APPENDIX C2 SYCAMORE ESTATES MMRP

INTRODUCTION

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared for the Rancho Encantada project (LDR No. 99-1094/SCH No. 2000011053) to comply with the mitigation monitoring statute (*Public Resource Code* 21081.6) which requires public agencies to adopt such programs to ensure effective implementation of the mitigation measures. This program shall be a requirement of the discretionary actions associated with the Rancho Encantada project.

The following text includes a list of mitigation measures identified in the environmental impact report for the Sycamore Estates sub-project and the monitoring efforts necessary to ensure that the mitigation measures are properly implemented. Mitigation measures, monitoring and reporting requirements shall be as defined in the environmental impact report and may require further detail prior to construction and/or following project implementation.

Specific mitigation measures are presented in the following sections of the MMRP.

	Section
Landform/Visual Quality	1
Biological Resources	2
Geology/Soils	3
Hydrology/Water Quality	4
Transportation	5
Noise	6
Air Quality	7
Cultural Resources	8
Paleontological Resources	9
Public Services	10
Public Safety	11
Water Conservation	12

The Mitigation, Monitoring, and Reporting Program (MMRP) shall require a deposit of $7,200 to be collected prior to the issuance of grading permits to cover the City's costs associated with implementation of the MMRP.

1. Landform/Visual Quality

1.1 Prior to the issuance of grading permits, the City of San Diego's Planning and Development Review Department shall review final maps and grading plans to verify implementation of contour grading of manufactured slopes shown on Exhibit A with the exception of slope numbers 32, 39, 40, 41, 47, 49, 51, 52, 53, 54, 55, 56, 57 and 60. City field inspectors shall inspect the grading to ensure conformance with approved grading plans prior to the issuance of certificates of occupancy.

2. Biological Resources

2.1 Mitigation for impacts to upland vegetation communities shall consist of on-site preservation in the acreage amounts presented in the table below. Upland vegetation communities shall be mitigated satisfactory to the City of San Diego's Environmental Review Manager of Land Development Review.

SYCAMORE ESTATES SUB-PROJECT ONLY

Habitat	Impact[1]	Mitigation Ratio (outside/inside MHPA)	On-site Preservation Inside MHPA[2]
Tier I			
Oak Woodland (OW)	0.9	2:1/1:1	OW 0.9
Native Grassland (NG)	3.5	2:1/1:1	NG 0.5 OW 3.0
Tier II			
Diegan Coastal Sage Scrub (DSS)	142.0	1.5:1/1:1	CSS 72.0 SMC 70.0
Diegan Coastal Sage Scrub/ Chaparral Ecotone(CSS/CE)	2.7	1.5:1/1:1	CSS/CE 0.2 SMC 2.5
Tier IIIA			
Southern Mixed Chaparral (SMC)	221.9	1:1/0.5:1	SMC 111.0
Chamise Chaparral (CC)	141.7	1:1/0.5:1	CC 69.5 NNG 1.7
Tier IIIB			
Non-Native Grassland (NNG)	4.1	1:1/0.5:1	NNG 2.1
Totals	**516.8**	–	**333.1**

1. Includes impacts to 0.5-acre of Diegan coastal sage scrub and 0.6-acre of chamise chaparral inside the MHPA on the City of San Diego parcel caused by road improvements. The mitigation ratio is as shown on the above table (1:1) for Diegan coastal sage scrub, but is increased from 0.5:1 to 1:1 for chamise chaparral.
2. Excess mitigation totals available for other projects assuming no mitigation for off-site improvements are: SMC: 13.3 acres; NNG: 0.4-acre, and CC: 1.0 acres.

a. If the Sycamore Estates sub-project precedes development of the adjacent Montecito sub-project and is responsible for constructing Rancho Encantada Parkway as an off-site improvement, the on-site preservation acreages shall be increased by the following amounts: SMC: 30.8 acres and CC: 1.9 acres.

b. No more than one week prior to grading, the MHPA open space limits, as shown on Exhibit A, shall be marked in the field by the construction supervisor and the project biologist, and orange construction fencing shall be installed. These limits shall be identified on the grading plan. The project biologist shall submit a letter report to the Environmental Review Manager, verifying that construction limits have been flagged in the field. No foot traffic nor other forms of disturbance shall be allowed within the MHPA open space limits,

except as otherwise permitted by the Project approvals or necessary to perform work pursuant to Project approvals as determined by the ERM. After the completion of grading, the project biologist shall submit a post-grading report to the Environmental Review Manager verifying that the amount of impacted acreage did not exceed the acreage amounts listed on the table above.

2.2 The following mitigation measure shall be required only if the sewer pump station design option is selected for implementation. Responsibility for mitigation would be assumed by Sycamore Estates if it is granted the first grading permit in Rancho Encantada.

Mitigation for impacts to upland vegetation communities due to construction of the sewer pump station (if planned for construction) shall be the responsibility of the owner/permittee who applies for the first grading permit within Rancho Encantada. Mitigation shall consist of on-site preservation in the acreage amounts presented in the table below. Upland vegetation communities shall be mitigated satisfactory to the City of San Diego's Environmental Review Manager of Land Development Review.

SEWER PUMP STATION

Habitat	Impact (inside MHPA)	Mitigation Ratio (preservation area outside/inside MHPA)	On-site Preservation Inside MHPA	
Tier II				
Diegan Coastal Sage Scrub (DSS)	0.8	2.1:1/1:1	SMC	0.8
Tier IIIA				
Chamise Chaparral (CC)	0.1	1.5:1/1:1	SMC	0.1
Tier IIIB				
Non-Native Grassland (NNG)	0.1	1.5:1/1:1	NNG	0.1
Totals	**1.0**	**–**		**1.0**

2.3 The following mitigation measure shall be required only if the off-site gravity sewer line design option is selected for implementation. Responsibility for mitigation would be assumed by the sub-project which is granted the first grading permit in Rancho Encantada.

Mitigation for impacts to upland vegetation communities due to construction of the off-site gravity sewer line (if selected for implementation) shall be the responsibility of the owner/permittee who applies for the first grading permit within Rancho Encantada. Mitigation shall consist of creation of 0.9 acres of coast live oak woodland and preservation of 0.3 acres of other upland vegetation as listed in the acreage amounts presented in the table below. Upland vegetation communities shall be mitigated satisfactory to the city of Poway.

OFF-SITE GRAVITY SEWER LINE (CITY OF POWAY)

Habitat	Impact	Mitigation Ratio	Mitigation Requirement
Coast Live Oak Woodland	0.3	3:1	0.9
Diegan Coastal Sage Scrub (and disturbed)	0.1	2:1	0.2
Non-Native Grassland	0.1	1:1	0.1
Developed	3.4	0	0.0
Disturbed	0.1	0	0.0
Totals	**4.0**	**–**	**1.2**

2.4 The following mitigation measure shall be required only if the sewer pump station design option is selected for implementation. Responsibility for mitigation would be assumed by Sycamore Estates if it is granted the first grading permit in Rancho Encantada.

Mitigation for impacts to 0.02-acre of natural flood channel due to construction of the sewer pump station (if planned for construction) shall be the responsibility of the owner/permittee who applies for the first grading permit within Rancho Encantada. Prior to issuance of grading permits, documentation shall be submitted to the Environmental Review Manager verifying that necessary California Department of Fish and Game Section 7 and Army Corps of Engineers Section 404 permits have been obtained and the City-approved wetland mitigation program has been initiated. Mitigation for wetland impacts shall consist of on-site wetland habitat restoration. Impacts to 0.02-acre of natural flood channel shall be mitigated at a 2:1 ratio, for a total of 0.04 acres. All wetland mitigation will be contingent upon state and federal resource agency approval. All impacts to wetlands must be mitigated "in-kind" and achieve "no-net-loss" of wetland function and values. Revegetation shall occur adjacent to existing wetland habitat and within the Rancho Encantada project boundaries. The habitat restoration plan must include a monitoring and maintenance program to ensure the success of the wetland mitigation. Monitoring shall occur for five years, or until five-year success criteria (80 percent coverage) are met.

2.5 The following mitigation measure shall be required only if the off-site gravity sewer design option is selected for implementation. Responsibility for mitigation would be assumed by Sycamore Estates if it is granted the first grading permit in Rancho Encantada.

Mitigation for impacts to 0.02-acre mule-fat scrub, 0.02-acre of southern willow scrub, 0.01-acre of freshwater marsh and 0.01-acre of freshwater seep due to construction of the off-site gravity sewer line (if planned for construction) shall be the responsibility of the owner/permittee who applies for the gravity sewer line construction permit from the city of Poway. Prior to issuance of construction permits by the city of Poway, documentation shall be submitted to the city of Poway verifying that necessary California Department of Fish and Game Section 7 and Army Corps of Engineers Section 404 permits have been obtained. Mitigation

for wetland impacts shall consist of restoring the ground surface of the sewer line alignment to its original condition prior to sewer line installation. All wetland mitigation will be contingent upon state and federal resource agency approval. All impacts to wetlands must be mitigated "in-kind" and achieve "no-net-loss" of wetland function and values. The habitat restoration plan must include a monitoring and maintenance program to ensure the success of the wetland mitigation. Monitoring shall occur for five years, or until five-year success criteria (80 percent coverage) are met.

2.6 Mitigation for wetland impacts shall consist of on-site wetland habitat restoration. Prior to issuance of grading permits, documentation shall be submitted to the Environmental Review Manager verifying that necessary California Department of Fish and Game (CDFG) Section 7 and Army Corps of Engineers (ACOE) Section 404 permits have been obtained and the City-required wetland mitigation program has been approved. Impacts to 0.53-acre of natural flood channel shall be mitigated at a 2:1 ratio, for a total of 1.06 acres. The wetland habitat restoration plan (provided in Appendix B-2 of the Rancho Encantada EIR), prepared in compliance with the City's Biology Guidelines, shall be initiated upon receipt of necessary state and federal agency approvals. Planting of riparian creation areas as specified in the approved wetland mitigation program shall commence in the first planting season following issuance of the first grading permit. Revegetation shall occur adjacent to existing wetland habitat and within the Sycamore Estates project boundaries. The habitat restoration plan must include a monitoring and maintenance program to ensure the success of the wetland mitigation. Monitoring shall occur for five years, or until five-year success criteria (80 percent coverage) are met. Impacts to ephemeral drainages (non-vegetated waters of the U.S.) are covered under ACOE and CDFG jurisdiction and final mitigation requirements will be determined upon project review as part of the ACOE Section 404, California Regional Water Quality Control Board Section 401, and CDFG Section 1603 permitting process. The conceptual mitigation plan shall account for mitigation of impacts to ephemeral drainages.

2.7 No more than one week prior to grading, orange construction fences shall be installed around all construction areas within 100-feet of wetlands. Locations of silt fences or other sediment prevention measures shown in the Project's approved Storm Water Pollution Prevention Program (SWPPP) necessary to minimize erosion impacts to wetlands shall be noted and graphically shown on the grading plan. The project biologist shall submit a letter report to the ERM, verifying that the silt fences and/or other sediment prevention measures have been installed in the appropriate locations. Once grading is completed, the silt fencing shall be removed.

2.8 Prior to the issuance of a grading permit, a qualified biologist shall determine the presence or absence of occupied raptor nests on the sub-project site and vicinity, with written results submitted to the Environmental Review Manager (ERM) of the Land Development Review Department. Grading and construction which creates adverse effects to active raptor nests, including noise levels above 60 dB(A), shall be restricted to 300 feet from any Cooper's hawk (*Accipiter cooperii*) nesting site; 900 feet from any northern harrier (*Circus cyaneus*) nesting site; and 4,000 feet

from any golden eagle (*Aquila chrysaetos*) nesting site. This restriction shall be noted on all grading and construction plans. If active raptor nests are located within the distances listed above, weekly biological monitoring of the nests shall be conducted by the project biologist during the breeding season (February 1 through August 15) with written results submitted to ERM of the Land Development Review Department. No grading or construction activities shall be permitted within those restricted areas until the young have fledged.

2.9 Prior to the issuance of grading permits, the following irrigation restriction shall be noted and graphically shown on the Landscape Plans, as shown on Exhibit A. No irrigation on the proposed manufactured slopes tributary to the off-site willowy monardella population shall be allowed beyond those areas necessary for brush management.

2.10 Prior to issuance of a grading permit, the following requirements shall be noted and graphically shown on the construction, grading, and landscaping plans for the Sycamore Estates sub-project site and approved by the Environmental Review Manager of the Land Development Review Department. Silt fences shall be installed around all construction areas on slopes within the watershed of the willowy monardella population. Silt fence locations shall be noted and graphically shown on the grading plan, as shown on the Exhibit A grading plan. The project biologist shall submit a letter report to the Environmental Review Manager, verifying that the silt fences have been installed in appropriate locations. Once grading is completed, the silt fencing may be removed and other silt trapping best management practices such as straw wattles or sand bags shall be installed in its place at the base of the manufactured slope upstream of the population to minimize erosion effects.

2.11 Prior to issuance of each building permit for those structures adjacent to MHPA, a lighting design shall be provided to the Environmental Review Manager (ERM) of the Land Development Review Department for approval. That plan shall minimize exterior lighting in development areas adjacent to the MHPA and where needed selectively placed, shielded, and directed away from native habitat. In addition, lighting from homes abutting conserved habitat shall be screened with vegetation, and large spotlight type lighting that may affect conserved habitat shall be prohibited. The lighting design shall be noted and graphically shown on construction building and landscape plans and compliance with this measure shall be monitored by the ERM of the Land Development Review Department. Restriction of spotlight type lighting adjacent to conserved habitat shall be noted in the sub-project's CC&Rs.

2.12 Prior to issuance of grading permits, a fencing plan shall be provided to the Environmental Review Manager (ERM) of the Land Development Review Department for approval. That plan shall require fencing in all areas adjacent to the MHPA as shown on Exhibit A to limit access to the MHPA Fencing shall not be required where slopes are sufficiently steep to preclude access. The fencing design shall be indicated on construction building and landscape plans and compliance with this measure shall be monitored by the ERM of the Land Development Review Department.

2.13 Educational materials regarding the sensitivity of the MHPA shall be given to project residents as part of the project's CC&Rs.

2.14 Prior to issuance of grading permits, a landscape plan shall be provided to the Environmental Review Manager (ERM) of the Land Development Review Department for approval. That plan shall require that newly graded slopes adjacent to the MHPA, and existing firebreaks within the MHPA (not being used for trials) be revegetated with native species. Pursuant to an approved landscape plan for this project, no invasive, non-native plant species as shown on Exhibit A shall be permitted on these slopes. The landscape design shall be indicated on construction building and landscape plans and compliance with this measure shall be monitored by the ERM of the Land Development Review Department.

2.15 Implementation of Mitigation Measure 3-1 (Geology/Soils), Mitigation Measures 4-1 through 4-11 (Hydrology/Water Quality), and 7-1 (Air Quality) shall mitigate potential indirect impacts to vegetation communities and sensitive plant species associated with erosion, exposure to urban pollutants, and dust.

2.16 For the purpose of this mitigation measure, "MHPA" refers to the MHPA limits as defined at the time of project application (September 1999) and shown as "Existing MHPA Line" on Exhibit A.

Based on the coastal California gnatcatcher and habitat survey conducted on the project site in 1999, there is limited potential for gnatcatchers to occur within the MHPA on-site. Mitigation for indirect noise impacts to gnatcathers during their breeding season shall only be required in MHPA areas with substantial coastal sage scrub. Therefore, this measure shall only apply to the MHPA area adjacent to Planning Area 11 and proposed access through the MHPA associated with Planning Area 11. Mitigation for indirect impacts is as follows:

a. No clearing of gnatcatcher-occupied habitat is allowed within the MHPA during the breeding season (March 1 to August 15).

b. If clearing or grading occurs adjacent to the MHPA during the gnatcatcher breeding season, gnatcatcher surveys shall be conducted in appropriate habitat within 500 feet of the MHPA boundary and impacts to the nesting areas avoided. If no gnatcatchers are identified within the MHPA, no additional measures will be required. If present, measures to minimize noise impacts will be required and may include temporary noise walls/berms. These noise attenuation measures shall not impact any sensitive vegetation. If a survey is not conducted and construction is proposed during the gnatcatcher breeding season, gnatcatcher presence will be assumed and a temporary noise wall/berm would be required. Noise levels from construction activities during the gnatcatcher breeding season should not exceed 60 dBA hourly LEQ at the edge of the MHPA or the ambient noise level if noise levels already exceed 60 dBA hourly LEQ. Construction noise in occupied gnatcatcher territories shall be measured after installation of noise attenuation measures and a report on noise levels provided to EAS. If necessary, additional noise attenuation will be required to ensure that gnatcatchers are not subjected to noise levels over 60 dBA.

3. Geology/Soils

3.1 Prior to the commencement of grading, a geotechnical consultant, satisfactory to the City's Environmental Review Manager (ERM), shall be employed for the purpose of observing earthwork procedures and testing the fills for substantial conformance with the recommendations of the projects' Geologic Investigation Reports. The geotechnical consultant shall provide adequate testing and observation services so that it may be determined if the work was performed in substantial conformance with the projects' Geologic Investigation Reports. Such information shall be submitted in writing to the City's ERM. Mitigation measures for soil and excavation activities, grading activities, installation of subdrains, slope construction, foundation design, retaining walls and lateral loads, drainage provisions, and final review of grading plans shall be implemented as a part of the grading plans for the proposed project. Prior to issuance of grading permits, the grading plans shall be approved by the City Planning and Development Review Department.

3.2 In conformance with the provisions of Public Resources Code §21081.6, the sub-project owner/permittee shall retain a mitigation monitor acceptable to the ERM to monitor the grading, construction, and installation of runoff control devices and erosion control revegetation. Prior to the issuance of building permits, the mitigation monitor shall submit in writing to the City Engineer verification that the sub-project has complied with the required notes on the grading plan, landscape plan and Storm Water Pollution Prevention Plan (SWPPP) addressing erosion/urban runoff controls related to erosion control. Grading shall be limited to the dry season (typically March 15 to November 15), unless specific measures for wet season grading are approved for the sub-project by the ERM of the City's Planning and Development Review Department.

4. Hydrology/Water Quality

4.1 Prior to the issuance of grading permits, the owner/permittee shall provide evidence, in the form of an acknowledgment from the SWRCB assigning the project its WDID Number, of intent to be covered under the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002. The WDID Number shall be listed on the project grading plans.

4.2 Prior to the issuance of grading permits, the owner/permittee shall prepare a Storm Water Pollution Prevention Plan (SWPPP) prepared in compliance with the NPDES General Permit requirements and the requirements of the Land Development Review (LDR) Division of the City of San Diego. The Environmental Review Manager (ERM) of the LDR Division shall approve the SWPPP prior to the issuance of the grading permits. The SWPPP shall include a permanent maintenance plan, prepared satisfactory to the ERM, that defines the party responsible for the permanent maintenance of each and all post-construction BMPs. The permanent maintenance plan shall define the method and schedule for maintenance of all permanent BMPs.

The SWPPP shall contain construction-related (temporary) BMPs including, as a minimum, the following:

a. Hydroseeding/hydromulching of all disturbed natural and manufactured slopes with seed mixes approved by the ERM.

b. A schedule for hydroseeding/hydromulching of completed slopes approved by the ERM.

c. BMPs specifically designed to address construction-related impacts to sensitive plant species located in southerly-trending drainages (Sycamore Estates sub-project only).

d. Other temporary BMPs approved by the ERM.

The SWPPP shall contain permanent post-construction BMPs to control the rate, volume and quality of runoff leaving the site and reduce the amount of pollutants and sediments discharged from the site including, as a minimum, the following:

Structural BMPs

e. *Swales.* Swales are channels with a relatively mild longitudinal slope and shallow side slope that are typically grassed or vegetated. They are designed for slow velocities during small storms, allowing opportunity for infiltration along the swale bottom and for the trapping of sediment and organic biosolids in the vegetative cover. Swales are typically located along roadways and other impervious areas. Swales and other BMPs that promote infiltration are feasible in areas with permeable soils (Soil Types A and B). This type of BMP should not be located above fill slopes or in other areas where infiltration can create soil or structural problems.

   The best opportunity for swales is in the Sycamore Estates sub-project adjacent to Rancho Encantada Parkway. In combination with filter strips, the swales can treat storm water before it enters the storm drainage system. The measures must be designed and implemented with proper pavement drainage and traffic safety requirements in mind.

f. *Filter Strips.* Sometimes called buffer strips, filter strips perform in a manner similar to swales but are not channels. Receiving flow is characteristically sheet flow. Filter strips are mildly sloping vegetated surfaces that are located adjacent to an impervious surface area. They are designed to slow the velocity of the runoff from the impervious area, thereby increasing the opportunities for infiltration and the trapping of pollutants. Filter strips and other BMPs that promote infiltration are feasible in areas with permeable soils (Soil Types A and B). Filter strips and other BMPs that trap pollutants in vegetative cover are feasible when they can be located away from heavily traveled areas. This type of BMP should not be located above fill slopes or in other areas where infiltration can create soil or structural problems.

The best opportunity for filter strips is within the Sycamore Estates sub-project adjacent to Rancho Encantada Parkway. In combination with drainage swales, the filter strips can treat storm water before it enters the storm drainage system. The design and implementation must be compatible with proper pavement drainage and traffic safety requirements. In addition, filter strips can be installed at storm water drainage outfalls within canyons.

g. *Infiltration Basins and Percolation Trenches.* These treatment controls capture runoff generated by small storms and provide good storm water treatment by transferring surface runoff to the groundwater regime. This filters out suspended pollutants and provides other treatment processes before water returns to the surface systems. Infiltration basins, percolation trenches and other BMPs that promote infiltration are feasible in areas with permeable soils (Soil Types A and B). This type of BMP should not be located above fill slopes or in other areas where infiltration can cause soil or structural problems.

   In the Sycamore Estates sub-project the only feasible location for infiltration basins and percolation trenches is within canyons where the soils permit infiltration. The sub-project proposes to use infiltration basins located in conjunction with detention basins as the primary storm water collection and treatment BMPs.

h. *Detention Controls.* Detention controls include extended detention basins (dry) which drain out completely between storm events, and retention ponds (wet), which retain storm runoff from a given event within its permanent pool until the next storm occurs. Retention ponds are not feasible for this project. Detention basins remove pollutants primarily through sedimentation of solids, but also through biochemical processes in the basin during the dry weather periods that follow storms.

The Sycamore Estates VTM includes several detention basins primarily designed for flood-peak attenuation. These basins shall be constructed in conjunction with infiltration basins and vegetation basins. In conjunction with these other basins, but also on their own, the detention basins will provide a benefit in improving storm water quality.

i. *Continuous Deflective Separation (CDS) Units or Equivalent BMPs.* Continuous deflective separation units or equivalent BMPs capture and retain floatables, trash, and debris larger than 0.05 inches in size found in storm water runoff, as well as fine sand and larger particles and the pollutants attached to those particles. The CDS unit or equivalent BMPs is a non-mechanical self-operating system and will function when there is flow in the storm drainage system. Material captured in the CDS unit or equivalent BMPs separation chamber and sump is retained even when the unit's design capacity is exceeded.

   The Sycamore Estates sub-project shall utilize continuous deflective separation units or other appropriate BMP measures at major parking areas associated with the multifamily residential development site, school site, institutional sites, and the park site.

j. *Drainage Inlet Inserts.* This category of structural BMPs includes pre-manufactured media filters in troughs and containers within inlets and catch basins configured to remove sediment, pollutants adsorbed to sediment, and oil and grease. The Sycamore Estates sub-project shall utilize drainage inlet inserts only where other structural BMPs cannot be used prior to the storm water being discharged into MHPA areas. (For the purpose of this mitigation measure, "MHPA" refers to the MHPA limits as defined at the time of Project application (March 1999) and shown as "Existing MHPA Line" on Exhibit A.)

k. *Other Measures*. The specific locations and implementation strategies for construction site erosion and sediment control practices shall be outlined in the sub-project Storm Water Pollution Prevention Plan (SWPPP). Typical construction site erosion and sediment control practices that can be applied during construction phases of the Sycamore Estates sub-project may include, but would not be limited to the following: 1) temporary sediment basins, 2) silt fences, 3) straw bale sediment traps, 4) storm drain inlet protection, 5) subsurface drains, 6) temporary slope drains, 7) grade stabilization structures, 8) storm drain outlet protection, 9) structural streambank protection, 10) temporary/permanent seeding, and 11) sodding/mulching.

Non-Structural/Housekeeping BMPs

Non-structural and housekeeping BMPs prevent and reduce the generation of pollutants at their source, as opposed to structural measures that are implemented to control pollutants after they are generated. The recommended non-structural BMPs include, but are not limited to the following:

l. *CC&R Language.* Language shall be included in the Sycamore Estates residential CC&Rs that encourages implementation of non-structural and housekeeping BMPs.

m. *Educational Materials.* Educational materials shall be developed by the Sycamore Estates sub-project owners/permittee to educate homebuyers, developers, and construction personnel. Educational materials may also be provided to administrators of the proposed school and institutional sites. The educational materials shall provide information and general guidance on water quality control including, but not limited to, the non-structural BMPs mentioned here.

n. *Catch Basin Stenciling.* "No Dumping–Drains to Ocean" or another equally effective phrase shall be posted on storm water inlets in order to alert the public to the ultimate destination of substances discharged into the storm water drainage system.

o. *Other Methods.* Other non-structural measures may include fertilizer management programs, integrated pest management, litter control and street sweeping programs, and construction site erosion and sediment control practices.

p. Other permanent BMPs, including alternative available technologies, approved by the ERM.

4.3 Prior to the issuance of grading permits and/or improvement permits for the Sycamore Estates sub-project, the following permanent post-construction structural BMPs shall be shown on the grading plans, improvement plans and/or erosion control landscaping plans, satisfactory to the ERM:

a. Swales.

b. Filter strips.

c. Infiltration Basins and Percolation Trenches.

d. Detention Controls.

e. Other permanent BMPs or alternate available technologies, approved by the ERM.

4.4 Prior to the issuance of grading permits and/or improvement permits, the following notes, as a minimum, shall be included in the grading plans, improvement plans and/or erosion control landscaping plans, satisfactory to the ERM:

a. The owner/permittee and/or contractor shall post the project SWPPP, with monitoring and maintenance updates after every storm event, on the job site during all construction activities.

b. No grading shall be performed during the rainy season (November 15 through March 31) without the implementation of the special erosion control measures shown on this Plan and approved by the ERM.

4.5 Prior to the issuance of building permits, the owner/permittee shall submit evidence, in the form of the annual certification required by the SWRCB, that the project is in compliance with the terms and conditions of the General Permit. This certification contains certification that the project is in compliance with the project SWPPP.

4.6 Prior to the issuance of building permits, the owner/permittee shall show the following permanent structural BMPs on the building plans to the satisfaction of the ERM:

a. Continuous Deflective Separation (CDS) Units.

b. Drainage Inlet Inserts.

c. Other permanent BMPs or alternate available technologies approved by the ERM.

4.7 Prior to the issuance of building permits, the owner/permittee shall include, within the project CC&Rs, requirements for the private homeowner or property owner to permanently maintain appropriate post-construction BMPs to the satisfaction of the ERM.

4.8 The owner/permittee shall file a Notice of Termination with the SWRCB as required under the terms and conditions of the General Permit. A requirement for termination of coverage is the submittal of a Post-Construction Storm Water Management Plan. The Plan must contain the permanent post-construction BMPs, and the party responsible for the permanent maintenance of each post-construction

BMP. An additional requirement for termination of coverage is certification that the project complies with all local agency storm water discharge ordinances. The owner/permittee shall submit the Notice of Termination and the Post-Construction Storm Water Management Plan to the ERM along with any notice of acceptance from the SWRCB as certification that the project has complied with the terms and conditions of the General Permit and that coverage under the General Permit has been terminated.

5. Transportation

5.1 Prior to recordation of the first final map, the owner/permittee shall assure the construction of Pomerado Road from Spring Canyon Road to north of Legacy Road as a modified four-lane major street with appropriate transitions, satisfactory to the City Engineer.

5.2 Prior to recordation of the first final map, the owner/permittee shall assure the construction of a traffic signal at the intersection of Rancho Encantada Parkway and Pomerado Road, satisfactory to the City Engineer.

5.3 Prior to recordation of the first final map, the owner/permittee shall assure the construction of a northbound right-turn lane and a southbound left-turn lane at the intersection of Rancho Encantada Parkway and Pomerado Road, satisfactory to the City Engineer.

5.4 Prior to recordation of the first final map, the owner/permittee shall assure the construction of a traffic signal at the intersection of Pomerado Road and Stonemill Drive, satisfactory to the City Engineer.

5.5 Prior to recordation of the first final map, the owner/permittee shall assure the construction of an additional northbound left-turn lane and an additional westbound left-turn lane at the intersection of Scripps Poway Parkway and Pomerado Road, satisfactory to the City Engineer.

5.6 Prior to recordation of the first final map, the owner/permittee shall assure the construction of an additional lane for the northbound off-ramp at I-15 and Pomerado Road, satisfactory to the City Engineer.

5.7 Prior to recordation of the first final map, the owner/permittee shall assure by permit and bond the construction of an additional lane along Pomerado Road between the U.S. Navy/Marine driveway and the USIU secondary driveway to improve the eastbound merging for the I-15 northbound off-ramp, satisfactory to the City Engineer.

5.8 Prior to recordation of the first final map, and as an alternative to assuring the construction of a High Occupancy Vehicle Lane (HOV) at I-15 and Pomerado Road westbound to southbound on-ramp, the owner/permittee shall contribute an equivalent cost (estimated as $500,000.00) of the proposed on-ramp widening to the improvement program proposed by Caltrans, specifically the southbound auxiliary lane on I-15 from Mira Mesa Blvd. to Miramar Way.

5.9 Prior to recordation of the first final map, the owner/permittee shall assure by permit and bond the construction of a traffic signal at the intersection of Spring Canyon Road with Spruce Run Drive, Semillon Boulevard and Scripps Creek Drive, satisfactory to the City Engineer.

5.10 Prior to recordation of the first final map, the owner/permittee shall assure by permit and bond the construction of median improvements at the intersection of Spring Canyon Road with Semillon Boulevard, Sunset Ridge Drive, Scripps Creek Drive, Spruce Run Drive, Blue Cypress, and other locations along Spring Canyon Road needed to reduce cut-thru traffic on local collector streets in the Scripps Miramar Ranch community, satisfactory to the City Engineer.

5.11 Prior to recordation of the first final map, the owner/permittee shall assure the construction of a traffic signal interconnect system on Spring Canyon Road between Scripps Ranch Boulevard and Pomerado Road, satisfactory to the City Engineer.

6. Noise

6.1 Prior to the issuance of building permits for single-family residential units in Planning Areas 9, 7A and 7 (west of the school/park site) and within 80 feet of the Rancho Encantada Parkway centerline, a subsequent acoustical analysis shall be prepared by a qualified acoustician to identify all necessary noise control requirements on building and site plans necessary to meet the City's interior standard of 45 dB CNEL and exterior standard of 65 CNEL. The qualified acoustician shall provide verification in writing that these requirements are met. Written verification shall be submitted to City's ERM. Building permits for homes within 80 feet of the Rancho Encantada Parkway in Planning Areas 9, 7A and 7 (west of the school/park site) shall not be issued until the subsequent noise report is approved by the City's ERM.

If architectural features are needed to achieve the interior noise standard, such features shall be noted on the building plans. The primary feature of an interior sound attenuation package is the use of dual-pane windows in the upstairs windows with a minimum sound transmission class of 26 to 28. Supplemental ventilation is required in these homes to allow for window closure. Air conditioning as a standard feature would meet the ventilation requirement. All noise level reduction architectural components shall be shown on the architectural building plans and shall be approved by the City's Planning and Development Review Department prior to the issuance of building permits.

6.2 A noise attenuation wall shall be constructed along Rancho Encantada Parkway in the locations shown on the Sycamore Estates Exhibit A VTM and PRD and as specified in the acoustical analysis report.

7. Air Quality

7.1 Prior to approval of grading permits, the owner/permittee shall submit an accelerated construction dust abatement management program to the City of San Diego Planning and Development Review Department, Environmental Review Manager (ERM) for approval. Dust abatement shall consist of, but not be limited to,

soil stabilizers, truck wash stations, use of tarpaulins or covers on haul trucks, and site watering to the satisfaction of the Planning and Development Review Department. Site watering shall increase if wind speeds exceed 15 mph. Uncovered soils being stockpiled shall be bound or covered when deposits are not being made.The dust abatement program shall achieve a minimum of 60 percent dust abatement. The dust abatement program shall be made a condition of the grading permit and shall be monitored by the City through periodic inspection during grading. If the City's Inspection Services field inspector finds that the accelerated construction dust abatement program is not being complied with, a "stop work" order shall be issued until compliance is obtained.

7.2 Prior to the commencement of construction, Low NOx tune-ups shall be required of all diesel-powered construction equipment. Documentation of the tune-up shall be provided to the City's Environmental Review Manager prior to the commencement of construction. Additional Low NOx tune-ups may be required periodically over the course of Project construction, as required by the City's Environmental Review Manager.

8. Cultural Resources

The following mitigation measures shall be incorporated to mitigate potentially significant direct impacts to Site CA-SDI-14027H to below a level of significance.

8.1 Prior to the recordation of the first final map and/or issuance of the first grading permit, the applicant shall provide a letter of verification to the Environmental Review Manager of Land Development Review (LDR) stating that a qualified archaeologist and/or archaeological monitor, as defined in the City's Historical Resources Guidelines, have been retained to implement the monitoring program. The requirement for archaeological monitoring shall be noted on the grading plans. All persons involved in the archaeological monitoring of the project, shall be approved by LDR prior to the start of monitoring. The applicant shall notify LDR of the start and end of construction.

8.2 The qualified archaeologist shall attend any preconstruction meetings to make comments and/or suggestions concerning the archaeological monitoring program with the construction manager.

8.3 The qualified archaeologist or archaeological monitor shall be present on site full-time during grading of native soils in and around CA-SDI-14027H.

8.4 When requested by the archaeologist, the City Engineer shall divert, direct or temporarily halt ground disturbance activities in the area of discovery to allow evaluation of potentially significant cultural resources. The archaeologist shall immediately notify LDR staff of such finding at the time of discovery. The significance of the discovered resources shall be determined by the archaeologist, in consultation with LDR and the Native American community. The LDR must concur with the evaluation before grading activities in the area of discovery will be allowed to resume. Any human bones of Native American origin shall be turned over to the appropriate Native American group for reburial.

8.5 All cultural materials collected shall be cleaned, catalogued, and permanently curated with an appropriate institution. All artifacts shall be analyzed to identify function and chronology as they relate to the history of the area. Faunal material shall be identified as to species and specialty studies shall be completed, as appropriate.

8.6 Prior to the release of the grading bond, a monitoring results report and/or evaluation report, if appropriate, which describes the results, analysis, and conclusions of the archaeological monitoring program (with appropriate graphics) shall be submitted to and approved by the Environmental Review Manager of LDR. For significant cultural resources, a Research Design and Data Recovery Program shall be included as part of the evaluation report. A mitigation report for significant cultural resources, if required, shall be submitted to and approved by the Environmental Review Manager of LDR prior to the release of the grading bond.

9. Paleontological Resources

The following measures would be implemented to mitigate impacts to paleontological resources sites and off-site areas in which grading is proposed in areas underlain by either the Stadium Conglomerate or Pomerado Conglomerate formation.

9.1 Prior to the issuance of the first grading permit, the applicant shall provide a letter of verification to the Environmental Review Manager of Land Development Review (LDR) stating that a qualified paleontologist and/or paleontologist monitor, as defined in the City's Paleontological Guidelines, have been retained to implement the monitoring program. The requirement for paleontological monitoring shall be noted on the grading plans. All persons involved in the paleontological monitoring of this project shall be approved by LDR prior to the start of monitoring. The applicant shall notify LDR of the start and end of construction.

9.2 The qualified paleontologist shall attend any preconstruction meetings to make comments and/or suggestions concerning the paleontological monitoring program with the construction manager.

9.3 The paleontologist or paleontological monitor shall be on site full-time during the initial cutting of previously disturbed areas. Monitoring may be increased or decreased at the discretion of the qualified paleontologist, in consultation with LDR, and will depend on the rate of excavation, the materials excavated, and the abundance of fossils.

9.4 When requested by the paleontologist, the City Engineer shall divert, direct, or temporarily halt construction activities in the area of discovery to allow recovery of fossil remains. The paleontologist shall immediately notify LDR staff of such finding at the time of discovery. The LDR shall approve salvaging procedures to be performed before construction activities are allowed to resume.

9.5 The paleontologist shall be responsible for preparation of fossils to a point of curation as defined in the City's Paleontological Guidelines and submittal of a letter of acceptance from a local qualified curation facility. Any discovered fossil sites shall be recorded by the paleontologist at the San Diego Natural History Museum.

9.6 Prior to the release of the grading bond, a monitoring results report, with appropriate graphics, summarizing the results, analysis, and conclusions of the paleontological monitoring program shall be submitted to and approved by the Environmental Review Manager of LDR.

10. Public Services

10.1 Prior to the issuance of each residential building permit(s), the sub-project owner/ permittee shall be required to pay statutory Senate Bill 50 fees in place for the requested building permit(s).

10.2 The Sycamore Estates sub-project owner/permittee shall convey an approximate 4.0 net-acre public park site next to a proposed school site, as shown in the Sycamore Estates PRD and VTM, a 8.05 net-acre public park site if the park is not adjacent to a school site, to the City, prior to issuance of the 500th residential occupancy permit within the Sycamore Estates PRD. With implementation of this mitigation measure, impacts to public parks would be reduced to below a level of significance.

10.3 Prior to the issuance of building permits for each development phase, a fire response time analysis shall be submitted to the City's Environmental Review Manager for the building permit in question. The analysis shall take the presence of gated entries into consideration. If the structure is located outside of a six-minute response time from an existing or planned fire station, a fire sprinkler system shall be installed in the structure satisfactory to the Environmental Review Manager and the City Fire Marshall.

10.4 *Destination of Materials:*

a. The owner/permittee and construction contractors of each sub-project shall contact and use businesses (including self) that accept post-consumer materials for manufacture. (A list of construction and demolition recyclers and materials accepted by these facilities is available from the City's Environmental Services Department.)

b. Construction contractors shall identify the method of transporting materials to either a landfill or reprocessing centers.

10.5 *Buy Recycled:*

a. The owner/permittee of each sub-project shall identify products to be used in the construction activities that may be made of post-consumer content.

b. A good-faith effort shall be made to identify and use readily available products made with post-consumer materials. Recycled products shall be comprised of at least 50 percent recycled materials.

10.6 *Education:*

a. The owner/permittee of each sub-project shall provide a plan to educate and inform contractors of the waste management plan's goals of waste reduction and procedures for implementing them. Where possible, goals shall be included in contractor specifications. The sub-project's owner/permittee shall ensure that contractors achieve the performance levels specified.

11. Public Safety

11.1 Prior to the issuance of building permits for the Sycamore Estates sub-project site, the owner/permittee shall remove the existing 4,000-gallon above ground diesel fuel tank at Site J as identified in the project's Phase I Environmental Site Assessment. The tank shall be removed in accordance with the San Diego County Health Department's Site Assessment and Mitigation Manual. The property owner shall perform all activities necessary to obtain closure from the county of San Diego, Department of Environmental Health, within six months of vacation by the lessee.

11.2 Prior to the issuance of grading permits for the Sycamore Estates sub-project site, the owner/permittee shall demolish buildings 99, 103, 104, 107, 114, and 115 (see Appendix K2 of the Rancho Encantada EIR for building location) and properly dispose of all demolition debris. Following demolition of the building foundations, the soil shall be field screened for the most likely constituents of concern in areas where painting, cleaning, or solvent use was identified and where hazardous chemicals were known to have been used or stored. The soil samples shall be collected using ASTM and EPA protocol and sampling methodologies. If contamination is discovered above regulatory levels, the property owner shall take remedial action as appropriate. A written report shall be prepared and submitted to the City that includes a synopsis of the work, documentation of laboratory analyses, verification of submittals to regulatory agencies and documentation of disposition of wastes.

11.3 Prior to the issuance of grading permits for the Sycamore Estates sub-project site, soil samples shall be taken from septic systems, storm water run-off areas, and container storage areas. Soil samples shall be collected from the leach fields in various locations below the depth of existing drain lines. The soil shall be sampled and analyzed for the most likely constituents of concern based on uses and activity at those locations using ASTM and EPA protocol and sampling methodologies. The following screening levels shall be utilized:

Constituent	Screening Level
Total Petroleum Hydrocarbons	50 PPM
Metals	1000 x TTLC
Volatile Organic Compounds in Soil	1000 x MCL for Drinking Water

TTLC- Total Threshold Limit Concentration
MCL- Maximum Contaminant Level

Additional assessments shall be made if the laboratory results exceed the above levels. If contamination is discovered above regulatory levels, the property owner shall take remedial action as appropriate. A written report shall be prepared and submitted to the City that includes a synopsis of the work, documentation of laboratory analyses, and verification of submittals to regulatory agencies.

11.4 A Phase II site assessment shall be conducted and implemented prior to the issuance of grading permits on the Sycamore Estates sub-project site. The assessment shall identify detailed remediation efforts for sites A, B, D and J.

11.5 Prior to the issuance of grading permits for the Sycamore Estates sub-project, 100 yards around Cultural Resource Site CA-SDI-15159H shall be marked in the field by the construction supervisor and the project's hazardous materials consultant. These limits shall be identified on the grading plan. The project's construction supervisor shall submit a letter report to the City's ESD, verifying that these limits have been flagged in the field. During grading operations, unauthorized ground personnel shall not be allowed within the flagged area. The top one foot of soil removed from within the 100-yard area shall be stockpiled separately and examined by the project's hazardous materials consultant for the presence of ammunition. The examination results shall be documented and submitted to the City's ESD. If ammunition is found, the MCAS Miramar and/or the San Diego bomb disposal squad shall be notified by the construction supervisor, and either of these parties would be responsible for its disposal.

11.6 During construction, if any soil contamination is suspected, e.g., by odor or visual means, construction shall temporarily cease at that location and the San Diego County Department of Environmental Health, Hazardous Materials Management Division (HMMD) shall be contacted. A work plan shall be prepared as required by the HMMD, the soil shall be sampled and the results shall be evaluated to determine if any further action will be necessary. If further action is necessary, measures shall be approved by the county HMMD to ensure appropriate remediation.

12. Water Conservation

12.1 Prior to the issuance of grading permits, the incorporation of low water use plant species shall be verified by the City's Landscape Division as shown on the landscape construction drawings. Use of drought tolerant, low water or no water (native) species on all artificial slopes (where appropriate in consideration of brush management requirements and MHPA Adjacency Guidelines) shall be provided.

12.2 Prior to the issuance of grading permits, the City's Landscape Division shall verify that all common irrigation areas shall be operated by a computerized irrigation system which includes a weather station/ET gauge capable of reading current weather data and making automatic adjustments to independent program run times for each irrigation valve based on changes in temperature, solar radiation, relative humidity, rain and wind. In addition, the computerized irrigation system shall be equipped with flow-sensing capabilities, thus automatically shutting down the irrigation system in the event of a mainline break or broken head. These features will assist in conserving water, eliminating the potential of slope failures due to mainline breaks and eliminating over watering and flooding due to pipe and/or head breaks.

12.3 Prior to the issuance of grading permits, appropriate plant groupings shall be verified by the City's Landscape Division as shown on the landscape construction drawings. Plants with similar water usage requirements shall be grouped together.

12.4 Prior to the issuance of building permits, the use of low-flush toilets and low-flow faucets shall be noted on the architecture construction drawings and verified by the City's Building Division.