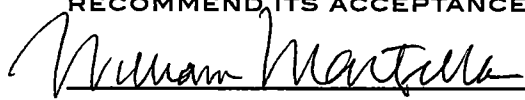


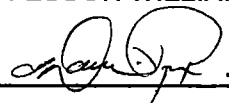
TO THE GRADUATE COUNCIL:

I AM SUBMITTING HERewith A THESIS WRITTEN BY KAREN ELIZABETH SNYDER ENTITLED "A PHENOMENOLOGICAL APPROACH TO ARCHITECTURE: THE COLON-WURTH WINERY. I HAVE EXAMINED THE FINAL COPY OF THIS THESIS FOR FORM AND CONTENT AND RECOMMEND THAT IT BE ACCEPTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARCHITECTURE, WITH A MAJOR IN ARCHITECTURE.

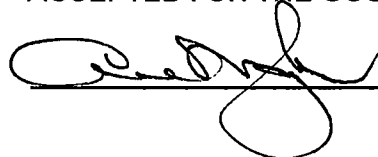

DR. GEORGE DODDS, MAJOR PROFESSOR

WE HAVE READ THIS THESIS AND
RECOMMEND ITS ACCEPTANCE:


PROFESSOR WILLIAM MARTELLA


PROFESSOR L. DAVID FOX

ACCEPTED FOR THE COUNCIL:



INTERIM VICE PROVOST AND
DEAN OF THE GRADUATE SCHOOL

**A PHENOMENOLOGICAL APPROACH TO ARCHITECTURE:
THE COLON-WURTH WINERY**

**A THESIS PRESENTED FOR THE
MASTER OF ARCHITECTURE DEGREE**

**THE UNIVERSITY OF TENNESSEE,
KNOXVILLE**

KAREN ELIZABETH SNYDER

MAY 2001

DEDICATION

THIS THESIS IS DEDICATED TO MY PARENTS

DR. WILLIAM BRYSON SNYDER, JR., PH.D.

AND

MRS. JUDY MERIDIETH SNYDER

MY BROTHER

MR. WILLIAM CHRISTOPHER SNYDER

AND MY FUTURE HUSBAND

MR. JEFFREY ALLEN WILLIAMSON

WHO HAVE PROVIDED ENDLESS LOVE AND ENCOURAGEMENT. THANK YOU FOR YOUR FAITH.

ACKNOWLEDGMENT

THERE ARE MANY PEOPLE TO WHOM I AM IN-DEBITED FOR THE OPPORTUNITY TO PURSUE THIS DEGREE. I HAVE LEARNED AND EXPERIENCED MORE THAN I COULD EXPRESS IN SUCH A BRIEF NOTE. I AM PARTICULARLY GRATEFUL TO PROFESSOR RICHARD M. KELSO, MS. JENNIFER MARTELLA AND PROFESSOR JON CODDINGTON FOR GIVING ME THE PUSH TO BE ACCEPTED TO SCHOOL, AND TO MY COMMITTEE, PROFESSOR DAVID FOX AND PROFESSOR BILL MARTELLA AND PROFESSOR GEORGE DODDS FOR GIVING ME THE PUSH TO GRADUATE. EACH HAS PROVIDED UNABATED ENCOURAGEMENT AND SUPPORT. I HOPE THAT THESE RELATIONSHIPS WILL ENDURE.

OTHERS WHO I WOULD LIKE TO INCLUDE ARE MY CLASSMATES. THANK YOU FOR MAKING THE LAST THREE YEARS BEARABLE. I THINK MY CHEEKS WILL HURT ETERNALLY FROM LAUGHING SO MUCH! YOU WILL ALL BE MISSED DEARLY. THANK YOU TO VERA FARRIS FOR HER BEAUTIFUL RENDERING ABILITY AND FRIENDSHIP.

FINALLY, I AM GRATEFUL FOR THE UNEXPECTED SURPRISE OF MEETING MY FUTURE HUSBAND, SOUL MATE AND MY BEST FRIEND JEFF WILLIAMSON.

ABSTRACT

THIS THESIS INVESTIGATES THE MAKING OF PLACE THROUGH AN ARCHITECTURE THAT SENSUOUSLY ENGAGES THE BODY, CREATING A "WHOLE" PHENOMENOLOGICAL EXPERIENCE FOR THE OCCUPANT. IF EXPERIENCES ARE REDUCED TO VISUAL ABSTRACTIONS AND DIMENSION, THEN WE HAVE REDUCED OURSELVES TO MERE OBSERVERS. THE BODY AND THE SENSES ARE CRITICAL BECAUSE THEY PLACE US IN THE HERE AND NOW-THEY HELP US TO DEVELOP AN INTIMACY WITH THE PLACE. SEVERAL QUALITIES DEFINE THIS INTIMACY. THESE INCLUDE MATERIALITY (TOUCH); ACOUSTICS (HEARING), TOPOGRAPHY, AND LUMINOSITY OF PLACE (LIGHT AND SHADOW) SMELL OF A PLACE AND EVEN CLIMATE. IN THIS THESIS, I HAVE EXPLORED HOW ARCHITECTURE CAN FOSTER AND SUSTAIN A SYNESTHETIC EXPERIENCE, MOVING BEYOND LIMITS OF THE FORMAL AND VISUAL.

SITE

THE WINERY IS ON HIGHWAY 29, 7 MILES NORTH OF ST. HELENA IN CALISTOGA, CALIFORNIA. IT PROVIDES UNIQUE OPPORTUNITIES AND CONSTRAINTS. DIVIDED INTO NORTH AND SOUTH SECTORS BY A PUBLIC ROAD, THE NORTH SECTOR IS DOMINATED BY A HEAVILY WOODED KNOLL. THIS IS IDEAL FOR CREATING CAVES TO AGE WINE AT A CONSTANT TEMPERATURE IN THE EARTH.

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"THANKS TO THE HOUSE, A GREAT MANY OF OUR MEMORIES ARE HOUSED, AND IF THE HOUSE IS A BIT ELABORATE, IF IT HAS A CELLAR AND A GARRET, NOOKS AND CORRIDORS, OUR MEMORIES HAVE REFUGES THAT ARE ALL THE MORE CLEARLY DELINEATED. ALL OUR LIVES WE COME BACK TO THEM IN DAYDREAMS. A PSYCHOANALYST SHOULD, THEREFORE, TURN HIS ATTENTION TO THIS SIMPLE LOCALIZATION OF OUR MEMORIES [TO WHICH] I SHOULD LIKE TO GIVE THE NAME OF TOPO-ANALYSIS. AT TIMES WE THINK WE KNOW OURSELVES IN TIME, WHEN ALL WE KNOW IS THE SEQUENCE OF FIXATIONS IN THE SPACES OF THE BEING'S STABILITY. IN ITS COUNTLESS ALVEOLI SPACE CONTAINS COMPRESSED TIME. THIS IS WHAT SPACE IS FOR.

THE TOPOLOGIST STARTS TO ASK QUESTIONS: WAS THE ROOM A LARGE ONE? WAS THE GARRET CLUTTERED UP? WAS THE NOOK WARM? HOW WAS IT LIGHTED? HOW, TOO, IN THESE FRAGMENTS OF SPACE, DID THE HUMAN BEING ACHIEVE SILENCE? MEMORY— WHAT A STRANGE THING IT IS!— DOES NOT RECORD CONCRETE DURATION, IN THE BERGSONIAN SENSE OF THE WORD. WE ARE UNABLE TO RELIVE DURATION THAT HAS BEEN DESTROYED. WE CAN ONLY THINK OF IT, IN THE LINE OF AN ABSTRACT TIME THAT IS DEPRIVED OF ALL THICKNESS. MEMORIES ARE MOTIONLESS, AND THE MORE SECURELY THEY ARE FIXED IN SPACE, THE SOUNDER THEY ARE."

GASTON BACHELARD

THE POETICS
OF SPACE

I. INTRODUCTION

THESIS STATEMENT

IT IS VIRTUALLY IMPOSSIBLE TO IMAGINE A MEMORABLE EXPERIENCE WITHOUT REFERENCE TO PLACE. PLACE MEANING MORE THAN ABSTRACT LOCATION, IT HELPS US DETERMINE THE CHARACTER OF THE ENVIRONMENT THROUGH THE USE OF LIGHT, SOUND, SMELL AND TACTILITY. THIS THESIS WILL EXPLORE THE MAKING OF MEMORABLE *PLACE* THROUGH AN ARCHITECTURE THAT SENSUOUSLY ENGAGES THE BODY, THEREBY CREATING A "WHOLE" PHENOMENOLOGICAL EXPERIENCE FOR THE OCCUPANT.

PROJECT TITLE:

THE COLÒN-WURTH WINERY- CALISTOGA, CA

SCOPE

THE WINERY WILL SERVE AS A LANDMARK FOR COLÒN-WURTH. IT IS TO BE LOCATED IN A VISUALLY PROMINENT POSITION FROM HIGHWAY 29. PRODUCTION WILL EVENTUALLY BE 50,000 CASES OR MORE OF WINE PER YEAR WITH SIXTY PERCENT BEING WHITE AND FORTY PERCENT RED. AT FULL CAPACITY, A TOTAL OF APPROXIMATELY 800 TONS OF GRAPES WILL BE DELIVERED TO THE WINERY PER HARVEST DURING A SIX WEEK PERIOD- AUGUST THROUGH OCTOBER. DAILY TONNAGE RECEIVED MAY BE AS MUCH AS SIXTY TONS. TOTAL WINERY CAPACITY WILL BE APPROXIMATELY 300,000 GALLONS OF STAINLESS STEEL TANKS AND WOODEN BARRELS. COLÒN-WURTH WILL BE A COMMERCIAL FACILITY, OPEN TO THE PUBLIC FOR TOURS OF THE WINERY AND SCULPTURE EXHIBITIONS. THE COLÒN-WURTH WINERY WILL BE A MEMORABLE PLACE FOR ALL OCCUPANTS. TAKING A

PHENOMENOLOGICAL APPROACH TO THE ARCHITECTURE THE WINERY WILL ONLY ENHANCE THE ALREADY SENSUOUS EXPERIENCE OF WINE MAKING AND TASTING.

THE WINERY WILL BE DESIGNED TO INCORPORATE EXHIBITION SPACE FOR AN EXTENSIVE DONALD JUDD SCULPTURE COLLECTION. THIS EXHIBITION SPACE WILL BE INTEGRATED WITH THOSE PRODUCTION FACILITIES THAT ARE OPEN TO THE PUBLIC. THE COLLECTION INCLUDES JUDD'S ALUMINUM BOX (INTERIOR) AND CONCRETE BOX (EXTERIOR) SCULPTURES. THESE SCULPTURES ARE 'INTERACTIVE', IN A MANNER THAT ALLOWS THE OBSERVER TO UNDERSTAND THE INEXHAUSTIBLE POSSIBILITIES OF THE PIECE. BOTH MATERIALS USED FOR THESE SCULPTURES, ALUMINUM AND CONCRETE, PROVOKE ALL OF THE SENSES, CONSCIOUSLY OR UNCONSCIOUSLY. FOR EXAMPLE ALUMINUM IS SMOOTH TO THE TOUCH, THERE IS A CONSTANT FLUX IN TEMPERATURE, IT SMELLS "SHARP" AND SOUND REVERBERATES BASED ON THE CONFIGURATION AND LOCATION OF THE PIECE. THE QUALITY OF LIGHT REFLECTED AND ABSORBED MAINTAINS CONSTANT VARIATION. THE SAME APPLIES TO CONCRETE AND ITS QUALITIES. JUST AS THE ART OF TASTING WINE REQUIRES USE OF THE SENSES, DONALD JUDD'S SCULPTURES REQUIRE THE OBSERVER TO EXPERIENCE THE PIECE PHENOMENOLOGICALLY.

THE EXHIBITION SPACE IS THE LEAST DEFINED FACILITY IN THE DESIGN PROGRAM. THIS IS INTENTIONAL AS TO MAINTAIN FLEXIBILITY FOR THE COLLECTION TO HAVE IDEAL SETTINGS ACCORDING TO THE NEEDS OF THE SCULPTURES.

II. PROGRAM

WINERY PROGRAM REQUIREMENTS

32,000 CASE WINERY SPACE REQUIREMENTS

AREA DESCRIPTION

GRAPE RECEIVING AND CRUSHING	NA	1800
FERMENTING AND PRESSING	18	3900
PROCESSING	12	480
TANK ROOM	18	2400
CAVES	12	6000
BOTTLING ROOM	9.5	528
BOTTLES AND SUPPLIES STORAGE	18	4000
CASED GOODS STORAGE	18	6500
LABORATORY	8	400
PRODUCTION TASTING ROOM	8	400
SHOP, MAINTENANCE AND TOOLS	8	500
MECHANICAL SYSTEMS	10	500
LOUNGES, EMPLOYEE LOUNGE	8	1000
TASTING AND DINING	10	1500
KITCHEN	10	750
OFFICES/ CONFERENCE	8	1500
TOTAL AREA		32,158

PROGRAM ANALYSIS

1. THERE MUST BE RELATIVE POSITIONS AND FLOWS BETWEEN PROCESS AREAS. FORKLIFT MOVEMENT MUST BE POSSIBLE BETWEEN ALL AREAS OF THE WINERY INCLUDING BARREL STORAGE.
2. GRAPE AND SUPPLY TRUCKS WILL BE TRACTOR-TRAILER TYPES WITH TRAILERS UP TO FIFTY FEET IN LENGTH. ADEQUATE SPACE MUST BE PROVIDED FOR STRAIGHT APPROACH AND EXIT TO CRUSHER-STEMMER AND GRAPE DELIVERY STATION. THE ROAD MUST HAVE ALL-WEATHER SURFACE. GRAPE UNLOADING AREAS HAVE SURFACE ELEVATION HIGHER THAN THE CRUSH AREA FLOOR ELEVATION.
3. GRAPE RECEIVING AND CRUSH PAD IS SIZED FOR FORKLIFT OPERATION, PUMPS, GRAPE CONVEYOR, AND CRUSHER STEMMER.
4. THE FERMENTATION AND PRESSING AREA IS INSIDE THE WINERY BUILDING. THIS SPACE WILL CONTAIN SIX STAINLESS STEEL TANKS THAT ARE NINETY-INCHES DIAMETER AND 114 INCHES TALL; TWO TANKS EIGHTY-FOUR INCHES DIAMETER AND 167-INCHES TALL; AND TWO TANKS, SIXTY SEVEN INCHES DIAMETER AND 131-INCHES TALL.
5. THE WOOD TANK ROOM WILL CONTAIN SIX TANKS, EIGHTY-FOUR INCHES DIAMETER AND TWO TANKS, SIXTY-SEVEN INCHES DIAMETER AND 131 INCHES TALL.
6. IN THE PROCESS AREA THERE WILL BE TWO FILTERS, A BARREL WASHING STATION, AND OTHER PROCESS EQUIPMENT LIKE CENTRIFUGES. THIS AREA WILL BE CENTRALLY LOCATED WITH ACCESS TO THE FERMENTATION TANK AREA, OAK TANK AREA, BARREL STORAGE, AND BOTTLING LINE. THIS AREA WILL HAVE CONSIDERABLE FORKLIFT TRAFFIC AND WILL ALSO BE USED TO STORE PUMPS AND OTHER PORTABLE PROCESS EQUIPMENT.

7. THE LABORATORY SHOULD BE AT THE SAME ELEVATION AS THE PRODUCTION AREA. NATURAL LIGHT TO THIS AREA IS DESIRABLE. THE PRODUCTION TASTING ROOM SHOULD BE ADJACENT TO THE LABORATORY OR ABOVE IF THE LAB IS ON THE GROUND FLOOR. IT SHOULD HAVE SUBSTANTIAL NORTH LIGHT.
8. THE MECHANICAL ROOM HOUSES A 50-TON REFRIGERATION SYSTEM, TANKS, AND A HOT WATER BOILER- GAS FIRED.
9. AS MUCH AS POSSIBLE, FREE SPANNED SPACE SHOULD BE DESIGNED FOR ALL PRODUCTION AREAS. THIS IS ESPECIALLY IMPORTANT IN THE WOOD TANK ROOM AND THE WAREHOUSE BOTTLE STORAGE, AND CASED GOODS STORAGE. THERE SHOULD BE NO COLUMNS IN THE BOTTLING ROOM AND PROCESS ROOM.
10. THE WAREHOUSE SPACE MUST BE AIR CONDITIONED AND ABLE TO BE CLOSED OFF FROM THE REST OF PRODUCTION AREAS. THE SAME IS TRUE FOR THE WOOD TANK ROOM.
11. SINCE THE WINERY WILL CONDUCT TOURS DURING WORKING HOURS, THE DESIGN CONCEPT SHOULD INCLUDE TOUR PATHS AND VIEWING AREA THAT WILL NOT DISTURB ANY OF THE PRODUCTION OPERATIONS.
12. THE MOST ECONOMICAL WAY TO STORE BARRELS IS TO NEST THEM. THEY SHOULD BE NESTED FOUR ROWS HIGH, APPROXIMATELY NINE TO TEN FEET, WITH A CEILING HEIGHT OF ROUGHLY 12 FEET. IN ALL WINE STORAGE AREA, TANK, BARREL BOTTLE, THE RATIO OF FREE AIR VOLUME TO CONTAINER VOLUME MUST BE KEPT TO A MINIMUM.

III. ISSUES

EXPERIENCING ARCHITECTURE PHENOMENOLOGICALLY

*"MORE THAN THE OTHER SENSES, THE EYE OBJECTIFIES AND MASTERS. IT SETS AT A DISTANCE, AND MAINTAINS THAT DISTANCE. IN OUR CULTURE, THE PREDOMINANCE OF THE LOOK OVER SMELL, TASTE, TOUCH, HEARING, HAS BROUGHT ABOUT AN IMPOVERISHMENT OF BODILY RELATIONS...THE MOMENT THE LOOK DOMINATES, THE BODY LOSES IT'S MATERIALITY."*¹

THE PHENOMENOLOGICAL EXPERIENCE OF SPACE ALLOWS US TO DESCRIBE HOW WE MIGHT ENCOUNTER ARCHITECTURE SENSUOUSLY. IF WE REDUCE OUR EXPERIENCE TO VISUAL ABSTRACTIONS OF DIMENSIONS BY ELIMINATING SMELL, SOUND AND TACTILE QUALITIES THEN WE HAVE REDUCED OURSELVES TO A MERE OBSERVER. TO EXPERIENCE ARCHITECTURE REQUIRES BODILY PARTICIPATION WHERE WE USE OUR SENSES TO CONSTANTLY APPREHEND THE SPACE WE OCCUPY.

THE VEHICLE FOR THIS EXPLORATION IS A WINERY. THIS IS AN OPPORTUNITY FOR ARCHITECTURE TO INFORM US PHENOMENOLOGICALLY- TO GO BEYOND THE VISUAL AND ALLOW US TO HAVE A FULL-BODIED EXPERIENCE OF SPACE. THERE MUST BE DIRECT COMPREHENSION OF THE SENSORIAL PERCEPTION THROUGH THE DIRECT STIMULATION OF THE SENSES RATHER THAN AN ABSTRACT RATIONAL PERCEPTION. THE BODY AND THE SENSES ARE CRITICAL BECAUSE THEY PLACE US IN THE HERE AND NOW

¹ LUCE IRIGARAY, AS QUOTED IN CRAIG OWENS. "FEMINISM AND POSTMODERNISM" IN HAL FOSTER, ED., *THE ANTI AESTHETIC*, PORT TOWNSEND: BAY PRESS, P. 198.

² PRECIS, *THE COLUMBIA ARCHITECTURAL JOURNAL*. ARCHITECTURE AND BODY, NEW YORK: RIZZOLI, 1988, P.11.

THE CONCRETE, IN THE "REAL" THAT WE HAVE LOST UNDER ALL THE SIMULATIONS.²

THE WINE TRADITION IS ONE FULL OF SENSUOUS EXPERIENCE. WINE TASTING INCORPORATES THE OBVIOUS SENSES - SMELL, TASTE AND SIGHT, BUT WINE MAKING ALSO INCORPORATES TOUCH AND SOUND. THERE ARE STILL WINERIES TODAY WHERE THE GRAPES ARE TRODDEN BY FOOT. THIS IS RARE, BUT IN THE SMALLER EUROPEAN CELLARS, THE ONLY CHANGE IN THE PROCESS HAS BEEN WEARING MORE CLOTHES.³ THE WINERIES THEMSELVES ALSO CREATE SENSUOUS EXPERIENCES —THE SOUND OF WALKING ON THE GRAVEL FLOORS OF OLDER WINERIES IS ONE NOT ONLY HEARD, BUT FELT, HAPTICALLY, BY THE WAY OUR BODY EXPERIENCES THE FEELING OF SINKING IN A GRAVEL WALK. FINALLY, THE ONE EXPERIENCE THAT RIVALS MOST, ARE THE INTOXICATING QUALITIES OF WINE. "ALCOHOL IN WINE FIRST RELEASES THE MECHANISM OF THE BRAIN AND FACILITATES THE AWAKING OF MEMORIES. SENSATIONS OF SMELL EASILY AWAKEN MEMORIES, AND THEN THE EXPERIENCE IS ANALYZED IN THE PARIETAL LOBE OF THE BRAIN. "⁴ BUT BEFORE IT IS ANALYZED BY THE BRAIN, IT IS EXPERIENCED BY THE BODY. THIS IS SOMETHING WE AS ARCHITECTS MUST TAKE INTO ACCOUNT WHEN MAKING PLACE.

³ HUGH JOHNSON. *THE WORLD ATLAS OF WINE*, NEW YORK: SIMON AND SCHUSTER, 1994. P. 34.

⁴ *IBID*, P 43.

MEMORY OF PLACE/MAKING OF PLACE/SPIRIT OF PLACE

"THE MOST ESSENTIAL AND MEMORABLE SENSE OF THREE DIMENSIONALITY ORIGINATES IN THE BODY EXPERIENCE AND THAT THIS SENSE MAY CONSTITUTE A BASIS FOR UNDERSTANDING SPATIAL FEELING IN OUR EXPERIENCE OF BUILDINGS."⁵

PLACE SEEMS TO BE DEFINED BY SEVERAL ESSENTIAL QUALITIES AND CONNECTIONS. THEY INCLUDE MATERIALITY, ACOUSTICS, TOPOGRAPHY, THE LUMINOSITY OF PLACE, THE CLIMATE AND THE SMELL OF A PLACE. OTHERS ARE THE DISTINCTION BETWEEN NATURAL AND MAN-MADE PLACE--PERHAPS THE DIFFERENTIATION BETWEEN INSIDE AND OUTSIDE. "TO SOME EXTENT, THE CHARACTER OF PLACE IS A FUNCTION OF TIME; IT CHANGES WITH THE SEASONS, THE COURSE OF THE DAY, AND THE WEATHER, FACTORS WHICH ABOVE ALL DETERMINE DIFFERENT CONDITIONS OF LIGHT."⁶

ACCORDING TO ROMAN BELIEF, EVERY "INDEPENDENT" BEING HAS ITS *GENIUS*; IT'S GUARDIAN SPIRIT. ARCHITECTURE COMES INTO BEING WHEN THE *GENIUS LOCI* IS FULLY REALIZED. AND TO REALIZE PLACE MEANS TO HAVE AN 'EXISTENTIAL FOOTHOLD' IN A CONCRETE SENSE. AND TO GAIN A FOOTHOLD, "MAN HAS TO BE ABLE TO ORIENT HIMSELF; HE HAS TO KNOW WHERE HE IS AND HOW HE IS IN A CERTAIN PLACE."⁷ SO, THEN, HOW DO WE ORIENT OURSELVES? THE ANSWER IS THROUGH OUR SENSES. WE FIND A "CORPOREAL CENTERPLACE, IT IS SIGNIFICANT

⁵ BLOOMER, KENT C. AND MOORE, CHARLES W. BODY MEMORY AND ARCHITECTURE, NEW HAVEN AND LONDON: YALE UNIVERSITY PRESS, 1977, P. X.

⁶ NORBERG-SCHULZ, CHRISTIAN. EXISTENCE, SPACE, AND ARCHITECTURE, NEW YORK: PRAEGER, 1971, P.39.

THAT A SENSE OF CENTER IS INDISPENSABLE FOR THE ORDERING OF STIMULI AND AN ESSENTIAL KEY TO THE PSYCHIC GEOGRAPHY OF OUR INTERNAL WORLD."⁸

"THE CONCEPT OF GENIUS LOCI NECESSARILY INVOLVES A MEETING, AND MERGING OF EXISTENCE WITH SPIRIT. IN SUCH A PLACE, OUR EXISTENTIAL OR CONCRETE AWARENESS EXTENDS INTO THE SPIRITUAL OR ABSTRACT DIMENSION. AN INTERACTION BETWEEN EXISTENCE AND SPIRIT EXPRESSES THE MULTIDIMENSIONALITY OF HUMAN ASPIRATION. THE EXPRESSION OF PRESENCE OF THIS MULTIDIMENSIONAL ASPIRATION IS THE NECESSARY PREREQUISITE TO A TRUE WORK OF ART; IT IS THE QUALITY THAT IMPARTS A MEMORABLE ENERGY TO THE WHOLE, THAT ESTABLISHES A POETIC DIMENSION."⁹

"IN ORDER FOR A WORK OF ART TO EXPRESS THE SPIRIT OF MAN THERE MUST BE SOMETHING BEYOND VISUAL IMAGERY; THE SURFACE STRUCTURE MUST BE UNDERLAID BY A DEEPER STRUCTURE. THE SOMETHING BEYOND SURFACE APPEARANCE IS A LINK WITH A MAN'S SUBCONSCIOUS, A LINK BETWEEN EXISTENTIAL APPEARANCE AND IMAGIC MEMORY."¹⁰

⁸NORBERG-SCHULZ, CHRISTIAN. EXISTENCE, SPACE, AND ARCHITECTURE, NEW YORK: PRAEGER, 1971, P.41.

⁹ BLOOMER, KENT C. AND MOORE, CHARLES W. BODY MEMORY AND ARCHITECTURE, NEW HAVEN AND LONDON : YALE UNIVERSITY PRESS, 1977,P. 50-51.

¹⁰ QUANTRILL, MALCOLM. THE ENVIRONMENTAL MEMORY: MAN AND ARCHITECTURE IN THE LANDSCAPE OF IDEAS, NEW YORK: SCHOCKEN BOOKS 1987,P.48-49.

SENSUALITY OF MATERIALS

"IN THE USE OF EVERY MATERIAL THERE MUST BE AN ANTICIPATION OF THE CONSTRUCTION OF A PLACE AND ITS TRANSFORMATION."¹⁰ ALDO ROSSI

IT IS IMPORTANT TO FOCUS NOT ONLY ON THE EXPERIENCE OF THE PLACE, BUT ALSO HOW IT IS CONSTRUCTED AND HOW THE MATERIALS USED AFFECT US SENSUOUSLY. ENVIRONMENTAL PSYCHOLOGIST JJ GIBSON, DESCRIBES HOW THE MOVEMENT OF OUR BODIES WITHIN AND AROUND BUILDINGS IS SIGNIFICANTLY AFFECTED BY THE TACTILE QUALITIES OF THE SURFACES WE ENCOUNTER. WE FEEL A LEVEL OF COMFORT BEING CLOSE TO SMOOTH SURFACES WHILE WE AVOID ROUGHER MATERIALS. TO FURTHER EXPOUND UPON THIS NOTION, GIBSON DESCRIBES HOW AN ARCHITECT COULD CHOREOGRAPH MOVEMENT THROUGH A SPACE SIMPLY BY THE COMPOSITION OF TEXTURAL CHANGES ALONE. HUMAN BEINGS ARE AWARE OF HOW THEIR SURROUNDINGS "FEEL" REGARDLESS IF THEY KNOW HOW TO DESCRIBE THEM.

"MOST BUILDINGS CONSIST OF A COMBINATION OF HARD AND SOFT, LIGHT AND HEAVY, TAUT AND SLACK, AND OF MANY KINDS OF SURFACES. THESE ARE ALL ELEMENTS OF ARCHITECTURE, SOME OF THE THINGS THE ARCHITECTS CAN CALL INTO PLAY. TO EXPERIENCE ARCHITECTURE, YOU MUST BE AWARE OF ALL OF THESE ELEMENTS."¹¹ THESE ELEMENTS MAKE US AWARE OF OUR SURROUNDINGS—OF HOW A BUILDING SMELLS OR SOUNDS, IF IT FEELS COLD OR WARM, DARK OR BRIGHT.

ESSENTIALLY, MAN-MADE SPACE CAN DEFINE OUR FEELING AND PERCEPTION THROUGH THE USE OF SPECIFIC MATERIALS AND SURFACES. ALL OF THESE EXPERIENCES IN BUILDING ARE WHAT WE REFER TO WHEN WE DISCUSS HOW TO BUILD PHENOMENOLOGICALLY.

THERE ARE SEVERAL SENSUOUS MATERIALS USED IN WINERIES. AS MENTIONED BEFORE, IT IS COMMON IN OLDER EUROPEAN WINERIES TO HAVE GRAVEL FLOORS IN THE CELLARS AND CAVES FOR RUNOFF OR SPILLAGE TO DRAIN. WINE IS AGED IN OAK BARRELS THAT IN THEMSELVES HAVE A SCENT, BUT ALSO HAVE THE RESIDUAL SCENT OF WINE SOAKED INTO THE WOOD. IN NEWER WINERIES, THE FLOORS IN PROCESS AND STORAGE AREAS ARE CONCRETE—A MATERIAL WITH ENDLESS SENSUOUS POSSIBILITIES.

MATERIALS THEMSELVES HAVE CHARACTERISTICS OF THEIR OWN, BUT HOW DOES A MATERIAL TRANSFORM WHEN SHOWERED WITH LIGHT AND SHADOW? LIGHT IS USED SPARINGLY IN A WINERY. THERE SHOULD BE ENOUGH TO CARRY ON ACTIVITY, BUT NOT TOO MUCH TO CAUSE HEAT GAIN. LIGHT IS ESSENTIAL IN THE PRODUCTION TASTING ROOM WHERE THERE MUST BE NORTH LIGHT TO VERIFY COLOR AND CLARITY OF THE WINE. LIGHT CREATES EXPERIENCE; WE FEEL THE WARMTH

¹⁰ ROSSI, ALDO, *A SCIENTIFIC AUTOBIOGRAPHY*, TRANS. LAWRENCE VENUTI.

CAMBRIDGE, MA, 1981, PART ONE.

¹¹ RASMUSSEN, STEEN EILER. *EXPERIENCING ARCHITECTURE*, CAMBRIDGE: THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY PRESS, 1962, P.41.

¹² *IBID.* P. 45.

ON OUR SKIN, WE FEEL THE EFFECTS OF DARKNESS/BRIGHTNESS ON OUR EYES,
AND WE RECOGNIZE FORMS DEFINED BY LIGHT AND SHADOW. MATERIALS AND
THE WAY MATERIALS TRANSFORM THROUGH LIGHT ARE PART OF WHAT DEVELOPS
A SENSUOUS ARCHITECTURAL EXPERIENCE.

V. WINE MAKING

HOW WINE IS MADE FROM FRESH GRAPES TO FINISHED BOTTLE

ALTHOUGH THE PARTICULARS VARY WIDELY FROM WINERY TO WINERY, THE BROAD OUTLINE OF WINEMAKING IS ALWAYS THE SAME, AND THE EQUIPMENT ALWAYS IDENTIFIABLE. THE ILLUSTRATIONS BELOW SHOW IN SEQUENCES HOW WINE IS MADE.

STEMMER-CRUSHERS GET MOST OF THE JUICE OUT OF GRAPES. NEARLY ALL OF THEM IN CALIFORNIA TODAY ARE THE GAROLLA TYPE. PADDLES REVOLVE WITHIN A PERFORATED STEEL CYLINDER POPPING THE GRAPES OFF THEIR STEMS AND BREAKING THE SKINS AS THEY DO SO. BROKER GRAPES DROP THROUGH THE PERFORATIONS. THE SPINDLY STEMS BLOW OUT ONE END OF THE MACHINE.

THERE ARE THREE BASIC PRESSES. THE GERMAN-DEVELOPED WILLMES TYPE HAS AN INFLATABLE NEOPRENE TUBE INSIDE A PERFORATED HORIZONTAL STEEL CYLINDER. THE TUBE PRESSES A THIN LAYER OF GRAPES AGAINST THE CYLINDER. A SECOND TYPE, ALSO HORIZONTAL, HAS MOVABLE END WALLS. THEY PRESS TOWARD EACH OTHER, FORCING JUICE OUT THROUGH SLOTS IN THE SIDEWALLS. THE THIRD TYPE IS THE ANCIENT BASKET PRESS, PICTURESQUE BUT HARD TO MANAGE. IT WORKS MUCH LIKE THE SECOND TYPE, BUT IS VERTICAL.

WHITE WINE GRAPE SOLIDS ARE PRESSED BEFORE FERMENTATION BEGINS. RED WINE SOLIDS ARE PRESSED AFTER FERMENTATION IS COMPLETE, OR NEARLY SO, FOR REASONS DESCRIBED BELOW. PRESS WINES ARE OFTEN KEPT SEPARATE FROM FREE RUN WINES AT THIS POINT, FOR LATER BLENDING INTO WINES, WHICH WILL BENEFIT FROM THEIR MORE INTENSE CHARACTERISTICS.

FERMENTORS ARE THE VESSELS IN WHICH GRAPE JUICE BECOMES WINE. THEY CAN BE OF WOOD, STAINLESS STEEL, OR CONCRETE. THEIR CAPACITIES RANGE FROM 50 GALLONS TO 500,000. NO MATTER WHAT SIZE, RED WINE FERMENTORS ARE OPEN TO THE AIR, BUT SINCE OXYGEN IS A SPECIAL ENEMY OF WHITE WINES, THEIR FERMENTORS ARE CLOSED TO MINIMIZE OXIDATION. (THE LATTER HAVE VENTS, TO ALLOW CO₂ TO ESCAPE.) MOST HAVE COOLING DEVICES, SINCE THE TEMPERATURE OF THE FERMENTATION MUST BE CONTROLLABLE TO ASSURE DESIRED CHARACTERISTICS IN EACH WINE.

FERMENTATION IS THE CONVERSION OF NATURAL GRAPE SUGAR INTO ROUGHLY EQUAL PARTS OF ALCOHOL AND CARBON DIOXIDE (CO₂). THE ACTIVE AGENT IS YEAST. SEVERAL STRAINS GROW ON GRAPE SKINS IN VINEYARDS, BUT ARE UNPREDICTABLE. MOST WINERIES USE SELECTED YEAST STRAINS KEPT IN THE LABORATORIES FROM ONE VINTAGE TO THE NEXT. IN THE CASE OF WHITE WINES, JUICE IS SEPARATED FROM THE GRAPE SOLIDS BEFORE IT GOES INTO THE FERMENTOR.

IN THE CASE OF REDS, JUICE AND SOLIDS GO TO THE FERMENTOR TOGETHER, BECAUSE COLOR AND OTHER DESIRED CHARACTERISTICS OF RED WINES EXTRACT FROM THE SKINS AS ALCOHOL DEVELOPS. ROSÉ WINES FERMENT WITH THE SKINS FOR ONLY A FEW HOURS RATHER THAN SEVERAL DAYS.

THERE THE FERMENTATION MAY DAWDLE ALONG FOR A CONSIDERABLE TIME. THE COOLER THE TEMPERATURE, THE LONGER IT WILL GO, UNLESS THE WINE IS CHILLED SO DEEPLY THAT FERMENTATION STOPS ALTOGETHER. THE MAJOR PART OF THE FERMENTATION TAKES FROM ONE TO TWO WEEKS. DURING THIS TIME, THE SUGAR

CONVERTS RAPIDLY, AND FORMING CO CAUSES THE FERMENTING JUICE TO FROTH STORMILY. WHEN ONLY A SMALL AMOUNT OF SUGAR REMAINS, THINGS QUIET DOWN, AND THE NEW WINE IS MOVED TO REGULAR STORAGE TANKS OR CASKS.

WINE AGES IN A VARIETY OF BULK CONTAINERS. THE COLLECTIVE NAME IS COOPERAGE. COOPERAGE, LIKE FERMENTORS, RANGES IN SIZE FROM 50 TO 50,000 GALLONS, AND IS MADE OF WOOD, STAINLESS STEEL, GLASS-LINED STEEL, AND CONCRETE.

THE WINEMAKER CHOOSES BOTH SIZE AND MATERIAL TO IMPART EXTRA FLAVORS TO A WINE, OR TO AVOID IT. THE LENGTH OF TIME A WINE AGES IN COOPERAGE ALSO PLAYS A ROLE IN THIS RESPECT. STEEL AND CONCRETE TANKS ARE NEUTRAL IN TERMS OF ADDING FLAVOR, AND ARE USUALLY RELATIVELY LARGE. ALL TABLE WINES START OUT IN LARGE COOPERAGE. THOSE MEANT TO BE DRUNK IN THE FRUITY BLOOM OF THEIR YOUTH ARE BOTTLED AFTER ONLY A FEW MONTHS IN COOPERAGE, USUALLY OF A LARGE AND NEUTRAL SORT (ALTHOUGH BOTH WORDS ARE RELATIVE, DEPENDING ON THE SIZE OF THE WINERY). ALL TABLE WINES START OUT IN LARGE COOPERAGE. THOSE MEANT TO BE DRUNK IN THE FRUITY BLOOM OF THEIR YOUTH ARE BOTTLED AFTER ONLY A FEW MONTHS IN COOPERAGE, USUALLY OF A LARGE AND NEUTRAL SORT (ALTHOUGH BOTH WORDS ARE RELATIVE, DEPENDING ON THE SIZE OF THE WINERY). LARGE WOOD TANKS, ESPECIALLY ONES MADE OF REDWOOD, ARE NEARLY BUT NOT QUITE AS NEUTRAL AS STEEL OR CONCRETE. WINES INTENDED TO BE HELD FOR LONG AGING IN THE BOTTLE ARE RACKED (MOVED FROM ONE CONTAINER TO ANOTHER) INTO SUCCESSIVELY SMALLER CASKS AT MANY WINERIES UNTIL THEY END UP IN BARRELS AS SMALL AS 50 GALLONS.

THIS KIND OF TECHNIQUE REQUIRES FROM 18 MONTHS TO THREE YEARS, DEPENDING UPON WINE TYPE AND WINEMAKERS' TASTES.

THE PURPOSE OF RACKING IS TO GET THE WINE EVER CLEARER. THE PURPOSE OF MOVING SOME TYPES INTO SMALLER AND SMALLER COOPERAGE IS TO INTENSIFY THE CHANGES BROUGHT ON BY AGING. MOST SMALL CASKS AND BARRELS ARE OF OAK. CALIFORNIA WINERIES USE AMERICAN, FRENCH, GERMAN, AND YUGOSLAV OAKS. EACH HAS PROPONENTS AMONG WINEMAKERS AND HOBBYISTS ALIKE.

WHEN THE WINE IS JUDGED MATURE, IT IS FILTERED (OR OTHERWISE GIVEN A FINAL CLARIFICATION), AND MOVED TO A HOLDING TANK AT THE BOTTLING LINE. BOTTLING MAY BE BY HAND, OR BY A FULLY SYNCHRONIZED, NEARLY AUTOMATIC LINE THAT WASHES THE BOTTLES, FILLS THEM, DRIVES THE CORKS (OR SCREWS THE CAPS ON), LABELS THEM FORE AND AFT, AND FORMS A FOIL CAP ON THE NECK. SOME LINES ARE SO SOPHISTICATED THEY FILL THE BOTTLES FROM THE BOTTOM UP AND DRAW A VACUUM AS THEY APPLY THE CORK, ALL TO MINIMIZE OXIDATION IN THE WINE.

STEMMER-CRUSHERS GET MOST OF THE JUICE OUT OF GRAPES. NEARLY ALL OF THEM IN CALIFORNIA TODAY ARE THE GAROLLA TYPE. PADDLES REVOLVE WITHIN A PERFORATED STEEL CYLINDER POPPING THE GRAPES OFF THEIR STEMS AND BREAKING THE SKINS AS THEY DO SO. BROKER GRAPES DROP THROUGH THE PERFORATIONS. THE SPINDLY STEMS BLOW OUT ONE END OF THE MACHINE.

PRESSES EXTRACT WHAT JUICE DOES NOT RUN FREELY AFTER CRUSHING—ABOUT FIFTEEN (15) PER CENT OF THE TOTAL. THERE ARE THREE BASIC PRESSES. THE GERMAN-DEVELOPED WILLMES TYPE HAS AN INFLATABLE NEOPRENE TUBE INSIDE A PERFORATED HORIZONTAL STEEL CYLINDER. THE TUBE PRESSES A THIN LAYER OF GRAPES AGAINST THE CYLINDER. A SECOND TYPE, ALSO HORIZONTAL, HAS MOVABLE END WALLS. THEY PRESS TOWARD EACH OTHER, FORCING JUICE OUT THROUGH SLOTS IN THE SIDEWALLS. THE THIRD TYPE IS THE ANCIENT BASKET PRESS, PICTURESQUE BUT HARD TO MANAGE. IT WORKS MUCH LIKE THE SECOND TYPE, BUT IS VERTICAL.

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WINE AGES IN A VARIETY OF BULK CONTAINERS. THE COLLECTIVE NAME IS COOPERAGE. COOPERAGE, LIKE FERMENTORS, RANGES IN SIZE FROM 50 TO 50,000 GALLONS, AND IS MADE OF WOOD, STAINLESS STEEL, GLASS-LINED STEEL, AND CONCRETE. THE WINEMAKER CHOOSES BOTH SIZE AND MATERIAL TO IMPART EXTRA FLAVORS TO A WINE, OR TO AVOID IT. THE LENGTH OF TIME A WINE AGES IN COOPERAGE ALSO PLAYS A ROLE IN THIS RESPECT.

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AFTER THE WINE IS BOTTLED, IT IS BINNED. BINNING FORMERLY MEANT STACKING INDIVIDUAL BOTTLES IN SHELVES. NOW IT MAY MEAN EITHER THAT OR PUTTING BOTTLES IN CASES AND STACKING THE CASES. THE LATTER METHOD BENEFITS THE WINE, SINCE IT MEANS FEWER HANDLINGS AND BETTER PROTECTION FROM LIGHT. THE WINERY MAY BOTTLE AGE WINES FOR A FEW WEEKS, OR MONTHS OR EVEN YEARS.

THOMPSON, BOB. CALIFORNIA WINE COUNTRY, MENLO PARK: LANE BOOKS, 1971.P. 8-9

V. SITE

CALIFORNIA AND THE NAPA VALLEY

THE NAPA VALLEY IS THE SYMBOL AS WELL AS THE CENTER OF THE TOP-QUALITY WINE INDUSTRY IN CALIFORNIA. IT HAS NEVER HAD A MONOPOLY. BUT IN ITS WINES, ITS WINEMAKERS AND THE IDYLIC ATMOSPHERE, WHICH FILLS IT FROM THE GREEN HILLS ON ONE SIDE TO THE GOLDEN ONES ON THE OTHER, IT CAPTURES THE IMAGINATION AND STAYS IN THE MEMORY.

THE VALLEY RUNS IN A SHALLOW ARC NORTHWEST FROM NAPA CITY, MOST OF ITS VINEYARDS LYING ON ITS NEARLY FLAT FLOOR WHICH IS BROKEN HERE AND THERE BY WOODED KNOLLS RISING 200-300 FEET (60-90 METERS). THE VINEYARDS CREEP UP THE BENCHLAND ON EITHER SIDE OF THE VALLEY UNTIL (ALONG THE EAST SIDE) THE SOIL BECOMES TOO THIN AND ROCK GRASSLAND TAKES OVER, DOTTED WITH DARK OAKS, OR (ON THE WEST) THE SLOPE BECOMES TOO STEEP AND FOREST OF MAPLE, MADRONE, LAUREL AND REDWOOD COVERS THE GROUND, GIVING WAY HERE AND THERE TO BOWLS OR RAMPS OF AMPHITHEATERS OF VINEYARD, EVEN HIGH UP IN THE MOUNTAINS.

THE TYPICAL NAPA VALLEY WINERY, LARGE OR SMALL, IS SET BESIDE A VALLEY ROAD IN THE VINES. OTHERS, SUCH AS SCHRAMSBERG, MAYACANAS, CHAPPELLET OR THE NEWTON VINEYARD, LIE IN ELEVATED ENCLAVES OF THEIR OWN, REMOTE FROM THE BUSTLE OF THE VALLEY FLOOR.

THE VALLEY FALLS INTO THREE CLIMATE ZONES. ITS SOUTHERN END, THE SEPARATE DISTRICT OF CARNEROS AND THE VALLEY PROPER FROM NAPA NORTH TO

OAKVILLE, IS REGION I, THE COOLEST. FROM OAKVILLE TO THE NORTHERN END OF ST. HELENA IS REGION II. THE HEAD OF THE VALLEY, AROUND CALISTOGA, REMOTEST FROM THE INFLUENCE OF THE BAY, IS REGION III.

IT COVERS NOT ONLY THE VALLEY, NOR SIMPLY IT'S MORE COMPLEX DRAINAGE AREA, BUT ALMOST THE ENTIRE COUNTY: BAYSIDE, MOUNTAINSIDE, VALLEY FLOOR AND HIGH PLATEAU. IT IS NOT REASONABLE TO ARGUE THAT THERE CAN BE ONE 'NAPA STYLE', HOWEVER RESOUNDING THE CABERNETS AND SUCCULENT THE CHARDONNAY'S THAT KEEP ITS REPUTATION AT THE TOP. HENCE A CONTINUING PROCESS OF HAMMERING OUT SUB-AVAS WHICH BEGAN A GENERATION AGO, INFORMALLY AND NOT UNCONTROVERSIALLY, WITH THE SUGGESTION THAT LOW

BENCHLAND (IN OTHER WORDS THE VERY FOOT OF THE HILL-SLOPES) FROM RUTHERFORD SOUTH INTO OAKVILLE ON THE WEST SIDE HAD A LOG TRACK RECORD FOR CHARACTERISTICALLY FORCEFUL AND LONG-AGING CABERNETS AND MIGHT BE DUBBED 'THE RUTHERFORD BENCH'.

WHY THIS MIDPOINT IN THE VALLEY SHOULD BE SO IDEAL IS A MATTER FOR DEBATE. GOOD DRAINAGE IS CERTAINLY A FACTOR. ANOTHER MAY BE UNDERGROUND SPRINGS. YET ANOTHER MAY BE GENERALLY NORTHEASTERN EXPOSURE OF THE GENTLE SLOPES, WHICH THEREFORE CATCH THE EARLIEST MORNING SUN IN SUMMER. THEIR SOILS WARM UP RAPIDLY, THEN LOSE THE HOTTEST RAYS IN THE AFTERNOON - LIKE, INCIDENTALLY, THOSE OF THE CÔTE D'OR. AS THE SHADOW OF THE WESTERN HILLS FALLS OVER THEIR VINES WITH SOIL AND AIR BOTH VERY WARM,

THEY ENJOY A LONG, SLOW PERIOD OF COOLING. GRAPES ON AN EASTERN SLOPE RIPEN MORE SLOWLY AND LATER. OTHER THINGS BEING EQUAL, ALL THESE ARE FACTORS THAT ENHANCE FLAVOUR AND AROMAS IN THE FRUIT.

HENCE THE DECISION TO MAKE RUTHERFORD AND OAKVILLE – THE WHOLE COMMUNITIES – AVAS, AND DROP (IF NOT FORGET) THEIR BENCHES.

JUST SOUTH OF OAKVILLE, ON ROUTE 29 AT YOUNTVILLE, THE VALLEY FLOOR IS CONSIDERABLY NARROWED BY TWO MAJOR OUTCROPPING EMINENCIES, WHICH INTERRUPT THE FLOW OF COOL AIR NORTHWARDS FROM THE BAY. TUCKED BEHIND ONE OF THESE HILLS, ON THE EASTERN SIDE, IS ANOTHER AREA WITH A CLAIM TO DISTINCTIVENESS AND NOW AN AVA: STAG'S LEAP (NAMED FOR THE CLIFF EDGE ABOVE IT). STAG'S LEAP WINE CELLARS AND NEIGHBORING CLOS DU VAL LED THE WAY HERE WITH CABERNETS IN A MORE SUPPLE, DELICATE STYLE THAN THOSE OF RUTHERFORD AND OAKVILLE. WHAT THEY DISCOVERED IS CONFIRMED BY AMONG OTHERS, SILVERADO AND SHAFER VINEYARDS.

THERE ARE TWO MUCH FREQUENTED ROUTES FOR VISITING THE NAPA VALLEY: THE COMMERCIAL ARTERY, HIGHWAY 29, UPS THE WEST SIDE, OR THE ROMANTIC SILVERADO TRAIL UP THE EAST. INFREQUENT AND AT TIMES BAFFLING CROSS-VALLEY ROADS LINK THEM. ON THE OTHER HAND, SAY GROWERS IN OAKVILLE, JUST TO THE SOUTH, THESE FACTORS AFFECT 'THE OAKVILLE BENCH' TOO. NONE OF WHICH PLEASES GROWERS BASED IN THESE TOWNSHIPS BUT OFF THE 'BENCH' (IF THERE IS ONE). THESE ARE THE AVAS OF THE VALLEY ITSELF (SO FAR). THE MOUNTAIN DISTRICTS AROUND HAVE BEEN EASIER TO DESIGNATE, AS (CLOCKWISE FROM

CARNEROS) THE SUB-AVAS OF MOUNT VEEDER AND SPRING MOUNTAIN IN THE MAYACAMAS RANGE, HOWELL MOUNTAIN TO THE NORTH AND THE FLEDGLING ATLAS PEAK TO THE EAST. HIGH IN THE WESTERN HILLS IT IS RIESLING, FOLLOWED BY CHARDONNAY, THAT HAS MADE THE BEST WINE FOR THE LONGEST; ON HOWELL MOUNTAIN IT IS ZINFANDEL, CABERNET AND NOW MERLOT.

WOODEN BARN, BUT ALSO FOR THE WELL-JUDGED ELEGANCE (THE ONLY WORD) OF ITS WINES. THIS IS THE COOLER END OF THE VALLEY, AS THE NERVE AND BALANCE OF CHARDONNAY, RIESLING AND EVEN CABERNET GROWN HERE BEAR WITNESS.

FOLLOW OAK KNOLL AVENUE AND TURN NORTH ON THE SILVERADO TRAIL TO FIND THE STAG'S LEAP AVA, WHERE THE TRAIL RUNS UNDER THE BROWN CRAGS WHERE THE STAG PRESUMABLY LEAPT.

OPPOSITE ACROSS ROUTE 29 LIES THE EXTRAVAGANZA OF OPUS ONE. THESE PLACES OF PILGRIMAGE ARE BEGINNING TO CHALLENGE DISNEYLAND IN POPULARITY. FROM HERE ON UP THE VALLEY THE FAMOUS NAMES CLOD UP WITH INCREASING FREQUENCY: INGLENOOK, BEAULIEU, LOUIS MARTI WITH A DENSE CONCENTRATION AROUND ST. HELENA. JUST NORTH OF THE LITTLE TOWN (WHICH RETAINS, DESPITE THE CROWDS, A POTENT CHARM) THE BERINGER WINERY HAS EXPENSIVE CAVES AND EXCELLENT WINES TO SHOW BEHIND IT 'RHINE HOUSE', A BUILDING ALMOST GHOULISHLY FAITHFUL TO GERMANIC TRADITION. CHARLES KRUG IS ANOTHER OF THE GREAT OLD NAMES OF THE VALLEY SURVIVING FROM THE 19TH CENTURY. FREEMARK ABBEY, BY THE ROAD, FOUNDED IN 1894 AND REFOUNDED IN 1967, HAS VERY HIGH STANDARDS - BUT THE SAME CAN BE SAID

FOR ANOTHER DOZEN SMALLER WINERIES IN THIS TOP SECTION OF THE VALLEY, FROM SMITH-MADRONE ON SPRING MOUNTAIN TO THE WEST AND THE SCHRAMSBERG THAT ROBERT LOUIS STEVENSON LOVED TO THE SPECTACULAR (THOUGH SECLUDED) PHELPS AND CHAPPELLET WINERIES TO THE EAST.

THE COUNTRY HERE WHERE THE VALLEY NARROWS BECOMES MORE AND MORE BEAUTIFUL. OAKS AND PINES, STREAMS, DARTING BIRDS, FRUIT TREES, SUNLIT MEADOWS STRETCH TO THE PRETTY LITTLE SPA OF CALISTOGA AND BEYOND UP INTO KNIGHT'S VALLEY OVER THE SONOMA COUNTY LINE.

BEFORE CALISTOGA IS ONE MANDATORY TOURIST STOP, THE ASTONISHING VISION OF AN APPARENT GREEK MONASTERY PERCHING ON A STEEP MID-VALLEY KNOLL: STERLING, THE FLAGSHIP WINERY OF SEAGRAM. ASCENT IS BY CANARY-COLOURED CABLE CAR. JUST BEYOND IS ANOTHER: COLÒN-WURTH (CLOS PEGASE), A WINERY THAT WOULD NOT LOOK OUT OF PLACE AT LUXOR ON THE NILE.

CALISTOGA

THE COLÒN-WURTH WINERY SITE IS ON HWY 29, 7 MILES NORTH OF ST. HELENA IN CALISTOGA, CA. IT PROVIDES BOTH UNIQUE OPPORTUNITIES AND CONSTRAINTS. DIVIDED INTO THE NORTH AND SOUTH SECTOR BY A PUBLIC ROAD, THE NORTH SECTOR IS DOMINATED BY A HEAVILY WOODED KNOLL ATOP WHICH IS A BURNED OUT RUIN OF THE FORMER HOUSE. A LONG LANE WINDS UP THE KNOLL FROM THE MAIN ROAD TO THE WINERY. THE REMAINS WILL BE REMOVED AND THE LANE WILL BE REROUTED..

HUGH JOHNSON. *THE WORLD ATLAS OF WINE*, NEW YORK: SIMON AND SCHUSTER, 1994, P.258-260.

VINEYARD KEY (FIG 1.)

THIS IS A MAP OF MITSUKO'S VINEYARD IN CANEROS (SOUTHERN PART OF THE NAPA VALLEY). IT IS ABOUT 420 ACRES IN TOTAL- OF THAT, 360 ARE PLANTED.

ME (MERLOT): (3) CLONE 3 (6) CLONE 6 AND (RAUCEDO) ARE ALL DIFFERENT CLONES WITH DIFFERENT CHARACTERISTICS.

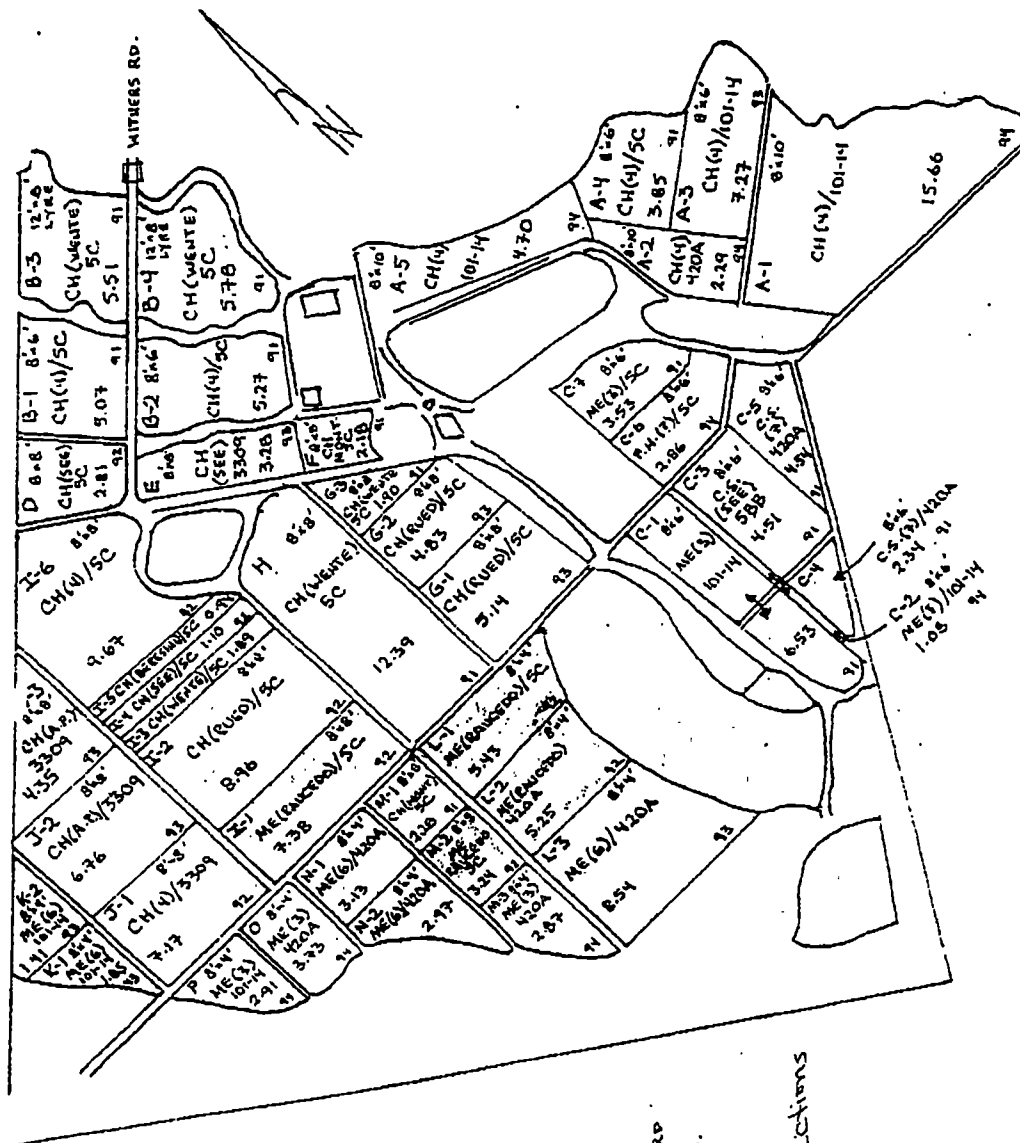
PN (PINOT NOIR)

CS CABERNET SAUVIGNON: CLONE 7 AND CLONE 5

5C, 101-14, 3309, 420A ARE ALL ROOTSTOCK- NATURAL GRAPEVINES (VITIS VINIFERA) ARE NOT RESISTANT TO PHYLLOXERA; THEREFORE, THEY NEED TO BE GRAFTED ON TO ALTERNATIVE ROOTS(FROM AMERICAN VITIS SPECIES.)

IN THE TOP LEFT CORNER OF EACH DIVISION IS THE BLOCK NUMBER E.G. A1, A2, A3, A4, A5 THROUGH TO O AND P. THE BLOCKS ARE SEPARATED ACCORDING TO SOIL TYPE AND MICROCLIMATE. IN THE TOP RIGHT CORNER IS THE VINE SPACING. 8' X 4' MEANS THAT THE ROWS ARE 8 FEET APART AND WITHIN THE ROWS, THE VINES ARE FOUR FEET APART.

ESSENTIALLY, THERE ARE FOUR VARIETIES PLANTED HERE BUT THEY YIELD OVER 46 DIFFERENT WINES. SOME BLOCKS ARE LARGE ENOUGH TO SPLIT, E.G., H BLOCK IS CHARDONNAY (WENTE CLONE) AND COVERS 12.39 ACRES. THE RESULT IS ROUGHLY 40 TONS OF FRUIT FORM THIS BLOCK AND IT IS SEPARATED INTO THREE DIFFERENT FERMENTATIONS.



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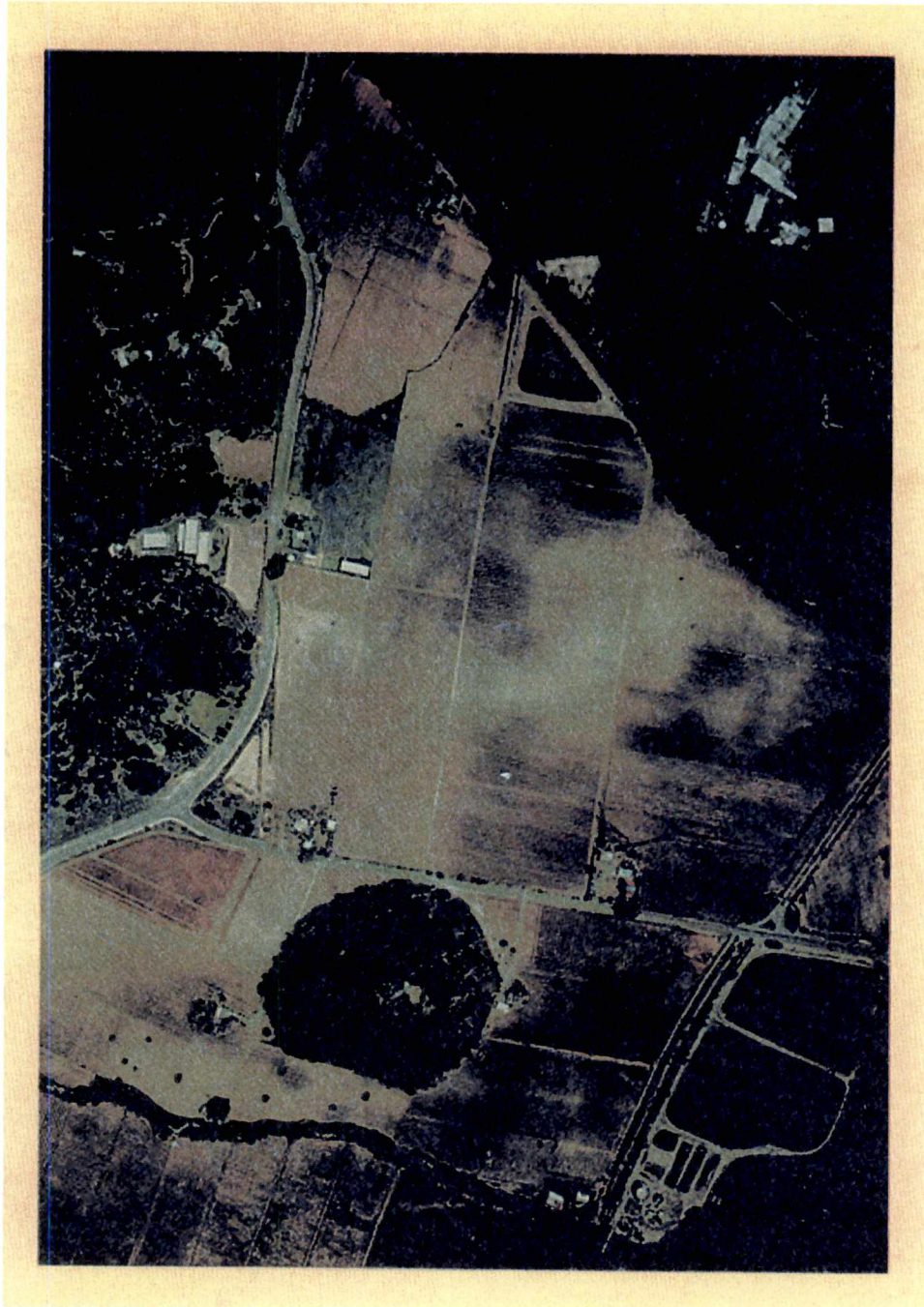
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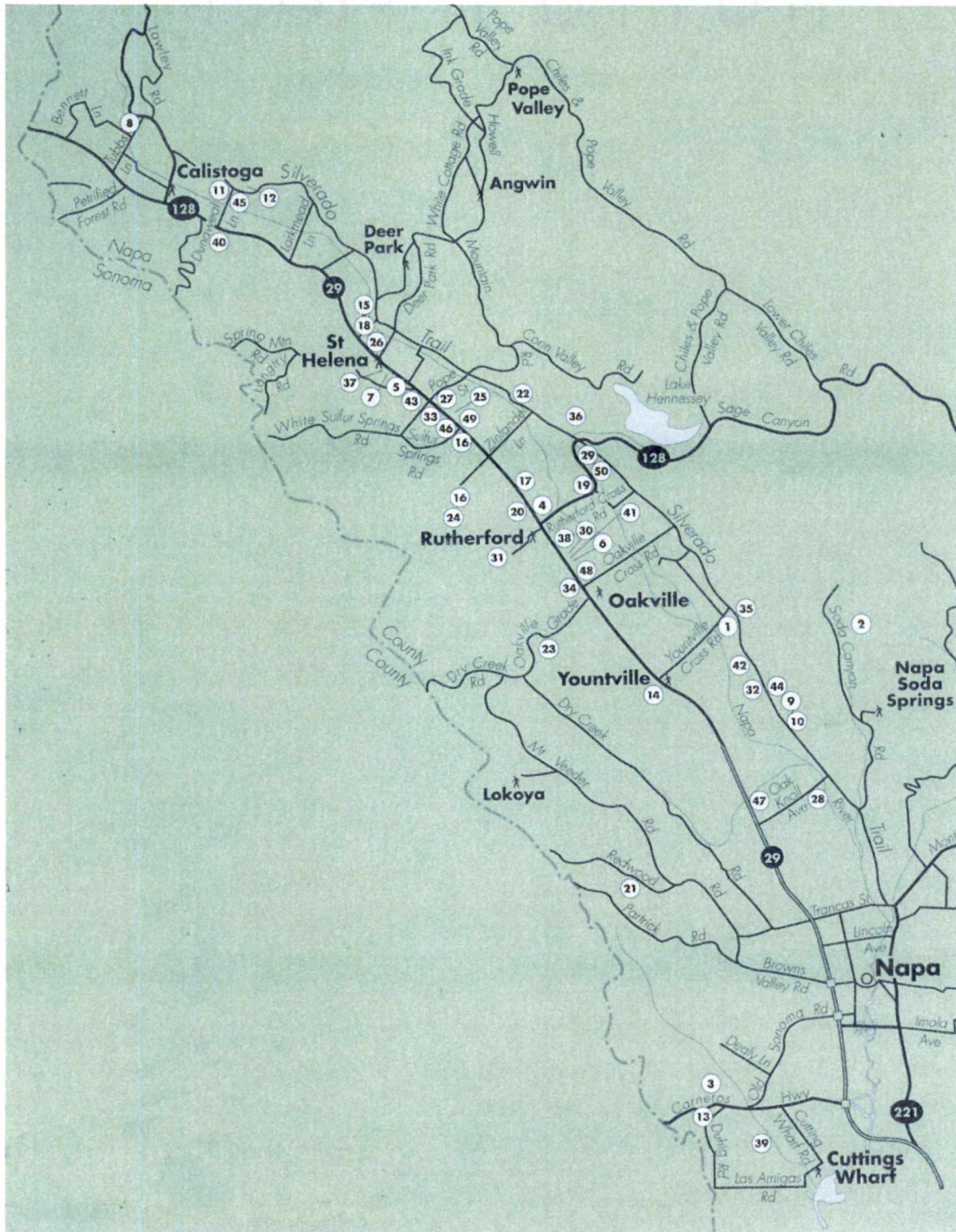
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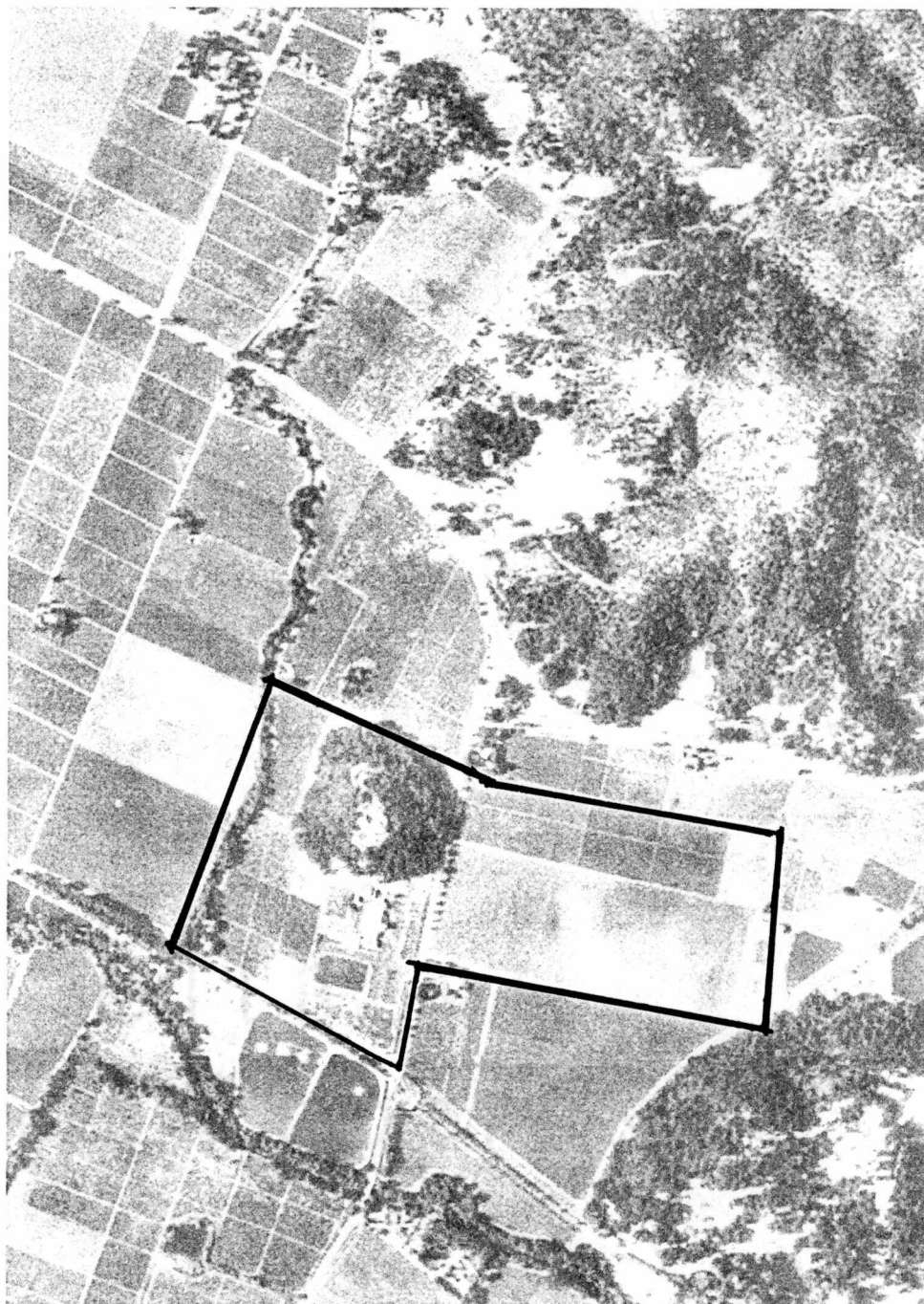
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APPENDICES

APPENDIX A
SITE DOCUMENTATION





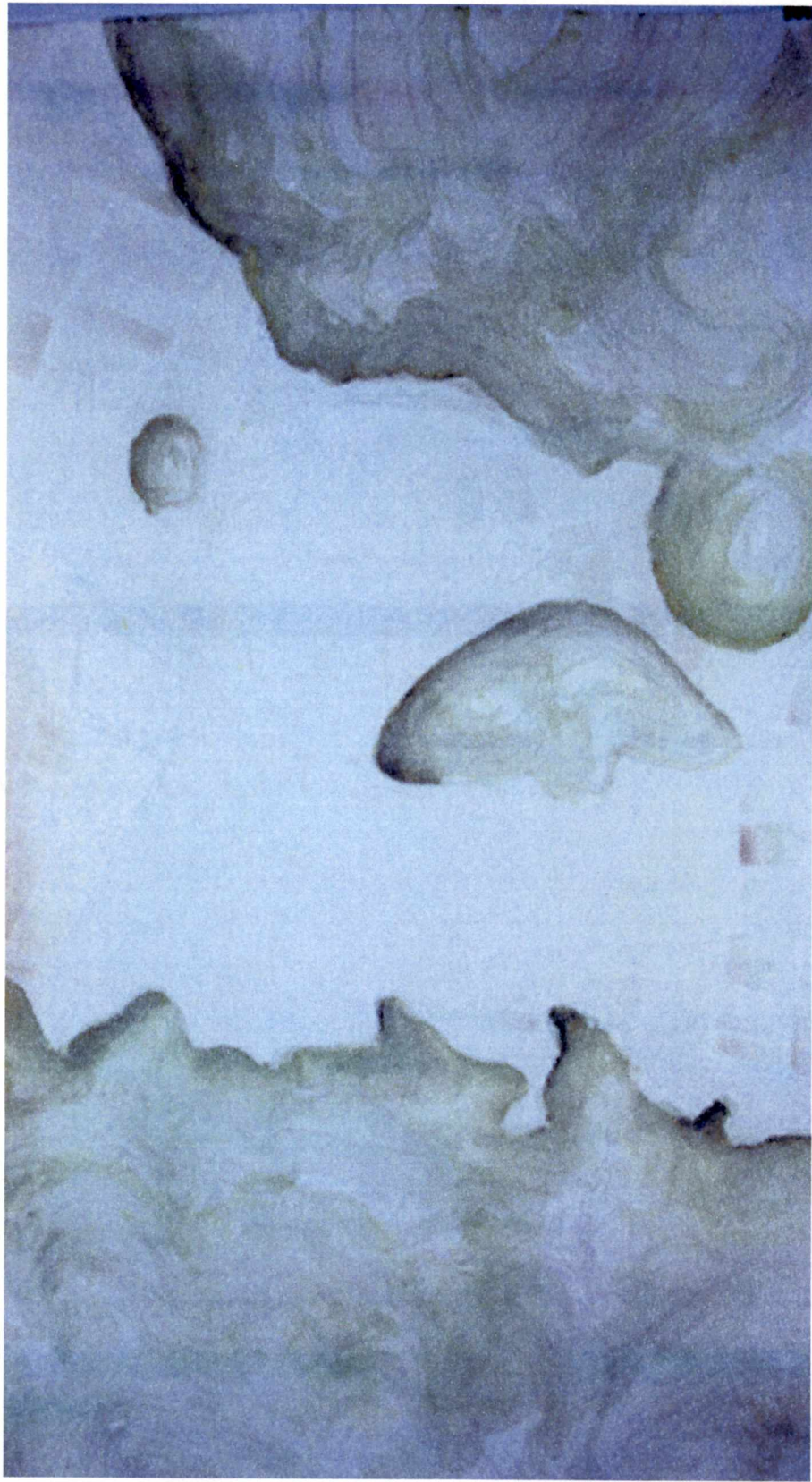


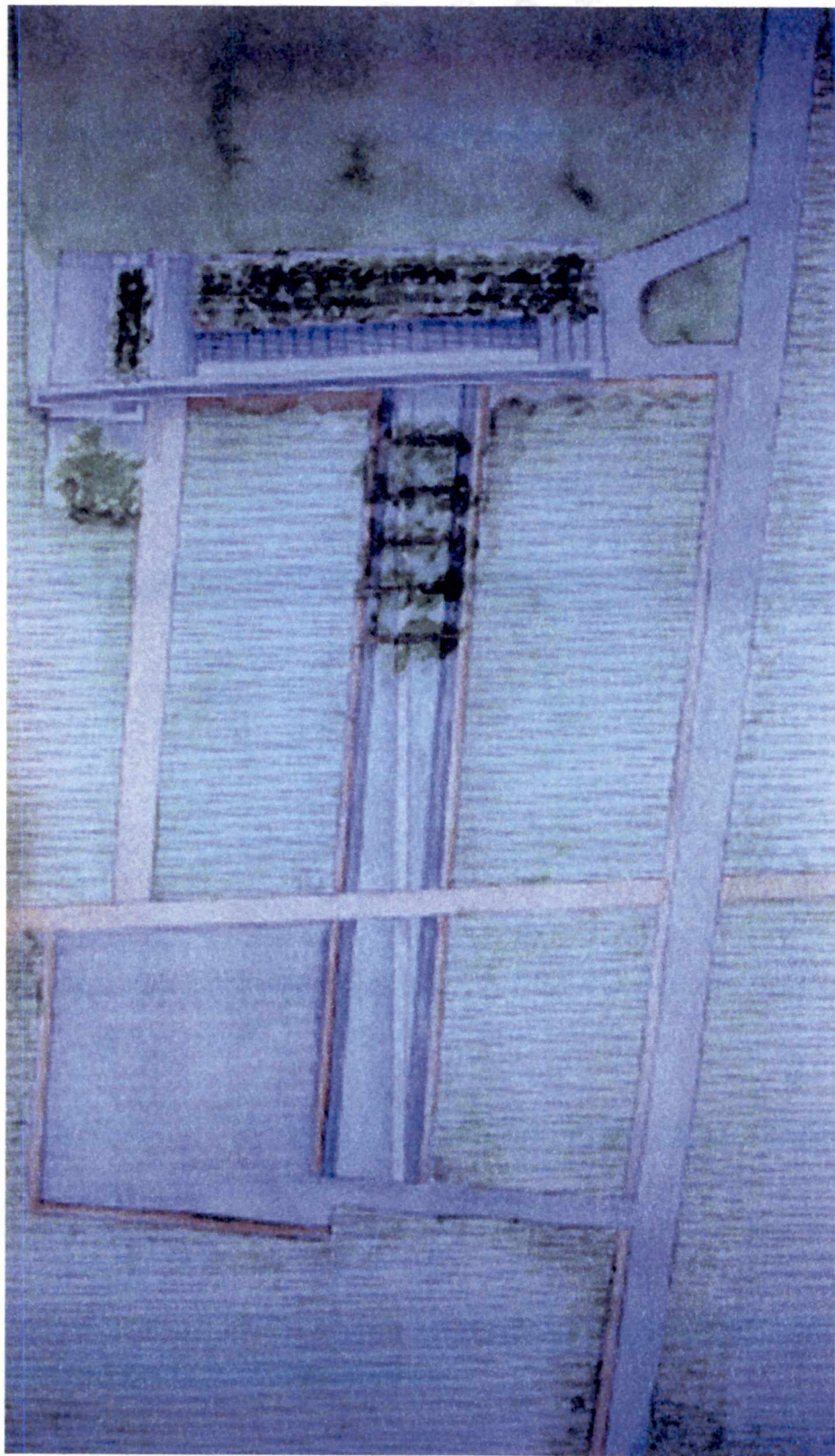


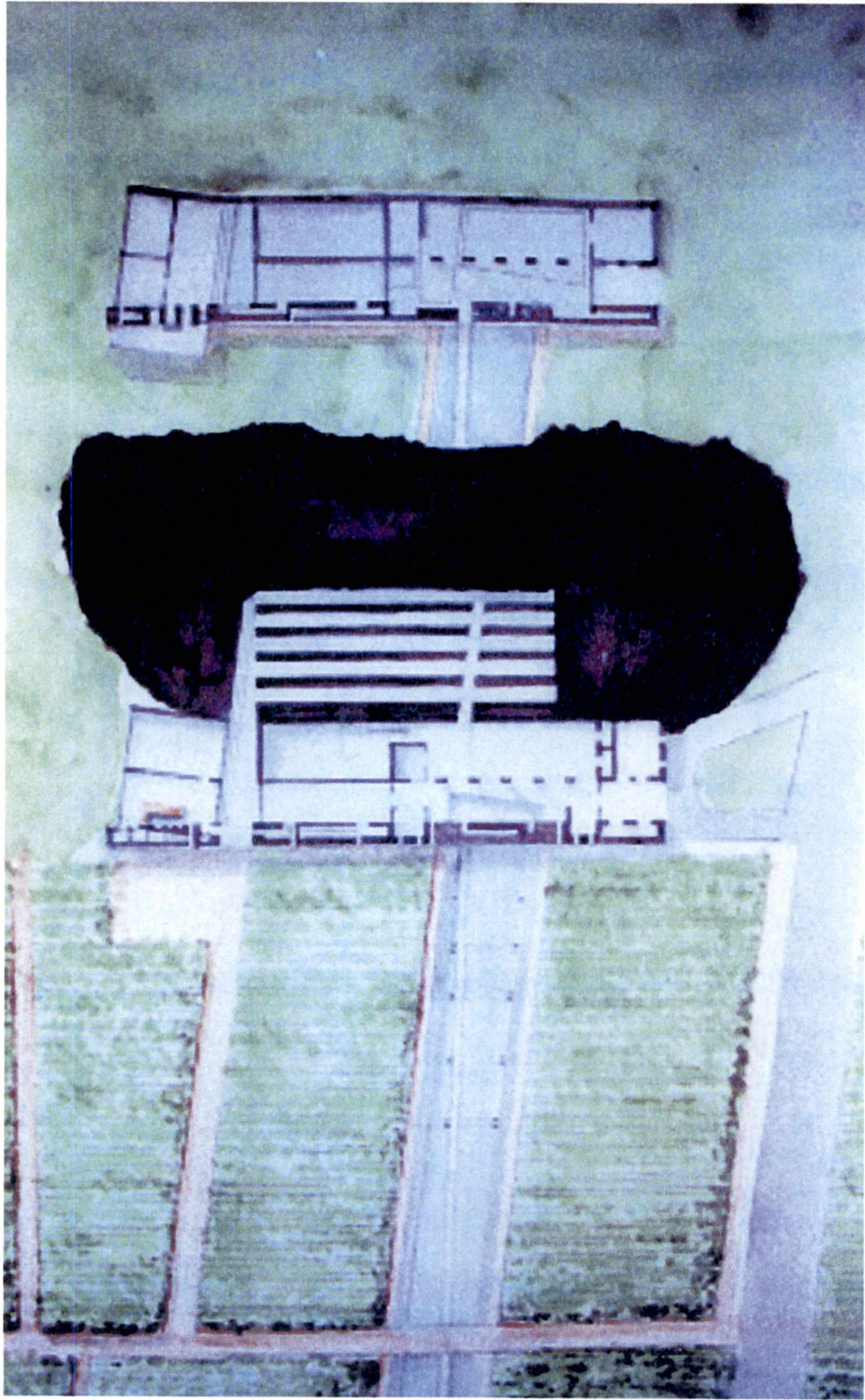


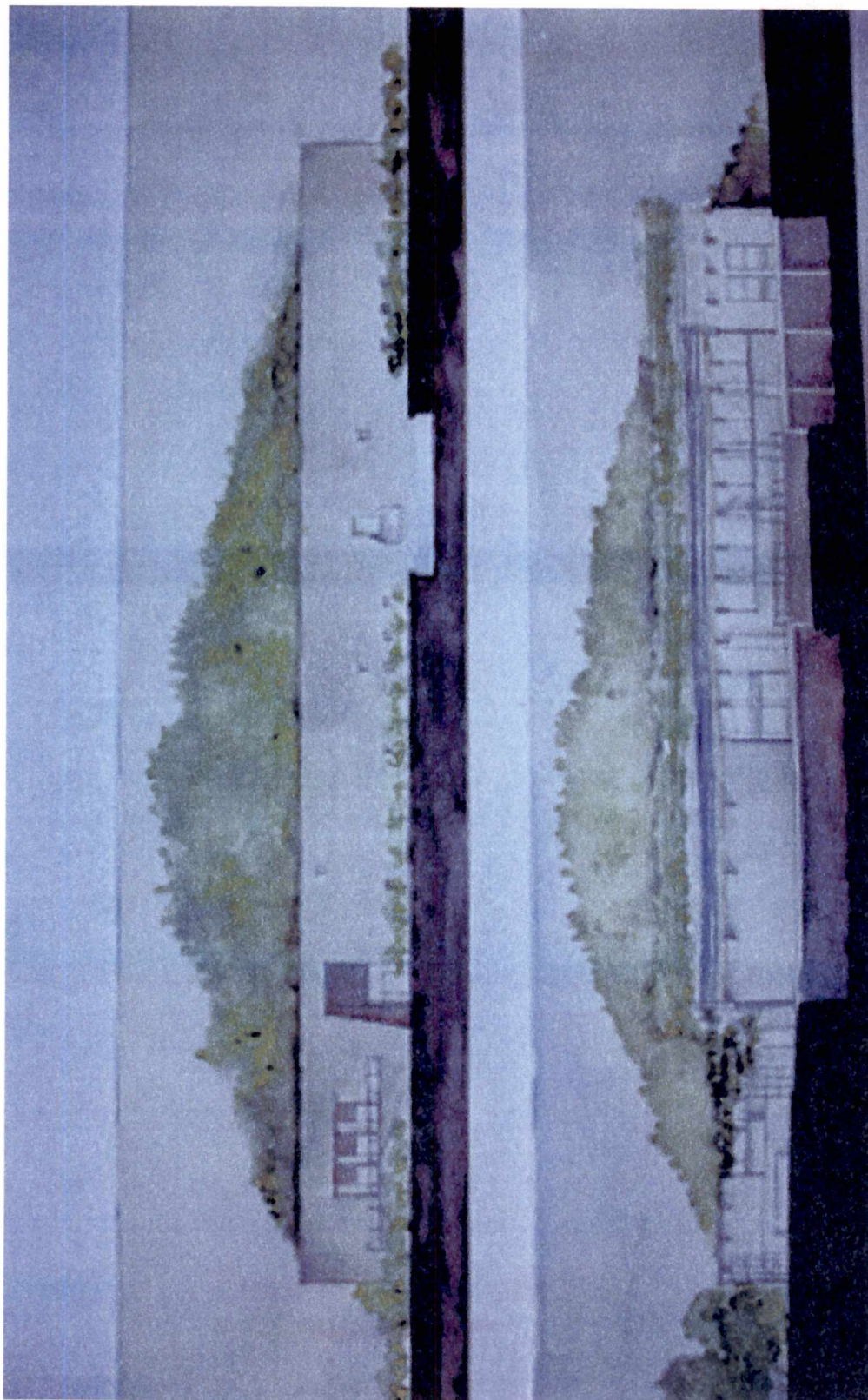
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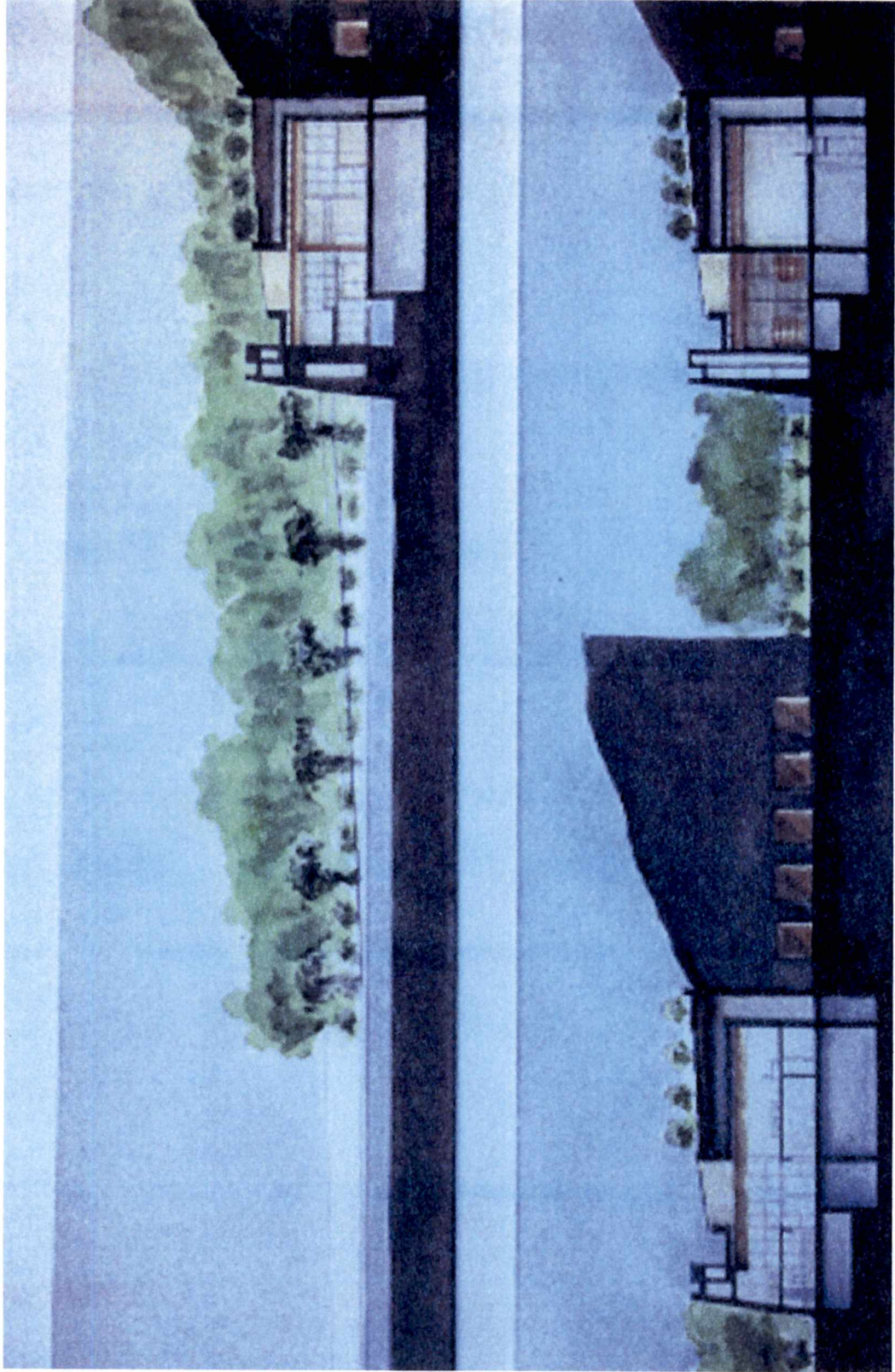
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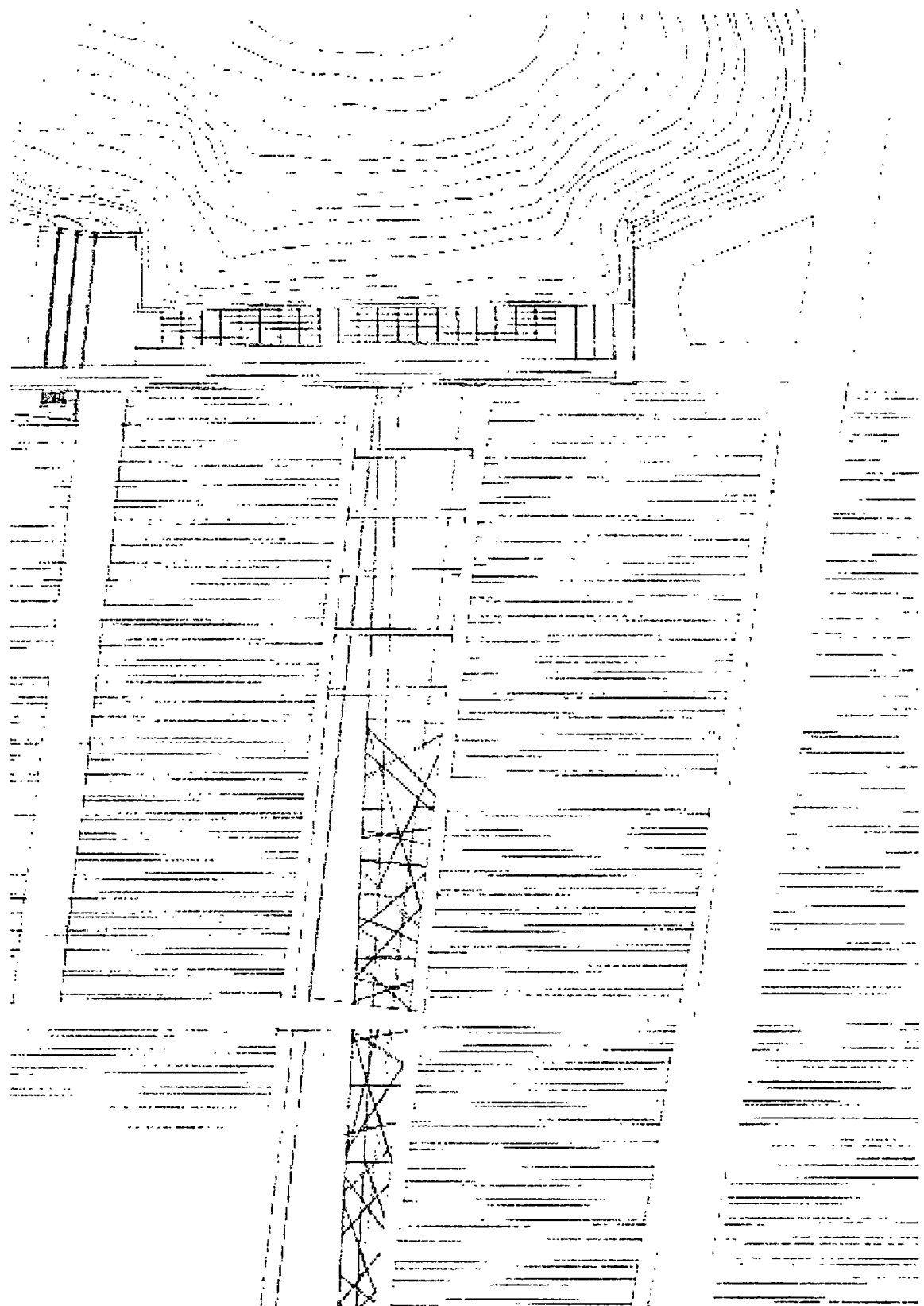


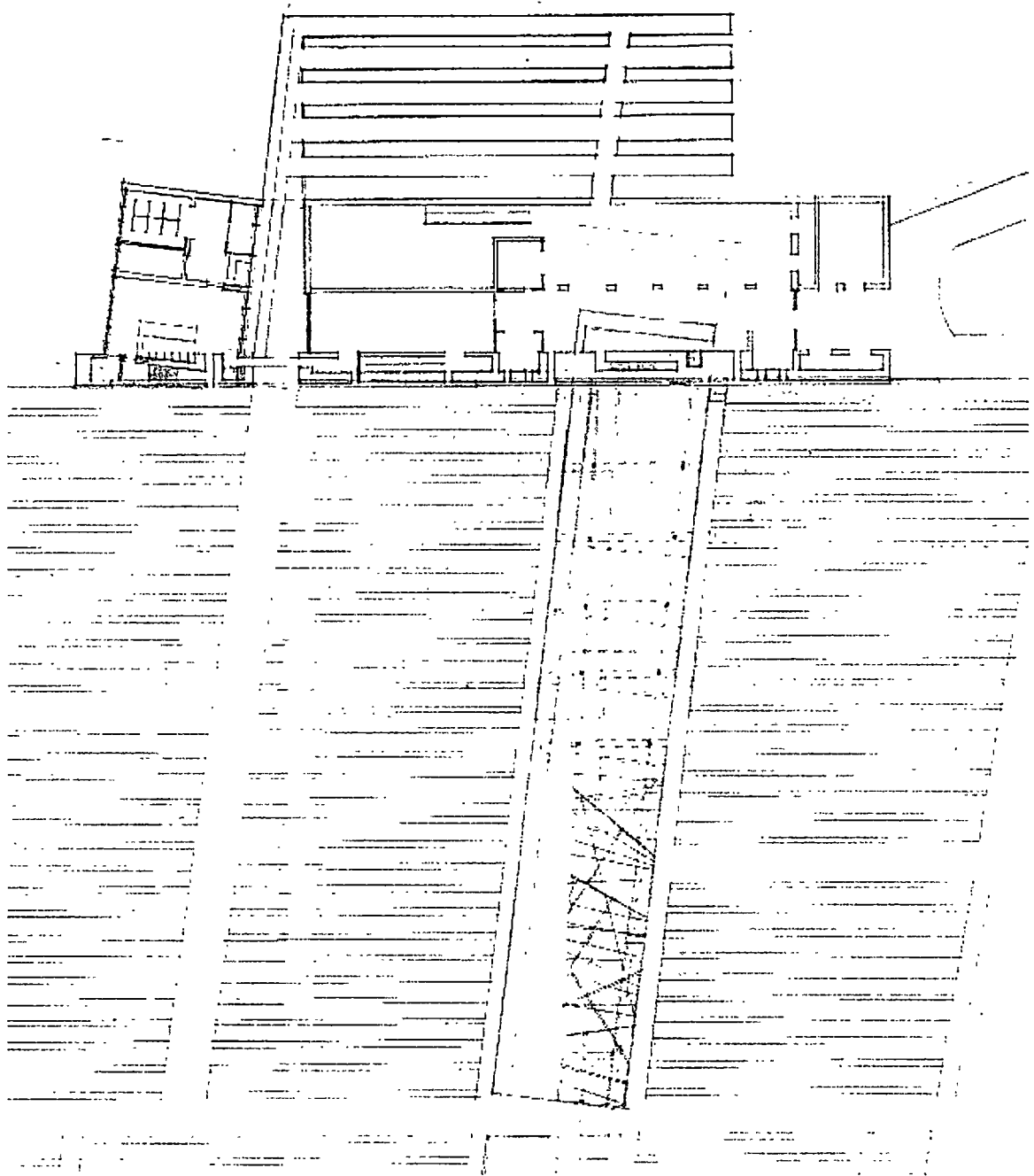


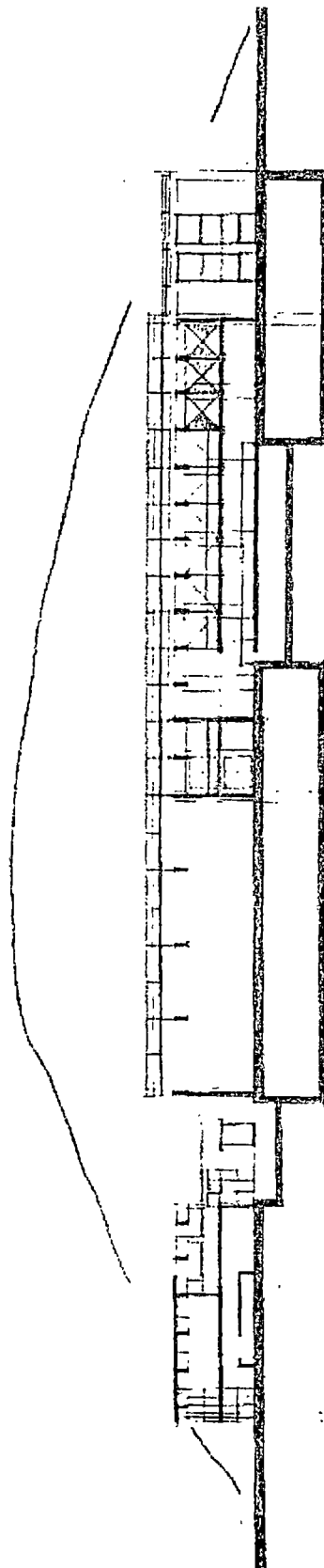


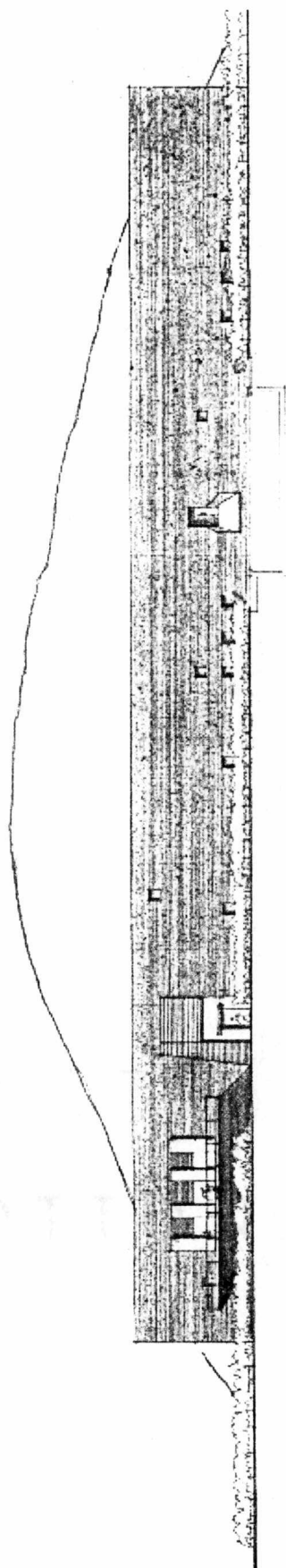


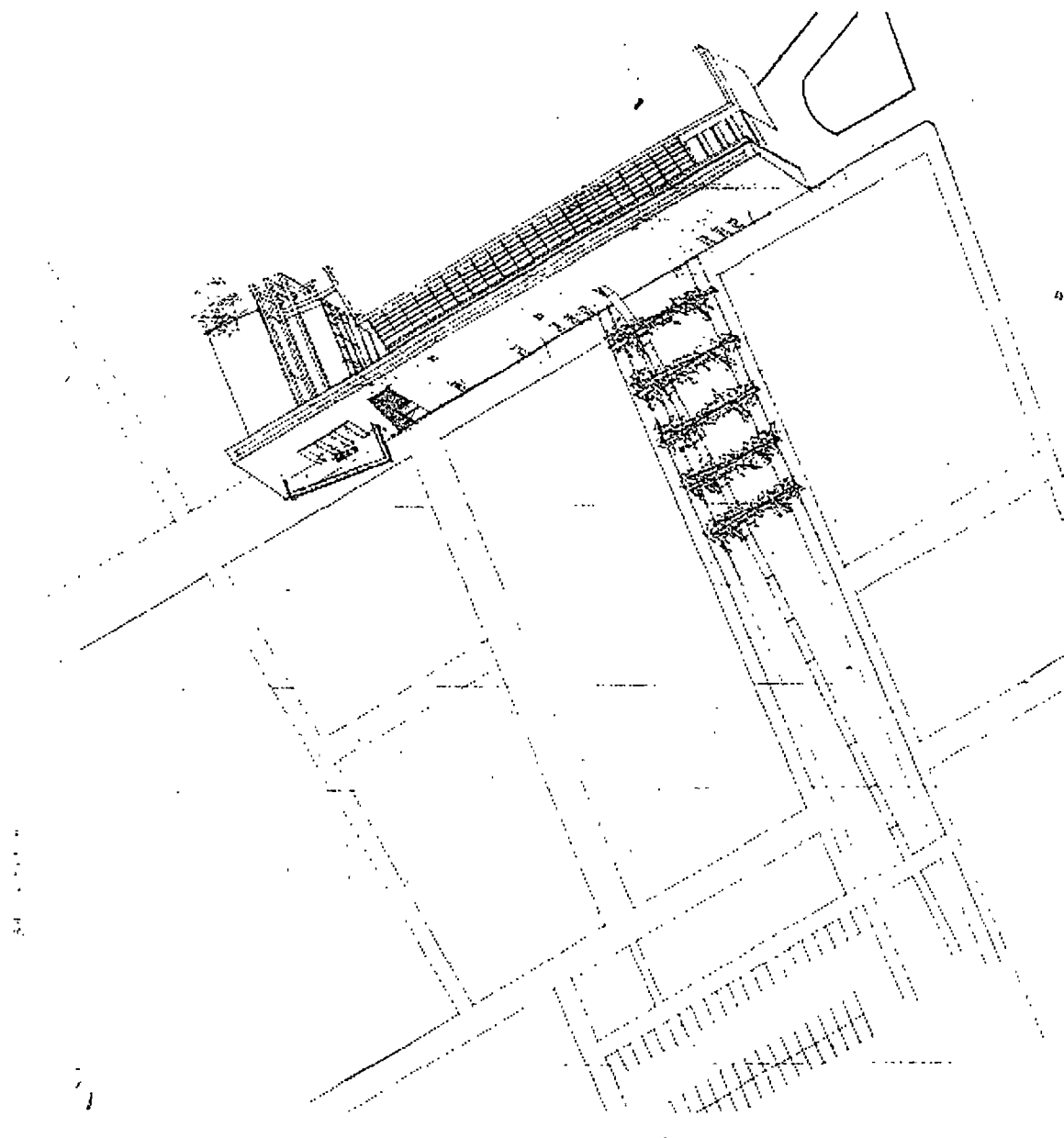






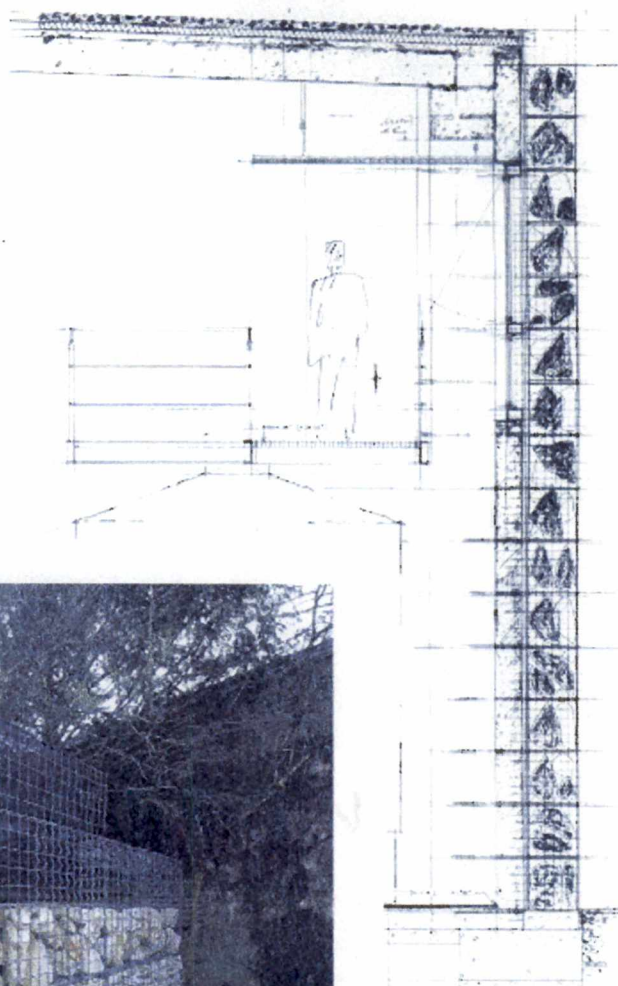






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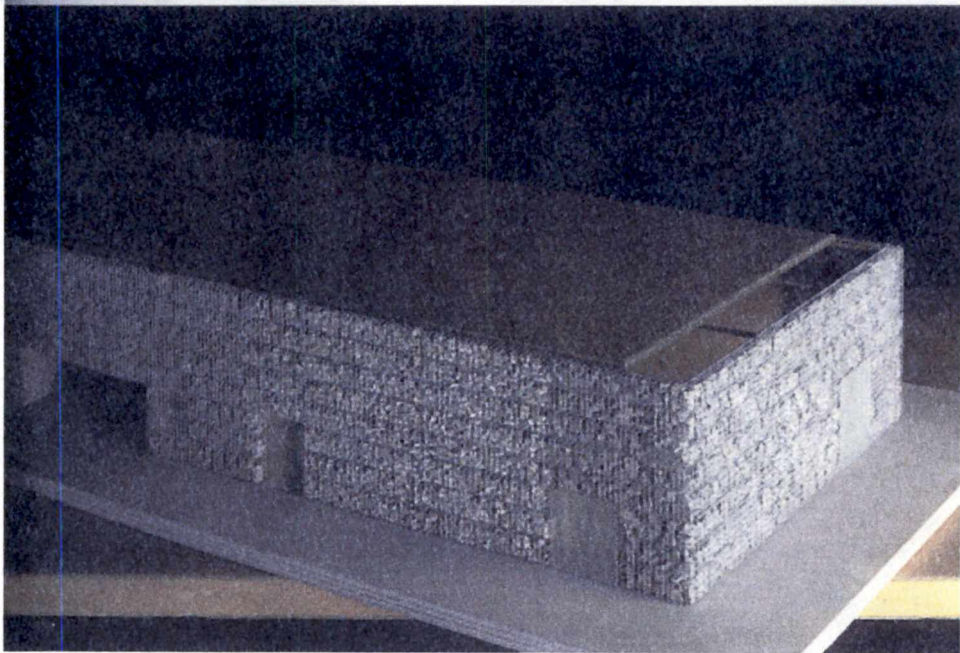
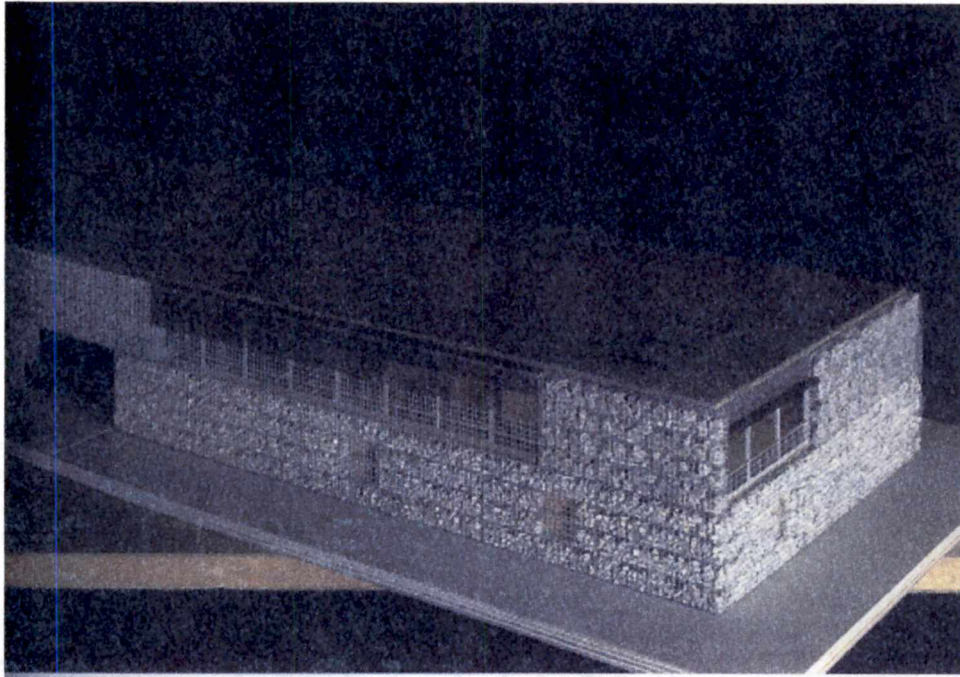
PRECEDENTS



Detalle de la estructura vertical de la fachada
con el sistema de drenaje



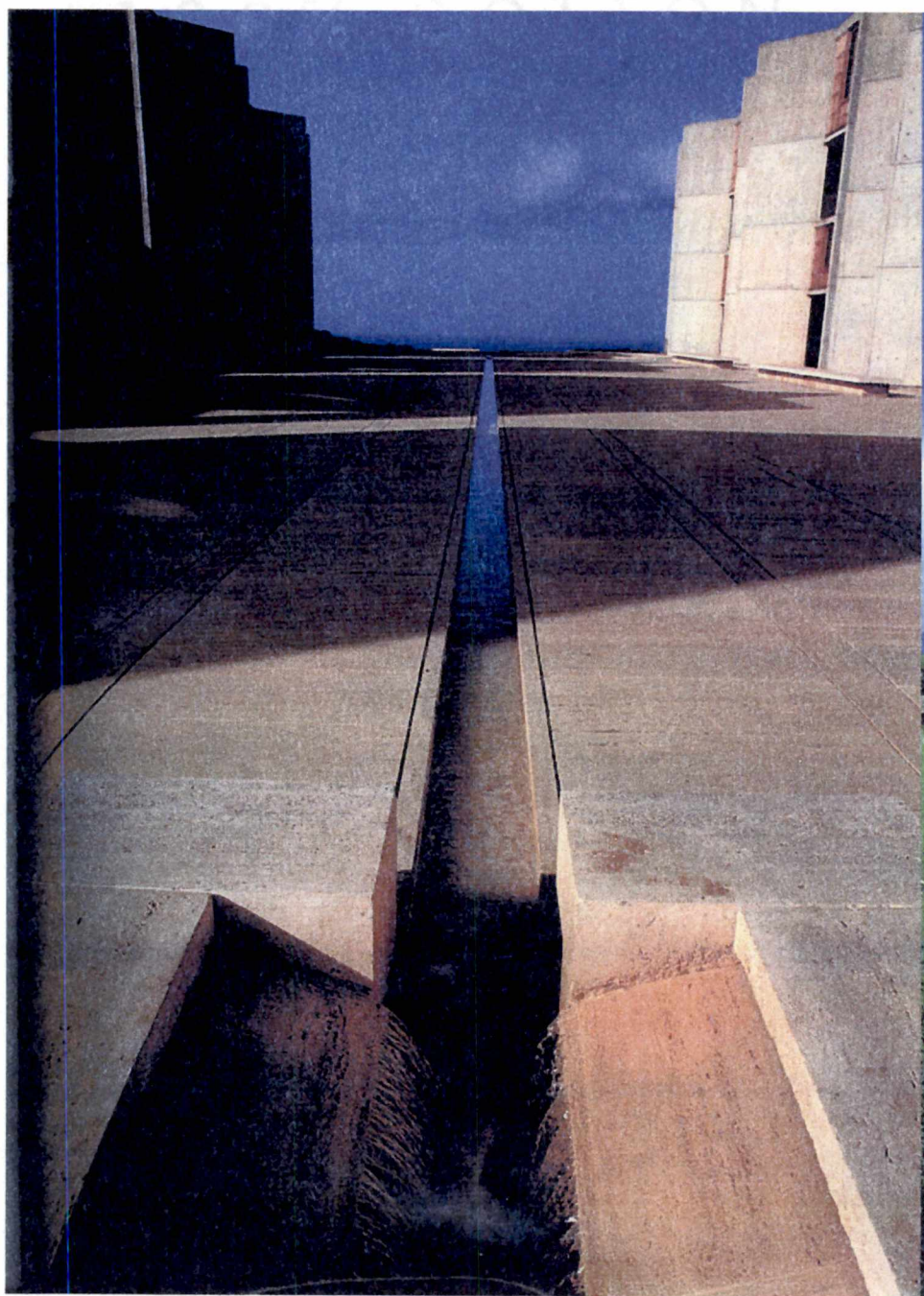
Detalle de la estructura a escala 1:1
con el sistema de drenaje













KAREN ELIZABETH SNYDER WAS BORN IN KNOXVILLE, TENNESSEE SEPTEMBER 5, 1970. SHE ATTENDED THE UNIVERSITY OF TENNESSEE, KNOXVILLE FROM 1988-1992 WHEN SHE RECEIVED A BACHELOR OF ARTS WITH A MAJOR IN PSYCHOLOGY. UPON GRADUATION, SHE MOVED TO CHARLOTTE, NORTH CAROLINA TO PURSUE A CAREER IN SALES AND MARKETING. IN 1998 SHE RETURNED TO KNOXVILLE TO ENTER THE GRADUATE PROGRAM IN THE SCHOOL OF ARCHITECTURE AND DESIGN. SHE GRADUATED IN MAY OF 2001 WITH A MASTER OF ARCHITECTURE.