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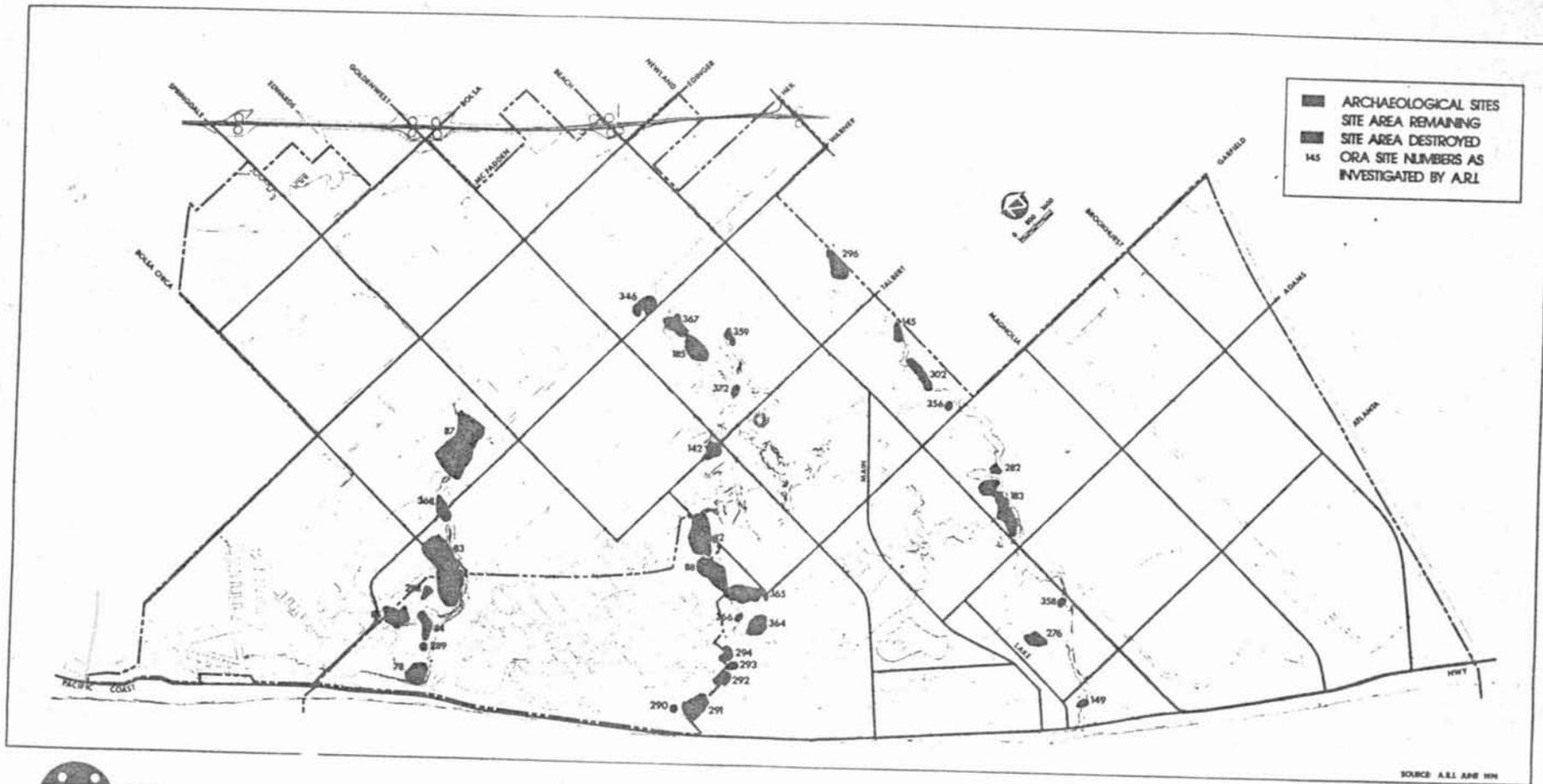
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REPORT OF A
SCIENTIFIC RESOURCES SURVEY
AND INVENTORY:
CONDUCTED FOR THE
CITY OF HUNTINGTON BEACH, CALIFORNIA

Prepared by:

MICHAEL L. AHLERING
ARCHAEOLOGICAL RESEARCH, INC.
3303 HARBOR BOULEVARD, B-9
COSTA MESA, CALIFORNIA

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PREFACE

A study such as this provides a political entity with the opportunity to understand and preserve its cultural resources and to develop the pride of its citizens in their unique heritage. To those who may view the subject matter of this study as "some old bones" we would refer to the idea of the historian Sybel, "A nation which fails to keep in living touch with its past is as near to drying up as a tree with severed roots. We are today, what we were yesterday."⁽¹⁾ Or as Clark observed, "In its broadest connotation history is a basic need, a very condition of human societies, which are distinguished from others precisely in that they are constituted by historical rather than merely by innate, biological inheritance."⁽²⁾

It is hoped that this study will not only prove to be a valuable planning aid but will also arouse genuine public interest and enthusiasm in some valuable resources that are largely misunderstood and underestimated.

Special attention is required for the conservation of scientific resources because, unlike many other resources, each individual expression is unique, never exactly duplicated and incapable of regeneration. If destroyed or damaged, it is lost forever.

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INTRODUCTION

SECTION I -- INTRODUCTION

A. RECITALS

This is a summary report of a Scientific Resources Survey conducted for the City of Huntington Beach, Orange County, California by Archaeological Research, Incorporated, Costa Mesa, California is intended to provide the reader with a general understanding of the archaeological, paleontological and historic values which exist within this city and the area of Bolsa Chica. The information is presented with sufficient narrative to place these values in perspective.

B. PROJECT BACKGROUND

While this unique project was sponsored and directed by the Planning Department, it came about through the cooperation of many city agencies and groups. The research began in early August, 1972, after nine months of consideration.

During approximately the same period, legislation was passed in Sacramento requiring the addition of a Conservation and Open Space Element to General Plans; however, the City of Huntington Beach adopted this program largely independently of said legislation.

Even to this date this additional element has not been implemented on a statewide basis.

Consequently, this study is basically a spontaneous effort on the part of the City to identify its irreplaceable scientific resources as a first stage to establishing an equitable land use/conservation program.

C. PROJECT METHODS

The survey, basically a three phase project, consisted of research, field inspection and reporting. Each of the disciplines involved was individually studied. The Paleontological research was directed towards location of geologic fossil bearing strata above sea level; determination of what fossil materials had already been discovered in the City and what might be expected to occur. Field work consisted of inspecting geologic exposures. Archaeological research was concerned with determination of the location and condition of previously reported deposits and a thorough search of the entire 27 square mile area within City boundaries. Teams of experienced field archaeologists systematically inspected all areas of the City on foot. The sites they located were recorded or re-recorded to reflect certain of their current physical characteristics. Determination of cultural and temporal association was possible only in sites



where excavation and testing occurred. Within the sphere of history the general phases of development of the City were researched. A representative property for each of these phases was selected and then field inspected to determine if the qualities of setting, design and workmanship of the property were historically significant according to established criteria of evaluation. Special effort was made to avoid oral traditions of the area because, although valuable for the general history, recollections of individuals are often in variance with the facts.

D. ORGANIZATION OF REPORT

The report has been divided into four major sections starting with the earliest in time; Paleontology, Archaeology, History, and a summary of conclusions and recommendations. The first three sections include a brief statement of the nature of the disciplines, their objectives and purposes, and a recommended course of action with respect to planning and conservation within the framework of all City resources. The final section includes recommendations and conclusions of the research.

mammoth



PALEONTOLOGICAL

SECTION II -- PALEONTOLOGY -- The Nature of the Discipline

Paleontology, literally the science of beings of the remote past, is the study of fossils. Originally, the word "fossil" meant anything dug up, including rocks and minerals; but now it means any trace, impression or remains of a plant or animal in rocks, the imprint of a fern or leaf, the footprint of a reptile, the shell of a mollusk or the skeleton of an animal.

Fossils are not freaks of nature nor chance records of extinct organisms, but are very important documents upon which the timetable of the geologic past has been established. They also indicate the path of organic evolution, the ancient distributions and migrations of plants and animals, the habitats of these organisms and important information as to the changes that have occurred in climate throughout geologic time.

Fossils are of many different types and vary greatly in their perfection. Insects are so perfectly preserved in amber that their soft parts may be dissected and the extinct mammoths of the frozen Siberian tundras are so well preserved that even the contents of their stomachs ordinarily may be examined. Most fossils, however, are only the harder parts of once living things. Most dead organisms are at once attacked by bacteria and by scavenging animals, so that they leave no

trace of their former existence. If, however, they are covered by sediments immediately after death, a complete or partial record of their presence may be preserved.

A. BRIEF GEOLOGIC HISTORY OF HUNTINGTON BEACH

The present day Los Angeles topographic basin is a lowland close to the sea and has been called a coastal plane (Mendenhall, 1905). It has a northwest trend and is 50 miles long and about 20 miles wide. (3)

Downtown Los Angeles is at the inner edge. Los Angeles Harbor and the City of Long Beach are at the outer edge. The lowland is bounded on the northeast by the Puente Hills, on the east and southeast by the Santa Ana Mountains and the San Joaquin Hills and on the southwest by the Palos Verdes Hills and the Pacific Ocean.

The basin during Miocene time, some 15 million years ago, was still larger, extending inland as far as Pasadena and Pomona and merging into the Ventura Basin to the northwest.

During Middle Miocene time, the basin was bounded on the southwest by a land mass (Catalina) that apparently was composed exclusively of glaucophene schist and related rocks. Today the basin's central floor is buried beneath at least 20,000 feet of Miocene and later

sedimentary rocks. The Los Angeles Basin was a deep marine trough at the beginning of Pliocene time, 10 million years ago, and was then filled successively with sediments containing fossils characteristic of shallower and shallower water, until the uppermost, largely continental Pleistocene strata, were deposited.

These continental sediments are much less fossiliferous than the marine beds, but they are far from barren.

Bones of Mammoth Horse, Sloth, Bison and Camel have been found in many places in similar types of sediments in the Los Angeles Basin. A notable exception is the Rancho La Brea locality, at Wilshire and La Brea Boulevards in Los Angeles County, where hundreds of thousands of Late Pleistocene bones have been collected from the asphalt pipes.

Apparently the modern basin has been deformed continuously up to very recent times, with its center sinking and at least part of its margin rising.

Principal Physiographic Features of Huntington Beach

The land surface of the Huntington Beach area is divided into two physiographic zones: (1) a broad alluvial floodplain that grades seaward into tidal marshland, and (2) a series of structural hills or mesas. (4)

Floodplain and Marshes -- The broad alluvial floodplain of the Santa Ana River (Downey plain) comprises much of Huntington Beach (i. e., lowland areas). Extensions of this floodplain reach the ocean through a series of gaps that interrupt a zone of structural hills and mesas trending northwestward along the coast. Only minor streams, now channelized for flood control, and local subsidence depressions associated with peat deposits interrupt the low relief of the plain. Before 1900 the gaps contained broad freshwater swamps that graded seaward into marine salt water marshes. Much of this swampland was cleared and drained for agricultural purposes in 1900 and the tidal marshes are now restricted to a coastal zone some 7,000 to 8,000 feet wide.

Hills and Mesas -- Bolsa Chica Mesa and Huntington Beach Mesa represent upper Pleistocene land surfaces produced by faulting and anticlinal folding within the northwest trending Newport-Inglewood structural zone. Huntington Beach anticline extending nearly 4 miles inland and reaching an elevation of 130 feet above sea level, a coastal bench is present west of the Newport-Inglewood fault, and an additional parallel belt of low hills further inland marks the position of another branch of this fault as it crosses the Mesa.

Bolsa Chica Mesa extends 2-1/2 miles inland and reaches a maximum elevation of 65 feet. It represents the northwest surface expression of

the Huntington Beach anticline and rises gently to where it is cut off by the stream bluff of Bolsa Gap. A twenty to forty foot west facing escarpment cuts across the Mesa reflecting displacement of the land surface across the Newport-Inglewood fault.

B. DISPOSITION OF FOSSIL DEPOSITS

Information regarding fossil locations for the Huntington Beach area is sparse. Marine vertebrates and invertebrates, as well as terrestrial vertebrates, may be encountered where the surface soil is disturbed more than 5 feet in depth or by soil erosion.

Undoubtedly fossils have been encountered in this area in the past and have either ended up as a doorstep or in someone's back yard, or as just an old bone not worth "picking up". The importance of each vertebrate fossil in reconstructing the past is beyond measure. Each fossil that goes unnoticed or into someone's back yard collection of "see my pretty fossils", as well as failure to note the collecting location, is a great loss to the Paleontologist and to modern day man. Research of field locations at Los Angeles County Museum of Natural History yielded only one vertebrate location listed for Huntington Beach. It is Location #65113, late Pleistocene, 5092 Wintersburg Road, Huntington Beach. Mr. Leslie L. Pierce collected specimens of Mammoth tooth and tusk fragments about 6 - 8 feet below soil level, along with inverte-

brates. This location is now covered by a building.

Another is listed for Seal Beach, but its relation to Huntington Beach is worth including in this report. It is LACM Location #1121 Seal

Beach, Pleistocene, 500 feet offshore and 1/4 mile north of the Gun

Club at Bolsa Chica, which is just south of Seal Beach. Mammoth

skull fragments, two upper molars, and a partial lower molar were found 15 feet below sea level (under water) in a small slightly indurated

outcrop of sandstone which was located by grappling. Specimens were found by T. Baldwin, R. Dill, D. Moore, and R. S. Dietz on April 14,

1954. It was suggested that the material be turned over to Scripps

Institution of Oceanography, LaJolla, California. (According to the above description, the reference to Seal Beach is probably in error and should be Sunset Beach -- editor).

Invertebrates were collected in pipeline trenching near Ellis and Magnolia just east of Huntington Beach Mesa in 1971 at 3 - 5 feet below soil level, along Pacific Coast Highway in the bluff north of Golden West Street across from Signal Oil properties' PCH gate. At this location one fragment of unknown bone was found by T. Manera, Geologist, Signal Oil.

The current research of Orange County is conducted by the Los Angeles County Museum of Natural History. Of primary concern is vertebrate material (i. e., bones). Invertebrates (i. e., shells) are of considerably less importance. Because there is a possibility of encountering vertebrate materials anywhere within the city, a program and plan is difficult to detail. However, it is most probable that if grading of five or more feet in depth is conducted on either of the mesas, the city engineer should inform the contractor that he may encounter fossils. The city engineer should also relay to the contractor that "bones" are what is important; furthermore, it is likely that they will be isolated and not part of a deposit.

Discovery of a fossil need not delay his grading if:

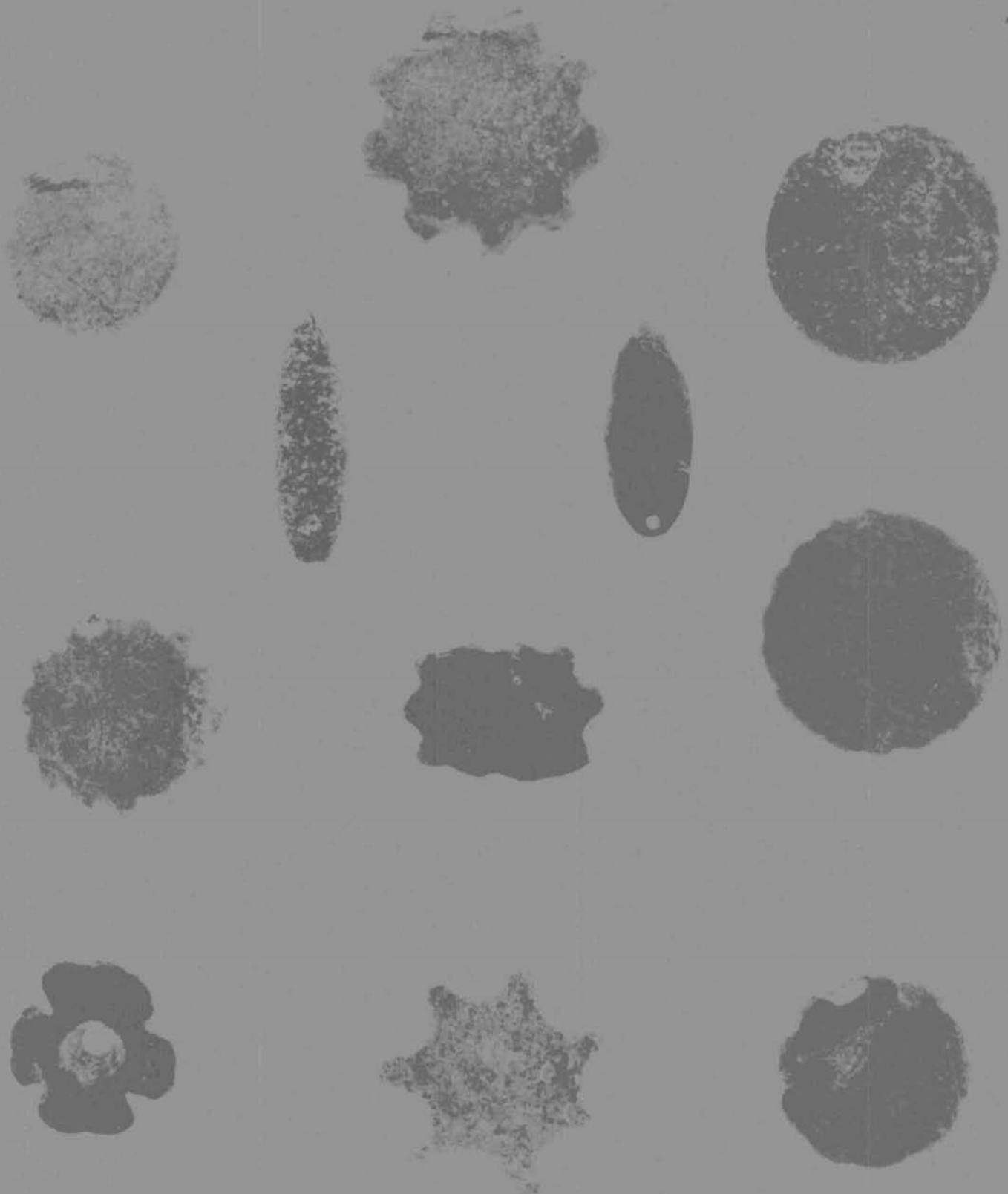
1. It is possible to avoid the area for a short time and he contacts the pre-designated city staff member, who in turn contacts the pre-determined member of the Los Angeles County Museum staff. The museum staff member may then either inspect and remove the fossil(s) or give instructions to the contractor on how to remove and forward the material himself.
2. If it is impossible to avoid the area, the material should be removed as carefully and completely as

possible and a record made of its location,
condition, and depth.

The County Museum of Natural History, the primary repository for the
material (and bones), investigated the site and found it of considerable
interest. However, because there is a possibility of encountering verte-
brate material anywhere within the city, a program and plan is diffi-
cult to define. However, it is most probable that a grading of five or
more feet in depth is required on either of the areas, the city engineer
should inform the contractor that they may encounter fossils. The city
engineer should also refer to the contractor that they see what is
important or otherwise. It is felt that they will be isolated and not
part of a team.

- 1. Discovery of a fossil need not delay the grading.
- 2. It is possible to avoid the area for a short time and be
contacted the pre-arranged city staff member, who in
turn contacts the pre-arranged member of the
Apples County Museum staff. The on scene staff
member may then either report and remove the
fossil(s) or give instructions to the contractor as
how to remove and forward the material himself.
- 3. If it is impossible to avoid the area, the material
should be removed as carefully and completely as

cog stones



ANTHROPOLOGICAL

SECTION III -- ARCHAEOLOGICAL - The Nature of the Discipline

"To do nothing now is to let our children lament that they never knew the magnificent diversity of mankind . . . " (5)

An archaeological survey and inventory is the first step in the process of archaeological explanation. Archaeologists seek to reconstruct the culture and life patterns of past human societies, societies composed of individuals. As individuals and as groups, they were faced with certain basic human problems, many of which are still problems for us today. Understanding, even limitedly, past solutions developed for these problems permit a progressive widening in the range of choices open to us today.

A. INTRODUCTION TO NEW WORLD ARCHAEOLOGY

In order to establish some general background for local archaeology, a certain understanding of New World prehistory is helpful. Man migrated into the new world from Siberia via the Bering Strait Land Bridge. As yet the date of this crossing is unknown, although it is known that early man reached the southern tip of South America at least 11,000 years ago.

Man first came to the American Continent not to satisfy an urge to explore, but rather to hunt the great mammals of the ice age, the mammoths, camel, big-horned bison, the horse and others. Following the trails of these herding animals, man found food, clothing, shelter and water. These trails, of course, did not invariably lead him ever southward. There are, and the number is increasing rapidly, numerous scattered dates placing man in the New World in the range from 20,000 to 38,000 years ago. Recent excavations at Calico, California, under the surveillance of the late Dr. Louis Leakey, have yielded possible indications of 50,000 to 100,000 years. ⁽⁶⁾ To avoid being side tracked, it is evident that man has been in the Americas for a long, long time; clearly the diversity of cultures that existed at the time of European contact was an independent evolution, a unique human experience.

By the end of the most recent ice age a uniform and widespread big game hunting culture dominated the continental United States. This Llano or Clovis culture, exhibited in every one of the 48 contiguous states and southward into Mexico, is conservatively dated at 11,000 years ago. While these big game hunting cultures developed and flourished, a different way of life based on small game hunting and gathering wild plants, existed west of the Rocky Mountains. This second basic life way gained predominance as the great mammals

faded into extinction, and expanded throughout the United States in two basic forms; the Eastern Archaic and the Desert cultures.

B. LOCAL PATTERNS

The Desert way of life is remarkable in that while in California it persisted virtually unchanged until the arrival of the "White" man, it provided the basis upon which the Pueblo and the highly sophisticated Mexican empire agricultural cultures were erected.

The Desert Culture of this state is usually divided into major classes or traditions: the Valley and the Coastal.⁽⁷⁾ (There are, of course, other older and more recent cultures represented in California; however, this Desert Culture is the dominant expression.)

The Coastal Tradition of southern California was established between 7 and 10 thousand years ago, progressively adapting to the coastal environment and reaching its most advanced state prior to the arrival of the first European, Juan Cabrillo, in 1542. The Vizcaino expedition of 1620, specifically commissioned to locate a harbor along the California coast, brought back glowing reports of the land and its people. "The women are very beautiful and virtuous; the children are fair and blonde and very merry."⁽⁸⁾ Spanish sailors were also

amazed by the sophisticated boat building, cordage, and woodworking skills of these people.

California Indians gained a one hundred and sixty-seven year reprieve due to the Spaniards' preoccupation with locating the immense wealth of Mexico and South America. Not until 1769 (largely for fear that Russia would occupy California) did the Spanish enter the state to colonize it and thus seal the fate of the Indians. In 1916, Ishi, the last California Indian to live totally outside the white man's society, died.⁽⁹⁾

Currently the local pre-history is not known in much more detail than outlined above. Several interesting "finds" have been made in Orange County and adjacent parts of other counties: "Laguna Woman" pre-dating the Llano or Clovis big game hunters, early manifestations of the Desert Culture, and indications of numerous different societies existing within the Coast Tradition.

C. DESCRIPTION OF LOCAL PREHISTORIC PEOPLES

The following brief summary is provided to give the reader some general picture of the way the local Indians lived prior to and immediately following the coming of the Europeans. This discussion

is based almost entirely on historic sources.

As long ago as 1,500 years before the present, people belonging to a seasonally nomadic desert culture pushed west from the inland area to claim a small 100 mile strip of coastline. This area currently encompasses Los Angeles and Orange Counties, including the area from Ventura on the north to Oceanside on the south. This region's moderate climate was consistent with the semi-arid conditions the people were accustomed to.

The Indians of the Los Angeles-Orange County Basin were a people of the Shoshonean linguistic stock.⁽¹⁰⁾ This linguistic family is a human grouping bound together by a common language. It extends as far east as the pueblos of New Mexico, north through Utah, and south through Mexico and portions of Central America. In coastal California the culture of these people slowly developed in its own way. Over a period of time their language became distinctly different from their kinsmen to the east. Their way of life evolved to conform with the new environment around them. The main body of the Shoshonean desert culture claimed and protected natural territories within this new area and formed separated local groups with unique characteristics.

The territories were diverse in nature. The Basin boundaries are formed by the natural watershed of the hills and surrounding mountains. It is a rich gently sloping area fed by several water sources. The area is divided by rolling hills throughout. The coastline was smooth, with long sand beaches and mud flats. The ocean was met by tall flat-topped terraces along most of this 100 mile stretch. This coastline became dominated by two major Shoshonean groups. The northern half was Gabrielino territory. The southern half was the land of the Luiseno. Inland, large semi-arid and mountainous zones were occupied by other Shoshonean people.

The Gabrielino held the majority of the Los Angeles-Orange County Basin. It is with this tribe that the major emphasis will be placed in this examination of southern California culture.

A peoples' territory is defined as that tract of land that was utilized by a group speaking the same dialect and honoring the same social customs. In the case of the Gabrielino this meant that several small bands ranged within the same territory, moving within it as necessity arose. They rarely left their own territory unless it was to trade with other groups. The Gabrielino home sites were scattered throughout their territory in areas that provided all the necessary resources for life: water, shelter, fuel and food. Each band con-

tained an average of 80 to 100 people made up of several extended families. Within each extended family was a dominant nuclear family -- a man, his wife and children, along with perhaps a sister and her children, a great aunt or an aged grandparent.

The typical housing of coastal bands was minimal during the summer months. During the rainy season, dome-shaped shelters were constructed from brush and tule thatch. An inland element of the Shoshone called this type of dwelling "kish". During the summer a simple thatched sun and wind shelter was built with one to three sides. These shelters were used for work and for sleeping on hot nights. Other types of shelter included a large, open air ceremonial blind constructed of brush. A sweathouse was also a common structure in most California sites.

Clothing was simple in southern California. With such a moderate climate, little or no clothing was needed. The men wore nothing in every day situations, while the women wore a small apron of yucca fibers hung from the waist. A long shoulder cape made of rabbit pelts was used by both sexes. The cape was used mainly for warmth. Sandals were made from bound mats of yucca fiber. Their general life style was derived from the desert tradition where an emphasis is placed on a lack of material possessions.

The Gabrielino maintained their life by hunting and gathering what food they needed. Depending on the area in which they lived, their main food sources were: deer and smaller mammals, some birds, wild grains, acorn, yucca and a large variety of roots and greens. Along the coast their diet was greatly supplemented by shellfish, an occasional sea mammal and a large variety of fish.

Together with the bow and arrow the Indians over most of southern California utilized a curved throwing stick for rabbit hunting. A "David and Goliath" type sling was also employed. Several varieties of snares were used to catch small game. The snares were either of the noose or dead-fall variety.

Roots from a number of edible plants provided a source of vegetable food. A long, stout digging stick was employed by the women to loosen the soil around the roots. The digging stick had a few basic variations in southern California. The pointed digging end could have been fire hardened, a forked handle sometimes appeared for better leverage or a well shaped stone weight might have been added for more driving power. All in all the digging stick was one of the most widely used yet simplest tools of the California Indians.

Wild seeds were collected by the women in wide, flat baskets. The

basket was held underneath a bush while she beat or shook the seeds free. The assorted wild seeds were then ground in milling stones and mixed into a paste. This paste could be used for a thick gruel or made into thin cakes. Sometimes crushed, dried rabbit was added depending on availability.

Where Oak trees were plentiful the women and children put much time into collecting and preparing acorns. When available, acorn meal was the main staple of California during the later periods. The shell of the acorn was cracked open and the meat removed. The meat was laid in the sun to dry. When thoroughly dried, the nuts were pounded into smaller bits and ground into a coarse meal. Because of the bitter tannic acid in acorns, a leaching process was necessary to make the meal edible. This was accomplished in various ways, differing from village to village. One basic method was to put a quantity of meal in a basket and pour water over it until the bitterness was leached out. The basket was dispensed with in coastal regions, where the meal was placed instead in a nest of grass or sea-weed directly on the sand. Along a stream a sealed basket was allowed to soak in the current until the meal was washed free of tannic acid. In one case the meal was buried in a container for months before the people considered the rather darkish delicacy edible. Acorn meal was used in the same way as wild grain in gruel or coarse cakes.

There are two methods of grinding; one, the mortar and pestle and two, the mano and metate. Both accomplish the same goal of grinding meal; however, the two methods are rarely used by the same culture. Grinding can be accomplished on a large bedrock boulder or a smaller portable rock. It is not uncommon to come upon an oak grove and find a bedrock with up to 20 or 30 grinding surfaces on it. In some areas, especially along the coast, there seems to be a greater use of the portable variety of grinding stones.

A grinding area was sometimes fitted with a four-posted shade roof. Picture a hot afternoon around such a grinding area with 7 or 8 women grinding acorn meal, all keeping up on local gossip, while surrounded by younger children, cracking and drying acorns. This was a center of society in southern California not so long ago.

Stone was used in a variety of ways. Soft Soapstone was used extensively by the Gabrielino for making stone bowls. Granite was used mostly for grinding implements. All types of stones that flake in sharp conchoidal fractures were used to produce cutting and scraping tools. Among these glassy stones were: Franciscan Chert, Basalt, Quartz, Quartzite, Obsidian and Chalcedony. The more glassy a type of stone, the easier it is to form, or knap, into a useable tool. Good "chipping material" was worth the effort of

traveling and trading. There were many well established trade routes leading to and from the Basin. It was not a one-sided trade either. The Gabrielino had many tradeable items derived from the sea. Abalone shells, salt, Olivella beads and Soapstone were all in demand in areas where they were not easily obtained. It is said that a man could trade an Abalone shell for a good pony on the plains. In return the Gabrielino accepted many needed materials, a major one being good stone for chipping. Obsidian was procured from the eastern slopes of the Sierra Nevada. Chalcedony, Jasper and Flint were the barter from the Serrano tribes in the Mohave desert to the east.

Projectile points for arrows and spears, awls, gravers, scrapers and knife edges were all manufactured from stone by flaking chips away to form the proper shape and edge. The two categories of flaking methods were percussion flaking and pressure flaking. The percussion method is simply a way of striking the chipable stone with a denser hammerstone to flake off excess material and shape a sharp variegated edge. Pressure flaking is a more refined system using an awl-shaped pointed bone called a chipping tool. A six inch length of deer antler served nicely as a chipping tool. Instead of striking the stone, pressure was applied to the edge of a thin flake to remove a small chip from the side. Time and time again small

chips are removed, slowly forming a uniform cutting edge. The two categories of flaking methods were used by the Gabrielino. The crude edges of scrapers and large cutting edges were formed by the percussion method. The percussion method was also employed to produce the large, thin flakes needed for finer tools produced by pressure flaking.

Shells from Mollusks, discarded during food preparation, served well.

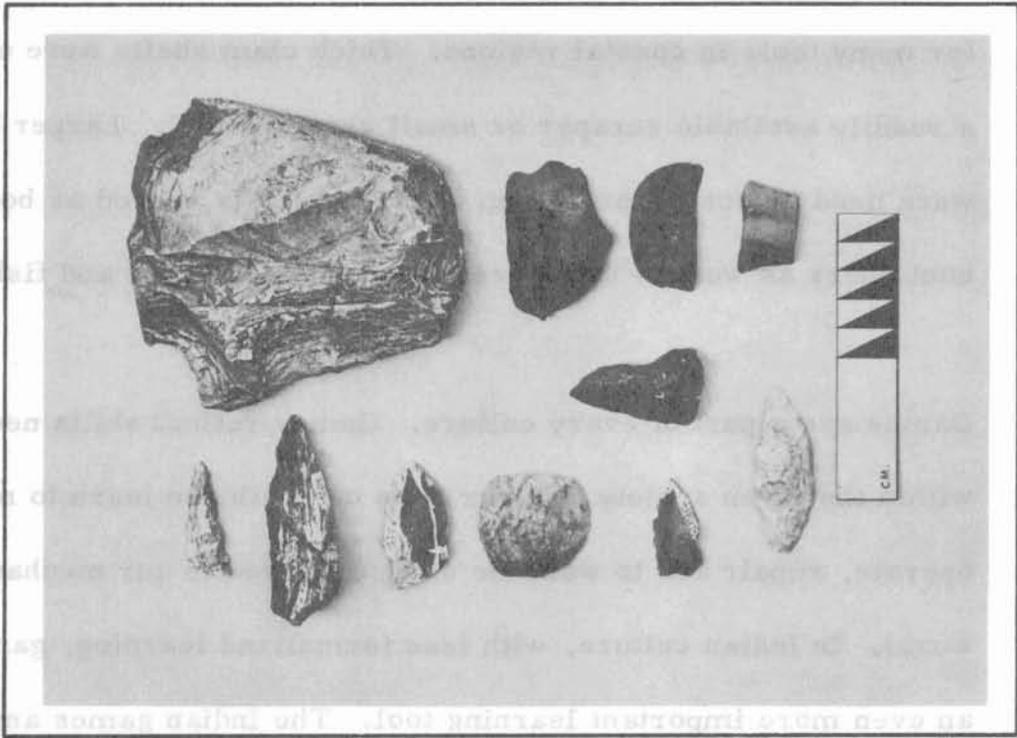


Figure 2: The above are local examples of chipped stone artifacts.

their everyday life.

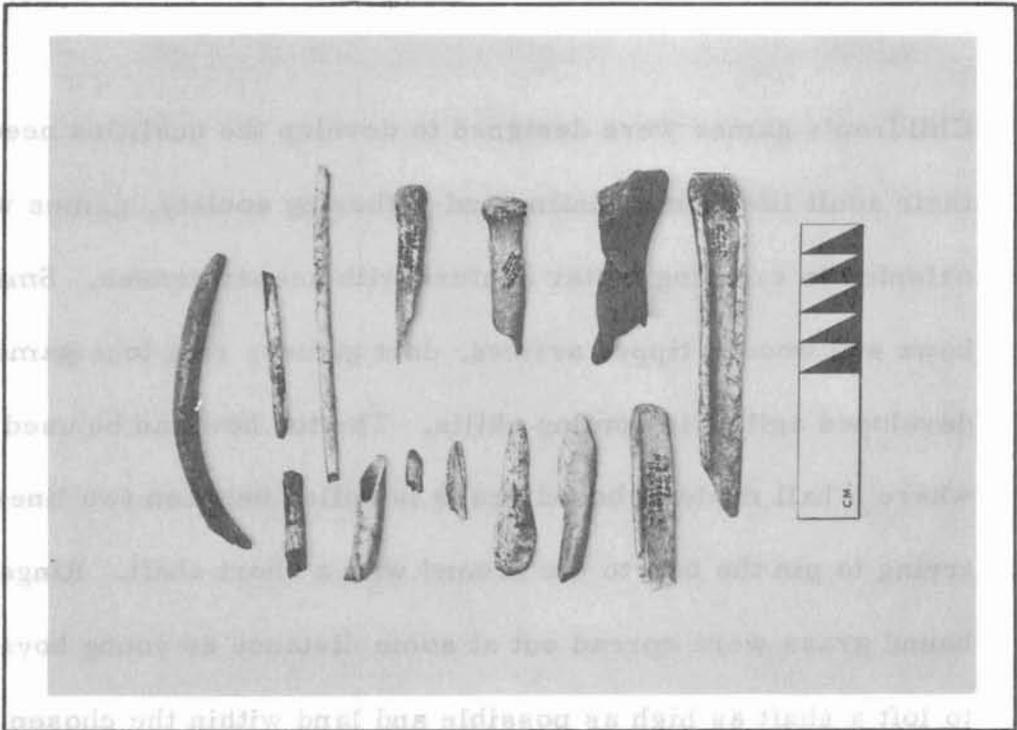


Figure 3: The above are local examples of 'bone artifacts.

Shells from Mollusks, discarded during food preparation, served well for many tools in coastal regions. Thick clam shells were used as a readily available scraper or small chopping tool. Larger bi-valves were used as scoops or ladles. Abalone shells served as bowls or containers as well as being used for pendants, beads and fish hooks.

Games are a part of every culture. Games reflect skills necessary within the given society. In our time our children learn to manipulate, operate, repair and to want the skills involved in our mechanized world. In Indian culture, with less formalized learning, games were an even more important learning tool. The Indian games and toys were simple compared to ours and they used the materials from their everyday life.

Children's games were designed to develop the qualities needed for their adult life. In a hunting and gathering society, games were oriented to creating better hunters with keener senses. Small sized bows and wooden tipped arrows, dart games, ring toss games, all developed agility in hunting skills. The toy bow can be used in a game where a ball made of bound grass is rolled between two lines of boys trying to pin the ball to the ground with a short shaft. Rings of bound grass were spread out at some distance as young boys tried to loft a shaft as high as possible and land within the chosen ring.

A dart was made with a body of light wood with a hard wooden tip.

Two or three feathers gave the dart a spin. Ball games were common in California. A form of soccer was played with a wicker ball.

The rules were loose and it often turned into more of a wrestling match than a ball game.

Dolls were also made for small children. They were animals, fish, birds or human made from sticks and bound with wicker.

Men also enjoyed team ball games upon occasion; however, guessing games were considered a real adult pastime. Dice was another common game but usually played by women. The dice were two sided instead of four. They were made from materials at hand. Split sticks with a round and a flat side were used. Coastal people employed shells filled with tar or pitch.

Thanks to archaeological investigation and some early ethnographic contact, a great deal has been pieced together about the Indians of southern California. Because of the swiftness with which the cultures were dissipated after the introduction to Western culture, much information has been lost. There are a lot of holes in the picture of primitive culture in southern California.

Information about their social structure, mythology and spiritual framework is sadly lacking. We know the Gabrielino, as with all other cultures, had a complete system of spiritual understanding.

The Gabrielino were known to have been associated with the Jimson weed cult. This cult or system of belief worships a deity called Chungichnich as he is known by the Luiseno and Juaneno. It is also known that certain animals such as the raven, coyote and rattlesnake held religious significance to the Gabrielino. Data of this type is scanty at best and mostly acquired from surrounding tribes. Enough is known, however, to tie the Gabrielino without a doubt, to the Shoshonean linguistic stock. Most of the information is obscure.

But the view presented so far has been gathered as if putting together a jig-saw puzzle without an idea of the shape or subject of the pieces. A people with a most basic technology adapted over generations to the area's terrain and resources. This generalized view of the Gabrielino and California Shoshone as a whole should give an idea as to the everyday life lived before the Spaniards came from the south to establish missions throughout California. Although we have enough information to draw a sketch of the Gabrielino's material culture, there is still much to be learned about them and about all of

the southern California Indians. There are still many pieces to be found before the puzzle is complete.

D. PROGRAM

As the City continues to become highly urbanized, the remaining archaeological sites face destruction. Once a site is destroyed, it is gone forever. In order to preserve some of these areas for future generations to study and enjoy, the City should consider all means available. Because, if nothing is done the last remaining links with the previous tenants of this land, will be lost.

On the basis of current evaluations and the results of the field inventory, it is recommended that a sample of 10% of the archaeological sites be preserved. These sites or portions of sites, should be declared archaeological preserves to be held undisturbed for future generations. In order to accomplish this preservation, the City may incorporate archaeological deposits in several compatible land uses; for example, Parks and Open Space or Trails Elements.

With respect to the remaining deposits, the current owners should be informed that their property may contain valuable archaeological materials and that prior to any land alteration, the deposits should be excavated.



HISTORICAL

early huntington beach

SECTION IV -- HISTORICAL -- The Nature of the Discipline

Historical research may be conducted on several levels. In this study, the emphasis was on actual physical properties. In order to provide a general framework within which to select properties for evaluation, the city's past was divided into general developmental phases. These phases should not be thought of as static periods. There is considerable overlap as demonstrated by the current occupation of two of the dwellings dating from two different, earlier phases. Rather, these general phases should be considered as representative of the predominant life styles of earlier periods.

The city has experienced five general development phases:

1. The Spanish/Mexican Rancho Period. Locally, this period spanned from 1784 to 1849.
2. Early Statehood - Grazing and Agriculture. For the purpose of this discussion the phase extended from 1850 to 1900.
3. Circa 1900 Agricultural Period. While this life style was practiced earlier and is still practiced locally, the hey-day, generally speaking, was from 1900-1920.
4. Oil Boom Period. This period is discussed only briefly; under this report's evaluation criteria, only properties

more than 50 years old will be discussed (1919 - 1922).

5. Urban Expansion Period. Not discussed because this period started about 1959.

A. EVALUATION CRITERIA

One property was selected from each phase and generally evaluated according to criteria established under the Historic Sites Act of 1935 and the Historic Preservation Act of 1966.

Criteria for Evaluation

The following criteria are designed to guide the States and the Secretary of the Interior in evaluating potential entries (other than areas of the National Park System and National Historic Landmarks) to the National Register:

The quality of significance in American history, architecture, archeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

(A) that are associated with events that have made a significant contribution to the broad patterns of our history; or

(B) that are associated with the lives of persons significant in our past; or

(C) that embody the distinctive characteristics of a type, period,

or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

- (D) that have yielded, or may be likely to yield, information important in prehistory or history.

Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register.

However, such properties will qualify if they fall within the following categories:

- (A) a religious property deriving primary significance from architectural or artistic distinction or historical importance;

or

- (B) a building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or

- (C) a birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life; or

- (D) a cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or
- (E) a reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or
- (F) a property primarily commemorative in intent of design, age, tradition, or symbolic value has invested it with its own historical significance; or
- (G) a property achieving significance within the past 50 years if it of exceptional importance.

B. HISTORICAL PHASES -- EVALUATIONS

1. The Spanish Rancho Period

What is now Huntington Beach first came under European control as a portion of 200,000 acre grant from the Spanish Governor of California, Pedro Fages, to Jose Manuel Nieto in or around 1784. This rancho was called Rancho La Zanja. Nieto's second son, Jose Antonio, married Catarina Ruiz in 1805 and took up residence in the area known as Rancho Las Bolsas. The ranch remained in the hands of his heirs until 1861 when it was purchased by Abel Stearns. The house associated with this early occupation is called the Morillo Adobe. While it is known that it stood on the western side of the Huntington Beach Mesa near

Slater Avenue, its exact location and fate is uncertain.

One possible site of this adobe was located in the course of the survey and research of the area. No positive identification has been made, but several strong lines of indirect evidence suggest that if any trace of this occupation remains, it is in the vicinity of Gothard Street and Slater Avenue to the west of the Standard Oil tank farm, within the boundaries of the new city park. Further research should be conducted toward location of this significant area. It is reasonable to believe that the occupation remains would reflect four significant periods:

- 1) initial European contact with the local Indians;
- 2) Spanish Rancho adaptation to the area;
- 3) the development of the Mexican nation in Alta, California; and
- 4) the transition of the area to the time of the admittance of California to the United States. The occupation would also reflect the continuous occupation by a single related family, not often encountered in the area.

The smaller Rancho La Bolsa Chica was partitioned from Las Bolsas in 1842 and was granted to Joaquin Ruiz only to be acquired by Abel Stearns around 1858. The short duration of occupation greatly lessens its historic significance.

2. Early Statehood -- Grazing and Agriculture

After Las Bolsas was purchased by Stearns, grazing of cattle and

sheep continued. In 1865, after a two year drought, Stearns exper-

ience serious financial problems. With the aid of monetary backing

from San Francisco, the Stearns Rancho Company was formed for the

purpose of subdividing and selling off the 200 square miles held by

Stearns. The Rancho Company outlived Stearns who died in 1871. The

last sale of the Rancho Company was the Huntington Beach Mesa to

Colonel Bob Northam, who was also the last manager of the company.

Northam used the house to conduct the Pancho Company's business

and later his own. In 1901 Northam in turn sold most of his holdings

to a land syndicate headed by P. A. Stanton, who laid out the townsite

then called Pacific Beach.

It is thought that the present house of Colonel Northam might reflect a

local era of ranching and farming of a large tract by a single land

owner at the turn of the century.

Evaluation of Northam House: The structures and grounds were in-

spected and the following evaluation was made: The landscaping and

grounds do not date to 1900. The structure itself was originally of a

rather modest, if not standard, design. Extensive interior modifi-

cations and alterations have removed the structure from the condition

of its original historic period. Location and maintenance of the building and grounds make it aesthetically pleasing, but it does not now, nor did it ever, represent any unique, interesting or innovative architectural structure. The house is not an historically significant site worthy of preservation.

3. Circa 1900 Agricultural Period

The next phase in the local history of Huntington Beach is one of small farming activity specializing in vegetable raising. This phase locally is somewhat in variance with the general countywide contemporaneous orchard type of agriculture; this period is one of the more obvious and best remembered phases. A certain amount of agriculture is still practiced today, and vast bean fields on the flood plains of the Santa Ana River are remembered by most citizens. During the early 1900's this activity represented the principal industry of the area, with the Huntington Beach-Fountain Valley farms producing millions of pounds of table vegetables for the cities of San Diego and San Francisco. The most important property which reflects this era is still present in the City at the Newland Ranch and House.

Evaluation of the Newland House: Much of the original feeling of the property is maintained today. Paintings and landscaping largely date to the turn of the century. The structure itself also remains much the

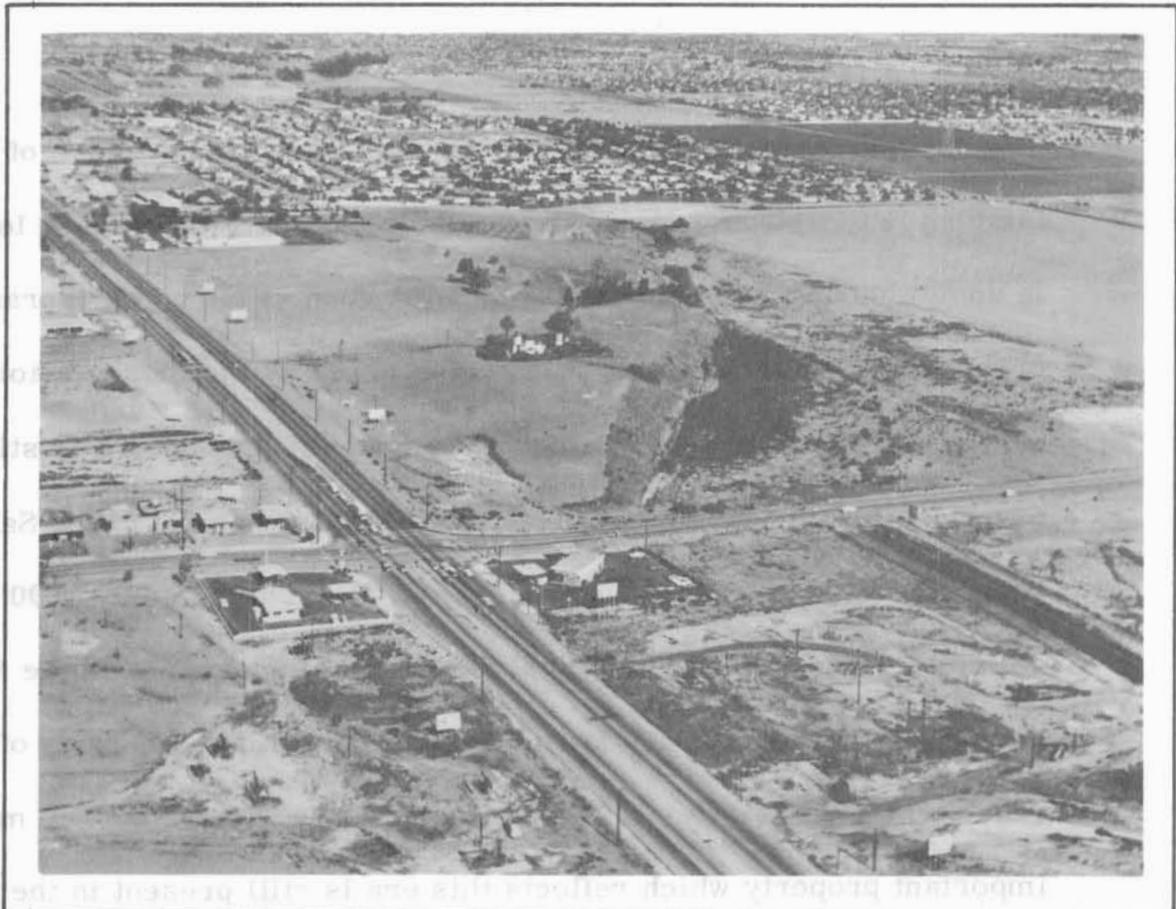


Figure 4: This is an aerial view of the Newland Estate (note the abundant surrounding open areas add to the rural atmosphere).

same as when it was constructed. The architecture is modest and representative of the time.

There is no indication of any unusual or innovative craftsmanship or design. Moderate additions were constructed at different times, but they conformed to the general appearance and feeling of the structure. The significance of the property is based primarily upon the fact that it is the best preserved example of this period within the City of Huntington Beach.

In addition to the building, the property contains an important archaeological deposit and a fresh water marsh of remarkable diversity; in combination the factors make the area valuable and worthy of conservation. Movement of the house or drastic reduction of the surrounding open space or grading of the natural land form may reduce the scientific and historical value of the property.

One other structure worthy of mention (but only in passing) is the remains of the Holly Sugar Factory. Constructed in 1911, it was at the time the most modern factory of its type in the United States. This plant produced 750 tons of sugar per day and employed several hundred workers. The machinery was moved to Torrington, Wyoming, in about 1926. Most of the buildings have since been razed. A similar vintage plant is still in operation in Santa Ana.

4. The Oil Boom

In 1919 the Standard Oil Company acquired a 500 acre lease in the vicinity of Reservoir Hill and began exploratory drilling. The first well, Huntington Beach #1, began production in 1920, yielding 100 barrels per day. A few months later Bolsa Chica #1 came in with a roar that could be heard for miles around! Initially it was reported to be producing 20,000 barrels a day.

The site of Bolsa Chica #1 today is nothing but a vacant pad cut into the Western bluff of the Huntington Beach Mesa. Huntington Beach #1 is marked by a plaque and some vintage equipment is still present.

C. PROGRAM

Some consideration should be given to the Newland House and Ranch area. The house itself could be relocated. If the house is removed, every attempt should be made to move the attendant shrubs and trees.

Further research could be directed towards locating the Morillo Adobe and to record the oral tradition of the area.

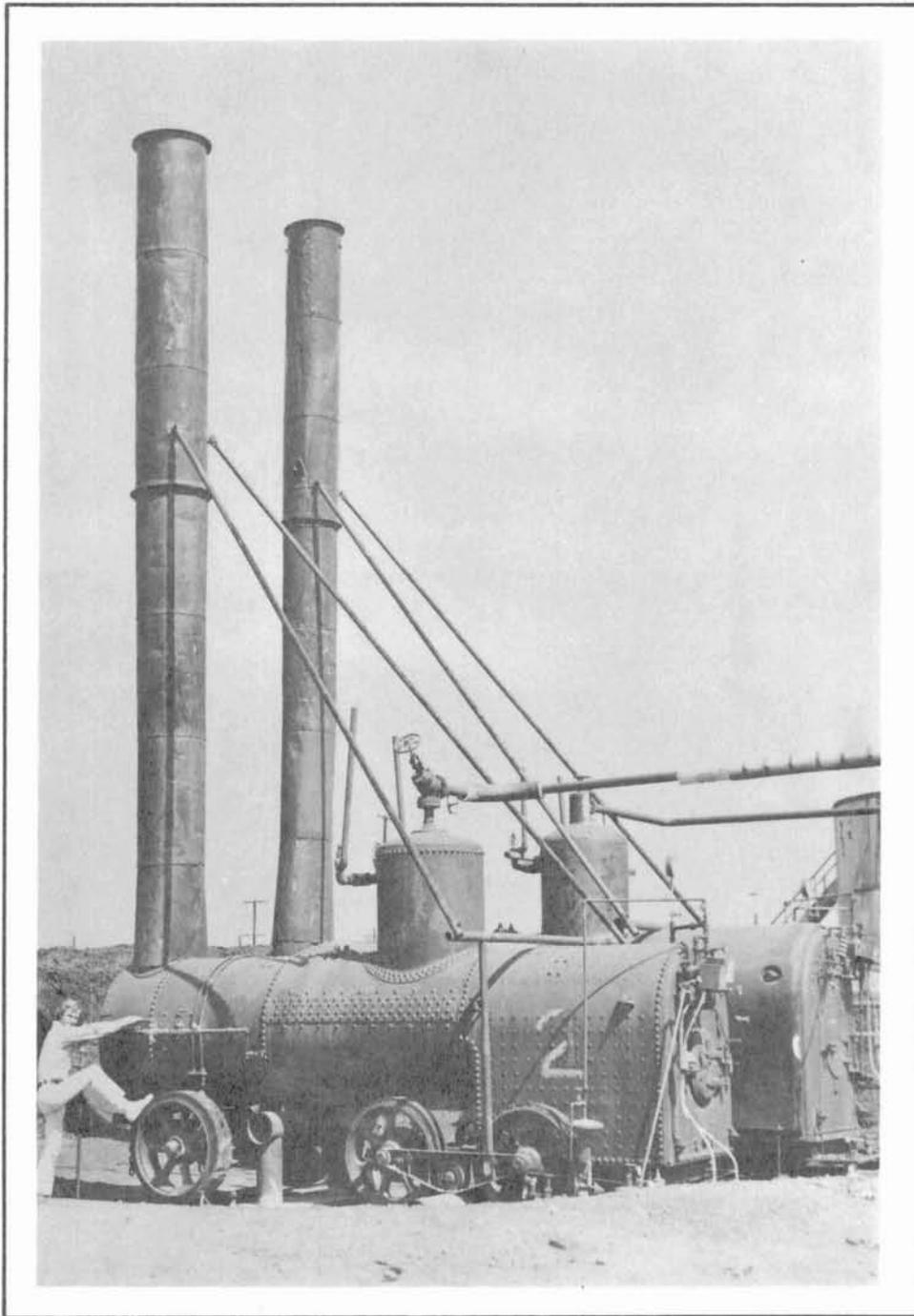


Figure 5: Antique equipment that is located near Huntington Number I.

A. GENERAL SUMMATION

I. Paleontology:

One vertebrate collection site is recorded for the city. The geologic structures and formations are of Pleistocene origin. The sediments of the area are intermixed continental and marine types; these types of strata have, in surrounding areas, yielded numerous remains of prehistoric animals. All specimens will be from one time period. The types of sites that would be worthy of preservation are large complexes of fossil materials. To date none of these have been discovered. If they are encountered they will probably be deeper than five feet below the present surface and therefore only related to grading activities in excess of five feet.

II. Archaeology:

Of the approximately thirty areas of prehistoric occupation recorded within the City the following data shows some disturbing trends. All of the areas have been damaged by recent human activity. Twenty percent are now totally destroyed; forty percent have been damaged to the extent that their scientific value is very limited. Forty percent, although damaged, are considered to be

substantially complete. The report recommends that four areas be completely, or at least partially preserved.

III. History:

There is one and possibly two historic properties in the city worthy of consideration. The Newland Ranch property and perhaps the

Morillo Adobe if it can be located. The Newland Ranch is only

✓ significant in respect to the city's history. Future historic research ✓

and activity should be directed to location of the adobe site and

documentation of persons, events, and areas of the city.

B. PROGRAM

Aside from the recommended programs and areas of future research

given at the end of each section the following general program is

suggested.

The first step would be the enactment of an ordinance to establish a

formal city policy regarding scientific resources. This ordinance

would also provide a method whereby the city may control and coordinate

the different institutions and groups working within the city. (A sample

ordinance is included for reference in the appendix).

✓ Secondly, a single location should be established as the official city

depository of scientific materials. This location should be the permanent storage and display area for the city. The proposed cultural center in the new Central Park Complex or perhaps one of the current city buildings which will be empty after completion of the new Civic Center would be suitable locations. Once this depository is established, a systematic reassemblage of the various fossils, artifacts and antiques could be begun.

The final step would be the organization of an antiquities commission. This commission headed by a city staff member or an appointed person should through consultations with experts in the related fields, local school districts, other city departments, local groups, and, very important, the owners of the involved properties, develop a preliminary plan.

The plan should outline which resources are to be preserved and how the preservation is to be accomplished, to identify, coordinate, and schedule various researchers to study and report on the resources of the city.

C. RECOMMENDATIONS

The major problem area in the city is the disposition of the remaining archaeological deposits. This report's general recommendation that

10% plus one site be preserved is the ideal situation. Due to the general similarities of the deposits within the City preservation of significant parts of three or four different sites would provide a representative sample for future investigation and study.

This recommendation does, of course, raise the question -- which sites should be preserved? Surprisingly from the scientific point of view, in this circumstance, it makes little difference which sites are preserved.

Steps have already been made to preserve Ora-145; thus only two or three other designations need to be made. A logical area would be along the western bluff of the Huntington Beach Mesa, between the new Central Park and the ocean. Along this strip, there are, or were, eight or nine sites; all face the bluff and are rather narrow. Furthermore, surface indications suggest that these sites reflect the overall diversity represented in the City.

This area is also being considered as a linear park connecting the Central Park and the proposed ecologic preserve in Bolsa Chica. Allowing this linear park does come to pass two, three, or all the sites could be incorporated in the park.

As for the remaining sites, the proposed Ordinance would insure that adequate testing and excavation occur. Individual sites which would require protection or preservation in the future could be dealt with separately.

APPENDIX

REFERENCE MATERIAL CITED

1. Kossinna, G. Ursprung und Verbreitung der Germanen in Vor-und fruhgeschichtlicher Zeit, Vol. 1, Leipzig, 1926.
2. Clark, G. Archaeology and Society, Barnes and Noble, New York, 1960.
3. Jahns, R. Geology of Southern California, California Department of Mines Bulletin 170, San Francisco, 1954.
4. _____ . Seawater Intrusion: Bolsa-Sunset Area, California Department of Water Resources Orange County Bulletin No. 63-2, _____ , 1968.
5. Farb, P. Mans Rise to Civilization, E. P. Dutton and Company, New York, 1968.
6. Leakey, L. et al. Pleistocene Man at Calico, San Bernardino County Museum Association, _____ , 1972.
7. Wiley, G. An Introduction to North American Archaeology, Prentice Hall, New Jersey, 1966.
8. _____ . Saddleback Ancestors, Orange County California Genealogical Society, Orange, California, 1969.
9. Kroeber, T. Ishi In Two Worlds, University of California Press, California, 1961.
10. Kroeber, A. Handbook of the California Indians, California Book Company, Ltd., Berkeley, California, 1970

GLOSSARY

REFERENCE MATERIAL CITED

Anticline: an upward folding of the earth's surface, resulting in the formation of an arch.

Archaic tradition: refers to cultures of eastern North American woodland and river valleys, which in the early stages resembled the Desert tradition, but thru time adapted to a forest environment.

Bench: a strip of relatively level earth or rock raised and narrow.

Blind, ceremonial: locally the blind was a large oval or semi-circular area formed by a fence of sticks used for religious purposes.

Culture: generally, culture refers to those non-biological habits and behavior patterns transmitted by and within a society. In archaeology, cultures are defined by the physical remains of their activities.

Desert tradition: refers to cultures based on hunting of modern animals and extensive use of vegetal materials, adapted generally to a semi-arid to arid environment.

Escarpment: a steep face terminating high lands abruptly.

Ethnographic: pertaining to the written description of pre-literate groups, usually made by early travelers.

Family, extended: a series of close relatives, tracing their descent along either the male or female line, usually not along both.

Gabrielino: the indians present in the Los Angeles Basin at the time of Spanish contact. They received their name from the Mission San Gabriel. (for more information, see A. Kroeber, Chapter 44.)

Glossary (cont.)

Gap: a steep sided furrow which cuts transversely across a ridge or rise.

Invertebrate: of, or pertaining to, all the phyla of animals exclusive of the Chordata or animals with notochord or backbones.

Luiseno: the historic indian group which occupied the territory within which the Mission San Luis Rey was located. (for more information, see A. Kroeber, Chapter 46.)

Oral traditions: the verbal history of an area which is passed down without being written or, if it is written, it is written by a second party or after an extended time interval from the occurrence of the event or events.

Physiography: the study of the genesis and evolution of land forms.

Seasonally nomadic: movement within an area caused by the differing availability of food resources related to the seasons.

Society: a group of persons who have lived together long enough to have become organized and to regard themselves as a social unit with clear limits.

Structural zone: an area which is part of or a consequence of a geologic structure.

Sweathouse: similar to a modern steambath or sauna, but used by men like a clubhouse.

Syncline: a downward folding of the earth's surface resulting in the formation of a trough-like structure.

Glossary (cont.)

Tribe: a social group, usually with a definite area, dialect, cultural homogeneity, and unifying social organization.

Vertebrate: phylum of animals possessing a spinal column and other more or less bony parts of an internal skeleton.

Luiseno: the historic Indian group which occupied the territory within which the Mission San Luis Rey was located. (for more information, see A. Kroeber, Chapter 46.)

Oral tradition: the verbal history of an area which is passed down without being written or, if it is written, it is written by a second party or after an extended time interval from the occurrence of the event or events.

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APPENDIX I

In Santa Barbara County there exist irreplaceable historical, archaeological and paleontological resources. These resources, hereinafter referred to as "objects of antiquity,"

The following is a "sample" Ordinance now being considered by the County of Santa Barbara. The basic content of this Ordinance should be considered by the City of Huntington Beach for immediate adoption.

The probable impact of any construction or development activity upon paleontological, archaeological, or historical resources, which are present, will be to damage or destroy them or remove them from their context so as to make them useless for further scientific study. Most of these resources are the only source of information on the past for any period of time before written records are available. In addition, archaeological resources are nonrenewable and irreplaceable. For these reasons, the destruction or damage of resources without adequate recording and documentation of the data in them represents an adverse impact on the environment.

It shall be unlawful for any person or persons, institution, corporation, or co-partnership to remove from context, disturb, destroy, or deface in any fashion whatsoever, or to excavate, or cause to be disturbed or excavated, any object of antiquity in the County of Santa Barbara on either public or private lands without a permit from the Santa Barbara County Planning Department.

The Planning Department shall grant permits dealing with antiquities and shall function within the requirements and definitions set forth in the antiquities ordinance when so granting.

Any person violating the provisions of this ordinance is guilty of a misdemeanor and upon conviction thereof, is punishable by a fine of not more than \$200.00 or by imprisonment in the County Jail for a period not exceeding six months, or both such fine and imprisonment. In the event of a continuing violation, each day that violation continues, constitutes a separate and distinct offense.

In Santa Barbara County there exist irreplaceable historical, archeological and paleontological resources. These resources, hereinafter referred to as "objects of antiquity" include archeological and paleontological sites, burial grounds, artifacts, relics, fossils, fossilized footprints, inscriptions made by human agency, historical buildings and/or landmarks, or other such objects of scientific or historical significance to the citizens of Santa Barbara County. These antiquities may be of great value in formulating the history of the county and in understanding the life-ways of the county's early Indian and historical inhabitants when said antiquities are studied under the supervision of qualified archeologists, paleontologists, historians, or other scientists.

The probable impact of any construction or development activity upon paleontological, archeological, or historical resources, which are present, will be to damage or destroy them or remove them from their context so as to make them useless for further scientific study. Most of these resources are the only source of information on the past for any period of time before written records are available. In addition, archeological resources are nonrenewable and are constantly diminishing at an accelerating rate. For these reasons, the destruction or damage of resources without adequate recording and documentation of the data in them represents an adverse impact on the environment.

It shall be unlawful for any person or persons, institution, corporation, or co-partnership to remove from context, disturb, destroy, or deface in any fashion whatsoever; or to excavate, or cause to be disturbed or excavated, any object of antiquity in the County of Santa Barbara on either public or private lands without a permit from the Santa Barbara County Planning Department.

The Planning Department shall grant permits dealing with antiquities and shall function within the requirements and definitions set forth in the antiquities ordinance when so granting.

Any person violating the provisions of this ordinance is guilty of a misdemeanor and upon conviction thereof, is punishable by a fine of not more than \$500.00 or by imprisonment in the County Jail for a period not exceeding six (6) months, or both such fine and imprisonment. In the event of a continuing violation, each day that violation continues, constitutes a separate and distinct offense.

Antiquities Permits

These permits are necessary prerequisites which will relieve the person or persons altering antiquity sites from incurring the penalty normally issued for such activities.

The Planning Department in accordance with County Ordinance will issue permits of two types under the following conditions:

Type I Permit (Research)

Permits for excavation, analysis and testing of objects of antiquity

(a) Prior to surface collecting, excavating, digging, exploring or disturbing any historic or prehistoric deposit for any purpose such as inventory, analysis, examination, sale, etc., by any person whatsoever, application must first be made to the Santa Barbara County Planning Department by written petition, specifically identifying the site or sites to be excavated and describing the purpose for said excavation.

(b) These permits will be issued to historians, archeologists, anthropologists, paleontologists, or other scientists who are recognized as qualified by their respective profession.

(c) The permits shall be in effect for the period of time designated thereon, and the location shown on the permit; and any other conditions or restrictions indicated.

(d) The permittee shall be required to submit a summary written report to the Santa Barbara County Planning Department within a period of one year after expiration of the excavation and/or research permit.

Type II Permit (Owners, Developers, Contractors)

(a) An order to determine whether objects of antiquity are present on property where any land development is proposed, before a permit will be issued to alter those lands, an antiquity inventory shall be made from existing knowledge of the area; and, where that information is inadequate or incomplete a reconnaissance type survey shall be performed. Alteration includes any land disturbance which is injurious to antiquities present

These permits are necessary to prevent the person or persons who are excavating or otherwise disturbing the property; or changes which alter the land in ways that will expose the antiquities, at a later date, to such adverse effects as accelerated erosion, increased vandalism or other indiscriminate uses.

Type I Permit (Research)

(b) The permittee must provide written proof to the Planning Department that the property has been adequately inventoried for objects of antiquity and, that planned development will not affect these objects or their deposited relationships. If development will affect these antiquities a release shall be required. This release shall be certified by an individual recognized by his profession as competent in the specific field relating to the endangered antiquities.

(c) The inventory shall be directed by a person or persons recognized as competent in the field of archeology, history, anthropology or paleontology by his profession as voiced through an established institution such as the University or State College system, a respected museum or another credible institution having as its major purpose the study of antiquities.

(d) The release shall be in written form and shall include an evaluation of the antiquities and an explanation of how adverse impact upon said antiquities will be alleviated or avoided.

(e) An individual deemed competent by his profession to inventory, analyze and report on antiquities may withhold a release for the beginning or continuance of a project. Said release may be withheld for a period normally not to exceed (90) ninety days.

(f) The permittee shall defray all costs for the inventory and for the subsequent work involved in obtaining and fulfilling the requirements of a release where a release is necessary.

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(g) It is generally supposed that the individual antiquities' specialist who has been engaged by the permittee will assist the permittee in the event that antiquities, which are located on the lands to be developed, are endangered. Some procedures followed in cases where antiquities are threatened are to:

- (a) abandon the projected development or land alterations,
 - (b) change the plans so that the antiquities lie in areas which will not be disturbed by the project,
 - (c) salvage the antiquities by excavation or collection.
- (h) If during land alterations which are the part of a project which has been permitted by the Santa Barbara County Planning Department objects of antiquity are encountered which have not been previously inventoried the permittee shall cease all activity in the area so affected and will not resume activity in that proximity until:
- (a) he has received a written release and has presented the Santa Barbara Planning Department and until the permit has been re-verified; or,
 - until:
 - (b) the permittee has shown that he cannot reasonably acquire such a release.

Any act done under the authority of a written permit issued hereunder shall be in accordance with the terms and conditions of such permit.

In no case shall a permit be approved which contemplates or describes the exhumation or disturbance in any way of graveyards or burial grounds still actively or recently used in whole or in part.

The permittee or owner of the property is required to grant a license for the excavation/analysis and/or publication of antiquities to the recognized person/persons of competence involved with antiquities work on the property, the terms of such a license shall be such as are agreed to by the prospective licensee and property owner/developer or antiquities permittee.

This ordinance shall be and is hereby declared to be in full force and effect as of thirty (30) days after its passage and shall be published once before the expiration of fifteen (15) days after its passage, with the names of the supervisors voting for and against the same in the Santa Barbara News Press, a newspaper of general circulation, published in the County of Santa Barbara.

If any section, sub-section, sentence, clause or phrase of this ordinance is for any reason held to be unconstitutional, or otherwise invalid, said decision shall not affect the validity of the remaining portions of this ordinance. Should any provision, section, sub-section, sentence, clause or phrase of this ordinance be in conflict with state law or cover an area expressly covered by state statute, said statute of the State of California shall prevail in said particulars.

(h) If during land alterations which are the part of a project which has been permitted by the Santa Barbara County Planning Department objects of antiquity are encountered which have not been previously inventoried the permittee shall cease all activity in the area so affected and will not resume activity in that proximity until: (a) he has received a written release and has presented the Santa Barbara Planning Department and until the permit has been re-verified; or, until: (b) the permittee has shown that he cannot reasonably acquire such a release.

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