PHOTODOCUMENTATION

LOS GATOS CREEK TRESTLE

Location: Former Western Pacific Railroad alignment across Los Gatos Creek, near Lincoln Avenue, Willow Glen neighborhood, San Jose, Santa Clara County, California

Present Owner City of San Jose, Parks Department

Present Use Unused

Significance The Los Gatos Creek Bridge was built in 1922 by the Western Pacific Railroad as part of the San Jose Branch, which extended south into Santa Clara County from the Western Pacific's main line at Niles Canyon. This trestle was one of several timber trestles built by the Western Pacific as its line looped in the region to the south and east. The trestle carried a single track over Los Gatos Creek between the opening of the line in 1922 and abandonment of part of this line early in the 21st century. The Los Gatos Creek Trestle has been found not to qualify for listing in the National Register of Historic Places, California Register of Historical Resources, or as a Landmark under the historic preservation program of the City of San Jose. **This photodocumentation is being prepared to ensure a record of this structure for the future and does not imply that the trestle is a significant historical resource.**

Historian Stephen D. Mikesell, Mikesell Historical Consulting, August 2015.

Project Information The abandoned stretch of Western Pacific Railroad San Jose Branch (Lonus Street to Minnesota Avenue) that includes this trestle was purchased by the City of San Jose for future trail development. The City initially planned to repair and rehabilitate this trestle to carry pedestrian and bicycle traffic over Los Gatos Creek as part of the Los Gatos Creek Trail Reach 4 prior to city acquisition.[1] After 10 years and further investigation, however, the City concluded that it was not prudent to rehabilitate this trestle, for reasons outlined in San Jose City Council memorandum of January 14, 2014. Instead, the City will construct a new steel bridge across the creek to carry the traffic of the recreational trail.

[1] Lincoln Auzerais Project Plans & Specifications, February 10, 2006.

Part I. Historical Information

A. Physical History:

1. **Date of Construction.** 1922. The Western Pacific Railroad built its San Jose Branch line in 1921 and 1922, i.e., construction began in 1921 and was completed in 1922. Construction proceeded from north to south. Because this trestle was near the southern terminus of this branch, the trestle was almost certainly built in 1922.
2. **Architect/Engineer.** The Los Gatos Creek Trestle was likely designed by the engineering and maintenance of way staff at the line's headquarters in San Francisco. In 1922, J. W. Williams was the Chief Engineer.[2] The timber bent trestle was a standard bridge type of which the Western Pacific Railroad had likely built hundreds by 1922.
3. **Builder/Contractor/Supplier.** The Western Pacific Railroad generally used its own crews for building track as well as standard design structures. It is quite likely that this trestle was built by Western Pacific's own crews.
4. **Original plans and construction.** No original plans for this structure were located as part of the photodocumentation for this bridge.
5. **Alterations and additions.** In the absence of original plans, it is difficult to document alterations to this structure over time. In general, it appears that the superstructure is largely unmodified. The substructure, however, appears to have been modified substantially through installation of new timber columns. The removal of rails from this branch line in 2010 also affected the integrity of the resource.

B. Historical Context:

The Los Gatos Creek Trestle was built by the Western Pacific Railway in 1922 as part of the San Jose Branch, which connected the City of San Jose and vicinity with the Western Pacific Railroad main line at Niles Canyon in Alameda County.

General History of Western Pacific Railroad

The Western Pacific Railroad[3] has sometimes been called the railroad that was built too late.[4] The chief backer of the line was George Gould, son of the legendary railroader Jay Gould, who felt his access to the California market was stymied by the Southern Pacific Railroad. Under the brief ownership of Edward Harriman in the early 20th century, the Southern Pacific Railroad had taken a much more

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[2] 1922 Annual Report, p. 3.

[3] The line was called the Western Pacific Railway when it was incorporated. The line went into receivership in 1915 and emerged as the Western Pacific Railroad. The latter name will be used except in quotations from historic sources.

[4] Spencer Crump, *Western Pacific: The Railroad that was Built Too Late,* Railway History Quarterly, Jan. 1963. It will be noted that there was an early San Francisco Bay Area railroad called the Western Pacific, which was absorbed into the Central Pacific in the 1870s. The early 20th century line of the same name has no corporate or operational relationship to that pioneer line.

aggressive stance toward Gould's holdings.[5] Gould was particularly concerned about ensuring access to the Port of Oakland, which the Harriman-owned Southern Pacific threatened to deny.

The Western Pacific Railroad was incorporated in 1903 and surveys of the line began almost immediately. The general alignment was to go from Salt Lake City to Oakland. The exact alignment, however, was fraught with difficulties, chiefly because the Southern Pacific already controlled the obvious railroad routes through Utah, Nevada, and California. The eastern end of the route – from Salt Lake City to Reno – was relatively easy to construct, although it was complicated by the need to cross the line of the Southern Pacific at various spots through the Humboldt River valley. The western end of the line, however, required heroic engineering and construction accomplishments. The line entered the Central Valley of California via the Feather River Canyon, a line that extended from Oroville in Butte County to a connection with an old Nevada- California-Oregon Railway (NCO) line, through what is commonly called the Beckwourth Pass. The Western Pacific line through the Feather River Canyon creates one of the most scenic railroad alignments in the United States and is the subject of many books.[6] The Feather River route also includes some of the most dramatic and significant railroad tunnels and bridges in the United States, which are commonly called out in national studies on railroad structures.[7]

In the San Francisco Bay Area, the Western Pacific Railroad found itself forced to wiggle around the lines of the Southern Pacific, which controlled all of the obvious passes and bridge sites. One key site was Niles Canyon, which connects the flatlands around the Bay in modern Fremont with the San Ramon Valley. The Niles Canyon alignment was first used in the 1860s by a pioneer line, also called the Western Pacific, but which has no corporate relationship with the early 20th century line. The old Western Pacific built through the canyon in 1865 but went bankrupt and was purchased by the Central Pacific.[8] The other difficult crossing the Western Pacific had to endure was the Altamont Pass, separating the Port of Stockton and the Central Valley from the San Ramon Valley and the Niles Canyon connector.

The old Niles Canyon route proved to be less useful than a more direct route between Oakland and Sacramento pioneered by the California Pacific Railroad, which extended from Oakland to Sacramento via a ferry crossing at Vallejo. The California Pacific alignment would prove to be the principal route for the Southern Pacific, relegating the Niles Canyon route to a secondary service. Nonetheless, the Southern Pacific still controlled and was using and upgrading the Niles Canyon alignment when the Western Pacific Railroad began to build its way through the Bay Area in 1909. The Western Pacific 1909 alignment proved to be superior to that of the older Western Pacific. The 1909 line of the Western Pacific is now used by Union Pacific freight trains as well as the busy Altamont Commuter Express passenger service.

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[5] Richard Orsi, *Sunset Limited: The Southern Pacific Railroad and the Development of the American West, 1850-1930,* University of California Press, 2005; David F. Myrick, *Railroads of Nevada and Eastern California: The Northern Roads*; Donald L. Hofsommer, *The Southern Pacific, 1901-1985,* Texas A&M Press, 1986.

[6] See, for example, Ken Rattenne, *The Feather River Route: A Geographical Tour, Son Francisco to Keddie,* Two Volumes, 1980.

[7] There are relatively few books on railroad bridges, relative to those on highway bridges. Two good examples that feature the Feather River bridges are: Brian Solomon, *North American Railroad Bridges,* Voyageur Press, 2008, and Robert J. Cook, *The Beauty of Railroad Bridges,* Golden West Books, 1987.

[8] Henry Luna, *Niles Canyon Railways,* Arcadia Press, 2005.

The Western Pacific Railroad was never successful financially and the company went bankrupt in 1935. It was reorganized and continued in independent operation until it was purchased by the Union Pacific Railroad in the 1960s. When the Union Pacific purchased the Southern Pacific in the 1990s, Class 1 railroad service in Northern California was consolidated into a single carrier.

Western Pacific San Jose Branch Line

In the early 20th century, the Western Pacific Railroad purchased or built short lines or branches to increase its freight revenue. This issue was broached in a 1915 report of the California Railroad Commission, Rate Department, "Report on Western Pacific Railway," April 1, 1915. [9] The author of the report notes that the newly-built line, if it were to succeed, would need to move into additional markets through the purchase of existing short lines or through construction of branches. The report analyzed various commodities that might add to the profitability of the line and discussed various planned or contemplated extensions from the main line from Oakland to the Feather River Canyon.
The Western Pacific did build many such lines. One extension was made using the old Nevada-California-Oregon Railway (NCO) tracks to connect with Reno, Nevada.[10] Another acquisition was the Boca and Loyalton in the Sierra Valley.[11] Another line, built in 1917, connected with the Toole Valley in Utah.[12] Still another line extended from Stockton south to Turlock. In 1918, when the railroad was under federal control, it reported that it was operating 87 miles of branch lines in California, Nevada, and Utah.[13]

The 1915 Railroad Commission report discussed the possibility of a relatively short branch line from Niles Canyon to the San Jose area. "It goes without saying that the Western Pacific Railway should be constructed south of Niles to San Jose at which point very large terminal facilities should be purchased so as to encourage construction of packing houses and industries on the rails of the new line."[14]
In 1917, the Western Pacific Railroad was reorganized from receivership and its funding was more dependable. It began to contemplate some expansion, including the branch line to San Jose. American entry into World War I, however, put the line into federal control and delayed any such construction. The work began on the San Jose Branch in 1921 and was completed in 1922. The 1921 Annual Report for the railroad expressed optimism that the San Jose Branch would help increase freight traffic. "The outlook is for better freight traffic in 1922 than in 1921. The extension of the Western Pacific line into San Jose and the Santa Clara Valley and a number of minor extensions which together are of substantial importance have recently been completed and should contribute to 1922 revenue."[15]

Many commentators, including the staff of the California Railroad Commission, felt that it was most logical for the Western Pacific to use existing Southern Pacific tracks to get from Niles Canyon to downtown San Jose. At this point, however, the Southern Pacific and Western Pacific were unwilling to engage in any discussions about shared trackage or any other type of cooperation. Instead, the Western

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[9] California Railroad Commission, Rate Department, "Report on Western Pacific Railway," April 1, 1915
[10] Myrick, 338.
[11] Western Pacific Railroad, First Annual Report, 1916, 6.
[12] Western Pacific Railroad, Second Annual Report, 1917, 6.
[13] Western Pacific Railroad, Third Annual Report, 1918, 6. The importance of "feeder" lines is discussed in detail by Crump, who argues that the absence of such feeder lines was ultimately the undoing of the late-arriving transcontinental line.
[14] California Railroad Commission, Rate Department, "Report on Western Pacific Railway," April 1, 1915, 16.
[15] Western Pacific Railroad, Sixth Annual Report, 1921, 6.

Pacific chose a great looping approach to San Jose in what many have called a huge fishhook, with a north-south shaft and a hook that turned to the west. It entered the city at the northeast, roughly paralleling Coyote Creek in a north-south direction. It passed near the modern San Jose Municipal Golf Course, crossing Santa Clara Street near where U.S. 101 now crosses Santa Clara. The line turned west near the corner of Senter and Phelan. It looped west into the community of Willow Glen, crossing the Guadalupe River and Los Gatos Creek, before heading due north into old San Jose. It terminated at stops at The Alameda and Sunol Street.

The Western Pacific acquired the Sacramento Northern electric line in an attempt to broaden its market. In 1982, the Western Pacific was acquired by the Union Pacific Railroad. The Union Pacific continues to use most of the Western Pacific "fishhook" though San Jose. The hook through Willow Glen was I taken out of service in recent years and the Union Pacific Railroad removed the track in about 2010.[16] The Union Pacific salvaged the valuable rails but left in place the railroad bed and many structures. The Los Gatos Creek Trestle was left in place but all rail was removed on either side of it and on the structure itself. [17]

Packing Industry in San Jose

One of the main reasons the Western Pacific Railroad decided to build a line from Niles Canyon to San Jose was to take advantage of the fast growing fruit packing business there. Although fruit had been dried for decades before the coming of the Western Pacific Railroad, the Western Pacific did enter the city at a time in which the business was growing rapidly.

There was a bumper crop of fruit in the Santa Clara County region during the 1870s, leading local farmers and businessmen to search for ways to preserve the crop long enough to be shipped outside the local market. Fruit drying and canning would emerge as the preferred method. Santa Clara County entrepreneurs would make great innovations in the business of fruit packing.[18]

These experiments led to the organization of the San Jose Fruit Packing Company in 1875, which would become a major part of the California Packing Company, or Calpak, which would in turn become the modern Del Monte Corporation. Experimentation included both fruit drying (especially useful for the huge apricot and plum crops) and fruit canning, favored for peaches. The innovations concerned the horticulture as well as industrial methods, especially as they pertained to automation in the drying and canning operations.

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[16] Holmes, Norman H., *Prune Country Railroading: Steel Rails to San Jose*, Shadetree Books, 1985, 162, shows a map of the lines still in use and the parts through Willow Glen that were abandoned.

[17]Camp Dresser & McKee, "Removal Action Plan Workshop Willow Glen Right of Way Minnesota Avenue to Lonus Street, San Jose California, November 8, 2010.

[18] The history of fruit packing in the region, oriented toward extant resources, is told in two very interesting places. One is a website, "Cannery Life: Del Monte in the Santa Clara Valley." http://www.historysanjose.org/cannerylife/canned-topics/del-monte-brand.html A second is a text for a tour of cannery sites in San Jose, prepared for the Society for Industrial Archaeology, May-June, 2008. See also: Robert James Claus, "Fruit and Vegetable Canning Industry in the Santa Clara Valley," MA Thesis, San Jose State, August 1966.

This industry was successful but still growing by the time the Western Pacific Railroad completed its branch to San Jose. The Calpak company was organized in 1916 and it first marketed its Del Monte brand in 1917. Calpak had small and large factories throughout the region by 1922. The Muirson Label company, which was responsible for many colorful fruit can and box labels, was also in operation prior to 1922.[19]

This industry had grown around the railroad network of the Southern Pacific Railroad long before the Western Pacific Railroad built to San Jose in 1922.[20] The Southern Pacific controlled a tangle of freight lines through San Jose from lines it developed and especially the line it acquired when it took control of the South Pacific Coast Railroad. The Southern Pacific got control of the South Pacific Coast in 1887 and converted it to standard gauge through dual-tracking in 1904.[21]

The 1932 Sanborn Fire Insurance Maps offer a glimpse of how canners and railroads interacted at the height of the canning industry.[22] Three facts are clear. First, packers are everywhere in the city. Second, there was a critical mass of packing and railroad resources at the huge Calpak Plant No. 3 at San Carlos and Los Gatos Creek, and at Plant No. 51 at Bush and San Fernando. Plant No. 3 was served directly only by the Southern Pacific but the Western Pacific tracks were nearby. Plant No. 51 was served only by the Southern Pacific Railroad. Third, while the Southern Pacific tracks appear to have offered more direct access, a packer could get a car to the Western Pacific through track linkages.

The Annual Reports of the Western Pacific Railroad suggest that the Western Pacific was an active but not dominant shipper of produce from the Santa Clara Valley. The report does not isolate tonnage by point of origin. It does, however, differentiate as to the type of tonnage. One category, particularly apropos for the San Jose area, was "dried fruit." In 1921, before the San Jose Branch was built, the Western Pacific shipped 7,626 tons of dried fruit. In 1922, when the San Jose branch was active, that figure jumped to 24,360, nearly a four-fold increase, almost certainly attributable to tapping the San Jose market. Between 1922 and 1930, that figure remained consistent: 20,560 in 1923, 23,602 in 1924, 34,321 in 1925, 37,220 in 1926, 44,781 in 1927, 36,157 in 1928, 28,875 in 1929, and 29,605 in 1930.[23] Again, these figures are not specific to Santa Clara County and may have been influenced by shipping elsewhere, such as Butte County, where dried fruit was also important.

Was the Western Pacific dominant in shipping dried fruit? One way to measure this is to compare the Western Pacific tonnage figure with the amount shipped by the Southern Pacific. In 1921, the Southern Pacific shipped 515,584 tons of dried fruit, compared with 7,626 tons for Western Pacific.[24] In 1922, the

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[19] SIA walking tour guide. See also another website history, "Label Legacy," dealing with the Muirson label, at http://www.historysanjose.org/labellegacy/places/rancho_el_potrero.html

[20] The most useful general history of railroad development in San Jose is: Norman W. Holmes, *Prune Country Railroading: Steel Trails to San Jose,* Huntington Beach, CA, 1985.

[21] Bruce A. MacGregor and Richard Truesdale, *South Pacific Coast*, Pruett Publishing Company, 1982.

[22] The California Room at the Martin Luther King, Jr. Library in downtown San Jose has a wonderfully intact paper copy of the 1932 Sanborn maps for San Jose.

[23] Annual Reports, Western Pacific Railroad 1921-1930. Available online from the Western Pacific Railroad Museum.

[24] Southern Pacific Company, Annual Reports, 1921-1930. On file at the California Railroad Museum Library.

Southern Pacific figure was 568,501, compared with 24,360 for the Western Pacific. Similar figures were maintained throughout the 1920s: 517,431 in 1923 (20,560 for the Western Pacific); 634,261 in 1924 (23,602 for the Western Pacific); 649,339 in 1925 (34,321 for the Western Pacific); 651,729 in 1926 (37,220 for the Western Pacific); 699,002 in 1927 (44,781 for the Western Pacific); 629,711 in 1928 (36,157 for the Western Pacific); 387,107 in 1929 (28,875 for the Western Pacific); and 399,610 in 1930 (29,605 for the Western Pacific). Neither the Western Pacific nor the Southern Pacific Annual Reports break down shipping by point of origin. Dried fruit was selected as a good indicator of activity in San Jose because of the dominance of Santa Clara County in the production of dried apricots and prunes. In this key measure, the Southern Pacific between 1921 and 1930 shipped between 10 and 20 times as much dried fruit as the Western Pacific.

The Timber Trestle in Bridge Engineering

The timber trestle has been a mainstay of railroad bridge design since the earliest years of American railroad construction and operation, and remains so today. Simply stated, the timber trestle is by far the most common railroad bridge type, particularly in reference to smaller branch lines, such as the San Jose Branch of the Western Pacific Railroad.

A sense of the place of the timber trestle in standard railroad operation is gained from a 1917 publication by Wilcott C. Foster, entitled *A Treatise on Wooden Trestle Bridges According to the Present Practice on American Railroads.*[25] This was written a few years before the Los Gatos Creek Trestle was constructed and is useful in assessing how and why this bridge type was selected for this crossing. Foster begins his discussion by estimating how many timber trestles may have been in place at that time. He writes:

> The amount of Timber Trestling in this country is very large, but few probably realizing its extent unless they have thoroughly studied the subject. At the present time there are about 2400 miles of single-track railway-trestle in the United States, of which we can consider about one quarter as only temporary, to be replaced by embankment. Of the remaining 1800 miles, at least 800 miles will be maintained in wood.[26]

Foster approximates the number of timber trestles, calculated on the basis of an average distribution across the country, to be more than 700,000 nationwide. Foster goes on to express his opinion as to why the timber trestle was such a common part of the American railroad landscape. "The great extent to which timber trestling has been adopted in this country is one of the principal factors in the economy of construction and rapidity of completion which have been characteristic of American railroad construction."[27] The timber trestle, in short, allowed a line to be built quickly and inexpensively with the hope that, as revenue increased for the new line, the wooden bridges could be replaced by steel bridges or embankments.

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[25]Wilcott C. Foster, *A Treatise on Wooden Trestle Bridges According to the Present Practice on American Railroads*, 1917 Edition.

[26] Foster, 1.

[27] Foster, 4.

To a surprising degree, timber trestles appear to be nearly as common today as they were in 1917. The AREMA publishes a *Practical Guide to Railway Engineering,* an encyclopedic guide to all aspects of railroad engineering, which includes a chapter on timber structures. The author of this chapter comments on the common nature of timber trestles: "While the advent of economical steel construction has more or less eliminated timber from new mainline structures of any size, the lower initial cost and ease of construction still makes timber construction attractive for many light density lines. Additionally, because of the relative ease of repair, many significant older timber structures remain in service today. In all of North America, timber trestles are the preponderant type of structure still found on branch lines, short lines and at temporary crossings."[28] This analysis suggests two things. First, railroads keep older timber trestles in service "because of the relative ease of repair." Second, it suggests that for branch lines or short lines, the timber trestle is preferred, even for new construction.

The common presence of timber trestles was also noted in a recent study of railroad bridge safety prepared by the General Accounting Office, or GAO. In this 2007 report on railroad bridge safety, the GAO cited a 1999 survey by the Federal Railroad Administration that found there are 61,000 bridges on Class I railroad lines.[29] Of these, 36 percent are made of timber, making wood the most common bridge material for railroad bridges; the other materials are steel (32 percent), masonry (20 percent) and unidentified materials for the remainder. If these figures are accurate, there are 19,520 timber bridges in use by Class I railroads in the United States. There are also 15,000 bridges owned by Class II and III lines, of which more than 5,000 are timber. Relying upon this large-scale data, it is reasonable to expect that there are more than 24,000 timber bridges in use by railroads today. That number would not include the Los Gatos Creek Bridge, which is not in current railroad use.

One of the key conclusions of the GAO report is that neither the federal government nor the states have systems in place for inspecting railroad bridges or even for knowing how many railroad bridges are in place. This is in stark contrast to the situation with highway bridges, where both the states and the federal government maintain very accurate lists of such bridges as well as the results of regular safety maintenance inspections. As a result, it is far more difficult to draw conclusions about the actual percentages associated with any one bridge type, including the timber trestle. The conclusions of the GAO and the AREMA, however, are that the trestle is the most common type of bridge, especially on branch lines or on Class II or III lines.

Part II. Structural/Design Information

A. General Statement

Character. The Los Gatos Creek Trestle exists along the former right of way for the Western Pacific Railroad in the San Jose neighborhood of Willow Glen. The right of way is now maintained as the Los Gatos Creek Trail by the City of San Jose. The Los Gatos Creek Trestle crosses Los Gatos Creek between Coe Avenue and Lonus Street, very near the I-280 crossing of Lincoln Boulevard in the Willow Glen neighborhood. The Los Gatos Creek Trestle is an open-deck pile-supported trestle that has an overall

[28] American Railway Engineering and Maintenance of Way Association, or AREMA, *Practical Guide to Railway Engineering*, 2007. Chapter 8-11.

[29] General Accounting Office, "Railroad Bridges and Tunnels: Federal Role in Providing Safety Oversight and Freight Infrastructure Investment Could Be Better Targeted," GAO 07-770, 2007, 6.

span length of 210.5 feet and is approximately 25 feet high at its tallest point. The trestle was constructed by the Western Pacific Railroad in 1922 but the tracks have been removed from the structure which is now owned by the City of San Jose. The structure is supported by two timber pile abutments and thirteen timber pile bents. The bents range in size and geometry at each location, but the longitudinal spacing of the bents is constant at approximately 15 feet. The bents have a skew angle of 9.5 degrees. The structure construction is generally in conformance with past and current editions of the AREMA (American Railway Engineering and Maintenance of Way Association) Manual for Railway Engineering for pile bent trestles.

Condition of Fabric. The timber members of the Los Gatos Creek Trestle are in generally poor condition, with the most deteriorated members being those at the bents, which have been exposed to water.

Description:
The Los Gatos Creek Trestle is a single track timber trestle, built by the Western Pacific Railroad in 1922 or 1923. It is 210.5' long between its abutments. The height of the structure varies greatly, being about 25' high at the center (across the creek) and varying in height to near zero at the abutments. The structure is 18' wide at the pile caps and at the ties on the deck. For ease of description, the structure may be seen as comprising a superstructure, which includes the deck and stringers that support it, and a substructure, which comprises the pile bents and abutments.

The superstructures comprises three elements: 18' long transverse ties; 10' long transverse ties; and longitudinal stringers running the 210'5' length of the structure. The 18' long ties are 4" x 8" and spaced on 5' centers. The 10' long are 8" x 8" and are spaced about 13' on center. The 4" x 8" ties are nailed to the 8" x 8" ties. The two longitudinal stringers were situated below the rails (the rails have been removed). Each stringer comprises four 8" x 20" boards bolted to form a single stringer.
The substructure comprises two abutments and 13 pile bents.[30] The bents and abutments comprises round timber piles driven into the soil, topped by a transverse beam, called a pile cap. Each pile can is 18' wide and is built of a 14" x 14" board. The piles are not consistent in dimension, ranging from 12" to 16" in diameter.

The 13 pile bents differ as to height, number of piles, and the nature of cross bracing. It appears the trestle was originally designed to include either five or six piles per bent. Six piles per bent is the most common configuration. The number of piles varies, however, from five in two bents, seven in two bents, and eight in one bent.[31]The variation in the number of piles per bents strongly suggests that the substructure was modified on an as-needed basis, with new bents added to bolster, or soldier, a bent that included piles that were structurally diminished. Supporting this notion is the fact that where there are more than six piles, the additional piles are placed adjacent to a pile with structural difficulties.

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[30] Inspection reports for this bridge treat these elements as 15 pile bents because there are driven piles at the abutments.

[31] The technical data on the trestle is derived in large part from CH2MHill, "Field Inspection Report, Three Creeks Trail Railroad Trestle at Los Gatos Creek," June 7, 2012

The general dimensions and appearance of the structure are shown in the attached "Typical Trestle Cross Section," developed by AN West Consulting Engineers in 2007, during planning efforts to see if this trestle could be reused as part of theLos Gatos Creek Trail Project.

Site Information:

The Los Gatos Creek Trestle is located in the Willow Glen neighborhood of San Jose, south and a little west of the downtown core of the city. While the Willow Glen neighborhood is densely settled, the immediate setting for the trestle is isolated from the neighborhood, owing to the fact that it is on an old railroad line. The piers for the trestle pass across Los Gatos Creek, a 24 mile long tributary of the Guadalupe River, which under ordinary circumstances carries some water year around.

PART III. Sources of Information

A. Primary Sources

American Railway Engineering and Maintenance of Way Association, or AREMA, *Practical Guide to Railway Engineering*, 2007.

California Railroad Commission, Rate Department, "Report on Western Pacific Railway," April 1, 1915.

Camp Dresser & McKee, "Removal Action Plan Workshop Willow Glen Right of Way Minnesota Avenue to Lonus Street, San Jose California, November 8, 2010.

CH2MHill, "Field Inspection Report, Three Creeks Trail Railroad Trestle at Los Gatos Creek," June 7, 2012.

General Accounting Office, "Railroad Bridges and Tunnels: Federal Role in Providing Safety Oversight and Freight Infrastructure Investment Could Be Better Targeted," GAO 07-770, 2007.

Sanborn Fire Insurance Maps, San Jose, 1932.

Southern Pacific Railroad, Annual Reports, 1921-1920.

Western Pacific Railroad, Annual Reports, 1915-1929.

B. Secondary Sources

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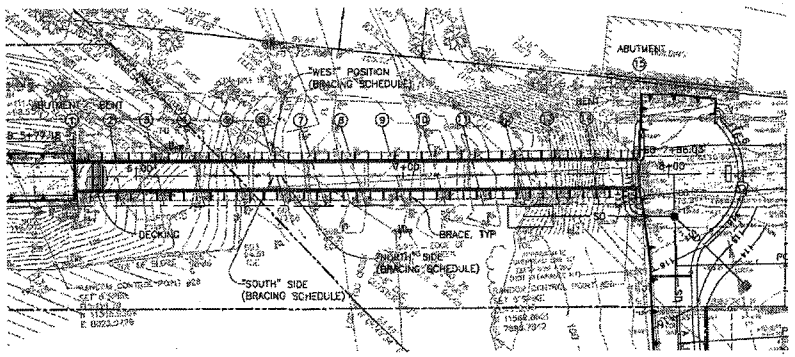
Ratenne, Ken, *The Feather River Route: A Geographical Tour, Son Francisco to Keddie,* Two Volumes, 1980.

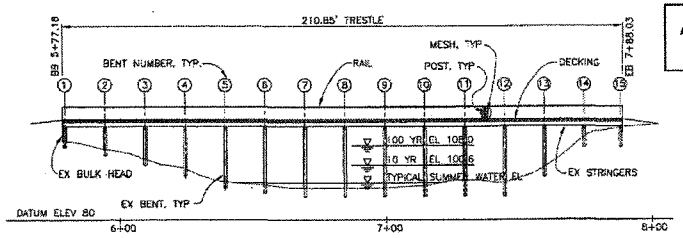
Solomon, Brian, *North American Railroad Bridges,* Voyageur Press, 2008.

C. Likely Sources Not Yet Investigated

The records of the Western Pacific Railroad have scattered, following dissolution of the company in the 1960s. It is possible the plans for this trestle are located at the Union Pacific Company archives in Omaha, Nebraska. The likelihood is low, however, that the company maintained records for such a common bridge type. It is also possible these plans are maintained in the Western Pacific Museum in remote Portola, California.

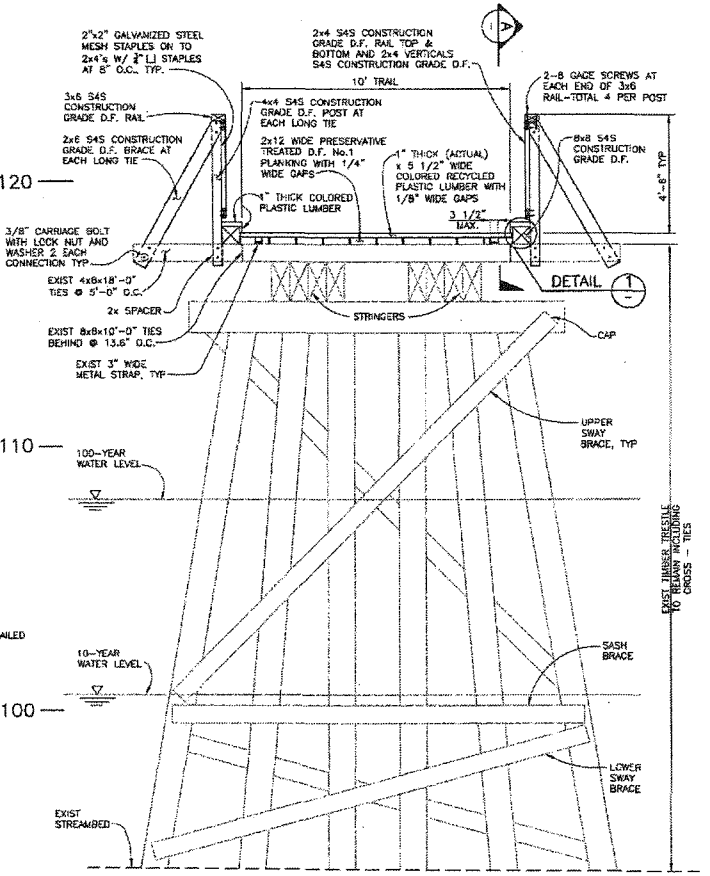


PLAN
1"=20'



ELEVATION
1"=20'

ALL WORK SHOWN ON THIS DRAWING IS NIC



NOTES:

1. EXISTING RAILS AND TRACK HARDWARE HAVE BEEN REMOVED

TYPICAL TRESTLE CROSS SECTION
1"=2'

S:

OVE 84 EXISTING 4"x4"x5' LONG RAILING POSTS AND CABLE
ACH SIDE OF THE TRESTLE AS DIRECTED BY THE ENGINEER.
4 NO. 5' LONG METAL POSTS.

LACE 35 DETERIORATED 8"x8"x10' LONG TIES AND REPLACE
NORATED 4"x8"x18' LONG TIES AS DIRECTED BY THE ENGINEER.
OP SURFACES OF NEW TIES AND EXISTING 43 LONG TIES TO
ELEVATION OF EXISTING ADJACENT TIES. DISPOSE OF REMOVED
D SHAVINGS IN ACCORDANCE WITH EPA APPROVED CONSUMER
ITION SHEET.

OVE APPROX. 130 DRIFT BOLTS PENETRATING THROUGH
O STRINGERS TO THE EXTENT NECESSARY TO INSTALL
DINAL PLANKING. REPLACE WITH NEW 3/4" DIA GALVANIZED
OLTS RECESSED BELOW SURFACE OF TIE AND PENETRATING
INTO CAP BELOW.

OVE 421 LINEAR FEET OF EXISTING 3'-2" WIDE 1" DEEP
ZED METAL GRATING AND METAL CLIPS.

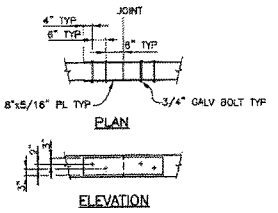
LACE 117 LINEAR FEET OF 8"x8" NOMINAL SASH BRACING
6" NOMINAL SWAY BRACING WITH NEW PRESERVATIVE
T TIMBER PER SCHEDULE BELOW. CONNECT TO EXISTING
EEL SPLICE PLATES AND BOLTS PER TYP. SPLICE DETAIL.
ECT TO PILES USING NEW BOLTS AND SPACER BLOCKS.

EW 1" THICK COLORED RECYCLED PLASTIC LUMBER
PLANKING WITH DECKING SCREWS, AS RECOMMENDED
TIC LUMBER MANUFACTURER.

HEAVY EQUIPMENT TO BE USED IN CHANNEL.
EAM DIVERSION ALLOWED.

STLE RAILING DESIGNED IN ACCORDANCE WITH CALTRANS
DESIGN SPECIFICATIONS 2.7.2.

ER DESIGN TO 2001 CALIFORNIA BUILDING CODE, VOLUME 2,
ED WITH 1997 UNIFORM BUILDING CODE, VOLUME 2.

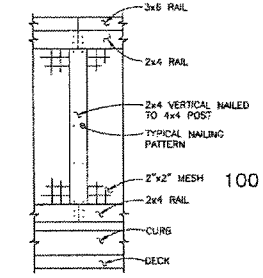


TYPICAL SPLICE DETAIL
1"=2'

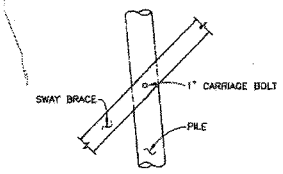
BRACING SCHEDULE

NOTES:
"ALL" REFERS TO REPLACEMENT OF COMPLETE BRACE.
"NORTH", "SOUTH", & "WEST" AS INDICATED FOR BENT 6 ON PLAN.

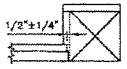
BENT NO.	BRACE	LOCATION: SIDE	LOCATION: POSITION	LF REPLACE
6	LOWER SWAY	NORTH	WEST	16
	SASH	NORTH	WEST	4
7	SASH	SOUTH	ALL	21
8	SASH	SOUTH	ALL	21
9	SASH	SOUTH	WEST	10
11	SASH	NORTH	WEST	12
	SASH	SOUTH	WEST	12
12	SASH	SOUTH	ALL	21



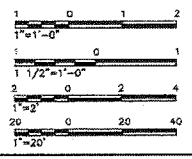
SECTION A
1"=1'-0"



TYPICAL SWAY BRACE CONNECTION
1"=2'



DETAIL 1
1 1/2"=1'-0"



AMWEST INC
Consulting Engineers

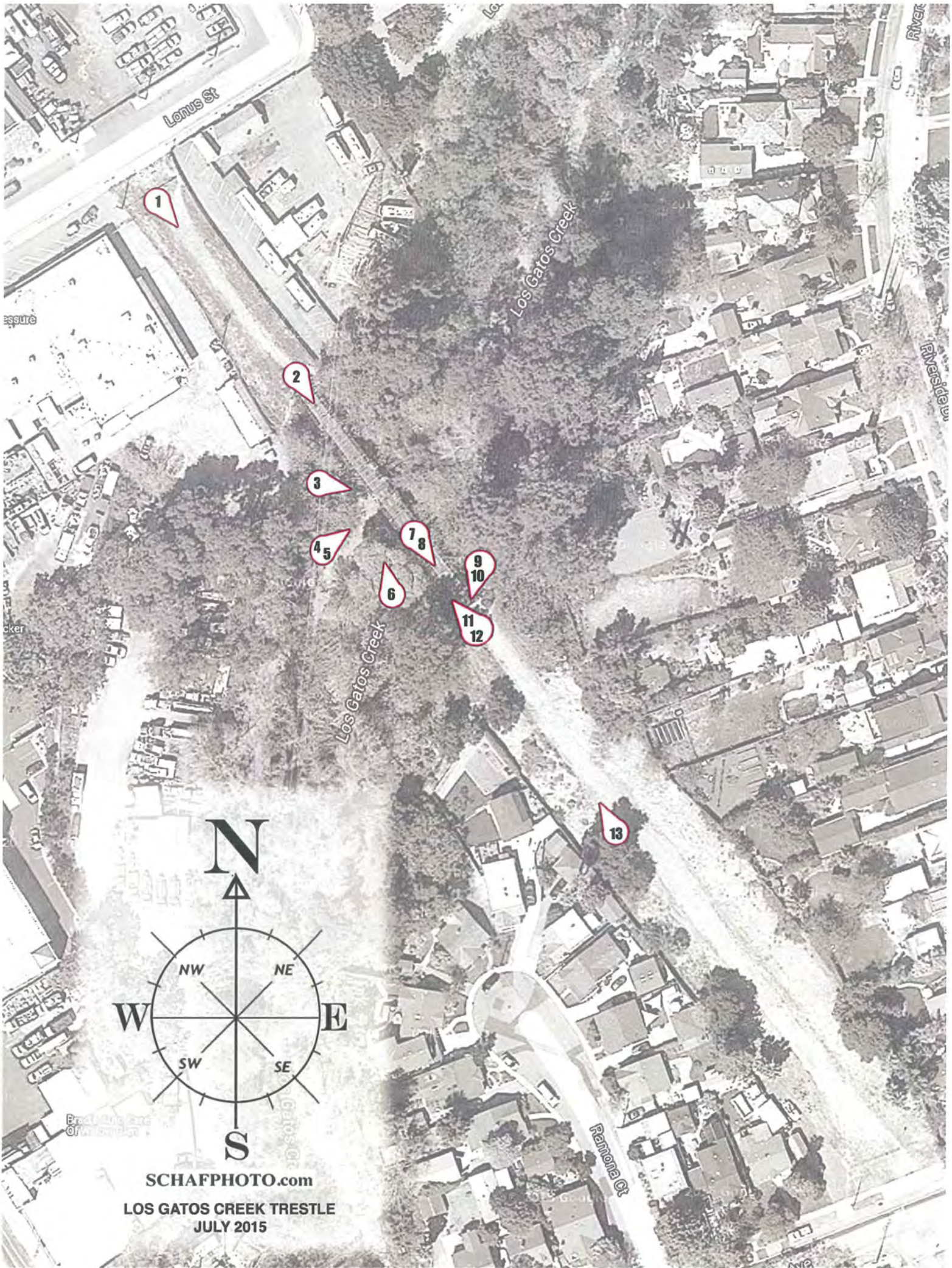
INDEX TO PHOTOGRAPHS

LOS GATOS CREEK TRESTLE
LINCOLN AVENUE VICINITY
WILLOW GLEN NEIGHBORHOOD
CITY OF SAN JOSE
SANTA CLARA COUNTY
CALIFORNIA

Note 1: The number following the caption in [brackets] represents the order in which the photographs were exposed and their corresponding view-number on the field notes.
Note 2: The Los Gatos Creek Trestle has been found not to qualify for listing in the National Register of Historic Places, California Register of Historical Resources, or as a Landmark under the historic preservation program of the City of San Jose. Preparation of this photodocumentation is being prepared to ensure a record of this structure for the future and does not imply that the trestle is a significant historical resource.

Stephen D. Schafer, Photographer, JULY 2015

PHOTO-1	CONTEXT VIEW OF APPROACH FROM NORTH OF TRESTLE. CAMERA POSITION IS NEAR LONUS STREET ATOP TRUCK. A SAFETY METAL FENCE IS VISIBLE AT THE NORTH END OF THE TRESTLE IN CENTER OF THE PHOTO. VERTICAL. CAMERA HEIGHT 11', FACING SOUTHEAST. [12]
PHOTO-2	VIEW OF OPEN-DECK OF TRESTLE DOWN CENTERLINE OF DECK. CAMERA POSITION IS ALIGNED WITH SAFETY METAL FENCE AT THE NORTH END OF THE TRESTLE ATOP NORTH ABUTMENT. CAMERA HEIGHT 5', FACING SOUTHEAST. [13]
PHOTO-3	OVERALL OBLIQUE VIEW OF MID-SPAN OF TRESTLE SUBSTRUCTURE FROM CREEK BANK BELOW. CAMERA HEIGHT 5', FACING EAST SOUTHEAST. [10]
PHOTO-4	ORTHOGONAL VIEW OF TALLEST PART OF MID-SPAN OF TRESTLE FROM CREEK BED. VERTICAL. CAMERA HEIGHT 5', FACING NORTHEAST. [8]
PHOTO-5	DUPLICATE OF PHOTO #4 WITH SCALE. ORTHOGONAL VIEW OF TALLEST PART OF MID-SPAN OF TRESTLE FROM CREEK BED. (12' SCALE IN TENTHS) VERTICAL. CAMERA HEIGHT 5', FACING NORTHEAST. [9]


Lonus St
Los Gatos Creek
Los Gatos Creek
Los Gatos Creek
Riverside
Ramona Ct
1
2
3
4
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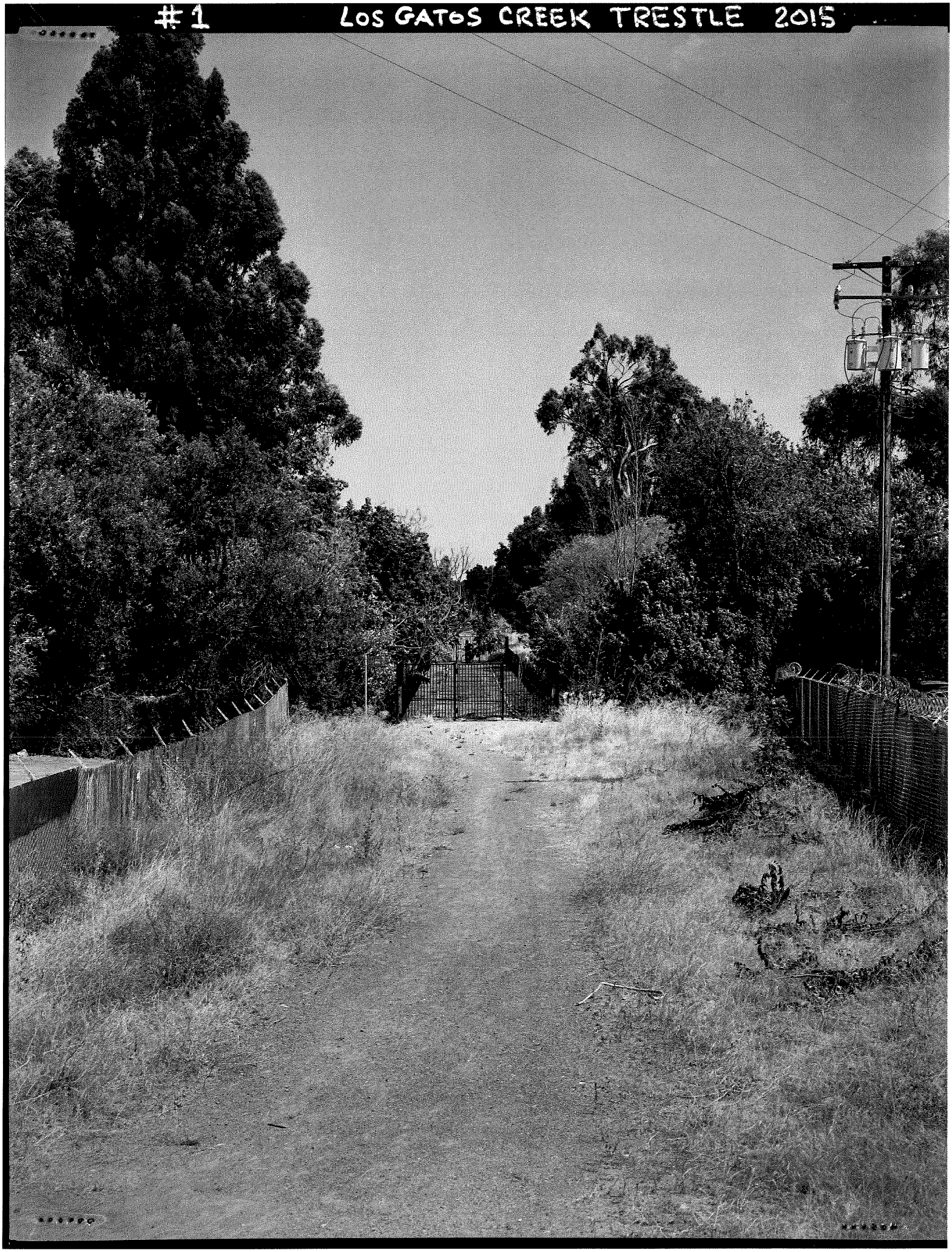
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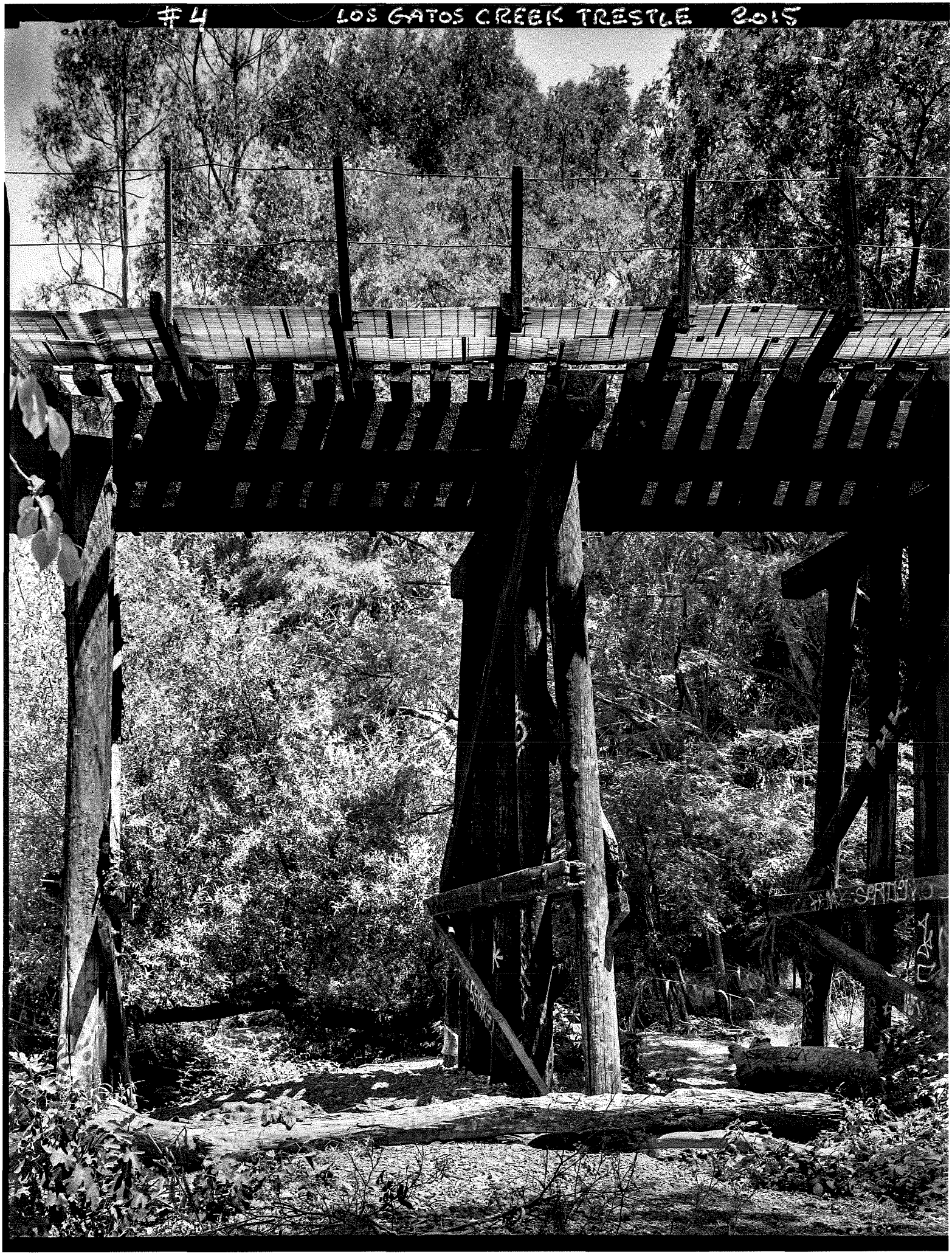
#2 LOS GATOS CREEK TRESTLE 2015


#3 LOS GATOS CREEK TRESTLE 2015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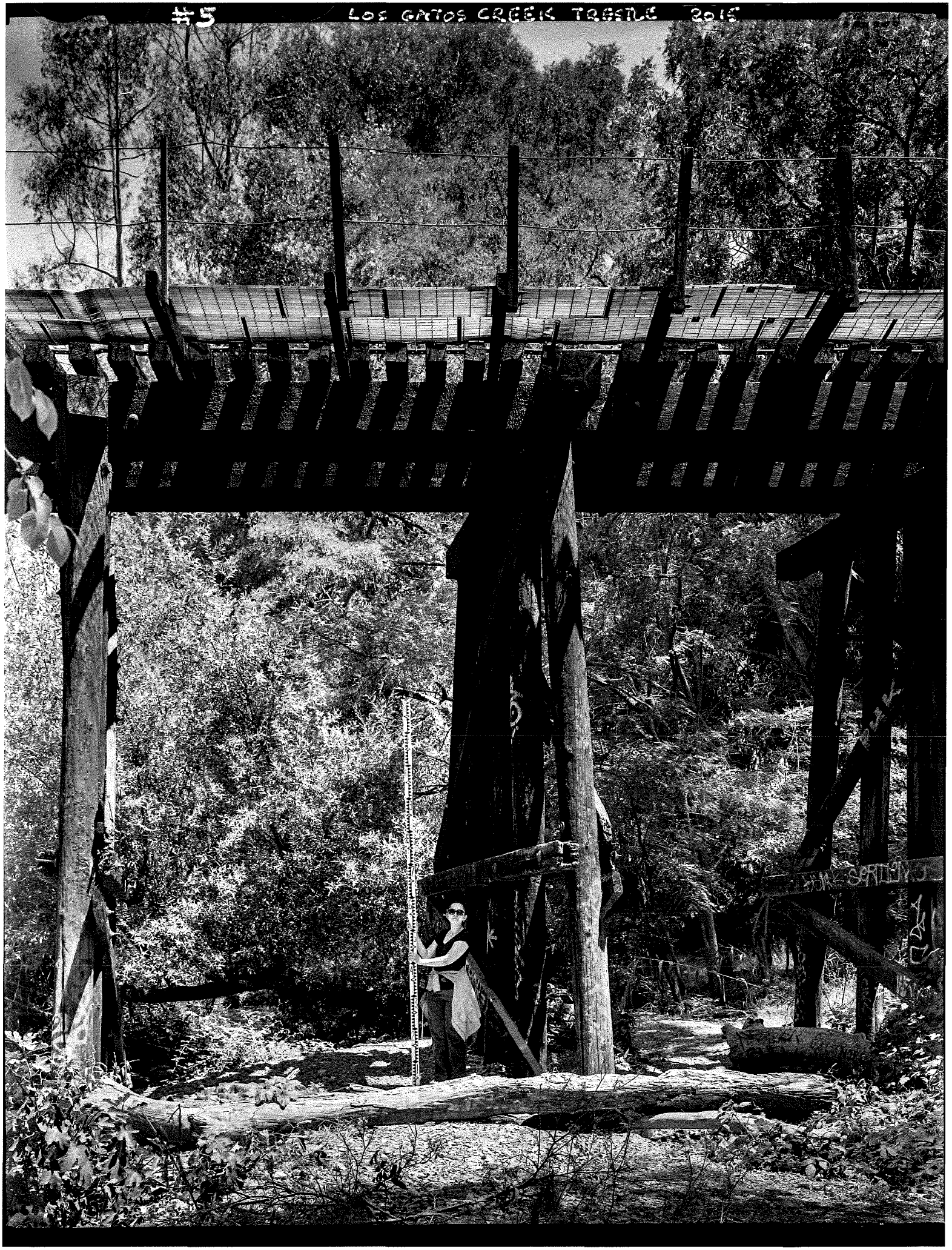
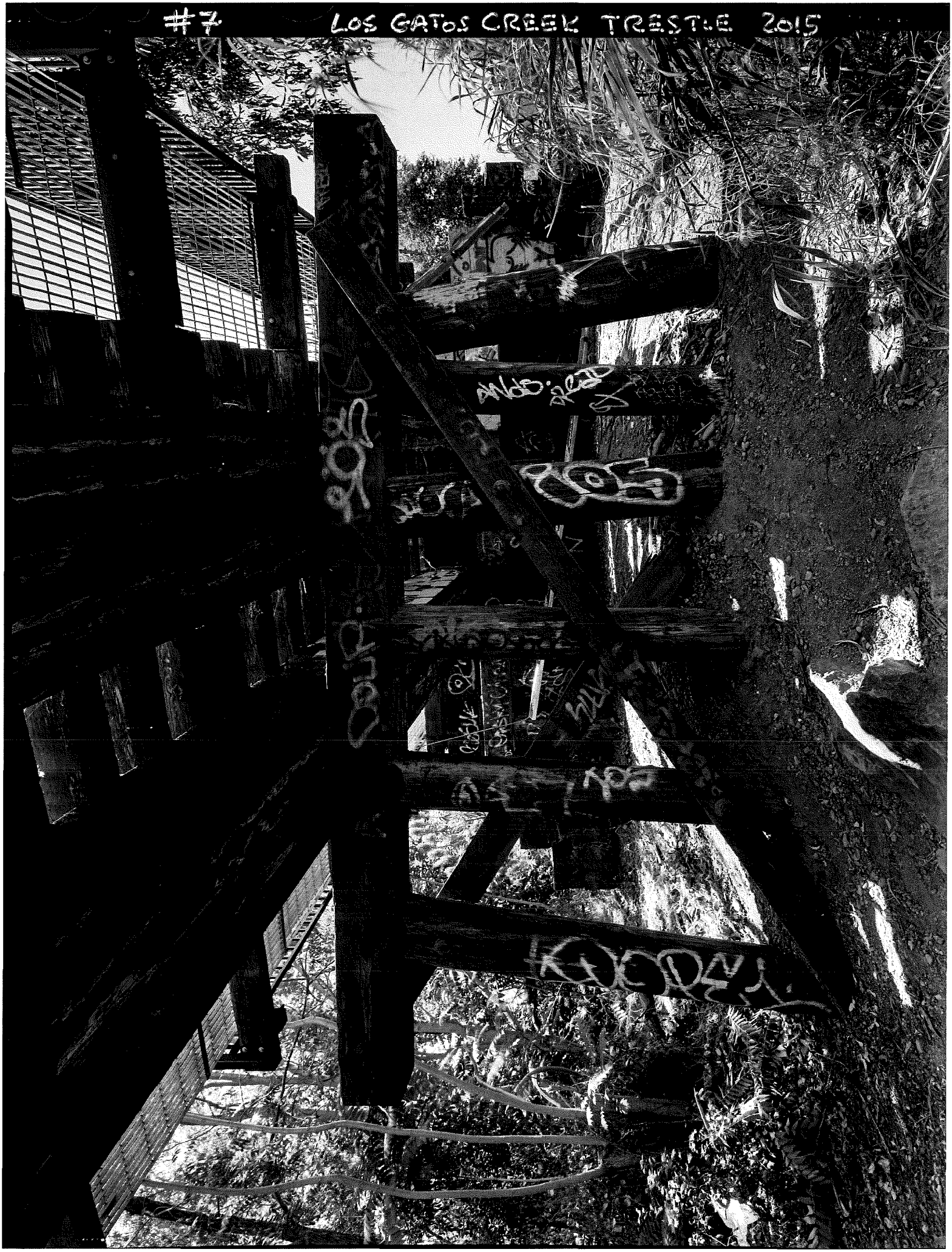
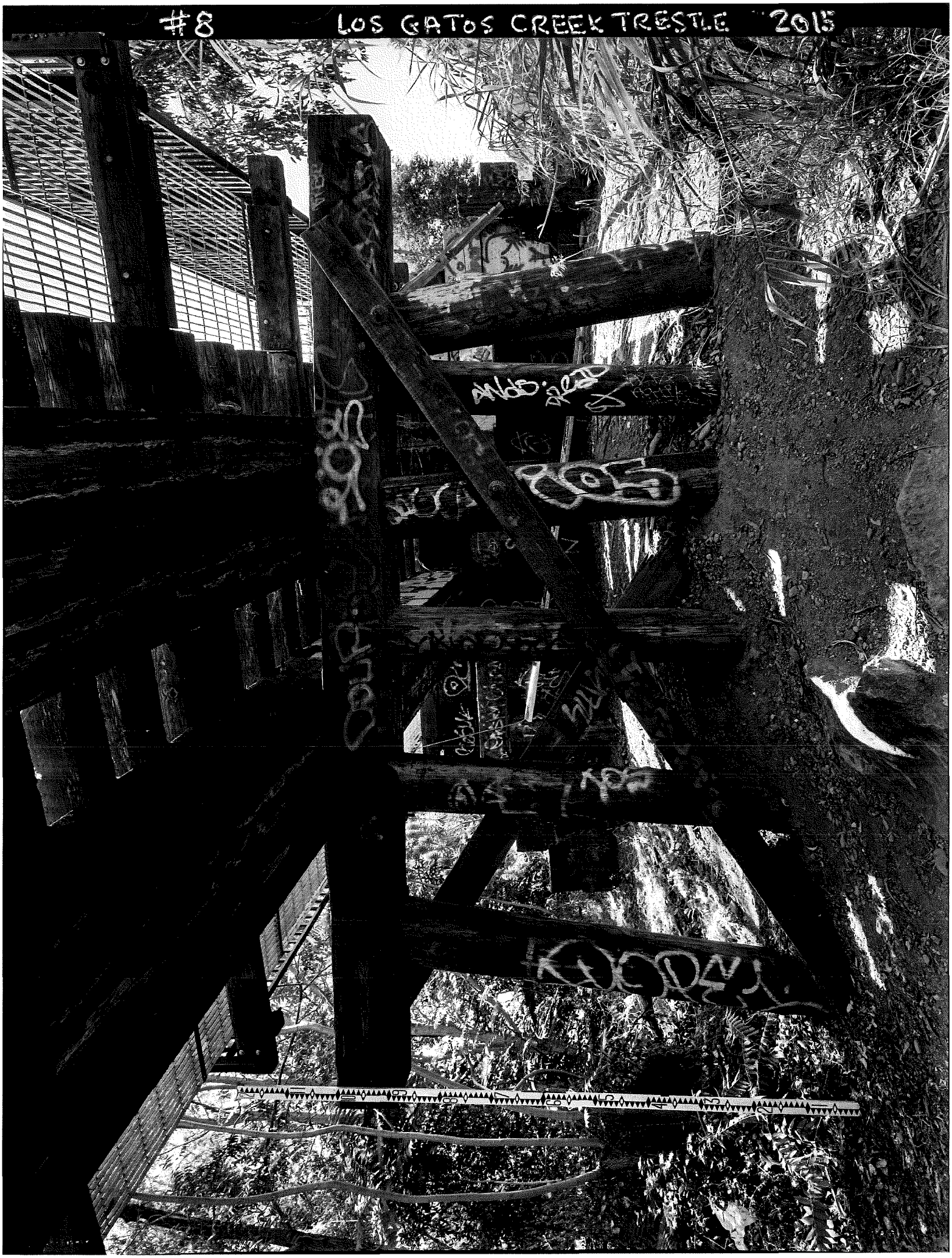
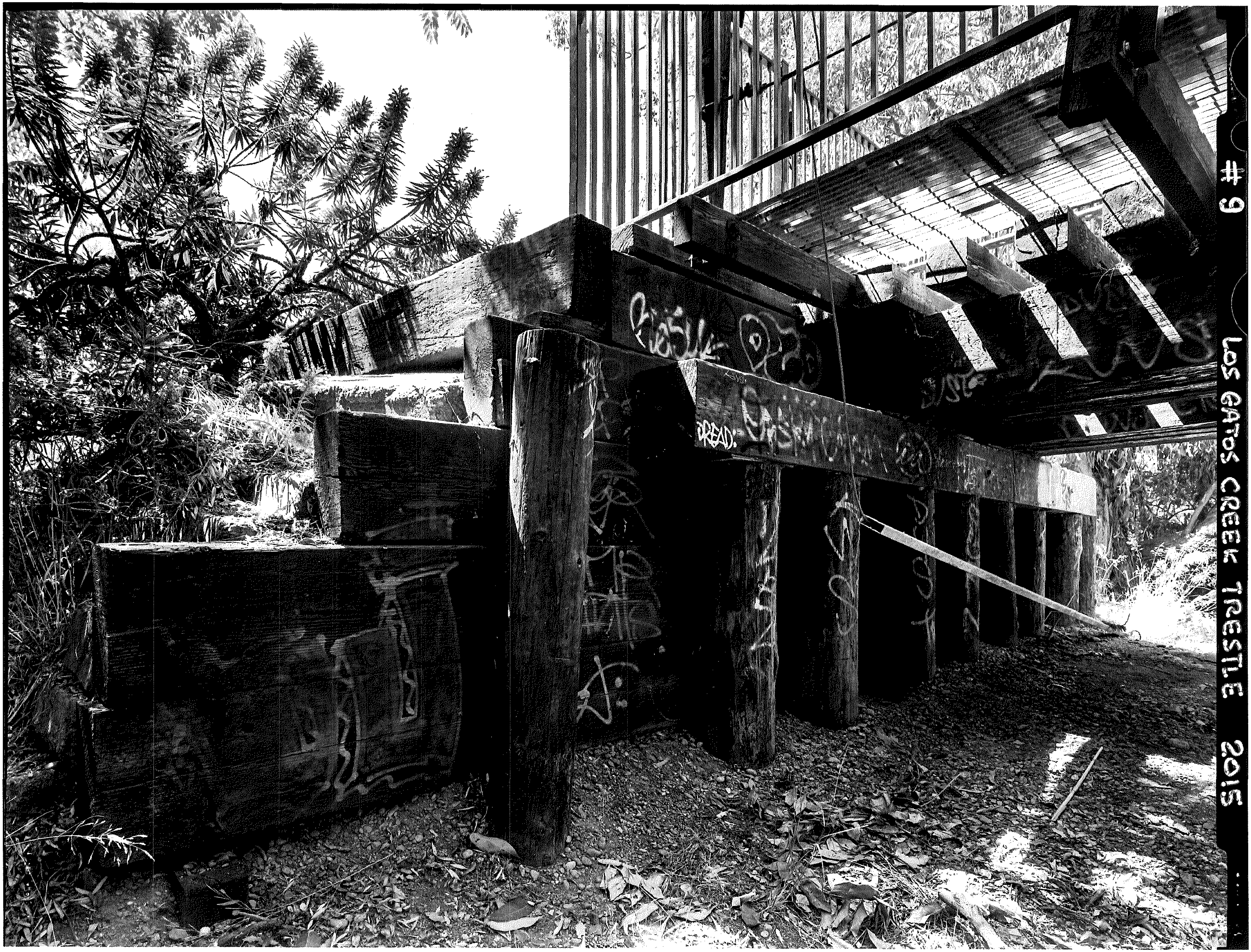

#5 LOS GATOS CREEK TRAIL 2015

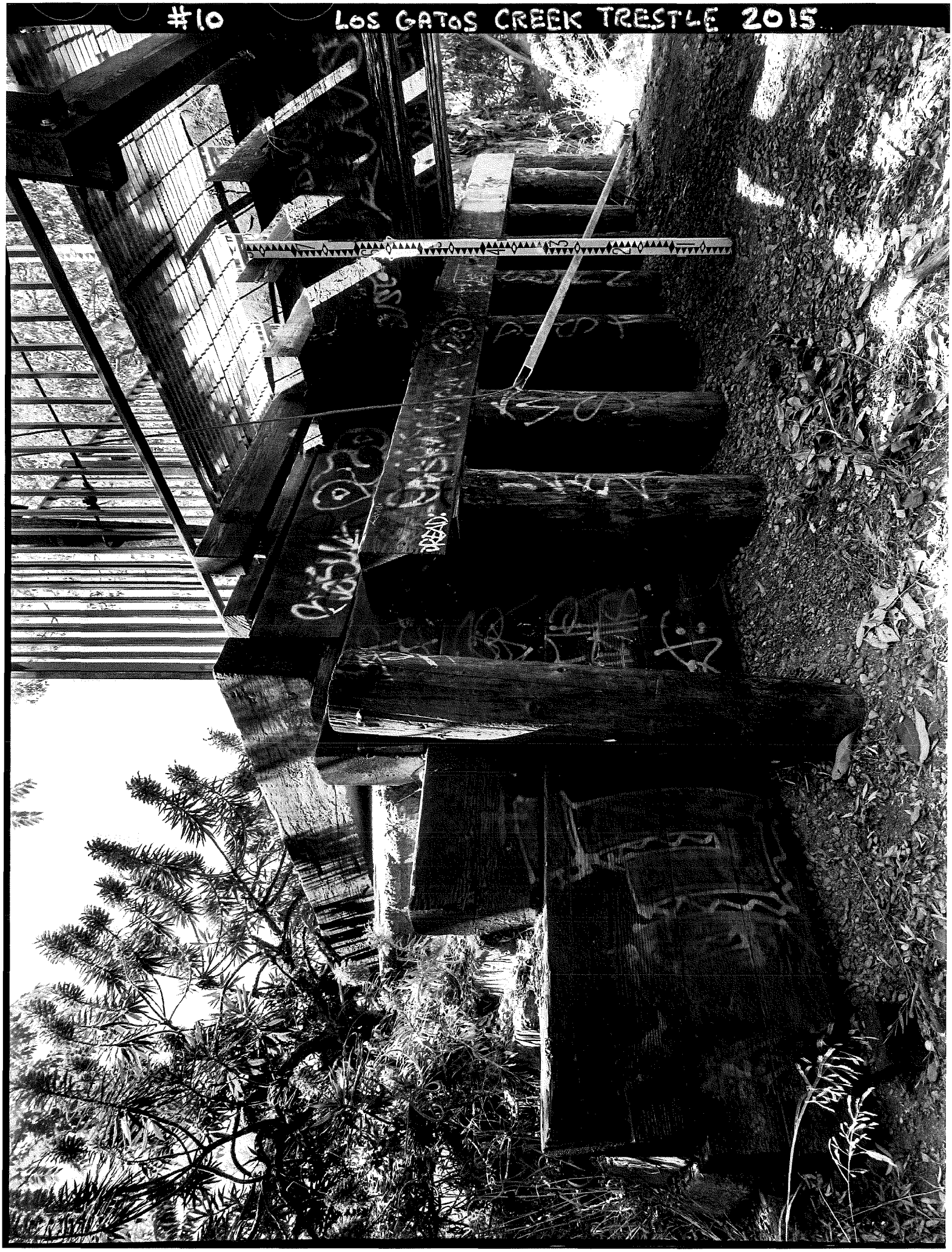
#6 LOS GATOS CREEK TRESTLE 2015


#7 LOS GATOS CREEK TRESTLE 2015


#8 LOS GATOS CREEK TRESTLE 2015


#9
LOS GATOS CREEK TRESTLE 2015

#10 LOS GATOS CREEK TRESTLE 2015




#11 LOS GATOS CREEK TRESTLE 2015


#12 LOS GATOS CREEK TRESTLE 2015


#13 LOS GATOS CREEK TRESTLE 2015

LARGE FORMAT PHOTOGRAPHIC TECHNICAL DATA
Photographer: Stephen D. Schafer, JULY 2015

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Scope of photography:

This photographic documentation was completed to (HABS) standards. 13 views of the LOS GATOS CREEK TRESTLE were photographed in detail and in context to the surroundings.

Photographic specifications:

All photographic views were exposed on Ilford HP5 and Kodak TMAX 400 black & white silver film on a polyester base in the 4 inch x 5 inch format. Locations were marked on a sketch map. Photo information was kept on the field-notes.

Archival digital photo mount cards were printed on an Epson Stylus Photo R2880 carbon-pigment printer with Epson 96 inks on Epson 5-Star Premium Presentation Matte paper. These archival digital printing standards are proscribed in the NPS November 2011 Photographic Specifications for HABS, HAER, and HALS. All photographs in this document are in the public domain.

Stephen Schafer
Schaf Photo, PO Box 24218,
Ventura, CA 93002
Phone 805-652-1000
e-mail: schaf@west.net
www.habsphoto.com