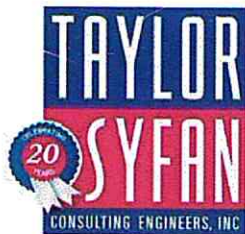


ATTACHMENT 5



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Date: February 20, 2014
To: County of Santa Barbara Planning & Development Department
From: Michelle McCovey-Good, PE
Taylor & Syfan Consulting Engineers
Project: Historical Rehabilitation Project
461 San Ysidro Road, Santa Barbara, California
T&S Job No.: 13371



Subject: Report of Existing Structural Conditions

This report is a detailed synopsis of the structural condition of the Adobe, Water Tower and Cottage Structures on the property located at 461 San Ysidro Road. This report is an in-depth follow up to two previous reports provided by our office on November 15, 2013 and December 16, 2013. It is meant to provide further justification for our findings in an effort to assist in the process of resolving the appeal filed by the Pearl Chase Society (PCS) on January 22, 2014. In particular, addressing the concern presented by the PCS of due process of the project in evaluating the conditions of the existing structures.

To give some background on our firm's history on the project, we originally provided structural repair design and details for all existing and historic buildings located on the private property. For the Adobe in-particular, we followed the recommendations outlined in a report, that was commissioned by the owner, and provided by Robert S. Vessely Engineering dated May 20, 2010. Robert S. Vessely Engineering is a reputable civil and structural firm that specializes in historic rehabilitation exclusively on the central coast. Mr. Vessely's report was incorporated into our evaluation and structural design to rehabilitate the Adobe Structure where applicable and allowable under the building code. All preservation measures, structural design, and details were reviewed and approved by the County of Santa Barbara Building and Safety Department.

As the contractor meticulously began the process of implementing these detailed repairs, it became apparent that the structural integrity of the existing structures was in a far greater state of disrepair than anyone originally anticipated. Years of neglect and faulty attempts by prior owners to repair and patch the Adobe walls and exterior facade have led to serious defects. This is a very common situation, as not all conditions are visible until finishes are removed and the underlying support structure is revealed. We have carefully evaluated the conditions uncovered on site and have consulted with Tim Aguilar – a local Adobe manufacturer – on the assessment of the existing Adobe walls.

The following is a more comprehensive report to provide a greater understanding of the conditions that are present in the field.

The Juarez-Hosmer Adobe:

Extensive cracking of the existing adobe walls is currently present due to excessive differential settlement of this building. The adobe structure sits directly on grade with no existing foundation system (see image 1). This has led to years and years of wicking of water from the soil into the adobe walls. This in combination with the structure being sealed with incompatible Portland cement plaster (versus adobe or lime plaster, which would have allowed for the adobe to breathe) has caused the adobe bricks to erode to a point where they are indiscernible from the mortar that was placed between them (see image 2). This makes re-keying of new adobe bricks into the existing walls impossible to perform. This is exacerbated by the fact that this deterioration occurs predominantly at the base of the wall where grading at the site allowed for water to pond against the exterior wall line of the adobe. Any attempts to repoint or replace adobe at the base of these walls would result in the further settlement and/or collapse of these walls. Poor weatherproofing of the roof has caused significant erosion in the adobe bricks at the top of the adobe walls as well (see image 3). This in combination with pest infestation (see image 4) has caused the tops of the walls to disintegrate upon the use of hand tools.

When attempting to remove the existing, incompatible plaster, the brittleness the water intrusion has created causes the adobe to disintegrate, even with the delicate use of hand tools. Therefore, shoring up of the existing structure to provide underpinning has not been a plausible solution for the placement of a foundation system. Currently, any attempt made to perform any of the detailed repairs outlined in the Rehabilitation Plan is causing the adobe walls to slough off into piles of dirt.

Adobe repairs must be performed with like materials for the plaster as well as the brick material itself, including a binding material that does not seem to be apparent in the remnants of adobe on this structure. In the instance of this particular adobe, well-intended patches and quick fixes performed over the years by laypersons using incompatible materials have contributed to a structure that is physically unable to be repaired. As the structure sits today, it should not be inhabited and any attempt at rehabilitating the structure would likely result in the failure of the building. With the disintegration at the bottom and top of the wall, we do not see any way to take the measures necessary to safely rehabilitate and inhabit the Adobe for use by the owner.

Water Tower:

The interior framing, wood siding, and floor and roof joists of the water tower structure have suffered extensive dry rot and damage from moisture intrusion and pest infestation. The most extensive damage occurs at key connection locations (see image 5 to 7). As indicated in the images, there are sections of posts that should be bearing on sill plates that have completely deteriorated leaving a void. Due to the extensive number of voids present throughout the structure's framing, the possibility of providing any kind of patch repair to the existing wood members is not feasible. The tower's main structural members have lost all structural integrity, as their cross sections have been reduced significantly from this damage (see image 8).

The tower sits on a stone foundation that occurs only on two sides of the structures footprint (see image 9). We anticipate maintaining the existing stone base on the two sides of the structure and placing a new foundation inboard, non-visible to the naked eye, that would provide the structural support needed for this tower element. However, that cannot be done effectively if the framing members supporting the structure are not of a capacity that can deliver the necessary loading to the foundation.

During efforts to rehabilitate the tower, the structure itself shifted out of plumb several inches. This tower is in severe disrepair and in the interest of human safety to the

construction crew on-site, it should be carefully dismantled as soon as possible as indicated in our previous reports and reconstructed using any salvageable timber on site, in addition to replacement wood framing.

Cottage:

The cottage is not historic in nature based on the report from the Historian, however it is part of the landmark for the Hosmer-Juarez property. As part of the Rehabilitation Plan, a structural design was provided to rehabilitate this structure as well. It has been determined that the cottage sits on a slab that does not have adequate embedment into the competent bearing material (see image 10). Additionally, the walls of the cottage are fabricated with flat 2x studs (see image 11). This is a convention that does not meet current code standards and is structurally unstable to adequately support the roof framing or provide lateral resistance during a seismic event. A vast majority of the wood framing of the cottage also suffers from significant rot and damage due to moisture exposure, parasite infestation, and lack of maintenance (see image 12). This building should be reconstructed to create a life safety factor that allows for the future use of the structure.

Conclusions:

Our firm has worked on damaged missions, and historic adobe retrofits, including the Arvin Adobe in Arvin, CA. While the missions projects, for which our firm has provided consultation, are older than this particular adobe structure, the missions have been carefully maintained by the inhabitants, and have had the advantage of continuous use since their construction by persons versed in adobe construction. The adobe at 461 San Ysidro has unfortunately not benefited from the same measure of diligent care and attention that has more successfully preserved other extant adobe structures. The extensive period of neglect is apparent in the structure's current dilapidated state.

We respectfully request that the cottage be omitted from the appeal for this project so that work may be continue on it, since it is not itself a historic structure. We would also, with equal respect, request the tower structure and adobe be meticulously deconstructed, cataloged and reconstructed, thus allowing the opportunity to rebuild these structures to current building code standards, utilizing new structural members in conjunction with any salvageable remnants of the existing structures to provide the necessary strength and capacity for the applicable seismic and wind zone.

To their credit, the owners of the property at 461 San Ysidro have gone to great effort and expense to save these structures. They have hired numerous experts in the field of historic rehabilitation for consultation. In our firm's experienced opinion, we feel these structures are sadly, and unfortunately, not salvageable. Our firm is very conscious of historical landmark status, as is reflected in our statement of qualifications, but human safety must be of equal consideration in this process.

If there are any questions, comments, or further clarification required, please do not hesitate to contact our office.

Sincerely,



Michelle McCovey-Good, PE
Principal / COO
Taylor & Syfan Consulting Engineers

Robert S. Vessely May 20, 2010 Juarez-Hossmer Adobe Report Recommendation Excerpts
with Taylor & Syfan Consulting Engineering, Inc. Responses due to Field Conditions:

1. Vessely Recommendation: *Grade around the building so that the surface of the soil is below the base of the adobe walls, exposing the top of the stone foundation and sloping substantially away from the walls. It is critical that the drainage and even landscaping adjacent to the adobe walls is such that little or no moisture is allowed to collect near the building. It may be appropriate to install a french drain or moisture barrier around the building depending on anticipated soil moisture.*

- Taylor & Syfan Response: It is intended to slope the site away from the walls to prevent ponding against the adobe structure, however, there is no stone foundation present as is typical with adobe construction.

2. Vessely Recommendation: *Have a soils engineer evaluate the soil conditions under the building. The optimum would be that by removing the moisture from the base of the walls, the settlement would stop and the building could be stabilized where it sits. If not, or if there turns out to be compressible soil under the footings, some foundation remediation such as underpinning may be appropriate.*

- Taylor & Syfan Response: There is no existing foundation system in place. During the exploratory phase of trying to implement this recommendation, the walls have crumbled at their bases. It is feared that any additional excavation at the base of the walls will cause collapse, therefore making underpinning nonviable as the walls continue to settle and crumble when attempts are made to pothole beneath the structure.

3. Vessely Recommendation: *Remove the existing Portland cement plaster from the walls inside and out and evaluate the walls. It is likely that erosion has occurred at the outside base of the walls and that those cavities have been filled with cement plaster. These can be repaired using mud plaster if the erosion is not too deep or by installing partial blocks with dry-pack mortar. Cracks in the walls should be repaired at this point by either "keying-in" new blocks, filling with adobe mortar by hand or pressure grouting with adobe mud mortar. It is not proposed that any reinforcement be installed in the walls. It is the massive, monolithic nature of the walls that provides shear and compressive strength as well as overall stability.*

- Taylor & Syfan Response: While removing the existing Portland cement plaster, deep erosion, versus surface erosion, has been revealed. The areas where the cement plaster has been successfully removed have exposed conditions where the adobe bricks are indiscernible from the mortar, thus making keying-in of new adobe block unfeasible. The application of any kind of pressure grouting is moot if the structure cannot be stabilized on a new foundation.

4. Vessely Recommendation: *Remove the existing composition shingles, wood shingles and any sheathing or framing that is deteriorated beyond help. Expose the tops of the walls and depending on their condition and the configuration of the rafters, install a heavy wood plate, possibly a 4x8 completely around the perimeter of the building. Drill through the plate and install fiberglass all-thread using a modified adobe mud or epoxy adhesive down into the walls approximately two or three feet. Tie the plates together at the corners. This provides a continuous tie or "bond-beam" around the tops of the walls that keeps the individual portions of the building from moving independently under seismic loads. The roof framing can then be replaced and the ceiling framing reinforced where needed, a diaphragm*

installed if required by the structural analysis, spaced sheathing reinstalled around the eaves and new roofing installed.

- **Taylor & Syfan Response:** In their current condition, it is feared that the walls would not be able to be drilled to install the anchors recommended for the placement of a wood bond beam to support the roof framing. Without being able to place a bond beam, the roof framing would not have adequate support which creates a life safety issues in the event of a seismic event. Additionally, the tops of the walls are not level due to excessive settlement of the walls caused by the lack of the presence of a foundation system.

5. **Vessely Recommendation:** Remove the existing wood flooring, salvaging what can be reused and excavate the area to the tops of the stone footings. If the footings would benefit from stabilization, excavate a trench around the inside of the footings and pour a concrete footing. Based on the architectural requirements, I understand that a concrete slab is to be installed with pressure-treated sleepers for the wood flooring and radiant floor heating elements.

- **Taylor & Syfan Response:** There are no existing concrete footings and all efforts to excavate around the base of the structure have resulted in further erosion of the decaying adobe walls.

6. **Vessely Recommendation:** After the walls have been repaired, the adobe mud plaster, inside and out should be repaired and coated with lime plaster or white wash depending on the historic treatment and architectural requirements. Lime plaster may not have been the original surface but will provide a more durable and serviceable surface without changing the original appearance.

- **Taylor & Syfan Response:** The final structure will be properly sealed with adobe compatible materials in hopes to prevent water intrusion, erosion and decay.

Site Photos:

Photo 1 : Adobe sitting on Soil vs Stone Foundation



Photo 2 : Area of Wall where mortar and adobe brick are indiscernible



Site Photos:

Photo 3 : Deep Erosion at top perimeter of wall line due to water intrusion



Photo 4 : Pest Intrusion typical at all wood to adobe interface



Site Photos:

Photo 5 : Vertical support posts completely rotted at sill plate



Photo 6 : Rot at upper floor where cross bracing meets floor plate. Corner post completely gone.



Site Photos:

Photo 7 : Rot at key structural connection



Photo 8 : Connection of brace post to sill plate completely rotted away



Site Photos:

Photo 9: Stone Foundation at Tower on right, earth to wood contact on left



Photo 10: Excavation at perimeter of slab at Cottage showing the absence of a footing



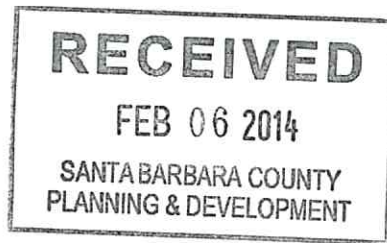
Site Photos:

Photo 11: 2x flat stud construction at load bearing perimeter wall



Photo 12: Rot at Floor Framing joists





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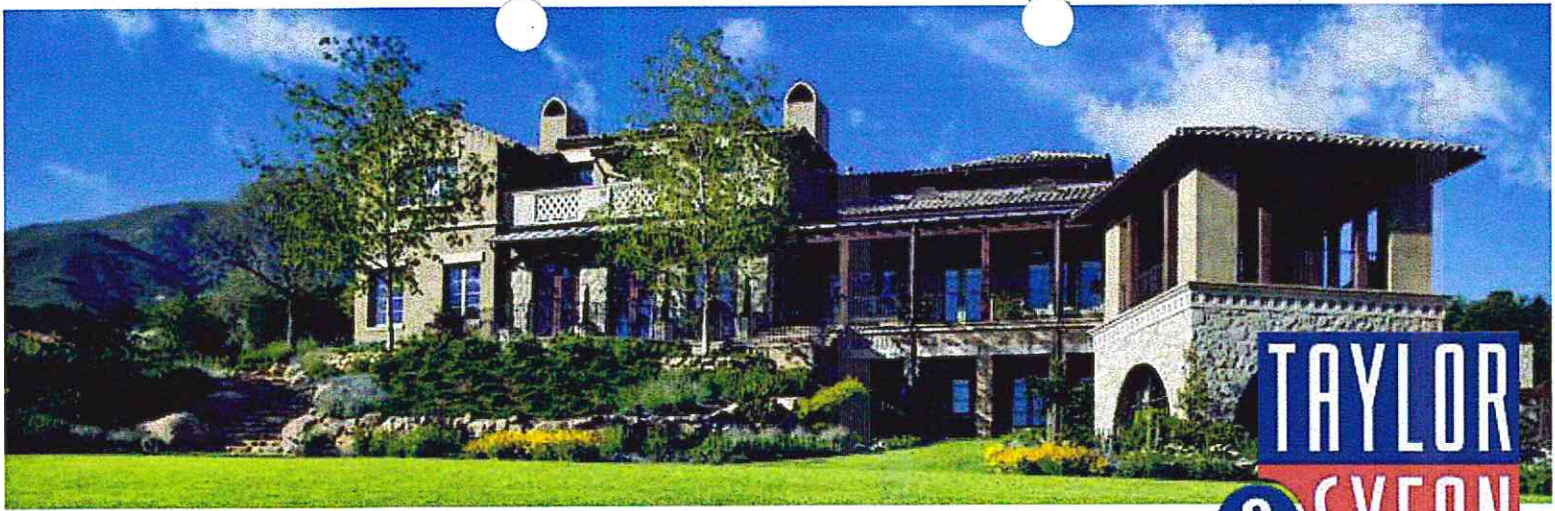
COMPANY RESUME

Taylor & Syfan Consulting Engineers, established in January of 1994, is a mid-sized structural engineering design firm with enthusiasm for and expertise in structures of every form and function.

We are proud of our broad range of expertise in designing structural steel, concrete, masonry and timber projects. Our engineers have extensive experience in both the public and private sectors, with involvement in residential, commercial, educational, institutional, industrial, military and health care projects. Additionally we are skilled in some distinct structural engineering services, such as rehabilitation of historic structures, forensic analysis, and expert witness to the legal profession. Among our principals and senior staff, we are licensed in the states of California, Nevada, Oregon, Washington, Virginia, Arizona, Colorado and Hawaii; as well as the United Kingdom and all member countries of the European Union. We are members of the US Green Building Council and founding members of SLO Green Build.

Our company is composed of 5 principals, 12 engineers, and 4 support staff with offices in San Luis Obispo and Pasadena. We provide full structural engineering services, from conceptual stage through completion of construction, to ensure an efficient and high quality project. The diverse backgrounds of the company's principals, along with its skilled and creative project engineers, produce a unique collaborative that can meet the needs of our varied clientele and undertake a multiplicity of structural engineering projects with confidence.

For more detailed information, please peruse our website at www.taylorsyfan.com



Proven Experience, No Matter the Project



Since its inception Taylor & Syfan has consulted with many different industries, completing a wide array of projects. Its team of engineers has worked on structures for a variety of project types and its resume includes expertise in design of structural steel, concrete, masonry, and timber-framed structures as well as several specialty endeavors.

RESIDENTIAL

Taylor & Syfan's residential experience ranges from small neighborhood remodels and deck additions to high-end development tract homes and large custom residences. Regardless if your site is at the beach, on a hillside, or in a high-fire or special wind or snow zone, Taylor & Syfan has provided specialized design in multiple jurisdictions.

HISTORIC

With vast experience in retrofit, un-reinforced masonry structures, and replacement framing and foundation repair on historical wood-framed structures, Taylor & Syfan understands code requirements for existing structures and strives to provide the least invasive structural retrofit requirements to maintain the historical integrity of your project.

COMMERCIAL

Taylor & Syfan's projects span the commercial industry to include restaurants, retail outlets, hotels, office buildings, financial institutions and mixed-use structures. Whether the project is for an tenant improvement or a new retail complex, Taylor & Syfan has staff with extensive experience in built projects to meet your design needs.

EDUCATIONAL

From elementary schools to university campuses, Taylor & Syfan has worked closely with educational institutions on various design projects. From feasibility studies to submittals to the Division of the State Architect, Taylor & Syfan has the ability to provide in-depth structural plans and specifications to accommodate your project.

CIVIC & RELIGIOUS

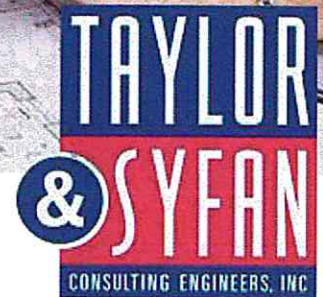
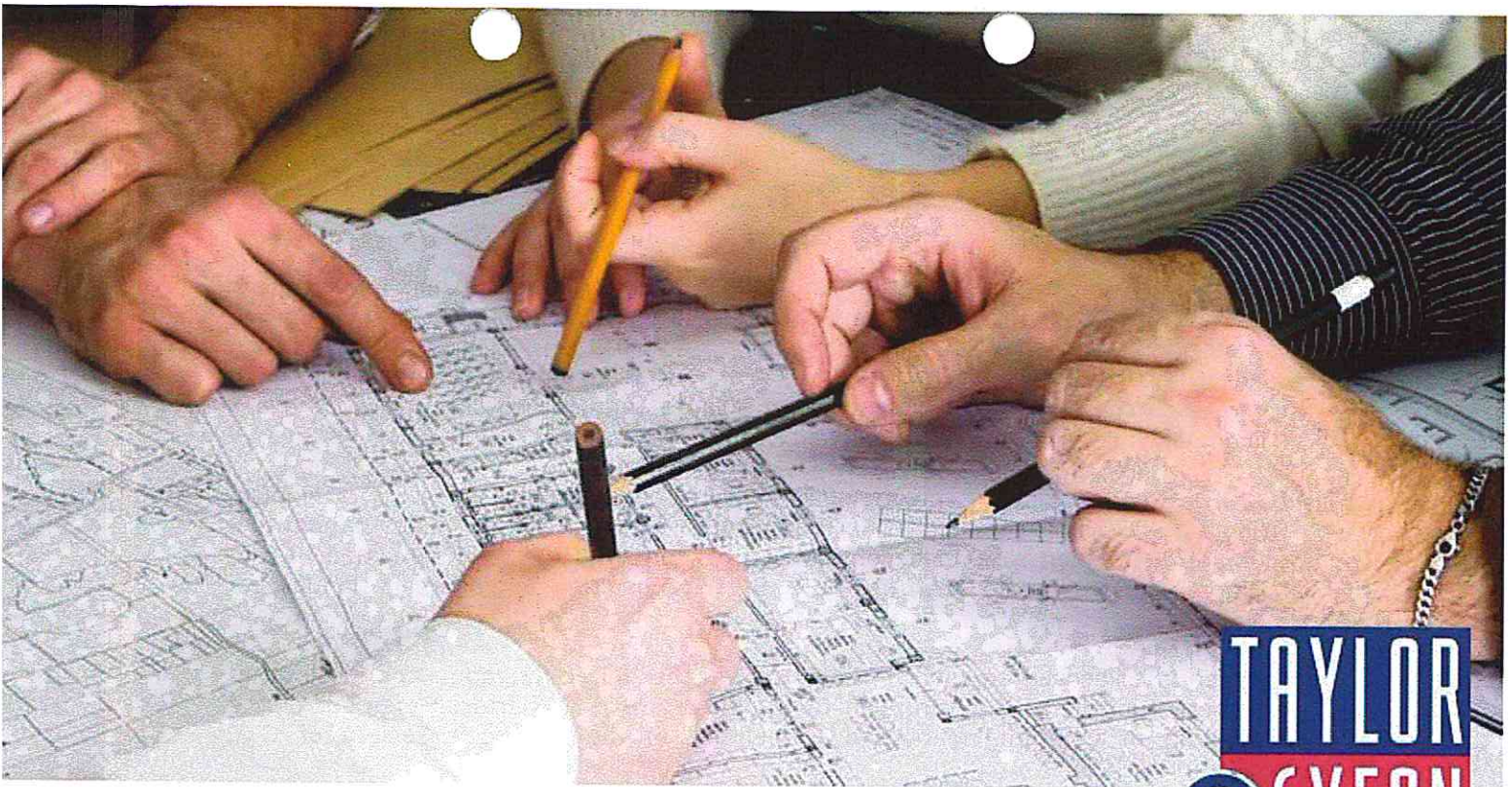
Taylor & Syfan has provided structural designs for civic and religious projects including revitalization projects, community centers, and infrastructure. Be it a large steel-framed courthouse or simple small cast-in place concrete monument sign, Taylor & Syfan can provide plans designed to your location's specific requirements.

INDUSTRIAL

Whether your project is a simple foundation system for a prefabricated steel winery building, a large scale concrete tilt-up structure with a panelized roof system, or equipment mounting at a power plant, Taylor & Syfan can provide you with cost-effective structural plans to meet your project needs.

SUSTAINABLE

Taylor & Syfan has several LEED-accredited members on staff who specify eco-friendly framing products and practices. Having provided structural designs for strawbale, various types of insulated concrete formwork, and multiple solar installations, Taylor & Syfan is at the forefront of assisting clients in their LEED certification goals.



Dedicated Principals Leading by Example

More than just an engineering firm, Taylor & Syfan is a collaborative organization which combines individuals of varying talents, creating a cohesive, unified team. That team's commitment to each project and dedication to each client begins with the company's principals. Of various educational and professional backgrounds with licensing as Professional Civil and Structural Engineers, Taylor & Syfan's Principals are a group of experienced professionals who each possess a passion for engineering which is evident when they speak about the work they do.

STEPHEN F. TAYLOR Founder, President and C.E.O. **Professional and Civil Engineer**

"Structural Engineering is terrific for those who wish to channel their mathematical and scientific abilities into a practical application that protects and enhances the community."

ROLLINS C. SYFAN Founder, C.T.O. **Professional Engineer**

"As the engineer it is our responsibility to be detailed and specific. However, without being creative and open, the design will manifest itself as flat and without true purpose."

NATHAN B. WHITE Vice President **Structural and Professional Engineer**

"Structural engineering has been a life-long passion and I take client expectations to heart. The greatest reward is the reception our solutions receive from the field and from our clients."

MICHELLE McCOVEY-GOOD C.O.O., Central Coast Office **Professional Engineer**

"I've always loved a puzzle. To me, engineering is a continual series of problem solving. It's my job to ensure that the client receives their desired final aesthetic while maintaining the safest possible structure."

KELLY EHRHEART C.F.O. and Business Manager

"We strive to engage our community and design partners; working together to create elegant and efficient design."

GARRETT MILLS C.O.O., Southern California Office **Structural and Professional Engineer**

"Structural engineers seek to maintain structures that perform exceedingly well for the client and for the safety of the public. However, engineering is not just crunching numbers, it is about meeting challenges with innovative, cost-effective designs that meet project budget and scheduling goals."

P R I N C I P A L S

Stephen Taylor was educated in England, graduating with an honors degree in structural engineering from Leicester University in 1972. Upon graduation he worked as a design engineer for IDC International in Stratford-upon-Avon, England. He then spent three years with Mowlem International in Tanzania working as their site engineer in charge of the construction of a large sugar processing facility and a 5 million gallon reservoir for the capital city of Dar-es-Salaam.

In 1981 Stephen joined a prestigious structural engineering firm in Santa Monica, California, V.K.K. that specializes in the design of amusement park rides nationwide. Ultimately, Stephen rose to become Vice President in 1987, and remained in that position until leaving to form Taylor & Syfan Consulting Engineers in January of 1994.

Stephen is a licensed engineer in California, in the United Kingdom, and in all other member countries of the European Community. He is a chartered member of the Institution of Civil Engineers and a member of the American Society of Civil Engineers (ASCE).

Nathaniel White began his education at Oregon State University in Corvallis, Oregon, where he studied Civil Engineering and Geology. In 1994 he transferred to Cal Poly San Luis Obispo to focus on Structural Engineering and received a B.S. degree in 1997 in Architectural Engineering, graduating in the top of his class. Additionally, he gained valuable in-the-field experience during college as a construction worker.

Upon graduation, Nathaniel began working as a project engineer at Taylor & Syfan Consulting Engineers. In just three years, the quality of his work, engineering expertise, and the level of his commitment led to his becoming a partner in the firm.

Nathaniel is a licensed Professional Engineer in the states of California, Oregon, Hawaii, and Nevada, and he is a member of the American Society of Civil Engineers (ASCE), the Structural Engineers Association of Southern California (SEAOSC), the International Conference of Building Officials (ICBO), and the Structural Engineering Institute (SEI).

Michelle McCovey-Good graduated Cal Poly, San Luis Obispo as an Architecture major. While participating in design labs and enjoying the artistic aspect of architecture, she found an interest and fascination with the physics and science behind creating structures and transferred into the Architectural Engineering Department.

Upon graduation, Michelle began working as a project engineer at Taylor & Syfan Consulting Engineers. In just six years, the quality of her work, engineering expertise, and the level of her commitment led to a partnership in the firm.

Michelle is a licensed Professional Engineer in the states of California, Colorado, Massachusetts, Montana, Illinois, Rhode Island, Pennsylvania and Nevada. She is a member of the American Indian Science and Engineering Society (AISES), the Structural Engineers Association of Southern California (SEAOSC), the United States Green Building Council (USGBC), and Institute of Classic Architecture (ICA).

Garrett Mills was educated at Cal Poly, San Luis Obispo, graduating with a B.S. degree in Architectural Engineering with minors in Spanish and Ethnic Studies. He gained valuable experience while in college, working summers and holiday breaks for a structural engineering firm in San Jose, CA where he performed drafting and engineering tasks for tract residential and swimming pool projects.

Just prior to graduating in 2002, Garrett started his ascent through the ranks at Taylor & Syfan, starting out as a project engineer in the Central Coast office. Garrett moved to Southern California in 2005 to strengthen the Pasadena office team. The partners were so impressed with his engineering and management abilities that he was asked to become the Chief Engineer of Los Angeles operations and a principal in the firm. Today Garrett oversees the majority of work in the Greater Los Angeles Area.

Garrett is a licensed Structural Engineer in California. He is a member of the Structural Engineers Association of Southern California (SEAOSC) and the American Institute of Steel Construction (AISC) and volunteers in Haiti with a NGO to help rebuild essential structures after the devastating 2010 earthquake.

HISTORIC Historic Projects



Mastagni Building



Clark Company



Fontana Facade



Carroll Building



Bethel Lutheran Church

From libraries to wineries, from churches to homes, Taylor & Syfan has worked to rehabilitate and retrofit a wide variety of historic structures. Its team of engineers has particular experience with the seismic retrofit of unreinforced masonry (URM) buildings, having worked on a great number of these on the Central Coast of California.

Taylor & Syfan's historic project resume includes the rehabilitation of masonry structures for the city of Fontana, seismic strengthening of Arvin Adobe and Mission San Miguel, and the seismic upgrade of a 100-year-old brick church, mentioned as a key reason the church survived the 2003 San Simeon Earthquake. One of its team's many interesting projects is the Halter Ranch Vineyard in Paso Robles, California.



Halter Ranch Vineyard, Paso Robles, CA
Architect: R2L Architects, San Luis Obispo, CA
Contractor: J.W. Design & Construction, San Luis Obispo, CA

Set in the hills near Paso Robles, Halter Ranch Vineyard's elaborate farmhouse remodel included work on a guest suite, terrace, covered porch, and balcony. Taylor & Syfan produced an engineered design addressing historical as well as geotechnical concerns, as the site is located directly above the Rinconada Fault. T&S also designed new offices and provided tank room and barrel storage remodel plans including an overall seismic upgrade, new mechanical unit and tank anchorage systems, and foundations for a new covered crush area.

Taylor & Syfan Consulting Engineers provides full structural engineering services from conceptual planning through the completion of construction, delivering efficient, high-quality designs. The varied backgrounds of the company's principals, along with the skill and creativity of its engineering staff, produce a unique collaborative which can undertake a wide range of project types with confidence while meeting the needs of a diverse clientele.





UNREINFORCED MASONRY RETROFIT & HISTORIC RESTORATION PROJECTS

The Fedora Building, 836 Fedora Street, Los Angeles

Architect: Hatch - Colasuonno Studio

The Fedora building consisted of a three-story unreinforced masonry structure with a partial basement. The building was rehabilitated to provide quality low income housing in central Los Angeles by the non-profit group *A Community of Friends*.

Fox-Normandie Apartments, Fox and Normandie, Los Angeles

Architect: Hatch - Colasuonno Studio

The Fox-Normandie Apartment building is a historical six-story unreinforced masonry structure with a large subterranean basement. The building was remodeled and retrofit to provide contemporary designed, quality, low income housing in central Los Angeles for the non-profit group *A Community of Friends*.

The Pier Café, Cayucos

The Pier Café is a small hollow clay tile building with a wood framed residential unit above. The structural system was predicated on minimizing the impact on both the operations and interior space of the first floor restaurant while preserving and providing seismic stability for the existing hollow clay tile construction.

The White House Restaurant, Laguna Beach

The White House is a single story, irregularly shaped, unreinforced masonry building. The restaurant is a busy year-round operation in downtown Laguna Beach. The design predicated that the operation could only be closed down for one day, which was accomplished by conducting the construction in phases with the majority of the interior work concentrated into one area of the building.

Renaissance Bakery and Café, Laguna Beach

A contemporary café in downtown Laguna Beach whose original un-reinforced masonry structure was completely renovated, including a full height glass storefront.

Arvin Adobe City Offices and Library

Architect: RRM Design Group

Prepared structural plans for the renovation and seismic upgrade of the historical Old City Library and Adobe Complex in the city of Arvin. A new entry vestibule and an addition to the library were incorporated into the historic rehabilitation design.

Park Street URM, 1225 Park Street, Paso Robles

Architect: A.H. Stephenson

Taylor & Syfan utilized the existing masonry and incorporated a steel frame at the storefront of this 2-story structure originally designed in 1922 by Chester H. Miller, Architect. This complete restoration had minimal effect on first-floor tenants while maintaining the historic integrity of the brick facade. This project is located in the cultural center of downtown Paso Robles, California.

SLO Railroad Warehouse, San Luis Obispo

Architect: RRM

Taylor & Syfan engineers provided preliminary structural and historical assessment for future rehabilitation of circa 1885 freight warehouse. This historically significant URM building has been reconstructed into the San Luis Obispo Railroad Museum Facility with space for hands-on historical exhibits, such as an educational small-scale railroad.

The Carlton Hotel, Atascadero

Architect: Studio Design Group

Originally a dilapidated two-story unreinforced masonry structure in old town Atascadero, the Carlton Hotel has been restored beyond its original grandeur as a resort hotel with restaurant, bakery, and gift shop. The roof structure consists of open web steel joists, over a composite deck design all supported on a mat foundation. The structure was meticulously designed and detailed to preserve and incorporate the two original brick facades in order to maintain the buildings historical significance to the city.

St. Anthony's Seminary, Santa Barbara

Architect: Cearnal Architects

Taylor & Syfan provided a seismic upgrade plan for the historic Seminary building adjacent to Santa Barbara Mission. St. Anthony's Seminary is a three-story structure with two-story tall unreinforced stone masonry exterior walls. The interior walls are three-story tall unreinforced brick masonry. These heavy and unreinforced walls provided a challenge for restoration. Each floor is approximately 10,000 square feet.

York Mountain Winery York Mountain Road, Templeton

Architect: Pults & Associates

Consulted with the owners and architect as to the possibility of restoring the original rustic stone tasting room and wine production facility. Our engineers produced a creative solution to allow this beloved element of our areas' oldest continually operating winery to be preserved.

Wellness Community Central Coast Cancer Center, Paso Robles

Taylor & Syfan donated our services to the renovation of an URM structure in Paso Robles for an international non-profit wellness support community whose mission is to partner with cancer patients and their families to "enhance their health and well-being by providing a professional program of emotional support, education, and hope."

Paso Electric Building, 1244 Pine Street, Paso Robles

Architect: MW Architecture

The Paso Electric Building Remodel project consists of an interior remodel, which involves relocating interior walls and introducing new stairwells. Additionally, we provided design for the reinforcement of the exterior concrete frames to bring them up to current code for lateral (wind/seismic) strength.

The Historic Paso Robles Inn, 1103 Spring Street, Paso Robles

Architect: Studio Design Group

The San Simeon Earthquake on December 22, 2003 caused serious damage to this recently restored historical landmark hotel and hot spring complex in downtown Paso Robles. We have prepared plans for repair of several notable buildings at the Inn, including the 100-year old Ballroom, the Lobby, Steakhouse, Cattlemen's Lounge and Coffee Shop. Three unreinforced brick chimneys in the restaurant/lobby building were damaged, including one with a challenging arched top.

The Clocktower Building, 801 12th Street, Paso Robles

Architect: R2L Architecture

The Clocktower Building is a reconstruction of the original iconic "Acorn Building" in downtown Paso Robles that was demolished after it's collapse in the San Simeon earthquake of 2003. The new

structure beautifully replicates the original clock tower while conforming to current building code standards for human safety.

Starpine Remodel & Seismic Upgrade, 840 11th Street, Paso Robles

Architect: MW ARchitecture

The Starpine project consists of a remodel with a seismic upgrade to an existing one-story commercial building with a basement. The structural design is to conform to Type V wood-framed construction with steel moment frames needed to open up areas of the building. Substantial portions of the building were reinforced and preserved for historic significance.

1225 Park Street, Paso Robles

This partial URM wall collapsed and had rocked piers due to the San Simeon Earthquake of 2003. Repairs were designed and detailed for repointing of the existing stone wall. A full retrofit was performed in order to prevent further damage due to any future seismic events.

819 12th Street, Paso Robles

Architect: MW Architecture

This historic building in downtown Paso Robles has undergone a full retrofit to restrain the existing masonry walls and repair damage incurred in the 2003 San Simeon earthquake. All masonry parapets above the roof diaphragm are to be replaced with wood to reduce their weight, therefore reducing the risk of collapse and implementing life safety measures. The retrofit includes reinforcing the floor and roof framing as well as including two moment frames for the storefronts on the first floor.

835 12th Street, Paso Robles

Taylor & Syfan provided repairs to this URM structure which was previously retrofit by another design team. Brick parapets were removed and replaced with lighter framed, veneered, wood studs. Existing concrete column that suffered major damage was removed and other exterior facade elements were repaired.

Grangers Union Building URM Retrofit, 12th and Pine Streets, Paso Robles

Architect: David Main, AIA

The Granger Union Building is an 11,000 sq ft one-story unreinforced masonry building built prior to 1866 that was retrofit to the City of Paso Robles Building Department Requirements and the 2003 International Existing Building Code while maintaining it's historical significance.

Gilson Commercial Buildings, 1307 & 1311 Park, Paso Robles

Phase 1 consisted of a seismic retrofit to the existing rear URM garage building.

Phase 2 consisted of a remodel to the front of the buildings to introduce a 15 to 20 foot deep dining patio area.

San Miguel Mission for the Diocese of Monterey, San Miguel

Performed an investigation and provided consultation and retrofit recommendations for repair of heavily earthquake-damaged adobe walls of the single story wings of the Mission's sacristy, kitchen dining area, and dormitories. Recommendations for repair with new, site made, adobe infill brick material as well as extensive waterproofing measures were made and incorporated.

St. Timothy's Church, Morro Bay

Architect: Steve Soenke, AIA

Worked with the church building committee to establish a cost effective method for the seismic retrofit of the sanctuary building incorporating steel plate shear panels to maintain the facade and interiors of this local treasure.

Bethel Lutheran Church, Templeton

Prepared plans for the repair and renovation of this 100 year old classic brick church severely damaged by the San Simeon Earthquake.

The Frog & Peach Pub, 728 Higuera Street, San Luis Obispo

Architect: Studio Design Group

Located in downtown San Luis Obispo, the Frog & Peach Pub project consisted of reinforcing the existing un-reinforced brick building in conformance with San Luis Obispo City's "Requirement for Strengthening Unreinforced Masonry Buildings" as well as performing a simultaneous remodel. The

remodel involved raising the roof at the back two thirds of the building and introducing a mezzanine to face the creek at the Mission. New construction was wood framed construction but made to compliment the existing masonry facades.

The Warden Block – Mixed Use Building, Higuera St, San Luis Obispo

Architect: SDG Architects

Built in 1898 by HM Warden, the Warden Block project consists of a URM retrofit that was built in phases to maintain retail presence on Higuera Street in downtown San Luis Obispo. Phases 1 & 2 involved remodeling the six retail units closest to Higuera Street. The design criteria desired was to bring the structure up to full code compliance while keeping the historic integrity of the iconic facade.

Hearst San Simeon State Historical Monument, San Simeon, CA

Taylor & Syfan has provided structural design services for a variety of projects for the State Historical Monument including a Guesthouse, an Auxiliary Building, retaining wall design and the Fountain and Hearst Ranch Beef Display at the Visitor Center. We also provided an emergency Road Stability Report following the 6.5 magnitude San Simeon earthquake in 2003.

Kevin Main Jewelers, 718 & 720 Higuera Street, San Luis Obispo

Architect: Studio Design Group

The Kevin Main Jewelers URM Seismic Retrofit project consisted of the seismic retrofit to the existing commercial building and maintenance of the existing facade to maintain the character of this structure that dates back to the 1800's.

Naman Block, 782-790 Higuera Street, San Luis Obispo

Architect: SDG Architecture

The Naman Seismic Retrofit project consists of the seismic retrofit of the three retail stores facing Chorro Street on the Creek at the Mission in downtown San Luis Obispo. The buildings historic facades have been painstakingly preserved while seismic reinforcement performed in conformance with the historic building codes to create a safe structure while maintaining the historically significant entry ways.

SUSTAINABLE

Sustainable Projects



ICF Residence



The Lofts on Laurel



RRM Design Group



SMOOE Straw Bale Building

With a focus on reducing environmental impact, Taylor & Syfan is dedicated to the basic principles of sustainability. As a founding member of SLO Green Build, and a member of the U.S. Green Building Council, Taylor & Syfan is continually aware of the latest techniques and materials available to those pursuing a completed project that's environmentally friendly.

Taylor & Syfan's sustainable project resume includes details such as structural steel, engineered wood framing with renewable construction materials, low VOC paints, and high-efficiency appliances. And for The Lofts on Laurel project, one-hundred percent of the construction debris was recycled. One of its team's most unique projects is the Fairview Modular Project in Santa Cruz, California.



Fairview Modular Project, Santa Cruz, CA
Architect: Marmol Radziner, Los Angeles, CA

This three-bedroom, three-story residence is a factory-built modular unit, which greatly minimizes impact to the surrounding environment as all components are factory-fabricated and shipped ready to assemble on site. Structurally insulated panels incorporate agricultural wheat fibers as insulation to provide a 12-14% reduction in energy consumption. Wood flooring is FSC-certified EcoTimber and the interiors include earth-friendly materials such as non-toxic, low VOC Green Seal paint. In addition, cabinet cores are fabricated from fiberboard made of annually renewable wheat straw and formaldehyde-free resin.

Taylor & Syfan Consulting Engineers provides full structural engineering services from conceptual planning through the completion of construction, delivering efficient, high-quality designs. The varied backgrounds of the company's principals, along with the skill and creativity of its engineering staff, produce a unique collaborative which can undertake a wide range of project types with confidence while meeting the needs of a diverse clientele.



CIVIC & RELIGIOUS

Civic & Religious Projects



El Centro



Cambria Presbyterian Church



First Church of Christ, Scientist



Agape Church



Arvin Adobe

From renovations to remodels, additions to seismic upgrades, Taylor & Syfan offers an extensive background with civic, municipal, and religious projects. No matter what you wish to accomplish, Taylor & Syfan's team has the expertise and industry knowledge to provide the engineering support needed to realize your vision.

Taylor & Syfan's civic & religious project resume includes details such as custom curtain wall supports, library additions, steel-framed trellises and pedestrian arcades, marquee towers, and roof systems composed of complex custom glue-laminated trusses. One of its team's most recent notable projects is the Paso Robles Superior Court in Paso Robles, California.



Paso Robles Superior Court, Paso Robles, CA
Architect: KMD Architects, San Francisco, CA
Contractor: Specialty Construction Inc., San Luis Obispo, CA

The dramatic radiused glass curtain wall at the entryway of this 22,000 square-foot, two-story courthouse showcases a custom cantilevered steel stair system, a cantilevered upper level deck, and a series of steel canopies. Housing four courtrooms and numerous offices for support staff, the building's structure is a steel post and beam system with tube steel braced frames and concrete-filled metal pan deck at the floors.

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