

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION**

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Clean Water Act Section 401 Water Quality Certification  
and Waste Discharge Requirements  
for Discharge of Dredged and/or Fill Materials

**PROJECT: Lilac Del Cielo Project**  
**Certification Number R9-2014-0015**  
**WDID: 9000002693**

Reg. Meas. ID: 394666
Place ID: 803032
Party ID: 549525
Person ID: 549526

**APPLICANT: Bonsall Group, LLC**  
**2603 Main St. Suite 1300**  
**Irvine, CA 92614**

**ACTION:**

<input type="checkbox"/> Order for Low Impact Certification	<input type="checkbox"/> Order for Denial of Certification
<input checked="" type="checkbox"/> Order for Technically-conditioned Certification	<input type="checkbox"/> Waiver of Waste Discharge Requirements
<input checked="" type="checkbox"/> Enrollment in SWRCB GWDR Order No. 2003-017-DWQ	<input type="checkbox"/> Enrollment in Isolated Waters Order No. 2004-004-DWQ

**PROJECT DESCRIPTION**

An application dated January 14, 2014 was submitted by Bonsall Holdings 76, LLC on behalf of Bonsall Group, LLC (hereinafter Applicant), for Water Quality Certification pursuant to section 401 of the Clean Water Act (33 U.S.C. § 1341) for the proposed Lilac Del Cielo Residential Development Project (Project). The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) deemed the application to be complete on September 18, 2014. The Applicant proposes to discharge dredge or fill material to waters of the United States and/or State associated with construction activity at the Project Site. The Applicant has also applied for a Clean Water Act section 404 permit from the United States Army Corps of Engineers for the Project (USACE File No. SPL-2008-00617-RJV).

The Project is located in the unincorporated community of Bonsall within San Diego County, California. The Project center reading is located at latitude 33.295996 and longitude -117.213769. The Applicant has paid all required fees for this Certification in the amount of \$11,339.00. On January 22, 2014, the San Diego Water Board provided public notice of the Project application pursuant to California Code of Regulations, title 23, section 3858 by posting information describing the Project on the San Diego Water Board's web site and providing a period of twenty-one days for public review and comment. No comments were received.

The Applicant proposes to develop 76 residential condominium units within 10.99 acres of the Project's 54.82 acre property. Project development includes a storm water detention basin, brow ditches, utilities, roads, infrastructure, buildings, landscaping, and fuel management zones (FMZs). The remaining 43.83 acre area is comprised of FMZs, a trail easement, conservation area, and the existing West Lilac Road right-of-way (3.60 acres).

The Project will convert approximately 10.99 acres of pervious ground cover to impervious surfaces. Runoff leaving the developed Project area would be significantly greater in volume, velocity, peak flow rate, and duration than pre-development runoff from the same area without mitigation. Post-construction best management practices (BMPs) to manage and control the effects of these runoff increases will consist of Filterra and/or FloGard filter units (or an equivalent system) and a detention basin. These BMPs will be designed, constructed, and maintained to meet the County of San Diego's Low Impact Development (LID) Capture Volume and hydromodification treatment requirements.

The Project application includes a description of the design objective, operation, and degree of treatment expected to be attained from equipment, facilities, or activities (including construction and post-construction BMPs) to treat waste and reduce runoff or other effluents which may be discharged. Compliance with the Certification conditions will help ensure that construction and post-construction discharges from the Project will not cause on-site or off-site downstream erosion, damage to downstream properties, or otherwise damage stream habitats in violation of water quality standards in the *Water Quality Control Plan for the San Diego Basin (9)* (Basin Plan).

Project construction will permanently impact 0.03 acre (844 linear feet) and temporarily impact 0.0004 acre (16 linear feet) of non-wetland waters of the United States and/or State. The Applicants reports that the Project purpose cannot be practically accomplished in a manner which would avoid or result in less adverse impacts to aquatic resources, considering all potential practicable alternatives, such as the potential for alternate available locations, designs, reductions in size, configuration or density.

The Applicant reports that compensatory mitigation for the permanent loss of 0.03 acre of jurisdictional waters will be achieved by the purchase of 0.44 acre of re-establishment and/or rehabilitation mitigation credits from the San Luis Rey Mitigation Bank. Mitigation purchased from the San Luis Rey Mitigation Bank is required to be protected and maintained in perpetuity by Wildlands according to the conditions of Water Quality Certification No. R9-2013-0050. All waters of the United States and/or State receiving temporary discharges of fill material will be restored upon removal of the fill. Mitigation for discharges of fill to waters of the United States and/or State will be completed at the San Luis Rey Mitigation Bank located in the Mission hydrologic sub-area (HSA 903.11) at a minimum compensation ratio of 14.7:1 (area mitigated:area impacted).

Additional Project details are provided in Attachments 1 through 4 of this Certification.

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### Attachments:

1. Definitions
2. Project Figures and Plans
3. Mitigation Purchase Agreement
4. CEQA Mitigation Monitoring and Reporting Program

## I. STANDARD CONDITIONS

Pursuant to section 3860 of title 23 of the California Code of Regulations, the following three standard conditions apply to all water quality certification actions:

- A. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to section 13330 of the Water Code and chapter 28, article 6 (commencing with title 23, section 3867), of the California Code of Regulations.
- B. This Certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to California Code of Regulations title 23, section 3855 subdivision (b), and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
- C. This Certification action is conditioned upon total payment of any fee required under title 23, chapter 28 (commencing with section 3830) of California Code of Regulations and owed by the applicant.

## II. GENERAL CONDITIONS

- A. **Term of Certification.** Water Quality Certification No. R9-2014-0015 (Certification) shall expire upon a) the expiration or retraction of the Clean Water Act section 404 (33 U.S.C. §1344) permit issued by the U.S. Army Corps of Engineers for this Project, or b) five (5) years from the date of issuance of this Certification, whichever occurs first.
- B. **Duty to Comply.** The Applicant must comply with all conditions and requirements of this Certification. Any Certification noncompliance constitutes a violation of the Water Code and is grounds for enforcement action or Certification termination, revocation and reissuance or modification.
- C. **General Waste Discharge Requirements.** The requirements of this Certification are enforceable through Water Quality Order No. 2003-0017-DWQ, *Statewide General Waste Discharge Requirements for Discharges of Dredged or Fill Material that have Received State Water Quality Certification* (Water Quality Order No. 2003-0017-DWQ). This provision shall apply irrespective of whether a) the federal permit for which the Certification was obtained is subsequently retracted or is expired, or b) the Certification is expired. Water Quality Order No. 2003-0017-DWQ is accessible at:  
  
[http://www.waterboards.ca.gov/water\\_issues/programs/cwa401/docs/generalorders/gowdr401regulated\\_projects.pdf](http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/generalorders/gowdr401regulated_projects.pdf).
- D. **Project Conformance with Application.** All water quality protection measures and BMPs described in the application and supplemental information for water quality certification are incorporated by reference into this Certification as if fully stated herein.

Notwithstanding any more specific conditions in this Certification, the Applicant shall construct, implement and comply with all water quality protection measures and BMPs described in the application and supplemental information. The conditions within this Certification shall supersede conflicting provisions within the application and supplemental information submitted as part of this Certification action.

**E. Project Conformance with Water Quality Control Plans or Policies.**

Notwithstanding any more specific conditions in this Certification, the Project shall be constructed in a manner consistent with the Basin Plan and any other applicable water quality control plans or policies adopted or approved pursuant to the Porter Cologne Water Quality Act (Division 7, commencing with Water Code Section 13000) or section 303 of the Clean Water Act (33 U.S.C §1313). The Basin Plan is accessible at:

[http://www.waterboards.ca.gov/sandiego/water\\_issues/programs/basin\\_plan/index.shtml](http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml)

**F. Project Modification.** The Applicant must submit any changes to the Project, including Project operation, which would have a significant or material effect on the findings, conclusions, or conditions of this Certification, to the San Diego Water Board for prior review and written approval. If the San Diego Water Board is not notified of a significant change to the Project, it will be considered a violation of this Certification.

**G. Certification Distribution Posting.** During Project construction, the Applicant must maintain a copy of this Certification at the Project site. This Certification must be available at all times to site personnel and agencies. A copy of this Certification shall also be provided to any contractor or subcontractor performing construction work, and the copy shall remain in their possession at the Project site.

**H. Inspection and Entry.** The Applicant must allow the San Diego Water Board or the State Water Resources Control Board, and/or their authorized representative(s) (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents as may be required under law, to:

1. Enter upon the Project or Compensatory Mitigation site(s) premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Certification;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Certification;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Certification; and
4. Sample or monitor, at reasonable times, for the purposes of assuring Certification compliance, or as otherwise authorized by the Clean Water Act or Water Code, any substances or parameters at any location.

**I. Enforcement Notification.** In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under State law. For

purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Certification.

- J. **Certification Actions.** This Certification may be modified, revoked and reissued, or terminated for cause including but not limited to the following:
1. Violation of any term or condition of this Certification;
  2. Monitoring results indicate that continued Project activities could violate water quality objectives or impair the beneficial uses of the San Luis Rey River or its tributaries;
  3. Obtaining this Certification by misrepresentation or failure to disclose fully all relevant facts;
  4. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; and
  5. Incorporation of any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.

The filing of a request by the Applicant for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Certification condition.

- K. **Duty to Provide Information.** The Applicant shall furnish to the San Diego Water Board, within a reasonable time, any information which the San Diego Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Certification or to determine compliance with this Certification.
- L. **Property Rights.** This Certification does not convey any property rights of any sort, or any exclusive privilege.
- M. **Petitions.** Any person aggrieved by this action of the San Diego Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with the California Code of Regulations, title 23, sections 3867 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Certification. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:  
[http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

### III. CONSTRUCTION BEST MANAGEMENT PRACTICES

- A. **Approvals to Commence Construction.** The Applicant shall not commence Project construction until all necessary federal, State, and local approvals are obtained.

- B. **Personnel Education.** Prior to the start of the Project, and annually thereafter, the Applicant must educate all personnel on the requirements in this Certification, pollution prevention measures, spill response measures, and BMP implementation and maintenance measures.
- C. **Spill Containment Materials.** The Applicant must at all times, maintain appropriate types and sufficient quantities of materials on-site to contain any spill or inadvertent release of materials that may cause a condition of pollution or nuisance if the materials reach waters of the United States and/or State.
- D. **General Construction Storm Water Permit.** Prior to start of Project construction, the Applicant must, as applicable, obtain coverage under, and comply with, the requirements of State Water Resources Control Board Water Quality Order No. 2009-0009-DWQ, the *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activity*, (General Construction Storm Water Permit) and any reissuance. If Project construction activities do not require coverage under the General Construction Storm Water Permit, the Applicant must develop and implement a runoff management plan (or equivalent construction BMP plan) to prevent the discharge of sediment and other pollutants during construction activities.
- E. **Grading Plans.** Prior to the start of construction, the Applicant must submit a copy of the final grading plans.
- F. **Waste Management.** The Applicant must properly manage, store, treat, and dispose of wastes in accordance with applicable federal, state, and local laws and regulations. Waste management shall be implemented to avoid or minimize exposure of wastes to precipitation or storm water runoff. The storage, handling, treatment, or disposal of waste shall not create conditions of pollution, contamination or nuisance as defined in Water Code section 13050. Upon Project completion, all Project generated debris, building materials, excess material, waste, and trash shall be removed from the Project site(s) for disposal at an authorized landfill or other disposal site in compliance with federal, state, and local laws and regulations.
- G. **Waste Management.** Except for a discharge permitted under this Certification, the dumping, deposition, or discharge of trash, rubbish, unset cement or asphalt, concrete, grout, damaged concrete or asphalt, concrete or asphalt spoils, wash water, organic or earthen material, steel, sawdust or other construction debris waste from Project activities directly into waters of the United States and/or State, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited.
- H. **Downstream Erosion.** Discharges of concentrated flow during construction or after Project completion must not cause downstream erosion or damage to properties or stream habitat.
- I. **Construction Equipment.** All equipment must be washed prior to transport to the Project site and must be free of sediment, debris, and foreign matter. All equipment used in direct contact with surface water shall be steam cleaned prior to use. All equipment using gas, oil, hydraulic fluid, or other petroleum products shall be inspected for leaks prior to use and shall be monitored for leakage. Stationary equipment (e.g.,

motors, pumps, generator, etc.) shall be positioned over drip pans or other types of containment.

- J. **Process Water.** Water containing mud, silt, or other pollutants from equipment washing or other activities, must not be discharged to waters of the United States and/or State or placed in locations that may be subjected to storm water runoff flows. Pollutants discharged to areas within a stream diversion must be removed at the end of each work day or sooner if rain is predicted.
- K. **Surface Water Diversion.** All surface waters, including ponded waters, must be diverted away from areas of active grading, construction, excavation, vegetation removal, and/or any other activity which may result in a discharge to the receiving water. Diversion activities must not result in the degradation of beneficial uses or exceedance of the receiving water quality objectives. Any temporary dam or other artificial obstruction constructed must only be built from materials such as clean gravel which will cause little or no siltation. Normal flows must be restored to the affected stream immediately upon completion of work at that location.
- L. **Re-vegetation and Stabilization.** All areas that have 14 or more days of inactivity must be stabilized within 14 days of the last activity. The Applicant shall implement and maintain BMPs to prevent erosion of the rough graded areas. After completion of grading, all areas must be re-vegetated with native species appropriate for the area. The re-vegetation palette must not contain any plants listed on the California Invasive Plant Council Invasive Plant Inventory, which can be accessed at <http://www.cal-ipc.org/ip/inventory/>.
- M. **Hazardous Materials.** Except as authorized by this Certification, substances hazardous to aquatic life, including, but not limited to, petroleum products, unused cement/concrete, asphalt, and coating materials, must be prevented from contaminating the soil and/or entering waters of the United States and/or State. BMPs must be implemented to prevent such discharges during each Project activity involving hazardous materials.
- N. **Vegetation Removal.** Removal of vegetation must occur by hand, mechanically, or through application of United States Environmental Protection Agency (USEPA) approved herbicides deployed using applicable BMPs to minimize adverse effects to beneficial uses of waters of the United States and/or State. Discharges related to the application of aquatic pesticides within waters of the United States must be done in compliance with State Water Resources Control Board Water Quality Order No. 2004-0009-DWQ, the Statewide General National Pollution Discharge Elimination System Permit for the Discharge of Aquatic Weed Control in Waters of the United States, and any subsequent reissuance as applicable. Removal of vegetation must occur outside of the avian nesting season (March 15- August 31).
- O. **Limits of Disturbance.** The Applicant shall clearly define the limits of Project disturbance to waters of the United States and/or State using highly visible markers such as flag markers, construction fencing, or silt barriers prior to commencement of Project construction activities within those areas.

- P. **On-site Qualified Biologist.** The Applicant shall designate an on-site qualified biologist to monitor Project construction activities within or adjacent to waters of the United States and/or State to ensure compliance with the Certification requirements. The biologist shall be given the authority to stop all work on-site if a violation of this Certification occurs or has the potential to occur. Records and field notes of the biologist's activities shall be kept on-site and made available for review upon request by the San Diego Water Board.
- Q. **Beneficial Use Protection.** The Applicant must take all necessary measures to protect the beneficial uses of waters of the San Luis Rey River. This Certification requires compliance with all applicable requirements of the Basin Plan. If at any time, an unauthorized discharge to surface waters (including rivers or streams) occurs or monitoring indicates that the Project is violating, or threatens to violate, water quality objectives, the associated Project activities shall cease immediately and the San Diego Water Board shall be notified in accordance with Notification Requirement VII.A of this Certification. Associated Project activities may not resume without approval from the San Diego Water Board.

#### IV. POST-CONSTRUCTION BEST MANAGEMENT PRACTICES

- A. **Post-Construction Discharges.** The Applicant shall not allow post-construction discharges from the Project site to cause or contribute to on-site or off-site erosion or damage to properties or stream habitats.
- B. **Storm Drain Inlets.** All storm drain inlet structures within the Project boundaries must be stamped and/or stenciled (or equivalent) with appropriate language prohibiting non-storm water discharges.
- C. **Post-Construction BMP Design.** The Project must be designed to comply with the most current Standard Storm Water Mitigation and Hydromodification Plans for San Diego County. Post-construction BMPs are described in the *Major Stormwater Management Plan for the Bonsall 76-Units, County of San Diego VTM # 5427* (SWMP).
- D. **Post-Construction BMP Implementation.** All post-construction BMPs must be constructed, functional, and implemented prior to completion of Project construction, occupancy, and/or planned use, and maintained in perpetuity. The post construction BMPs must include those described in the SWMP, dated December 9, 2013, prepared on behalf of the Applicant by Latitude 33 Planning and Engineering; or any subsequent version of the SWMP approved by San Diego County.
- E. **Storm Water Management Plan:** Prior to the start of construction, the Applicant must submit a copy of the final SWMP.
- F. **Post-Construction BMP Maintenance.** The post construction BMPs must be designed, constructed, and maintained in accordance with the most recent California Storm Water Quality Association (CASQA)<sup>1</sup> guidance. The Applicant shall:

<sup>1</sup> California Storm Water Quality Association (*California Storm Water BMP Handbook, New Development and Redevelopment 2003*), available on-line at: <http://www.cabmphandbooks.org/> [Accessed on January 15, 2012]

1. No less than two times per year, assess the performance of the BMPs to ensure protection of the receiving waters and identify any necessary corrective measures;
2. Perform inspections of BMPs, at the beginning of the wet season no later than October 1 and the end of the wet season no later than April 1, for standing water, slope stability, sediment accumulation, trash and debris, and presence of burrows;
3. Regularly perform preventative maintenance of BMPs, including removal of accumulated trash and debris, as needed to ensure proper functioning of the BMPs;
4. Identify and promptly repair damage to BMPs; and
5. Maintain a log documenting all BMP inspections and maintenance activities. The log shall be made available to the San Diego Water Board upon request.

**V. PROJECT IMPACTS AND COMPENSATORY MITIGATION**

- A. Project Impact Avoidance and Minimization.** The Project must avoid and minimize adverse impacts to waters of the United States and/or State to the maximum extent practicable.
- B. Project Impacts and Compensatory Mitigation.** Unavoidable Project impacts to the San Luis Rey River and its unnamed tributaries within the San Luis Rey Hydrologic Unit must not exceed the type and magnitude of impacts described in the table below. At a minimum, compensatory mitigation required to offset unavoidable temporary and permanent Project impacts to waters of the United States and/or State must be achieved as described in the table below:

	Impacts (acres)	Impacts (linear ft.)	Mitigation for Impacts (acres)	Mitigation Ratio (area mitigated :area impacted)	Mitigation for Impacts (linear ft.)	Mitigation Ratio (linear feet mitigated:linear feet impacted)
Wetland (Permanent impacts)	0.03	844	0.44 <sup>1</sup> Re Establishment	14.7:1	N/A <sup>2</sup>	N/A <sup>2</sup>
Wetland (Temporary impacts)	0.0004	16	0.0004	1:1	16	1:1

1. Permanent impacts will be mitigated through the purchase of re-establishment and/or rehabilitation mitigation credits from the San Luis Rey Mitigation Bank. Mitigation purchased from the San Luis Rey Mitigation Bank is required to be protected and maintained in perpetuity by Wildlands according to the conditions of Water Quality Certification No. R9-2013-0050. The mitigation provided for Project impacts contributes to the net gain of wetlands per the State of California Net Gain Policy (Executive Order W-59-93).
2. The amount of mitigation credits purchased is not reported in terms of linear feet of mitigation.

- C. Mitigation Credit Purchase.** The Applicant must provide the San Diego Water Board proof of mitigation credit purchase from the San Luis Rey Mitigation Bank prior to the start of Project construction.

## VI. MONITORING AND REPORTING REQUIREMENTS

- A. **Representative Monitoring.** Samples and measurements taken for the purpose of monitoring under this Certification shall be representative of the monitored activity.
- B. **Monitoring Reports.** Monitoring results shall be reported to the San Diego Water Board at the intervals specified in section V of this Certification.
- C. **Monitoring and Reporting Revisions.** The San Diego Water Board may make revisions to the monitoring program at any time during the term of this Certification and may reduce or increase the number of parameters to be monitored, locations monitored, the frequency of monitoring, or the number and size of samples collected.
- D. **Records of Monitoring Information.** Records of monitoring information shall include:
1. The date, exact place, and time of sampling or measurements;
  2. The individual(s) who performed the sampling or measurements;
  3. The date(s) analyses were performed;
  4. The individual(s) who performed the analyses;
  5. The analytical techniques or methods used; and
  6. The results of such analyses.
- E. **Annual Project Progress Reports.** The Applicant must submit annual Project progress reports describing status of BMP implementation and compliance with all requirements of this Certification to the San Diego Water Board prior to **March 1** of each year following the issuance of this Certification, until the Project has reached completion. The monitoring period for each Annual Project Progress Report shall be January 1<sup>st</sup> through December 31<sup>st</sup> of each year. The report must include the following information:
1. The names, qualifications, and affiliations of the persons contributing to the report;
  2. The status, progress, and anticipated schedule for completion of Project construction activities including the installation and operational status of best management practices project features for erosion and storm water quality treatment;
  3. A description of Project construction delays encountered or anticipated that may affect the schedule for construction completion; and
  4. A description of each incident of noncompliance during the annual monitoring period and its cause, the period of the noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent

reoccurrence of the noncompliance.

F. **Final Project Completion Report.** The Applicant must submit a Final Project Completion Report to the San Diego Water Board **within 30 days of completion of the Project.** The final report must include the following information:

1. Date of construction initiation;
2. Date of construction completion;
3. BMP installation and operational status for the Project;
4. As-built drawings of the Project, no bigger than 11"X17"; and
5. Photo documentation of implemented post-construction BMPs and all areas of permanent and temporary impacts, prior to and after project construction. Photo documentation must be conducted in accordance with guidelines posted at [http://www.waterboards.ca.gov/sandiego/water\\_issues/programs/401\\_certification/docs/StreamPhotoDocSOP.pdf](http://www.waterboards.ca.gov/sandiego/water_issues/programs/401_certification/docs/StreamPhotoDocSOP.pdf). In addition, photo documentation must include Global Positioning System ("GPS") coordinates for each of the photo points referenced.

G. **Reporting Authority.** The submittal of information required under this Certification, or in response to a suspected violation of any condition of this Certification, is required pursuant to Water Code section 13267 and 13383. Civil liability may be administratively imposed by the San Diego Water Board for failure to submit information pursuant to Water Code sections 13268 or 13385.

H. **Electronic Document Submittal.** The Applicant must submit all reports and information required under this Certification in electronic format via e-mail to [SanDiego@waterboards.ca.gov](mailto:SanDiego@waterboards.ca.gov). Documents over 50 megabytes will not be accepted via e-mail and must be placed on a disc and delivered to:

California Regional Water Quality Control Board  
San Diego Region  
Attn: 401 Certification No. R9-2014-0015: PIN 803032  
2375 Northside Drive, Suite 100  
San Diego, California 92108

Each electronic document must be submitted as a single file, in Portable Document Format (PDF) format, and converted to text searchable format using Optical Character Recognition (OCR). All electronic documents must include scanned copies of all signature pages; electronic signatures will not be accepted. Electronic documents submitted to the San Diego Water Board must include the following identification numbers in the header or subject line: Certification No. R9-2014-0015: PIN 803032.

I. **Document Signatory Requirements.** All applications, reports, or information submitted to the San Diego Water Board must be signed as follows:

1. For a corporation, by a responsible corporate officer of at least the level of vice president.
2. For a partnership or sole proprietorship, by a general partner or proprietor, respectively.
3. For a municipality, or a state, federal, or other public agency, by either a principal executive officer or ranking elected official.
4. A duly authorized representative may sign applications, reports, or information if:
  - a. The authorization is made in writing by a person described above.
  - b. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity.
  - c. The written authorization is submitted to the San Diego Water Board Executive Officer.

If such authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the Project, a new authorization satisfying the above requirements must be submitted to the San Diego Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative.

- J. **Document Certification Requirements.** All applications, reports, or information submitted to the San Diego Water Board must be certified as follows:

*"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."*

## VII. NOTIFICATION REQUIREMENTS

- A. **Twenty Four Hour Non-Compliance Reporting.** The Applicant shall report any noncompliance which may endanger health or the environment. Any such information shall be provided orally to the San Diego Water Board within **24 hours** from the time the Applicant becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Applicant becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The San Diego Water Board, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

- B. Hazardous Substance Discharge.** Except for a discharge which is in compliance with this Certification, any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, shall as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the County of San Diego, in accordance with California Health and Safety Code section 5411.5 and the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Government Code Title 2, Division 1, Chapter 7, Article 3.7 (commencing with section 8574.17), and immediately notify the State Water Board or the San Diego Water Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of section 13271 of the Water Code unless the Applicant is in violation of a Basin Plan prohibition.
- C. Oil or Petroleum Product Discharge.** Except for a discharge which is in compliance with this Certification, any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Government Code Title 2, Division 1, Chapter 7, Article 3.7 (commencing with section 8574.1). This requirement does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Clean Water Act section 311, or the discharge is in violation of a Basin Plan prohibition.
- D. Anticipated Noncompliance.** The Applicant shall give advance notice to the San Diego Water Board of any planned changes in the Project or the Compensatory Mitigation project which may result in noncompliance with Certification conditions or requirements.
- E. Transfers.** This Certification is not transferable in its entirety or in part to any person or organization except after notice to the San Diego Water Board in accordance with the following terms:
- 1. Transfer of Property Ownership:** The Applicant must notify the San Diego Water Board of any change in ownership of the Project area. Notification of change in ownership must include, but not be limited to, a statement that the Applicant has provided the purchaser with a copy of the Section 401 Water Quality Certification and that the purchaser understands and accepts the certification requirements and the obligation to implement them or be subject to liability for failure to do so; the seller and purchaser must sign and date the notification and provide such notification to the San Diego Water Board **within 10 days of the transfer of ownership.**
  - 2. Transfer of Mitigation Responsibility:** Any notification of transfer of responsibilities to satisfy the mitigation requirements set forth in this Certification must include a signed statement from an authorized representative of the new party

(transferee) demonstrating acceptance and understanding of the responsibility to comply with and fully satisfy the mitigation conditions and agreement that failure to comply with the mitigation conditions and associated requirements may subject the transferee to enforcement by the San Diego Water Board under Water Code section 13385, subdivision (a). Notification of transfer of responsibilities meeting the above conditions must be provided to the San Diego Water Board **within 10 days of the transfer date.**

3. **Transfer of Post-Construction BMP Maintenance Responsibility:** The Applicant assumes responsibility for the inspection and maintenance of all post-construction structural BMPs until such responsibility is legally transferred to another entity. At the time maintenance responsibility for post-construction BMPs is legally transferred the Applicant must submit to the San Diego Water Board a copy of such documentation and must provide the transferee with a copy of a long-term BMP maintenance plan that complies with manufacturer specifications. The Applicant must provide such notification to the San Diego Water Board within **10 days** of the transfer of BMP maintenance responsibility.

Upon properly noticed transfers of responsibility, the transferee assumes responsibility for compliance with this Certification and references in this Certification to the Applicant will be interpreted to refer to the transferee as appropriate. Transfer of responsibility does not necessarily relieve the Applicant of this Certification in the event that a transferee fails to comply.

- F. **Discharge Commencement.** The Applicant must notify the San Diego Water Board in writing **at least 5 days prior to** the start of Project construction.

## VIII. CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

- A. The County of San Diego, Department of Planning and Land Use is the Lead Agency under the California Environmental Quality Act (CEQA) (Public Resources Code section 21000, et seq.) section 21067, and CEQA Guidelines (California Code of Regulations, title 14, section 15000 et seq.) section 15367, and has filed a Mitigated Negative Declaration (MND) for the Project, dated April 4, 2008 (State Clearing House Number 2008011070). The Lead Agency has determined the Project will have a significant effect on the environment and mitigation measures were made a condition of the Project.
- B. The San Diego Water Board is a Responsible Agency under CEQA (Public Resources Code section 21069; CEQA Guidelines section 15381). The San Diego Water Board has considered the Lead Agency's MND and finds that the Project as proposed will have a significant effect on resources within the San Diego Water Board's purview.
- C. The San Diego Water Board has required mitigation measures as a condition of this Certification to avoid or reduce the environmental effects of the Project to resources within the Board's purview to a less than significant level.
- D. The Lead Agency has adopted a mitigation monitoring and reporting program pursuant to Public Resources Code section 21081.6 and CEQA Guidelines section 15097 to ensure that mitigation measures and revisions to the Project identified in the FEIR are implemented. The Mitigation Monitoring and Reporting Program (MMRP) is included

and incorporated by reference in Attachment 4 to this Certification. The Applicant shall implement the Lead Agency's MMRP described in the FEIR, as it pertains to resources within the San Diego Water Board's purview. The San Diego Water Board has imposed additional MMRP requirements as specified in sections IV and V of this Certification.

- E. As a Responsible Agency under CEQA, the San Diego Water Board will file a Notice of Determination in accordance with CEQA Guidelines section 15096 subdivision (i).

#### IX. SAN DIEGO WATER BOARD CONTACT PERSON

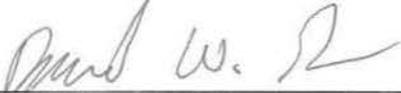
Alan Monji, Environmental Scientist  
Telephone: (619) 521-3968  
Email: Alan.Monji@waterboards.ca.gov

#### X. WATER QUALITY CERTIFICATION

I hereby certify that the proposed discharge from the **Lilac Del Cielo Project** (Certification No. R9-2014-0015) will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Board Order No. 2003-0017-DWQ, "*Statewide General Waste Discharge Requirements for Dredged or Fill Discharges that have Received State Water Quality Certification (General WDRs)*," which requires compliance with all conditions of this Water Quality Certification. Please note that enrollment under Order No. 2003-017-DWQ is conditional and, should new information come to our attention that indicates a water quality problem, the San Diego Water Board may issue individual waste discharge requirements at that time.

Except insofar as may be modified by any preceding conditions, all Certification actions are contingent on (a) the discharge being limited to, and all proposed mitigation being completed in strict compliance with, the applicants' Project description and/or the description in this Certification, and (b) compliance with all applicable requirements of the Basin Plan.

I, David W. Gibson, Executive Officer, do hereby certify the forgoing is a full, true, and correct copy of Certification No. R9-2014-0015 issued on January 16, 2015.

  
\_\_\_\_\_  
DAVID W. GIBSON  
Executive Officer  
San Diego Water Board

16 Jan 2015  
Date

# ATTACHMENT 1

## DEFINITIONS

**Activity** - when used in reference to a permit means any action, undertaking, or project including, but not limited to, construction, operation, maintenance, repair, modification, and restoration which may result in any discharge to waters of the state.

**Buffer** - means an upland, wetland, and/or riparian area that protects and/or enhances aquatic resource functions associated with wetlands, rivers, streams, lakes, marine, and estuarine systems from disturbances associated with adjacent land uses.

**California Rapid Assessment Method (CRAM)** - is a wetland assessment method intended to provide a rapid, scientifically-defensible and repeatable assessment methodology to monitor status and trends in the conditions of wetlands for applications throughout the state. It can also be used to assess the performance of compensatory mitigation projects and restoration projects. CRAM provides an assessment of overall ecological condition in terms of four attributes: landscape context and buffer, hydrology, physical structure and biotic structure. CRAM also includes an assessment of key stressors that may be affecting wetland condition and a "field to PC" data management tool (eCRAM) to ensure consistency and quality of data produced with the method.

**Compensatory Mitigation Project** - means compensatory mitigation implemented by the Applicant as a requirement of this Certification (i.e., applicant -responsible mitigation), or by a mitigation bank or an in-lieu fee program.

**Discharge of dredged material** – means any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the waters of the United States and/or State.

**Discharge of fill material** – means the addition of fill material into waters of the United States and/or State.

**Dredged material** – means material that is excavated or dredged from waters of the United States and/or State.

**Ecological Success Performance Standards** – means observable or measurable physical (including hydrological), chemical, and/or biological attributes that are used to determine if a compensatory mitigation project meets its objectives.

**Enhancement** – means the manipulation of the physical, chemical, or biological characteristics of an aquatic resource to improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

**Establishment** – means the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist. Creation results in a gain in aquatic resource area.

**Fill material** – means any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a water body.

**Isolated wetland** – means a wetland with no surface water connection to other aquatic resources.

**Mitigation Bank** – means a site, or suite of sites, where resources (e.g., wetlands, streams, riparian areas) are restored, established, enhanced, and/or preserved for the purpose of providing mitigation for impacts authorized by this Certification.

**Preservation** - means the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

**Re-establishment** - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/ historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

**Rehabilitation** - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/ historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

**Restoration** - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

**Start of Project Construction** - For the purpose of this Certification, "start of Project construction" means to engage in a program of on-site construction, including site clearing, grading, dredging, landfilling, changing equipment, substituting equipment, or even moving the location of equipment specifically designed for a stationary source in preparation for the fabrication, erection or installation of the building components of the stationary source within waters of the United States and/or State.

**Uplands** - means non-wetland areas that lack any field-based indicators of wetlands or other aquatic conditions. Uplands are generally well-drained and occur above (i.e., up-slope) from nearby aquatic areas. Wetlands can, however, be entirely surrounded by uplands. For example, some natural seeps and constructed stock ponds lack aboveground hydrological connection to other aquatic areas. In the watershed context, uplands comprise the landscape matrix in which aquatic areas form. They are the primary sources of sediment, surface runoff, and associated chemicals that are deposited in aquatic areas or transported through them.

**Water quality objectives and other appropriate requirements of state law** – means the water quality objectives and beneficial uses as specified in the appropriate water quality control plan(s); the applicable provisions of sections 301, 302, 303, 306, and 307 of the Clean Water Act; and any other appropriate requirement of state law.

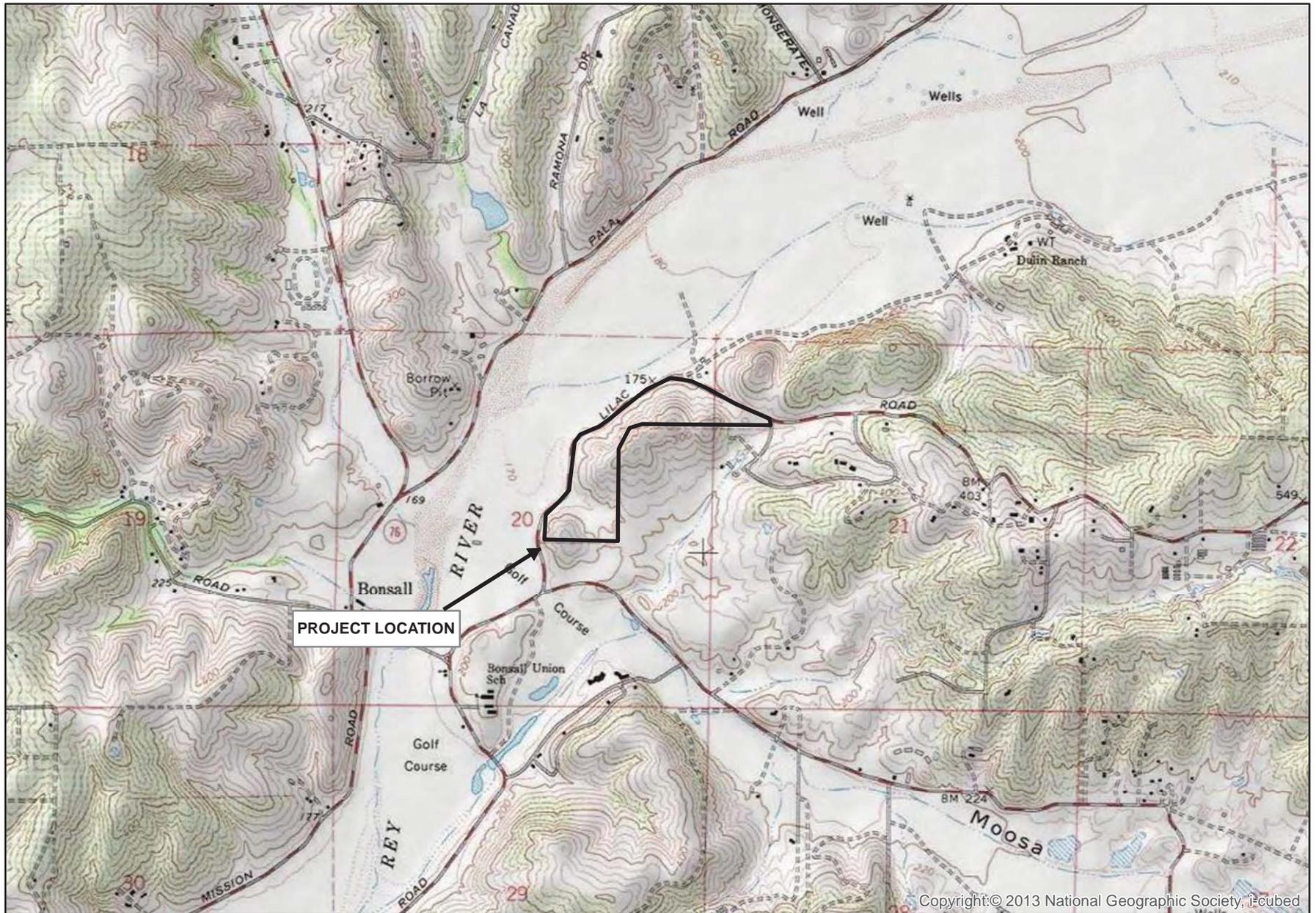
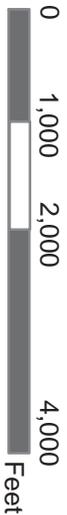
Bonsall Group LLC  
Lilac Del Cielo  
Certification No. R9-2014-0015

**ATTACHMENT 2**  
**PROJECT FIGURES AND PLANS**

Project Figures

1. Glenn Lukos Associates Exhibit 2, Vicinity Map
2. Glenn Lukos Associates Exhibit 1A, Corps/RWQCB Jurisdictional Delineation Map
3. Latitude 33 Planning and Engineering, County of San Diego Tract No. 5427 RPL, pages 1-24

Adapted from USGS Bonsall, CA quadrangle



Copyright © 2013 National Geographic Society, iCubed

# THE BONSALL PROJECT

Vicinity Map

GLENN LUKOS ASSOCIATES



Exhibit 2



**GENERAL NOTES:**

- APPROVAL OF THIS GRADING PLAN DOES NOT CONSTITUTE APPROVAL OF VERTICAL OR HORIZONTAL ALIGNMENT OF ANY PRIVATE ROAD SHOWN HEREON FOR COUNTY ROAD PURPOSES.
- FINAL APPROVAL OF THESE GRADING PLANS IS SUBJECT TO FINAL APPROVAL OF THE ASSOCIATED IMPROVEMENT PLANS WHERE APPLICABLE. FINAL CURB GRADE ELEVATIONS MAY REQUIRE CHANGES IN THESE PLANS.
- IMPORT MATERIAL SHALL BE OBTAINED FROM A LEGAL SITE.
- A CONSTRUCTION EXCAVATION OR ENCROACHMENT PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS WILL BE REQUIRED FOR ANY WORK IN THE COUNTY RIGHT OF WAY.
- ALL SLOPES WILL BE PLANTED IN ACCORDANCE WITH SAN DIEGO COUNTY SPECIFICATIONS.
- THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK. NOTICE OF THE PROPOSED WORK SHALL BE GIVEN TO THE FOLLOWING AGENCIES:  
SEWER: RAINBOW MUNICIPAL WATER DISTRICT  
WATER: RAINBOW MUNICIPAL WATER DISTRICT  
STORM DRAIN: COUNTY OF SAN DIEGO  
TELEPHONE: SBC  
GAS AND ELECTRIC: SD&E  
CABLE T.V.: ADELPHA COMMUNICATIONS
- A SOILS REPORT MAY BE REQUIRED PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
- APPROVAL OF THESE PLANS BY THE DIRECTOR OF PUBLIC WORKS DOES NOT AUTHORIZE ANY WORK OR GRADING TO BE PERFORMED UNTIL THE PROPERTY OWNER'S PERMISSION HAS BEEN OBTAINED AND VALID GRADING PERMIT HAS BEEN ISSUED.
- THE DIRECTOR OF PUBLIC WORKS APPROVAL OF THESE PLANS DOES NOT CONSTITUTE COUNTY BUILDING OFFICIAL APPROVAL OF ANY FOUNDATIONS FOR STRUCTURES TO BE PLACED IN THE AREA COVERED BY THESE PLANS. NO WAIVER OF THE GRADING ORDINANCE REQUIREMENTS CONCERNING MINIMUM COVER OVER EXPANSIVE SOILS IS MADE OR IMPLIED (SECTIONS 87.403 & 87.410). ANY SUCH WAIVER MUST BE OBTAINED FROM THE DIRECTOR OF PLANNING AND LAND USE.
- ALL OPERATIONS CONDUCTED ON THE PREMISES INCLUDING THE WARMING UP, REPAIR, ARRIVAL, DEPARTURE OR RUNNING OF TRUCKS, FARMING EQUIPMENT, CONSTRUCTION EQUIPMENT AND ANY OTHER ASSOCIATED GRADING EQUIPMENT SHALL BE LIMITED TO THE PERIOD BETWEEN 7 AM AND 6 PM EACH DAY, MONDAY THROUGH SATURDAY, AND NO EARTHMOVING OR GRADING OPERATIONS SHALL BE CONDUCTED ON THE PREMISES ON SUNDAYS OR HOLIDAYS.
- ALL MAJOR SLOPES SHALL BE ROUNDED INTO EXISTING TERRAIN TO PRODUCE A CONTIGUOUS TRANSITION FROM CUT OR FILL FACES TO NATURAL GROUND AND ABUTTING CUT OR FILL SURFACES.
- NOTWITHSTANDING THE MINIMUM STANDARDS SET FORTH IN THE GRADING ORDINANCE AND NOTWITHSTANDING THE APPROVAL OF THESE GRADING PLANS, THE PERMITTEE IS RESPONSIBLE FOR THE PREVENTION OF DAMAGE TO ADJACENT PROPERTY. NO PERSON SHALL EXCAVATE ON LAND SO CLOSE TO THE PROPERTY LINE AS TO ENDANGER ANY ADJOINING PUBLIC STREET, SIDEWALK, ALLEY, FUNCTION OF ANY SEWAGE DISPOSAL SYSTEM OR ANY OTHER PUBLIC OR PRIVATE PROPERTY WITHOUT SUPPORTING AND PROTECTING SUCH PROPERTY FROM SETTLING, CRACKING, EROSION, SILTING, SCOUR OR OTHER DAMAGE WHICH MIGHT RESULT FROM THE GRADING DESCRIBED ON THIS PLAN. THE COUNTY WILL HOLD THE PERMITTEE RESPONSIBLE FOR CORRECTION OF NONDEDICATED IMPROVEMENTS WHICH DAMAGE ADJACENT PROPERTY.
- SLOPE RATIOS:**  
CUT - 2.0:1 FOR ALL SLOPES (UNLESS OTHERWISE NOTED)  
FILL - 2.0:1 FOR ALL SLOPES (PER GEOTECHNICAL REPORT)  
EXCAVATION: 47,000 C.Y. FILL: 47,000 C.Y.  
WASTE/IMPORT: 0 C.Y.  
A SEPARATE PERMIT MUST BE OBTAINED FOR WASTE OR IMPORT AREA.
- SPECIAL CONDITION:** IF ANY ARCHAEOLOGICAL RESOURCES ARE DISCOVERED ON THE SITE OF THIS GRADING DURING GRADING OPERATIONS, SUCH OPERATIONS WILL CEASE IMMEDIATELY, AND THE PERMITTEE WILL NOTIFY THE DIRECTOR OF PUBLIC WORKS OF THE DISCOVERY. GRADING OPERATIONS WILL NOT RECOMMENCE UNTIL THE PERMITTEE HAS RECEIVED WRITTEN AUTHORITY FROM THE DIRECTOR OF PUBLIC WORKS TO DO SO.
- ALL GRADING DETAILS WILL BE IN ACCORDANCE WITH SAN DIEGO COUNTY STANDARDS DRAWINGS DS-8, DS-10, DS-11, AND D-75.
- THE CONSTRUCTION OF ONE AC STANDARD DRIVEWAY PER LOT, LOCATION TO BE DETERMINED IN THE FIELD BY THE ENGINEER OF WORK. AC SURFACING OF DRIVEWAY TO EXTEND FROM CURB TO PROPERTY LINE. SEE SAN DIEGO COUNTY DESIGN STD. DWG. DS-7.
- ALL NEW AND EXISTING UTILITY DISTRIBUTION FACILITIES, INCLUDING CABLE TELEVISION LINES, WITHIN THE BOUNDARIES OF THE SUBDIVISION OR WITHIN ANY HALF STREET ABUTTING THE SUBDIVISION, SHALL BE PLACED UNDERGROUND IN ACCORDANCE WITH SECTION 81.403(o)(6) OF THE SUBDIVISION ORDINANCE. THE SUBDIVIDER IS RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THIS CONDITION, AND SHALL MAKE THE NECESSARY ARRANGEMENTS WITH EACH OF THE SERVING UTILITIES, INCLUDING LICENSED CABLE TELEVISION OPERATORS, FOR THE INSTALLATION OF SUCH FACILITIES. THE SUBDIVIDER SHALL EITHER PROVIDE THE DEPARTMENT OF PUBLIC WORKS, WITH THE DOCUMENTATION FROM A LICENSED CABLE TELEVISION OPERATOR STATING CABLE TELEVISION SERVICE IS AVAILABLE, OR WITH DOCUMENTATION THAT THE CABLE TELEVISION REVIEW COMMISSION HAS REPORTED THAT NO LICENSED CABLE TELEVISION OPERATOR IS WILLING AND ABLE TO PROVIDE SERVICE TO THE SUBDIVISION.
- THE INSTALLATION (IF REQUIRED) OF ALL GAS, ELECTRIC, SEWER, AND WATER LINES AND ANY OTHER BELOW SURFACE UTILITIES IS TO TAKE PLACE BEFORE THE INSTALLATION OF ANY CONCRETE CURBS, GUTTER, SIDEWALKS, AND THE SURFACING OF THE STREETS.

**CONTRACTOR'S NOTE**

Construction contractor agrees that in accordance with generally accepted construction practices, construction contractor will be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property; that this requirement shall be made to apply continuously and not be limited to normal working hours, and construction contractor further agrees to defend, indemnify and hold County of San Diego harmless from any and all liability, real or alleged, in connection with the performance of work on this project, excepting liability arising from the sole negligence of County of San Diego professional.

**ENGINEER'S NOTE**  
**UNAUTHORIZED CHANGES & USES:**  
The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes to the plans must be in writing and must be approved by the preparer of these plans.  
CELSOC  
Consulting Engineers & Land Surveyors of California  
TOLL FREE 1-800-422-4133  
Two working days before you dig

**IMPORTANT NOTICE**  
Section 4216 of the Government Code requires that a Dig Alert identification Number be issued before a "Permit to Excavate" will be valid. For your Dig Alert ID, Number Call Underground Service Alert  
TOLL FREE 1-800-422-4133  
Two working days before you dig

**SPECIAL NOTES:**

- THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE ENGINEER OF WORK. THE DIRECTOR OF PUBLIC WORKS SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF ANY OF THESE NOTES, AND THE COUNTY WILL NOT BE RESPONSIBLE FOR THEIR ENFORCEMENT.
- 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.
  - LOCATION AND ELEVATION OF IMPROVEMENTS TO BE MET BY WORK TO BE DONE SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK.
  - BEFORE EXCAVATING FOR THIS CONTRACT, VERIFY LOCATION OF UNDERGROUND UTILITIES. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS HAS BEEN OBTAINED FROM AVAILABLE RECORDS ONLY AND MAY NOT REFLECT ALL EXISTING UTILITIES. LOCATIONS OF ALL EXISTING UTILITIES SHALL BE CONFIRMED BY FIELD MEASUREMENTS BY CONTRACTOR PRIOR TO CONSTRUCTION OF WORK.
  - CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN HEREON AND ANY OTHER EXISTING LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
  - WHERE TRENCHES ARE ADJACENT TO FUTURE BUILDING SITES, SOILS REPORTS SHALL BE SUBMITTED TO THE ENGINEER OF WORK BY A QUALIFIED SOILS ENGINEER WHICH CERTIFY THAT TRENCH BACKFILL WAS COMPACTED AS DIRECTED BY THE SOILS ENGINEER IN ACCORDANCE WITH THE ON-SITE EARTHWORK SPECIFICATIONS.
  - DURING ACTIVE CONSTRUCTION, AREAS SHALL BE WATERED TO REDUCE FUGITIVE DUST.
  - CONTRACTOR TO ADJUST ALL PROPOSED AND EXISTING FACILITIES TO GRADE.
  - CONTRACTOR TO REMOVE/REPLACE/RELOCATE ALL EXISTING FACILITIES REQUIRED TO INSTALL PROPOSED IMPROVEMENTS.
  - CONTRACTOR TO REMOVE/REPLACE/RELOCATE ANY LANDSCAPING/HARDSCAPING WHICH CONFLICTS IN ANY WAY WITH THE INSTALLATION OR PROPER FUNCTIONING OF THE PROPOSED IMPROVEMENTS.
  - ALL PROPOSED STORM DRAIN FACILITIES ARE PRIVATE UNLESS OTHERWISE NOTED.
  - TEMPORARY OPEN SPACE FENCING TO BE INSTALLED PRIOR TO GRADING, CLEARING AND/OR GRUBBING, SAID FENCING SHALL REMAIN UNTIL GRADING AND/OR CLEARING AND BRUSHING ARE COMPLETED, AND MUST BE REMOVED UPON COMPLETION OF SUCH ACTIVITIES.

**LEGAL DESCRIPTION**

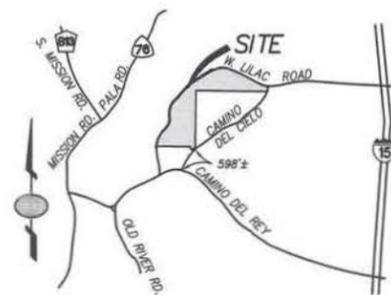
THAT CERTAIN PARCEL OF LAND IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, BEING A PORTION OF SECTION 20 AND 21, TOWNSHIP 10 SOUTH, RANGE 3 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO UNITED STATES GOVERNMENT SURVEY APPROVED DEC. 27, 1870; TOGETHER WITH LOT 1 OF COUNTY OF SAN DIEGO TRACT 3825, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 10396, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, MAY 27, 1982. SAID PARCEL AND SAID LOT 1 HAVE BEEN ADJUSTED PER PLAT NO. BC 04-0069. CERTIFICATE OF COMPLIANCE AS PARCEL B, RECORDED JULY 29, 2004 AS DOCUMENT NO. 2004-0714159 OF OFFICIAL RECORDS.

**ASSESSOR'S PARCEL NUMBER** 126-060-74, 126-060-75  
**TOPOGRAPHY** EXISTING AERIAL TOPOGRAPHY WAS PREPARED BY SAN-LO AERIAL SURVEYS, FLOWN 10-23-98. (CONTOURS SHOWN ON PLAN ARE 2 FOOT INTERVAL.)  
**SITE ADDRESS** CAMINO DEL CIELO - WEST OF INTERSTATE 15  
**OWNER/PERMITTEE** TM 82 ASSOCIATES, LLC, 6191 CORNERSTONE COURT, SUITE 113, SAN DIEGO, CA 92121

<b>RAINBOW MUNICIPAL WATER DISTRICT</b> <b>POTABLE WATER SERVICE APPROVAL</b> (R.M.W.D. # _____) Approved by: _____ R.C.E. _____ Date _____ Job Number _____ Note: Signature Expires 2 Years After Date	
<b>RAINBOW MUNICIPAL WATER DISTRICT</b> <b>SEWER SERVICE APPROVAL</b> (R.M.W.D. # _____) Approved by: _____ R.C.E. _____ Date _____ Job Number _____ Note: Signature Expires 2 Years After Date	
<b>NORTH COUNTY FIRE DISTRICT</b> JOB NUMBER _____ SIGNATURE _____ DATE _____ PRINT NAME: _____	
<b>COUNTY OF SAN DIEGO DEPARTMENT OF PLANNING AND LAND USE</b> APPROVED FOR COMPLIANCE WITH THE ENVIRONMENTAL REVIEW APPROVED BY: _____ DATE: _____	
<b>DECLARATION OF RESPONSIBLE CHARGE</b> 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 THE CURRENT STANDARDS. I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE COUNTY OF SAN DIEGO IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR PROJECT DESIGN. STEVEN C. KETTLER LATITUDE 33 PLANNING AND ENGINEERING 4933 PARAMOUNT DRIVE, 2ND FLOOR, SAN DIEGO, CA, 92123 TELEPHONE: (858) 751-0633 BY: _____ DATE: _____ STEVEN C. KETTLER, R.C.E. 48358 MY REGISTRATION EXPIRES 6-30-2010	

COUNTY OF SAN DIEGO TRACT NO. 5427 RPL<sup>2</sup>

**BONSALL**

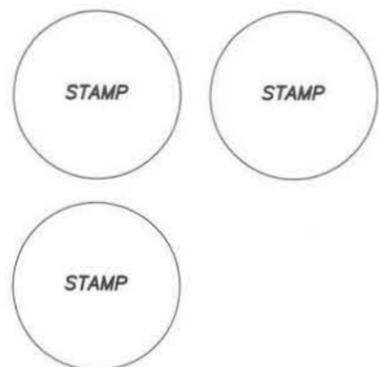


**VICINITY MAP**  
NO SCALE  
THOMAS BROTHERS 1048/B7

**SOILS ENGINEER'S CERTIFICATE**

THESE GRADING PLANS HAVE BEEN REVIEWED BY THE UNDERSIGNED AND FOUND TO BE IN CONFORMANCE WITH THE RECOMMENDATIONS AS OUTLINED IN OUR SOILS AND GEOTECHNICAL REPORTS FOR THIS PROJECT ENTITLED: GEOTECHNICAL INVESTIGATION FOR TOPMARK-BONSALL PROPERTY, COUNTY OF SAN DIEGO, TRACT TM 5427 RPL, SAN DIEGO COUNTY, CALIFORNIA. PREPARED BY: GECCON INCORPORATED, DATED: JULY 23, 2008

BY: \_\_\_\_\_ R.C.E. 63773  
DATE: \_\_\_\_\_ EXP. 09-30-08  
NAME: TREVOR E. MYERS  
BY: \_\_\_\_\_ C.E.G. 2408  
DATE: \_\_\_\_\_ EXP. \_\_\_\_\_  
NAME: TROY K. REIST  
BY: \_\_\_\_\_ C.E.G. 1860  
DATE: \_\_\_\_\_ EXP. \_\_\_\_\_  
NAME: DAVID B. EVANS



**OWNER'S/PERMITTEE'S**

NAME: TM 82 ASSOCIATES, LLC  
ADDRESS: 6191 CORNERSTONE COURT E, SUITE 113, SAN DIEGO, CA 92121  
TELEPHONE NO.: (858) 452-2521  
SHORT LEGAL DESCRIPTION: PORTION 20 & 21, T10S R3W, SB, AND LOT 1 OF TRACT 3825  
SITE ADDRESS: CAMINO DEL CIELO - WEST OF INTERSTATE 15  
THOMAS BROS. 1048, B7  
A.P.N. NO. 126-060-77, 126-430-01

**Latitude 33**  
Planning and Engineering  
4933 Paramount Dr. 2nd Flr.  
San Diego, Ca. 92123  
Tel 858-751-0633 Fax 858-751-0634

DESIGNED BY: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_

BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
STEVEN C. KETTLER, R.C.E. 48358  
MY REGISTRATION EXPIRES 6-30-2010



**KEY MAP**  
NO SCALE

**KEY MAP LEGEND**

PROJECT BOUNDARY - - - - -  
LOT LINE - - - - -  
LOT NO. 1  
NOTE: FOR INDEX MAP SEE SHEET NO. 2

**SHEET INDEX**

- SHEET 1 GRADING TITLE SHEET
- SHEET 2 SECTIONS AND DETAILS
- SHEET 3-4 GRADING PLANS
- SHEET 5 EROSION CONTROL NOTES & DETAILS
- SHEET 6 EROSION CONTROL PLAN
- SHEET 7-8 SLOPE IRRIGATION PLANS
- SHEET 9 IRRIGATION LEGEND
- SHEET 10-12 IRRIGATION DETAILS & NOTES
- SHEET 13-15 IRRIGATION SPECIFICATIONS
- SHEET 16-17 IRRIGATION CALCULATIONS
- SHEET 18-19 SLOPE PLANTING PLANS
- SHEET 20-21 FUEL MANAGEMENT PLANS
- SHEET 22 PLANTING LEGEND, DETAILS, NOTES & SPECIFICATIONS
- SHEET 23 RETAINING WALL SPECIFICATIONS AND DETAILS
- SHEET 24 RETAINING WALL PLAN AND SECTIONS

**OWNER'S CERTIFICATE**

IT IS AGREED THAT FIELD CONDITIONS MAY REQUIRE CHANGES TO THESE PLANS.  
IT IS FURTHER AGREED THAT THE OWNER (DEVELOPER) SHALL HAVE A REGISTERED CIVIL ENGINEER MAKE SUCH CHANGES, ALTERATIONS OR ADDITIONS TO THESE PLANS WHICH THE DIRECTOR OF PUBLIC WORKS DETERMINES ARE NECESSARY AND DESIRABLE FOR THE PROPER COMPLETION OF IMPROVEMENTS.  
I HEREBY AGREE TO COMMENCE WORK ON ANY IMPROVEMENTS SHOWN ON THESE PLANS WITHIN EXISTING COUNTY RIGHT-OF-WAY WITHIN 60 DAYS AFTER ISSUANCE OF THE CONSTRUCTION PERMIT AND TO PURSUE SUCH WORK ACTIVITY ON EVERY NORMAL WORKING DAY UNTIL COMPLETED, IRRESPECTIVE AND INDEPENDENT OF ANY OTHER WORK ASSOCIATED WITH THIS PROJECT OR UNDER MY CONTROL.

BY: STEVEN P. DELANEY DATE \_\_\_\_\_  
TITLE: CHIEF EXECUTIVE OFFICER

**SOLAR CERTIFICATE**

I CERTIFY THAT THIS GRADING PLAN HAS RESERVED A MINIMUM OF ONE HUNDRED (100) SQUARE FEET OF SOLAR ACCESS FOR EACH LOT CREATED BY THIS SUBDIVISION PURSUANT TO SECTION 81.401(m) OF THE SUBDIVISION ORDINANCE.

BY: STEVEN C. KETTLER, R.C.E. 48358 DATE \_\_\_\_\_  
LATITUDE 33 PLANNING AND ENGINEERING



**WORK TO BE DONE**

GRADING AND DRAINAGE WORK CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS, THE CURRENT SAN DIEGO COUNTY DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS FOR IMPROVEMENT OF SUBDIVISION STREETS AND STANDARD REFERENCE DRAWINGS.

**STANDARD DRAWINGS**

- SAN DIEGO REGIONAL STANDARD DRAWINGS (S.D.R.S.D.), DOCUMENT NO. AEC1231063, DATED DECEMBER 31, 2006.

**LEGEND**

ITEM	STD. DWG. NO.	SYMBOL
SUBDIVISION BOUNDARY		---
EASEMENT LINE		---
EXISTING STORM DRAIN		---
EXISTING DRAINAGE STRUCTURE		---
EXISTING BROW DITCH		---
EXISTING SPOT ELEVATIONS		(1074.0)
EXISTING CONTOURS		1310
LOT NUMBER		1
PROPOSED PAD ELEVATION		(205)
PROPOSED SLOPES (2:1 MAX. CUT/FILL, UNLESS NOTED OTHERWISE)		---
PROPOSED CONTOURS		---
CUT / FILL LINE		---
DAYLIGHT LINE		---
PROPOSED BROW DITCHES (TYPE 'B' & 'D')	D-75	---
PROPOSED RIP RAP APRON (SIZE PER PLAN)	D-40	---
PROPOSED EARTHEN SWALE	(SEE DETAIL - SHEET 2)	---
PROPOSED SPOT ELEVATIONS		1100.50
PROPOSED FLOW LINE ELEVATIONS HIGH POINT		1200.0
PROPOSED FLOW LINE ELEVATIONS LOW POINT		1195.4
PROPOSED STORM DRAIN PIPE (PRIVATE)	D-60, D-61	---
PROPOSED TYPE "A-4" CLEANOUT (PRIVATE)	D-8, D-11	---
PROPOSED TYPE "B" CURB INLET WITH FOSSIL FILTERS (PRIVATE)	SDG-100, SDG-110, D-2, D-11, D-12, D-61	---
PROPOSED CURB OUTLET	D-25	---
PROPOSED TYPE "G" CATCH BASIN (PRIVATE)	D-8, D-11, D-15	---
PROPOSED 4' HIGH SPLIT RAIL FENCE		---
PROPOSED 8' HIGH TEMPORARY CONSTRUCTION WALLS		---
PROPOSED SDSRD RETAINING WALLS	C-5, C-7 & C-8	---
PROPOSED STRUCTURAL RETAINING WALLS (WHERE NOTED)		---
(SPECIAL DRAWING - SEE SHEETS 23 & 24)		

**COUNTY APPROVED CHANGES**

NO.	DESCRIPTION	APPROVED BY	DATE

**PERMITS**

SITE PLAN PERMIT NO.	SOS-027
REZONE PERMIT NO.	RGS-008
SPECIAL USE PERMIT NO.	N/A
TENTATIVE MAP NO.	TM 5427RPL <sup>1</sup>
N.O.I. #	TBD
HABITAT LOSS PERMIT	N/A

**BENCH MARK**  
DESCRIPTION: BRASS DISC STAMPED "E 228 1968" SET ON A STEEL ROD  
LOCATION: MISSION ROAD  
RECORD FROM: COUNTY OF SAN DIEGO ROS 17292  
ELEVATION: 195.42 DATUM: M.S.L.

**PRIVATE CONTRACT**

SHEET 1 OF 24 SHEETS  
COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS  
GRADING PLANS FOR: **BONSALL**  
LOTS 1 & 2, TM 5427 RPL<sup>2</sup>  
CALIFORNIA COORDINATE INDEX 410-1707  
Approved By: MOHAMMAD FAKHRIDDINE FOR COUNTY ENGINEER  
By: \_\_\_\_\_  
Engineer of work: STEVEN C. KETTLER  
R.C.E. 48358  
Grading Permit No. **L-15450**

**SPECIFIC ENVIRONMENTAL NOTES**

- BIOLOGICAL**
- PRIOR TO THE COMMENCEMENT OF ANY GRADING AND OR CLEARING IN ASSOCIATION WITH THIS GRADING PLAN, TEMPORARY ORANGE CONSTRUCTION FENCING SHALL BE PLACED TO PROTECT FROM INADVERTENT DISTURBANCE OF ALL OPEN SPACE EASEMENTS THAT DO NOT ALLOW GRADING, BRUSHING OR CLEARING. TEMPORARY FENCING IS ALSO REQUIRED IN ALL LOCATIONS OF THE PROJECT WHERE PROPOSED GRADING OR CLEARING IS WITHIN 100 FEET OF AN OPEN SPACE EASEMENT BOUNDARY. THE TEMPORARY FENCING SHALL BE REMOVED AFTER THE CONCLUSION OF SUCH ACTIVITY.
  - RESTRICT ALL BRUSHING, CLEARING AND/OR GRADING SUCH THAT NONE WILL BE ALLOWED WITHIN 300 FEET OF NATIVE OR NATURALIZED HABITAT DURING THE BREEDING SEASON FOR LISTED AN OR MIGRATORY BIRD SPECIES. THIS IS DEFINED AS OCCURRING BETWEEN FEBRUARY 1ST TO SEPTEMBER 15TH. THE DIRECTOR OF PLANNING AND LAND USE MAY WAIVE THIS CONDITION, THROUGH WRITTEN CONCURRENCE FROM THE US FISH AND WILDLIFE SERVICES AND THE CALIFORNIA DEPARTMENT OF FISH AND GAME, THAT NO ACTIVE BIRD NESTS ARE PRESENT IN THE VICINITY OF THE BRUSHING, CLEARING OR GRADING BASED ON A FIELD SURVEY COMPLETED WITHIN ONE WEEK OF THE PROPOSED ONSET OF GROUND DISTURBANCE.
  - PRIOR TO THE CONCLUSION OF GRADING ACTIVITIES AND FINAL GRADING RELEASE, PROVIDE EVIDENCE TO THE SATISFACTION OF THE DIRECTOR OF PLANNING AND LAND USE THAT THE PERMANENT FENCES OR WALLS, AND OPEN SPACE SIGNS HAVE BEEN PLACED ALONG THE BIOLOGICAL OPEN SPACE BOUNDARIES AS SHOWN ON THESE PLANS AND THE OPEN SPACE FENCING AND SIGNAGE PLAN IN THE BIOLOGICAL REPORT DATED OCTOBER 2006 ON FILE WITH THE DEPARTMENT OF PLANNING AND LAND USE AS ENVIRONMENTAL REVIEW NUMBER 05-02-013.
    - EVIDENCE SHALL BE SITE PHOTOS AND A STATEMENT FROM A CALIFORNIA REGISTERED ENGINEER, OR LICENSED SURVEYOR THAT THE PERMANENT WALLS OR FENCES, AND OPEN SPACE SIGNS HAVE BEEN INSTALLED.
    - THE SIGNS MUST BE CORROSION RESISTANT, MINIMUM OF 6"X9" IN SIZE, ON POSTS NOT LESS THAN THREE (3) FEET IN HEIGHT FROM THE GROUND SURFACE AND MUST STATE THE FOLLOWING:
 

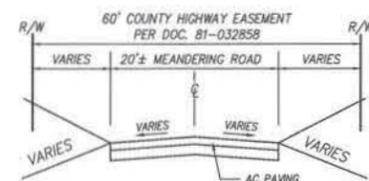
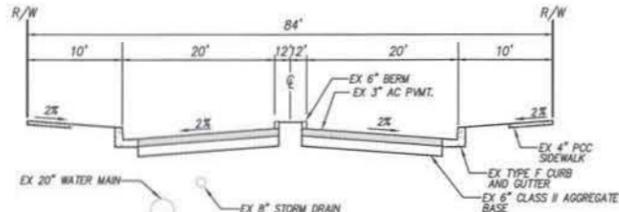
**"SENSITIVE ENVIRONMENTAL RESOURCES"**  
DISTURBANCE BEYOND THIS POINT IS RESTRICTED BY EASEMENT INFORMATION: CONTACT COUNTY OF SAN DIEGO, DEPARTMENT OF PLANNING AND LAND USE. REF: 05-02-013
  - THE GRADING PLANS, SHALL INDICATE PERMANENT FENCES OR WALLS ALONG THE OPEN SPACE BOUNDARIES AS SHOWN ON THE OPEN SPACE FENCING AND SIGNAGE PLAN IN THE BIOLOGICAL REPORT DATED OCTOBER 2006 ON FILE WITH THE DEPARTMENT OF PLANNING AND LAND USE AS ENVIRONMENTAL REVIEW NUMBER 05-02-013. THE FENCE OR WALL SHALL BE A MINIMUM OF FOUR FEET (4') HIGH AND CONSIST OF SPLIT RAIL. ANY CHANGE IN CONSTRUCTION MATERIALS AND FENCE OR WALL DESIGN SHALL BE APPROVED BY THE DEPARTMENT OF PLANNING AND LAND USE PRIOR TO INSTALLATION.
  - THE GRADING, AND OR IMPROVEMENT PLANS SHALL INDICATE OPEN SPACE SIGNS PLACED EVERY 100' ALONG THE OPEN SPACE BOUNDARIES AS SHOWN ON THE OPEN SPACE FENCING AND SIGNAGE PLAN IN THE BIOLOGICAL REPORT DATED OCTOBER 2006 ON FILE WITH THE DEPARTMENT OF PLANNING AND LAND USE AS ENVIRONMENTAL REVIEW NUMBER 05-02-013. THE SIGNS MUST BE CORROSION RESISTANT, A MINIMUM OF 6"X9" IN SIZE, ON POSTS NOT LESS THAN THREE (3) FEET IN HEIGHT FROM THE GROUND SURFACE, AND MUST STATE THE FOLLOWING:
 

**"SENSITIVE ENVIRONMENTAL RESOURCES"**  
DISTURBANCE BEYOND THIS POINT IS RESTRICTED BY EASEMENT INFORMATION: CONTACT COUNTY OF SAN DIEGO, DEPARTMENT OF PLANNING AND LAND USE. REF: 05-02-013
- CULTURAL**
- THE COUNTY CERTIFIED PROJECT ARCHAEOLOGIST (AND, IF ALSO CONTRACTED, THE NATIVE AMERICAN MONITOR) SHALL ATTEND THE PRE-CONSTRUCTION MEETING WITH THE CONTRACTORS TO EXPLAIN AND COORDINATE THE REQUIREMENTS OF THE MONITORING PROGRAM.
  - THE PROJECT ARCHAEOLOGIST SHALL MONITOR ALL AREAS IDENTIFIED FOR DEVELOPMENT INCLUDING OFF-SITE IMPROVEMENTS.
  - DURING THE ORIGINAL CUTTING OF PREVIOUSLY UNDISTURBED DEPOSITS, THE PROJECT ARCHAEOLOGIST AND NATIVE AMERICAN MONITOR SHALL BE ON-SITE AS DETERMINED NECESSARY BY THE PROJECT ARCHAEOLOGIST. INSPECTIONS WILL VARY BASED ON THE RATE OF EXCAVATION, THE MATERIALS EXCAVATED, AND THE PRESENCE AND ABUNDANCE OF ARTIFACTS AND FEATURES. THE FREQUENCY AND LOCATION OF INSPECTIONS WILL BE DETERMINED BY THE PROJECT ARCHAEOLOGIST IN CONSULTATION WITH THE NATIVE AMERICAN MONITOR. MONITORING OF CUTTING OF PREVIOUSLY DISTURBED DEPOSITS WILL BE DETERMINED BY THE PROJECT ARCHAEOLOGIST.
  - IN THE EVENT THAT PREVIOUSLY UNIDENTIFIED POTENTIALLY SIGNIFICANT CULTURAL RESOURCES ARE DISCOVERED, THE PROJECT ARCHAEOLOGIST SHALL HAVE THE AUTHORITY TO DIVERT OR TEMPORARILY HALT GROUND DISTURBANCE OPERATIONS IN THE AREA OF DISCOVERY TO ALLOW EVALUATION OF POTENTIALLY SIGNIFICANT CULTURAL RESOURCES. THE PROJECT ARCHAEOLOGIST SHALL CONTACT THE COUNTY STAFF DESIGNATED BY THE DIRECTOR OF PLANNING AND LAND USE AT THE TIME OF DISCOVERY. THE PROJECT ARCHAEOLOGIST, IN CONSULTATION WITH THE DESIGNATED COUNTY STAFF, SHALL DETERMINE THE SIGNIFICANCE OF THE DISCOVERED RESOURCES. THE DESIGNATED COUNTY STAFF MUST CONCUR WITH THE EVALUATION BEFORE CONSTRUCTION ACTIVITIES WILL BE ALLOWED TO RESUME IN THE AFFECTED AREA. FOR SIGNIFICANT CULTURAL RESOURCES, A RESEARCH DESIGN AND DATA RECOVERY PROGRAM TO MITIGATE IMPACTS SHALL BE PREPARED BY THE PROJECT ARCHAEOLOGIST AND APPROVED BY THE DESIGNATED COUNTY STAFF, THEN CARRIED OUT USING PROFESSIONAL ARCHAEOLOGICAL METHODS.
  - THE PROJECT ARCHAEOLOGIST (AND NATIVE AMERICAN MONITOR, IF CONTRACTED) SHALL MONITOR ALL AREAS IDENTIFIED FOR DEVELOPMENT.
  - IF ANY HUMAN BONES ARE DISCOVERED, THE PROJECT ARCHAEOLOGIST SHALL CONTACT THE COUNTY CORONER. IN THE EVENT THAT THE REMAINS ARE DETERMINED TO BE A NATIVE AMERICAN ORIGIN, THE MOST LIKELY DESCENDANT, AS IDENTIFIED BY THE NATIVE AMERICAN HERITAGE COMMISSION, SHALL BE CONTACTED BY THE PROJECT ARCHAEOLOGIST IN ORDER TO DETERMINE PROPER TREATMENT AND DISPOSITION OF THE REMAINS.
  - THE PROJECT ARCHAEOLOGIST SHALL SUBMIT MONTHLY STATUS REPORTS TO THE DIRECTOR OF PLANNING AND LAND USE STARTING FROM THE DATE OF THE NOTICE TO PROCEED TO TERMINATION OF IMPLEMENTATION OF THE GRADING MONITORING PROGRAM. THE REPORTS SHALL BRIEFLY SUMMARIZE ALL ACTIVITIES DURING THE PERIOD AND THE STATUS OF PROGRESS ON OVERALL PLAN IMPLEMENTATION. UPON COMPLETION OF THE IMPLEMENTATION PHASE, A FINAL REPORT SHALL BE SUBMITTED DESCRIBING THE PLAN COMPLIANCE PROCEDURES AND SITE CONDITIONS BEFORE AND AFTER CONSTRUCTION. (NOTE: USE THIS CONDITION ONLY IF GRADING WILL TAKE MORE THAN 1 MONTH.
  - PRIOR TO ROUGH GRADING INSPECTION SIGN-OFF FOR EACH PHASE, PROVIDE EVIDENCE THAT THE FIELD GRADING MONITORING ACTIVITIES HAVE BEEN COMPLETED TO THE SATISFACTION OF THE DIRECTOR OF PLANNING AND LAND USE. EVIDENCE SHALL BE IN THE FORM OF A LETTER FROM THE PROJECT ARCHAEOLOGIST.

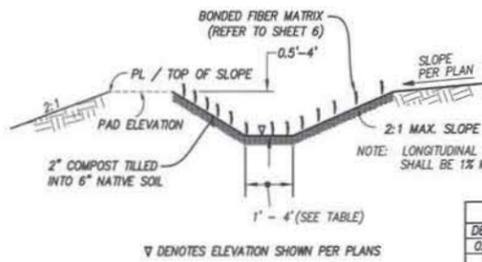
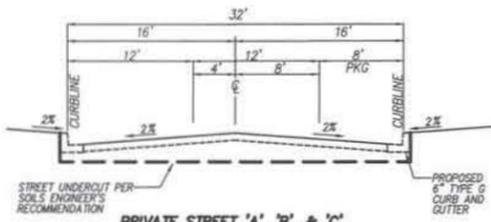
**SPECIFIC ENVIRONMENTAL NOTES (CONT.)**

- PRIOR TO FINAL GRADING RELEASE FOR EACH PHASE, SUBMIT TO THE SATISFACTION OF THE DIRECTOR OF PLANNING AND LAND USE, A FINAL REPORT THAT DOCUMENTS THE RESULTS, ANALYSIS, AND CONCLUSIONS OF ALL PHASES OF THE ARCHAEOLOGICAL MONITORING PROGRAM. THE REPORT SHALL INCLUDE THE FOLLOWING:
    - DEPARTMENT OF PARKS AND RECREATION PRIMARY AND ARCHAEOLOGICAL SITE FORMS.
    - EVIDENCE THAT ALL CULTURAL COLLECTED DURING THE GRADING MONITORING PROGRAM HAS BEEN CURATED AT A SAN DIEGO FACILITY THAT MEETS FEDERAL STANDARDS PER 36 CFR PART 79, AND THEREFORE WOULD BE PROFESSIONAL CURATED AND MADE AVAILABLE TO OTHER ARCHAEOLOGISTS/RESEARCHERS FOR FURTHER STUDY. THE COLLECTIONS AND ASSOCIATED RECORDS SHALL BE TRANSFERRED, INCLUDING TITLE, TO AN APPROPRIATE CURATION FACILITY WITHIN SAN DIEGO COUNTY. TO BE ACCOMPANIED BY PAYMENT OF THE FEES NECESSARY FOR PERMANENT CURATION. EVIDENCE SHALL BE IN THE FORM OF A LETTER FROM CURATION FACILITY IDENTIFYING THAT ARCHAEOLOGICAL MATERIALS HAVE BEEN RECEIVED AND THAT ALL FEES HAVE BEEN PAID.

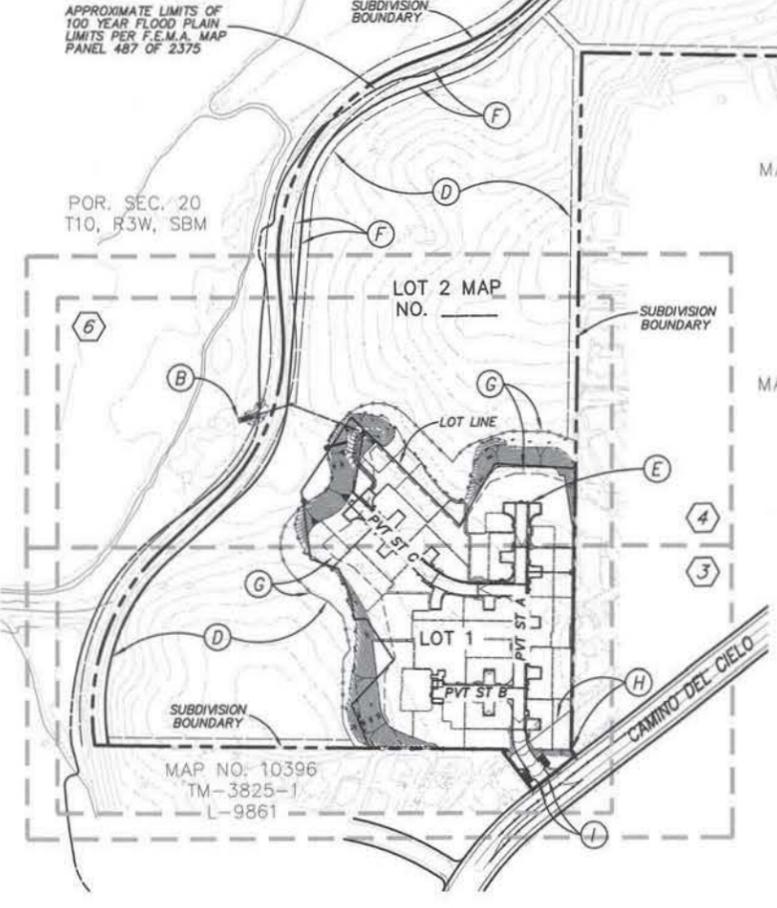
IN THE EVENT THAT NO CULTURAL RESOURCES ARE DISCOVERED, A BRIEF LETTER TO THAT EFFECT SHALL BE SENT TO THE DIRECTOR OF PLANNING AND LAND USE BY THE PROJECT ARCHAEOLOGIST THAT THE GRADING MONITORING ACTIVITIES HAVE BEEN COMPLETED.
  - PRIOR TO PRECONSTRUCTION CONFERENCE AND GRADING ACTIVITIES, PROVIDE EVIDENCE TO THE SATISFACTION OF THE DIRECTOR OF PLANNING AND LAND USE THAT THE TEMPORARY CONSTRUCTION NOISE BARRIER HAS BEEN CONSTRUCTED ALONG THE SOUTHERN AND EASTERN BOUNDARIES OF THE PROJECT SITE, PURSUANT TO THE APPROVED GRADING PLAN. EVIDENCE OF THE WALL SHALL CONSIST OF THE FOLLOWING: A SIGNED, STAMPED STATEMENT FROM A CALIFORNIA REGISTERED ENGINEER, LICENSED SURVEYOR OR COUNTY APPROVED NOISE CONSULTANT AND PHOTOGRAPHIC EVIDENCE THAT THE NOISE WALL HAS BEEN CONSTRUCTED.
  - A TEMPORARY CONSTRUCTION NOISE BARRIER SHALL BE SHOWN ON THE GRADING PLANS. THE TEMPORARY WALL SHALL BE PLACED ALONG THE SOUTHERN AND EASTERN BOUNDARIES OF THE PROJECT SITE WILL BE EIGHT FEET (8') HIGH WITH A MINIMUM SURFACE DENSITY OF 3 POUNDS PER SQUARE FOOT, CONSISTING OF PLYWOOD, MASONRY, WOOD, BERM, PLASTIC, FIBERGLASS, STEEL, OR A COMBINATION OF THESE MATERIALS WITH NO CRACKS OR GAPS THROUGH OR BELOW THE WALL. IF WOOD IS USED, TEMPORARY BARRIER DESIGN SHALL INCORPORATE TONGUE AND GROOVE WITH A MINIMUM THICKNESS OF 7/8" OF AN INCH.
- TEMPORARY CONSTRUCTION NOISE BARRIER DETAILS AND LOCATION ARE SHOWN ON SECTION: PROJECT IMPACTS AND PHASES IN THE NOISE REPORT PREPARED BY LSA RECEIVED ON DECEMBER 18, 2007. THE TEMPORARY CONSTRUCTION NOISE BARRIER LOCATED ALONG THE SOUTHERN AND EASTERN BOUNDARIES OF THE PROJECT SITE WILL REMAIN DURING THE GRADING PHASES. NOISE REPORT IS ON FILE WITH THE DEPARTMENT OF PLANNING AND LAND USE AS CASE NUMBER TENTATIVE PARCEL MAP TM5427."



TYPICAL STREET SECTIONS (EXISTING)  
NO SCALE



EARTHEN SWALE			
DEPTH	WIDTH	SLOPE	RATIO
0.5'-1'	1'	2:1	MAX
2'	2'	-	-
3'	3'	-	-
4'	4'	-	-

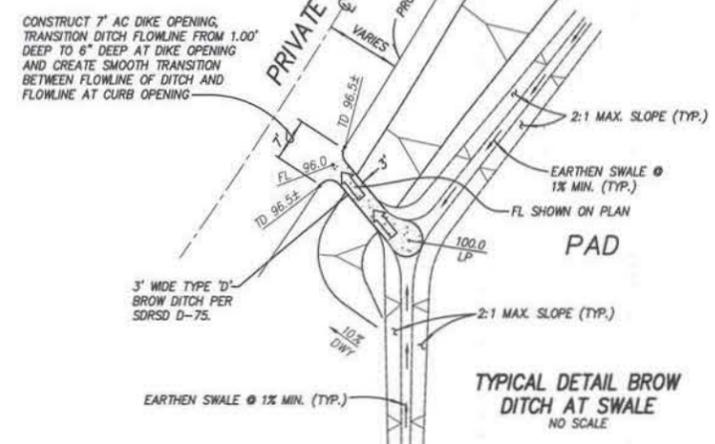


**KEY/INDEX MAP LEGEND**

- PROJECT BOUNDARY
- LOT LINE
- 100-YR. FLOOD LINE
- EXIST. EASEMENT LINE
- PROP. EASEMENT LINE
- LOT NO.
- PLAN SHEET
- PLAN SHEET NO.

**EASEMENTS**

- 60' EASEMENT FOR PUBLIC HIGHWAY AND INCIDENTAL PURPOSES GRANTED TO THE COUNTY OF SAN DIEGO PER DOC 81-032858 RECORDED 02-02-81.
- 10' PUBLIC STORM DRAIN EASEMENT PER SEPARATE DOCUMENT
- 20' TRAIL EASEMENT PER SEPARATE DOCUMENT
- OPEN SPACE EASEMENT PER SEPARATE DOCUMENT
- 32' WATER AND SEWER EASEMENT PER FINAL MAP
- PORTIONS OF WEST LILAC ROAD DEDICATED PER SEPARATE DOCUMENT
- LIMITED BUILDING ZONE EASEMENT PER SEPARATE DOCUMENT
- NOISE EASEMENT PER FINAL MAP
- RIGHT-OF-WAY DEDICATION PER FINAL MAP



**OWNER'S/PERMITEE'S**

NAME: TM B2 ASSOCIATES, LLC.  
ADDRESS: 6191 CORNERSTONE COURT E, SUITE 113  
SAN DIEGO, CA 92121  
TELEPHONE NO: (858) 452-2521  
SHORT LEGAL DESCRIPTION: LOTS 1 AND 2 OF TM 5427 RPL2  
SITE ADDRESS: CAMINO DEL CIELO - WEST OF INTERSTATE 15  
THOMAS BROS. 104B, B7  
A.P.N. NO. 126-060-77, 126-430-01

**Latitude 33**  
Planning and Engineering  
4933 Paramount Dr. 2nd Fl.  
San Diego, Ca. 92123  
Tel 658-751-0633 Fax 658-751-0634

DESIGNED BY: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_

BY: STEVEN C. KETTLER, R.C.E. 48358  
DATE: \_\_\_\_\_  
MY REGISTRATION EXPIRES 6-30-2010

COUNTY APPROVED CHANGES			
NO.	DESCRIPTION	APPROVED BY	DATE

**PERMITS**

SITE PLAN PERMIT NO. S05-027  
REZONE PERMIT NO. R05-006  
SPECIAL USE PERMIT NO. N/A  
TENTATIVE MAP NO. TM 5427RPL2  
N.O.I. # TBO  
HABITAT LOSS PERMIT N/A

**BENCH MARK**

DESCRIPTION: BRASS DISC STAMPED "1E 228 1988" SET ON A STEEL ROD  
LOCATION: MISSION ROAD  
RECORD FROM: COUNTY OF SAN DIEGO ROS 17282  
ELEVATION: 195.42 DATUM: M.S.L.

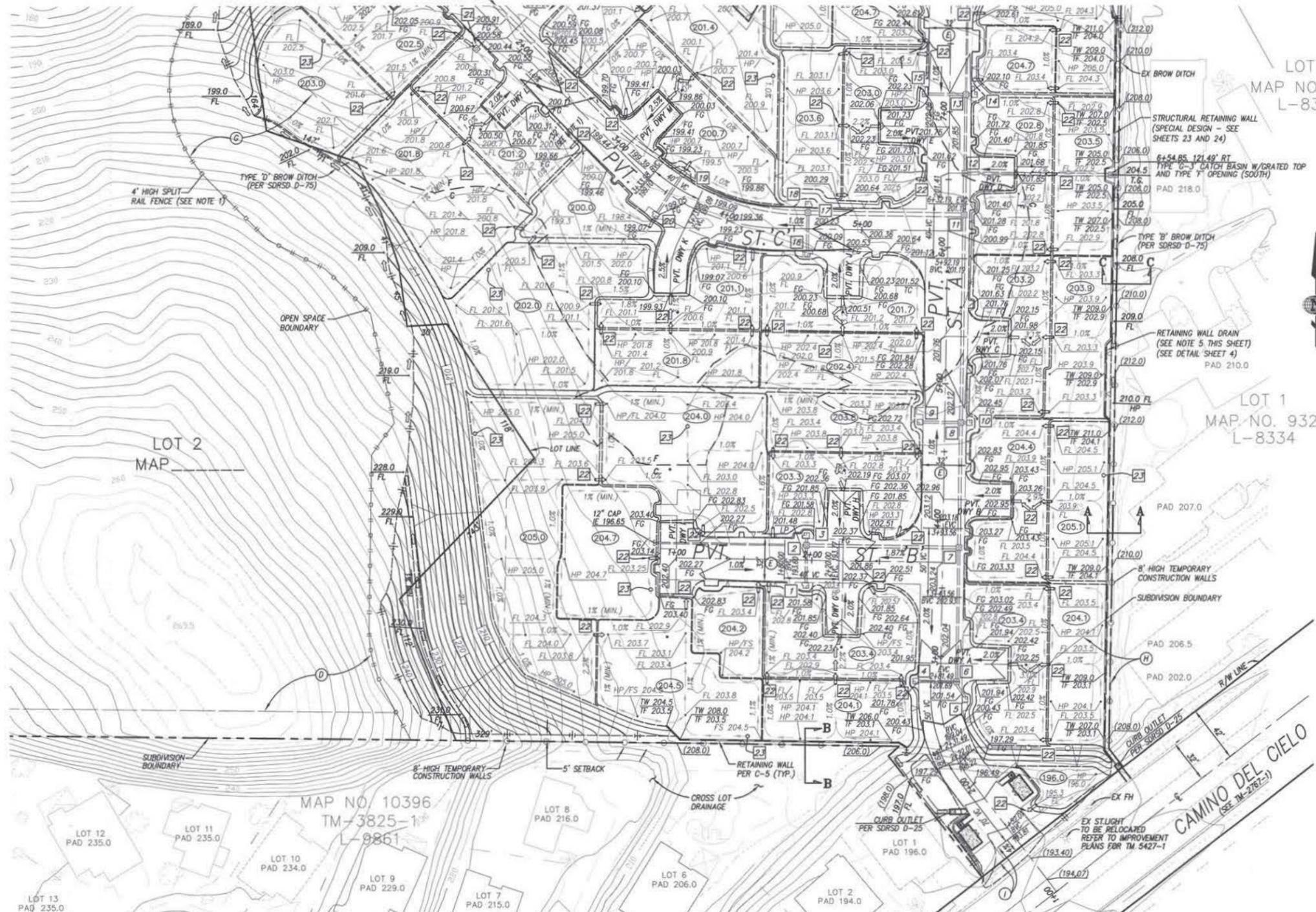
**PRIVATE CONTRACT**

SHEET 2 COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS 24 SHEETS

GRADING PLANS FOR: **BONSALL**  
LOTS 1 & 2, TM 5427 RPL2  
CALIFORNIA COORDINATE INDEX 410-1707

Approved By: MICHAEL F. HERRIDINE FOR COUNTY ENGINEER  
By: \_\_\_\_\_  
Engineer of work: STEVEN C. KETTLER  
R.C.E. 48358  
Grading Permit No. L-15450

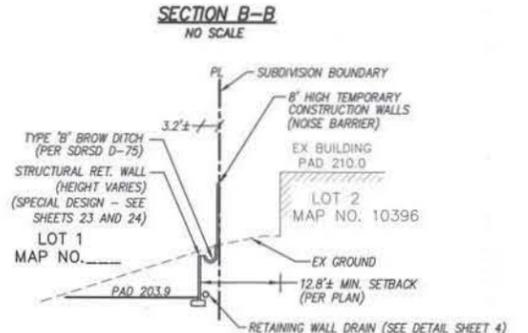
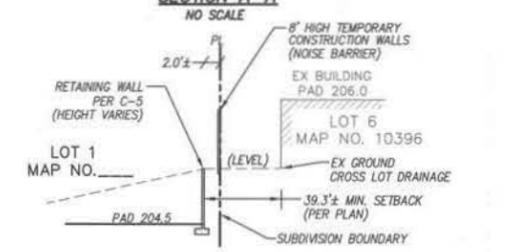
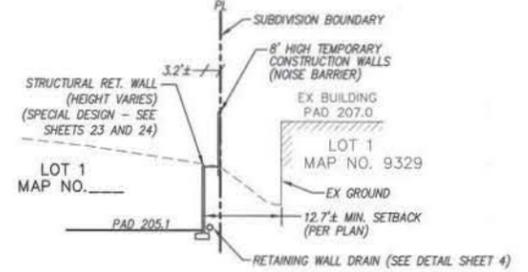
(SEE SHEET 4)



LOT 2  
MAP NO. 9329  
L-8334

LOT 1  
MAP NO. 9329  
L-8334

MAP NO 10396  
TM-3825-1  
L-9861



**NOTES**

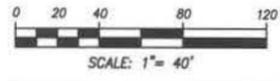
- OPEN SPACE SIGNAGE WILL BE POSTED ON THE FENCE AT LEAST EVERY 100 FEET.
- SIGNS MUST BE CORROSION RESISTANT, MINIMUM OF 6"x9" IN SIZE, ON POSTS NOT LESS THAN 3 FEET IN HEIGHT FROM THE GROUND SURFACE AND STATE THE FOLLOWING:  
 "SENSITIVE ENVIRONMENTAL RESOURCES"  
 DISTURBANCE BEYOND THIS POINT IS RESTRICTED  
 BY EASEMENT INFORMATION:  
 CONTACT COUNTY OF SAN DIEGO, DEPARTMENT OF PLANNING AND LAND USE  
 REF: 05-02-013
- A TEMPORARY CONSTRUCTION NOISE BARRIER WILL BE PLACED ALONG THE SOUTHERN AND EASTERN BOUNDARIES OF THE PROJECT SITE BEING EIGHT FEET HIGH WITHIN A MINIMUM SURFACE DENSITY OF 3 POUNDS PER SQUARE FOOT, CONSISTING OF PLYWOOD, MASONRY, WOOD, BERM, PLASTIC, FIBERGLASS, STEEL OR A COMBINATION OF THESE MATERIALS WITH NO CRACKS OR GAPS THROUGH OR BELOW THE WALL. IF WOOD IS USED, TEMPORARY BARRIER DESIGN SHALL INCORPORATE TONGUE AND GROOVE WITH A MINIMUM THICKNESS OF 7/8 OF AN INCH.
- THE TEMPORARY CONSTRUCTION NOISE BARRIER SHALL REMAIN DURING CONSTRUCTION.
- FOR STREET AND DRAINAGE IMPROVEMENTS SEE IMPROVEMENT PLANS TM 5427-1.
- FOR SEWER AND WATER IMPROVEMENTS SEE IMPROVEMENT PLANS TM 5427-1.
- THE PVT. STREETS AND STORM DRAIN FACILITIES SHOWN HEREON WILL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION PER CC&R'S.

**EASEMENTS**

- (D) OPEN SPACE EASEMENT PER DOC. NO. \_\_\_\_\_ RECORDED \_\_\_\_\_ O.R.
- (E) PUBLIC SEWER AND WATER EASEMENT (WIDTH VARIES) PER FINAL MAP
- (G) LIMITED BUILDING ZONE EASEMENT PER DOC. NO. \_\_\_\_\_ RECORDED \_\_\_\_\_ O.R.
- (H) NOISE EASEMENT PER FINAL MAP
- (I) RIGHT-OF-WAY DEDICATION PER FINAL MAP

**CONSTRUCTION NOTES**

- INSTALL TYPE "B-1" CURB INLET, L=6' STA 1+96.00, 16.25' LT STREET "B"
- INSTALL TYPE "A-4" C.O. STA 1+96.00, 11.0' RT STREET "B"
- INSTALL TYPE "B-1" CURB INLET, L=6' STA 1+96.00, 16.25' RT STREET "B"
- INSTALL TYPE "B-1" CURB INLET, L=4' STA 2+81.43, 16.25' LT STREET "A"
- INSTALL TYPE "B-1" CURB INLET, L=4' STA 2+87.37, 16.25' RT STREET "A"
- INSTALL TYPE "A-4" C.O. STA 2+81.43, 12.0' RT STREET "A"
- INSTALL TYPE "A-4" C.O. STA 3+79.56, 12.0' RT STREET "A"
- INSTALL TYPE "A-4" C.O. STA 3+08.61, 11.0' LT STREET "B"
- INSTALL TYPE "A-4" C.O. STA 4+71.48, 12.0' RT STREET "A"
- INSTALL TYPE "B-1" CURB INLET, L=4' STA 4+71.48, 16.25' LT STREET "A"
- INSTALL TYPE "A-4" C.O. STA 6+24.19, 12.0' RT STREET "A"
- INSTALL TYPE "A-4" C.O. STA 5+75.49, 11.0' LT STREET "C"
- INSTALL TYPE "A-4" C.O. STA 6+54.85, 12.0' RT STREET "A"
- INSTALL TYPE "A-4" C.O. STA 7+12.86, 12.0' RT STREET "A"
- INSTALL TYPE "B-1" CURB INLET, L=9' STA 7+12.86, 16.25' RT STREET "A"
- INSTALL TYPE "B-1" CURB INLET, L=8' STA 7+12.86, 16.25' LT STREET "A"
- INSTALL TYPE "B-1" CURB INLET, L=7' STA 4+60.06, 16.25' RT STREET "C"
- INSTALL TYPE "A-4" C.O. STA 4+60.06, 12' LT STREET "C"
- INSTALL TYPE "B-1" CURB INLET, L=6' STA 4+60.06, 16.25' RT STREET "A"
- INSTALL TYPE "B-1" CURB INLET, L=4' STA 3+53.00, 16.25' RT STREET "C"
- INSTALL TYPE "B-1" CURB INLET, L=4' STA 3+53.00, 16.25' RT STREET "C" W/TYPE "F" OPENING (NORTH), FL IN=197.63
- INSTALL TYPE "A-4" C.O. STA 1+76.11, 21.72' RT STREET "C" FL IN=200.3
- INSTALL TYPE "F" CATCH BASIN STA 1+76.11, 21.72' RT STREET "C" FL IN=200.3
- INSTALL TYPE "D" BROW DITCH
- INSTALL EARTHEN SWALE (SEE DETAIL SHEET 2) 1.0% MIN. SLOPE



**Latitude 33**  
 Planning and Engineering  
 4933 Paramount Dr. 2nd Fl.  
 San Diego, Ca. 92123  
 Tel 858-751-0833 Fax 858-751-0834

DESIGNED BY: \_\_\_\_\_  
 DRAWN BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

BY: STEVEN C. KETTLER, R.C.E. 48358  
 MY REGISTRATION EXPIRES 6-30-2010



COUNTY APPROVED CHANGES			
NO.	DESCRIPTION	APPROVED BY	DATE

PERMITS	
SITE PLAN PERMIT NO.	S05-027
REZONE PERMIT NO.	ROS-006
SPECIAL USE PERMIT NO.	N/A
TENTATIVE MAP NO.	TM 5427RPL2
N.O.I. #	TBD
HABITAT LOSS PERMIT	N/A

**BENCH MARK**

DESCRIPTION: BRASS DISC STAMPED "TE 228 1968" SET ON A STEEL ROD  
 LOCATION: MISSION ROAD  
 RECORD FROM: COUNTY OF SAN DIEGO ROS 17292  
 ELEVATION: 195.42 DATUM: M.S.L.

PRIVATE CONTRACT		
SHEET 3	COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS	24 SHEETS
GRADING PLANS FOR: <b>BONSALL</b>		
CALIFORNIA LOTSDATA INDEX 410-1707		
Approved By: MICHAEL FAKHRUDDINE FOR COUNTY ENGINEER	Engineer of work: STEVEN C. KETTLER	R.C.E. 48358
Grading Permit No. L-15450	Date	

**NOTES**

1. OPEN SPACE SIGNAGE WILL BE POSTED ON THE FENCE AT LEAST EVERY 100 FEET.
2. SIGNS MUST BE CORROSION RESISTANT, MINIMUM OF 6"x9" IN SIZE, ON POSTS NOT LESS THAN 3 FEET IN HEIGHT FROM THE GROUND SURFACE AND STATE THE FOLLOWING:

"SENSITIVE ENVIRONMENTAL RESOURCES"  
DISTURBANCE BEYOND THIS POINT IS RESTRICTED  
BY EASEMENT  
INFORMATION:  
CONTACT COUNTY OF SAN DIEGO, DEPARTMENT OF PLANNING AND  
LAND USE  
REF: 05-02-013

3. A TEMPORARY CONSTRUCTION NOISE BARRIER WILL BE PLACED ALONG THE SOUTHERN AND EASTERN BOUNDARIES OF THE PROJECT SITE BEING EIGHT FEET HIGH WITHIN A MINIMUM SURFACE DENSITY OF 3 POUNDS PER SQUARE FOOT, CONSISTING OF PLYWOOD, MASONRY, WOOD, BERM, PLASTIC, FIBERGLASS, STEEL OR A COMBINATION OF THESE MATERIALS WITH NO CRACKS OR GAPS THROUGH OR BELOW THE WALL. IF WOOD IS USED, TEMPORARY BARRIER DESIGN SHALL INCORPORATE TONGUE AND GROOVE WITH A MINIMUM THICKNESS OF 7/8 OF AN INCH.
4. THE TEMPORARY CONSTRUCTION NOISE BARRIER SHALL REMAIN DURING CONSTRUCTION.
5. FOR STREET AND DRAINAGE IMPROVEMENTS SEE IMPROVEMENT PLANS TM5427-1.
6. FOR SEWER AND WATER IMPROVEMENTS SEE IMPROVEMENT PLANS TM5427-1.
7. THE PVT. STREETS AND STORM DRAIN FACILITIES SHOWN HEREON WILL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION PER CC&R'S.

**EASEMENTS**

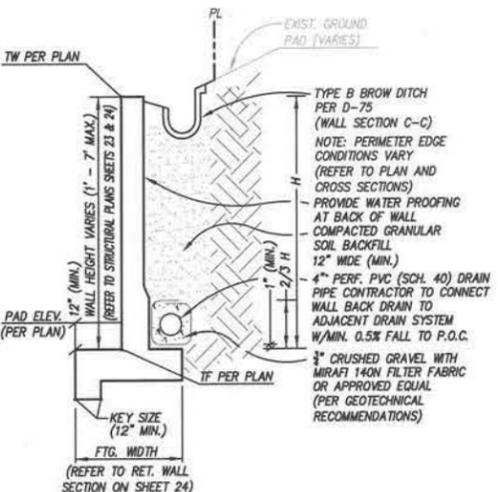
- 60' EASEMENT FOR PUBLIC HIGHWAY AND INCIDENTAL PURPOSES GRANTED TO THE COUNTY OF SAN DIEGO PER DOC. B1-032858 RECORDED 02-02-81.
- 10' PUBLIC STORM DRAIN EASEMENT PER DOC. NO. \_\_\_\_\_ RECORDED \_\_\_\_\_ O.R.
- 20' TRAIL EASEMENT PER DOC. NO. \_\_\_\_\_ RECORDED \_\_\_\_\_ O.R.
- OPEN SPACE EASEMENT PER DOC. NO. \_\_\_\_\_ RECORDED \_\_\_\_\_ O.R.
- PUBLIC SEWER AND WATER EASEMENT (WIDTH VARIES) PER FINAL MAP
- PORTIONS OF WEST LILAC ROAD DEDICATED PER DOC. NO. \_\_\_\_\_ RECORDED \_\_\_\_\_ O.R.
- LIMITED BUILDING ZONE EASEMENT PER DOC. NO. \_\_\_\_\_ RECORDED \_\_\_\_\_ O.R.

**CONSTRUCTION NOTES**

1. INSTALL TYPE "C" CATCH BASIN STA 1+29.11, 23.28' LT STREET "C" FL IN=200.2
2. INSTALL WING TYPE HEADWALL PER D-34
3. INSTALL TYPE "D" BROW DITCH
4. INSTALL EARTHEN SWALE (SEE DETAIL SHEET 2) 1.0% MIN. SLOPE

**RETAINING WALL NOTES:**

1. THE LOCATION OF THE WALL, INCLUDING THE FOOTING, SHALL BE CONSTRUCTED TO AVOID ENCRoACHING INTO THE ADJACENT PROPERTY.
2. WALL DRAINAGE PANELS SUCH AS MIRADRAIN 6000 OR EQUIVALENT MAY BE USED IN LIEU OF EXTENDING GRAVEL TO TWO-THIRDS THE WALL HEIGHT.
3. RETAINING WALL SHALL BE PROVIDED WITH A DRAINAGE SYSTEM (AS SHOWN) TO PREVENT BUILDUP OF HYDROSTATIC FORCES AND SHOULD BE WATERPROOFED TO PREVENT WATER INTRUSION.
4. THE USE OF DRAINAGE OPENING THROUGH THE BASE OF THE WALL (WEEP HOLES) ARE NOT ALLOWED FOR THIS TYPE OF APPLICATION.
5. THE RECOMMENDATIONS ASSUME A PROPERLY COMPACTED GRANULAR (E1 LESS THAN 50) FREE-DRAINING BACKFILL MATERIAL WITH NO HYDROSTATIC FORCES OR IMPOSED SURCHARGE LOAD.
6. IF FIELD CONDITIONS DIFFER, THE GEOTECHNICAL ENGINEER SHALL BE CONTACTED FOR ADDITIONAL RECOMMENDATIONS.



**Latitude 33**  
Planning and Engineering  
4933 Paramount Dr. 2nd Fl.  
San Diego, Ca. 92123  
Tel 858-751-0833 Fax 858-751-0834

DESIGNED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_

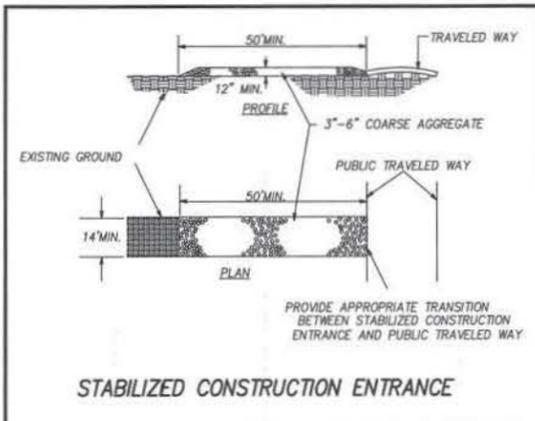
REGISTERED PROFESSIONAL ENGINEER  
STEVEN C. KETTLER  
No. 48358  
Exp. 06-30-10

COUNTY APPROVED CHANGES			
NO.	DESCRIPTION	APPROVED BY	DATE

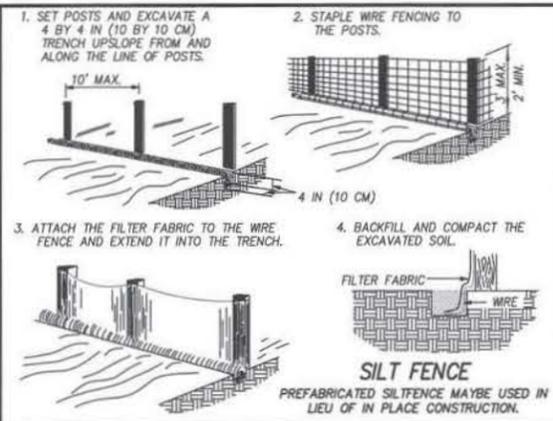
PERMITS	
SITE PLAN PERMIT NO.	S05-027
REZONE PERMIT NO.	R05-006
SPECIAL USE PERMIT NO.	N/A
TENTATIVE MAP NO.	TM 5427RPL#
N.O.I. #	TB0
HABITAT LOSS PERMIT	N/A

BENCH MARK	
DESCRIPTION:	BRASS DISC STAMPED "T 228 1988" SET ON A STEEL ROD
LOCATION:	MISSION ROAD
RECORD FROM:	COUNTY OF SAN DIEGO ROS 17292
ELEVATION:	195.42
DATUM:	M.S.L.

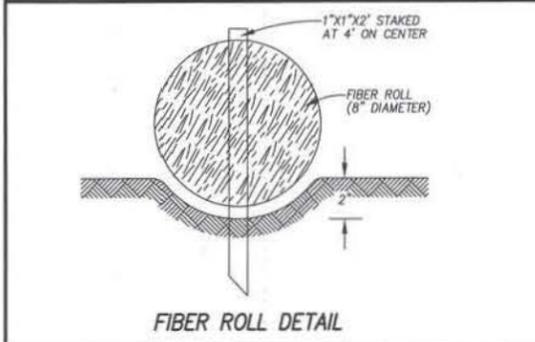
PRIVATE CONTRACT		
SHEET 4	COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS	24 SHEETS
GRADING PLANS FOR:		
BONSALL		
LOTS 1 & 2, TM 5427 RPL2		
CALIFORNIA COORDINATE INDEX 410-1707		
Approved By:	MOHAMAD FAKHRIRODINE FOR COUNTY ENGINEER	Engineer of work: STEVEN C. KETTLER R.C.E. 48358
By:		Grading Permit No. L-15450
Date:		



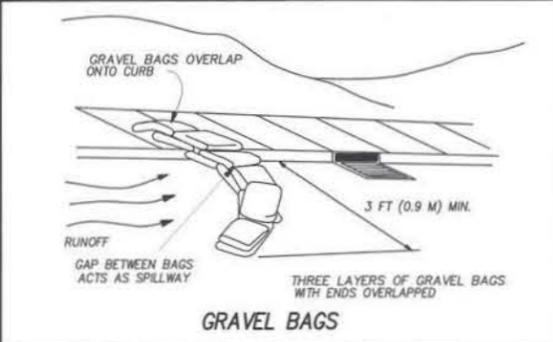
**STABILIZED CONSTRUCTION ENTRANCE**



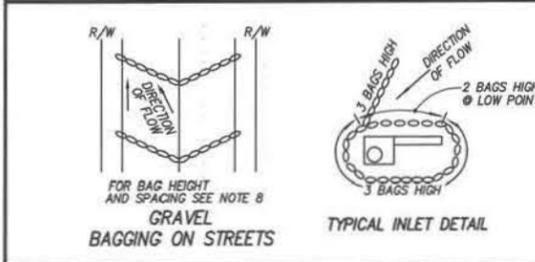
**SILT FENCE**



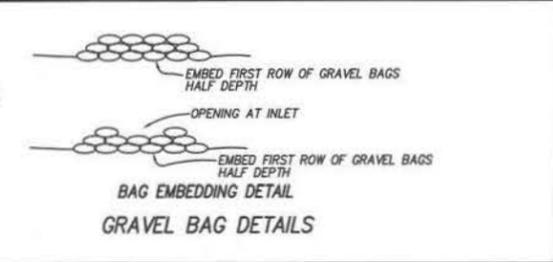
**FIBER ROLL DETAIL**



**GRAVEL BAGS**



**GRAVEL BAGGING ON STREETS**



**BAG EMBEDDING DETAILS**

**BMP LEGEND DURING CONSTRUCTION**

DESCRIPTION	SYMBOL
STABILIZED CONSTRUCTION ENTRANCE	[Symbol]
SILT FENCE	[Symbol]
FIBER ROLL GRAVEL BAGS	[Symbol]
BONDED FIBER MATRIX (SEE THIS SHEET FOR SPECIFICATIONS AND APPLICATION NOTES)	[Symbol]
HYDROSEED MIX/PAD STABILIZATION (SEE THIS SHEET FOR SPECIFICATIONS AND APPLICATION NOTES)	[Symbol]
CONCRETE WASTE STORAGE	CW
SOLID WASTE STORAGE	SW
SANITARY SEWER WASTE STORAGE	SSW
MATERIALS STORAGE	MS
HAZARDOUS WASTE	HW

**BMP LEGEND FOR POST - CONSTRUCTION**

FLOGARD +PLUS FILTER INSERT	[Symbol]
STENCIL OR TILE ON SIGNS ("NO DUMPING - DRAINS TO SAN LUIS REY RIVER")	[Symbol]
EXTENDED DRY-DETENTION BASIN	[Symbol]

**HYDROSEED**

NON-IRRIGATED HYDROSEED MIXTURE	RATE
ESCHSCHOLZIA CALIFORNICA	2 LBS./ACRE
GALLARDIA ARISTATA	2 LBS./ACRE
PHACELIA CAMPANULARIA	2 LBS./ACRE
PLANTAGO INSULARIS	25 LBS./ACRE
TRIFOLIUM HIRTUM 'HYKON'	10 LBS./ACRE
VULPIA MICROSTACHYS	8 LBS./ACRE

AVAILABLE FROM HYDRO-PLANT (760) 744-7360  
APPLICATION PROCEDURES AND EQUIPMENT

**A. EQUIPMENT** - HYDRAULIC EQUIPMENT USED FOR THE APPLICATION OF THE FERTILIZER, SEED AND SLURRY OF PREPARED WOOD PULP SHALL BE OF THE "SUPER HYDRO-SEEDER" TYPE AS APPROVED BY THE SAN DIEGO COUNTY ENGINEER. THIS EQUIPMENT SHALL HAVE A BUILT-IN AGITATION SYSTEM AND OPERATING CAPACITY SUFFICIENT TO AGITATE, SUSPEND, AND HOMOGENEOUSLY MIX A SLURRY CONTAINING NOT LESS THAN 41% OF FIBER MULCH PLUS A COMBINED TOTAL OF 7# FERTILIZER SOLIDS FOR EACH 100 GALLONS OF WATER. THE SLURRY DISTRIBUTION LINES SHALL BE LARGE ENOUGH TO PREVENT STOPPAGE AND SHALL BE EQUIPPED WITH A SET OF HYDRAULIC SPRAY NOZZLES WHICH WILL PROVIDE A CONTINUOUS NON-FLUCTUATING DISCHARGE. THE SLURRY TANK SHALL HAVE A MINIMUM CAPACITY OF 1500 GALLONS AND SHALL BE MOUNTED ON A TRAVELING UNIT, EITHER SELF-PROPELLED OR DRAWN BY A SEPARATE UNIT, WHICH WILL PLACE THE SLURRY TANK SPRAY NOZZLES WITHIN SUFFICIENT PROXIMITY TO THE AREAS TO BE SEED.

**B. PREPARATION** - THE SLURRY PREPARATION SHALL TAKE PLACE AT THE SITE OF WORK AND SHALL BEGIN BY ADDING WATER TO THE TANK WHEN THE ENGINE IS AT HALF-THROTTLE. WHEN THE WATER LEVEL HAS REACHED THE HEIGHT OF THE AGITATOR SHAFT, GOOD RECIRCULATION SHALL BE ESTABLISHED AND, AT THIS TIME, THE SEED SHALL BE ADDED. FERTILIZERS SHALL THEN BE ADDED, FOLLOWED BY WOOD PULP MULCH. MULCH SHALL ONLY BE ADDED TO THE MIXTURE AFTER THE SEED AND WHEN THE TANK IS AT LEAST ONE-THIRD (1/3) FILLED WITH WATER. THE ENGINE THROTTLE SHALL BE OPENED TO FULL SPEED WHEN THE TANK IS HALF-FILLED WITH WATER. ALL THE WOOD PULP MULCH SHALL BE ADDED BY THE TIME THE TANK IS TWO-THIRDS (2/3) TO THREE-FOURTHS (3/4) FULL. SPRAYING SHALL COMMENCE IMMEDIATELY WHEN THE TANK IS FULL.

**HYDROSEED (CONT.)**

**C. APPLICATION** - THE OPERATOR SHALL SPRAY THE SLOPES WITH A UNIFORM, VISIBLE COAT BY USING THE GREEN COLOR OF THE WOOD PULP AS A GUIDE. THE SLURRY SHALL BE APPLIED IN A SHEEPING MOTION, IN AN ARCHING STREAM SO AS TO FALL LIKE RAIN, ALLOWING THE WOOD FIBERS TO BUILD ON EACH OTHER UNTIL A GOOD COAT IS ACHIEVED, AND THE MATERIAL IS SPREAD AT THE REQUIRED RATE PER ACRE.

ALL BARE SPOTS SHALL BE RESEED WITHIN NINETY (90) DAYS TO THE SATISFACTION OF THE CITY ENGINEER.

SEEDS SHALL BE APPLIED IN A SLURRY CONSISTING OF:

WOOD CELLULOSE FIBER	2000 LBS./ACRE
ALL-PURPOSE FERTILIZER (15/15/15)	300 LBS./ACRE
GUAR GUM SOIL BINDER	100 LBS./ACRE

**EMERGENCY EROSION CONTROL MEASURE NOTES:**

- ALL BUILDING PADS TO BE DIKED AND THE DIKES MAINTAINED TO PREVENT WATER FROM FLOWING FROM THE PAD UNTIL THE STREETS AND DRIVEWAYS ARE PAVED AND WATER CAN FLOW FROM THE PADS WITHOUT CAUSING EROSION, OR CONSTRUCT DRAINAGE FACILITIES TO THE SATISFACTION OF THE COUNTY DEPARTMENT OF PUBLIC WORKS THAT WILL ALLOW WATER TO DRAIN FROM THE PAD WITHOUT CAUSING EROSION.
- TOPS OF ALL SLOPES TO BE DIKED OR TRENCHED TO PREVENT WATER FROM FLOWING OVER THE CREST OF SLOPES.
- MANUFACTURED SLOPES AND PADS SHALL BE ROUNDED VERTICALLY AND HORIZONTALLY AS APPROPRIATE TO BLEND WITH THE SURROUNDING TOPOGRAPHY.
- AS SOON AS CUTS OR EMBANKMENTS ARE COMPLETED, BUT NOT LATER THAN OCT. 1, ALL CUT AND FILL SLOPES SHALL BE STABILIZED WITH A HYDROMULCH MIXTURE OR AN EQUAL TREATMENT APPROVED BY THE COUNTY DEPARTMENT OF PUBLIC WORKS, BETWEEN OCT.1 AND APRIL 30, APPROVED SLOPE PROTECTION MEASURES SHALL PROCEED IMMEDIATELY BEHIND THE EXPOSURE OF CUT SLOPES AND /OR THE CREATION OF EMBANKMENT SLOPES.
- CATCH BASINS, DESILTING BASINS AND STORM DRAIN SYSTEM SHALL BE INSTALLED TO THE SATISFACTION OF THE COUNTY DEPARTMENT OF PUBLIC WORKS.
- GRAVEL BAG CHECK DAMS TO BE PLACED IN A MANNER APPROVED BY THE COUNTY DEPARTMENT OF PUBLIC WORKS IN UNPAVED STREETS WITH GRADIENTS IN EXCESS OF 2% AND ON OR IN OTHER GRADED OR EXCAVATED AREAS AS REQUIRED BY THE COUNTY DEPARTMENT OF PUBLIC WORKS.
- THE DEVELOPER TO MAINTAIN THE PLANTING AND EROSION CONTROL MEASURES DESCRIBED ABOVE UNTIL RELIEVED OF SAME BY THE COUNTY DEPARTMENT OF PUBLIC WORKS. THE DEVELOPER TO REMOVE ALL SOIL INTERCEPTED BY THE GRAVEL BAGS, CATCH BASINS AND DESILTING BASINS AND KEEP THESE FACILITIES CLEAN AND FREE OF SILT AND SAND AS DIRECTED BY THE COUNTY DEPARTMENT OF PUBLIC WORKS. THE DEVELOPER SHALL REPAIR ANY ERODED SLOPES AS DIRECTED BY THE COUNTY DEPARTMENT OF PUBLIC WORKS.

**SILTATION & SEDIMENT CONTROL MEASURES NOTES:**

- THE SEDIMENT BASINS SHALL BE PROVIDED AT THE LOWER END OF EVERY DRAINAGE AREA PRODUCING SEDIMENT RUNOFF. THE BASINS SHALL BE MAINTAINED AND CLEANED TO DESIGN CONTOURS AFTER EVERY RUNOFF PRODUCING STORM. THE BASINS SHOULD BE SEMI-PERMANENT STRUCTURES THAT WOULD REMAIN UNTIL SOIL STABILIZING VEGETATION HAS BECOME WELL ESTABLISHED ON ALL ERODIBLE SLOPES.
  - SEDIMENTATION BASINS MAY NOT BE REMOVED OR MADE INOPERATIVE WITHOUT PRIOR APPROVAL OF THE COUNTY ENGINEER.
  - UTILITY TRENCHES THAT ARE CUT THROUGH BASIN INLET DIKES SHALL BE PLUGGED WITH GRAVEL BAGS FROM TOP OF PIPE TO TOP OF DIKE.
  - ALL UTILITY TRENCHES SHALL BE BLOCKED AT THE PRESCRIBED INTERVALS WITH A DOUBLE ROW OF GRAVEL BAGS WITH A TOP ELEVATION THAT IS TWO GRAVEL BAGS BELOW THE GRADED SURFACE OF THE STREET. GRAVEL BAGS ARE TO BE PLACED WITH LAPPED COURSES. THE INTERVALS PRESCRIBED BETWEEN GRAVEL BAG BLOCKING SHALL DEPEND ON THE SLOPE OF THE GROUND SURFACE, BUT NOT EXCEED THE FOLLOWING:
- | GRADE OF STREET | INTERVAL AS REQUIRED |
|-----------------|----------------------|
| LESS THAN 2%    | 200 FEET, MAX.       |
| 2% - 4%         | 100 FEET             |
| 4% - 10%        | 50 FEET              |
| OVER 10%        | 25 FEET              |
- AFTER UTILITY TRENCHES ARE BACKFILLED AND COMPACTED, THE SURFACES OVER SUCH TRENCHES SHALL BE MOUNDING SLIGHTLY TO PREVENT CHANNELING OF WATER IN THE TRENCH AREA. CARE SHOULD BE EXERCISED TO PROVIDE FOR CROSS FLOW AT FREQUENT INTERVALS WHERE TRENCHES ARE NOT ON THE CENTERLINE OF A CROWNED STREET.
  - ALL BUILDING PADS SHOULD BE SLOPED TOWARDS THE DRIVEWAYS AND VELOCITY CHECK DAMS PROVIDED AT THE BASE OF ALL DRIVEWAYS DRAINING INTO THE STREET.
  - PROVIDE VELOCITY CHECK DAMS IN ALL UNPAVED GRADED CHANNELS AT THE INTERVALS INDICATED BELOW:
- | GRADE OF CHANNEL | INTERVALS BETWEEN CHECK DAMS |
|------------------|------------------------------|
| LESS THAN 3%     | 100 FEET                     |
| 3% - 6%          | 50 FEET                      |
| OVER 6%          | 25 FEET                      |
- PROVIDE VELOCITY CHECK DAMS IN ALL STREET AREAS ACCORDING TO INTERVALS INDICATED BELOW. VELOCITY CHECK DAMS MAY BE CONSTRUCTED OF GRAVEL BAGS, TIMBER, OR OTHER EROSION RESISTANT MATERIALS APPROVED BY THE COUNTY ENGINEER, AND SHALL EXTEND COMPLETELY ACROSS THE STREET OR CHANNEL AT RIGHT ANGLES TO THE CENTERLINE. VELOCITY CHECK DAMS MAY ALSO SERVE AS SEDIMENT TRAPS.

GRADE OF STREET	INTERVAL	NUMBER OF BAGS HIGH
LESS THAN 2.0%	AS REQUIRED, 200' MAX	1
2% - 4%	100 FEET	1
4% - 6%	50 FEET	1
6% - 10%	50 FEET	2
OVER 10%	25 FEET	2

**SILTATION & SEDIMENT CONTROL MEASURES NOTES: (CONT.)**

- PROVIDE A GRAVEL BAG SILT BASIN OR TRAP BY EVERY STORM DRAIN INLET TO PREVENT SEDIMENT FROM ENTERING DRAIN SYSTEM.
- GRAVEL BAGS AND FILL MATERIAL SHALL BE STOCKPILED AT INTERVALS, READY FOR USE WHEN REQUIRED.
- ALL EROSION CONTROL DEVICES WITHIN THE DEVELOPMENT SHOULD BE MAINTAINED DURING AND AFTER EVERY RUNOFF PRODUCING STORM, IF POSSIBLE MAINTENANCE CREWS WOULD BE REQUIRED TO HAVE ACCESS TO ALL AREAS.
- PROVIDE ROCK RIPRAP ON CURVES AND STEEP DROPS IN ALL EROSION PRONE DRAINAGE CHANNELS DOWNSTREAM FROM THE DEVELOPMENT. THIS PROTECTION WOULD REDUCE EROSION CAUSED BY THE INCREASED FLOWS THAT MAY BE ANTICIPATED FROM DENUDE SLOPES, OR FROM IMPERVIOUS SURFACES.
- ANY PROPOSED ALTERNATE CONTROL MEASURES MUST BE APPROVED IN ADVANCE BY ALL RESPONSIBLE AGENCIES; IE. COUNTY ENGINEER, DEPARTMENT OF SANITATION AND FLOOD CONTROL, OFFICE OF ENVIRONMENTAL MANAGEMENT, ETC.

**STORMWATER PROTECTION ON GRADING PROJECTS**

- DURING THE RAINY SEASON THE AMOUNT OF EXPOSED SOIL ALLOWED AT ONE TIME SHALL NOT EXCEED THAT WHICH CAN BE ADEQUATELY PROTECTED BY THE PROPERTY OWNER IN THE EVENT OF A RAINSTORM. 125% OF ALL SUPPLIES NEEDED FOR BMP MEASURES SHALL BE RETAINED ON THE JOB SITE IN A MANNER THAT ALLOWS FULL DEPLOYMENT AND COMPLETE INSTALLATION IN 48 HOURS OR LESS OF A FORECAST RAIN.
- NO AREA BEING DISTURBED SHALL EXCEED 50 ACRES ANY GIVEN TIME WITHOUT DEMONSTRATING TO THE SAN DIEGO COUNTY DPW DIRECTOR'S SATISFACTION THAT ADEQUATE EROSION AND SEDIMENT CONTROL CAN BE MAINTAINED. ANY DISTURBED AREA THAT IS NOT ACTIVELY GRADED FOR 10 DAYS MUST BE FULLY PROTECTED FROM EROSION. UNTIL ADEQUATE LONG-TERM PROTECTIONS ARE INSTALLED, THE DISTURBED AREA SHALL BE INCLUDED WHEN CALCULATING THE ACTIVE DISTURBANCE AREA. ALL EROSION CONTROL MEASURES SHALL REMAIN INSTALLED AND MAINTAINED FURING ANY INACTIVE PERIOD.
- THE PROPERTY OWNER IS OBLIGATED TO INSURE COMPLIANCE WITH ALL APPLICABLE STORMWATER REGULATIONS AT ALL TIMES. THE BMP'S (BEST MANAGEMENT PRACTICES) THAT HAVE BEEN INCORPORATED INTO THIS PLAN SHALL BE IMPLEMENTED AND MAINTAINED TO EFFECTIVELY PREVENT THE POTENTIALLY NEGATIVE IMPACTS OF THIS PROJECT'S CONSTRUCTION ACTIVITIES ON STORMWATER QUALITY. THE MAINTENANCE OF THE BMP'S IS THE PERMITTEE'S RESPONSIBILITY, AND FAILURE TO PROPERLY INSTALL OR MAINTAIN THE BMP'S MAY RESULT IN ENFORCEMENT ACTION BY THE COUNTY OF SAN DIEGO OR OTHERS. IF INSTALLED BMP'S FAIL, THEY MUST BE REPAIRED OR REPLACED WITH AN ACCEPTABLE ALTERNATE WITHIN 24 HOURS, OR AS SOON AS SAFE TO DO SO.
- A NOTICE OF INTENT (NOI) MUST BE FILED WITH THE STATE WATER RESOURCES CONTROL BOARD (SWRCB) AND A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) MUST BE PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF CALIFORNIA GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY (PERMIT NO. CAS00002) FOR ALL OPERATIONS ASSOCIATED WITH GRADING PLAN L-15450 AND IMPROVEMENTS SHOWN ON TM 5427-1. THE PERMITTEE SHALL KEEP A COPY OF THE SWPPP ON SITE AND AVAILABLE FOR REVIEW BY COUNTY.
- 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.
- THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE DIRECTOR OF PUBLIC WORKS DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES WHICH MAY ARISE.
- THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
- CONTRACTOR TO PROTECT ALL EXISTING HARDSCAPE AND LANDSCAPE AREAS AND REPLACE IN KIND ANY REMOVED OR DAMAGED AREAS PER THE LANDSCAPE ARCHITECT, OWNER, ENGINEER OF WORK, OR THE COUNTY INSPECTOR.
- ALL EROSION CONTROL PLANS MUST PROVIDE A 24-HOUR TELEPHONE NUMBER AND THE NAME(S) OF THE PERSON(S) RESPONSIBLE FOR EMERGENCY WORK. A TELEPHONE ANSWERING MACHINE OR ANSWERING SERVICE IS UNACCEPTABLE. CONTACT: TODD PETERS (858) 756-9401 CELL (619) 507-2196

**STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NOTES**

PRIOR TO ANY DISTURBANCE TO THE SITE, EXCLUDING UTILITY MARK-OUTS AND SURVEYING, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A PRE-CONSTRUCTION MEETING WITH THE CITY OF SAN DIEGO FIELD ENGINEERING DIVISION (858) 627-3200.

THE CONTRACTOR SHALL HIRE A "QUALIFIED PERSON," WHO HAS BEEN TRAINED TO CONDUCT INSPECTIONS AND PREPARE REPORTS OF THE CONSTRUCTION SITE WITH RESPECT TO THE CITY'S MUNICIPAL CODE/ORDINANCES AND THE SWPPP. THE QUALIFIED PERSON SHALL ATTEND THE PRE-CONSTRUCTION MEETING. THE QUALIFIED PERSON SHALL HAVE KNOWLEDGE AND TRAINING OF THE INTENT AND ENFORCEMENT OF SWPPP'S AND BMP'S.

THE QUALIFIED PERSON SHALL CONDUCT REGULAR INSPECTIONS OF THE PROJECT SITE IN ACCORDANCE WITH RECOMMENDATIONS OUTLINED IN THE SWPPP. EACH INSPECTION SHALL BE DOCUMENTED IN THE FORM OF WRITTEN REPORTS RETAINED ON-SITE. ALL REPORTS SHALL BE MADE AVAILABLE TO THE COUNTY OF SAN DIEGO AND SWRCB REPRESENTATIVES UPON REQUEST.

THE CONTRACTOR SHALL HAVE EMERGENCY MATERIALS AND EQUIPMENT ON HAND FOR UNFORESEEN SITUATIONS, SUCH AS DAMAGE TO UNDERGROUND WATER AND SEWER UTILITIES WHEREBY FLOWS MAY GENERATE EROSION AND SEDIMENT POLLUTION.

**MAINTENANCE**

**STORM WATER BMP MAINTENANCE:**

IN ORDER FOR THIS PLAN TO BE EFFECTIVE AND MEET THE PERFORMANCE STANDARDS IDENTIFIED IN FEDERAL, STATE AND LOCAL ORDINANCES A MAINTENANCE PLAN ENSURING THE FOSSIL FILTER CATCHMENT AND INLET STENCILING IS FUNCTIONING AS INTENDED.

GREYSTONE HOMES, INC. AND THEIR CONTRACTORS ARE RESPONSIBLE FOR MAINTAINING CONSTRUCTION ACTIVITY BMP'S.

A HOMEOWNER'S ASSOCIATION WILL BE RESPONSIBLE FOR LONG TERM MAINTENANCE OF THE PRIVATE DRIVES, STORM DRAIN FACILITIES, OPEN SPACE AREAS, AND AMENITY/COMMON AREAS. THE COVENANT OF CONDITIONS & RESTRICTIONS (CC&R's) WILL CONTAIN STATEMENTS OF LONG TERM MAINTENANCE RESPONSIBILITY.

TYPICAL MAINTENANCE REQUIREMENTS FOR STORM DRAIN FACILITIES ARE AS FOLLOWS:

- INLET STENCILING - INLETS AND STENCILING AND/OR TILING SHALL BE INSPECTED ANNUALLY PRIOR TO THE RAINY SEASON (OCT.1-APR.30). INLETS SHALL BE CLEANED OF ANY TRASH, LITTER AND DEBRIS. EXISTING STENCILING OR TILING SHALL BE PLACED AS NECESSARY SO THE MESSAGE IS LEGIBLE FOR ANOTHER YEAR PERIOD.
- FOSSIL FILTER CATCHMENTS - INLETS SHALL BE INSPECTED ANNUALLY PRIOR TO THE RAINY SEASON (OCT.1-APR.30). INLETS SHALL BE CLEANED OF ANY TRASH, LITTER AND DEBRIS. FILTER MEDIA SHALL BE REPLACED ANNUALLY AT A MINIMUM AND PERIODICALLY AS REQUIRED TO PRODUCE EFFECTIVE RESULTS BASED ON MANUFACTURE RECOMMENDATIONS. DEFECTIVE PARTS SHALL BE REPLACED IMMEDIATELY UPON DISCOVERY.

ESTIMATED ANNUAL BMP MAINTENANCE COST:

- FOSSIL FILTER INSERTS  
26 INLETS RECEIVE FOSSIL INSERTS-AVER. LENGTH 6 FEET.  
2 REPLACEMENTS PER/YEAR @ \$250/REPLACEMENT THEREFORE \$500/YEAR PER INLET  
THEREFORE 26 INLETS x \$500/YEAR=\$13,000/YEAR
- INLET TILING AND/OR STENCILING TO BE CONSIDERED MINOR. ESTIMATE \$1,100/YEAR FOR REPAINTING AND/OR TILE REPLACEMENT.
- SWALES TO BE MAINTAINED AS PART OF THE OVERALL LANDSCAPE MAINTENANCE COSTS.

TOTAL ESTIMATED ANNUAL MAINTENANCE COST IS \$14,100.

**BONDED FIBER MATRIX (BFM)**

THE USE OF BFM IS SUBJECT TO THE FOLLOWING LIMITATIONS AND RESTRICTIONS:

- APPLICATION RATES SHALL BE 3500 LBS. PER ACRE MINIMUM FOR 2:1 OR SHALLOWER SLOPES AND 4000 LBS. PER ACRE FOR SLOPES STEEPER THAN 2:1.
- BFM SHALL BE APPLIED AT LEAST 24 HOURS BEFORE OR AFTER RAINFALL.
- THE SITE MUST BE PROTECTED WITH BROW DITCHES AND OR DIVERSION BERMS AT THE TOP OF SLOPES TO DIVERT FLOW FROM THE FACE OF THE SLOPE.
- BFM SHALL BE APPLIED TO PROVIDE 100% COVERAGE (I.E.: APPLICATION FROM MULTIPLE ANGLES).
- FOR PERMANENT EROSION CONTROL PURPOSES, BFM MUST BE INSTALLED IN CONJUNCTION WITH SEEDED EROSION CONTROL VEGETATION.
- A LETTER FROM THE HYDROSEED CONTRACTOR CERTIFYING THAT THE BFM HAS BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED APPLICATION RATES AND COVERAGE REQUIREMENTS SHALL BE SUBMITTED TO THE COUNTY INSPECTOR FOR APPROVAL.

**STABILIZED FIBER MATRIX (SFM)**

THE USE OF SFM IS SUBJECT TO THE FOLLOWING LIMITATIONS AND RESTRICTIONS:

- SFM MAY BE USED FOR TEMPORARY EROSION CONTROL FOR DISTURBED AREAS WITH A SLOPE RATIO OF 1 VERTICAL TO 2 HORIZONTAL OR SHALLOWER, INCLUDING PAD AND SEPTIC FIELD AREAS.
- THE SFM SHALL BE APPLIED AT LEAST 24 HOURS BEFORE OR AFTER RAINFALL AND SHALL BE APPLIED TO PROVIDE 100% COVERAGE (I.E.: APPLIED FROM MULTIPLE DIRECTIONS AND ANGLES).
- THE APPLICATION AREA MUST BE PROTECTED BY BROW DITCHES AND/OR DIVERSION BERMS AT TOP OF SLOPES TO DIVERT FLOW FROM THE FACE OF THE PROTECTED SLOPE.
- FOR PERMANENT EROSION CONTROL PURPOSES, SFM MUST BE INSTALLED IN CONJUNCTION WITH SEEDED EROSION CONTROL VEGETATION OR HAND PLANTINGS. AS WITH ALL OTHER APPLICATIONS, SFM WILL NOT BE CONSIDERED PERMANENT UNTIL 70% VEGETATION ESTABLISHMENT.
- COVERAGE AND CONCENTRATION: FOR EACH ACRE COVERED, THE MINIMUM APPLICATION VOLUME SHALL BE 10 GALLONS NON-TOXIC WATER PERMEABLE SOIL-STABILIZING LIQUID EMULSION WITH 3,000 LBS. OF HYDRAULIC MULCH. THE EMULSION MUST BE DESIGNED TO PROTECT SOIL, PREVENT EROSION, AND FLOCCULATE (CLUMP) SEDIMENT.
- A LETTER FROM THE HYDROSEED CONTRACTOR CERTIFYING THE SFM WAS INSTALLED IN ACCORDANCE WITH APPROVED APPLICATION RATES, COVERAGE, AND MANUFACTURER'S DILUTION RATIO SHALL BE SUBMITTED TO THE COUNTY INSPECTOR FOR APPROVAL.
- FLAT AREAS OF LESS THAN 5% (LIKE BUILDING PADS, PARKING AREAS, LEACH FIELDS) SHALL HAVE 100% PROTECTION USING GEOTEXTILES, MATS (SS-7 OR ESC20), OR OTHER MATERIAL APPROVED BY THE COUNTY FOR STABILIZING SLOPES, OR USING TRACKING AND SOIL STABILIZERS/BINDERS (SS-5), TEMPORARY SEEDING (SS-4), MULCH/WOOD CHIPS (SS-3, SS-6, SS-8), OR JUTE MATTING (SS-7). THE COUNTY MAY REDUCE THIS REQUIREMENT FOR FLAT AREAS PROVIDED FULL SEDIMENT CONTROL IS PROVIDED THROUGH CONSTRUCTED AND MAINTAINED DESILTATION BASINS (SC-2) AT ALL PROJECT DISCHARGE POINTS.



**Latitude 33**  
Planning and Engineering  
4933 Paramount Dr. 2nd Fl.  
San Diego, Ca. 92123  
Tel 858-751-0633 Fax 858-751-0634

BY: STEVEN C. KETTLER, R.C.E. 48358  
DATE: MY REGISTRATION EXPIRES 6-30-2010

DESIGNED BY:	NO.	DESCRIPTION	APPROVED BY:	DATE:
DRAWN BY:				
CHECKED BY:				

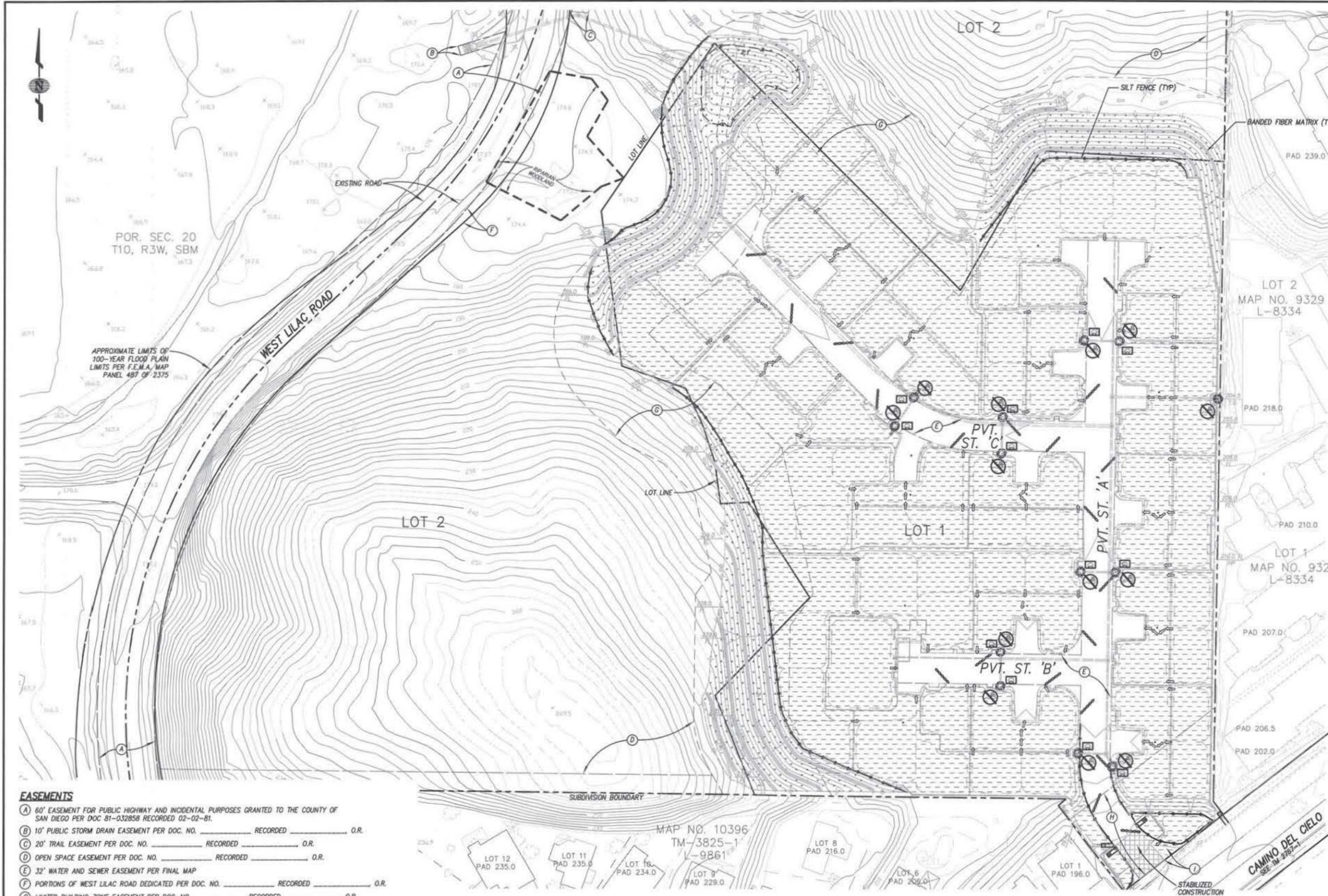
COUNTY APPROVED CHANGES		PERMITS	
NO.	DESCRIPTION	PERMIT NO.	DATE
		505-027	
		ROS-006	
		N/A	
		TM 5427RPL2	
		780	
		N/A	

**PRIVATE CONTRACT**

SHEET 5 COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS 24 SHEETS

EROSION CONTROL PLANS FOR: **BONSALL**  
LOTS 1 & 2, TM 5427 RPL2  
CALIFORNIA COORDINATE INDEX 410-1707

Approved By: MOHAMAD FAKHRUDDINE FOR COUNTY ENGINEER  
By: [Signature] R.C.E. 48358  
Grading Permit No. L-15450

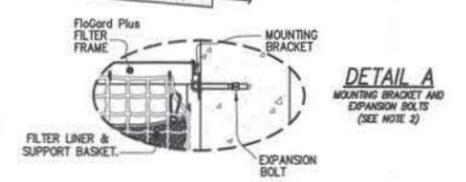
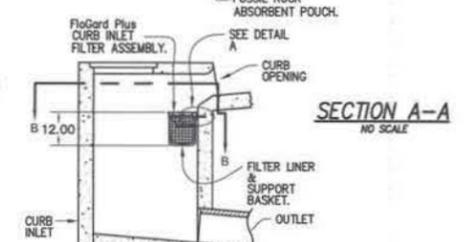
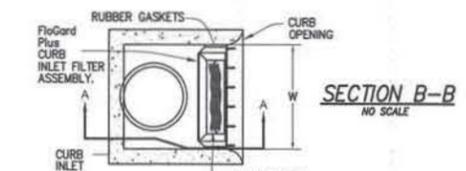


**FILTER INSERT NOTES:**

- FloGard Plus filter inserts shall be installed across the entire width of curb opening. Storage capacity and clean flow rates are based on full width installation.
- Filter insert shall be attached to the catch basin with stainless steel expansion anchor bolts & washers (3/8" x 2-1/2" minimum length.) See detail A.
- FloGard Plus filter inserts are designed with a debris trap/energy dissipator for the retention of floatables and collected sediments.
- Filter support frame shall be constructed from stainless steel Type 304.
- Filter liner shall be constructed from durable polypropylene, woven, monofilament, geotextile. Filter liner shall not allow the retention of water between storm events.
- Filter inserts are supplied with "clip-in" filter pouches utilizing FOSSIL ROCK filter medium for the collection and retention of petroleum hydrocarbons (oils & greases).
- FloGard Plus filter inserts and FOSSIL ROCK filter medium pouches must be maintained in accordance with manufacturer recommendations.
- FloGard Plus filter inserts are available in standard lengths of 24", 30", 35", 42" & 48" and may be installed in various length combinations (end to end) to fit length of noted catch basin.
- Clean flow rates are "calculated" based on liner flow rate of 140 gallons per minute per square foot of material, a factor of 50 has been applied allow for anticipated sediment & debris loading. An additional safety factor of between .25 & .50 may be applied to allow for site specific sediment loading.
- Storage capacity reflects maximum solids collection prior to impeding "initial" filtering bypass. The "ultimate" high-flow bypass will not become impeded due to maximum solids loading.

**SPECIFIER CHART**

MODEL NO.	Curb Opening Width - W	Storage Capacity - Cu. Ft.	Clean Flow Rate - GPM/CFS
FGP-48CI	4.0' (48")	2.10	768 / 1.76
FGP-50CI	5.0' (60")	2.40	900 / 2.00
FGP-60CI	6.0' (72")	3.05	1,128 / 2.51
FGP-70CI	7.0' (84")	3.65	1,350 / 3.01
FGP-80CI	8.0' (96")	4.25	1,576 / 3.51
FGP-100CI	10.0' (120")	4.85	1,800 / 4.01

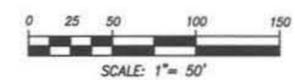


**BMP LEGEND FOR POST - CONSTRUCTION**

- FLOGARD +PLUS FILTER INSERT
- STENCIL OR TILE ON SIGNS ("NO DUMPING - DRAINS TO SAN LUIS REY RIVER")
- EXTENDED DRY-DETENTION BASIN

- EASEMENTS**
- A) 60' EASEMENT FOR PUBLIC HIGHWAY AND INCIDENTAL PURPOSES GRANTED TO THE COUNTY OF SAN DIEGO PER DOC 81-032858 RECORDED 02-02-81.
  - B) 10' PUBLIC STORM DRAIN EASEMENT PER DOC. NO. \_\_\_\_\_ RECORDED \_\_\_\_\_ O.R.
  - C) 20' TRAIL EASEMENT PER DOC. NO. \_\_\_\_\_ RECORDED \_\_\_\_\_ O.R.
  - D) OPEN SPACE EASEMENT PER DOC. NO. \_\_\_\_\_ RECORDED \_\_\_\_\_ O.R.
  - E) 32' WATER AND SEWER EASEMENT PER FINAL MAP
  - F) PORTIONS OF WEST LILAC ROAD DEDICATED PER DOC. NO. \_\_\_\_\_ RECORDED \_\_\_\_\_ O.R.
  - G) LIMITED BUILDING ZONE EASEMENT PER DOC. NO. \_\_\_\_\_ RECORDED \_\_\_\_\_ O.R.
  - H) NOISE EASEMENT PER FINAL MAP
  - I) RIGHT-OF-WAY DEDICATION PER FINAL MAP

- BMP STENCIL PLACEMENT NOTES TO BE SHOWN ON PLANS:**
- A.) ALL STORM DRAIN INLETS AND CATCH BASINS WITHIN THE PROJECT AREA SHALL HAVE A STENCIL OR TILE PLACED WITH PROHIBITIVE LANGUAGE (SUCH AS: "NO DUMPING - I LIVE IN SAN LUIS REY RIVER") AND/OR GRAPHICAL ICONS TO DISCOURAGE ILLEGAL DUMPING.
  - B.) SIGNS AND PROHIBITIVE LANGUAGE AND/OR GRAPHICAL ICONS, WHICH PROHIBIT ILLEGAL DUMPING, MUST BE POSTED AT PUBLIC ACCESS POINTS ALONG CHANNELS AND CREEKS WITHIN THE PROJECT AREAS.
  - C.) LEGIBILITY OF STENCILS, TILES AND SIGNS MUST BE MAINTAINED AND TILES MUST BE PLACED FLUSH WITH THE TOP OF CONCRETE TO REDUCE TRIPPING BY PEDESTRIANS.



SEE SHEET 5 FOR EROSION CONTROL NOTES AND DETAILS



**Latitude 33**  
Planning and Engineering  
4933 Paramount Dr. 2nd Fl.  
San Diego, Ca. 92123  
Tel 858-751-0893 Fax 858-751-0834

DESIGNED BY: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

BY: STEVEN C. KETTLER, R.C.E. 48358  
MY REGISTRATION EXPIRES 6-30-2019

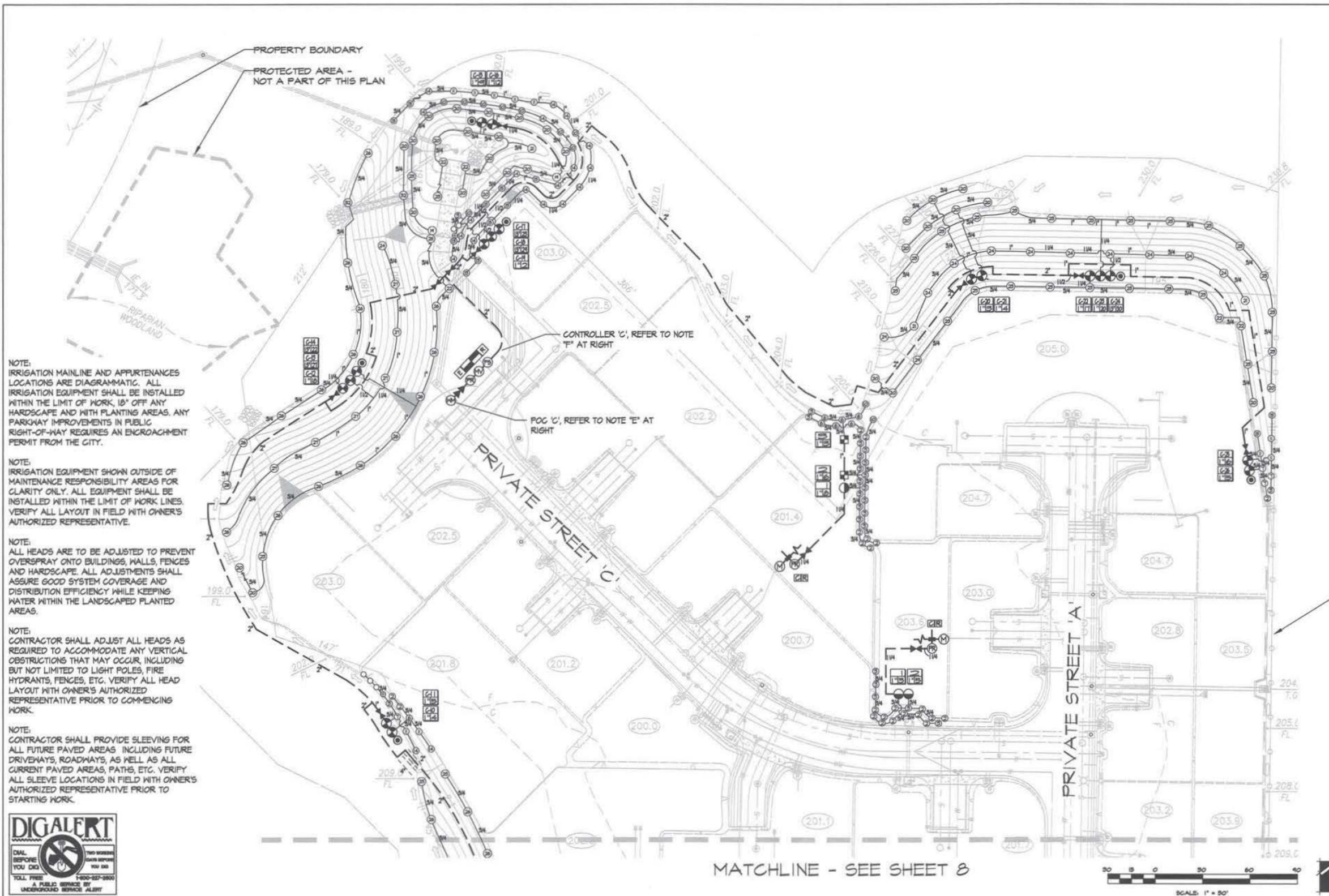
COUNTY APPROVED CHANGES			
NO.	DESCRIPTION	APPROVED BY	DATE

PERMITS	
SITE PLAN PERMIT NO.	SOS-027
REZONE PERMIT NO.	ROS-008
SPECIAL USE PERMIT NO.	N/A
TENTATIVE MAP NO.	TM 5427RPL
N.O.I. #	TBD
HABITAT LOSS PERMIT	N/A

**BENCH MARK**

DESCRIPTION: BRASS DISC STAMPED "TE 228 1988" SET ON A STEEL ROD  
LOCATION: MISSION ROAD  
RECORD FROM: COUNTY OF SAN DIEGO ROS 17282  
ELEVATION: 195.42 DATUM: M.S.L.

PRIVATE CONTRACT		
SHEET 6	COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS	24 SHEETS
EROSION CONTROL PLANS FOR: <b>BONSALL</b> LOTS 1 & 2, TM 5427 RPL2		
CALIFORNIA COORDINATE INDEX 410-1707		
Approved By: MOHAMMAD FAHRRUDDINE FOR COUNTY ENGINEER	Engineer of work: STEVEN C. KETTLER	R.C.E. 48358
By: _____	Grading Permit No. L-15450	Date: _____



**NOTE A:**  
 POC 'C' TO BE A 1" POTABLE WATER METER WITH A 1/2" SERVICE LATERAL.  
 BACKFLOW WYE/CV SIZE: 1 1/2"  
 BACKFLOW ENCLOSURE: NONE/ V.I.T. SBBC-30CR  
 MASTER VALVE SIZE: 1 1/2"  
 FLOW SENSOR SIZE: 1 1/2"  
 STATIC WATER PRESSURE: 252 PSI  
 DESIGN WATER PRESSURE: 61 PSI  
 BOOST REQUIRED: NO  
 MAXIMUM DEMAND: 31 GPM  
 SET POC REGULATOR @ 75 PSI  
 ESTIMATED AREA SERVED: 61,173 SQ. FT.  
 EST. ANNUAL WATER USE: 2.12 ACRE FT. PER YEAR  
 MAWA: 5.15 ACRE FT. PER YEAR  
 ROAD STATION: \_\_\_\_\_  
 WATER SOURCE: RAINBOW MUNI

THE CONTRACTOR SHALL VERIFY LOCATION AND WATER PRESSURE BY DIRECT MEASUREMENT IN THE FIELD. IF EXISTING PRESSURE IS NOT AS STATED ON THE PLANS THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE BEFORE PURCHASE OF EQUIPMENT AND BEGINNING INSTALLATION. PURCHASE OF EQUIPMENT AND ANY INSTALLATIONS WHEN EXISTING STATIC PRESSURE IS BELOW THAT STATED ABOVE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

**NOTE B:**  
 CONTROLLER 'C' SHALL BE A D.I.G. CONTROLLER ASSEMBLY, MODEL #:  
 LEIT X-28

FINAL LOCATION OF CONTROLLER, ELECTRICAL SERVICE, AND APPURTENANCES SHALL BE 2' FROM ADJACENT SIDEWALK IN LANDSCAPE AREA AND CONFIRMED WITH OWNER'S REPRESENTATIVE PRIOR TO COMMENCING WORK.

**NOTE:**  
 IRRIGATION MAINLINE AND APPURTENANCES LOCATIONS ARE DIAGRAMMATIC. ALL IRRIGATION EQUIPMENT SHALL BE INSTALLED WITHIN THE LIMIT OF WORK, 18" OFF ANY HARDSCAPE AND WITH PLANTING AREAS. ANY PARKWAY IMPROVEMENTS IN PUBLIC RIGHT-OF-WAY REQUIRES AN ENCROACHMENT PERMIT FROM THE CITY.

**NOTE:**  
 IRRIGATION EQUIPMENT SHOWN OUTSIDE OF MAINTENANCE RESPONSIBILITY AREAS FOR CLARITY ONLY. ALL EQUIPMENT SHALL BE INSTALLED WITHIN THE LIMIT OF WORK LINES. VERIFY ALL LAYOUT IN FIELD WITH OWNER'S AUTHORIZED REPRESENTATIVE.

**NOTE:**  
 ALL HEADS ARE TO BE ADJUSTED TO PREVENT OVERSPRAY ONTO BUILDINGS, WALLS, FENCES AND HARDSCAPE. ALL ADJUSTMENTS SHALL ASSURE GOOD SYSTEM COVERAGE AND DISTRIBUTION EFFICIENCY WHILE KEEPING WATER WITHIN THE LANDSCAPED PLANTED AREAS.

**NOTE:**  
 CONTRACTOR SHALL ADJUST ALL HEADS AS REQUIRED TO ACCOMMODATE ANY VERTICAL OBSTRUCTIONS THAT MAY OCCUR, INCLUDING BUT NOT LIMITED TO LIGHT POLES, FIRE HYDRANTS, FENCES, ETC. VERIFY ALL HEAD LAYOUT WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK.

**NOTE:**  
 CONTRACTOR SHALL PROVIDE SLEEVING FOR ALL FUTURE PAVED AREAS INCLUDING FUTURE DRIVEWAYS, ROADWAYS, AS WELL AS ALL CURRENT PAVED AREAS, PATHS, ETC. VERIFY ALL SLEEVE LOCATIONS IN FIELD WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO STARTING WORK.



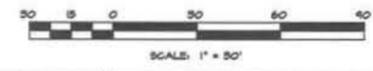
**gmp**  
 Gillespie  
 Moody  
 Patterson, Inc.  
 LANDSCAPE ARCHITECTURE  
 & PLANNING

1404 GENESEE AVENUE, SUITE 140  
 LA JOLLA, CALIFORNIA 92037-1394  
 858-558-8477  
 FAX 858-558-4366

REVISIONS

RE-NUMBER SHEETS	01-24-08
CIVIL BASE REVS	12-11-08
PLOTTED ON	01-08-08
DRAWN	PM
APPROVED	JF
JOB NO.	08-058-00
DATE	01-24-08
SCALE	AS SHOWN

MATCHLINE - SEE SHEET 8



**SHEET INDEX**

SEE SHEET	1-6	CIVIL ENGINEER'S GRADING PLANS
SEE SHEET	7-9	FOR IRRIGATION PLANS
SEE SHEET	4	FOR IRRIGATION LEGEND
SEE SHEET	10-12	FOR IRRIGATION DETAILS & NOTES
SEE SHEET	13-15	FOR IRRIGATION SPECIFICATIONS
SEE SHEET	16-17	FOR IRRIGATION CALCULATIONS
SEE SHEET	18-19	FOR PLANTING PLANS
SEE SHEET	20-21	FOR PLANTING LEGEND, DETAILS, NOTES & SPECIFICATIONS
SEE SHEET	22	FOR FUEL MANAGEMENT PLAN
SEE SHEET	23-24	STRUCTURAL ENGINEER'S PLANS

**DECLARATION OF RESPONSIBLE CHARGE:**  
 I hereby declare that I am the Landscape Architect of work for this project, that I have exercised responsible charge over the design of the project as defined in section 4702 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 County of San Diego is confined to a review only and does not relieve me, as Landscape Architect of Work, of my responsibilities for project design.

*[Signature]* 01-05-09 Date  
 John Patterson RLA # 3505

Gillespie Moody Patterson, Inc.  
 1404 Genesee Avenue, Suite 140  
 La Jolla, CA 92037  
 (858) 558-8477

**HOLD HARMLESS AND INDEMNIFICATION CLAUSE**

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE 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 CITY/COUNTY OF LOCAL JURISDICTION AND THE LANDSCAPE ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, THE CITY/COUNTY OF LOCAL JURISDICTION, OR THE LANDSCAPE ARCHITECT.

**PERMITS**

SITE PLAN PERMIT NO.	S05-027
REZONE PERMIT NO.	R05-006
SPECIAL USE PERMIT NO.	N/A
TENTATIVE MAP NO.	TM 5427 RPL2
N.O.I. NO.	T.B.D.
HABITAT LOSS PERMIT	N/A

**ENVIRONMENTAL SERVICES UNIT**

APPROVED FOR COMPLIANCE WITH THE ENVIRONMENTAL REVIEW

APPROVED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

I FIND THAT THIS SHEET CONFORMS TO ACCEPTED LANDSCAPE ARCHITECTURAL PRACTICES AND IS IN COMPLIANCE WITH THE REQUIREMENTS LISTED IN SECTION 4702.1 THROUGH (J) OF THE SAN DIEGO COUNTY ZONING ORDINANCE.

*[Signature]* 01-05-09 DATE  
 JOHN PATTERSON RLA # 3505

**COUNTY APPROVED CHANGES**

NO.	DESCRIPTION	APPROVED BY	DATE

**BENCHMARK**

DESCRIPTION: BRASS DISC STAMPED "E 228 1968"  
 SET ON A STEEL ROD.

LOCATION: MISSION ROAD

RECORD FROM: COUNTY OF SAN DIEGO ROS 17292

ELEVATION: 195.42 DATUM: M.S.L.

**PRIVATE CONTRACT**

SHEET	7	COUNTY OF SAN DIEGO	24
DEPARTMENT OF PUBLIC WORKS		SHEET	

SLOPE IRRIGATION PLAN FOR:  
**BONSALL**  
 LOTS 1 & 2, TM 5427 RPL2  
 CALIFORNIA COORDINATE INDEX 410-1707

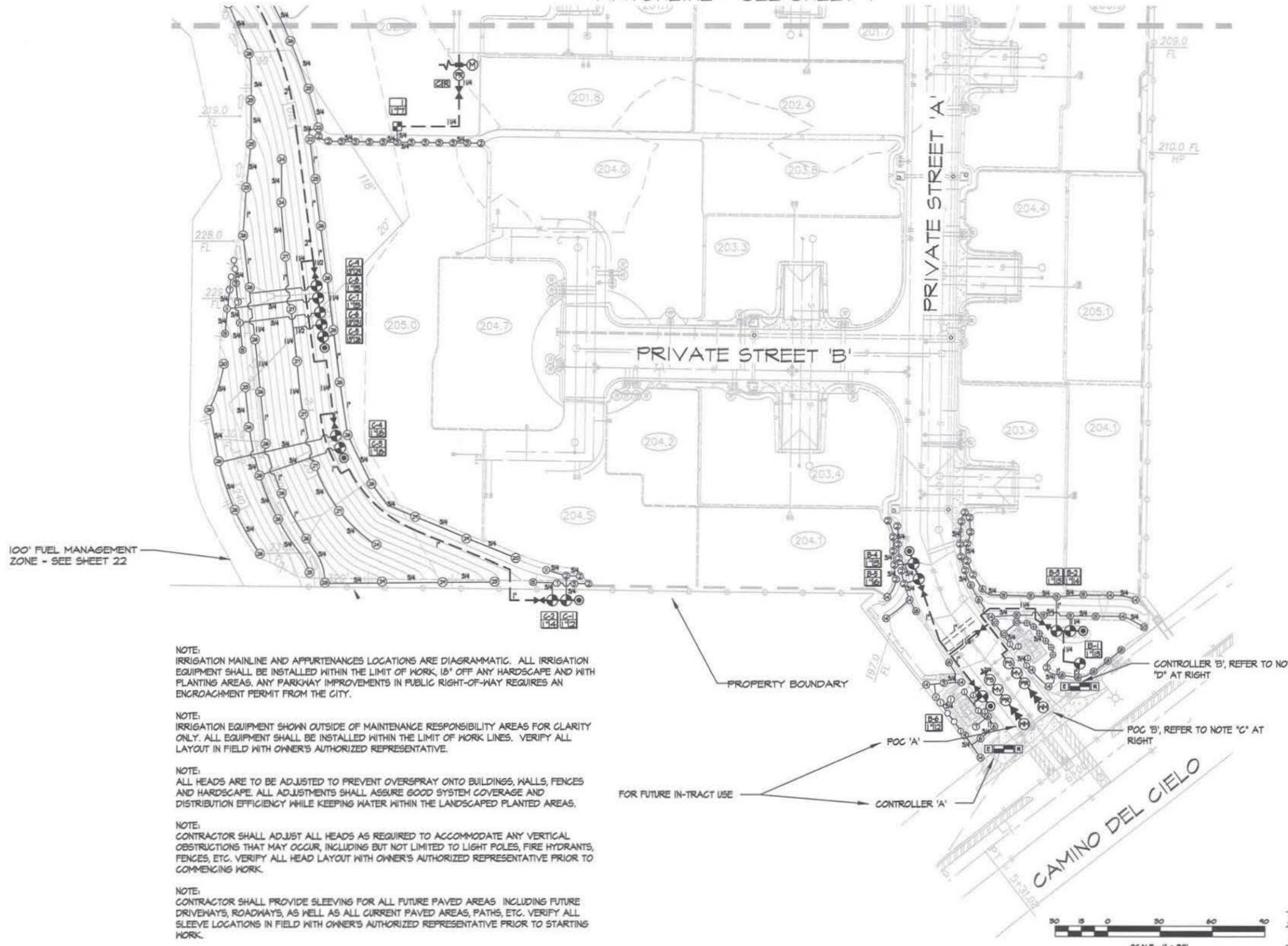
APPROVED: *[Signature]* ENGINEER OF RECORD: STEVEN C. KETTLER  
 FOR COUNTY ENGINEER R.C.E. 4858

BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

GRADING PERMIT NO. **L-15450**

LAND ARCH. NAME: GILLESPIE MOODY PATTERSON, INC. (GMP, INC.)  
 08-085-00 BONSALL SLOPES  
 PHONE NO. (858) 558-8977

MATCHLINE - SEE SHEET 7



**NOTE C:**  
 POC 'B' TO BE A 1" POTABLE WATER METER WITH A 1/2" SERVICE LATERAL.  
 BACKFLOW WYE/CV SIZE: 1 1/2"  
 BACKFLOW ENCLOSURE: V.I.T. SBBG-30CR  
 MASTER VALVE SIZE: 1 1/2"  
 FLOW SENSOR SIZE: 1 1/2"  
 STATIC WATER PRESSURE: 24.9 PSI  
 DESIGN WATER PRESSURE: 6.2 PSI  
 BOOST REQUIRED: NO  
 MAXIMUM DEMAND: 14 GPM  
 SET POC REGULATOR @ 75 PSI  
 ESTIMATED AREA SERVED: 2,961 SQ. FT.  
 EST. ANNUAL WATER USE: .17 ACRE FT. PER YEAR  
 MAWA: 23 ACRE FT. PER YEAR  
 ROAD STATION: \_\_\_\_\_  
 WATER SOURCE: RAINBOW MUNI  
 THE CONTRACTOR SHALL VERIFY LOCATION AND WATER PRESSURE BY DIRECT MEASUREMENT IN THE FIELD. IF EXISTING PRESSURE IS NOT AS STATED ON THE PLANS THE CONTRACTOR SHALL NOTIFY THE OWNERS' REPRESENTATIVE BEFORE PURCHASE OF EQUIPMENT AND BEGINNING INSTALLATION. PURCHASE OF EQUIPMENT AND ANY INSTALLATIONS WHEN EXISTING STATIC PRESSURE IS BELOW THAT STATED ABOVE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

**NOTE D:**  
 CONTROLLER 'B' SHALL BE A D.I.G. CONTROLLER ASSEMBLY, MODEL #:  
 LEIT X-10 (28 STATION)  
 FINAL LOCATION OF CONTROLLER, ELECTRICAL SERVICE AND APPURTENANCES SHALL BE 2' FROM ADJACENT SIDEWALK IN LANDSCAPE AREA AND CONFIRMED WITH OWNER'S REPRESENTATIVE PRIOR TO COMMENCING WORK.

100' FUEL MANAGEMENT ZONE - SEE SHEET 22

**NOTE:**  
 IRRIGATION MAINLINE AND APPURTENANCES LOCATIONS ARE DIAGRAMMATIC. ALL IRRIGATION EQUIPMENT SHALL BE INSTALLED WITHIN THE LIMIT OF WORK, 18" OFF ANY HARDSCAPE AND WITH PLANTING AREAS. ANY PARKWAY IMPROVEMENTS IN PUBLIC RIGHT-OF-WAY REQUIRES AN ENCROACHMENT PERMIT FROM THE CITY.

**NOTE:**  
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PROPERTY BOUNDARY

FOR FUTURE IN-TRACT USE

CONTROLLER 'B', REFER TO NOTE 'D' AT RIGHT

POC 'B', REFER TO NOTE 'C' AT RIGHT

CONTROLLER 'A'

CAMINO DEL CIELO



**gmp**  
 Gillespie Moody Patterson, Inc.  
 LANDSCAPE ARCHITECTURE & PLANNING  
 1404 GENESEE AVENUE, SUITE 140  
 LA JOLLA, CALIFORNIA 92037-3394  
 858-555-8477  
 FAX 858-555-9166

REVISIONS  
 REVISIONS 01-24-08  
 CIVIL BASE REVS 12-11-08

PLOTTED ON 01-08-09  
 DRAWN PM  
 APPROVED JF  
 JOB NO. 08-028-00  
 DATE 07-24-08  
 SCALE AS SHOWN

**SHEET INDEX**

SEE SHEET	1-6	CIVIL ENGINEER'S GRADING PLANS
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SEE SHEET	16-17	FOR IRRIGATION CALCULATIONS
SEE SHEET	18-19	FOR PLANTING PLANS
SEE SHEET	20-21	FOR PLANTING LEGEND, DETAILS, NOTES & SPECIFICATIONS
SEE SHEET	22	FOR FUEL MANAGEMENT PLAN
SEE SHEET	23-24	STRUCTURAL ENGINEER'S PLANS

**DECLARATION OF RESPONSIBLE CHARGE:**  
 I hereby declare that I am the Landscape Architect of work for this project, that I have exercised responsible charge over the design of the project as defined in section 6709 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 County of San Diego is confined to a review only and does not relieve me, as Landscape Architect of Work, of my responsibilities for project design.

John Patterson, RLA # 3505 Date 01-05-09

Gillespie Moody Patterson, Inc.  
 1404 Genesee Avenue, Suite 140  
 La Jolla, CA 92037  
 (858) 555-8477

**HOLD HARMLESS AND INDEMNIFICATION CLAUSE**

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE 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 CITY/COUNTY OF LOCAL JURISDICTION, AND THE LANDSCAPE ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, THE CITY/COUNTY OF LOCAL JURISDICTION, OR THE LANDSCAPE ARCHITECT.

**PERMITS**

SITE PLAN PERMIT NO.	SD05-027
REZONE PERMIT NO.	RO5-006
SPECIAL USE PERMIT NO.	N/A
TENTATIVE MAP NO.	TM 5427 RPL <sup>2</sup>
N.O.I. NO.	T.B.D.
HABITAT LOSS PERMIT	N/A

**ENVIRONMENTAL SERVICES UNIT**

APPROVED FOR COMPLIANCE WITH THE ENVIRONMENTAL REVIEW

APPROVED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

I FIND THAT THIS SHEET CONFORMS TO ACCEPTED LANDSCAPE ARCHITECTURAL PRACTICES AND IS IN COMPLIANCE WITH THE REQUIREMENTS LISTED IN SECTION 6730.1(d) THROUGH (v) OF THE SAN DIEGO COUNTY ZONING ORDINANCE.

JOHN PATTERSON RLA # 3505 DATE 01-05-09

**COUNTY APPROVED CHANGES**

NO.	DESCRIPTION	APPROVED BY	DATE

**BENCHMARK**

DESCRIPTION: BRASS DISC STAMPED "E 228 1968"  
 SET ON A STEEL ROD.

LOCATION: MISSION ROAD

RECORD FROM: COUNTY OF SAN DIEGO ROS 17292

ELEVATION: 195.42 DATUM: M.S.L.

**PRIVATE CONTRACT**

SHEET 2	COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS	24 SHEET
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SLOPE IRRIGATION PLAN FOR:  
**BONSALL**  
 LOTS 1 & 2, TM 5427 RPL<sup>2</sup>  
 CALIFORNIA COORDINATE INDEX 410-1707

APPROVED MICHAEL FARRINGTON FOR COUNTY ENGINEER  
 BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

ENGINEER OF WORK: STEVEN C. KETTLER  
 R.C.E. 4836

GRADING PERMIT NO. **L-15450**

LAND ARCH. NAME: GILLESPIE MOODY PATTERSON, INC. (GMP, INC.)  
 PHONE NO. (858) 558-8977

IRRIGATION MATERIAL LEGEND

SYMBOL	MANUFACT.	MODEL NO. / DESCRIPTION	GPM	PSI	SPACING	DETAIL
⓪	RAIN BIRD	1800-SAM-PRS-3 POP-UP	10, 15, 20	30	5 FT	A
①	RAIN BIRD	1800-SAM-PRS-UB POP-UP	26, 35, 52, 105	30	8 FT	A
②	RAIN BIRD	1800-SAM-PRS-UI0 POP-UP	34, 52, 74, 137	30	10 FT	A
③	RAIN BIRD	1800-SAM-PRS-UI2 POP-UP	55, 87, 13, 2.6	30	12 FT	A
④	RAIN BIRD	1800-SAM-PRS-UI5 POP-UP	75, 125, 185, 370	30	15 FT	A
⑤	RAIN BIRD	1800-SAM-PRS-IBEST/56T POP-UP	61, 121	30	5x15 FT 5x30 FT	A
⑥	HUNTER	I-20-ADV/36V-3/1.0/2.0 SR ROTOR HEAD	45, 90, 17	40	20 FT	A
⑦	HUNTER	I-20-ADV/36V-TS/1.5/3.0 SR ROTOR HEAD	68, 13, 27	40	25 FT	A
⑧	HUNTER	I-20-ADV/36V-1.0/2.0/4.0 ROTOR HEAD	1.0, 1.8, 3.7	40	30 FT	A
⑨	HUNTER	I-20-ADV/36V-1.5/3.0/6.0 ROTOR HEAD	1.4, 2.4, 4.9	40	35 FT	A
⑩	HUNTER	I-20-ADV/36V-2.0/4.0/8.0 ROTOR HEAD	1.8, 3.7, 6.0	40	40 FT	A
NO SYMBOL	RAIN BIRD/ HUNTER	ALL SHRUB HEADS INSTALLED FARTHER THAN TEN (10) FEET FROM PAVING, CURBS, SIDEWALKS, STEPS, TURF BOUNDARIES OR OTHER PEDESTRIAN AREAS MAY BE INSTALLED AS A HUNTER INST-00 SHRUB ADAPTER WITH THE NOZZLE AS SHOWN				B
NO SYMBOL	N/A	INSTALL ALL SHRUB HEADS ON 12" POP-UPS AND ALL TURF HEADS ON 6" POP-UPS.				

IRRIGATION MATERIAL LEGEND (POTABLE WATER)

SYMBOL	MANUFACT.	MODEL NO. / DESCRIPTION	DETAIL
⊕	P.O.C.	POTABLE IRRIGATION WATER METER (SEE NOTES FOR DESIGNATION AND SIZES). VERIFY ACTUAL LOCATION, SIZE, AND WATER PRESSURE IN THE FIELD PRIOR TO COMMENCING WORK AND PURCHASING EQUIPMENT.	N/A
▶	HILKINS	475XLYSR SERIES BACKFLOW PREVENTION ASSEMBLY W/ MODEL Y8P NYE STRAINER. ALL PIPING BETWEEN METER AND BACKFLOW DEVICE SHALL BE K' COPPER OR RED BRASS.	B
⊖	HILKINS	500-HLR SERIES PRESSURE REDUCING VALVE WITH 10 TO 125 PSI SPRING RANGE, SIZE AND PRESSURE SETTINGS AS NOTED.	C
⊕	RAIN BIRD	EPB-CP-0 SERIES BRASS MASTER CONTROL VALVE WITH DIG LEMA 15215 MICROPOWHER ACTUATOR SOLENOID. MASTER VALVE SHALL BE INSTALLED IN A 'JUMBO' SIZED VALVE BOX WITH LOCKING GREEN COVER AND 'RCV' HEAT BRANDED ON COVER.	G
⊖	DATA IN/ITS	IR-220 FVC FLOW SENSOR, WIRE TO CONTROLLER USING FTITID CABLE IN 1" CONDUIT, INSTALL PER MANUFACTURER'S RECOMMENDATIONS. MULTIPLE FLOW SENSORS REQUIRE SEPARATE CONDUIT RUNS.	D
⊖	NIBCO	MODEL NUMBER T-580-66 BRONZE BALL VALVE, LINE SIZE, THREADED TWO-PIECE BODY, VALVE BOX WITH GREEN LID, HEAT BRAND LID WITH 'BV'.	O
⊕	RAIN BIRD	44LC QUICK COUPLER VALVE, INSTALLED IN 10" ROUND VALVE BOX WITH LOCKING GREEN COVER AND 'GCV' HEAT BRANDED ON COVER. INSTALL GCV ON A 1/2" STUB-OUT OFF MAINLINE. EACH GCV SHALL BE ISOLATED FROM THE MAINLINE BY A 1/2" BALL VALVE AND INSTALLED AT 200' O.C. PER CITY REQUIREMENTS.	HM
⊕	RAIN BIRD	FEB-CP-PRS-D SERIES BRASS PRESSURE REGULATING CONTROL VALVE WITH DIG LEMA 15215 MICROPOWHER ACTUATOR SOLENOID, SIZE AS SHOWN, INSTALL ONE VALVE PER STD. RECT. VALVE BOX WITH LOCKING GREEN COVER AND 'RCV' HEAT BRANDED ON COVER. VALVES SHALL BE INSTALLED IN MANIFOLDS ISOLATED FROM THE MAINLINE BY A BALL VALVE LINE SIZE.	I
⊖	DIG	IRRIGATION CONTROLLER BY DIG LEIT X SERIES CONTROLLER. SEE IRRIGATION DESIGN FOR MODEL NUMBERS AND STATION COUNT.	Q
R	MINI CLIK II/ITS	RAIN SENSOR, ITS WILL MOUNT TO ENCLOSURE AND WIRE TO CONTROLLER.	N/A
E	N/A	120 VOLT ELECTRICAL POWER, PROVIDED BY ELECTRICIAN, VERIFY ACTUAL LOCATION IN FIELD	N/A
---	AS APPROVED	PVC SOLVENT WELD LATERAL PIPE WITH SCH.40 FITTINGS, 3/4"-1 1/2" SCH. 40, 2"-2 1/2" CLASS 200, DEPTH AS PER DETAIL.	N/A
---	AS APPROVED	PVC PIPE MAINLINES, DEPTH AS PER DETAIL, 1/2" & SMALLER SHALL BE SOLVENT WELD SCH.40 WITH SCH.40 SOLVENT WELD FITTINGS, 2"-3" SHALL BE SOLVENT WELD CL. 315 WITH SCH.80 SOLVENT WELD FITTINGS, 2 1/2"-5" FITTINGS SHALL BE THRUST BLOCKED, 4" AND LARGER SHALL BE CL. 200 GASKET JOINT WITH LEMCO DUCTILE IRON FITTINGS AND JOINT RESTRAINT.	N/A
---	AS APPROVED	PVC PIPE AS SLEEVING, CL. 315 TWICE THE DIAMETER OF PIPE OR WIRE BUNDLE CARRIED PLACE BELOW ALL PAVING, HARDSCAPE, ETC., AND AS DIRECTED BY OWNER'S AUTHORIZED REPRESENTATIVE. SLEEVES UNDER BROW DITCHES SHALL BE ENCASED IN CONCRETE A MINIMUM OF 6" THICK ON ALL SIDES OF PIPE. EXTEND ALL SLEEVES 12" MINIMUM PAST HARDSCAPE EDGES, MARK HARDSCAPE CURBS WITH 1 1/2" IN 2" HIGH LETTERS FOR LOCATION(S). EXTEND ALL PIPE 18" PAST SLEEVE PRIOR TO ANY FITTINGS.	N/A
NO SYMBOL	AS APPROVED	IRRIGATION CONTROL WIRE SHALL BE #14-F AWG DIRECT BURIAL (U.L. APPROVED), COLOR CODE WIRE PER CONTROLLER, A MINIMUM OF THREE SEPARATE SPARE PILOT WIRES TO THE END OF EACH MAINLINE. ROUTE SPARE WIRES INTO EACH VALVE MANIFOLD LOCATION, BUNDLE AND TAPE ALL WIRE AND INSTALL ADJACENT TO MAINLINE. LEAVE SPARE WIRE ENDS IN THE LAST VALVE MANIFOLD BOX ON THE MAINLINE. IRRIGATION COMMON WIRE SHALL BE #12-F AWG DIRECT BURIAL (U.L. APPROVED).	N/A
NO SYMBOL	SPEARS	DS-500 PRE-FILLED WIRE CONNECTORS, USE ON ALL WIRE CONNECTIONS IN VALVE OR PULL BOXES ONLY	N/A
NOT SHOWN	VALCON	5000 SERIES ADV, USED ON ALL SPRINKLERS WITH LOW HEAD DRAINAGE UNCONTROLLABLE BY FACTORY INTEGRAL SPRINKLER HEAD CHECK VALVE.	N/A
N	KBI	SPRING TYPE CHECK VALVE, LINE SIZE BY LATERAL LINE, INSTALL DOWNSTREAM OF EACH RCV WHEN RCV IS HIGHER THAN THE SPRINKLER HEADS.	F
N	KBI	SHING TYPE CHECK VALVE, LINE SIZE BY LATERAL LINE, INSTALL DOWNSTREAM OF EACH RCV WHEN RCV IS LOWER THAN THE SPRINKLER HEADS.	F
NO SYMBOL	LASCO	MANUFACTURED SCH.40 O-RING SWING JOINTS. FOR 1/2" SPRAY HEADS USE T532-212, FOR 3/4" TURF ROTORS USE T532-212, FOR 1" SPORT ROTORS USE 6132-412, FOR 1" QUICK COUPLER VALVES USE 6132S-212 WITH MALE BRASS STABILIZER ELBOW, FOR 3/4" QUICK COUPLER VALVES USE 6132T-212 WITH MALE BRASS STABILIZER ELBOW.	N/A
NO SYMBOL	GARSON	VALVE BOXES, SIZE PER EQUIPMENT LEGEND, WITH T-COVER LIDS AND CAPTIVE BOLT AND LOG-KIT. FOR ROUND DRIP EMITTERS USE MODEL 310, T' SECOND SHALL BE MODEL 708, 10" ROUND SHALL BE MODEL 910, 12" STANDARD RECT. SHALL BE MODEL 1418, 12" JUMBO RECT. SHALL BE MODEL 1220, SUPER JUMBO SHALL BE MODEL 1524, AND SUPER JUMBO XL SHALL BE MODEL 1730. VALVE BOXES SHALL HAVE BLACK HDPE BODY AND GREEN LIDS IN TURF, BLACK LIDS IN SHRUB BEDS, AND TAN LIDS IN ROCK MULCH. FOR USE IN NON-VEHICULAR TRAFFIC SITUATIONS ONLY. DO NOT INSTALL IN CONCRETE OR ASPHALT.	N/A

⊕ CONTROLLER / STATION #  
 --- GPM  
 --- VALVE SIZE



**gmp**  
 Gillespie  
 Moody  
 Patterson, Inc.  
 LANDSCAPE ARCHITECTURE  
 & PLANNING

1404 GENESEE AVENUE, SUITE 140  
 LA JOLLA, CALIFORNIA 92037-0994  
 858 • 558 • 8477  
 FAX 858 • 558 • 8158

REVISIONS  
 REVISIONS 01-24-08  
 CIVIL BASE REVS 12-11-08

PLOTTED ON 01-08-09  
 DRAWN PMH  
 APPROVED JF  
 JOB NO. 08-028-00  
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*[Signature]* 01-08-09 Date  
 John Patterson RLA # 3503

Gillespie Moody Patterson, Inc.  
 1404 Genesee Avenue, Suite 140  
 La Jolla, CA 92037  
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**PERMITS**

SITE PLAN PERMIT NO.	S05-027
REZONE PERMIT NO.	R05-006
SPECIAL USE PERMIT NO.	N/A
TENTATIVE MAP NO.	TM 5427 RPL <sup>2</sup>
N.O.I. NO.	T.B.D.
HABITAT LOSS PERMIT	N/A

**ENVIRONMENTAL SERVICES UNIT**

APPROVED FOR COMPLIANCE WITH THE ENVIRONMENTAL REVIEW

APPROVED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

I FIND THAT THIS SHEET CONFORMS TO ACCEPTED LANDSCAPE ARCHITECTURAL PRACTICES AND IS IN COMPLIANCE WITH THE REQUIREMENTS LISTED IN SECTION 6736(J) THROUGH (V) OF THE SAN DIEGO COUNTY ZONING ORDINANCE.

*[Signature]* 01-08-09 DATE  
 JOHN PATTERSON RLA # 3503

**COUNTY APPROVED CHANGES**

NO.	DESCRIPTION	APPROVED BY	DATE

**BENCHMARK**

DESCRIPTION: BRASS DISC STAMPED "E 228 1968"  
 SET ON A STEEL ROD.

LOCATION: MISSION ROAD

RECORD FROM: COUNTY OF SAN DIEGO ROS 17292

ELEVATION: 195.42 DATUM: M.S.L.

**PRIVATE CONTRACT**

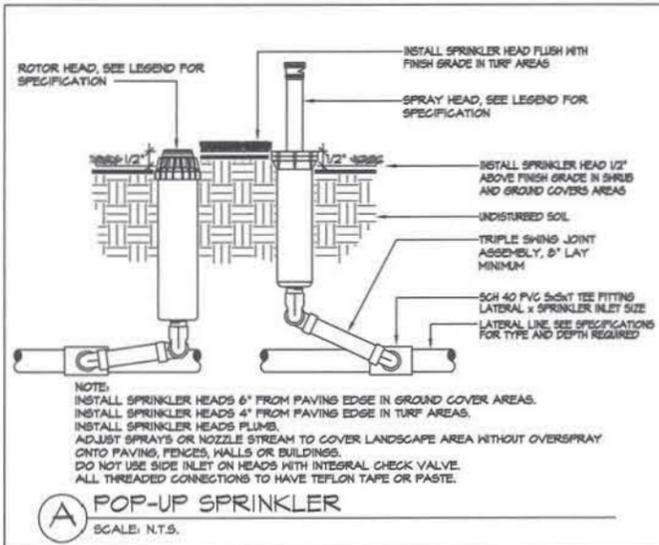
SHEET 9 COUNTY OF SAN DIEGO 24 SHEET  
 COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS

**IRRIGATION LEGEND FOR:**  
**BONSALL**  
 LOTS 1 & 2, TM 5427 RPL<sup>2</sup>  
 CALIFORNIA COORDINATE INDEX 410-1707

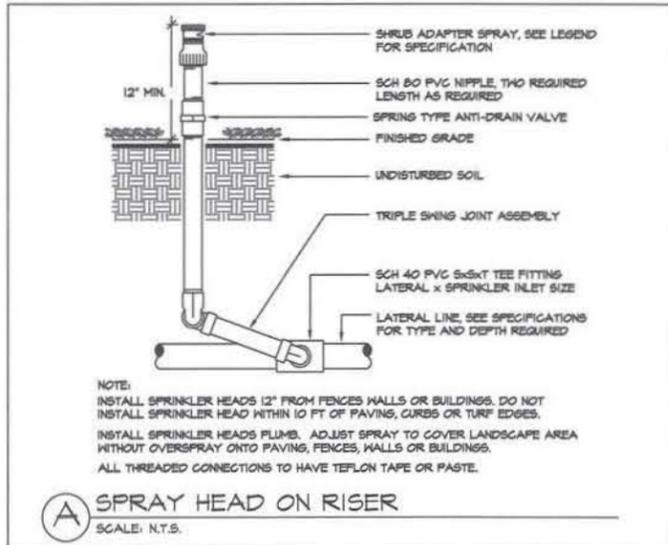
APPROVED MOHAMMAD FAKHERDIN FOR COUNTY ENGINEER  
 ENGINEER OF RECORD STEVEN C. KETTLER  
 R.C.E. 48368

GRADING PERMIT NO. L-15450

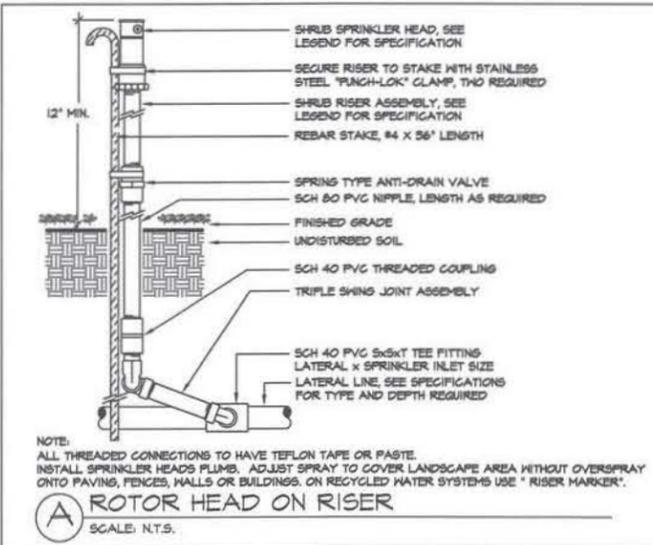
LAND ARCH. NAME: GILLESPIE MOODY PATTERSON, INC. (GMP, INC.)  
 08-085-00 BONSALL SLOPES  
 PHONE NO. (858) 558-8577



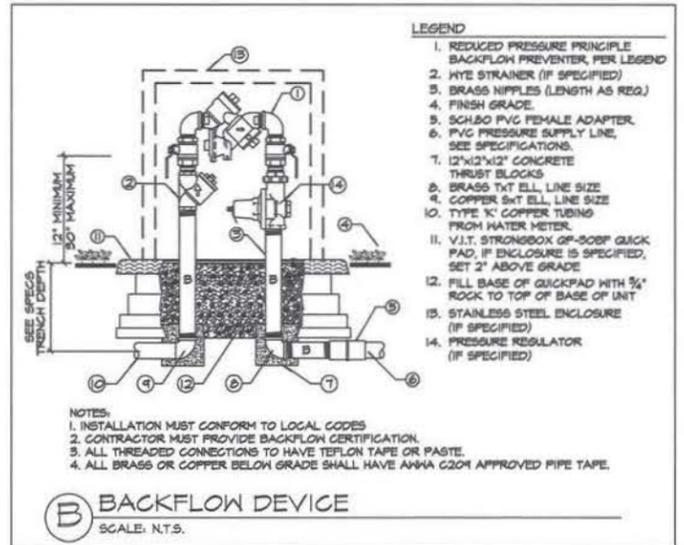
**A POP-UP SPRINKLER**  
SCALE: N.T.S.



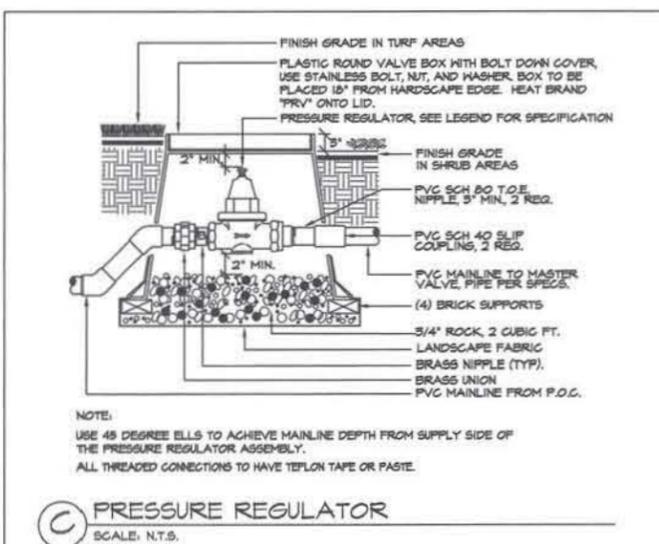
**A SPRAY HEAD ON RISER**  
SCALE: N.T.S.



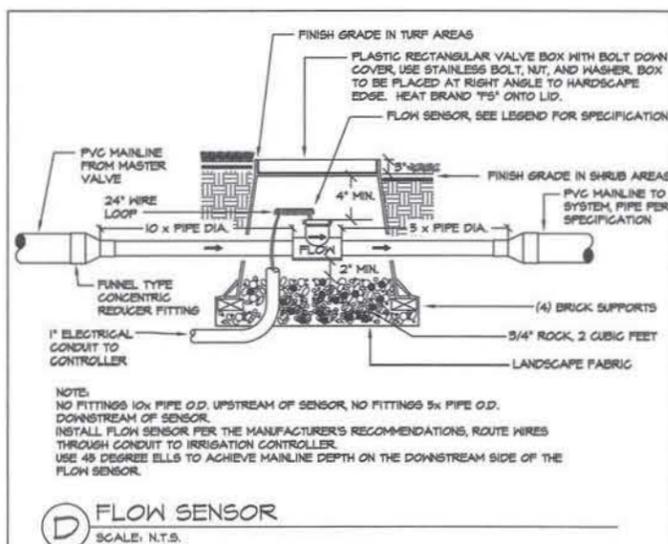
**A ROTOR HEAD ON RISER**  
SCALE: N.T.S.



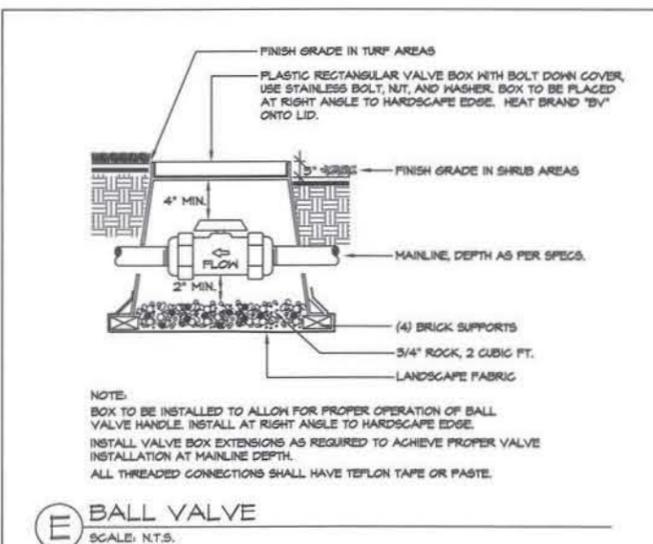
**B BACKFLOW DEVICE**  
SCALE: N.T.S.



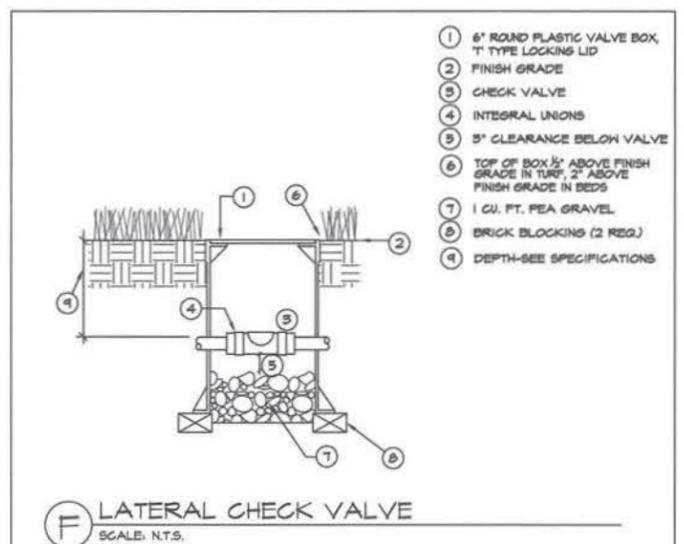
**C PRESSURE REGULATOR**  
SCALE: N.T.S.



**D FLOW SENSOR**  
SCALE: N.T.S.



**E BALL VALVE**  
SCALE: N.T.S.



**F LATERAL CHECK VALVE**  
SCALE: N.T.S.



**gmp**  
Gillespie Moody Patterson, Inc.  
LANDSCAPE ARCHITECTURE & PLANNING

4404 GENESSEE AVENUE, SUITE 140  
LA JOLLA, CALIFORNIA 92037-3554  
858-558-8471  
FAX 858-558-1188

REVISIONS  
RE-NUMBER SHEETS 09-24-08  
CIVIL BASE REVS 12-11-08

PLOTTED ON 01-08-09  
DRAWN PM  
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**PERMITS**

SITE PLAN PERMIT NO.	S05-027
REZONE PERMIT NO.	R05-006
SPECIAL USE PERMIT NO.	N/A
TENTATIVE MAP NO.	TM 5427 RPL <sup>2</sup>
N.O.I. NO.	T.B.D.
HABITAT LOSS PERMIT	N/A

**ENVIRONMENTAL SERVICES UNIT**

APPROVED FOR COMPLIANCE WITH THE ENVIRONMENTAL REVIEW

APPROVED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

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JOHN PATTERSON RLA # 3505 DATE 01-05-09

**COUNTY APPROVED CHANGES**

NO.	DESCRIPTION	APPROVED BY	DATE

**BENCHMARK**

DESCRIPTION: BRASS DISC STAMPED "TE 228 1968"  
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LOCATION: MISSION ROAD

RECORD FROM: COUNTY OF SAN DIEGO ROS 17292

ELEVATION: 195.42 DATUM: M.S.L.

**PRIVATE CONTRACT**

SHEET 10 COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS SHEET 24

IRRIGATION DETAILS FOR: L1-03

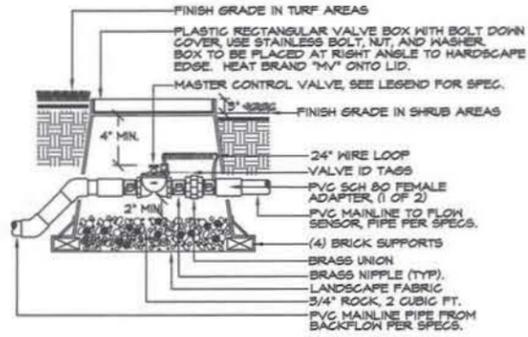
**BONSALL**  
LOTS 1 & 2, TM 5427 RPL2  
CALIFORNIA COORDINATE INDEX 410-1707

APPROVED SHEETLAD FALCONE/RODREZ FOR COUNTY ENGINEER

ENGINEER OF RECORD: STEVEN C. BERTLER  
R.C.E. 46558

GRADING PERMIT NO. L-15450

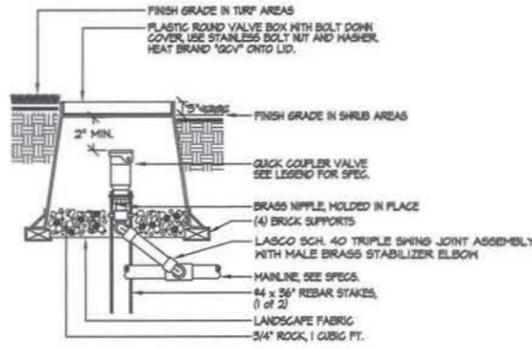
LAND ARCH. NAME: GILLESPIE MOODY PATTERSON, INC. (GMP, INC.)  
PHONE NO. (858) 558-8977



NOTE:  
USE 45 DEGREE ELLS TO ACHIEVE MAINLINE DEPTH FROM SUPPLY SIDE OF THE MASTER VALVE ASSEMBLY.  
ALL THREADED CONNECTIONS TO HAVE TEFLON TAPE OR PASTE.

**MASTER VALVE**

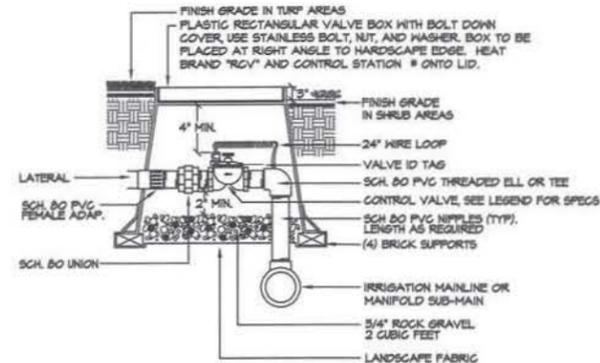
SCALE: N.T.S.



NOTE:  
ALL THREADED CONNECTIONS TO HAVE TEFLON TAPE OR PASTE.  
QUICK COUPLER VALVE KEY MUST SWIVEL FREELY WHEN INSERTED INTO LUG TRACK.

**QUICK COUPLER VALVE**

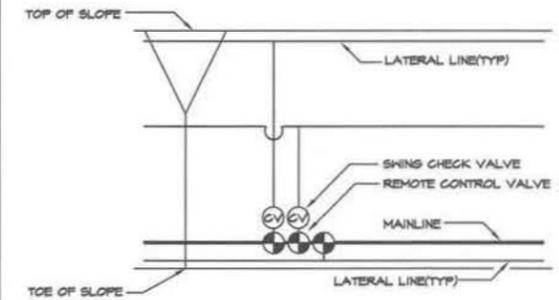
SCALE: N.T.S.



NOTE:  
ALL THREADED CONNECTIONS TO HAVE TEFLON TAPE OR PASTE.  
IF MAINLINE OR MANIFOLD SUB-MAIN IS AT VALVE DEPTH, TEE INTO VALVE WITH SCH.80 NIPPLE, LENGTH AS REQUIRED.

**REMOTE CONTROL VALVE**

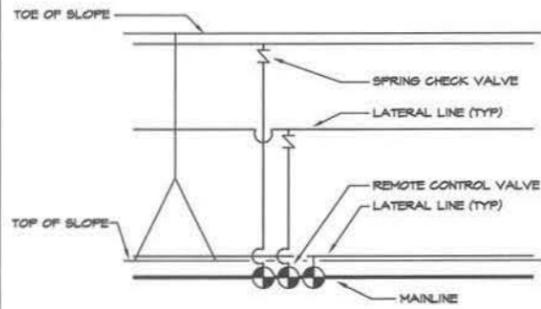
SCALE: N.T.S.



NOTES:  
WHEN HEADS ARE ABOVE RCV, USE SPRING CHECK VALVES 'CV' WHERE LATERALS CONNECT TO RCV.  
INSTALL IN SEPARATE 6" VALVE BOX.  
ALL THREADED CONNECTIONS TO HAVE TEFLON TAPE OR PASTE.

**RCV AT TOE OF SLOPE**

SCALE: N.T.S.



NOTES:  
WHERE HEADS ARE BELOW RCV USE SPRING CHECK VALVES AT LATERALS.  
ALL THREADED CONNECTIONS TO HAVE TEFLON TAPE OR PASTE.

**RCV AT TOP OF SLOPE**

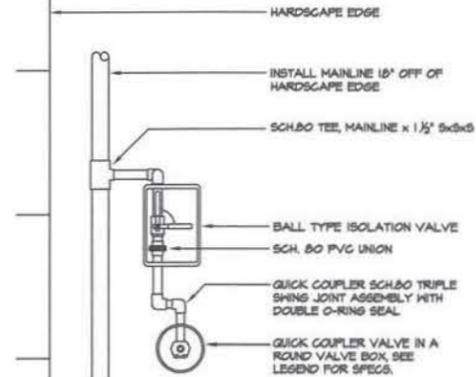
SCALE: N.T.S.

POTABLE WATER	RECYCLED WATER	CONTROLLER	DESIGNATION	EQUIPMENT
DH	RH	A	CC	COMMUNICATION CABLE FULL BOX
DH	RH	A	RCV + STATION #	REMOTE CONTROL VALVE
DH	RH	A	MV	MASTER CONTROL VALVE
DH	RH	A	FS	FLOW SENSOR
DH	RH	A	BV	BALL VALVE
DH	RH	A	FI	FERTILIZER INJECTOR
DH	RH	A	BS	BASKET STRAINER
DH	RH	A	MS	MOISTURE SENSOR
DH	RH	A	PB	FULL BOX
DH	RH	A	QCV	QUICK COUPLER VALVE
DH	RH	A	FV	FLUSH VALVE
DH	RH	A	SLV	SLEEVE MARKER
DH	RH	A	BO	MAINLINE BLOW OUT
DH	RH	A	DV	DRAIN VALVE
DH	RH	A	ARV	AIR/VACUUM RELIEF
DH	RH	A	DF	DISK FILTER
DH	RH	A	FRV	PRESSURE REG. VALVE

CONTACT IRRIGATION CONSULTANT FOR ANY DEVICE NOT LISTED.

**VALVE BOX IDENTIFICATION**

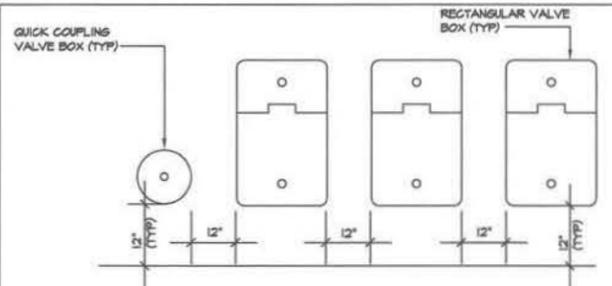
SCALE: N.T.S.



NOTE:  
ALL THREADED CONNECTIONS TO HAVE TEFLON TAPE OR PASTE.  
QCV TO BE INSTALLED IN PLANTING AREAS WHEN POSSIBLE.

**SINGLE QCV INSTALLATION**

SCALE: N.T.S.



NOTES:  
1. VALVE BOXES SHALL BE LABELED BY HOT IRON BRANDING OR ALUMINUM ASPHALT BASED WATERPROOF PAINT.  
2. CONTROL VALVES SHALL BE INSTALLED TO ALLOW ORDERLY ARRANGEMENT OF VALVE BOXES.  
3. LOCATE VALVE ASSEMBLIES IN SHRUB OR GROUND COVER AREAS WHEN POSSIBLE.  
4. LOCATION OF VALVE ASSEMBLIES SHALL BE STAKED FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.  
5. CENTER VALVE BOXES OVER VALVE ASSEMBLY TO FACILITATE ACCESS AND MAINTENANCE.  
6. SET VALVE BOXES AT EQUAL ELEVATIONS WITH TOPS AT FINISH GRADE IN TURF AREAS OR 3\"/>

**VALVE BOX LAYOUT**

SCALE: N.T.S.



SHEET INDEX		
SEE SHEET	1-6	CIVIL ENGINEER'S GRADING PLANS
SEE SHEET	7-8	FOR IRRIGATION PLANS
SEE SHEET	4	FOR IRRIGATION LEGEND
SEE SHEET	10-12	FOR IRRIGATION DETAILS & NOTES
SEE SHEET	13-15	FOR IRRIGATION SPECIFICATIONS
SEE SHEET	16-17	FOR IRRIGATION CALCULATIONS
SEE SHEET	18-19	FOR PLANTING PLANS
SEE SHEET	20-21	FOR PLANTING LEGEND, DETAILS, NOTES & SPECIFICATIONS
SEE SHEET	22	FOR FUEL MANAGEMENT PLAN
SEE SHEET	23-24	STRUCTURAL ENGINEER'S PLANS

DECLARATION OF RESPONSIBLE ALERT:  
I hereby declare that I am the Landscape Architect 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 County of San Diego is confined to a review only and does not relieve me, as Landscape Architect of Work, of my responsibilities for project design.  
John Patterson RLA # 3505 Date 01-05-09  
Gillespie Moody Patterson, Inc.  
9404 Genesee Avenue, Suite 140  
La Jolla, CA 92037  
(858) 558-8477

HOLD HARMLESS AND INDEMNIFICATION CLAUSE  
CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE 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 CITY/COUNTY OF LOCAL JURISDICTION, AND THE LANDSCAPE ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, THE CITY/COUNTY OF LOCAL JURISDICTION, OR THE LANDSCAPE ARCHITECT.

PERMITS  
SITE PLAN PERMIT NO. S05-027  
REZONE PERMIT NO. R05-008  
SPECIAL USE PERMIT NO. N/A  
TENTATIVE MAP NO. TM 5427 RPL<sup>2</sup>  
N.O.I. NO. T.B.D.  
HABITAT LOSS PERMIT N/A

ENVIRONMENTAL SERVICES UNIT  
APPROVED FOR COMPLIANCE WITH THE ENVIRONMENTAL REVIEW  
APPROVED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

I FIND THAT THIS SHEET CONFORMS TO ACCEPTED LANDSCAPE ARCHITECTURAL PRACTICES AND IS IN COMPLIANCE WITH THE REQUIREMENTS LISTED IN SECTION 6736.1 THROUGH 6736.10 OF THE SAN DIEGO COUNTY ZONING ORDINANCE.  
JOHN PATTERSON RLA # 3505 DATE 01-05-09

COUNTY APPROVED CHANGES  
NO. DESCRIPTION APPROVED BY DATE

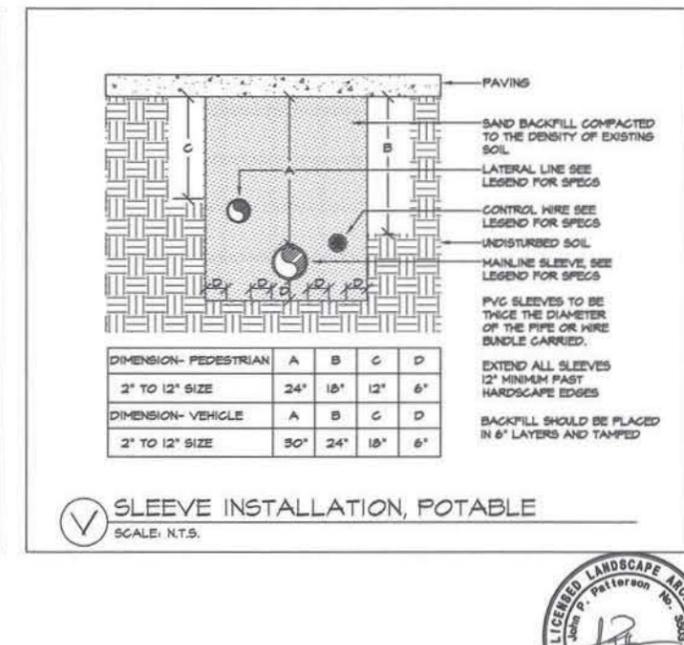
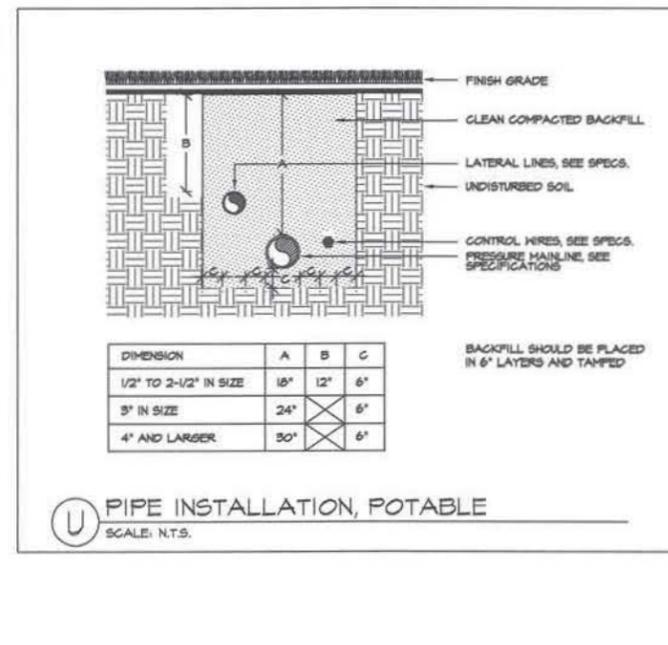
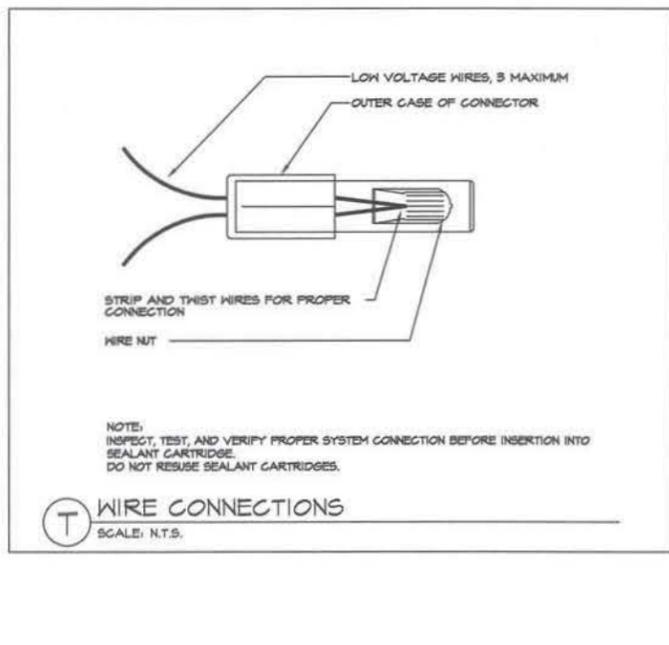
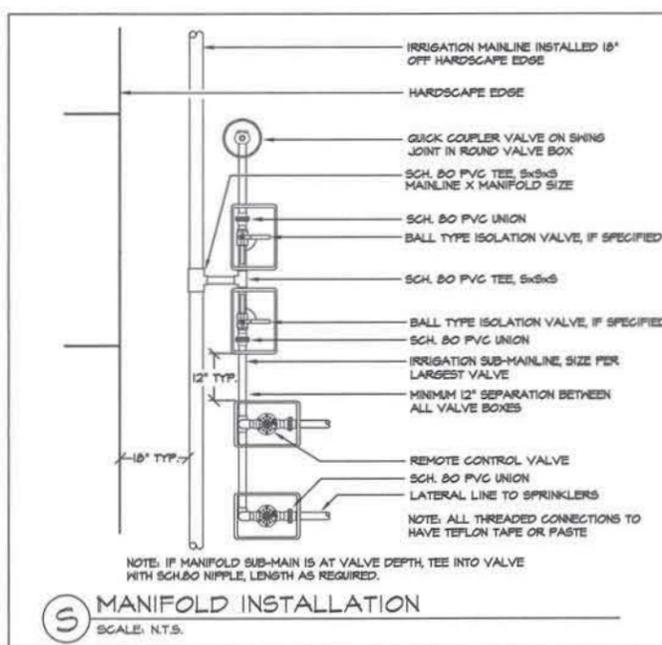
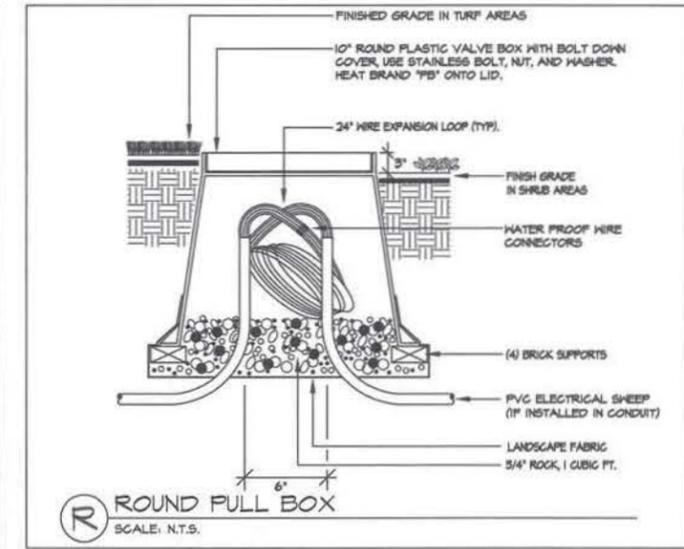
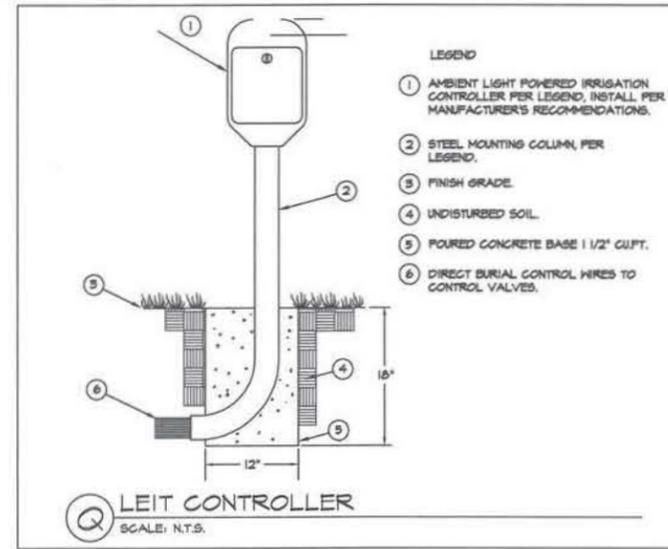
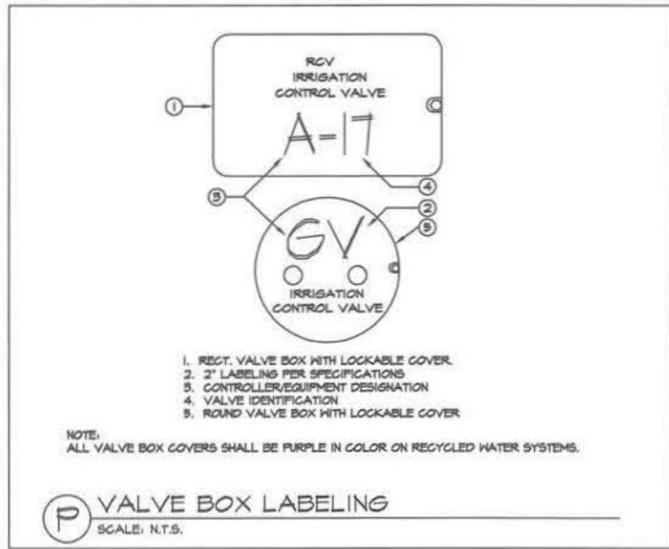
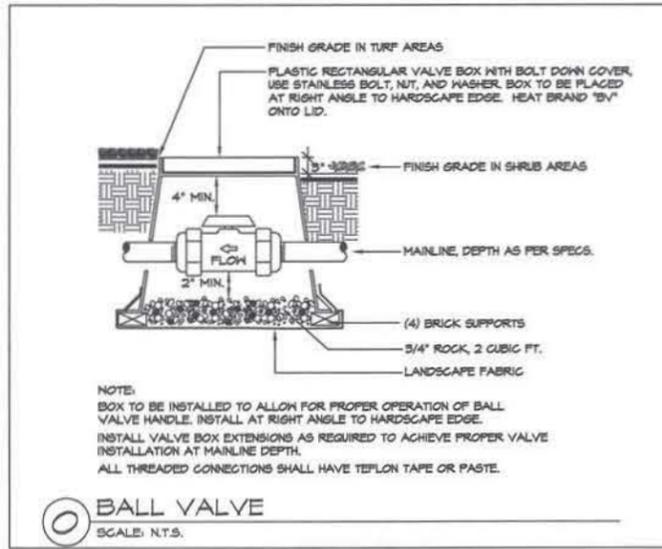
BENCHMARK  
DESCRIPTION: BRASS DISC STAMPED "TE 228 1968"  
SET ON A STEEL ROD.  
LOCATION: MISSION ROAD  
RECORD FROM: COUNTY OF SAN DIEGO RGS 17292  
ELEVATION: 195.42 DATUM: M.S.L.

PRIVATE CONTRACT  
SHEET 11 COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS 24 SHEET  
IRRIGATION DETAILS FOR: L1-04  
BONSALL  
LOTS 1 & 2, TM 5427 RPL2  
CALIFORNIA COORDINATE INDEX 410-1707  
APPROVED: MOHAMMAD FAKHRUDDIN FOR COUNTY ENGINEER  
ENGINEER OF PUBLIC: STEVEN C. KETTLER  
R.C.E. 4858  
GRADING PERMIT NO. L-15450  
DATE



REVISIONS	
REVISION	DATE
REVISION	DATE
CIVIL BASE REVS	12-11-08
PLOTTED ON	01-08-09
DRAWN BY	PM
APPROVED BY	JF
JOB NO.	08-088-00
DATE	07-24-08
SCALE	AS SHOWN

LAND ARCH. NAME: GILLESPIE MOODY PATTERSON, INC. (GMP, INC.) 08-085-00 BONSALL SLOPES  
PHONE NO. (858) 558-8977



**gmp**  
 Gillespie  
 Moody  
 Patterson, Inc.  
 LANDSCAPE ARCHITECTURE  
 & PLANNING

9404 GENESEE AVENUE, SUITE 140  
 LA JOLLA, CALIFORNIA 92037-3594  
 858-558-8477  
 FAX 858-558-8186

REVISIONS  
 REVISIONS 09-24-08  
 CIVIL BASE REVS 12-11-08

PLOTTED ON 01-08-04  
 DRAWN PM  
 APPROVED JF  
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 DATE 07-24-08  
 SCALE AS SHOWN

**SHEET INDEX**

SEE SHEET	1-6	CIVIL ENGINEER'S GRADING PLANS
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DECLARATION OF RESPONSIBLE CHARGE:  
 I hereby declare that I am the Landscape Architect of work for this project, that I have exercised responsible charge over the design of the project as defined in section 6709 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 County of San Diego is confined to a review only and does not relieve me, as Landscape Architect of work, of my responsibilities for project design.

*John Patterson* 01-05-09 Date  
 John Patterson RLA # 3505

Gillespie Moody Patterson, Inc.  
 9404 Genesee Avenue, Suite 140  
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**PERMITS**

SITE PLAN PERMIT NO.	S05-027
REZONE PERMIT NO.	R05-006
SPECIAL USE PERMIT NO.	N/A
TENTATIVE MAP NO.	TM 5487 RPL <sup>2</sup>
N.O.I. NO.	T.B.D.
HABITAT LOSS PERMIT	N/A

**ENVIRONMENTAL SERVICES UNIT**

APPROVED FOR COMPLIANCE WITH THE ENVIRONMENTAL REVIEW

APPROVED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

I FIND THAT THIS SHEET CONFORMS TO ACCEPTED LANDSCAPE ARCHITECTURAL PRACTICES AND IS IN COMPLIANCE WITH THE REQUIREMENTS LISTED IN SECTION 67501.1 THROUGH V) OF THE SAN DIEGO COUNTY ZONING ORDINANCE.

JOHN PATTERSON RLA # 3505 DATE 01-05-09

**COUNTY APPROVED CHANGES**

NO.	DESCRIPTION	APPROVED BY	DATE

**BENCHMARK**

DESCRIPTION: BRASS DISC STAMPED "E 228 1968"  
 SET ON A STEEL ROD.

LOCATION: MISSION ROAD

RECORD FROM: COUNTY OF SAN DIEGO ROS 17292

ELEVATION: 195.42 DATUM: M.S.L.

**PRIVATE CONTRACT**

SHEET 12	COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS	24 SHEET
----------	--	----------

IRRIGATION DETAILS FOR: L1-05

**BONSALL**  
 LOTS 1 & 2, TM 5427 RPL2  
 CALIFORNIA COORDINATE INDEX 410-1707

APPROVED MOHAMMAD FAKHRUDDOOG FOR COUNTY ENGINEER  
 BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

ENGINEER OF RECORD STEVEN C. KENTLER  
 R.C.E. 4858

GRADING PERMIT NO. L-15450

LAND ARCH. NAME: GILLESPIE MOODY PATTERSON, INC. (GMP, INC.)  
 PHONE NO. (858) 558-8577  
 08-085-00 BONSALL SLOPES

**IRRIGATION SPECIFICATIONS**

**SECTION 02811  
LANDSCAPE IRRIGATION**

**PART I - GENERAL**

**1.01 SUMMARY**  
A. IT IS THE INTENT OF THE SPECIFICATIONS AND DRAWINGS THAT THE FINISHED SYSTEM IS COMPLETE IN EVERY RESPECT AND SHALL BE READY FOR OPERATION SATISFACTORY TO THE OWNER.  
B. THE WORK SHALL INCLUDE ALL MATERIALS, LABOR, SERVICES, TRANSPORTATION, AND EQUIPMENT NECESSARY TO PERFORM THE WORK AS INDICATED ON THE DRAWINGS, IN THESE SPECIFICATIONS, AND AS NECESSARY TO COMPLETE THE CONTRACT.

**1.02 CONSTRUCTION DRAWINGS**  
A. DUE TO THE SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, SLEEVES, ETC. WHICH MAY BE REQUIRED. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE STRUCTURAL AND FINISHED CONDITIONS AFFECTING ALL OF HIS WORK AND PLAN HIS WORK ACCORDINGLY, FURNISHING SUCH FITTINGS, ETC. AS MAY BE REQUIRED TO MEET SUCH CONDITIONS. DRAWINGS ARE GENERALLY DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE INSTALLED. THE WORK SHALL BE INSTALLED IN SUCH A MANNER AS TO AVOID CONFLICTS BETWEEN IRRIGATION SYSTEMS, PLANTING, AND ARCHITECTURAL FEATURES.  
B. ALL WORK CALLED FOR ON THE DRAWINGS BY NOTES OR DETAILS SHALL BE FURNISHED AND INSTALLED WHETHER OR NOT SPECIFICALLY MENTIONED IN THE SPECIFICATIONS. WHEN AN ITEM IS SHOWN ON THE PLANS BUT NOT SHOWN ON THE SPECIFICATIONS OR VICE VERSA, IT SHALL BE DEEMED TO BE AS SHOWN ON BOTH. THE LANDSCAPE ARCHITECT SHALL HAVE FINAL AUTHORITY FOR CLARIFICATION.  
C. THE CONTRACTOR SHALL NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES OR DISCREPANCIES IN AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AS SOON AS DETECTED. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISION NECESSARY.

**1.03 QUALITY ASSURANCE**  
A. PROVIDE AT LEAST ONE ENGLISH SPEAKING PERSON WHO SHALL BE PRESENT AT ALL TIMES DURING EXECUTION OF THIS PORTION OF THE WORK AND WHO SHALL BE THOROUGHLY FAMILIAR WITH THE TYPE OF MATERIALS BEING INSTALLED AND THE MANUFACTURER'S RECOMMENDED METHODS OF INSTALLATION AND WHO SHALL DIRECT ALL WORK PERFORMED UNDER THIS SECTION.  
B. MANUFACTURER'S DIRECTIONS AND DETAILED DRAWINGS SHALL BE FOLLOWED IN ALL CASES WHERE THE MANUFACTURER OF ARTICLES USED IN THIS CONTRACT FURNISH DIRECTIONS COVERING POINTS NOT SHOWN IN THE DRAWINGS AND SPECIFICATIONS.  
C. ALL LOCAL, MUNICIPAL AND STATE LAWS, RULES AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS, AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR. ANYTHING CONTAINED IN THESE SPECIFICATIONS SHALL NOT BE CONSTRUED TO CONFLICT WITH ANY OF THE ABOVE RULES AND REGULATIONS OF THE SAME. HOWEVER, WHEN THESE SPECIFICATIONS AND DRAWINGS CALL FOR OR DESCRIBE MATERIALS, WORKMANSHIP, OR CONSTRUCTION OF A BETTER QUALITY, HIGHER STANDARD, OR LARGER SIZE THAN IS REQUIRED BY THE ABOVE RULES AND REGULATIONS, THE PROVISIONS OF THESE SPECIFICATIONS AND DRAWINGS SHALL TAKE PRECEDENCE.  
D. ALL MATERIALS SUPPLIED FOR THIS PROJECT SHALL BE NEW AND FREE FROM ANY DEFECTS. ALL DEFECTIVE MATERIALS SHALL BE REPLACED IMMEDIATELY AT NO ADDITIONAL COST TO OWNER.  
E. THE CONTRACTOR SHALL SECURE THE REQUIRED LICENSES AND PERMITS INCLUDING PAYMENTS OF CHARGES AND FEES, GIVE REQUIRED NOTICES TO PUBLIC AUTHORITIES, VERIFY PERMITS SECURED OR ARRANGEMENTS MADE BY OTHERS AFFECTING THE WORK OF THIS SECTION.

**1.04 SUBMITTALS**  
A. MATERIALS LIST:  
1. AFTER AWARD OF CONTRACT AND BEFORE ANY IRRIGATION SYSTEM MATERIALS ARE DELIVERED TO THE JOB SITE, SUBMIT TO THE OWNER A COMPLETE LIST OF ALL IRRIGATION SYSTEMS, MATERIALS, OR PROCESSES PROPOSED TO BE FURNISHED AND INSTALLED AS PART OF THIS CONTRACT.  
2. SHOW MANUFACTURER'S NAME AND CATALOG NUMBER FOR EACH ITEM, FURNISH COMPLETE CATALOG CUTS AND TECHNICAL DATA, FURNISH THE MANUFACTURER'S RECOMMENDATIONS AS TO THE METHOD OF INSTALLATION.  
3. NO SUBSTITUTIONS WILL BE ALLOWED WITHOUT PRIOR WRITTEN ACCEPTANCE BY THE LANDSCAPE ARCHITECT OR OWNER'S AUTHORIZED REPRESENTATIVE.  
4. MANUFACTURER'S WARRANTIES SHALL NOT RELIEVE THE CONTRACTOR OF HIS LIABILITY UNDER THE GUARANTEE. SUCH WARRANTIES SHALL ONLY SUPPLEMENT THE GUARANTEE.  
B. SUBSTITUTIONS:  
IF THE IRRIGATION CONTRACTOR WISHES TO SUBSTITUTE ANY EQUIPMENT OR MATERIALS FOR THOSE EQUIPMENT OR MATERIALS LISTED ON THE IRRIGATION DRAWINGS AND SPECIFICATIONS HE MAY DO SO BY PROVIDING THE FOLLOWING INFORMATION TO THE LANDSCAPE ARCHITECT OR OWNER'S AUTHORIZED REPRESENTATIVE AND CITY INSPECTOR FOR APPROVAL:  
1. PROVIDE A WRITTEN STATEMENT INDICATING THE REASON FOR MAKING THE SUBSTITUTION.  
2. PROVIDE CATALOG CUT SHEETS, TECHNICAL DATA, AND PERFORMANCE INFORMATION FOR EACH SUBSTITUTE ITEM.  
3. PROVIDE IN WRITING THE DIFFERENCE IN INSTALLED PRICE IF THE ITEM IS ACCEPTED.

**1.05 EXISTING CONDITIONS**  
A. THE CONTRACTOR SHALL VERIFY AND BE FAMILIAR WITH THE LOCATIONS, SIZE AND DETAIL OF POINTS OF CONNECTION PROVIDED AS THE SOURCE OF WATER, ELECTRICAL SUPPLY, AND ANY TELEPHONE LINE CONNECTION TO THE IRRIGATION SYSTEM.  
B. IRRIGATION DESIGN IS BASED ON THE AVAILABLE STATIC WATER PRESSURE SHOWN ON THE DRAWINGS. CONTRACTOR SHALL VERIFY STATIC WATER ON THE PROJECT PRIOR TO THE START OF CONSTRUCTION. SHOULD A DISCREPANCY EXIST, NOTIFY THE LANDSCAPE ARCHITECT AND OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO BEGINNING CONSTRUCTION.  
C. PRIOR TO CUTTING INTO THE SOIL, THE CONTRACTOR SHALL LOCATE ALL CABLES, CONDUITS, SEWER SEPTIC TANKS, AND OTHER UTILITIES AS ARE COMMONLY ENCOUNTERED UNDERGROUND AND HE SHALL TAKE PROPER PRECAUTIONS NOT TO DAMAGE OR DISTURB SUCH IMPROVEMENTS. IF A CONFLICT EXISTS BETWEEN THE SUCH OBSTACLES AND THE PROPOSED WORK, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE LANDSCAPE ARCHITECT AND OWNER WHO WILL ARRANGE FOR RELOCATIONS. THE CONTRACTOR WILL PROCEED IN THE SAME MANNER IF A ROCK LAYER OR ANY OTHER SUCH CONDITIONS ARE ENCOUNTERED.  
D. THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES AND FEATURES TO REMAIN ON AND ADJACENT TO THE PROJECT SITE DURING CONSTRUCTION. CONTRACTOR SHALL REPAIR, AT HIS OWN COST, ALL DAMAGE RESULTING FROM HIS OPERATIONS OR NEGLIGENCE.  
E. THE IRRIGATION CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR FOR INSTALLATION OF REQUIRED SLEEVING AS SHOWN ON THE PLANS.

**1.06 INSPECTIONS**  
A. THE CONTRACTOR SHALL PERMIT THE LANDSCAPE ARCHITECT, OWNER'S AUTHORIZED REPRESENTATIVE AND CITY INSPECTOR TO VISIT AND INSPECT AT ALL TIMES ANY PART OF THE WORK AND SHALL PROVIDE SAFE ACCESS FOR SUCH VISITS.  
B. WHERE THE SPECIFICATIONS REQUIRE WORK TO BE TESTED BY THE CONTRACTOR, IT SHALL NOT BE COVERED OVER UNTIL ACCEPTED BY THE LANDSCAPE ARCHITECT, OWNER'S AUTHORIZED REPRESENTATIVE, AND/OR GOVERNING AGENCIES. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR NOTIFYING THE LANDSCAPE ARCHITECT, OWNER, AND GOVERNING AGENCIES A MINIMUM OF 48 HOURS IN ADVANCE, WHERE AND WHEN THE WORK IS READY FOR TESTING. SHOULD ANY WORK BE COVERED WITHOUT TESTING OR ACCEPTANCE, IT SHALL BE, IF SO ORDERED, UNCOVERED AT THE CONTRACTOR'S EXPENSE.  
C. INSPECTIONS WILL BE REQUIRED FOR THE FOLLOWING AT A MINIMUM:  
1. SYSTEM LAYOUT  
2. PRESSURE TEST OF IRRIGATION MAIN LINE (FOUR HOURS AT 125 PSI OR 120% OF STATIC WATER PRESSURE, WHICH EVER IS GREATER) APPROVAL REQUIRED BY CITY INSPECTOR.  
3. COVERAGE TEST OF IRRIGATION SYSTEM  
4. FINAL INSPECTION PRIOR TO START OF MAINTENANCE PERIOD  
5. FINAL ACCEPTANCE  
D. SITE OBSERVATIONS AND TESTING WILL NOT COMMENCE WITHOUT THE RECORD DRAWINGS AS PREPARED BY THE IRRIGATION CONTRACTOR. RECORD DRAWINGS MUST COMPLETE AND UP TO DATE FOR EACH SITE VISIT.  
E. WORK WHICH FAILS TESTING AND IS NOT ACCEPTED WILL BE RETESTED. HOURLY RATES AND EXPENSES OF THE LANDSCAPE ARCHITECT, OWNER'S AUTHORIZED REPRESENTATIVE, AND GOVERNING AGENCIES FOR REINSPECTION OR RETESTING WILL BE PAID BY THE IRRIGATION CONTRACTOR AT NO ADDITIONAL EXPENSE TO OWNER.

**1.07 STORAGE AND HANDLING**  
A. USE ALL MEANS NECESSARY TO PROTECT IRRIGATION SYSTEM MATERIALS BEFORE, DURING, AND AFTER INSTALLATION AND TO PROTECT THE INSTALLATION WORK AND MATERIALS OF ALL OTHER TRADES. IN THE EVENT OF DAMAGE, IMMEDIATELY MAKE ALL REPAIRS AND REPLACEMENTS NECESSARY TO THE ACCEPTANCE OF THE LANDSCAPE ARCHITECT AND OWNER AND AT NO ADDITIONAL COST TO THE OWNER.  
B. EXERCISE CARE IN HANDLING, LOADING, UNLOADING, AND STORING PLASTIC PIPE AND FITTINGS UNDER COVER UNTIL READY TO INSTALL. TRANSPORT PLASTIC PIPE ONLY ON A VEHICLE WITH A BED LONG ENOUGH TO ALLOW THE PIPE TO LAY FLAT TO AVOID UNDESIRABLE BEHINDS AND CONCENTRATED EXTERNAL LOAD.

**1.08 CLEANUP AND DISPOSAL**  
A. DISPOSE OF WASTE, TRASH, AND DEBRIS IN ACCORDANCE WITH APPLICABLE LAWS AND ORDINANCES AND AS PRESCRIBED BY AUTHORITIES HAVING JURISDICTION. BURY NO SUCH WASTE MATERIAL AND DEBRIS ON THE SITE. BURNING OF TRASH AND DEBRIS WILL NOT BE PERMITTED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF RUBBISH AND DEBRIS GENERATED BY HIS WORK AND WORKMEN AT FREQUENT INTERVALS OR WHEN ORDERED TO DO SO BY THE OWNER'S AUTHORIZED REPRESENTATIVE.  
B. AT THE TIME OF COMPLETION THE ENTIRE SITE WILL BE CLEARED OF TOOLS, EQUIPMENT, RUBBISH AND DEBRIS WHICH SHALL BE DISPOSED OF OFF-SITE IN A LEGAL DISPOSAL AREA.

**1.09 TURNOVER ITEMS**  
A. RECORD DRAWINGS:  
1. RECORD ACCURATELY ON ONE SET OF CONTRACT DRAWINGS ALL CHANGES IN THE WORK CONSTITUTING DEPARTURES FROM THE ORIGINAL CONTRACT DRAWINGS.  
2. THE CHANGES AND DIMENSIONS SHALL BE RECORDED IN A LEGIBLE AND WORKMANLIKE MANNER TO THE SATISFACTION OF THE OWNER. PRIOR TO FINAL INSPECTION OF WORK, SUBMIT RECORD DRAWINGS TO THE LANDSCAPE ARCHITECT OR OWNER'S AUTHORIZED REPRESENTATIVE.  
3. DIMENSIONS FROM TO PERMANENT POINTS OF REFERENCE SUCH AS BUILDINGS, SIDEWALKS, CURBS, ETC. SHALL BE SHOWN. DATA ON RECORD DRAWINGS SHALL BE RECORDED ON A DAY TO DAY BASIS AS THE PROJECT IS BEING INSTALLED. ALL LETTERING ON DRAWINGS SHALL BE MINIMUM 1/8 INCH IN SIZE.  
4. SHOW LOCATIONS AND DEPTHS OF THE FOLLOWING ITEMS:  
A. POINT OF CONNECTION (INCLUDING WATER METERS, BACKFLOW PREVENTERS, MASTER CONTROL VALVES, ETC.)  
B. ROUTING OF SPRINKLER PRESSURE LINES (DIMENSIONS SHOWN AT A MAXIMUM OF 100 FEET ALONG ROUTING)  
C. GATE VALVES  
D. AUTOMATIC REMOTE CONTROL VALVES AND ISOLATION BALL VALVES  
E. QUICK COUPLING VALVES AND ISOLATION BALL VALVES  
F. ROUTING OF CONTROL WIRES  
G. IRRIGATION CONTROLLERS  
H. RELATED EQUIPMENT (AS MAY BE DIRECTED)  
5. MAINTAIN RECORD DRAWINGS ON SITE AT ALL TIMES. UPON COMPLETION OF WORK, TRANSFER ALL AS-BUILT INFORMATION AND DIMENSIONS TO REPRODUCIBLE SEPIA PRINTS.

**B. CONTROLLER CHARTS:**  
1. RECORD DRAWINGS MUST BE APPROVED BY LANDSCAPE ARCHITECT AND/OR OWNER'S AUTHORIZED REPRESENTATIVE BEFORE CHARTS ARE PREPARED.  
2. PROVIDE ONE CONTROLLER CHART FOR EACH AUTOMATIC CONTROLLER. CHART SHALL SHOW THE AREA COVERED BY THE PARTICULAR CONTROLLER.  
3. THE CHART IS TO BE A REDUCED COPY OF THE ACTUAL 'RECORD' DRAWING. IN THE EVENT THE CONTROLLER SEQUENCE IS NOT LEGIBLE WHEN THE DRAWING IS REDUCED, IT SHALL BE ENLARGED TO A READABLE SIZE.  
4. WHEN COMPLETED AND APPROVED, THE CHART SHALL BE HERMETICALLY SEALED BETWEEN TWO PIECES OF PLASTIC, EACH PIECE BEING A MINIMUM 20 MILS IN THICKNESS.

**C. OPERATION AND MAINTENANCE MANUALS:**  
1. TWO INDIVIDUALLY BOUND COPIES OF OPERATION AND MAINTENANCE MANUALS SHALL BE DELIVERED TO THE LANDSCAPE ARCHITECT OR OWNER'S AUTHORIZED REPRESENTATIVE AT LEAST 10 CALENDAR DAYS PRIOR TO FINAL INSPECTION. THE MANUALS SHALL DESCRIBE THE MATERIAL INSTALLED AND THE PROPER OPERATION OF THE SYSTEM.  
2. EACH COMPLETE, BOUND MANUAL SHALL INCLUDE THE FOLLOWING INFORMATION:  
A. INDEX SHEET STATING CONTRACTOR'S ADDRESS AND TELEPHONE NUMBER, DURATION OF GUARANTEE PERIOD, LIST OF EQUIPMENT INCLUDING NAMES AND ADDRESSES OF LOCAL MANUFACTURER REPRESENTATIVES.  
B. OPERATING AND MAINTENANCE INSTRUCTIONS FOR ALL EQUIPMENT.  
C. SPARE PARTS LISTS AND RELATED MANUFACTURER INFORMATION FOR ALL EQUIPMENT.

**D. EQUIPMENT:**  
1. SUPPLY AS A PART OF THIS CONTRACT THE FOLLOWING ITEMS:  
A. TWO (2) WRENCHES FOR DISASSEMBLY AND ADJUSTMENT OF EACH TYPE OF SPRINKLER HEAD USED IN THE IRRIGATION SYSTEM.  
B. THREE 50-INCH SPRINKLER KEYS FOR MANUAL OPERATION OF CONTROL VALVES.  
C. TWO KEYS FOR EACH AUTOMATIC CONTROLLER.  
D. FIVE QUICK COUPLER KEYS WITH A BRONZE HOSE THREAD 90 DEGREE SHIVEL ATTACHMENT AND FIVE COUPLER LID KEYS.  
E. FIVE VALVE BOX COVER KEY OR WRENCH.  
F. ONE 3-FOOT TEE WRENCH FOR OPERATING GATE VALVES 3 INCHES OR LARGER (IF USED).  
G. SIX EXTRA SPRINKLER HEADS OF EACH SIZE AND TYPE PER IRRIGATION P.O.C.  
2. THE ABOVE EQUIPMENT SHALL BE TURNED OVER TO OWNER'S AUTHORIZED REPRESENTATIVE AT THE FINAL INSPECTION.

**1.10 COMPLETION**  
A. AT THE TIME OF THE PRE-MAINTENANCE PERIOD INSPECTION, THE LANDSCAPE ARCHITECT, OWNER'S AUTHORIZED REPRESENTATIVE, AND GOVERNING AGENCIES WILL INSPECT THE WORK, AND IF NOT ACCEPTED, WILL PREPARE A LIST OF ITEMS TO BE COMPLETED BY THE CONTRACTOR. AT THE TIME OF THE POST-MAINTENANCE PERIOD OR FINAL INSPECTION THE WORK WILL BE REINSPECTED AND FINAL ACCEPTANCE WILL BE IN WRITING BY THE LANDSCAPE ARCHITECT, OWNER'S AUTHORIZED REPRESENTATIVE, AND GOVERNING AGENCIES.  
B. THE OWNER'S AUTHORIZED REPRESENTATIVE SHALL HAVE FINAL AUTHORITY ON ALL PORTIONS OF THE WORK.

**C. AFTER THE SYSTEM HAS BEEN COMPLETED, THE CONTRACTOR SHALL INSTRUCT OWNER'S AUTHORIZED REPRESENTATIVE IN THE OPERATION AND MAINTENANCE OF THE IRRIGATION SYSTEM AND SHALL FURNISH A COMPLETE SET OF OPERATING AND MAINTENANCE INSTRUCTIONS.  
D. ANY SETTILING OF TRENCHES WHICH MAY OCCUR DURING THE ONE-YEAR PERIOD FOLLOWING ACCEPTANCE SHALL BE REPAIRED TO THE OWNER'S SATISFACTION BY THE CONTRACTOR WITHOUT ANY ADDITIONAL EXPENSE TO THE OWNER. REPAIRS SHALL INCLUDE THE COMPLETE RESTORATION OF ALL DAMAGE TO PLANTING, PAVING OR OTHER IMPROVEMENTS OF ANY KIND AS A RESULT OF THE WORK.**

**1.11 GUARANTEE**  
A. THE ENTIRE SPRINKLER SYSTEM, INCLUDING ALL WORK DONE UNDER THIS CONTRACT, SHALL BE UNCONDITIONALLY GUARANTEED AGAINST ALL DEFECTS AND FAULT OF MATERIAL AND WORKMANSHIP, INCLUDING SETTILING OF BACK FILL AREAS BELOW GRADE, FOR A PERIOD OF ONE (1) YEAR FOLLOWING THE FILING OF THE NOTICE OF COMPLETION. SHOULD ANY PROBLEM WITH THE IRRIGATION SYSTEM BE DISCOVERED WITHIN THE GUARANTEE PERIOD, IT SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO OWNER WITHIN TEN (10) CALENDAR DAYS OF RECEIPT OF WRITTEN NOTICE FROM OWNER. WHEN THE NATURE OF THE REPAIRS AS DETERMINED BY THE OWNER CONSTITUTE AN EMERGENCY (I.E. BROKEN PRESSURE LINE) THE OWNER MAY PROCEED TO MAKE REPAIRS AT THE CONTRACTOR'S EXPENSE. ANY AND ALL DAMAGES TO EXISTING IMPROVEMENT RESULTING EITHER FROM FAULTY MATERIALS OR WORKMANSHIP, OR FROM THE NECESSARY REPAIRS TO CORRECT SAME, SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER BY THE CONTRACTOR, ALL AT NO ADDITIONAL COST TO THE OWNER.

B. GUARANTEE SHALL BE SUBMITTED ON CONTRACTORS OWN LETTERHEAD AS FOLLOWS: GUARANTEE FOR SPRINKLER IRRIGATION SYSTEM HE HEREBY GUARANTEE THAT THE SPRINKLER IRRIGATION SYSTEM HE FURNISHED AND INSTALLED IS FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP, AND THE WORK HAS BEEN COMPLETED IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS, ORDINARY WEAR AND TEAR AND UNUSUAL ABUSE, OR NEGLIGENCE EXCEPTED. HE AGREES TO REPAIR OR REPLACE ANY DEFECTIVE MATERIAL DURING THE PERIOD OF ONE YEAR FROM DATE OF FILING OF THE NOTICE OF COMPLETION AND ALSO TO REPAIR OR REPLACE ANY DAMAGE RESULTING FROM THE REPAIRING OR REPLACING OF SUCH DEFECTS AT NO ADDITIONAL COST TO THE OWNER. HE SHALL MAKE SUCH REPAIRS OR REPLACEMENTS WITHIN 10 CALENDAR DAYS FOLLOWING WRITTEN NOTIFICATION BY THE OWNER. IN THE EVENT OF OUR FAILURE TO MAKE SUCH REPAIRS OR REPLACEMENTS WITHIN THE TIME SPECIFIED AFTER RECEIPT OF WRITTEN NOTICE FROM OWNER, HE AUTHORIZES THE OWNER TO PROCEED TO HAVE SAID REPAIRS OR REPLACEMENTS MADE AT OUR EXPENSE AND HE WILL PAY THE COSTS AND CHARGES THEREFOR UPON DEMAND.

PROJECT NAME:  
PROJECT LOCATION:  
CONTRACTOR NAME:  
ADDRESS:  
TELEPHONE:  
SIGNED:  
DATE:

**PART II - MATERIALS**

**2.01 SUMMARY**  
USE ONLY NEW MATERIALS OF THE MANUFACTURER, SIZE AND TYPE SHOWN ON THE DRAWINGS AND SPECIFICATIONS, MATERIALS OR EQUIPMENT INSTALLED OR FURNISHED THAT DO NOT MEET LANDSCAPE ARCHITECTS, OWNERS, OR GOVERNING AGENCIES STANDARDS WILL BE REJECTED AND SHALL BE REMOVED FROM THE SITE AT NO EXPENSE TO THE OWNER.

**2.02 PIPE**  
A. PRESSURE SUPPLY LINE FROM POINT OF CONNECTION THROUGH BACKFLOW PREVENTION UNIT SHALL BE TYPE K 'HARD' COPPER PIPE OR BRASS NIPPLES (LENGTH AS REQUIRED).  
B. PRESSURE SUPPLY LINES 2 INCHES IN DIAMETER AND UP TO 2.5 INCHES IN DIAMETER DOWNSTREAM OF BACKFLOW PREVENTION UNIT SHALL BE CLASS 315 SOLVENT WELD PVC. PIPING SHALL CONFORM TO ASTM D2241.  
C. PRESSURE SUPPLY LINES 3 INCHES IN DIAMETER AND UP TO 8 INCHES IN DIAMETER DOWNSTREAM OF BACKFLOW PREVENTION UNIT SHALL BE CLASS 200 GASKET JOINT PVC. PIPING SHALL CONFORM TO ASTM D2241.  
D. PRESSURE SUPPLY LINES 1.5 INCHES IN DIAMETER AND SMALLER OF THE BACKFLOW PREVENTION UNIT SHALL BE SCHEDULE 40 SOLVENT WELD PVC CONFORMING TO ASTM D7185.  
E. NON-PRESSURE LINES 1.5 INCHES IN DIAMETER AND LARGER DOWNSTREAM OF THE REMOTE CONTROL VALVE SHALL BE SCH. 40 PVC.  
F. RECYCLED (RECLAIMED) WATER PVC PIPE TO BE COLOR-CODED PURPLE IN COLOR MARKED ON TWO SIDES WITH RECLAIMED WATER WARNING STATEMENTS 'CAUTION-RECYCLED (RECLAIMED) WATER'. RECLAIMED WATER PIPING MUST BE ACCEPTED BY LOCAL RECLAIMED WATER GOVERNING AGENCIES. RECYCLED WATER PIPE SHALL BE USED ONLY ON RECYCLED SYSTEM. NON-PRESSURE PIPING SHALL CONFORM TO ASTM D7185.

**2.03 METAL PIPE AND FITTINGS**  
A. BRASS PIPE SHALL BE 85 PERCENT RED BRASS, ANSI, IP5 STANDARD 125 POUNDS, SCHEDULE 40 SCREWED PIPE.  
B. BRASS FITTINGS SHALL BE MEDIUM BRASS, SCREWED 125-POUND CLASS.  
C. COPPER PIPE SHALL BE 'HARD' TYPE K OR AS NOTED ON THE DRAWING LEGEND OR DETAILS.  
D. COPPER FITTINGS SHALL BE SOLDERED TYPE.



SHEET INDEX		
SEE SHEET	1-6	CIVIL ENGINEER'S GRADING PLANS
SEE SHEET	7-8	FOR IRRIGATION PLANS
SEE SHEET	9	FOR IRRIGATION LEGEND
SEE SHEET	10-12	FOR IRRIGATION DETAILS & NOTES
SEE SHEET	13-15	FOR IRRIGATION SPECIFICATIONS
SEE SHEET	16-17	FOR IRRIGATION CALCULATIONS
SEE SHEET	18-21	FOR PLANTING PLANS
SEE SHEET	20-21	FOR PLANTING LEGEND, DETAILS, NOTES & SPECIFICATIONS
SEE SHEET	22	FOR FUEL MANAGEMENT PLAN
SEE SHEET	23-24	STRUCTURAL ENGINEER'S PLANS

**DECLARATION OF RESPONSIBLE CHARGE:**  
I hereby declare that I am the Landscape Architect of work for this project, that I have exercised responsible charge over the design of the project as defined in section 6705 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 County of San Diego is confined to a review only and does not relieve me, as Landscape Architect of Work, of my responsibilities for project design.  
John Patterson RLA # 5905 Date 01-05-09  
Gillespie Moody Patterson, Inc.  
9404 Genesee Avenue, Suite 140  
La Jolla, CA 92037  
(858) 550-8471

**HOLD HARMLESS AND INDEMNIFICATION CLAUSE**  
CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE 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 CITY/COUNTY OF LOCAL JURISDICTION, AND THE LANDSCAPE ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, THE CITY/COUNTY OF LOCAL JURISDICTION, OR THE LANDSCAPE ARCHITECT.

**PERMITS**  
SITE PLAN PERMIT NO. 505-027  
REZONE PERMIT NO. 805-006  
SPECIAL USE PERMIT NO. N/A  
TENTATIVE MAP NO. TM 5427 RPL2  
N.O.I. NO. T.B.D.  
HABITAT LOSS PERMIT N/A  
**COUNTY APPROVED CHANGES**  
APPROVED FOR COMPLIANCE WITH THE ENVIRONMENTAL REVIEW  
APPROVED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

I FIND THAT THIS SHEET CONFORMS TO ACCEPTED LANDSCAPE ARCHITECTURAL PRACTICES AND IS IN COMPLIANCE WITH THE REQUIREMENTS LISTED IN SECTION 8175(a)(1) THROUGH (v) OF THE SAN DIEGO COUNTY ZONING ORDINANCE.  
JOHN PATTERSON RLA # 5905 DATE 01-05-09  
**COUNTY APPROVED CHANGES**  
NO. DESCRIPTION APPROVED BY DATE

**BENCHMARK**  
DESCRIPTION: BRASS DISC STAMPED "E 228 1968"  
SET ON A STEEL ROD.  
LOCATION: MISSION ROAD  
RECORD FROM: COUNTY OF SAN DIEGO ROS 17292  
ELEVATION: 195.42 DATUM: M.S.L.

**PRIVATE CONTRACT**  
SHEET 13 COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS 24 SHEET  
IRRIGATION SPECIFICATIONS FOR: LI-06  
**BONSALL**  
LOTS 1 & 2, TM 5427 RPL2  
CALIFORNIA COORDINATE INDEX 410-1707  
APPROVED MINORAL FLEISHERBERG FOR COUNTY ENGINEER  
ENGINEER OF RECORD STEVEN C. ESTLER R.C.E. 4859  
BY: \_\_\_\_\_  
GRADING PERMIT NO. L-15450  
DATE



**gmp**  
Gillespie Moody Patterson, Inc.  
LANDSCAPE ARCHITECTURE & PLANNING  
9404 GENESSEE AVENUE, SUITE 140  
LA JOLLA, CALIFORNIA 92037-0394  
858-550-8471  
FAX 858-550-8188

REVISIONS  
RE-NBR SHTS 09-24-08  
CIVIL BASE REVS 12-11-08  
PLOTTED ON 01-08-09  
DRAWN PHM  
APPROVED JF  
JOB NO. 08-039-00  
DATE 01-24-09  
SCALE AS SHOWN

LAND ARCH: GILLESPIE MOODY PATTERSON, INC. (GMP, INC.)  
08-085-00 BONSALL SLOPES  
PHONE NO. (858) 558-8977

IRRIGATION SPECIFICATIONS (CONT'D)

PART II - MATERIALS

2.04 PLASTIC PIPE AND FITTINGS

- A. PIPE SHALL BE MARKED CONTINUOUSLY WITH MANUFACTURER'S NAME, NOMINAL PIPE SIZE, SCHEDULE OR CLASS, PVC TYPE AND GRADE, NATIONAL SANITATION FOUNDATION APPROVAL, COMMERCIAL STANDARDS DESIGNATION, AND DATE OF EXTRUSION.
- B. ALL PLASTIC PIPE SHALL BE EXTRUDED OF AN IMPROVED PVC VIRGIN PIPE COMPOUND IN ACCORDANCE WITH ASTM D2241 OR ASTM D1784.
- C. ALL PVC FITTINGS SHALL BE STANDARD HEIGHT SCHEDULE 40 AND SHALL BE INJECTION MOLDED OF AN IMPROVED VIRGIN PVC FITTING COMPOUND. SLIP PVC FITTINGS SHALL BE THE "DEEP SOCKET" BRACKETED TYPE. THREADED PLASTIC FITTINGS SHALL BE INJECTION MOLDED. ALL TEES AND ELLS SHALL BE SIDE GATED. ALL FITTINGS SHALL CONFORM TO ASTM D2466.
- D. ALL THREADED NIPPLES SHALL BE STANDARD HEIGHT SCHEDULE 80 WITH MOLDED THREADS AND SHALL CONFORM TO ASTM D1785.
- E. ALL SOLVENT CEMENTINGS OF PLASTIC PIPE AND FITTINGS SHALL BE A TWO-STEP PROCESS, USING PRIMER AND SOLVENT CEMENT APPLIED PER THE MANUFACTURER'S RECOMMENDATIONS. CEMENT SHALL BE OF A FLUID CONSISTENCY, NOT GEL-LIKE OR ROOPY. SOLVENT CEMENTING SHALL BE IN CONFORMANCE WITH ASTM D2564 AND ASTM D2255.
- F. WHEN CONNECTION IS PLASTIC TO METAL, FEMALE ADAPTERS SHALL BE HAND TIGHTENED, PLUS ONE TURN WITH A STRAP WRENCH. JOINT COMPOUND SHALL BE NON-LEAD BASE TEFLON PASTE, TAPE, OR EQUAL.

2.05 BACKFLOW PREVENTION UNITS

- A. THE BACKFLOW PREVENTION UNIT SHALL BE OF THE MANUFACTURER, SIZE, AND TYPE INDICATED ON THE DRAWINGS.
- B. THE BACKFLOW PREVENTION UNIT SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH BY LOCAL CODES.
- C. THE BACKFLOW PREVENTION ASSEMBLY SHALL CONSIST OF BRASS PIPING, UNIONS AND FITTINGS.

2.06 VALVES

- A. GATE VALVES:
  1. GATE VALVES SHALL BE OF THE MANUFACTURER, SIZE, AND TYPE INDICATED ON THE DRAWINGS.
  2. GATE VALVES SHALL BE CONSTRUCTED OF A BRONZE BODY, BONNET AND DISC, AND A MALLEABLE IRON HANDWHEEL. GATE VALVES SHALL HAVE THREADED CONNECTIONS.
  3. ALL GATE VALVES SHALL HAVE A MINIMUM WORKING PRESSURE OF NOT LESS THAN 150 PSI AND SHALL CONFORM TO ANHA STANDARDS.
- B. BALL VALVES:
  1. BALL VALVES SHALL BE OF THE MANUFACTURER, SIZE, AND TYPE INDICATED ON THE DRAWINGS.
  2. BALL VALVES SHALL BE CONSTRUCTED OF A BRONZE BODY, STAINLESS STEEL BALL AND STEM, MALLEABLE IRON HANDLE. BALL VALVES SHALL HAVE THREADED CONNECTIONS.
  3. ALL BALL VALVES SHALL HAVE A MINIMUM WORKING PRESSURE OF NOT LESS THAN 150 PSI AND SHALL CONFORM TO ANHA STANDARDS.
- C. QUICK COUPLER VALVES:
  1. QUICK COUPLER VALVES SHALL BE OF THE MANUFACTURER, SIZE, AND TYPE INDICATED ON THE DRAWINGS.
  2. QUICK COUPLER VALVES SHALL BE BRASS WITH A WALL THICKNESS GUARANTEED TO WITHSTAND NORMAL WORKING PRESSURE OF 150 PSI WITHOUT LEAKAGE. VALVES SHALL HAVE FEMALE THREADS OPENING AT BASE, WITH TWO-PIECE BODY. VALVES TO BE OPERATED ONLY WITH A COUPLER KEY, DESIGNED FOR THAT PURPOSE. COUPLER KEY IS INSERTED INTO VALVE AND A POSITIVE, WATERTIGHT CONNECTION SHALL BE MADE BETWEEN THE COUPLER KEY AND VALVE. HINGE COVER SHALL BE THE LOCKING TYPE CONSTRUCTED OF BRASS WITH A RUBBER-LIKE VINYL COVER.
  3. VINYL QUICK COUPLER COVER FOR RECLAIMED WATER QUICK COUPLER VALVES TO BE PURPLE IN COLOR WITH THE WORDS "WARNING-RECYCLED (RECLAIMED) WATER-DO NOT DRINK PERMANENTLY" MARKED ON LID FOR RECYCLED SYSTEM.
- D. AUTOMATIC CONTROL VALVES:
  1. AUTOMATIC CONTROL VALVES SHALL BE OF THE MANUFACTURER, SIZE, AND TYPE INDICATED ON THE DRAWINGS.
  2. AUTOMATIC CONTROL VALVES SHALL BE ELECTRICALLY OPERATED.
- E. ANTI-DRAIN VALVES:
  1. ANTI-DRAIN VALVES SHALL BE OF THE MANUFACTURER, SIZE, AND TYPE INDICATED ON THE DRAWINGS.
  2. ANTI-DRAIN VALVES SHALL HAVE 1/8" STAINLESS STEEL SPRINGS AND VALVE STEMS WITH BUNA-N SEALS.
  3. ANTI-DRAIN VALVES WILL HAVE THREADED CONNECTIONS THE SIZE OF THE RISER OR PIPE THEY ARE TO BE INSTALLED ONTO, OR THE NEXT AVAILABLE SIZE. NO SLIP CONNECTION ANTI-DRAIN VALVES ARE ALLOWED.

2.07 VALVE BOXES

- A. VALVE BOXES SHALL BE FABRICATED FROM A DURABLE, WEATHER-RESISTANT PLASTIC MATERIAL RESISTANT TO SUNLIGHT AND CHEMICAL ACTION OF SOILS.
- B. THE VALVE BOX COVER SHALL BE GREEN IN COLOR AND SECURED WITH BOLTS.
- C. THE COVER AND BOX SHALL BE CAPABLE OF SUSTAINING A LOAD OF 1,500 POUNDS.
- D. VALVE BOX EXTENSIONS SHALL BE BY THE SAME MANUFACTURER AS THE VALVE BOX.
- E. AUTOMATIC CONTROL AND MASTER VALVE BOXES SHALL BE 16"x11"x12" RECTANGULAR SIZE. VALVE BOX COVERS SHALL BE "HEAT BRANDED" IN 2" HIGH LETTERS WITH EITHER "RCV" WITH THE VALVE IDENTIFICATION NUMBERS OR "MCV".
- F. SPECIALITY "JIMBO" BOXES MAY BE INDICATED ON DRAWINGS AND SHALL BE 25"x15"x12" RECTANGULAR SIZE.
- G. BALL VALVE, GATE VALVE, AND QUICK COUPLER VALVE BOXES SHALL BE CIRCULAR 10" SIZE. VALVE BOX COVERS SHALL BE "HEAT BRANDED" IN 2" HIGH LETTERS WITH EITHER "BV", "GV", OR "QCV".
- H. VALVE BOX COVER FOR RECLAIMED SYSTEMS SHALL BE PURPLE IN COLOR AND PERMANENTLY MARKED WITH THE WORDS "WARNING-RECYCLED (RECLAIMED) WATER - DO NOT DRINK" FOR RECYCLED IRRIGATION SYSTEM.

2.08 IRRIGATION CONTROLLER

- A. CONTROLLER SHALL BE OF THE MANUFACTURER, SIZE AND TYPE INDICATED ON THE DRAWINGS.
- B. THE CONTROLLER ENCLOSURE SHALL BE OF THE MANUFACTURER, SIZE AND TYPE INDICATED ON THE DRAWINGS. THE ENCLOSURE SHALL ALSO ENCLOSE THE CONTROLLER ELECTRICAL METER.
- C. THE CONTROLLER SHALL BE OF THE MANUFACTURER, SIZE AND TYPE REQUIRED BY VISTA IRRIGATION DISTRICT.

2.09 ELECTRICAL

- A. ALL ELECTRICAL EQUIPMENT SHALL BE NEMA TYPE 3, WATERPROOFED FOR EXTERIOR INSTALLATIONS.
- B. ALL ELECTRICAL WORK SHALL CONFORM TO LOCAL CODES AND ORDINANCES.
- 2.10 LOW VOLTAGE CONTROL WIRING
  - A. REMOTE CONTROL WIRE SHALL BE DIRECT-BURIAL ANS-UF TYPE, SIZE AS INDICATED ON THE DRAWINGS, AND IN NO CASE SMALLER THAN 14 GAUGE.
  - B. CONNECTIONS SHALL BE EITHER EPOXY-SEALED PACKET TYPE OR PENN-TITE CONNECTORS.
  - C. COMMON WIRES SHALL BE WHITE IN COLOR, AND IN NO CASE SMALLER THAN 12 GAUGE. CONTROL WIRES SHALL BE RED (WHERE TWO OR MORE CONTROLLERS ARE USED, THE CONTROL WIRES SHALL BE A DIFFERENT COLOR FOR EACH CONTROLLER. THESE COLORS SHALL BE NOTED ON THE "RECORD DRAWINGS" PLANS LOCATED ON CONTROLLER DOOR).
  - D. GROUND WIRES SHALL BE GREEN IN COLOR, AND IN NO CASE SMALLER THAN 6 GAUGE.
  - E. PROVIDE A 24" LONG EXPANSION LOOP FOR ALL DIRECTIONAL CHANGES IN CONTROL WIRE ROUTING.

2.11 IRRIGATION HEADS

- A. SPRINKLER HEADS SHALL BE OF THE MANUFACTURER SIZE, TYPE, WITH RADIUS OF THROW, OPERATING PRESSURE, AND DISCHARGE RATE INDICATED ON THE DRAWINGS.
- B. POP-UP HEADS AND RISER HEADS SHALL BE USED AS INDICATED ON THE DRAWINGS.
- C. IRRIGATION HEADS FOR RECYCLED SYSTEM SHALL HAVE PURPLE RECYCLED (RECLAIMED) WATER WARNING COVER.

PART III - EXECUTION

3.01 SITE CONDITIONS

- A. INSPECTIONS:
  1. PRIOR TO ALL WORK OF THIS SECTION CAREFULLY INSPECT THE INSTALLED WORK OF ALL OTHER TRADES AND VERIFY THAT ALL SUCH WORK IS COMPLETE TO THE POINT WHERE THIS INSTALLATION MAY PROPERLY COMMENCE.
  2. VERIFY THAT IRRIGATION SYSTEM MAY BE INSTALLED IN STRICT ACCORDANCE WITH ALL PERTINENT CODES AND REGULATIONS, THE ORIGINAL DESIGN, THE REFERENCED STANDARDS, AND THE MANUFACTURER'S RECOMMENDATIONS.
- B. DISCREPANCIES:
  1. IN THE EVENT OF DISCREPANCY, IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT OR OWNER'S AUTHORIZED REPRESENTATIVE.
  2. DO NOT PROCEED WITH INSTALLATION IN AREAS OF DISCREPANCY UNTIL ALL DISCREPANCIES HAVE BEEN RESOLVED.
- C. GRADES:
  1. BEFORE STARTING WORK, CAREFULLY CHECK ALL GRADES TO DETERMINE THAT WORK MAY SAFELY PROCEED, KEEPING WITHIN THE SPECIFIED MATERIAL DEPTHS WITH RESPECT TO FINISH GRADE.
  2. FINAL GRADES SHALL BE ACCEPTED BY THE ENGINEER BEFORE WORK ON THIS SECTION WILL BE ALLOWED TO BEGIN.
- D. FIELD MEASUREMENTS:
  1. MAKE ALL NECESSARY MEASUREMENTS IN THE FIELD TO ENSURE PRECISE FIT OF ITEMS IN ACCORDANCE WITH THE ORIGINAL DESIGN. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL IRRIGATION MATERIALS WITH ALL OTHER WORK.
  2. ALL SCALED DIMENSIONS ARE APPROXIMATE. THE CONTRACTOR SHALL CHECK AND VERIFY ALL SIZE DIMENSIONS PRIOR TO PROCEEDING WITH WORK UNDER THIS SECTION.
  3. EXERCISE EXTREME CARE IN EXCAVATING AND WORKING NEAR EXISTING UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO UTILITIES WHICH ARE CAUSED BY HIS OPERATIONS. NEGLIGENCE.
- E. DIAGRAMMATIC INTENT: THE DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC. THE SIZE AND LOCATION OF EQUIPMENT AND FIXTURES ARE DRAWN TO SCALE WHERE POSSIBLE. PROVIDE OFFSETS IN PIPING CHANGES IN EQUIPMENT LOCATIONS AS NECESSARY TO CONFORM WITH STRUCTURES AND TO AVOID OBSTRUCTIONS OR CONFLICTS WITH OTHER WORK AT NO ADDITIONAL EXPENSE TO OWNER.
- F. LAYOUT:
  1. PRIOR TO INSTALLATION, THE CONTRACTOR SHALL STAKE OUT ALL PRESSURE SUPPLY LINES, ROUTING AND LOCATION OF SPRINKLER HEADS, VALVES, BACKFLOW PREVENTER, AND AUTOMATIC CONTROLLER.
  2. LAYOUT IRRIGATION SYSTEM AND MAKE MINOR ADJUSTMENTS REQUIRED DUE TO DIFFERENCES BETWEEN SITE AND DRAWINGS. WHERE PIPING IS SHOWN ON DRAWINGS UNDER PAVED AREAS, BUT RUNNING PARALLEL AND ADJACENT TO PLANTED AREAS, INSTALL THE PIPING IN THE PLANTED AREAS.
- G. WATER SUPPLY CONNECTIONS TO, OR THE INSTALLATION OF, THE WATER SUPPLY SHALL BE AT THE LOCATIONS SHOWN ON THE DRAWINGS. MINOR CHANGES CAUSED BY ACTUAL SITE CONDITIONS SHALL BE MADE AT NO ADDITIONAL EXPENSE TO OWNER.
- H. ELECTRICAL SERVICE:
  1. CONNECTIONS TO THE ELECTRICAL SUPPLY SHALL BE AT THE LOCATIONS SHOWN ON THE DRAWINGS. MINOR CHANGES CAUSED BY SITE CONDITIONS SHALL BE MADE AT NO ADDITIONAL EXPENSE TO OWNER.
  2. CONTRACTOR SHALL MAKE 120 VOLT CONNECTION TO THE IRRIGATION CONTROLLERS. ELECTRICAL POWER SOURCE TO CONTROLLER LOCATIONS SHALL BE PROVIDED BY OTHERS.

3.02 TRENCHING

- A. EXCAVATIONS SHALL BE STRAIGHT WITH VERTICAL SIDES, EVEN GRADE, AND SUPPORT PIPE CONTINUOUSLY ON BOTTOM OF TRENCH. TRENCHING EXCAVATION SHALL FOLLOW LAYOUT INDICATED ON DRAWINGS TO THE DEPTHS BELOW FINISHED GRADE AND AS NOTED. WHERE LINES OCCUR UNDER PAVED AREA, THESE DIMENSIONS SHALL BE CONSIDERED BELOW SUBGRADE.
- B. PROVIDE MINIMUM COVER OF 18 INCHES ON PRESSURE SUPPLY LINES 2 1/2 INCHES AND SMALLER. PROVIDE MINIMUM COVER OF 24 INCHES ON PRESSURE SUPPLY LINES 3 INCHES, AND 36 INCHES OF COVER ON PRESSURE SUPPLY LINES 4 INCH AND LARGER.
- C. PROVIDE MINIMUM COVER OF 18 INCHES FOR CONTROL WIRES.

- D. PROVIDE MINIMUM COVER OF 12 INCHES FOR NON-PRESSURE LINES.
- E. PIPES INSTALLED IN A COMMON TRENCH SHALL HAVE A 4 INCH MINIMUM SPACE BETWEEN PIPES.
- F. PROVIDE SAND BACKFILL A MINIMUM OF 4 INCHES OVER AND UNDER ALL MAINLINE PIPING.

3.03 BACKFILLING

- A. BACKFILL MATERIAL ON ALL LINES SHALL BE THE SAME AS ADJACENT SOIL FREE OF DEBRIS, LITTER, AND ROCKS OVER 1/2 INCH IN DIAMETER.
- B. BACKFILL SHALL BE TAMPED IN 4-INCH LAYERS UNDER THE PIPE AND UNIFORMLY ON BOTH SIDES FOR THE FULL WIDTH OF THE TRENCH AND THE FULL LENGTH OF THE PIPE. BACKFILL MATERIALS SHALL BE SUFFICIENTLY DAMP TO PERMIT THOROUGH COMPACTION, FREE OF VOIDS. BACKFILL SHALL BE COMPACTED TO DRY DENSITY EQUAL TO ADJACENT UNDISTURBED SOIL AND SHALL CONFORM TO ADJACENT GRADES.
- C. FLOODING IN LIEU OF TAMPING IS NOT ALLOWED.
- D. UNDER NO CIRCUMSTANCES SHALL TRUCK WHEELS BE USED TO COMPACT BACKFILL.
- E. PROVIDE SAND BACKFILL A MINIMUM OF 6 INCHES OVER AND UNDER ALL PIPING UNDER PAVED AREAS.

3.04 PIPING

- A. PIPING UNDER EXISTING PAVEMENT MAY BE INSTALLED BY JACKING, BORING, OR HYDRAULIC DRIVING. NO HYDRAULIC DRIVING IS PERMITTED UNDER ASPHALT PAVEMENT.
- B. CUTTING OR BREAKING OF EXISTING PAVEMENT IS NOT PERMITTED.
- C. CAREFULLY INSPECT ALL PIPE AND FITTINGS BEFORE INSTALLATION, REMOVING DIRT, SCALE, BURRS REAMING. INSTALL PIPE WITH ALL MARKINGS UP FOR VISUAL INSPECTION AND VERIFICATION.
- D. REMOVE ALL DENTED AND DAMAGED PIPE SECTIONS.
- E. ALL LINES SHALL HAVE A MINIMUM CLEARANCE OF 6 INCHES FROM EACH OTHER AND 12 INCHES FROM LINES OF OTHER TRADES.
- F. PARALLEL LINES SHALL NOT BE INSTALLED DIRECTLY OVER EACH OTHER.
- G. IN SOLVENT WELDING, USE ONLY THE SPECIFIED PRIMER AND SOLVENT CEMENT AND MAKE ALL JOINTS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED METHODS INCLUDING WIPING ALL EXCESS SOLVENT FROM EACH WELD. ALLOW SOLVENT WELDS AT LEAST 15 MINUTES SETUP TIME BEFORE MOVING OR HANDLING AND 24 HOURS CURING TIME BEFORE FILLING.
- H. PVC PIPE SHALL BE INSTALLED IN A MANNER WHICH WILL PROVIDE FOR EXPANSION CONTRACTION AS RECOMMENDED BY THE PIPE MANUFACTURER.

- I. CENTERLOAD ALL PLASTIC PIPE PRIOR TO PRESSURE TESTING.
- J. ALL THREADED PLASTIC-TO-PLASTIC CONNECTIONS SHALL BE ASSEMBLED USING TEFLON TAPE OR TEFLON PASTE.
- K. FOR PLASTIC-TO-METAL CONNECTIONS, WORK THE METAL CONNECTIONS FIRST. USE A NON-HARDENING PIPE DOPE AN ALL THREADED PLASTIC-TO-METAL CONNECTIONS, EXCEPT WHERE NOTED OTHERWISE. ALL PLASTIC-TO-METAL CONNECTIONS SHALL BE MADE WITH PLASTIC FEMALE ADAPTERS.
- L. ALL CONNECTIONS BETWEEN PVC LATERAL LINES SHALL BE MADE USING SCH. 40 PVC FITTINGS WITH COMPRESSION ADAPTERS. ALL CONNECTIONS BETWEEN DRIPPER LINES TO BE MADE USING COMPRESSION FITTINGS OF MANUFACTURER OF THE DRIPPER LINE. USE NO PIPE DOPE, TEFLON TAPE, PRIMER OR SOLVENT CEMENT ON COMPRESSION FITTINGS.

3.05 CONTROLLER

- A. THE EXACT LOCATION OF THE CONTROLLER SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER'S AUTHORIZED REPRESENTATIVE BEFORE INSTALLATION. THE ELECTRICAL SERVICE SHALL BE COORDINATED WITH THIS LOCATION.
- B. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR THE FINAL ELECTRICAL HOOK UP TO IRRIGATION CONTROLLER.
- C. THE IRRIGATION SYSTEM SHALL BE PROGRAMMED TO OPERATE DURING THE PERIODS OF MINIMAL USE OF THE DESIGN AREA.
- D. INSTALL CONTROLLER ENCLOSURE AS RECOMMENDED BY THE MANUFACTURER.

3.06 CONTROL WIRING

- A. LOW VOLTAGE CONTROL WIRING SHALL OCCUPY THE SAME TRENCH AND SHALL BE INSTALLED ALONG THE SAME ROUTE AS THE PRESSURE SUPPLY LINES WHENEVER POSSIBLE.
- B. WHERE MORE THAN ONE WIRE IS PLACED IN A TRENCH, THE WIRING SHALL BE TAPED TOGETHER IN A BUNDLE AT INTERVALS OF 10 FEET. BUNDLE SHALL BE SECURED TO THE MAINLINE WITH TAPE AT INTERVALS OF 20 FEET.
- C. ALL CONNECTIONS SHALL BE OF AN APPROVED TYPE AND SHALL OCCUR IN A VALVE BOX. PROVIDE AN 18 INCH SERVICE LOOP AT EACH CONNECTION.
- D. AN EXPANSION LOOP OF 12 INCHES SHALL BE PROVIDED AT EACH WIRE CONNECTION AND/OR DIRECTIONAL CHANGE, AND ONE OF 24 INCHES SHALL BE PROVIDED AT EACH REMOTE CONTROL VALVE.
- E. A CONTINUOUS RUN OF WIRE SHALL BE USED BETWEEN A CONTROLLER AND EACH REMOTE CONTROL VALVE. UNDER NO CIRCUMSTANCES SHALL SPLICES BE USED WITHOUT PRIOR APPROVAL.



**gmp**  
Gillespie  
Moody  
Patterson, Inc.  
LANDSCAPE ARCHITECTURE  
& PLANNING

9404 GENESSEE AVENUE, SUITE 140  
LA JOLLA, CALIFORNIA 92037-1394  
958 • 558 • 8471  
FAX 958 • 558 • 8188

REVISIONS	
REV-NUMBER	DATE
01-24-08	
CIVIL BASE REV	12-11-08
PLOTTED ON	01-08-09
DRAWN BY	PM
APPROVED BY	JF
JOB NO.	08-098-00
DATE	01-24-08
SCALE	AS SHOWN

SHEET INDEX		
SEE SHEET	1-6	CIVIL ENGINEER'S GRADING PLANS
SEE SHEET	7-8	FOR IRRIGATION PLANS
SEE SHEET	9	FOR IRRIGATION LEGEND
SEE SHEET	10-12	FOR IRRIGATION DETAILS & NOTES
SEE SHEET	13-15	FOR IRRIGATION SPECIFICATIONS
SEE SHEET	16-17	FOR IRRIGATION CALCULATIONS
SEE SHEET	18-19	FOR PLANTING PLANS
SEE SHEET	20-21	FOR PLANTING LEGEND, DETAILS, NOTES & SPECIFICATIONS
SEE SHEET	22	FOR FUEL MANAGEMENT PLAN
SEE SHEET	23-24	STRUCTURAL ENGINEER'S PLANS

DECLARATION OF RESPONSIBLE CHARGE:  
I hereby declare that I am the Landscape Architect 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 County of San Diego is confined to a review only and does not relieve me, as Landscape Architect of Work, of my responsibilities for project design.

*John Patterson* RLA # 5505 Date 01-08-09

Gillespie Moody Patterson, Inc.  
9404 Genessee Avenue, Suite 140  
La Jolla, CA 92037  
(958) 558-8471

**HOLD HARMLESS AND INDEMNIFICATION CLAUSE**

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE 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 CITY/COUNTY OF LOCAL JURISDICTION, AND THE LANDSCAPE ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, THE CITY/COUNTY OF LOCAL JURISDICTION, OR THE LANDSCAPE ARCHITECT.

PERMITS	
SITE PLAN PERMIT NO.	S05-027
REZONE PERMIT NO.	R05-006
SPECIAL USE PERMIT NO.	N/A
TENTATIVE MAP NO.	TM 6427 RPL <sup>2</sup>
N.O.I. NO.	T.B.D.
HABITAT LOSS PERMIT	N/A
ENVIRONMENTAL SERVICES UNIT	
APPROVED FOR COMPLIANCE WITH THE ENVIRONMENTAL REVIEW	
APPROVED BY:	
DATE:	

I FIND THAT THIS SHEET CONFORMS TO ACCEPTED LANDSCAPE ARCHITECTURAL PRACTICES AND IS IN COMPLIANCE WITH THE REQUIREMENTS LISTED IN SECTION 67501.1 THROUGH V OF THE SAN DIEGO COUNTY ZONING ORDINANCE.		
<i>John Patterson</i>	01-08-09	DATE
JOHN PATTERSON	RLA # 5505	
COUNTY APPROVED CHANGES		
NO.	DESCRIPTION	APPROVED BY DATE

BENCHMARK	
DESCRIPTION:	BRASS DISC STAMPED "TE 228 1968"
LOCATION:	MISSION ROAD
RECORD FROM:	COUNTY OF SAN DIEGO ROS 17292
ELEVATION:	195.42 DATUM: M.S.L.

PRIVATE CONTRACT		
SHEET 14	COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS	24 SHEET
IRRIGATION SPECIFICATIONS FOR: LI-07		
BONSALL		
LOTS 1 & 2, TM 5427 RPL2		
CALIFORNIA COORDINATE INDEX 410-1707		
APPROVED NORMAL FIDELITY/ISSUE FOR COUNTY ENGINEER	ISSUED BY: STEVEN C. KESTLER	
	R.C.E. 4858	
BY:		
GRADING PERMIT NO. L-15450		
DATE:		

LAND ARCH. NAME: GILLESPIE MOODY PATTERSON, INC. (GMP, INC.)  
PHONE NO. (958) 558-8977

IRRIGATION SPECIFICATIONS (CONT'D)

- 3.07 VALVES
- A. AUTOMATIC CONTROL VALVES, BALL VALVES, GATE VALVES, AND QUICK COUPLER VALVES SHALL BE INSTALLED IN THE APPROXIMATE LOCATIONS INDICATED ON THE DRAWINGS.
  - B. VALVE SHALL BE INSTALLED IN SHRUB AREAS WHENEVER POSSIBLE.
  - C. INSTALL ALL VALVES AS INDICATED IN THE DETAIL DRAWINGS.
  - D. VALVES TO BE INSTALLED IN VALVE BOXES SHALL BE INSTALLED ONE VALVE PER BOX.
  - E. REMOTE CONTROL VALVES AND QUICK COUPLER VALVES SHALL BE ISOLATED FROM THE MAINLINE BY A BALL VALVE SIZED PER THE LARGEST R.C.V. IN THE MANIFOLD OR 1 1/2 INCH FOR G.C.V.'S.
- 3.08 VALVE BOXES
- A. VALVE BOXES SHALL BE INSTALLED IN SHRUB AREAS WHENEVER POSSIBLE.
  - B. EACH VALVE BOX SHALL BE INSTALLED ON A FOUNDATION OF 3/4 INCH GRAVEL BACKFILL, 2 CUBIC FEET MINIMUM. VALVE BOXES SHALL BE INSTALLED WITH THEIR TOPS 1/2 INCH ABOVE THE SURFACE OF SURROUNDING FINISH GRADE IN LAWN AREAS AND 3 INCHES ABOVE FINISH GRADE IN GROUND COVER AREAS.
- 3.04 BACKFLOW PREVENTERS
- A. INSTALL BACKFLOW PREVENTER UNIT AS INDICATED IN THE DETAIL DRAWINGS.
  - B. INSTALL BACKFLOW ASSEMBLIES AT LOCATIONS APPROVED IN THE FIELD AND AT HEIGHT REQUIRED BY LOCAL CODES.
  - C. INSTALL NYE STRAINERS AND PRESSURE REGULATORS ON THE BACKFLOW ASSEMBLY.
  - D. IF BACKFLOW PREVENTER IS INSTALLED ADJACENT TO A BUILDING, HALL, OR OTHER OBSTRUCTION, INSTALL UNIT SO THAT THE TEST COCKS ARE FACING OUTWARD AWAY FROM THE OBSTRUCTION.
  - E. INSTALL BACKFLOW ENCLOSURE AS RECOMMENDED BY THE MANUFACTURER.
- 3.10 SPRINKLER HEADS
- A. SPRINKLER HEADS SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS.
  - B. SPACINGS OF HEADS SHALL NOT EXCEED MAXIMUM INDICATED ON THE DRAWINGS.
  - C. RISER NIPPLES SHALL BE OF THE SAME SIZE AS THE RISER OPENING IN THE SPRINKLER BODY.
  - D. POP-UP SPRINKLER HEADS SHALL NOT BE INSTALLED USING SIDE OUTLET OPENINGS.
  - E. RISER NIPPLES ON RECYCLED WATER SYSTEMS SHALL BE IDENTIFIED WITH ADHESIVE VINYL MARKERS BELOW SPRINKLER HEAD AND A MINIMUM OF 10 INCHES ABOVE FINISH GRADE.
- 3.11 MISCELLANEOUS EQUIPMENT
- A. INSTALL ALL ASSEMBLIES SPECIFIED HEREIN ACCORDING TO THE RESPECTIVE DETAIL DRAWINGS OR SPECIFICATIONS, USING BEST STANDARD PRACTICES.
  - B. QUICK COUPLER VALVES SHALL BE SET APPROXIMATELY 12 INCHES FROM WALKS, CURBS, HEADER BOARDS, OR PAVED AREAS WHERE APPLICABLE.
  - C. UNLESS DESIGNED AS AN INTEGRAL PART OF THE IRRIGATION HEAD, ANTI-DRAIN VALVES WILL BE INSTALLED UNDER EVERY HEAD. THE ANTI-DRAIN VALVE WILL BE THE SAME DIAMETER AS THE RISER AND BE INTEGRAL TO THE RISER ASSEMBLY.
  - D. INSTALL RAIN SENSOR AS INDICATED ON THE DRAWINGS AND AS RECOMMENDED BY THE MANUFACTURER.
- 3.12 FLUSHING THE SYSTEM
- A. PRIOR TO INSTALLATION OF SPRINKLER NOZZLES, THE VALVES SHALL BE OPENED AND A FULL HEAD OF WATER USED TO FLUSH OUT THE LINES AND RISERS.
  - B. SPRINKLER NOZZLES SHALL BE INSTALLED AFTER FLUSHING THE SYSTEM HAS BEEN COMPLETED.
- 3.13 ADJUSTING THE SYSTEM
- A. CONTRACTOR SHALL ADJUST VALVES, ALIGN HEADS, AND CHECK COVERAGE OF EACH SYSTEM PRIOR TO COVERAGE TEST.
  - B. IF IT IS DETERMINED BY THE LANDSCAPE ARCHITECT OR OWNER'S AUTHORIZED REPRESENTATIVE THAT ADDITIONAL ADJUSTMENTS OR NOZZLE CHANGES WILL BE REQUIRED TO PROVIDE PROPER COVERAGE, ALL NECESSARY CHANGES OR ADJUSTMENTS SHALL BE MADE PRIOR TO ANY PLANTING.
  - C. THE ENTIRE SYSTEM SHALL BE OPERATING PROPERLY BEFORE ANY PLANTING OPERATIONS COMMENCE.
  - D. AUTOMATIC CONTROL VALVES ARE TO BE ADJUSTED SO THAT THE SPRINKLER HEADS OPERATE AT THE PRESSURE RECOMMENDED BY THE MANUFACTURER.

- 3.14 TESTING AND OBSERVATION
- A. DO NOT ALLOW OR CAUSE ANY OF THE WORK OF THIS SECTION TO BE COVERED UP OR ENCLOSED UNTIL IT HAS BEEN OBSERVED, TESTED AND ACCEPTED BY THE LANDSCAPE ARCHITECT, OWNER, AND GOVERNING AGENCIES.
  - B. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR NOTIFYING THE LANDSCAPE ARCHITECT, OWNER, AND GOVERNING AGENCIES, A MINIMUM OF 48 HOURS IN ADVANCE, WHERE AND WHEN THE WORK IS READY FOR TESTING.
  - C. WHEN THE SPRINKLER SYSTEM IS COMPLETED, THE CONTRACTOR SHALL PERFORM A COVERAGE TEST OF EACH SYSTEM IN ITS ENTIRETY TO DETERMINE IF THE WATER COVERAGE FOR THE PLANTED AREAS IS COMPLETE AND ADEQUATE IN THE PRESENCE OF THE LANDSCAPE ARCHITECT.
  - D. THE CONTRACTOR SHALL FURNISH ALL MATERIALS AND PERFORM ALL WORK REQUIRED TO CORRECT ANY INADEQUACIES OF COVERAGE DUE TO DEVIATIONS FROM THE PLANS, OR WHERE THE SYSTEM HAS BEEN FULLY INSTALLED AS INDICATED ON THE DRAWINGS WHEN IT IS OBVIOUSLY INADEQUATE, WITHOUT BRINGING THIS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. THIS TEST SHALL BE ACCEPTED BY THE LANDSCAPE ARCHITECT AND ACCOMPLISHED BEFORE STARTING ANY PLANTING.
  - E. FINAL INSPECTION WILL NOT COMMENCE WITHOUT RECORD DRAWINGS AS PREPARED BY THE IRRIGATION CONTRACTOR.
- 3.15 MAINTENANCE
- DURING THE MAINTENANCE PERIOD THE CONTRACTOR SHALL ADJUST AND MAINTAIN THE IRRIGATION SYSTEM IN A FULLY OPERATIONAL CONDITION PROVIDING COMPLETE IRRIGATION COVERAGE TO ALL INTENDED PLANTINGS.
- 3.16 COMPLETION CLEANING
- CLEAN-UP SHALL BE MADE AS EACH PORTION OF THE WORK PROGRESSES. REFUSE AND EXCESS DIRT SHALL BE REMOVED FROM THE SITE, ALL WALKS AND PAVING SHALL BE BROOMED, AND ANY DAMAGE SUSTAINED ON THE WORK OF OTHERS SHALL BE REPAIRED TO ORIGINAL CONDITIONS.
- END OF SECTION

GENERAL GMP IRRIGATION NOTES

1. ALL LOCAL MUNICIPAL AND STATE LAWS, RULES AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR. IN CASE OF CONFLICT BETWEEN THE SPECIFICATIONS, DRAWINGS, AND/OR CODE, THE MORE STRINGENT REQUIREMENT SHALL PREVAIL.
2. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES AND SERVICES BEFORE COMMENCING WORK. THE LOCATIONS OF UTILITIES, STRUCTURES AND SERVICES SHOWN IN THESE PLANS ARE APPROXIMATE ONLY. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE.
3. THE CONTRACTOR SHALL OBTAIN THE PERTINENT ENGINEERING OR ARCHITECTURAL PLANS BEFORE BEGINNING WORK.
4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK INDICATED HEREIN BEFORE BEGINNING WORK.
5. THE MAINLINE AND SLEEVING IS DIAGRAMMATIC. ALL PIPING IS FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED WITHIN LIMIT OF WORK BOUNDARIES AND IN SHRUB PLANTING AREAS WHERE POSSIBLE. AVOID ANY CONFLICTS BETWEEN THE SPRINKLER SYSTEM, PLANTING AND ARCHITECTURAL FEATURES.
6. IRRIGATION EQUIPMENT AS SHOWN IS DIAGRAMMATIC. INSTALL ALL THE IRRIGATION REMOTE CONTROL VALVES, QUICK COUPLERS, MASTER VALVES, FLOW SENSORS, BACKFLOWS, AIR/VACUUM DEVICES, BALL VALVES, AND ANCILLARY EQUIPMENT, IN SHRUB PLANTING AREAS WHEN FEASIBLE OR AS APPROVED BY OWNER'S REPRESENTATIVE AND THE LANDSCAPE IRRIGATION DESIGNER.
7. DO NOT FULLY INSTALL ANY EQUIPMENT AS SHOWN ON THE PLANS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN CONDITIONS EXIST THAT WERE NOT EVIDENT AT THE TIME THESE PLANS WERE PREPARED. ANY SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE PRIOR TO ANY WORK OR THE IRRIGATION CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY FIELD CHANGES DEEMED NECESSARY BY THE OWNER.
8. INSTALL ALL EQUIPMENT AS SHOWN IN THE DETAILS AND SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH LOCAL CITY, COUNTY AND STATE REQUIREMENTS FOR BOTH EQUIPMENT AND INSTALLATION.
9. ACTUAL LOCATION FOR THE INSTALLATION OF THE BACKFLOW PREVENTER, RECYCLED CROSS CONNECTION TEST VALVE, PUMP STATION AND THE AUTOMATIC CONTROLLER IS TO BE DETERMINED IN THE FIELD BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
10. CONTRACTOR IS TO PROVIDE THREE (3) ADDITIONAL PILOT WIRES AND ONE (1) COMMON WIRE TO THE END OF THE MAINLINE RUN IN TWO DIRECTIONS FROM THE CONTROLLER. THE ADDITIONAL WIRE SHALL BE EXTENDED 10', MAKING A COIL TO FIT INSIDE A RECTANGULAR FULL BOX. LABEL THE LID OF THE FULL BOX 'SW'.
11. ALL PIPE UNDER PAVED AREAS, HARDSCAPE, OR AS DIRECTED BY OWNERS REPRESENTATIVE TO BE INSTALLED IN SLEEVING, TWICE THE DIAMETER OF PIPE OR WIRE BUNDLE CARRIED. ALL 2" AND 3" SLEEVING SHALL BE PVC1220 SCH. 40, TYPE I, GRADE 2 MATERIAL CONFORMING TO ASTM STANDARD D-1785-4. ALL 4" AND LARGER SLEEVING SHALL BE PVC1220 CLASS 200 SDR21, TYPE I, GRADE 2 MATERIAL CONFORMING TO ASTM STANDARD D-2241. SLEEVES UNDER BROWN DITCHES SHALL BE ENGAGED IN CONCRETE A MINIMUM OF 6" THICK ON ALL SIDES OF PIPE. SLEEVES TO EXTEND AT LEAST 12" PAST THE EDGE OF PAVING.
12. ALL QUICK COUPLER VALVES TO BE INSTALLED IN SHRUB OR GROUND COVER AREAS WHERE POSSIBLE. ALL QUICK COUPLER VALVES TO BE INSTALLED AS SHOWN ON THE INSTALLATION DETAILS. INSTALL ALL QUICK COUPLER VALVES WITHIN 18" OF HARDSCAPE.
13. ALL HEADS ARE TO BE INSTALLED WITH THE NOZZLE, SCREEN AND ARCS SHOWN ON THE PLANS. ALL HEADS ARE TO BE ADJUSTED TO PREVENT OVERSPRAY ONTO BUILDINGS, WALLS, FENCES AND HARDSCAPE. THIS INCLUDES, BUT NOT LIMITED TO, ADJUSTMENT OF DIFFUSER PIN OR ADJUSTMENT SCREW, REPLACEMENT OF PRESSURE COMPENSATING SCREENS, REPLACEMENT OF NOZZLES WITH MORE APPROPRIATE RADIUS UNITS AND THE REPLACEMENT OF NOZZLES WITH ADJUSTABLE ARC UNITS. WHEN VERTICAL OBSTRUCTIONS (PROPS, STREET LIGHTS, TREES, ETC.) INTERFERE WITH THE SPRAY PATTERN OF THE SPRINKLER HEADS PREVENTING PROPER COVERAGE, THE IRRIGATION CONTRACTOR SHALL FIELD ADJUST THE SPRINKLER SYSTEM BY INSTALLING A QUARTER CIRCLE OR HALF CIRCLE SPRINKLER HEAD ON EACH SIDE OF THE OBSTRUCTION SO AS TO PROVIDE PROPER COVERAGE. ALL ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.

14. THE IRRIGATION CONTRACTOR SHALL ADJUST THE PRESSURE REGULATOR ON EACH ELECTRICAL CONTROL VALVE SO THAT THE SPRINKLER HEAD FARTHEST AND HIGHEST IN ELEVATION FROM ITS RESPECTIVE CONTROL VALVE OPERATES WITHIN THE OPERATING PRESSURE SHOWN ON THE IRRIGATION LEGEND. NOT TO EXCEED FIVE (5) PSI ABOVE THE GIVEN OPERATING PRESSURE FROM THE SPECIFIED PRESSURE LOCATED ON THE IRRIGATION LEGEND.
15. THE IRRIGATION SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE IRRIGATION DRAWINGS AT EACH POINT OF CONNECTION. THE IRRIGATION CONTRACTOR SHALL VERIFY WATER PRESSURE VIA DIRECT FIELD MEASUREMENT PRIOR TO CONSTRUCTION. REPORT ANY DIFFERENCE BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT PRESSURE DIFFERENCES ARE NOT REPORTED PRIOR TO START OF CONSTRUCTION, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS, AND COSTS ASSOCIATED WITH SAID REVISIONS.
16. SHOULD FIELD CONDITIONS REQUIRE PIPE INSTALLATION OTHER THAN THAT SHOWN ON PLANS, THE CONTRACTOR SHALL LIMIT EXCESS FLOW AND SIZE ALL PIPE NOT TO EXCEED A VELOCITY OF 5 FEET PER SECOND (FPS) IN PVC PIPE AND CAST IRON PIPE. FLOW THROUGH ANCILLARY EQUIPMENT, STEEL AND COPPER PIPE SHALL NOT EXCEED A VELOCITY OF 7 1/2 FPS. ALL ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.
17. ELECTRICAL POWER SOURCE FOR THE IRRIGATION CONTROLLER AND/OR BOOSTER PUMP SHALL BE PROVIDED UNDER THE ELECTRICAL SECTION OF THE SPECIFICATIONS. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO COORDINATE ELECTRICAL SERVICE WITH THE GENERAL CONTRACTOR AND SHALL MAKE THE FINAL CONNECTION FROM THE ELECTRICAL SOURCE TO THE CONTROLLER AND/OR BOOSTER PUMP.



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REVISIONS  
REVISIONS 09-24-08  
CIVIL BASE REVS 12-11-08

PLOTTED ON 01-08-04  
DRAWN PMH  
APPROVED JF  
JOB NO. 08-089-00  
DATE 07-24-08  
SCALE AS SHOWN

SHEET INDEX		
SEE SHEET	1-6	CIVIL ENGINEER'S GRADING PLANS
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DECLARATION OF RESPONSIBLE CHARGE:  
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I understand that the check of project drawings and specifications by the County of San Diego is confined to a review only and does not relieve me, as Landscape Architect of Work, of my responsibilities for project design.

*John Patterson* 01-05-04 Date  
John Patterson RLA # 3503

Gillespie Moody Patterson, Inc.  
4404 Genessee Avenue, Suite 140  
La Jolla, CA 92037  
(858) 558-8471

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PERMITS	
SITE PLAN PERMIT NO.	805-027
REZONE PERMIT NO.	805-006
SPECIAL USE PERMIT NO.	N/A
TENTATIVE MAP NO.	TM 5427 RPL2
N.O.I. NO.	T.B.D.
HABITAT LOSS PERMIT	N/A

I FIND THAT THIS SHEET CONFORMS TO ACCEPTED LANDSCAPE ARCHITECTURAL PRACTICES AND IS IN COMPLIANCE WITH THE REQUIREMENTS LISTED IN SECTION 6170a(1) THROUGH (4) OF THE SAN DIEGO COUNTY ZONING ORDINANCE.

*John Patterson* 01-05-04 DATE  
John Patterson RLA # 3503

ENVIRONMENTAL SERVICES UNIT		
COUNTY APPROVED CHANGES		
NO.	DESCRIPTION	APPROVED BY DATE
	APPROVED FOR COMPLIANCE WITH THE ENVIRONMENTAL REVIEW	
	APPROVED BY: _____	
	DATE: _____	

BENCHMARK	
DESCRIPTION:	BRASS DISC STAMPED "E 228 1968"
LOCATION:	MISSION ROAD
RECORD FROM:	COUNTY OF SAN DIEGO ROS 17292
ELEVATION:	195.42
DATUM:	M.S.L.

PRIVATE CONTRACT

SHEET 15	COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS	24 SHEET
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IRRIGATION SPECIFICATIONS FOR: L1-08

**BONSALL**  
LOTS 1 & 2, TM 5427 RPL2  
CALIFORNIA COORDINATE INDEX 410-1707

APPROVED MOHAMMAD FAHEEM/DONOR FOR COUNTY ENGINEER

ENGINEER OF PUBLIC WORKS: STEVEN C. BENTLEY  
R.C.E. 4858

BY: \_\_\_\_\_

GRADING PERMIT NO. L-15450

DATE: \_\_\_\_\_

LAND ARCH. NAME: GILLESPIE MOODY PATTERSON, INC. (GMP, INC.)  
PHONE NO. (858) 558-8977



WATER TYPE		POTABLE WATER	
HYDRAULIC GRADE LINE	778	DATE	9/18/2008
METER NUMBER	C	PROJECT	BONSALL LOTS 1 & 2
METER SIZE	1"	JOB NUMBER	08-085
METER ELEVATION	202	LOCATION	BONSALL, CA
STATIC PRESSURE	249	CLIENT	
VALVE NUMBER CHECKED	6	CONTACT	
GPM AT VALVE	31	PREPARED BY	PALL MORRISON
PUMP PSI	0	WATER DISTRICT	RAINBOW
SERVICE LINE		1.40	
WATER METER		5.70	
WYE STRAINER		2.00	
BACKFLOW PREVENTER		12.00	
MASTER VALVE		2.30	
FLOW SENSOR		0.50	
MAINLINE		2.80	
ISOLATION VALVES		0.70	
REMOTE CONTROL VALVE		2.30	
LATERAL LINES		3.55	
HEAD LOSS		7.79	
MISC LOSSES		0	
SUBTOTAL		41.04	
FITTING LOSSES		3.33	
SUB TOTAL FROM ABOVE		41.04	
REQUIRED PSI AT LAST HEAD		40	
TOTAL		84.37	
STATIC PSI		249	
BOOSTED PSI		0	
PSI REQUIRED		84	
RESIDUAL PSI		165	

RUN-TIME CALC			
PROJECT NAME	METER 'C' / CONTROLLER 'C'		
T=	60 x INTERVAL x PEAK Eto x KC	POTABLE	
TIME = MIN	PR x IE		
INTERVAL	1.4 WATER 5 DAYS/WEEK		
PEAK Eto	0.118		
KC	0.80 TURF (WUCOLS HIGH 0.7-0.9)		
	0.50 SHRUB (WUCOLS LOW 0.1-0.3, MOD 0.4-0.6)		
	0.45 SLOPE (WUCOLS VERY LOW 0.1)		
	0.70 TREE		
PR	1.85 SPRAY		
	0.50 ROTOR		
	0.30 DRIP		
	3.00 BUBBLER		
IE	0.60 SPRAY		
	0.85 ROTOR		
	0.90 DRIP		
	0.85 BUBBLER		
SHRUB ROTORS	T = 12 MINSTA	X 0 STATIONS	= 0 MINUTES
SHRUB ROTORS SLOPE	T = 10 MINSTA	X 14 STATIONS	= 147 MINUTES
TURF ROTORS	T = 19 MINSTA	X 0 STATIONS	= 0 MINUTES
TURF SPRAYS	T = 7 MINSTA	X 0 STATIONS	= 0 MINUTES
SHRUB SPRAYS	T = 4 MINSTA	X 10 STATIONS	= 45 MINUTES
SHRUB DRIP	T = 18 MINSTA	X 0 STATIONS	= 0 MINUTES
TREE BUBBLERS	T = 3 MINSTA	X 0 STATIONS	= 0 MINUTES
TOTAL		192 MINUTES	
total number of stations:		24	
		3.19 HOURS	
		35.48% OF 9HR	
		OVER-HEAD ZONES: 3.19 HOURS	
		DRIP ZONES: 0.00 HOURS	

ZONE TYPE	AREA (SQ.FT.)	EWJ =	GPD
SHRUB ROTORS	65,143	EWJ = 3,304.49	GPD
		(Eto x 0.5 x HA x .62/.85)	
TURF ROTORS		EWJ = 0.00	GPD
		(Eto x 0.8 x HA x .62/.85)	
SHRUB SPRAYS	1,500	EWJ = 105.16	GPD
		(Eto x 0.5 x HA x .62/.60)	
TURF SPRAYS		EWJ = 0.00	GPD
		(Eto x 0.8 x HA x .62/.60)	
SHRUB DRIP		EWJ = 0.00	GPD
		(Eto x 0.5 x HA x .62/.90)	
TREE BUBBLER		EWJ = 0.00	GPD
		(Eto x 0.5 x HA x .62/.85)	
TOTAL SQ. FEET:	67,643	EWJ = 3410.65	
ACRE:	1.55	886,769 GPD	2.72 AC FT/yr
			118544.15 CLFT/yr
*EWJ based on watering 5 days per week, 52 weeks per year, with no effective rainfall.			
MAWA=Eto x 0.8 x AREA x 0.62	DAILY MAWA:	4,596	
	YEARLY MAWA:	1,677,546	5.15 AC FT.
		GPY	



**gmp**  
Gillespie Moody Patterson, Inc.  
LANDSCAPE ARCHITECTURE & PLANNING

1404 GENESEE AVENUE, SUITE 140  
LA JOLLA, CALIFORNIA 92037-1894  
958-558-8471  
FAX 958-558-4188

REVISIONS:  
REVISION DATE 09-24-08  
CIVIL BASE REV 12-11-08

PLOTTED ON 01-05-09  
DRAWN P.M.  
APPROVED J.P.  
JOB NO. 08-085-00  
DATE 07-24-08  
SCALE AS SHOWN

SHEET INDEX		
SEE SHEET	1-6	CIVIL ENGINEER'S GRADING PLANS
SEE SHEET	7-8	FOR IRRIGATION PLANS
SEE SHEET	9	FOR IRRIGATION LEGEND
SEE SHEET	10-12	FOR IRRIGATION DETAILS & NOTES
SEE SHEET	13-15	FOR IRRIGATION SPECIFICATIONS
SEE SHEET	16-17	FOR IRRIGATION CALCULATIONS
SEE SHEET	18-19	FOR PLANTING PLANS
SEE SHEET	20-21	FOR PLANTING LEGEND, DETAILS, NOTES & SPECIFICATIONS
SEE SHEET	22	FOR FUEL MANAGEMENT PLAN
SEE SHEET	23-24	STRUCTURAL ENGINEER'S PLANS

DECLARATION OF RESPONSIBLE CHARGE:  
I hereby declare that I am the Landscape Architect 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 County of San Diego is confined to a review only and does not relieve me, as Landscape Architect of work, of my responsibilities for project design.

John Patterson RLA # 3505 Date 01-05-09

Gillespie Moody Patterson, Inc.  
1404 Genesee Avenue, Suite 140  
La Jolla, CA 92037  
(958) 558-8471

**HOLD HARMLESS AND INDEMNIFICATION CLAUSE**

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE 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 CITY/COUNTY OF LOCAL JURISDICTION, AND THE LANDSCAPE ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, THE CITY/COUNTY OF LOCAL JURISDICTION, OR THE LANDSCAPE ARCHITECT.

PERMITS	
SITE PLAN PERMIT NO.	S05-027
REZONE PERMIT NO.	R05-006
SPECIAL USE PERMIT NO.	N/A
TENTATIVE MAP NO.	TM 5427 RPL <sup>2</sup>
N.O.I. NO.	T.B.D.
HABITAT LOSS PERMIT	N/A

I FIND THAT THIS SHEET CONFORMS TO ACCEPTED LANDSCAPE ARCHITECTURAL PRACTICES AND IS IN COMPLIANCE WITH THE REQUIREMENTS LISTED IN SECTION 67301.1 THROUGH V) OF THE SAN DIEGO COUNTY ZONING ORDINANCE.

JOHN PATTERSON RLA # 3505 DATE 01-05-09

ENVIRONMENTAL SERVICES UNIT		COUNTY APPROVED CHANGES	
NO.	DESCRIPTION	APPROVED BY	DATE
	APPROVED FOR COMPLIANCE WITH THE ENVIRONMENTAL REVIEW		
	APPROVED BY:		
	DATE:		

BENCHMARK	
DESCRIPTION:	BRASS DISC STAMPED "TE 228 1968"
LOCATION:	MISSION ROAD
RECORD FROM:	COUNTY OF SAN DIEGO ROS 17292
ELEVATION:	195.42 DATUM: M.S.L.

PRIVATE CONTRACT	
SHEET 17	24 SHEET
COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS	
IRRIGATION CALCULATIONS FOR: LI-09	
BONSALL LOTS 1 & 2, TM 5427 RPL2	
CALIFORNIA COORDINATE INDEX 410-1707	
APPROVED FOR COUNTY ENGINEER	ENGINEER OF RECORD: STEVEN C. KENTLER R.C.E. 48356
BY:	GRADING PERMIT NO. L-15450
DATE:	

LAND ARCH. NAME: GILLESPIE MOODY PATTERSON, INC. (GMP, INC.)  
PHONE NO. (958) 558-8977  
08-085-00 BONSALL SLOPES

FOR FULL PLANTING AND HYDROSEED LEGEND - SEE SHEET 20

**PLANT LEGEND**

NOTE: ANY SUBSTITUTIONS INCLUDING SIZE AND SPECIES MUST BE APPROVED BY LANDSCAPE ARCHITECT

**TREES**

SYMBOL	BOTANICAL NAME	COMMON NAME
●	ARBUTUS UNIDO	STRAWBERRY TREE
▲	CERCIS OCCIDENTALIS	WESTERN REDBUD
⊠	PLATANUS RACEMOSA	CALIFORNIA SYCAMORE
+	QUERCUS AGRIFOLIA	COAST LIVE OAK

NOTE: TREES WITHIN 5' OF HARDSCAPE IMPROVEMENT SHALL RECEIVE ROOT BARRIERS. SEE DETAIL D.

**SHRUBS**

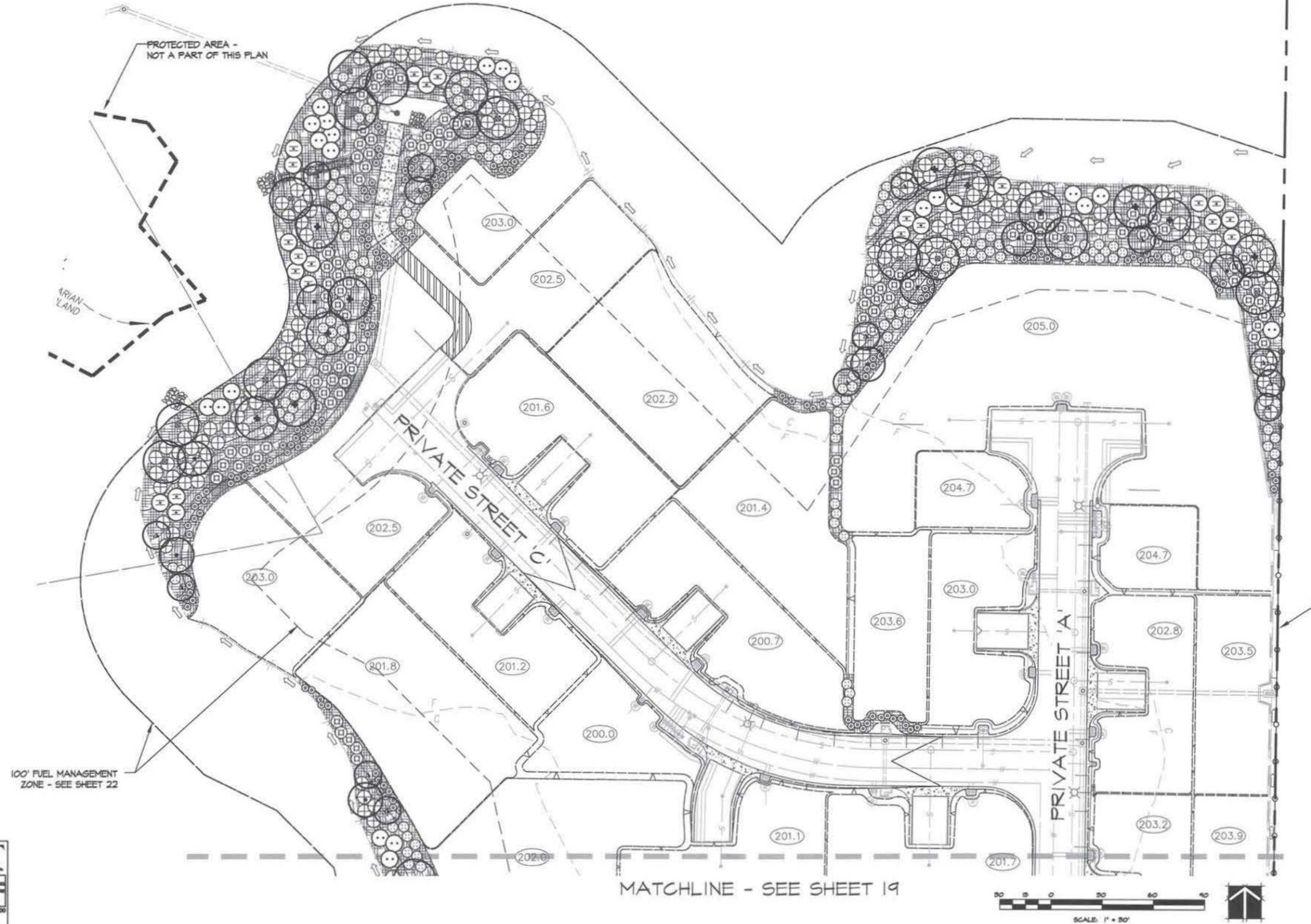
SYMBOL	BOTANICAL NAME	COMMON NAME
⊕	CEANOTHUS 'JULIA PHELPS'	MILD LILAC VARIETY
⊙	CISTUS X HYBRIDUS	ROCKROSE SPECIES
⊘	HETEROMELES ARBUTIFOLIA	TOYON
⊖	LAURUS NOBILIS	SWEET BAY (COLUMNAR)
⊗	RHUS INTEGRIFOLIA	LEMONADE BERRY
⊚	SALVIA GREGGII	AUTUMN SAGE
⊛	NESTRINSIA FRUTICOSA	COAST ROSEMARY

**GROUND COVER & HYDROSEED MIX**

SYMBOL	BOTANICAL NAME	COMMON NAME
⊞	10% BAGCHARIS PILLULARIS THIN PEAKS #2	DWARF COYOTE BRUSH VARIETY
⊟	50% CEANOTHUS GRISEUS VAR. HORIZONTALIS	GARMEL CREEPER

- BLEND BOTH GROUND COVER SPECIES EVENLY  
- GROUND COVER AVAIL FROM TREE OF LIFE NURSERY

NO SYMBOL: NON-IRRIGATED HYDROSEED MIX - SEE SHEET 20



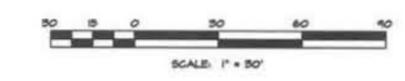
PROTECTED AREA - NOT A PART OF THIS PLAN

ADJACENT LAND

100' FUEL MANAGEMENT ZONE - SEE SHEET 22

PROPERTY BOUNDARY

MATCHLINE - SEE SHEET 19



9404 GENESEE AVENUE, SUITE 140  
LA JOLLA, CALIFORNIA 92037-0994  
858-556-8471  
FAX 858-556-4188

**REVISIONS**

REVISION	DATE
NO. 01-24-08	01-24-08
CIVIL BASE REVS	12-11-08

PLOTTED ON: 01-08-09  
DRAWN: G.M.P.  
APPROVED: J.P.  
JOB NO.: 08-038-00  
DATE: 07-24-08  
SCALE: AS SHOWN



**SHEET INDEX**

SEE SHEET	DESCRIPTION
1-6	CIVIL ENGINEER'S GRADING PLANS
7-9	FOR IRRIGATION PLANS
10-12	FOR IRRIGATION LEGEND & NOTES
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John Patterson RLA # 3505 Date: 01-05-09

Gillespie Moody Patterson, Inc.  
9404 Geneesee Avenue, Suite 140  
La Jolla, CA 92037  
(858) 556-8471

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CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE 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 CITY/COUNTY OF LOCAL JURISDICTION, AND THE LANDSCAPE ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, THE CITY/COUNTY OF LOCAL JURISDICTION, OR THE LANDSCAPE ARCHITECT.

**PERMITS**

SITE PLAN PERMIT NO.	S05-027
REZONE PERMIT NO.	R05-006
SPECIAL USE PERMIT NO.	N/A
TENTATIVE MAP NO.	TM 5427 RPL2
N.O.I. NO.	T.B.D.
HABITAT LOSS PERMIT	N/A

**ENVIRONMENTAL SERVICES UNIT**

APPROVED FOR COMPLIANCE WITH THE ENVIRONMENTAL REVIEW

APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

I FIND THAT THIS SHEET CONFORMS TO ACCEPTED LANDSCAPE ARCHITECTURAL PRACTICES AND IS IN COMPLIANCE WITH THE REQUIREMENTS LISTED IN SECTION 613(a)(1) THROUGH (4) OF THE SAN DIEGO COUNTY ZONING ORDINANCE.

JOHN PATTERSON RLA # 3505 DATE: 01-05-09

**COUNTY APPROVED CHANGES**

NO.	DESCRIPTION	APPROVED BY	DATE

**BENCHMARK**

DESCRIPTION: BRASS DISC STAMPED "E 228 1968"  
SET ON A STEEL ROD.

LOCATION: MISSION ROAD

RECORD FROM: COUNTY OF SAN DIEGO ROS 17292

ELEVATION: 195.42 DATUM: M.S.L.

**PRIVATE CONTRACT**

SHEET	COUNTY OF SAN DIEGO	24
18	DEPARTMENT OF PUBLIC WORKS	

SLOPE PLANTING PLAN FOR:  
**BONSALL**  
LOTS 1 & 2, TM 5427 RPL2  
CALIFORNIA COORDINATE INDEX 410-1707

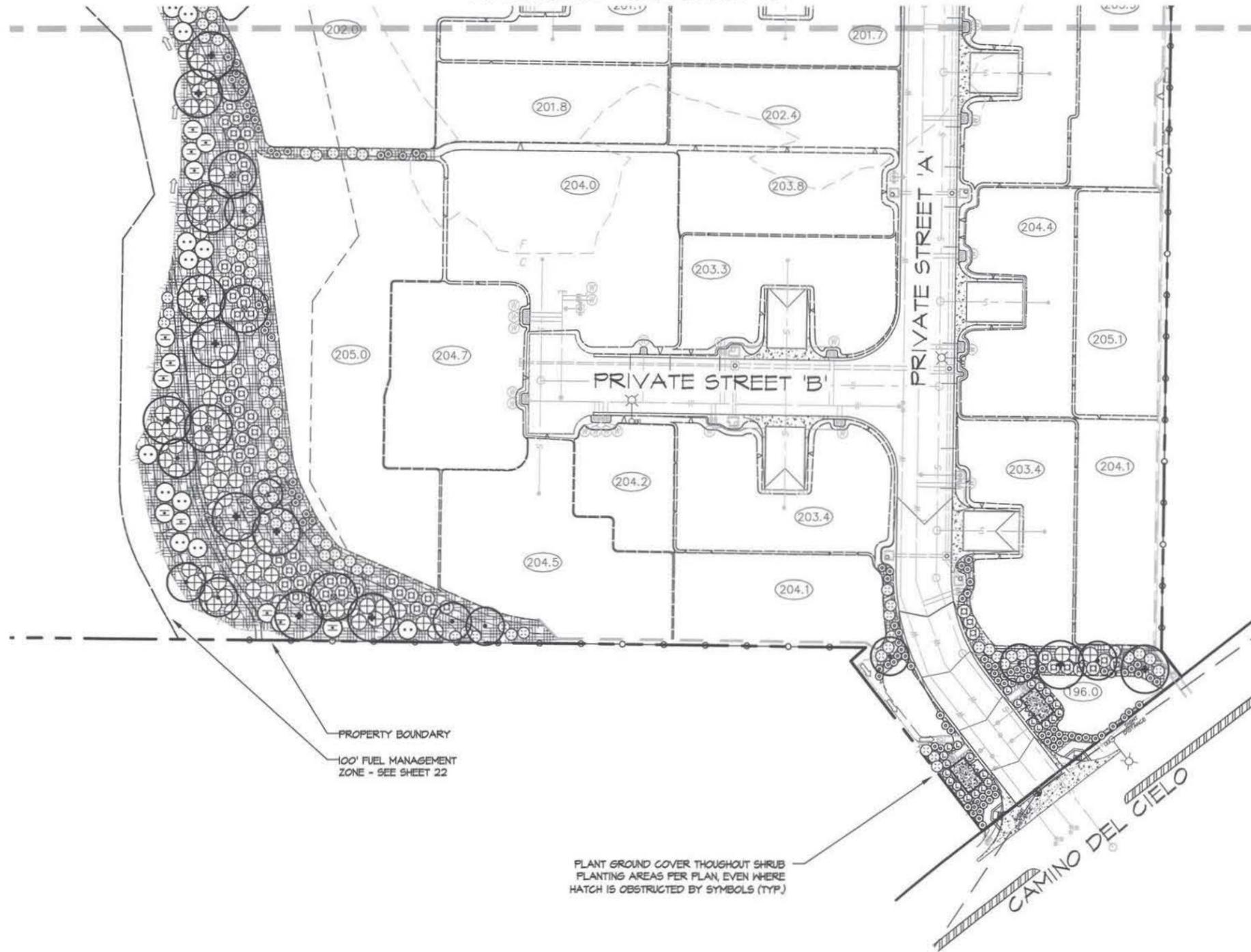
APPROVED MORRIS FLEISHERGOTT FOR COUNTY ENGINEER

ENGINEER OF WORK: STEVEN C. KETTLER  
R.C.E. 48958

GRADING PERMIT NO. **L-15450**

LAND ARCH. NAME: GILLESPIE MOODY PATTERSON, INC. (G.M.P., INC.)  
08-085-00 BONSALL SLOPES  
PHONE NO. (858) 556-8977

MATCHLINE - SEE SHEET 18



FOR FULL PLANTING AND HYDROSEED LEGEND - SEE SHEET 20

**PLANT LEGEND**

NOTE: ANY SUBSTITUTIONS INCLUDING SIZE AND SPECIES MUST BE APPROVED BY LANDSCAPE ARCHITECT

**TREES**

SYMBOL	BOTANICAL NAME	COMMON NAME
●	ARBUTUS UNIDO	STRAWBERRY TREE
▲	CERCIS OCCIDENTALIS	WESTERN REDBUD
☒	PLATANUS RACEMOSA	CALIFORNIA SYCAMORE
+	QUERCUS AGRIFOLIA	COAST LIVE OAK

NOTE: TREES WITHIN 5' OF HARDSCAPE IMPROVEMENT SHALL RECEIVE ROOT BARRIERS. SEE DETAIL D.

**SHRUBS**

SYMBOL	BOTANICAL NAME	COMMON NAME
⊕	CEANOTHUS 'JULIA PHELPS'	WILD LILAC VARIETY
⊙	CISTUS X HYBRIDUS	ROCKROSE SPECIES
⊙	HETEROMELES ARBUTIFOLIA	TOYON
⊙	LAURUS NOBILIS	SHEET BAY (COLUMNAR)
⊙	RHUS INTEGRIFOLIA	LEMONADE BERRY
⊙	SALVIA GREGGII	AUTUMN SAGE
⊙	WESTRINGIA FRUTICOSA	COAST ROSEMARY

**GROUND COVER & HYDROSEED MIX**

SYMBOL	BOTANICAL NAME	COMMON NAME
⊠	70% BACCHARIS PILLULARIS THIN PEAKS #2	DWARF COYOTE BRUSH VARIETY
⊠	30% CEANOTHUS GRISAEUS VAR. HORIZONTALIS	GARNEI CREEPER
-	- BLEND BOTH GROUND COVER SPECIES EVENLY - GROUND COVER AVAIL FROM TREE OF LIFE NURSERY	
NO SYMBOL	NON-IRRIGATED HYDROSEED MIX - SEE SHEET 20	

PLANT GROUND COVER THROUGHOUT SHRUB PLANTING AREAS PER PLAN, EVEN WHERE HATCH IS OBSTRUCTED BY SYMBOLS (TYP.)

PROPERTY BOUNDARY  
100' FUEL MANAGEMENT ZONE - SEE SHEET 22

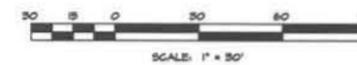


1404 GENESEE AVENUE, SUITE 140  
LA JOLLA, CALIFORNIA 92037-1994  
858-558-8471  
FAX 858-558-4188

REVISIONS

NO.	DATE	DESCRIPTION
1	01-24-09	REVISED SHEETS
2	02-11-09	CIVIL BASE REVISIONS

PLOTTED ON: 01-08-09  
DRAWN: GJHY  
APPROVED: JF  
JOB NO: 08-099-00  
DATE: 01-24-09  
SCALE: AS SHOWN



**SHEET INDEX**

SEE SHEET	NO.	DESCRIPTION
SEE SHEET	1-6	CIVIL ENGINEER'S GRADING PLANS
SEE SHEET	7-8	FOR IRRIGATION PLANS
SEE SHEET	4	FOR IRRIGATION LEGEND
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**DECLARATION OF RESPONSIBLE CHARGE.**  
I hereby declare that I am the Landscape Architect of work for this project, that I have exercised responsible charge over the design of the project as defined in section 6709 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 County of San Diego is confined to a review only and does not relieve me, as Landscape Architect of work, of my responsibilities for project design.

*[Signature]* 01-05-09  
John Patterson RLA # 3505 Date

Gillespie Moody Patterson, Inc.  
1404 Genesee Avenue, Suite 140  
La Jolla, CA 92037  
(858) 558-8471

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**PERMITS**

SITE PLAN PERMIT NO.	S05-027
REZONE PERMIT NO.	R05-006
SPECIAL USE PERMIT NO.	N/A
TENTATIVE MAP NO.	TM 5427 RPL2
N.O.I. NO.	T.B.D.
HABITAT LOSS PERMIT	N/A

**ENVIRONMENTAL SERVICES UNIT**

APPROVED FOR COMPLIANCE WITH THE ENVIRONMENTAL REVIEW

APPROVED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

I FIND THAT THIS SHEET CONFORMS TO ACCEPTED LANDSCAPE ARCHITECTURAL PRACTICES AND IS IN COMPLIANCE WITH THE REQUIREMENTS LISTED IN SECTION 6709.1 THROUGH V) OF THE SAN DIEGO COUNTY ZONING ORDINANCE.

*[Signature]* 01-05-09  
JOHN PATTERSON RLA # 3505 DATE

**COUNTY APPROVED CHANGES**

NO.	DESCRIPTION	APPROVED BY	DATE

**BENCHMARK**

DESCRIPTION: BRASS DISC STAMPED "E 228 1968"  
SET ON A STEEL ROD.

LOCATION: MISSION ROAD

RECORD FROM: COUNTY OF SAN DIEGO ROS 17292

ELEVATION: 195.42 DATUM: M.S.L.

**PRIVATE CONTRACT**

SHEET	NO.	DATE
19	24	01-24-09

COUNTY OF SAN DIEGO  
DEPARTMENT OF PUBLIC WORKS

SLOPE PLANTING PLAN FOR:  
**BONSALL**  
LOTS 1 & 2, TM 5427 RPL2  
CALIFORNIA COORDINATE INDEX 410-1707

APPROVED: *[Signature]*  
FOR COUNTY ENGINEER

ENGINEER OF FILE: STEVEN C. EYTLER  
R.C.E. 48556

BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

GRADING PERMIT NO. **L-15450**

LAND ARCH. NAME: GILLESPIE MOODY PATTERSON, INC. (GMP, INC.)  
PHONE NO. (858) 558-8977

**PLANTING NOTES**

1. A. THE PLANTING PLAN IS DIAGRAMMATIC. ALL PLANT LOCATIONS ARE APPROXIMATE. PLANT SYMBOLS TAKE PRECEDENCE OVER PLANT QUANTITIES SPECIFIED.
- B. QUANTITIES SHOWN ON THE PLANTING PLAN ARE APPROXIMATE AND ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY.
- C. CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF THE DISCREPANCIES BETWEEN QUANTITIES AND SYMBOLS SHOWN.
2. LANDSCAPE CONTRACTOR SHALL APPLY A CONTACT HERBICIDE, WHERE WEEDS ARE PRESENT, PER MANUFACTURER'S SPECIFICATIONS A MINIMUM OF TEN (10) DAYS PRIOR TO COMMENCEMENT OF ANY PLANTING OR IRRIGATION WORK. WEEDS SHALL BE ALLOWED TO COMPLETELY DIE BACK, INCLUDING THE ROOTS BEFORE PROCEEDING WITH WORK.
3. LANDSCAPE CONTRACTOR SHALL SUBMIT A SOIL ANALYSIS REPORT FROM AN AUTHORIZED TESTING AGENCY TO THE LANDSCAPE ARCHITECT BEFORE BEGINNING WORK.
4. PRIOR TO PLANTING, IRRIGATION SYSTEM SHALL BE FULLY OPERATIONAL AND PLANTING AREAS SHALL BE THOROUGHLY SOAKED.
5. ALL AREAS TO BE PLANTED, WHICH HAVE A SLOPE OF LESS THAN 10%, SHALL BE CROSS-RIPPED TO A DEPTH OF SIX (6") INCHES AND THE FOLLOWING AMENDMENTS SPREAD EVENLY AND THOROUGHLY BLENDED IN PER 10000 SQUARE FEET (QUANTITIES SUBJECT TO CHANGE PER SOIL ANALYSIS):
  - A. 3 CUBIC YARDS NITROGEN FORTIFIED REDWOOD SHAVINGS
  - B. 100 POUNDS AGRICULTURAL GYPSUM
  - C. 15 POUNDS IRON SULPHATE
  - D. 25 POUNDS 16-6-8 SLOW RELEASE FERTILIZER
6. EACH PLANT SHALL RECEIVE "AGRIFORM" (OR EQUAL) PLANT TABLETS AS FOLLOWS:
 

ROOTED CUTTINGS/4" POT	(1) 5 GRAM
1 GAL. CONTAINER	(1) 21 GRAM
5 GAL. CONTAINER	(3) 21 GRAM
15 GAL. CONTAINER	(5) 21 GRAM
BOX TREE	(1) 21 GRAM PER 3' BOX SIZE
7. PLANT BACKFILL SHALL BE 50% SITE SOIL, AND 50% NITROGEN FORTIFIED REDWOOD SHAVINGS BY VOLUME.
8. PLANT PITS SHALL BE TWICE THE SIZE OF THE DESIGNATED NURSERY CONTAINER.
9. PLANT MATERIAL SHALL NOT BE ROOT BOUND. FIVE GALLON PLANTS AND LARGER SHALL HAVE BEEN GROWN IN CONTAINERS FOR A MINIMUM OF 6 MONTHS AND A MAXIMUM OF TWO YEARS. PLANTS SHALL EXHIBIT HEALTHY GROWTH AND BE FREE OF DISEASES AND PESTS.
10. A. STAKE ALL TREES PER DETAIL.
- B. REMOVE NURSERY STAKES ON ALL VINES AND ATTACH TO ADJACENT FENCES WITH GALV. NAILS AND GREEN NURSERY TAPE.
- C. REMOVE NURSERY STAKES & TIES FROM ALL CONTAINER STOCK. MAINTAIN SIDE GROWTH ON ALL TREES.
11. PLANTS SHALL NOT BE PLACED WITHIN TWELVE (12") INCHES OF SPRINKLER HEADS.
12. SHRUBS SHOWN IN PLANT AREAS SHALL BE UNDER-PLANTED WITH GROUND COVER SHOWN BY ADJACENT SYMBOL, TO WITHIN 12" OF MAIN PLANT STEM.
13. LANDSCAPE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 2% DRAINAGE AWAY FROM ALL BUILDINGS, STRUCTURES AND WALLS. FINISHED GRADES SHALL BE SMOOTHED TO ELIMINATE PUDOLING OR STANDING WATER. ALL LANDSCAPE AREAS SHALL BE FINISH GRADED TO REMOVE ROCKS AND TO ENSURE SURFACE DRAINAGE AWAY FROM BUILDINGS (PER COUNTY GUIDELINES).
14. FINISHED GRADES SHALL BE ONE (1) INCH BELOW THE TOP OF CURBS, SILLS, AND WALKWAYS IN ALL AREAS. WHERE 60D IS LAID NEXT TO THESE IMPROVEMENTS-FINISH GRADE BEFORE LAYING 60D SHALL BE 1-1/2" BELOW THE TOP.
15. THE LANDSCAPE CONTRACTOR SHALL LEAVE SITE IN A CLEAN CONDITION, REMOVING ALL UNUSED MATERIAL, TRASH, AND TOOLS.
16. LANDSCAPE CONTRACTOR SHALL MAINTAIN ALL PLANTINGS FOR A PERIOD OF SIXTY (60) DAYS AFTER COMPLETION. ALL AREAS SHALL BE KEPT CLEAN, WATERED, AND WEED FREE.

17. AT COMPLETION OF ALL WORK OUTLINED IN THESE PLANS, THE LANDSCAPE CONTRACTOR SHALL CONTACT OWNER AND ARRANGE FOR A WALK THROUGH TO DETERMINE THAT ALL ASPECTS OF WORK ARE COMPLETED. WORK MUST BE FULLY COMPLETED ACCORDING TO ALL PLANS AND SPECIFICATIONS AND MUST BE COMPLETED IN A GOOD WORKMANSHIP MANNER AND MUST BE ACCEPTED BY THE OWNER IN WRITING PRIOR TO THE BEGINNING OF THE MAINTENANCE PERIOD.
- THE MAINTENANCE PERIOD SHALL INCLUDE THE FOLLOWING SCOPE OF WORK:
  - A. DAILY WATERING OF ALL PLANT MATERIAL.
  - B. WEEKLY MOWING OF ALL TURF AREAS.
  - C. WEEDING AND REMOVAL OF ALL WEEDS FROM GROUND COVER AREAS.
  - D. REPLACEMENT OF ANY DEAD, DYING, OR DAMAGED TREES, SHRUBS, OR GROUND COVERS.
  - E. FILLING AND REPLANTING OF ANY LOW AREAS WHICH CAUSE STANDING WATER.
  - F. ADJUSTING OF SPRINKLER HEAD HEIGHT AND WATERING SYSTEM.
  - G. FILLING AND RECOMPACTATION OF ERODED AREAS.
  - H. WEEKLY REMOVAL OF ALL TRASH, LITTER, CLIPPINGS, AND ALL FOREIGN DEBRIS.
  - I. AT 30 DAYS AFTER PLANTING, AMMONIUM SULFATE SHALL BE APPLIED TO LAWN AREAS AT THE RATE OF 5 LBS. PER 10000 SQUARE FEET.
  - J. AT 60 DAYS AFTER PLANTING AND PRIOR TO THE END OF THE MAINTENANCE PERIOD, BEST FERTILIZER COMPANY 16-6-8 (OR EQUAL) SHALL BE APPLIED AT THE RATE OF 6 LBS. PER 10000 SQUARE FEET TO LAWN AREAS AND PLANTING AREAS.
18. PRIOR TO END OF MAINTENANCE PERIOD, LANDSCAPE CONTRACTOR SHALL CONTACT OWNER AND ARRANGE FOR A FINAL WALK THROUGH. OWNER MUST ACCEPT ALL MAINTAINED AREAS IN WRITING PRIOR TO END OF MAINTENANCE PERIOD.
19. A. ALL GROUND COVERS SHALL BE GUARANTEED BY THE CONTRACTOR AS TO GROWTH AND HEALTH FOR A PERIOD OF SIXTY (60) DAYS AFTER THE COMPLETION OF MAINTENANCE PERIOD AND FINAL ACCEPTANCE. ALL SHRUBS SHALL BE GUARANTEED BY THE CONTRACTOR AS TO GROWTH AND HEALTH FOR A PERIOD OF NINETY (90) DAYS AFTER COMPLETION OF MAINTENANCE PERIOD AND FINAL ACCEPTANCE. ALL TREES SHALL BE GUARANTEED BY THE CONTRACTOR TO LIVE AND GROW IN AN ACCEPTABLE UPRIGHT POSITION FOR A PERIOD OF ONE (1) YEAR AFTER COMPLETION OF THE SPECIFIED MAINTENANCE PERIOD AND FINAL ACCEPTANCE.
- B. THE CONTRACTOR, WITHIN FIFTEEN (15) DAYS OF WRITTEN NOTIFICATION BY THE LANDSCAPE ARCHITECT, SHALL REMOVE AND REPLACE ALL GUARANTEED PLANT MATERIALS, WHICH FOR ANY REASON FAIL TO MEET THE REQUIREMENTS OF THE GUARANTEE. REPLACEMENT SHALL BE MADE WITH PLANT MATERIALS AS INDICATED OR SPECIFIED ON THE ORIGINAL PLANS, AND ALL SUCH REPLACEMENT MATERIALS SHALL BE GUARANTEED AS SPECIFIED FOR THE ORIGINAL MATERIAL GUARANTEE.

**HYDROSEED**

**NON-IRRIGATED HYDROSEED MIXTURE**

BOTANICAL NAME	RATE
ESCHSCHOLZIA CALIFORNICA	2 LBS/ACRE
GAILLARDIA ARISTATA	2 LBS/ACRE
PHAGELIA GAMPANILARIA	2 LBS/ACRE
PLANTAGO INSULARIS	25 LBS/ACRE
TRIFOLIUM HIRTUM 'HYKON'	10 LBS/ACRE
VILFIA MICROSTACHYS	8 LBS/ACRE

AVAILABLE FROM HYDRO-PLANT (760) 744-7360

**APPLICATION PROCEDURES AND EQUIPMENT**

- A. EQUIPMENT - HYDRAULIC EQUIPMENT USED FOR THE APPLICATION OF THE FERTILIZER, SEED AND SLURRY OF PREPARED WOOD PULP SHALL BE OF THE "SUPER HYDRO-SEEDER" TYPE AS APPROVED BY THE SAN DIEGO COUNTY ENGINEER. THIS EQUIPMENT SHALL HAVE A BUILT-IN AGITATION SYSTEM AND OPERATING CAPACITY SUFFICIENT TO AGITATE, SUSPEND, AND HOMOGENEOUSLY MIX A SLURRY CONTAINING NOT LESS THAN 41% OF FIBER MULCH PLUS A COMBINED TOTAL OF 7% FERTILIZER SOLIDS FOR EACH 100 GALLONS OF WATER. THE SLURRY DISTRIBUTION LINES SHALL BE LARGE ENOUGH TO PREVENT STOPPAGE AND SHALL BE EQUIPPED WITH A SET OF HYDRAULIC SPRAY NOZZLES WHICH WILL PROVIDE A CONTINUOUS NON-FLUCTUATING DISCHARGE. THE SLURRY TANK SHALL HAVE A MINIMUM CAPACITY OF 1500 GALLONS AND SHALL BE MOUNTED ON A TRAVELING UNIT, EITHER SELF-PROPELLED OR DRAWN BY A SEPARATE UNIT, WHICH WILL PLACE THE SLURRY TANK SPRAY NOZZLES WITHIN SUFFICIENT PROXIMITY TO THE AREAS TO BE SEED.
- B. PREPARATION - THE SLURRY PREPARATION SHALL TAKE PLACE AT THE SITE OF WORK AND SHALL BEGIN BY ADDING WATER TO THE TANK WHEN THE ENGINE IS AT HALF-THROTTLE. WHEN THE WATER LEVEL HAS REACHED THE HEIGHT OF THE AGITATOR SHAFT, GOOD RE-CIRCULATION SHALL BE ESTABLISHED AND AT THIS TIME, THE SEED SHALL BE ADDED. FERTILIZERS SHALL THEN BE ADDED, FOLLOWED BY WOOD PULP MULCH. MULCH SHALL ONLY BE ADDED TO THE MIXTURE AFTER THE SEED AND WHEN THE TANK IS AT LEAST ONE-THIRD (1/3) FILLED WITH WATER. THE ENGINE THROTTLE SHALL BE OPENED TO FULL SPEED WHEN THE TANK IS HALF-FILLED WITH WATER. ALL THE WOOD PULP MULCH SHALL BE ADDED BY THE TIME THE TANK IS TWO-THIRDS (2/3) TO THREE-FOURTHS (3/4) FULL. SPRAYING SHALL COMMENCE IMMEDIATELY WHEN THE TANK IS FULL.
- C. APPLICATION - THE OPERATOR SHALL SPRAY THE SLOPES WITH A UNIFORM, VISIBLE COAT BY USING THE GREEN COLOR OF THE WOOD PULP AS A GUIDE. THE SLURRY SHALL BE APPLIED IN A SKEEPIING MOTION, IN AN ARCHED STREAM SO AS TO FALL LIKE RAIN, ALLOWING THE WOOD FIBERS TO BUILD ON EACH OTHER UNTIL A GOOD COAT IS ACHIEVED, AND THE MATERIAL IS SPREAD AT THE REQUIRED RATE PER ACRE.
- D. ALL BARE SPOTS SHALL BE RESEED WITHIN NINETY (90) DAYS TO THE SATISFACTION OF THE CITY ENGINEER.

**SEEDS SHALL BE APPLIED IN A SLURRY CONSISTING OF:**

WOOD CELLULOSE FIBER	2000 LBS/ACRE
ALL-PURPOSE FERTILIZER (18/18/18)	300 LBS/ACRE
GUAR GUM SOIL BINDER	100 LBS/ACRE

**PLANT LEGEND**

NOTE: ANY SUBSTITUTIONS INCLUDING SIZE AND SPECIES MUST BE APPROVED BY LANDSCAPE ARCHITECT

**TREES**

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QTY.	DETAIL	REMARKS
●	ARBUS UNIDO	STRAWBERRY TREE	5 GAL.	17	A & B	MULTI-TRUNK
▲	CERCIS OCCIDENTALIS	WESTERN REDBUD	5 GAL.	17	A & B	MULTI-TRUNK
☒	PLATANUS RACEMOSA	CALIFORNIA SYCAMORE	5 GAL.	18	A & B	SINGLE TRUNK
+	QUERCUS AGRIFOLIA	COAST LIVE OAK	5 GAL.	22	A & B	SINGLE TRUNK

NOTE: TREES WITHIN 5' OF HARDSCAPE IMPROVEMENT SHALL RECEIVE ROOT BARRIERS. SEE DETAIL D.

**SHRUBS**

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QTY.	DETAIL	REMARKS
⊕	CEANOTHUS 'JULIA PHELPS'	WILD LILAC VARIETY	1 GAL.	230	B	N/A
⊙	GISTUS X HYBRIDUS	ROCKROSE SPECIES	1 GAL.	224	B	N/A
⊙	HETEROMELES ARBUTIFOLIA	TOYON	1 GAL.	31	B	N/A
⊙	LAURUS NOBILIS	SHEET BAY (COLUMNAR)	15 GAL.	28	B	COLUMNAR FORM
⊙	RHUS INTEGRI-FOLIA	LEMONADE BERRY	1 GAL.	34	B	N/A
⊙	SALVIA GREGGII	AUTUMN SAGE	1 GAL.	266	B	N/A
⊙	WESTRINGIA FRUTICOSA	COAST ROSEMARY	1 GAL.	170	B	N/A

**GROUND COVER & HYDROSEED MIX**

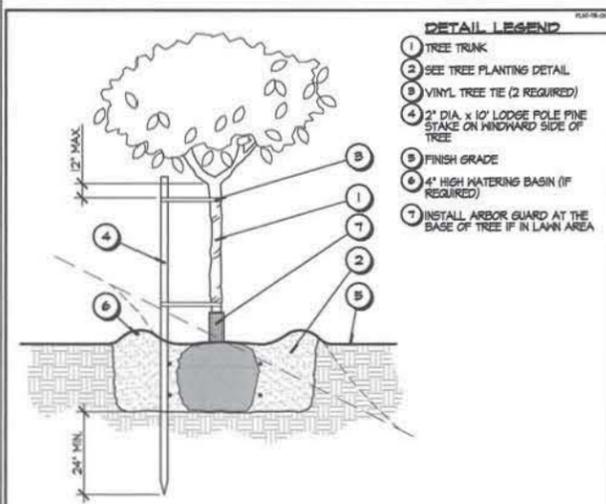
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	DETAIL	QTY.
☒	10% BAGGHARIS PILLULARIS TRIN PEAKS #2	DWARF COYOTE BRUSH VARIETY	LINEAR PLUGS @ 12" O.C.	C	AS NEEDED
☒	50% CEANOTHUS GRISEUS VAR. HORIZONTALIS	CARVEL CREEPER	4" POTS @ 12" O.C.	C	AS NEEDED

- BLEND BOTH GROUND COVER SPECIES EVENLY ACROSS SLOPES.  
- GROUND COVER AVAIL. FROM TREE OF LIFE NURSERY 944.720.0688, CHECKED AVAIL. ON 12-11-08.

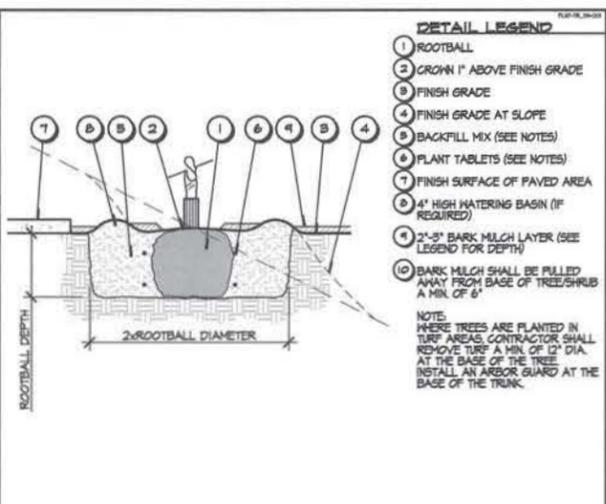
NO SYMBOL: NON-IRRIGATED HYDROSEED MIX - SEE SHEET 20

ALL SLOPES CONTAINING THE ABOVE REFERENCED GROUND COVERS SHALL RECEIVE A HYDROSEED MIX FOLLOWING SITE PAD GRADING AND PRIOR TO GROUND COVER INSTALLATION FOR PURPOSES OF SOIL STABILIZATION. NO SYMBOL IS SHOWN FOR THIS HYDROSEED MIX. REFER TO HYDROSEED NOTES FOR HYDROSEED MIX SPECIFICATIONS.

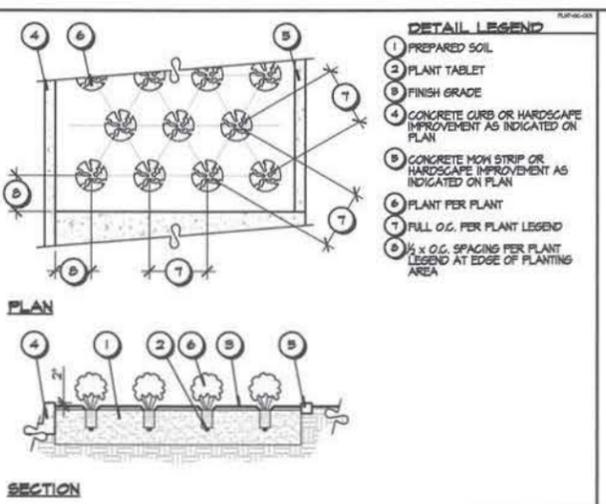
ALL SEED SPECIFICATIONS AND AVAILABILITY INFORMATION PROVIDED BY HYDRO-PLANT, (760) 744-7360



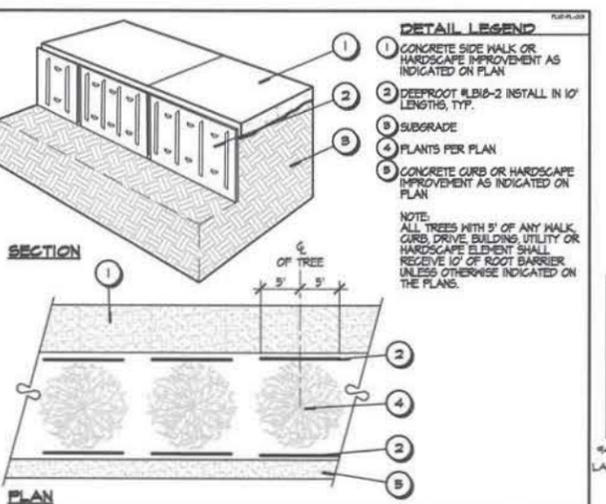
- DETAIL LEGEND**
- 1 TREE TRUNK
  - 2 SEE TREE PLANTING DETAIL
  - 3 VINYL TREE TIE (2 REQUIRED)
  - 4 2" DIA x 12' LODGE POLE PINE STAKE ON WINDWARD SIDE OF TREE
  - 5 FINISH GRADE
  - 6 4" HIGH WATERING BASIN (IF REQUIRED)
  - 7 INSTALL ARBOR GUARD AT THE BASE OF TREE IF IN LAWN AREA



- DETAIL LEGEND**
- 1 ROOTBALL
  - 2 GROWN 1" ABOVE FINISH GRADE
  - 3 FINISH GRADE
  - 4 FINISH GRADE AT SLOPE
  - 5 BACKFILL MIX (SEE NOTES)
  - 6 PLANT TABLETS (SEE NOTES)
  - 7 FINISH SURFACE OF PAVED AREA
  - 8 4" HIGH WATERING BASIN (IF REQUIRED)
  - 9 2"-5" BARK MULCH LAYER (SEE LEGEND FOR DETAIL)
  - 10 BARK MULCH SHALL BE PULLED AWAY FROM BASE OF TREE/SHRUB A MIN. OF 6"
- NOTE: WHERE TREES ARE PLANTED IN TURF AREAS, CONTRACTOR SHALL REMOVE TURF A MIN. OF 12" DIA. AT THE BASE OF THE TREE. INSTALL AN ARBOR GUARD AT THE BASE OF THE TRUNK.



- DETAIL LEGEND**
- 1 PREPARED SOIL
  - 2 PLANT TABLET
  - 3 FINISH GRADE
  - 4 CONCRETE CURB OR HARDSCAPE IMPROVEMENT AS INDICATED ON PLAN
  - 5 CONCRETE MOW STRIP OR HARDSCAPE IMPROVEMENT AS INDICATED ON PLAN
  - 6 PLANT PER PLANT
  - 7 FILL O.C. PER PLANT LEGEND
  - 8 1/2" x O.C. SPACING PER PLANT LEGEND AT EDGE OF PLANTING AREA



- DETAIL LEGEND**
- 1 CONCRETE SIDE WALK OR HARDSCAPE IMPROVEMENT AS INDICATED ON PLAN
  - 2 DEEPROOT #1810-2 INSTALL IN 10' LENGTHS, TYP.
  - 3 SUBGRADE
  - 4 PLANTS PER PLAN
  - 5 CONCRETE CURB OR HARDSCAPE IMPROVEMENT AS INDICATED ON PLAN
- NOTE: ALL TREES WITHIN 5' OF ANY WALK, CURB, DRIVE, BUILDING, UTILITY OR HARDSCAPE ELEMENT SHALL RECEIVE 10" OF ROOT BARRIER UNLESS OTHERWISE INDICATED ON THE PLANS.

**SHEET INDEX**

SEE SHEET	NO.	TITLE
1-6	CIVIL ENGINEER'S GRADING PLANS	
7-9	FOR IRRIGATION PLANS	
10-12	FOR IRRIGATION LEGEND & NOTES	
13-15	FOR IRRIGATION SPECIFICATIONS	
16-17	FOR IRRIGATION CALCULATIONS	
18-19	FOR PLANTING PLANS	
20-21	FOR PLANTING LEGEND, DETAILS, NOTES & SPECIFICATIONS	
22	FOR FUEL MANAGEMENT PLAN	
23-24	STRUCTURAL ENGINEER'S PLANS	

**DECLARATION OF RESPONSIBLE CHARGE:**  
I hereby declare that I am the Landscape Architect 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 County of San Diego is confined to a review only and does not relieve me, as Landscape Architect of Work, of my responsibilities for project design.

John Patterson RLA # 3505 Date 01-05-09

Gillespie Moody Patterson, Inc.  
9404 Genesee Avenue, Suite 140  
La Jolla, CA 92037  
(658) 558-6477

**HOLD HARMLESS AND INDEMNIFICATION CLAUSE**

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE 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 CITY/COUNTY OF LOCAL JURISDICTION, AND THE LANDSCAPE ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, THE CITY/COUNTY OF LOCAL JURISDICTION, OR THE LANDSCAPE ARCHITECT.

**PERMITS**

SITE PLAN PERMIT NO.	S05-027
REZONE PERMIT NO.	R05-006
SPECIAL USE PERMIT NO.	N/A
TENTATIVE MAP NO.	TM 5427 RPL <sup>2</sup>
N.O.I. NO.	T.B.D.
HABITAT LOSS PERMIT	N/A

**ENVIRONMENTAL SERVICES UNIT**

APPROVED FOR COMPLIANCE WITH THE ENVIRONMENTAL REVIEW

APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

**COUNTY APPROVED CHANGES**

NO.	DESCRIPTION	APPROVED BY	DATE

APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

**BENCHMARK**

DESCRIPTION: BRASS DISC STAMPED "E 228 1968"

LOCATION: MISSION ROAD

RECORD FROM: COUNTY OF SAN DIEGO ROS 17292

ELEVATION: 195.42 DATUM: M.S.L.

**PRIVATE CONTRACT**

SHEET 20 COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS SHEET 24

PLANTING LEGEND, DETAILS & NOTES FOR:

**BONSALL**  
LOTS 1 & 2, TM 5427 RPL2  
CALIFORNIA COORDINATE INDEX 410-1707

APPROVED: MOHAMMAD BAKKERBROGH FOR COUNTY ENGINEER

ENGINEER OF RECORD: STEVEN G. KETTLER  
R.C.E. 48358

GRADING PERMIT NO. L-15450



**REVISIONS**

NO.	DESCRIPTION	DATE
RE-NUM SHTS	01-24-08	01-24-08
CIVIL BASE REVS	12-11-08	12-11-08

PLOTTED ON 01-08-09

DRAWN BY GJM

APPROVED BY JP

9404 GENESSEE AVENUE, SUITE 140  
LA JOLLA, CALIFORNIA 92037-1334  
858-558-6477  
FAX 858-558-6188

JOB NO. 08-038-00  
DATE 01-24-08  
SCALE AS SHOWN

PLANTING SPECIFICATIONS

LANDSCAPING PART I - GENERAL I.1 RELATED DOCUMENTS

- SECTION I.2 SUMMARY A. This section includes the following: 1. Trees. 2. Shrubs. 3. Vines. 4. Plants/Groundcovers. 5. Soil amendments. 6. Fertilizers and mulches. 7. Stakes. 8. Landscape edgings.

- I.3 SUBMITTALS A. General: Submit each item in this Article according to the Conditions of the Contract. B. Product certificates signed by manufacturers certifying that their products comply with specified requirements.

- C. Material test reports from qualified independent testing agency indicating and interpreting test results relative to compliance of the following materials with requirements indicated. 1. Analysis of existing surface soil. 2. Analysis of imported topsoil.

- D. Planting schedule indicating anticipated dates and locations for each type of planting.

I.4 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced installer who has completed landscaping work similar in material, design, and extent to that indicated for this Project and with a record of successful landscape establishment.

- B. Provide quality, size, genus, species, and variety of trees, shrubs and other plant materials indicated, complying with applicable requirements of ANSI Z60.1 American Standard for Nursery Stock.

- C. Preinstallation Conference: Conduct conference at Project site notifying Landscape Architect, allow 48 hours notice.

I.5 DELIVERY, STORAGE, AND HANDLING

- A. Packaged Materials: Deliver packaged materials in containers showing weight, analysis, and name of manufacturer. Protect materials from deterioration during delivery and while stored at site.

- B. Trees and Shrubs: Do not prune trees and shrubs before delivery, except as approved by Landscape Architect. Protect bark, branches, and root systems from sun scald, drying, sweating, whipping and other handling and tying damage.

- C. Deliver trees, shrubs, vines, ground covers, and other plant material after preparations for planting have been completed and install immediately. If planting is delayed after delivery, set planting materials in shade, protect from weather and mechanical damage, and keep roots moist.

- 1. Do not remove container-grown stock from containers before time of planting. 2. Water root systems of trees, shrubs and vines and other plant materials stored on site with a fine-mist spray. Water as often as necessary to maintain root systems in a moist condition.

I.6 PROJECT CONDITIONS

- A. Utilities: Determine location of above grade and underground utilities and perform work in a manner which will avoid damage. Hand excavate, as required. Maintain grade stakes until removal is mutually agreed upon by parties concerned.

- B. Excavation: When conditions detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions, or obstructions, Notify Landscape Architect before planting.

I.7 COORDINATION AND SCHEDULING

- A. Coordinate installation of planting materials during normal planting seasons for each type of plant material required.

I.8 WARRANTY

- A. General Warranty: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and not concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.

- B. Special Warranty: Warrant the following living planting materials for a period of one year for trees and 90 days for shrubs, groundcover and plants, after date of Substantial Completion, against defects including death and unsatisfactory growth, except for defects resulting from lack of adequate maintenance, neglect, or abuse by Owner, abnormal weather conditions unusual for warranty period, or incidents that are beyond Contractor's control.

- C. Remove and replace dead planting materials immediately unless required to plant in the succeeding planting season.

- D. Replace planting materials that are more than 25 percent dead or in an unhealthy condition at end of warranty period.

I.9 TREE, SHRUB AND VINE MAINTENANCE

- A. Maintain trees, shrubs and vines by pruning, cultivating, watering, weeding, fertilizing, restoring planting saucers, tightening and repairing stakes, and resetting to proper grades or vertical position, as required to keep trees and shrubs free of insects and diseases. Restore or replace damaged tree wrappings. Maintain trees and shrubs for the following period: 1. Maintenance Period: 5 months following Substantial Completion.

PART 2 - PRODUCTS

2.1 TREE, SHRUB AND VINE MATERIAL

- A. General: Furnish nursery-grown trees and shrubs conforming to ANSI Z60.1, with healthy root systems developed by transplanting or root pruning. Provide well-shaped, fully-branched, healthy, vigorous stock free of disease, insects, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement. B. Grade: Provide trees and shrubs of sizes and grades conforming to ANSI Z60.1 for type of trees and shrubs required. Trees and shrubs of a larger size may be used if acceptable to Architect, with a proportionate increase in size of roots or balls. C. Label at least 1 tree and 1 shrub of each variety and caliber with a securely attached, waterproof tag bearing legible designation of botanical and common name.

2.2 SHADE AND FLOWERING TREES

- A. Shade Trees: Single-stem trees with straight trunk, well-balanced crown, and intact leader, of size indicated, conforming to ANSI Z60.1 for type of trees required. 1. Branching Height: 1/2 of tree height. B. Small Trees: Small upright or spreading type, branched or pruned naturally according to species and type, and with relationship of caliper, height, and branching recommended by ANSI Z60.1, and stem form as follows: 1. Form: Multistem, clump, with 2 or more main stems. C. Container-grown trees will meet ANSI Z60.1 limitations for container stock.

2.3 BROADLEAF EVERGREENS

- A. Form and Size: Normal-quality, well-balanced, broadleaf evergreens, of type, height, spread, and shape required, conforming to ANSI Z60.1.

2.4 PLANTS/GROUNDCOVERS

- A. Seed: Provide fresh, clean, new-crop seed complying with tolerance for purity and germination established by official seed analysts of North America. Provide seed mixture composed of seed species, proportions and minimum percentages of purity, germination, and maximum percentage of weed seed, as specified in the "schedule of seed mixtures" indicated on plans. B. Provide ground cover plants established and well rooted in flat removable containers and with not less than the minimum number and length of runners required by ANSI Z60.1 for the pot size shown or listed.

2.5 TURF

- A. The sod shall consist of live, growing, mature grass as specified on the planting legend obtained from a local reputable sod farm. The sod shall be cut from the field with a minimum of one-half inch of soil that completely covers the roots of the sod. The sod shall have a healthy, viable root system of dense, thickly matted roots throughout. B. The sod shall arrive vigorous and have a lush appearance, uniform texture and dark-green color throughout with no dead or dry edges. C. The sod shall be sufficiently dense to bear handling and placement without tearing. D. The sod shall be free of disease and harmful insects, obnoxious weeds or other grasses and shall not contain any other matter deleterious to its growth or which might affect its substructure or hardness when transplanted.

2.6 SOIL AMENDMENTS

- A. Lime: ASTM C 602, Class T, agricultural limestone containing a minimum 80 percent calcium carbonate equivalent, with a minimum 99 percent passing a No. 8 (236 um) sieve and a minimum 75 percent passing a No. 60 (250 micron) sieve. 1. Provide lime in the form of dolomitic limestone. B. Aluminum Sulfate: Commercial grade, unadulterated. C. Sand: Clean, washed, natural or manufactured sand, free of toxic materials. D. Perlite: Horticultural perlite, soil amendment grade. E. Peat Humus: Finely divided or granular texture, with a pH range of 6 to 7.5, composed of partially decomposed moss peat (other than sphagnum), peat humus, or reed-sedge peat. F. Peat Moss: For acid-tolerant trees and shrubs, provide moss peat, with a pH range of 3.2 to 4.5, coarse fibrous texture, medium-divided sphagnum moss peat or reed-sedge peat. G. Sawdust or Ground-Bark Humus: Decomposed, nitrogen-treated, of uniform texture, free of chips, stones, sticks, soil, or toxic materials. 1. When site treated, mix (2.4 kg) of ammonium nitrate or 0.25 lb (4 kg) of ammonium sulfate per cu. ft. (cu. m) of loose sawdust or ground bark. H. Manure: Well-rotted, unleached stable or cattle manure containing not more than 25 percent by volume of straw, sawdust, or other bedding materials; free of toxic substances, stones, sticks, soil, weed seed, and material harmful to plant growth.

- I. Herbicides: EPA registered and approved, of type recommended by manufacturer. J. Water: As provided by local water purveyor.

2.6 FERTILIZER

- A. Bone-meal: Commercial, raw, finely ground; minimum of 4 percent nitrogen and 20 percent phosphoric acid. B. Superphosphate: Commercial, phosphate mixture, soluble; minimum of 20 percent available phosphoric acid. C. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources or urea-form, phosphorus, and potassium in the following composition: 1. Composition: 1 lb per 1000 sq. ft. (0.5 kg per 100 sq. m) of actual nitrogen, 4 percent phosphorus, and 2 percent potassium, by weight. 2. Composition: Nitrogen, phosphorus, and potassium in amounts recommended in soil reports from a qualified soil-testing agency. D. Slow-Release Fertilizer: Granular fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition: 1. Composition: 5 percent nitrogen, 10 percent phosphorus, and 5 percent potassium, by weight. 2. Composition: 20 percent nitrogen, 10 percent phosphorus, and 10 percent potassium, by weight. 3. Composition: Nitrogen, phosphorus, and potassium in amounts recommended in soil reports from a qualified soil-testing agency. 4. 'Agriform' (or equal) planting tablets shall be tightly compressed, long-lasting and slow-release. Weights of 3, 10, and 21 grams listed in the guaranteed analysis.

2.7 MULCHES

- A. Organic Mulch: Organic mulch, free from deleterious materials and suitable as a top dressing of trees and shrubs, consisting of one of the following: 1. Type: Ground or shredded bark. B. Peat Mulch: Provide peat moss in natural, shredded, or granulated form, of fine texture, with a pH range of 4 to 6 and a water-absorbing capacity of 1100 to 2000 percent. C. Fiber Mulch: Biodegradable dried-wood cellulose-fiber mulch, nontoxic, free of plant growth- or germination-inhibitors, with maximum moisture content of 15 percent and a pH range of 4.5 to 6.5. D. Install 3" depth of mulch in all non-turf planting areas less steep than 3:1.

2.8 MISCELLANEOUS LANDSCAPE MATERIALS

- A. STAKES 1. Upright Stakes: Rough-sawn, sound, new hardwood, redwood, or pressure-preservative-treated softwood, free of knots, holes, cross grain, and other defects, 2 inches diameter by length indicated, pointed at one end. 2. Hose Chafing Guards: Reinforced rubber or plastic hose at least 1/2 inch (13 mm) in diameter, black cut to lengths required to protect tree trunks damage. B. HERBICIDES AND INSECTICIDES 1. All job site pesticide application shall be made by personnel capable of identifying the pest species to be controlled, knowledgeable of control techniques and able to apply pesticides at prescribed dosages and rates of application, as required to achieve the required control under the job site conditions, without danger to people, pets, or other non-target animals or vegetation.

C. ROOT BARRIER

- 1. Root barriers are to be used on all trees within 5' of any curb wall, hardscape element, building fire hydrant, utility vault or light fixture. Use Deep Root LB-24-2 interlocking linear barrier of length and depth as indicated on the drawings.

D. ARBOR GUARD

- 1. Install tree trunk protector for all trees installed in lawn areas. Trunk protector shall encircle entire base of tree trunk to a height of 9' above finish grade. Trunk protector shall be made of a hard plastic material to prevent damage from weed whippers and lawn mowers, protectors shall have holes to allow the tree trunk to breathe and prevent mold.

E. TREE TIES

- 1. Tree ties shall be made of black vinyl material which shall conform to ASTM-D-412 standards for tensile and elongation strength. Ties are to be secured to tree stake using a galvanized nail.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive landscaping for compliance with requirements and for conditions affecting performance of work of this Section. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 NEED ABATEMENT

- A. Upon the completion of the irrigation system and after all existing weeds and grass have been removed from the planting area, perform the following weed abatement program. Water all areas four (4) times daily for twenty-one (21) consecutive days and until weed seeds have germinated. Cease watering for three (3) days. Apply a non-selective herbicide (Round-Up) per manufacturer's recommendations to eradicate the germinated weeds. Allow herbicide to kill all weeds. Rake or hoe off all dead weeds to a depth of 1/4 inch below the surface of the soil. If perennial weeds or grasses still exist, re-water four (4) times daily for fourteen (14) consecutive days until new growth appears. Reapply a herbicide with a dye indicator. Remove weeds after herbicide has had sufficient time to kill.

3.3 PREPARATION

- A. Lay out individual tree and shrub locations and areas for multiple plantings. Stake locations, outline areas, and secure Architect's acceptance before the start of planting work. Make minor adjustments as may be required.

3.4 PLANTING SOIL PREPARATION

- A. Mix soil amendments and fertilizers with site soil at rates indicated. Delay mixing fertilizer if planting does not follow placing of planting soil within a few days. Amendments will be modified from those noted based on soils reports performed by contractor min. (3). B. For tree pit or trench backfill, mix planting soil before backfilling and stockpile at site. C. For planting beds, mix planting soil either prior to planting or apply on surface of topsoil and mix thoroughly before planting.

- D. Plant backfill shall be per soil test performed by a soil testing laboratory pre-approved by the County of San Diego. The test shall indicate but not be limited to the following: a. organic matter content b. N, P, K c. EC d. soil texture (silt, clay, sand) e. recommendations for amendments, leaching and maintenance fertilizations.

- The results and recommendations of the soil testing laboratory shall be submitted to and approved by the County of San Diego. The approved recommendations for amendments and backfill shall be incorporated into the landscape plans prior to the start of construction and shall become part of the approved plans. Products specified by product name by the soil lab in the recommendations may be substituted with "or equal" products approved by the County of San Diego.

3.5 GROUND COVER AND PLANTING BED PREPARATION

- A. Loosen subgrade of planting bed areas to a minimum depth of 6 inches (150 mm). Remove stones larger than 1-1/2 inches (38 mm) in any dimension and sticks, roots, rubbish, and other extraneous materials. B. Spread planting soil mixture to depth required to meet thickness, grades, and elevations shown after light rolling and natural settlement. Place soil mixture in two (2) lifts and insure proper compaction of planting beds. C. Each plant shall receive one (1) 5 gram 'Agriform' (or equal) plant tablet.

3.6 EXCAVATION FOR TREES AND SHRUBS

- A. Fills and Trenches: Excavate with vertical sides and with bottom of excavation slightly raised at center to assist drainage. Loosen hard subsoil in bottom of excavation. 1. Container-Grown Trees and Shrubs: Excavate to twice container width, and to depth of rootball in container. 2. Excavation and planting of trees shall be completed prior to installation of drain lines. B. Obstructions: Notify Landscape Architect if unexpected rock or obstructions detrimental to trees or shrubs are encountered in excavations. 1. Hardpan Layer: Drill 6-inch (150 mm)-diameter holes into free-draining strata or to a depth of 10 feet (3 m), whichever is less, and backfill with free-draining material. C. Drainage: Notify Landscape Architect if subsurface conditions evidence unexpected water seepage or retention in tree or shrub pits. D. Fill excavations with water and allow to percolate out, before placing setting layer and positioning trees and shrubs.

3.7 PLANTING TREES, SHRUBS AND VINES

- A. Set container-grown stock plumb and in center of pit or trench with top of ball level to adjacent finish grades as indicated. 1. Carefully remove containers so as not to damage root balls. 2. Place backfill around ball in layers, tamping to settle backfill and eliminate voids and air pockets. When pit is approximately 1/2 backfilled, water thoroughly before placing remainder of backfill. Repeat watering until no more is absorbed. Water again after placing and tamping final layer of backfill. B. Dish and lamp top of backfill to form a 3-inch (75-mm)-high mound around the rim of the pit. Do not cover top of root ball with backfill.

3.8 TREE, SHRUB AND VINE PRUNING

- A. Prune, thin and shape trees and shrubs according to standard horticultural practice. Prune trees to retain required height and spread. Unless otherwise directed by Architect, do not cut tree leaders; remove only injured or dead branches from flowering trees. Prune shrubs to retain natural character. Shrub sizes indicated are size after pruning. Vines are to be allowed to spread/climb and should not be pruned back heavily.

3.9 TREE AND SHRUB STAKING

- A. Upright Staking and Tying: Stake trees of 15 gallon and larger. Use a minimum of 2 stakes of length required to penetrate at least 24 inches below bottom of backfilled excavation and to extend at least 72 inches above grade. Set vertical stakes and space to avoid penetrating balls or root masses. Support trees with 2 strands of tie wire encased in hose sections of contact points with tree trunk. Staking and tying of tree is not intended to immobilize tree. Install to allow slack in ties, avoiding rigid restraint of tree.

3.10 VINE TYING

- A. Standard nursery stake shall be removed from all vines and the vines shall be trained and fastened to the walls/fences as directed by the Landscape Architect. B. Use standard green plant tie tape to tie train vine to trellis or fence. C. Plant anchor kits may be used on masonry surfaces. Kit shall consist of anchor cap, glue and plant tie.

3.11 PLANTING PLANTS

- A. Space plants as indicated on drawings. B. Dig holes large enough to allow spreading of roots, and backfill with planting soil. Work soil around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water. Water thoroughly after planting, taking care not to cover plant crowns with wet soil.

3.12 TURF INSTALLATION

- A. Soil Preparation 1. Prior to planting sod, remove all rocks and debris, eradicate and physically remove all vegetation and weeds, dead or alive, from the site. 2. Backfill or grade the area to a depth of 4 to 6 inches. Eliminate drainage problems by having soil slope away from foundations, etc. 3. Incorporate organic matter (humus, redwood, sand, etc.), gypsum, lime and fertilizer as recommended by an approved soils report to a depth of 3 to 4 inches. In the Desert Southwest, incorporate soil amendments into the top 2 to 4 inches of the soil profile. 4. Rake and smooth the soil, removing rocks, roots, and large clods. Roll the area lightly with a lawn roller 1/3 full of water, leaving the grade 1 inch below finish grade. 5. Water the prepared area to a depth of 6 inches to settle soil and provide a moist base for turf. B. Sodding 1. Prior to planting, the irrigation system shall be tested and fully functional. 2. Sod shall be harvested within 24 hours prior to delivery and planted within three days after harvest. 3. Install sod immediately upon delivery. In hot weather, protect unrolled sod by placing stacks in shade, covering with moist burlap packing and sprinkling. 4. Begin installing sod along the longest straight line, such as a driveway or sidewalk. Butt and push edges and ends against each other tightly, without stretching. Avoid gaps or overlaps. Stagger the joints in each row in a brick-like fashion, using a large sharp knife to trim corners, etc. Avoid leaving small strips at outer edges as they will not retain moisture. On slopes, lay the turf pieces horizontally across the slope. On 2:1 slopes or greater, stake sod to hold in place with 1/2" x 1" x 12" pegs at 6-foot spacing. To avoid causing indentations or air pockets, avoid walking or kneeling on the turf while it is being installed or just after watering. Do not lay whole lawn before watering. When a conveniently large area has been sodded, water lightly to prevent drying. 5. After installing the turf, roll the entire area to improve turf-to-soil contact and remove air pockets. 6. Begin watering within 30 minutes of installation.

3.13 MULCHING

- A. Mulch backfilled surfaces of pits, trenches, planted areas, and other areas indicated. 3" layer shall be installed in shrub area with grade less than 5:1. Submit sample to County Inspector for approval.

3.14 CLEANUP AND PROTECTION

- A. During landscaping, keep pavements clean and work area in an orderly condition. B. Protect landscaping from damage due to landscape operations, operations by other contractors and trades, and trespassers. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged landscape work as directed.

3.15 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Disposal: Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of it off the Owner's property.

END OF SECTION

SHEET INDEX table with columns for SEE SHEET, SHEET NO., and DESCRIPTION.

DECLARATION OF RESPONSIBLE CHARGE. I hereby declare that I am the Landscape Architect of work for this project...

HOLD HARMLESS AND INDEMNIFICATION CLAUSE. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION...

PERMITS table listing SITE PLAN PERMIT NO., REZONE PERMIT NO., SPECIAL USE PERMIT NO., TENTATIVE MAP NO., N.O.I. NO., and HABITAT LOSS PERMIT.

COUNTY APPROVED CHANGES table with columns for NO., DESCRIPTION, and APPROVED BY DATE.

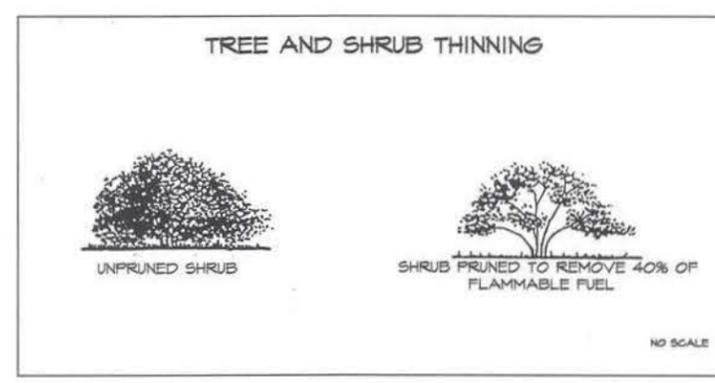
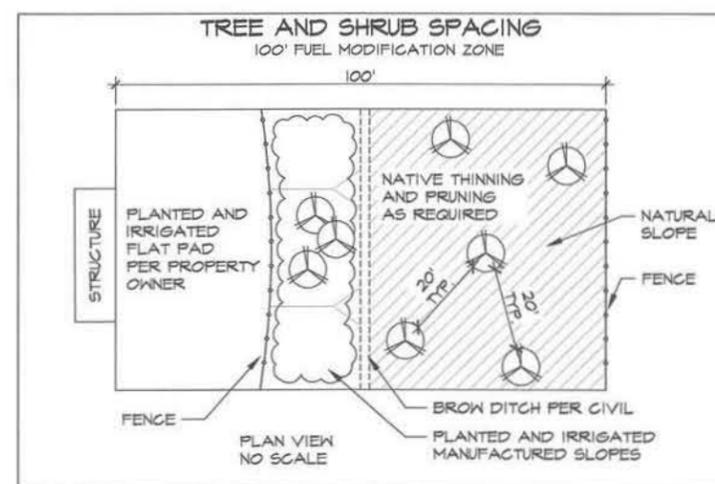
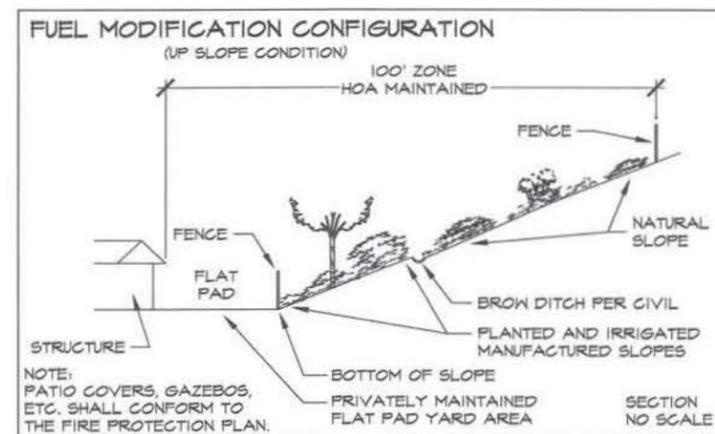
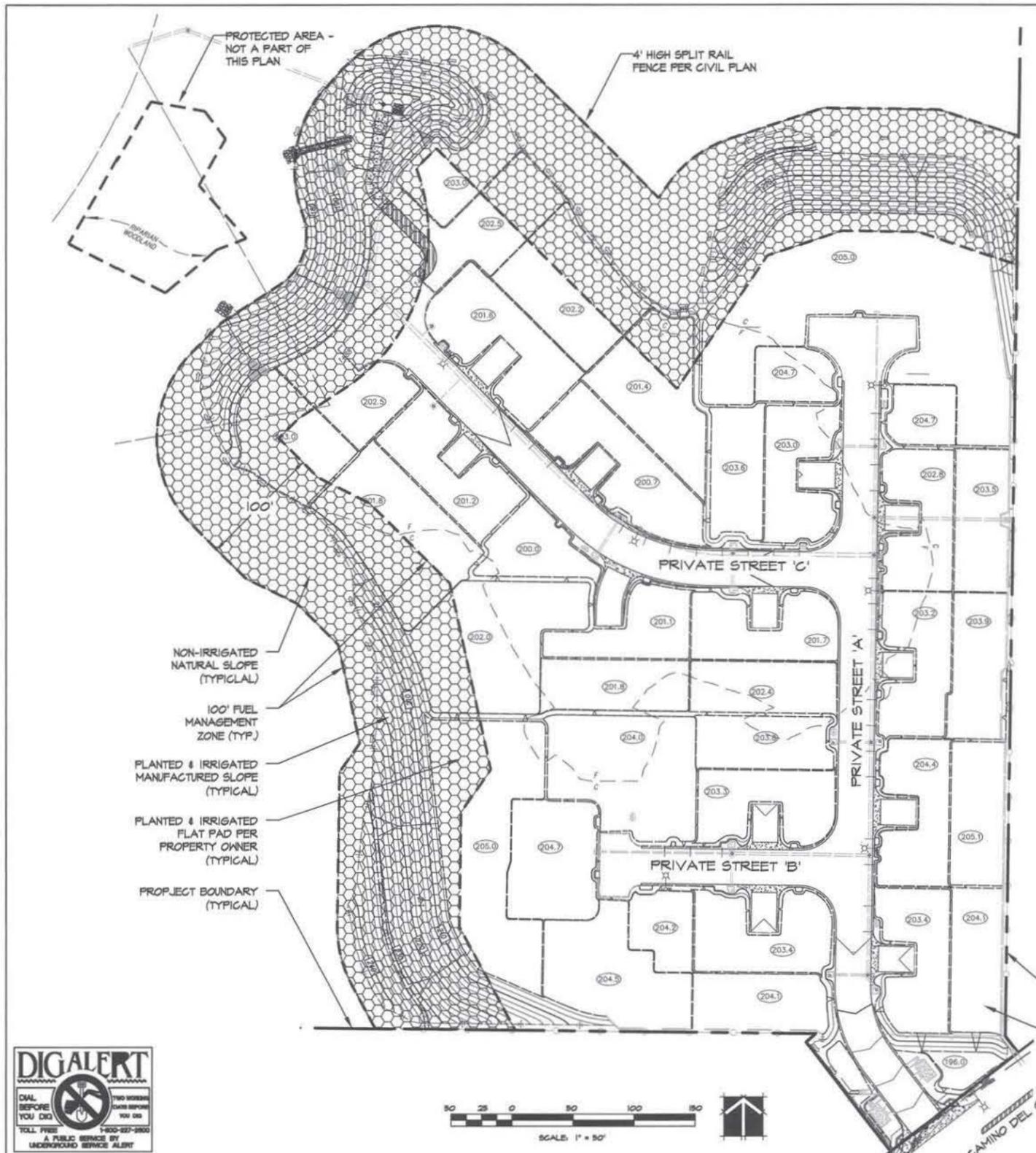
BENCHMARK table with columns for DESCRIPTION, LOCATION, RECORD FROM, and ELEVATION/DATUM.

PRIVATE CONTRACT header, SHEET 21, COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS, PLANTING SPECIFICATIONS FOR BONSALL LOTS 1 & 2, TM 5427 RPL2, CALIFORNIA COORDINATE INDEX 410-1707, APPROVED BY GILLESPIE MOODY PATTERSON, INC., ENGINEER OF WORK: STEVEN C. KETTLER, R.C.E. 6856, GRADING PERMIT NO. L-15450.



gmp logo and contact information for Gillespie Moody Patterson, Inc. 4404 GENESSEE AVENUE, SUITE 140, LA JOLLA, CALIFORNIA 92037-0554, 858-558-8477, FAX 858-558-4188.

LAND ARCH. NAME: GILLESPIE MOODY PATTERSON, INC. (GMP, INC.) 08-085-00 BONSALL SLOPES PHONE NO. (858) 558-8977



**FUEL MANAGEMENT NOTES:**

Contact Information:  
 North County Fire District  
 Contact Person: T.B.D.  
 Phone Number: 760-723-2010

The following notes are taken from the County of San Diego D.P.L.U. guidelines dated 05-15-2003. Refer to the following website link for more information:  
[http://www.co.san-diego.ca.us/dplu/fire\\_resistant.html](http://www.co.san-diego.ca.us/dplu/fire_resistant.html)

Fuel management zones to be planted and maintained according to San Diego County regulations and specifications and the project-specific Fire Protection Plan if applicable.

Combustible vegetation must be cleared from a 100 foot radius from any structure. Additional clearing may be required by local fire department. The 100 foot radius does not apply past property lines and responsibility may be assumed by that property owner. Combustible vegetation is any material that left in its natural state, will readily ignite, burn, and cause fire to move. This includes dry grass, weeds, litter, and waste. Accumulation of combustible vegetation is hereby found to be potentially hazardous for the general health and welfare of the public. Therefore any presence of such material within 10 feet of driveways, 30 feet of property lines, or 100 feet of structure will constitute a public nuisance.

**Defensible Space Maintenance**

Plants fire-resistant, irrigated landscaping in the first 30 feet from structure. Plants must be maintained year round. Note: no irrigated, or non-native landscaping is allowed within open space easement. Keep natural vegetation in the remaining 30 feet of the 100 foot space. Thin and cut back these plants no more than 6 inches above ground. Perform as needed to control grow back. Do not remove all vegetation leaving bare ground to prevent soil erosion. Do not remove or disturb existing plant root system to prevent future erosion. Remove dead and dying vegetation. Trim all trees that overhang or touch any structure. Vary the height of plants and adequately space them, larger plants spaced farther apart. Existing trees and shrubs to be pruned and cut back to 6 feet above the ground to prevent fire spreading upwards. Remove any tree limbs within 10 feet of chimney. Avoid planting trees under or near electrical lines. Remove dead, weak, and diseased plant material to improve growing conditions. Properly irrigated plants will reduce the chance of wildfire. Permanent irrigation is to be confined to the first 30 feet from structure. Trees and shrubs are to be maintained by deep watering at least once a month for drought tolerant species and once a week for high water use species.

**Defensible Plant Types**

Plants that grow close to the ground. That have a low sap or resin content. That grow without accumulating dead branches, needles, or leaves. That are easily maintained and pruned. That are drought tolerant. When first planting drought-tolerant plants, water deeply to encourage roots to find natural moisture in the soil. Continue for at least three years after planting. Provide more water in summer and less (if any) in winter.

**Clearing Prohibited Materials Legally**

Combustible vegetation can only be removed by moving, cutting, and grazing as long as the root structure is left intact. Any removed trees shall have the stumps cut no higher than 8 inches above the ground. Exception: orchard trees may have their stumps completely removed. Areas where material is removed may be re-planted with single specimens of trees, fire resistant ornamental shrubbery, and other fire resistant material or ground cover which does not transmit fire rapidly to other structures or plants. If an open space easement is located on site, a 100 foot radius from structure may be legally cleared even if it enters the easement. No irrigated or non-native landscaping is allowed within an open space easement. The removal of prohibited material shall be carried out in conformance with all federal, state, and local environmental laws and regulations.



**gmp**  
 Gillespie  
 Moody  
 Patterson, Inc.  
 LANDSCAPE ARCHITECTURE  
 & PLANNING

1404 GENESSEE AVENUE, SUITE 140  
 LA JOLLA, CALIFORNIA 92037-3591  
 858-558-8471  
 FAX 858-558-9186

REVISIONS  
 RE-REVISIONS 04-24-08  
 CIVIL BASE REVS 12-11-08

PLOTTED ON 01-08-09  
 DRAWN B.J.Y.  
 APPROVED J.P.  
 JOB NO. 08-039-00  
 DATE 07-24-08  
 SCALE AS SHOWN



**SHEET INDEX**

SEE SHEET	1-6	CIVIL ENGINEER'S GRADING PLANS
SEE SHEET	7-8	FOR IRRIGATION PLANS
SEE SHEET	9	FOR IRRIGATION LEGEND
SEE SHEET	10-12	FOR IRRIGATION DETAILS & NOTES
SEE SHEET	13-15	FOR IRRIGATION SPECIFICATIONS
SEE SHEET	16-17	FOR IRRIGATION CALCULATIONS
SEE SHEET	18-19	FOR PLANTING PLANS
SEE SHEET	20-21	FOR PLANTING LEGEND, DETAILS, NOTES & SPECIFICATIONS
SEE SHEET	22	FOR FUEL MANAGEMENT PLAN
SEE SHEET	23-24	STRUCTURAL ENGINEER'S PLANS

**DECLARATION OF RESPONSIBLE CHARGE:**  
 I hereby declare that I am the Landscape Architect 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 County of San Diego is confined to a review only and does not relieve me, as Landscape Architect of Work, of my responsibilities for project design.

John Patterson RLA # 5505 Date 01-05-09

Gillespie Moody Patterson, Inc.  
 1404 Genessee Avenue, Suite 140  
 La Jolla, CA 92037  
 (858) 558-8471

**HOLD HARMLESS AND INDEMNIFICATION CLAUSE**

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE 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 CITY/COUNTY OF LOCAL JURISDICTION, AND THE LANDSCAPE ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, THE CITY/COUNTY OF LOCAL JURISDICTION, OR THE LANDSCAPE ARCHITECT.

**PERMITS**

SITE PLAN PERMIT NO. S05-027  
 REGIONAL PERMIT NO. R05-006  
 SPECIAL USE PERMIT NO. N/A  
 TENTATIVE MAP NO. TM 5427 RPL2  
 N.O.I. NO. T.B.D.  
 HABITAT LOSS PERMIT N/A

**ENVIRONMENTAL SERVICES UNIT**

APPROVED FOR COMPLIANCE WITH THE ENVIRONMENTAL REVIEW

APPROVED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

I FIND THAT THIS SHEET CONFORMS TO ACCEPTED LANDSCAPE ARCHITECTURAL PRACTICES AND IS IN COMPLIANCE WITH THE REQUIREMENTS LISTED IN SECTION 6729.1(i) THROUGH (v) OF THE SAN DIEGO COUNTY ZONING ORDINANCE.

JOHN PATTERSON RLA # 5505 DATE 01-05-09

**COUNTY APPROVED CHANGES**

NO.	DESCRIPTION	APPROVED BY	DATE

**BENCHMARK**

DESCRIPTION: BRASS DISC STAMPED "E 228 1968"  
 SET ON A STEEL ROD.

LOCATION: MISSION ROAD

RECORD FROM: COUNTY OF SAN DIEGO ROS 17292

ELEVATION: 195.42 DATUM: M.S.L.

**PRIVATE CONTRACT**

SHEET 22 COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS 24 SHEET

FUEL MANAGEMENT PLAN FOR:  
**BONSALL**  
 LOTS 1 & 2, TM 5427 RPL2  
 CALIFORNIA COORDINATE INDEX 410-1707

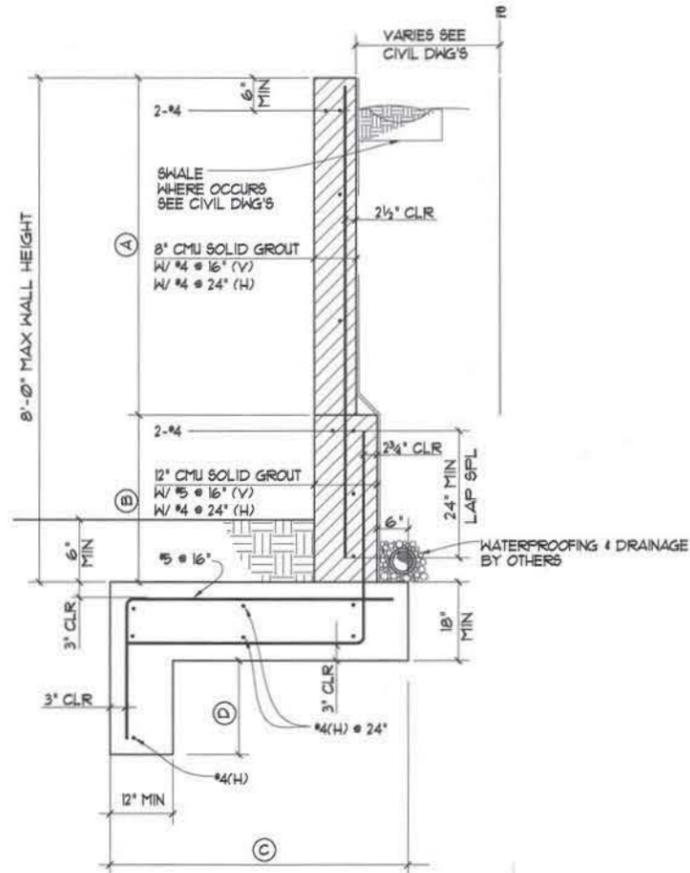
APPROVED MOHAMMAD FLEHREDDINE FOR COUNTY ENGINEER ENGINEER OF FUEL STEVEN C. EYTLER R.C.E. 48558

BY: \_\_\_\_\_ DATE: \_\_\_\_\_

GRADING PERMIT NO. L-15450

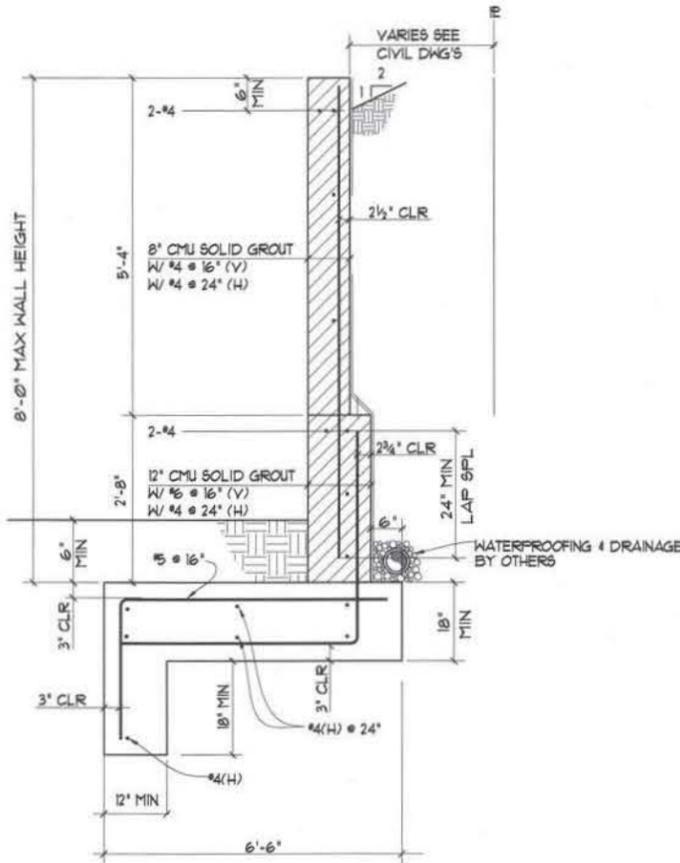
LAND ARCH. NAME: GILLESPIE MOODY PATTERSON, INC. (GMP, INC.)  
 PHONE NO. (858) 558-8977





**RETAINING WALL SECTION**

SCALE: 3/4"=1'-0"

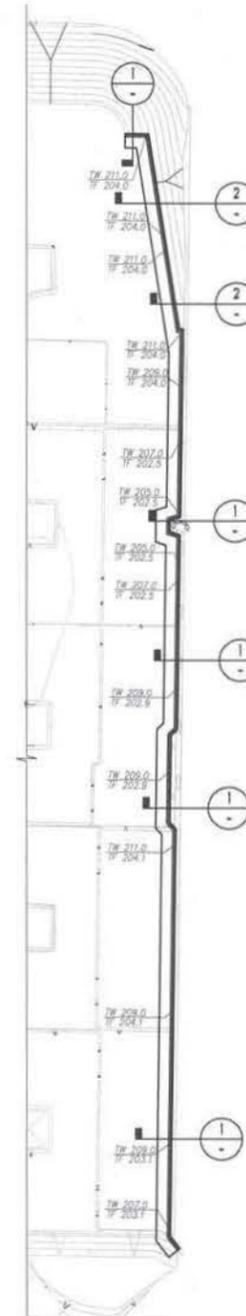


**RETAINING WALL SECTION**

SCALE: 3/4"=1'-0"

NOTE: SPECIAL INSPECTION REQUIRED

RETAINING WALL SCHEDULE					
MAX WALL HT	8" CMU (A)	12" CMU (B)	FTG. WIDTH (C)	KEY DEPTH (D)	SPECIAL INSP.
0'-0" TO 4'-0"	4'-0"	NONE	3'-0"	NONE	YES
4'-0" TO 5'-4"	5'-4"	NONE	3'-6"	12"	YES
5'-4" TO 8'-0"	5'-4"	2'-8"	5'-0"	18"	YES



**RETAINING WALL SITE WALL PLAN**

SCALE: N.T.S.



**HTK HOROWITZ TAYLOR KUSHKAKI**  
 STRUCTURAL ENGINEERS  
 14208 Danilison Street, Suite #200  
 Poway, CA 92064-8819  
 (658) 679-8989 • Fax (658) 679-8958  
 BY: RICHARD W. HOROWITZ NO. 38249 DATE: 1-6-09  
 EXPIRES 3-31-09

DESIGNED BY: D.T.  
 DRAWN BY: D.T.  
 CHECKED BY: D.T.  
 JOB No. 08-176.00

COUNTY APPROVED CHANGES			
NO.	DESCRIPTION	APPROVED BY	DATE

PERMITS	
SITE PLAN PERMIT NO.	505-027
REZONE PERMIT NO.	ROS-006
SPECIAL USE PERMIT NO.	N/A
TENTATIVE MAP NO.	TM 5427RPL2
N.O.I. #	TBD
HABITAT LOSS PERMIT	N/A

BENCH MARK	
DESCRIPTION:	BRASS DISC STAMPED "TE 228 1968" SET ON A STEEL ROD
LOCATION:	MISSION ROAD
RECORD FROM:	COUNTY OF SAN DIEGO ROS 17292
ELEVATION:	195.42
DATUM:	M.S.L.

PRIVATE CONTRACT			
SHEET 24	COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS	24 SHEETS	
GRADING PLANS FOR: <b>BONSALL</b>			
LOTS 1 & 2, TM 5427 RPL2			
CALIFORNIA COORDINATE INDEX 410-1707			
Approved By: MOHAMAD FAKHRIDDINE FOR COUNTY ENGINEER	By: _____	Engineer of work: RICHARD W. HOROWITZ	R.C.E. _____
Permit No. _____	Date _____	Grading Permit No. L-15450	Date _____

FILE NO.

ENGINEER'S NAME: HTK STRUCTURAL ENGINEERING  
 PHONE NO. (858) 679-8989

Bonsall Group LLC  
Lilac Del Cielo  
Certification No. R9-2014-0015

### **ATTACHMENT 3**

#### **MITIGATION CREDIT DOCUMENT**

1. San Luis Rey Mitigation Bank, Agreement for Sale of Wetland Mitigation Credits, August 19, 2014

## SAN LUIS REY MITIGATION BANK

### AGREEMENT FOR SALE OF WETLAND MITIGATION CREDITS

USACE File # SPL-2008-00617-RJV  
CDFW SAA File # 1600-2014-0003-R5  
RWQCB File # R9-2014-0015

This Agreement for Sale of Wetland Mitigation Credits (“**Agreement**”), dated for reference purposes only as August 13, 2014, is entered into by and between **WILDLANDS SLR HOLDINGS I, LLC**, a Delaware limited liability company (“**Bank Sponsor**”), and **BONSALL HOLDINGS 76, LLC**, a California limited liability company (“**Project Proponent**”) as follows:

#### RECITALS

- A. Bank Sponsor is in the process of developing the San Luis Rey Mitigation Bank (“**Bank**”) located in San Diego County, California.
- B. The Bank will be developed under Nationwide Permits 27 and 33, ID #SPL-2011-00694-SAS, issued by the United States Army Corps of Engineers (“**USACE**”) and pursuant to a Mitigation Bank Enabling Instrument (“**BEI**”).
- C. Bank Sponsor is seeking the approval of the USACE and the California Department of Fish and Wildlife (“**CDFW**”) (collectively, the “**IRT**”) to operate the Bank as a mitigation bank with wetland waters of the United States/State credits, waters of the United States/State credits and buffer credits for sale as compensation for the loss of waters of the United States, waters of the State and/or State jurisdictional habitats.
- D. Project Proponent is seeking to implement the project described on Exhibit A attached hereto (“**Project**”), which would unavoidably and adversely impact waters of the United States and waters of the State thereon, and seeks to compensate for the loss of waters of the United States and waters of the State by purchasing 0.44 wetland waters of the United States/State credits (“**Wetland Credits**”) from the Bank.
- E. Bank Sponsor anticipates that the IRT will authorize an initial release of Wetland Credits (the “**Initial Release**”) upon the IRT’s approval of the Bank.
- F. Project Proponent anticipates being authorized by USACE under Section 404 Permit # SPL-2008-00617-RJV, by CDFW under Section 1602 Streambed Alteration Agreement (“**SAA**”) number 1600-2014-0003-R5, and by the San Diego Regional Water Quality Control Board (“**RWQCB**”) under Section 401 Water Quality Certification # R9-2014-0015 to purchase Wetland Credits from the Bank to compensate for the loss of waters of the United States and waters of the State.

G. Project Proponent desires to purchase from Bank Sponsor, and Bank Sponsor desires to sell to Project Proponent 0.44 Wetland Credits pursuant to the terms and conditions of this Agreement.

**NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:**

1. Effective Date. For purposes of this Agreement, the date on which the last party executes this Agreement, with the liquidated damages provision initialed by the parties, and delivers it to the other party shall be referred to as the "**Effective Date.**"

2. Purchase and Sale. Pursuant to the terms and conditions of this Agreement, Bank Sponsor hereby agrees to sell to Project Proponent, and Project Proponent hereby agrees to purchase from Bank Sponsor, 0.44 Wetland Credits for the purchase price of Two Hundred Forty-Two Thousand and No/100ths Dollars (\$242,000.00), which was determined by multiplying Five Hundred Fifty Thousand and No/100ths Dollars (\$550,000.00) by the number of Wetland Credits that Project Proponent is purchasing under this Agreement ("**Purchase Price**").

3. Payment of Purchase Price.

a. Deposit. Within five (5) days after the Effective Date of this Agreement, Project Proponent shall pay to Bank Sponsor the amount of Twenty-Four Thousand Two Hundred and No/100ths Dollars (\$24,200.00), which constitutes ten percent (10%) of the Purchase Price ("**Deposit**"). The Deposit shall be non-refundable upon payment (except in the event of a failure of a condition to close or breach of this Agreement by Bank Sponsor), and shall be credited to the Purchase Price at Closing (as hereinafter defined).

b. Balance. On or before the Closing, Project Proponent shall deliver to Bank Sponsor the balance of the Purchase Price, in immediately available funds.

4. Closing. For purposes of this Agreement, "**Closing**" shall be defined as the date on which Bank Sponsor delivers to Project Proponent a Bill of Sale evidencing the transfer of the Wetland Credits to Project Proponent (provided that the IRT has approved the Initial Release). The Bill of Sale shall be in the form attached hereto as Exhibit B and incorporated herein by this reference. The Closing shall occur on January 30, 2015 (the "**Closing Date**"), unless the Parties mutually agree, in their sole and absolute discretion, to accelerate the Closing Date to an earlier date. In the event that the Initial Release has not occurred by the Closing Date for any reason whatsoever, Project Proponent shall have the right to either (a) terminate this Agreement by providing written notice of such termination to Bank Sponsor, in which event the Deposit shall be immediately refunded to Project Proponent, and the parties shall thereafter have no further rights, duties or obligations under this Agreement, or (b) extend the Closing Date to June 1, 2015 by providing Bank Sponsor with written notice of its election to extend the Closing Date by January 20, 2015. Project Proponent's failure to timely provide such extension notice shall be deemed to constitute Project Proponent's election to terminate this Agreement. In the event that Project Proponent elects to extend the Closing Date to June 1, 2015, and the IRT does not approve the Initial Release prior to June 1, 2015, this Agreement shall automatically terminate on

such date, in which event the Deposit shall be immediately refunded to Project Proponent, and the parties shall thereafter have no further rights, duties or obligations under this Agreement. In no event shall Bank Sponsor's failure to obtain the IRT's approval of the Bank or the Initial Release by the Closing Date constitute a default by Bank Sponsor under this Agreement.

5. Initial Release; Right to Terminate. Subject to Bank Sponsor's termination rights under this Section 5, Bank Sponsor shall use its good faith, commercially reasonable efforts to obtain the IRT's approval of the Initial Release by the Closing Date. Bank Sponsor shall keep Project Proponent periodically informed of the status of its efforts to obtain such approval. Bank Sponsor makes no representation or warranty concerning the timing for obtaining the IRT's approval of the Initial Release or whether IRT will approve the Initial Release at all. Bank Sponsor shall have the right, in its sole and absolute discretion, to terminate this Agreement at any time prior to the Closing upon the occurrence of any one or more of the following events:

a. The IRT imposes, or Bank Sponsor determines that the IRT intends to impose, a condition or obligation under the Bank Agreement or on Bank Sponsor that is not acceptable to Bank Sponsor in its sole and absolute discretion;

b. Bank Sponsor is unable to obtain any approval or permit that Bank Sponsor deems (in its sole and absolute discretion) is necessary in order to develop and/or construct the Bank within Bank Sponsor's schedule and/or budget;

c. Bank Sponsor determines, in its sole and absolute discretion, that the market is not sufficient to warrant proceeding with the development of the Bank; and/or

d. Bank Sponsor determines, in its sole and absolute discretion, that the Bank is no longer a financially feasible project.

6. No Interest in Real Property. The sale and transfer of the Wetland Credits described herein is not intended as a sale or transfer to Project Proponent of a security, license, lease, easement, or possessory or non-possessory interest in real property, nor the granting of any interest of the foregoing.

7. Limitation on Obligations. Project Proponent shall have no obligation whatsoever by reason of the purchase of the Wetland Credits, to support, pay for, monitor, report on, sustain, continue in perpetuity, or otherwise be obligated or liable for the success or continued expense or maintenance in perpetuity of the Wetland Credits sold, or the Bank. As required by law, Bank Sponsor shall monitor and make reports to the appropriate agency or agencies on the status of any Wetland Credits sold to Project Proponent. Bank Sponsor shall be fully and completely responsible for satisfying any and all conditions placed on the Bank or the Wetland Credits, by all state or federal jurisdictional agencies. Bank Sponsor shall indemnify Project Proponent of and from all such liabilities and obligations.

8. No Assignment. Except as otherwise provided in this Section 8, Project Proponent shall not assign this Agreement, voluntarily or by operation of law, without the prior written consent of Bank Sponsor, which may be given or withheld in Bank Sponsor's sole and absolute discretion.

a. Assignment to Successor Project Developer. Subject to the provisions of this Section 8, Project Proponent shall have the right to assign this Agreement to any successor in and to the Project (the "**Successor Project Developer**"). In order for such assignment to be valid, (i) any such assignment shall be in writing, (ii) the Successor Project Developer shall have agreed in such written assignment to assume all of the obligations of Project Proponent hereunder, (iii) any such assignment shall be an assignment of all of Project Proponent's rights and obligations under this Agreement, (iv) a copy of the written assignment shall be delivered to Bank Sponsor promptly following its execution, and (v) the written assignment shall contain the name, address, telephone number, facsimile number and contact person for the Successor Project Developer. Any attempted assignment in violation of the foregoing provision shall be void. Absent a written agreement between the parties hereto to the contrary, no assignment of any of the rights or obligations under this Agreement shall result in a novation or in any other manner release Project Proponent from its obligations under this Agreement.

9. Transfer of Wetland Credits. Except as otherwise provided in this Section 9, the Wetland Credits sold and transferred to Project Proponent hereunder shall be nontransferable and non-assignable, and shall not be used as compensatory mitigation for any project or purpose other than the Project. Project Proponent acknowledges that, except as provided herein, Bank Sponsor is not willing to sell Wetland Credits which could be resold in competition with Bank Sponsor's remaining Wetland Credits. In the event that Project Proponent elects at any time after the Closing to not proceed with its development of the Project such that it no longer needs all or any portion of the Wetland Credits (the "**Excess Credits**"), Project Proponent shall have the following rights:

a. Assignment to Successor Project Developer. Project Proponent shall have the right to transfer and assign the Excess Credits to any Successor Project Developer, provided that Project Proponent gives Bank Sponsor at least ten (10) days' prior written notice of such transfer and assignment. The assignment and transfer restrictions set forth in this Section 9 shall apply to any subsequent transfer by the Successor Project Developer.

b. Bank Sponsor' Repurchase Option. If Project Proponent desires to sell, transfer or assign the Excess Credits other than pursuant to a transfer to a Successor Project Developer, then Bank Sponsor shall have the exclusive and preemptory right to repurchase the Excess Credits in accordance with the following terms:

- i. Project Proponent shall give Bank Sponsor written notice ("**Excess Credits Notice**") of the amount of Excess Credits, and the purchase price therefore, which the Parties agree shall be the same price per Wetland Credit paid by Project Proponent to Bank Sponsor for each Excess Credit.
- ii. Bank Sponsor shall have thirty (30) days after the date on which it receives the Excess Credits Notice in which to exercise its right to repurchase all or any portion of the Excess Credits by giving Project Proponent written notice ("**Exercise Notice**") that Bank Sponsor has elected to exercise its right to repurchase all or a portion of the Excess Credits for the same per Mitigation Value price paid by Project

Proponent to Bank Sponsor for each Excess Credits Value. In the event that Bank Sponsor delivers an Exercise Notice to Project Proponent, Bank Sponsor shall pay the repurchase amount in full, in cash or its equivalent, within sixty (60) days after the date of the Exercise Notice.

c. Survival. The provisions of this Section 9 shall survive the Closing.

**10. Liquidated Damages. PROJECT PROPONENT RECOGNIZES THAT THE WETLAND CREDITS WILL BE REMOVED BY BANK SPONSOR FROM THE MARKET DURING THE EXISTENCE OF THIS AGREEMENT. IF THE SALE OF THE WETLAND CREDITS IS NOT CONSUMMATED BECAUSE OF PROJECT PROPONENT'S DEFAULT, THE PARTIES HAVE DETERMINED AND AGREED THAT THE ACTUAL AMOUNT OF DAMAGES THAT WOULD BE SUFFERED BY BANK SPONSOR AS A RESULT OF ANY SUCH DEFAULT WOULD BE VERY DIFFICULT OR IMPRACTICABLE TO DETERMINE AS OF THE DATE OF THIS AGREEMENT. AS A RESULT, THE PARTIES HAVE AGREED THAT THE DEPOSIT PAID BY PROJECT PROPONENT TO BANK SPONSOR PRIOR TO THE DEFAULT IS SUFFICIENT TO COVER ANY ESTIMATED DAMAGES THAT MAY BE INCURRED BY BANK SPONSOR. FOR THESE REASONS, THE PARTIES AGREE THAT IF THE PURCHASE OF THE WETLAND CREDITS IS NOT CONSUMMATED BECAUSE OF PROJECT PROPONENT'S DEFAULT, BANK SPONSOR SHALL BE ENTITLED TO RETAIN THE DEPOSIT PAID BY PROJECT PROPONENT PRIOR TO THE DEFAULT AS BANK SPONSOR'S SOLE REMEDY AND NO FURTHER DAMAGES SHALL BE AWARDBLE TO BANK SPONSOR. NOTHING SET FORTH IN THIS SECTION 8 SHALL PRECLUDE ANY ACTION FOR THE AWARD OF ATTORNEY'S FEES AND COSTS IN CONJUNCTION WITH ANY ACTION RELATING TO THIS AGREEMENT.**

Bank Sponsor Initials JA

Project Proponent's Initials JG

11. Miscellaneous.

a. Notices. All notices, demands, consents, requests or other communications required to or permitted to be given pursuant to this Agreement shall be in writing, shall be given only in accordance with the provisions of this Section, shall be addressed to the parties in the manner set forth below, and shall be conclusively deemed to have been properly delivered: (a) upon receipt when hand delivered during normal business hours (provided that notices which are hand delivered shall not be effective unless the sending party obtains a signature of a person at such address that the notice has been received); (b) upon receipt when sent by facsimile prior to 5:00 p.m. of a given Business Day (otherwise such receipt is deemed as of the following Business Day) to the number set forth below (provided, however, that notices given by facsimile shall not be effective unless the sending party's machine provides written confirmation of successful delivery thereof); (c) upon the day of delivery if the notice has been deposited in an authorized receptacle of the United States Postal Service as first-class, registered or certified mail, postage prepaid, with a return receipt requested (provided that the sender has in

its possession the return receipt to prove actual delivery); or (d) one (1) Business Day after the notice has been deposited with either FedEx or United Parcel Service to be delivered by overnight delivery (provided that the sending party receives a confirmation of actual delivery from the courier). The addresses of the parties to receive notices are as follows:

To Bank Sponsor: Wildlands SLR Holdings I, LLC  
3855 Atherton Road  
Rocklin, California 95765  
Attention: Sherrie R. Aland, Corporate Counsel  
Telephone: (916) 435-3555  
Facsimile: (916) 435-3556

To Project Proponent: Bonsall Holdings 76, LLC  
8799 Balboa Avenue, Suite 270  
San Diego, California 92123  
Attention: Max Stewart  
Telephone: (858) 268-8901 ext. 122  
Facsimile: (858) 268-0337

with a copy to: Rodrigue Law  
2240 Encinitas Blvd., D-449  
Encinitas, California 92024  
Attention: Jon P. Rodrigue, Esq.  
Telephone: (619) 384-2160  
Facsimile: (858) 430-4884

b. Amendments. This Agreement may not be amended, altered or modified except by a writing signed by the party to be bound.

c. No Partnership or Joint Venture. The relationship of Bank Sponsor and Project Proponent hereunder is and will be that of Bank Sponsor and Project Proponent, and none of the provisions of this Agreement are intended to create any relationship other than Bank Sponsor and Project Proponent. No agency, partnership, joint venture or other relationship is intended hereby, and neither party shall be deemed the agent, servant, employee, partner or joint venturer of the other party. Bank Sponsor and Project Proponent shall not, in any way or for any reason be deemed to have become a partner of the other in the conduct of its business or otherwise, or a joint venturer. In addition, by virtue of this Agreement, there shall not be deemed to have occurred a merger or any joint enterprise between Project Proponent and Bank Sponsor.

d. Attorneys' Fees. If any Party commences an action against another Party to interpret or enforce any of the terms of this Agreement or because of the breach by another Party of any of the terms hereof, the losing Party shall pay to the prevailing party reasonable attorneys' fees, costs and expenses and court costs and other costs of action incurred in connection with the prosecution or defense of such action, whether or not the action is prosecuted to a final judgment. For the purpose of this Agreement, the terms "attorneys' fees" or "attorneys' fees and costs" shall mean the fees and expenses of counsel to the Parties hereto,

which may include printing, photostating, duplicating and other expenses, air freight charges, and fees billed for law clerks, paralegals, librarians and others not admitted to the bar but performing services under the supervision of an attorney. The terms "attorneys' fees" or "attorneys' fees and costs" shall also include, without limitation, all such fees and expenses incurred with respect to appeals, arbitrations and bankruptcy proceedings, and whether or not any action or proceeding is brought with respect to the matter for which said fees and expenses were incurred. The term "attorney" shall have the same meaning as the term "counsel."

e. Construction of Agreement. The Agreement contained herein shall not be construed in favor of or against either party, but shall be construed as if both parties prepared this Agreement. Project Proponent and Bank Sponsor acknowledge that they have been represented, or have had the opportunity to be represented, by counsel of their own choice.

f. Headings. The headings in this Agreement are inserted only as a matter of convenience and in no way define, limit, extend or interpret the scope of this Agreement or of any particular provision hereof.

g. Governing Law and Venue. This Agreement and the documents in the forms attached as exhibits hereto shall be governed by, and construed in accordance with, the laws of the State of California. In the event of any legal action to enforce or interpret this Agreement or any of the documents in the forms attached as exhibits hereto, the sole and exclusive venue shall be a court of competent jurisdiction located in San Diego County; and the parties hereto agree to and do hereby submit to the jurisdiction of such court.

h. Partial Invalidity. If any term or provision of this Agreement or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this Agreement, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each such term and provision of this Agreement shall be valid, and shall be enforced to the fullest extent permitted by law.

i. Successors and Assigns. This Agreement shall be binding upon and shall inure to the benefit of the permitted successors and assigns of the Parties hereto.

j. Entire Agreement. This Agreement (including all Exhibits attached hereto) is the final expression of, and contains the entire agreement between, the Parties with respect to the subject matter hereof and supersedes all prior understandings with respect thereto. This Agreement may not be modified, changed, supplemented, superseded, canceled or terminated, nor may any obligations hereunder be waived, except by written instrument signed by the Party to be charged or by its agent duly authorized in writing or as otherwise expressly permitted herein. The Parties do not intend to confer any benefit hereunder on any person, firm or corporation other than the Parties hereto and lawful assignees.

k. Further Actions. Each party agrees to perform any further acts and execute and deliver any further documents reasonably necessary to carry out the provisions of this Agreement including, but not limited to, Bank Sponsor providing Project Proponent with reasonable evidence of the IRT's approval of the Initial Release to the extent such approval is

obtained.

l. Time of Essence. The Parties hereby acknowledge and agree that time is strictly of the essence with respect to each and every term, condition, obligation and provision under this Agreement and that failure to timely perform any of the terms, conditions, obligations or provisions hereof by any Party shall constitute a material breach of and a non-curable (but waivable) default under this Agreement by the Party so failing to perform.

m. Recitals/Exhibits. The Recitals herein, and any exhibits to this Agreement, are hereby incorporated by reference into this Agreement. The parties warrant that the Recitals are true and correct.

n. Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original, but all of which, together, shall constitute one and the same instrument. This Agreement may be signed and signatures transmitted by facsimile, PDF or other electronic means, and any such digital copy shall be equivalent to a binding signed original for all purposes.

o. Independent Consideration. Project Proponent shall deposit with Bank Sponsor, concurrently with and in addition to the Deposit, the amount of \$100 (the “**Independent Consideration**”). The Independent Consideration shall be non-refundable to Project Proponent as independent consideration for the rights extended to Project Proponent hereunder, including the right to terminate this Agreement as provided in this Agreement. If Project Proponent elects to terminate this Agreement for any reason other than Bank Sponsor’s default, Bank Sponsor shall retain the Independent Consideration. The Independent Consideration shall not be applicable towards the Purchase Price.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the parties have executed this Agreement the day and year first above written.

**BANK SPONSOR:**

**WILDLANDS SLR HOLDINGS I, LLC, a**  
Delaware limited liability company

By:  \_\_\_\_\_

Its: Wildlands, Manager  
Mark Heintz, Manager

Date: 8/19/2014

**PROJECT PROPONENT:**

**BONSALL HOLDINGS 76, LLC, a**  
California limited liability company

By:  \_\_\_\_\_  
Max A. Stewart

Its: Manager

Date: 8/19/14

**Exhibit "A"**

**DESCRIPTION OF PROJECT  
TO BE  
MITIGATED**

The Project site consists of undeveloped land that is dominated by non-native grassland and disturbed Diegan sage scrub habitat. Topography on site down-slopes steeply from off-site developed areas towards West Lilac Road. Elevations range from approximately 350 feet above mean sea level (amsl) at the top of the property to approximately 180 feet amsl along West Lilac Road. A series of maintained firebreaks traverse the southern and eastern perimeter of the Project site. Additional firebreaks run downslope of the Project site at fairly regular intervals at approximately 50-feet in width. Three ephemeral drainages traverse the site in a general westerly direction before ultimately sheet-flowing into the San Luis Rey River floodplain located west/north-west of the Project site across West Lilac Road.

The proposed Project would subdivide the approximate 56-acre property into two lots. One 8.6-acre lot would include a total of 76 condominium units. The remaining 47.3-acre lot would be retained as permanent open space and would include public trails and fuel management zones for the condominium complex and for the existing residential development that abuts the Project site. Access to the Project site would be via several private roads off of Camino Del Cielo, an improved public road, as well as West Lilac Road to the west and north. Associated site improvements would include construction of landscape slopes, an extended detention basin, driveways, curb, sidewalk and gutter, storm drain improvements, and wet and dry utilities.

The Project encompasses approximately 56 acres of vacant land, and is located within Assessor's Parcel Numbers (APNs) 126-060-77 and 126-430-01. The Project is located at latitude 33.295996° and longitude -117.213769° within Sections 20 and 21, Township 10 South, and Range 3 West. The Project site is bounded by the San Luis Rey River and associated floodplain to the north and west across West Lilac Road, and residential development to the south and east.

\*\*\*\*\*

**Exhibit "B"**

**BILL OF SALE**

**Contract #SLRMB-14-\_\_\_\_**  
**USACE File # SPL-2008-00617-RJV**  
**CDFW SAA File # 1600-2014-0003-R5**  
**RWQCB File # R9-2014-0015**

In consideration of Two Hundred Forty-Two Thousand and No/100ths Dollars (\$242,000.00), receipt of which is hereby acknowledged, **WILDLANDS SLR HOLDINGS I, LLC**, a Delaware limited liability company ("**Bank Sponsor**"), does hereby bargain, sell and transfer to **BONSALL HOLDINGS 76, LLC**, a California limited liability company ("**Project Proponent**"), 0.44 wetland waters of the United States/State Credits for the Lilac del Cielo project in the San Luis Rey Mitigation Bank in San Diego County, California, developed and approved under the authority of the United States Army Corps of Engineers and California Department of Fish and Wildlife.

Bank Sponsor represents and warrants that it has good title to the Credits, has good right to sell the same, and that they are free and clear of all claims, liens, or encumbrances.

Bank Sponsor covenants and agrees with the buyer to warrant and defend the sale of the Credits hereinbefore described against all and every person and persons whomsoever lawfully claiming or to claim the same.

**WILDLANDS SLR HOLDINGS I, LLC**, a  
Delaware limited liability company

By: \_\_\_\_\_  
Its: \_\_\_\_\_  
Date: \_\_\_\_\_

Bonsall Group LLC  
Lilac Del Cielo  
Certification No. R9-2014-0015

## **ATTACHMENT 4**

### **CEQA MITIGATION REQUIREMENTS**

1. Mitigated Negative Declaration for Bonsall Subdivision (Topmark Communities) Zone Reclassification (R05-006), Tentative Map (TM 5427RPL), Site Plans (S05-027 and S05-050), April 4, 2008, SCH # 2008011070



ERIC GIBSON  
INTERIM DIRECTOR

## County of San Diego

### DEPARTMENT OF PLANNING AND LAND USE

5201 RUFFIN ROAD, SUITE B, SAN DIEGO, CALIFORNIA 92123-1666  
INFORMATION (858) 694-2960  
TOLL FREE (800) 411-0017

### MITIGATED NEGATIVE DECLARATION

April 4, 2008

Project Name: Bonsall Subdivision (Topmark Communities)

Project Number(s): TM5427RPL<sup>2</sup>, R 05-006, S 05-026, S 05-027, S 05-050;  
Log No. 05-02-013

**This Document is Considered Draft Until it is Adopted by the Appropriate  
County of San Diego Decision-Making Body.**

This Mitigated Negative Declaration includes of this form along with the following  
Environmental Initial Study components:

- a. Initial Study Form
- b. Environmental Analysis Form and attached extended studies for Noise Analysis, Biological Report and Supporting Information, Archaeological Survey Report, Storm Water Management Plan, Drainage Study, Traffic Impact Analysis.

1. **California Environmental Quality Act Mitigated Negative Declaration Findings:**

Find, that this Mitigated Negative Declaration reflects the decision-making body's independent judgment and analysis; and that the decision-making body has reviewed and considered the information contained in this Mitigated Negative Declaration and the comments received during the public review period; and that revisions in the project plans or proposals made by or agreed to by the project applicant would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and, on the basis of the whole record before the decision-making body (including this Mitigated Negative Declaration) that

there is no substantial evidence that the project as revised will have a significant effect on the environment.

**2. Required Mitigation Measures:**

Refer to the attached Environmental Initial Study for the rationale for requiring the following measures:

- I. Prior to issuance of grading permits or construction permits, or on the Final Map, whichever comes first, the applicant shall:

(Specific Biological Conditions: DPLU)

- A. Grant to the County of San Diego by separate document, an open space easement as shown on the Open Space Exhibit dated **December 18, 2007** on file with the Department of Planning and Land Use as Environmental Review Number 05-02-013. This easement is for the protection of biological resources and prohibits all of the following on any portion of the land subject to said easement: grading; excavation; placement of soil, sand, rock, gravel, or other material; clearing of vegetation; construction, erection, or placement of any building or structure; vehicular activities; trash dumping; or use for any purpose other than as open space. Granting of this open space authorizes the County and its agents to periodically access the land to perform management and monitoring activities for the purposes of species and habitat conservation.  
**[DPLU, FEE]**

The sole exception(s) to this prohibition is:

- (1) Selective clearing of vegetation by hand to the extent required by written order of the fire authorities for the express purpose of reducing an identified fire hazard. While clearing for fire management is not anticipated with the creation of this easement, such clearing may be deemed necessary in the future for the safety of lives and property. All fire clearing shall be pursuant to the Uniform Fire Code and the Memorandum of Understanding dated February 26, 1997, between the wildlife agencies and the fire districts and any subsequent amendments thereto.
- (2) Activities conducted pursuant to a revegetation or habitat management plan approved by the Director of Planning and Land Use or the Director of Public Works.

- (3) Vegetation removal or application of chemicals for vector control purposes where expressly required by written order of the Department of Environmental Health of the County of San Diego.
- B. Grant by separate document to the County of San Diego a Limited Building Zone Easement as shown on the Open Space Exhibit dated **December 18, 2007** on file with the Department of Planning and Land Use as Environmental Review Number 05-02-013. The purpose of this easement is to limit the need to clear or modify vegetation for fire protection purposes within the adjacent biological open space easement and prohibits the construction or placement of any structure designed or intended for occupancy by humans or animals. The only exceptions to this prohibition are: **[DPLU, FEE]**
1. Structures designed or intended for occupancy by humans or animals located no less than 100 feet from the nearest biological open space easement boundary, provided that the structures meet the minimum Fire-Resistive Construction Requirements as defined by the Fire Protection Authority (FPA) having jurisdiction over the property and that FPA has approved in writing a reduction in the vegetation clearing/fuel modification requirements so that they will not be required within any portion of the biological open space easement.
  2. Decking, fences, and similar facilities.
  3. Sheds, gazebos, and detached garages, less than 250 square feet in total floor area, that are designed, constructed and placed so that they do not require clearing or fuel modification within the biological open space easement, beyond the clearing/fuel modification required for the primary structures on the property.
- C. Prior to approval of grading and/or improvement plans, and prior to approval of the Final Map, provide evidence to the satisfaction of the Director of Planning and Land Use that the following "Agency Permits" have been obtained:
- (1) Provide the Director of Planning and Land Use with a copy of a Clean Water Act, Section 401/404 permit issued by the California Regional Water Quality Control Board and the U.S. Army Corps of Engineers for all project related disturbances of waters of the U.S. and/or associated wetlands or provide evidence satisfactory to the

- Director of Planning and Land Use that such permit is not required.  
**[DPLU, FEE]**
- (2) Provide the Director of Planning and Land Use with a copy of a Streambed Alteration Agreement issued by the California Department of Fish and Game for all project related disturbances of any streambed or provide evidence satisfactory to the Director of Planning and Land Use that such an agreement is not required.  
**[DPLU, FEE]**
- (3) Provide the Director of Planning and Land Use with a copy of an Endangered Species Act Section 10a and or a Section 7 Permit has been obtained for the take of southwestern arroyo toad. This includes the following: **[DPLU, FEE]**
1. A copy of the Biological Opinion from the consultation with the United States Fish and Wildlife Service (USFWS) and,
  2. A Letter from the Army Corps of Engineers (ACOE), or
  3. Documentation from USFWS and ACOE that the permits are not required.
- D. Submit to and receive approval from the Director of the Department of Planning and Land Use, a Resource Management Plan (RMP). The RMP shall be for the perpetual management of (the 45.5 acre, Parcel "B") coastal sage scrub and non-native grassland habitat. The plan shall be prepared and approved pursuant to the County of San Diego Biological Report Format and Requirement Guidelines, and be consistent with the Biological resource report prepared by Affinis, dated October 2006.

(Specific Cultural Resources Conditions: DPLU)

- E. Implement a grading monitoring and data recovery program to mitigate potential impacts to undiscovered buried archaeological resources on the Bonsall Subdivision TM5427RPL<sup>2</sup>Project, 05-0041014 to the satisfaction of the Director of Planning and Land Use. **[DPLU, FEE]**
- F. Provide evidence that a County approved archaeologist ("Project Archaeologist") has been contracted to implement a grading monitoring and potential data recovery program, which complies with the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements, to the satisfaction of the Director of Planning

and Land Use. Also, provide evidence that a Native American Monitor has been contracted to monitor grading, or evidence that no Native American Monitor was available, in which case the Project Archaeologist shall perform that function and,

(1). The Contract shall include a cost estimate of the required monitoring; this estimate shall be submitted to the Director of Public Works and included in the Bond Cost Estimate for the required Grading.

(Specific Noise Conditions: DPLU)

- G. Grant to the County of San Diego a perpetual Noise Protection Easement, as shown on Tentative Map TM5427RPL<sup>2</sup>. The easement shall be placed over the first 136 feet from the centerline of Camino del Cielo. The easement is for the mitigation of present and anticipated future excess noise levels on residential uses of the affected Parcel. [DPLU, FEE X3]
- H. The following noise easement language shall be placed on the face of the map:

"This Noise Protection Easement requires that before the issuance of any building or grading permit for any residential use within the noise protection easement over a strip of land 136 feet from the centerline of Camino del Cielo, the applicant shall:

- (1) "Complete to the satisfaction of the Director of the Department of Planning and Land Use, an acoustical analysis performed by a County certified acoustical engineer, demonstrating that the present and anticipated future noise levels for the interior and exterior of the residential dwelling will not exceed the allowable sound level limit of the Noise Element of the San Diego County General Plan [exterior (60 dB CNEL), interior (45 dB CNEL)]. Future traffic noise level estimates for Camino del Cielo shall use a traffic flow equivalent to a Level of Service "C" traffic flow for a Collector road that is the designated General Plan Circulation Element buildout roadway classification."
- (2) "Incorporate to the satisfaction of the Director of the Department of Planning and Land Use all of the recommendations or mitigation measures of the acoustical analysis into the project design and building plans."

II. Specific Plan Requirements: DPLU

- a. Prior to the approval of grading or improvement plans, issuance of a grading permit, and prior to approval of each final map, provide evidence to the satisfaction of the Director of Public Works that the following "Specific Environmental Items" have been placed on the grading, and or improvement plans for the unit or phase of the Tentative Map that the plans, permit or final map relates to:

(Biological)

- (1) The grading, and or improvement plans, shall indicate permanent fences or walls along the open space boundaries as shown on the Open Space Fencing and Signage Plan in the Biological Report dated **October 2006** on file with the Department of Planning and Land Use as Environmental Review Number 05-02-013. The fence or wall shall be a minimum of four feet (4') high and consist of split rail. Any change in construction materials and fence or wall design shall be approved by the Department of Planning and Land Use prior to installation.
- (2) The grading, and or improvement plans shall indicate open space signs placed every 100' along the open space boundaries as shown on the Open Space Fencing and Signage Plan in the Biological Report dated **October 2006** on file with the Department of Planning and Land Use as Environmental Review Number 05-02-013.

The signs must be corrosion resistant, a minimum of 6" x 9" in size, on posts not less than three (3) feet in height from the ground surface, and must state the following:

**"Sensitive Environmental Resources"**  
Disturbance Beyond this Point is Restricted  
by Easement  
Information:  
Contact County of San Diego, Department of Planning and  
Land Use  
Ref: 05-02-013"

(Noise)

- (3) A temporary construction noise barrier shall be shown on the grading plans. The temporary wall shall be placed along the southern and eastern boundaries of the project site will be eight feet (8') high with a minimum surface density of 3 pounds per square foot, consisting of plywood, masonry, wood, berm, plastic, fiberglass, steel or a combination of these materials with no cracks or gaps through or below the wall. If wood is used, temporary barrier design shall incorporate tongue and groove with a minimum thickness of 7/8 of an inch.

Temporary construction noise barrier details and location are shown on Section: Project Impacts and Figure 3 in the noise report prepared by LSA received on December 18, 2007. The temporary construction noise barrier located along the southern and eastern boundaries of the project site will remain during the grading phases. Noise report is on file with the Department of Planning and Land Use as case number tentative parcel map TM5427."

- III. Prior to the approval of grading or improvement plans, issuance of a grading permit, and prior to approval of each final map, provide evidence to the satisfaction of the Director of Public Works that the following "Specific Environmental Notes" have been placed on the grading, and or improvement plans for the unit or phase of the Tentative Map that the plans, permit or final map relates to:

(Biological)

- (1) "Prior to the commencement of any grading and or clearing in association with this grading plan, temporary orange construction fencing shall be placed to protect from inadvertent disturbance of all open space easements that do not allow grading, brushing or clearing. Temporary fencing is also required in all locations of the project where proposed grading or clearing is within 100 feet of an open space easement boundary. The temporary fencing shall be removed after the conclusion of such activity."
- (2) "Restrict all brushing, clearing and/or grading such that none will be allowed within 300 feet of native or naturalized habitat during the breeding season for listed and or migratory bird species. This is defined as occurring between February 1<sup>st</sup> to September 15th. The

Director of Planning and Land Use may waive this condition, through written concurrence from the US Fish and Wildlife Service and the California Department of Fish and Game, that no active bird nests are present in the vicinity of the brushing, clearing or grading based on a field survey completed within one week of the proposed onset of ground disturbance." [DPLU, FEE]

- (3) "Prior to the conclusion of grading activities and Final Grading Release, provide evidence to the satisfaction of the Director of Planning and Land Use that the permanent fences or walls, and open space signs have been placed along the biological open space boundaries as shown on these plans and the Open Space Fencing and Signage Plan in the Biological Report dated October 2006 on file with the Department of Planning and Land Use as Environmental Review Number 05-02-013. " [DPLU, FEE]
- a. Evidence shall be site photos and a statement from a California Registered Engineer, or licensed surveyor that the permanent walls or fences, and open space signs have been installed.
- b. The signs must be corrosion resistant, a minimum of 6" x 9" in size, on posts not less than three (3) feet in height from the ground surface, and must state the following:

**"Sensitive Environmental Resources"**  
Disturbance Beyond this Point is Restricted  
by Easement  
Information:  
Contact County of San Diego,  
Department of Planning and Land Use  
Ref: 05-02-013."

(Cultural)

- (4) "The County certified Project Archaeologist (and, if also contracted, the Native American Monitor) shall attend the pre-construction meeting with the contractors to explain and coordinate the requirements of the monitoring program."
- (5) "The Project Archaeologist shall monitor all areas identified for development including off-site improvements."

- (6) "During the original cutting of previously undisturbed deposits, the Project Archaeologist and Native American monitor shall be onsite as determined necessary by the Project Archaeologist. Inspections will vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The frequency and location of inspections will be determined by the Project Archaeologist in consultation with the Native American monitor. Monitoring of cutting of previously disturbed deposits will be determined by the Project Archaeologist."
- (7) "In the event that previously unidentified potentially significant cultural resources are discovered, the Project Archaeologist shall have the authority to divert or temporarily halt ground disturbance operations in the area of discovery to allow evaluation of potentially significant cultural resources. The Project Archaeologist shall contact the County staff designated by the Director of Planning and Land Use at the time of discovery. The Project Archaeologist, in consultation with the designated County staff, shall determine the significance of the discovered resources. The designated County staff must concur with the evaluation before construction activities will be allowed to resume in the affected area. For significant cultural resources, a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the Project Archaeologist and approved by the designated County staff, then carried out using professional archaeological methods."
- (8) "The Project Archaeologist (and Native American monitor, if contracted) shall monitor all areas identified for development."
- (9) "If any human bones are discovered, the Project Archaeologist shall contact the County Coroner. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the Native American Heritage Commission, shall be contacted by the Project Archaeologist in order to determine proper treatment and disposition of the remains."
- (10) "The Project Archaeologist shall submit monthly status reports to the Director of Planning and Land Use starting from the date of the notice to proceed to termination of implementation of the grading monitoring program. The reports shall briefly summarize all activities during the period and the status of progress on overall plan implementation. Upon completion of the implementation

phase, a final report shall be submitted describing the plan compliance procedures and site conditions before and after construction. (Note: use this condition only if grading will take more than 1 month)." [DPLU, FEE]

- (11) "Prior to rough grading inspection sign-off for each phase, provide evidence that the field grading monitoring activities have been completed to the satisfaction of the Director of Planning and Land Use. Evidence shall be in the form of a letter from the Project Archaeologist." [DPLU, FEE]
- (12) "Prior to Final Grading Release for each phase, submit to the satisfaction of the Director of Planning and Land Use, a final report that documents the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program. The report shall include the following: [DPLU, FEE X 2]
  - (a) Department of Parks and Recreation Primary and Archaeological Site forms.
  - (b) Evidence that all cultural collected during the grading monitoring program has been curated at a San Diego facility that meets federal standards per 36 CFR Part 79, and therefore would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Diego County, to be accompanied by payment of the fees necessary for permanent curation. Evidence shall be in the form of a letter from the curation facility identifying that archaeological materials have been received and that all fees have been paid.

Or

"In the event that no cultural resources are discovered, a brief letter to that effect shall be sent to the Director of Planning and Land Use by the Project Archaeologist that the grading monitoring activities have been completed."

(Noise)

- (13) "Prior to preconstruction conference and grading activities, provide evidence to the satisfaction of the Director of Planning and Land

Use; that the temporary construction noise barrier has been constructed along the southern and eastern boundaries of the project site, pursuant to the approved grading plan. Evidence of the wall shall consist of the following: A signed, stamped statement from a California Registered Engineer, licensed surveyor or County approved noise consultant, and photographic evidence that the noise wall has been constructed." [DPLU, FEE]

- IV. Enter into a Traffic Mitigation Agreement with CalTrans, and pay \$519,042 for the Transnet SR-76 Widening project which is tentatively scheduled to begin construction in late 2008. \$519,042 is the CalTrans-County agreed upon fair share amount for mitigation of the project's direct impacts to SR-76. Provide evidence of this agreement and payment to the satisfaction of the Director of Public Works.
- V. Prior to issuance of construction permits, the applicant shall pay a Transportation Impact Fee (TIF). The payment of the TIF, in combination with other components of this program, will mitigate the potential cumulative traffic impacts to less than significant. The TIF shall be paid in accordance with County Ordinance applicable at the time of building permits less any DPW approved credit to be given for a portion of the payments made for the far share amount for mitigation of the project's direct impacts to State Route 76.

**VI. Critical Project Design Elements That Must Become Conditions of Approval:**

The following project design elements were either proposed in the project application or the result of compliance with specific environmental laws and regulations and were essential in reaching the conclusions within the attached Environmental Initial Study. While the following are not technically mitigation measures, their implementation must be assured to avoid potentially significant environmental effects.

**COMMENTS:**

Pending Receipt of the project's traffic study revised per DPW memo Dated March 6, 2008 to the Satisfaction of the Department of Public Works.

- I. Subject Tentative Map is a subdivision located in Bonsall, between W. Lilac Road and Camino Del Cielo. It proposes to subdivide 55 acres into: 1 condominium lot with a total of 76 residential condominium units, and 1 open space lot.

- II. If the Planning Commission or Board of Supervisors approves this Tentative Map, approval should be subject to the conditions and requirements of Division I of Title 8 of the San Diego County Code.
- B. The "Standard Conditions for Tentative Subdivision Maps" approved by the Board of Supervisors on June 16, 2000, and filed with the Clerk as Resolution No. 00-199, shall be made conditions of this Tentative Map approval. Only those exceptions to the Standard Conditions set forth in this Resolution or shown on the Tentative Map will be authorized.
- C. The following conditions shall be complied with before a Final Map is approved by the Board of Supervisors and filed with the County Recorder of San Diego County (and, where specifically, indicated, shall also be complied with prior to issuance of grading or other permits as specified):

## PLANS AND SPECIFICATIONS

### (Street Improvements)

1. Standard Conditions 1 through 11.
2. Specific Conditions:
  - a. Provide a drawing showing existing W. Lilac Road improvements including: pavement, drainage, signing and striping, street lighting and other facilities in relation to the subject boundary and proposed road right-of-way and dedications including public drainage easements. This drawing shall also show all dimensions and locations of all trails easements and dedications to the satisfaction of the Department of Parks and Recreation, DPR. All of the above shall be to the satisfaction of the Director of Public Works.
  - b. Improve or agree to improve and provide security for Camino Del Cielo (SC 260), along the Project's southeasterly boundary, at Lot 1, to a minimum graded one-half width of forty-two feet (42') and to an improved width of thirty-two feet (32'), twenty feet on the Project side of centerline and with Portland cement concrete curb, gutter, and sidewalk with face of curb at thirty-two feet (32'), from centerline. The project improvements shall be widened as necessary to meet existing Camino Del Cielo improvements, and to provide a Bike lane, and a left turn lane into the project's entrance driveway, and conform to County Public Light Collector Road Standards, with traffic striping, with traffic control, and with taper transitions. Improvements shall include all safety and access provisions

as recommended in the traffic report approved by the Department of Public Works. Provide grading, paving, and walkway transitions at both ends of the Project improvements to meet existing or proposed improvements. All of the above shall be to the satisfaction of the Director of Public Works.

- c. Provide driveway access from the site to publicly maintained roadway, Camino Del Cielo which meets all County ordinances and standards to the satisfaction of the Director of Public Works.
- d. Provide a signed, sealed and dated letter from a registered civil engineer, a registered traffic engineer, or a licensed land surveyor that states: "Physically, there is a minimum unobstructed sight distance in both directions along Camino Del Cielo from the project access driveway for the prevailing operating speed of traffic on Camino Del Cielo, per Section 6.1E of the Public Road Standards (approved July 14, 1999)." Any vegetation currently obstructing sight distance shall be removed or cut back. If the lines of sight fall within the existing public road right-of-way, the engineer or surveyor shall further certify: "Said lines of sight fall within the existing right-of-way and a clear space easement is not required."
- e. Private interior driveways, parking areas, turnarounds, and signage shall be provide to the requirements of the North County Fire Protection District, and as approved by the Director of Public Works.
- f. Asphalted concrete surfacing material shall be hand-raked and compacted to form smooth tapered connections along all edges including those edges adjacent to soil. The edges of asphaltic concrete shall be hand-raked at 45 degrees or flatter, so as to provide a smooth transition next to existing soil, including those areas scheduled for shoulder backing. The above shall be done to the satisfaction of the Director of Public Works.
- g. Improve or agree to improve and provide security for the trails or pathways as specified under Streets and Dedication per design standards and the following conditions provided by the Director of Parks and Recreation. This shall be to the satisfaction of the Director of Public Works.
  - (1) Clear and brush the four access trail easement locations, (Points A., B., C. and D.) within the West Lilac Road Right-of-Way for trail user safety and improved line of sight (horizontal and vertical clearance) as shown on Trail Easement Exhibit (Attachment A.)

This shall be to the satisfaction of the Director of the Department of Parks and Recreation.

- (2) All access trail easements shall be improved to provide smooth transition from the trail to West Lilac Road (Points B, C, and D.) and Camino Del Cielo (Point A.) as shown on the Trail Easement Exhibit (Attachment A). This shall be to the satisfaction of the Director of the Department of Parks and Recreation.

(Drainage and Flood Control)

3. Standard Conditions 13 through 18.

4. Specific Conditions:

- a. A flowage easement shall be granted to the San Diego County for those portions of all lots subject to inundation by a 100-year flood, from a drainage area in excess of one (1) square mile.
- b. The 100-year flood line of the natural channels crossing all lots with drainage watersheds in excess of twenty-five (25) acres shall be clearly delineated on the non-title information sheet of the Final Map.
- c. On-site and Off-site drainage easements shall be provided to the satisfaction of the Director of Public Works.
- d. Private storm drains, detention basins, stormwater treatment facilities, desilting basins and other drainage facilities shall be privately maintained by a private maintenance mechanism such as a homeowners association or other private entity (to ensure perpetual maintenance) acceptable to the satisfaction of the Director of Public Works.
- e. A Waiver and Release Agreement shall be obtained from each property owner who is impacted by significant changes (to include diversion and concentration) in downstream flow characteristics resulting from grading, private roads, utility easements or access roads, or other improvements, to the satisfaction of the Director of Public Works.

(Grading Plans)

5. Standard Conditions 19(a-e).

6. Specific Conditions:

- a. Obtain letters of permission for all offsite grading.
- b. Comply with applicable stormwater regulations at all times. The activities proposed under this application are subject to enforcement under permits from the San Diego Regional Water Quality Control Board (RWQCB) and the County of San Diego Watershed Protection, Stormwater Management, and Discharge Control Ordinance (Ordinance No. 9424, Ordinance No. 9426, and Ordinance No. 9518) and all other applicable ordinances and standards. This includes requirements for materials and wastes control, erosion control, and sediment control on the project site. Projects that involve areas greater than 1 acre require that the property owner keep additional and updated information on-site concerning stormwater runoff. This requirement shall be to the satisfaction of the Director of Public Works.
- c. It is determined that the project includes category 2 post-construction BMPs; the applicant will be required to establish a maintenance agreement/mechanism (to include easements) to assure maintenance of these BMPs and to provide security to back up maintenance pursuant to the County Maintenance Plan Guidelines to the satisfaction of the Director of Public Works.

#### **FAIR HOUSING**

7. Standard Condition 20.

#### **SANITATION**

8. Standard Condition 21.

#### **FIRE PROTECTION AND WATER SUPPLY**

9. Standard Conditions 23.1 and 23.2

#### **PLANNING AND ZONING ADMINISTRATION**

10. Specific Conditions [DPLU]:
  - a. Obtain a Zone Reclassification (R05-006) to the (P) RV11 or more restrictive use regulation by the Board of Supervisors. [DPLU – Regulatory Planning Division]

- b. Prior to the issuance of a grading permit, the subdivider shall obtain approval from the Director of Planning and Land Use for a detailed Landscape Plan. The Landscape Plan and review fee shall be submitted to the Regulatory Planning Division. Said Plan shall show the types and locations of all landscaping features including planting and irrigation. The landscape material shall not interfere with any required solar access (plans shall show the proposed solar access/solar panel locations). [DPLU - Regulatory Planning Division]

### DEVELOPMENT IMPACT FEES

#### 11. Specific Conditions:

- a. Deposit with the County Department of Public Works sufficient funds to cover the cost of inspection of the private road improvements.
- b. Deposit with the County Department of Public Works \$220.00. Said deposit shall be used to cover the cost of site inspection by a County geologist to determine whether any geologic hazard exists and, if such is found, to review the geologic report prepared by the developer's engineering geologist. The developer shall reimburse the County Department of Public Works for any cost in excess of the deposit prior to recording the Final Map. Any unused portion of the deposit will be refunded.
- c. Participate in the cost of traffic signal installations at the intersection of Camino Del Rey with West Lilac Road. The amount of the developer's portion of the entire cost of the signal shall be \$4,250. The Planning Commission/Board of Supervisors hereby determines that:
  - (1) The fee is to assist in financing the construction of a traffic signal to mitigate the impact of this project on traffic safety;
  - (2) The fee will be used to contribute toward the installation of a traffic signal at the intersection of Camino Del Rey with West Lilac Road;
  - (3) The traffic signal will help mitigate the additional traffic impact on this intersection caused by the residential subdivision;
  - (4) This residential subdivision will contribute additional traffic to the intersection of Camino Del Rey with West Lilac Road; and

- (5) The fee of \$4,250 is based on an estimate of the percentage of traffic this project will contribute to this intersection.
- e. Participate in the cost of traffic signal installations at the intersection of Camino Del Rey with Old River Road. The amount of the developer's portion of the entire cost of the signal shall be \$3,830. The Planning Commission/Board of Supervisors hereby determines that:
- (1) The fee is to assist in financing the construction of a traffic signal to mitigate the impact of this project on traffic safety;
  - (2) The fee will be used to contribute toward the installation of a traffic signal at the intersection of Camino Del Rey with Old River Road;
  - (3) The traffic signal will help mitigate the additional traffic impact on this these intersection caused by the residential subdivision;
  - (4) This residential subdivision will contribute additional traffic to the intersection of Camino Del Rey with Old River Road; and
  - (5) The fee of \$3,830 is based on an estimate of the percentage of traffic this project will contribute to this intersection.
- f. Participate in the cost of traffic signal installations at the intersection of Camino Del Rey with Camino Del Cielo. The amount of the developer's portion of the entire cost of the signal shall be \$3,500. The Planning Commission/Board of Supervisors hereby determines that:
- (1) The fee is to assist in financing the construction of a traffic signal to mitigate the impact of this project on traffic safety;
  - (2) The fee will be used to contribute toward the installation of a traffic signal at the intersection of Camino Del Rey with Camino Del Cielo;
  - (3) The traffic signal will help mitigate the additional traffic impact on this these intersection caused by the residential subdivision;
  - (4) This residential subdivision will contribute additional traffic to the intersection of Camino Del Rey with Camino Del Cielo; and
  - (5) The fee of \$3,500 is based on an estimate of the percentage of traffic this project will contribute to this intersection.

## FINAL MAP RECORDATION

(Streets and Dedication)

### 12. Specific Conditions:

- a. On the Final Map dedicate the right-of-way for West Lilac Road, within the subdivision boundary as shown on a drawing prepared per C.2.a, to include existing and project-proposed street and drainage improvements and adjoining parkway width, together with right to construct and maintain slopes and drainage facilities. All of the above shall be to the satisfaction of the Director of Public Works.
- b. On the Final Map dedicate the project half of Camino Del Cielo, along the project's Lot 1 boundary on project side of centerline to a one-half width of forty-two feet (42') as necessary to meet existing Camino Del Cielo improvements and conform to County Public Light Collector Road Standards, together with right to construct and maintain slopes and drainage facilities to the satisfaction of the Director of Public Works.
- c. Contact the Department of Public Works to determine the desired location of the centerlines of all Circulation Element roads, which are shown on the Circulation Element of the County General Plan. The following shall be shown on the Final Map:

"The centerline location as approved by the Department of Public Works."
- d. On the final map relinquish access rights along the project's W. Lilac Road and Camino Del Cielo frontages except for a driveway access to Lot 1 to the satisfaction of the Director of Public Works.
- e. With the recording of the Final Map, the County shall vacate or abandon the easement for flowage of Water and Incidental purposes granted to the San Diego County, Drainage Maintenance District No. 1, per Doc No 76-273555 recorded August 23, 1976 of Official Records.
- f. With the Final Map, or prior to approval of the final map dedicate a 20-foot wide non-motorized trail easement as follows: (Refer to the Trail Easement Exhibit).
  - (1) Starting at the project's east corner at Camino Del Cielo thence northerly to West Lilac Road, from Point A. to Point B.

(approximately 120 feet). The 20-foot wide non-motorized trail easement shall continue thence westerly along the existing trail to Point C (approximately 2,575 feet) thence southerly along the existing trail to Point D. (approximately 1,275 feet).

- (2) Provide an extension at Points B, C, and D to serve for trail access from the limits of the above described 20 foot wide trail to the West Lilac Road dedicated Right-of-Way to the satisfaction of the Director of the Department of Parks and Recreation.
  - (3) Provide an extension at Point A to serve for trail access from the limits of the above described 20-foot wide trail to the Camino Del Cielo dedicated Right of Way to the satisfaction of the Director of the Department of Parks and Recreation.
- g. Cause to be granted an Irrevocable Offer of Dedication (IOD) for real property, a 20-foot wide non-motorized trail easement to the subdivision boundary Point D to Point E (approximately 1,120 feet). The IOD will extend southeasterly from Point D, around a cluster of trees, thence westerly and southerly along West Lilac Road to Point E at the southerly property line. See the Trail Easement Exhibit Attachment A.

The center line of the trail easements and Irrevocable Offer to Dedicate shall be placed generally over the center line of the existing disturbed areas within the Fuel Management Area (FMZ). The trail tread shall be a minimum of 6 feet wide or the width of the existing tread which ever is greater. Trails shall not be in a state of disrepair due to erosion or other conditions in conformance to the Design and Construction Guidelines in the Community Trails Master Plan and to the satisfaction of the Director of Parks and Recreation and Director of Public Works.

- h. Prior to approval of improvement and/or grading plans, issuance of excavation permits, and issuance of any further grant of approval, the owners of this project will be required to sign a statement that they are aware of the County of San Diego, Department of Public Works, Pavement Cut Policy and that they have contacted all adjacent property owners and solicited their participation in the extension of utilities.
- i. The Basis of Bearings for the Subdivision Map shall be in terms of the California Coordinate System Zone 6 NORTH AMERICAN DATUM OF 1983 by use of existing Horizontal Control stations with first order accuracy to the satisfaction of the Director of Public Works (Ref. San Diego County Subdivision Ordinance Section 81.811).

- j. The Subdivision Map shall be prepared to show two measured ties from the boundary of the subject property to existing Horizontal Control station(s) having California coordinate values of first order accuracy as published in the County of San Diego's Horizontal Control book. These tie lines to the existing control shall be shown in relation to the California Coordinate System (i.e. Grid bearings and Grid distances). All other distances shown on the map are to be shown as ground distances. A combined factor for conversion of Ground-to-Grid distances shall be shown on the map, all to the satisfaction of the Director of Public Works (Ref. San Diego County Subdivision Ordinance Section 81.811 and 81.506(j)).

### MISCELLANEOUS

13. Standard Conditions 25, 26, 27, and 28.

### WAIVERS AND EXCEPTIONS

These recommendations are pursuant to the provisions of the State Subdivision Map Act, the County Subdivision Ordinance, the County Public Road and Private Road Standards, and all other required ordinances of San Diego County except for a waiver or modification of the following:

14. Standard Conditions for Tentative Maps.

Standard Condition 11: Said condition pertains to condominium units or a planned development.

- i. Standard Condition 22: Said condition pertains to private subsurface sewage disposal systems this project is required to be served by a public sewer system. Standard Condition 21 applies to this project.
- ii. Condition 27.1: Said condition states that the Final Map may be filed as units or groups of units. The Final Map for this project is required to include the entire area shown on the Tentative Map and shall not be filed as units or groups
  - a. Project Conditions, improvements of frontage public roads:
    - (1) DPW approved request to remove requirements to improve the project's frontage with W. Lilac Road, the segment of Camino Del Cielo along the project's northeasterly frontage, and including the W. Lilac Road / Camino Del Cielo intersection.

- b. Section 6.1.C of the Public Road Standards requires a minimum 300' between Non-Circulation Roads entering a Circulation Element Road. An exception request has been submitted request to allow driveway access to Lot 1 from Camino Del Cielo, a Circulation Element Road within 300 feet of 3 existing private residential driveways.

**ADOPTION STATEMENT:** This Mitigated Negative Declaration was adopted and above California Environmental Quality Act findings made by the:

*Rosemary Rowan*  
\_\_\_\_\_  
on *April 4, 2008*  
\_\_\_\_\_

Rosemary Rowan, Planning Manager  
Regulatory Planning Division

EG:RR:tp