services vehicles such as police, fire, and ambulances; and
- Reduction in radii of streets.

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

- Type of adjacent development and the 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;
- Width of travel lanes; and
- Roundabout locations.

The following traffic calming techniques may be implemented in the design of the roadways within the Specific Plan.

Local Neighborhood Street Design

Neighborhood streets within the Specific Plan 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 may be reduced by incorporating tapered intersections for local streets as illustrated in ***Exhibit 12c, Neighborhood Street Chokers.*** Tapers may not be appropriate at all intersections.

Lanes (Private Alleys)

The lanes (private alleys) within the Specific Plan will incorporate tapers at the entrance to lanes to slow traffic in these areas and to provide a visual element to discourage drivers from using lanes as a through street. Speeds for traffic entering the lanes and cut-through traffic can be reduced by incorporating tapers at the entrance to these lanes as illustrated on ***Exhibit 12d, Lane (Private Alley) Tapers.***

Landscaping

Landscaping adjacent to streets within the Specific Plan area will combine the use of shade trees, shrubs, and ground cover adjacent to sidewalks to create a more intimate streetscape, encouraging drivers to reduce driving speeds. The landscape concept for the Specific Plan is designed to contribute a sense that the street system is a pedestrian "protected area" to promote slower traffic speeds.

5.1.3 Pedestrian Circulation

Off-street pedestrian circulation will be available throughout the Specific Plan by means of the interconnected paved sidewalk system within the roadway right-of-way separated from vehicular travel lanes by a landscaped parkway. All pedestrian circulation improvements within the SCE corridor and County Line Channel require approval from the appropriate public entity prior to the construction of any improvements.

5.1.4 Bicycle Trails

Bicycle trails are an integral element creating accessibility and mobility within the Specific Plan. A multi-purpose pedestrian and bicycle trail will be provided within the SCE Corridor between Eucalyptus Ave. and County Line Channel. This multi-purpose trail will provide a link within the City's Master Planned trail system proposed for SCE easements and corridors throughout the City. All bicycle trail improvements within the SCE corridor and County Line Channel require approval from the appropriate public entity prior to the construction of any improvements. Refer to ***Exhibit 13, Pedestrian and Bicycle Circulation Plan.***

5.2 Water Master Plans

All pipe improvements, sizing and alignment shall follow the most currently approved version of the Master Plan (currently 2012), in case there are discrepancies between pipe improvements, sizing and/or alignment as shown on the utility exhibits versus the Master Plans.

5.2.1 Domestic and Recycled Water Master Plan

Domestic water will be provided by the City of Ontario. The New Model Colony Water Master Plan Phase 1 (Phases 1a–1e) identifies new water facilities to include three reservoirs, four groundwater wells, and potable and recycled transmission water lines. Construction of the on-site and off-site Master Plan water service improvements shall be the responsibility of the developer(s) and is required prior to issuance of occupancy permits for the Specific Plan. One of the waterlines included in the Phase 1 improvements is a 24-inch water main in Eucalyptus Ave., which borders the Specific Plan on the north. Master planned domestic and recycled water main lines serving surrounding and within the Specific Plan, as identified in the Water Master Plan, shall be constructed prior to issuance of first occupancy.

Exhibit 13 — Pedestrian and Bicycle Circulation Plan

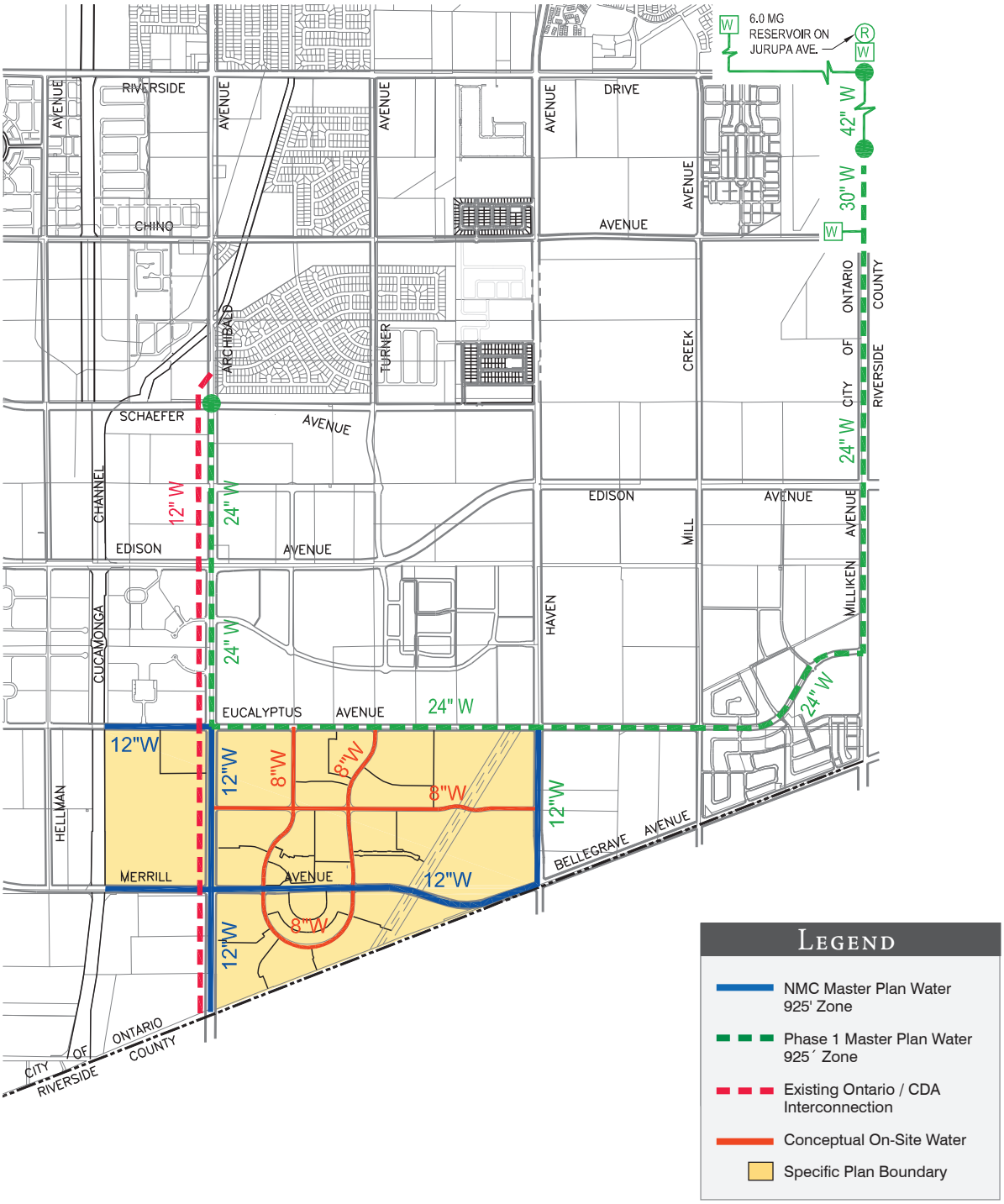


Exhibit 14— Conceptual Domestic Water Master Plan

5.2.2 Domestic Water

The project site lies within the 925 Pressure Zone. Master Plan water mains to be constructed as part of the development of the Specific Plan will include a 12-inch water main in Merrill Ave., Haven Ave., and Archibald Ave. Within the project site, a network of minimum 8-inch water lines will be installed. The proposed on-site public water system sizing is subject to the recommendations and approval of the required hydraulic analysis.

The Master Plan for domestic water for the Specific Plan is illustrated on Exhibit 14, Conceptual Domestic Water Improvement Plan.

5.2.3 Recycled Water System

New recycled water lines in conformance with the City of Ontario's Recycled Water Master Plan will be constructed as part of the development of the Specific Plan. The source of recycled water is an Inland Empire Utilities Agency (IEUA) Facility located east of the Cucamonga Creek Channel and north of Riverside Drive. The project site lies within the 930 Pressure Zone. The master plan improvements, adjacent to the project site, will include a 16-inch recycled water line in Eucalyptus Ave., a 12-inch recycled water line in Archibald Ave., and in Merrill Ave. (west of Archibald Ave.), and 8-inch recycled water lines in Merrill Ave. (east of Archibald Ave.) and in Haven Ave. The planned recycled water line along Riverside Drive will be constructed generally as follows: Easterly along Riverside Drive from RP-1, southerly along Haven to Chino Avenue, including the pressure reducing station at Haven & Chino. This pipeline shall be fully operational prior to occupancy. Within the project site, a network of minimum 8-inch recycled water lines will be installed. The proposed on-site public water system sizing is subject to the recommendations and approval of the required hydraulic analysis. The Subarea 29 Specific Plan shall comply with City Ordinance 2689 and make use of recycled water for all approved uses, including but not limited to irrigation of parks, schools, street landscaping, recreational trails, HOA maintained on-site common areas, and commercial/industrial landscaping. An Engineering Report approved by the City and the Department of Health Services is required prior to the use of recycled water.

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. In this case, the recycled water system will connect to the potable system initially, until such point that recycled water service is available.

The Recycled Water Master Plan for recycled water for the Specific Plan is illustrated on ***Exhibit 15, Conceptual Recycled Water Master Plan.***

5.3 Sewer Master Plan

All pipe, improvements, sizing, and alignment shall follow the most current approved version of the Sewer Master Plan (currently 2012), in case there are discrepancies between pipe improvements, sizing, and/or alignments as show on the utility exhibits versus the Master Plan. Sewer service for the Specific Plan area will be provided by the City of Ontario. The City's Sewer Master Plan identifies ultimate sewer facilities from the project site to the Eastern Trunk Sewer. Master Planned facilities within the project area include a 24-inch sewer main extending along Merrill Ave. from the easterly project boundary to the Eastern Trunk Sewer. Completion of these Master Plan improvements is required to provide ultimate sewer service to the project area. Within the project site, a network of minimum 8-inch sewer lines will be installed. The proposed on-site public sewer system sizing is subject to the recommendations and approval of the required sewer analysis.

The Sewer Master Plan for the Specific Plan is illustrated on ***Exhibit 16, Conceptual Sewer Master Plan.***

5.4 Drainage

All pipe, improvements, sizing, and alignment shall follow the most current approved version of the Storm Drain Master Plan (currently 2012), in case there are discrepancies between pipe improvements, sizing, and/or alignments as show on the utility exhibits versus the Master Plan. The City's Storm Drain Master Plan identifies two new storm drain systems to serve the site and properties north of the site. The storm drain systems, namely the Turner Storm Drain and the Archibald Storm Drain, will connect to the County Line Channel. Completion of these Master Plan improvements will provide permanent storm drain service to the Specific Plan area.

That portion of the Master Planned line, which lies within the Specific Plan, will be constructed as a part of the development of the Specific Plan. The Archibald Ave. storm drain includes a 90-inch storm drain in Archibald Ave., which transitions to a 96-inch storm drain and connects to the County Line Channel. The Celebration Ave. storm drain includes a 84-inch storm drain in Turner Ave., which transitions to an 90-inch storm drain, then transitions to a 96-inch storm drain and connects to the County Line Channel.

On-site storm drains will be constructed to convey the on-site flows to the proposed Master Planned lines. Size and location of proposed SD may change based on final design. On-site storm flows from the Specific Plan west of Archibald Ave. will be collected at an outlet into the Cucamonga Creek Channel.

The Storm Drain Master Plan for the Specific Plan is illustrated in ***Exhibit 17, Conceptual Storm Drain Master Plan.*** Size and location of proposed storm drain may change based on final design.

5.4.1 NPDES Compliance

The grading and drainage of the Specific Plan area shall be designed to detain, filter, and treat surface runoff, in a manner and combination which is practical, to comply with the most recent requirements of the San Bernardino County NPDES Storm Water Program's Quality Management (WQMP) for significant new development projects. The objective of the WQMP for this project is 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 (BMP's) and/or either on-site Structural Treatment Control BMP's, or participation in regional or watershed-based Treatment Control BMP's.

Prior to the issuance of a grading or construction permit, a Storm Water Pollution Prevention Plan (SWPPP) will also be prepared. The SWPPP will be prepared to comply with the California State Water Resources Control Board's (State Water Board) current, "General Permit to Discharge Storm Water Associated With Construction Activity" and the current Area Wide Urban Storm Water Runoff (Regional NPDES Permit). The SWPPP will identify and detail all appropriate Best Management Practices (BMP's) to be implemented or installed during construction of the project.

In addition to the preparation of a SWPPP for construction-related activities, and as part of the approval of any grading plans within the Specific Plan Area, the applicant will be required to submit a Water Quality Management Plan (WQMP) on the regional model form provided by the City. The WQMP shall identify and detail all Site Design BMP's, Source Control BMP's and Treatment Control BMP's to be implemented or installed at this site in order to reduce storm water pollutants and site runoff.

The Mill Creek Wetlands, a regional runoff treatment facility for the sub-watershed area that this project lies within has been constructed. This regional treatment facility is part of an overall solution for storm water treatment.

5.5 Schools

The Specific Plan area is located within the Mountain View School District which serves the school needs for grades K-8 and the Chaffey Joint Union School District, which serves the school needs for grades 9-12.

Development of the Subarea 29 Specific Plan area will generate an estimated student population as follows (based on student generation numbers supplied by the City of Ontario, "School Generation for NMC Subareas," July 2, 2004):

Grades K-5 - Generation Factor 0.38/du - 0.38 x 2,392 = 909

Grades 6-8 - Generation Factor 0.22du - 0.22 x 2,315 = 527

Grades 9-12 - Generation Factor 0.20/du - 0.20 x 2,315 = 479

One 10-acre elementary school is included within the Subarea 29 Specific Plan (Planning Area 18). The school is located north of Merrill Ave. in the heart of Park Place, adjacent to the two (2) neighborhood parks. Joint use school/park facilities are envisioned, serving the K-5 school needs generated by the project.

A 20-acre middle school site is conceptually located east of Subarea 29, east of Haven Ave. and south of Eucalyptus Ave. (not within the Specific Plan area).

The developers of the Specific Plan will be required to pay school fees or construct school facilities as required by the State of California.

5.6 Public Utilities

Public utilities including telephone, gas, and electrical service will be available to the site and will be extended into the planned community as part of the development of the Specific Plan. All existing overhead utilities shall be under-grounded, including all on-site utilities and those within the public right-of-way along streets fronting the project. All new facilities will be under-grounded by developer and according to the City of Ontario adopted ordinance.

5.6.1 Telecommunications

Proposed Fiber Optics (conduits and fiber) will be placed underground within a duct and structure system to be installed by the Developer. The fiber optic conduits along the backbone streets shall be installed in a joint trench by each Developer as the last lane improvements are completed. In-tract fiber optic conduits shall be installed by the Developer in joint trenches with City Street Light conduits where possible. Maintenance of the installed system will be the responsibility of the City/Special District. Development of the Project requires the installation by the Developer of all fiber optic conduits and pullboxes as well as payment of Development Impact Fees to cover the installation of the fiber optic cable.

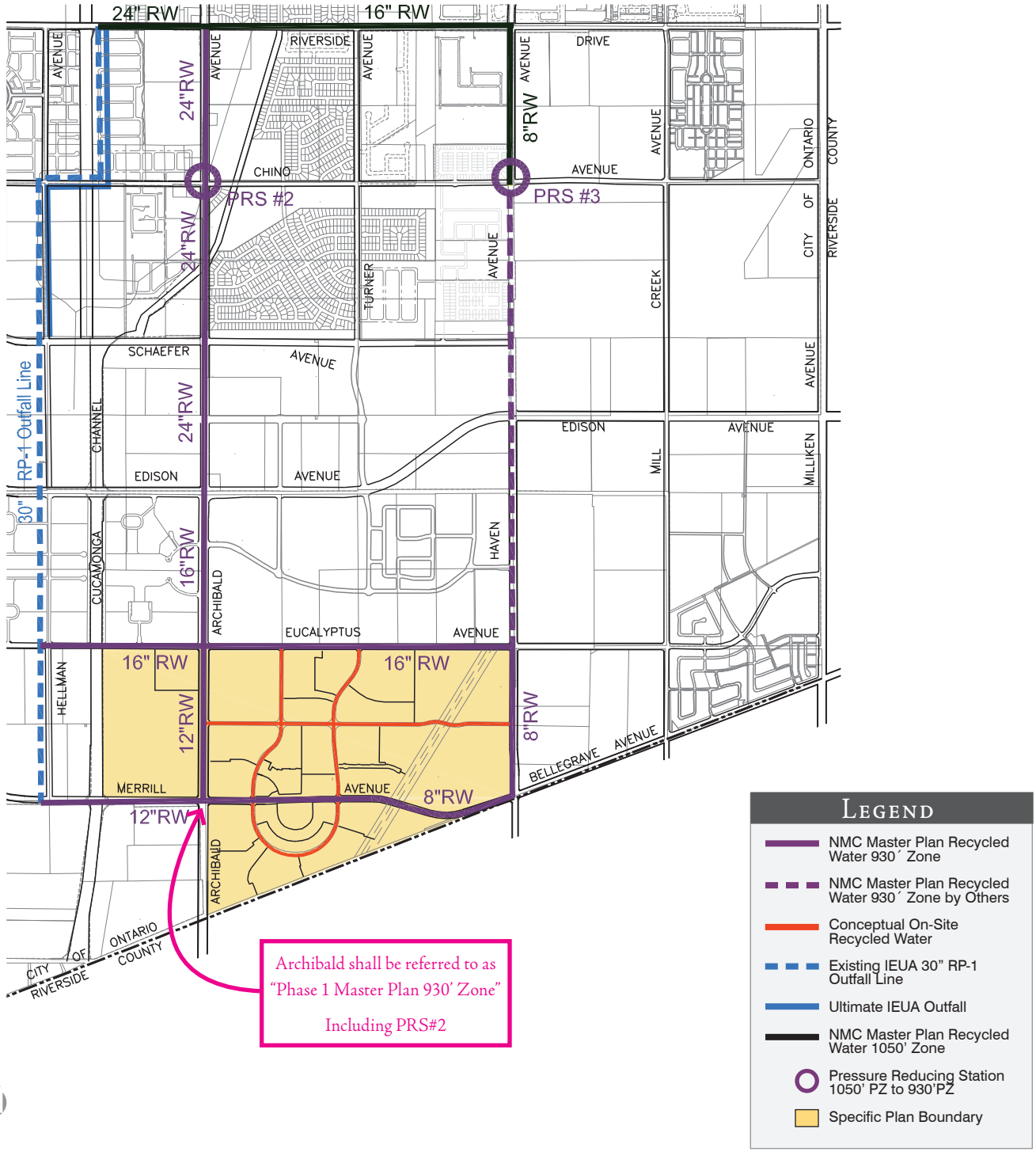


Exhibit 15— Conceptual Recycled Water Master Plan

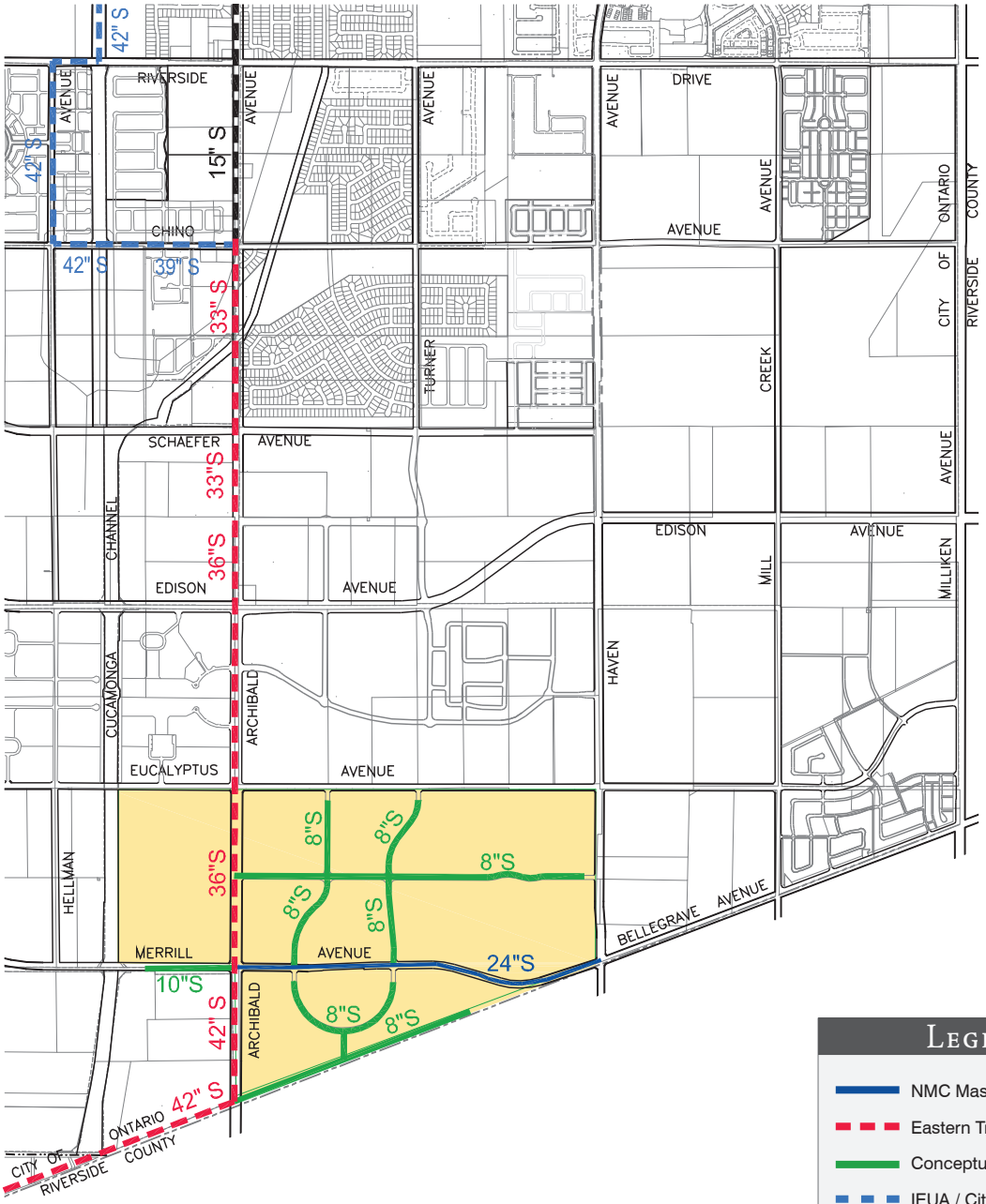
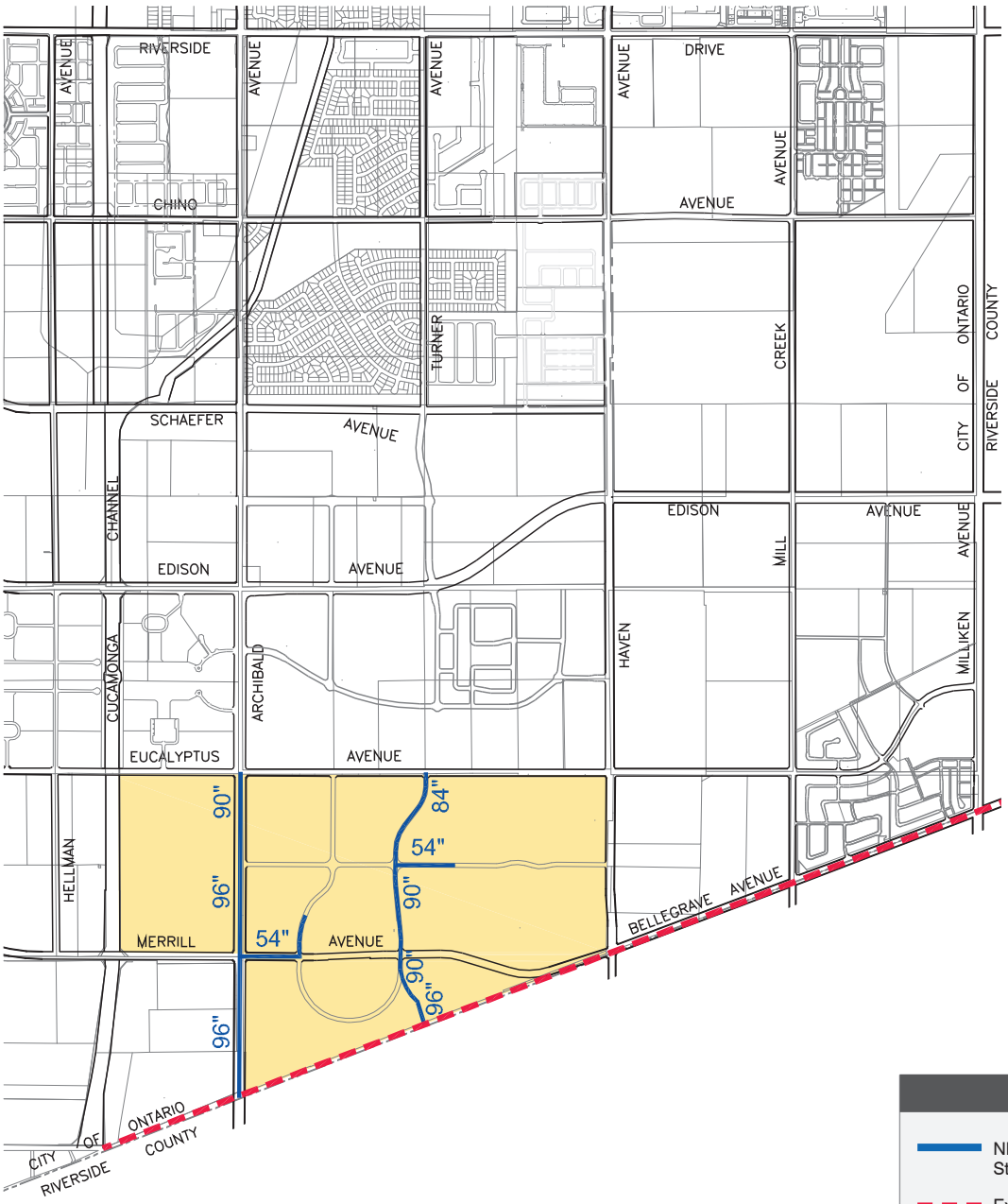


Exhibit 16— Conceptual Sewer Master Plan



Legend

- NMC Master Plan Storm Drain
- Existing County Line Channel
- Specific Plan Boundary

Exhibit 17—Conceptual Storm Drain Master Plan

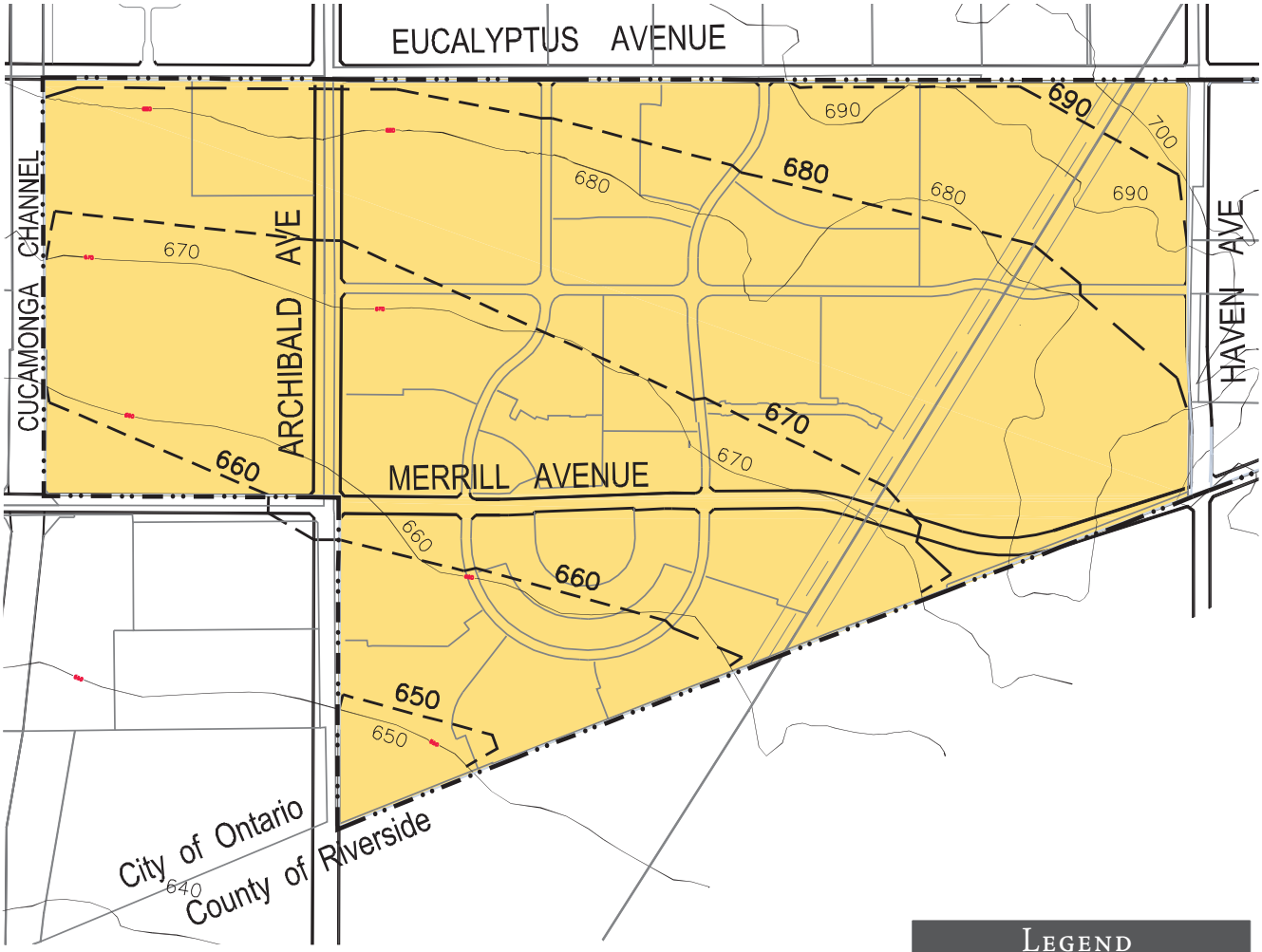


Exhibit 18—Conceptual Grading Plan

5.6.2 Natural Gas

The Southern California Gas Company will provide natural gas to the site.

5.6.3 Electricity

Southern California Edison will provide electricity to the site from existing facilities in the vicinity of the site. Proposed on-site facilities will be located underground.

5.6.4 Solid Waste

- Commercial - Developer shall comply with Municipal Code Sec. 6-3.314 Commercial Storage Standards, and Sec. 6-3.601 Business Recycling Plan.
- Apartment - For apartments using commercial bin service developer shall comply with Municipal Code Sec. 6-3.314 Commercial Storage Standards and Sec. 6-3.601 Business Recycling Plan.
- Residential - For curbside automated container service developer shall comply with Municipal Code Sec. 6-3.308.9(a) and (d), Residential Receptacles, Placement.
- Recycling Requirements - Developer shall comply with Municipal Code Article 6. Recycling Requirements for Specified Business Activity, Sec. 6-3.601 Business Recycling Plan, and Sec. 6-3.602 Construction and Demolition Recycling Plan.
- Site Improvement Plans shall follow the City of Ontario refuse collections standards.
- Standard two bin enclosures (for solid waste) may be used to service the residents. Modification to the standard two bin enclosure may be allowed to accommodate architectural/design layout for the cluster products.
- CC&Rs/HOA shall define areas where tenants place their waste cans for pickup by service vehicles. Said policy shall be reviewed/ approved by the Solid Waste Department.

5.7 Grading Concept

The existing ground has a gentle, uniform slope to the south, at approximately 1.0 to 2.0% and will not require a large grading operation, nor will it result in noticeable cut or fill slope banks. The grading operation will generally consist of the removal of any manure left over from dairy operations, clearing and grubbing, demolition of existing structures, and movement of surface soils to construct residential building pads and streets.

The grading and drainage of the Subarea 29 Specific Plan shall be designed to retain, infiltrate, and treat surface runoff, in a manner and combination which is practical, to reach NPDES compliance. Landscaped strips and landscaped setback areas can be swaled and depressed to retain and infiltrate irrigation water and runoff from smaller storm events. Pedestrian paseos, open space, and paseo connectors are examples of the landscaped strips that work well for this purpose in residential areas. If slopes are required on the property, the top of the slopes shall be set at the property lines. In areas adjacent to a ridgeline or in moderate slope areas, dwelling units and structures should be sited to use the natural ridgeline as a backdrop for structures; use landscape plant materials as a backdrop; and use structure to maximize concealment of cut slope. If retaining walls are constructed, they shall be kept to a minimum height and step with the contours of the property. Where retaining walls or fences face roadways, they shall be built, when feasible, of decorative materials consistent with the wall theme of the neighborhood. Exposed walls and fences facing roadways shall be no greater than six feet (6) in height, except as necessary for acoustical purposes to satisfy the intent of the noise ordinance.

5.7.1 Preliminary Earthwork Calculations

Based on the Conceptual Grading Plan, the estimated total amount of cut/fill for the project would be approximately 1,200,000 cubic yards.

5.7.2 Preliminary Grading/Drainage Concept

Grading plans for each tract in the Specific Plan area will be reviewed and approved 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 control and erosion control requirements.

A Conceptual Grading Plan for the project site is illustrated in Exhibit 18.

5.8 Phasing

Development of the Specific Plan area will be phased to meet the following objectives:

- Orderly build-out of the community based upon market and economic conditions;
- Provisions for adequate infrastructure and public facilities as determined and deemed necessary by the City Engineer; and
- Protection of public health, safety and welfare.

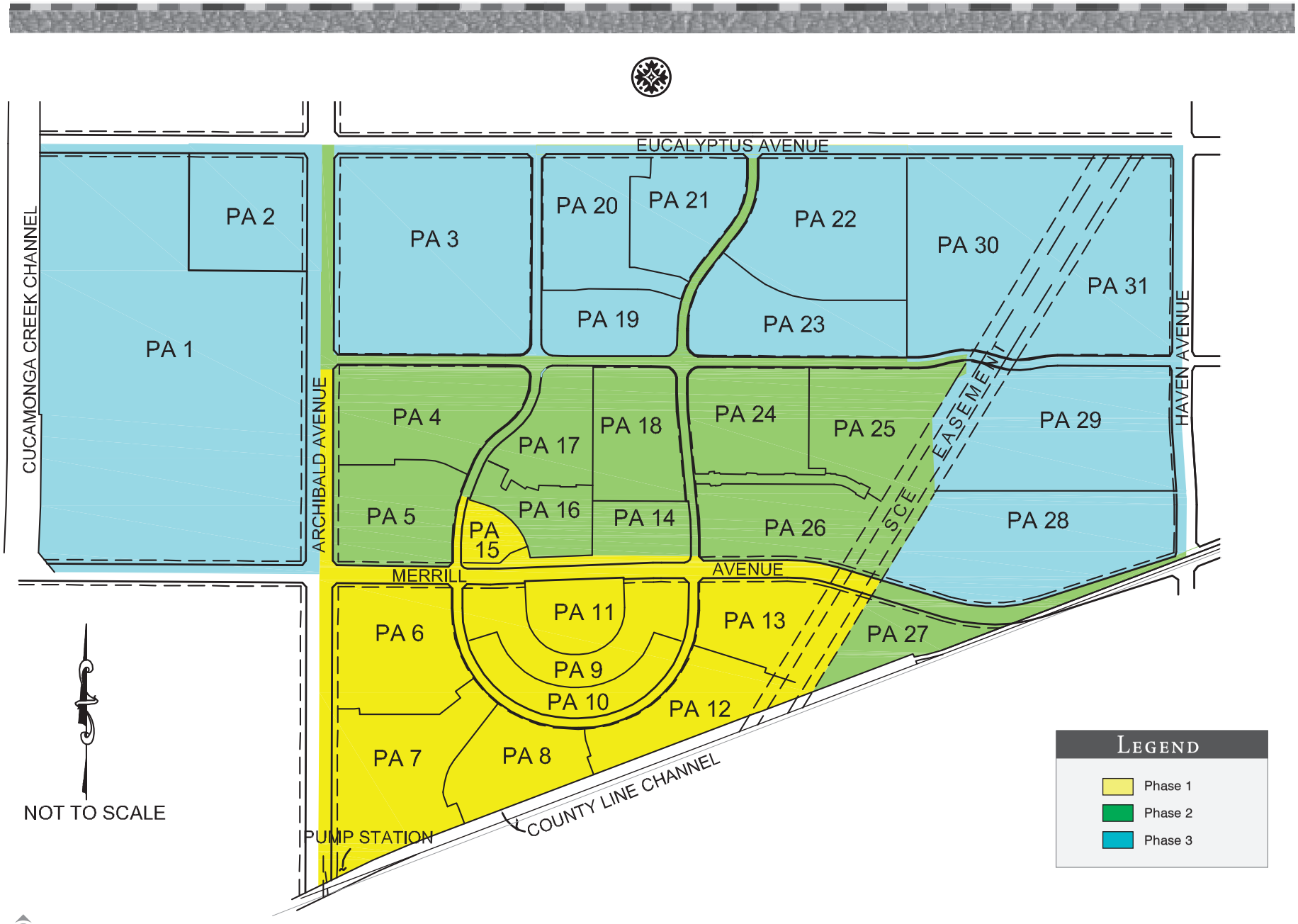


Exhibit 19—Conceptual Phasing Plan

Development phasing of the project site will be determined by the landowner and/or developer based upon real estate market conditions. Phasing will occur as appropriate levels of infrastructure, community facilities, and open space dedications are provided. Phasing sequencing is subject to change over time to respond to these various factors and individual phases may overlap or develop concurrently. Phased infrastructure improvements, as required and approved by the City Engineer to support each phase, will be installed by the developer. Refer to ***Exhibit 19, Conceptual Phasing Plan***. This plan describes three general phases of development, starting in the southern portion of Park Place and extending north over time.

Infrastructure required to serve the commercial development area will be installed by the developer(s) of these areas. The timing for installation of infrastructure and utilities and the provision of public services for the commercial development within the Specific Plan will be determined as part of the City's approval of parcel maps. Facilities will be constructed and services made available in a timely manner as development progresses.

Backbone infrastructure to serve all areas of the Specific Plan shall be installed by the developer(s) in accordance with the City's adopted Master Plan for the areas or 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. This may require installation of off-site infrastructure improvements beyond a given phase boundary.

Flexibility to adjust final product selection in Phases 2 and 3 shall be provided to the master developer, based on evolving market conditions. In particular, parcels designated for lane loaded product may be re-designated to conventionally loaded product in the future, at the time Phases 2 and 3 are underway. Other single-family detached product lines may also be adjusted over time, while not sacrificing the overall integrity of the proposed land plan and with the approval of the City of Ontario. Should a new product be introduced, a Specific Plan Amendment will be required.

A "Model Home Permit" is required and will be approved through the "Temporary Use Permit" process. Flexibility to adjust final product

Land Use, Infrastructure and Services

Water, recycled water and sewer utilities may be designated as "public utilities" if located within public or private streets. All public utilities within private streets shall be designed and constructed per City standards and contained within acceptable easements. The CC&RS shall contain language that requires all proposed work by the HOA within said easements to be plan checked and inspected by the City, including applicable fees. Generally, utilities will not be accepted as public within lanes, parking areas or driveways. Utilities within commercial and industrial parking lots and loading areas shall be designated as private. The extent to which said utilities will be accepted as public utilities shall be determined, at the full discretion of the City, during final design plan review.