1- GENERAL **Final Version**

1-100 INTRODUCTION

The purpose of this manual is to provide engineers and developers a guide to land development processing in the City of Chula Vista. This manual covers land development processing beginning with the filing of a tentative map through approval and recordation of final maps. This manual does not address General Development Plans (GDP), Specific ~~Planning~~Development Services Area (SPA) plans, Public Facility Financing Plans (PFFP), Environmental Impact Reports (EIR) or Initial Studies (IS). This manual also does not address the Design Review process in detail. This manual is structured under the assumption that the above plans and reports have been processed and approved prior to submittal of a tentative map.

This manual contains general guidelines for typical subdivision processing. It is not intended that every portion of this manual address or apply to every situation. However, compliance with this manual and the controlling documents thereof is required. Proposed deviations from this manual, or controlling documents, must be approved by the City Engineer. In all cases, the City Engineer may modify requirements set forth herein as deemed necessary.

The Development Services Department's Mission Statement:
"We are an innovative team, empowered to provide efficient and reliable development services, inclusive of and valued by our community, r~~f~~esulting in a prosperous, safe and balanced Chula Vista"

Development Services Department Customer Bill of Rights
In working with you and on behalf of the citizens we represent, we strive for an atmosphere of mutual respect, courtesy, professionalism and accountability. We pledge to honor your rights as a customer.
You have the right to . .
Be assisted by ~~staff who are knoledgable~~knowledgeable, cooperative and courteous staff.
Be listened to and communicated with honestly.
Be considered as a individual with unique services needs.
Receive a timely response when you have made a request in person or by phone.
Know the names of Development Service staff who are serving you.
Have us explore alternatives and find creative solutions with you.
Receive an explanation of our requirements, regulations, and costs.
Be directed to other persons and sources of information, when we are unable to assist you.
Ex~~s~~press your concerns confidentially.
Speak to a supervisor.

1-200 MANUAL ORGANIZATION

This manual is divided into five chapters: 1- General; 2- Subdivision Maps; 3- Design Criteria; 4- Construction Plans; 5- Appendices.

Chapter 1 provides definitions to terms as used in this manual, briefly describes the documents that control land development processing, and provides a general overview of submittal requirements and processing flow charts.

Chapter 2 provides specific guidelines for processing tentative and final maps for major subdivisions (Section 2-100) and minor subdivisions (2-200). Each subsection of this chapter includes a flow chart, sample map cover sheet and checklist. Section 2-300 of this chapter details the City's surveying requirements including procedure of survey guidelines, monumentation requirements, and monument verification. Section 2-400 covers adjustment and consolidation plats and Section 2-500 covers certificates of compliance. Formats for typical jurats, certificates, bonds, and agreements are included in Section 2-600.

Chapter 3 addresses general design criteria and covers lot design and layout (Section 3-100), drainage requirements and storm drain design (Section 3-200), sewer requirements and sewer system design (Section 3-300), and street and road design and construction criteria (Section 3-400).

Chapter 4 provides specific guidelines for processing construction plans including improvement plans (Section 4-100), grading plans (Section 4-200), an overview of landscape and irrigation plan requirements (Section 4-300), plans for construction permits (Section 4-400) and revisions, construction changes and as-builts (Section 4-500). Each section covers form, content and processing for each type of plan. Sections 4-100 and 4-200 also contain flow charts, sample title sheets, checklists and typical notes for improvement and grading plans, respectively.

Chapter 5 includes a summarized list of initial plan check deposits and fees (Section 5-101 & 5-102), a list of other typical fees due at final map approval or building permit issuance (Section 5-103), a summary of blueline and mylar submittal requirements and requirements for first submittals (Sections 5-201 & 5-202) and a list of names and titles of government officials responsible for signing various maps and documents (Section 5-300). It is expected that one or more of these sections will be modified regularly by City Council action. Users of this manual should verify that they have the current copy of each appendix.

1-300 DEFINITIONS

The definitions listed in this section are in addition to those listed in the Subdivision Map Act and Chula Vista Municipal Code. The definitions contained in the Map Act and the Code are incorporated herein by reference.

1-301 Adjustment Plat - Drawing plats used to adjust, modify or eliminate lot lines and boundaries of legal lots that have been created by a recorded subdivision map or by a grant deed recorded prior to March 4, 1972. Adjustment plats are not recorded maps. The changes reflected by an adjustment plat are reflected in new grant deeds for the affected properties. The changes reflected by an adjustment plat are not considered legal changes until the new grant deeds are recorded.

1-302 Certificate of Compliance - A document that certifies the City's determination that parcels of property comply with the provisions of the Map Act and the local subdivision ordinance. A certificate of compliance is issued by the City Engineer and is recorded. A Conditional Certificate of Compliance may contain conditions relating to zoning and building ordinances or as specified in the Map Act.

1-303 Construction Permit - A permit to construct public improvements. The Subdivision Improvement Agreement acts as the construction permit for public improvement construction after a final map has been approved. When related to a final map, construction permits are usually issued to construct public improvements prior to approval of the final map. Construction permits are required to construct public improvements associated with parcel maps.

1-304 Final Map - Delineates the boundary of the subdivision by bearings and distances; indicates the procedure of survey; and establishes the boundary for each lot within the subdivision. For purposes of this manual, "final map" refers to final maps for major subdivisions and "parcel map" refers to final maps for minor subdivisions.

1-305 Legal Lot - A parcel established or set forth by one of the following means:

(1) A deed that was recorded prior to March 4, 1972 and that describes the property;

(2) A subdivision map prepared and recorded pursuant to the Subdivision Map Act;

(3) Either of the above means combined with a City approved boundary adjustment plat for which the deeds are recorded.

NOTE: An Assessor's Parcel Number (APN) does not necessarily mean a parcel is a legal parcel.

1-306 Major Subdivisions - Divisions of land creating five or more lots or proposed condominium projects consisting of five or more units.

1-307 Master Fee Schedule - Indicates the fees for all services, administrative acts and other legally required fees. The Master Fee Schedule is adopted by City Council resolution may be amended by City Council Action (Ordinance 2547).

1-308 Minor Subdivisions - Divisions of land creating four or fewer lots or proposed condominium project consisting of four or fewer units. Also may include boundary adjustments and lot consolidations.

1-309 Parcel Map Agreement - An agreement between the developer or subdivider and the City wherein the developer agrees to satisfy all conditions of tentative parcel map approval that: 1) require an agreement; 2) cannot be satisfied prior to final map approval; and 3) the City has agreed to defer until a future date. Parcel map agreements run with the ownership of the real property covered by the parcel map.

1-310 Preliminary Plat - An informal sketch submitted to the ~~Planning~~Development Services Department ~~Department or Engineering Division City~~ for their advice regarding City requirements, constraints on development, recommendations for development and for the most expedient and efficient method of processing the subsequent map.

1-311 Subdivision Improvement Agreement (SIA) - An agreement between the developer or subdivider and the City wherein the developer agrees to construct all public improvements required as conditions of tentative map approval subsequent to approval of the final map within a specified time period (2 years or not greater than 3 years). An SIA is used when the required public improvements have not been installed prior to approval of the final map. SIA's run with the ownership of the real property covered by the final map.

1-312 Supplemental Subdivision Improvement Agreement (SSIA) - An agreement between the developer or subdivider and the City wherein the developer agrees to satisfy all conditions of tentative map approval that: 1) require an agreement; 2) cannot be satisfied prior to final map approval; and 3) the City has agreed to defer until a future date. SSIA's run with the ownership of the real property covered by the final map.

1-313 Tentative Map - An official submittal depicting the overall development proposed for a major or minor subdivision. Upon approval by the City, the tentative subdivision map constitutes an agreement between the developer and the City. For purposes of this manual, "tentative map" refers to tentative maps for major subdivisions and "tentative parcel map" refers to tentative maps for minor subdivisions.

1-400 CONTROLLING DOCUMENTS

1-401 The current State of California Subdivision Map Act (Map Act) shall govern divisions of land above all other documents and ordinances relative to the subdivision of land.

1-402 The City of Chula Vista Subdivision ~~ordinance~~ Ordinance (Title 18 of the Chula Vista Municipal Code) ~~expands, delineates and~~ provides further regulation, pursuant to the City's policy power,~~es~~ of subdivision and land use within the City of Chula Vista for those areas that are not specifically preempted by state law~~those items that the Map Act delegates to local jurisdictions~~.

1-403 The City of Chula Vista Grading ordinance (Title 15.04 of the Chula Vista Municipal Code)~~number 1797, and amendments~~, and this manual shall govern grading and grading plan preparation.

1-404 The The National Pollutant Discharge Elimination System (NPDES) Municipal Permit, Order No. R9-2007-0001 (Municipal Permit), the City of Chula Vista Standard Urban Storm Water Mitigation Plan (SUSMP), the Chula Vista Municipal Code Chapter 14.20, and the City of Chula Vista Development Storm Water Manual (latest edition) ~~City of Chula Vista Stormwater Management and Discharge Control Ordinance~~ and this manual shall govern stormwater quality and urban runoff from the project site to public storm drainage systems during and after construction.

1-404 The Standard Specification for Public Works Construction "Green Book", the Regional Supplement Amendments (to the Greenbook), and the City of Chula Vista Standard Special Provisions (to the Greenbook), as currently adopted by the City of Chula Vista City Council.~~latest revision~~.

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1-500 DIGITAL SUBMITTALS

All maps and associated grading/improvement plans shall be submitted in digital format. Chula Vista and other agencies have been working to establish a "regional standard" for digital submittals. Until that time, it may be necessary for some firms to translate or segregate their data and delete and combine their layers to conform to the city's standard prior to submittal. Digital submittals shall be submitted after the City has requested mylar submittal and shall conform to the following:

1-501 Format~~s~~

1-501.1 ~~1-501.1~~ ESRI's shapefile or geodatabase (ArcGIS version 9.0 or above)
1-501.2 AutoCAD (DWG) or;
1-501.3~~2~~ Digital exchange Format (DXF)

1-502 ~~Media~~Web Based Submittal

~~1-502.1~~ All projects shall be submitted in a digital format, either AutoCAD DWG or DXF (AutoCAD version 2000 or above), ESRI GIS shapefile, file, or personal geodatabase (ArcGIS version 9.0 or above). The files should be transmitted directly to the GIS section using the city's digital submittal file upload website at **http://www.chulavistaca.gov/goto/GIS** ~~PC's:~~

~~(1) Compact Disk (CD) or~~
~~(2)3½" high density diskette in DOS format, or~~
~~(3)~~(2) ~~Electronic Mail (E-mail).~~

1-502.2 Miscellaneous

(1) Each submittal shall be labeled with the project name, project number and company name and phone number.

(2) All drawings shall be tied to the California Coordinate System CCS 83, Zone 6, epoch, 1991.35 or other ties as authorized by the City Engineer.

(3) All blocks used in any drawing shall be provided. Reference drawings shall be merged.

(3) ~~(4)~~ All files shall be uncompressed or provide the necessary software to uncompress the data.

(4) Lines should be POLYLINE (2-D), not POLYLINEZ (3-D). No callouts, page boundaries, or map primitives of any kind are required. Please turn off any extensions outside of the usual cad software.

(5) All projects (except single family detached residential) will be required to submit a digital plan of building footprint, POC, illuminated directory location, emergency access locations, fire lanes, and similar information to the satisfaction of the Fire Marshall prior to the sooner of either: final map approval (if concurrently processed) or building permit issuance.

1-503 Layering - "Layer Groups" shall contain separate layers named as shown in the "Individual Layer" column of the tables in Section 1-505.

1-504 Grading, Improvement and Subdivision Map Digital Submittal

1-504.1 A drawing file containing the project in its entirety and containing the layers of the attached table.

1-505 DIGITAL SUBMITTAL GUIDELINES

The intent of the digital submittal is to secure a copy of the "model" plan and not individual construction sheets.

Digital files submitted shall be based on accurate coordinate geometry calculations and the California Coordinate System, CCS 83, Zone 6 epoch 1991.35. The digital file submitted shall combine all individual plan sheets for the proposed subdivision into a single "*.dwg*" or "*.dxf*" formatted drawing, and shall illustrate all improvements within the project area. Basic descriptive information may be included in the associated layer, or added as a separate layer. Submit the digital files in accordance with City Guidelines for digital Submittal as approved by the City Engineer.

IMPROVEMENT PLANS

INDIVIDUAL LAYER	DESCRIPTION
S ACCESS	Sewer Access covers (size, type)
CURB	Curbs, berms, and sidewalk
FINGRADE	Finished grade contours and elevation
MEDIAN	Medians
S/W	Sidewalks
HYDRANTS	Fire hydrants
UTILITIES	Public Utilities (water, gas, elect., cable)
RAMP	Pedestrian Ramp locations
EXEASE	Existing easements
FUTEASE	Proposed easements
STLIGHT	Street Lights
EXSEWER	Existing sewer lines
FUTSEWER	Future sewer lines
EXSTORM	Existing storm drain lines
STORM DRAIN	Proposed storm drain lines
INLETS	Storm drain inlets
OUTLETS	Storm drain outlets

GRADING PLANS

INDIVIDUAL LAYER	DESCRIPTION
EXGRADE	Existing grade contours and elevations
FINGRADE	Finished grade contours and elevations
FLOW	Swales, direction of flow
SPOTELEV	Spot elevation markers and elevations
FTPRINT	Building footprints (if known)
STORM DRAIN	Culvert and storm drain outlets/inlets

DETENTION	Detention/desilting facilities
INLETS	Storm drain inlets
OUTLETS	Storm drain outlets
BMP	Any Best Management Practise Water Quality Device required by the Water Quality Technical Report
Pad	Pad elevation

LANDSCAPE/IRRIGATION PLANS

LAYER NAME	DESCRIPTION
IRRHEAD	Sprinkler head locations
IRRPIPE	Irrigation piping
LANDSCTREE	Tree locations
LANDSCSHRUB	Shrub locations

FINAL MAPS AND PARCEL MAPS

Digital files submitted shall be based on accurate coordinate geometry calculations and the California Coordinate System, CCS 83, Zone 6, epoch 1991.35. The digital file submitted shall combine all individual plan sheets for the proposed subdivision into a **single** CADD formatted drawing. This drawing shall contain the following individual layers.

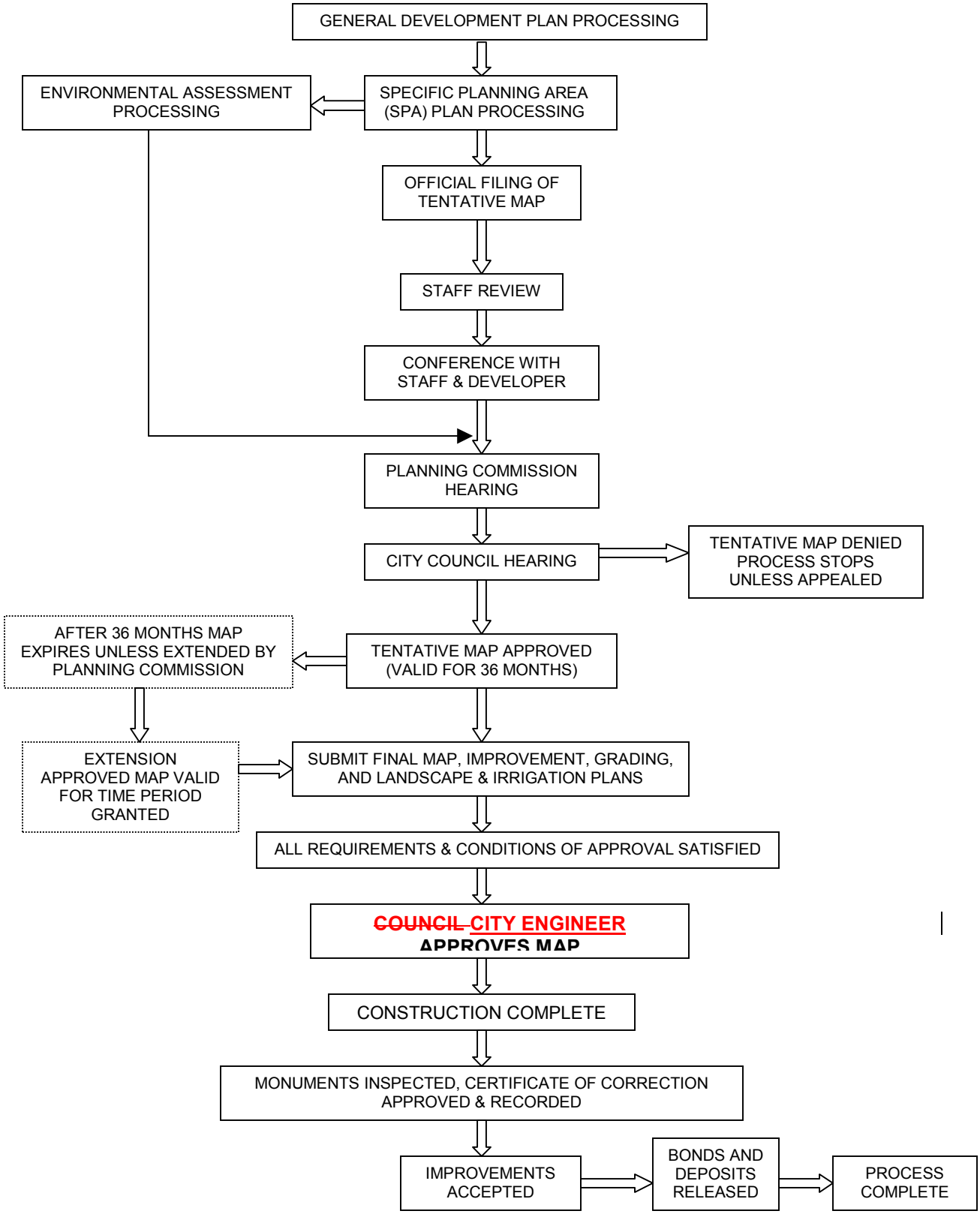
1) SUBDIVISION BOUNDARY (polylines)
2) LOT/PARCEL LINES (polylines)
3) LOT NUMBERS (annotation)
4) STREET CENTERLINES (polylines)
STREET NAMES (annotation)
EASEMENTS (polylines)
FTPRINT[1] (polylines)

~~1) Subdivision boundary~~
~~2) Lot boundaries~~
~~3) Lot numbers~~
~~4) Street centerline~~
~~5) Street names~~
~~6) Easements (if applicable)~~

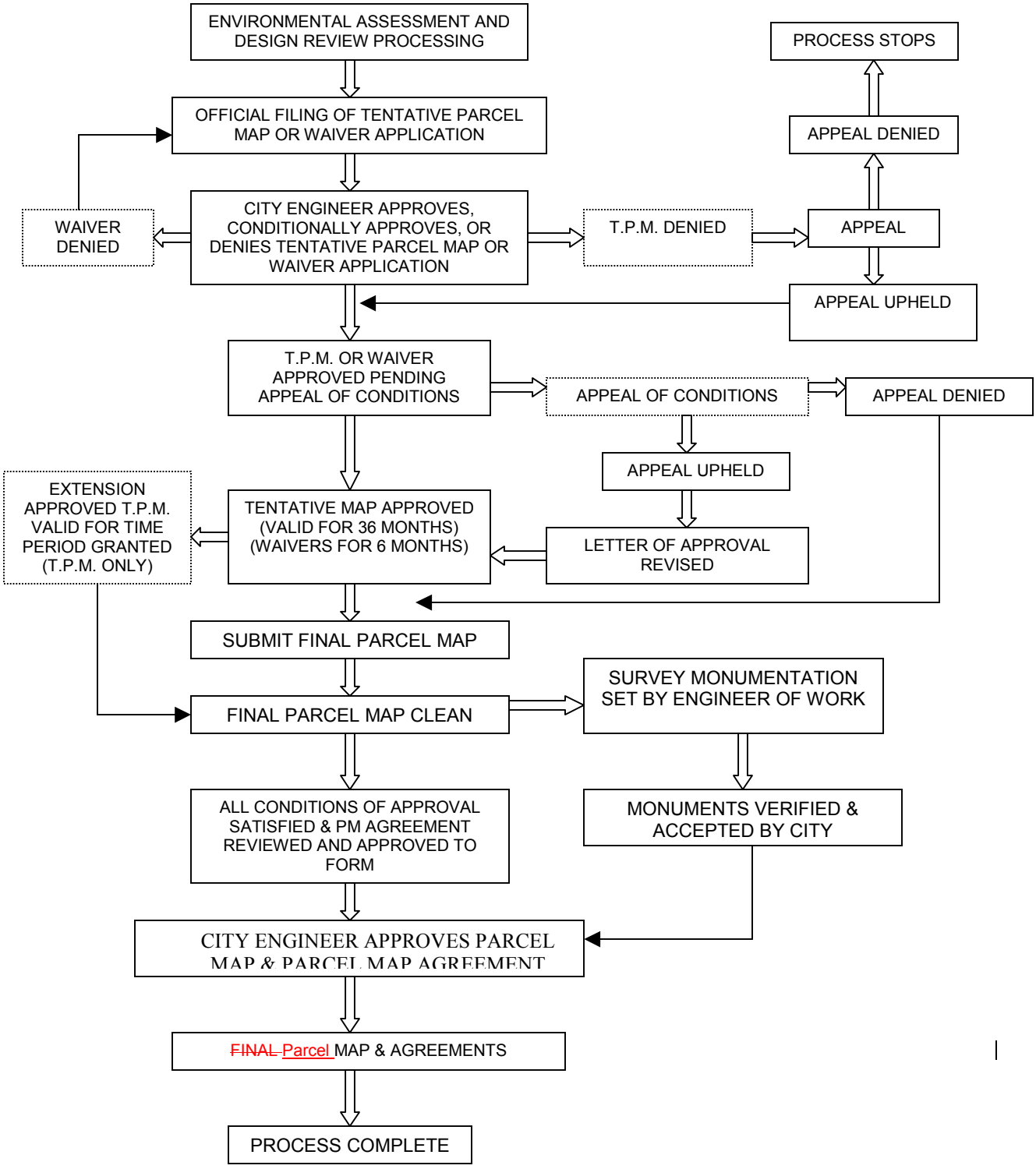
Multiple files submitted, as part of a single subdivision, will not be accepted. In addition, a lot area tabulation of each lot (including open space lots, and private streets, etc) will be required in an Excel spreadsheet format and submitted for all final maps, parcel maps, and lot line adjustments. The spreadsheet will show the lot number or letter, the units in acres if the lot size is over half an acre, and square feet and acres if the lot is under half an acre. (example: 7,000 sf, 0.160ac) for each lot. The acreage shall be shown to at least three decimal places. Open space lots shall be identified either as private or public. ~~Submit the digital files in accordance with City Guidelines for Digital Submittal on 3½" disks, as an e-mail attachment to the Project Engineer, or as otherwise approved by the City Engineer-In-Charge~~.

[1] Required for non-residential projects and Multi-Family Residential

1-601 MAJOR SUBDIVISION MAP FLOW CHART



1-602 MINOR SUBDIVISION (PARCEL) MAP FLOW CHART



2- SUBDIVISION MAPS

Subdivision Maps are used to create a division or consolidation of land under the provisions of the Subdivision Map Act and the Subdivision Ordinance. The procedure may require filing of a tentative map and final map. Subdivisions are classified as either major or minor. Major subdivisions generally create a division of land resulting in more than four lots or condominium units and these maps are ~~generally~~ referred to as final maps. Criteria for processing major subdivision maps may be found in this manual under Section 2-100 Major Subdivisions. Minor subdivisions consist of a division of land usually resulting in four or fewer lots or condominium units are ~~generally~~ referred to as parcel maps. Criteria for processing minor subdivision maps may be found in this manual under Section 2-200 Minor Subdivisions. A more detailed description of the types of subdivision maps may be found in the State of California Subdivision Map Act Section 66410 - 66499.58. Parcel maps may also be filed as the enabling document for lot consolidation or boundary adjustment processes (See Section 2-400 Adjustment Plats)

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MAJOR SUBDIVISIONS
SECTION 2-100

2-100 MAJOR SUBDIVISIONS - General

Major subdivision maps are used to create a division of land resulting in more than four lots or condominium units as set forth in the Subdivision Map Act and the Subdivision Ordinance. The process requires filing of a tentative map and a final map. A preliminary map, depicting the development concept may be submitted prior to a formal application (See Section 2-101.3). Map processing is administered by the ~~the Planning~~Development Services Department~~ and the Engineering Division of the Public Works Department~~. Tentative maps are approved, conditionally approved, or denied by the City Council following recommendation by the City Planning Commission~~ except that one lot condominium tentative subdivision maps may be approved by the Planning Commission~~. ~~The Planning~~Development Services~~ Department administers processing for tentative maps. The Engineering Division administers processing of the final map and submits the final map to City Council for approval.~~

Tentative Maps shall be prepared by a California Registered Civil Engineer. Final Maps and Parcel Maps shall be prepared either by a California Registered Civil Engineer (with a registration number of 33965 or lower) or a Licensed Land Surveyor authorized to prepare maps in accordance with provisions of the Subdivision Map Act or the Land Surveyors Act.

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MAJOR SUBDIVISIONS
SECTION 2-101
TENTATIVE MAPS

2-101 TENTATIVE MAPS

2-101.1 PURPOSE

Tentative ~~subdivision~~ maps depict the overall development proposed. Although not precise in detail, such as pavement structural section, tentative maps are specific in those items that can be predetermined such as street dimensions, right of way and utility location. Upon City approval, tentative subdivision maps essentially constitute an agreement between the developer and the City relative to the approximate subdivision design including existing and proposed grading, zoning, and public improvements. Tentative maps guide all subsequent work. Therefore, tentative maps should be as complete and specific as reasonably possible.

All tentative maps shall be prepared by a California Registered Civil Engineer.

2-101.2 FORM AND CONTENT

(1) General

a) Tentative maps shall be legibly drawn on mylar, (min. 3 mils (0.08mm) thick) or other reproducible material as approved by the Director of ~~Planning~~Development Services.

b) Minimum size shall be 18" X 26" (46cm x 66cm).

c) Minimum scale shall be 1" = 100' (1cm = 10m).

(2) Margin Information

a) Title - Name of Subdivision

b) Chula Vista Tract Number (CVT) - All subdivisions in Chula Vista will be assigned a tract number by the ~~Planning~~Development Services Department. A typical designation such as "CHULA VISTA TRACT NO. 11~~95~~-05, UNIT NO. 2" indicates that subject development was the 2nd unit of the 5th tentative subdivision map filed in 2011~~1995~~.

c) A concise legal description to define the location of the proposed subdivision.

d) Tax Assessor's parcel number(s).

e) The name, address, telephone number and signature of the record owner or owners.

f) The name, address and telephone number of the subdivider, if other than owner(s).

g) The name, address and telephone number of the person, firm or organization preparing the tentative map and the license or registration number of the registered civil engineer responsible for the map.

h) Source of domestic potable water supply for each lot.

i) Method of sewage disposal.

j) Existing zoning.

k) Proposed zoning.

l) Proposed land use of each parcel.

m) Gross area (acres and square feet (square meters)) .

n) Source of topographic information

o) Statement relative to quantity of proposed grading

p) The date the map was prepared and the number and date of any revision(s).

q) A vicinity map with north arrow and scale.

(3) Map Data

a) North arrow.

b) Map Scale in words or figures and graphically, in the event the map is enlarged or reduced.

c) Approximate curve information for all curves shall be shown (boundaries; streets; Easements; Tentative Maps; Major Subdivisions; ~~Easements; easements;~~ etc.)

d) Lines of inundation (if any) for the design storm of any streams or watercourses passing through or adjacent to the tentative map boundaries.

(4) Boundary Data

a) Fully dimension all boundaries (approximate values).

b) Indicate proposed boundaries using solid lines.~~,~~ U~~u~~se dashed lines for existing boundaries.

c) Tie property boundaries to street centerline when adjacent or in close proximity to public streets.

d) Clearly identify all City or County boundaries

(5) Existing Conditions - The following information shall be shown within the tentative map boundaries and within a minimum of 100 feet (30m) thereof:

a) Locations, names, grades, existing widths of all highways, streets, and roads, and if private designated as such.

b) Location, widths, and type of any sidewalks, curbs and gutter, and driveways.

c) Widths and approximate locations of all existing ~~Easements,~~ Tentative Maps and~~,~~ E~~e~~asements, including rights of way, whether public or private, recorded or unrecorded.

d) Location and identification of any existing utilities and drainage facilities.

e) Identification of all buildings or structures as to land use (single-family dwelling, duplex, commercial building, barn, shed, etc);

f) Location of all existing buildings or structures with respect to proposed lot lines.

g) The approximate location of all isolated trees that are located within the boundaries of the tract and have~~with~~ an average trunk diameter of 4 inches (10cm) or greater ~~within the boundaries of the tract,~~ and the outlines of groves or orchards.

h) Topography and contours at no more than 5 foot (2m) intervals within the total ownership boundaries. Contours shall extend beyond such boundaries a minimum of 100 feet (30m). In addition, any predominant ground slopes in the vicinity shall be shown or noted. Contours shall be based on City Bench Marks.

i) Widths and directions of flow for all watercourses.

j) Adjacent lands if owned, leased, or under option to purchase by the owner of the land proposed to be subdivided, or the subdivider. The exclusion of any land from the proposed subdivision shall not create strips or parcels incapable of development, as determined by the ~~Planning~~Development Services Director.

k) Seismic fault lines.

(6) Proposed Development - All proposed improvements shall be clearly identified by means of notes, symbols and/or typical sections including:

a) Locations, grades, and widths of any proposed highways, streets, or roads, and if to be private designated as such;

b) Proposed street or Easements, Tentative Maps, easement dedications;

c) Approved names for all streets within the boundaries of the tentative map;

d) Proposed sidewalks, pavement, curbs and gutter, retaining walls, street lights, and driveways;

e) Location, size, and direction of flow for all sewer facilities and whether public or private.

f) Proposed drainage facilities, direction of surface drainage; and structural best management practices ("BMP's");

g) Any existing structures to be removed or relocated and any proposed buildings;

h) Proposed grading using symbols and criteria per the Grading Ordinance and Standard Drawings of the City of Chula Vista.

i) Any trees to be removed.

j) Location, purpose and size of proposed Easements, Tentative Maps, easements and whether public or private.

k) Other methods of proposed development including lot design, providing utilities, and any matters which might pertain solely to the particular subdivision.

(7) Lot information

a) Approximate dimensions shall be shown for each proposed lot.

b) All lots are to be consecutively numbered beginning with Lot 1. Proposed open space lots shall be consecutively lettered beginning with Lot "A".

c) Net area of each lot in acres and square feet (square meters) shall be shown. In addition to showing areas on each lot, provide a separate tabulation of areas by lot (See Sample Tentative Map - Section 2-101.5)

d) Provide Prototypical Details on the Tentative Map of lot frontages showing the location of a driveway, utilities and at least one tree for each lot type. Note - this will be a key item in evaluating plans for conformance with the Tentative Map.

e) When retaining walls are necessary (proposed) on corner lots, additional consideration shall be given to the design of those walls, such as articulation of the wall and/or additional plantings. A typical wall/planting detail for any corner lots with retaining walls shall be shown on the Tentative Map.

2-101.3 PROCESSING

(1) Preliminary Subdivision Map. The Subdivider is strongly encouraged to submit a preliminary map depicting his concept for development of the property. This map is an informal sketch (without fees) submitted to the ~~Planning~~Development Services Department for their advice regarding City requirements; constraints on development; recommendations for development; and the most expedient method of processing the subsequent tentative map.

a) Preliminary Map Submittals - Submit six (6) copies of the preliminary subdivision map to the ~~Planning~~Development Services Department. The map should contain the following:

1) Location Map.
2) North arrow and scale (1"=100' (1cm=10m) preferred).
3) Acreage of the subdivision.
4) Date.
5) Number of lots and approximate size of each.
6) Existing and proposed streets (indicate street widths, grades and cul-de-sac radii).
7) Existing topography.

8) Proposed grading and pad elevations.
9) Any other information which may affect the project (i.e., environmental, adjacent development, trees, etc.).

b) Preliminary Subdivision Map Review and Conference - The city staff will review the preliminary subdivision map within two to three weeks, after which an informal conference will be scheduled with the subdivider.

c) Environmental Review Process - Subdivisions are subject to the provisions of the California Environmental Quality Act (CEQA) and cannot be considered by the Planning Commission unless a Negative Declaration has been certified or and Environmental Impact Report has been reviewed by the Planning Commission. An Initial Study submitted with the preliminary subdivision map could result in a Negative Declaration or a simplified or focused Environmental Impact Report which may accelerate the environmental review process on the tentative subdivision map.

(2) Tentative Map Filing. The tentative map ("TM") is filed with the ~~Planning~~Development Services Department and reviewed by both the Planning Commission and the City Council. The Commission acts in the capacity of an advisory body to the Council and shall recommend either approval, conditional approval or disapproval of the TM to the Council within 50 days after certification of the Environmental Impact Report, adoption of a Negative Declaration, or a determination that the project is exempt from the requirements of Division 13 (Commencing with Section 21000) of the Public Resources Code.

(3) Submittal Requirements - The items listed below should be submitted to the Director of ~~Planning~~Development Services for tentative map processing. A tentative map application will not be considered officially filed until all items are submitted.

a) One reproducible copy (sepia, mylar or approved media) and 23 blueline copies of Tentative Map. See Section 2-201.2

b) Preliminary Title Report - 2 copies

c) Preliminary Soils / Geotechnical / Geologic Report prepared pursuant to the City of San Diego's latest adopted "Guidelines for Geotechnical Reports" (http://www.sandiego.gov/development-services/industry/pdf/geoguidelines.pdf) as determined by the City Engineer - 1 copy

d) ~~Geological Report - 1 copy (Not required for condominium conversions)~~Landscape Master Plan
- A 100 scale plan including but not limited to each open space lot, walls, fences medians, parkways, trees, channels, outlet structures, detention basins, water quality BMP's, and trails; the proposed level of landscaping and the proposed perpetual maintenance entity responsible for each area.
- The City's General Fund only maintains City parks and typically paved public streets and public storm drains. The Sewer Fund maintains only 8" and larger public sewer mains.
- Access, acceptable to the City Engineer, shall be provided for all areas to be maintained.

- The City requires that all proposed infrastructure be sustainable meaning that lifecycle costs must be funded by a Community Facilities District (formed prior to the first final map) or some other funding mechanism acceptable to the City Engineer.
- Lifecycle cost shall included but not be limited to, private streets / drives, landscaping, private sewers, private storm drains, and any other items of common ownership / usage as outlined in the California Department of Real Estate latest version of the "Reserve Study Guidelines For Homeowner Association Budgets"

e) Scenic Highways Proposal - 1 copy (Not required for condominium conversions)

f) Development Standards - 1 copy (P-C zone) (Not required for condominium conversions)

g) Affirmative Fair Marketing Plan - 1 copy for developments of 50 or more lots/units(Not required for condominium conversions)

h) Condominium conversions :

1) Landscape concept plan - 1 blueline copy; 1 colored copy; and 28 copies reduced to 8-1/2" X 11" (22cm X 28cm)

2) Building elevations - 1 blueline copy; 1 colored copy; 28 copies reduced to 8-1/2" X 11" (22cm X 28cm); and one 35 mm colored slide (if colored)

3) Site plan - 1 blueline copy; 1 colored copy; 28 copies reduced to 8-1/2" X 11" (22cm X 28cm); and one 35 mm colored slide (if colored)

4) Floor plans - 28 copies reduced to 8-1/2" X 11" (22cm X 28cm); and one 35 mm colored slide (if colored)

5) Statement on utilities and meters - 1 copy

6) CC&R's - 1 copy

7) Stamped, self-addressed envelope for each tenant- 3 sets

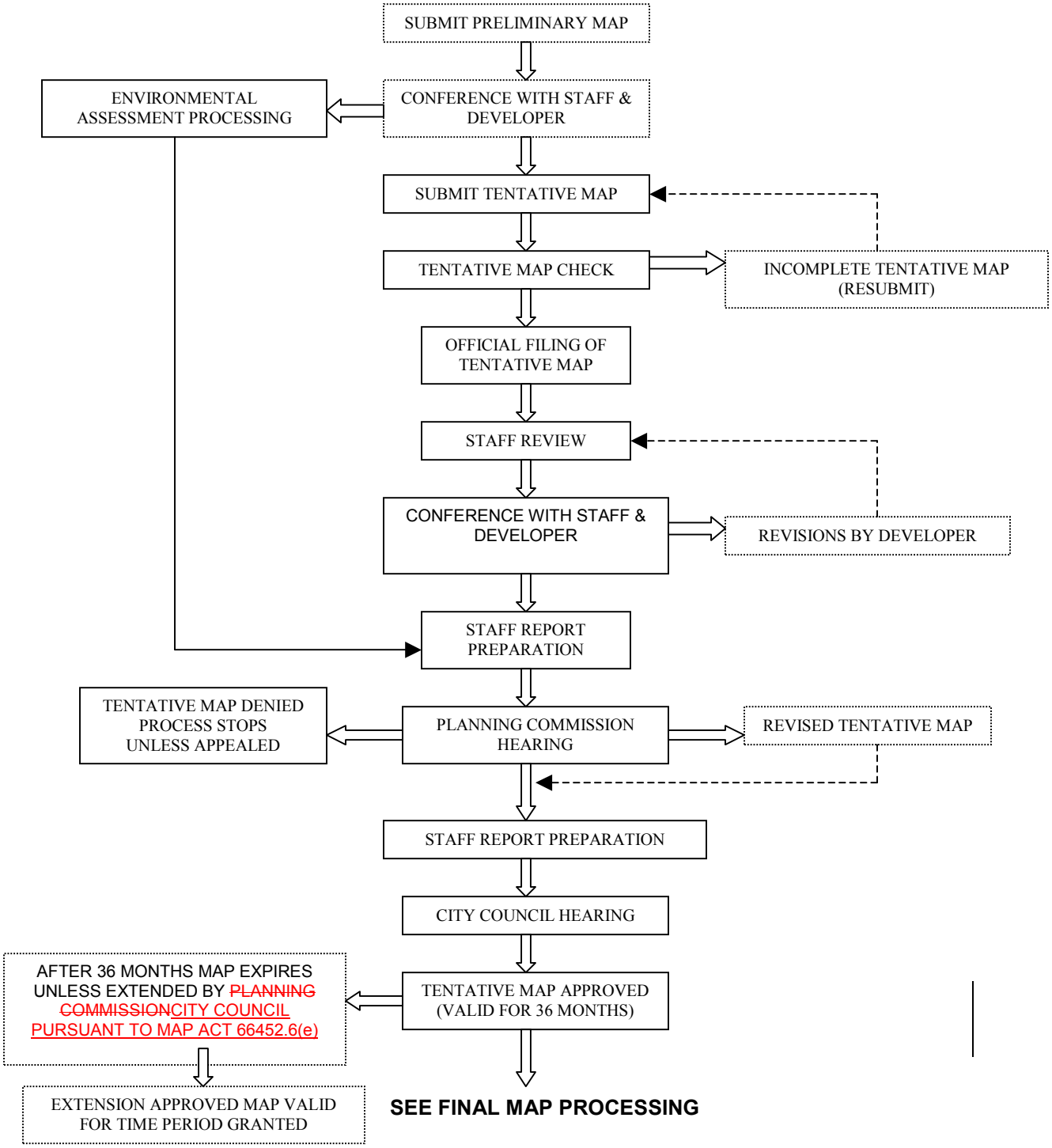
8) Evidence of compliance of all notification packages ~~of intent to convert given to tenants 60 days prior to filing of tentative map~~required by the Subdivision Map Act Section 66427.1

(4) Approval - Pursuant to Subdivision Map Act Sections 66452.1 and 66452.2.

(5) Appeal - Tentative map determinations may be appealed pursuant to City ordinance.

(6) Amended Map - If field conditions prevent completion of a subdivision in substantial conformance with an approved tentative map, either an amended tentative map or a new tentative map shall be filed, as determined by the City Engineer.

2-101.4 TENTATIVE SUBDIVISION MAP FLOW CHART



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Tentative Map – Chula Vista Tract ~~No. 96-06 Vista Del Mar~~

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2.102.6 TENTATIVE MAP CHECKLIST
CITY OF CHULA VISTA

FOR OFFICE USE ONLY
DP - _____
PCS-_____
INITIALS: _____
DATE: _____

SUBDIVISION _____
_____

TRACT NO. _____

_____

Property Owner(s):

&
Address

Engineer/Surveyor: _____
_____

PHONE:

ITEM	CHECK	REMARKS
2-101.3(2) SUBMITTAL PACKAGE - Maps, Reports, Statements & Exhibits		
Initial Deposit — Amount $_____		
B. Development Processing Agreement executed		
C. Tentative Map Submittal		
D. Preliminary Title Report – 2 copies		
E. Preliminary Soils Report prepared pursuant to the City of San Diego's latest adopted "Guidelines for Geotechnical Reports" (http://www.sandiego.gov/development-services/industry/pdf/geoguidelines.pdf) as determined by the City Engineer – 1 copy		
F. Geological Report – 1 copy (if required)		
G. Scenic Highways Proposal – 1 copy (if required)		
H. Development Standards – 1 copy (P-C zone) (if required)		
I. Affirmative Fair Marketing Plan – 1 copy for developments of 50 or more lots/units (if required)		

ITEM	CHECK	REMARKS
J. Notification List and associated items		
K. Condominium conversions:		
1. Landscape concept plan and required copies		
2. Building elevations and required copies		
3. Site plan and required copies		
4. Floor plans and required copies		
5. Statement on utilities and meters – 1 copy		
6. CC&R's – 1 copy		
7. Stamped, self-addressed envelope of each tenant – 3 sets		
8. Evidence of notification of intent to convert given to tenants 60 days prior to filing of tentative map.		
2-101.2(1) FORM AND CONTENT - General		
A. Legibly drawn on mylar, sepia or other approved media		
B. Min. 18" x 26" (46cm x 66cm), Max. 36" x 60" (91cm x 152cm) With 1" (2.5cm) margin		
C Scale: 1" = 100' (1cm = 10m) minimum in both words and graphically and north arrow		
2-101.2(2) MARGINAL INFORMATION:		
A. Title – Subdivision Name		
B. Chula Vista Tract No.		
C. Legal description: Sufficient to define map boundaries		
D. Tax Assessor's Parcel Number(s)		
E. Owner's name, address, telephone number and signature		
F. Applicant's name, address, telephone number (if other than owner)		
G. Civil engineer's name, address, telephone number, and registration or license number		
H. Source of water supply		
I. Method of sewage disposal		
J. Zoning – existing and proposed		

ITEM	CHECK	REMARKS
K. Present and Proposed usage of each parcel		
L. Gross area (acres and square feet (square meters))		
M. Reference to topographic source		
N. Grading – statement if no grading proposed		
O. Date of preparation and number and dates of any revision		
P. Vicinity map with north arrow and scale.		
Q. Total number of lots and total number of each type of lot		
R. Minimum, Maximum, and Average lot size		
S. Drainage and Flood Control measures		
2-101.2(3) MAP DATA:		
A. North arrow		
B. Scale (min. 1" = 100' (1cm = 10m) shown both in words or figures and graphically		
C. Approximate curve information for all curves		
D. Inundation lines for design flood		
2-101.2(4) BOUNDARY DATA:		
A. Fully dimensioned (approximate)		
B. Proposed as solid lines, existing as dashed lines		
C. Tied to street centerline		
D. City/County boundaries identified		
2-101.2(5) EXISTING		
A. Highways, streets, roads - names, grades, widths, if private designated as such		
B. Sidewalks, pavement, curbs and gutters, street lights, driveways		
C. Easements – location, purpose, size, public or private and recording information		
D. Utilities:		
1. Sewer - location, size, type, depth manholes		
2. Water - location, size, type		

ITEM	CHECK	REMARKS
3. Gas - location, size		
4. Electrical, telephone, cable TV lines - location, size, type, poles, overhead or underground		
E. Buildings/structures identified as to land use		
F. Buildings/structures – located with respect to lot lines		
G. Trees – groves, orchards and trees of trunk diameter 4" (10cm) or more shown		
H. Contours – maximum 5' (2m) interval		
I. Water courses – widths, directions of flow		
J. Adjacent lands if owned, leased, or under option to purchase by owner		
2-101.2(6) PROPOSED DEVELOPMENT:		
A. Highways, streets, roads – locations, grades, widths, and if to be private, designated as such		
B. Proposed street and easement dedications		
C. Approved street names (or temporary names) shown		
D. Sidewalks, curbs and gutters, driveways, pedestrian ramps		
E. Sewers – location, size, type, manholes		
F. Drainage facilities		
G. Existing buildings to be removed or relocated and proposed buildings shown		
H. Grading – degree of slope, benches, retaining walls, pad elevations		
I. Removal of existing trees		
J. Easements – location, purpose, size, public or private		
2-101.2(7) LOT INFORMATION		
A. Approximate dimensions		
B. Numbered in consecutive order		
C. Net area of each parcel (acres or square feet (m^2))		

MAJOR SUBDIVISIONS
SECTION 2-102
FINAL MAPS

2-102 FINAL SUBDIVISION MAPS

2-102.1 PURPOSE

Final subdivision maps are the legal means by which property is subdivided. Final maps show all information relating to title interest in the property including lot boundaries, easements, reservations, and dedications. The ~~Engineering~~ Land Development Division ~~of the Public Works Department~~ is responsible for processing final subdivision maps and presenting the maps to the City Engineer~~Council~~ for approval. Time limitations for submissions and processing are contained in the Subdivision Map Act.

2-102.2 FORM AND CONTENT

(1) General

a) Final maps shall be clearly and legibly drawn on 18" X 26" (46cm X 66cm) mylar (min. 3 mils (0.08mm) thick) using black drawing ink only.

b) Hand lettering shall be a minimum of 1/8" (3mm) in height. Typed or computer generated lettering shall be a minimum of 1/10" (2.5mm) in height.

c) Final maps shall contain a 1" (2.5cm) margin separated by a medium heavy marginal line completely around each sheet.

d) Subdivision title, unit number and tract number shall be shown on each sheet, centered and below the upper margin. Maps filed for "Reversion to Acreage" or for "Resubdivision" shall include such terminology in the subdivision title.

e) Lowest and highest lot numbers shall be circled on key map an on subsequent sheets.

(2) MARGIN INFORMATION - The following information shall be included on each sheet of the final map:

a) Upper right:

1) MAP NO 4" (10cm) LINE

2) SHEET _____ OF _____

b) Lower right:

1) City of Chula Vista Work Order No.;

2) Tentative Map No.;

3) California Coordinates (i.e. LC 154-1755)

c) Lower left - Name, address and phone number of engineer or firm that prepared the final map.

(3) Title/Cover Sheet Information - The following information shall be included on the final map title or cover sheet:

a) Generalized legal description centered under the subdivision title

b) Total number of lots, units, numbered lots, and lettered lots within the subdivision centered under the legal description

c) Gross area of map in acres

d) Name of the title company and subdivision guarantee order number

e) Vicinity map with north arrow and scale indicated

f) Certificates and jurat as shown in Section 2-600 or as required by the Map Act including but not limited to:

(1) Owners' Certificate
(2) Holders of Beneficial Interest or Trustees Under Trust Deed per Sec. 66436(a)(2)
(3) Surveyor's Certificate
(4) City Engineer's Certificate
(5) City Clerk's Certificate
(6) County Tax Assessor's Certificate
(7) Recorder's Certificate
(8) County Board of Supervisor's Certificate

Additional sheets as necessary may be added to accommodate the required certificates.

g) A separate index sheet may also be necessary and shall show the following:

1) Identify sheet numbers.
2) All lots shown and numbered or lettered.
3) All streets shown and identified.
4) Show subdivision, City-County boundaries, etc.
5) Surveyor's Company Information (name, address, and phone number.

(4) Procedure of Survey - Final Maps shall include a procedure of survey as set forth in Section 2-301 of this manual.

(5) Map Sheets - General. The following shall be shown on each map sheet:

a) North arrow and scale in words or figures and graphically (minimum 1"=100' (1cm = 10m)).

b) Boundaries:

(1) Indicate the exterior boundary of the subdivision using a solid boundary line approximately 1/6" wide.

(2) Clearly indicate the location, dimensions, and bearings of the proposed lots.

(3) Identify City/County boundary as applicable.

(4) Show adjacent lot, block, subdivision, or section lines using dashed or shadowed lines.

(5) All lines shown on the map within the boundary that do not constitute a part of the subdivision, and any area enclosed by such lines, shall be labeled "not a part of this subdivision" and shall be dashed.

c) Show existing and proposed street names, widths and sidelines (solid lines).

d) Consecutively number or letter each proposed lot. Lots offered for dedication as open space lots shall be lettered consecutively beginning with Lot "A".

e) Indicate monuments found, and to be set, using distinct symbols per Section 2-302.4 of this manual. Monumentation and basis of bearing shall conform to subdivision requirements as prescribed in the manual under Section 2-301.

f) Show all survey and mathematical information and data necessary to locate all monuments and to locate and retrace any and all interior and exterior boundary lines, lot lines and street centerlines appearing thereon, including bearings, basis of bearings, and distances of straight lines, and radii and arc lengths for all curves, and such information as may be necessary to determine the location of the centers of curves. No ditto marks shall be used for any dimensions. All line and arc segment lengths shown shall add to total lengths shown.

g) All reference data adjacent (or in the near vicinity) such as section corners, blocks, lot lines, recorded maps, etc.

h) Record bearings, distances and references in parentheses for latest record map.

i) Arrange map sheets so that no lot is split between two or more sheets.

(6) Dedicated Streets

a) Indicate right of way lines of each street being dedicated and widths of any existing street dedications.

b) Indicate widths and locations of adjacent streets and other public properties within 50' (15m) of the subdivision

c) Indicates access rights to be relinquished or previous relinquishments by short hash marks along the relinquishment section. Relinquishment shall be shown in the legend thus: "///// indicates abutter's rights of access relinquished hereon."

d) All private streets shall be shown on the subdivision map and shall be clearly identified as a "Private Street."

(7) Easements:

a) Sidelines of all existing easements to remain in effect and all proposed easements shall be shown by fine dotted lines.

b) Widths of all easements and sufficient ties thereto to definitely locate the same with respect to the subdivision must be shown.

c) All easements shall be clearly labeled and identified.

d) Existing Easements to Remain in Effect:

1) All existing easements to remain in effect shall be shown on the map. If an existing easement to remain in effect cannot be definitely located, a statement of the existence, the nature thereof and its recorded reference must appear on the title sheet.

2) Distances and bearings on the side lines of lots that are intersected by an easement must be dimensioned to indicate clearly along the lot line from at least one end of that line.

3) Sidelines of existing easements need not be dimensioned.

4) Clearly label and identify all existing easements to remain in effect including the recording information.

e) Dedicated Easements:

1) Easements dedicated on the map shall be indicated in the owners' certificate.

2) Fully dimension, including the side lines, all proposed easements with the exception of street tree easements and 10' (3m) general utility easements in open space lots.

3) Street tree easements shall be provided in conformance with City Standards. In any instance where sidewalk is waived or a less than standard right of way width is approved, the easement for street trees shall have a minimum width of 10' (3m).

f) ~~f)~~ Public Easements to be Abandoned - Pursuant to Section ~~66499.20-1/2~~66434(g) of the State Subdivision Map Act, existing public easements may be abandoned on the final map. Said easements shall not be plotted and a certificate shall be placed on the title sheet of the final map.

g) In the event a private access or utility easement for the use of subsequent owners or purchasers is required within the boundaries of the land to be divided, the easements shall:

1) be delineated on the parcel map and shall be conveyed to subsequent purchasers;

2) be shown on the parcel map by a dashed line and a note that the area represents a future easement to be conveyed to subsequent owners or purchasers pursuant to the requirements of Section 18.16.260 of the Municipal Code.

(8) Master Subdivision or "A" Map:

a) A master subdivision is intended to create superblocks, based on an approved tentative map, for subsequent subdivision into smaller lots by the eventual buyer of a superblock.

b) All lots shall front on a dedicated and improved (or bonded) public street.

c) Utility easements shall be adequate to allow service to any individual superblock without obtaining additional rights from owners of other superblocks.

d) Grading, as a minimum, shall include all streets to be dedicated, all common easements, and along common lot lines in conformance with grades shown on the approved tentative map.

e) ~~e)~~ The Master Subdivision Map shall only map that portion of the tentative map that can satisfy the above conditions. Any "remainder" of the phased mapping of an approved tentative map area must have access to a dedicated and improved (or bonded) public street.

f) The funding entity for the perpetual maintenance of BMP's parkways, medians and detention basins (and all items listed in the Landscape Master plan) must be formed prior to the approval of the "A" map.

2-102.3 PROCESSING

(1) Submittal Requirements

a) Acceptance of Maps for Plan Check - In order to reduce the number of revisions and reduce the number of plan checks; to allow staff to efficiently review plans; to provide a timely review of the initial and subsequent submittals and to treat all development submittals in a fair and equitable manner; submittals and resubmittals will only be made by appointment with the city's project engineer. The submittal will be checked for compliance with the check sheet. Subsequent submittals will also be checked for responsiveness to questions or corrections noted on the plans. If the submittals are not complete, they will be returned without checking.

b) First Submittal - The first submittal package includes but is not limited to the following:

1) Initial plan check deposit.

2) Executed Development Agreement.

3) Blue / Black line copies of Final Map per Section 5-201of this manual.

4) Proof of ownership (Title Report dated within 60 days of map submittal).

5) Copies of all deeds, deed restrictions, and easements, including copies of all maps and other documents referenced on the map.

6) Traverse and closure computations including exterior boundary traverse, lots, and ties to CCS83 monuments. Traverses shall close within 1:10,000. Traverses shall be based on map calls and not inverses.

7) Improvement Plans (if required).

8) Grading Plans (if required).

9) Landscape Improvement Plans (if required).

10) Design data and/or calculations for special structures.

11) Engineer's estimates for construction of public improvements, grading, landscape and irrigation, and survey monumentation (may be submitted with subsequent plan check).

12) Other items as specified by City Council in approval of tentative map.

c) Subsequent Plan Check - Subsequent plan check submittals shall include but not be limited to:

1) 2 revised blueline copies.

2) Original City plan check comments.

3) Other information and documentation as requested.

(2) **Additional** Items Required a Minimum of ~~2~~18 Days Prior to ~~Council Consideration~~map recordation:

a) Pay all fees that are due prior to final map approval and all assessments.

b) Inspection and plan check deposits as required by the City Engineer.

c) Subdivision Improvement Agreement(s). ~~Three~~ One executed original~~s~~ required (City signatures not required).

d) Supplemental Subdivision Improvement Agreement(s). ~~Three~~ One executed original~~s~~ required (City signatures not required).

e) Bonds or request for delayed bonding procedure.

f) Easements for off-site improvements.

g) Executed Grant Deeds for dedicated open space lots.

h) Any other required deeds and/or easements.

i) Plats of the subdivision:

1) One 200 scale reproducible plat;
2) One 400 scale reproducible plat;
3) One 8-1/2" X 11" (22cm X 28cm) transparency plat;

j) Updated title report and subdivision guarantee dated within sixty (60) days of proposed ~~Council meeting~~map recordation.

k) Compliance with all outstanding conditions of approval.

l) Signed mylars of the final map. ~~At least eight (8) days in advance of the date scheduled for Council consideration, t~~The title sheet shall be fully executed except for certificates by the City Clerk, and Attorney, Clerk of Board of Supervisors and County Recorder.

(3) Final subdivision maps are not considered filed until all documents and plans supporting the subdivision have been submitted and the required fees have been paid.

(4) ~~(4)~~ **Approval** - All conditions of approval and other documentation must be received no later than ~~21 days~~1 week prior to City Council's notice of pending Approval pursuant to Map Act Section 66458(d). Final subdivision maps will not be ~~docketed~~ noticed for pending approval on the City Council agenda until all items required have been received. Following the Council ~~approval~~notice, City staff will obtain the required City signatures on all maps and agreements.

a) City Council Notice of Pending Approval:

In accordance with California Government Code Section 66458(d), notice is hereby given that the City Engineer has reviewed and, immediately following this City Council of **[Insert Date]**, will approve the following final map(s): **[INSERT NAME of MAP OR MAPS]**

Specifically, the City Engineer has caused the map(s) to be examined and has made the following findings:

(1) The map(s) substantially conform(s) to the approved tentative map(s), and any approved alterations thereof and any conditions of approval imposed with said tentative map(s).

(2) The map(s) comply(ies) with the provisions of the Subdivision Map Act and any local ordinances applicable at the time of approval of the tentative map(s).

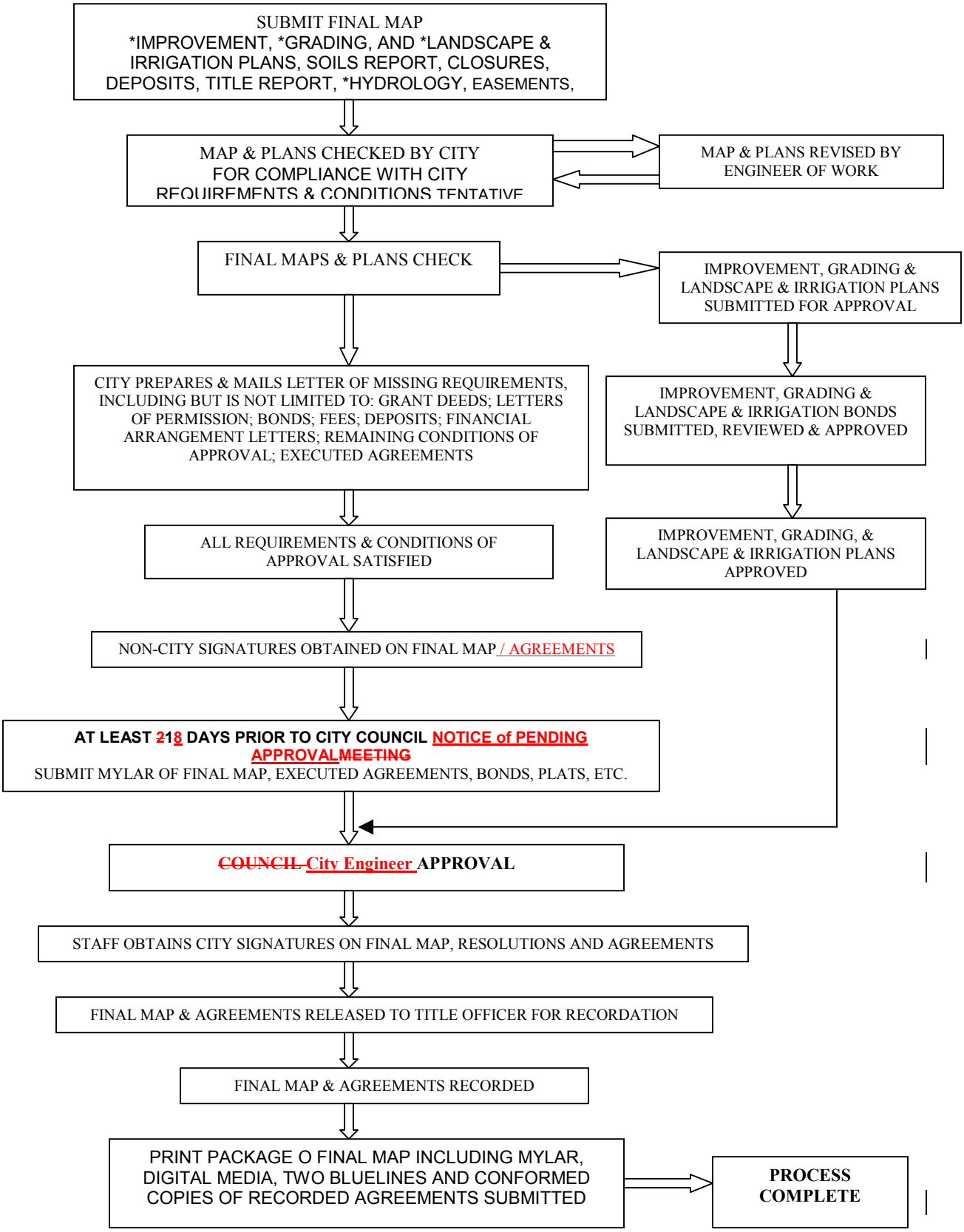
(3) The map is technically correct.

Said map will be finalized and recorded, unless an interested party files a valid appeal of the City Engineer's action to City Council no later than 2:00 p.m., 10 calendar days from the date of this City Council meeting. A valid appeal must identify the improper/incorrect finding and the basis for such conclusion.

If you have questions about the map approval findings or need additional information about the map or your appeal rights, please feel free to contact **[Insert Staff Contact Information].**

(5) **Recordation Procedures** - Signed maps, deeds and agreements will be released only to the title officer of record to be recorded with the County of San Diego 10 days after the City Council has been notified of the pending approval. **Title officer shall provide the City with conformed copies of the deeds and agreements, a full size photo mylar of recorded map (min. 3mils (0.08mm) thick) and the required number of blueline copies (see Section 5-201).**

2-102.4 FINAL SUBDIVISION MAP FLOW CHART



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SAMPLE FINAL MAP

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2-102.6 SUBDIVISION FINAL MAP CHECKLIST CITY OF CHULA VISTA

FOR OFFICES USE ONLY
DE- _____
_____
FILE _____
_____
INITIALS: _____

NAME

CVT NO.

Property Owner(s):

&
Address

Engineer/Surveyor:

Phone:

(References are to City of Chula Vista Subdivision Manual)

ITEM	CHECK	REMARKS
2-102.3(1) FIRST SUBMITTAL REQUIREMENTS		
A. Initial Plan Check Deposit — Amount $ _____		
B. Development Processing Agreement executed		
C. Blueline copies submitted		
D. Proof of ownership grant deeds, and title report		
E. Current grant deeds and/or pre-1972 deeds, deed restrictions and easements		
F. Copies of traverses and closures submitted		
G. Hydraulic Calculations		
H. Soils Report prepared pursuant to the City of San Diego's latest adopted "Guidelines for Geotechnical Reports" (http://www.sandiego.gov/development-		

ITEM	CHECK	REMARKS
services/industry/pdf/geoguidelines.pdf) as determined by the City Engineer		
I. Improvement plans submitted (see Section 4-100)		
J. Grading plans submitted (see Section 4-200)		
K. Landscape & Irrigation plans (see Section 4-300)		
L. Design data and/or calculations for special structures		
M. Other items as required by tentative map approval		
N. Engineer's cost estimates for improvements, grading, landscape & irrigation, and survey monumentation		
2-102.2 FORM & CONTENT - General		
A. Drawn on 18" x 26" (46cm x 66cm) polyester base film with black drawing ink		
B. Lettering – Computer or typed lettering min. 0.10 in. high; Hand lettering min. 1/8 in. high		
C. One-inch (2.5 cm) margin		
D. Subdivision title, unit number, and tract number shown on each sheet		
2-102.2(2) Margin Information		
A. Upper Right		
a) Final Map No. _____(4" (10 cm) line)_____ ___ in upper right hand margin		
b) Sheet _____ of _____ sheet(s)		
B. Lower Right		
a) City of Chula Vista W.O. No.		
b) Tentative Map No.		
c) California Coordinates (LC)		
C. Lower Left – Name, address & phone number of engineer		
2-102.2(3) Title/Cover Sheet		
A. A generalized legal description centered under the subdivision title		

ITEM	CHECK	REMARKS
B. Total number of lots, units, numbered lots, and lettered lots shown under the legal description		
C. Gross area of map in acres (square meters)		
D. Name of the title company and subdivision guarantee order number		
E. Vicinity map with north arrow and scale indicated		
F. Certificates and jurat as required in Section 2-600		
G. Index sheet, if necessary, shall include the following:		
a) Identify sheet numbers		
b) All lots shown and numbered or lettered		
c) All streets shown and identified		
d) Show subdivision, City-County boundaries, etc.		
2-301.3 Procedure of Survey – Form & Content		
A. Basis of Bearing		
a) Basis of Bearing not of record conform to following:		
(1) Established from at least 2 California Coordinate System, Zone 6, NAD 83 points of second order or better.		
(2) Note stating that the basis of bearing is the California Coordinate System, Zone 6, NAD 83 with a list of coordinate station names and coordinates		
(3) Established from a triangulation or trilateration net on the map with ties to existing control points and at least 2 points on subdivision boundary.		
b) Basis of bearing that is a reference line must conform to following:		
(1) Shown on a recorded subdivision map or record of survey		
(2) Bearing of reference line is in terms of the California Coordinate System		
(3) A least two found or established points of record are on reference line		
(4) A basis of bearing statement		

ITEM	CHECK	REMARKS
including a description of the line, the name of the reference map and the reference bearing and indicating that the bearings, distances and coordinate are in terms of the California Coordinate System, Zone 6, NAD 83		
c) Following must be shown for basis of bearing:		
(1) Record bearing shown on line		
(2) Line established by two record monuments		
d) The basis of bearing must NOT:		
(1) Be assumed or calculated		
(2) Line may not be only shown on a City tie point sheet, improvement drawing, State highway map, road survey, or any other map that is not recorded		
B. Legend (see standard symbols CVD SS-01 thru SS-05)		
a) Definition of all abbreviations used		
b) Explanation of any special conditions		
c) Explanation concerning monuments for interior lot corners		
d) Symbol for City/County boundary as needed		
e) Symbol for subdivision boundary		
f) Symbol for lot boundary		
g) Symbol for first and last lot number		
h) Symbol for each type of monument to be set		
i) Symbol for found monuments as needed		
j) Other symbols as needed for relinquishing access rights, easement call, etc.		
C. Title centered at top of sheet including subdivision name and tract or tentative parcel map number and “Procedure of Survey” directly below.		
D. Civil Engineer or Land Surveyor’s certificate with signature and seal if it doesn’t fit on title sheet.		
E. Vicinity map with north arrow and scale indicated		
F. North arrow and Scale: min. 1” = 200’ (1cm = 20m)		

ITEM	CHECK	REMARKS
G. Other notes as needed to clarify survey, monumentation, or easements		
H. Miscellaneous		
a) Gross area: (square feet and acres (square meters))		
b) Table showing area, number of units and proposed use for each lot (condos only)		
c) Other certificates that could not fit on title sheet		
d) All lots shown and numbered		
e) All streets shown and identified		
f) Show record bearings, distances, and references in parenthesis for latest record map in disagreement with survey		
g) Show record bearings, distances and references in parenthesis for any deed data in disagreement with survey		
h) Record maps, sections, ¼ sections identified		
i) Signature omission statement and signature omission letters per Section 66436 of the Subdivision Map Act		
2-102.2(5) Map Sheets		
A. A north arrow and scale in words or figures and graphically (minimum 1” = 100’ (1cm = 10m))		
B. Boundaries:		
a) Exterior boundary is a solid dashed boundary line approximately /16” (1.5mm) wide		
b) Location, dimensions, and bearings of the proposed lots shown		
c) City/Council boundary (if applicable)		
d) Adjacent lot, block, subdivision, or section lines dashed or shadowed		
e) Lines shown that do not constitute a part of the subdivision, and any area enclosed by such lines, labeled “not a part” and dashed		

ITEM	CHECK	REMARKS
C. Existing and proposed street names, widths and sidelines (solid lines)		
D. Lots consecutively numbered or lettered. Open Space Lots lettered		
E. Monuments found, and to be set, using distinct symbols per Section 2- 302		
F. All survey and mathematical information and data necessary to locate all monuments and to locate and retrace all boundaries and lines. Sum of parts of any line or curve must equal total length.		
G. All reference data adjacent shown		
H. Record bearings, distances and references in parenthesis for latest record map in disagreement with survey		
I. No lot is split between two or more sheets where practicable		
2-102.3(6) Dedicated Streets		
A. Right of way lines and widths of each street being dedicated of any existing streets		
B. Widths and locations of adjacent streets and public properties within 50' (15m) of subdivision		
C. Amount of conformity or non-conformity of proposed streets that are a continuation of an existing street		
D. Access rights to be relinquished or previous relinquishments, by short hash marks along the relinquishment section		
E. Private streets shown and clearly identified		
F. Easements		
a) Side easement lines shown as light dash lines		
b) Widths of all easements and sufficient ties to the subdivision must be shown.		
c) Identify as existing or proposed and purpose		
d) Existing Easements to Remain in Effect:		
(1) Existing easements to remain in effect shown or noted as not plottable		

ITEM	CHECK	REMARKS
(2) Distances and bearings on the side lines of lots that are cut by an easement shown		
(3) Sidelines of existing easements not dimensioned		
(4) All existing easements to remain in effect clearly labeled and identified		
e) Dedicated Easements:		
(1) Easements to be granted on the map shall be included in the owners' certificate		
(2) All proposed easements fully dimensioned, including the side lines (street tree easements and 10' (3m) general utility easements in open space lots excepted)		
(3) Street tree easements provided in conformance with City Standards		
G. Public Easements to be Abandoned not plotted and a certificate on the title sheet		
2-102.3(c) Submittal for ~~Council~~City Engineer's Approval		
A. All fees that are due prior to final map approval and all assessments paid;		
B. Inspection and plan check deposits as required by the City Engineer;		
C. Subdivision Improvement Agreement(s)		
D. Supplemental Subdivision Improvement Agreement(s)		
E. Bonds or request for delayed bonding procedure		
F. Easements for off-site improvements		
G. Grant Deeds for dedicated open space lots		
H. Any other required deeds and/or easements		
I. Plats of the subdivision: One 200 scale reproducible plat; One 400 scale reproducible plat; One 8-1/2" x 11" (22cm x 28cm) transparency plat;		
J. Updated title report and subdivision guarantee dated within sixty (60) days of the proposed ~~Council meeting~~recordation date.		

ITEM	CHECK	REMARKS
K. Compliance with all outstanding conditions of approval		
L. Signed mylars of the final map. At least eight (18) days in advance of the date scheduled for ~~Council consideration~~recordation, the title sheet shall be fully executed except for certificates by the City Clerk, City Attorney, Clerk of the Board of Supervisors and County Recorder. A recorded tax certificate shall be submitted.		

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MINOR SUBDIVISONS
SECTION 2-200

2-200 MINOR SUBDIVISIONS - GENERAL

A parcel map procedure is used to create a division or consolidation of land under the provisions of the Subdivision Map Act and the Subdivision Ordinance. This procedure requires filing of a tentative parcel map and final parcel map. The parcel map procedure is administered by the ~~Engineering Division of the Public Work's~~Development Services Department. Tentative and final parcel maps are approved, conditionally approved, or waived by both the City Engineer and the Director of ~~Planning~~Development Services, who have joint responsibility for processing tentative and final parcel maps.

The following general criteria apply to all tentative and final parcel maps filed under this procedure:

- All lots created or divided by parcel maps shall conform to City standards and no existing building or structure shall be made non-conforming with respect to yard or other zoning requirements by the process.

- No existing easement in favor of the public shall be rendered impractical by the creation of a parcel on any parcel map.

- The design and construction of required improvements shall conform to the criteria and standards contained in this manual and dictated by local ordinance.

- A parcel map improvement agreement similar to a subdivision improvement agreement per Section 18.16.210 of the City Code may be required for improvements in conjunction with parcel maps. Said agreements, along with security instruments, shall be fully executed prior to recordation of parcel map.

- All final parcel maps shall be prepared either by a licensed land surveyor or a Registered Civil Engineer authorized to prepare maps in accordance with provisions of the Subdivision Map Act or the Land Surveyors Act.

- Environmental Review Clearance is required by the ~~Department of Building and Planning~~Development Services Department for all Tentative Parcel Maps prior to submittal to the Engineering Division.

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MINOR SUBDIVISIONS
SECTION 2-201
TENTATIVE PARCEL MAPS

2-201 TENTATIVE PARCEL MAPS

2-201.1 PURPOSE

Tentative parcel maps show existing and proposed topography, boundaries and improvements. Tentative parcel maps may be approved, conditionally approved, denied or waived by both the City Engineer and the Director of ~~Planning~~Development Services.

2-201.2 FORM AND CONTENT

(1) General:

a) Tentative parcel maps shall be drawn on mylar (min. 3 mil (.08mm) thick) using black drawing ink only.

b) The size shall be 18" x 26" (46cm X 66 cm) with a 1" (2.5cm) margin.

c) The scale shall be a minimum of 1" = 100' (1cm = 10m).

(2) Margin Information:

a) Title - Tentative Parcel Map.

b) Adequate legal description of the land to define the boundaries of the ownerships involved.

c) Tax Assessor's parcel number(s).

d) Name, address, telephone number, and signature of owner(s).

e) Name, address and telephone number of applicant, i.e., the person seeking approval of the parcel map, if other than the owner(s).

f) Name, address and telephone number of the civil engineer or land surveyor who prepared map, and engineer's registration or license number.

g) Source of domestic potable water supply for each lot.

h) Method of sewage disposal.

i) Existing zoning.

j) Proposed zoning.

k) Proposed land use of each parcel.

l) Gross area (acres and square feet (square meters)).

m) Source of topographic information.

n) Statement relative to quantity of proposed grading;

o) Date of preparation and the numbers and dates of any revisions.

p) Vicinity map with north arrow and scale indicated.

(3) Map Data:

a) North arrow.

b) Scale (minimum: 1" = 100') (1cm = 10m).

c) Approximate curve information for all curves shall be shown (boundaries, streets, easements, etc.).

d) Lines of inundation for the design storm of any streams or watercourses passing through or adjacent to the tentative parcel map boundaries.

(4) Boundary Data:

a) Fully dimension all boundaries (approximate values).

b) Indicate proposed boundaries using solid lines, use dashed lines for existing boundaries.

c) Tie property boundaries to street centerline when adjacent, or in close proximity, to public streets.

d) Clearly identify all City or County boundaries.

(5) **Existing Conditions** - The following information shall be shown within the tentative parcel map boundaries and within a minimum of 100 feet (30m) thereof:

a) Locations, names, grades, existing widths of all highways, streets, and roads, and if private designated as such.

b) Location, widths, and type of any sidewalks, curbs and gutter and driveways.

c) Widths and approximate locations of all existing easements, including rights of way, whether public or private, recorded or unrecorded.

d) Location and identification of any existing utilities and drainage facilities.

e) Identification of all buildings or structures as to land use (single-family dwelling, duplex, commercial building, barn, shed, etc);

f) Location of all existing buildings or structures with respect to proposed lot lines.

g) Approximate location of all trees of trunk diameter 4" (10cm) or greater, and any groves or orchards.

h) Topography and contours (maximum 5' (2m) contour interval) shall be shown, along with the locations, widths and directions of flow of all water courses.

i) Seismic fault lines, 100 year Flood Zone or Local Coastal Zone, if applicable.

(6) **Proposed Development** - All proposed improvements shall be clearly identified by means of notes, symbols, and/or typical sections including:

a) Locations, grades, and widths of any proposed highways, streets, or roads, and if to be private designated as such;

b) Names for all streets or easements within the boundaries of the tentative parcel map which have been approved, or temporary names which shall be alphabetical beginning with Street "A";

c) Proposed street dedications or easements;

d) Proposed sidewalks, pavement, curbs and gutter, street lights, and driveways;

e) All proposed sewers and sewage disposal systems and size and type of sewers and manholes shall be shown;

f) Proposed drainage facilities, direction of surface drainage, and structural best management practices;

g) Any existing structures to be removed or relocated;

h) Proposed buildings;

i) Any proposed grading using symbols and criteria contained in the Grading Ordinance and Standard Drawings of the City of Chula Vista.

j) Any trees to be removed.

(7) **Parcels**

a) The approximate dimensions shall be shown for each proposed parcel.

b) All parcels are to be numbered in consecutive order beginning with parcel one.

c) The net area of each parcel in acres and square feet (m2) shall be shown.

2-201.3 TENTATIVE PARCEL MAP WAIVERS

(1) **General** - Tentative parcel map waivers may be granted in the following general circumstances.

a) Project is located on legally created parcel(s) of land and;

b) A parcel map is not otherwise required by the subdivision ordinance or the Map Act (i.e. boundary adjustments or consolidations) or;

c) The proposed development meets the following criteria:

1) Right-of-way dedication is not required;

2) Re-zoning or change in land use designation is not required;

3) Drainage, street and sewer improvements on-site are to be private facilities;

4) A coastal development permit is not required; and

5) A declaration of negative environmental impact has been issued.

d) Tentative subdivision, tentative parcel, parcel, or final maps were previously submitted for the proposed subdivision and processing stopped or;

e) Project consists of one lot condominiums with fewer than 5 units and complies with the limitations as set forth in (c) above.

(2) **Compliance** with the above circumstances does not guarantee approval of a request for tentative parcel map waiver. The City Engineer and Director of ~~Planning~~Development Services may revise or amend the above listing on a case by case basis.

(3) **Application** - Submit applications for tentative parcel map waiver to the City Engineer. Waiver applications shall include:

a) Completed application form (see Section 2-201.7);

b) Documentation that the existing parcel(s) has been legally created. Said documentation includes pre-1972 grant deeds or record maps;

c) Preliminary Title Report and current grant deeds;

d) Copy of environmental review determination or declaration of negative impact;

e) Evidence that the Design Review process is complete for industrial or commercial projects.

2-201.4 TENTATIVE PARCEL MAP PROCESSING

(1) Submittal requirements - Submit the following items in addition to submittal requirements of Section 2-101.3 for tentative map processing:

a) Copies of current Grant Deeds and deeds recorded prior to March 4, 1972, if not a lot of a subdivision or parcel map.

b) Copy of current title report.

c) Notification package prepared by the developer to include:

1) A list of owners' names and addresses for all properties within a 300-foot (91m) radius measured from the boundary of the subject subdivision. Attach a sketch showing the subject property and the 300-foot limit line.

2) A completed notification letter for all property owners as described above.

3) An 8-1/2" x 11" (22cm X 28cm) exhibit clearly showing the subject property relative to the adjacent streets. An assessor's parcel page is a good example.

4) A stamped envelope addressed to each of the owners within the 300-foot (91m) radius area specified in Item 1) containing the letter and exhibit from Items 2) and 3). Do not seal the envelopes so the City may review the enclosures.

(2) **Approval** - The City Engineer and the Director of ~~Planning~~Development Services shall approve, conditionally approve or deny: A tentative parcel map application within 50 working days of receipt of a complete application; or a tentative parcel map waiver application within 15 working days of receipt of a complete application.

Please Note: The 50 day period noted above shall begin no sooner than after Environmental Review Clearance for the proposed Tentative Parcel Map is received from the ~~Department of Building and Planning~~Development Services Department.

(3) **Appeal** - Tentative parcel map determinations may be appealed pursuant to City ordinance.

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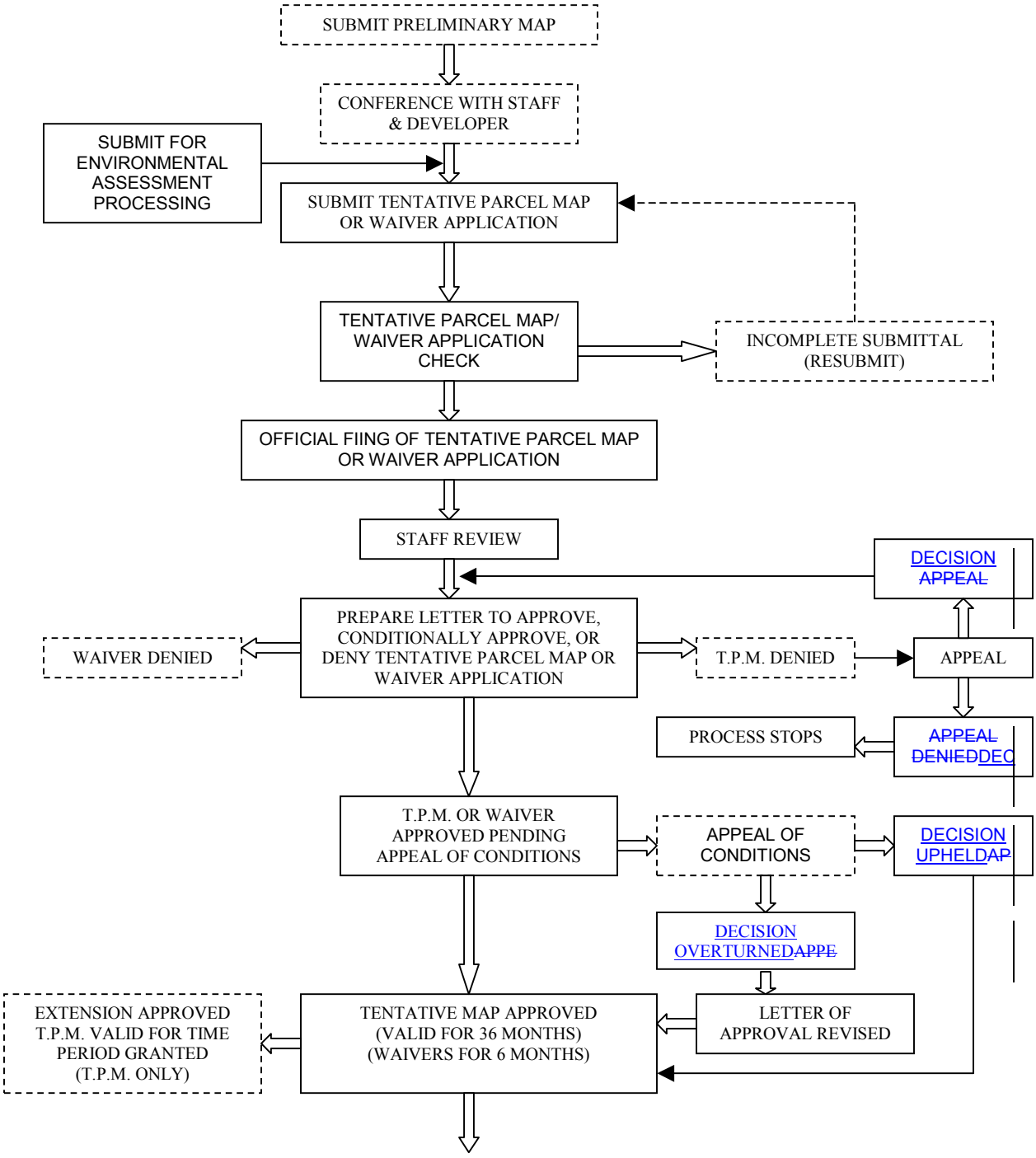
2-201.5 TENTATIVE PARCEL MAP FLOW CHART



SEE FINAL PARCEL MAP PROCESSING

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2-201.6 SAMPLE TENTATIVE PARCEL MAP

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2-201.7 TENTATIVE PARCEL MAP WAIVER APPLICATION

FOR OFFICE USE ONLY
DE - _____
_____
EP - _____
_____
INITIALS: _____
_____
DATE: _____

TENTATIVE PARCEL MAP WAIVER APPLICATION

Tentative Parcel Map No.: _____

Property Owner(s): _____
_____

Address & Phone: _____
_____

Developer(s): _____
_____

Address & Phone: _____
_____

Engineer/Surveyor: _____
_____

Address & Phone: _____
_____

PROJECT INFORMATION:

LOCATION: _____
_____

DESCRIPTION: _____
_____

_____
_____

_____
_____

PROJECT IS (CHECK ONE) ~~☐ One Lot Condominium~~ ☐ Lot Line Adjustment or

~~With <5 units~~

☐ Consolidation Parcel Map

~~☐ Exempt under Section 66426 of the Subdivision Map Act.~~

PROPERTY INFORMATION:

Are lots/parcels created by a recorded map ☐
Yes ☐ No
(or grant deeds recorded prior to March 1972?)

Have any of the following been previously filed with the ☐ Yes
☐ No
City of Chula Vista and has expired or terminated?

Tentative Map
☐ Yes ☐ No
Tentative Parcel Map
☐ Yes ☐ No
Final Map
☐ Yes ☐ No
Final Parcel Map
☐ Yes ☐ No

PLEASE COMPLETE REVERSE SIDE

TENTATIVE PARCEL MAP WAIVER APPLICATION Page 2 of 2

PROPOSED DEVELOPMENT INFORMATION:

Has Design Review been completed? ☐
Yes ☐ No

Is public right of way dedication required? ☐
Yes ☐ No

Are public street improvements required? ☐
Yes ☐ No

Is a change in zoning or land use required? ☐
Yes ☐ No

Is on-site grading, drainage improvements, streets, and/or sewer improvements proposed?
☐ Yes ☐ No

If yes, will these facilities be privately maintained? ☐ Yes
☐ No

Has a Declaration of Negative Environmental Impact been issued? ☐ Yes
☐ No

Is a coastal development permit required? ☐
Yes ☐ No

Attach the following supporting documents as applicable

_____Plan Check Deposit (required)
_____Preliminary Title Report (required)
_____2 Copies of a detailed site plan prepared by a Registered Civil Engineer in the State of California showing proposed lot lines, street right-of-way dimensions and existing/proposed buildings and improvements.
_____Recorded map or grant deeds
_____Copy of Declaration of Negative Environmental Impact
_____Copy of Design Review findings
_____Additional Information as needed

SUBMITTAL OF A COMPLETE APPLICATION DOES NOT GUARANTEE A WAIVER OF THE TENTATIVE PARCEL MAP. A TENTATIVE PARCEL MAP MAY BE REQUIRED AS DETERMINED BY THE CITY ENGINEER AND ~~PLANNING~~THE DIRECTOR OF DEVELOPMENT SERVICES ~~and BUILDING DIRECTOR~~.

2-201.8 TENTATIVE PARCEL MAP CHECKLIST

CITY OF CHULA VI

TENTATIVE PARCEL MAP NO. _____

FOR OFFICE USE ONLY
DE- _____
_____
EP- _____
_____
INITIALS:

Location:

Property Owner(s): _____
_____
&
Address

Engineer/Surveyor: _____
_____

Phone:

(References are to City of Chula Vista Subdivision Manual)

ITEM	CHECK	REMARKS
2-201.4(1) SUBMITTAL REQUIREMENTS		
A. Initial Deposit — **Amount** $ _____		
B. Development Processing Agreement executed		
C. Copies of current Grant Deeds and pre-1972 deeds (if not a lot of subdivision or parcel map)		
D. Reproducible and copies of tentative parcel map submitted		
E. Notification package to all properties within 300 foot (91m) radius including: ~~1.~~List of owners' names & addresses and sketch ~~2.~~Completed notification letter 3. 8-1/2" x 11" (22cm x 28cm) plat 4. Stamped, addressed envelope for each owner containing the letter and plat		
2-201.2(1) FORM AND CONTENT – GENERAL		
A. Drawn on linen, polyester base film, or vellum with black waterproof drawing ink		

ITEM	CHECK	REMARKS
B. 18” x 26” (46cm x 66cm) with 1” (2.5cm) margin		
C. Scale: 1” = 100’ (1cm = 10m) minimum with north arrow		
2-201.2(2) MARGINAL INFORMATION:		
A. Title: Tentative Parcel Map		
B. Legal description: Sufficient to define map boundaries		
C. Tax Assessor’s Parcel Number(s)		
D. Owner’s name, address, telephone number and signature		
E. Applicant’s name, address, telephone number (if other than owner)		
F. Civil engineer’s or land surveyor’s name, address, telephone number and registration or license number		
G. Source of water supply		
H. Method of sewage disposal		
I. Zoning – existing and proposed		
J. Proposed usage of each parcel		
K. Gross area (acres and square feet (square meters))		
L. Reference to topographic source		
M. Grading – statement if no grading proposed		
N. Date of preparation and number and dates of any revision		
O. Vicinity map with north arrow and scale		
2-201.2(3) MAP DATA:		
A. North arrow with scale (min. 1” = 100’ (1cm = 10m))		
B. Boundaries:		
1. Fully dimensioned (approximate)		
2. Proposed as solid lines, existing as dashed lines		
3. City/County boundaries identified		
4. Approximate Curve information – deltas, radii, lengths		

ITEM	CHECK	REMARKS
5. Inundation lines for design flood		
C. Existing – Following shown within the map boundaries and within at least 100 ft. (30m):		
1. Highways, streets, roads – names, grades, widths, if private designated as such		
2. Sidewalks, pavement, curbs and gutters, street lights, driveways		
D. Utilities:		
1. Sewer – location, size, type, depth manholes		
2. Water – location, size, type		
3. Gas – location, size		
4. Electrical, telephone, cable TV lines – location, size, type, poles, overhead or underground		
5. Water courses – widths, directions of flow		
6. Buildings/Structures – location with respect to lot lines		
7. Trees – groves, orchards and trees of trunk diameter 4” (10cm) or more shown		
8. Contours – maximum 5’ (2m) interval		
9. Easements – location, purpose, size, public or private		
E. Proposed:		
1. Highways, streets, roads – names, grades, widths, and if to be private designated as such		
2. Sidewalks, curbs and gutters, driveways		
3. Sewers – location, size, type, manholes		
4. Drainage facilities		
5. Removal or relocation of existing buildings and location of any proposed buildings		
6. Removal of existing trees		
7. Grading – degree of slope, benches, retaining walls, pad elevations		

ITEM	CHECK	REMARKS
8. Easements – location, purpose, size, public or private		
F. Parcels:		
1. Approximate dimensions		
2. Numbered in consecutive order		
3. Net area of each parcel (acres or square feet (m^2))		

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MINOR SUBDIVISIONS
SECTION 2-202
FINAL PARCEL MAPS

2-202 FINAL PARCEL MAPS

2-202.1 PURPOSE

Final parcel maps are the legal means by which parcels of property are subdivided. Final parcel maps show all information relating to title interest in the property including parcel boundaries; easements, reservations, and dedications.

2-202.2 FORM AND CONTENT

(1) General

a) Final parcel maps shall be drawn on 18" x 26" (46cm X 66cm) mylar (min. 3 mils (0.08mm) thick) using black drawing ink only.

b) Hand lettering shall be a minimum of 1/8" (3mm) in height. Type or computer generated lettering shall be a minimum of 0.10" (2.5mm) in height.

c) A 1" (2.5cm) margin separated by medium, heavy marginal line completely around each sheet.

(2) Margin Information - The following information shall be included on each sheet of the final parcel map:

a) Upper right:

1) PARCEL MAP NO. (4" (10CM) LINE)

2) SHEET _____ OF _____

b) Lower right:

1) City of Chula Vista Work Order No.;

2) Tentative Parcel Map No.;

3) California Coordinates (i.e. ~~LC 154-1755~~CCS83 101-6335).

c) Lower left - Name, address and phone number of engineer or firm that prepared the final parcel map.

(3) Title/Cover Sheet Information - The following information shall be included on the final parcel map title or cover sheet:

a) Legal description

b) Total number of lots and units

c) Gross area of map

d) Title Company and parcel map guarantee order number

e) Vicinity map with north arrow and scale indicated

f) Certificates and jurats as shown in Section 2-600 or as required by the Map Act including but not limited to:

1) Owners' Certificate
2) Surveyor's Certificate
3) City Engineer's Certificate
4) Improvement Certificate
5) County Tax Assessor's Certificate
6) Recorder's Certificate

g) Surveyor's Company Information (name, address, and phone number)

(4) Procedure of Survey - Final Parcel Maps shall include a procedure of survey as set forth in Section 2-301 of this manual.

(5) Map Data:

a) North arrow and scale (minimum 1"=100' (1cm=10m)).

b) Boundaries:

1) Indicate the exterior boundary of the land being consolidated or divided by the parcel map using a heavy, solid black line.

2) Clearly indicate the location, dimensions, and bearings of both the original and proposed parcels.

3) Identify City/County boundary as applicable

4) Show adjacent lot or block lines using dashed lines

5) Show existing and proposed street names, widths, and sidelines (solid lined)

6) Show previously vacated streets or easements as light dashed lines and indicate recording information for vacation.

7) Number each proposed parcel. Non-buildable or parcels to be deeded to the City of Chula Vista shall be lettered lots.

8) Indicate monuments found, and to be set, using distinct symbols per Section 2-302.4. Monumentation and basis of bearing shall conform to subdivision requirements as prescribed in this manual under Section 2-301.

9) Reference all recorded surveys or maps and name of adjoiners with document recording number, which include any portion of, or are adjacent to, or in the near vicinity of, the land being divided or consolidated.

c) Easements:

1) Show all existing easements that will remain in effect after approval of the parcel map.

2) All on-site easements to be granted to the City or public and all public street dedications shall be offered and accepted or rejected on the parcel map.

3) Fully dimension sidelines of proposed easements.

4) In the event a private access or utility easement for the use of subsequent owners or purchasers is required within the boundaries of the land to be divided, the easements shall:

   (a) be delineated on the parcel map and shall be conveyed to subsequent purchasers;

   (b) be shown on the parcel map by a dashed line and a note that the area represents a future easement to be conveyed to subsequent owners or purchasers pursuant to the requirements of Section 18.20.~~150~~240 of the City Code of the City of Chula Vista.

2-202.3 SURVEY BONDS - All survey monumentation to be set per final parcel maps shall be set and verified prior to release of the final parcel map for recordation (see Surveyor Certificate Section 2-600). Monumentation may be deferred upon submittal of a cash monumentation bond in an adequate amount, if approved by the City Engineer (to allow grading and/or construction of improvements adjacent to the monument) to secure said monumentation.

2-202.4 PROCESSING

(1) **Submittal requirements** - Submit items set forth in Section 2-102.3 for final subdivision map processing

(2) **Agreements** - Parcel Map agreements may be utilized to satisfy all remaining conditions of tentative parcel map approval that will not or cannot be satisfied prior to recordation of the parcel map (see Section 2-605.3). Said agreement shall be executed in triplicate and approved by the City Engineer concurrently with approval of the final parcel map.

(3) **Approval** - The City Engineer shall act or approve the final parcel map within the time limits contained in the Subdivision Map Act and after submittal of a complete package, including signed mylars of the final parcel map and all applicable agreements, and payment of all associated fees.

(4) **Recordation** - The approved parcel map and parcel map agreement will be released to the applicants' title officer for recordation with the County of San Diego. Upon recordation, the applicant shall furnish the Engineering Division with one photo mylar (minimum 3 mil (0.08mm) thick) and the number of blueline prints of the recorded parcel map as set forth in Section 5-201.

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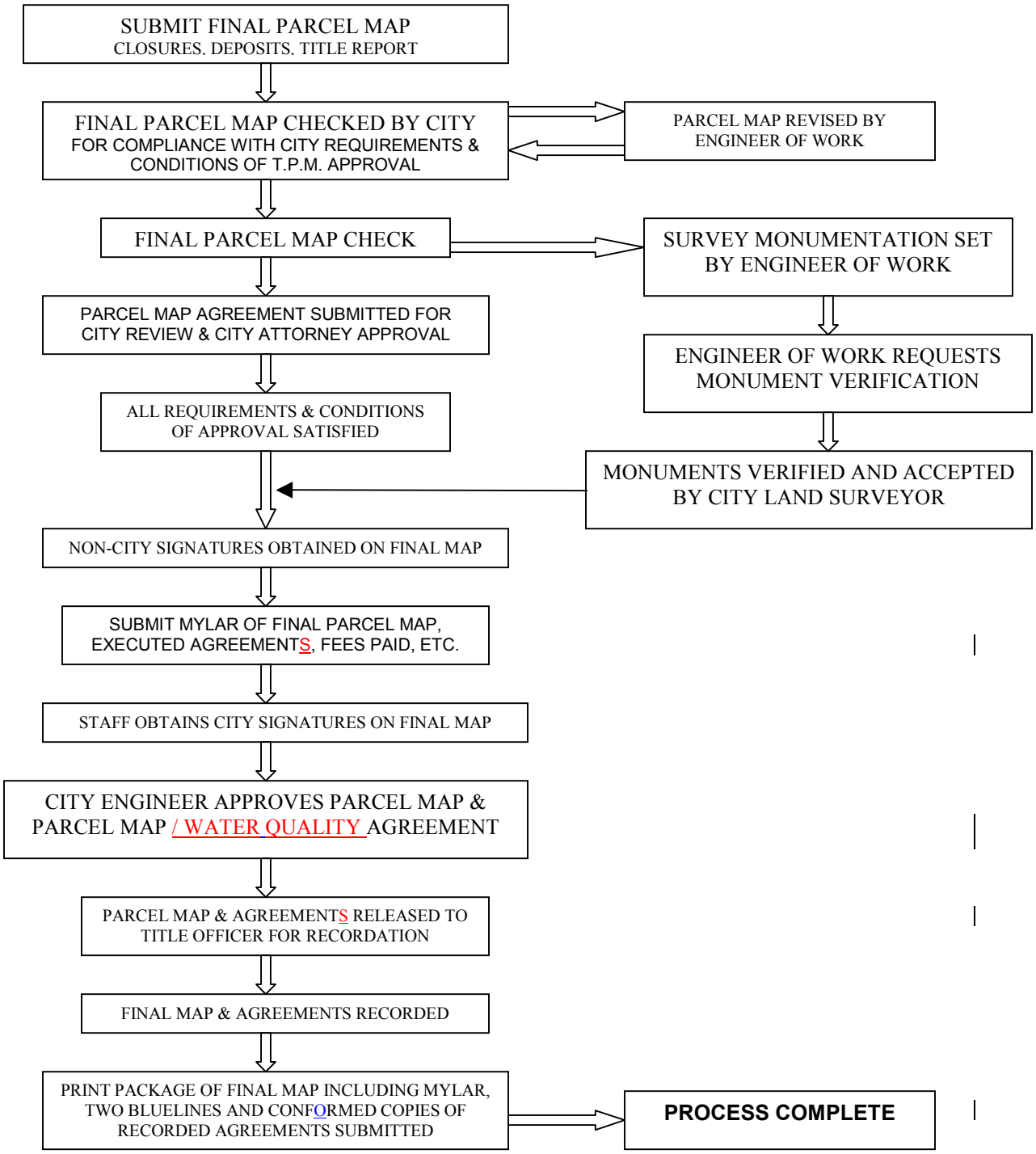
2-202.5 FINAL PARCEL MAP FLOW CHART



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2-202.6 SAMPLE FINAL PARCEL MAP

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2-202.7 FINAL PARCEL MAP CHECKLIST
CITY OF CHULA VISTA

FOR OFFICE USE ONLY
DE- _____
_____
EP- _____
_____
INITIALS:

Tentative Parcel Map No.: _____

Location:

Property Owner(s): _____
_____
&
Address: _____
_____

Engineer/Surveyor: _____
_____

PHONE:

(References are to City of Chula Vista Subdivision Manual)

ITEM	CHECK	REMARKS
1. GENERAL		
1. Plan Check Deposit — Amount $ _____		
2. Development Processing Agreement		
3. Reproducible and copies submitted		
4. Proof of ownership grant deeds, and title report		
a. Current grant deeds and/or pre-1972 deeds (if not filed with TPM)		
b. Title report		
c. Parcel map guarantee		
5. Copies of easements submitted		
6. Copies of traverses and closures submitted		
7. Drawn on polyester base film (min. 3 mil (0.08mm) thick) with black waterproof		

ITEM	CHECK	REMARKS
drawing ink		
8. Lettering – Computer or typed lettering min. 0.10" (2.5mm) high; Hand lettering min. 1/8" (3mm) high		
9. 18" x 26" (46cm x 66cm) with 1" (2.5cm) margin		
2. MATHEMATICAL DATA		
1. Traverses include exterior boundaries, each parcel and streets and easements		
2. Traverses close (1:10,000)		
3. Sum of parts of any line or curve must equal total length		
4. Area calculations furnished where required		
3. MARGINAL INFORMATION: (each sheet)		
1. Parcel Map No. _____ (4" (10cm) line) _____ in upper right hand margin		
2. Sheet _____ of _____ sheet(s)		
4. TITLE OR COVER SHEET INFORMATION		
1. Legal description – Sufficient to define boundaries – division or consolidation of property		
2. Number of lots, number of units, and gross area (acres and square feet (square meters))		
3. Vicinity map with north arrow and scale indicated		
4. Owners' certificate and signature(s) (Section 2-600)		
5. City Engineer's and City Clerk's certificates (Section 2- 600); ~~Planning~~Development Services Director's Certificate (Section 2-600)		
6. Improvement Certificate (Section 2-600)		
7. County Recorder's, Tax Collector's, Clerk of the Board's certificates (Section 2-600)		

ITEM	CHECK	REMARKS
8. Surveyor's certificate with signature, number and seal (Section 2-600)		
9. Signature Omission Statement(s) (Section 2-600)		
2-301.3 Procedure of Survey – Form & Content		
1) Basis of Bearing		
~~A.~~ Tied to two points on the Subdivision Boundary Listing of Coordinates s for these two points Basis of Bearing not of record conform to following: ~~Basis of Bearing not of record conform to following:~~		
2) **Legend** (see Standard Symbols CVD SS-01 thru SS-05)		
A. Definition of all abbreviations used		
B. Explanation of any special conditions		
C. Explanation concerning monuments for interior lot corners		
D. Symbol for City/County boundary as needed		
E. Symbol for subdivision boundary		
F. Symbol for lot boundary		
G. Symbol for first and last lot number		
H. Symbol for found monuments as needed		
I. Other symbols, as needed, for relinquishing access rights, easement call, etc.		
3) Title centered at top of sheet including subdivision name and tract or tentative parcel map number and "Procedure of Survey" directly below		
4) Civil engineer or land surveyor's certificate with signature and seal if it doesn't fit on title sheet		
5) Vicinity map with north arrow and scale indicated		
6) North arrow and Scale: min. 1" = 200' (1cm = 20m) & Convergence Angle of Point of Beginning.		
7) Other notes as needed to clarify survey, monumentation, or easements		
8) Miscellaneous		

ITEM	CHECK	REMARKS
A. Gross area: (square feet and acres (m^2))		
B. Table showing area, number of units and proposed use for each lot (condos only)		
C. Other certificates that could not fit on title sheet		
D. All lots shown and numbered		
E. All streets shown and identified		
F. Show record bearing, distances, references in parenthesis for all record maps in disagreement with survey		
G. Show record bearing, distances and references in parenthesis for any deed data in disagreement with survey		
H. Record maps, sections, ¼ sections identified		
2-202.2(5) MAP DATA:		
A. North arrow and scale (min.: 1” = 100’ (1cm = 10m)		
B. Boundaries		
1. All are fully dimensioned		
2. Parcel boundaries are heavy solid black lines		
3. City/Council boundaries identified		
4. Adjacent lot or block lines shown in dashed lines		
C. All bearings, distances, radii and deltas of traverses shown on map		
D. Record bearings, distances and reference in parenthesis for:		
1. All record maps in disagreement with survey		
2. Any deed data in disagreement with survey		
E. Lines intersecting curves identified by bearing and whether (radial) or (non-radial)		
F. Existing street – names, widths, and side		

ITEM	CHECK	REMARKS
lines shown as solid lines		
G. Previously vacated streets or easements shown as light dash lines with recorded vacation data		
H. Easements		
1. Identify as existing or proposed, width, and purpose		
2. Side lines shown as light dash lines		
3. Recorded easements identified by document number and date of recordation and sufficiently tied		
4. New easements fully dimensioned to include sufficient ties		
I. Additional notes on map as needed to clarify survey, explain discrepancies or reference non-recorded information such as City ties, road survey, State Highway maps, etc.		
5. Monumentation (per Section 2-302)		
1. Monuments per legend or fully described as to type, size, disc and engineer's or surveyor's number		
2. Labeled as "No Record" or referenced to record map		
3. If controlling location not of record: "No Record – Accepted Hereon As (describe location)"		
4. Monuments tied into survey by bearing and distance, or "Used for Line Only"; No floating monuments		
6. Parcel Map Compliance		
1. Complies with General Plan		
2. Zoning requirements		
3. Tentative Parcel Map		
4. All conditions imposed for parcel map approval		

ITEM	CHECK	REMARKS
7. Separate Deeds and Easements		
1. Prepared, signed and submitted or dedicated on parcel map		
2. Accepted by City Clerk		
3. Recorded with County Recorder and conformed copy returned (only if by separate document)		

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SURVEY REQUIREMENTS
SECTION 2-300

2-300 Survey Requirements

This section covers the City of Chula Vista's requirements related to surveys and monumentation and is applicable to both major and minor subdivisions. This section includes: guidelines for preparing a procedure of survey; standard requirements for monument types, sizes, and locations and standard symbols. This section also includes a standard procedure for survey monument inspection by the City.

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SURVEY REQUIREMENTS
SECTION 2-301
PROCEDURE OF SURVEY

2-301 Procedure of Survey

2-301.1 General

The procedure of survey shall show the general plan of the subdivision and its location relative to the following:

(1) surrounding subdivisions
(2) record of survey maps
(3) city and county boundaries
(4) street, highway and freeway centerlines and right-of-way lines
(5) major easements
(6) rancho lines
(7) section lines
(8) 1/4 section lines (within Rancho de la Nacion).
(9) City of Chula Vista control monuments (ROS 14841) (This map is the basis of entire City control network; monuments shall be shown and perpetuated.)

2-301.2 Purpose

The procedure of survey must clearly show how the subdivision boundary has been established and its relationship with the surrounding subdivisions, record of surveys and deeded property. Record information and data (calls) from these documents must be reflected on the procedure of survey and subdivision map as necessary to clearly demonstrate the method used to resolve the boundary.

2-301.3 Form and Content

Procedures of Survey must contain the following:

(1) **Record Monuments** - All record monuments found and used to establish the subdivision boundary shall be shown on the procedure of survey. Bearings and distance ties between these monuments and the subdivision boundary shall be annotated in all cases. The initial submittal of the Procedure of Survey shall include a copy of the Surveyor's Work Sheet indicating which maps were used, and why others in the vicinity (if any) were not. Indicate which monuments were searched for but not found.

(2) **Basis of Bearing** -The basis of bearing shall be in terms of the California State Coordinate System, CCS 83, Zone 6, epoch 1991.35. The bearing may be obtained from a previously recorded survey (or from a new survey) meeting the following requirements.

a) If the basis of bearing is not of record:

1) It shall be established from at least two monuments having recorded coordinates in the California Coordinate System, CCS 83, Zone 6, epoch 1991.35 and said monuments must conform to the requirements of Public Resources Code 8813.2; or

2) It shall be established from at least two monuments shown on a Recorded Map meeting the above requirements; and

3) A triangulation or trilateration net on the map and the bearing and distance ties from the existing control points to at least two points on the subdivision boundary shall be shown;

4) A note shall be place on the map indicating that the basis of bearing is the California Coordinate System, CCS83, Zone 6, epoch 1991.35 and listing the CCS 83 station names, grid coordinates and bearing between stations. The note shall also state that all bearings and distances are in terms of ground measurements unless labeled "grid (CCS 83); and

5) A note shall be placed on the map indicating the combined correction factor and the convergence angle for the nearest control points used for conversion on the map.

6) If coordinate values from other maps are given in an epoch other than 1991.35, those values may be translated to epoch 1991.35 using method and values of both HTDP v2.4 or later. (That software can be downloaded from www.NGS.NOAA.GOV/Tools/HTDP/HTDP.HTML)

b) If the basis of bearing is a reference line, it must meet the following criteria:

1) Shown on a recorded subdivision map, parcel map, or record of survey; and

2) Bearing of the line is in terms of the California Coordinate System, CCS 83, Zone 6, epoch 1991.35; and

3) At least two found monuments of record are on that line.

4) A basis of bearing statement must be added to the map including a description of the line, the name of the reference map and the reference bearing. The statement must also indicate that the bearings, distances, and coordinates are in terms of the CCS 83, Zone 6, epoch 1991.35 and indicate the name and order of the local stations used as the basis of bearing.

5) If coordinate values from other maps are given in an epoch other than 1991.35, those values may be translated to epoch 1991.35 using method and values of both HTDP v2.4 or later. (That software can be downloaded from www.NGS.NOAA.GOV/Tools/HTDP/HTDP.HTML)

c) The following information related to the Basis of Bearing shall be shown on the Procedure of Survey:

1) Record bearing shown on the line;

2) Line established by two record monuments;

3) Found monuments on the line are of record;

NOTE:

Bearing of line cannot be assumed: line shall not be accepted if only shown on a City tie sheet, improvement drawing, State highway map, road survey, or any other map that is not recorded.

(3) **Legend** - The legend defines the symbols and abbreviations used on the map and should eliminate or reduce the need for repetitious explanatory notes relating to found or set monuments and other mapping elements. Symbols used in the legend shall conform to the table shown in Section 2-302.4. The legend shall contain:

a) Definition of all abbreviations used;

b) Explanation concerning monuments for interior lot corners in lieu of symbols;

c) Symbol for City/County boundaries;

d) Symbol for subdivision boundary;

e) Symbol for lot boundary;

f) Symbol for first and last lot number;

g) Symbol for each type of monument to be set with map;

h) Symbol for found monuments as necessary;

i) Other symbols as required for relinquishing access rights, easement calls, etc.

(4) **Title** - Title shall be centered at the top of the sheet and shall include the name of the subdivision with the tract number with "Procedure of Survey" directly below

(5) **Land Surveyors' ~~or~~ and Civil Engineers' Certificate** - A Land Surveyors' ~~or~~ and Civil Engineers' certificate ~~(see Section 2-600) is required for all subdivision maps. Said certificate shall be completed, signed and stamped by a Land Surveyor licensed in the State of California or a Civil Engineer licensed to practice land surveying in the State of California. If this certificate does not fit on the cover sheet, it may be placed on the procedure of survey~~is required pursuant to the Subdivision Map Act and the Business and Professions Code.

(6) **Vicinity Map** - A vicinity map is required for all subdivision maps and may be placed on the procedure of survey if it does not fit on the title sheet

(7) **North arrow and Scale** - Each procedure of survey sheet shall include a north arrow and a scale depicted graphically (bar scale) and in words. The minimum scale for a procedure of survey is 1"=200' (1cm=20m).

(8) **Notes** - Any notes needed to clarify the monumentation, easements or special conditions shall be placed on the procedure of survey.

(9) **Surveyor's Notes** - Any notes needed to clarify special conditions affecting the procedure of survey may be placed on the Procedure of Survey sheet.

(10) **Multiple Unit Maps**

The Procedure of Survey need be filed only with the first unit of a multiple unit map, provided the following conditions are met:

a) The Procedure of Survey shows the complete exterior boundary of the entire property being subdivided.

b) Each unit map, together with the Procedure of Survey Sheet from the first unit is complete without other reference.

c) Ties from two points on the unit boundary to two points on the subdivision boundary must be shown.

d) The Procedure of Survey is referenced by page number, subdivision tract and final map number on each subsequent unit map.

e) When using the Procedure of Survey by referenced method, a separate index map is required for maps with more than two map sheets (excluding title & procedure of survey sheets).

f) If approved, the following note must be added to subsequent maps using the same procedure of survey:

FOR PROCEDURE OF SURVEY, SEE SHEET _____ OF (NAME OF SUBDIVISION) , CITY OF CHULA VISTA TRACT NO. _____, MAP NO. _____

(SIGNATURE) ,
(DATE)
(RCE/LS NUMBER & EXPIRATION)

2-301 Sample Procedure of Survey Final Map

2-301 Sample Procedure of Survey Parcel Map

PROCEDURE OF SURVEY CHECKLIST
CITY OF CHULA VISTA

FOR OFFICE USE ONLY
FILE NO.: _____
_____
DE NO.: _____

SUBDIVISION _____

_____

_____

TRACT NO. _____

Property Owner(s): _____

_____

&
Address

Engineer/Surveyor: _____

_____

PHONE:

(References are to City of Chula Vista Subdivision Manual)

ITEM	CHECK	REMARKS
2-301.3 FORM & CONTENT		
1. Complies with general format for subdivision maps		
2. Basis of Bearing		
A. Basis of Bearing not of record, conform to following:		
1) Established from at least two CCS 83, Zone 6, epoch 1991.35 points		
2) Established from a triangulation or trilateration net on the map with ties to existing control points and at least 2 points on subdivision boundary		
3) Note stating that the basis of bearing is the CCS, Zone 6, epoch 1991.35 with a list of coordinate station names and coordinates		
4) Convergence angle and correction		

ITEM	CHECK	REMARKS
factor		
B. Basis of bearing that is a reference line must conform to following:		
1) Shown on a recorded subdivision map or record of survey		
2) Bearing of reference line is in terms of the California Coordinate System		

3) At least two found monuments of record are on reference line		
4) A basis of bearing statement including a description of the line, the name of the reference map and the reference bearing and indicating that the bearings, distances and coordinate are in terms of the CCS83, Zone 6, epoch 1991.35.		
C. Following must be shown for basis of bearing:		
1) Record bearing shown on line		
2) Line established by two record monuments		
3) Line is not accepted if shown only on a City tie point sheet, improvement drawing, State Highway map, road survey, or any other map that is not recorded.		
3. **Legend** (see standard symbols CVD-SS01 – SS05)		
A. Definition of all abbreviations used		
B. Explanation of any special conditions		
C. Explanation concerning monuments for interior lot corners		
D. Symbol for City/County boundary as needed		
E. Symbol for subdivision boundary		
F. Symbol for lot boundary		
G. Symbol for first and last lot number		
H. Symbol for each type of monument to be set		
I. Symbol for found monuments as needed		
J. Other symbols as needed for relinquishing access rights, easement call, etc.		
4. Title centered at top of sheet including subdivision name and tract or tentative parcel map number and "Procedure of Survey" directly below		
5. Civil Engineer or Land Surveyor's certificate with signature and seal if it doesn't fit on title sheet		
6. Vicinity map with north arrow and scale indicated		
7. North arrow and Scale: min. 1" = 200' (1cm = 20m)		

8. Other notes as needed to clarify survey, monumentation, or easements		
9. Miscellaneous		
A. Gross subdivision area: (square feet and acres (m^2))		
B. Table showing area, number of units and proposed use for each lot (condos only)		
~~C. Other certificates that could not fit on title sheet~~		
D. All lots shown and numbered		
E. All streets shown and identified		
F. Show record bearings, distances and references in parenthesis for record map or record of survey		
G. Show record bearings, distances and references in parenthesis for any deed data in disagreement with survey		
H. Record maps, sections, ¼ sections identified		
I. City of Chula Vista control monuments shown		

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SURVEY REQUIREMENTS
SECTION 2-302
MONUMENTATION REQUIREMENTS

2-302 MONUMENTATION REQUIREMENTS

2-302.1 General.

(1) Monuments are set or placed at a particular location to mark a point of a boundary or survey. They shall be sufficient in number and located so as to not be readily disturbed and to assure the perpetuation or reestablishment of any point or line of the survey. Monuments shall be a permanent type of monument such as a pipe, concrete cylinder, or steel rod with a brass disc or metal cap showing RCE or L.S. number. Plastic caps or plugs are not accepted.

(2) Found Monuments:

a) All "found" monuments shall be fully identified by type, condition (rusted, bent, etc.) lot and block number, tract name and number, place of record, section, township and range, or other proper identification; and if they appear on a previously recorded map, record of survey, County Road Survey, City Tie Sheet, State Highway or other public record, the reference number of the record shall be shown.

b) Monuments on major subdivision maps shall be flagged in the field. Inspected, and approved by the City prior acceptance of public improvements.

c) All boundary monuments shown on final parcel maps shall be flagged in the field, inspected and approved by the City prior to recordation of final parcel maps.

d) All found monuments, to be restored, shall be shown on any and all grading plans for the site and labeled "Preserve Monument until it has been tied for restoration."

e) Any City Horizontal Control Network System monuments that are obliterated or disturbed by construction activities shall be replaced following the requirements of Section 2-302.1(8) of this manual.

(3) Monuments to be Set:

a) All monuments to be set by a major subdivision final map shall be set within and flagged in the field within thirty (30) days after completion of public improvement for inspection and acceptance by the City Land Surveyor prior to acceptance of public improvements by the City.

b) All monuments to be set by a minor subdivision final parcel map shall be set and flagged in the field for inspection by the City prior to recordation of the final parcel map unless delayed monumentation has been approved and a cash bond to guarantee monumentation has been submitted and approved. If monumentation is delayed, all monuments shall be set and flagged in the field within thirty (30) days after completion of public improvements for City inspection and acceptance prior to acceptance of public improvements.

(4) All monuments found or set shall be tied into the subdivision by bearing and distance. In case there is a variance between the "record" tie and the "measured" tie to a found monument, the record bearing and distance, and related map references shall be shown in parenthesis; for example (S89ø51'20"E, 139.75', R. of S. 8006).

(5) Proper notation shall be made concerning any points reset by ties.

(6) The subdivider shall be responsible for retaining the services of a registered civil engineer or licensed land surveyor authorized to practice land surveying in California. and shall:

a) Replace any monuments or bench marks, as required by this manual or located in making a survey, that is disturbed or destroyed prior to City acceptance of all improvements.

b) Reestablish before acceptance of improvements at or near the surface any monument which will be buried during the process of subdivision development.

(7) The map shall show monuments set at the true corners, angle points and points of curvature around the boundary of the parcel or parcels being surveyed, except where conditions make it physically impossible to monument the true corner; the monuments may be shown as having been set at an offset, in which case the bearing and distance shall be shown between the corner and the monument.

(8) The City Horizontal Control Network System was established by Record of Survey 14841 and consists of monuments compliant with the requirements of California Public Resources Code 8813. Those monuments are established at ½ mile density in most areas. In some areas the existing density is as much as 1 mile. In areas where the ½ mile density has not yet been achieved, the Engineer of Work shall establish additional Horizontal Control Monuments to the satisfaction of the City Engineer.

a) City Horizontal Control Monuments are to be installed after improvements are complete and shall be placed in publicly accessible locations suitable for GPS observation.

b) Accuracy shall be compliant with the requirements of California Public Resources Code 8813 and shall be referenced to California Coordinate System of 1983, Zone 6, Epoch 1991.35.

c) Monuments shall be, at a minimum, 1” brass disc set in a permanent major drainage structure (catch basin, curb inlet, etc.).

d) The location of existing City Horizontal Control Monuments shall be shown on all Parcel Maps and Final Maps.

e) The location of existing City Horizontal Control Monuments shall be shown graphically on all public improvement plan sheets.

(9) New Horizontal Control Monuments shall be approved by the City Engineer per the following procedure:

a) Engineer of Work shall submit a diagram of the existing and proposed monuments for review.

b) The City Survey Section will review the proposed locations and either approve or suggest alternate locations.

c) Upon approval of locations of the new Horizontal Control Monuments, the new monuments will be constructed, field observations made, and the results shall be shown on a Record of Survey.

2-302.2 Type, Size and Location

(1) **Section Corners** - Monuments to be set for standard or closing section. Section corners shall be 2" diameter X 30" long iron pipe with brass disc showing RCE or L.S. number.

(2) **1/4 and 1/16 Section Corners** - Monuments to be set for quarter and sixteenth section corners shall be 1" diameter x 30" long iron pipe with brass disc showing RCE or L.S. number.

(3) **Township Corners** - Monuments to be set for township corners shall be 3" diameter x 30" long iron pipe with brass disc showing RCE or L.S. number.

(4) **Subdivision Boundary** - All angle points, beginning and ending of curves and lines of subdivision boundary shall be monumented with a 2" diameter X 24" long iron pipe with brass disc showing RCE or L.S. number. Intermediate monuments shall be set along the boundary, not more than 1,000 feet apart at a point of intervisibility.

(5) **Lot Corners** - a) All lot corners that are not on street right-of-way lines shall be monumented with 3/4" diameter X 18" long iron pipe with brass disc or ½" x 18" rebar with metal cap showing RCE or L.S. numbers. b) Lot corners along street right-of-way at the projection of the sidelines of individual lots shall be monumented with lead plug and brass disc offset along an extension of the side lot line in the top of curb. The lead must be set in a hole a minimum of 3/4" deep and the disc must be recessed below the surface of the top of curb. c) Points of curvature and angle points along street right-of-way are ~~not~~ required to be monumented. If said points are monumented, they shall be monumented with lead plug and brass disc offset in the top of curb. The lead must be set in a hole a minimum of 3/4" deep and the disc must be recessed below the surface of the curb. Monuments on a curve shall be placed on a radial line; at an angle point, the monument shall be placed at the bisector of the angle.

(6) **Street Centerline** - All angle points, beginning and ending of curves, street intersections and street/subdivision boundary intersections shall be monumented with a tagged 2" iron pipe in a well as shown on Chula Vista Standard Drawing CVCS15. Monuments for street intersections at a sewer

manhole shall be set on a 5.0' offset along the extension of the minor street centerline per CVCS 15.

(7) In locations where the required monument cannot be set or is impractical to be set, the proposed type size and location of the substitute or reference monument shall be approved in writing by the City Engineer or designated staff member Land Surveyor.

(8) The setting of monuments at the PI (Point of Intersection) instead of at the beginning and ending of curves will be permitted only when the resulting External Secant does not exceed 2.00 feet and the Length of Curve does not exceed 75.00 feet.

2-302.3 Bench Marks

All bench marks and improvement plans shall be referenced to NAVD88 datum.

(1) All vertical control for subdivisions shall be referenced to the established City Bench Mark System.

The City Bench Mark System consists of durable monuments established at 1/4 mile density in most areas. In some undeveloped areas the existing density is as much as 1 mile. In areas where the 1/4 mile density has not yet been achieved, the Engineer of Work shall establish additional benchmarks as follows:

a) New bench marks will be located at street intersections as necessary to achieve the ¼ mile density. (i.e. if a existing benchmark is more than a quarter mile away, the developer shall be required to install benchmarks to meet the ¼ mile density, to the satisfaction of the City Engineer.)

b) During construction the Engineer of Work shall establish and maintain a temporary bench mark network for construction staking and inspection needs.

c) Permanent bench marks are to be installed after improvements are complete.

d) Accuracy shall be Third Order or better (12mm//k where k=the distance in Kilometers)

e) Monuments shall be 1" brass disc set in a permanent major drainage structure (catch basin, curb inlet, etc.). Discs will be furnished by City Survey Group upon request.

The location of permanent bench marks to be installed shall be shown graphically on all public improvement plan sheets**.**

(2) New reference bench marks shall be approved by the City Engineer per the following procedure:

a) Engineer of Work submits a copy of the field survey level notes showing levels taken from established City bench marks to any new reference bench marks.

b) The City Survey Group will field check the monuments and review the field notes and calculations of new bench marks.

c) Upon approval of the new bench mark, it will be entered in the registry of City Bench Mark System.

(3) Existing and proposed reference bench marks shall be shown on all public improvement plan sheets.

2-302.4 Standard symbols for monuments as shown on the table below shall be used in the legend for all subdivision maps unless otherwise approved by the City Engineer. The length of pipes to be set shall be noted. The labeling on the brass disk shall be noted on the map.

MONUMENT TYPE	SYMBOL	
	FOUND	SET
3” DIAMETER IRON PIPE x 30” LONG	⦿	⓪
2” DIAMETER IRON PIPE x 24” LONG	⦿	⓪
¾” DIAMETER IRON PIPE x 18” LONG	●	❍
2” DIAMETER IRON PIPE WITH DISC SET IN CONCRETE IN MONUMENT WELL, PER CVCS 15	▲	△
LEAD PLUG & BRASS DISC	■	□
BENCH MARK	(ELEV. _____) ○ (BM# _____)	

SURVEY REQUIREMENTS
SECTION 2-303
MONUMENT VERIFICATION

2-303 Monument Verification

2-303.1 **Inspection**

(1) All monuments found or set shall be flagged in the field for inspection and shall be verified by the City prior to acceptance of public improvements or recordation of a final parcel map. Monumentation for phased development shall be verified prior to City acceptance of the improvements. ~~and/or issuance of a Final Certificate of Occupancy.~~

(2) The Land Surveyor or Civil Engineer signing the map shall notify the City's Land Surveyor or project inspector in writing immediately after new monuments have been set and all monuments have been flagged. ~~Partial inspection requests are encouraged~~.

(3) The City's Land Surveyor or a Land Surveyor hired by the City or developer and working under the direct supervision of the City Land Surveyor, shall field check the monumentation and issue a report of findings. The report shall note discrepancies found or corrections needed and indicate whether a certificate of correction or map amendment will be required.

(4) The Land Surveyor or Civil Engineer signing the map shall replace or repair any monuments as deemed necessary by the City's Land Surveyor and shall prepare a certificate of correction or map amendment as deemed necessary by the City's Land Surveyor.

(5) All repairs, replacements, map amendments or certificates of correction must be completed prior to acceptance of public improvements (major subdivisions) or recordation of final parcel maps or Certificate of Occupancy.

(6) In the event of the death, disability, retirement or refusal of the engineer or land surveyor responsible for monument, a substitute engineer or land surveyor shall file an amended map in accordance with the provisions of Sections 66469 to 66472 inclusive of the State Subdivision Map Act and this subdivision manual. Monuments will then be set by the substitute engineer or land surveyor. Monuments may also be set by a substitute surveyor if a certificate of correction is approved by the City Land Surveyor and properly recorded.

(7) The monumentation bond will be released after acceptance of public improvements (or recordation of a final parcel map) upon written request of the developer or registered civil engineer/land surveyor who set the monuments has requested release and given written notice that payment has been made for those services.

2-303.2 **Certificate of Correction**

(1) Purpose

Certificates of correction are used to amend a recorded subdivision map, recorded parcel map, or record of survey map to correct an error in any course or distance shown therefrom, to correct an error in the description of land which the map

comprised, or to correct the character and location of survey monuments set per the subject map after said map has recorded. Certificates of correction may also be required by the City's Land Surveyor as part of the monument inspection process. All certificates of correction must be reviewed and approved by the City Engineer prior to recordation.

(2) Form and Content - All certificates of correction shall contain the following information~~ as required by Section 6646709 of the Subdivision Map Act~~.

a) Subdivision Maps - Name and tract number of subdivision and recording information and map number.

b) A list and description of all changes or corrections to be accomplished by the certificate.

c) A statement that the names of all the present fee owners of real property affected by such corrections are as shown on the certificate of correction

d) A list of all fee property owners including names, addresses and parcel numbers.

e) Certificate signed by the engineer or surveyor stating that the certificate of correction was prepared by or under the direction and control of the engineer or surveyor.

f) Certificate signed by the City Engineer stating that the certificate of correction has been examined and that the only changes shown on the certificate of correction are provided for by Section 66469 of the Subdivision Map Act, or Section 8770.5 of the Land Surveyor's Act or any amendments thereto.

g) Certificates of correction and all accompanying exhibits shall be submitted on 8-1/2" X 11" (22cm X 28cm) standard bond paper.

h) Certificates of correction may be accompanied by a sketch for purposes of clarity.

2-303.3 Processing

(1) Requests for monument inspection and certificates of correction shall be submitted to the City's Land Surveyor for review and approval.

(2) After approval, certificates of correction will be released to the Civil Engineer or Land Surveyor of work for recordation. The Civil Engineer or land surveyor shall return two conformed copies of the recorded certificate to the City Engineer. One copy shall be maintained by the Subdivision Section and one by the City's Land Surveyor.

(3) The City's Land Surveyor will note on the map that a certificate of correction has been recorded. The City's Land Surveyor will notify the project inspector that the monumentation is complete. Bonds may be released after the City accepts the improvements.

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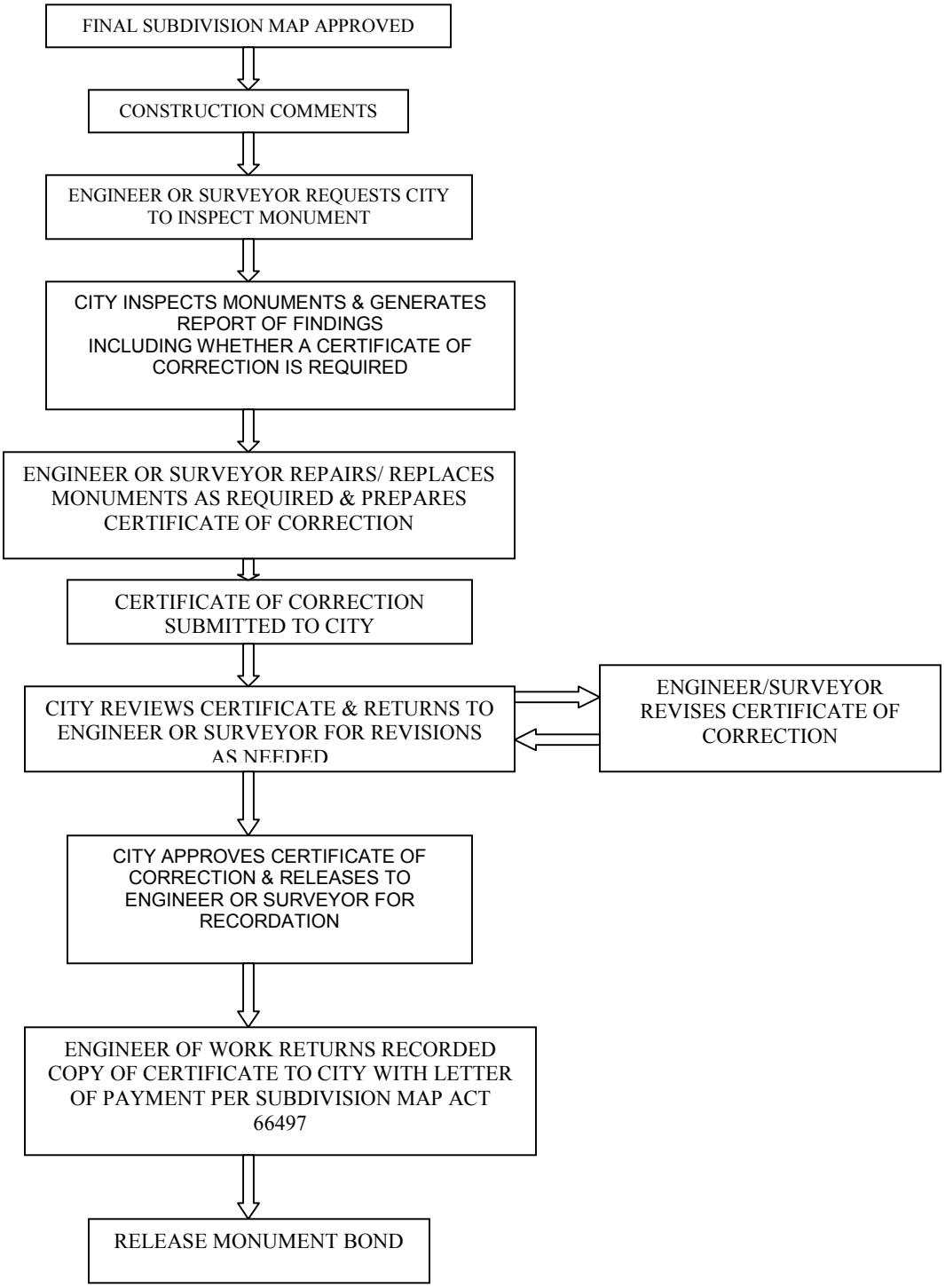
2-303.4 MONUMENT INSPECTION FLOW CHART



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2-303.5 Sample Certificate of Correction

RECORDING REQUESTED BY:

WHEN RECORDED MAIL TO:

(SPACE ABOVE THIS LINE FOR RECORDER'S USE)

CERTIFICATE OF CORRECTION

(Pursuant to Chapter 3, Article 7, of the Subdivision Map Act or Section 8770.5 of the Land Surveyor's Act as they may be amended)

NOTICE IS GIVEN that I hereby certify that (Map or Parcel Map) No. _____, in the City of Chula Vista, County of San Diego, State of California, filed in the office of the County Recorder of said County on _____, is in error in that the character and/or location of the following survey monuments are in error and are corrected as follows in accordance with Section 8770.5 of the Land Surveyor's Act or Section 66469 of the Subdivision Map Act as follows:

LIST OF CORRECTIONS

(LIST ALL CORRECTIONS NECESSARY)

I certify that the following are the names of all of the present fee owners of real property affected by such corrections:

(LIST ALL FEE PROPERTY OWNERS)

CERTIFICATE OF ENGINEER OR SURVEYOR

I further certify that the above Certificate of Correction was prepared by or under the direction and control of the undersigned registered civil engineer, or licensed land surveyor.

(LEAVE ROOM FOR ENGINEER
OR LAND SURVEYOR'S STAMP)

_____
(NAME & LICENSE NUMBER)

I, Land Surveyor for the City of Chula Vista, State of California, certify that I have examined the foregoing Certificate of correction and find that the only changes shown hereon are changes provided for by Section 66469 of the Subdivision Map Act, or Section 8770.5 of the Land Surveyor's Act or any amendments thereto.

(NAME) {See Section 5-300)
(LEAVE ROOM FOR CITY ENGINEER
LAND SURVEYOR
OR LAND SURVEYOR'S STAMP)

CITY OF CHULA VISTA

DATE: _____

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2-303.6 MONUMENT INSPECTION CHECKLIST
CITY OF CHULA VISTA

FOR OFFICE USE ONLY
FILE: _____
_____
_____
INITIALS

MAP TITLE

MAP NO.: _____

Property Owner(s): _____
_____
&
Address

Engineer/Surveyor:

PHONE:

(References are to the City of Chula Vista Subdivision Manual)

ITEM	CHECK	REMARKS
2-303.3 SUBMITTAL PACKAGE – Monument Inspection Request		
A. Monument Check Deposit — **Amount** $_____		
B. Blueline copy of map showing set and found monuments		
C. Written request for monument verification		
SUBMITTAL PACKAGE - Certificate of Correction		
A. Blueline copy of map showing set and found monuments		
B. Copy of Land Surveyor's report		
C. Draft Certificate of Correction		
D. List of affected property owners		
E. Copy of notification letter to be sent to property		

ITEM	CHECK	REMARKS
owners		
2-302 Monument Criteria		
A. Monuments of type and character indicated on map are set at location indicated on map		
B. Found monuments of type and character indicated on map are at location indicated on map.		
C. Subdivision Boundary monumented with 2" x 24" iron pipe with brass disc showing RCE or LS number		
D. Lot corners monumented with ¾" x 18" iron pipe with brass disc or ½" x 18" rebar with metal cap showing RCE or LS number or with lead and brass disc in top of curb at offset indicated on map		
E. Centerline of streets are monumented with City well monument per CV~~D-TR03~~CS 15		
2-303.2 Certificate of Correction – Form & Content		
A. 8½ " x 11" plain bond		
B. Signed by registered civil engineer licensed to do land surveying or licensed land surveyor		
C. List of fee property owners correct		
D. All corrections to be made shown		
E. Map, Parcel Map, or Record of Survey Number & recording information		
Processing		
A. Certificate of Correction approved by City Land Surveyor		
B. Certificate of Correction released for recordation		
C. Conformed copy of certificate of correction received with letter of payment per SMA 66497		
D. Certificate of correction recording information added to City's mylar copy of map.		

SECTION 2-400
ADJUSTMENT PLATS

2-400 ADJUSTMENT PLATS

Adjustment plats are used to adjust, modify or eliminate lot lines and boundaries of legal lots that have been created by a recorded subdivision map or by a grant deed recorded prior to March 4, 1972.

Adjustment plats are not recorded maps. The changes affected by an adjustment plat are reflected in new grant deeds for the affected properties. The changes affected by an adjustment plat are not considered legal changes until the new grant deeds are recorded.

The City will issue a certificate of compliance in conjunction with approval of an adjustment plat if so requested by the applicant. All other requests for certificates of compliance will be processed per Section 2-500 of this manual.

All adjustment plats and lot consolidation adjustment plats shall be prepared by a licensed Land Surveyor or a Registered Civil Engineer.

2-401 Purpose

Adjustment plats may be used to adjust lot boundaries or consolidate existing lots under the following provisions:

2-401.1 **Lot line adjustment plats**; may be approved provided the Director of ~~Planning~~Development Services and the City Engineer determine that lots lie adjacent to and/or are contiguous with each other and that the adjustment and exchange of property does not:

(1) Contain more than four adjoining lots / Create any new lots.

(2) Include any lots or parcels created illegally.

(3) Result in any lots that do not meet applicable zoning regulations.

(4) Impair any existing access or create a need for access to any adjacent lots or parcels.

(5) Impair any existing easements or create a need for any new easements serving any adjacent lots or parcels.

(6) Require substantial alteration of any existing improvements or create a need for any new improvements.

2-401.2 Lot consolidation adjustment plats ~~,~~:may be approved provided the Director of ~~Planning~~Development Services and the City Engineer determine that the consolidation does not:

(1) Include any lots or parcels created illegally;

(2) Result in any lots which do not meet applicable zoning regulations;

(3) Impair any existing access or create a need for access to any adjacent lots or parcels;

(4) Impair any existing easements or create a need for any new easements serving any adjacent lots or parcels;

(5) Require substantial alteration of any existing improvements or create a need for any new improvements.

2-402 Form and Content

2-402.1 General

(1) Each plat shall be drawn on a 8-1/2" X 11" (22cm X 28cm) vellum bond or 18" X 24" (46cm X 61cm) mylar (min. 3 mils (0.08mm) thick) or other form as may be approved by the City Engineer. Forms for vellum bond plats are available in the office of the City Engineer upon request.

(2) The plat shall be drawn to a minimum scale of one inch equals one hundred feet (1" = 100' (1cm=10m)).

(3) Lettering size - 0.10in (2.5mm) computer; 1/8" (3mm) hand in black drawing ink

(4) All parcels proposed for adjustment shall be shown, including all contiguous property to be retained by the owner. Property to be retained shall be designated on the plat as a separate parcel.

(5) All existing lots or parcels shown on final maps, parcel maps or final division plats shall be designated by dotted lines, and said maps shall be identified by map type and number.

2-402.2 Each plat shall contain the following information:

(1) A plat number as issued by Engineering Department.

(2) North arrow and scale.

(3) Name, address, telephone number and signature of owner(s).

(4) Name, address, telephone number and registration or license number of the Civil Engineer or Land Surveyor preparing the plat.

(5) Location, width and names, if any, of all existing streets and the location, width and purpose of all easements which lie within the boundaries of the subject parcels.

(6) The names of the owners and the Assessor's Parcel Numbers labeled within or adjacent to the parcels involved.

(7) Existing boundaries shown as a dashed line.

(8) The proposed boundaries shown as a solid line.

(9) Sufficient legal description of the land to define the boundaries of the ownerships involved.

(10) A vicinity map with north arrow and scale indicated.

(11) The net area of each proposed lot.

(12) The dimensions of each boundary of each proposed lot.

(13) The locations of all existing buildings and structures and their uses, the distance between said buildings and structures, and the minimum distance between each building or structure, and the boundary of the proposed lot on which it is located.

(14) A statement of the existing and proposed zoning and the proposed use of each lot.

(15) Basis of Bearings

2-403 Procedure

2-403.1 Submittal Requirements

(1) **First Submittals** are accepted per Section 5-203 of this manual and shall contain the following items:

a) Fee for adjustment or consolidation processing as set forth in Section 5-100 of this manual.

b) Three copies of the adjustment plat.

c) Proof of ownership (Title Report dated within 60 days of submittal)

d) Copies of grant deeds, deed restrictions and easements including current grant deeds and deeds recorded prior to March 4, 1972 (if existing lots were not created by a record map).

e) Copy of legal description(s) of adjusted lot(s) for new grant deed(s). Applicant shall submit executed deeds for City review prior to recordation.

f) Individual traverse calculations, including error of closure, for each lot affected by the adjustment plat.

g) Record of Survey plat, if a survey is desired and monuments will be set.

(2) **Subsequent Submittals** - Subsequent submittals are accepted by appointment with the plan checker and shall include the following:

a) Two plain paper (or blueline) copies of plat;

b) Previous City check print;

c) Other items as may be required by plan checker or conditions of approval.

2-403.2 Approval

(1) Conditions for Approval of an Adjustment Plat.

When applicable, the City Engineer may prescribe the following requirements as conditions of approval of adjustment plats:

a) Relocation or elimination of lot lines to provide lots that comply with any applicable zoning regulations and conform to the standards of lot design specified in this manual.

b) The provision of safe and adequate access to each lot or parcel within the adjustment plat.

c) Adequate relocation of existing utilities, infrastructures or easements.

d) Prepayment of real property taxes.

e) If one or more of the parcels affected by the lot line adjustment is encumbered by a deed of trust, a mortgage or a special assessment imposed by special district, the instrument shall be amended to reflect the new lot line. Provide a letter from the trust deed holder stating that the deed of trust will be amended once the new deeds are recorded.

(2) **Certification**. If the Director of ~~Planning~~Development Services and the City Engineer determine that the adjustment plat meets the conditions of approval, the requirements of this manual, the municipal code, and the State Subdivision Map Act, they shall certify on the adjustment plat that it has been approved.

2-403.3 Recordation of the Deeds

(1) Following approval of the adjustment plat, the applicant must have the necessary deeds recorded in the office of the County Recorder. The City shall release the executed deeds only to the applicant's title officer of record. Upon receipt of a conformed copy of the recorded deeds, the City shall release a copy of the approved adjustment plat to the applicant.

(2) If the plat has been prepared on 18" X 24" (46cm X 61cm) mylar, the applicant is responsible to provide the City with the following:

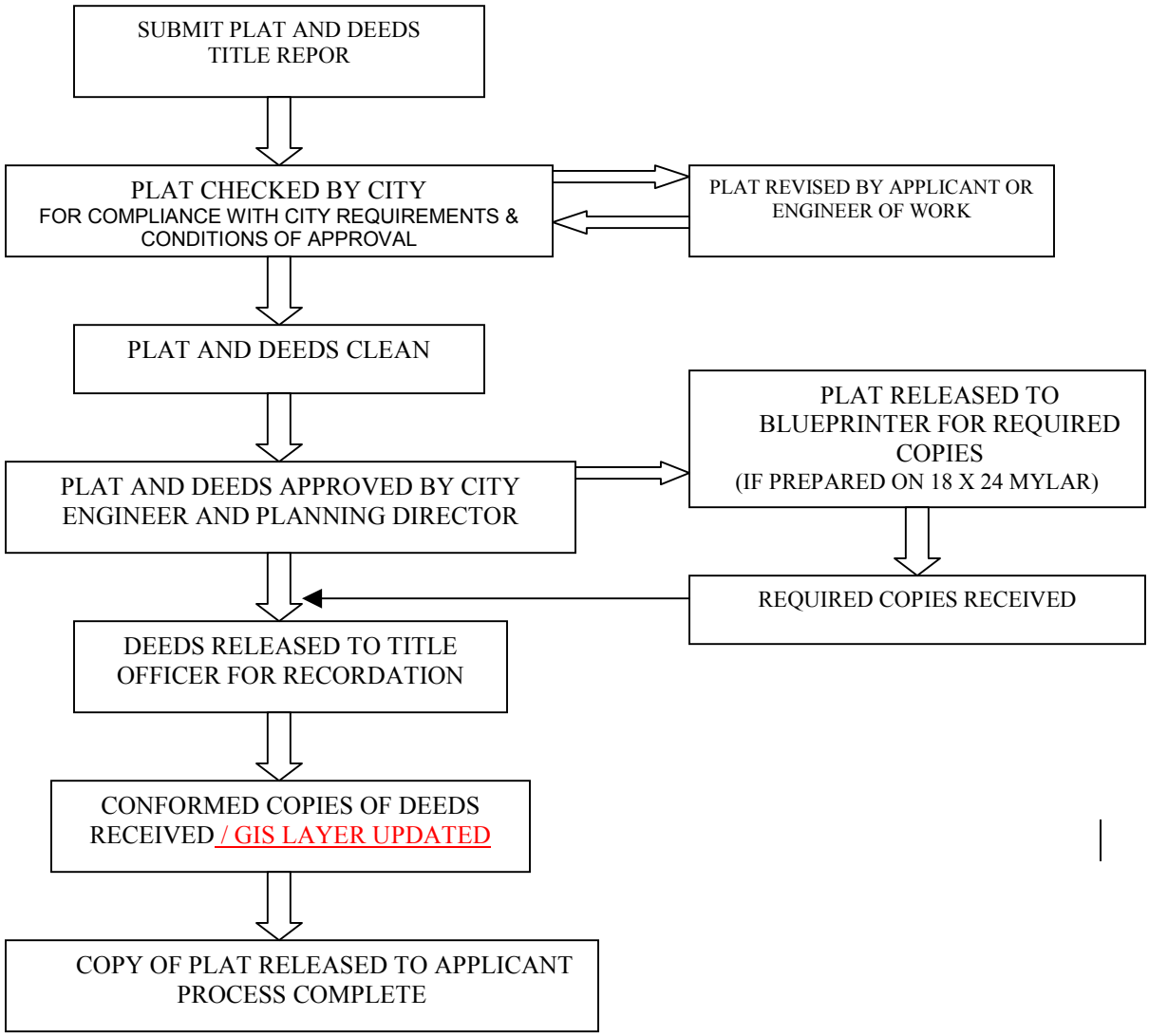
a) Full-size mylar, minimum 3 mils (.08mm) thick;

b) Plain paper copy reduced to 8-1/2" X 11" (22cmX28cm);

c) Mylar copy reduced to 8-1/2" X 11"

(3) Approved plats will be released only to blueprint companies bonded with the City. The copies listed above must be received prior to City's release of the grant deeds for recordation.

2-404 ADJUSTMENT PLAT FLOW CHART



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2-405 SAMPLE ADJUSTMENT PLAT

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2-406 ADJUSTMENT PLAT CHECKL

FOR OFFICE USE ONLY
FILE: _____

CITY OF CHULA VISTA

PLAT TITLE _____

PLAT NO. _____

Property Owner(s): _____

&
Address

Engineer/Surveyor:

PHONE:

(References are to City of Chula Vista Subdivision Manual)

ITEM	CHECK	REMARKS
2-403.1 **SUBMITTAL PACKAGE** - Plats, Deeds, Statements & Exhibits		
A. Plan Check Fee — Amount $ _____		
B. Plain Paper or Blueline copies		
C. Current Property Deeds and Title Report		
D. Pre-1972 Deeds (if required)		
E. Legal Descriptions for New Deeds		
F. Executed New Deeds for Review		
G. Mylar (min. 3 mils. (.08mm) thick)		
H. Reduced Copies of Plat		
I. Conformed Copy of New Deeds		
J. Individual Traverse Calcs for each lot		
K. Record of Survey Plat, if monuments will be set		
2-401 Adjustment/Consolidation Criteria		

ITEM	CHECK	REMARKS
A. No new lots are created		
B. Existing Lots/Parcels are legal		
C. All resulting lots meet applicable zoning regulations		
D. Existing access not impaired or new access not required		
E. Substantial alteration of existing improvements or new improvements not required		
2-402 FORM AND CONTENT – General		
A. Legibly drawn on mylar, sepia or other approved media		
B. 8-1/2” x 11” (22cm x 28cm) or 18” x 24” (46cm x 61cm)		
C. Lettering size – 0.10 in. (2.5 mm) computer; 1/8” (3mm) hand in black drawing ink		
D. Scale: 1” = 100’ (1cm = 10m) and north arrow		
E. All parcels to be adjusted and contiguous property to be retained by owner shown		
F. Existing lots or parcels shown on final maps or parcel maps designated by dashed line and identified		
G. Plat number		
H. Work Order Number		
I. North arrow and scale		
J. Name, address, telephone number and signature(s) of owner(s)		
K. Name, address, telephone number and registration or license number of Engineer or Surveyor		
L. Location, width and names of all existing streets and location, width and purpose of all easements		
M. Lots/Parcels labeled with names of owners and Assessor’s Parcel Numbers		
N. Existing boundaries shown as dashed lines		
O. Proposed boundaries shown as solid lines		
P. Legal description		
Q. Vicinity map with north arrow shown		

ITEM	CHECK	REMARKS
R. Net area of each proposed lot shown		
S. Dimensions or each boundary and proposed lot		
T. Locations of all existing buildings and structures and their uses		
U. Existing zoning and proposed use of each lot		

CERTIFICATE OF COMPLIANCE
SECTION 2-500

2-500 CERTIFICATE OF COMPLIANCE

2-501 Purpose

A request for a Certificate of Compliance may be filed, pursuant to the provisions of this section, when a property owner desires certification that a particular property was legally created and conforms to City of Chula Vista Municipal Code and the State Subdivision Map Act requirements. Requests for Certificates of Compliance shall include items as listed in Section 2-503.

The provisions of this section apply to requests for Certificates of Compliance that are not associated with an adjustment plat or financial lot split (see Section 2-400).

2-502 Form and Content

2-502.1 Certificate of Compliance

A Certificate of Compliance will be approved by the City if it is determined that the parcel(s) is legal and buildable. The Certificate shall include:

(1) Name and Address of Owner(s)

(2) Assessor Parcel Number(s)

(3) Statement certifying compliance with City ordinances and the State Subdivision Map Act.

(4) The number of parcels for which the Certificate of Compliance is being issued.

(5) Legal Description labeled Exhibit 'A'

(6) Plat of subject parcel(s) labeled Exhibit 'B'

2-502.2 Plat - General

(1) The plat for a Certificate of Compliance shall be prepared by applicant's engineer or land surveyor and drawn on a form prescribed by the City Engineer. Such forms are available in the Engineering Department upon request.

(2) The plat shall be drawn to a minimum scale of one inch equals one hundred feet (1" = 100'(1cm=10m)).

(3) Lettering size - 0.10in (2.5mm) computer; 1/8" (3mm) hand in black drawing ink

2-502.3 Each plat shall contain the following information:

(1) A plat number as issued by Engineering Department.

(2) North arrow and scale.

(3) Name, address, telephone number and signature of owner(s).

(4) Name, address, telephone number and registration or license number of the Civil Engineer or Land Surveyor preparing the plat.

(5) A vicinity map with north arrow and scale indicated.

(6) Sufficient legal description of the land to define the boundaries of the ownerships involved.

(7) The boundaries to be shown as a solid line, with bearings (directions) and distances labeled along boundaries.

(8) The net area of subject parcel(s).

(9) The location, width and names, if any, of all existing streets; and the location, width and purpose of all easements which lie within or immediately adjacent to the exterior boundaries of the parcel.

(10) All referenced maps shall be fully identified by map type and number.

(11) The locations of all existing buildings and structures and their uses, the distance between said buildings and structures, and the distance between each building or structure and the boundary of the lot.

(12) A statement of the existing zoning and any proposed zoning.

(13) Lots/Parcels shall be labeled with names of owners and Assessor's Parcel Numbers

(14) City work order number shall be shown at the lower right corner of plat.

2-503 **Procedure:**

2-503.1 **Submittal**

(1) First Submittal is accepted per Section 5-203 of this manual and shall contain the following items:

a) Fees. - All submittals shall include a fee for processing as set forth in Section 5-100 of this manual.

b) Three copies of the Certificate of Compliance plat.

c) Legible copies of grant deeds, deed restrictions and easements including current grant deeds and deeds recorded prior to March 4, 1972 (if existing lots were not created by a record map).

d) Documentation of recorded access to the subject property unless abutting a public street.

e) Plat showing parcel(s) to be certified per Section 2-502 above.

1) A revised plat shall be submitted for certification when the City Engineer finds that the number or nature of the changes required for approval are such that they cannot be shown clearly or simply on the original plat.

2) Failure to File Revised Plat. When required to prepare a revised plat, the failure to file said plat within six months from the date of approval or conditional approval of the original plat shall terminate all proceedings.

(2) Subsequent submittals are accepted by appointment with the plan checker and shall include:

a) Two copies of plat

b) City check print of plat

c) Additional information as may be requested by the plan checker.

2-503.2 **Approval**

(1) Certificate of Compliance

City Staff will prepare a Certificate of Compliance for City Engineer's signature if it is determined that the parcel(s) is legal and buildable. The Certificate package shall include:

a) Certificate of Compliance (prepared by City Staff)

b) Legal Description of the parcel(s) (prepared by applicant's Civil Engineer, Land Surveyor, or title officer)

c) Plat (prepared by applicant's Civil Engineer or Land Surveyor)

(2) Conditional Certificate of Compliance.

Whenever applicable, the City Engineer may prescribe the following requirements as conditions of a Conditional Certificate of Compliance:

a) Relocation of lot lines to provide lots that comply with any applicable zoning regulations, and conform to the standards of lot design specified in this manual.

b) The provision of safe and adequate access to each lot or parcel within the adjustment plat.

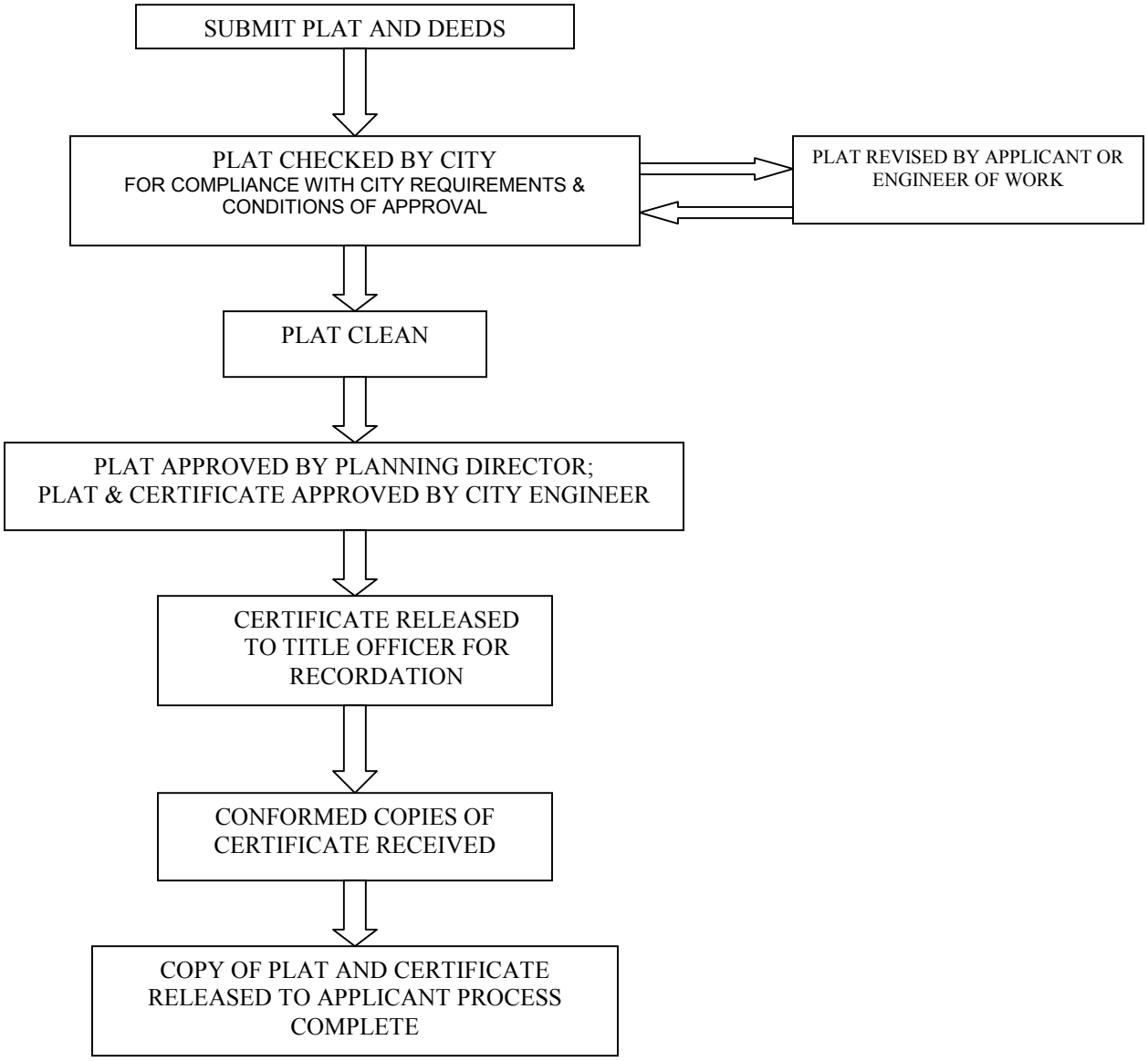
c) The addition of a distinctive boundary line, clearly labeled, which delineates the limits of any area determined by the City Engineer to be subject to flooding or inundation. The plat shall contain an appropriate note stating said area is subject to flooding or inundation.

(3) Any conditions to a Certificate of Compliance shall be enumerated on the certificate to be recorded. A Conditional Certificate of Compliance shall contain the same items listed above for a Certificate of Compliance.

2-503.3 Recordation of the Certificate of Compliance

Certificates of Compliances are in effect only after recordation. The applicant must record the approved Certificate of Compliance package in the office of the San Diego County Recorder. The City will release the approved package only to applicant's title officer of record. Upon receipt of a conformed copy of the recorded certificate, the City shall release a copy of the certificate to the applicant at applicant's request.

2-504 CERTIFICATE OF COMPLIANCE FLOW CHART



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SAMPLE CERTIFICATE OF COMPLIANCE & PLAT

SAMPLE CERTIFICATE OF COMPLIANCE

RECORDING REQUESTED BY:

After recording mail to:
City of Chula Vista
Engineering Division, Subdivisions
276 Fourth Ave.
Chula Vista, CA. 91910

CERTIFICATE OF COMPLIANCE
[Section 66499.35(a~~b~~) of the Subdivision Map Act]

Property Description

See Exhibits "A" attached.

Property Ownership

(LIST OWNERS' NAMES & ADDRESSES)

Certification

The City Engineer has determined that the real property in the Legal Description of Exhibit "A" and shown in Exhibit "B" has been divided or has resulted from a division or combining of lots in compliance with the Subdivision Map Act and with the provisions of the Chula Vista Municipal Code pursuant thereto.

This certificate relates only to issues of compliance or noncompliance with the Subdivision Map Act and local ordinances enacted pursuant thereto. The parcel described herein may be sold, leased, or financed without further compliance with the Subdivision Map Act or any local ordinance enacted pursuant thereto. Development of the parcel may require issuance of a permit or permits, or other grant or grants of approval.

(NAME)
CITY ENGINEER

BY:

(NAME) DATE
~~SENIOR CIVIL ENGINEER~~Land Surveyor

2-505.2 SAMPLE CERTIFICATE OF COMPLIANCE PLAT

2-506 CERTIFICATE OF COMPLIANCE CHECKLIST
CITY OF CHULA VISTA

OFFICE USE ONLY
FILE: _____
_____
INITIALS: _____

PLAT TITLE _____

PLAT NO.: _____

Property Owner(s): _____
&
Address

Engineer/Surveyor: _____

PHONE:_____

(References are to the City of Chula Vista Subdivision Manual)

ITEM	CHECK	REMARKS
2-503.1 SUBMITTAL PACKAGE – Plats, Deeds, Statements & Exhibits		
A. Plan Check Fee — **Amount** $ _____		
B. Plain paper copies		
C. Current Property Deeds		
D. Pre-1972 Deeds (if appropriate)		
E. Conformed Copies of Certificate		
2-500 Certificate of Compliance Criteria		
A. Existing Lots/Parcels are legal		
B. All lots meet applicable zoning regulations		
C. Existing access not impaired or new access not required		
2-502.2 FORM AND CONTENT – Plat		
A. Legibly drawn on bond, mylar, sepia or other approved media		
B. Lettering size – 0.10 in. (2.5mm) computer; 1/8" (3mm) hand in black drawing ink		
C. Scale: 1: = 100' (1cm = 10m) and north arrow		

ITEM	CHECK	REMARKS
D. Plat Number		
E. North arrow and scale		
F. Boundaries all parcels shown as solid line		
G. Name, address, telephone number and signature(s) of owner(s)		
H. Name, address, telephone number and registration or license number of engineer or surveyor		
I. Vicinity map with north arrow shown		
J. Legal description		
K. Boundaries shown as solid lines with bearings (directions) and distances labeled		
L. Net area of each parcel shown		
M. Location, width and names of all existing streets and location, width and purpose of all easements		
N. All referenced map fully identified by map type and number		
O. Locations of all existing buildings and structures and their uses		
P. Existing zoning and proposed use of each lot		
Q. Lots/Parcels labeled with names of owners and Assessor's Parcel Numbers		
R. Work Order Number		

JURATS, CERTIFICATES
SAMPLE BONDS & AGREEMENTS
SECTION 2-600

2-600 Jurats, Certificates, Sample Bonds, Sample Agreements;

2-601 All Subdivision Maps

2-601.1 Owners' Certificate

(1) General Format

WE HEREBY CERTIFY THAT WE ARE THE OWNERS OF OR ARE INTERESTED IN THE LAND EMBRACED WITHIN THIS SUBDIVISION, TO BE KNOWN AS CHULA VISTA TRACT NO. _____(CVT) (Subdivision Name)_____ AND WE HEREBY CONSENT TO THE PREPARATION AND RECORDATION OF THIS MAP, CONSISTING OF _____ SHEETS AND DESCRIBED IN THE CAPTION THEREOF.

(2) Condominium Projects Add

THIS IS A CONDOMINIUM PROJECT AS DEFINED IN SECTION 1351 OF THE CIVIL CODE OF THE STATE OF CALIFORNIA CONTAINING A MAXIMUM OF _____ RESIDENTIAL UNITS AND IS FILED PURSUANT TO THE SUBDIVISION MAP ACT.

(3) Granting Public Streets Add

WE HEREBY DEDICATE FOR PUBLIC USE ___(List Streets And Portions of Streets by Name) ALL AS SHOWN ON THIS MAP WITHIN THIS SUBDIVISION.

(4) Granting An Irrevocable Fee Interest

WE HEREBY OFFER TO DEDICATE AN IRREVOCABLE FEE INTEREST TO THE CITY OF CHULA VISTA, A MUNICIPAL CORPORATION, IN LOTS <list lots> FOR OPEN SPACE AND OTHER PUBLIC PURPOSES AND LOTS <list lots> FOR PUBLIC PARK PURPOSES, ALL AS SHOWN ON THIS MAP WITHIN THIS SUBDIVISION.

(Note: Separate "Irrevocable Fee Interest" document must be acknowledged by the City Clerk concurrent with the approval of the final map for each Lot irrevocably offered in fee to the City. Said "Irrevocable Offer of Dedication of Fee Interest" must be recorded concurrently with recording of the final map)
* See Offers of Dedication – Acceptance and Rejection Table, Section 2-605.4

(5) Granting Street Tree Easement

WE HEREBY GRANT TO THE CITY OF CHULA VISTA, A MUNICIPAL CORPORATION, THE 5.5 FOOT TREE PLANTING AND MAINTENANCE EASEMENT, WITH THE RIGHTS OF INGRESS AND EGRESS FOR THE CONSTRUCTION AND MAINTENANCE OF STREET PLANTING ALONG (List Streets) AS SHOWN ON THIS MAP WITHIN THIS SUBDIVISION.

(6) Granting Storm Drain Easement Add

WE HEREBY GRANT TO THE CITY OF CHULA VISTA, A MUNICIPAL CORPORATION, THE (Width) DRAINAGE EASEMENT WITH THE RIGHTS OF INGRESS AND EGRESS

FOR CONSTRUCTION AND MAINTENANCE OF PUBLIC DRAINAGE FACILITIES AS SHOWN ON THIS MAP WITHIN THIS SUBDIVISION

(7) Granting Sewer Easement Add

WE HEREBY GRANT TO THE CITY OF CHULA VISTA, A MUNICIPAL CORPORATION, THE (Width) SEWER EASEMENT WITH THE RIGHTS OF INGRESS AND EGRESS FOR CONSTRUCTION AND MAINTENANCE OF PUBLIC SEWER FACILITIES AS SHOWN ON THIS MAP WITHIN THIS SUBDIVISION

(8) Granting General Access Easement

WE HEREBY GRANT TO THE CITY OF CHULA VISTA, A MUNICIPAL CORPORATION, THE GENERAL ACCESS EASEMENT AS SHOWN ON THIS MAP WITHIN THIS SUBDIVISION.

(9) Reserving Underlying Continued Use (Add after all easements)

RESERVING HOWEVER, TO THE OWNER OF THE FEE UNDERLYING ANY EASEMENTS HEREIN GRANTED THE CONTINUED USE OF THE SURFACE OF SAID REAL PROPERTY, SUBJECT HOWEVER TO THE FOLLOWING CONDITIONS: THE ERECTING OF BUILDINGS, MASONRY WALLS, MASONRY FENCES AND OTHER STRUCTURES; PLANTING OR GROWING OF TREES~~S~~ OR SHRUBS; INSTALLATION OF PRIVATELY OWNED PIPELINES; OR CHANGING THE SURFACE GRADE SHALL BE PROHIBITED UNLESS WRITTEN PERMISSION IS FIRST OBTAINED FROM THE CITY OF CHULA VISTA. (If the street tree planting easement is the only easement, then verbiage related to planting trees or shrubs and installation of privately owned pipelines may be deleted.)

(10) Granting Water Easements. Add certificate or language granting and accepting easement as required by subject water utility.

a) Grant

WE HEREBY GRANT TO THE OTAY MUNICIPAL WATER DISTRICT _____ _____ WATER EASEMENT AS SHOWN ON THIS MAP.

b) Acceptance

THIS IS TO CERTIFY THAT THE EASEMENT GRANTED ON THIS MAP TO OTAY WATER DISTRICT, A POLITICAL CORPORATION AND/OR GOVERNMENTAL AGENCY, IS HEREBY ACCEPTED BY ORDER OF THE BOARD OF DIRECTORS, PURSUANT TO THE AUTHORITY CONFERRED BY RESOLUTION NO. 1829, ADOPTED FEBRUARY 23, 1981, AND THE GRANTEE CONSENTS TO THE RECORDATION THEREOF BY ITS DULY AUTHORIZED OFFICER.

OTAY WATER DISTRICT

(Name) GENERAL MANAGER

2-601.2 Signature Omission Statement

THE SIGNATURES OF THE FOLLOWING PARTIES HAVE BEEN OMITTED UNDER THE PROVISIONS OF SECTION 66436, SUBSECTION (a) (3) (A) (i) OF THE SUBDIVISION MAP ACT, THEIR INTEREST IS SUCH THAT IT CANNOT RIPEN INTO A FEE TITLE AND SAID SIGNATURES ARE NOT REQUIRED BY THE GOVERNING BODY: (List Holder and Recording Information for Each Easement)

2-601.3 Assessment District Certificate

A. I AM THE CLERK OF THE LEGISLATIVE BODY OF THE CITY OF CHULA VISTA, WHICH CREATED THAT CERTAIN SPECIAL ASSESSMENT DISTRICT KNOWN AND DESIGNATED AS ASSESSMENT DISTRICT NO _____ (List Assessment Districts Separately)_____

B. THE LAND WHICH IS TO BE SUBDIVIDED UPON THE RECORDATION OF THE WITHIN MAP IS SUBJECT TO A SPECIAL ASSESSMENT FOR PAYMENT OF A BOND OF SAID ASSESSMENT DISTRICT, WHICH ASSESSMENT HAS NOT BEEN PAID IN FULL OR SECURED PURSUANT TO GOVERNMENT CODE SECTION 66493(c).

C. SAID LEGISLATIVE BODY HAS DETERMINED THAT PROVISION HAS BEEN MADE FOR THE SEGREGATION OF RESPONSIBILITY OF EACH OF THE PROPOSED NEW PARCELS OR A PORTION OF THE ASSESSMENT PAYMENT OBLIGATION IN THE MANNER PROVIDED IN THE STATUTES PURSUANT TO WHICH THE ASSESSMENTS WERE LEVIED OR TO WHICH THE BONDS WERE SECURED.

DATE
NAME, (See Section 5-300) CLERK OF THE LEGISLATIVE BODY OF THE CITY OF CHULA VISTA, STATE OF CALIFORNIA

2-601.4 Abandonment of Public Easement Certificate

A. I AM THE CLERK OF THE LEGISLATIVE BODY OF THE CITY OF CHULA VISTA, HOLDER OF THAT CERTAIN EASEMENT FOR (Purpose & Details of Easement) FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY ON _____, AS FILE NO. _____.

B. SAID EASEMENT(S) ARE UPON, OVER AND ACROSS LAND WHICH IS TO BE MERGED AND RE-SUBDIVIDED UPON THE RECORDATION OF THE WITHIN MAP AND MAY BE ABANDONED.

C. SAID LEGISLATIVE BODY HAS DETERMINED THAT SAID EASEMENT IS NO LONGER NECESSARY FOR THE PURPOSES STATED AND HEREBY CERTIFIES ABANDONMENT OF SAID EASEMENT PURSUANT TO THE SUBDIVISION MAP ACT SECTION 66434(g)~~99.20½~~ .

NAME, (See Section 5-300) CLERK OF THE LEGISLATIVE BODY OF THE CITY OF CHULA VISTA, CALIFORNIA

2-601.5 County Board of Supervisors Certificate; (as below or as required by the County Board of Supervisors)

I, *NAME*, *(See Section 5-300)*, CLERK OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SAN DIEGO, HEREBY CERTIFY THAT THE PROVISIONS OF THE SUBDIVISION MAP ACT (DIVISION 2 OF TITLE 7 OF GOVERNMENT CODE) REGARDING (A) DEPOSITS FOR TAXES AND (B) CERTIFICATION OF THE ABSENCE OF LIENS FOR UNPAID STATE, COUNTY, MUNICIPAL OR LOCAL TAXES OR SPECIAL ASSESSMENTS COLLECTED AS TAXES, EXCEPT THOSE NOT YET PAYABLE, HAVE BEEN COMPLIED WITH.

NAME, (See Section 5-300)

BY:
DATE:
DEPUTY

2-601.6 County Recorder's Certificate; (as follows or as required by the County Recorder's Office)

FILE NO.

I, *NAME, (See Section 5-300*, RECORDER OF THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, HEREBY CERTIFY THAT I ACCEPTED FOR RECORDATION THIS MAP FILED AT THE REQUEST OF _____ THIS _____ DAY OF _____ 200__, AT _____ O' CLOCK __M.

NAME, (See Section 5-300)
COUNTY RECORDER

BY:
DEPUTY
FEE: ~~$8.00 (FIRST SHEET; EACH ADDITONAL SHEET $2.00)~~
~~MF: $1.00~~

2-601.7 Signature Jurats; (as follows or as required by State of California)

STATE OF CALIFORNIA)
COUNTY OF SAN DIEGO)

ON _____, 200___, BEFORE ME, _____, A NOTARY PUBLIC, PERSONALLY APPEARED _____ PERSONALLY KNOWN TO ME (OR PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE) TO BE THE PERSON(S) WHOSE NAME(S) ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO BE THAT THEY EXECUTED THE SAME IN THEIR AUTHORIZED CAPACITIES, AND THAT BY THEIR SIGNATURES ON THE INSTRUMENT, THE

PERSONS, OR ENTITY UPON BEHALF OF WHICH THE PERSON ACTED, EXECUTED THE INSTRUMENT.

WITNESS MY HAND:
SIGNATURE:

PRINT NAME:

A NOTARY PUBLIC IN AND FOR SAID STATE

PRINCIPAL PLACE OF BUSINESS IS COUNTY OF _____

MY COMMISSION EXPIRES: _____

2-602 Major Subdivision Maps

2-602.1 City Clerk's Certificate

(1) General

STATE OF CALIFORNIA)
COUNTY OF SAN DIEGO) SS.

I, *NAME, (See Section 5-300)*, CITY CLERK OF THE CITY OF CHULA VISTA, CALIFORNIA, HEREBY CERTIFY THAT, ~~BY RESOLUTION NO. _____THE COUNCIL OF SAID CITY HAS APPROVED THIS MAP OF CHULA VISTA TRACT NO. (Tract No. & Subdivision Name) CONSISTING OF ___ SHEETS AND DESCRIBED IN THE CAPTION THEREOF:~~

~~(Enter acceptance/rejection text as follows, as necessary)~~

~~IN WITNESS THEREOF, SAID COUNCIL HAS CAUSED THESE PRESENTS TO BE EXECUTED BY THE CITY CLERK AND ATTESTED BY ITS SEAL THIS _____ DAY OF _____, 200__.~~THE CITY ENGINEER, PURSUANT TO THE AUTHORITY GRANTED IN THE MUNICIPAL CODE SECTION 18.16.210 HAS APPROVED THIS MAP OF CHULA VISTA TRACT NO. *XX-XX*, *[INSERT DESCRIPTION OF MAP]*; HAS ACCEPTED ON BEHALF OF THE PUBLIC, *XXXX* ROAD AND HAS ACCEPTED ON BEHALF OF THE CITY OF CHULA VISTA, A MUNICIPAL CORPORATION, THE *[LIST ALL EASEMENTS]*, RESERVING ~~HOWEVER,~~ TO THE OWNER OF THE FEE UNDERLYING ANY EASEMENT HEREIN GRANTED THE CONTINUED USE OF THE SURFACE OF SAID REAL PROPERTY, SUBJECT TO THE FOLLOWING CONDITIONS: THE ERECTING OF BUILDINGS, MASONARY WALLS AND FENCES, AND OTHER STRUCTURES, THE PLANTING OR GROWING OF TREES SHRUBS, THE CHANGING OF THE SURFACE GRADE, OR THE INSTALLATION OF PRIVATELY-OWNED PIPELINES SHALL BE PROHIBITED UNLESS WRITTEN PERMISSION AND AN ENCROACHMENT PERMIT IS FIRST OBTAINED FROM THE CITY OF CHULA VISTA; AND HAS ACKNOWLEDGED ON BEHALF OF THE PUBLIC THE IRREVOCABLE OFF~~R~~RER OF DEDICATION OF FEE INTEREST OF LOTS XX FOR OPEN SPACE AND OTHER PUBLIC PURPOSES, ALL AS SHOWN ON THIS MAP, WITHIN THIS SUBDIVISION NOTING THAT SECTION 66477.2 OF THE SUBDIVISION MAP ACT OF THE SATE OF CALIFORNIA PROVIDES THAT SUCH OFFERS MAY BE ACCEPTED AT ANY TIME

(Leave Minimum 2½ " Square

For City Clerk Seal)

~~NAME, (See Section 5-300), CITY CLERK~~

~~(2) Acceptance Language~~

~~a) For Public Street Dedication, Add:~~

~~AND HAS ACCEPTED ON BEHALF OF THE PUBLIC _____(list Street Names)_____~~

~~b) To Dedicate Open Space with 10' Utility Easement Add:~~

~~AND HAS ACCEPTED ON BEHALF OF THE CITY OF CHULA VISTA, A MUNICIPAL CORPORATION, LOT _____ FOR OPEN SPACE AND OTHER PUBLIC PURPOSES, INCLUDING A 10 FOOT GENERAL UTILITY EASEMENT WITHIN SAID LOT, FOR INSTALLATION AND MAINTENANCE OF PUBLIC UTILITIES, NOTING THAT USE OF SAID EASEMENT BY OTHERS IS SUBJECT TO WRITTEN PERMISSION AND ISSUANCE OF AN ENCROACHMENT PERMIT FROM THE CITY OF CHULA VISTA, ALL AS SHOWN ON THIS MAP WITHIN THIS SUBDIVISION.~~

~~c) For Easement Dedication, Add:~~

~~AND HAS ACCEPTED ON BEHALF OF THE CITY OF CHULA VISTA, A MUNICIPAL CORPORATION, A (Insert Description of Easement as in Dedication Language) _____, RESERVING HOWEVER TO THE OWNER OF THE FEE UNDERLYING ANY EASEMENT HEREIN GRANTED THE CONTINUED USE OF THE SURFACE OF SAID REAL PROPERTY; SUBJECT, HOWEVER TO THE FOLLOWING CONDITIONS: THE ERECTING OF BUILDINGS; MASONRY FENCES AND OTHER STRUCTURES; OR THE PLANTING OR GROWING OF TREES OR SHRUBS; OR CHANGE THE SURFACE GRADE; OR THE INSTALLATION OF PRIVATELY OWNED PIPE LINES SHALL BE PROHIBITED UNLESS WRITTEN PERMISSION IS FIRST OBTAINED FROM THE CITY OF CHULA VISTA, ALL AS SHOWN ON THIS MAP WITHIN THIS SUBDIVISION. (If street tree planting easement is the only easement, then delete verbiage related to planting trees or shrubs and installation of privately owned pipelines)~~

(3) If Open Space Lots are to be HOA Maintained add Rejection Language

AND HAS REJECTED ON BEHALF OF THE CITY OF CHULA VISTA, A MUNICIPAL CORPORATION, (INSERT DEDICATION LANGUAGE FOR EASEMENT), NOTING THAT SECTION 66477.2 OF THE SUBDIVISION MAP ACT OF THE STATE OF CALIFORNIA PROVIDES THAT AN OFFER OF DEDICATION SHALL REMAIN OPEN AND SUBJECT TO FUTURE ACCEPTANCE BY THE CITY.

2-602.2 County Tax Collector's Certificate;

WE, COUNTY TREASURER-TAX COLLECTOR OF THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA AND DIRECTOR OF THE DEPARTMENT OF PUBLIC WORKS OF SAID COUNTY, HEREBY CERTIFY THAT THERE ARE NO UNPAID SPECIAL ASSESSMENTS OR BONDS WHICH MAY BE PAID IN FULL, SHOWN BY THE BOOKS OF OUR OFFICES, AGAINST THE TRACT OR SUBDIVISION OR ANY PART THEREOF SHOWN ON THE ANNEXED MAP AND DESCRIBED IN THE CAPTION THEREOF.

NAME, (See Section 5-300) BY: _____

_____
COUNTY TREASURER- DEPUTY
TAX COLLECTOR DATED: _____

_____

NAME, (See Section 5-300) BY: _____

_____
DIRECTOR OF DEPUTY
PUBLIC WORKS DATED: _____

_____

2-602.3 Engineers/Surveyors Statement

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF (NAME OF PERSON AUTHORIZING MAP) ON (DATE). MONUMENTS OF THE CHARACTER INDICATED HAVE BEEN SET OR FOUND AS SHOWN; I WILL SET ALL OTHER MONUMENTS OF THE CHARACTER AND POSITION INDICATED BY LEGEND ON THIS MAP WITHIN 30 DAYS AFTER THE COMPLETION OF THE REQUIRED IMPROVEMENTS AND THEIR ACCEPTANCE BY THIS CITY OF CHULA VISTA; AND THAT SUCH MONUMENTS ARE, OR WILL BE, SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. I HEREBY STATE THAT THIS FINAL MAP SUBSTANTIALLY CONFORMS TO THE CONDITIONALLY APPROVED TENTATIVE MAP AND THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN. (SEE LEGEND AND NOTES ON SHEET _____)
(Leave Room for Surveyors
Stamp)

(Signed) _____ **DATE:**

_____
R.C.E. (or L.S.) No. _____ **EXPIRES:**

_____

2-602.4 ~~Deputy City Manager's~~Director of Finance's Certificate

I, *NAME, (See Section 5-300)*, DEPUTY CITY MANAGER OF THE CITY OF CHULA VISTA, CALIFORNIA, CERTIFY THAT THERE ARE NO LIENS FOR UNPAID CITY TAXES OR UNPAID BONDS ISSUED UNDER ANY IMPROVEMENT ACT OR IMPROVEMENT BOND ACT OF THE STATE OF CALIFORNIA, AS SHOWN BY THE BOOKS OF THIS OFFICE, EXCEPT TAXES NOT YET PAYABLE AGAINST THIS SUBDIVISION, OR ANY PART THEREOF, SHOWN ON THE ANNEXED MAP AND DESCRIBED IN THE CAPTION THEREOF.

IN WITNESS THEREOF, I HAVE HEREUNTO SET MY HAND THIS ____ DAY OF _____, 200__.

_____

NAME, (See Section 5-300), DEPUTY CITY MANAGER

2-602.5 City Engineer/~~Planning~~Development Services Director's Certificate

WE THE UNDERSIGNED, HEREBY CERTIFY THAT WE HAVE EXAMINED THE ANNEXED MAP AND FIND IT TO BE SUBSTANTIALLY THE SAME AS IT APPEARED ON THE TENTATIVE MAP AND ANY APPROVED ALTERATION THEREOF, THAT THE PROVISIONS OF THE STATE SUBDIVISION MAP ACT AND ANY LOCAL ORDINANCES OF THE CITY OF CHULA VISTA, APPLICABLE AT THE TIME OF APPROVAL OF THE TENTATIVE MAP, HAVE BEEN COMPLIED WITH, ~~THAT THE MAP IS TECHNICALLY CORRECT,~~ AND THAT WE HAVE EXAMINED EACH LOT OF THE SUBJECT SUBDIVISION AS TO ITS VALUE FOR RESIDENTIAL OR COMMERCIAL PURPOSES AND WE FIND SAID SUBDIVISION SUITABLE FOR SUCH PURPOSES. I DO HEREBY ACCEPT THOSE ITEMS LISTED IN THE OWNER'S CERTIFICATE UNDER THE CONDITIONS EXPRESSED THEREIN.
(Leave Minimum 2" Square
For City Engineer's Seal)

NAME, (See Section 5-300), CITY ENGINEER DATE
RCE EXP. (See Section 5-300)

NAME, (See Section 5-300), CITY ~~PLANNING~~DEVELOPMENT SERVICES DIRECTOR
DATE

APPROVED AS TO FORM:

NAME, (See Section 5-300), CITY ATTORNEY DATE

2-603 Minor Subdivision Maps;

2-603.1 City Clerk Certificate (Parcel Maps) - Dedication Acceptance/Rejection

THIS IS TO CERTIFY THAT THE CITY ENGINEER, PURSUANT TO THE AUTHORITY GRANTED IN THE MUNICIPAL CODE SECTION 18.20.190 HAS APPROVED THIS PARCEL MAP *[INSERT DESCRIPTION OF MAP]*; HAS ACCEPTED ON BEHALF OF THE PUBLIC, *XXXX* ROAD AND HAS ACCEPTED ON BEHALF OF THE CITY OF CHULA VISTA, A MUNICIPAL CORPORATION, THE *[LIST ALL EASEMENTS]*, RESERVING ~~HOWEVER,~~ TO THE OWNER OF THE FEE UNDERLYING ANY EASEMENT HEREIN GRANTED THE CONTINUED USE OF THE SURFACE OF SAID REAL PROPERTY, SUBJECT TO THE FOLLOWING CONDITIONS: THE ERECTING OF BUILDINGS, MASONARY WALLS AND FENCES, AND OTHER STRUCTURES, THE PLANTING OR GROWING OF TREES SHRUBS, THE CHANGING OF THE SURFACE GRADE, OR THE INSTALLATION OF PRIVATELY-OWNED PIPELINES SHALL BE PROHIBITED UNLESS WRITTEN PERMISSION AND AN ENCROACHMENT PERMIT IS FIRST OBTAINED FROM THE CITY OF CHULA VISTA; AND HAS ACKNOWLEDGED ON BEHALF OF THE PUBLIC THE IRREVOCABLE ORRER OF DEDICATION OF FEE INTEREST OF LOTS XX FOR OPEN SPACE AND OTHER PUBLIC PURPOSES, ALL AS SHOWN ON THIS MAP, WITHIN THIS SUBDIVISION NOTING THAT SECTION 66477.2 OF THE SUBDIVISION MAP ACT OF THE SATE OF CALIFORNIA PROVIDES THAT SUCH OFFERS MAY BE ACCEPTED AT ANY TIME~~(Dedication/rejection Language See Major Subdivision Maps) ALL AS SHOWN ON THIS MAP WITHIN THIS SUBDIVISION AND CONVEYED HEREON TO THE CITY OF CHULA VISTA, ARE HEREBY ACCEPTED ON BEHALF OF THE CITY COUNCIL PURSUANT TO AUTHORITY CONFERRED BY RESOLUTION 15645 OF THE CHULA VISTA CITY COUNCIL ADOPTED ON JUNE 5, 1990.~~

DATED:
NAME, (Section 5-300), CLERK OF THE
LEGISLATIVE BODY OF THE CITY OF
CHULA VISTA, STATE OF CALIFORNIA

2-603.2 City ~~Engineer's~~ Land Surveyor's Certificate

I HEREBY ~~CERTIFY THAT I HAVE EXAMINED THE ANNEXED MAP AND HAVE FOUND THAT THE SUBDIVISION AS SHOWN IS SUBSTANTIALLY THE SAME AS IT APPEARED ON THE TENTATIVE MAP, IF REQUIRED, AND ANY APPROVED ALTERATIONS THEREOF; THAT ALL THE PROVISIONS OF THE SUBDIVISION MAP ACT OF THE STATE OF CALIFORNIA, AS AMENDED AND ANY LOCAL ORDINANCE OF THE CITY OF CHULA VISTA APPLICABLE AT THE TIME OF THE APPROVAL OF THE TENTATIVE MAP,~~

state
~~IF REQUIRED, HAVE BEEN COMPLIED WITH, AND~~ THAT THIS MAP IS TECHNICALLY CORRECT.

(Leave Min. 2" Square
For City ~~Engineer's~~ Land Surveyor's Seal)

NAME, (See Section 5-300), CITY ENGINEER
DATED
RCE , EXP (See Section 5-300)

2-603.3 Engineers/Surveyors Statement

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION (AND WAS COMPILED FROM RECORD DATA) (AND IS BASED UPON A FIELD SURVEY) IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF (NAME OF PERSON AUTHORIZING MAP) ON (DATE). I HEREBY STATE THAT THIS PARCEL MAP SUBSTANTIALLY CONFORMS TO THE APPROVED OR CONDITIONALLY APPROVED TENTATIVE MAP, IF ANY, AND THAT ALL MONUMENTS ARE OF THE CHARACTER INDICATED AND OCCUPY THE POSITIONS SHOWN, AND SUCH MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED; ([IF DELAYED MONUMENTS] THAT I WILL SET ALL OTHER MONUMENTS INDICATED BY LEGEND ON THIS MAP WITHIN 30 DAYS AFTER THE COMPLETION OF THE REQUIRED IMPROVEMENTS AND THEIR ACCEPTANCE BY THE CITY OF CHULA VISTA.). (SEE LEGEND NOTES ON SHEET ___).

(Leave Sufficient Space
For Surveyor's Stamp)

(Signed) _____DATE: _____
R.C.E. (or L.S.) No. _____ EXPIRES _____

2-603.4 Improvement Certificate

THE FOLLOWING IMPROVEMENTS AS REQUIRED BY THE NOTICE OF APPROVAL OF THE TENTATIVE PARCEL MAP SHALL BE GUARANTEED PRIOR TO THE ISSUANCE OF ANY BUILDING PERMITS OR OTHER GRANT OF APPROVAL FOR THE DEVELOPMENT OF ANY PARCEL CREATED BY THIS MAP AS NOTED. THE OWNER SHALL BE RESPONSIBLE FOR THE FOLLOWING:

(List Required Improvements Separately)

Section 2-604 Sample Survey Bond - Note: For current bond form see: www.ci.chula-vista.ca.us

File No.: _____
Bond No.: _____

SURVEY MONUMENT INSTALLATION BOND

LET IT BE KNOWN BY THESE PRESENT, that
_____
_____ as the subdivider (hereinafter "Principal"), and
_____, a corporation of the State of _____ (hereinafter "Surety"), are held and firmly bound unto the City of Chula Vista, a municipal corporation (hereinafter "City"), in the County of San Diego, State of California, and to and for the benefit of any and all persons who may suffer damage by reason of the breach of the conditions hereof, in the penal sum of _____ _____ dollars ($_____) lawful money of the United States, to be paid to City.

WHEREAS, Principal is presently engaged in subdividing certain lands to be known as
_____
_____ subdivision in the City of Chula Vista; and,

WHEREAS, Principal and City have entered into a Subdivision Improvement Agreement approved by City Council Resolution No. _____ (hereinafter referred to as "Agreement") whereby Principal agrees to install durable survey monuments for said subdivision, which said Agreement, dated _____, 20_____, and identified as project
_____
_____, is hereby referred to and made a part hereof; and,

WHEREAS, Principal desires to not install durable survey monuments prior to the recordation of the final map of the subdivision and desires to install same at a later date,

NOW, THEREFORE, the condition of the above obligation is that if Principal shall have installed durable monuments of the survey by
_____
(Name of Licensed Civil Engineer or Land Surveyor)
in accordance with the final map of said subdivision, a copy o f which said map is hereby made and same is incorporated herein as though set forth in full, and according to the ordinances of the City of Chula Vista in full force and effect at the time of the giving of this bond, on or before the expiration of thirty (30) consecutive days following completion and acceptance of public improvements within said subdivision as specified in said Agreement, then the obligation shall be void, otherwise to be and remain in full force and effect.

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety above named, on _____, 20_____.

_____

_____

Name of Principal (Applicant) Name of Surety Company

By _____ By _____

By _____

_____

Address of Surety Company

_____

_____

Bond/Policy No. City State Zip Code

ABOVE SIGNATORIES MUST BE NOTARIZED

APPROVED AS TO FORM:

_____

City Attorney

DEVELOPMENT PROJECT PROCESSING AGREEMENT

Applicant's Name:

_____ Phone: _____

Applicant's Address:

_____

Project Type:

_____

Agreement Date: _____ Deposit Amount: $_____ Receipt No.: _____

Deposit Account No.: _____ Project Account No.: _____

This agreement ("Agreement") between the City of Chula Vista, a chartered municipal corporation ("City") and the forenamed applicant for a Development Project ("Applicant"), effective as of the Agreement Date set forth above, is made with reference to the following facts:

WHEREAS, Applicant has made application to City for review of a Tentative Map, Subdivision Map, or a certain type of permit of the type aforereferenced ("Project"), which City has required to be obtained as a condition of permitting Applicant to develop a parcel of property; and,

WHEREAS, City will incur expenses in order to process said Project through the various departments and before the various boards and commissions of the City ("Processing Services"); and,

WHEREAS, the purpose of this Agreement is to reimburse City for all expenses it will incur in connection with providing the Processing Services;

NOW THEREFORE, the parties do hereby agree, in exchange for the mutual promises herein contained, as follows:

I. **Applicant's Duty to Pay**: Applicant shall pay all of City's expenses incurred in providing Processing Services related to Applicant's Project, including all of City's direct and overhead costs related thereto. This duty of Applicant shall be referred to herein as "Applicant's Duty to Pay".

A. Applicant's Deposit Duty: As partial performance of Applicant's Duty to Pay, Applicant shall deposit the amount aforereferenced ("Deposit").

~~1.~~City shall charge its lawful expenses incurred in providing Processing Services against Applicant's Deposit. If, after the conclusion of processing Applicant's Project, and portion of the Deposit remains, City shall return said balance to Applicant without interest thereon. If, during the processing of Applicant's Project, the amount of the deposit becomes exhausted, or is imminently likely to become exhausted in the opinion of the City, upon notice of same by City, Applicant shall forthwith provide such additional deposit as City shall calculate as reasonably necessary to continue to provide Processing Services. The duty of Applicant to initially deposit and to supplement said deposit as herein required shall be known as "Applicant's Deposit Duty".

II. **City's Duty**: City shall, upon the condition that Applicant is not in breach of Applicant's Duty to Pay or Applicant's Deposit Duty, use good faith to provide Processing Services in relation to Applicant's Project application.

A. City shall have no liability hereunder to Applicant for the failure to process Applicant's Project application, or for failure to process Applicant's Project within the time frame requested by Applicant or estimated by City.

B. By execution of this Agreement, Applicant shall have no right to the Project for which Applicant has applied. City shall use its discretion in evaluating Applicant's Project application without regard to Applicant's promise to pay for the Processing Services, or the execution of the Agreement.

III. Remedies:

A. Suspension of Processing: In addition to all other rights and remedies which City shall otherwise have at law or equity, City has the right to suspend and/or withhold the processing of the Project which is the subject matter of this Agreement, as well as any other Project ~~which may be the subject matter of any other Project~~ which Applicant may have~~s~~ before the City.

B. Civil Collection: In addition to all other rights and remedies which City shall otherwise have at law or equity, City has the right to collect all sums which are or may become due hereunder by civil action, and upon instituting litigation to collect same, the prevailing party shall be entitled to reasonable attorney's fees and costs.

IV. Miscellaneous

A. Notices: All notices, demands, or requests provided for or permitted to be given pursuant to this Agreement must be in writing. All notices, demands, and requests to be sent to any party shall be deemed to have been properly given or served if personally served or deposited in the United States mail, addressed to such party, postage prepaid, registered or certified, with return receipt requested, at the addresses identified adjacent to the signatures of the parties represented.

B. Governing Law/Venue: This Agreement shall be governed by and construed in accordance with the law of the State of California. Any action arising under or relating to this Agreement shall be brought only in the federal state courts located in San Diego County, State of California, and if applicable, the City of Chula Vista, or as close thereto as possible. Venue for this Agreement, and performance hereunder, shall be the City of Chula Vista.

C. Multiple Signatories: If there are multiple signatories to this Agreement on behalf of Applicant, each of such signatories shall be jointly and severally liable for the performance of Applicant's duties herein set forth.

D. Signatory Authority: The signatory to this Agreement hereby warrants and represents, that to be the duly designated agent for the Applicant, and has been duly authorized by the Applicant to execute this Agreement on behalf of the Applicant. Signatory shall be personally liable for Applicant's Duty to Pay and Applicant's Deposit Duty in the event of non-authorization to execute this Agreement by the Applicant.

E. Hold Harmless: Applicant shall defend, indemnity, and hold harmless City, its elected and appointed officers and employees, from and against all claims for damages, liability, cost, and expense (including without limitation, attorney's fees) arising out of processing Applicant's Project, except only for those claims arising from the sole negligence or sole willful conduct of the City, its officers, or employees. Applicant's indemnification shall include any and all costs, expenses, attorney's fees, and liability incurred by City, its officers, agents, or employees in defending against such claims, whether the same proceed to judgment or not. Further, Applicant, at its own expense, shall, upon written request by City, defend any such suit or action brought against City, its officers, agents, or employees. Applicant's indemnification of City shall not be limited by any prior or subsequent declaration by Applicant.

F. Administrative Claims Requirements and Procedures: No suit or arbitration shall be brought arising out of this Agreement against City unless a claim has first been presented in writing and filed with City and acted upon by City in accordance with the procedures set forth in Chapter 1.34 of the Chula Vista Municipal Code, as same may from time to time be amended, the provisions of which are incorporated by this reference as if fully set forth herein, and such policies and procedures used by City in the implementation of same. Upon request by City, Consultant shall meet and confer in good faith with City for the purpose of resolving any dispute over the terms of this Agreement.

NOW, THEREFORE, the parties hereto, having read and understood the terms and conditions of this Agreement, do hereby express their consent to the terms hereof by setting their hand hereto on the date set forth adjacent thereto.

CITY OF CHULA VISTA
276 FOURTH AVENUE
CHULA VISTA, CA 91910

By: _____
Date:_____

APPLICANT
By: _____
Date:_____

By: _____
Date:_____

By: _____
Date:_____

2-605.2 Sample Subdivision Improvement Agreement
(Prepared by City Attorney)

Recording Requested by:
CITY CLERK
When Recorded, Mail to:
CITY OF CHULA VISTA
276 Fourth Avenue
Chula Vista, Ca. 919l0

No transfer tax is due as this is a conveyance
to a public agency of less than a fee interest
for which no cash consideration has been paid or
received.

Declarant

SUBDIVISION IMPROVEMENT AGREEMENT

THIS AGREEMENT, made and entered into this _____ day of _____ _____ , 201~~0~~, by and between THE CITY OF CHULA VISTA, a municipal corporation, hereinafter called "City", and

hereinafter called "Subdivider";

W I T N E S S E T H :

WHEREAS, Subdivider is about to present to the City Council of the City of Chula Vista for approval and recordation, a final subdivision map of a proposed subdivision, to be known as _____
_____
_____ ("Subdivision")
pursuant to the provisions of the Subdivision Map Act of the State of California, and in compliance with the provisions of Title 18 of the Chula Vista Municipal Code relating to the filing, approval and recordation of subdivision map; and,

WHEREAS, the Code provides that before said map is finally approved by the Council of the City of Chula Vista, Subdivider must have either installed and completed all of the public improvements and/or land development work required by the Code to be installed in subdivisions before final maps of subdivisions are approved by the Council for purpose of recording in the Office of the County Recorder of San Diego County, or, as an alternative thereto, Subdivider shall enter into an agreement with City, secured by an approved improvement security to e~~i~~nsure the performance of said work pursuant to the requirements of Title 18 of the Chula Vista Municipal Code, agreeing to install and complete, free of liens at Subdivider's own expense, all of the public improvements and/or land development work required in said subdivision within a definite period of time prescribed by said Council, and

WHEREAS, Subdivider is willing in consideration of the approval and recordation of said map by the Council, to enter into this agreement wherein it is provided that Subdivider will install and complete, at Subdivider's own expense, all the public improvement work required by City in connection with the proposed subdivision and will deliver to City improvement securities as approved by the City Attorney, and

WHEREAS, a tentative map of said subdivision has heretofore been approved, subject to certain requirements and conditions, as contained in Resolution No. _____ ___, approved on the _____ day of _____ ___, 200_____ ("Tentative Map Resolution"); and

WHEREAS, complete plans and specifications for the construction, installation and completion of said public improvement work have been prepared and submitted to the City Engineer, as shown on Drawings Nos. _____, on file in the office of the City Engineer, and

WHEREAS, an estimate of the cost of constructing said public improvements according to said plans and specifications has been submitted and approved by the City in the amount of

NOW, THEREFORE, IT IS MUTUALLY UNDERSTOOD AND AGREED AS FOLLOWS:

1. Subdivider, for itself and his successors in interest, ~~, an obligation the burden of which encumbers and runs with the land,~~ agrees to comply with all of the terms, conditions and requirements of the Tentative Map Resolution; to do and perform or cause to be done and performed, at its own expense, without cost to City, in a good and workmanlike manner, under the direction and to the satisfaction and approval of the City Engineer, all of the public improvement and/or land development work required to be done in and adjoining said subdivision ("Improvement Work"); and to~~will~~ furnish the necessary materials therefore, all in strict conformity and in accordance with the plans and specifications, which documents have heretofore been filed in the Office of the City Engineer and by this reference are incorporated herein and made a part hereof.

2. It is expressly understood and agreed that all monuments have been or will be installed within thirty (30) days after the completion and acceptance of the Improvement Work, and that Subdivider has installed or will install temporary street name signs if permanent street name signs have not been installed.

3. ~~It is expressly understood and agreed that~~ Subdivider shall~~will~~ cause all necessary materials to be furnished and all Improvement Work required under the provisions of this contract to be done on or before the anniversary date of Council approval of the Subdivision Improvement Agreement.

4. ~~It is understood and agreed that~~ Subdivider shall~~will~~ perform said Improvement Work as set forth hereinabove, or that portion of said Improvement Work serving any buildings or structures ready for occupancy in said subdivision, prior to the issuance of any certificate of clearance for utility connections for said buildings or structures in said subdivision, and such certificate shall not be issued until the City Engineer has certified in writing the completion of said public improvements or the portion thereof serving said building or structures approved

by the City; provided, however, that the improvement security shall not be required to cover the provisions of this paragraph.

5. ~~It is expressly understood and agreed to by~~ Subdivider shall~~that~~, in the performance of said Improvement Work, ~~Subdivider will~~ conform to and abide by all of the provisions of the ordinances of the City of Chula Vista, and the laws of the State of California applicable to said work.

6. Subdivider shall~~further agrees to~~ furnish and deliver to the City of Chula Vista, simultaneously with the execution of this agreement, an approved improvement security from a sufficient surety, whose sufficiency has been approved by the City in the sum of _____ _____ which security shall guarantee the faithful performance of this contract by Subdivider and is attached hereto, marked Exhibit "A" and made a part hereof.

7. Subdivider ~~further agrees to~~ shall furnish and deliver to the City of Chula Vista simultaneously with the execution of this agreement, an approved improvement security from a sufficient surety, whose sufficiency has been approved by the City in the sum of _____ _____ to secure the payment of material and labor in connection with the installation of said public improvements, which security is attached hereto, marked Exhibit "B" and made a part hereof and the bond amounts as contained in Exhibit "B", and made a part hereof.

8. Subdivider shall~~further agrees to~~ furnish and deliver to the City of Chula Vista, simultaneously with the execution of this agreement, an approved improvement security from a sufficient surety, whose sufficiency has been approved by the City in the sum of _____ _____ to secure the installation of monuments, which security is attached hereto, marked Exhibit "C" and made a part hereof.

9. ~~It is further agreed that~~ In the event that~~if~~ the Improvement Work is not completed within the time agreed herein, the sums provided by said improvement securities may be used by City for the completion of the Improvement Work within said subdivision in accordance with such specifications herein contained or referred, or at the option of the City, as are approved by the City Council at the time of engaging the work to be performed. Upon certification of completion by the City Engineer and acceptance of said work by City, and after certification by the Director of Finance that all costs hereof are fully paid, the whole amount, or any part thereof not required for payment thereof, may be released to Subdivider or its successors in interest, pursuant to the terms of the improvement security. Subdivider shall~~agrees~~ to pay to the City any difference between the total costs incurred to perform the work, including design and administration of construction (including a reasonable allocation of overhead), and any proceeds from the improvement security.

a. In the event that Subdivider transfers any or all of the property within the subdivision by any means, including gift, devise, sale, foreclosure, prior to completing the Improvement Work, the City may require any new owner to provide security independent of that provided by Subdivider for those purposes identified in Sections 6, 7, and 8 above.

10. It is also expressly agreed and understood by the parties hereto that in no case will the City of Chula Vista, or any department, board or officer thereof, be liable for any portion of the costs and expenses of the work aforesaid, nor shall any officer, his sureties or bondsmen, be liable for the payment of any sum or sums for said work or any materials

furnished therefore, except to the limits established by the approved improvement security in accordance with the requirements of the State Subdivision Map Act and the provisions of Title 18 of the Chula Vista Municipal Code.

11. ~~It is further understood and agreed by~~ Subdivider shall pay~~that~~ any engineering costs (including plan checking, inspection, materials furnished and other incidental expenses) incurred by City in connection with the approval of the Improvement Work plans and installation of Improvement Work hereinabove provided for, and the cost of street signs and street trees as required by City and approved by the City Engineer ~~shall be paid by Subdivider, and that Subdivider~~ , and Subdivider shall deposit, prior to recordation of the Final Map, with City a sum of money sufficient to cover said cost.

12. ~~It is understood and agreed that until such time as all Improvement Work is fully completed and accepted by City,~~ Subdivider shall~~will~~ be responsible for the care, maintenance of, and any damage to, the streets, alleys, easements, and water and sewer lines within the proposed subdivision until such time as all Improvement Work is fully completed and accepted by City. ~~It is further understood and agreed that~~ Subdivider shall guarantee all public improvements for a period of one year from date of final acceptance and correct any and all defects or deficiencies arising during said period as a result of the acts or omission of Subdivider, its agents or employees in the performance of this agreement, and that upon acceptance of the work by City, Subdivider shall grant to City, by appropriate conveyance, the public improvements constructed pursuant to this agreement; provided, however, that said acceptance shall not constitute a waiver of defects by City as set forth hereinabove.

13. ~~It is understood and agreed that~~ City, as indemnitee~~y~~, or any officer or employee thereof, shall not be liable for any injury to person or property occasioned by reason of the acts or omissions of Subdivider, its agents or employees, or indemnity, related to this agreement.

14. Subdivider shall~~further agrees to~~ defend, indemnify~~protect~~ and hold the City, its officers and employees, harmless from any and all claims, demands, causes of action, liability or loss of any sort, because of or arising out of acts or omissions of Subdivider, its agents or employees, or indemnitee~~y~~, related to this agreement; provided, however, that the approved improvement security shall not be required to cover the provisions of this paragraph. Such indemnification and agreement to hold harmless shall extend to damages to adjacent or downstream properties or the taking of property from owners of such adjacent or downstream properties as a result of the construction of said subdivision and the public improvements as provided herein. It shall also extend to damages resulting from diversion of waters, change in the volume of flow, modification of the velocity of the water, erosion or siltation, or the modification of the point of discharge as the result of the construction and maintenance of drainage systems. The approval of plans providing for any or all of these conditions shall not constitute the assumption by City of any responsibility for such damage or taking, nor shall City, by said approval, be an insurer or surety for the construction of the subdivision pursuant to said approved improvement plans. The provisions of this paragraph shall become effective upon the execution of this agreement and shall remain in full force and effect for ten (l0) years following the acceptance by the City of the improvements.

15~~l4~~. Subdivider shall~~agrees~~ to defend, indemnify, and hold harmless the City or its agents, officers, and employees from any claim, action, or proceeding against the City or its agents, officers, or employees to attack, set aside, void, or annul, an approval of the City, advisory agency, appeal board, or legislative body concerning a subdivision, which action is

brought within the time period provided for in Section 66499.37 of the Government Code of the State of California.

16. The burden of the covenants contained in this Agreement ("Burden") is for the benefit of the Subdivision and the City, its successors and assigns and any successor in interest thereto. City is deemed the beneficiary of such covenants for and in its own right and for the purposes of protecting the interest of the community and other parties public or private, in whose favor and for whose benefit of such covenants running with the land have been provided without regard to whether City has been, remained or are owners of any particular land or interest therein. If such covenants are breached, the City shall have the right to exercise all rights and remedies and to maintain any actions or suits at law or in equity or other proper proceedings to enforce the curing of such breach to which it or any other beneficiaries of this Agreement and the covenants may be entitled.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed the day and year first hereinabove set forth.

THE CITY OF CHULA VISTA
SUBDIVIDER:

~~Mayor~~ City Engineer of the City of Chula Vista

ATTEST
City Clerk

Approved as to form by

City Attorney

(Attach Notary Acknowledgment)

LIST OF EXHIBITS

Exhibit "A" ~~Improvement Security - Faithful Performance~~

~~Form:~~

~~Amount:~~Legal Description

Exhibit "B" Securities
Improvement Security - Material and Labor Amount / Bond Number
Improvement Security – Faithful Performance Amount / Bond Number
Monumentation Bond Amount and Bond Number~~:~~

~~Form:~~

~~Amount:~~

~~Exhibit "C" Improvement Security - Monuments:~~

~~Form:~~

~~Amount:~~

Securities approved as to form and amount by

City Attorney

Improvement Completion Date:

~~H:\home\attorney\ssia\subdivis.std~~

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2-605.3 Sample Supplemental Subdivision Improvement Agreement
(Prepared by City Attorney)

RECORDING REQUESTED BY:)

)
City Clerk
)
)
WHEN RECORDED MAIL TO:)
)
CITY OF CHULA VISTA
)
276 Fourth Avenue
)
Chula Vista, CA 91910
)

)
No transfer tax is due as this is a)
conveyance to a public agency of)
less than a fee interest for which)
no cash consideration has been paid)
or received.
)
)
)
_____
)
Developer
)
)

Above Space for Recorder's Use

SUPPLEMENTAL SUBDIVISION IMPROVEMENT AGREEMENT

(Conditions _, _, __, __, __, __, __,)

This Supplemental Subdivision Improvement Agreement ("Agreement") is made this ____ _____ day of _____, 201~~0~~_, by and between THE CITY OF CHULA VISTA, California ("City" or "Grantee" for recording purposes only) and _____ _____, a _____ _____ ("Developer" or "Grantor"), with reference to the facts set forth below, which recitals constitute a part of this Agreement:

RECITALS

A. This Agreement concerns and affects certain real property located in Chula Vista, California, more particularly described on Exhibit "A" attached hereto and incorporated herein ("Property"). The Property is part of a project commonly known as _____ _____. For purposes of this Agreement the term "Project" shall mean "Property".

B. Developer is the owner of the Property.

C. Developer has applied for and the City has approved a Tentative Subdivision Map commonly referred to as _____ ___, Tract _____ ("Tentative Subdivision Map") for the subdivision of the Property.

D. The City has adopted Resolution No. ~~_____~~2010-278 ("Standard Resolution") pursuant to which standard Tentative Map Conditions have been approved for every ~~every~~ subdivision and has adopted Resolution No. _____ ("Resolution") pursuant to which it has approved the Tentative Subdivision Map subject to certain conditions as more particularly described in the Resolution. The description of the conditions in this recital section of this Agreement is intended only to summarize and paraphrase such conditions in the Resolution, and is not intended herein to modify, ~~or~~ explain ~~them~~, or be used~~and is not intended~~ as a basis for interpreting them.

E. Condition No. __ and __ of the Standard Resolution requires Developer to...

F. Condition No. ___ of the Resolution requires Developer to...

G. Condition No. __ of the Resolution requires the Developer to...

H. City is willing, on the premises, security, terms and conditions herein contained to approve the final map for which Developer has applied as being in substantial conformance with the Tentative Subdivision Map described in this Agreement.

NOW, THEREFORE, in exchange for the mutual covenants, terms and conditions herein contained, the parties agree as set forth below.

1. Agreement Applicable to Subsequent Owners.

1.1 **Agreement Binding Upon Successors**. This Agreement shall be binding upon and inure to the benefit of the transfereees~~successors~~, assigns and successors in interest~~s~~ of the parties as to any or all of the Property until released by the mutual consent of the parties.

1.2 **Agreement Runs with the Land**. The burden of the covenants contained in this Agreement ("Burden") is for the benefit of the Property and the City, its successors and assigns and any successor in interest thereto. City is deemed the beneficiary of such covenants for and in its own right and for the purposes of protecting the interest of the community and other parties public or private, in whose favor and for whose benefit of such covenants running with the land have been provided without regard to

whether City has been, remained or are owners of any particular land or interest therein. If such covenants are breached, the City shall have the right to exercise all rights and remedies and to maintain any actions or suits at law or in equity or other proper proceedings to enforce the curing of such breach to which it or any other beneficiaries of this agreement and the covenants may be entitled.

a. **Developer Release on Guest Builder Assignments**. If Developer assigns any portion of the Project, Developer may ~~have the right to~~ obtain a release of any of Developer's obligations under this Agreement, provided Developer obtains the prior written consent of the City to such release. Such assignment shall, however, be subject to this Agreement and the Burden of this Agreement shall remain a covenant running with the land. The City shall not withhold its consent to any such request for a release so long as the assignee acknowledges that the Burden of the Agreement runs with the land, assumes the obligations of the Developer under this Agreement, and demonstrates, to the reasonable satisfaction of the City, its ability to perform its obligations under this Agreement as it relates to the portion of the Project which is being acquired by the Assignee.

b. **Partial Release of Developer's Assignees**. If Developer assigns any portion of the Project subject to the Burden of this Agreement, upon request by the Developer or its assignee, the City shall release the assignee of the Burden of this Agreement as to such assigned portion if such portion has complied with the requirements of this Agreement and such partial release will not, in the opinion of the City, jeopardize the likelihood that the remainder of the Burden will not be completed.

2. **Condition No. __ - (Title of Condition**). In satisfaction of Condition No. ___ of the Resolution, Developer

3. **Condition No. __ - (Title of Condition)**. In satisfaction of Condition No. __ of the Resolution, Developer

SEE ATTACHED SCHEDULE 1 FOR COMMON CONDITIONS FOUND
IN SUBDIVISION MAP APPROVALS

4. **Satisfaction of Conditions**. City agrees that the execution of this Agreement constitutes satisfaction of Developer's obligation of Conditions __, __, __, __, of the Resolution.

5. **Recording**. This Agreement, or an abstract hereof prepared by either or both parties, may be recorded by either party.

6. Miscellaneous.

6.1 **Notices**. Unless otherwise provided in this Agreement or by law, any and all notices required or permitted by this Agreement or by law to be served on or delivered to either party shall be in writing and shall be deemed duly served, delivered, and received when personally delivered to the party to whom it is directed, or in lieu thereof, when three (3) business days have elapsed following deposit in the U.S. mail, certified or registered mail, return receipt requested, first-class postage prepaid, addressed to the address indicated in this Agreement. A party may change such address for the purpose of

this paragraph by giving written notice of such change to the other party. Facsimile transmission shall constitute personal delivery.

CITY OF CHULA VISTA
276 Fourth Avenue
Chula Vista, CA. 91910
Attn: Director of Public Works

Developer:

Attn: _____

A party may change such address for the purpose of this paragraph by giving written notice of such change to the other party in the manner provided in this paragraph. Facsimile transmission shall constitute personal delivery.

6.2 **Captions**. Captions in this Agreement are inserted for convenience of reference and do not define, describe or limit the scope or intent of this Agreement or any of its terms.

6.3 **Entire Agreement**. This Agreement contains the entire agreement between the parties regarding the subject matter hereof. Any prior oral or written representations, agreements, understandings, and/or statements shall be of no force and effect. This Agreement is not intended to supersede or amend any other agreement between the parties unless expressly noted.

6.4 **Preparation of Agreement**. No inference, assumption or presumption shall be drawn from the fact that a party or his attorney prepared and/or drafted this Agreement. It shall be conclusively presumed that both parties participated equally in the preparation and/or drafting this Agreement.

6.5 **Recitals; Exhibits**. Any recitals set forth above are incorporated by reference into this Agreement.

6.6 **Attorneys' Fees**. If either party commences litigation for the judicial interpretation, reformation, enforcement or rescission hereof, the prevailing party will be entitled to a judgment against the other for an amount equal to reasonable attorney's fees and court costs incurred. The "prevailing party" shall be deemed to be the party who is awarded substantially the relief sought.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed the day and year first hereinabove set forth.

CITY OF CHULA VISTA
DEVELOPER:

By:

Mayor

[Name]

Attest:

[Title]

(See Section 5-300), City Clerk By:

Approved as to Form:

[Name]

(See Section 5-300), City Attorney

[Title]

Attach Notary Acknowledgment)

EXHIBIT "A"

Property Description

[To Be Attached]

~~COMMON CONDITIONS FOUND IN SUBDIVISION MAP APPROVALS~~

~~1. **Condition No. __ - No Protest of Maintenance District or Assessment District**. In satisfaction of Condition No. __ of the Resolution, Developer hereby agrees not to protest the formation of a maintenance district for the maintenance of _____ and not to protest the formation of and inclusion of the Property in an assessment district for the maintenance of _____ _____. This agreement to not protest the inclusion of these public improvements shall not be deemed a waiver of the right to challenge the amount of any assessment which may be imposed due to the addition of these new improvements and shall not interfere with the right of any person to vote in a secret ballot election.~~

~~2. **Condition No. __ - No Protest of Formation of Community Facility District**. In satisfaction of Condition No. __ of the Resolution, Developer hereby agrees not to protest the formation of and inclusion of the Property in a community facility district to finance _____. This agreement to not protest the inclusion of these public improvements shall not be deemed a waiver of the right to challenge the amount of any assessment which may be imposed due to the addition of these new improvements and shall not interfere with the right of any person to vote in a secret ballot election.~~

~~3. **Condition No. __ - Subdivision Map Indemnity**. In satisfaction of Condition No. __ of the Resolution, the Developer agrees that, on the condition that City shall promptly notify the Developer of any claim, action or proceeding and on the further condition that the City fully cooperates in the defense, the Developer shall defend, indemnify, and hold harmless the City, and its agents, officers and employees, from any claim, action or proceeding against the City, or its agents, officers or employees, to attack, set aside, void or annul any approval by the City, including approvals by its Planning Commission, City Council, or any approval by its agents, officers, or employees with regard to this Project.~~

~~4. **Condition No. __ - Cable Television Easements**. In satisfaction of Condition No. __ of the Resolution, the Developer agrees to permit all cable television companies franchised by the City of Chula Vista equal opportunity to place conduit to and provide cable television service for each lot or unit within the Project. Developer further agrees to grant, by license or easement, and for the benefit of, and to be enforceable by, the City of Chula Vista, conditional access to cable television conduit within the properties situated within the Project only to those cable television companies franchised by the City of Chula Vista the condition of such grant being that (a) such access is coordinated with Developer's construction schedule so that it does not delay or impede Developer's construction schedule and does not require the trenches to be reopened to accommodate the placement of such conduits; and (b)any such cable company is and remains in compliance with, and promises to remain in compliance with, the terms and conditions of the franchise and with all other rules, regulations, ordinances and procedures regulating and affecting the operation of cable television companies as same may have been, or may from time to time be, issued by the City of Chula Vista. Developer hereby conveys to the City of Chula Vista the authority to enforce said covenant by such remedies as the City determines appropriate, including revocation of said grant upon a determination by the City of Chula Vista that they have violated the conditions of the grant.~~

~~5. **Condition No. __ of Resolution No. _____ - Erosion and Drainage Indemnity**. In satisfaction of Condition No. __ of Resolution No. _____, the Developer agrees that, on~~

~~the condition that City shall promptly notify the Developer of any claim, action or proceeding, Developer shall defend, indemnify, and hold harmless the City, and its agents, officers and employees, from any claim, action, or proceeding against the City, or its agents, officers or employees, related to erosion, siltation or increased flow of drainage resulting from the Property. City agrees to reasonably cooperate with Developer in the defense of any such action, claim or proceeding.~~

~~6. **Condition No. __ of Resolution No. _____ - Implement previously adopted conditions**. In satisfaction of Condition ___ Developer hereby agrees, unless otherwise conditioned, that Developer shall comply with all unfulfilled conditions of approval of the _____ Tentative Map, Tract ____ established by Resolution No. ____ approved by Council on _____ and shall remain in compliance with and implement the terms, conditions and provisions of _____.~~

Section 2-605.4

CITY OF CHULA VISTA
OFFERS OF DEDICATION – ACCEPTANCE AND REJECTION

FINAL COPY	OPEN SPACE & PARKS DEDICATION OF FEE INTEREST*	ROADWAY DEDICATIONS
Dedication Language	We hereby Offer to Dedicate an Irrevocable Fee Interest to the City of Chula Vista, a municipal corporation, in Lots <list lots> for Open Space and Other Public Purposes and Lots <list lots> for Public Park Purposes, all as shown on this map within this subdivision. ~~(Separate instrument also executed)~~	We hereby dedicate for public use <list street names>, all as shown on this map within this subdivision.
Acceptance Language	. . . and has accepted Lots <list lots> for Open Space and Other Public Purposes and Lots <list lots> for Public Park Purposes, all as shown on this map within this subdivision. . .	. . . and has accepted on behalf of the Public <list street names>.
Rejection Language	. . . and has ~~acknowledged~~ rejected on behalf of the City of Chula Vista the Irrevocable Offer(s) of a Dedication of Fee Interest in Lots <list lots> for Open Space and Other Public Purposes and Lots <list lots> for Public Park Purposes, all as shown on this map within this subdivision, noting that Section ~~7050 of the Government Code of the~~66477.2(a) ~~State of California~~ of the Map Act provides that such offers of dedication may be accepted at any future time by the City Council.	. . . and has rejected on behalf of the public <list street names>, all as shown on this map within this subdivision, noting that Section 66477.2 of the Subdivision Map Act provides that an offer of dedication shall remain open and subject to future acceptance by the City Council. [Section (664~~5~~77.2) provides that the City Council may, by resolution at a later date, rescind its action]
Separate Instrument	See attached "Grant Deed" for acceptance and "Irrevocable	

FINAL COPY	OPEN SPACE & PARKS DEDICATION OF FEE INTEREST*	ROADWAY DEDICATIONS
	Offer of Dedication of Fee Interest" for acknowledgment. ~~[Separate document executed with final map. City Clerk acknowledges offer under authority to accept deeds or grants to real property per Resolution 15645]~~	NONE REQUIRED
Final Map Title Sheet	The Irrevocable Offer of Dedication recorded [DATE] as File No. [###] offered to the City of Chula Vista, a municipal corporation, in Lots <list lots> for "Open Space and Other Public Purposes"[3] and Lots <list lots> for "Public Park Purposes"[3], is not shown on this map because it has been terminated, vacated and abandoned pursuant to ~~Section 7050 of the CA Government Code and Section 8335 of the CA Streets and Highways Code~~Section 66434(g) (for Final Maps) 66445(j) (for Parcel Maps) of the CA Government Code.	The Irrevocable Offer of Dedication for "Street Right of Way"[3] purposes recorded [DATE] as File No. [###] offered to the City of Chula Vista, a municipal corporation, for public purpose <list street names>, is not shown on this map because it has been terminated pursuant to Section 66434(g) (for Final Maps) 66445(j) (for Parcel Maps) of the CA Government Code. ~~66477.2(e) of the Subdivision Map Act of the CA Government Code.~~
City ~~Clerk's~~ Engineer'sLanguage	. . . and has terminated, vacated and abandoned the Irrevocable Offer of Dedication recorded [DATE] as File No. [###] offered to the City of Chula Vista, a municipal corporation, in Lots <list lots> for "Open Space and other Public Purposes"[3] and Lots <list lots> for "Public Park Purposes"[3], pursuant to Section 66434(g) (for Final Maps) 66445(j) (for Parcel Maps) of the CA Government Code.~~7050 of the CA Government Code and Section~~	. . . and has terminated the Irrevocable Offer of Dedication for "Street Right of Way"[3] purposes recorded [DATE] as file No. [###} offered to the City of Chula Vista, a municipal corporation, for public purpose <list street names>, pursuant to Section 66434(g) (for Final Maps) 66445(j) (for Parcel Maps) of the CA Government Code.~~66477.2(e) of the Subdivision Map Act of the CA Government Code~~(or .

FINAL COPY	OPEN SPACE & PARKS DEDICATION OF FEE INTEREST*	ROADWAY DEDICATIONS
	~~8335 of the CA Streets and Highways Code.~~	
Notes	1. Use 66477.2(e) of the Subdivision Map Act of the CA Government Code for resubdivisions for termination of a resubdivision or reversion to acreage. ~~Summary vacations shall only be utilized for unaccepted IOD's~~. 2. No separate resolution pursuant to Section 7050 of the Government Code and Section 8335 of the Streets and Highways Code is needed if the above termination language is noted on a Final Map. ~~If terminated, vacated, and abandoned by separate document, use separate resolution per Section 7050 of the CA Government code and Section 8335 of the CA Streets and Highways Code rather than on a Final Map.~~ ~~3. Description of use should be identical to that listed on the IOD being vacated.~~	~~1. No separate resolution is needed if the above termination language is noted on a Final Map.~~ ~~2. If a street has been previously dedicated in fee to the City, then its vacation is accomplished by separate document. Use a separate resolution for summary vacation per Section 8335 of the CA Streets and Highways Code rather than on a Final Map.~~ ~~3. Description of use should be identical to that listed on the IOD being vacated.~~

3 - GENERAL DESIGN CRITERIA

This section contains general guidelines for the design of subdivisions and related improvements. This section is intended as a guide only. The requirements, definitions and provisions of the following documents control subdivision design and are incorporated herein by reference: Chula Vista Municipal Code; Chula Vista Street Design Standards Policy; and Chula Vista Design and Construction Standards.

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GENERAL DESIGN CRITERIA
SECTION 3-100
LOT DESIGN

3-100 LOT DESIGN

3-101 General

Subdivision lots shall be designed to present an orderly and uniform appearance pursuant to the requirements in Title 19 of the Chula Vista Municipal Code (Zoning Ordinance) and approved SPA plan for the site. All requirements, definitions, and provisions of the Zoning Ordinance are hereby incorporated by reference.

3-102 Size

3-102.1 Each lot shall constitute a practical building site appropriate for the type of development contemplated, and shall include adequate pad areas. The pad area is adequate if it accommodates the proposed structures with adequate level areas as determined by the Zoning Ordinance.

3-102.2 The minimum lot area, lot widths, depths, and building setbacks are established by the Zoning Ordinance. Although a lot may have the required "lot area", it may not have adequate "pad area" due to slopes on the lot. Therefore, the "pad area" actually dictates the size of the lot. Custom lots are not usually affected by "pad area" because the house will be designed to fit the site.

3-102.3 The minimum depth for all residential lots shall be as established by the Zoning Ordinance (Title 19 of the Municipal Code) or by Planned Community District Regulations in a PC Zone District.

3-103 Frontage

3-103.1 Minimum lot frontages are established by the Zoning Ordinance and the Planned Community District Regulations. The Zoning Ordinance and Planned Community District Regulations will prevail over conflicting provisions contained in this manual.

3-103.2 Each lot created shall have direct access to public right of way unless waived by Planning Commission or meet flag lot provisions (See Section 19.22.150 of the Municipal Code). If this requirement is waived each lot shall have adequate access to public right of way via access easements or private streets.

3-103.3 The minimum lot frontage of a lot on a cul-de-sac or knuckle is 35 feet (11m) to allow adequate distance between driveways for on street parking or as prescribed in the Planned Community District Regulations.

3-103.4 Lots fronting on two (2) paralleling local streets are not permitted. Dual frontage lots may be permitted in "hillside development" areas but will have rights of access to only one street subject to approval of the City Engineer and Director of ~~Planning~~Development Services.

3-103.5 Lots shall not front on prime arterials, major streets, Class I collectors, railroads, transmission lines and drainage channels unless otherwise approved by the Planning Commission or City Council. Lots may have rear lot lines that abut these areas or front lot lines on a frontage road.

3-103.6 If double frontage lots are approved and border a major or collector street, access to such streets shall be relinquished and a decorative masonry wall plus a ten foot minimum width landscape area with an automatic sprinkler system shall be provided for the full width of the lot.

3-103.7 Whenever lots are permitted to front on arterial, major or Class I collector streets by the Planning Commission or City Council, a "T" type driveway shall be provided on each lot in order that a car not back out onto the street because of the high potential traffic hazard.

3-104 Lot Lines

3-104.1 Side lot lines should be 90° perpendicular to a straight street and radial to a curved street and cul-de-sac to present a more orderly appearance. Side lot lines which are not perpendicular or radial may be permitted if the standard lot configurations would be awkward.

3-104.2 Lot lines shall be located at the top of slope because it is easier to maintain the slope from the down side of the slope. The lot line shall never be located on the slope. If a subdivision boundary line is at the toe of a slope, the toe shall be set back a sufficient distance to allow maintenance.

3-104.3 Lots shall not be divided by a City boundary or by a tax code boundary.

3-105 Lot Grading and Drainage

1. Each lot shall be graded so that storm water will drain from the back yard through the side yards and front yard, directly to the abutting street or to an approved drainage facility as approved by the City Engineer.

2. Within street tree easements, the maximum slope shall be 5:1 (up or down).

3-106 Street Trees

The developer shall be responsible for street trees in accordance with Section 18.28.10 of Chula Vista Municipal Code and shall be planted in accordance with approved City Landscape Improvement Plans. The use of approved herbicidal root barriers shall be included where required by the City Engineer to reduce the impact of root systems disrupting adjacent sidewalks and rights-of-way.

3-107 Miscellaneous

1. The design of the subdivision shall provide, to the extent feasible, for future passive or natural heating or cooling opportunities in accordance with the Section 66473.1 of the Subdivision Map Act.

2. If the subdivision includes or abuts a waterway, stream or river there must be a dedication of a public easement along a portion of bank or waterway pursuant to Map Act Section 66478.5.

GENERAL DESIGN CRITERIA
SECTION 3-200
HYDROLOGY/DRAINAGE/URBAN RUNOFF

3-200 HYDROLOGY/DRAINAGE/URBAN RUNOFF

3-201 General

This section establishes design criteria and procedures to be followed in the design of storm drain facilities.

3-201.1 Definitions

(1) Major Drainage Channel or System - A channel which drains an area in excess of 750 acres (3km2).

(2) Lateral Drainage Channel or System - A channel which drains an area in excess of 100 acres (0.40km2) but less than 750 (3km2) acres and empties into a major channel.

(3) Local Drainage Channel or System - A drainage system which collects local runoff from an area of less than 100 acres (0.40km2) and transports water to a lateral or major system.

(4) Drainage Channel or System - An open or closed conduit, improved or unimproved, designed for the purpose of collecting and transporting storm water runoff in such manner as to protect public and private property.

(5) Drainage Structure - A catch basin, outlet, inlet, headwall, spillway, energy dissipater, junction box, cleanout box, diversion box, etc., in a drainage channel or closed conduit system.

(6) Design Storm - A storm of a magnitude that may be expected to occur once during a specified number of years and resulting in the maximum storm water runoff to be anticipated once during that specified number of years.

(7) Dry Lane - A minimum street width that shall not be inundated at all times during a given design storm.

3-201.2 General Responsibility for Drainage Facilities - The developer of a proposed subdivision is required to:

(1) Accept any drainage entering a proposed subdivision and to provide adequate drainage facilities to convey all drainage on the property to discharge into, or connect to, the drainage facility into which the drainage would naturally flow;

(2) Provide on-site storm detention facilities such that the post-development flow rate for a given design storm does not exceed the pre-development flow rate at the outlet of the subdivision;

(3) Provide on-site erosion protection and desilting facilities

(4) Provide bonds for the cost of design and construction of any drainage facilities, including but not limited to off-site easements or facilities, necessary to accomplish these responsibilities.

(5) Provide all graded pads with adequate drainage facilities as approved by the City Engineer.

(6) Submit plans for all private storm drain systems for review and approval by the City Engineer.

3-201.3 Design Flows. Storm drain facilities shall be designed to convey design flows as follows:

(1) All major drainage channels shall be designed to discharge a 100-year ultimate storm, without static head;

(2) Lateral channels shall be designed to discharge a 50-year storm without static head at entrances and a 100-year ultimate storm utilizing available head without causing any damage to surrounding property;

(3) Local channels and drainage facilities within street right of ways shall be designed to discharge a 50-year storm utilizing available head without causing any property damage

(4) All storm drainage systems shall be designed so that the combination of the underground storm drain capacity and street overflow without dry-lane limitations shall convey the 100-year storm event without property damage. For tidally influenced areas the tail water assumed for this calculation shall be 16 inches higher than the highest high tide.

(5) Where a sump condition exists and excess runoff has no alternate route, special design shall be required for the protection of property.

(6) At all major intersections (with major, prime or expressways), surface drainage shall be fully intercepted by properly sized inlets. All inlets adjacent to major intersections shall be designed to intercept a 50-year storm event.

3-202 Hydrologic/Drainage/Urban Runoff Reports

Hydrology and/or drainage reports shall be submitted as required per this manual. Reports shall include the following:

3-202.1 A suitable and recent topographic map that shows the following:

(1) On-site drainage maps at a minimum scale of 1"=100' (1cm=10m)

(2) Off-site drainage maps scales may vary depending on the size of the drainage area covered by the map.

(3) Shows appropriate contours on the map for the drainage on-site and extending beyond the subdivision boundary to indicate the drainage pattern.

(4) Indicate the existing basin boundaries and existing drainage facilities.

(5) Show proposed subdivision layout, proposed drainage systems, and proposed basin layout.

(6) Show quantity of flow and time of concentration at each inlet, outlet, interceptor, point of concentration or confluence points.

(7) All drainage area labels, points of concentration labels and system designations shall be shown in the logical order corresponding to the attached calculations.

(8) Indicate all crests, sags and street intersections with flow arrows.

(9) Compare pre-development and post-development flow rates for a given design storm at the outlet(s) of the subdivision.

(10) To mitigate runoff due to development, show on-site regional detention/desilting facilities that act as treatment control structural Best Management Practices (BMPs). Temporary and permanent detention/desilting facilities shall be shown on the plans.

3-202.2 Report Calculations

(1) Hydrology studies shall use appropriate methods and show in detail the determination of basin areas, basin flows, time of concentration, and all assumptions and physical data

(2) Hydraulic studies shall show that all conduits, channels and appurtenances are adequate to handle design flows. Studies shall include entrance and exit conditions, head losses, design flows and velocities, critical depth, scouring and silting velocities, energy and hydraulic gradient lines.

(3) Hydraulic studies shall also include a profile plot for all proposed channels showing channel flow line and water surface profile and hydraulic gradient line for the design-year storm event.

(4) Detention basin calculations shall include inflow and outflow hydrographs developed using an acceptable modeling procedure.

(5) Erosion control calculations shall show that silt and debris generation will be contained on-site using proposed measures including desilting and sedimentation basins.

~~3-203~~ 3-203 Hydrology

Developers draining to a river or stream will be required to use the latest adopted County Hydrology Manual to determine the flows expected at a given frequency (Q10, Q50 Q100, etc,) Infill developments will use the following Hydrology requirements.

The City Engineer will determine which projects may be considered "infill" projects.

3-203.1 Previously Approved Reports - Runoff quantities; as set forth or derived from the report prepared by Lawrence, Fogg, Florer and Smith titled "A Special Study of Storm Drain Facilities" on file in the office of the City Engineer may be used in the design of drainage facilities in Chula Vista. A hydrologic study prepared and approved at General Development Plan (GDP) or Specific Planning Area (SPA) plan may be used as determined by the City Engineer.

3-203.2 For local drainage basins, storm discharge flow may be estimated based on the Rational Method or the Modified Rational Method. For all lateral and major drainage basins the SCS method, U.S. Army Corps of Engineers HEC-1 computer method or other tabular or computer method may be used upon City Engineer approval.

3-203.3 Rational and Modified Rational Methods

(1) The rational method equation relates storm rainfall intensity (I), a selected runoff coefficient (C) and drainage area (A) to the peak runoff rate (Q):

$$Q = CIA \text{ (Empirical Units)}$$

where:

Q = Peak runoff in cubic feet per second
C = Runoff coefficient
I = Intensity, inches per hours
A = Drainage basin area in acres

Or

$$Q=0.278CIA \text{ (Metric Units)}$$

where:

Q = Peak runoff in cubic meters per second
C = Runoff coefficient
I = Intensity in millimeters per second
A = Drainage area in square kilometers

(2) Coefficient of Runoff: Consider probable development. Use highest number of the following values:

a)	Paved Surface	0.90
b)	Commercial Area	0.85
c)	Dense Residential (R2, R3)	0.75
d)	Normal Residential (R1)	0.65
e)	Suburban Property (RE)	0.55
f)	Barren Slopes Steep	0.80
g)	Barren Slopes Hilly	0.75
h)	" " Rolling	0.70
i)	" " Flat	0.65
j)	Vegetated Slopes Steep	0.60
k)	" " Hilly	0.55

l)	"	" Rolling	0.50
m)	"	" Flat	0.45
n)	Farm Land		0.35
o)	Parks, Golf Courses		0.30

NOTES:	Steep =	Steep, rugged terrain with average slopes generally above 30%.
	Hilly =	Hilly terrain with average slopes of 10% to 30%.
	Rolling =	Rolling terrain with average slopes of 5% to 10%.
	Flat =	Relatively flat land, with average slopes of 0% to 5%.
	Composite =	Where drainage areas are composed of parts having different runoff characteristics, a weighted coefficient for the total drainage area may be used.

The runoff coefficient for a basin should be a composite coefficient made of the many different runoff coefficients for the sub-areas of the basin per equation:

$$CA_T = C_1A_1+C_2A_2+\ldots CnAn$$
n

(3) Time of Concentration (t_c = minutes) is the time required for runoff to flow from the most remote part of the watershed to the outlet point under consideration. With exceptions for limited natural watersheds, the time of concentration shall be calculated as follows:

a) $t_c = t_i + t_f$ where:

t_i = Initial time or overland flow time of concentration, the time required for runoff to flow to the first inlet or to the street gutter

t_f = Travel time of concentration, the time required for runoff to flow within street gutters to inlets, with channels or within storm drain pipes.

b) t_i may be calculated using the following natural watershed flow formula:

$$t_i = 60x\ [(11.9L^3)/H]^{0.385}$$

L = Length of water shed (miles)
H = Difference in elevation from furthermost point to the design point (feet).

If computed t_i is:	Add
Less than 5 Minutes	6 Minutes
5-10 Minutes	5 Minutes
11-15 Minutes	Use 15 Minutes
Greater than 15 Minutes	0 Minutes

NOTE: Add minutes only when using this formula.

c) or, t_l may be calculated using the following flow formula for developed areas with overland flow:

$$t_l = \frac{1.8(1.1-C)\sqrt{D}}{\sqrt[3]{S}} \quad \text{(in minutes)}$$

D = Length of watercourse (feet)
S = Slope (percent)
C = Runoff coefficient

d) For limitations in using these formulas, refer to the San Diego County Hydrology Manual.

(4) **Intensity of Rainfall** (I = inches/hr.) – The rainfall intensity (I) can be calculated using the following equation:

$$I = 7.44\ P_6\ D^{-0.645}$$

P_6 = adjusted 6-hour storm precipitation (If P_6 is not within 45% to 65% of P_{24}, increase or decrease P_6 as necessary to meet this criteria.)
D = duration in minutes (use t_c)

Note: (1) This equation applies only to the 6-hour storm.
(2) The 24-hour isopluvials are available from the County. The 6-hour isopluvials are in Chula Vista Design Standards.

(5) Area of water shed (A = acres), measured using suitable topographic map.

3-203.4 Other recognized hydrologic methods to determine runoff may be used, if substantiated, and approved by the City Engineer.

3-203.5 Whenever 6-hour storm precipitation rates (10, 50 or 100-year) are used to determine rainfall intensity, the Isopluvial Maps of the City of Chula Vista shall be used.

3-204 Drainage Criteria

The storm drainage system, consisting of surface and sub-surface facilities, shall be designed of sufficient capacity, without regards to dry-lane requirements, to convey the 100-year storm event without any damage to properties.

3-204.1 Street System

(1) For local drainage systems, inlet size and spacing shall be designed to intercept a 50-year storm without exceeding the City dry lane requirements and without causing property damage.

(2) Underground storm drain facilities, pipes and appurtenances shall be designed to discharge a 50-year storm runoff in an open channel flow condition. If offsite conditions create a seal, special pipe and/or joint design may be required for pressure flow.

(3) Dry-lane Requirements – In no case shall flow (Q_{50}) exceed the top of the curb.
a) Expressways, Six-lane Prime Arterials, and Six-lane Major roads shall maintain two driving lanes dry in each direction.

b) Four-lane Major, Class I Collector and Village Entry roads shall maintain a 12-foot dry lane on each side of centerline (or raised median)

c) Class II and Class III Collector, Secondary Village Entry, Promenade and Residential Streets' flow shall not exceed the top of curb

d) ~~d)~~ Industrial streets' flow shall not exceed the top of curb.

e) Criteria for tidally influenced areas. The tail water elevations for all dry lane drainage calculations shall be performed at the highest high tide plus an anticipated 16" of sea level rise.

(4) All drainage shall be intercepted and collected at superelevated roadway transition sections where concentrated flows are not permitted to cross travel lanes under the design storm frequency for the street. Median inlets shall be designed and spaced so the lane adjacent to the median (number one lane or fast lane of traffic adjacent to the median) is free from drainage flow for the design storm frequency.

(5) Under no circumstances shall the flow on one side of given street at a set slope exceed the capacity of a 21 foot inlet (20' opening) to intercept 100% of the flow (Q_{50}).

3-204.2 Storm Drain Facilities - Specific methods of handling storm drainage are subject to detailed approval of the City Engineer based on currently accepted engineering practices supported by thorough engineering calculations. The following guidelines shall be used for work in the City of Chula Vista.

(1) The following Manning "n" factors are to be used:

a)

Pipe	n	
CMP, fully bituminous coated	0.024	(Not allowed in City maintained system)
CMP, fully asphalt paved	0.018	(Not allowed in City maintained system)
CMP, invert asphalt paved	0.023	(Not allowed in City maintained system)
RCP, All	0.013	
Cast in place	0.014	
PVC & HDPE, ALL	0.012	

b)

Channel	n
P.C.C., formed, no finish	0.015
P.C.C., trowel finish	0.013
P.C.C., float finish	0.014
Gunite, no finish	0.019

Gunite, trowel finish 0.015

c) "n" factors for other materials or type of construction shall be as approved by the City Engineer.

(2) Public storm drain pipes shall be reinforced concrete pipe (RCP) unless otherwise stated below or approved by the City Engineer. Corrugated metal pipe (CMP) shall not be used unless specifically approved by the City Engineer.

(3) Minimum pipe diameter shall be 18" (46cm), minimum "D" load rating for RCP within the right of way shall be 1500.

(4) Storm drainage must be enclosed within a closed conduit for design runoff within a street right of way or City easement that can be carried in a 42" (107cm) diameter pipe or less.

(5) Minimum grade of storm drains and culverts shall be 0.5%.

(5) ~~(6)~~ Maximum grade for RCP storm drains shall be 40%. PVC pipe may be used for grades greater than 40%.

(6) Type A storm drain cleanouts shall have a minimum 6" clearance between the outside wall of pipe and inside of cleanout structure. Also, the maximum allowable skew shall not exceed 20 degrees and limit the size of pipe to 39" without an engineering detail. Any pipes that are 39" or larger shall have an engineering detail.

(7) Maximum cleanout spacing:

a) Pipe diameters equal to or less than 30" (76cm): 300 feet (91m).

b) Pipe diameters greater than 30" (76cm): 800 feet (244m).

c) Storm drains constructed on grades greater than 20% shall use concrete anchors per Regional Standard S-9 at intervals of not more than 40 feet (12m).

(8) **Storm Drain Systems** – Shall be designed to convey runoff flow from inlets to cleanouts to the system outlet. Inlets will not be allowed on any system pipe larger than 18", unless approved by the City Engineer.

(9) **Pipe Radius/Watertight Pipe**

a) The radius of pipes in curves shall be based on standard or single bevel or double bevel pipe without breaking joints and shall comply with City of San Diego Drainage Design Manual, Table 1-103.7A. Pipe bevel and length shall be shown on plans.

b) The deflection angle at the inlet or cleanout shall be indicated on the plans and shall not be more than 10 degrees, unless special design is provided by the Engineer of Work on the plans.

c) For all storm drains under pressure, where the design HGL is 1-foot above the inside top of pipe elevation, watertight joints shall be used. Watertight joints shall also be used for storm drains constructed on grades of 20% or greater. If watertight, beveled pipe is proposed the Engineer of Work shall submit evidence that the proposed pipe is readily available. Further, the use of pipe collars will not be allowed in-place of manufactured watertight joints.

d) Prior to construction, the contractor shall submit lay out sheets to the City for the following cases:

i) where horizontal and vertical curves are combined;
ii) where beveled pipe lengths other than 4-feet or 8-feet is required to fit the curve.

(10) Easements:

a) Minimum width of storm drain easements shall be equal to the pipe diameter plus ten feet (3m) or a minimum of 15 feet (5m) in width, whichever is greater.

b) Minimum width of easements for improved channels shall be equal to the width of the improved channel plus ten feet (3m), or a minimum of fifteen feet (5m), whichever is greater.

c) Easements for natural channels shall include the inundation line for the design flood.

d) No fences, walls, or other construction shall be authorized within a drainage easement without the specific written approval of the City Engineer. Easement shall not split lot lines without specific written approval of the City Engineer.

e) No structures, poles, wires or other appurtenances shall extend, or pass over, the boundaries of any drainage easement without the specific written approval of the City Engineer.

f) Drainage easements for open channels shall not be included in building lot area calculations but may be included in setback requirements.

(11) **Safety fences or walls** shall be constructed alongside improved channels or as directed by the City Engineer.

(12) **Minimum freeboard** for channels and brow ditches shall be 6 inches (15cm). For supercritical velocities very close to the critical velocity, make the wall heights at least

equal to the sequent depth. For curved alignments, add 1.0 foot (0.3m) above the calculated maximum superelevated water surface.

(13) For supercritical velocities very close to the critical velocity, make the wall heights at least equal to the sequent depth. For curved alignments, add 1.0 foot (0.3m) above the calculated maximum.

(14) Inlets and inlet transition shall not be placed within pedestrian crosswalks or driveways.

(15) Provide a minimum of 10 foot (3.0m) curb transition on both sides of inlets unless otherwise approved by the City Engineer.

(16) Grates will not be considered in calculations as capable of receiving any flow of water since they are easily clogged with debris.

(17) Grates shall be capable of being safely crossed by bicycles.

(18) Permanent improved access shall be provided for maintenance of all public drainage facilities.

(19) ~~(19)~~ Where public storm drains outlet across private property or open space drainage facilities shall be designed to meet structural and hydraulic requirements of the City Engineer. Minimum freeboard of 6" to be maintained.

(20) Corrugated High Density Polyethylene Pipe (HDPE) pipe

a. The use of HDPE pipe is allowed except in the following circumstances, unless approved by the City Engineer:
   i. Within roadways with more than two lanes;
   ii. Within 15 feet of any building structure;
   iii. Within 16 feet of any outlet structure
   iv. In conditions in which groundwater is or may be present in the trench or in soil conditions in which the trench sidewall is not stable
b. Allowable sizes are 18” to 48” diameter.
c. Pipe shall be Type S (smooth interior, corrugated outside).
d. Pipe shall meet the requirements of AASHTO Specifications M-294 and the Greenbook, and unless otherwise specified in the project plans or specifications, installation of the pipe and fittings shall be in accordance with the manufacturer’s recommendations.
e. Pipe and resin producers shall be certified according to the PPI/CPPA Third Party Certification Program. All corrugated polyethylene pipe shall contain the appropriate program mark, either an official label or permanent affixation prior to shipment.
f. HDPE storm drains constructed on grades of 20% or more:
   i. Newly compacted fills require concrete anchors per SDRSD S-9, otherwise cutoff walls per SDRSD S-10 are required; both at 40’ intervals.
   ii. Backfill shall be rounded over the trench.

iii. No HDPE storm drain pipe is allowed on grades exceeding 65%.

g. Only concrete structures (i.e., cleanouts, inlets, catch basins, headwalls, etc.) with watertight, waterstop gaskets will be allowed for use with HDPE storm drain pipe.

h. New connections to existing HDPE pipe shall be made by constructing a storm drain cleanout structure in accordance with Regional Standard Drawing No. D-9., not lugs.

i. Manufactured, watertight mechanical connections will be considered for tying-in laterals with diameters up to one-third of the larger pipe's diameter. Said connections shall be recommended by the HDPE pipe manufacturer and be subject to the review and approval of the City Engineer.

j. Pipe joints shall conform to the following performance criteria:

   i. Watertight Joints – The joints must be certified by an independent laboratory to meet a 10.8 psi (74 kPa) laboratory test per ASTM D3212 and utilize a bell and spigot design with a gasket meeting ASTM F 477. Defective pipe joints will not be allowed.

   ii. Horizontal and vertical curves shall be constructed using pre-fabricated bevels. Pipe lay sheets for pipes with horizontal and vertical curves shall be submitted to the City Engineer for review and approval prior to installation. Simultaneous horizontal and vertical curves are not permitted.

   iii. Fittings used with the pipe shall not reduce or impair the overall integrity or function of the pipeline. Fittings may be molded or fabricated and shall be furnished by the pipe manufacturer.

   iv. Joints may not be "pulled" to accommodate a horizontal curve. Fittings supplied by the manufacture must be used where curves are indicated on the drawings.

k. Within paved areas, cover over the top of the HDPE pipe shall not be less than 36 inches as measured from the bottom of the pavement surface layer to the top of the pipe.

l. In open space areas, the downstream 16 feet of pipe shall be reinforced concrete pipe (RCP) and shall be connected to the HDPE pipe using manufactured connectors, not lugs.

m. HDPE Storage / Installation

   i. Once HDPE pipe is delivered to the installation location, it shall be installed within three months. If not installed within three months, then HDPE shall either be stored indoors or under a cover that does not allow penetration of ultraviolet light.

   ii. Pipe installation and field inspections shall meet the requirements of Section 207-18 of the Standard Specifications for Public Works Construction.

   iii. Installation shall be per the manufacturer's published recommendations with a minimum cover as specified in "Specifications and Procedures" for H-25 loading and ¾" rock envelope (Type C) per San Diego County Regional Standard Drawing S-4. Metallic locator tape shall be placed at the top of the pipe zone

iv. At least two weeks prior to the installation of HDPE pipe, the contractor shall submit certification from the manufacturer that he/she has received installation training specific to the HDPE pipe to be installed before installation of the pipe will be allowed to proceed. Said certification shall include the names of individuals that have received such training.

v. At least two weeks before the installation of all horizontal and vertical curves, the contractor or permittee shall submit City Engineer-approved pipe lay sheets to the project Public Works Inspector

vi. All installed HDPE pipe shall be inspected by Closed Circuit Television in accordance with the Standard Specifications for Public Works Construction, Section 306-1.4.8, "Televising Sewer Mains and Storm Drains," and the City of Chula Vista Standard Special Provisions

3-204.3 Runoff Detention Basins

(1) The rate of inflow to the storage facility (inflow hydrographs) shall be developed using an acceptable hydrologic procedure, and shall be based on the watershed conditions expected to prevail during the anticipated effective life of the structure. Permanent facilities shall assume ultimate development of the contributing areas.

(2) Detention facilities shall be designed to convey a minimum 100-year frequency storm with a minimum 1-foot (0.3m) freeboard and utilizing maximum expected siltation elevation.

(3) The maximum allowable release rate after development shall not exceed pre-development flow rates. The 10, 50, and 100 year storm events shall be analyzed when releasing flows into a natural channel or when requested by the City Engineer.

(4) Adequate energy dissipation features shall be incorporated to reduce outflow velocities to acceptable levels to avoid downstream erosion.

(5) An emergency or overflow spillway shall be provided to pass the design flow if the principal outlets become blocked.

(6) Outlet facilities shall pass all runoff from a 100-year frequency storm event within a reasonable length of time as determined by the City Engineer.

(7) The California Division of Safety of Dams has jurisdiction over detention facilities: a) meeting or exceeding 25 feet (7m) in height and storing 15 acre-feet (18,500 m^3) or more; or b) of any height storing 50 acre-feet (61,700 m^3)or more; or as determined by the State of California.

(8) Embankment slopes shall be planted to provide erosion protection as determined by the City Engineer.

(9) Developer shall be required to maintain detention facilities in accordance with conditions of tentative map approval. A maintenance schedule shall be submitted for approval by the City Engineer prior to City acceptance of permanent facilities.

(10) Drainage structures within basins shall be provided with a reinforced concrete pad for maintenance purposes. The size, shape and location of the pad will be determined/approved by the City Engineer and Deputy Director of Operations.

3-204.4 Sediment Basins - Sedimentation basins shall be designed to provide adequate storage of sufficient duration to cause deposition of transported sediment as determined by the City Engineer.

(1) Vegetation shall be planted on all slopes within the subdivision and on the embankments of the basin to avoid erosion.

(2) Elevation marks shall be placed on the outlet riser pipe to monitor sediment levels.

(3) Sedimentation basins shall be maintained per a maintenance plan approved by, or as determined by the City Engineer.

(4) Pipe outlets shall consist of a perforated vertical pipe or box-type riser connected to a horizontal pipe that extends beyond the downstream embankment or that connects to an existing storm drain system.

(5) An emergency spillway shall be provided so that the capacity of the spillway alone will convey the 100-year design flood.

(6) Basins shall be designed to retain the design flood with a minimum 2-foot (0.6m) freeboard.

(7) Desilting basin(s) shall be designed using the standard equation:

$$As = 1.2Q/Vs$$

Where: *As* is the minimum surface area for trapping soil particles of a certain size; *Vs* is the settling velocity of the design particle size chosen; and Q = C x I x A where Q is the discharge rate measured in cubic feet per second; C is the runoff coefficient; I is the average precipitation intensity for the 10-year, 6-hour rain event and A is the disturbed and undisturbed areas draining into the sediment basin in acres. The design particle size shall be the smallest soil grain size determined by wet sieve analysis, or the fine silt sized (0.01mm) particle, whichever is the largest, and the Vs used shall be 100 percent of the calculated settling velocity.

The length is determined by measuring the distance between the inlet and the outlet; the length shall be more than twice the dimension as the width; the depth shall not be less than three feet nor greater than five feet for safety reasons and for maximum efficiency (two feet minimum of settling depth plus the depth needed for sediment storage). The sediment storage volume shall be determined using the “Basic Soil Loss” table (see below) or any other methodology approved by the City Engineer. The basin(s) shall be located on the site where it can be maintained on a year-round basis and shall be maintained on a schedule to retain the two feet minimum of settling depth.

A sediment basin shall have a means for dewatering within 3 to 7 calendar days following a storm event. Sediment basins may be fenced if safety (worker or public) is a concern, or as determined by the City Engineer.

BASIC SOIL LOSS TABLE
(in cubic yards)*

TRACT AREA (acres)	AVERAGE SLOPES					
	2%	5%	8%	10%	12%	15%
10	270	350	370	400	450	500
15	400	420	460	600	675	750
20	540	700	740	800	900	1000
40	1080	1400	1480	1600	1800	2000
80	2160	2800	2960	3200	3600	4000
100	2700	3500	3700	4000	4500	5000
150	4000	4200	4600	6000	6750	7500
200	5400	7000	7400	8000	9000	10000

* ***Engineer shall interpolate the figures listed in the tables as required.***

3-204.5 Items to be Submitted with Drainage Calculations - To ensure proper design and to simplify and expedite checking procedures, design calculations and related information are required for all drainage facilities including the following:

(1) Engineer's design calculations

(2) A suitable topographic map, which includes the subdivision and the total drainage basin with the sub-basins delineated and labeled.

(3) Calculations showing the determination of design flow, including all assumptions and physical data.

(4) Calculations showing that all conduits, channels, and appurtenances are adequate for design flows; to include entrance and exit conditions, head losses, hydraulic jumps, critical depths, scouring and silting velocities, energy line elevation at the entrance, exit, and at each junction, bend, and angle point, and any other items affecting the functioning of the facility.

(5) A profile (to scale) showing the bottom of the channel or pipe, the hydraulic grade line, and the design flow and velocity.

(6) Calculations showing that the requirements for dry lanes will be met.

(7) All assumptions and input file information for computer programs along with a list of abbreviations and symbols used.]

3-205 **Storm Water Quality and Urban Runoff**

Prior to approval of any and all grading, construction, and building permits for the project, the Developer shall demonstrate to the satisfaction of the City Engineer compliance with all of the applicable provisions of the following and any amendments thereto.

(1) The City of Chula Storm Water Management and Discharge Control Ordinance (Chula Vista Municipal Code Section 14.20).

(2) NPDES Municipal Permit No. CAS0108758 (San Diego Regional Water Quality Control Board Order No. 2001-001).

(3) NPDES Construction Permit Co. CAS000002 (State Water Resources Control Board Order No. 99-08-DWQ), including modifications dated April 26, 2001, where applicable.

During project planning and design, the Developer shall incorporate effective construction and post-construction Best Management Practices and provide all necessary studies and reports as determined by the City Engineer demonstrating compliance with the applicable regulations and standards.

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3-200.11/ Eastlake South Greens (Unit 4) Developed Condition Hydrology Map

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GENERAL DESIGN CRITERIA
SECTION 3-300
SEWER DESIGN

3-300 SEWER DESIGN CRITERIA

3-301 Design capacity sewer trunks and mains; - The design criteria for public sewers is based on residential (R1) zoning and land use with a density of 4 dwelling units per acre and 3.3 persons per dwelling unit. Use these figures unless more accurate population or land use studies are available:

3-301.1 Sewage production

(1) Residential = 80 gallons (304 lpcd) per capita per day (gpcd) or 265 gallons (1006 liters) per EDU, per day.

(2) School flow:

a) Elementary Schools: 15 gpcd (57 lpcd).

b) Junior High and High Schools: 20 gpcd (76 lpcd).

(3) Commercial/Industrial/Church: 2,500 gpd/acre.

(4) Parks: 500 gpd/acre.

(5) Peak to average ratio: See CVDS 18.

3-301.2 Pipe design capacity based on Manning's flow equation:

(1) Use 1/2 full design flow for diameters up to and including 12 inches.

(2) Use 3/4 full design flow for diameters greater than 12 inches (30cm).

(3) "n" factors

a) for vitrified clay or reinforced concrete pipe:

1) n = 0.013 for pipes up to 21" (53cm) diameter;

2) n = 0.012 for pipes greater than 21" (53cm) diameter;

b) for PVC pipe, n = 0.012 for PVC pipe all sizes.

(4) Velocities:

a) Minimum = 2 feet/second (.61m/s). See Section 3-302.2(6) also.

b) Maximum = 12 feet/second (3.6m/s) (except as approved by City Engineer).

3-302 System Design Criteria

3-302.1 Minimum Pipe Sizes

(1) Public Sewer mains: 8 inches (20cm).

(2) Sewer laterals: 4 inches (10cm).

3-302.2 Grades

(1) Grades shall be determined by using design flow and velocities with the exception that minimum grade for 8" (20cm) sewer shall not be less than 0.4%.

(2) Sewer construction on grades of 20% or more, in newly compacted fills, shall use concrete anchors per Regional Standard Drawing No. S-9, at intervals of not more than 40 feet (12m), between anchors. Backfill shall be rounded over trench.

(3) Sewer constructed on grades of 20% or more, under conditions other than above, shall use cutoff walls per Regional Standard Drawing No. S-10, at intervals of not more than 40 feet (12m), between cutoff walls.

(4) Grades above 65% shall use cast iron pipe, Class 150, without bedding.

(5) Portions of sewer systems, which serve the equivalent of less than 10 residential lots, shall be constructed at a minimum grade of 2% if vitrified clay pipe is used or 1% for PVC pipe.

(6) Sewer mains that do not sustain 2 fps at peak flow shall be designed to have a minimum slope of 1%.

3-302.3 Cradle/Encasement Requirements Depth ;(depth of cover is measured from the top of pipe to finish grade)

(1) PVC - Per Manufacturer's Recommendations for long-term deflections not to exceed 5%.

3-302.4 Trenching and Backfill Regional Standard Drawing No. S-4.

3-302.5 Deep Sewer Requirements

(1) Deep Sewer Connections - Sewer mains greater than 15 feet (5m) deep with lateral connections shall be constructed in conformance with CVCS 14. Parallel sewer line shall be constructed for the full length of the deep sewer.

(2) Deep Sewer Laterals - Sewer laterals greater than 15 feet (5m) deep shall not be permitted without written approval of the City Engineer. A shallower, parallel sewer main shall be constructed to receive the lateral flows. The shallower sewer main shall connect to the deeper sewer at a manhole.

(3) Deep Sewer Mains - Sewer mains greater than 20 feet (6m) deep shall be constructed with PVC pipe, Class 900 for pipe diameters 12-inches or less and Class 905 for pipe diameters greater than 12-inches, from manhole to manhole.

3-302.6 Manholes

(1) Sewer manholes shall be per Regional Standard Drawing Nos. S-2 and M-3.

(2) Maximum distance between manholes = 400 feet (122m).

(3) Maximum distance from manholes to plugs on grades not exceeding 7% = 200 feet (61m).

(4) Manholes shall be provided as determined by the City Engineer.

(5) In a cul-de-sac, all sewers shall terminate in a manhole.

(6) Sewer Cleanouts shall be provided at a maximum of 100 foot (30m) intervals for sewer laterals.

(7) The manhole connecting a force main and gravity sewer and the four downstream manholes, shall be lined with T-lock or equivalent.

(8) Locking manhole covers per RSD M-4 shall be used on all major and prime streets at all intersections.

3-302.7 Sewer Locations

(1) **Sewer Trunks and Mains**

a) Sewer trunks and mains will normally be located on the centerline of streets for streets without medians unless otherwise approved by the City Engineer.

b) Sewer trunks and mains will normally be located in the center of the driving lane for streets with medians unless otherwise approved by the City Engineer.

c) The angle of connection in manholes for sewer pipes greater than 10" in diameter shall not exceed 45° and 30' minimum shall be provided between the manholes unless otherwise approved by the City Engineer. Manholes shall be centered in driving lanes.

d) Sewer mains between residential lots should be avoided to the maximum extent possible.

(2) **Sewer Easements**

a) Sewer easements shall be equal to the pipe diameter plus ten feet (3m) or a minimum of 15 (4.6m) feet in width, whichever is greater. Sewer

easement shall not split residential lots unless specifically approved by the City Engineer.

b) Permanent obstructions within (or over) the easement which would hinder the maintenance of sewer facilities within the easement (i.e. fences, walls, steep slopes, overhanging eaves) are not allowed.

c) Easements shall be granted to provide access to all sewer manholes.

(3) Sewers that may be extended in the future shall be constructed to the boundary of the land being developed, or to the end of permanent improvements as determined by the City Engineer.

(4) Sewer and water lines paralleling each other shall be separated by a minimum of 10 feet (3m).

(5) Sewers crossing water lines shall cross under the water line.

(6) Deep sewer connections shall be in accordance with CVCS14.

3-302.8 Sewer constructed along curved alignments

(1) **Horizontal Alignment**:

a) Minimum pipe centerline radius shall conform to "Green Book" specifications (Table 306-1.2.13 (C)). Lesser radii may be approved in accordance with manufacturer's specifications upon approval of the City Engineer.

b) Curves of radii exceeding 200 feet (61m) may be formed by the deflection of each joint or by use of specially beveled pipe.

c) Curves of radii equal to 200 feet (61m) or less will use two-foot length pipe for every other length when using joint deflections.

d) Short radius curves may be formed by the use of short pipe with deflected joints, beveled pipe, or a combination of both.

(2) **Vertical Curvilinear Alignment**. Although straight grades are preferred between manholes, vertical curves, using criteria given for horizontal alignment, above may be used upon approval by the City Engineer.

3-302.9 Sewer Laterals

(1) All sewer laterals shall be in accordance with Regional Standard Drawing Nos. S-13.

(2) Deep sewer lateral connections shall be in accordance with CVCS 18. Sewer laterals deeper than 15 feet are not allowed without written approval of the City Engineer.

(3) Minimum grade for sewer laterals is 2%, unless otherwise approved by City Engineer.

(4) Each sewer lateral shall have one sewer cleanout placed at the property line per CVCS-20 and CVCS-21. If the edge of sidewalk is at the property line, the cleanout shall be placed within the adjacent general utility easement.

(5) To the maximum extent possible, sewer laterals shall not be placed under driveways.

3-302.10 Private Sewers

(1) ~~(1)~~ Private sewer mains shall be designed to public standards and shall be submitted for review and approval by the City Engineer.

Private Sewers designed to the plumbing code, plan checked by the Building Division and inspected by the building inspector may be shown on the Engineering Improvement plans with a note specifying what segments of sewer are the responsibility of the Building Inspector. ~~10~~

(2)

3-303 Force Sewer Mains and Sewer Pump Stations

3-303.1 General

(1) Construction of force sewer mains and sewage pump stations shall be avoided unless other options are unavailable. Permanent sewer pump stations are not desirable and generally will not be approved. Permanent or temporary sewer pump stations may be approved only in accordance with the provisions of City policy No. 570-03, adopted by Resolution No. 17491.

(2) Easements shall be granted to the City of Chula Vista for all temporary pump stations, as deemed necessary by the City Engineer. Documents granting said easements, shall be recorded prior to City acceptance of the pump station. Permanent pump stations shall be located on parcel(s) granted, or owned, in fee to the City of Chula Vista.

(3) Developer shall enter into agreements with the City of Chula Vista that define pump station maintenance, operation, billing, responsibilities, and acceptance of temporary pump stations. Said agreement shall be approved by the City Council and be in accordance with City Policy No. 570-03.

(4) Representatives from the Engineering Department, Public Works Operations, developer, and contractor shall meet prior to start of construction of pump stations.

(5) Pump station plans shall include a site plan, pump curves, specifications, details, profiles, pump head, pump horsepower, pump capacity, cost estimate, emergency storage and complete electrical layout.

(6) Plans for working on existing pump stations during mechanical re-fit, new connection, etc., shall include a note indicating "the Contractor shall provide continuous sewer service including source of power", to insure that residents relying on the pump station will maintain sewer service.

(7) All plans must be approved by the City of Chula Vista Engineering, Operations, Building and Housing, and ~~Planning~~Development Services departments.

(8) Operational checks and tests shall be performed on site with representatives from Public Works Operations (pump operators, electricians, and sewers), Public Works Inspection, the developer, and equipment suppliers.

(9) All pumping stations will incorporate dual force mains beginning from pumps and ending at gravity flows.

3-303.2 General Pump Station Criteria

(1) Site Work - Site shall be landscaped outside the fence line. Structures and fences/walls shall be constructed, and painted in a style to blend with the surrounding neighborhood, subject to approval by the City of Chula Vista. The area inside the fence shall be paved and shall drain to an approved drainage structure at a minimum slope of 2%.

(2) Access - Station access shall be provided in accordance with the following criteria:

a) Access shall be provided around the entire station.

b) An access road with a minimum width of 20 feet and maximum slope of 15% shall be provided. The station shall have parking for two large trucks with a turnaround. No private gates will be permitted across access roads.

c) Station shall be fenced or walled with locking gate to prevent unwanted entry. Fencing or wall shall be in an acceptable manner that blends in with the surrounding community. Fencing shall have three-strand barbed wire on top.

d) If access incorporates a tunnel, the dimensions shall be 20 feet wide by 14 feet high.

e) A minimum 62 ft. driveway radius sweep is required to accommodate large vehicles.

(3) Every pump station shall be provided with emergency storage capacity of a minimum of 6 hours at average ultimate flow. Additional storage capacity may be required when station is located close to a water supply reservoir, the bay front, or any other water way. ~~In areas with limited space, the emergency storage may be complied with by providing complete redundancy (including force main and plumbing), pending City approval.~~ Emergency storage reservoirs shall be constructed of Portland cement concrete (P.C.C.).

(4) Each pump station shall be provided with two independent power sources. This shall be accomplished by providing an on site diesel generator. Generator switching equipment shall be located in a building.

(5) Below ground stations shall be of fiberglass construction. The maximum allowable cover over a fiberglass enclosure shall be no deeper than 20 feet from top of enclosure.

(6) Phone, SCADA radio and water services shall be provided to all stations.

(7) Screen openings for vents and all other screened areas shall be of sufficient size to prevent infestation from all pests, including bees.

(8) A door or removable ventilation louver shall be installed in generator buildings and be large enough to accommodate removal of the generator.

(9) All stations shall have exterior lighting near the wet well and pump house. Lamps shall be 250 watt high pressure sodium.

(10) Pipes shall be color coded with flow arrows for direction of flow and type of liquid or gas.

(11) All outside doors and frames shall be corrosion and vandal resistant.

(12) Guard rails with toe boards shall be installed around all floor openings and shall have two chains fitted with snap hooks and eyes. All guardrails, chains, snap hooks, eyes and toe boards shall be of non-corrosive materials.

(13) Shower, sink, and eye wash station shall be provided at each station.

(14) Fire extinguisher shall be provided as per Fire Code. Type 2A10BC, one per every 3,000 sq. ft. of building area. A minimum of one fire extinguisher per station.

3-303.3 Other Requirements

(1) A dehumidifier shall be incorporated into all below ground stations.

(2) A bi~~n~~oxide odor control system shall be installed at all pump stations.

(3) Intake air shall be ducted near floor and exhaust air should be near ceiling.

(4) Intake and exhaust points shall be as diagonally opposite as possible.

(5) Both intake and exhaust outside outlets shall be above ground.

(6) Blower and ducting shall be made out of corrosion resistant materials (PVC acceptable).

(7) Screening over ventilation openings shall be made of corrosion resistant materials.

(8) Certified performance test of ventilation system is required for acceptance.

3-303.4 Alarms

(1) SCADA components and ~~A~~alarms - Pump station shall have alarms that shall be telemetered to the designated monitoring station.

(2) Alarms shall be of identical type as City currently utilizes for lift station monitoring. Contact Public Works Operations for specifications.

(3) The station shall be equipped with alarms sound for pump failure, high wet well, low wet well, power failure, generator failure, dry well flooded, and any alarms necessary for equipment safety, or particular installations.

(4) Alarm equipment shall be housed in a water tight, dust proof enclosure.

(5) All telemetry wiring shall be per phone company specifications.

(6) The following is required for alarm hookup:

a) Station must have address.

b) Telephone Company must already have phone lines pulled or laid up to the alarm/pump station. Contractor/developer shall pay for and arrange with Pacific Bell.

c) Conduit from pump station to Telco phone lines with an above ground riser with pull rope.

(7) After alarm is connected, connect the Information Systems:

a) Arrange for Telco to install alarm circuit on existing alarm circuit.

b) Contractor or other to meet Telco by arrangement to have access to alarm station.

c) Notify Public Works Operations of addition of new alarm circuit.

d) Contractor installs alarm electronics at pump station and at 276 Fourth Avenue, or as otherwise directed by Public Works Operations.

e) Communication Division connects new alarm signal to Police Dispatch alarm panel.

(8) Public Works/Engineering will provide account number for City and Pacific Bell charges.

3-303.5 General Equipment Criteria

(1) City shall be provided with four complete sets of manufacturer's brochures, technical data, operating and maintenance manuals, for all equipment and controls. One set shall be on a CD ROM in PDF or other format acceptable to City. City shall be provided a vendors list for all equipment and parts.

(2) A maintenance agreement for all generators installed shall be for one year from time of acceptance of station and shall cover transfer switch.

(3) A 24-hour call list for generator maintenance under warranty and Maintenance Agreement shall be provided.

(4) Training, for maintenance personnel, shall be provided by a manufacturer's representative.

(5) Lifting eyes shall be installed above all equipment.

(6) All equipment shall have adequate clearance to perform maintenance and repair work.

(7) Lighting shall be a minimum 40 foot candles at the machine level and be shadow free.

(8) Guards shall be installed around all moving parts of equipment as required by safety codes and have appropriate safety labels.

(9) All concrete floors shall be treated with an approved sealant and walking areas shall be non-slip.

(10) Step and walkways shall have non-slip surfaces.

(11) Station shall be able to operate independently of SCADA controls.

3-303.6 Electrical/Controls

(1) Panels and sub-panels shall be Square "D" or an approved equal, approved by City Electrician.

(2) All building wiring shall be THHN insulation grade 90øC/194øF minimum and be copper only, and usable in damp and dry locations.

(3) An electronic bubbler system with a backup mercury float switch shall be used for level control.

(4) Each pump shall have hour meter reading in 1/10th hours.

(5) Panel installed shall have indicator light indicating which pump is in operation.

(6) Panel shall display wet well level.

(7) Control panel shall not sit on floor. Mounting shall be at least 3 inches from floor.

(8) All controls shall be vapor proof and conform to all Safety Codes.

(9) Air lines shall have a water trap between compressor and controls.

3-303.7 Pumps

(1) Pump stations shall use ~~Gorman-Rupp~~ pumps ~~or an equivalent~~ approved by City of Chula Vista, Public Works Operations.

(2) Minimum size self-priming pump will be a 3-inch with the ability of passing a 2-1/2 inch sphere.

(3) Submersible pumps shall be avoided when a self-priming pump can be used.

(4) Submersible pumps may only be installed with a minimum of 100 feet TDH (Total Dynamic Head). They must be a minimum size of 4~~6~~ inches with the ability to pass a 3-inch sphere. Submersibles shall be avoided when a self-priming pump can be used.

(5) The minimum running time for each pump cycle is 5 minutes.

(6) Pump station capacity call be based on peak flow plus a 30% safety factor (Qdesign = 1.3 x Qpeak).

(7) Each pump station shall be equipped with one standby (back-up) pump in addition to the primary pumping unit(s).

(8) The maximum pump motor speed shall be 1,800 RPM.

(9) The most efficient pump performance shall be at the design TDH (Total Dynamic Head).

(10) Each pump shall be lab tested with certified copies of the performance test furnished to Public Works Operations.

(11) All self-priming pumps shall have air release valves 1-inch minimum.

(12) Any drain lines shall be 1-1/4 inch minimum.

(13) Pumps shall have oil filled suction and discharge gauges reading in feet of water (exception of suction gauges on submersible pumps).

(14) Pump motors shall be UL (Underwriters Laboratory) rated or rating acceptable to City Engineer.

(15) Any non-sewage pumps and piping shall be epoxy coated to prevent corrosion.

3-303.8 Plumbing

(1) Discharge lines and manifolds shall be supported and braced.

(2) Sleeves shall be used for wall penetration for pump suction and discharge lines and shall be sealed air-tight.

(3) Water service shall be 1-inch minimum and have an approved backflow prevention device.

(4) Sump lines shall be 1-1/2 inch diameter minimum.

(5) In manifolds, "wyes" are required and shall be the same size as manifold.

(6) Valves:

a) Pump isolation, suction, discharge, and sump line valves shall be plug valves. Valves on forced main and influent to the exterior of the pump station or wet well shall be plug valves.

b) All gauge lines shall have ball valves.

c) All piping either entering or leaving station shall have plug valves on the exterior of station.

d) All valves shall have hand operators geared as required, per manufacturer's recommendations.

e) Check valves shall be between pump and discharge line plug valve and have external spring loaded arm.

f) All valves needing extensions shall have the extensions supplied by contractor.

g) All valves shall be labeled as to their type, function, and operational direction.

3-303.9 Pump Stations - Dry & Wet Wells

(1) All piping and conduits shall be adequately sealed so that no gasses can seep into dry well from wet well.

(2) Dry well requires minimum six changes of air per hour, running continuously, and 15 air changes per hour intermittent ventilation to be interlocked with the light switch.

(3) Pump Stations - Wet Well:

a) Wet wells shall be physically separated from pump area excepting submersible stations.

b) Wet well shall have a read out in inches of water.

c) Wet well shall be completely lined either with T-lock or an approved equal.

d) Wet well floor shall be sloped toward suction sump at a minimum of 1/8 inch per foot.

e) Sewage influent shall be above the high water operating level in order to allow for free flow of the gasses into the wet well.

f) In wet wells incorporating large diameter retention areas, a smaller diameter operating area shall be below the larger retention area, keeping the operating volume of sewage to minimum.

g) Wet well shall be sealed on exterior surface.

h) Wet wells shall be vented. Pump stations receiving flow from trunk sewers (18 inches or larger) shall have positive ventilation. Other pump stations may have passive ventilation.

3-304 Pivate Pump Stations

(1) All plans must be prepared to the satisfaction of the City engineer and the Director of Development Services
(2) Pump Stations plans shall include site plans, pump curves, specifications, details on elevations of influent lines, forced mains, wet-wells, storage vaults, water tables, surrounding pavement, installed underground utilities, nearby storm drains, profiles, pump head and horsepower, capacity of station, and electrical layout.
(3) Pump Stations must be constructed in a manner that they do not have a negative visual impact on the surroundings and are protected from tampering.
(4) Every pump station shall be provided with emergency storage capacity of a minimum of 6 hours at average ultimate flow. Additional storage capacity may be required by the City Engineer when a station is located up stream of a potable reservoir, the bay, a water way, or a sensitive receptor downstream.
(5) Every pump station shall be equipped with dual forced mains originating at the pumps and terminating in a gravity sewer with capacity to receive flows during peak flow periods without surcharging the gravity system.
(6) Each station shall be configured in a manner using best management practices, (BMP's) to prevent any accidental or incidental spillages or overflows of sewage, oils, treatment chemicals, etc. from ~~will not~~ directly running off into the storm drain system,
(7) Each pump station shall be equipped with two separate electrical supply systems.
(8) Each pump station shall have an alarm system that will monitor all events that could lead to a station sewer overflow. This system must be able to monitor and callout response personnel on a 24 hour per day, 7 day per week basis. Response personnel must be available on the same basis~~,~~ and able to respond prior to an overflow event.
(9) Each station shall be equipped with a minimum of two pumps. If the capacity is enough where two pumps must run together to achieve normal flows backup~~(s)~~ pump(s) must be installed in the event of a pump failure.
(10) All electrical components must be Underwriters Laboratories or equivalent rating agency acceptable to City Engineer.
(11) Pump Station shall be designed in a manner to prevent the production of gasses that would cause corrosion to the gravity system or negatively impact the surrounding area with noxious odors.
(12) Line five sewer manholes in the gravity flow system from the point the forced main daylights to gravity flow, utilizing lining method currently approved by the City of Chula Vista for sewer manhole lining.

GENERAL DESIGN CRITERIA
SECTION 3-400
STREET AND ROAD DESIGN

3-400 STREET AND ROAD DESIGN - GENERAL

The standards in the following sections are minimum standards prepared by the Engineering Division, Public Works Department, for the information and guidance of both City Staff and those professionals in the private design sector responsible for the design of the City's streets. The street design standards establish uniform policies and procedures to carry out the City's General Plan, and Circulation Element goals. It is neither intended as, nor does it establish, a legal safety standard. For more detailed information refer to the City of Chula Vista Street Design Standard Policy as adopted by City Council per Resolution 15349 on October 17, 1989.

The following standards are applicable primarily to areas without unusual terrain problems and in developed areas of the City where existing buildings do not create obstacles in obtaining needed right-of-way. In difficult terrain and in older developed areas where flexibility is required, deviations from these standards may be approved by the City Engineer, only after demonstration to the City that these standards are not reasonably achievable. The request for deviation must be prepared by a registered civil engineer and show that the safety of the public will not be reduced and that the deviation conforms with common engineering practice and standards.

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3-401 General Design Criteria

Streets must be designed as required for the various functional classifications. Whenever expected ADT is greater than the approximate maximum ADT stated, the street shall be designed to a higher satisfactory functional classification. The widths and configurations of streets shown in this manual are related to the estimated future average daily traffic (ADT) for level of service (LOS) "C". Notwithstanding the forgoing, it is the intent of the following laws, policies, objectives and goals to provide Chula Vistans with Complete Streets, those streets that are functional to more than just vehicular traffic:
The State of California's Complete Streets Act of 2008,
The City's General Plan, Theme 4, "Improved Mobility";
The General Plans's Land Use and Transportation Element Goal 6.3 "A sustainable circulation / mobility system that provides transportation choices and is well integrated with the City's land uses"; the General Plan's Land Use and Transportation Element Objective 23: "Promote the use of non-polluting and renewable alternatives for mobility through a system of bicycle and pedestrian paths and trails that are safe, attractive and convenient forms of transportation".
To this end, every four lane and larger street classification shall be provided with bike lanes; all two lane non-residential streets with parking shall be provided with "sharrows" to indicate to motorists where the bicyclists are likely to be and any freeway crossing by a local road shall be provided with bike lanes. The City's Design Standards for streets may be modified by the City Engineer and the Director of Development Services to achieve a "Complete Street" as determined by the Director of Development Services and the City Engineer. This determination shall be based on achieving the elements given in ITE's "Designing Walkable Urban Thoroughfares: A Context Sensitive Approach", latest edition.

3-401.1 Expressway

Expressways are designed to move high volumes of traffic between major generators and to distribute traffic to and from the freeway system and provide intercommunity access. See Chula Vista Design Standard CVD-ST01 for typical cross section.

(1) Design Features

There are three primary design features which contribute to higher roadway capacity on the expressway facility. These capacity increasing features include one mile (2km) spacing of major crossing intersections, grade separated urban interchanges and restricted access.

(2) Intersections/Crossings

a) Major crossings shall be spaced no less than one mile (2km) intervals except upon approval of the City Engineer. These major crossings shall be controlled by grade separated urban interchanges. Also, at locations where the expressway facility crosses regional freeways, special interchange geometric configurations may be required to carry the high volumes anticipated on the expressway facility.

b) A raised median is required to separate the two directions of travel and to improve the visual appearance of the expressway corridor. No median openings shall be permitted.

c) Pedestrian crossing demand should be well planned, focused and controlled to allow the periodic placement of mid-block overpasses to link major generators and attractors where appropriate.

(3) Access

Vehicular access to and from the expressway from minor streets or abutting properties shall typically be restricted. Limited street or driveway access will only be considered by the City Engineer if all other feasible means of obtaining alternate access have been exhausted.

(4) Landscaping - Expressways shall provide landscaped buffer areas.

(5) Parking/Bicycles - ~~All non-motorized travel and~~ parking on these facility shall be prohibited with the exception of emergency parking. A Class I bike path shall be provided for the length of the expressway with lateral connections to the community.

(6) Design ADT - 70,000

(7) Minimum design speed - 60 mph (96kph)

(8) Curb-to-curb - 104' (32m) (includes a 16'(5m) raised median)

(9) Right-of-way - 128' (39m)

(10) Maximum grade - 6%

(11) Minimum curve radius - 1,500' (457m) with 5% super-elevation; 2,500' (762m) with no superelevation

3-401.2 Six-lane Prime Arterial

The prime arterials are designed to move traffic between major generators. See CVD-ST01 for typical cross section.

(1) Intersections/Crossings

a) Typically, intersections shall be spaced no closer than 660 feet (200m) and signalized intersections shall be spaced no closer than one-half mile (804m) intervals.

b) A raised median is required to separate the two directions of travel and to improve the visual appearance of the arterial corridor. No median openings shall be permitted except at major intersections.

c) Widen all approaches to intersections as per CVD-ST12 in order to provide for additional lanes as per CVD-ST11.

d) Pedestrian crossing demand should be well planned, focused and controlled to allow for crossings at major signalized intersections as well as the periodic placement of mid-block overpasses to link major generators and attractors where appropriate.

(2) Access

Vehicular access to and from prime arterials from minor streets or abutting properties shall typically be restricted. No direct access from single-family residential homes is allowed. Should a property have frontage only on the prime arterial facility, driveway or minor street access shall be permitted at locations deemed appropriate by the City Engineer. These access points shall be limited to right turns in and right turns out only. Also, these access points shall require additional roadway width to provide for acceleration and deceleration lanes.

(3) Landscaping - Landscaped buffer areas shall be provided on prime arterial facilities.

(4) Parking - Parking on this facility shall be prohibited with the exception of emergency parking.

(5) Bicycles - Bike lanes shall be provided on prime arterial facilities in conformance with routes identified in the Bicycle Element of the Chula Vista General Plan~~.~~

(6) Design ADT - 50,000

(7) Minimum design speed - 55 mph (88kph)

(8) Curb-to-curb - 104' (32m)(includes a 16' (5m) median)

(9) Right-of-way - 128' (39m)

(10) Maximum grade - 6%

(11) Minimum curve radius - 1,150' (350m) with 5% super-elevation; 2,000' (610m) without superelevation

3-401.3 Six-lane Major

Major streets are primarily designed to distribute localized trips. See CVD-ST01 and CVD-ST02 for typical cross sections.

(1) Intersections/Crossings

a) Typically, intersections shall be spaced no closer than 660 feet (200m) and signalized intersections shall be spaced no closer than one-quarter mile (402m) intervals.

b) A raised median is required to separate the two directions of travel and to improve the visual appearance of the major corridor. One mid-block median opening may be permitted with approval of the City Engineer. Such intersections and any resulting signals shall not negatively impact signal progression and traffic flow on major

streets. This opening shall typically be spaced at the mid-point between the major intersections (approx. 660' (200m)). The specific location of these median openings shall be determined by the City Engineer.

c) Widen all approaches to intersections as per CVD-ST13 and CVD-ST14 in order to provide for additional lanes, as per CVD-ST11.

d) Pedestrian crossing demand should be well planned, focused and controlled to direct pedestrians to designated crossing points at signalized intersections.

(2) Access

Vehicular access to and from six-lane major streets from abutting properties (commercial) shall typically be controlled but not restricted. No direct access from single-family residential homes is allowed. Full access median openings will be permitted on these facilities only at locations specified by the City Engineer and under conditions established by the City.

(3) Landscaping - Six-lane major arterials shall provide landscaped buffer areas.

(4) Parking - Parking on these facilities shall typically be allowed. However, parking at critical locations may be denied as deemed appropriate by the City Engineer.

(5) Bicycles - If ~~a bike lane is to be provided on this six-lane major facility and~~ parking is to be retained, an additional 10 feet (3m) of right-of-way will be required to allow for a 10-foot (3m) widening of the roadway cross section.

(6) Design ADT - 40,000

(7) Minimum design speed - 45 mph (72kph)

(8) Curb-to-curb - 104'(32m) (includes a 16' (5m) raised median)

(9) Right-of-way - 128' (39m)

(10) Maximum grade - 7%

(11) Minimum curve radius - 1,100'(335m) with no superelevation

3-401.4 FOUR-LANE MAJOR

Major streets are primarily designed to distribute localized trips. See CVD-ST02 and CVD-ST21 for typical cross section.

(1) Intersections/Crossings

a) Typically, intersections shall be spaced no closer than 660 feet (200m) and signalized intersections shall be spaced no closer than one-quarter mile (402m) intervals.

b) A raised median is required to separate the two directions of travel and to improve the visual appearance of the arterial corridor. One mid-bloc median opening may be permitted only with approval of the City Engineer. Such intersection and any resulting signals shall not negatively impact signal progression and traffic flow on major streets. This opening shall typically be spaced at the mid-point between the major intersections (approx. 660' (200m)). The specific location of these median openings shall be determined by the City Engineer.

c) Widen all approaches to intersections as per CVD-ST15 & 16 in order to provide for additional lanes, as per CVD-ST11.

d) Pedestrian crossing demand should be well planned, focused and controlled to direct pedestrians to designated crossing points at signalized intersections.

(2) Access

Vehicular access to and from four-lane major streets from abutting properties shall typically be controlled but not restricted. No direct access from single-family residential homes is allowed. In developed areas direct access from single-family homes may be allowed as determined by City Engineer. Full access median openings may be permitted at locations as determined by the City Engineer and under conditions established by the City.

(3) Landscaping - Four-lane majors shall provide landscaped buffer areas.

(4) Parking - Parking on these facilities shall typically be allowed. However, parking at critical locations may be denied as deemed appropriate by the City Engineer.

(5) Bicycles - If ~~a bike lane is to be provided on this four-lane major facility and~~ parking is to be retained, an additional 10 feet (3m) of right-of-way will be required to allow for a 10-foot (3m) widening of the roadway cross section.

		Commercial Areas (frequent driveways)	Low Density Areas
(6) Design ADT	**-**	**28,000**	**30,000**
(7) Minimum design speed	**-**	**45 mph (72kph)**	**55mph (88kph)**
(8) Curb-to-curb	**-**	**80'(24m) (includes** 16' (5m) median)	**80'(24m)** (includes a 16' (5m) median)
(9) Right-of-way	**-**	**104' *(32m)**	**104' (32m)**

(10)	**Maximum grade**	**-**	**7%**	**7%**
(11)	**Minimum curve -**	**-**	**1,100' (335m) with no super-** elevation	**1,150' (350m) with 5% super** elevation; 2,000' (610m) with no super-elevation

3-401.5 Class I Collector Streets

Class I collector streets serve primarily to circulate localized traffic and to distribute traffic to and from arterials and major streets. Class I collectors are designed to accommodate four lanes of traffic, however, they carry lower traffic volumes at slower speeds than major arterials, and they have a continuous left turn lane separating the two directions of traffic flow. See CVD-ST02 and CVD-ST21 for typical cross section.

(1) Intersections/Crossings

a) Typically, intersections shall be spaced no closer than 660 feet (200m) and signalized intersections shall be spaced no closer than one-quarter mile (402m) intervals.

b) Widen all approaches to intersections in developed areas west of I-805 as per CVD-ST016 in order to provide for additional lanes, as per CVD-ST11.

c) In special cases if no abutting property access is allowed, the strip's median, with approval of the City Engineer, can be reduced to 4 feet (1.5m).

(2) Access

Access to and from Class I collector streets from abutting properties shall typically be controlled but not restricted. No direct access from single-family residential homes is allowed. In developed areas, direct access from single-family homes may be approved by the City Engineer.

(3) Parking - Parking on this facility shall typically be allowed. However, parking at critical locations may be denied as deemed appropriate by the City Engineer.

(4) Bicycles - If ~~a bike lane is to be provided in conformance with the Bicycle Element on this Class I facility and~~ parking is to be retained, an additional 10 feet (3m) of right-of-way will be required to allow for a 10-foot (3m) widening of the roadway cross section.

(5) Design ADT	**-**	**22,000**
(6) Minimum design speed	**-**	**45 mph (72kph)**
(7) Curb-to-curb	**-**	**74' (23m)**
(8) Right-of-way	**-**	**94' (29m)**

(9) Maximum grade - 8%

(10) Minimum curve radius - 700' (214m) with 5% superelevation;1,100' (335m) with no superelevation

3-401.6 Class II Collector Streets

Class II collector streets with two-way center turn lanes serve primarily to circulate localized traffic and to distribute traffic to and from arterials, major streets and Class I collectors. Class II collectors are designed to accommodate two lanes of traffic, however, they carry lower traffic volumes at slower speeds than Class I collector streets. This type of facility provides access to properties and circulation to residential neighborhoods. See CVD-ST03 and CVD-ST22 for typical cross section.

(1) Intersections

a) Minimum distance between centerline of intersections shall be 250 feet (76m)

b) Widen all approaches to intersections in developed areas west of I-805 in conformance with CVD-ST16 to provide additional lanes as shown in CVDS-ST11.

(2) Access - Access to and from Class II collector streets from abutting properties shall be permitted at locations approved by the City Engineer.

(3) Parking - Parking on this facility shall typically be allowed. However, parking at critical locations may be denied as deemed appropriate by the City Engineer.

(4) Bicycles - If ~~a bike lane is to be provided on this Class II facility and~~ parking is to be retained, an additional 10 feet (3m) of right-of-way will be required to allow for a 10-foot (3m) widening of the roadway cross section.

(5) Design ADT - 12,000

(6) Minimum design speed - 30 mph (48kph)

(7) Curb-to-curb - 52' (16m)

(8) Right-of-way - 72' (22m)

(9) Maximum grade - 10% residential zone

(10) Minimum curve radius - 300' (91m) with 4% superelevation; 450' (138m) with no superelevation

3-401.7 Class III Collector Streets

Class III collector streets circulate localized traffic as well as distribute traffic to and from arterials and other collectors to access residential areas. Class III collector streets accommodate low volume levels and the use of this facility as a carrier of through traffic should be discouraged by its design. See CVD-ST03 and CVD-ST22 for typical cross section.

(1) Intersections - Minimum distance between centerline of intersections shall be 250 feet (76m).

(2) Parking - Parking on this facility shall typically be allowed. However, parking at critical locations may be denied as deemed appropriate by the City Engineer.

(3) Bicycles - If ~~a bike lane is to be provided on this Class III facility and~~ parking is to be retained, an additional 10 feet (3m)of right-of-way will be required to allow for a 10-foot (3m) widening of the roadway cross section.

(4) Design ADT - 7,500 with no driveway access from abutting property. 5,000 with driveway access from abutting property

(5) Minimum design speed - 30 mph (48kph)

(6) Curb-to-curb - 40' (12m)

(7) Right-of-way - 60' (18m)

(8) Maximum grade - 12%

(9) Minimum curve radius - 450' (138m) with no superelevation; super-elevation may be approved by the City Engineer where there is no residential driveway access.

3-401.8 Residential Streets

(1) See CVD-ST03, CVD-ST04, CVD-ST22, and CVD-ST23 for typical cross section.

(2) Minimum distance between centerline intersections shall be 150 feet (46m).

(3) Grade segments in excess of 12% shall not exceed 300 feet (91m) in length.

(4) Minimum radius for cul-de-sacs with a maximum length of 500 feet (152m) may be 100 feet (30m) and a maximum central angle of 45° subject to the approval of the City Engineer. The minimum tangent length between horizontal curves of radius 100 feet (30m) shall be 150 feet (152m).

(5) Average grade over any 1,000-foot (305m) segment shall not exceed 10%.

(6) Portland cement concrete pavement shall be required for grades in excess of 12%.

(7) Design ADT - 1,200

(8) Minimum design speed - 25 mph (40kph)

(9) Curb-to-curb - 36' (11m) (34' (10m) single loaded)

(10) Right-of-way - 56' (17m) (50' (15m) single loaded)

(11) Maximum grade - 15%

(12) Minimum curve radius - 200' (61m) with no super-elevation

3-401.9 Industrial Roads

(1) See CVD-ST04 and CVD-ST23 for typical cross section.

(2) Minimum distance between centerline intersections is 300 feet (91m).

(3) Design ADT - 2,000

(4) Minimum design speed - 30 mph (48kph)

(5) Curb-to-curb - 52' (16m)

(6) Right-of-way - 72' (22m)

(7) Maximum grade - 7%

(8) Minimum curve radius - 450' (138m) with no super-elevation

3-401.10 ADDITIONAL DESIGN CRITERIA

(1) No transition shall be allowed on horizontal curves except upon approval of the City Engineer.

(2) Circular curves shall be used for all horizontal changes of centerline direction.

(3) Horizontal curves for median curbs shall not be less than the center line radius less the offset.

(5) Vertical curves shall be used when change in grade exceeds 1% in sags and 0.5% on crests.

(6) Angles between centerlines of intersecting streets shall be as close to right angles as possible, but in no case less than 70° or greater than 110°. Streets shall intersect only in tangent sections. Tangent lengths shall extend a minimum of 100'(30m) beyond the point of curb return on each leg of an intersection except as approved by the City Engineer.

(5) Intersection sight distance shall comply with the current CALTRANS Highway Design Manual and Chula Vista Design Standards.

(7) A minimum of one on-street parking space (20 feet(6m)) shall be provided along the frontage of each residential lot. Equivalent on-street parking space may be acceptable upon approval of the City Engineer.

(8) All streets with controlled access devices, such as gates, shall contain the following features:

a) Gates shall be 150 feet (45m) away from the extension of the intersecting street curbline, except upon approval by the City Engineer.

b) All motorized gates shall include a knox switch and opticom device with manual override approved by the City Fire Marshal.

c) A turnaround shall be provided at the location of the gate. The size and location of said turn-around and gate, shall be approved by the City Engineer.

(9) Compound curves shall not be allowed.

(10) The maximum centerline grade for permanent cul-de-sac streets within the turnaround area shall be 5%, the maximum centerline grade for temporary cul-de-sacs shall be 8%.

(11) The minimum gutter grade in the turn around segments of cul-de-sacs shall be 1%.

(12) The maximum longitudinal street grade or cross slope at 90 degrees to a cross gutter shall be 3% for 25 feet (8m) from any edge of the cross gutter. This grade may be increased at residential intersections, subject to approval of the City Engineer, if the intersection is designed as a maximum comfortable acceleration sag vertical curve designed for a minimum speed of 25 mph (40kph) [i.e., Length of vertical curve = 3.125 feet x Difference in approach grades] and the maximum cross slope in any driving lane is 5%.

(13) The maximum grade at any intersection of two streets shall be ~~2~~3~~6~~% within the intersection and for at least 50 feet (17m) past the nearest curb lines of the intersecting street as long as ADA requirements for sidewalks, etc. are met.

(14) Pavement cross slopes shall be in accordance with CVD-ST01 through ST04 and CVD-ST31 through CVD-ST35. The minimum cross slope shall be 2% except at intersections where the cross slope may be reduced to 1%. The maximum cross slope shall be 5% on any street whose cross section varies from said construction standards.

(15) At major street to major street intersections and above, the pavement cross slope shall be reduced to 1% through the intersection.

(16) Portland Cement Concrete monolithic curbs, gutters, and sidewalks are required along all streets with the exception that the City Engineer may approve reduction of sidewalk requirements in those areas that are deemed unnecessary by the City Engineer.

(17) Pedestrian ramps in accordance with the ~~San Diego Regional Standard Drawings~~Chula Vista Design Standards shall be constructed in the following locations on all streets unless otherwise approved by the City Engineer:

a) All curb returns shall have two pedestrian ramps, one for each pedestrian crossing.

b) At t-intersections opposite one curb return.

(18) Driveway approaches for all residential and commercial applications shall conform to CVCS1, unless otherwise approved by the City Engineer.

(19) Cross gutters will not be allowed at signalized intersections unless otherwise approved by the City Engineer.

(20) Curb returns shall be checked for constructability. When the forms are "warped" in the field, it will result in severe grade breaks, bad drainage and a poor driving lane. The calculated PI of the curb return shall be determined from the extended curb grade of the main street. The straight grade from the PCR to the calculated PI of the curb return shall be shown on the plan. The grade breaks from this grade and the grade of the tangent portion of the curb at the PCR shall not exceed 1%. The curb return shall be designed in a plane.

~~(21) The maximum grade along the curb of a curb return shall not exceed 5~~6% ~~and the sidewalk in all places shall not exceed 8.33%.~~

(22) Lighted sag vertical curves, when sight distance requirements do not govern, shall be of sufficient length to produce no perceptible acceleration. The minimum length of vertical curve shall be $L=1.2\ AV^2$, where L is the length of the vertical curve in feet, A is the algebraic difference in grades in decimal and V is the design speed in miles per hour. This formula may be used at intersections for Residential and Class III Street classifications, or equivalent, only if other design options are not feasible.

(23) The safe speed of vertical curves, as designed, shall be shown on the plans (V=X mph (or kph) and should equal or exceed the design speed for the classification of the road.

(24) In new streets or existing streets with storm drain, median drainage shall be provided per CVD-ST11-Alternate A

(25) Bus Turnout Criteria – Bus turnouts shall be considered if one or more of the following factors are present:

a) Location convenient to park & ride facilities, intermodal transfer facilities, and/or transfer facilities between bus services.

b) Location serves major pedestrian traffic generators (i.e. village centers, shopping malls, schools, transit centers, hospitals, etc.)

c) Transit route dwell time exceeds 30 seconds.

d) Posted traffic speed limit is greater than 40 mph.

e) Bus volumes are 5 or more per peak hour.

f) Passenger volumes exceed 20 boardings per hour.

g) Traffic in the curb lane exceeds 250 vehicles during peak hours.

h) History of traffic and/or pedestrian accidents at the stop location.

i) Sight distance prevents traffic from stopping safely behind a stopped bus.

26. Bus turnouts shall be designed to meet the regional standard described in the Metropolitan Transit Development Board's Designing for Transit Manual, and meet all applicable American with Disabilities Act (ADA) accessibility requirements.

27. The location of bus turnouts is subject to the approval of the City Engineer. Far side placement at intersections is preferred in most cases to avoid conflicts with right turn movements and obstruction of views of traffic for pedestrians and autos.

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3-401.11 STREET STANDARD SUMMARY

CLASS	CVDSDWG. NO.	DESIGN ADT	DESIGN SPEED MPH (KPH)	STREET WIDTHS[8]						
				TRAVEL LANES (ft.(m))		PARKING LANES (ft.(m))		MEDIAN WIDTH (ft.(m))	CURB-CURB (ft.(m))	ROW (ft.(m))
				NO. LANES	WIDTH/LANE	NO. LANES	WIDTH/LANE			
EXPRESSWAY	CVD-ST01	70,000	60 (96)	6	12 (3.6)	2	8 (2.4)	16 (4.9)	104 (32)	128 (39)
6-LANE PRIME ARTERIA	CVD	50,000	55 (88)	6	12 (3.6)	2	8 (2.4)	16 (4.9)	104 (32	128 (39

L	-ST01								)	)
6-LANE MAJOR [2]	CVD-ST01ST02	40,000	45 (72)	6	12 (3.6)	2	8 (2.4)	16 (4.9)	104 (32)	128 (39)
4-LANE MAJOR	CVD-ST02,ST21	28,000 [3]	45 (72)	4	12 (3.6)	2	8 (2.4)	16 (4.9)	80 (24)	104 (32)
CLASS I COLLECTOR	CVD-ST02,ST21	22,000	45 (72)	4	12 (3.6)	2	8 (2.4)	4/10 [4] (1.2/3)	74 (22.5)	94 [4] (29)
CLASS II COLLECTOR	CVD-ST03,	12,000	30 (48)	2	13 (4)	2	8 (2.4)	10 (3 m)	52 (16)	72 (22)

	ST22									
CLASS III COLLECTOR	CVD-ST03, ST22	7,500/ 5,000[5]	30 (48)	2	20 (6)	-	-	-	40 (12)	60 (18)
RESIDENTIAL[6]	CVD-ST03 ST04, ST22, ST23	1,200	25 (40	2	18 (5.5)	-	-	-	36	56 (17)
INDUSTRIAL	CVD-ST04, ST23	2,000	30 (48)	2	26 (8)	-	-	-	52	72 (22)

1 – SEE CURRENT STREET DESIGN STANDARDS POLICY FOR SUPERELEVATION CROSS SLOPES.
2 – THE CRITERIA FOR 6-LANE MAJORES IN DEVELOPED AREA WEST OF I-805 DIFFERS. SEE STREET DESIGN POLICY.
3 – THESE VALUES DIFFER FOR 4-LANE MAJORS IN A LOW DENSITY AREA. SEE STREET DESIGN POLICY.
4 – THESE VALUES MAY BE REDUCED WITH APPROVAL OF THE CITY ENGINEER. SEE STREET DESIGN POLICY.
5 – THIS VALUE IS FOR NO DRIVEWAY ACCESS FROM ABUTTING PROPERTIES. IF DRIVEWAY ACCESS IS APPROVED, USE 5,000 ADT
6 – THESE VALUES VARY FOR SINGLE LOADED RESIDENTIAL STREETS. SEE STREET DESIGN POLICY
7 – STREET SEGMENTS IN EXCESS OF 12% SHALL NOT EXCEED 300 FT. IN LENGTH. AVERAGE GRADE OVER ANY 1,000 FT. SEGMENT SHALL NOT EXCEED 10%.
8 – ADDITIONAL WIDTH SHALL BE PROVIDED FOR ROADWAYS WITH DESIGNATED BIKE LANES.

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3-402 General Design Criteria – *Otay Ranch Street Standards*

Streets must be designed as required for the various functional classifications. Whenever expected ADT is greater than the approximate maximum ADT stated, the street shall be designed to a higher satisfactory functional classification unless otherwise approved by the Director of ~~Planning~~Development Services ~~and Building~~ and the City Engineer. These standards should be used within the **Otay Ranch GDP** area only.

3-402.1 Otay Ranch Expressway

Expressways are designed to move high volumes of traffic between major generators and to distribute traffic to and from the freeway system and provide intercommunity access. See Chula Vista Design Standard CVD-ST31 for typical cross section.

(1) Design Features

There are three primary design features which contribute to higher roadway capacity on the expressway facility. These capacity increasing features include one mile (2km) spacing of major crossing intersections, grade separated urban interchanges and restricted access.

(2) Intersections/Crossings

a) Major crossings shall be spaced no less than one mile (2km) intervals except upon approval of the City Engineer. These major crossings shall be controlled by grade separated urban interchanges. Also, at locations where the expressway facility crosses regional freeways, special interchange geometric configurations may be required to carry the high volumes anticipated on the expressway facility.

b) A raised median is required to separate the two directions of travel and to improve the visual appearance of the expressway corridor. No median openings shall be permitted.

c) Pedestrian crossing demand should be well planned, focused and controlled to allow the periodic placement of mid-block overpasses to link major generators and attractors where appropriate.

(3) Access

Vehicular access to and from the expressway from minor streets or abutting properties shall typically be restricted. Limited street or driveway access will only be considered by the City Engineer if all other feasible means of obtaining alternate access have been exhausted.

(4) Landscaping - Expressways shall provide landscaped buffer areas.

(5) Parking/Bicycles - All non-motorized travel ~~and parking~~ on these facilities shall be provided with a Class I Bike Path adjacent to the Expressway with lateral connections to the community. ~~prohibited with the exception of emergency parking.~~

(6) Design ADT - 70,000 Level of Service C

(7) Minimum design speed - 60 mph (96kph)

(8) Curb-to-curb - 104' (32m) (includes a 16'(5m) raised median)

(9) Right-of-way - 128' (39m)

(10) Maximum grade - 6%

(11) Minimum curve radius - 1,500' (457m) with 5% super-elevation; 2,500' (762m) with no superelevation

3-402.2 Otay Ranch-Six-lane Prime Arterial

The prime arterials are designed to move traffic between major generators. See CVD-ST31 for typical cross section.

(1) Intersections/Crossings

a) Typically, intersections shall be spaced no closer than 660 feet (200m) and signalized intersections shall be spaced no closer than one-half mile (804m) intervals.

b) A raised median is required to separate the two directions of travel and to improve the visual appearance of the arterial corridor. No median openings shall be permitted except at major intersections.

c) Widen all approaches to intersections as per CVD-ST12 in order to provide for additional lanes as per CVD-ST37.

d) Pedestrian crossing demand should be well planned, focused and controlled to allow for crossings at major signalized intersections as well as the periodic placement of mid-block overpasses to link major generators and attractors where appropriate.

(2) Access

Vehicular access to and from prime arterials from minor streets or abutting properties shall typically be restricted. No direct access from single-family residential homes is allowed. Should a property have frontage only on the prime arterial facility, driveway or minor street access shall be permitted at locations deemed appropriate by the City Engineer. These access points shall be limited to right turns in and right turns out only. Also, these access points shall require additional roadway width to provide for acceleration and deceleration lanes.

(3) Landscaping - Landscaped buffer areas shall be provided on prime arterial facilities.

(4) Parking - Parking on this facility shall be prohibited with the exception of emergency parking.

(5) Bicycles - Bike lanes shall be provided on prime arterial facilities in conformance with routes identified in the Bicycle Element of the Chula Vista General Plan.

(6) Design ADT - 50,000 Level of Service C

(7) Minimum design speed - 55 mph (88kph)

(8) Curb-to-curb - 104' (32m)(includes a 16' (5m) median)

(9) Right-of-way - 128' (39m)

(10) Maximum grade - 6%

(11) Minimum curve radius - 1,150' (350m) with 5% super-elevation; 2,000' (610m) without superelevation

3-402.3 OTAY RANCH - SIX-LANE MAJOR

Major streets are primarily designed to distribute localized trips. See CVD-ST31 for typical cross-sections.

(1) Intersections/Crossings

a) Typically, intersections shall be spaced no closer than 660 feet (200m) and signalized intersections shall be spaced no closer than one-quarter mile (402m) intervals.

b) A raised median is required to separate the two directions of travel and to improve the visual appearance of the major corridor. One mid-block median opening may be permitted with approval of the City Engineer. Such intersections and any resulting signals shall not negatively impact signal progression and traffic flow on major streets. This opening shall typically be spaced at the mid-point between the major intersections (approx. 660' (200m)). The specific location of these median openings shall be determined by the City Engineer.

c) Widen all approaches to intersections as per CVD-ST13 and CVD-ST14 in order to provide for additional lanes, as per CVD-ST37.

d) Pedestrian crossing demand should be well planned, focused and controlled to direct pedestrians to designated crossing points at signalized intersections.

(2) Access

Vehicular access to and from six-lane major streets from abutting properties (commercial) shall typically be controlled but not restricted. No direct access

from single-family residential homes is allowed. Full access median openings will be permitted on these facilities only at locations specified by the City Engineer and under conditions established by the City.

(3) Landscaping – Six-lane major arterials shall provide landscaped buffer areas.

(4) Parking – Parking on these facilities shall be prohibited with the exception of Emergency Parking.

(5) Design ADT - 40,000

(6) Minimum design speed - 45 mph (72kph)

(7) Curb-to-Curb - 104' (32m) (includes a 16' (5m) raised median)

(8) Right-of-Way - 128' (39m)

(9) Maximum Grade - 7%

(10) Minimum curve radius - 1,100' (335m) with no super-elevation

3-402.4 OTAY RANCH - FOUR-LANE MAJOR

Major streets are primarily designed to distribute localized trips. See CVD-ST31 for typical cross section.

(1) Intersections/Crossings

a) Typically, intersections shall be spaced no closer than 660 feet (200m) and signalized intersections shall be spaced no closer than one-quarter mile (402m) intervals.

b) A raised median is required to separate the two directions of travel and to improve the visual appearance of the arterial corridor. One mid-block median opening may be permitted only with approval of the City Engineer. Such intersection and any resulting signals shall not negatively impact signal progression and traffic flow on major streets. This opening shall typically be spaced at the mid-point between the major intersections (approx. 660' (200m)). The specific location of these median openings shall be determined by the City Engineer.

c) Widen all approaches to intersections as per CVD-ST31 in order to provide for additional lanes, as per CVD-ST37.

d) Pedestrian crossing demand should be well planned, focused and controlled to direct pedestrians to designated crossing points at signalized intersections.

(2) Access

Vehicular access to and from four-lane major streets from abutting properties shall typically be controlled but not restricted. No direct access from single-family residential homes is allowed. In developed areas direct access from single-family homes may be allowed as determined by City Engineer. Full access median openings may be permitted at locations as determined by the City Engineer and under conditions established by the City.

(3) Landscaping - Four-lane majors shall provide landscaped buffer areas.

(4) Parking - Parking on these facilities shall be prohibited with the exception of emergency parking.

		Commercial Areas (frequent driveways)	Low Density Areas
(5) Design ADT	**28,000**	**30,000**	
(6) Minimum design speed	**45 mph (72kph)**	**55 mph (88kph)**	
(7) Curb-to-curb	**80' (24m) [includes** 16' (5m) median]	**80' (24m) [includes** 16' (5m) median]	
(8) Right-of-Way	**104' (32m)**	**104' (32m)**	
(9) Maximum Grade	**7%**	**7%**	
(10) Minimum curve radius		**1,100' (335m)** with no super-elevation	**1,150' (350m) with** 5% superelevation; 2,000' (610m) with no superelevation

3-402.5 Otay Ranch-Transit Village Entry/Village Entry

Village entry streets serve primarily to circulate localized traffic and to distribute traffic to and from arterials and major streets. These streets are designed to accommodate four lanes of traffic, however, they carry lower traffic volumes at slower speeds than major arterials. See CVD-ST32 for typical cross section.

(1) Intersections/Crossings

a) Typically, signalized and unsignalized intersections shall be spaced no closer than 400 feet (120m).

b) Widen all approaches to intersections as per CVD-ST36 in order to provide for additional lanes, as per CVD-ST37.

(2) Access

Access to and from these facilities from abutting properties shall typically be controlled but not restricted. No direct access from single-family residential homes is allowed. Only limited access from commercial or multi-family properties served by a single driveway may be allowed with the approval of the City Engineer.

(3) Parking - Parking on this facility shall be prohibited with the exception of emergency parking. However, parking at Village core areas may be approved as determined by the City Engineer.

		Transit Village Entry	Village Entry
(4) Design ADT	**22,000**	**22,000**	
(5) Minimum design speed	**35 mph (56kph)**	**35 mph (56kph)**	
(6) Curb-to-curb	**97-111' (29.6-33.8m)**	**76' (23.2m)** 133'-137' (40.5-41.8m)	112' (34m)
(7) Right-of-Way	**104' (32m)**	**104' (32m)**	
(8) Maximum Grade	**8%**	**8%**	
(9) Minimum curve radius	**450' (137m)** with no super-elevation	**450' (137m) with** no superelevation	

3-402.6 Otay Ranch-Secondary Village Entry w/Median/Secondary Village Entry

Secondary Village Entry streets serve primarily to circulate localized traffic and to distribute traffic to and from arterials, major streets and Village entry streets. These facilities are designed to carry lower traffic volumes at slower speeds than Village entry streets. This type of facility provides access to properties and circulation to residential neighborhoods. See CVD-ST33 for typical cross section.

(1) Intersections

a) Minimum distance between centerline of intersections shall be 250 feet (76m).

b) Widen all approaches to intersections as per CVD-ST36 in order to provide for additional lanes, as per CVD-ST37.

(2) Access - Access to and from this facility from abutting properties shall be permitted at locations approved by the City Engineer.

(3) Parking – Parking on this facility shall be prohibited with the exception of Emergency Parking.

	Secondary Village Entry w/Median	Secondary Village Entry
(4) Design ADT	**7,500**	**7,500**
(5) Minimum design speed	**25 mph (40kph)**	**25 mph (40kph)**
(6) Curb-to-curb	**68' (207m)**	**34' (104m)**
(7) Right-of-Way	**95' (29m)**	**61' (22.9m)**
(8) Maximum Grade	**10% (residential)**	**10% (residential zone)**
(9) Minimum curve radius	**200' (61m)** with no super-elevation	**200' (61m) with** no superelevation

3-402.7 Otay Ranch-Residential Promenade/Core Promenade

Promenade streets circulate localized traffic as well as distribute traffic to and from arterials and other collectors to access residential areas. These streets accommodate low volume levels and the use of this facility as a carrier of through traffic should be discouraged by its design. See CVD-ST34 for typical cross section.

(1) Intersections – Minimum distance between centerline of intersections shall be 250 feet (76m)

(2) Parking – Parking on this facility shall typically be allowed. However, parking at critical locations may be denied as deemed appropriate by the City Engineer.

	Core Promenade	Residential Promenade
(3) Design ADT	**7,500 with no** driveway access from abutting property. 5,000 with driveway access from abutting property.	**7,500 with no driveway** access from abutting property. 5,000 with driveway access from abutting property.
(4) Minimum design speed	**25 mph (40kph)**	**25 mph (40kph)**
(5) Curb-to-curb	**40' (12m)**	**32' (9.8m)**

(6) Right-of-Way	**69' (20.4m)**	**59' (18.0m)**
(7) Maximum Grade	**12%**	**12%**
(8) Minimum curve radius	**200' (61m)** with no super-elevation.	**200' (61m) with** no superelevation

3-402.8 Otay Ranch-Parkway Residential/Single Loaded Residential

(1) See CVD-ST35 for typical cross section.

(2) Minimum distance between centerline intersections shall be 150 feet (46m).

(3) Grade segments in excess of 12% shall not exceed 300 feet (91m) in length.

(4) Minimum radius for cul-de-sacs with a maximum length of 500 feet (152m) may be 100 feet (30m) and a maximum central angle of 45ø subject to the approval of the City Engineer. The minimum tangent length between horizontal curves of radius 100 feet (30m) shall be 150 feet (152m).

(5) Average grade over any 1,000-foot (305m) segment shall not exceed 10%.

(6) Portland cement concrete pavement shall be required for grades in excess of 12%.

(7) Design ADT - 1,200

(8) Minimum design speed - 25 mph (40kph)

(9) Curb-to-curb - 32' (9.8m) (28' (8.5m) single loaded)

(10) Right-of-way - 58' (17.7m) (54' (16.5m) single loaded)

(11) Maximum grade - 15%

(12) Minimum curve radius - 200' (61m) with no superelevation

3-402.9 Otay Ranch-Industrial Roads

(1) See CVD-ST35 for typical cross section.

(2) Minimum distance between centerline intersections is 300 feet (91m).

(3) Design ADT - 2,000

(4) Minimum design speed - 30 mph (48kph)

(5) Curb-to-curb - 52' (16m)

(6) Right-of-way - 72' (22m)

(7) Maximum grade - 7%

(8) Minimum curve radius - 450' (138m) with no superelevation

3-402.10 Otay Ranch-Additional Design Criteria

(1) Refer to Section 3-401.10 for additional design criteria.

3-403 Public Streets/Otay Ranch Streets

3-403.1 The Chula Vista Street Design Standards Policy contains standards for typical street sections and specific design criteria. Generally, street systems shall provide:

(1) Streets compatible with the pattern and type of streets in the General Plan;

(2) Adequate capacity for the development of adjacent lands and projected traffic volumes;

(3) Adequate access for the area being developed;

(4) Type G monolithic curb, gutter and sidewalk per adopted San Diego Regional Standard Drawings unless otherwise approved by the City Engineer or shown on the approved Tentative Map.

3-403.2 Subdivision Design Criteria for Streets

(1) Generally street systems within subdivisions shall be designed as Class III collectors or residential streets and shall satisfy the City Standards for those classifications and the following general criteria:

a) Class III collector streets:

1) Collect and carry principally vehicular traffic generated by 120 to 500 tributary dwelling units through a subdivision.

2) Constitute the principal entrance to a residential subdivision of more than 120 lots.

b) Residential streets:

1) Provide access to not more than 120 tributary dwelling units

2) Are not to be used as a principal entrance to a subdivision and shall be designed in such manner as to discourage their use by through traffic.

3) Four-way intersections involving residential streets shall be avoided.

(2) Otay Ranch Streets: See Otay Ranch Street Standards Summary in Section 3-403.3 for the Otay Ranch Street Sections.

(3) Frontage roads are discouraged by the City but may be used upon approval of the City Engineer and City Council.

(4) Main access to any school shall meet or exceed requirements for a Class III Collector street.

(5) Half-width streets may be permitted by the City Council along the boundary of a subdivision or the developer's property. Only the portion of right of way required for the half-width street need be dedicated on the subdivision map. Minimum paved width from face of curb to edge of pavement shall be twenty-eight feet (8.5m).

(6) Streets proposed to provide future connections to adjoining property shall be extended to the subdivision boundary. Subdivider shall submit an alignment and profile demonstrating the feasibility of such a future extension. The profile shall extend a minimum of 300 feet (90m) beyond the subdivision boundary or as deemed necessary by the City Engineer.

(7) a) Cul-de-sac streets shall conform to CVD-ST06. A street ending in a cul- de-sac shall provide access to no more than 30 single-family residential lots, as counted from the last intersection not located on a "Dead End".~~.~~

b) Single family residential development shall not exceed 120 residential lots unless two points of access are provided.

c) Single family residential development shall not exceed 200 residential lots unless three points of access are provided.

d) Points of access mean streets with no driveway access consisting of two or more lanes. "Emergency access only" type connections shall not be considered as a point of access.

e) These requirements do not apply to condominium or multi-family residential land uses.

(8) All streets not intended for through traffic shall end in a cul-de-sac.

(9) Streets to be subsequently extended beyond the development boundaries shall terminate in one of the following:

a) A temporary turnaround with a minimum radius of 24 feet (7m) shall be constructed upon the adjoining property (If the adjoining property owner(s) grants permission to construct such temporary turnaround on their property; or

b) A temporary street shall be constructed across the adjoining property; or

c) A permanent type cul-de-sac will be constructed within the development boundaries as a temporary measure until the street is extended.

(10) Continuous Left-Turn Lanes. Ten-foot minimum, continuous, two-way left-turn lanes, may be authorized by the City Engineer subject to the following conditions:

a) Distance between curbs must exceed 36 feet; and

b) Posted speed limit does not exceed 40 miles per hour; and

c) Where development is primarily commercial, and where heavy demand exists for left-turns in and out of driveways.

(11) Minimum centerline grade for public streets shall be 0.5%.

(12) Portland Cement Concrete (PCC) pavement with cutoff walls shall be required for all public streets with centerline grades in excess of 12%.

(13) All horizontal curves shall have a minimum intervening tangent distance measured along the centerline in feet equal to four times the design speed (designated in miles per hour) of the street.

(14) Superelevation shall be provided on all streets where required by the City Engineer.

(15) Minimum curb return radii at face of curb shall be:

a) Residential street to residential street: 20 feet (6m)

b) All other intersections: 30 feet (10m)

(16) Sight Distance - Intersection sight distance shall comply with the current CALTRANS Highway Design Manual. Refer also to Chula Vista Design Standards.

If headlight sight distance is not available in grade sags, lighting may be considered and the following formula may be used:

$$L = \frac{AV^2}{46.5}$$

Where: L = Length of vertical curve
A = Algebraic difference of grades in percent
V = Design speed

This formula may be used only with written approval by the City Engineer.

(17) Placement of guardrail shall conform to the California Department of Transportation's Traffic Manual and AASHTO's Roadside Design Guide.

(18) All new streets shall comply with the "Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way" as applicable.

SECTION 3-403.3

ARDS SUMMARY

DESIGN ADT	DESIGN SPEED MPH (KPH)	STREET WIDTHS [8]							MINIM RADIU
		TRAVEL LANES (ft.(m))		PARKING LANES (ft.(m)) OR BIKE LANE		MEDIAN WIDTH (ft.(m))	CURB-CURB (ft.(m))	ROW (ft.(m))	SUPER ELEVA (ft.(m))
		No. Lanes	Width/ Lane	No. Lanes	Width/ Lane				
70,000	60 (96)	6	12 (3.6)	2	8 (2,4)[3]	16 (4,9)	104 (32)	128 (39)	1,500 (
50,000	55 (88)	6	12 (3,6)	2	8 (2,4)[3]	16 (4,9)	104 (32)	128 (39)	1,150 (
40,000	45 (72)	6	12 (3,6)	2	8 (2,4)[3]	16 (4,9)	104 (32)	128 (39)	
28,000[4]	45 (72)	4	12 (3,6)	2	8 (2,4)[3]	16 (4,9)	80 (24)	104 (32)	
22,000	35 (56)	4	11(3.4) & 12(3.6)	2	7(2.1)[5]	36-50 (11-15.2)	97-111 (29.6-33.8)	133-147 (40.5-44.8)	
22,000	35 (56)	4	11(3.4) & 12 (3.6)	2	7 (2.1)[5]	16 (4.9)	76 (23.3)	112 (34.1)	
7,500	25 (40)	4	12 (3.6)			10 (3.0)	68 (20.7)	95 (29.0)	
7,500	25 (40)	2	12 (3.6)				34 (10.4)	61 (22.7)	
7,500[6]	25 (40)	2	12 (3.6)	2	8 (2.4)		40 (12.2)	67 (20.4)	
7,500[6]	25 (40)	2	12 (3.6)	1	8 (2.4)		32 (9.8)	59 (18.0)	
1,200	25 (40)	2	16 (4.9)				32 (9.8)	58 (17.7)	
1,200	25 (40)	2	16 (4.9) 12 (3.6)				28 (8.5)	54 (16.5)	
2,000	30 (48)	2	26 (8)				52 (15.9)	78 (23.8)	300 (9

1 - See the Chula Vista Design Standard Street Section Drawing for Additional Details and Notes

2 - See Current Street Design Standards policy for Superelevation cross slopes
3 - Only Emergency Parking is permitted
4 - These values differ fro 4-lane majors in a low density area. See Subdivision Manual Section
5 - Only Emergency Parking is permitted except in core areas where parking is permitted with the approval of the City Engineer
6 - This value is for no driveway access from single family residences. Driveway access to single family residences is permitted only if traffic volume does not exceed 5,000 vehicles per day. See Subdivision Manual Section
7 - Street Segments in excess of 12% shall not exceed 300 ft. in length. Average grade over any 1,000 ft. segment shall not exceed 10%.
8 – Additional width shall be provided for roadways with designated bike lanes.

3-404 Private Streets Within Subdivisions

3-404.1 Applicability

Private streets are not generally recommended but may be approved if they meet all of the following:

(1) Private streets will be allowed in new developments where their use is logically consistent with a desire for neighborhood identification and control of access, and where special overall design concepts may be involved. The use of private streets shall be limited to cul-de-sacs and to minor local streets not carrying through traffic and those with a projected traffic volume not exceeding 800 ADT. Private street designations shall be subject to review and approval by the Planning Commission and the City Council.

(2) The streets are not required to serve properties outside the development and is not required for general public circulation.

(3) Maintenance of said streets shall be provided by homeowners association and the City ~~is~~ shall have the right, but not the obligation, to enforce~~made a party to~~ the covenants, conditions and restrictions. ~~and shall have the right to enforce said agreement.~~

3-404.2 Design Criteria

(1) Minimum Widths

a) With parking on both sides: 36' (11m) curb to curb

b) With parking on one side only: 32' (10m) curb to curb

c) Without parking: 24' (8m) curb to curb

(2) Grades

a) Maximum 15% (Over 12% PCC pavement with cutoff walls required)

b) Minimum 1.0% unless a flatter grade, to 0.5% is approved by the City Engineer.

(3) Horizontal Alignment

a) Minimum design speed shall be 15 mph (24kph).

b) Streets shall normally intersect at right angles and shall have at least 20' (6m) of tangent adjacent to intersections. The tangent length shall be increased where short radii curves are used near the intersections.

c) Cul-de-sacs shall not ordinarily exceed 500' (150m) in length. Curb radius at the turnaround shall be at least 30' (9m) if parking is prohibited and 40' (12m) if parking is not prohibited.

d) Centerline radius shall be 150' (45m) minimum for loop streets over 800' (244m) in length, and 100' (30m) minimum for cul-de-sacs and for loop streets less than 800' (244m) in length. Where right-angled bends are used in the street pattern, in lieu of the minimum radii required above, widening sufficient to accommodate truck turning movements shall be provided by use of knuckles or other appropriate means. Curb return radius shall be 15' (5m) minimum.

(4) Vertical Design

a) Sight distance equal to 25 mph (24kph) minimum.

b) Vertical curves used when change in grade exceeds 1% in sags and 0.5% on crests.

3-404.3 Other Requirements

(1) Lighting adequate for pedestrian and vehicle safety and adequate for security purposes shall be provided subject to the approval of the City Engineer.

(2) Easements for utility and drainage purposes shall be provided as required by the City Engineer.

(3) Easements for street trees shall be provided unless waived on the Tentative Map or by the City Engineer.

(4) Where it is proposed to reduce street widths by the reduction or elimination of curbside parking, equivalent parking shall be provided by other means subject to approval by the Planning Commission.

(5) Adequate provision subject to Planning Commission approval shall be made for trash pickup and for emergency vehicle access.

(6) Adequate signs, subject to the approval of the City Engineer and ~~Planning~~Development Services Director shall be provided and maintained at all entrances to private streets clearly designating the private status of such streets.

(7) The City will assume no responsibility for enforcement of traffic control unless specifically requested and approved by City Council.

(8) A paving plan shall be submitted to the Department of ~~Planning~~Development Services and Building in compliance with their handout entitled "Guidelines for the Installation and Acceptance of Paving on Private Property in the City of Chula Vista". Along with the paving plan calculations supporting the proposed structural street sections shall be submitted. Structural street sections shall meet the minimum requirements of Section 3-405. (Applies to driveway, parking areas and other similar situations.)

(9) Where streets are proposed to be offered for dedication and rejected, the street design shall conform to public street standards.

(10) The design of all private streets shall be reviewed and subject to the approval by the City Engineer; and the construction shall be inspected by the Engineering Division of the Public Works Department. Private street construction is subject to standard design review and inspection deposits.

(11) All private streets with controlled access devices, such as gates, shall contain the following features:

a) Gates shall be a minimum 150 feet (45m) away from the extension of the intersection street curbline, except upon approval by the City Engineer.

b) All motorized gates shall include a knox switch and opticom device with manual override approved by the City Fire Marshal.

c) A turnaround shall be provided at the location of the gate. The size and location of the said turnaround and gate shall be approved by the City Engineer.

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3-405 Street Names

3-405.1 General

Candidate street names for all streets, public and private, within subdivisions shall be submitted to the City for review and approval. Generally, street names and suffixes shall conform to CVD TR06A and the following:

(1) Length - Street names including suffixes shall be no longer than 15 characters with every two "I" characters counting as one character.

(2) Names for streets shall:

a) be unique in spelling and pronunciation to prevent confusion with existing streets;

b) not be named after a person unless that person is deceased and has made a significant achievement or contribution;

c) be short names for short streets, cul-de-sac streets and winding streets.

d) loop streets shall be named such as to avoid intersections with the same name.

e) avoid directional prefixes when possible.

3-405.2 Suffixes - Street name suffixes are determined by the street classification and direction and shall conform to the following:

(1) Prime Arterials; Major Streets; Collectors; Residential Streets; Commercial/Industrial Roads that are:

a) Generally straight:

1) N-S Direction - AVENUE (AVENIDA)
2) E-W Direction - STREET (CALLE)

b) Meandering:

1) N-S Direction - DRIVE (PASEO)
2) E-W Direction - ROAD (CAMINO)

c) Cul-de-Sacs:

1) N-S Direction - PLACE (PLAZA)
2) E-W Direction - COURT (CORTE)

d) Loop Streets - CIRCLE or LOOP (CIRCULO)

(2) Hillside Streets that are generally:

a) Between fields and enclosed with fences and trees - LANE

b) Routes to or between specific location(s) - WAY (VIA)

c) Along tops of slopes - TERRACE (TERRAZA)

d) On steep slopes - GRADE (GRADO)

e) View Streets - VIEW (VISTA)

(3) Frontage Roads and Alleys are not named.

(4) Street names shall not include directions with the suffix, i.e., Calle Cristobal South.

(5) Names for Private Streets shall follow the naming standards for public streets.

3-405.3 STREET NAME SUMMARY

TYPE OF STREET	APPROVED SUFFIX (SPANISH EQUIVALENT)	REMARKS
1 – PRIME ARTERIALS; MAJOR, COLLECTOR, & RESIDENTIAL STREETS; & INDUSTRIAL ROADS	N-S DIRECTION: AVENUE (AVENIDA) N-S DIRECTION:….DRIVE (PASEO) E-W DIRECTION: STREET (CALLE) E-W DIRECTION: ROAD (CAMINO)	GENERALLY STRAIGHT GENERALLY MEANDERS GENERALLY STRAIGHT GENERALLY MEANDERS
2 – CLASS III COLLECTOR & RESIDENTIAL CUL-DE-SACS	N-S DIRECTION: PLACE (PLAZA) E-W DIRECTION: COURT (CORTE)	
3 – CLASS III COLLECTOR & RESIDENTIAL LOOP STREETS	CIRCLE (CIRCULO) LOOP	
4 – HILLSIDE STREETS	LANE WAY (VIA) TERRACE (TERRAZA) GRADE (GRADO) VIEW (VISTA)	GENERALLY BETWEEN FIELDS AND ENCLOSED WITH FENCES AND TREES ROUTE TO OR BETWEEN SPECIFIC LOCATION(S) COMMONLY FOLLOWS TOP OF SLOPE STEEP SLOPE VIEW STREET
5 – FRONTAGE ROADS & ALLEYS	NOT NAMED	
6 – PRIVATE STREETS		

NOTES:
1. THE MAXIMUM NUMBER OF LETTERS PER NAME INCLUDING SUFFIX – 15; TWO “I” COUNT AS ONE LETTER
2. USE SHORT NAMES FOR SHORT STREETS, CUL-DE-SACS AND WINDING STREETS TO ALLOW NAMES TO BE SHOWN ON MAPS & PLANS.

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3-406 Structural Section Design

3-406.1 General

(1) Dedicated streets and Otay Ranch streets with grades up to 12% shall be paved with asphalt concrete; streets with grades over 12% and alleys will be paved with Portland Cement Concrete in accordance with City of Chula Vista Standard Specifications.

(2) Suitably designed Portland Cement Concrete pavement may, upon approval by the City Engineer, be substituted for any of the asphalt pavements.

3-406.2 Asphalt Pavement

(1) Structural Sections.

a) Asphalt Concrete:

1) Minimum of 5" minimum section per table 3-405.3 thickness on prime arterials and major (6 Lane) streets..

2) Minimum 4" thickness on major (4 lanes) streets, collectors, and residential collectors.

3) Minimum 3" thickness on residential streets.

b) Aggregate base: Minimum type and thickness as shown on table 3-405.3.

(2) 1" of asphalt concrete may be substituted for 2" of aggregate base on streets with Traffic Indices of 7.0 or lower, however the minimum standards for asphalt concrete and base above are required in all cases.

(3) The City Engineer shall design all structural sections for asphalt pavement in accordance with CalTrans Highway Design Manual, latest revision ("R" Value shall be based upon "R" Value by stabilimeter or by expansion whichever is the least.)

(4) Soil tests shall be performed by a civil engineer registered in the State of California, principally doing business in the field of applied soil mechanics. Location and number of samples and soil tests to be performed shall be as designated by the City Engineer.

(5) The T.I. pavements structural sections shall be calculated in accordance with the CalTrans Highway Design Manual using the traffic flow data based on SANDAG traffic modeling runs for 20 years with the most likely scenario or as established by the City Engineer.

(6) The T.I. to be used to calculate the structural section for the area within the intersection of two intersecting streets of major or higher classification shall be the T.I. of the highest approach leg increased by 0.5 (i.e., a T.I. of 10.5 shall be increased to 11.0). If a lesser classification street intersects a major road or prime arterial, such

incrementally higher T.I. shall not be used unless the lesser classification serves an industrial area, is a designated truck route, or is known to carry a significant volume of truck traffic.

(7) The total structural section thickness for the area within the actual intersection as indicated above shall not exceed that of the heaviest adjacent leg. This may require the thickness of asphalt pavement to be increased and the thickness of aggregate base to be decreased accordingly. The increased structural section for intersections shall apply to the area defined by a line between the beginning of curb returns (BCR's) on the approach leg and end of curb returns (ECR's) on the departure leg for each leg of the intersection.~~(5) Pavements structural sections must be designed to carry the projected one-way truck traffic for a period of 20 years in accordance with the CalTrans Highway Design Manual. The traffic index (T.I.) shall be as established by the City Engineer.~~

3-406.3 Concrete Construction

(1) Design of Portland Cement Concrete Pavement for streets shall be in accordance with the Portland Cement Association's "Structural Design of Rigid Pavements".

(2) Curbs, gutters, sidewalks and driveways shall be constructed of Portland Cement Concrete. Temporary facilities may be constructed of asphalt or other material if shown on the approved Tentative Map or authorized by the City Engineer.

(3) Sidewalk ramps shall be included with the construction of curb returns at such locations as specified by the City Engineer.

(4) The City Engineer may require cross block pedestrian ways for access to schools, playgrounds, shopping centers and similar facilities. Such ways shall be at least 8 feet in width, fully paved with a minimum thickness of 4" Portland Cement Concrete and bordered by landscaping with chainlink fence or masonry walls.

3-406.4 Alleys, Driveway Approaches and Driveways

(1) Residential driveway approaches shall conform to Chula Vista Standard Drawing CVCS1.

(2) Alley-type driveway approaches shall conform to Regional Standard Drawing G17 (modified). An alley-type approach may be authorized or required by the City Engineer for any situation involving large traffic volumes and/or safety considerations.

(3) Driveways serving two or more dwelling units shall be constructed to commercial driveway standards per CVCS1.

(4) Alleys shall conform to Regional Standard Drawing G-21.

(5) The minimum thickness of concrete alley driveway approaches and alleys is 5 1/2-inches (14cm) subject to soils tests of the subgrade verifying that the R-values are adequate for that thickness. If tests are not provided, those improvements shall be

constructed 8-inches (20cm) thick and shall be reinforced with 6"x6" (15cm x 15cm), 4/4 welded wire mesh. The plans shall have a note reflecting this requirement.

MINIMUM STRUCTURAL SECTIONS FOR
VARIOUS ROAD CLASSIFICATIONS(1)

ROAD CLASSIFICATION	TRAFFIC INDEX MINIMUM	MINIMUM AC THICKNESS	MINIMUM CRUSHED AGGREGATE BASE THICKNESS
PRIME ARTERIAL	9.5	5”	12” (2)
6 LANE MAJOR	9.5	5”	11” (2)
4 LANE MAJOR	9.0	4”	12” (2)
INDUSTRIAL	9	5"	11"(2)
CLASS I COLLECTOR (VILLAGE ENTRY)	8.5	4”	11” (2)
CLASS II COLLECTOR (SECONDARY VILLAGE ENTRY)	8.0	4”	10” (2)
CLASS III COLLECTOR	7.5	4”	8” (3)
RESIDENTIAL	6.0	3”	7” (3)
RESIDENTIAL CUL-DE-SAC	5.0	3”	4” (3)

NOTE:
1) The native subgrade material shall have an R-value equal to or greater than 40 in order for the minimum structural section to be allowed

2) Crushed aggregate base (Green Book Section 200-2.2) shall be used for Prime Arterials, Major Roadways, Class I and Class II Collectors. Alternatively, crushed aggregate base with a minimum sand equivalent of 40, minimum fine durability of 60, and manufactured from a “Hard Rock Quarry” may be used for Prime Arterials, Major Roadways, Class I and II collectors, provided all other quality requirements specified in Section 200-2.2 of the “Green Book" for Crushed Aggregate Base are satisfied. “Hard Rock Quarry” is defined as an igneous or metamorphic rock source characterized by a strong-bonded structure and is excavated by blasting.

3) Crushed aggregate base with a minimum sand equivalent of 40 shall be used for Class III Collectors and residential streets, provided all other quality requirements specified for

crushed aggregate base in Section 20-2.2 of the "Standard Specifications for Public Works Construction (Green Book)" are satisfied.

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3-407 Street Lights, Pavement Markings and Street Signs

3-407.1 Street Lights – At the first improvement plan submittal stage, the Developer is required to submit improvement plans showing street light locations and type. At the second submittal, the Developer is required to submit the following: pull box location and type, conduit and wire location and size, service point locations and voltage drop calculations. Developer will be responsible for furnishing and installing the complete street lighting system including underground circuitry, standard, and luminaire. The number and location of street lights shall be subject to the approval of the City Engineer.

(1) Street Light Standards

a) ~~100 watt, 150 watt and 250 watt, high pressure sodium vapor~~LED, street lighting standard per CVCS 6.

b) Street lighting standards, foundation and details CVCS 7, 8, and 9.

~~**(2) Number and location of street lights shall be subject to the approval of the City Engineer.**~~

c) Sufficient lighting shall be provided at the following: intersections, short radius curves, knuckles, at the neck of cul-de-sacs, and at other potential traffic safety locations as may be determined by the City Engineer.

d) Street Light Construction Summary

1) Poles shall be installed plumb and 6.75' behind the curb face when not installed within a raised median.
2) Base Depth, Anchor Bolts, Grounding (CVCS-9) Coil 15'- #6 Bare copper ground wire to be installed 3" below the foundation and extended through the foundation to the system neutral.
3) Each pole shall have a fuse (see "Specifications").
4) Trench depth shall be 18" minimum in the parkway and 30" minimum in the street areas. Backfill shall be compacted to 95%.
5) A pull box shall be installed within five (5) feet of each streetlight unless the streetlight is within 10' of SDG&E service point.
6) Pull Boxes shall be installed a) On both sides of the street crossing; b) Within 10' of SDG&E service point(s) and c) Every 190 feet.
7) Conduit shall be installed at a minimum of 30" below final grade in street and a minimum of 18" below final grade when behind curb. (See CVCS 10 for Conduit and Trench) and 1-1/2" or larger conduit to be Schedule 40 PVC. No ABS or Rigid Galvanized Steel. A 2" conduit, Schedule 80 PVS shall be required when crossing a street.
8) Luminaires shall be level.
9) Wires to be THW #8, #6, #4, or #2 with #6 or #8 insulated copper ground. Use #8 ground for #8 and #6 circuit wires and #6 ground for #4 and #2 circuit wires. Types THHN, THWN not acceptable. The entire circuit run shall use the same size wire. No cascading of wire sizes allowed.
10) Voltage-Drop to be less than 3% (3.6 volts for 120V circuits and 7.2 volts for 240V circuits). Add 5 extra lineal feet of wire in your calculations at each pull

box and 40' for each luminaire. Voltage Drop Calc required for each circuit having two or more lights or where the service is over 500' away.

11) WIDE ARTERIAL STREETS (greater than 40'): LED equivalent of 250 watt HPSV w/cutoff luminaire: 175' to 250' if staggered spacing (350' to 500' same side) 125' to 250' in median (twin luminaire).

12) RESIDENTIAL COLLECTOR STREETS (36' to 40'): LED equivalent of 150 watt HPSV w/cutoff luminaire: 300' to 400' staggered spacing.

13) RESIDENTIAL STREETS (36' or less): LED equivalent of 100 watt HPSV w/cutoff luminaire: 350 to 450' staggered spacing.

14) In addition to required spacing, streetlights should be installed:
   i. At all intersections, sharp or abrupt curves, knuckles and long cul-de-sacs.
   ii. As per 12/8/82. File #CY-004, Street Lighting Policy: "In existing neighborhoods (generally west of I-805), street lights will be provided at least every 600' on tangent streets".

15) Construction "As-Built" drawings shall be submitted prior to final inspection (see "Requirements").

16) When laying conduits across a street, they shall be at right angles to the curb line. Conduits shall not cross the street within an intersection or the cul-de-sac turnaround area.

17) Plans shall reference:
   i. Street light stationing.
   ii. Street light size (watts)
   iii. Street light installation detail (Refer to CVCS 6, 7 and 9).
   iv. SDG&E service point and stationing. Indicate serving voltage (120v or 240v).
   v. S~~s~~ervice pull box and installation detail
   vi. Size of conduit (1-1/2" minimum) Schedule 40 PVC. Use 2" Schedule 80 PVC when crossing street.
   vii. Indicate trench depth.
   viii. Size and number of wires.
   ix. Street Light Note:

The streetlights and service point shown hereon are approximate only. Service points are subject to revision by final SDG&E plans. It shall be the sub dividers responsibility to provide the proper services to the streetlights shown on this plan according to the applicable City of Chula Vista plans and specifications. The developer shall be responsible for providing conduit and conductors from street lights to approved service points furnished by SDG&E. C~~c~~onduit runs and conductor size ~~shall~~ from street lights to service points shall be shown on these plans and shall be approved by the City Engineer prior to construction. Street light conduit shall be 1-1/2 minimum Schedule 40 PVC. Final location and size of street lights, conduit and wire and pull boxes shall be approved prior to beginning of construction. Install 20A fused protection for unmetered street light system.

18) The Engineer of record shall be responsible for providing final "As-Built" drawings once the lighting system is installed and approved by the inspector. The construction "As-Built~~td~~" drawings will be the basis for providing the final drawings. The final drawings are to be CAD drafted and shall be signed off by the engineer of record.

19) All non-standard City street lights shall be approved by Planning and/or engineering and the Public Works Traffic Devices Tech Supervisor and shall be LED or Induction light sources

20) Structural pole base calculations are required to be submitted as a supporting document when non-standard streetlights are approved for installation.

Calculations shall be prepared by a licensed California registered engineer and shall be wet-stamped.

21) Fuses

i. Fuses shall be slow blow 10A, 13/32" x 1 ½" In-line type fuse. The fuse shall be installed in the hot leg of the lighting conductor of each luminaire. When twin luminaires are installed in a median, each luminaire shall be fused. The luminaire shall be fused in the base of the pole (not in the adjacent pull box).

ii. A 20A In-line fuse shall be installed in the "Street Light Service" pull box adjacent to the SDG&E service point to protect the circuit.

iii. Fuse holders shall be completely waterproof and shall grip the fuse in load side section when it is opened. (Type HEB or HEX for 120 and 240 volt circuits)

22) LUMINAIRES

i. Certified luminaire performance data shall be furnished with "Equipment List and Drawings" conforming to the Caltrans Standard Specifications. This data shall include complete photometric test data in the form of isolux charts at a scale of (1" = 20') for the luminaire and wattages indicated on the plans. Alternate data may be in the form of horizontal foot-candle values recorded on a (15' x 15') grid, extending one hundred-fifty feet (150') longitudinally from the light source and fifteen feet (15') behind and one hundred-twenty feet (120') in front of the light source for the luminaire and wattage indicated on the plans. The horizontal foot-candle levels in the data submitted should provide a minimum horizontal foot-candle level of at least 0.9fc average maintained in the intersection with a minimum of 0.60fc at centerline and 0.15fc at the furthest crosswalk. Failure to satisfactorily meet the referenced values will be justifications for refusal of bid at the sole option of the agency

ii. The test shall be performed by an independent and recognized testing laboratory or by the manufacturer's laboratory. When the tests are performed by the manufacturer's laboratory, the test data shall be certified. Required: IES (LM79) Approved method for the electrical and photometric measurements of solid state lighting products and recommended: LM80, IES approved method for measuring lumen maintenance of LED lighting sources. Subsequent to contractor's installation of any streetlight luminaires, field checks may be performed at random by the Public Works Director or his assigned representative. Failure to satisfactorily meet or exceed the referenced values during field check will be justification for replacement by the contractor at the sole option of the agency.

iii. Each luminaire shall consist of an assembly that utilizes light emitting diodes (LEDs) as the primary light source.

iv. The luminaire shall be a single self-contained device, not requiring on-site assembly for installation with an optical assembly that shall provide an IES Distribution Type III or Type II with cutoff optics.

v. IP (Ingress or Intrusion Protection) Rating: Optical assembly shall be IP-65 minimum. The power supply enclosure shall be IP-55 minimum.

vi. The luminaire housing shall be primarily constructed of metal. Finish shall be gray in color, powder coated and rust resistant.

vii. There shall be a multi-volt (120/240) power supply assembly mounted on the die-cast Pwr/module door and easily removable and replaceable through the use of quick disconnect plugs.

viii. The one-piece pipe clamp (slip fitter) shall be capable of adapting to 1-1/4" to 2" pipe without rearrangement of clamp or bolts.

ix. There shall be a pre-wired tool-less adjustment photoelectric control receptacle.

23) Wiring

i. Service runs to lights shall be THW stranded copper wire #8 minimum. Copper wire shall conform to the applicable portion of ASTM B3 and B8. Size of wire shall be determined by means of voltage drop calculations and shall also be indicated on the "As-Built" plans. Wire connectors shall be of type approved by the Public Works Inspector, and bear the UL seal of approval. The installation procedure, including connector size and crimping tools shall conform to the manufacturer's recommendations. Aluminum conductors are not to be allowed. #10 wire shall be used from the base of the pole to the luminaire.

24) SPLICING

i. Splices shall be permitted in pull boxes and lighting standard hand holes only. All splices in pull boxes shall be waterproof with epoxy capsulation (3M type) or heat-shrink tubing.

25) PULL BOXES

i. No. 3 ½ Pull Box (15-3/8" x 10-1/8") or City-approved equivalent shall be per Caltrans Standard Specifications Section 86-2.06. Pull boxes shall be installed per CVCS-11. A pull box shall be installed within five (5) feet of each streetlight standard unless within 10' of SDG&E service point.

ii. Pull boxes shall not be spaced more than 190 feet apart.

iii. The bottom of the pull box shall rest firmly on a six (6) inch-thick bed of one-inch crushed rock extending six (6) inches beyond the outside edges of the pull box. Pull boxes shown in the vicinity of curbs shall be placed adjacent to the back of the curb, and where practical, shall be installed with the short side parallel to the curb.

iv. Pull boxes shall not be installed in any part of a driveway or other traveled way unless approved by the Public Works Inspector. A steel "traffic-rated" cover shall be provided on any pull box installed in a travel way or driveway. Pull box covers shall be inscribed "Street Lighting".

v. Pull boxes shall be installed on both sides of a street crossing and within 10' of SDG&E service points. If a streetlight is within 10' of an SDG&E service point, no additional pull box shall be required.

26) STREETLIGHT POLES AND MAST ARMS

i. Streetlight poles shall be octagonal pre-stressed concrete, shall be gray in color and have an anti-graffiti coating, and shall have a two-inch aluminum or steel pole top mast arm (MAS), all as manufactured by AMERON (or City-approved equivalent).

ii. Maximum distance behind curb face shall be 6.75' to center of pole (or 1.25' behind 5' wide contiguous sidewalk). The standard MAS length shall be 8'. If due to conflict, the streetlight pole must be installed behind the curb face, then the minimum distance is to be 36" to center of pole (in this case, a 6' mast arm may be used). See CVCS-7.

iii. Pole shape and color shall be uniform for any one project and replacement poles shall match existing ones.

Roadway Classification	Pole Height	MAS Length	Pole Designation	Anchor Bolt	Bolt Circle
Residential	23'-3"	8'	1C1-23	1" x 36" x 4"	12-1/2"
Collector	28'-3"	8'	1C1-28	1" x 36" x 4"	12-1/2"
Arterial	28'-3"	8'	1C1-28	1" x 36" x 4"	12-1/2"

27) ANCHOR BOLTS & FOUNDATIONS

i. Anchor bolts shall be of the type and size as shown on Chula Vista Standard Drawing, CVCS-7.

ii. Anchor bolts shall conform to the specifications of ASTM A 307, and shall be provided with two nuts and two washers each. Bolts, nuts and washers shall be galvanized by the hot-dip process conforming to ASTM A 153, or cadmium plated with Type NS coating conforming to ASTM A 165.

iii. Plumbing of the standard shall be accomplished by adjusting the nuts on the anchor bolts before the foundation cap is poured. Shims or other similar devices for plumbing or raking will not be permitted. After plumbing the standard, anchor bolts shall have ends cut and ground down to maximum exposed length of ¼ inch above the nuts

iv. Pole base foundations for all standard streetlights shall be shall be installed per CVCS-6, 7, 9. All non-standard decorative style streetlights shall be submitted for approval by Planning and/or Engineering and the Public Works Traffic Devices Tech Supervisor. Structural pole base calculations are required to be submitted as a supporting document along with the streetlight plans when using non-standard streetlights. Calculations shall be prepared by a licensed California registered engineer and shall be wet-stamped. All non-standard foundations shall have structural steel cages.

v. The non-standard street light installation detail shall show anchor bolt size and quantity, foundation diameter and depth, type and strength of concrete, size and quantity of steel (horizontal and vertical), anchor bolt setting guide (bolt circle, depth of embedment of base and leveling nuts), grounding method, dimension from curb and sidewalk and must match the structural calculation details

28) HOOK-UP TO SDG&E SERVICE POINT

i. Contact SDG&E for a service point. SDG&E will identify what service is available and where it is located. In rare cases, a new streetlight can be connected to an existing streetlight circuit, but not without permission from the Public Works Inspector. New voltage drop calculations shall be required to verify that existing circuit can handle additional load.

ii. The service point should be in the City's right-of-way; otherwise, the city will require an easement to the service point. Easements are expensive and time-consuming to the developer. Avoid service runs across private property.

29) CONSTRUCTION AS-BUILT DRAWING REQUIREMENTS

i. Two sets of "As-Built" drawings must be given to the Public Works Inspector before SDG&E will energize a light. Showing a North arrow, streets referenced to the nearest cross street, pole locations, pull box locations, conduit runs, service point locations, wattage/lamp at each pole

ii. Maximum size of As-Built drawings shall be 11" x 17".

iii. Provide the following information In addition to As-Built Drawings

1. Pole
    a. Manufacturer's name
    b. Supplier's name and contact information
    c. Material
    d. Height
    e. Mast Arm Length
    f. Footing Type (AB)
2. **FIXTURE:**
    a. Manufacturer's name
    b. Supplier's name and contact information
    c. Wattage and Voltage
    d. Fuse size and type
    e. Photocell manufacturer and model number
3. **DISTRIBUTION:**
    a. Conduit type and size
    b. Wire type and gauge
    c. Pull box manufacturer and size
    d. Service point I.D. number

3-407.2 Pavement Markings and Street Signs

(1) The Developer's engineer is required to submit a separate signing and striping plan for any street classified as a Class III Collector or higher, or functioning as a Collector. Signing and striping shall conform to the California Department of Transportation's Traffic Manual.

The Developer's engineer shall submit the signing and striping plan with the first improvement plan submittal.

(2) Developer will pay for street name signs and regulatory signs and their installation.

(3) The City shall install all regulatory and street name signs.

(3) ~~(4)~~ Street name signs shall be placed at the right-hand corner of the secondary street entering or intersecting with a primary street.

(4) All signs shall be treated with anti graffiti materials such as 1160 OL or an equivalent.

~~**LOCATIONS**~~

~~Sufficient lighting shall be provided at the following: intersections, short radius curves, knuckles, at the neck of cul-de-sacs, and at other potential traffic safety locations as may be determined by the City Engineer. Other than at the locations listed, street lights will be installed at typical spacing as specified in the table contained herein, on tangent portions of roadway.~~

~~**STANDARDS**~~

~~The following standards shall apply to lighting on public streets in compliance with this policy.~~

~~Street Classification~~	~~Street Width Curb to Curb~~	~~Size/Type Light Fixture~~	~~Spacing of Light Standards~~	~~Short Radius Curve Defined~~
~~Residential Street~~	~~36' or less~~	~~100 watt HPSV~~	~~350' to 450'~~	~~250' or less~~
~~Class III Collector~~	~~> 36' to 40'~~	~~150 watt HPSV~~	~~300' to 400'~~	~~450' or less~~
~~Arterial Streets~~	~~Greater than 40'~~	~~250 watt HPSV~~	~~See Notes Below~~	~~1,100' or less~~

~~Notes:~~

~~1. Installations are to be of a staggered pattern (alternating sides of the street). A street light will be provided at a typical spacing of 175' to 250' on the stagger or every 350' to 500' along the same side of the street.~~

~~2. Upon divided roadways with center median islands of at least 14' in width, the street light standards will be provided, centered on the median island, at a typical spacing between 125' and 250' between light standards. Each median mounted standard will have two mast arms and luminaries so that there is lighting over each half of the roadway.~~

~~3. On existing streets, the same standards shall apply, except that the spacing on residential streets shall not exceed 600'. Street lights on all streets less than 40' in width will be 100 Watt, High Pressure Sodium Vapor (HPSV) full cut-off fixtures.~~

~~4. All street lighting shall be installed in accordance with Chula Vista Standards Drawings per sheets CVCS-6,7,9,10 & 11 and CVD-TR04.~~

3-408 License requirements for contractors performing work within the right-of-way

The purpose of this policy is to set forth the license requirements for contractors performing work within the right-of-way.
Any person performing construction work in California on jobs that total $500 dollars or more in labor and materials must be licensed by the California State License Board. The License Board specifies what type of license is required for each type of work. Generally, a Class "A" license is required for the type of work that typically occurs within the right-of-way pursuant to Business and Professions Code Section 7056. The following contractors are authorized to perform their respected trades within the right-of-way: (References: Business and Professions Code Section 7056, Municipal Code 15.04.160, 12.20.010)

- C8 Concrete Contractors may construct driveway approaches, curb, gutter and sidewalk.
- C12 Earthwork and Paving Contractors may perform grading work.
- C16 Fire Protection Engineering Contractors may perform installation of fire service lines.
- C27 Landscaping Contractors may perform landscaping related work.
- C31 Construction Zone Traffic Control Contractors may prepare traffic control plans and setup traffic control in the field.
- C32 Parking and Highway Improvement Contractors may perform parking lot pavement work including installation of protective vehicle signage and/or devices.
- C34 Pipeline Contractors may perform water and gas line work including trenching, compacting and surface paving.
- C42 Sanitation System Contractors may perform storm drain and sanitary sewer line work including trenching, compacting and surface paving. (C36 Plumbing Contractors are not allowed to perform sewer line work in the public right-of-way).
- C57 Water Well Drilling Contractors may perform installation and repair of water wells and pumps by boring, drilling, excavating, casing, cementing and cleaning to provide a supply of uncontaminated water.

Notwithstanding the foregoing, a "B" License Contractor performing work on-site may be allowed by the City Engineer to perform minor work within the right-of-way after pulling a construction permit for said work. Any traffic control plans associated with work performed within the right-of-way must be prepared and stamped by either a "C31" or an "A" License contractor.

3-408

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4 - CONSTRUCTION PLANS

This section covers public improvement, grading, landscape and irrigation and construction permit plans related to a major or minor subdivision. This section covers form, content and processing of construction plans. Although elements of this section may apply to construction plans for private improvements, the processing procedure is limited to that related to subdivisions. Submittal and processing requirements may differ for private improvement plans. For a major subdivision, the Subdivision Improvement Agreement (SIA) represents a permit to construct public improvements associated the subdivision. For minor subdivisions, a separate Construction Permit (PC) is issued (see section 4-400).

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CONSTRUCTION PLANS
SECTION 4-100
IMPROVEMENT PLANS

4-100 IMPROVEMENT PLANS

4-101 Purpose

Improvement plans detail construction of public improvements within existing public right-of-way or within existing easements for the purpose of constructing and maintaining public improvements. These plans are generally associated with a tentative or final map for a major subdivision.

4-102 Form and Content

4-102.1 General

(1) Improvement plans shall be prepared by a registered civil engineer and shall be accurate engineering drawings which are technically correct and complete and shall show in detail all improvements required to be constructed or installed, including site grading unless such grading is covered by separate grading plans and permit.

(2) Design criteria for the public improvements must conform to the standards set forth in Section 3 of this manual, Chula Vista Municipal Code Ordinances, Chula Vista Standard Drawings and Standard Specifications, CALTRANS Highway Design Manual, the San Diego County Regional Standard Drawings and other specifications as may be deemed appropriate by the City Engineer.

(3) Improvement plans shall be clearly and legibly drawn on 24" x 36" (61cm X 91cm)(Chula Vista Standard D sheet) mylar (min. 3mils (0.08mm) thick) using black drawing ink only.

(4) Hand lettering shall be a minimum of 1/8" (3mm) in height. Typed or computer generated lettering shall be a minimum of 1/10" (2.5mm) in height.

(5) Minimum scale shall be 1" = 40' (1cm = 10m).

(6) The engineer of work shall sign and stamp each sheet of the plans including engineer's registration number and expiration date.

(7) Each sheet shall contain a title block as described in Section 4-102.2

(8) Final improvement plans shall be submitted in digital format according to Section 1-500. Digital files shall be exact copies of the approved improvement plans.

4-102.2 Title Block; - Each sheet shall contain the Chula Vista standard title block which includes the information described below. Standard D sheet size mylars with the title block are available from the City either with or without profile grid.

(1) Title - Subdivision designation, the type of improvement shown on that sheet such as sewer, street, drainage, etc., and the location or extent of such improvements.

(2) Drawing Numbers - Drawing numbers will be assigned by the Engineering Division usually after the first plan check.

(3) Sheet Numbers - Sheets shall be numbered consecutively. Each sheet shall also show the total number of sheets in the plan.

(4) Work Order Number - The work order number shall be located above the title block over the block for drawing numbers. The work order will be assigned by the City and will be included in the first plan check comments.

(5) City Signatures - Each sheet of the approved plans will contain the following City signatures:

a) At approval, each sheet will be signed by a Senior Civil Engineer and the City Engineer. The cover sheet must allow a minimum 2" high X 5" wide clear area above the City approval signature block to accommodate the Senior Civil Engineer's and City Engineer's stamps.

b) Office, Field, Traffic - These blocks will be initialed when approved by the appropriate City personnel.

(6) Engineer of Work Signatures - This block must include the initials of the people responsible for designing, drafting and checking the plans as well as the signature and registration number of the engineer of work and the date signed.

(7) Scale - Indicate the horizontal and vertical scale for each sheet.

(8) Bench Mark - Bench mark description shall be shown on each sheet of the plans. Bench marks shall conform to Section 2-302.3 of this manual

(9) Revisions - The reference number, description, approval signature and date shall be shown for each plan revision or construction change (see Section 4-500) on each sheet affected. New mylars may not be submitted for construction changes unless otherwise approved by the City Engineer.

(10) Reference Drawings - The drawing numbers for all existing and adjacent improvements shall be shown on each sheet.

(11) Construction Record - The construction record shall include contractor's signature, inspectors' signature and date the plans are as-built (see Section 4-500).

4-102.3 Title Sheet(s); - The title sheet for improvement plans shall contain the following items:

(1) Title - The subdivision name and unit number shall be placed in bold print at the top center of the title sheet.

(2) A vicinity map with north arrow and scale shall be indicated.

(3) A key map drawn to a scale of 1" = 200' (1cm=20m) shall be shown on the cover sheet which depicts the general plan of the subdivision to include roads adjacent to the subdivision, street light and fire hydrant locations, overall sewer plan, overall drainage plan; and, if applicable, the area of improvement covered by each sheet. The key map shall have a north arrow and scale shown.

(4) Work to be done and legend. Items in the work to be done will vary with the improvements to be constructed. Symbols used in legend shall conform with City of Chula Vista and San Diego Regional Standard symbols.

(5) A typical cross-section of each class of existing and proposed streets. The typical section shall indicate structural section to conform to the paving note. It shall also show roadway widths, right of way widths, side slopes, shoulders, curbs, gutters, sidewalks, medians, typical street light and fire hydrant locations and relationship of centerline grade to top of curb grade. The typical section shall also make reference to elevations as shown on the profiles. Typical street cross sections shall comply with City of Chula Vista Street Design Standards. Where possible, fire hydrants should be placed on the "no parking" side of the street.

(6) A concise legal description to define the location of the proposed subdivision.

(7) Tax Assessor's parcel number(s).

(8) The name, address, telephone number and signature of the record owner or owners.

(9) The name, address and telephone number of the subdivider, if other than owner(s).

(10) Construction Notes - General, Special, Water, Sewer, Fire shall be added to the title sheet as necessary.

(11) NPDES Certificate. An NPDES certificate is required on all improvement plans unless an NPDES permit was previously obtained, and still in effect, for advance grading operations. (See Section 4-209)

(12) Engineer of Work Certificate. This certificate shall be complete and signed by the Engineer of Work as part of the as-built process (see Section 4-500).

(13) Declaration of Responsible Charge. This certificate shall be signed by the Engineer of Work prior to City approval.

(14) Traffic Control Plan - Construction projects involving work within the public rights of way in the City of Chula Vista shall require a determination by the City Engineer relative to the need for preparation of Traffic Control Plans. If Traffic Control Plans are required, they must be approved prior to the issuance of Construction or Utility Permits, or the finalizing of a final map.

(15) Other Agency Signatures. If approval is required from other agencies (i.e. water company), the appropriate signature block for those agencies shall be added as deemed necessary by those agencies. Other agency signatures must be obtained prior to City approval of the improvement plans. Private Water Lines may be shown and plan checked on the Improvement Plans with a note that the Building Inspector is responsible for inspection.

4-102.4 Plan and Profile Sheets - General

The plan and profile sheets of the improvement plans shall show sufficient detail of all proposed improvements and facilities to facilitate proper construction and inspection and at a minimum shall include the following:

(1) North arrow.

(2) Map Scale in words or figures shall be shown on both the plan and profile views. In additions, the scale shall be shown graphically on the plan view, in the event the map is enlarged or reduced.

(3) Horizontal scale for plan and profile shall be the same and be either 1" = 10' (1cm=1m), 1" = 20' (1cm=2m) or 1" = 40' (1cm=5m).

(4) Stationing shall generally be from left to right.

(5) "As-Built" Certificate (to be completed through as-built process).

(6) All data tables shall be complete (except sewer lateral table).

(7) Existing Conditions - Existing improvements adjacent to the area of work or to be met by proposed work shall be shown by dashed lines. Any existing improvements to be relocated or removed shall be so noted on the plan view sheet containing said improvements.

4-102.5 Plan View

(1) All existing underground utilities or facilities (sewer, water, gas, drainage, curb ramps, driveways) shall be shown, labeled, and dimensioned on both the plan and profile. Existing underground utilities shall be extended beyond the limits of work at least 50 feet (15m) on both plan and profile.

(2) New gas distribution systems to be constructed along with subdivision improvements shall not be shown.

(3) When possible with clarity, street, sewer and drainage designs shall be shown upon the same sheet.

(4) Where drainage systems are complex and extend beyond the street right of way, they shall be shown on separate sheets depicting the complete system.

(5) Driveway locations shall be shown for each lot.

(6) Manholes shall be numbered on both plan and profile sheets.

(7) Provide a sewer lateral data table. Each residential lot shall be listed in said table. The table shall include the following information for each lot:

a) lot number
b) invert elevation at main
c) drop to main
d) length in feet
e) invert elevation at property line

f) slope of lateral
g) top of curb elevation

h) depth below top of curb at property line
i) sewer station
j) whether a backflow preventor is required

(8) Lot number and backflow preventor columns of the sewer lateral table shall be complete prior to approval. Remaining information will be added during the "as-built" process. Sewer laterals and backflow preventors shall also be shown on plan views (see Section 4-500).

(9) Existing right of way, property lines, and improvements, in or adjacent to area to be improved.

(10) New right of way, property lines, and lot numbers of area being improved.

(11) Streets.

a) Centerline shown by standard symbol. The centerline shall be stationed at each 500 feet (200m) with "tick marks" at 100' (30m) intervals, and B.C.'s and E.C.'s shall be stationed. Provide data tables for street centerlines.

b) Street names shown within each street.

c) That portion of the street to be paved or overlaid shall be shaded and dimensioned.

(12) Show curb return street stationing at the beginning and end of each curb return. Provide data tables for all curbs. Curb dimensioning shall be from face of curb to centerline of street.

(13) For major street to major street intersections and higher, show a detail at 20 scale of the diagonals of the intersection with contours at 0.2 ft. intervals or spot elevations to evaluate driveability and drainage to the satisfaction of the City Engineer. The detail shall include the area through the curb returns.

(14) Show pedestrian ramps at each curb return and show one pedestrian ramp opposite either curb return at T-intersections. Final location of pedestrian ramps at T-intersections will be determined by the City's Traffic Section.

(15) Sidewalks with dimensions showing width and location.

(16) Street light locations and stations, conduits, service points and pull boxes shall be shown. Final locations of street lights will be determined by the City's Traffic Section.

(17) Show flowline elevations of cross gutters per CVCS 2.

(18) Fire hydrant locations and stations shall be shown.

(19) The following information shall be shown for all drainage facilities:

a) Size

b) Length
c) Grade
d) Material
e) Design flows and velocities and hydraulic grade lines for 50-year storm event
f) Centerline and storm drain stationing
g) Encasement and special bedding requirements.
h) Location by street stationing and dimensions from centerline of street.
i) Data tables for all storm drain pipe showing alignment data.
j) Details for all drainage facilities that are not to be constructed in accordance with Standard Drawings including detail plan view, cross-sections, and typical sections.
k) Drainage pipe gauge, or D-load may be stated in the general notes. If a general note relative to pipe gauge or D-load is used, then only segments of pipe which don't conform to the standard note need be indicated on the profile of the pipe.

(20) Show drainage, sewer, street tree planting and pedestrian easements. Detail location of facility within easements, width of easement and relationship of easement to nearby or adjacent lot lines.

(21) Sewer mains and manholes shall be shown on centerline of streets except when otherwise approved by the City Engineer. Provide data tables for all sewer pipe and number all sewer manholes.

(22) Water systems shown will be reviewed for conflicts with other facilities only. Water company approval of water facilities is required prior to City approval of the plans.

(23) Irrigation lines and facilities within the public right of way shall be shown.

(24) Clearly identify all City or County boundaries

(25) Erosion Control Plans shall include the following:

a) A map of the entire subdivision at a minimum scale of 1” = 200’ (1 cm = 20m) showing placement of all gravel bags, desilting basins, desilting devices, and silt fences.
b) Temporary desilting basins in the street with a table showing the spacing for the gravel bag rows.
c) Cross section of the street showing the height of the gravel bags and weirs, street centerlines, curblines, right of way line and undercut or subgrade line.
d) Temporary desilting devices at all inlets with a separate detail for all sump conditions.
e) Construction entrance details.

4-102.6 Profile View

(1) Vertical scale for profile shall be either 1" = 2' (1cm=1m) or 1" = 4' (1cm=2m) unless more than one profile break will occur per plan sheet; then a scale of 1" = 8' (1cm=5m) may be used.

(2) Symmetrical streets may be shown with a single profile with a note clearly stating that the curb elevation is a specific distance higher or lower than the centerline

grade. Knuckles, cul-de-sacs, curb inlet locations, curb returns, roadway transitions and roads in superelevation shall have separate curb profiles.. Unsymmetrical streets shall be shown by three profiles, one for centerline and one for each curb. Curb profiles shall extend a minimum of 50 feet (15m) beyond the point of symmetry.

(3) The original ground profile at centerline shall be shown.

(4) For street widening show profiles for the existing centerline, edge of pavement and new curbs. Engineer of work shall also submit separate drawings showing cross sections of the street widening at approximately 50 foot intervals.

(5) Show percent grade for all straight grades, on all profiles.

(6) Stations and elevations shall be shown at a maximum of 100 foot stations at match lines, curb returns, points on vertical curves, street intersections, and at any other location necessary for clarification of plans or construction of improvements.

(7) Centerline, crown-line and curb lines of cul-de-sacs and knuckles shall be clearly indicated on profiles.

(8) Vertical curves shall be clearly indicated to show:

a) Length of vertical curve.
b) Tangent grades
c) Stations and elevations at B.V.C., E.V.C., P.I., high/low point and at a maximum of 25 foot (8m) stationing.

(9) Curb return profiles shall be shown separately with elevations shown for top of curb at P.C.R.'s, quarter points, and high/low points. Show the street name and percent grade of tangents at each end of curb return. Show the curb return PI elevation based on a projection of the grade along the main (through) street. Show the calculated grade from the side street PCR elevation along the tangent to this PI elevation. The grade break at the PCR shall not exceed 1%. The curb return shall be designed in a plane.

(10) Show size, type, percent grade and length between manholes on proposed sewers. Show elevations at manhole rims, manhole flow lines and vertical curves as specified above. Show sewer profile on same sheet as sewer plan.

(11) Culvert and storm drain profiles shall be shown and labeled. Where possible, culvert profiles shall be shown on same sheet as the culvert plan. Show existing ground line, finish ground lines, percent grade of flow line, inlet and outlet elevations of the conduits, catch basins and cleanouts and size, class or gauge of conduits.

(12) Top of curb elevations shall be given at both ends of curb inlets, at the end of curb transitions and at centerline of the box. Street centerline stations shall be shown at the center of each curb inlet.

4-103 Processing

4-103.1 Submittal Requirements

(1) Submittals will only be accepted in conformance with Section 5-203 of this manual

(2) First Submittal - The first submittal package includes but is not limited to the following:

a) Initial plan check deposit per Section 5-100.

b) Executed Development Agreement (unless previously filed)

c) Blueline copies of Improvement Plan per Section 5-200

d) Hydraulic computations including dry-lane calculations.

e) Soils Report or Geotechnical Report ~~(if required)~~prepared pursuant to the City of San Diego's latest adopted "Guidelines for Geotechnical Reports" (http://www.sandiego.gov/development-services/industry/pdf/geoguidelines.pdf) as determined by the City Engineer -2 Original ~~& 2 microfiche~~ copies.

f) Design data and/or calculations for special structures.

g) Engineer's estimates for construction of public improvements (may be submitted with subsequent plan check). Construction cost estimates shall be calculated using the current "City of San Diego Unit Price List for Estimating Subdivision and Permit Bonds" as accepted by the City of Chula Vista.

h) Landscaping and Irrigation Plans.

i) Other items as specified by City Council in approval of associated tentative map (if any).

(3) Subsequent Plan Check - Subsequent plan check submittals shall include but not be limited to:

a) 2 revised blueline copies;

b) Original City plan check comments;

c) Other information and documentation as requested.

(4) Additional Items Required Prior to Approval:

a) Inspection and plan check deposits as required by the City Engineer;

b) Improvement Bonds. Approved bond amounts shall be based on the Engineer's approved construction cost estimate and in accordance with Section 18.16.220 of the City's Municipal Code.

c) Easements for off-site improvements.

d) Any other required deeds and/or easements.

e) Compliance with all outstanding conditions of approval related to improvements ((if any).

f) Signed mylars of the improvement plan. Improvement plans must be signed by all parties except the City prior to City approval.

(5) See Table 5-202.5 for Plan and Bonding requirements.

4-103.2 Approval

(1) When it has been determined that the improvement plans are complete, technically correct, and in accord with the final map or parcel map, and all required signatures obtained, then the improvement plans will be approved by the City Engineer.

(2) Approval of the improvement plans does not constitute a permit to construct. If the improvement plans are associated with a tentative or final subdivision map, the corresponding Subdivision Improvement Agreement (SIA) is the permit to construct. Otherwise, an advance permit or construction permit is required.

4-103.3 Print Package - Signed improvement plans will be released only to blueprint companies bonded with the City. Engineer of work shall be responsible to provide the City with a full size mylar set of the improvement plans (min. 3mils (0.08mm) thick) and the required number of blueline copies (see Section 5-201).

4-103.4 Partial Approval - The subdivider may receive partial approval of the improvement plans for storm drain approval only if required for an advance grading permit. Such partial approval shall be clearly shown on each sheet with a separate and permanent signature block labeled "STORM DRAIN APPROVAL ONLY".

4-103.5 Advance Permit - An advance permit to construct public improvements associated with a tentative or final subdivision map prior to approval of the SIA may be issued upon agreement between the City and the developer. In such cases, all bonds, bond riders, letters of permission, inspection deposits and print packages must be submitted and accepted by the City prior to issuance of the construction permit. A construction permit number (PC) will be issued for advance permits.

4-103.6 As-Builts - shall be processed in accordance with Section 4-500. The following shall be shown as on all as-built improvement plans:

(1) Show sewer lateral on the plan view indicating the distance from the closest property line and complete the sewer lateral table.

(2) Back flow preventors must be shown on both the lateral table and the plan view.

(3) Structural street sections listed with limits indicated for each change.

(4) Street light conduit locations, pull boxes and power sources.

(5) Show driveways including station of driveway centerline and width of driveway.

(6) Sewer lateral cleanouts at property lines.

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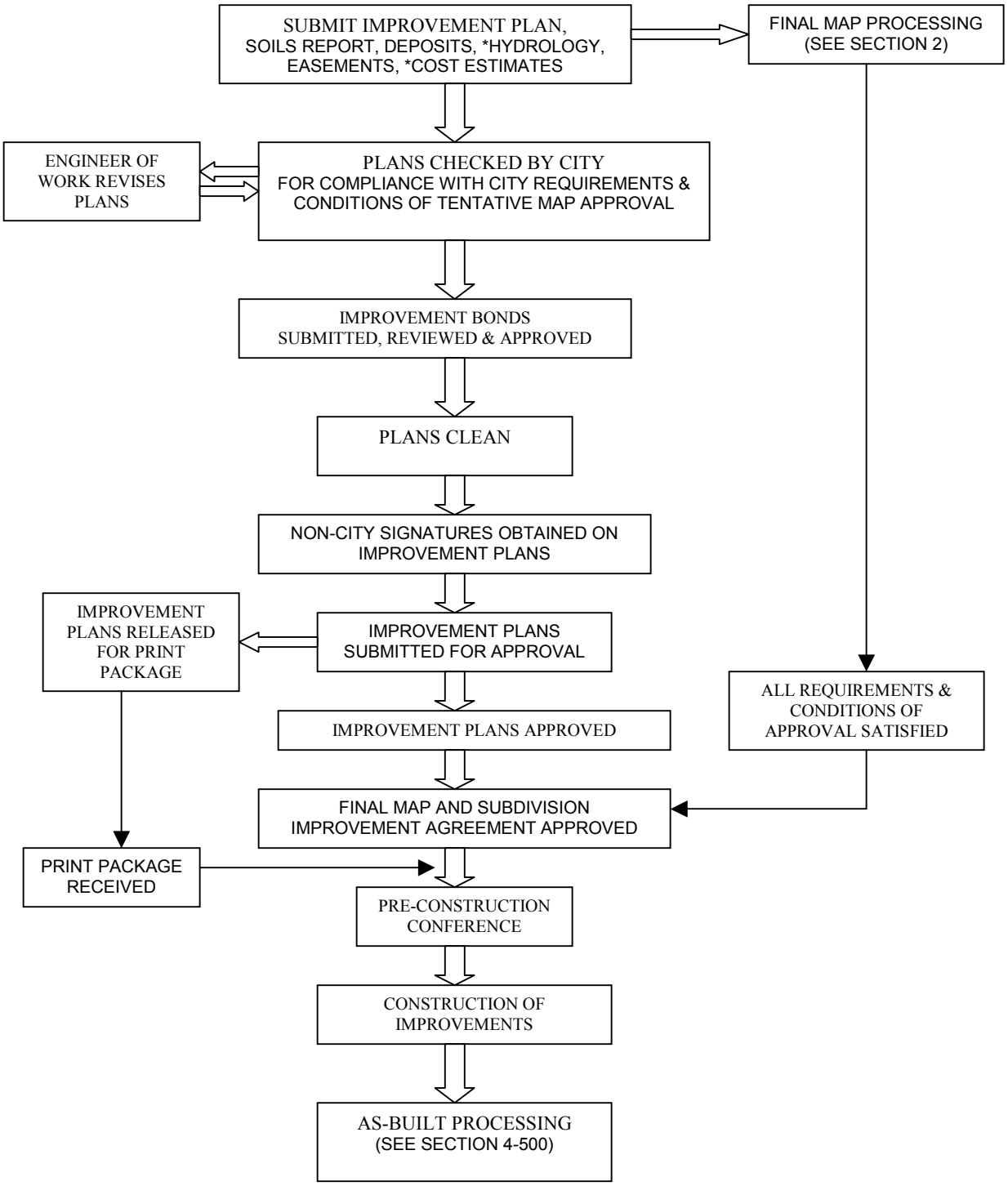
4-103.7 IMPROVEMENT PLAN FLOW CHART



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4-103.8 SAMPLE TITLE SHEET FOR IMPROVEMENT PLANS

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4-104 IMPROVEMENT PLAN CHECKLIST
CITY OF CHULA VISTA

FOR OFFICE USE ONLY
DE- _____
_____
FILE: _____

SUBDIVISION _____
_____

TRACT NO.: _____

Property Owner(s): _____
_____
&
Address

Engineer/Surveyor: _____
_____

PHONE: _____

(References are to City of Chula Vista Subdivision Manual)

ITEM	CHECK	REMARKS
4-103.1 SUBMITTAL PACKAGE – Plans, Reports, Statements & Exhibits		
a. Initial Deposit — **Amount** $		
b. Development Processing Agreement executed		
c. Blueline copies		
d. Hydraulic Report including dry lane calc's		
e. Soils Report – prepared pursuant to the City of San Diego's latest adopted "Guidelines for Geotechnical Reports" (http://www.sandiego.gov/development-services/industry/pdf/geoguidelines.pdf) as determined by the City Engineer~~1 copy (if required)~~ 2 Copies		
f. Design data and/or calculations for special structures		
g. Engineers' construction cost estimate		

ITEM	CHECK	REMARKS
h. Inspection deposit		
i. Improvement bonds		
j. Easements and/or deeds required		
k. Mylar (min. 3 mils thick)		
l. Print Package		
4-102 FORM AND CONTENT - General		
1. Legibly drawn on mylar, sepia or other approved media		
2. 24" x 36" (61cm x 91cm) with 1" (2.5cm) margin		
3. Lettering size – 0.10 in (2.5mm) computer; 1/8" (3mm) hand in black drawn ink		
4. Scale: 1" = 40' (1cm = 10m) minimum in both words and graphically and north arrow		
5. Engineer of Work signature and stamp on each sheet		
4-102.2 TITLE BLOCK		
1. Title – Subdivision Name, type of improvement & location		
2. Drawing Nos. – add when assigned		
3. Sheet Numbers		
4. Work Order Number – add when assigned		
5. City Approval Signature – when approved		
6. Office, Field, Traffic Initials – when approved		
7. Engineer of Work Signatures – designer, drafter, plan checker, Engineer of Work Signature and Stamp		
8. Scale		
9. Bench Mark		
10. Revisions – complete when as-built		
11. Reference Drawings		

ITEM	CHECK	REMARKS
12. Construction Record – complete when as-built		
4-102.3 TITLE SHEET		
1. Title – subdivision name and unit number		
2. Vicinity map with north arrow and scale		
3. Key map – including street lights, sewer, storm drain, fire hydrant, streets, street names, area covered by each sheet		
4. Work to be Done & Legend		
5. Typical street cross sections		
6. Legal Description		
7. Tax Assessor's Parcel Number(s)		
8. Owners' name, address, phone & signature		
9. Developers' name, address, phone & signature (if other than owner)		
10. Construction Notes – General, Special, Water, Sewer, Fire, etc. (see Section 4-107)		
11. NPDES Certificate (if required)		
12. Engineer of Work (as-built) certificate		
13. Declaration of Responsible Charge		
14. Determine need for traffic control plan in public streets		
15. Other agency signatures		
4-102.4 PLAN & PROFILE SHEETS – General		
1. North arrow		
2. Scale (min. 1" = 100' (1cm = 10m)) shown both in words or figures and graphically		
3. Horizontal scale for plan view identical to horizontal scale for profile view		
4. Centerline and key points stationed		

ITEM	CHECK	REMARKS
5. "As-Built" certificate on each sheet		
6. Existing Conditions shown as dashed lines		
7. All data tables complete		
4-102.5 PLAN VIEW		
1. Proposed as solid lines, existing as dashed lines		
2. Tied to street centerline		
3. City/County boundaries identified		
4. Highways, streets, roads – names, grades, widths, if private designated as such		
5. Sidewalks, pavement, curbs and gutters, street lights, driveways		
6. Easements – location, purpose, size, public or private and recording information		
7. All utilities shown and labeled and dimensioned		
8. Driveway locations shown		
9. Manholes numbered		
10. Sewer Lateral Table		
11. Existing right of way, property lines and improvements		
12. Street centerline, names, stationing, paving		
13. Curb returns with street stationing at PCR's shown		
14. Pedestrian ramps shown		
15. Sidewalks dimensioned showing width and location		
16. Street light locations and stations, pull box, conduit, wire location and size, service point location		
17. Flow line elevations of all cross gutters shown		
18. Fire hydrant locations and stations shown		
19. All drainage facilities including size, length, grade, material, etc. shown		

ITEM	CHECK	REMARKS
20. All easements shown		
21. Water systems shown		
22. Irrigation lines and facilities within right of way shown		
23. City and/or County boundaries shown		
4-102.6 PROFILE VIEW		
1. Vertical scale 1" = 2' (1cm = 1m) or 1" = 4' (1cm = 2m)		
2. Appropriate curb profiles shown (See pg 4-100)		
3. Original ground profile shown		
4. Street centerline and/or edge of pavement (if widening) shown		
5. Percent grades shown		
6. Stations & elevations at 100' intervals, BCs, Ecs, PCRs, street intersections, etc. shown		
7. Centerline, crown line and curb line of cul-de-sacs and knuckles shown		
8. Vertical curve data shown (length, tangent grades, stations, & elevations of BVC, EVC, high/low point, and at 25 foot (8m) intervals)		
9. Separate profiles for curb returns shown		
10. Sewer main size, type, percent grade and length between manholes, manhole stations, rim elevations, inverts shown		
11. Culvert & storm drain profiles shown & labeled		
12. Top of curb elevations at both ends of curb inlets, at the end of curb transitions and at the center of each inlet shown		

4-105 IMPROVEMENT PLANS TYPICAL NOTES AND CERTIFICATES

GENERAL NOTES

1. ALL UNDERGROUND UTILITIES AND LATERALS TO BE INSTALLED BEFORE CONSTRUCTION OF CURB, SIDEWALK, OR SURFACING OF STREETS.

2. SIDEWALK IS TO BE SIX INCHES THICK THROUGH ALL DRIVEWAYS.

3. ALL WORK SHALL BE COMPLETED PER THESE PLANS AND APPROVED REVISIONS. ALL CHANGES OR REVISIONS THERETO MUST BE APPROVED BY THE CITY ENGINEER, IN WRITING, PRIOR TO ANY REQUEST FOR INSPECTION.

4. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITY PIPES AND STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS, TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN HEREON, HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING UTILITIES OR STRUCTURES LOCATED AT THE WORK SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT UNDERGROUND SERVICE ALERT (PHONE 1-800-422-4133) TWO (2) WORKING DAYS IN ADVANCE OF ANY EXCAVATION FOR THE MARK OUT OF THE LOCATION OF UTILITIES AND NOTIFICATION OF COMMENCEMENT OF WORK. FOR ANY QUESTIONS REGARDING THE MARK OUT OF UNDERGROUND UTILITIES, THE CONTRACTOR SHOULD CONTACT THE RESPECTIVE UTILITY COMPANY:

STREET LIGHT OR SIGNAL LIGHT CONDUIT	CITY OF CHULA VISTA	(619) 397-6163
SEWER OR STORM DRAIN	CITY OF CHULA VISTA VERIFICATION	(619) 691-5024
	NOTIFICATION	(619) 397-6000
GAS & ELECTRIC	SAN DIEGO GAS & ELECTRIC	1-800-227-2600
WATER	OTAY WATER DISTRICT	(619) 670-2222
	SWEETWATER AUTHORITY	(619) 420-1413
TELEPHONE	PACIFIC BELL	(619) 266-4683
TELEVISION	COX CABLE OF SAN DIEGO	(619) 263-9251
	ULTRONICS	(619) 476-0177

5. CITY OF CHULA VISTA INSPECTION NOTICE:

a. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM THE CITY ENGINEER 2 WORKING DAYS IN ADVANCE OF COMMENCEMENT OF WORK. PHONE: 397-6128.

b. THE CONTRACTOR SHALL GIVE 24 HOURS (ONE WORKING DAY) NOTICE ON CALLS FOR INSPECTION. PHONE: 397-6128.

c. ANY WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL AT CONTRACTOR'S EXPENSE.

d. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND WORK PRIOR TO THE EXCAVATION FOR INSTALLATION OF NEW UNDERGROUND WORK.

6. STREET LIGHT NOTE:

THE STREET LIGHTS AND SERVICE POINTS SHOWN HEREON ARE APPROXIMATE ONLY, SERVICE POINTS ARE SUBJECT TO REVISION BY SAN DIEGO GAS AND ELECTRIC COMPANY FINAL PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE PROPER SERVICES TO THE STREET LIGHTS SHOWN ON THE PLAN ACCORDING TO ALL THE APPLICABLE CITY OF CHULA VISTA PLANS AND SPECIFICATIONS. THE DEVELOPER SHALL BE RESPONSIBLE FOR PROVIDING CONDUIT AND CONDUCTORS FROM STREET LIGHTS TO APPROVED SERVICE POINTS FURNISHED BY SAN DIEGO GAS AND ELECTRIC COMPANY. CONDUIT RUNS AND CONDUCTOR SIZE FROM STREET LIGHTS TO SERVICE POINTS SHALL BE SHOWN ON THESE PLANS AND APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION. STREET LIGHTING CONDUIT SHALL BE 1-1/2" MIN. PVC (SCHEDULE 80). FINAL LOCATION AND SIZE OF STREET LIGHTS, CONDUIT, WIRE AND PULL BOXES SHALL BE APPROVED PRIOR TO BEGINNING OF CONSTRUCTION.

7. NEITHER THE OWNER NOR THE ENGINEER OF WORK WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS DURING CONSTRUCTION OPERATIONS.

8. LOCATION AND TYPE OF STREET TREES FOR EACH LOT TO BE DETERMINED BY THE PUBLIC WORKS DEPARTMENT - STREET OPERATIONS.

9. MAXIMUM DISTANCE BETWEEN PULL BOXES IS 190 FEET.

10. ALL UTILITIES SHALL HAVE A MINIMUM OF 90% RELATIVE COMPACTION IN ALL TRENCH BACKFILL.

11. THE CONTRACTOR SHALL BE RESPONSIBLE THAT ANY MONUMENT OR BENCH MARK WHICH IS DISTURBED OR DESTROYED SHALL BE RE-ESTABLISHED AND REPLACED BY A REGISTERED CIVIL ENGINEER WHO IS ALLOWED TO PRACTICE SURVEYING OR A LICENSED LAND SURVEYOR AND A CORNER RECORD, RECORD OF SURVEY, OR CERTIFICATE OF CORRECTION FILED AS REQUIRED BY THE LAND SURVEYOR'S ACT.

12. AS-BUILT DRAWINGS:

A SET OF BLUELINE PRINTS AND A SET OF SPECIFICATIONS SHALL BE KEPT AT ALL TIMES ON WHICH ALL CHANGES OR VARIATIONS IN THE WORK, INCLUDING ALL UTILITIES, ARE TO BE RECORDED.

13. CONTRACTOR SHALL FURNISH TO THE ENGINEER OF WORK AS-BUILT PLANS FOR ALL NEW IMPROVEMENTS SHOWN ON THESE PLANS FOR SUBMITTAL TO THE CITY ENGINEER FOR APPROVAL.

14. THE OWNER MUST OBTAIN AN EXCAVATION PERMIT FROM THE DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (D.O.S.H.) PRIOR TO START OF CONSTRUCTION.

15. ALL STORM DRAIN PIPE SHALL BE1500 D-LOAD UNLESS OTHERWISE SHOWN ON THESE PLANS.

16. DUST GENERATED BY CONSTRUCTION ACTIVITIES SHALL COMPLY WITH LOCAL DUST CONTROL AND UNIFORM BUILDING CODE (UBC) REQUIREMENTS WHICH INCLUDE DUST CONTROL MEASURES FOR CONSTRUCTION SITES. DUST REDUCING MEASURES SHALL INCLUDE REGULAR WATERING OF GRADED SURFACES AND RESTRICTION OF ALL CONSTRUCTION VEHICLES AND EQUIPMENT TO TRAVEL ALONG ESTABLISHED AND REGULARLY WATERED ROADWAYS.

SPECIAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSURE THAT ALL SLOPES, STREETS, UTILITIES, AND STORM DRAINS ARE BUILT IN ACCORDANCE WITH THESE PLANS. IF THERE IS ANY QUESTION REGARDING THESE PLANS OR FIELD STAKES, THE CONTRACTOR SHALL REQUEST AN INTERPRETATION BEFORE DOING ANY WORK BY CALLING THE ENGINEER OF WORK AT_____ AND THE CITY INSPECTOR. THE CONTRACTOR SHALL ALSO TAKE THE NECESSARY STEPS TO PROTECT THE PROJECT AND ADJACENT PROPERTY FROM ANY EROSION AND SILTATION THAT RESULT FROM CONTRACTOR'S OPERATIONS BY APPROPRIATE MEANS (SAND BAGS, HAY BALES, TEMPORARY DESILTING BASINS, SILT FENCES, DIKES, SHORING, ETC.) UNTIL SUCH TIME THAT THE TOTAL PROJECT IS COMPLETED AND ACCEPTED FOR MAINTENANCE BY WHATEVER OWNER, AGENCY OR ASSOCIATION IS TO BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE.

2. CONTRACTOR WILL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES.

3. LOCATION AND ELEVATIONS OF IMPROVEMENTS TO BE MET (OR AVOIDED) BY WORK TO BE DONE SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK. CONTRACTOR SHALL REPORT TO THE ENGINEER OR CITY INSPECTOR ANY DISCREPANCIES BETWEEN FIELD MEASUREMENTS AND THE PLANS.

4. BEFORE EXCAVATING FOR THIS CONTRACT, THE CONTRACTOR SHALL FIELD VERIFY LOCATION OF UNDERGROUND UTILITIES. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO OTHER EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS.

5. CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER EXISTING LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.

6. CONTRACTOR AGREES: TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, THE ENGINEER AND THE CITY OF CHULA VISTA HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING THEREFROM LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER OR THE CITY OF CHULA VISTA.

7. CONTRACTOR IS RESPONSIBLE FOR HAVING TRAFFIC CONTROL PLANS APPROVED BY THE CITY ENGINEER PRIOR TO COMMENCING ANY WORK IN THE PUBLIC RIGHT OF WAY.

8. CONTRACTOR SHALL REPAIR ALL DESTROYED OR DAMAGED EXISTING SURFACE IMPROVEMENTS WITH IMPROVEMENTS EQUAL OR SUPERIOR.

9. ALL DEMOLISHED MATERIAL SHALL BE REMOVED FROM THE JOB SITE TO AN APPROVED DISPOSAL SITE.

10. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL PROPOSED CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS AND THE CITY ENGINEER.

11. STOP SIGN AND STREET NAME SIGN POLES SHALL BE CONSTRUCTED CONCURRENT WITH SIDEWALK CONSTRUCTION IN ACCORDANCE WITH CVDS 14 AND 32.

SEWER NOTES

1. SEWER SHOWN ON THESE PLANS IS P.V.C. SEWER PIPE PER ASTM D-3034 TYPE PSM SDR-35, UNLESS OTHERWISE NOTED, WITH MINIMUM PIPE STIFFNESS OF 46 WHEN TESTED AT FIVE PERCENT DEFLECTION. GRAVITY P.V.C. SEWER SHALL HAVE A 3/4 INCH MAXIMUM CRUSHED ROCK BACKFILL TO ONE FOOT ABOVE THE PIPE.

2. AS AN ALTERNATE TO P.V.C. AN A.B.S COMPOSITE SEWER PIPE CONFORMING TO ASTM D-2680 WITH TYPE S.C. COUPLERS MAY BE USED IN SIZES EIGHT INCHES AND ABOVE. FOUR INCHES OR SIX INCHES SHALL BE A.B.S. SOLID WALL WITH F/DY NOT LESS THAN 150 PSI PER ASTM D- 2751.

3. SEWER CONTRACTOR SHALL MAKE CERTAIN THAT ALL MANHOLES ARE CONSTRUCTED IN EXACT LOCATION SHOWN, AND WITH THE OFFSET CONE POSITIONED AWAY FROM SURVEY MONUMENT LOCATION ADJACENT THERETO.

4. THE PIPE BEDDING SHALL BE IN ACCORDANCE WITH REGIONAL STANDARD DRAWING NO. S-4 (TYPE C).

5. THE P.V.C. AND A.B.S. PIPE CONNECTIONS TO MANHOLES SHALL HAVE MANHOLE WATER STOP GASKETS AT EACH CONNECTION TO MANHOLES. THESE

WATER STOP GASKETS SHALL BE CONSIDERED TO BE INCLUDED IN THE UNIT PRICE BID FOR MANHOLES.

6. RIM ELEVATIONS SHOWN ARE FOR INFORMATION ONLY. ALL MANHOLES SHALL BE ADJUSTED TO FINISHED GRADE, FINAL PAVING ELEVATIONS AND CROSS SLOPES ACCORDING TO CHULA VISTA STANDARDS AND SPECIAL PROVISIONS.

7. EACH UNIT SHALL RECEIVE ONE SEWER LATERAL WHICH WILL BE SHOWN ON AS-BUILT PLANS.

8. PIPE CONNECTION TO MANHOLE (MH) SHALL COMPLY WITH REGIONAL STANDARDS.

9. EACH SEWER LATERAL SHALL RECEIVE ONE CLEANOUT INSTALLED AT PROPERTY LINE.

FIRE NOTES

1. COMMERCIAL FIRE HYDRANTS SHALL HAVE ONE (1) 4-INCH OUTLET AND TWO (2) 2 1/2 INCH OUTLETS. RESIDENTIAL FIRE HYDRANTS SHALL HAVE ONE (1) FOUR INCH OUTLET AND TWO (2) 2-1/2 INCH OUTLETS. INSTALLATION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

2. FIRE HYDRANT SPACING SHALL BE:

- 300 FEET FOR COMMERCIAL BUILDINGS, APARTMENTS & CONDOMINIUMS.
- 500 FEET FOR RESIDENTIAL
- 1,000 FEET ON PARKWAYS – ALTERNATING SIDES OF STREET.

3. PROTECTION OF FIRE HYDRANTS TO BE PROVIDED AND MAINTAINED AT ALL TIMES.

4. WATER SUPPLY SHALL BE INSTALLED AND OPERABLE PRIOR TO DELIVERY OF COMBUSTIBLE MATERIALS TO THE SITE.

5. WATER SUPPLY WILL CONSIST OF FIRE HYDRANTS AS APPROVED AND INDICATED BY THE FIRE DEPARTMENT DURING PLANCHECK. A TEMPORARY SUPPLY MAY BE ALLOWED AND WILL INCLUDE ABOVE GROUND PIPING (HIGH LINE) CONNECTED TO AN UNDERGROUND SUPPLY. ANY TEMPORARY WATER SUPPLY SOURCE IS SUBJECT TO PRIOR APPROVAL FROM THE FIRE MARSHAL.

6. PROVIDE AND MAINTAIN AN APPROVED FIRE DEPARTMENT ACCESS ROAD (MINIMUM 20' WIDE AND 13'6" VERTICAL CLEAR) PRIOR TO ANY COMBUSTIBLES BEING BROUGHT ON THE SITE. THE FIRE DEPARTMENT ACCESS ROAD SHALL BE PROVIDED TO WITHIN 150' OF THE MOST REMOTE POINT OF THE UNFINISHED BUILDING MATERIAL OR COMBUSTIBLE CONSTRUCTION MATERIAL. COMPLY WITH THE REQUIREMENTS SET FORTH IN CHULA VISTA FIRE DEPARTMENT STANDARD OPERATIONAL GUIDELINES, NO. OPS 2916.00.~~ACCESS FOR FIRE APPARATUS TO BE PROVIDED AND MAINTAINED TO WITHIN 150 FEET OF ANY FINISHED OR UNFINISHED BUILDING MATERIAL OR COMBUSTIBLE CONSTRUCTION MATERIAL~~.

7. ACCESS TO FIRE HYDRANTS TO BE PROVIDED AND MAINTAINED AT ALL TIMES. HYDRANTS SHALL NOT BE OBSTRUCTED IN ANY MANNER. CURBS SHALL BE PAINTED RED A MINIMUM OF 15 FEET ON EACH SIDE OF HYDRANT.

8. THE FIRE FLOWS SHALL BE DETERMINED BY THE FIRE MARSHAL.

9. TEMPORARY STREET NAME SIGNS SHALL BE PROVIDED BEFORE CONSTRUCTION BEGINS AND SHALL BE THE SOLE RESPONSIBILITY OF THE DEVELOPER.

MISCELLANEOUS NOTES

TO BE INCLUDED AS SEPARATE ITEMS ON COVER SHEET)

DIG ALERT NOTICE

SECTION 4216/4217 OF THE GOVERNMENT CODE REQUIRES THAT DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID.
FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT TOLL FREE 1-800-422-4133 AT LEAST TWO WORKING DAYS BEFORE YOU DIG.

~~IMPORTANT NOTICE~~
~~SECTION 4215/4217 OF THE GOVERNMENT CODE REQUIRES THAT A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. PER YOUR DIG ALERT I.D. NUMBER CALL UNDERGROUND SERVICE ALERT TOLL FREE 1-800-422-4133 TWO WORKING DAYS BEFORE YOU DIG.~~

PAVING NOTE
THE OFFICE OF THE CITY ENGINEER SHALL DESIGN ALL STRUCTURAL STREET SECTIONS BASED ON THE "R" VALUE METHOD SPECIFIED BY THE CITY ENGINEER. THE SOIL TEST SHALL BE PERFORMED BY A REGISTERED CIVIL ENGINEER WHOSE PRIMARY PROFESSIONAL ACTIVITY IS PERFORMING SUCH TESTS. TEST RESULTS SHALL BE PROVIDED TO THE CITY BY THE SUBDIVIDER IN THE NUMBER AND AT SUCH LOCATIONS AND TIMES AS DETERMINED BY THE CITY ENGINEER. WHERE HEAVY GRADING IS PROPOSED, GATHERING OF SAMPLES SHALL BE DELAYED UNTIL ROUGH SUBGRADE IS MADE. MINIMUM BASE THICKNESS ON ALL STREET CLASSIFICATIONS SHALL BE PER SECTION 3-405.3 OF THE SUBDIVISION MANUAL. BASE MATERIAL SHALL CONFORM TO CRUSHED AGGREGATE BASE, 3/4 INCH MAXIMUM, OR APPROVED ALTERNATIVE, AS SET FORTH IN THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SECTION 200-2.2 LATEST EDITION. ALL ASPHALT CONCRETE SURFACES SHALL BE SEAL COATED IN ACCORDANCE WITH SECTION 302-5.10 OF THE CITY OF CHULA VISTA STANDARD SPECIAL PROVISIONS.

(For alleys and alley approaches only) WHERE R VALUE TESTS ARE NOT PROVIDED OR RESULTS ARE NOT ADEQUATE FOR 5.5-INCH (14 CM) THICK CONCRETE, ALLEYS AND ALLEY TYPE DRIVEWAY APPROACHES SHALL BE CONSTRUCTED OF 8-INCH (20 CM) THICK CONCRETE REINFORCED WITH 6-INCH BY 6-INCH (15CM X 15 CM) 4/4 WOVEN WIRE MESH OR EQUIVALENT.

SPECIAL STREET LIGHT NOTE

STREET LIGHT CONSTRUCTION SHALL NOT PROCEED UNTIL SERVICE POINTS ARE KNOWN AND STREET LIGHTING CONDUIT, PULL BOXES, AND WIRE SIZES ARE SHOWN ON THESE PLANS TO THE SATISFACTION OF THE CITY ENGINEER. STREET LIGHT WIRING AND SERVICE POINTS SHALL BE ADDED TO THESE PLANS BY A CONSTRUCTION CHANGE APPROVED BY THE CITY ENGINEER.

INSTALL 30 AMP CIRCUIT BREAKER FOR UNMETERED SAFETY LIGHTING.

TRAFFIC CONTROL
IF THE NEED FOR TRAFFIC CONTROL BECOMES APPARENT AFTER THE ISSUANCE OF A PERMIT OR START OF WORK, THE INSPECTION SECTION MAY REQUIRE THE PREPARATION OF SUCH A PLAN. IF SUCH A DETERMINATION IS MADE BY THE INSPECTION SECTION, UPON NOTIFICATION OF THE SUPERINTENDENT OF THE JOB IN QUESTION, WORK IN THE RIGHTS OF WAY SHALL CEASE UNTIL SUCH TIME AS TRAFFIC CONTROL PLANS HAVE BEEN APPROVED BY TRAFFIC ENGINEERING.

TRAFFIC CONTROL STRIPING AND MARKINGS NOTE
ANY TRAFFIC SIGNS, STRIPING AND/OR PAVEMENT MARKINGS REMOVED OR OTHERWISE OBLITERATED BY THE CONTRACTOR DURING THE COURSE OF CONSTRUCTION SHALL BE REPLACED BY PERMANENT TRAFFIC SIGNS, STRIPING AND/OR PAVEMENT MARKINGS, BY THE CONTRACTOR, AT CONTRACTOR'S EXPENSE, AND AS SOON AS PRACTICAL AFTER COMPLETION OF THE PERMITTED CONSTRUCTION, AND IN NO CASE LATER THAN TWO (2) WEEKS AFTER COMPLETION OF THE WORK PERMITTED. PROPER CONTROL, ALIGNMENT, LAY-OUT AND REPLACEMENT OF EXISTING TRAFFIC SIGNS, STRIPING AND/OR PAVEMENT MARKINGS SHALL LIKEWISE BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.

ALL PERMANENT TRAFFIC STRIPING AND/OR PAVEMENT MARKINGS SHALL CONFORM TO THE STANDARDS FOR TRAFFIC STRIPES AND PAVEMENT MARKINGS PROVIDED IN THE CALTRANS STANDARD SPECIFICATION SECTIONS 84-1 "GENERAL" AND 84-3 "PAINTED TRAFFIC STRIPES AND PAVEMENT MARKINGS" IN THE MOST RECENTLY PUBLISHED VERSION OF THE CALTRANS STANDARD SPECIFICATIONS. PERMANENT PAVEMENT MARKERS AND THEIR APPLICATION SHALL CONFORM TO SECTION 85, "PAVEMENT MARKERS", OF THE CALTRANS STANDARD SPECIFICATIONS AND SHALL BE .70-INCH MINIMUM. NON-REFLECTIVE OR "LOW PROFILE" TYPE MARKERS SHALL NOT BE ACCEPTED WITHOUT PERMISSION, IN ADVANCE, OF THE CITY ENGINEER. PAINT FOR TRAFFIC STRIPES AND PAVEMENT MARKINGS SHALL CONFORM TO THE STATE SPECIFICATION NUMBER 8010-21C-30, RAPID DRY WATER-BORNE, WHITE OR YELLOW. GLASS BEADS SHALL CONFORM TO STATE SPECIFICATION NUMBER 8010-21C-22 TYPE II.

IN THE EVENT THAT CONSTRUCTION CAUSE REMOVAL OR OBLITERATION OF TRAFFIC SIGNS, STRIPING AND/OR PAVEMENT MARKINGS, AND THE CONSTRUCTION IS NOT COMPLETED DURING THE SAME DAY TO FINISHED SURFACE CONDITION, OR PERMANENT TRAFFIC SIGNS, STRIPING AND/OR PAVEMENT MARKERS CANNOT BE REPLACED BEFORE THE END OF EACH WORK DAY, TEMPORARY RAISED PAVEMENT MARKERS (REFLECTIVE TABS), OF THE SAME COLOR AS THE EXISTING OR PERMANENT OR DAMAGED TRAFFIC STRIPING MAY BE USED IN THE PLACE OF PERMANENT TRAFFIC MARKINGS. IN NO CASE SHALL THE TEMPORARY MARKINGS REMAIN IN PLACE OF PERMANENT TRAFFIC MARKINGS. IN NO CASE SHALL THE TEMPORARY MARKINGS REMAIN IN PLACE IN EXCESS OF TWO (2) WEEKS FROM THE COMPLETION OF PERMITTED CONSTRUCTION. SIGNS MAY BE TEMPORARILY PLACED ON TYPE III BARRICADES UNTIL CONSTRUCTION IS COMPLETED. STREETS SHALL BE TEMPORARILY OR PERMANENTLY MARKED AT THE END OF EACH WORK DAY.

TEMPORARY RAISED PAVEMENT MARKERS (TABS) SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONSIST OF STIMSONITE MODEL 300 AND 301 CHIP-SEAL/TEMPORARY OVERLAY MARKERS (YELLOW OR WHITE) OR AN APPROVED EQUAL AND SHALL BE PLACED BY THE CONTRACTOR, AND MAINTAINED IN GOOD CONDITION BY THE CONTRACTOR UNTIL SUCH TIME AS PERMANENT TRAFFIC

STRIPING AND PAVEMENT MARKINGS ARE RESTORED. UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER, ALL TEMPORARY RAISED PAVEMENT MARKERS SHALL BE REMOVED BY THE CONTRACTOR AFTER THE INSTALLATION OR REPLACEMENT OF PERMANENT STRIPING AND/OR PAVEMENT MARKINGS.

WORK TO BE DONE
THE IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE IN ACCORDANCE WITH THESE PLANS, THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (2000 EDITIONS) COMMONLY REFERRED TO AS THE "GREEN BOOK", AND 2000 SUPPLEMENT, AND SAN DIEGO REGIONAL SUPPLEMENT AMENDMENTS (2000), SAN DIEGO AREA REGIONAL STANDARD DRAWINGS (2000), STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD PLANS (JULY 1999) AND STANDARD SPECIFICATIONS (JULY 1999), STATE OF CALIFORNIA MANUAL OF TRAFFIC CONTROLS (1996), DESIGN AND CONSTRUCTION STANDARDS OF THE CITY OF CHULA VISTA (2002), AND CITY OF CHULA VISTA STANDARD SPECIAL PROVISIONS, ALL AS ADOPTED BY THE CITY OF CHULA VISTA, ARE MADE PART OF THE SPECIFICATIONS. ANY CHANGES OR REVISIONS THEREFROM SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO ANY REQUEST FOR INSPECTION.

(Note: Contact City's Land Development Section to verify date of latest edition adopted by Council prior to first submittal of plans.)

CERTIFICATES

OWNERS CERTIFICATE
IT IS AGREED THAT FIELD CONDITIONS MAY REQUIRE CHANGES TO THESE PLANS. IT IS FURTHER AGREED THAT THE OWNER (DEVELOPER) SHALL HAVE THE ENGINEER OF WORK MAKE SUCH CHANGES, ALTERATIONS OR ADDITIONS TO THESE PLANS WHICH THE ENGINEER OF WORK DETERMINES ARE NECESSARY AND DESIRABLE FOR THE PROPER COMPLETION OF THE IMPROVEMENTS. ALL PLAN CHANGES SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION.

I FURTHER AGREE TO COMMENCE WORK ON ANY IMPROVEMENTS SHOWN ON THESE PLANS WITHIN EXISTING CITY RIGHT-OF-WAY WITHIN 60 DAYS AFTER ISSUANCE OF THE CONSTRUCTION PERMIT AND TO PURSUE SUCH WORK ACTIVELY ON EVERY NORMAL WORKING DAY UNTIL COMPLETED, IRRESPECTIVE AND INDEPENDENT OF ANY OTHER WORK ASSOCIATED WITH THIS PROJECT OR UNDER MY CONTROL.

NAME:

ADDRESS:

PHONE:

BY:
DATE:

DECLARATION OF RESPONSIBLE CHARGE
I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXECISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS. I UNDERSTAND THAT THE CHECK OF THE PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF CHULA VISTA AND WATER DISTRICT IS CONFINED TO REVIEW ONLY AND DOES NOT RELIEVE ME AS ENGINEER OF WORK, OF MY RESPONSIBLITIES FOR THE PROJECT DESIGN.

(FIRM NAME & ADDRESS)

BY:
DATE
(ENGINEER'S NAME, LICENSE NO. & LICENSE EXPIRATION)

AS-BUILT CERTIFICATES

ENGINEER OF WORK (ON TITLE SHEET ONLY)
I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE IMPROVEMENTS SHOWN ON THIS SET OF PLANS (SHEET 1 THROUGH SHEET ___) HAVE BEEN INSTALLED AND CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH

SAID PLANS, APPROPRIATE STANDARDS AND ANY DISCRETIONARY APPROVAL(S) FOR THE PROJECT.

SIGNED:
DATE:

PRINTED NAME: _____
P.E. NO. _____
DISCIPLINE: _____ MY
REGISTRATION EXPIRES: _____

ON EACH PLAN SHEET

"AS BUILT"	
	DATE
(SIGNATURE)	
	P.E. NO.
(PRINTED NAME)	
MY REGISTRATION EXPIRES: _____ _____	DISCIPLINE: _____ _____

PARTIAL APPROVAL FOR STORM DRAIN AND/OR SEWER

FOR STORM DRAIN (OR SEWER) APPROVAL ONLY

Submitted _____	
Approved _____	
By: _____	
_____ By: _____	

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CONSTRUCTION PLANS
SECTION 4-200
GRADING PLANS

4-200 GRADING PLANS

4-201 PURPOSE

Grading plans detail mass grading for the purpose of creating pads for building construction. These plans are generally associated with a tentative or final map for a subdivision or grading associated with private construction. All grading work shall be designed in accordance with Chula Vista Ordinance 1797, Chapter 15.04 of the Chula Vista Municipal Code.

4-202 FORM AND CONTENT

4-202.1 GENERAL

(1) Grading plans shall be prepared by a registered civil engineer and shall be accurate engineering drawings which are technically correct and complete and shall show in detail all grading, excavation and fill required and appurtenant structures to be constructed or installed.

(2) Design criteria for all grading must conform to the standards set forth in Section 3 of this manual, Chula Vista Municipal Code Ordinances, Chula Vista Standard Drawings and Standard Specifications, the San Diego County Regional Standard Drawings and other specifications as may be deemed appropriate by the City Engineer.

(3) Grading plans shall be clearly and legibly drawn on 24" x 36" (61cm X 91cm)(Chula Vista Standard D sheet) mylar (min. 3mils (0.08mm) thick) using black drawing ink only.

(4) Hand lettering shall be a minimum of 1/8" (3mm) in height. Typed or computer generated lettering shall be a minimum of 1/10" (2.5mm) in height.

(5) Minimum scale shall be 1" = 100' (1cm = 10m).

(6) The engineer of work shall sign and stamp each sheet of the plans including engineer's registration number and expiration date.

(7) Each sheet shall contain a title block as described in Section 4-202.2

4-202.2 TITLE BLOCK; - Each sheet shall contain the Chula Vista standard title block which includes the information described below. Standard D sheet size mylars with the title block are available from the City.

(1) **Title** - Subdivision designation, the type of plan (i.e. mass grading), and the location or extent of such grading.

(2) **Drawing Numbers** - Drawing numbers will be assigned by the Engineering Division usually after the first plan check.

(3) **Sheet Numbers** - Sheets shall be numbered consecutively. Each sheet shall also show the total number of sheets in the plan.

(4) **Work Order Number** - The work order number shall be located above the title block over the block for drawing numbers. The work order will be assigned by the City and will be included in the first plan check comments.

(5) **City Signatures** - Each sheet of the approved plans will contain the following City signatures:

a) At approval, each sheet will be signed by a Senior Civil Engineer and the City Engineer. The cover sheet must allow a minimum 2" high X 5" wide (5cmX13cm) clear area above the City approval signature block to accommodate the Senior Civil Engineer's and City Engineer's stamps.

b) Office, Field, Traffic - These blocks will be initialed when approved by the appropriate City personnel.

(6) **Engineer of Work Signatures** - This block must include the initials of the people responsible for designing, drafting and checking the plans as well as the signature and registration number of the engineer of work and the date signed.

(7) **Scale** - Indicate the horizontal and vertical scale for each sheet.

(8) **Bench Mark** - Bench mark description shall be shown on each sheet of the plans. Bench marks shall conform to Section 2-302.3 of this manual

(9) **Revisions** - The reference number, description, approval signature and date shall be shown for each plan revision or construction change (see Section 4-500) on the each sheet affected. New mylars may not be submitted for construction changes unless otherwise approved by the City Engineer.

(10) **Reference Drawings** - The drawing numbers for all existing and adjacent improvements shall be shown on each sheet.

(11) **Construction Rec**ord - The construction record shall include contractor's signature, inspectors' signature and date the plans are as-built (see Section 4-500).

4-202.3 **Title Sheet(s)**; - The title sheet for grading plans shall contain the following items:

(1) Title - The subdivision name and unit number shall be placed in bold print at the top center of the title sheet.

(2) A vicinity map with north arrow and scale shall be indicated.

(3) A key map drawn to a scale of 1" = 200' (1cm=20m) shall be shown on the cover sheet which depicts the general plan of the subdivision to include roads adjacent to the subdivision, overall drainage plan, grading limits (including off-site grading); and, if applicable, the area of grading covered by each sheet. The key map shall have a north arrow and scale shown.

(4) Work to be done and legend. Items in the work to be done will vary with the grading and improvements to be constructed. Symbols used in legend shall conform with City of Chula Vista and San Diego Regional Standard symbols.

(5) A typical cross-section of each class of existing and proposed streets shall be shown. The typical section shall show roadway widths, right of way widths, side slopes, shoulders, curbs, gutters, sidewalks, medians, typical street light and fire hydrant locations, relationship of centerline grade to top of curb grade and subgrade or undercut boundary. The typical section shall also make reference to elevations as shown on the plan sheets. Typical street cross sections shall comply with City of Chula Vista Street Design Standards.

(6) A detail plan of a lot showing typical grading and drainage.

(7) Concise legal description defining the location of the work.

(8) Tax Assessor's parcel number(s).

(9) Name, address, telephone number and signature of the record owner or owners.

(10) Name, address and telephone number of the subdivider, if other than owner(s).

(11) Construction Notes - General, Special, Water, Sewer, Fire shall be added to the title sheet as necessary.

(12) NPDES Certificate is required on all grading plans.

(13) Engineer of Work Certificate. This certificate shall be complete and signed by the Engineer of Work as part of the as-built process (see Section 4-500).

(14) Declaration of Responsible Charge. This certificate shall be signed by the Engineer of Work prior to City approval.

(15) Soils Engineer certificate. This certificate shall be signed by the soils engineer of work prior to City approval.

(16) Other Agency Signatures. If approval is required from other agencies, the appropriate signature block for those agencies shall be added as deemed necessary by those agencies. Other agency signatures must be obtained prior to City approval of the improvement plans.

(17) Items that cannot fit on the cover sheet may be shown on the erosion control plan sheet.

4-202.4 Erosion Control Plan

All grading plans shall include a plan for erosion control that contains the following:

(1) Map of the entire subdivision at 1"=200' (1cm=20m) scale minimum showing placement of sandbag rows for temporary desilting basins within the streets;

(2) Erosion control details including:

a) Temporary desilting basins in the street with a table showing the spacing for the sandbag rows;

b) Cross section of the street desilting basins showing the height of the sandbags and weirs, street centerline, curbline, right-of-way line and undercut or subgrade line;

c) Temporary desilting basins at all inlets with a separate detail for sump conditions as necessary.

(3) Erosion Control Notes as shown in Section 4-209.

(4) Any notes or details that could not fit on the cover sheet.

4-202.5 Plan Sheets

The plan sheets of the grading plans shall show sufficient detail of all proposed grading, excavation, fill, improvements and facilities to facilitate proper construction and inspection and at a minimum shall include the following:

(1) North arrow.

(2) Map Scale in words or figures and graphically.

(3) Stationing shall generally be from left to right.

(4) "As-Built" Certificate (to be completed through as-built process).

(5) Existing Conditions - Existing improvements adjacent to the area of work or to be met by proposed work shall be shown by dashed lines. Any existing improvements to be relocated or removed shall be so noted on the plan sheet containing said improvements.

(6) Grading Plans: Contours;Contour Lines - Existing and finish grade contour lines shall be shown and shall conform to the following:

a) Existing contour lines shall be « screened or dashed with the existing elevations enclosed in parenthesis;

b) Proposed contour lines shall be bold, solid lines with proposed elevations;

c) Contour lines shall be shown at the following intervals:

Average Slope of Area	Contour Interval
0-2%	1' (0.3m)
2-5%	2' (0.6m)
5-20%	5' (1.5m)
Over 20%	10' (3m)

d) Contour lines shall extend for a distance of 100 feet (30.5m) beyond the subdivision boundary for plans drawn at scale of 1"=40' (1cm=30m) and a distance of 50 feet (15m) for plans at 1"=20' (1cm=15m).

(7) All existing underground utilities or facilities (sewer, water, gas, drainage) shall be shown, labeled, and dimensioned on both the plan and profile. Existing underground utilities shall be extended beyond the limits of work at least 50 feet (15m).

(8) All proposed drainage structures or facilities required to drain the site post-grading shall be shown and if temporary so indicated. If ultimate storm drain facilities are to be constructed, include full data including plan and profile drawings unless storm drains are included on improvement plans and an advanced permit for storm drain construction will be requested. In such case, only the pipe size and length need be shown on the grading plans.

(9) The following information shall be shown for each lot:

a) pad elevation for each lot;

b) finished grade elevations at the intersection of side lot lines and right-of-way lines;

c) lengths of all lot lines;

d) building set back lines

(10) Subdivision boundary shall be fully dimensioned including bearings, distances, curve radii, angles and lengths.

(11) Existing survey monuments shall be shown.

(12) Existing right of way, property lines, contour lines and improvements, in or adjacent to area to be graded.

(13) New right of way, property lines, contour lines and lot numbers of area being improved.

(14) Streets - The following data shall be shown for all streets:

a) Centerline shown by standard symbol. The centerline shall be stationed at each 500 feet (200m) with "tick marks" at 100' (30m) intervals, and B.C.'s and E.C.'s shall be stationed;

b) Street names shown within each street;

c) Finished grade elevations at all street centerline intersections;

d) Centerline finished grade elevation at all BC's, EC's, BVC's, EVC's, and centers of cul-de-sacs.

(15) Show flowline elevations of cross gutters (per CVCS 2), channels and ditches to be constructed.

(16) The following information shall be shown for all storm drain facilities:

a) Size
b) Length
c) Grade
d) Material

(17) If storm drain design is shown on the grading plans, the following additional information must be shown:

a) Encasement and special bedding requirements.

b) Location by street stationing and dimensions from centerline of street.

c) Data tables for all storm drain pipe (if storm drain design on the grading plans).

d) Details for all drainage facilities that are not to be constructed in accordance with Standard Drawings including detail plan view, cross-sections, and typical sections.

e) Drainage pipe gauge, or D-load may be stated in the general notes. In such case the pipe gauge or D-load for only those segments that don't conform to the note need be shown on the pipe profile.

f) Profile plot of all storm drain facilities including pipes and inlets.

(18) All slopes shall have a maximum slope ratio of 2:1. All fill slopes shall be shaded and the cut/fill line shall be shown and clearly identified.

(19) Slopes within street tree easements shall have a maximum slope ratio of 5:1 unless otherwise approved by the City Engineer.

(20) Show top and bottom elevations of all retaining walls appurtenant to the proposed grading. Said retaining walls shall be in accordance with San Diego Area Regional Standard Drawings, or as approved by the City Engineer. Details for non-standard walls shall be shown on the grading plans.

(21) Limits of grading operations shall be clearly shown on each sheet and a reference to any letters of permission to grade shall be shown where appropriate.

(22) Show existing and proposed drainage, sewer, street tree planting and pedestrian easements.

(23) Clearly identify all City or County boundaries

(24) Show seismic fault lines

4-202.6 **Landscape Improvement Plans**

(1) Landscape improvement plans in conformance with the Chula Vista Landscape Manual and Section 4-300 of this manual, shall be submitted and approved prior to issuance of a Land Development (grading) permit or other permit to grade, excluding mass grading permit.

(2) Grading plans for mass grading shall show the hydroseed components on the erosion control sheets(s)

(3) For purposes of this section, mass grading is defined as grading which does not include finished pads and/or street cuts.

4-203 PROCESSING

4-203.1 Submittal Requirements

(1) Submittals will only be accepted in conformance with Section 5-203 of this manual

(2) First Submittal - The first submittal package includes but is not limited to the following:

a) Initial plan check deposit

b) Executed Development Agreement (unless previously filed)

c) Blueline copies of Grading Plan per Section 5-201

d) Hydraulic calculations with a drainage basin map.

e) Soils Report - (preliminary and final) 2 copies, signed and stamped by a registered civil engineer whose primary expertise is soils engineering, prepared pursuant to the City of San Diego's latest adopted "Guidelines for Geotechnical Reports" (http://www.sandiego.gov/development-services/industry/pdf/geoguidelines.pdf) as determined by the City Engineer~~and 2 microfiche~~.

The report shall present all the geological information for the area pertinent to the proposed grading. Cross sections of existing and proposed significant slopes that may be unstable must be included. The geology map must utilize a copy of the latest grading plan as a base. The scale of the map should be appropriate to permit sufficiently accurate measurements for analysis of remedial design and construction. Generally, for geologic purposes, the scale of the map and cross sections should be prepared at a minimum scale of 1 inch equals 100 feet. If the grading plan is revised, a geology map and cross section(s) should be prepared based on the new plan.

f) Geologic and Seismic reports as required by the City Engineer.

g) Design data and/or calculations for special structures or retaining walls.

h) Engineer's estimates for grading, appurtenant structures, slope landscape & irrigation, and landscape maintenance and water costs for at least one year (may be submitted with later plan check). Cost estimates shall be calculated using the current "City of San Diego Unit Price List for Estimating Subdivision and Permit Bonds".

i) Notarized letter of permission to grade from adjacent property owners for all off-site grading.

j) A list of lot within the subdivision indicating whether they are located on areas or cut, fill, or transition between cut and fill.

k) Other items as specified by City Council in approval of associated tentative map (if any).

(3) Subsequent Plan Check - Subsequent plan check submittals shall include but not be limited to:

a) 2 revised blueline copies;
b) Original City plan check comments;
c) Other information and documentation as requested.

(4) Additional Items Required Prior Plan Approval:

a) Inspection and plan check deposits as required by the City Engineer;

b) Grading and Erosion Control Bonds. Approved bond amounts shall be based on the Engineer's approved construction cost estimate and in accordance with Section 18.16.220 of the City's Municipal Code.

c) Easements for off-site appurtenant structures.

d) Notarized letter of permission to grade from adjacent property owners for all off-site grading with copy of approved portion of plan attached and initialed.

e) Any other required deeds, easements, and/or agreements.

f) Compliance with all outstanding conditions of approval related to grading (if any).

g) Signed mylars of the grading, erosion control and landscape improvement plans. Plans must be signed by all parties except the City prior to City approval. Landscape improvement plans must be approved by the City prior to issuance of a land development permit, except for mass grading.

h) Completed Land Development Permit application form.

(5) See Table 5-202.5 for Plan and Bond requirements.

4-203.2 **Approval**

(1) When it has been determined that the grading plans are complete, technically correct, and in accord with the final map or parcel map, and all required signatures obtained, then the grading plans will be approved by the City Engineer.

(2) Approval of the grading plans does not constitute a permit to grade. An advance land development permit is required.

4-203.3 **Land Development Permits**; shall be required for all grading operations, including brushing and clearing as applicable, pursuant to the Chula Vista Municipal Code (Ordinance 1797).

(1) Land Development Permits shall be valid for the time period specified on the permit. If no date is specified, the permit shall be valid for 180 days after

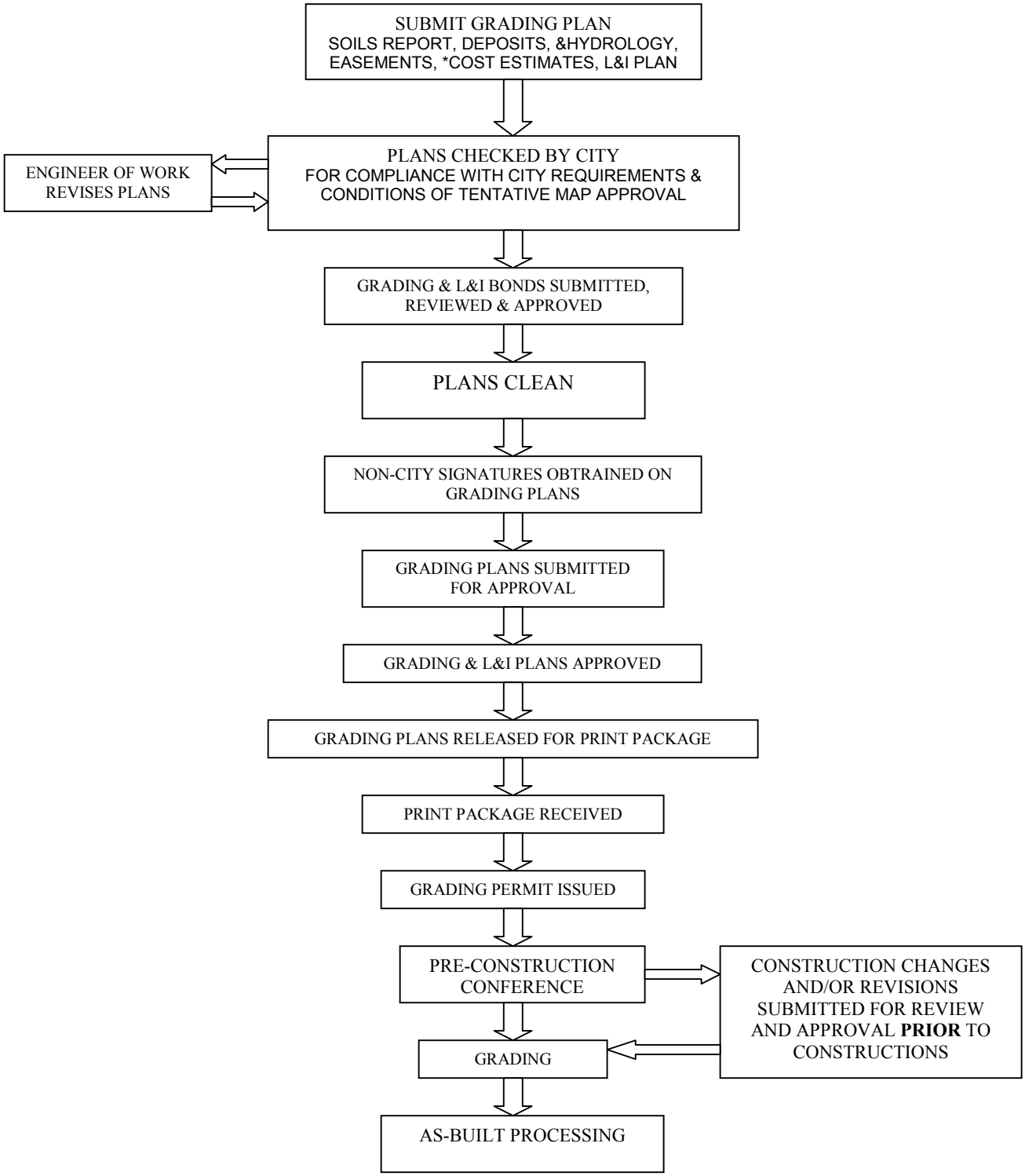
issuance of the permit. If the work cannot be completed within the specified time, the permittee may request an extension of the permit. Such a request must be submitted in writing and sufficiently in advance of the expiration of the permit to allow processing and approval of the extension prior to expiration of the permit. The City Engineer may grant one extension and said extension shall not exceed the original length of time designate on the permit.

(2) Land Development Permits to be issued for grading associated with a proposed subdivision shall not be issued prior to approval of the tentative map or tentative parcel map for said subdivision.

4-203.4 **Print Package**; - Signed grading plans will be released only to blueprint companies bonded with the City. Engineer of work shall be responsible to provide the City with a full size mylar set of the grading plans (min. 3 mils (0.08mm) thick) and the required number of blueline copies (see Section 5-201).

4-203.5 **As-Builts** - As-built plans and reports shall be prepared in accordance with Section 15.04.140 of the Chula Vista Municipal Code.

4-204 GRADING PLAN FLOW CHART



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4-205 SAMPLE GRADING PLAN SHEETS

4-205.1 SAMPLE TITLE SHEET

4-205.2 SAMPLE EROSION CONTROL PLAN

4-206 SAMPLE LAND DEVELOPMENT PERMIT

4-207 SAMPLE GRADING BOND FORM

GRADING AND/OR DRAINAGE BOND

File No.:_____
Bond No.:_____
Premium:_____
_

KNOW ALL PERSONS BY THESE PRESENTS that we,_____ _____, a corporation of _____ as Principal, and

_____
__ of _____, a corporation incorporated under the laws of the State of _____ and duly authorized under the State of California to act as Surety, are held and firmly bound unto the City of Chula Vista in the sum of _____ ($ _____), lawful money of the United States of America, for the payment whereof, well and truly to be made, said Principal and Surety bind themselves, their heirs, administrators, successors and assigns, jointly and severally, firmly by these presents.

The condition of the foregoing obligation is such that whereas the above-bound Principal has agreed to provide certain improvements for the property known as _____, in accordance with _____, and is required by said City of Chula Vista, to give a bond to guarantee the performance and completion of said improvements.

NOW, THEREFORE, if the said Principal shall well and truly perform all work specified in said permit, drawings, or agreement, then this obligation shall be null and void, otherwise it shall remain in full force and effect. In addition, this bond shall be conditioned on the Surety's full compliance with all terms and conditions of the required Land Development Permit, including the provision specifying a time limit; and further conditioned upon full compliance with the ordinances and standards of the City of Chula Vista including, but not limited to, Chapter 15.04 and Chapter 18.36 of the Chula Vista Municipal Code.

As part of the obligation secured hereby and in addition to the face amount specified therefor, there shall be included costs and reasonable expenses and fees, and including reasonable attorney's fees, incurred by City in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

The Surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of said Permit or to the work to be performed thereunder or the specifications accompanying the same shall in anywise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Permit or to the work or to the specifications.

SIGNED AND SEALED AT _____
this _____ day of _____, 20____.

APPROVED AS TO FORM:

_____
City Attorney

_____
Bond / Policy No.

(Notary Acknowledgment and Corporate Authorization Required for Each Signatory)

D:\Section 4-200.doc

_____
Name of Principal (Applicant)

By _____

By _____

_____
Name of Surety Company

By _____

_____
Address of Surety Company

_____
City State Zip Code

NOTE: FOR CURRENT BOND FORMS SEE: www.ci.chula-vista.ca.us

4-208 GRADING PLAN CHECKLIST
CITY OF CHULA VISTA

SUBDIVISION

TRACT NO._____

Property Owner(s):

&
Address

Engineer/Surveyor: _____
_____

PHONE:

(References are to City of Chula Vista Subdivision Manual)

ITEM	CHECK	REMARKS
4-203.1 **SUBMITTAL PACKAGE** – Plans, Reports, Statements & Exhibits		
1. First Submittal a. Initial Deposit — **Amount** $		
b. Development Processing Agreement executed		
c. Blueline copies		
d. Hydraulic Report including dry lane calc's		
e. Soils Report prepared pursuant to the City of San Diego's latest adopted "Guidelines for Geotechnical Reports" (http://www.sandiego.gov/development-services/industry/pdf/geoguidelines.pdf) as determined by the City Engineer – 2 copies		
f. Design data and/or calculations for special structures		
g. Engineer's grading bond estimate (including appurtenant structures)		

ITEM	CHECK	REMARKS
h. Notarized letters of permission to grade		
i. Landscape & Irrigation Plans		
j. List of lots on cut, fill, or transition		
k. Geologic and/or Seismic Report if required		
2. Prior to Approval a. Inspection deposit		
b. Approved Landscape & Irrigation Plans		
c. Grading and Landscape & Irrigation bonds		
d. Easements and/or deeds required		
e. Mylar (min. 3 mils thick)		
f. Completed Land Development Permit application form		
g. Print Package – Grading Plans		
4-202.1 FORM AND CONTENT – General		
1. Legibly drawn on mylar, sepia or other approved media		
2. 24” x 36” (61cm x 91cm) with 1” (2.5cm) margin		
3. Lettering size – 0.10 in (2.5mm) computer; 1/8” (3mm) hand in black drawing ink		
4. Scale: 1” = 40’ (1cm = 10m) minimum in both words and graphically and north arrow		
5. Engineer of Work signature and stamp on each sheet		
4-202.2 TITLE BLOCK		
1. Title – Subdivision Name, type of improvement & location		
2. Drawing Nos. – add when assigned		
3. Sheet Numbers		
4. Work Order Number – add when assigned		
5. City Approval Signature – when approved		

ITEM	CHECK	REMARKS
6. Office, Field, Traffic Initials – when approved		
7. Engineer of Work Signatures – designer, drafter, plan checker, Engineer of Work Signature & Stamp		
8. Scale		
9. Bench Mark		
10. Revisions – complete when as-built		
11. Reference Drawings		
12. Construction Record – complete when as-built		
4-202.3 TITLE SHEET		
1. Title – subdivision name and unit number		
2. Vicinity map with north arrow and scale		
3. Key map – including: a. North Arrow		
b. Scale: 1” = 200’ (1cm = 20m)		
c. General Plan of subdivision showing boundary, streets and lots		
d. Adjacent Subdivisions & connecting streets shown		
e. Sheet coverage		
f. Legend identifying symbols used		
g. Drainage facilities		
h. Direction of drainage flow		
4. Work to be Done & Legend		
5. Typical street cross sections		
6. Detail showing typical lot grading		
7. Legal Description		
8. Tax Assessor’s Parcel Number(s)		

ITEM	CHECK	REMARKS
9. Owner's name, address, phone & signature		
10. Developers' name, address, phone & signature (if other than owner)		
11. Construction Notes – General, Special, Water, Sewer, Fire, etc (see Section 4-207)		
12. NPDES Certificate		
13. Engineer of Work (as-built) certificate		
14. Declaration of Responsible Charge		
15. Soils Engineer Certificate		
16. Other agency signatures		
4-202.4 EROSION CONTROL PLAN		
1. North arrow		
2. Scale (min. 1" = 200' (1cm = 20m)) shown both in words or figures and graphically		
3. Placement of sandbags, temporary desilt basins, etc shown		
4. Erosion control details for temporary desilt basins, etc.		
5. Erosion control notes		
4-202.5 PLAN SHEETS		
1. North Arrow		
2. Scale		
3. Centerline stationing every 500' (200m) with tick marks @ 100' (30m) intervals		
4. As Built Certificate shown on each sheet		
5. Existing conditions shown screened or dashed		
6. Existing contour lines screened		
7. Proposed contour lines bold		
8. Contour interval as appropriate (typical 2' (o.6m))		

ITEM	CHECK	REMARKS
9. All existing underground utilities and facilities shown to 50' (15m) beyond limits of grading		
10. Proposed drainage facilities required to drain site shown		
11. Pad elevations, finish grade at right-of-way, lot line lengths and building set backs shown for each lot		
12. Subdivision boundary fully dimensioned		
13. Existing survey monuments shown		
14. Existing right-of-way, property lines, contour lines and improvements		
15. New right-of-way, property lines, contour lines and lot numbers shown		
16. Street centerline, names, stationing, width, grade, and direction of drainage flow		
17. Finished grade at centerline BC's, EC's, BVC's, EVC's, centerline intersections, and centers of cul-de-sacs shown		
18. Slopes: 2:1 max; fill slopes shaded; cut/fill line shown		
19. Flow line elevations of all cross gutters shown		
20. All drainage facilities including size, length, grade, material shown		
21. Storm drain design data shown (unless shown on improvement plans)		
22. All existing and proposed easements shown		
23. City and/or County boundaries shown		

4-209 TYPICAL GRADING PLAN NOTES

GENERAL NOTES

1. THE SOILS REPORT TITLED _____(SOILS REPORT TITLE & DATE)_____ FROM _____(FIRM NAME)_____ ___ SHALL BE CONSIDERED TO BE PART OF THIS GRADING PLAN. ALL GRADING SHALL BE DONE IN ACCORDANCE WITH THE RECOMMENDATIONS AND SPECIFICATIONS CONTAINED IN SAID REPORT.

2. STORM DRAINS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF SIZES, LOCATIONS, AND TYPE OF SEWER AND DRAINAGE FACILITIES, OR ANY SURFACE IMPROVEMENTS WITHIN FUTURE STREET RIGHTS-OF-WAY SHOWN ON THESE PLANS. SEPARATE APPROVALS AND PERMITS FOR THESE SHALL BE REQUIRED IN CONJUNCTION WITH IMPROVEMENT PLANS.

3. WRITTEN PERMISSION SHALL BE OBTAINED FOR ANY OFF-SITE GRADING

4. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS REQUIRED TO PROTECT ADJACENT PROPERTIES DURING GRADING OPERATIONS. ANYTHING DAMAGED OR DESTROYED SHALL BE REPLACED OR REPAIRED TO CONDITION EXISTING PRIOR TO GRADING.

5. THE DEVELOPER SHALL BE RESPONSIBLE THAT ANY MONUMENT OR BENCH MARK WHICH IS DISTURBED OR DESTROYED THROUGH GRADING OPERATIONS SHALL BE RE-ESTABLISHED AND REPLACED BY A REGISTERED CIVIL ENGINEER WHO IS ALLOWED TO PRACTICE LAND SURVEYING, OR A LICENSED LAND SURVEYOR, AND A CORNER RECORD, RECORD OF SURVEY, OR CERTIFICATE OF CORRECTION FILED AS REQUIRED BY THE LAND SURVEYORS' ACT.

6. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING, AND SHALL BE RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS, AND REGULATIONS.

7. ALL FLOWS SHOWN ARE FOR 100-YEAR STORM.

8. ALL SEDIMENTATION BASINS, OUTLET PIPES AND DITCHES ARE PRIVATE UNLESS OTHERWISE NOTED AND HAVE NOT BEEN REVIEWED FOR ADEQUACY BY THE CITY ENGINEERING DEPARTMENT.

9. THE OWNER MUST OBTAIN AN EXCAVATION PERMIT FROM THE DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (D.O.S.H.)

FOR CONSTRUCTION OF TRENCHES OR EXCAVATIONS WHICH ARE FIVE FEET OR DEEPER INTO WHICH A PERSON IS REQUIRED TO DESCEND. SAID PERMIT IS REQUIRED PRIOR TO ISSUANCE OF A GRADING PERMIT BY THE CITY OF CHULA VISTA.

10. GRADING EQUIPMENT SHALL NOT USE OR BLOCK TRAFFIC LANES DURING GRADING ACTIVITY, TRUCK OPERATIONS IN AND OUT OF CONSTRUCTION AND STAGING AREAS SHALL BE CONTROLLED AS REQUIRED BY THE CITY. TRUCK AND EQUIPMENT ROUTES IN AND OUT OF THE SITE, SHALL BE APPROVED BY THE CITY PRIOR TO START OF WORK. AT THE END OF THE WORKING DAY, STREETS SHALL BE CLEANED OF DIRT AND CONSTRUCTION DEBRIS TO THE SATISFACTION OF THE CITY INSPECTOR AND THE MITIGATION MONITOR.

11. DUST GENERATED BY CONSTRUCTION ACTIVITIES SHALL COMPLY WITH LOCAL DUST CONTROL, ALL REQUIREMENTS OF ALL MITIGATION MONITORING PROGRAMS, AND UNIFORM BUILDING CODE (UBC) REQUIREMENTS, WHICH INCLUDE DUST CONTROL MEASURES FOR CONSTRUCTION SITES. DUST REDUCING MEASURES SHALL INCLUDE, BUT NOT LIMITED TO, REGULAR WATERING OF GRADED SURFACES AND RESTRICTION OF ALL CONSTRUCTION VEHICLES AND EQUIPMENT TO TRAVEL ALONG ESTABLISHED AND REGULARLY WATERED ROADWAYS AT SPECIFIED SPEEDS.

NOTIFICATIONS

1. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITY PIPES AND STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORD, TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN HEREON, HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING UTILITIES OR STRUCTURES LOCATED AT THE WORK SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT UNDERGROUND SERVICE ALERT (PHONE 1-800-422-4133) TWO (2) WORKING DAYS IN ADVANCE OF ANY EXCAVATION FOR THE MARK OUT OF THE LOCATION OF UTILITIES AND NOTIFICATION OF COMMENCEMENT OF WORK.

   FOR ANY QUESTIONS REGARDING THE MARK OUT OF UNDERGROUND UTILITIES, THE CONTRACTOR SHOULD CONTACT THE RESPECTIVE UTILITY COMPANY:

STREET LIGHT OR SIGNAL LIGHT CONDUIT	CITY OF CHULA VISTA	(619) 397-6163
SEWER OR STORM DRAIN	CITY OF CHULA VISTA	
	VERIFICATION	(619) 691-5024
	NOTIFICATION	(619) 397-6000

GAS & ELECTRIC	SAN DIEGO GAS & ELECTRIC CO.	1-800-227-2600
		(619) 230-7800
WATER	OTAY WATER DISTRICT	(619) 670-2222
	SWEETWATER AUTHORITY	(619) 420-1413
TELEPHONE	PACIFIC BELL	(619) 266-4683
TELEVISION	COX CABLE OF SAN DIEGO	(619) 263-9251/ (619) 266-5597
	ULTRONICS	(619) 476-0177

2. CONTRACTOR SHALL NOTIFY THE CITY ENGINEER'S OFFICE (PHONE 619-397-6128) AND THE MITIGATION MONITOR AT THE ~~PLANNING~~DEVELOPMENT SERVICES DIVISION (PHONE 619- 691-5101) 48 HOURS (2 WORKING DAYS) PRIOR TO BEGINNING ANY WORK ON THIS PROJECT.

3. THE CONTRACTOR SHALL GIVE 24 HOURS (ONE WORKING DAY) NOTICE ON CALLS FOR INSPECTION. PHONE: 397-6128.

4. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL AT CONTRACTOR'S EXPENSE.

SPECIAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE QUANTITIES SHOWN HEREON AND BALANCING THE EARTHWORK ONSITE. IF DISCREPANCIES ARISE, THE ENGINEER OF WORK SHALL PROVIDE AREAS OF ADJUSTMENT TO THE CONTRACTOR. WHERE TRENCHES ARE WITHIN EASEMENTS, STREETS, OR 10' OF ANY BUILDING, SOILS REPORTS SHALL BE SUBMITTED TO THE ENGINEER OF WORK BY A QUALIFIED SOILS ENGINEER WHICH INDICATE THAT THE TRENCH BACKFILL WAS COMPACTED UNDER THE OBSERVATION OF THE SOILS ENGINEER AND IN ACCORDANCE WITH THE EARTHWORK SPECIFICATIONS.

2. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSURE THAT ALL SLOPES ARE BUILT IN ACCORDANCE WITH THESE PLANS. IF THERE IS ANY QUESTION REGARDING THESE PLANS OR FIELD STAKES, THE CONTRACTOR SHALL REQUEST AN INTERPRETATION BEFORE DOING ANY WORK BY CALLING THE ENGINEER AT (ENGINEER OF WORK PHONE NO.).

3. THE PALEONTOLOGICAL MONITOR SHALL BE PRESENT DURING THE GRADING OF THE PLIOCENE SAN DIEGO FORMATION (TSD) ON THE SITE. THE MONITOR SHALL HAVE THE AUTHORITY TO

TEMPORARILY DIRECT, DIVERT, OR HALT GRADING TO ALLOW RECOVERY OF FOSSIL REMAINS.

4. THE CONTRACTOR SHALL UNCOVER ALL UTILITIES THAT MAYBE JOINED, CROSSED, OR PARALLELED TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATION PRIOR TO ANY CONSTRUCTION. ANY CONFLICT OR DISCREPANCY SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO CONSTRUCTION. OTHERWISE THE CONTRACTOR ACCEPTS FULL RESPONSIBILITY FOR ANY ADDITIONAL CONSTRUCTION OR RELOCATION COSTS.

5. ALL FILL AREAS, WHICH ARE FENCED, SHALL REMAIN FENCED. TEMPORARY AND/OR FINAL FENCING SHALL BE PROVIDED AS SHOWN ON THE PLANS.

6. ALL APPROVED GEOTEXTILE ENGINEERING FABRIC SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

7. A 6" MINIMUM THICKNESS BEDDING BLANKET UNDERLAIN BY A LAYER OF GEOTEXTILE (MIRAFI 700X OR EQUIVALENT) SHALL BE CONSTRUCTED BENEATH ALL RIP RAP. THE BEDDING BLANKET SHALL MEET THE FOLLOWING SPECIFICATIONS:

a. FRACTION PASSING THE NO. 3/8 IN. STANDARD SIEVE SHALL BE 100% BY WEIGHT.

b. ANY SOURCE OF ON-SITE MATERIAL DEEMED SUITABLE BY THE SOILS ENGINEER.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, MAINTAINING, RELOCATING, AND OR REMOVING EXISTING UTILITIES.

9. THE CONTRACTOR SHALL REPLACE ALL DESTROYED OR DAMAGED SURFACE IMPROVEMENTS WITH IMPROVEMENTS EQUAL OR SUPERIOR.

10. ALL CONTOURS AND ELEVATIONS SHOWN HEREON REPRESENT FINISH GRADE. CONTRACTOR SHALL MAKE THE APPROPRIATE ALLOWANCES FOR PAVEMENT SUBGRADE, PAD UNDERCUT, AND UTILITY TRENCHING.

11. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL PROPOSED CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS AND THE CITY OF CHULA VISTA.

GRADING NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE APPROVED PLANS AND APPROVED REVISIONS. ANY CHANGES

OR REVISIONS THERETO SHALL BE APPROVED BY THE CITY ENGINEER AND MITIGATION MONITOR PRIOR TO ANY REQUEST FOR INSPECTION.

2. ALL GRADING SHALL BE INSPECTED AND TESTED BY OR UNDER THE DIRECTION OF A QUALIFIED SOILS ENGINEER. THE SOILS ENGINEER SHALL: INSPECT THE EXCAVATION, AND SHALL OBSERVE AND TEST THE PLACEMENT, AND COMPACTION OF FILL AND BACKFILL AND COMPACTION OF TRENCHES; SUBMIT GEOTECHNICAL OR SOILS REPORTS AS REQUIRED AND DETERMINE THE SUITABILITY OF ANY FILL MATERIAL UPON COMPLETION OF GRADING OPERATIONS. THE SOILS ENGINEER SHALL STATE THAT OBSERVATIONS AND TESTS WERE MADE BY, OR UNDER DIRECTION OF THE SOILS ENGINEER, AND THAT EMBANKMENTS AND EXCAVATIONS WERE CONSTRUCTED IN ACCORDANCE WITH THE GEOTECHNICAL ASPECTS OF THE APPROVED GRADING PLANS, ANY APPROVED REVISIONS THERETO, SUBJECT LAND DEVELOPMENT PERMIT AND ORDINANCE NO. 1797 AS AMENDED, AND THAT ALL EMBANKMENTS AND EXCAVATIONS ARE ACCEPTABLE FOR THEIR INTENDED USE.

3. THE CONTRACTOR SHALL PROPERLY GRADE ALL EXCAVATED SURFACES TO PROVIDE POSITIVE DRAINAGE AND PREVENT PONDING OF WATER. CONTRACTOR SHALL CONTROL SURFACE WATER TO AVOID DAMAGE TO ADJOINING PROPERTIES OR TO FINISHED WORK ON THE SITE, AND SHALL TAKE REMEDIAL MEASURES TO PREVENT EROSION OF FRESHLY GRADED AREAS UNTIL SUCH TIME AS PERMANENT DRAINAGE AND EROSION CONTROL MEASURES HAVE BEEN INSTALLED TO THE SATISFACTION OF THE CITY ENGINEER AND THE MITIGATION MONITOR.

4. ALL AREAS TO BE FILLED SHALL BE PREPARED PRIOR TO FILLING, AND FILL SHALL BE PLACED IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND THE RECOMMENDATIONS AND SPECIFICATIONS CONTAINED IN THE SOILS REPORT. ALL VEGETABLE MATTER AND OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED, BY THE CONTRACTOR, FROM THE SURFACE UPON WHICH THE FILL IS TO BE PLACED. LOOSE FILL AND UNSUITABLE SOILS SHALL BE REMOVED TO SUITABLE FIRM NATURAL GROUND. THE EXPOSED SOILS SHALL BE SCARIFIED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND THEN COMPACTED TO A MINIMUM OF 90% OF ASTM-D1557. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE, SPREAD, WATER AND COMPACT THE FILL IN STRICT ACCORDANCE WITH THE SPECIFICATIONS.

5. CUT AND FILL SLOPES SHALL BE CUT AND TRIMMED TO THE FINISHED GRADE TO PRODUCE SMOOTH SURFACES AND UNIFORM CROSS SECTIONS. THE SLOPES OF EXCAVATIONS AND EMBANKMENTS SHALL BE SHAPED, TRIMMED, AND PLANTED IN ACCORDANCE WITH THE PLANTING NOTES AND AS

DIRECTED BY THE ENGINEER OF WORK, AND LEFT IN A NEAT AND ORDERLY CONDITION. ALL STONES, ROOTS AND OTHER WASTE MATERIALS EXPOSED ON THE EXCAVATION OR EMBANKMENT SLOPES WHICH ARE LIABLE TO BECOME LOOSENED, SHALL BE REMOVED AND DISPOSED OF. THE TOE AND TOP OF ALL SLOPES SHALL BE ROUNDED IN ACCORDANCE WITH ORDINANCE NO. 1797, THESE GRADING PLANS, AND THE STANDARD DRAWINGS CVDS 26 AND 27. SLOPE SETBACKS AND GRADES SHALL CONFORM TO CVDS 25.

6. IF THERE ARE EROSION SCARS ON EXISTING SLOPES WHICH OTHERWISE WOULD NOT BE ELIMINATED BY THE PROPOSED GRADING, THESE SCARS ARE TO BE ELIMINATED BY TRIMMING, FINE GRADING AND PLANTING. IF THE SCARS ARE IN AREAS OF NATIVE VEGETATION, THE REPAIRS SHOULD BE PERFORMED WITH AN EFFORT TO AVOID OR MINIMIZE IMPACTS TO NATIVE VEGETATION. ALL SUCH REPAIRS IN AREAS OF NATIVE VEGETATION SHALL BE REVIEWED AND APPROVED BY THE CITY'S MITIGATION MONITORING COORDINATOR PRIOR TO THE BEGINNING OF THE REPAIR WORK.

7. ALL TREES, BRUSH, GRASS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE COLLECTED, PILED OR OTHERWISE DISPOSED OF OFF THE SITE BY THE CONTRACTOR SO AS TO LEAVE THE AREAS THAT HAVE BEEN CLEARED WITH A NEAT AND FINISHED APPEARANCE FREE FROM UNSIGHTLY DEBRIS. APPROVAL OF LOCATIONS FOR DEBRIS FILL SHALL BE OBTAINED FROM THE SOILS ENGINEER PRIOR TO THE DISPOSAL OF ANY SUCH MATERIAL.

8. SUBDRAIN LOCATIONS SHOWN ARE APPROXIMATE AND ARE RECOMMENDED FOR ALL SIGNIFICANT FILL CANYONS. THE ACTUAL LOCATION AND EXTENT OF SUBDRAINS SHALL BE DETERMINED BY THE GEOTECHNICAL CONSULTANT AT THE TIME OF CONSTRUCTION.

9. BY REFERENCE HERE, THE REPORT _____(TITLE OF GEOTECHNICAL REPORT)_____ PREPARED BY ___(GEOTECHNICAL CONSULTANT)__ ON __(DATE)_____ IS INCLUDED AS PART OF THESE PLANS.

10. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES. LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE AND SHOWN FOR GENERAL INFORMATION ONLY.

11. WHERE GRADING DOES NOT OCCUR, ALL EXISTING PLANT MATERIAL IS TO BE PROTECTED IN PLACE. NO CONSTRUCTION EQUIPMENT WILL BE ALLOWED TO TRAVEL THROUGH AND DAMAGE ANY OF THESE AREAS. ALL AREAS TO BE RETAINED IN A NATURAL CONDITION SHALL BE FENCED UNDER THE DIRECTION OF THE PROJECT BIOLOGIST. CONTRACTOR WILL

BE RESPONSIBLE TO REPAIR ANY AND ALL DAMAGE/IMPACTS TO THESE AREAS.

12. THE CONTRACTOR SHALL FURNISH TO THE ENGINEER OF WORK AS-BUILT PLANS FOR ALL NEW IMPROVEMENTS AND GRADING SHOWN ON THESE PLANS FOR SUBMITTAL TO THE CITY ENGINEER FOR APPROVAL IN ACCORDANCE WITH SECTION 15.04.140 OF THE CHULA VISTA MUNICIPAL CODE.

13. IN THE CASE OF CONFLICTS, THE REQUIREMENTS OF THE EARTHWORK, SPECIFICATIONS PREPARED FOR THE PROJECT BY THE SOILS ENGINEER SHALL GOVERN THE REQUIREMENTS OF THIS PLAN AND THESE NOTES AND THESE PLANS SHALL BE REVISED ACCORDINGLY.

LANDSCAPING NOTES

1. ALL SLOPES SHALL BE PLANTED AND IRRIGATED IN ACCORDANCE WITH PLANS APPROVED BY THE CITY OF CHULA VISTA DIRECTOR OF PARKS AND RECREATION AND CITY ENGINEER. PLANS SHALL CONFORM TO THE CITY OF CHULA VISTA LANDSCAPE MANUAL AND ORDINANCE NO. 1797, BOTH AS AMENDED.

2. FINISH GRADING AND PLANTING SHALL BE ACCOMPLISHED ON ALL SLOPES PRIOR TO OCTOBER 1 OR IMMEDIATELY UPON COMPLETION OF ANY SLOPES GRADED BETWEEN OCTOBER 1 AND APRIL 1. PADS OR OTHER RELATIVELY LEVEL AREAS SHALL BE PLANTED AS DIRECTED BY THE CITY'S DIRECTORS OF ~~PLANNING~~DEVELOPMENT SERVICES AND BUILDING DEPARTMENT AND/OR OFFICE OF BUILDING AND PARK CONSTRUCTION.

3. PRIOR TO GRADING, CONTRACTOR SHALL FIELD VERIFY EXISTING IRRIGATION SYSTEMS TO DETERMINE WHICH ARE OPERABLE. UNLESS OTHERWISE NOTED ON THESE PLANS, ALL EXISTING IRRIGATION SYSTEMS ARE TO BE PROTECTED IN PLACE AND REMAIN OPERABLE. CONTACT THE ~~PLANNING~~DEVELOPMENT SERVICES AND BUILDING DEPARTMENT AND/OR OFFICE OF BUILDING AND PARK CONSTRUCTION (LANDSCAPING COORDINATION NAME AND PHONE NO., PER SEC. 5-300).

EROSION CONTROL NOTES

PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, TEMPORARY EROSION CONTROL SHALL BE PREFORMED AND INSTALLED BY THE CONTRACTOR AS INDICATED BELOW:

1. THE EROSION CONTROL CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSPECTION AND MODIFICATION OF THE EROSION CONTROL DEVICES DURING THE RAINY SEASON. THE CONTRACTOR, PERMITTEE OR OWNER SHALL BE RESPONSIBLE

FOR THE CONTINUAL MAINTENANCE OF THE EROSION CONTROL DEVICES DURING THE RAINY SEASON. IN THE EVENT OF FAILURE OR REFUSAL TO PROPERLY MAINTAIN SAID DEVICES, THE CITY ENGINEER OR MITIGATION MONITOR MAY CAUSE EMERGENCY MAINTENANCE WORK TO BE DONE TO PROTECT ADJACENT PRIVATE AND PUBLIC PROPERTY, THE COST (INCLUDING AN INITIAL MOBILIZATION AMOUNT) OF WHICH SHALL BE CHARGED TO THE OWNER.

2. SEDIMENTATION BASINS MAY NOT BE REMOVED OR MADE INOPERATIVE WITHOUT PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER AND MITIGATION MONITOR.

3. TEMPORARY EROSION CONTROL DEVICES, WHICH INTERFERE WITH THE WORK, SHALL BE RELOCATED OR MODIFIED AS THE WORK PROGRESSES, AS RECOMMENDED BY THE ENGINEER OF WORK AND AS APPROVED BY THE CITY ENGINEER AND MITIGATION MONITOR.

4. ALL REMOVABLE PROTECTION DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE 5-DAY RAIN PROBABILITY FORECAST EXCEEDS 40 PERCENT. AFTER EACH RAINSTORM EXCEEDING 1/4 INCH IN A 12-HOUR PERIOD, SILT AND DEBRIS SHALL BE REMOVED FROM CHECK DAMS AND DESILTING BASINS AND BASINS SHALL BE PUMPED DRY AS DEEMED NECESSARY BY THE CITY ENGINEER AND MITIGATION MONITOR.

5. EFFECTIVE PLANTING SHALL BE INSTALLED, FULLY GERMINATED, AND SHALL EFFECTIVELY COVER THE REQUIRED SLOPES PRIOR TO FINAL APPROVAL. THE PLANTING MIX SHALL BE APPROVED, BY THE DIRECTOR OF ~~PLANNING~~DEVELOPMENT SERVICES AND BUILDING AND/OR THE OFFICE OF BUILDING AND PARK CONSTRUCTION, PRIOR TO INSTALLATION. SPRINKLER SYSTEMS ARE REQUIRED ON ALL SLOPES OVER FIVE FEET IN HEIGHT.

6. A 12 INCH HIGH BY 3 FEET WIDE BERM SHALL BE MAINTAINED ALONG THE TOP OF THE SLOPE OF THOSE FILLS ON WHICH GRADING IS NOT IN PROGRESS. CONCENTRATED WATER SHALL NOT BE CARRIED CLOSER THAN 10 FEET FROM THE TOP OF SLOPES.

7. SILT BASINS, TRAPS, OR SANDBAGS SHALL BE PROVIDED AT EVERY STORM DRAIN INLET TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM.

8. FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPE, THE CONTRACTOR SHALL INSURE THAT WATER DRAINING TO THE SUMPS IS DIRECTED INTO THE INLET, AND THAT A MINIMUM OF 1.00' FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS, THE CONTRACTOR SHALL

PROVIDE IT VIA TEMPORARY MEASURES, I.E. SANDBAGS OR DIKES.

9. THE GRADING CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREETS DUE TO CONSTRUCTION ACTIVITY.

10. THE CONTRACTOR SHALL CHECK AND MAINTAIN LINED AND UNLINED DITCHES AFTER EACH RAINFALL.

11. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH RAINFALL EXCEEDING 1/4" IN A 12-HOUR PERIOD AND WHEN SILT REACHES A DEPTH OF 1.0'

12. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.

13. DEVICES SHOWN ON THESE PLANS SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE PUBLIC WORKS INSPECTOR AND MITIGATION MONITOR.

14. THE CONTRACTOR SHALL RESTORE ALL EROSION CONTROL DEVICES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER AND MITIGATION MONITOR AFTER EACH RAINFALL WHICH PRODUCES RUNOFF.

15. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE CITY ENGINEER OR MITIGATION MONITOR DUE TO INCOMPLETE GRADING OPERATIONS OR UNFORSEEN CIRCUMSTANCE WHICH MAY ARISE.

16. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.

17. ALL EROSION CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREIN.

18. GRADED AREA AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPES AT THE CONCLUSION OF EACH WORKING DAY.

19. IN CASE EMERGENCY WORK IS REQUIRED, CONTACT _____ ___(DEVELOPER'S NAME & PHONE NO.)_____.

20. THE CONTRACTOR SHALL TAKE THE NECESSARY STEPS TO PROTECT THE PROJECT AND ADJACENT PROPERTY FROM ANY EROSION AND SILTATION THAT MAY RESULT FROM GRADING

OPERATIONS BY APPROPRIATE MEANS (SANDBAGS, HAY BALES, TEMPORARY DESILTING BASINS, SILT FENCES, DIKES, SHORING, ETC.) UNTIL SUCH TIME THAT THE TOTAL PROJECT IS COMPLETED AND ACCEPTED FOR MAINTENANCE BY OWNER.

MISCELLANEOUS

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STATEMENT

(FOR PROJECTS SUBJECT TO NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES)

DEVELOPMENT OF THIS PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF STATE WATER RESOURCES CONTROL BOARD (SWRCB) (NPDES GENERAL PERMIT NO. CAS000002, WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES OF STORM WATER RUNOFF ASSOCIATED WITH CONSTRUCTION ACTIVITY. IN ACCORDANCE WITH SAID PERMIT, A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND A MONITORING PROGRAM PLAN SHALL BE DEVELOPED AND IMPLEMENTED CONCURRENT WITH THE COMMENCEMENT OF GRADING ACTIVITIES. THE SWPPP SHALL SPECIFY BOTH CONSTRUCTION AND POST-CONSTRUCTION STRUCTURAL AND NON-STRUCTURAL POLLUTION PREVENTION MEASURES. THE SWPPP SHALL ALSO ADDRESS OPERATION AND MAINTENANCE OF POST-CONSTRUCTION POLLUTION PREVENTIONS MEASURES, INCLUDING SHORT-TERM AND LONG-TERM FUNDING SOURCES AND THE PARTY OR PARTIES THAT WILL BE RESPONSIBLE FOR THE IMPLEMENTATION OF SAID MEASURES.

A COMPLETE AND ACCURATE NOTICE-OF-INTENT (NOI) WILL BE FILED WITH THE SWRCB. A COPY OF THE ACKNOWLEDGMENT FROM THE SWRCB THAT A NOI HAS BEEN RECEIVED FOR THIS PROJECT SHALL BE FILED WITH THE CITY OF CHULA VISTA WHEN RECEIVED; FURTHER, A COPY OF THE COMPLETED NOI FROM THE SWRCB SHOWING THE PERMIT NUMBER FOR THIS PROJECT SHALL BE FILED WITH THE CITY OF CHULA VISTA WHEN RECEIVED.

IN ADDITION, THE UNDERSIGNED AND SUBSEQUENT OWNER(S) OF ANY PORTION OF THE PROPERTY COVERED BY THIS GRADING PERMIT NO. _____ SHALL COMPLY WITH SPECIAL PROVISIONS REGARDING THE REVOCATION OR CANCELLATION OF NPDES GENERAL PERMIT COVERAGE, AS SET FORTH IN SWRCB ORDER NO. CAS000002, AND ANY SUBSEQUENT AMENDMENTS THERETO AND REISSUANCES THEREOF.

OWNER OF LAND

SIGNATURE OF LAND OWNER, CORPORATE OFFICE, GENERAL PARTNER, OR PROPRIETOR DATE

PRINTED NAME OF ABOVE PERSON

TITLE

PERMIT IDENTIFICATION NUMBER

OWNERS' CERTIFICATE

IT IS AGREED THAT FIELD CONDITIONS MAY REQUIRE CHANGES TO THESE PLANS. IT IS FURTHER AGREED THAT THE OWNER (DEVELOPER) SHALL HAVE THE ENGINEER OF WORK MAKE SUCH CHANGES, ALTERATIONS OR ADDITIONS TO THESE PLANS, WHICH THE ENGINEER OF WORK DETERMINES ARE NECESSARY AND DESIRABLE FOR THE PROPER COMPLETION OF THE GRADING. ALL PLAN CHANGES SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION.

I FURTHER AGREE TO COMMENCE WORK ON ANY IMPROVEMENTS SHOWN ON THESE PLANS WITHIN EXISTING CITY RIGHT-OF-WAY WITHIN 60 DAYS AFTER ISSUANCE OF THE GRADING PERMIT AND TO PURSUE SUCH WORK ACTIVELY ON EVERY NORMAL WORKING DAY UNTIL COMPLETED, IRRESPECTIVE AND INDEPENDENT OF ANY OTHER WORK ASSOCIATED WITH THIS PROJECT OR UNDER MY CONTROL.

NAME: (DEVELOPER FIRM NAME)
ADDRESS:
TELEPHONE:

BY:
DATE

SOILS ENGINEER'S CERTIFICATE

I, _____(NAME)_____, A REGISTERED CIVIL ENGINEER OF THE STATE OF CALIFORNIA, PRINCIPALLY DOING BUSINESS IN THE FIELD OF APPLIED SOIL MECHANICS, HEREBY VERIFY THAT A SAMPLING AND STUDY OF THE SOIL CONDITIONS PREVALENT WITHIN THIS SITE WAS MADE BY ME OR UNDER MY DIRECTION BETWEEN THE DATES OF _____ AND _____. ONE COMPLETE COPY OF THE SOILS REPORT COMPILED FROM THIS STUDY, WITH MY RECOMMENDATIONS, HAS BEEN SUBMITTED TO THE OFFICE OF THE CITY ENGINEER.

THESE GRADING PLANS HAVE BEEN REVIEWED BY ME OR UNDER MY DIRECTION AND CONFORM TO THE RECOMMENDATIONS MADE IN THE SOILS REPORT MENTIONED ABOVE.

SIGNED:
DATE

RCE NO._____ EXPIRATION DATE _
_____

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF CHULA VISTA IS CONFINED TO A REVIEW ONLY AND DOES NOT

RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR THE PROJECT DESIGN.

(NAME OF ENGINEER) (RCE NO.)
DATE

WORK TO BE DONE

THE WORK TO BE DONE CONSISTS OF THE ITEMS INDICATED UNDER THE "LEGEND" SHOWN BELOW, AND IS TO BE DONE IN ACCORDANCE WITH THESE PLANS AND THE FOLLOWING LIST OR PRINTED MATERIALS AS CURRENTLY ADOPTED BY THE CHULA VISTA CITY COUNCIL INCLUDING THE FOLLOWING:

1. Standard specifications for Public Works Construction ("Greenbook") and Supplements
   Amendments thereto:

2. San Diego Area Regional Standard Drawings

3. City of Chula Vista Standard Special Provisions (to the Greenbook)

4. Design and Construction Standards of the City of Chula Vista

5 State of California Department of Transportation Standard Plans

6. Standard Specifications, State of California Manual of Traffic Controls

All references are to be made part of these plans. Any changes or revisions therefrom, shall be approved by the City Engineer, or his designee, prior to any request for inspection.

LEGEND

1. (DESCRIPTION) (Ref. Dwg.)
   (Symbol)

AS-BUILTS

THE CONTRACTOR SHALL FURNISH TO THE ENGINEER OF WORK, AS-BUILT PLANS FOR ALL NEW IMPROVEMENTS AND GRADING SHOWN ON THESE PLANS FOR SUBMITTAL TO THE CITY ENGINEER FOR APPROVAL IN ACCORDANCE WITH SECTION 15.04.140 OF THE CHULA VISTA MUNICIPAL CODE.

PRECONSTRUCTION CONFERENCE

THE CONTRACTOR SHALL NOT BEGIN ANY WORK ON THIS PROJECT UNTIL A PRECONSTRUCTION CONFERENCE IS HELD WITH THE ENGINEER OF WORK, THE

SOILS ENGINEER, ENGINEERING GEOLOGIST, A QUALIFIED PALEONTOLOGICAL MONITOR, A BOTANIST, THE DEVELOPER, THE CITY INCLUDING THE MITIGATION MONITOR AND _____(WATER COMPANY)_____.

ENGINEER OF WORK CERTIFICATE

I HEREBY CERTIFY THAT IN MY PROFESSIONAL OPINION ALL WORK INCORPORATED IN THE GRADING PLANS SHEET 1 THROUGH SHEET ___ AND AUTHORIZED UNDER GRADING PERMIT NO. ____ HAS BEEN CONSTRUCTED TO THE LINES AND GRADES IN SUBSTANTIAL CONFORMANCE WITH SAID PLANS AND ANY APPROVED REVISIONS.

SIGNED:
DATE

PRINTED NAME:
P.E. NO.

DISCIPLINE:_____
REGISTRATION EXPIRES _____

"DIG ALERT NOTICE"

SECTION 4216/4217 OF THE GOVERNMENT CODE REQUIRES THAT DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID.
FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT TOLL FREE 1-800-422-4133 AT LEAST TWO WORKING DAYS BEFORE YOU DIG.

As-Built Certificate: To be placed on each plan sheet

"AS –BUILT"	
	DATE
(Signature)	
	P.E. No.
(Printed Name)	
MY REGISTRATION EXPIRES: _____	DISCIPLINE: _____
_____	_____

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CONSTRUCTION PLANS
SECTION 4-300
LANDSCAPE IMPROVEMENT PLANS

4-300 LANDSCAPE IMPROVEMENT PLANS

4-301 Purpose

Landscape improvement plans detail construction of landscape and irrigation facilities within public and private open space, right of way and park sites. These plans are generally associated with a tentative or final map for a major subdivision or with an application for a building permit for private construction. All landscaping and irrigation shall be designed in accordance with Titles 17 and 19 of the Chula Vista Municipal Code and the City of Chula Vista Landscape Manual.

4-302 Applicability

4-302.1 All building permit applications for industrial, commercial, civic, or multi-family residential buildings or structures; residential developments with common areas; development of parklands, recreation facilities, maintenance districts, street medians; and all discretionary permit applications for the aforementioned types of land uses regulated in any manner by the provisions of Titles 17 and 19 of the Municipal Code shall be subject to review and approval in accordance with the provisions of the City Landscape Manual. Interior remodels or minor modifications to building exteriors constituting a valuation of less than $20,000 are not subject to the provisions of the City Landscape Manual.

4-302.2 Applicants for the following types of projects shall submit and obtain approval of Landscape Plans prior to the issuance of the applicable permit or other discretionary approval:

(1) Multiple family (CVMC 19.14.485)
(2) Commercial (CVMC 19.14.485)
(3) Industrial (CVMC 19.14.485)
(4) Planned Unit Developments (CVMC 19.14.485)
(5) Unclassified uses (CVMC 19.14.485)
(6) Remodels with a valuation of $20,000 or more for the above uses (CVMC 19.14.485)
(7) Projects requiring Precise Plans (CVMC 19.14.485)
(8) Parking lots with five or more stalls (CVMC 19.14.485)
(9) Graded slopes (CVMC 19.14.485)
(10) Parks and open space (CVMC 17.10)

4-302.3 **Model home** complexes for single family and/or multi-family projects shall submit a landscape plan for at least one model home. Construction of single-family homes or duplexes on individual lots are not normally required to submit a landscape plan. In addition, developers of single-family residential projects with 5 or more units shall provide written information on designing, installing and maintaining water efficient landscapes, to all new homeowners. At least one model home shall post a sign directing the attention of prospective purchasers to drought-tolerant features within the landscape design.

4-303 Form And Content

4-303.1 General

(1) Planting and irrigation plans shall be prepared by a registered landscape architect and shall be accurate drawings which are technically correct and complete and shall show in detail all planting and facilities required to be constructed or installed.

(2) Planting and Irrigations plans shall conform to the format set forth in the City of Chula Vista Landscape Manual.

(3) Street trees, where required in parkways or in an adjacent street tree planting easement may be shown on the Street Improvement plans. The type, size, and location shall be in conformance with the details on the approved Tentative Map.

4-304 Processing

4-304.1 Erosion Control, Landscape & Irrigation Plans for Public Property, Right-of-Way, Public Parks & Open Space Maintenance Districts

(1) First Submittal Requirements.

a) First Submittals of Landscape Improvement plans for public property associated with a subdivision shall be submitted to the Engineering Division when the second submittal of the associated grading plans is submitted to Public Works Operations Department and shall contain the number of bluelines specified in Section 5-200 of this manual.

b) The Landscape Improvement plans will be routed to the appropriate departments for review and final processing in accordance with the Chula Vista Landscape Manual.

c) Submittals will only be accepted in conformance with Section 5-203 of this manual

(2) Final Submittal - Prior to approval two bluelines of the landscape improvement plans shall be submitted to the Engineering Division for review.

(3) Landscape improvement plans and bonds must be submitted and approved prior to issuance of a Land Development (grading) permit unless otherwise approved by the Director of ~~Planning~~Development Services & Building (or the Director of the Office of Buildnig and Park Construction) or its designee.

4-304.2 Landscape Improvement plans for privately maintained open space, parks, and/or common areas shall be processed as set forth in the Chula Vista Landscape Manual.

CONSTRUCTION PLANS
SECTION 4-400
CONSTRUCTION PERMITS

4-400 CONSTRUCTION PERMITS

Construction permits are required to construct public improvements without a Subdivision Improvement Agreement. Generally the types of projects that require a construction permit are associated with construction on private property that requires public improvements, minor subdivision (parcel) maps, and advance permits for major subdivisions or SPA developments. Construction permit plans show all work required, including grading, to construct public improvements.

4-401 Form & Content – Plans required for issuance of a construction permit generally follow the form and content requirements for Improvement Plans (Section 4-100) and Grading Plans (Section 4-200) as applicable. The typical construction notes required on the plans is an appropriate mixture of the typical notes for improvement and grading plans

4-402 Processing – Construction Permit plans are processed either by the Permit Section or, in the case of major subdivisions and advance permits, the Subdivision Section.

4-402.1 **First Submittals** - First submittals for all Construction Permit plans shall contain the items listed in Sections 4-103 and 4-203. Submittal times for the two sections are:

(1) Permit Section Submittals - Monday through Friday during normal working hours (8:00 a.m. to 5:00 p.m.). Submittals will be accepted only from the engineer of work. Submittals sent by runner or courier will not be accepted unless prior arrangements have been made.

(2) Subdivision Section Submittals - Monday, Wednesday and Friday between 8:00 a.m. and 12:00 p.m. unless prior arrangements have been made. Submittals will be accepted only from the engineer of work. Submittals sent by runner or courier will not be accepted unless prior arrangements have been made.

4-402.2 Subsequent Submittals for either section will be accepted only through appointment with the plan checker unless prior arrangements have been made.

4-402.3 The following items are required prior to plan approval and issuance of a Construction Permit:

(1) Mylars and print package of signed plans (Section 5-201)
(2) Inspection deposit
(3) Completed application form (Section 4-403.1)
(4) Required bonds (usually one-job bonds. Section 4-403.2)
(5) Traffic Control Agreement (Section 4-403.3)
(6) Barricade Agreement (Section 4-403.4)
(7) Street Permit Card (Section 4-403.5)
(8) Cal-OSHA Certification (if required. Section 4-403.6)

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4-403 SAMPLE DOCUMENTS

4-403.1 Construction Permit Application

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4-403.2 SAMPLE BOND FORM

File No. _____

Note: For current bond forms see: www.ci.chula-vista.ca.us Bond No. _____

Premium _____

BOND FOR STREET IMPROVEMENTS
(To Be Used With A Construction Permit)

KNOW ALL PERSONS BY THESE PRESENTS,
That I/We _____as Principal, and _____, a corporation of the State of _____, as Surety, are held and firmly bound unto the City of Chula Vista, a municipal corporation, in the County of San Diego, State of California, and to and for the benefit of any and all persons who may suffer damages by reason of the breach of the conditions hereof, in the sum of _____ dollars, ($_____) lawful money of the United States of America, to be paid to the said City of Chula Vista, or to any and all persons who may suffer damages by reason of the breach of any of the conditions hereof, for which payment well and truly to be made, the Principal hereby binds himself, his successors and assigns, and the Surety herein binds itself, its successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the above-bound Principal is desirous of obtaining a license and permit to do one such job within the City of Chula Vista and of complying with regulations prescribed by the applicable ordinances and standards of said City to secure such license and permit, said job to performed at the location commonly known as _____Chula Vista, California, in accordance with ☐ Construction Permit No._____, or ☐ Other instrument _____ and as shown on approved plans: Chula Vista drawing nos. _____.

NOW, THEREFORE, the condition of the above obligation is such that whenever the said Principal shall construct any street improvements in or upon any public highway, lane, alley, court, park, street or public place in the City of Chula Vista, State of California, if the above-bound Principal shall cause all such work to be done, and improvements to be made to the official grade and according to the specifications therefore as prescribed by the ordinances and standard of the City of Chula Vista in force at the time of making such improvement, or doing such work, and when such improvement or work consists of, or includes, sidewalk, curb or street paving, the improvement shall be graded to the official grade, and all debris and surplus material shall be removed from the street upon the completion of such work or improvement, all as specified in the ordinances and standards of said City in such cases made and provided, then this obligation shall be void, otherwise to remain in full force and effect; and conditioned further that this bond shall inure to the benefit of the City of Chula Vista, and to and for the benefit of all persons who may suffer damage by reason of the breach of any of the conditions hereof, and any persons so damaged may bring suit upon said bond in his own name, provided that in the event of the failure of the Principal to construct any sidewalk, curb, gutter or pavement as hereinabove mentioned in compliance with the specifications as prescribed by the ordinances and standards of the City of Chula Vista, or to the

official grade, the damages to the City of Chula Vista will be deemed to include the cost of removing such defective work and constructing same according to the grade and/or according to specifications prescribed by ordinances and standards; in addition, this bond shall be conditioned upon the Surety's full compliance with all terms and conditions of the required permit and further conditioned upon full compliance with all provisions of the ordinances and standards of the City of Chula Vista.

PROVIDED FURTHER, that this bond shall not be void upon the first recovery, but may be sued and recovered upon from time to time and judgments may be recovered hereon by said City or any person aggrieved or damaged in his own name, until the whole penalty is exhausted, and the life of the obligation of this bond shall continue for such length of time as such license remains in force, and for thirty (30) days thereafter.

As part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees, and including reasonable attorney's fees, incurred by City in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

IN WITNESS WHEREOF, the said Principal and Surety and each hereunto set their hands, this _____day of _____, 20 _____.

PRINCIPAL: Bond No. _____

Name of Contracting Company (Please print)

_____ Date _____
Signature

_____
Print name

SURETY:

_____ Title _____
Name of officer (Please print)

_____
Name of surety company

_____
Address

_____
City
State Zip

_____ Date _____
Signature

(Notary Acknowledgment and Corporate Authorization Required for Each Signatory)

Approved as to form:
CITY ATTORNEY

By:_____
D:\Section 4-400.doc

4-403.3 Sample Traffic Control Agreement

4-403.4 Sample Barricade Agreement

4-403.5 Sample Street Card

4-403.6 Sample Cal-OSHA Certification

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CONSTRUCTION PLANS
SECTION 4-500
CONSTRUCTION PHASING, STOP WORK PROCEDURE, CONSTRUCTION CHANGES, PROJECT CLOSEOUT AND AS-BUILTS~~REVISIONS, CONSTRUCTION CHANGES AND AS-BUILTS~~

4-500 CONSTRUCTION PHASING, STOP WORK PROCEDURE, CONSTRUCTION CHANGES, PROJECT CLOSEOUT AND AS-BUILTS

4-500.1 Construction Phasing

The purpose of this section is to set forth guidelines for construction phasing so that the ultimate end user of the project is not unduly burdened by partially constructed facilities.

1. If an off-site unbuilt access road is needed to serve the project (Project "A") and the unbuilt access road has been designed and bonded for by another entity (Project "B"), Owner "A" must either:
   a. Enter into an agreement with Owner "B" and the City for the joint construction of said roadway; or,
   b. must design and bond independently for said roadway,

   Needed roadways are those that are required per the approved Tentative Map or as otherwise required by the City Engineer for adequate circulation.
2. Projects that have not begun construction within two years of final map approval may, with initiation by the City Council, revert to acreage pursuant to 66499.11 of the Map Act.
3. In accordance with provisions in Subdivision Improvement Agreements, in the event that a Project has been sold, transferred or foreclosed upon, the city shall require the new owner of such Project to ~~s that have gone through forclosure proceedings~~~~back to the bank been overtaken by a bank or have been sold to a subsequent owner~~ ~~shall require~~execute a new subdivision improvement agreement and submit new bonds prior to the new owner obtaining his/her/their~~to the~~ first building permit~~ or the City may revertion to acreage proceedings~~.
4. Projects that have are partially constructed and have been suspended indefinitely shall be graded for long term sustainability to the satisfaction of the City Engineer.
5. Prior to the construction of buildings the owner shall comply with Chula Vista Fire Department Policies for water, access, temporary turnarounds and street signs.
6. Prior to building permit sign off, the owner shall plant and irrigate all adjacent slopes, medians and parkways and final pave the street, complete all street improvements, unless bonded with erosion control BMP's in place.

4-500.2 Stop Work Procedure

The purpose of this section is to provide guidance for when a stop work order is appropriate during the grading or construction of facilities by private developers from plans signed by the City Engineer. It is the intent of this policy to ensure that construction proceeds in an orderly manner without major interruptions in the work if at all possible. (References: 2006 Standard Specifications for Public Works Construction, Section 6-3, "Suspension of Work"; Chula Vista Municipal Code Chapter 12.20 and Chapter 15.04)

1. Health and Safety – There shall be no circumstance where this procedure limits the Public Works Inspector from protecting the health and safety of the public by stopping all work at a construction site.

2. Major changes in work requiring a Construction Change to the plans – The Public Works Inspector shall inform the Principal Civil Engineer, Public Works Inspection Section when

the nature of a change in work or change in conditions necessitates a construction change to the plans prior to commencing work. If the Principal Civil Engineer concurs with this finding, the Public Works Inspector shall immediately communicate this direction to the contractor. The contractor will be allowed to continue to progress on other portions of plans while the construction change is processed by the Development Services Department – Land Development Section. It shall be the Contractor's obligation to inform the Engineer of Work / Owner that the plans require a construction change. Should the contractor continue to work on the area specifically under review for a construction change before the approval of the construction change, the Public Works Inspector shall issue a stop work notice.

3. Minor changes in work to be shown on the as-built "red line" plans. – Should the Principal Civil Engineer make a finding that the changes are not Major as specified in Section 2defined in the above bullet, the changes shall be shown on the red-line plans and processed as "As-Built" at the end of construction.

4-501 General Description of Plan Changes

4-501.1 Revisions are changes in the design required by changed design requirements identified prior to start of construction. Revisions shall follow the general procedure in Section 4-502.

4-501.2 Construction Changes are changes in the design required by unforeseen field conditions. Construction changes shall be approved before the proposed change is constructed. Construction changes must be submitted to and approved by the Development Services Department – Land Development Section to the Inspection Section, but may be processed either by the Land Development Section or by the Inspection Section as determined by the Inspection Section, and shall follow the general procedure in Section 4-502

4-501.3 As-built changes are revisions to construction plans to reflect as constructed conditions. As-builts are to be processed by the Inspection Section following the general procedure in Section 4-502 and must be complete and approved prior to acceptance of all public improvements and release of bonds. Grading plans are as-built in accordance with Section 15.04.140 of the Municipal Code Typically, the following items are added to approved plans during the as-built process:

(1) Add sewer laterals to plan view with a distance from the closest property line indicated, show backflow preventors on plan view, and complete sewer lateral table.
(2) List structural street sections with limits indicated for each change;
(3) Show street light conduit locations, pull boxes and power sources;
(4) Show driveway locations including driveway centerline with street centerline stationing and width of driveway.

4-502 General AS-Built Procedure

(1) Submit two sets of blueprints with changes indicated in red. If the project is not yet complete, then the redlined plans will be returned to the Engineer-of-Work and marked "Rejected - Resubmit Upon Project Completion". If the plans contain errors or are incomplete they will be returned to the Engineer-of-Work for corrections.

(2) After changes are approved provide one set of sepias for City files and check out mylars. Mylars may be checked out by the Engineer of Work or a bonded messenger approved by the City.
(3) Make revisions on originals per approved redline changes. Alternatively, computer generated "As-Built" mylars and a digital "As-Built" file in DWG format, upon approval of the redline blueprint plan, may be submitted in-lieu of hand-drafted revisions, but must be signed by the Inspection Section Senior Civil Engineer and must include the "As-Built Replacement Street Approval" as specified in Section 4-503.
(4) Complete "Engineer of Work Certificate" on title sheet and "As-Built Certificate" on each plan sheet (See Section 4-105 and 4-208)
(5) Submit revised mylar and the approved blueprints to City for signature.
(6) Provide mylar and number of blueprints as specified in Section 5-200.
(7) New mylars may not be submitted for construction changes unless otherwise approved by the City Engineer.

4-503 As-Builts with Replacement Mylars

1) Submit two sets of bluelines with changes indicated in red for review and approval.
2) .After changes are approved, submit replacement mylars for signature showing all approved changes from original plans in a revision bubble. Include the following additional signature box for City approval of replacement mylar:

AS-BUILT REPLACEMENT SHEET APPROVAL

Sr. Civil Engineer _____ Date _____

Principal Senior Civil Engineer _____ Date _____

3) Complete "Engineer of Work Certificate" on title sheet and "As-Built Certificate" on each plan sheet (See Section 4-105 and 4-208)

4) Provide copies of approved as-builts as specified in Section 5-200.

Project Closeout Procedures

(1) Field Inspection

a. The Inspection Section receives a written request from developer for a Final Inspection of improvements or grading. A Final Inspection will be scheduled with the Developer within two weeks of receipt of the request.
b. The Final Inspection should be conducted when the adjacent buildings are completed. If the structures are not completed, a second Final Inspection

will be required after the last building is permanently occupied in the project area.

c. A Punch List of corrective work and outstanding paperwork to be completed will be sent to the developer within two weeks of the Final Inspection walk.

d. Once the Developer has completed the corrective work on the punch list the Developer requests a reinspection. The reinspection will be scheduled within two weeks.

(2) Project Acceptance

a. **Improvements:** Once all punch list items are complete and a positive balance exists in the developer's deposit account, the Public Works inspector prepares an acceptance memo and forwards to the Director of Public Works for final acceptance. The Faithful Performance and Labor and Material bond can be released with Director of Public Works initial on the acceptance memo and the receipt of the maintenance bond. Rewrite this to indicate acceptance memo and close-out happens after the one yr maintenance period and finally the release of the maintenance bond.

b. Landscaping

i. Any Landscaping associated with and/or adjacent to a roadway must be completed prior to the City Accepting the roadway

ii. City Bonded Landscaping shall not be turned over for Home Owner Association Maintenance until

1. A cursory walkthrough with the City Landscape Inspector and the HOA and has been completed and all punch list items corrected.
2. Landscaping and irrigation installed per plan verified by the landscape architect of record, and a City L&I Substantial Conformance Form 5522 has been filled out, signed and submitted.
3. Assignment of any developer maintenance agreement.
4. Ownership of the lot transferred from the developer to the HOA.

iii. The turnover to the CFD for City Open Space maintenance shall not occur until:

1. Landscaping and irrigation, lighting, fencing, walls, trails, and any other CFD maintained improvements have been installed and verified per plan by the landscape architect of record, and a City L&I Substantial Conformance Form 5522 has been filled out, signed and submitted.
2. At a minimum, one (1), complete irrigation water meter, point of connection, controller, and all landscaping, lighting (including lighting electric meter and pedestal and electrical point of connection), communication (including communication point of connection), drainage, fencing, walls, trails, and any other CFD maintained improvements and infrastructures associated with

and/or adjacent to such points of connection, have been completely installed per City approved plans.

3. A walkthrough with the City Landscape Inspector has been completed and all punch list items corrected.
4. A CFD L&I utility, infrastructure and any other maintained improvements, "maintenance turnover map", has been submitted to the City's Open Space Division (Paul Sirois and Chevis Fennell, 1800 Maxwell Rd., Chula Vista, CA 91911) 18 months prior to the intended date for the City to take over maintenance. This map is to include: square footage of all areas of the City's 5 Open Space maintenance codes (see City Open Space Division for details), and all utility information, all infrastructure information (walls, fencing, trees, drainage, trails, pedestrian lighting, etc.), and any other CFD maintained improvements associated with and/or adjacent to areas intended to be turned over to the City of Chula Vista for maintenance.
5. The CFD has collected adequate funds for the maintenance thereof, and a system to continue to collect adequate funding indefinitely has been set up and is in place.
6. The City has accepted the irrevocable offer of dedication or otherwise owns or has an easement to maintain the lot, and this information has been recorded and submitted to the City Open Space Division.
7. A one year establishment period (which begins after all landscaping, irrigation, lighting, fencing, walls, trails, and any other CFD maintained improvements have been installed and completed) is complete and all punchlist items corrected.

c. Grading Permits:

i. Once all punchlist items are complete the grading bond will be released after the permit is signed by the Inspector.
ii. If there is a desilt maintenance agreement associated with the grading project, the release of the bond is controlled by the agreement. (typically 5 years after the last building permit is complete)
iii. If any CFD maintained BMP's or basins are associated with the grading bond, the acceptance of the facility and the release of the bond is conditioned on there being enough funds in the CFD for the maintenance thereof.

(3) Maintenance Period

a. Approximately ten to eleven months after the acceptance of the public improvements, the Inspector will perform a maintenance walk and inform the Developer of any corrective work in writing.
b. Once the Developer has completed all corrective work and brought the deposit account to a positive balance the maintenance bond will be released and the project will be closed-out. Any funds remaining in the account at that time will be returned to the developer.

~~4-500 CONSTRUCTION CHANGES AND AS-BUILTS~~

~~4-501 General~~

~~4-501.1 Revisions are changes in the design required by changed design requirements identified prior to start of construction. Revisions shall follow the general procedure in Section 4-502.~~

~~4-501.2 Construction Changes are changes in the design required by unforeseen field conditions. Construction changes shall be approved before the proposed change is constructed. Construction changes must be submitted to the Inspection Section, but may be processed either by the Land Development Section or by the Inspection Section as determined by the Inspection Section, and shall follow the general procedure in Section 4-502~~

~~4-501.3 As-built changes are revisions to construction plans to reflect as constructed conditions. As-builts are to be processed by the Inspection Section following the general procedure in Section 4-502 and must be complete and approved prior to acceptance of all public improvements and release of bonds. Grading plans are as-built in accordance with Section 15.04.140 of the Municipal Code Typically, the following items are added to approved plans during the as-built process:~~

~~(1) Add sewer laterals to plan view with a distance from the closest property line indicated, show backflow preventors on plan view, and complete sewer lateral table.~~
~~(2) List structural street sections with limits indicated for each change;~~
~~(3) Show street light conduit locations, pull boxes and power sources;~~
~~(4) Show driveway locations including driveway centerline with street centerline stationing and width of driveway.~~

~~4-502 General Procedure~~

~~(1) Submit two sets of blueprints with changes indicated in red.~~
~~(2) After changes are approved provide one set of sepias for City files and check out mylars. Mylars may be checked out by the Engineer of Work or a bonded messenger approved by the City.~~
~~(3) Make revisions on originals per approved redline changes. Alternatively, computer generated "As-Built" mylars and a digital "As-Built" file in DWG format, upon approval of the redline blueprint plan, may be submitted in-lieu of hand-drafted revisions, but must be signed by the Inspection Section Senior Civil Engineer and must include the "As-Built Replacement Street Approval" as specified in Section 4-503.~~
~~(4) Complete "Engineer of Work Certificate" on title sheet and "As-Built Certificate" on each plan sheet (See Section 4-105 and 4-208)~~
~~(5) Submit revised mylar and the approved blueprints to City for signature.~~
~~(6) Provide mylar and number of blueprints as specified in Section 5-200.~~
~~(7) New mylars may not be submitted for construction changes unless otherwise approved by the City Engineer.~~

~~4-503 As-Builts with Replacement Mylars~~

~~1) Submit two sets of bluelines with changes indicated in red for review and approval.~~

~~2) .After changes are approved, submit replacement mylars for signature showing all approved changes from original plans in a revision bubble. Include the following additional signature box for City approval of replacement mylar:~~

AS-BUILT REPLACEMENT SHEET APPROVAL

Sr. Civil Engineer _____ Date _____

Principal Senior Civil Engineer _____ Date _____

~~3) Complete "Engineer of Work Certificate" on title sheet and "As-Built Certificate" on each plan sheet (See Section 4-105 and 4-208)~~

~~4) Provide copies of approved as-builts as specified in Section 5-200~~.

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5-000 APPENDICES

This section contains list of fees, submittal requirements and names of government officials. This portion of the manual is subject to rather frequent changes. Rather than recertify the subdivision manual each time a change in one or more of the lists occur, it is proposed that only the appendix be modified and presented to the City Council for approval.

5-100 DEPOSIT/FEE SCHEDULE

This section contains list of fees, submittal requirements and names of government officials. This portion of the manual is subject to rather frequent changes. Rather than recertify the subdivision manual each time a change in one or more of the lists occur, it is proposed that only the ~~appendix~~ master fee schedule be modified and presented to the City Council for approval.

~~This appendix was approved by Resolution _____ on _____, by the City Council of the City of Chula Vista. (To determine if this is the current schedule, call (619) 691-5021)~~

5-101 ~~Plan Check Deposit~~Master Fee Schedule (Chapter 11)

~~5-101.1 Final Maps or Improvement Plans~~

~~SINGLE FAMILY, MULTI-FAMILY WITH PUBLIC STREETS~~			~~CONDO CONVERSIONS, MULTI-FAMILY WITH PRIVATE STREETS~~	
~~NO. OF UNITS~~	~~PLAN CHECK~~	~~INSPECTION~~	~~PLAN CHECK~~	~~INSPECTION~~
~~Less than 5~~	~~Min. $2,000~~	~~Min. $2,000~~	~~Min. $2,000~~	~~Min. $2,000~~
~~5-25~~	~~12,000~~	~~8,000~~	~~6,000~~	~~6,000~~
~~26-100~~	~~16,000~~	~~14,000~~	~~12,000~~	~~12,000~~
~~101-200~~	~~20,000~~	~~20,000~~	~~15,000~~	~~15,000~~
~~201 & UP~~	~~$100 per unit~~	~~$100 per unit~~	~~$65 per unit~~	~~$65 per unit~~

~~5-101.2 Grading Plans~~

~~SINGLE FAMILY, MULTI-FAMILY WITH PUBLIC STREETS~~			~~CONDO CONVERSIONS, MULTI-FAMILY WITH PRIVATE STREETS~~	
~~NO. OF UNITS~~	~~PLAN CHECK~~	~~INSPECTION~~	~~PLAN CHECK~~	~~INSPECTION~~
~~Less than 5~~	~~Min. $2,000~~	~~Min. $2,000~~	~~Min. $2,000~~	~~Min. $2,000~~
~~5-25~~	~~5,000~~	~~8,000~~	~~3,500~~	~~5,000~~
~~26-100~~	~~10,000~~	~~14,000~~	~~8,000~~	~~12,000~~
~~101-200~~	~~15,000~~	~~20,000~~	~~12,000~~	~~15,000~~
~~201 & UP~~	~~$75 per unit~~	~~$100 per unit~~	~~$60 per unit~~	~~$75 per unit~~

~~5-101.3 **Parcel Maps**~~

~~(1) At Tentative Parcel Map Submittal $3,000~~

~~(2) At Tentative Parcel Map Waiver Submittal $ 500~~

~~(3) At Final Parcel Map Submittal $2,500~~

~~**5-102 Plan Check Fee Schedule**~~

~~5-102.1 Adjustment Plats; $ 420 (per single line adjustment)~~
~~5-102.2 Consolidation Plats $ 360 (per single line consolidation)~~
~~5-102.3 Certificates of Compliance $ 200~~

~~**5-103 Other Fees**~~

~~The following fees do not represent all fees that may be applicable to a project and are subject to amendment. Fees due prior to final subdivision map approval will be determined during the tentative map process. All other fees will be determined at issuance of building permit. The fees set forth below may be amended from time to time and must be verified.~~

~~5-103.1 Collected at Final Subdivision Map Approval~~

~~(1) Telegraph Canyon Drainage DIF $4,579/AC~~

~~(2) Spring Valley Sewer Fee $ 130/AC~~

~~(3) Park Acquisition & Development (PAD)~~
~~Single family detached Refer to Council resolutions~~
~~Condominiums Refer to Council resolutions~~

~~(4) Park Fee Estimates for Park Sites~~
~~Park Acquisition Refer to Council resolutions~~
~~Park Improvements Refer to Council resolutions~~

~~5-103.2 Collected at Issuance of Building Permit~~
~~(amounts shown below are for single family detached developments)~~

~~(1) Transportation DIF $8,180.00/EDU~~

~~(2) Public Facilities DIF $4,888.00/EDU~~

~~(3) Telegraph Canyon Gravity Sewer DIF $216.50/EDU~~

~~(4) Telegraph Canyon Pumped Sewer DIF $560.00/EDU~~

~~(5) SR-125 DIF $820.00/DU~~

~~(6) Salt Creek Sewer DIF $284.00/EDU~~

~~(7) Sewer Capacity Charge $2,220.00/EDU~~

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5-200 SUBMITTAL REQUIREMENTS (NOTE – This schedule is affective January 1, 1998. To determine if this is the current schedule, call (619) 691-5021)

5-201 Blueline and Mylar Submittals

TYPE OF SUBMITTAL	PURPOSE	SUBMITTAL REQUIREMENTS
TENTATIVE PARCEL MAP	PRELIMINARY REVIEW	2 BLUELINES
TENTATIVE PARCEL MAP	OFFICIAL SUBMITTAL	20 BLUELINES & 1 SEPIA
TENTATIVE PARCEL MAP	REVISED	2 BLUELINES & SEPIA
FINAL PARCEL MAP	FIRST SUBMITTAL	8 BLUELINES
FINAL PARCEL MAP	SUBSEQUENT SUBMITTALS	4~~2~~ BLUELINES
RECORDED PARCEL MAP	COMPLETE PROCESS	1 MYLAR & 1 BLUELINE
TENTATIVE MAP	PRELIMINARY REVIEW	3 BLUELINES
TENTATIVE MAP	OFFICIAL SUBMITTAL	2~~2~~0 BLUELINES & 1 SEPIA 28 8½ x 11 REDUCTIONS
CONDO CONVERSION		20~~2~~ BLUELINES & 1 SEPIA 28 8½ x 11 REDUCTIONS
FINAL MAP	FIRST SUBMITTAL	8 BLUELINES
FINAL MAP	SUBSEQUENT SUBMITTALS	4~~2~~ BLUELINES
RECORDED FINAL MAP	COMPLETE PROCESS	4 BLUELINES & 1 MYLAR
IMPROVEMENT PLANS	FIRST SUBMITTAL	12 BLUELINES
IMPROVEMENT PLANS	SUBSEQUENT SUBMITTALS	2 BLUELINES
IMPROVEMENT PLANS	AFTER APPROVAL	6 BLUELINES, 1 MYLAR, 2 REDUCED COPIES (11”x17”)
IMPROVEMENT PLANS	REVISIONS FOR CHECKING	2 BLUELINES
IMPROVEMENT PLANS	APPROVED REVISIONS	6 BLUELINES & 1 MYLAR
IMPROVEMENT PLANS	AS-BUILTS	1 BLUELINE & 1 MYLAR
GRADING PLANS	FIRST SUBMITTAL	12 BLUELINES

GRADING PLANS	SUBSEQUENT SUBMITTAL	2 BLUELINES
GRADING PLANS	AFTER APPROVAL	6 BLUELINES 1 MYLAR, 2 REDUCED COPIES (11”X17”)
GRADING PLANS	REVISIONS FOR CHECKING	2 BLUELINES
GRADING PLANS	AS-BUILTS	1 MYLAR
LANDSCAPE & IRRIGATION	ALL PLAN CHECK SUBMITTALS	4 BLUELINES
LANDSCAPE & IRRIGATION	APPROVED	3 BLUELINES & 1 MYLAR

PLEASE REVIEW OTHER SIDE

5-202 First Submittal Packages

5-202.1 Tentative Subdivision Maps

(1) Plan Check Deposit per Section 5-101
(2) Bluelines, etc. per Section 5-201
(3) Notification Letters per Sections 2-100 & 2-200
(4) Preliminary Title Report

5-202.2 Final Subdivision Maps

(1) Plan Check Deposit per Section 5-101
(2) Bluelines per Section 5-201
(3) Traverse Calculations
(4) Preliminary Title Report
(5) Subdivision Guarantee
(6) Reference maps & deeds

5-202.3 Improvement Plans

(1) Plan Check Deposit per Section 5-101
(2) Bluelines per Section 5-201
(3) Hydraulic Report including dry lane calculations
(4) Construction Cost Estimate

5-202.4 Grading Plans

(1) Plan Check Deposit per Section 5-101
(2) Bluelines per Section 5-201
(3) Hydrology Report
(4) Soils Report prepared pursuant to the City of San Diego's latest adopted "Guidelines for Geotechnical Reports" (http://www.sandiego.gov/development-services/industry/pdf/geoguidelines.pdf) as determined by the City Engineer
(5) Grading Cost Estimate
(6) Landscape & Improvement bluelines per Section 5-201

5-202.5 See table 5-202.5 for Plan and Bond requirements

5-203 Submittal Times & Days

5-203.1 FIRST SUBMITTALS

(1) Must be submitted by Engineer of Work
(2) Allow minimum 1 hour for check in
(3) Submittals made by runner or not on the days at times specified will not be accepted
(4) Accepted by appointment with Plan Checker only.

5-203.2 SUBSEQUENT SUBMITTALS

(1) Must be submitted by Engineer of Work unless approved by plan checker
(2) Submittals made by runner without consent of plan checker will not be accepted

PLEASE REVIEW OTHER SIDE

5-202.5 PLAN/BONDING REQUIREMENTS

SUBDIVISION TYPE	GRADING PLANS	IMPROVEMENT PLANS	BONDING REQUIREMENTS
SINGLE FAMILY RESIDENCE – PUBLIC STREETS	REQUIRED	REQUIRED	FULL BONDING REQUIRED
SINGLE FAMILY RESIDENCE – PRIVATE STREETS	REQUIRED	REQUIRED	BONDING REQUIRED FOR PUBLIC FACILITIES
CONDOMINIUM	REQUIRED	REQUIRED	BONDING REQUIRED FOR PUBLIC FACILITIES
APARTMENT	REQUIRED	Applicant may choose to process improvement plans or process site work with a building permit ~~NOT REQUIRED~~	If Applicant chooses to process Improvement Plans BONDING REQUIRED FOR PUBLIC FACILITIES
COMMERCIAL/ INDUSTRIAL	REQUIRED	Applicant may choose to process improvement plans or process site work with a building permit~~NOT REQUIRED~~	BONDING REQUIRED FOR GRADING/LI/ PUBLIC FACILITIES
PUBLIC IMPROVEMENT WITHIN PRIVATE DEVELOPMENT	REQUIRED	REQUIRED	FULL BONDING REQUIRED

5-203 BOND SUBSTITUTIONS

Any project that changes ownership may substitute new bonds listing the new owner as principal for the existing bonds with an assignment agreement approved by the City. Any project that changes ownership via the trust deed must provide new bonds for the project prior to the next ministerial or discretionary action on the project or the City may initiate a reversion to acreage.

~~5-300 **NAMES LIST** (NOTE – This list is effective January 1, 1998. To determine if this is current, call (619) 691-5021)~~

~~TITLE~~	~~NAME~~	~~LICENSE~~	~~EXPIRATION DATE~~
~~City Engineer~~	~~Clifford L. Swanson~~	~~RCE 18666~~	~~06-30-05~~
~~Senior Civil Engineer~~	~~Sohaib Al-Agha~~	~~RCE 45440~~	~~12-31-02~~
~~City Surveyor~~	~~Peter Ehlert~~	~~L.S. 5116~~	~~06-30-03~~
~~City Clerk~~	~~Susan Bigelow~~		
~~City Finance Director/ Deputy City Manager~~	~~Robert W. Powell~~		
~~City Planning Director~~	~~Robert A. Leiter~~		
~~City Parks & Recreation Director~~	~~Andy Campbell~~		
~~City Attorney~~	~~John Kaheny~~		
~~Director of Public Works, County of San Diego~~	~~John L. Snyder~~		
~~County Treasurer/ Tax Collector~~	~~Bart Hartman~~		
~~Clerk of the Board of Supervisors~~	~~Thomas J. Pastuszka~~		

5-300 Standardized Tentative Map Conditions

All subdivisions must comply with the City's standard Tentative Map conditions approved by City Council with Resolution 2010-278 in addition to any site specific Tentative Map conditions of development outlined with the Resolution approving the Tentative Map. The following is a list of the City's Standard Tentative Map conditions.

STANDARD CONDITIONS OF APPROVAL

Unless otherwise specified or required by law: (a) the conditions and Code requirements set forth below shall be completed prior to the related final map as determined by the Director of Development Services and the City Engineer (b) unless otherwise specified, "dedicate" means grant the appropriate easement, rather than fee title. Where an easement is required the applicant shall be required to provide subordination of any prior lien and easement holders in order to ensure that the City has a first priority interest and rights in such land unless otherwise excused by the City. Where fee title is granted or dedicated to the City, said fee title shall be free and clear of all encumbrances, unless otherwise excused by the City.

Should conflicting wording or standards occur between these conditions of approval, any conflict shall be resolved by the City Manager or designee.

GENERAL/PRELIMINARY

1. All of the terms, covenants and conditions contained herein shall be binding upon and inure to the benefit of the heirs, successors, assigns and representatives of the Applicant as to any or all of the Property. (Development Services)

2. The Applicant shall comply with all requirements and guidelines of the City of Chula Vista General Plan; the Chula Vista Municipal Code; the City's Growth Management Ordinance; Chula Vista Landscape Manual, the Chula Vista Subdivision Manual; the Chula Vista Design and Construction Standards; Chula Vista Greenbelt Master Plan; the relevant General Development Plan, the relevant Sectional Planning Area Plan (SPA) or Precise Plan; the relevant Public Facilities Financing Plan and Air Quality Improvement Plan; the Chula Vista Development Storm Water Manual; the Water Conservation Plan; and applicable Chula Vista City Council policies, all as amended from time to time, unless specifically modified by the Director of Development Services. (Development Services)

3. If any of the terms, covenants or conditions contained herein shall fail to occur or if they are, by their terms, to be implemented and maintained over time, if any of such conditions fail to be so implemented and maintained according to their terms, the City shall have the right to revoke or modify all approvals herein granted including issuance of building permits, deny, or further condition the subsequent approvals that are derived from the approvals herein granted, institute and prosecute litigation to compel their compliance with said conditions or seek damages for their violation. The applicant shall be notified 10 days in advance prior to any of the above actions being taken by the City and shall be given the opportunity to remedy any deficiencies identified by the City. (Development Services)

4. Applicant shall indemnify, protect, defend and hold the City harmless from and against any and all claims, liabilities and costs, including attorney's fees, arising from

CEQA challenges and subsequent environmental review for the Project and any or all entitlements and approvals issued by the City in connection with the Project. (Development Services)

5. The Applicant shall agree to defend, indemnify and hold harmless the City and its agents, officers and employees, from any claim, action or proceeding against the City, or its agents, officers or employees, to attack, set aside, void or annul any approval by the City, including approval by its Planning Commission, City Council or any approval by its agents, officers, or employees with regard to this subdivision pursuant to Section 66499.37 of the State Map Act provided the City promptly notifies the Applicant of any claim, action or proceeding and on the further condition that the City fully cooperates in the defense. (Development Services)

6. Applicant shall ensure that all franchised cable television companies ("Cable Company") are permitted equal opportunity to place conduit and provide cable television service to each lot within the subdivision. Applicant agrees that the City of Chula Vista may grant access to cable companies franchised by the City of Chula Vista to place conduit within the City's easement situated within the Project. Applicant shall restrict access to the conduit to only those franchised cable television companies who are, and remain in compliance with, all other rules, regulations, ordinances and procedures regulating and affecting the operation of cable television companies as same may have been, or may from time to time be issued by the City of Chula Vista. (Development Services)

7. The Applicant shall agree to hold the City harmless from any liability for erosion, siltation, habitat impact, or increased flow volume or discharge rate resulting from this project. (Development Services)

8. The Applicant shall implement, to the satisfaction of the Director of Development Services, all environmental impact mitigation measures identified in the project's EIR, or Mitigated Negative Declaration, the CEQA Findings and Mitigation Monitoring and Reporting Program. (Development Services)

9. Prior to any activity that may potentially impact biological resources, such as grading, clearing and grubbing, or maintenance activities, the Applicant shall comply with all applicable requirements of the California Department of Fish and Game, the California State Water Resources Quality Control Board, the U.S. Fish and Wildlife Service and the U.S. Army Corps of Engineers. (Development Services)

The Applicant shall comply with the approved City of Chula Vista MSCP Subarea Plan, as applicable for the Project and shall apply for and receive a take permit/authorization from either the U.S. Fish and Wildlife Service and California Department of Fish and Game, or the City of Chula Vista, as applicable. (Development Services)

PUBLIC FACILITIES, UTILITIES, IMPROVEMENTS AND PHASING (Streets, Transit, Sewer, Water, Drainage, Grading)

10. The Applicant shall install public facilities in accordance with the Public Facilities Finance Plan (PFFP) or phased development as applicable and as may be amended from time to time or as required by the City Engineer to meet threshold standards adopted by the City of Chula Vista. At the Applicant's request, the City Engineer and Director of Development Services may, at their discretion, modify the

sequence, schedule, alignment and design of improvement construction should conditions change to warrant such a revision. (Development Services)

11. Applicant shall dedicate, with the applicable final map, for public use all the public streets shown on the tentative map within the subdivision boundary. Prior to the approval of the first map, the applicant shall construct or enter into an agreement to construct and secure all street improvements as necessary to mitigate the impacts of the project as required by the relevant PFFP or Environmental document. The Applicant shall construct the public improvements and provide security satisfactory to the City Engineer and City Attorney. (Development Services)

Prior to the approval of a final map which requires over sizing of the improvements necessary to serve other properties, applicant shall install all necessary improvements to serve the project plus the necessary over sizing of facilities required to serve such other properties to the satisfaction of the City Engineer (in accordance with the restrictions of state law and City ordinances). (Development Services)

Applicant shall construct a protective fencing system around all proposed permanent detention basins, and the inlets and outlets of storm drain structures, as and when directed by the City Engineer concurrent with the construction of the drainage facility. The final fencing design and types of construction materials shall be subject to approval of the City Engineer. (Development Services)

Prior to approval of each final map, Applicant shall acquire and then grant to the City all applicable off-site rights-of-way and easements necessary for the installation of required street improvements and/or utilities. (Development Services)

12. The amount of the security for any required improvements not constructed at the time of the final map shall be 110% times a construction cost estimate approved by the City Engineer if improvement plans have been approved by the City, 150% times the approved cost estimate if improvement plans are being processed by the City or 200% times the construction cost estimate approved by the City Engineer if improvement plans have not been submitted for City review. A lesser percentage may be required if it is demonstrated to the satisfaction of the City Engineer that sufficient data or other information is available to warrant such reduction. (Development Services)

13. At the time and in the manner determined by City Engineer the Applicant shall install all underground conduits, improvements, standards and luminaries for streetlights and traffic signals in conjunction with the construction of the applicable street improvements. In addition, the applicant shall install mast arm, signal heads, and associated equipment when traffic signals warrant as determined by the City Engineer. (Development Services)

14. Applicant shall obtain the approval of the City Engineer for striping plans for all collector or higher classification streets simultaneously with the associated improvement plans. (Development Services)

FIRE

15. The Applicant shall comply with the Fire Department's standard details, guidelines, codes and policies for Fire Prevention, as may be amended from time to time. Prior to the issuance of any building permit(s) for the Project, the Applicant shall provide

the following items prior to delivery of combustible materials on any construction site on the Project:

Water supply consisting of operational and tested fire hydrants as approved and indicated by the Fire Department during plan check to the satisfaction of the Fire Department. Any temporary water supply source is subject to prior approval by the Fire Marshal.

Emergency vehicle access consisting of a minimum first layer of hard asphalt surface or concrete surface, with a minimum standard width of 20 feet.

Street signs installed to the satisfaction of the Department of Public Works. Temporary street signs shall be subject to the approval of the Department of Public Works and Fire Department. Locations and identification of temporary street signs shall be subject to review and approval by the Department of Public Works and Fire Department. (Fire, Development Services)

Applicant shall obtain the approval of the City's Fire Marshal for the timing of construction of all internal streets in the Project. Production units require the installation of permanent streets, water supply and street signs, and only model homes can have temporary access, water supply and street signs. (Fire, Development Services)

16. Applicant shall construct a temporary turnaround or street improvements, upon the request of and as determined necessary by the City Engineer and Fire Marshal, at the end of temporarily stubbed streets greater than 150 ft. in length (as measured from the nearest street centerline intersection) when construction of the ultimate facility is phased. (Development Services)

17. Prior to the approval of the first map, the Applicant shall enter into an agreement to secure and install Chula Vista transit stop facilities within the tentative map boundary at a frequency of 1 transit stop on each side of the street for each 1/2 mile of non residential streets within the project to the satisfaction of the Director of Public Works.

a. Prior to the approval of the first final map proposing construction of private utilities in the right of way the Applicant shall enter into an agreement with the City where the Applicant agrees to the following:

i. Apply for an encroachment permit for installation of the private facilities within the public right-of-way; and,

ii. Maintain membership in an advance notice such as the USA Dig Alert Service; and,

iii. Mark out any private facilities owned by the Applicant whenever work is performed in the area; and,

iv. The terms of this agreement shall be binding upon the successors and assigns of the Applicant.

b. Shutoff devices as determined by the City Engineer are provided at those locations where private facilities traverse public streets. (Development Services)

18. Prior to issuance of any grading permit based on plans proposing the creation of down slopes adjacent to public or private streets, Applicant shall obtain the City Engineer's approval of a study to determine the necessity of providing guardrail improvements at those locations. Applicant shall construct and secure any required guardrail improvements in conjunction with the associated grading and/or construction permit as determined by and to the satisfaction of the City Engineer. The guardrail shall be installed per CalTrans Traffic Manual and Roadside Design Guide requirements to the satisfaction of the City Engineer. (Development Services)

GRADING AND DRAINAGE

19. Prior to approval of any final map that proposes to modify a National Flood Insurance Program Maps for the project, Applicant shall obtain the approval of a the Federal Emergency Management Agency (FEMA) of a Conditional Letter of Map Revision (CLOMR) for the proposed change. The Applicant shall also enter into an agreement that the grading bond shall not be reduced or released until such time as FEMA has approved the LOMR for the project. (Development Services)

20. Prior to the issuance of any grading permit which impacts off-site property, the applicant shall deliver to the City, a notarized letter of permission to grade and drain for all off-site grading. (Development Services)

21. Applicant shall provide improved all-weather access with H-20 loading to all public storm drain clean-outs or as otherwise approved by the City Engineer. (Development Services)

22. Provide a minimum of 6-inch thick PCC (reinforced with #4 BAR at 18" on center each way) designed for H-20 loading and heavy broom finish for those access road to retention/detention basins with grades of 10% or greater. All other access roads must be asphalt concrete designed to carry H-20 loading. In addition, maintenance pads adjacent to the inlet structures shall be a minimum of 6-inch PCC (reinforced with #4 bar at 18" on center each way) designed for H-20 loading with a heavy broom finish. (Development Services)

23. The Applicant shall comply with all requirements of applicable National Pollutant Discharge Elimination System (NPDES) permits such as the General Construction Permit (NPDES No. CAS000002), the Municipal Permit (NPDES No. CAS0108758), or the General Industrial Permit (NPDES No. CAS000001). (Development Services)

24. Storm drain clean outs shall not be located on slopes or in inaccessible areas for maintenance equipment. Public storm drains shall be installed as close to perpendicular to the slope contours as possible but in no case greater than 15 degrees from perpendicular to the contours. (Development Services)

25. Prior to issuance of the Project's first mass grading permit, Applicant shall provide a study showing that the proposed quantities of earthwork will balance for each phase. (Development Services)

26. Applicant shall enter into a maintenance agreement prior to the issuance of any grading permit to secure the maintenance of drainage related facilities including but not limited to the removal of silt from any temporary or permanent basins, the repair of any downstream erosion, and to provide any resource agency permits necessary for said maintenance. The agreement shall be in a form acceptable to the City Attorney and the Director of Development Services and shall be for a minimum term of the construction period and five years thereafter. The construction period is herein defined as the period during which all building permits tributary to the basin have not been finaled. If any drainage facilities are to be maintained by the City the agreement shall identify a perpetual funding mechanism and shall require the developer to provide new resource agency permits for maintenance at the time of turnover to the City. Further, the agreement shall require the developer provide a survey signed and sealed by a registered Land Surveyor every two years demonstrating that all basins are built to the lines and grades of the approved plans. The security for this maintenance agreement shall be based on a five-year maintenance estimate approved by the City Engineer with the first year being in cash and the subsequent four years in a bond or other type security acceptable to the Director of Finance and the City Engineer. (Development Services)

27. Prior to installation of base paving and placement of curb and gutter form work related to approved construction plans the Applicant shall demonstrate, to the City Engineer's satisfaction that highly expansive fill soils (with an expansion index over 90) are not within the upper five feet of any public right of way or public easement. Applicant shall selectively grade fill soils with an expansion index above 90 within the upper five feet of any public right of way or propose an alternate method to mitigate expansive soils. Said alternate method shall be subject to the approval of the City Engineer prior to placement of curb and gutter, sidewalk or aggregate base. Additionally, any formational materials within three feet of sub grade shall be tested for expansion, and replaced with a soil satisfactory to the City Engineer. (Development Services)

28. Prior to approval of a grading permit for the construction of a proposed naturalized channel and/or detention, Applicant shall accomplish the following:

    a. Prepare a maintenance program of all the proposed drainage and water quality treatment facilities in the channel or basin, including but not limited to naturalized channel, wetlands restoration areas, detention basins, and water quality treatment facilities. The maintenance program shall include, but not be limited to: a) a plan describing the inspection, operation and maintenance of the drainage and water quality treatment facilities; b) an estimate of the cost of such operation and maintenance activities; and c) a funding mechanism and schedule for financing the maintenance program. Said maintenance program shall be subject to approval by the City Engineer.. The applicant shall be responsible for obtaining the approval of the maintenance program from all applicable federal and state agencies.

    b. Enter into an agreement with the City of Chula Vista and the applicable resource agencies wherein the parties agree to implement the maintenance program.

    c. Enter into an agreement with the City of Chula Vista, wherein Applicant agrees to the following:

i) Provide for the maintenance of all proposed drainage and water quality treatment facilities, including but not limited to the naturalized drainage channel, wetlands restoration areas as allowed by the resource agencies, detention basins, and water quality treatment facilities until the latter to occur of: (a) maintenance of such facilities is assumed by the City, open space district or Master Homeowner's Association, or; (b) the City determines all erosion protection plantings are adequately established, or runoff treatment or detention are no longer necessary. Maintenance activities shall be conducted in accordance with the project's approved Inspection, Operation, ands Maintenance Plan, or as approved by the City Engineer.

ii) Provide for the removal of silt, trash, and overgrown vegetation from all proposed drainage and water quality treatment facilities, including but not limited to the naturalized drainage channel, wetlands restoration areas as allowed by resource agencies, detention basins, and water quality treatment facilities until all upstream grading of the area contained within the Project is completed and all erosion protection planting is adequately established, or runoff treatment or detention are no longer necessary as determined by the City Engineer.

iii) Provide for the removal of silt, trash, and overgrown vegetation resulting from all proposed drainage and water quality treatment facilities in Salt Creek, including but not limited to the naturalized drainage channel, wetlands restoration areas as allowed by the resource agencies, detention basins, and water quality treatment facilities, attributable to the Project, for a minimum period of five years after maintenance of such facility is accepted by the City or an appropriate Maintenance District.

iv) In the event that maintenance responsibility for any drainage detention, or water quality treatment facility is transferred to the City or any other entity, such facility shall be free of silt, trash, and overgrown vegetation, in good working order and functional as designed at the time of said transfer.

v) Obtain all necessary environmental permits from environmental resource agencies before conducting the above referenced activities.

d. Applicant shall provide security, satisfactory to the City Engineer, guaranteeing the performance of the aforementioned maintenance and siltation removal obligations. (Development Services)

SEWER

29. Applicant shall grant on the appropriate final "B" Map a 20-foot minimum sewer and access easement for sewer lines located between residential units unless otherwise directed by the City Engineer. (Development Services)

PARKS AND OPEN SPACE

30. Prior to the approval of the first Final B Map for a Projects over 50 acres, the applicant shall prepare and submit to the Director of Development Services a comprehensive "Project Landscape Master Plan". The Landscape Master Plan shall be approved prior to the issuance of the first construction permit for the project. The contents of the Landscape Master Plan shall contain the following major components unless waived by the Director of Development Services: (Development Services)

    a. Landscape Concept (includes landscape concept statement)
    b. Master Planting Plan (includes trees, shrubs, and groundcovers)
    c. Master Irrigation Plan (includes mainline and point of connection locations)
    d. Maintenance Responsibility Plan (delineates private and public property and indicates maintenance responsibility and maintenance code for each)
    e. Hardscape Concept and Trail Plan (identifies types and finishes of paving)
    f. Conceptual Wall and Fence Plan (includes type, material, height and location).
    g. Brush Management Plan (identifies brush management zones and treatments, if any)
    h. Utility Coordination Plan (includes locations of major utility boxes and vaults)

31. Prior to approval of the applicable final map, Applicant shall enter into a maintenance agreement and grant easements as necessary for any landscaping or other enhancements proposed within the City right-of-way or such other public areas required by the City Engineer. (Development Services)

32. In the event Applicant requests the formation of a Maintenance District or similar, the Applicant shall make such request prior to the approval of the first Final A map for the Project, as follows:

    a. Submit an application packet for formation of a Community Facilities District (CFD), and submit the request for CFD formation to the City Council for consideration.

    b. The CFD shall be formed prior to approval of the first Final Map for the Project.

    c. Subject to the approval of the Director of Public Works, Applicant shall submit a list of amenities, acreage and costs for all Open Space District lots including but not limited to the cost of any detention basin maintenance and all costs to comply with the Department of Fish and Game and the U.S. Army Corps of Engineers permit requirements, if any.

    d. Applicant shall maintain the open space improvements for a minimum period of one year or until such time as accepted into the open space district by the Director of Public Works. If Council does not approve the CFD formation, another financing mechanism such as a Master Homeowners Association or an endowment shall be established and submitted to the City Council for consideration prior to approval of the first map.

e. Prior to the approval of the first map, Applicant shall submit an initial cash deposit to begin the process of formation of the Maintenance District. All costs of formation and other costs associated with the processing of the open space relating to this project shall be borne by the Applicant.

f. The Applicant shall provide all the necessary information and materials (e.g., Tables, diagrams, etc.) required by the City Engineer for processing the formation of the proposed open space district. (Public Works)

OPEN SPACE/ASSESSMENTS

33. Prior to the approval of the first final "B" Map, the Applicant shall:

a. Submit evidence, acceptable to the City Engineer and the Director of Development Services of the formation of a Master Homeowner's Association (MHOA), or another financial mechanism acceptable to the City Manager. A Community Facilities District (CFD) is the preferred financial mechanism for a maintenance district. If a CFD is not formed, the MHOA shall be responsible for the maintenance of those landscaping improvements that are not to be included in the proposed financial mechanism. Improvements shall be maintained by the Open Space District unless determined otherwise by the City Engineer and the Director of Development Services. The final determination of which improvements are to be included in the Open Space District and those to be maintained by the MHOA shall be made during the Open Space District Proceedings. The MHOA shall be structured to allow annexation of future tentative map areas in the event the City Engineer and Director of Development Services require such annexation of future tentative map areas. The MHOA formation documents shall be subject to the approval of the City Attorney; and,

b. The Applicant shall submit for City's approval the CC&Rs, grant of easements and maintenance standards and responsibility of the MHOA's for the Open Space Areas within the Project area. Applicant shall acknowledge that the MHOA's maintenance of public open space, trails, etc. may expose the City to liability. Applicant agrees to establish a MHOA that will hold the City harmless from any actions of the MHOA in the maintenance of such areas; and,

c. Submit and obtain approval of the City Engineer and the Director of Development Services of a list of all facilities and other items to be maintained by the proposed district or HOA. Separate lists shall be submitted for the improvements and facilities to be maintained by the Open Space District and those to be maintained by a Master Homeowner's Association. Include a description, quantity and cost per year for the perpetual maintenance of said improvements. These lists shall include but are not limited to the following facilities and improvements:

i. All facilities located on open space lots to include but not be limited to: walls, fences, water fountains, lighting structures, paths, trails, access roads, drainage structures and landscaping. Each open space lot shall also be broken down by the number of acres of: 1)

turf, 2) irrigated, and 3) non-irrigated open space to aid in the estimation of a maintenance budget thereof.

ii. Medians and parkways along Project roadways, (onsite and offsite) and all other street parkways proposed for maintenance by the applicable Community Facilities District or Homeowners' Association.

iii. The proportional share of the proposed detention basin (temporary or permanent) located in the applicable Sewer Basin(s). This includes but is not limited to the cost of maintenance and all cost to comply with the Department of Fish and Game and the Corps of Engineers permit requirements.

iv. The proportional share of the maintenance of any medians and parkways along that applicable roadways as identified in the PFFP adjoining the development as determined by the City Engineer.

v. All water quality basins serving the Project. (Development Services)

34. Prior to the approval of each Final "B" Map, a Declaration or Supplementary Declaration of Covenants, Conditions, and Restrictions (CC&Rs) shall be submitted and subject to the approval of the Director of Development Services. The CC&Rs shall include the following obligations of the Master Homeowners Association:

a. A requirement that the MHOA shall maintain comprehensive general liability insurance against liability incident to ownership or use of the following areas:

i. All open space lots that shall remain private,

ii. Other Master Association property.

b. Before any revisions to provisions of the CC&RS that may particularly affect the City can become effective, the City shall review said revisions and if acceptable to the City, the City will approve said revisions. The MHOA shall not seek approval from the City of said revisions without the prior consent of 100 percent of the holders of first mortgages or property owners within the MHOA.

c. The MHOA shall indemnify and hold the City harmless from any claims, demands, causes of action liability or loss related to or arising from the maintenance activities of the MHOA.

d. The MHOA shall not seek to be released by the City from the maintenance obligations described herein without the prior consent of the City and 100 percent of the holders of first mortgages or property owners within the MHOA.

e. The MHOA is required to procure and maintain a policy of comprehensive general liability insurance written on a per occurrence basis in an amount not less than one million dollars combined single limit. The policy shall be

acceptable to the City and name the City as additionally insured to the satisfaction of the City Attorney.

f. The CC&Rs shall incorporate restrictions for each lot adjoining open space lots containing walls maintained by the open space district to ensure that the property owners know that the walls may not be modified or supplemented nor may they encroach on City property.

g. The CC&Rs shall include provisions assuring maintenance of all streets, driveways, drainage and sewage systems which are private.

h. The CC&Rs shall include provisions assuring MHOA membership in the USA Dig Alert Service in perpetuity. The HOA will be required to mark out all underground HOA facilities upon advance notice by the USA Dig Alert Service.

i. The CC&Rs shall include provisions that provide the City has the right but not the obligation to enforce the CC&R provisions the same as any owner in the project.

j. The CC&R provisions setting forth restrictions in these Tentative Map conditions may not be revised at any time without prior written permission of the City.

k. The MHOA shall not dedicate or convey for public streets, land used for private streets without approval of 100% of all the HOA members or holder of first mortgages within the MHOA.

l. The CC&R's shall contain a provision to review all proposed landscaping within the HOA to ensure plant palettes and irrigation systems are designed to use water efficiently.

m. All buyers of lots adjoining open space lots containing walls maintained by the open space district sign a statement, when purchasing their homes, stipulating that they are aware that the walls are on City property and that they shall not modify or supplement the wall or encroach onto City property. These restrictions shall also be incorporated in the CC&Rs for all lots.

35. An HOA shall be responsible for the maintenance and operation of all facilities within the common areas and streets behind any gated entrances. The facilities to be maintained include, but are not limited to: pavements, sidewalks, street trees, street lights including power supply, street sweeping, private drainage facilities and landscaping of private common areas. (Development Services)

36. The Applicant agrees to not protest formation or inclusion in a maintenance district or zone for the maintenance of landscaped medians and scenic corridors along streets within or adjacent to the subject subdivision. (Development Services)

37. Prior to issuance of any grading permit which includes Landscaping and Irrigation (L&I) improvements to be installed in an open space lot to be maintained by the Community Facility District (CFD), the Applicant shall place a cash deposit, or other funding mechanism acceptable to the City, in the City's sole discretion, with the City which will guarantee the maintenance of the L&I improvements until the City accepts

said improvements. In the event the improvements are not maintained to City standards, as determined by the City Engineer and the Director of Development Services, the deposit shall be used to perform the maintenance. The amount of the deposit shall be equivalent to the estimated cost of maintaining the open space lots to City standards for a period of six months, ("Minimum Deposit Amount"), as determined by the City Engineer. Any unused portion of said deposit may be incorporated into the CFD's Reserve Account, or returned to the Applicant, according to the following:

a. The Applicant shall maintain any landscape area designated for CFD maintenance until such time as the CFD has the funds available for said maintenance.

b. If the Reserve Account is at or above the Minimum Deposit Amount, the unused portion of the deposit may be returned to the Applicant in 6 equal monthly increments over the last six month's of the maintenance period if the maintenance is being accomplished to the satisfaction of the Director of Development Services. (Development Services)

WATER

38. Prior to approval of each Final Map, present verification to the City Engineer in the form of a letter from the applicable Water District that the subdivision will be provided adequate water service and long-term water storage facilities. The Applicant shall phase and install water system improvements as required by the Otay Water District. (Development Services)

EASEMENTS

39. The Applicant shall process a joint use agreement for roads crossing other agencies existing easements to the satisfaction of the City Attorney and the other agency prior to the issuance of the construction permit for such a road. (Development Services)

40. The Applicant shall notify the City at least 60 days prior to consideration of the first map by City if any off-site right-of-way cannot be obtained as required by the Conditions of approval. (Only off-site right-of-way or easements affected by Section 66462.5 of the Subdivision Map Act are covered by this condition.) After said notification, the Applicant shall:

a. Pay the full cost of acquiring off-site right-of-way and/or easements required by the Conditions of Approval of the tentative map.

b. Deposit with the City the estimated cost of acquiring said right-of-way and/or easements. Said estimate to be approved by the City Engineer.

c. Have all easements and/or right-of-way documents and plats prepared and appraisals complete which are necessary to commence condemnation proceedings as determined by the City Attorney.

d. Request that the City use its powers of Eminent Domain to acquire right-of-way, easements or licenses needed for off-site improvements or work

related to the final map. The Applicants shall pay all costs, both direct and indirect incurred in said acquisition. (Development Services)

Applicant shall provide easements for all off-site public storm drains and sewer facilities prior to approval of each final map requiring those facilities. The easements shall be sized as required by the City of Chula Vista Standards, unless otherwise approved by the City Engineer. (Development Services)

AGREEMENTS/FINANCIAL

Prior to approval of each Final Map, the Applicant shall contract with the City's current street sweeping franchisee, or other server approved by the Director of Public Works to provide street sweeping for each phase of development on a frequency and level of service comparable to that provided for similar areas of the City. The Applicant shall cause street sweeping to commence immediately after the final residence, in each phase, is occupied and shall continue sweeping until such time that the City has accepted the street or 60 days after the completion of all punch list items, whichever is shorter. The Applicant further agrees to provide the City Engineer with a copy of the memo requesting street sweeping service, which memo shall include a map of areas to be swept and the date the sweeping will begin. (Public Works)

41. Prior to the approval of any Final Map for the Project that contains open space, the Applicant shall enter into an agreement to construct and secure open space landscape improvements within the map area. All landscape improvements shall be secured in amounts as determined by the Director of Development Services and approved in form by the City Attorney. (Development Services)

SCHOOLS

42. Prior to approval of all final maps, which includes a school site for the Project, the Applicant shall provide evidence and proof, to the satisfaction of the Director of Development Services, of an agreement from the applicable School District(s) regarding the need for the school site(s) by the district(s) for use as a school site. (Development Services)

43. Prior to the issuance of each building permit, the Applicant(s) shall provide the City with evidence of certification by the CVESD that any fee, charge, dedication, or other requirements levied by the school district has been complied with or that the district has determined the fee, charge or other requirements does not apply to the construction. (Development Services)

44. Applicant shall agree to construct and secure, and thereafter construct and secure, to the satisfaction of the City Engineer, the following improvements:

    a. All necessary improvements for providing ingress and egress to each school site. This requirement shall also include but is not limited to any required modification to medians, storm drainage system, street lights, and irrigation improvements; and,

b. If warranted and upon the request of the City engineer, traffic signal improvements for providing vehicular ingress and egress to the School site. (Development Services)

45. For every school site within the project the Applicant shall provide a sewer manhole and a sewer lateral. (Development Services)

46. Airport Flyover Agreements- Prior to the recordation of any Final Map within an Airport Overflight Area, Applicant shall record an Airport Overflight Agreement against the property to the satisfaction of the Director of Development Services.

OTAY RANCH STANDARD CONDITIONS (In addition to TM conditions 1 through 52, the following TM conditions 53 through 59 are applicable to projects within the boundaries of the Otay Ranch)

Applicant shall comply with all requirements and guidelines of the Otay Ranch General Development Plan, the Otay Ranch Resource Management Plan, Phase 1 and Resource Management Plan Phase 2; the Ranch Wide Affordable Housing Plan; Otay Ranch Overall Design Plan; the Specific Area Plan or Sectional Planning Area (SPA) Plan and supporting documents including: the Public Facilities Finance Plan; the City's Standard Fiscal Impact Model, the Parks, Recreation, Open Space and Trails Plan; the Affordable Housing Plan and the Non-Renewable Energy Conservation Plan, Water Conservation, Air Quality, and Non-Renewable Energy Conservation Plan and as they may be amended from time to time. These plans may be subject to minor modifications by the appropriate department head, with the approval of the City Manger, however, any material modifications shall be subject to approval by the City Council. (Development Services)

Pursuant to the provisions of the Growth Management Ordinance (Section 19.09 of the CVMC) and the Otay Ranch General Development Plan (GDP), and as they may be amended from time to time, the Applicant shall complete the following: (1) Fund the preparation of an annual report monitoring the development of the community of Otay Ranch. The annual monitoring report will analyze the supply of, and demand for, public facilities and services governed by the threshold standards. An annual review shall commence following the first fiscal year in which residential occupancy occurs and is to be completed during the second quarter of the following fiscal year. The annual report shall adhere to those guidelines noted on page 353, Section D of the GDP/SRP; and (2) Prepare a five year development phasing forecast identifying targeted submittal dates for future discretionary applications (SPA's and tentative maps), projected construction dates, corresponding public facility needs per the adopted threshold standards, and identifying financing options for necessary facilities. (Development Services)

Prior to the first Map the Applicant shall cease all cattle grazing on the land to be conveyed. In addition, the Applicant shall ensure through the maintenance of existing fencing or gating, if sufficient, or the construction of new fencing or gating, if deemed necessary by the City, that cattle from adjacent areas cannot access the land being conveyed. (Development Services)

Prior to the approval of the first map for the Project, the Applicant must create a perpetual funding mechanism for the maintenance, management, and monitoring of the Otay Ranch Preserve per the requirements of the Otay Ranch Resource Management Plan, Phase 2. (Development Services)

Prior to recordation of each Final Map Applicant shall convey Otay Ranch Resource Management Plan Preserve land to an entity the City designates. The Applicant shall convey

fee title, or upon the consent of the Preserve Owner/Manager (POM) and any lien holder, an easement restricting use of the land to those permitted by the Otay Ranch Resource Management Plan (RMP), to the POM upon the recordation of each final map for an amount of land equal to the final map's obligation to convey land to the Preserve. Where an easement is conveyed, the Applicant shall be required to provide subordination of any prior lien holders in order to ensure that the POM has a first priority interest in such land. Where consent and subordination cannot be obtained, the Applicant shall convey fee title. Where fee title or an easement is conveyed, access to the satisfaction of the POM shall also be conveyed, and each tentative map shall be subject to a condition that the Applicant shall execute a maintenance agreement with the POM stating that it is the responsibility of the Applicant to maintain the conveyed parcel until the Habitat Maintenance District has generated sufficient revenues to enable the POM to assume maintenance responsibilities. Where an easement is granted, each tentative map is subject to a condition that fee title shall be granted upon demand by the POM. The Applicant shall irrevocably offer for dedication to the City or its designee, fee title, upon the recordation of each final map for an amount of land equal to the final map's obligation to convey land to the Preserve. The Applicant shall maintain and manage the conveyed parcel until the Preserve Community Facilities District (CFD) has generated sufficient revenues to enable the POM to assume maintenance and management responsibilities. (Development Services)

Upon request of the Director of Development Services, applicant shall execute a maintenance agreement with the City or its designee for the Otay Ranch Preserve. (Development Services)

PEDESTRIAN BRIDGE

47. The Applicant shall provide a pedestrian bridge system to serve the project as follows:

    a. Prior to approval of the first map for the Project, the Applicant shall fund the preliminary design of said bridge system and identify and establish the funding mechanism to be used to fund the pro rata share of constructing said pedestrian bridge system; and,

    b. Prior to approval of the first map for the Project, Applicant shall provide the preliminary design of said bridge system, and shall obtain the approval of the Directors of Public Works and Development Services; and,

    c. The timing of the construction of said bridge system will be determined by the City, consistent with the requirements of the PFFP, as may amended from time to time; and,

    d. The bridge system shall be constructed in a location as directed by the Directors of Development Services and Public Works. (Development Services)

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