DELTA CONSULTING & ENGINEERING
OF ST. HELENA

RECEIVED
SEP 23 2010
NAPA CO. CONSERVATION
DEVELOPMENT & PLANNING DEPT.

EASEMENT REPORT

FOR

ROGERS WINERY

PROJECT LOCATED AT

970 CONN VALLEY ROAD
ST. HELENA, CA 94574

County: NAPA
APN: 025-180-061

JULY 15, 2010

PREPARED FOR REVIEW BY:

NAPA COUNTY DEPARTMENT OF PUBLIC WORKS
1195 THIRD STREET, ROOM 201
NAPA, CA 94559

Documents Included:

272 O.R. 392
2005-0049053
65 Deeds 82

1104 ADAMS STREET, SUITE 203 – ST. HELENA, CALIFORNIA 94574
707-963-8456 TELE + 707-963-8528 FAX

Ivar Otto Asplund
Saima Ilona Asplund

Executed in the presence of
J. H. Thorpe
Witness
Consideration not more than $100.00

STATE OF CALIFORNIA)
) ss.
COUNTY OF NAPA)

On this 7th day of January A.D. One Thousand Nine Hundred and Forty-seven, before me, Beverly Doughty, a Notary Public in and for said County, residing therein, duly commissioned and sworn, personally appeared J. H. Thorpe, known to me to be the same person whose name is subscribed to the within instrument, as a witness thereto, who, being duly sworn, deposed and said, that he resides in the County of Napa, State of California, that he was present and saw Ivar Otto Asplund and Saima Ilona Asplund (personally known to him to be the persons described in and who executed the said instrument, as parties thereto), sign and execute the same, and that, at their request, he, the said affiant, thereupon subscribed his name as a witness thereto.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, at my office, in the said County of Napa, the day and year in this certificate first above written.

(SEAL)

Beverly Doughty
Notary Public in and for the County of Napa, State of California

My commission expires April 6, 1947

A true copy of an original recorded at Request of Ry Express Agency, Aug 22, 1947 A.D. at 1 min. past 9 o'clock A.M.

COMPARED
BOOK U.S.
INST. E.Q.

A.R. L5311 $1.20 Paid

Dottie C. Wright
County Recorder
By Janice McArthur
Deputy Recorder

WILLIAM D. BROWN
TO
PACIFIC GAS AND ELECTRIC CO. etal

810-82

William D. Brown, a married man, dealing with his separate property hereinafter called first party, does hereby grant unto Pacific Gas and Electric Company, and The Pacific Telephone and Telegraph Company, California corporations, hereinafter called Pacific Gas and Pacific Telephone, respectively, when referred to individually and second parties when referred to jointly, the right and privilege of erecting, inspecting, replacing, maintaining and using a single line of poles and such wires as second parties shall from time to time suspend therefrom and all necessary and proper guys, anchors, crossarms and braces and other fixtures, for transmitting and distributing by Pacific Gas of electric energy and for rendering by Pacific Telephone of telephone and telegraph service, respectively, together with a right of way therefor, over and across those certain premises situate in the County of Napa, State of California, which are described as follows:

The routes of said poles shall be as follows, viz:

1. Beginning at a point in the westerly boundary line (marked by a fence) of said premises distant thereon 119.5 feet northerly from the southwest corner of the northwest quarter of the northeast quarter of said section 28 and running thence south 67° 01' east 992.2 feet; thence south 33° 31' east 415.4 feet; thence south 39° 38' east 678.5 feet; thence south 10° 31' east 261.9 feet; thence south 34° 48' east 300.0 feet; thence south 6° 38' west 60 feet, more or less, to the northeasterly boundary line of said 1.078 acre parcel of land.

2. Beginning at the most easterly point in the route hereinbefore described and designated I and running thence south 34° 48' east 367 feet, more or less, to the southeasterly boundary line of said premises.

3. Beginning at a point in said premises distant south 6° 38' west 413.7 feet from the most easterly point in the route hereinbefore described and designated I and running thence north 6° 38' east 60 feet, more or less, to the southwesterly boundary line of said 1.078 acre parcel of land.

4. Beginning at a point in the route hereinbefore described and designated I distant thereon 2348.0 feet southeasterly from the northwesterly terminus thereof and running thence north 39° 00' west 150 feet, more or less.

First party also grants to second parties and each of them the right to trim any trees along said poles and wires whenever considered necessary for the complete enjoyment of the rights hereby granted.

The provisions hereof shall inure to the benefit of, and bind, the respective successors and assigns of the parties hereto.

IN WITNESS WHEREOF first party has executed these presents this 9 day of Sept, 1946.

William D. Brown

Executed in the presence of
J. H. Thorpe
Witness.

Consideration not more than $100.00

STATE OF CALIFORNIA)
)ss.
COUNTY OF NAPA)

On this 7 day of January A. D. One Thousand Nine Hundred and Forty-seven, before me, Beverly Doughty, a notary Public in and for said County, residing therein, duly commissioned and sworn personally appeared J. H. Thorpe, known to me to be the same person whose name is subscribed to the within instrument, as a witness thereto, who, being duly sworn, deposed and said, that he resides in the County of Napa, State of California, that he was present and saw William D. Brown (personally known to me to be the person described in and who executed the said instrument, as party thereto), sign and execute the same, and that, at his request, he, the said affiant, thereupon subscribed

394

A true copy of an original recorded at Request of Ry. Express Agency, Aug 22, 1947 A.D., at 2 mins. past 9 o'clock A.M.

COMPARED
BOOK 11S.
INST. 20.

A.R. L5312 $1.40 Paid

Dottie C. Wright
County Recorder
By Tamie McArthur
Deputy Recorder

COUNTY OF NAPA

TO

PACIFIC GAS AND ELECTRIC CO.etal

810-75

County of Napa, hereinafter called first party, does hereby grant unto Pacific Gas and Electric Company, and The Pacific Telephone and Telegraph Company, California corporations, hereinafter called Pacific Gas and Pacific Telephone, respectively, when referred to individually and second parties when referred to jointly, the right and privilege of suspending, inspecting, replacing, maintaining and using such wires as second parties shall from time to time deem necessary for transmitting and distributing by Pacific Gas of electric energy and for rendering by Pacific Telephone of telephone and telegraph service, respectively, together with a right of way therefor, over and across those certain premises situate in the County of Napa, State of California, which are described as follows, viz.:

That certain 0.58 acre parcel of land, situate in section 34, township 8 north, range 5 west, M. D. B. & M., described in the deed executed by Elizabeth B. Shand to County of Napa dated June 30, 1945 and recorded in Volume 228 of Official Records at page 287, records of said Napa County.

The route of said wires shall be as follows, viz.:

Beginning at a point in the southeasterly boundary line of said premises distant thereon 120.0 feet southwesterly from the most easterly corner of said premises and running thence south 60° 01' west 140 feet, more or less, to the southwesterly boundary line of said premises.

First party also grants to second parties and each of them the right to trim any trees along said wires whenever considered necessary for the complete enjoyment of the rights hereby granted.

The provisions hereof shall inure to the benefit of, and bind, the respective successors and assigns of the parties hereto.

IN WITNESS WHEREOF first party has executed these presents this 10th day of September, 1946.

Consideration not more than $100.00

County of Napa

By Thomas Maxwell
Its Chairman of Its Board of Supervisors
Attest: R. A. Dollarhide
County Clerk

Executed in the presence of
J. H. Thorpe
Witness

STATE OF CALIFORNIA }
" " } ss.
COUNTY OF NAPA }

On this 7th day of January, in the year One Thousand

2005-0049053

Order No: 115861-1
deeds/macveagh.egd

When recorded mail to:

ROBERT P & JUDITH J SCULATTI
FRANK R & JOANN SCULATTI
THE ESTATE OF CAREY L. SCULATTI
701 ROSSI ROAD
ST HELENA CA 94574

Recorded
Official Records
County of
Napa
JOHN TUTEUR
Assessor Clerk Recorder

REC FEE 13.00

LS
01:41PM 30-Nov-2005 Page 1 of 3

For Recorder's Use Only

MAIL TAX STATEMENTS TO:

SAME AS ABOVE

THE UNDERSIGNED GRANTOR DECLARES
DOCUMENTARY TRANSFER TAX $ -0-
X Computed on the consideration or value of property conveyed; OR
___ Computed on the consideration or value less liens or encumbrances remaining at time of sale.

GRANT OF EASEMENT

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

ELLEN MAC VEAGH RUBLEE, as Trustee of The MacVeagh Family Trust, under Declaration of Trust dated May 2, 1990,

hereby GRANT(S) to ROBERT P. SCULATTI and JUDITH J. SCULATTI, husband and wife, FRANK R. SCULATTI and JOANN SCULATTI, husband and wife, and THE HEIRS OR DEVISEES OF CAREY L. SCULATTI, Case No. 26-06120, Superior Court State of California, County of Napa

the real property in the County of Napa, State of California, described as

LEGAL DESCRIPTION ATTACHED HERETO AND MADE A PART HEREOF
AND DESIGNATED EXHIBIT "A"

Dated: July 25, 2005

Ellen MacVeagh Rublee
ELLEN MAC VEAGH RUBLEE

STATE OF NEW HAMPSHIRE }
}ss.
COUNTY OF Hillsborough }

On July 25, 2005, before me, Susan A. Blanchette personally appeared ELLEN MAC VEAGH RUBLEE, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies) and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature Susan A. Blanchette
Notary Public

SUSAN A. BLANCHETTE
My Commission Expires June 23, 2009

MAIL TAX STATEMENTS AS DIRECTED ABOVE

Form NAP1097SP

EXHIBIT "A"

An Easement, not to be exclusive, as an appurtenance to the parcel of land set forth as "Dominant Tenement" herein below, for laying and maintaining water pipelines, being 10 feet in width, lying 5 feet at each side of the following centerline:

COMMENCING at the northeast corner of the tract of land firstly described in the deed to Elwood Johnson, et Ux., recorded on February 19, 1949 in Book 301 of Official Records at Page 364 in the office of the Napa County Recorder; thence along the northeasterly side of said tract Northwesterly 2.9 feet to the intersection with the center of an existing PVC pipeline, said intersection being the TRUE POINT OF BEGINNING of this easement; thence along the center of said pipeline North 54°54' East 39.9 feet, North 57°00' East 10.6 feet, North 38°45' East 19.2 feet, South 66°08 East 45.1 feet, South 45°31' East 50.9 feet, South 29°15' East 40.0 feet, South 28°21' East 40.4 feet, South 34°28' East 37.4 feet, South 43°31' East 42.0 feet, South 47°52' East 38.6 feet, South 43°42' East 40.4 feet, South 44°46' East 47.2 feet, South 67°05' East 23.6 feet, South 68°48' East 20.7 feet, North 57°44' East 49.3 feet, North 47°06' East 8.6 feet, North 52°42' East 139.2 feet, North 57°06' East 39.0 feet, North 52°14' East 85.5 feet, North 46°09' East 18.8 feet, North 43°31' East 12.6 feet, North 29°09' East 67.0 feet, North 25°05' East 34.2 feet, North 22°35' East 45.7 feet, North 25°25' East 39.0 feet, North 17°21' East 21.5 feet, North 3°54' West 18.0 feet, North 31°43' West 19.9 feet, North 48°41' West 38.9 feet, North 46°32' West 39.1 feet, North 43°51' West 37.9 feet, North 10°54' East 16.8 feet, North 49°35' West 3.5 feet and North 43°33' East 7.8 feet to the southwesterly line of the lands of Frank R. Sculatti as described in Book 1260 of Official Records at Page 405, recorded on October 29, 1982 in said Recorder's office.

DOMINANT TENEMENT

PARCEL ONE:

A portion of the southwest quarter of the northwest quarter of Section 27 and a portion of the east half of Section 28, Township 8 North, Range 5 West, M.D.B. & M., described as follows:

COMMENCING at a point from which the quarter section corner on the line between Sections 27 and 28, Township 8 North, Range 5 West, M.D.B. & M., bears the following courses and distances: South 51° 13' East 28.23 feet and East (23 links) 15.18 feet distant; and running thence from said point of commencement, North 31° 30' East 582.63 feet; thence North 75° 00' West 86.82 feet; thence South 52° 18' West 776.41 feet; thence South 64° 27' East 240.85 feet; thence South 37° 08' West 318.54 feet; thence North 76° 49' East 59.66 feet; thence North 46° 00' East 432.70 feet to the point of commencement.

PARCEL TWO:

A portion of the southwest quarter of the northwest quarter of Section 27 and a portion of the east half of Section 28, Township 8 North, Range 5 West, M.D.B. & M., described as follows:

COMMENCING at the most western corner of that certain 3.91 acre tract of land described in the Deed to Elwood Johnson, et ux, of record in Book 296 at page 473 of Official Records of Napa County; running thence South 64° 27' East 240.85 feet; thence South 37° 08' West 97.55 feet; thence North 42° 25' West 372.91 feet; thence North 52° 18' East 692.98 feet; thence South 75° East 164.75 feet; thence South 52° 18' West 776.41 feet to the point of commencement.

macveagh.egd

END OF DOCUMENT

PARCEL THREE:
Commencing at a point from which the most western corner of that certain 3.91 acre tract of land conveyed by Wm. Brown, et ux to Elwood Johnson by Deed of record in Book 296 at page 473 of Official Records of Napa County bears North 66° 48′ East 705.05 feet; and thence North 64° 27′ West 0.34 feet distant; and running thence from said point of commencement, North 23° 12′ West 2.50 feet; thence South 66° 48′ West 15.00 feet; thence South 23° 12′ East 15.00 feet; thence North 66° 48′ East 15.00 feet; thence North 23° 12′ West 12.50 feet to the point of commencement.

[illegible] the [illegible] with the Original record [illegible] in this office and that the same are a correct transcript therefrom and of the whole of such original record.

In Witness whereof I have hereunto set my hand and affixed the Seal of said Court at the County of Lake the day and year in this Certificate first above written,

[illegible] County Clerk

(Seal)

and Ex officio Clerk of Said Superior Court of Said Lake County

A True Copy of an Original recorded at request of [illegible] Jones Mch 19 A.D. 1900 at 30 mins past 4 O'clock P.M.

W. E. Dewees Co Recorder
By Ed M Rockwell Deputy

65D82 3/20/1900

Theo A Bell et al To John Shepard Et als	This Indenture made the 6th day of February in the year one thousand Nine hundred, Between Theo A. Bell and August Beretta of the County of Napa. State of California

party of the first part, and John Shepard. H L Tarrow, H.A. Tubbs. A J Townsend and S J Townsend parties of the Second part: Witnesseth:- That the party of the first part for and in Consideration of the Sum of Ten (10) dollars in lawful money of the United States. to them in hand paid by the said parties of the Second part, the receipt whereof is hereby acknowledged, do by these presents grant, bargain Sell, convey, remise, release and forever quitclaim unto the said parties of the Second part and to their heirs and assigns forever, all their right, title, interest, estate, Claim and demand, both at law and in equity and as well in possession as in expectancy of the said party of the first part of, in or to a certain right of way thirty feet in width for road purposes through the real property commonly known as the "Alrip Place" in [illegible] Valley County and State aforesaid the northerly line of which right of way being particularly described in Exhibit "A" hereunto attached and made a part hereof.

To have and to hold the said right of way unto the said party of the Second part their heirs and assigns forever

In Witness Whereof the parties of the first part have hereunto Set their hands and Seals, the day and year first above written.

Theo A. Bell
August Beretta

State of California } ss County of Napa	On this 6th day of February in the year One thousand Nine hundred before me Geo W. Fee. a Notary Public in and for Said Napa County residing therein, duly Commissioned and

Sworn, personally appeared August Beretta Known to me to be the person whose name is Subscribed to the within instrument and he acknowledged that he executed the Same,

In Witness Whereof. I have hereunto Set my hand and affixed my Official Seal at my Office in the Town of St Helena County of Napa the day and year in this Certificate first above written

(Seal)

Geo W. Fee Notary Public
In and for Napa County State of California

State of California County of Napa	On this 7th day of February in the year One Thousand Nine Hundred. before me Edw. S. Bell. a Notary Public in

and for the County of Napa, State of California, residing therein, duly Commissioned and Sworn personally appeared Theo A Bell known to me to be the person whose name is Subscribed to the within instrument and he duly acknowledged to me that he executed the Same.

In Witness Whereof, I have hereunto Set my hand and affixed my Official Seal at my Office in the City of Napa County of Napa the day and year in this certificate first above written.

Seal

Edw S. Bell Notary Public
In and for Said Napa County, State of California

Exhibit "A"

Beginning on the Northerly Side of the County Road in Conn Valley, and about 4.10 chains measured along the Side of Said road, westerly from the South boundary Corner of E. Burdick's land at a post of the fence marked "R" thence running on the left hand Side of the road Setting posts marked "R" at the angle points and terminus. South 70½° East 3.94 chains to a point 40 feet Northerly of the North Side of the County Road and 30 feet distant Westerly from the boundary of the Burdick and Alsip tracts of land; thence running North 44½° East parallel with Said Burdick boundary and 30 feet distant therefrom 3.34 chains: thence North 23° East 1.04 chains; N. 30½° E. at 50 links across Conn Creek 2.13 chains to a point in Orchard 20 feet West of the right bank of Conn Hollow Creek; N. 34½° E 2.34 chains N. 20¼° E 1.19 chains N 60¼ E. 2.54 chains to a wire fence on the west bank of Said Creek, Cuing 30 feet distant N. 38¼° E 1.03 chains; N 69 E. 90 links to Said West bank; N. 55 E. Cross Said Creek 1.14 to a point 30 feet to the left of Said Burdick boundary; N. 44½° East parallel with Said boundary 7 chains to a point Opposite ¼ Section Corner between 27 and 28; N 31½° E. parallel to Said boundary 9.50 chains to the end of Valley land; N 31½° E. Crossing Said Creek three times 3.14 chains; N. 15¼ E. 2.20 chains to point 30 feet to the left of the Creek bank; N. 37° E. 1.44 chains; N. 53¾° E. at 1.00 chains cross partial fence 1.78 chains to a Slide; N. 84½° E. 1.17 chains; N. 77½° E. 1.71 to the South Side of a White Oak tree 12 inches diameter; N. 67¾° E. 1.26 chains N. 29¾° E. 1.70 chains N. 67¾° E. 1.28 chains fence post to the right on the bank of the Creek 30 feet distant; S. 87½ E. 1.86 chains; N. 83° E. 2.90 chains fence to the right 30 feet S. 84½° E. 2.86 chains N. 67¾ E. 2.48 chains fence to the right 30 feet; N. 35¼° E. 2.54 chains to foot of grade. fence 68 links to the right; N. 12¼° E. 1.52 chains following the grade up; N. 40¾° E. 2.06 chains N. 5 3¼° E. 1.19 chains; N 8 8¾° E. 2.00 chains to point 20 feet to the left of the grade line; N. 6° E. 1.00 chains. Creek bank to the right 50 links N. 4¼° W. 3.70 chains. Creek bank to the right 60 links; N. 12° W. 2.32 chains N. 8¼° W. 1.84 chains; N. 19° E. 2.27 chains N. 6° E. 2.44 chains to the South boundary of H. Tubbs' land and 70 links West of the Northwest Corner of the Carver tract of land. Containing 1.68 acres of Valley land and 2.79 acres of Hill land and one mile and 9 rods in length. less 7 links.

Surveyed by W. A. Peirce. Jan 27th. 1900

50 cent int Stamp cancelled

A true Copy of an Original recorded at request of W. F. H. & March 20 A.D. 1900 at

DELTA CONSULTING & ENGINEERING
OF ST. HELENA

RECEIVED
SEP 23 2010
NAPA CO. CONSERVATION
DEVELOPMENT & PLANNING DEPT.

HYDROLOGY & DRAINAGE REPORT

FOR

ROGERS WINERY

LOCATED AT

970 CONN VALLEY RD
ST. HELENA, CA 94574

County: NAPA
APN: 025-180-038

JULY 15, 2010

PREPARED FOR REVIEW BY:

COUNTY OF NAPA DEPARTMENT OF PUBLIC WORKS
1195 THIRD STREET, SUITE 201
NAPA, CA 94558

1104 ADAMS STREET, SUITE 203 – ST. HELENA, CALIFORNIA 94574
707-963-8456 TELE + 707-963-8528 FAX

TABLE OF CONTENTS

1. Report Description & Background

i. Introduction

The purpose of this report is to analyze the site hydrology associated with the proposed development of a new 30,000 gallon winery in the Napa Valley. The winery is located at 970 Conn Valley Rd, St. Helena, California. The property consists of 53.48 acres, and the Napa County Assessor's Parcel Number, or NCAPN, is 025-180-038. See Figure 1 for the overall site location.

This report examines the site watershed storm water runoff patterns and theoretical volumes for a 10-year, 24-hour storm event. Two facets of the proposed winery will be analyzed with regard to the site hydrology. First, the proposed site is located below a 10.8 acre watershed. The theoretical quantity of storm water runoff derived from this watershed will be determined and evaluated against the flow capacity of an existing berm proposed to protect the existing site by conveying the storm water runoff away from the winery site. The second step is to assess and compare the post-construction storm water runoff flows with the pre-construction storm water runoff flows of the watershed within the proposed winery site. To ensure the storm water flow volumes are not increased due to this project, the site parameters will be analyzed for both conditions, and detention features will be implemented as required for mitigation.

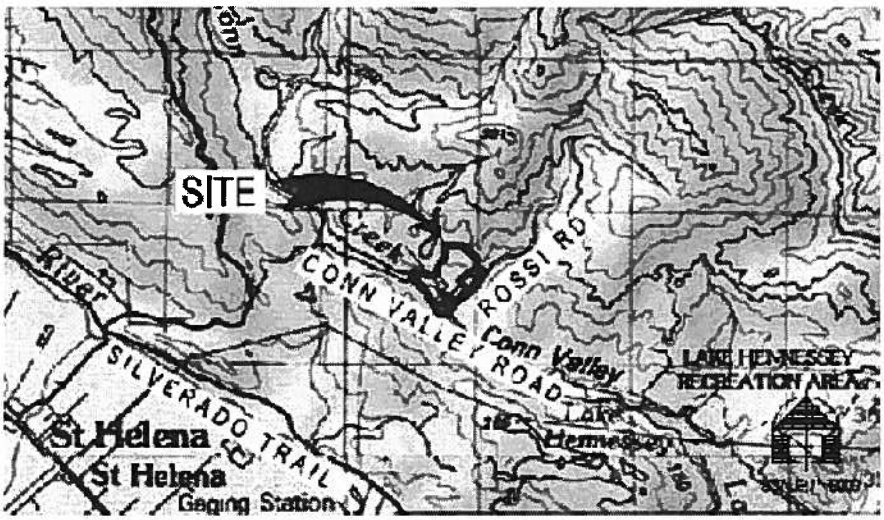


Figure 1: Site Location

ii. Methodology

The first step in completing the hydrologic analysis of the proposed winery is to ascertain the quantity of rainfall for specified design storm events. A common practice in rainfall-runoff analysis is to develop a synthetic rainfall distribution to use in lieu of actual storm events. The intensity of rainfall varies considerably during storm events, as well as with geographic location. Therefore, the synthetic rainfall distribution model must account for both of these variables to appropriately recreate a storm event.

The National Resource Conservation Service (NRCS, formerly the SCS) developed four synthetic 24-Hour rainfall distributions types (I, IA, II, and III) from National Weather Service duration-frequency data. Each rainfall distribution type represents various regions of the United States; each modeling rainfall distributions typical to each geographic area. The design rainfall for this site was derived using the SCS (NRCS) Type IA 24-Hr Storm Distributions as this project site is located within the geographic boundaries of the specified Type IA rainfall distribution. The SCS 24-hour rainfall distributions are shown in Figure 2, with the corresponding geographic boundaries shown in Figure 3. The design rainfall for a ten year storm event (a storm event with a magnitude predicted to occur one time every ten years) in the Napa Valley using this method is 6.1 inches rainfall over 24 hours. The design rainfall for a two year storm event (a storm event with a 50% chance of occurrence within any given year) in the Napa Valley using this method is 4.5 inches rainfall over 24 hours. Combined with the site time of concentration and the surface curve numbers, the theoretical peak flows and the total storm runoff volumes are able to be estimated.

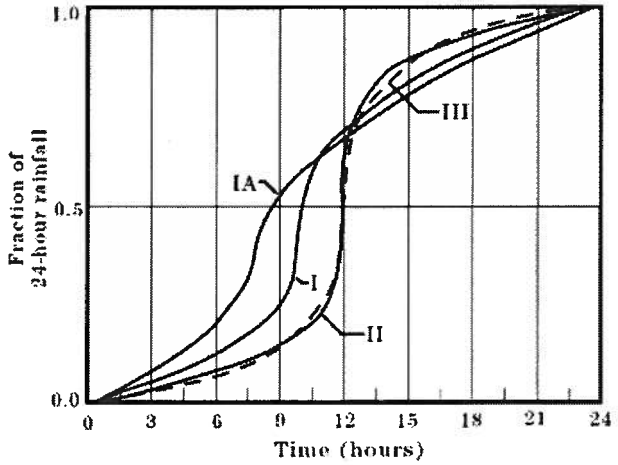


Figure 2: SCS 24-Hour Storm Distributions

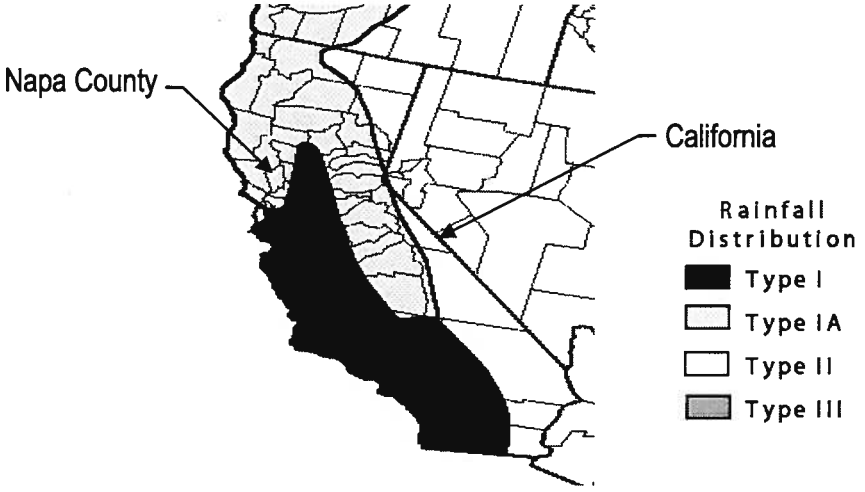


Figure 3: SCS Rainfall Distribution Geographic Boundaries in California

Within a given watershed basin, the time of concentration is the overland travel time it takes for a rain water drop to travel from the most remote point in the watershed to the point of interest (also known as the concentration point). This rain water drop concentrates with other droplets to become storm water runoff. The storm water runoff travels through the watershed as sheet flow, shallow concentrated flow, open channel flow, or any combination of these depending on the site specific topography. The site characteristics for each basin are defined and the type of overland travel by the storm water runoff is determined. The time of concentration is determined by summing together all of the individual runoff travel times within each sub basin.

The SCS TR-55 curve number is another variable used in determining the hydrologic quantities of watersheds. It is a simple, efficient, and commonly used method for determining the fraction of precipitation depth that will translate into watershed basin runoff. The curve number is based on the drainage basin area's hydrologic soil group, land use, and hydrologic conditions. A high curve number is used for impervious surfaces, and causes nearly all of the precipitation to translate into runoff. On the other side of the spectrum, a low curve number value such as for sandy soils causes the majority of the precipitation to be captured as infiltration and not translate into runoff. Curve numbers range in value from 0 to 100. See Appendix 5 for the TR-55 Curve Number Table.

iii. Topographical Data

The topographical data used to define the on-site winery watershed was derived via site ground surveys performed by Albion Surveys, St. Helena, CA. The site surveys were performed in March of 2010.

The upstream watershed was derived using the 2007 Napa County GIS topographical data, which is an approximate representation of the site topography.

2. General Watershed Description

The watershed upstream of the winery site is the resultant of two topographical conditions. Two hillsides of 20-30% slopes are located approximately 1,000 feet upstream of the proposed winery site, concentrating storm water flow and releasing into vineyards. The vineyards are set on slopes of 5-10% with row spacing of approximately 8.0'. The storm water travels through the vineyards and meets an existing 1.0' berm directly upstream of the winery site.

The on-site winery watershed is located at the base of the upstream watershed, and is currently developed as a residential enclave with a detached garage, barn, storage building and guest homes. The changes to the winery watershed due to the proposed site plan are located in Appendix 4.

A site evaluation was performed on June 15, 2010 by Delta Consulting and Engineering of St. Helena to determine the soil properties on the site. During the site evaluation, five test pits were excavated at the winery site and in the vineyards upstream on the site. The soil was consistent in all five test pits, with sandy clay being the predominant soil texture. As the soil is a mixture of clay and sand, some percolation does occur during runoff, yet the high clay content limits the quantity of runoff infiltrating into the ground.

3. Upstream Watershed Analysis

The storm water runoff derived from the upstream watershed is currently deterred and redirected around the proposed winery site by an existing 1.0' tall berm. To verify the existing berm is sufficient to withstand the demand of storm water derived during the 10-year, 24 hour storm, a model was created and tested in the hydrologic analysis software StormNet. The Napa County GIS topographical data was used to create the topographic parameters of this watershed. The watershed was divided into two distinct sub-basins. Sub-basin 1 extends outside of the property line to the peak of two neighboring hills. This sub-basin consists of four

(4) acres with approximately 25% slopes. The second sub-basin is located between the winery watershed and sub-basin 1, and is composed of vineyards with an average slope of 8%.

The results of the model show the berm is capable of diverting the entire quantity of storm water around the proposed winery site. However, according to the model, the berm capacity is at 98% during the storm. Therefore, storms larger than the 10-year, 24 hour storm will have a high chance of overtaking the berm and entering the winery site. In this case, the proposed grading of the winery site will convey the excess water through the site and into proposed site BMP's described in Section 4, Subsection iii of this report.

4. Pre- and Post- Construction Analysis

i. Winery Watershed

According to the Napa County Post-Construction Runoff Management Requirements, "Post-development runoff volumes shall not exceed pre-development runoff volumes for the 2- year, 24-hour storm event." After hydrologic analysis, if the post-project runoff volume exceeds the pre-project runoff volume, the difference in the two volumes must be reduced on-site and released from the subject parcel at the pre-project volume.

As an added factor of safety, the design rainfall event used to analyze the pre- and post-project flows is the 10-year, 24 hour storm event. This synthetic storm produces a total of 6.1 inches per rain in 24 hours. The winery watershed is 1.23 acres including buildings, roads, and parking area.

ii. Pre-Construction Analysis – Winery Watershed

The pre-construction condition of the winery is developed as a residential enclave. Site features include an existing stone ghost winery building, gravel access road, grassy areas, multiple buildings, gravel patio areas, and designed landscaping. The soil is a combination of clays and sands with low permeability. A composite curve number of 86.32 is used for analysis. The runoff will be conveyed to the outlet point via shallow concentrated flow over a maximum length of 577 feet, with slopes of 4.6% to 5.3%. With these parameters, the time of concentration for the pre-construction winery basin is 3.93 minutes. This produces a peak storm runoff

flow of 1.46 cubic feet per second. The pre-construction hydrology map is shown in Appendix 3.

iii. Post-Construction Analysis – Winery Watershed

The overall site improvements for the proposed winery are relatively minor. The existing gravel access road will be paved with an impervious all weather surface, a new covered winery crush pad will be constructed, and five impervious parking spaces built. Out of the total 1.23 acre winery watershed, 0.17 acres will be converted to impervious surfaces. The surface runoff derived during storm events is designed to sheet flow into two proposed grassy-lined swales. The runoff will then be released into rock energy dissipaters and sheet flow across local vineyards. The grassy-lined swale, rock energy dissipater, and the natural drainage system of the vineyards are designed to allow for infiltration, retard the flow of the runoff, and filter the storm water runoff prior to finally releasing into Conn Valley Creek.

The additional site features in the post-construction site plan alter the parameters of the winery watershed. Due to the increase in impervious area, the composite curve number increases from 86.32 to 87.56. However, the time of concentration remains constant from the pre-construction site plan to the post-construction site plan as the higher runoff coefficient is offset by the rock energy dissipaters. Overall, the peak storm water runoff flow increases from 1.46 cubic feet per second to 1.5 cubic feet per second due to the site improvements.

The post-construction storm water runoff flow is greater than the pre-construction runoff flow by 0.04 cubic feet per second. As the increase is minimal, the excess storm water flow is able to be reduced without requiring detention features. The grassy lined swales will promote infiltration of the runoff into the ground. The rock energy dissipaters will reduce the flow of the runoff and disperse the runoff into the existing vineyards, which is the existing natural drainage course for the site.

4. Conclusion

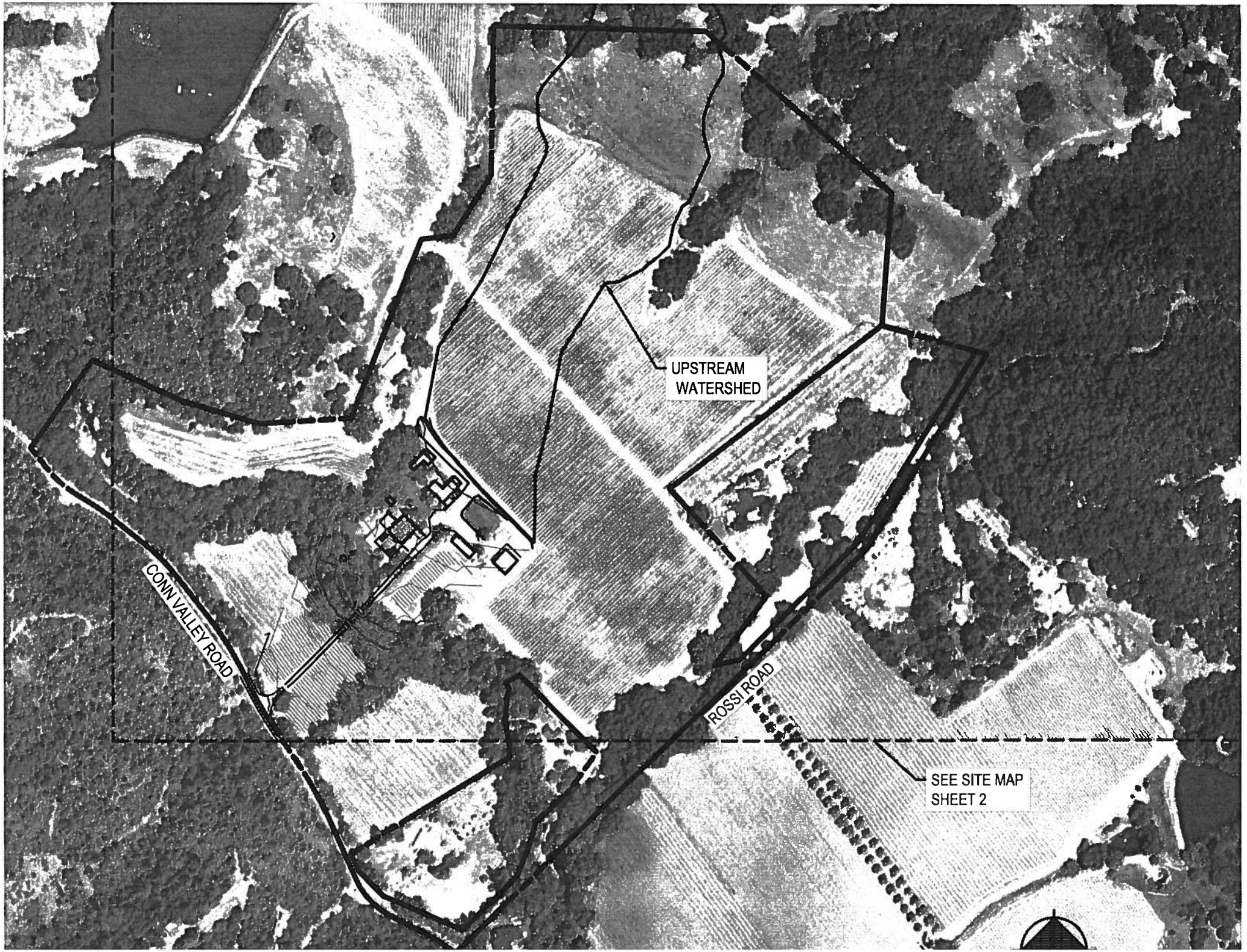
During a 10-year, 24 hour storm event, the winery site should be protected from flooding by an existing 1.0' berm. In the proposed site plan, the winery will continue to utilize the existing berm to divert the storm water around the winery site.

Construction within the winery site itself will create an additional 0.17 acres of impervious areas in the winery watershed. However, this increase in impervious area only produces an addition of 0.04 cubic feet per second of peak runoff. This slight increase is able to be mitigated for without the use of on-site BMP features as described in this report.

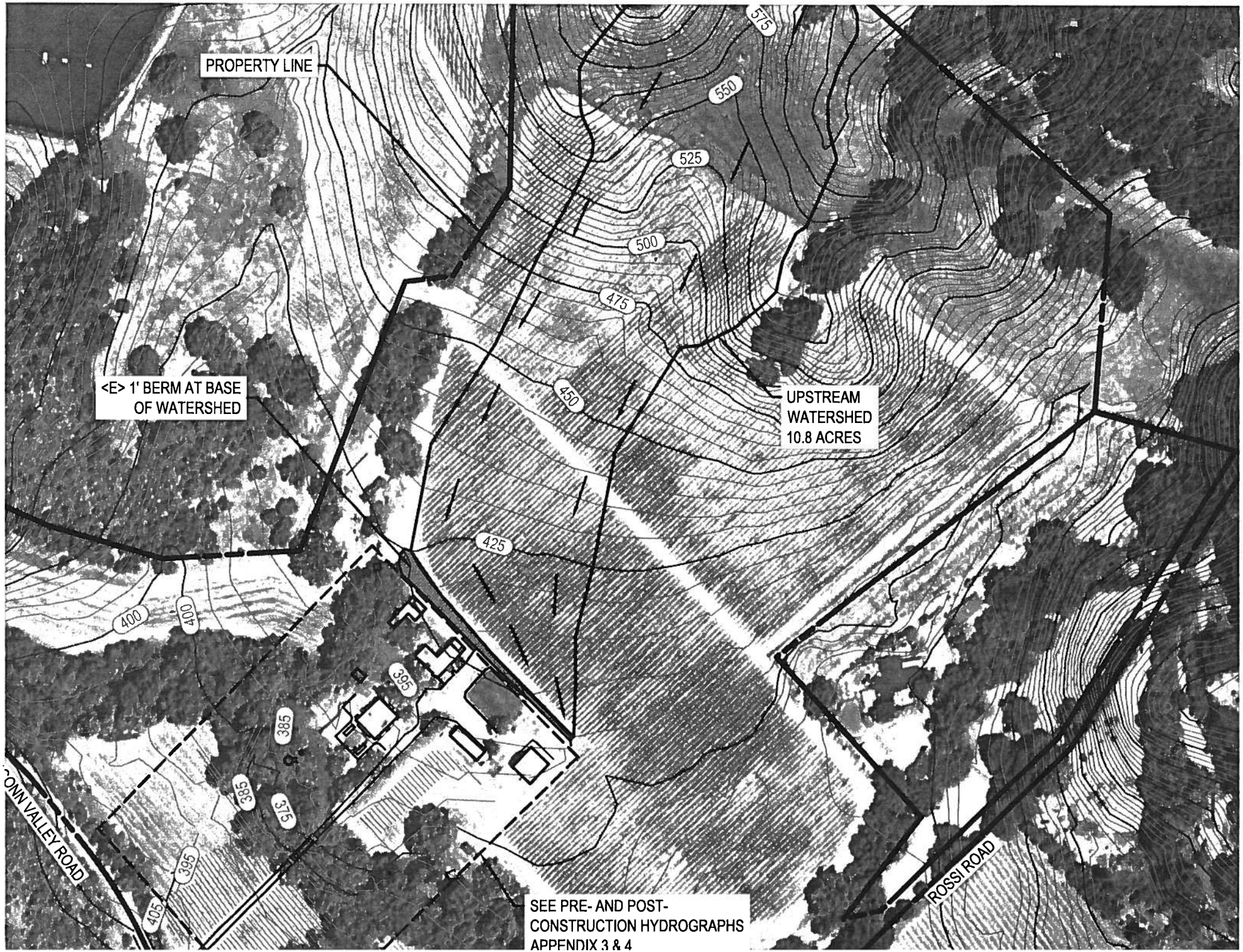
APPENDIX

Appendix 1 – Vicinity Map
Appendix 2 – Site Map
Appendix 3 – Pre-Construction Hydrology Map
Appendix 4 – Post-Construction Hydrology Map
Appendix 5 – SCS TR-55 Curve Number Table
Appendix 6 – Pre- and Post-Construction Hydrographs

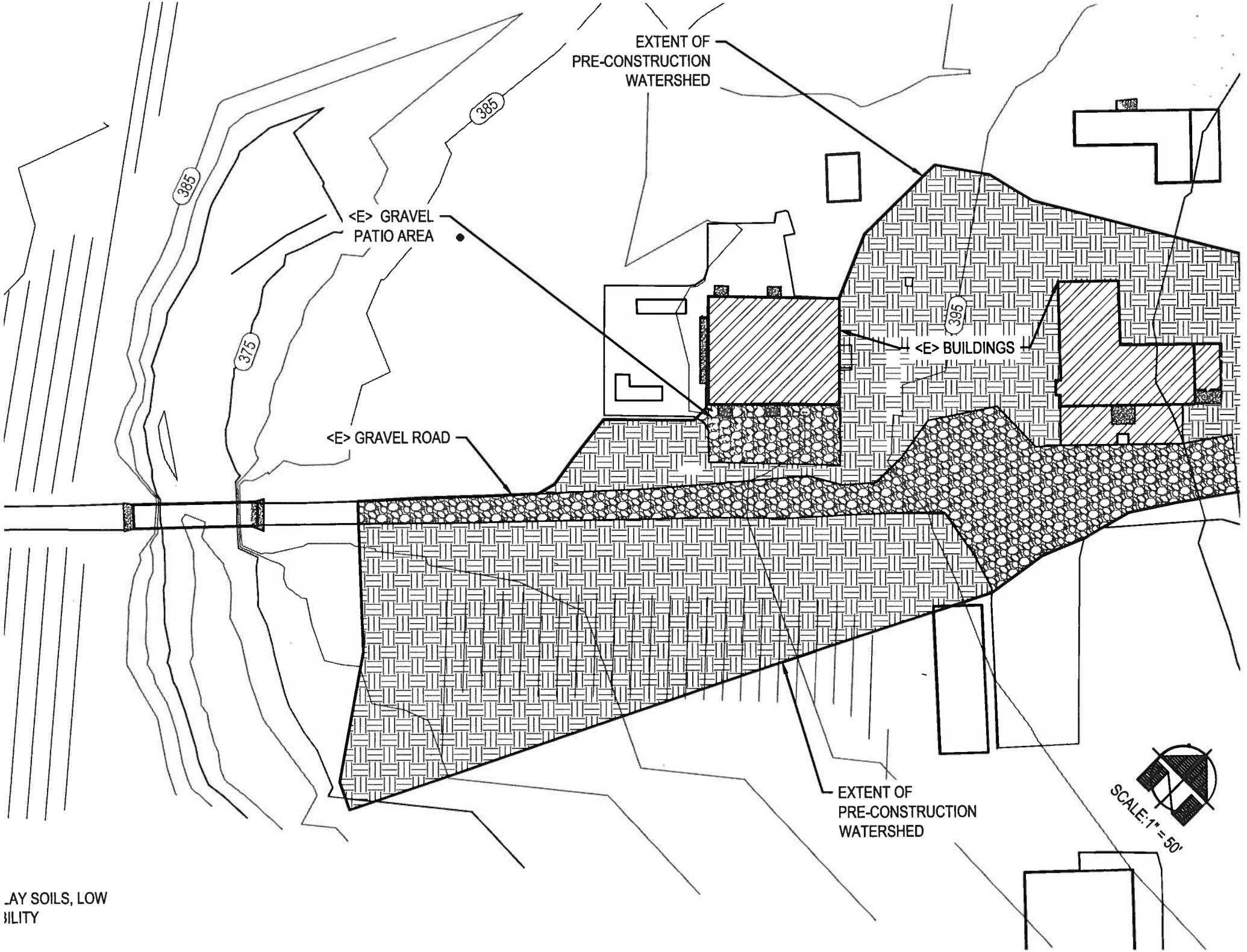
APPENDIX 1


UPSTREAM
WATERSHED
CONN VALLEY ROAD
ROSSI ROAD
SEE SITE MAP
SHEET 2

APPENDIX 2

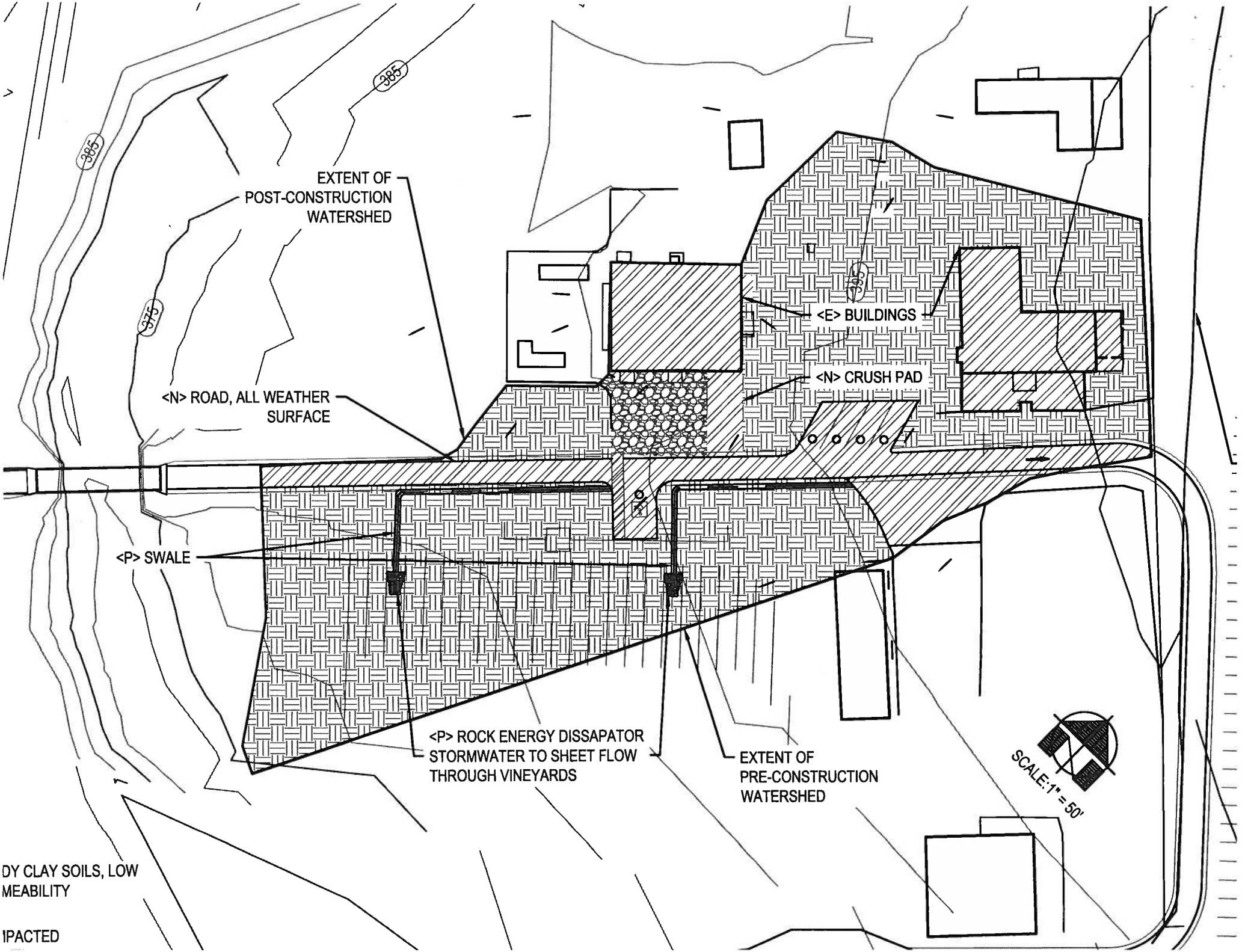

PROPERTY LINE
<E> 1' BERM AT BASE OF WATERSHED
UPSTREAM WATERSHED 10.8 ACRES
575
550
525
500
475
450
425
400
404
395
385
375
395
405
ONN VALLEY ROAD
ROSSI ROAD
SEE PRE- AND POST-CONSTRUCTION HYDROGRAPHS APPENDIX 3 & 4

APPENDIX 3



AY SOILS, LOW
ILITY

APPENDIX 4


385
375
385
EXTENT OF
POST-CONSTRUCTION
WATERSHED
<N> ROAD, ALL WEATHER
SURFACE
<E> BUILDINGS
<N> CRUSH PAD
<P> SWALE
<P> ROCK ENERGY DISSAPATOR
STORMWATER TO SHEET FLOW
THROUGH VINEYARDS
EXTENT OF
PRE-CONSTRUCTION
WATERSHED
SCALE:1" = 50'
DY CLAY SOILS, LOW
MEABILITY
IPACTED

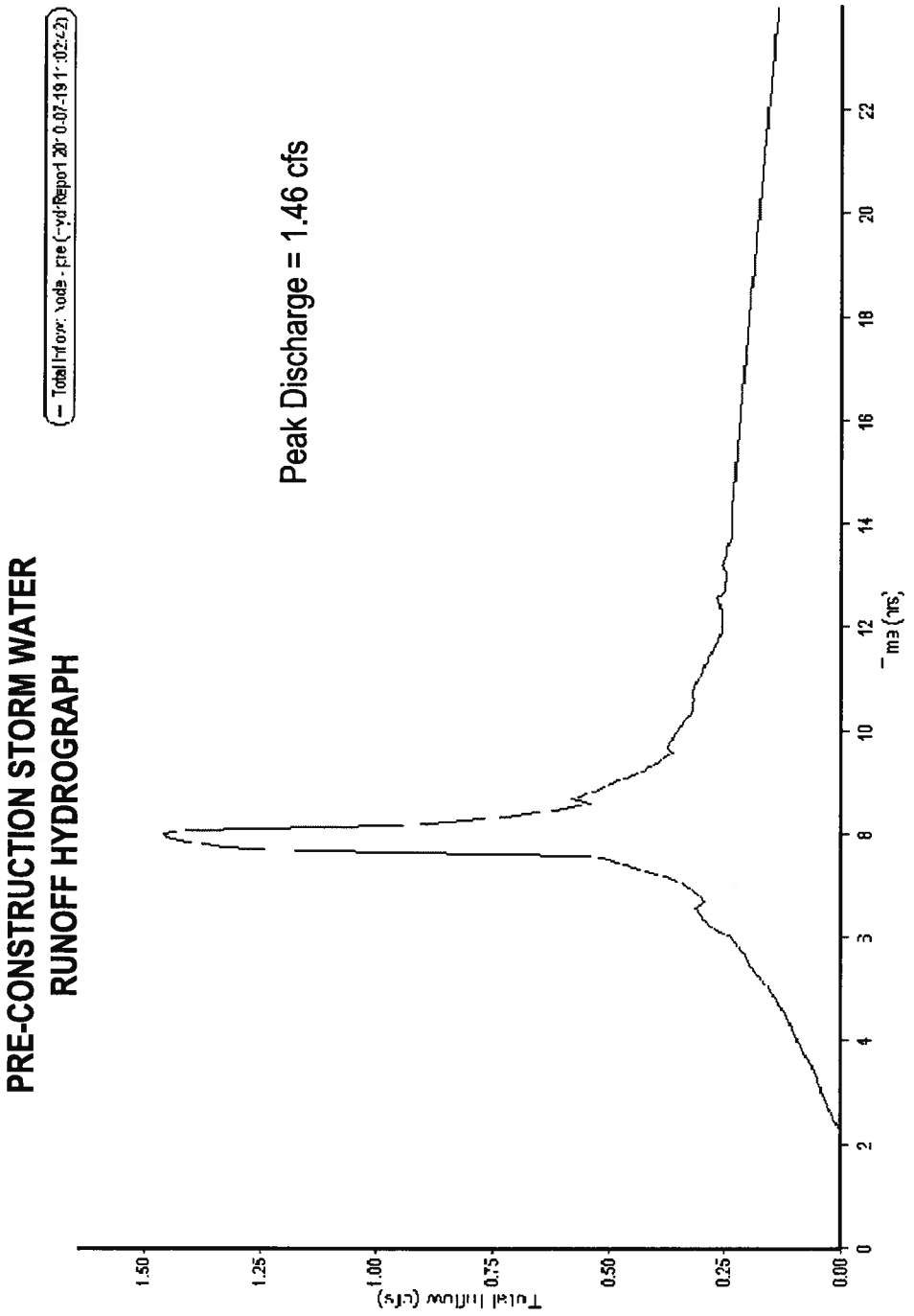
APPENDIX 5

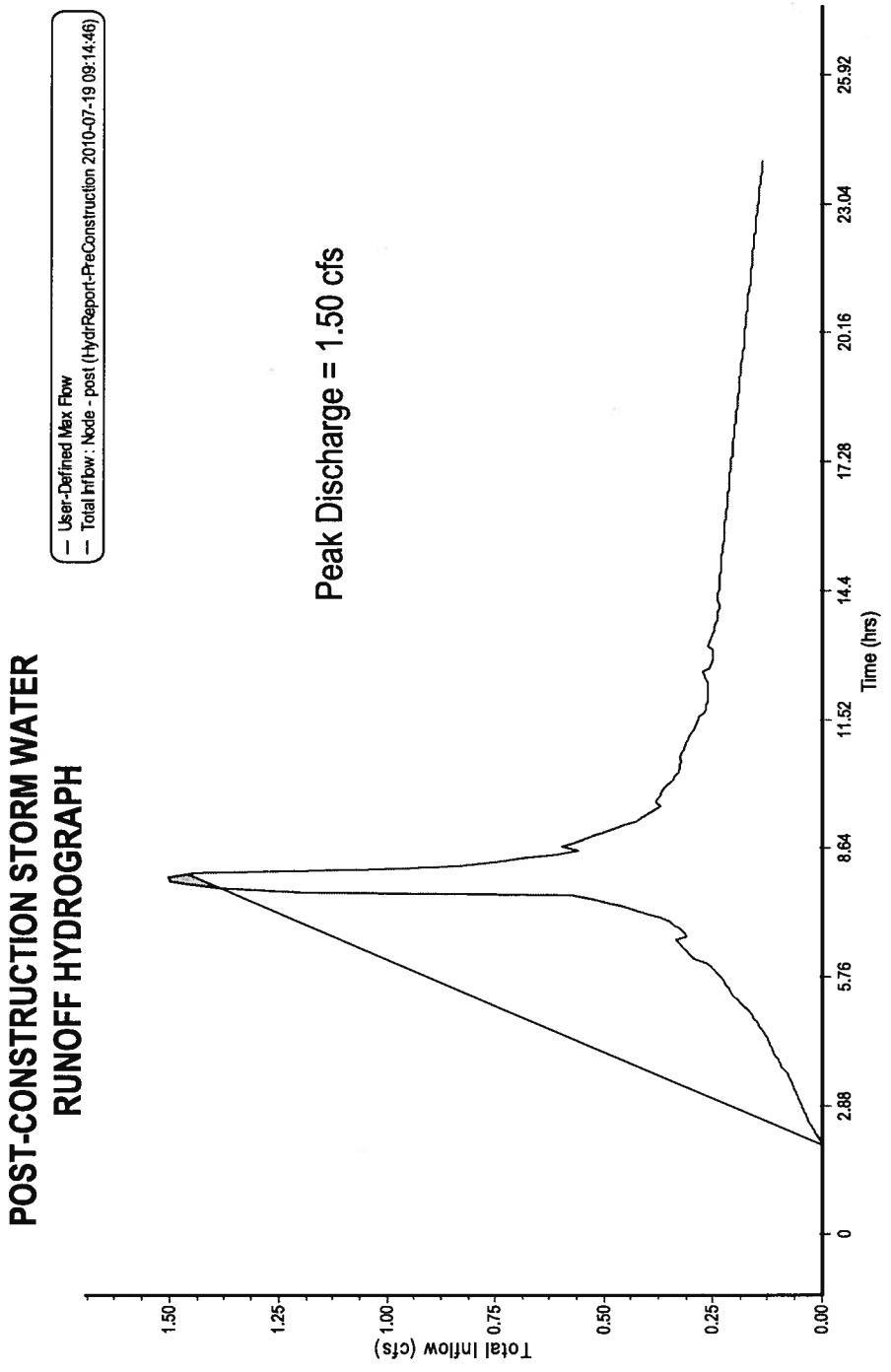
Appendix 6 TR-55 Curve Number Table

Description	Condition	A	B	C	D	Condensed Description
FULLY DEVELOPED URBAN AREAS	Vegetation					
Open space (lawns, parks, etc.)						
grass cover < 50%	Poor	68	79	86	89	< 50% grass cover
grass cover 50% to 75%	Fair	49	69	79	84	50 - 75% grass cover
grass cover > 75%	Good	39	61	74	80	> 75% grass cover
Impervious Areas						
Paved parking lots, roofs, driveways		98	98	98	98	Paved parking & roofs
Streets and roads						
Paved: curbs and storm sewers		98	98	98	98	Paved roads with curbs & sewers
Paved: open ditches (with right-of-way)	50% imp	83	89	92	93	Paved roads with open ditches
Gravel (with right-of-way)		76	85	89	91	Gravel roads
Dirt (with right-of-way)		72	82	87	89	Dirt roads
Urban Districts	impervious					
Commercial & business	85% imp	89	92	94	95	Urban commercial
Industrial	72% imp	81	88	91	93	Urban industrial
Residential Districts						
(by average lot size)	impervious					
1/8 acre (town houses)	65% impervious	77	85	90	92	1/8 acre lots
1/4 acre	38% impervious	61	75	83	87	1/4 acre lots
1/3 acre	30% impervious	57	72	81	86	1/3 acre lots
1/2 acre	25% impervious	54	70	80	85	1/2 acre lots
1 acre	20% impervious	51	68	79	84	1 acre lots
2 acre	12% impervious	46	65	77	82	2 acre lots
Western Desert Urban Areas						
Natural desert (pervious areas only)		63	77	85	88	Natural western desert
Artificial desert landscaping		96	96	96	96	Artificial desert landscape
DEVELOPING URBAN AREA	(No Vegetation)					
Newly graded area (pervious only)		77	86	91	94	Newly graded area
CULTIVATED AGRICULTURAL LAND						
Fallow						
Bare soil		77	86	91	94	Fallow, bare soil
Crop residue (CR)	Poor	76	85	90	93	Fallow, crop residue
Crop residue (CR)	Good	74	83	88	90	Fallow, crop residue
Row crops						
Straight row (SR)	Poor	72	81	88	91	Row crops, straight row
Straight row (SR)	Good	67	78	85	89	Row crops, straight row
SR + Crop residue	Poor	71	80	87	90	Row crops, SR + CR
SR + Crop residue	Good	64	75	82	85	Row crops, SR + CR
Contoured (C)	Poor	70	79	84	88	Row crops, contoured
Contoured (C)	Good	65	75	82	86	Row crops, contoured
C + Crop residue	Poor	69	78	83	87	Row crops, C + CR
C + Crop residue	Good	64	74	81	85	Row crops, C + CR
Contoured & terraced (C&T)	Poor	66	74	80	82	Row crops, C&T
Contoured & terraced (C&T)	Good	62	71	78	81	Row crops, C&T
C&T + Crop residue	Poor	65	73	79	81	Row crops, C&T + CR
C&T + Crop residue	Good	61	70	77	80	Row crops, C&T + CR
Small grain						
Straight row (SR)	Poor	65	76	84	88	Small grain, straight row
Straight row (SR)	Good	63	75	83	87	Small grain, straight row
SR + Crop residue	Poor	64	75	83	86	Small grain, SR + CR
SR + Crop residue	Good	60	72	80	84	Small grain, SR + CR
Contoured (C)	Poor	63	74	82	85	Small grain, contoured
Contoured (C)	Good	61	73	81	84	Small grain, contoured
C + Crop residue	Poor	62	73	81	84	Small grain, C + CR
C + Crop residue	Good	60	72	80	83	Small grain, C + CR

Contoured & terraced (C&T)	Poor	61	72	79	82	Small grain, C&T
Contoured & terraces (C&T)	Good	59	70	78	81	Small grain, C&T
C&T + Crop residue	Poor	60	71	78	81	Small grain, C&T + CR
C&T + Crop residue	Good	58	69	77	80	Small grain, C&T + CR
Close-seeded legumes/rotated meadow						
Straight row	Poor	66	77	85	89	Legumes, straight row
Straight row	Good	58	72	81	85	Legumes, straight row
Contoured	Poor	64	75	83	85	Legumes, contoured
Contoured	Good	55	69	78	83	Legumes, contoured
Contoured & terraced	Poor	63	73	80	83	Legumes, C&T
Contoured & terraced	Good	51	67	76	80	Legumes, C&T
OTHER AGRICULTURAL LAND						
Pasture, grassland, or range	Poor	68	79	86	89	Pasture, grassland, or range
	Fair	49	69	79	84	Pasture, grassland, or range
	Good	39	61	74	80	Pasture, grassland, or range
Meadow, continuous grass, non-grazed		30	58	71	78	Meadow, non-grazed
Brush or brush/weed/grass mixture	Poor	48	67	77	83	Brush
	Fair	35	56	70	77	Brush
	Good	30	48	65	73	Brush
Woods & grass combination	Poor	57	73	82	86	Woods & grass combination
	Fair	43	65	76	82	Woods & grass combination
	Good	32	58	72	79	Woods & grass combination
Woods	Poor	45	66	77	83	Woods
	Fair	36	60	73	79	Woods
	Good	30	55	70	77	Woods
Farmsteads		59	74	82	86	Farmsteads
ARID AND SEMIARID RANGELAND						
Herbaceous	Poor		80	87	93	Herbaceous range
	Fair		71	81	89	Herbaceous range
	Good		62	74	85	Herbaceous range
Oak & Aspen	Poor		66	74	79	Oak & Aspen range
	Fair		48	57	63	Oak & Aspen range
	Good		30	41	48	Oak & Aspen range
Pinyon & Juniper	Poor		75	85	89	Pinyon & Juniper range
	Fair		58	73	80	Pinyon & Juniper range
	Good		41	61	71	Pinyon & Juniper range
Sagebrush (w/grass understory)	Poor		67	80	85	Sagebrush range
	Fair		51	63	70	Sagebrush range
	Good		35	47	55	Sagebrush range
Desert shrub	Poor	63	77	85	88	Desert shrub range
	Fair	55	72	81	86	Desert shrub range
	Good	49	68	79	84	Desert shrub range

APPENDIX 6


PRE-CONSTRUCTION STORM WATER
RUNOFF HYDROGRAPH
Peak Discharge = 1.46 cfs
Total Inflow (cfs)
Time (hrs)
0.00
0.25
0.50
0.75
1.00
1.25
1.50
0
2
4
6
8
10
12
14
16
18
20
22


POST-CONSTRUCTION STORM WATER
RUNOFF HYDROGRAPH
User-Defined Max Flow
Total Inflow : Node - post (HydrReport-PreConstruction 2010-07-19 09:14:46)
Peak Discharge = 1.50 cfs
Total Inflow (cfs)
1.50
1.25
1.00
0.75
0.50
0.25
0.00
0
2.88
5.76
8.64
11.52
14.4
17.28
20.16
23.04
25.92
Time (hrs)

DELTA CONSULTING & ENGINEERING
OF ST. HELENA

RECEIVED
SEP 23 2010
NAPA CO. CONSERVATION
DEVELOPMENT & PLANNING DEPT.

STORMWATER RUNOFF MANAGEMENT PLAN (SRMP)

FOR THE

ROGERS WINERY USE PERMIT

PROJECT LOCATED AT

970 CONN VALLEY ROAD
ST. HELENA, CA 94574

County: NAPA
APN: 025-180-061

JULY 16, 2010

PREPARED FOR REVIEW BY:

NAPA COUNTY DEPARTMENT OF PUBLIC WORKS
1195 THIRD STREET, ROOM 201
NAPA, CA 94559

1104 ADAMS STREET, SUITE 203 – ST. HELENA, CALIFORNIA 94574
707-963-8456 TELE + 707-963-8528 FAX

A. PLANNING AND ORGANIZATION

1. **Completed Post-Construction BMP Applicability Checklist (Appendix A)**
   See Attached.

2. **Completed SRMP General Information Form (Appendix B)**
   See Attached.

3. **Completed SRMP General Checklist for a Complete Application (Appendix C)**
   See Attached

4. **Vicinity Map**
   See sheet UP1.0 in the Use Permit Plans prepared by this office and dated 07-15-10.

5. **Other Applicable Regulatory Permits**
   Not applicable.

6. **Nature and Purposed Use of the Project**
   The purpose of this project is for the Rogers Winery Use Permit. Rogers Winery proposes to construct a winery with a production capacity of 30,000 gallons per year. The project is a preliminary design of the winery site, including constructing an all-weather surface of an existing access drive, converting an existing building to a winery tasting room and production building, locating a new covered crush pad and parking spaces, and performing all applicable grading and drainage for the site.

B. IDENTIFY POLLUTANTS AND CONDITIONS OF CONCERN

1. **Drainage Study (Projects > 10,000 ft^2 new impervious surface)**
   See Hydrology Report for Rogers Winery prepared by this office and dated July 15, 2010.

2. **Source Control BMP Selection Worksheet (Appendix E)**
   See Attached

3. **Storm water Conveyance Systems**
   See sheet UP2.1 of the Use Permit Plans prepared by this office and dated 07-15-10 for the proposed stormwater conveyance system. The project is neither within the FEMA floodway nor the 100-year flood zone.

4. **Post-Construction BMP Selection Worksheet (Appendix F – Treatment Control)**
   Not Applicable

C. POST-CONSTRUCTION BMPS

Site Design BMP's

1. **Maintain Storm water Runoff Volumes to Pre-Development Levels**

Site Design BMP	Activity
Minimize impervious footprint	The proposed site plan utilizes existing landscaping and planter areas to maintain the impervious footprint. The proposed access drive has been designed to the minimum width allowed, minimizing the impervious footprint.
Conserve natural areas	The existing development of the site is being utilized fully for this project. The proposed access road will be located at the same location as the existing site access road. Grass lined swales will be used to convey the stormwater to vineyards. Swales will expel stormwater into rock energy dissipaters and into the adjacent vineyards where the stormwater currently sheet flows.

2. **Storm water Outfall Structures within Jurisdiction of DFG, RWQCB, and/or ACE**
   Not Applicable.

3. **Slopes and Distances between Project Footprint and Open Storm Water Conveyance Systems**
   The proposed winery building and nearest parking spot is 200' from Conn Creek. Stormwater derived in this area will be conveyed to the adjacent vineyards via an open-channel swale. The stormwater will sheet flow across the vineyards, allowing the majority of the water to percolate into the ground while filtering the balance of potential contaminants.

Source Control BMPs

4. **Source Control Measures (Appendix E)**
   A. Roads and Driveways – The existing gravel access drive will be replaced with an all-weather access drive. The proposed access drive will be located in the exact location as the existing hard-packed gravel access drive, minimizing the affects of the increased impervious area.

B. Parking Areas – The existing site has large open areas for parking. The proposed site plan calls for a total of 5 parking spaces.

C. New or Reconstructed Storm water Conveyance Systems – The overall stormwater conveyance is not being altered. The grading of the site has been designed such that the existing stormwater routes will not be altered. The proposed swales are releasing the stormwater into the same vineyards in which the stormwater currently flows into during storm events.

D. Storm Drain Inlets, Open Channels, and Creeks – Two new open channel grassy lined swales will capture and convey the stormwater into the adjacent vineyards. The stormwater will be released into rock energy dissipaters and be allowed to sheet flow through the vineyards for percolation and filtration.

E. Landscaping – The landscaping and planting areas on the proposed site will remain.

F. Trash Storage Areas – The trash and recycling area shall be contained in the existing covered garage on the site.

G. Pools, Spas, and Fountains – N/A

H. Roofs, Gutters and Downspouts – All roofs, gutters, and downspouts shall be construction with PVC or HDPE. Once released, the stormwater will sheet flow across adjacent vineyards.

I. Loading and Unloading Dock Areas – N/A

J. Outdoor Material Storage Areas – N/A

K. Processing Areas – A proposed winery crush pad on the site will be covered. A floor drain on the crush pad will be connected to the septic system.

L. Vehicle/Equipment Repair and Maintenance Areas – N/A

M. Vehicle/Equipment Wash Areas – N/A

N. Food Service Equipment Cleaning – N/A

O. Interior Floor Drains – All interior floor drains shall be plumbed to the sewer system and not connected to the storm drain system.

P. Fueling Areas – N/A

Treatment Control BMP's

5. **Treatment Control BMP Selection Worksheet (Appendix F)**
   Not Applicable.

6. **BMP Treatment Control Calculations**
   Not Applicable.

D. SITE PLAN

The Use Permit Plans for this project (prepared by this office and dated 07-15-10) shows the limit of disturbance, drainage patterns, location of Site Design and Source Control BMP's, and location of future impervious areas. Sheet UP1.0 has an overview of the entire parcel, and sheets UP2.0 and UP2.1 has the localized improvements to the parcel

E. POST-CONSTRUCTION BMP IMPLEMENTATION AND MAINTENANCE AGREEMENT

1. The Napa County Department of Public Works will be notified in writing 48 hours prior to commencing with construction. Failure to do so constitutes a violation of the approved SRMP.

2. Review and or approval of the SRMP shall not relieve the contractor from his or her responsibilities for compliance with Construction Site Runoff Control Requirements, nor shall it relieve the contractor from errors or omissions in the approved plan.

3. The stormwater contact person shall evaluate the performance of all BMPs and modify the SRMP and BMP implantation as appropriate to eliminate all illicit discharges and will notify the Napa County Department of Public Works within 48 hours.

4. I, the undersigned, certify that all land clearing, construction and development shall be done pursuant to the approved plan.

5. The BMPs presented in these plans shall be inspected and maintained on an annual basis at minimum. The BMPs for this proposed project include the grassy lined swales used to convey the stormwater into vineyards.

Signed: _____ Date: _____

Title: _____

APPENDIX

NAPA COUNTY POST-CONSTRUCTION RUNOFF MANAGEMENT REQUIREMENTS

APPENDIX A – APPLICABILITY CHECKLIST

Post-Construction Runoff Management Applicability Checklist	County of Napa Department of Public Works 1195 Third Street Napa, CA 94559 (707) 253-4351 for information

Project Address:	Assessor Parcel Number(s):	Project Number: *(for County use Only)*
970 Conn Valley Road, St. Helena	025-180-061	

Instructions:

Structural projects requiring a use permit, building permit, and/or grading permit must complete the following checklist to determine if the project is subject to the Post-Construction Runoff Management Requirements. In addition, the impervious surface worksheet on the reverse page must also be completed to calculate the amount of new and reconstructed impervious surfaces proposed by your project. This form must be completed, signed, and submitted with your permit application(s). Definitions are provided in the Post-Construction Runoff Management Requirements policy. **Note:** If multiple building or grading permits are required for a common plan of development, the total project shall be considered for the purpose of filling out this checklist.

POST-CONSTRUCTION STORMWATER BMP REQUIREMENTS (Parts A and B)

✓ If any answer to Part A are answered "yes" your project is a "Priority Project" and is subject to the Site Design, Source Control, and Treatment Control design standards described in the Napa County Post-Construction Runoff Management Requirements.

✓ If all answers to Part A are "No" and any answers to Part B are "Yes" your project is a "Standard Project" and is subject to the Site Design and Source Control design standards described in the Napa County Post-Construction Runoff Management Requirements.

✓ If every question to Part A and B are answered "No", your project is exempt from post-construction runoff management requirements.

Part A: Priority Project Categories

Does the project meet the definition of one or more of the priority project categories?

1. Residential with 10 or more units ..... Yes (No)
2. Commercial development greater than 100,000 square feet..... Yes (No)
3. Automotive repair shop..... Yes (No)
4. Retail Gasoline Outlet..... Yes (No)
5. Restaurant..... Yes (No)
6. Parking lots with greater than 25 spaces or greater than 5,000 square feet..... Yes (No)

*Refer to the definitions section for expanded definitions of the priority project categories.

Part B: Standard Project Categories

Does the project propose:

1. A facility that requires a NPDES Permit for Stormwater Discharges Associated with **Industrial** Activities?..... Yes (No)
2. New or redeveloped impervious surfaces 10,000 square feet or greater, excluding roads?..... Yes (No)
3. Hillside residential greater than 30% slope..... Yes (No)
4. Roadway and driveway construction or reconstruction which requires a Grading Permit..... (Yes) No
5. Installation of new storm drains or alteration to existing storm drains?..... Yes (No)
6. Liquid or solid material loading and/or unloading areas?..... Yes (No)
7. Vehicle and/or equipment fueling, washing, or maintenance areas, excluding residential uses?..... (Yes) No
8. Commercial or industrial waste handling or storage, excluding typical office or household waste?..... Yes (No)

Note: To find out if your project is required to obtain an individual General NPDES Permit for Stormwater discharges Associated with Industrial Activities, visit the State Water Resources Control Board website at, www.swrcb.ca.gov/stormwtr/industrial.html

NAPA COUNTY POST-CONSTRUCTION RUNOFF MANAGEMENT REQUIREMENTS
APPENDIX A – APPLICABILITY CHECKLIST

Impervious Surface Worksheet

Project phasing to decrease impervious surface area shall not exempt the project from Post-Construction Runoff Management requirements. A new development or redevelopment project must comply with the requirements if it is part of a larger common plan of development that would result in the creation, addition and/or reconstruction of one acre or more of impervious surface. (For example, if 50% of a subdivision is constructed and results in 0.9 acre of impervious surface, and the remaining 50% of the subdivision is to be developed at a future date, the property owner must comply with the Post-Construction Runoff Management requirements.

Type of Impervious Surface	Impervious Surface (Sq Ft)			Total New and Reconstructed Impervious Surfaces (Sq Ft)
	Pre-Project (if applicable)	New (Does not replace any existing impervious area)	Reconstructed (Replaces existing impervious area)	
Buildings, Garages, Carports, other Structures with roofs	5,840	0	2,840	2,840
Patio, Impervious Decking, Pavers and Impervious Liners	n/a	n/a	n/a	n/a
Sidewalks and paths	n/a	n/a	n/a	n/a
Parking Lots	n/a	1,447	n/a	1,447
Roadways and Driveways,	n/a	5,517	n/a	5,517
Off-site Impervious Improvements	n/a	n/a	n/a	n/a
Total Area of Impervious Surface (Excluding Roadways and Driveways)	n/a	6,964	2,840	9,804

Incorrect information on proposed activities or uses of a project may delay your project application(s) or permit(s).

I declare under penalty of perjury, that to the best of my knowledge, the information presented herein is accurate and complete.

Name of Owner or Agent (Please Print):	Title:
Signature of Owner or Agent:	Date:

NAPA COUNTY POST-CONSTRUCTION RUNOFF MANAGEMENT REQUIREMENTS
APPENDIX B – APPLICATION FOR SRMP REVIEW

FOR OFFICE USE ONLY

SUBMITTAL DATE: _____ **FILE #:** _____ **APN #:** _____

USGS QUAD: _____ **CalWatershed:** _____

REQUEST: _____

_____

USE PERMIT CATEGORY: ☐ Hillside Residence ☐ Subdivision ☐ Commercial Facility **TYPE:** ☐ Private ☐ Public

BUILDING AND/OR GRADING PERMIT: ☐ Structure ☐ Driveway ☐ Road ☐ Reservoir ☐ Cave ☐ Other

FINAL APPROVAL: Date: _____

Deposit: $ _____ _____ _____ _____

Deposit *Receipt Number* *Received By* *Date*

TO BE COMPLETED BY APPLICANT

(Please type or print legibly)

Applicant's Name: Gary Rogers **Company:** _____

Telephone #: (____)_____ **Fax #:** (____)_____ **E-Mail:** _____

Mailing Address: 10 Clay Street # 200 Oakland CA 94607

No Street City State Zip

Status of Applicant's Interest in Property: Owner

Property Owner's Name: Same as applicant

Telephone #: (____)_____ **Fax #:** (____)_____ **E-Mail:** _____

Mailing Address: _____

No Street City State Zip

Site Address/Location: 970 Conn Valley Road St. Helena, CA 94574

No Street City

Assessor's Parcel #(s): 025-180-061

SIGNATURE: I hereby certify that all the information contained in this application, including but not limited to, this application form, the Stormwater Runoff Management Plan (SRMP), the supplemental information sheets, site plan, plot plan, cross sections/elevations, is complete and accurate to the best of my knowledge. I hereby authorize such investigations including access to County Assessor's Records as are deemed necessary by the Department of Public Works for evaluation of this application and preparation of reports related thereto, including the right of access to the property involved.

_____ _____ _____ _____

Signature of Applicant Date Signature of Property Owner Date

NAPA COUNTY CONSTRUCTION SITE RUNOFF CONTROL REQUIREMENTS
APPENDIX C – SRMP CHECKLIST FOR A COMPLETE APPLICATION

FOR OFFICIAL USE ONLY
PLAN REVIEWER: _____ DATE RECEIVED: _____
PROJECT NAME: _____ PROJECT NUMBER: _____
PERMIT CATEGORY: ☐ Use Permit ☐ Building Permit ☐ Grading Permit

Project Category (check all applicable Priority or Standard Project categories)	
☐ **Priority Project**	☒ **Standard Project**
____ Residential with 10 or more units	____ Industrial NPDES permit
____ 100,000 sq ft commercial	____ Impervious surface > 10,000 sq ft (excluding roads)
____ Automotive repair shop	____ Hillside residential on slopes 30% or more
____ Restaurant	_X_ Roadways and driveways that require a grading permit
____ Retail Gasoline Outlet	____ New or alteration of storm drains
____ Parking Lot (>25 spaces or >5,000SF)	____ Liquid or solid material loading areas
	____ Vehicle or equipment fueling, washing, or maintenance
	____ Commercial or industrial waste handling and storage

At a minimum, the Stormwater Runoff Management Plan must cover the areas listed below.

√ = Complete, X = Incomplete, NA = Not Applicable

A. Planning and Organization

1. _X_ Completed Post-Construction BMP Applicability Checklist (Appendix A)
2. _X_ Completed SRMP General Information Form (Appendix B).
2. _X_ Vicinity map showing the site in relation to the surrounding area.
3. _NA_ If applicable, incorporate or reference other regulatory permits and their requirements. **Note:** All State and Federal Permits (1600, 401/404, General Permit, etc) must be approved prior to any construction within State Waters.
4. _X_ Describe the nature of the proposed use of the development project.

B. Identify Pollutants and Conditions of Concern

1. _X_ Standard and Priority Projects proposing 10,000 or more sq. ft. of new impervious surface, excluding roadways and driveways or projects directly discharging to tidally-influenced receiving waters, must prepare a drainage study that calculates the pre-development runoff volume according to the criteria in Chapter 3.1.
2. _X_ Standard and Priority Projects must provide a completed Source Control BMP Selection Worksheet (Appendix E) that lists all anticipated activities associated with the use of the proposed project that have the potential to generate pollutants.
3. _X_ Standard and Priority Projects must list and describe all stormwater conveyance systems (e.g. storm drain, ditch, creek, etc) within 150 feet of the project footprint. Discretionary projects must also provide an analysis for all open stormwater conveyance systems. At a minimum, the analysis must consider the criteria in Chapter 3.3.

4. NA Priority Projects required to incorporate Treatment Control BMPs into the project design shall provide a completed Post-Construction BMP Selection Worksheet (Appendix F).

D. Post-Construction BMPs

Site Design BMPs

1. X List and describe all Site Design BMPs used to maintain stormwater runoff volumes to pre-development conditions according to the criteria described in Chapter 4.1. If structural controls are required to maintain pre-development peak runoff conditions, a description of why Site Design BMPs alone are not practicable for maintaining runoff conditions is required.

2. NA List and describe all structures (outfalls, culverts, etc.) proposed within the jurisdiction of the DFG, RWQCB, and/or ACE. The description must include the structure's specifications and designed storm capacity. The structure must be constructed in accordance with all applicable State and Federal permits.

3. X Provide the average slope and minimum and maximum distance between the project footprint and all open stormwater conveyance systems (e.g. ditches, creeks, etc.). Ministerial projects must establish setbacks that comply with the stream setback requirements in the Conservation Regulations and Floodplain Management Regulations. Discretionary projects may establish and/or restore wider buffers zones to protect aquatic resources and structures.

Source Control BMPs

4. X List and describe all source control measures included in the project design to eliminate pollutant contact with stormwater from the anticipated activities identified in the Source Control BMP Selection worksheet (Appendix E). The description must include the location and design specifications for each source control BMP.

Treatment Control BMPs

5. NA Priority Projects provide a completed Treatment Control BMP Selection Worksheet (Appendix F) and include a description of the location and design specifications for each treatment control BMP.

6. NA Provide the calculations used to design the treatment control BMPs to satisfy the numeric sizing treatment standards in Chapter 4.3. Applicants may count the site design BMPs toward meeting these numeric standards.

F. Site Plan

The site plan shall be neat and legible and shall be drawn on a 24" X 36" sheet and shall be folded to 8 ½ " by 11" prior to submittal. When two or more sheets are used to illustrate the plan view, an index sheet is required, illustrating the entire project on one (1) 24" x 36" (minimum) sheet. The entire parcel shall be identified on the plan. If only a portion of the site will be developed, the entire parcel may be shown as a detail, with the area to be developed, cleared, and/or graded drawn to an appropriate scale.

The site plan shall include all of the following:

1. X Provide and legend and north arrow on the plan.

2. X Maximum plan scale of 1" = 100'.

3. X An outline of the entire property.

4. X Provide a "limit of disturbance" line which shows the limit of soil disturbance and areas where existing vegetation is preserved.

5. X All open stormwater conveyance systems (e.g. ditches, creeks) and setback distances must be delineated.
6. NA State and Federal wetlands must be accurately delineated.
7. NA The National Flood Insurance Program 100 Year Flood Zone and Flood Way must be delineated.
8. X Drainage areas on the property and direction of flow. Map must extend as far outside the site perimeter as necessary to illustrate relevant drainage areas. Where relevant drainage areas are too large to depict on the map, map notes or inserts are sufficient.
9. NA All storm drain inlets and outlets must be located on the plan.
10. X Anticipated stormwater discharge locations.
11. X Location of existing and future Site Design and source Control BMPs.
12. NA Location of existing and future Treatment Control BMPs.
13. X Location of existing and future "impervious" areas - paved areas, buildings, covered areas.

G. Post-Construction BMP Implementation and Maintenance Agreement

1. NA One of the maintenance mechanisms described in Chapter 5A, which is satisfactory to the Director, must be signed and executed.
2. X Include a signed Owner's Certification that states "I, the undersigned, certify that all land clearing, construction and development shall be done pursuant to the approved plan." This must be signed in ink on each plan submitted or on an original reproducible.

NAPA COUNTY POST-CONSTRUCTION RUNOFF MANAGEMENT REQUIREMENTS
APPENDIX E – SOURCE CONTROL BMP SELECTION WORKSHEET

All Standard and Priority Projects must complete and sign the Source Control BMP Selection Worksheet and submit it with their Stormwater Runoff Management Plan (SRMP).

Date of Application: 07-16-10

Project Number: *(For County Use Only)*

Type of Application: ☒ Use Permit ☐ Building Permit ☐ Grading Permit

Project Location or Address: 970 Conn Valley Road St. Helena, CA 94574

Project Name: Rogers Winery

Property Owner Name: Gary Rogers

Applicant's Name: Gary Rogers

☒ Owner ☐ Contractor ☐ Engineer/Architect ☐ Developer

Applicant's Address: 10 Clay Street #200 Oakland, CA 94607

Applicant's Phone: _____ **Fax:** _____ **E-mail:** _____

Parcel/Tract #: _____ **Lot #:** _____ **APN:** 025-180-061

Fill out the table below to indicate which Source Control BMPs in Chapter 4.2 apply to your project.

Check box to indicate proposed activity	Land Use/Activities	Limited Exclusion (Check box if project is excluded)	Source Control BMP Standard
x	Roads and driveways.	None	4.2.A
x	Parking Areas	None	4.2.B
x	New or Reconstructed Stormwater Conveyance Systems	None	4.2.C
	Storm drain Inlets and open channels or creeks.	☐ Detached Residential Homes	4.2.D
	Landscaping	None	4.2.E
	Trash Storage Areas.	☐ Detached Residential Homes	4.2.F
	Pools, Spas, and Fountains.	None	4.2.G
	Roofs, Gutters, and Downspouts.	None	4.2.H
	Loading and Unloading Dock Areas	None	4.2.I
	Outdoor Material Storage Areas.	☐ Detached Residential Homes	4.2.J
x	Processing Areas.	None	4.2.K
	Vehicle and Equipment Repair and Maintenance Areas	☐ Detached Residential Homes	4.2.L
	Vehicle and Equipment Wash Areas	☐ Detached Residential Homes	4.2.M
	Food Service Equipment Cleaning	None	4.2.N
x	Interior Floor Drains.	None	4.2.O
	Fueling Areas.	None	4.2.P

Incorrect information on proposed activities or uses of a project may delay your project application(s) or permit(s).

I declare under penalty of perjury, that to the best of my knowledge, the information presented herein is accurate and complete.

Name of Owner or Agent (Please Print):	Title:
Signature of Owner or Agent:	Date: