Appendix N Water Demand Report

Appendices

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FUSCOE
ENGINEERING

WATER DEMAND REPORT
OCMA MUSEUM HOUSE

Newport Beach, California

OCMA Urban Housing, LLC
18201 Von Karman Avenue, Suite 900
Irvine, CA 92612

Prepared By:

Fuscoe Engineering, Inc.
16795 Von Karman, Suite 100
Irvine, California 92606
949.474.1960
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Project Manager:
Oriana Slasor, P.E.

Date Prepared: May 2016

Job Number: 622-013

REGISTERED PROFESSIONAL ENGINEER
SUSAN K. WILLIAMS
NO. 52976
CIVIL
STATE OF CALIFORNIA

6/3/16

full circle thinking®

Table of Contents

Section **Page**

I. Introduction

1.1 Purpose of the Study

The purpose of this analysis is to calculate the water demand for the proposed OCMA Museum House project, located at 850 San Clemente Drive in the City of Newport Beach, California. The water demand estimates that are calculated in this report will assist with the water supply analysis needed for CEQA documentation.

1.2 Site Description

The OCMA Museum House project site encompasses a total area of two acres. The existing site consists of the Orange County Museum of Art (OCMA) building, related utility infrastructure, and parking.

The site is bounded to the north by the San Joaquin Plaza Apartments project (currently under construction), to the east by a recently installed parking garage, and to the south by San Clemente Drive. Santa Barbara Drive is to the west of the project. Santa Cruz Drive is to the east of the project. A Location Map is included on Page 3 of this report.

1.3 Existing Water Facilities

Water for domestic service and fire protection is provided to the project site by the City of Newport Beach. The water atlas maps show an existing 8" ACP water line within a 15' easement within the property. In addition, a public fire hydrant is located within an easement near the northeast corner of the property. The 8" public water line is connected to an existing 12" public ACP water line in San Clemente Drive. An exhibit has been prepared, which shows the locations of the existing water facilities associated with this project. This exhibit is included in this report as Appendix 1.

Record drawings (as-built plans) have been obtained for the existing public water lines, and these plans are included in Appendix 2.

Fire hydrant flow tests have been performed, which confirm that adequate flows are available to service this project, with static pressures ranging from 113 to 117 psi, and residual pressures ranging from 95 to 102 psi. The fire hydrant flow test results are included in this report as Appendix 3.

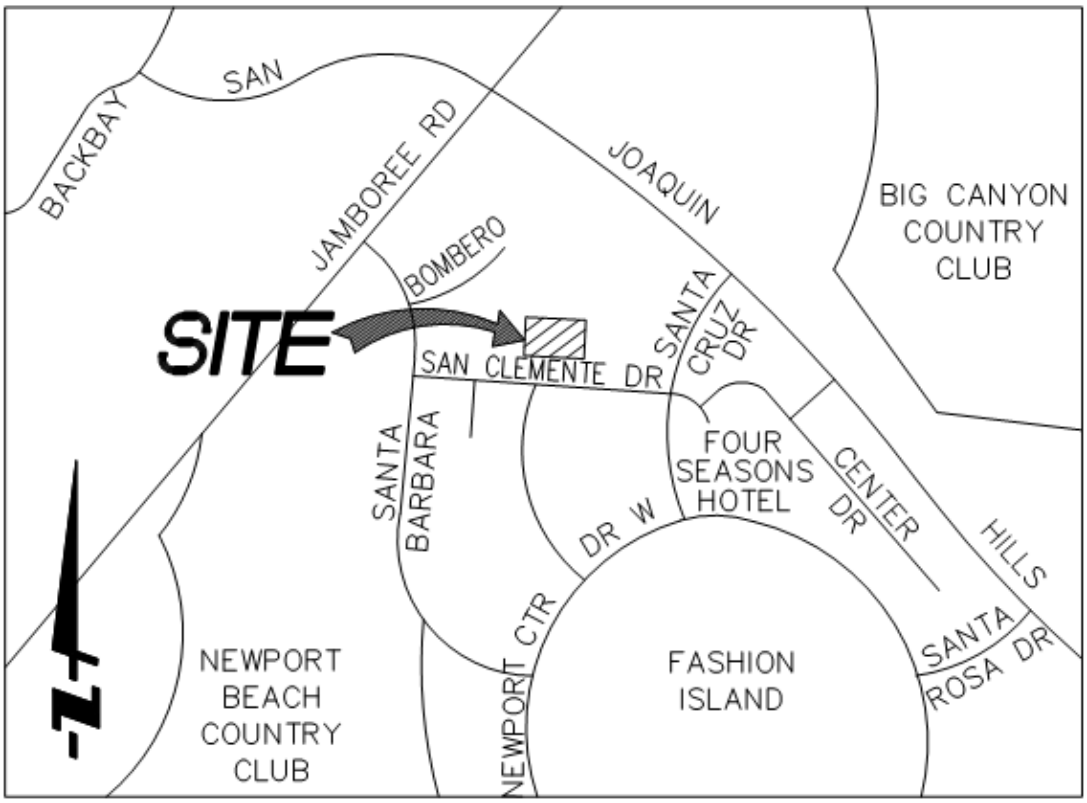
Recycled water in the City is provided by the Orange County Water District (OCWD). The OCWD operates a 16-inch recycled water pipeline as part of the Green Acres Project, which is located within Jamboree Road, and terminates in Santa Barbara Drive,

north of San Clemente Drive. This 16-inch pipeline is assumed to be the supply source for the proposed Newport Center recycled water system.

There are no existing recycled water lines on San Clemente Drive in the vicinity of the OCMA Museum House project. Currently, the closest connection point from the project site to their recycled water main is on Santa Barbara Drive, north of San Clemente Drive, discussed in the previous paragraph. (This is the point where they serve the Newport Beach Country Club.) Correspondence with OCWD has been initiated to determine if new lines in San Clemente are planned. Due to the possibility of installation of future recycled water infrastructure in the adjacent public roadways, communication with OCWD staff should be continued as the design progresses.

1.4 Proposed Development

The proposed project development consists of 100 condominium units. Residential centers such as pools, fitness, and other amenities are also proposed. A Conceptual Site Plan is included as Appendix 4.



LOCATION MAP
NTS

II. Methodology and Water Demand Estimates

The proposed water demand is directly associated with the proposed development provided by Related California and MVE Partners, Architects. Water demand calculations for the proposed residential units are based on the City of Newport Beach Water Supply Assessment (WSA), dated June 13, 2012. For water demand of the various amenities located within the project, factors provided by the Irvine Ranch Water District (IRWD) were used. The demand from the amenities was then added to the demand for the residential units. The existing land use (museum) was included as a credit to the calculated water demand. (See Appendix 5 for Excerpt from City of Newport Beach WSA, and Appendix 6 for IRWD Design Criteria.)

The estimated water demand estimates are as follows:

- Proposed Residential (100 units): 56 acre-feet/year
- Proposed Amenities: >1 acre-feet/year
- Total Proposed Project: 56 acre-feet/year
- Existing Museum (credit): 8 acre-feet/year
- Net Water Demand: 48 acre-feet/year

See Appendix 7 for Water Demand Calculations

III. Proposed Water Improvements

The project will necessitate the removal of the existing onsite public 8" water line. In addition, the existing fire hydrant at the northeast corner will be relocated, to accommodate the proposed building. There will be three proposed water connections at the south boundary of the property, connecting to the existing 12" water line in San Clemente Drive. It is anticipated that the existing fire hydrant fronting the building near the west corner will require relocation, to accommodate a proposed driveway associated with the new development. The exhibit showing the proposed water improvements is included in this report as Appendix 8.

IV. Conclusion

As shown by the Water Demand calculations (See Appendix 7), the proposed Water Demand for the project is 56 acre-feet/year. Using the existing museum of a credit (-8 acre-feet/year), the net water demand for this site is 48 acre-feet/year. These water demand estimates will be used to provide guidance for the water supply analysis needed for CEQA.

V. List of Appendices

Appendix 1 – Existing Water Facilities Exhibit

Appendix 2 – As-Built Plans

Appendix 3 – Fire Hydrant Flow Test Results

Appendix 4 – Conceptual Site Plan

Appendix 5 – Excerpt from City of Newport Beach Water Supply Assessment

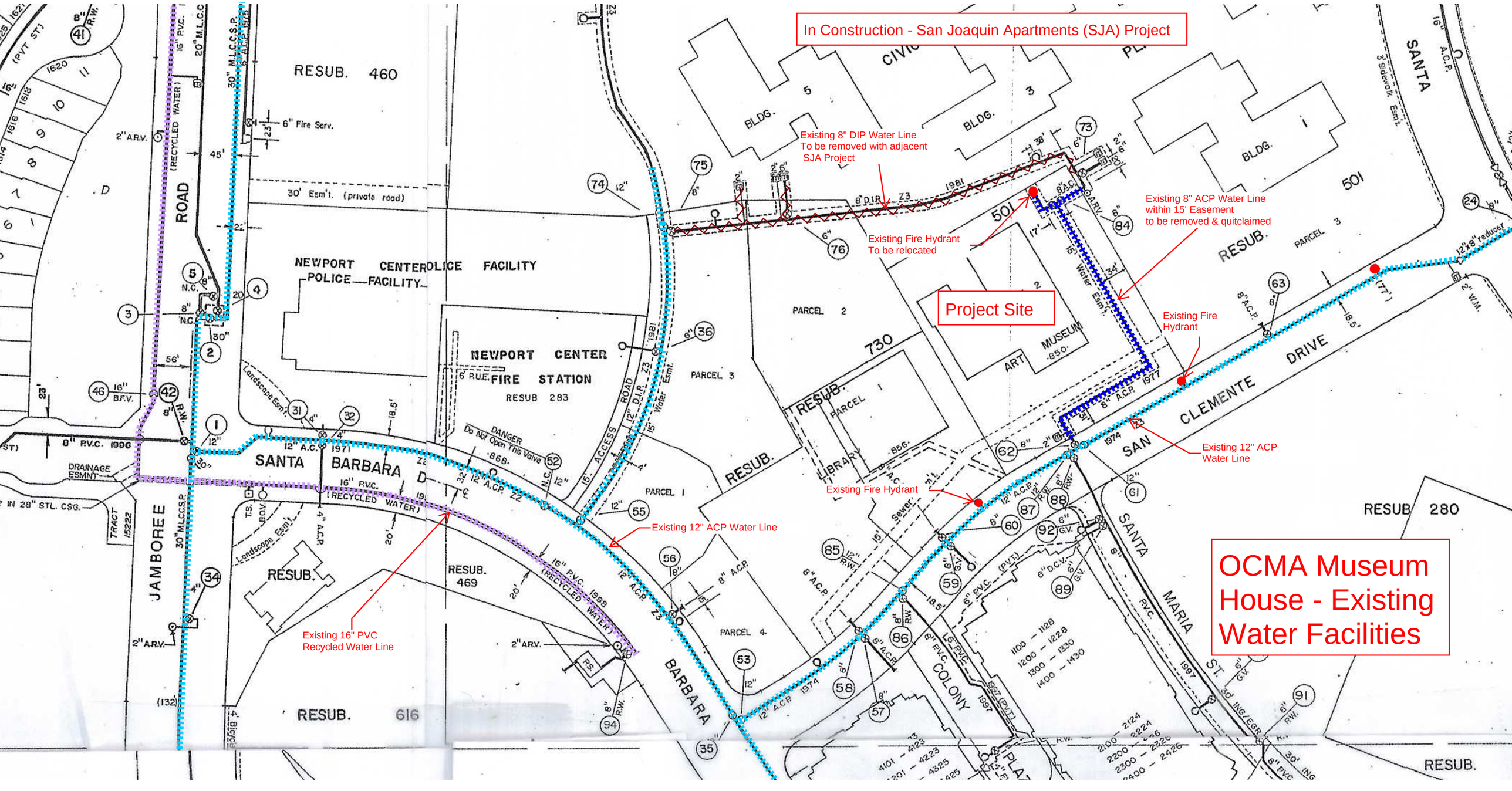
Appendix 6 – IRWD Design Criteria

Appendix 7 – Water Demand Calculations

Appendix 8 – Proposed Water Improvements Exhibit

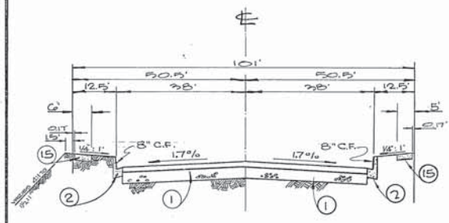
Appendix 1

Existing Water Facilities Exhibit


In Construction - San Joaquin Apartments (SJA) Project
Existing 8" DIP Water Line
To be removed with adjacent
SJA Project
Existing Fire Hydrant
To be relocated
Existing 8" ACP Water Line
within 15' Easement
to be removed & quitclaimed
Project Site
Existing Fire
Hydrant
Existing 12" ACP
Water Line
Existing Fire Hydrant
Existing 12" ACP Water Line
Existing 16" PVC
Recycled Water Line
OCMA Museum
House - Existing
Water Facilities
RESUB. 460
NEWPORT CENTER POLICE FACILITY
NEWPORT CENTER FIRE STATION
RESUB 283
RESUB. 469
RESUB. 616
RESUB 280
PARCEL 1
PARCEL 2
PARCEL 3
PARCEL 4
ROAD
SANTA BARBARA
SAN CLEMENTE DRIVE
SANTA MARIA ST.
JAMBOREE
COLONY
MUSEUM
LIBRARY
ART
BLDG. 5
BLDG. 3
BLDG. 1
501
730
30" Esm't. (private road)
6" Fire Serv.
2" A.R.V.
8" P.V.C. 1996
16" P.V.C. (RECYCLED WATER)
16" P.V.C. 1998 (RECYCLED WATER)
12" A.C.P. 1971
12" A.C.P. 1974
8" A.C.P. 1977
8" A.C.P. 1974
8" D.I.P.
6" A.C.P.
8" P.V.C.
6" P.V.C.
12" P.V.C. 1997
8" A.C.P. 1997
DANGER Do Not Open This Valve
DRAINAGE ESMNT
Landscape Esm't.
Water Esm't.
Sewer Esm't.
3' Sidewalk Esm't.
ACCESS ROAD
TRACT 15222
P.S.
T.S.
B.O.V.
4' Bicycle Trail
30" M.L.C.C.S.P.
30" M.L.C.C.S.P.
IN 28" STL. CSG.

Appendix 2

As-Built Plans



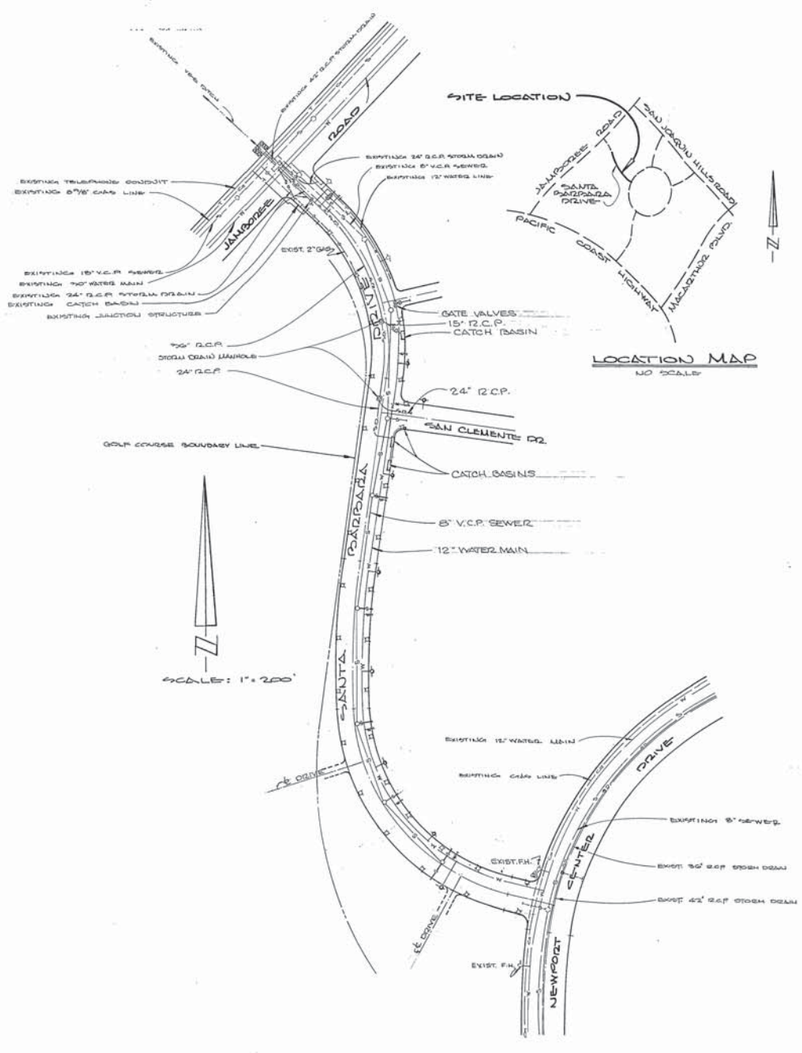
TYPICAL SECTION
SANTA BARBARA DRIVE

CONSTRUCTION NOTES

1. PLACE 4" A.C. OVER 8" A.B.
2. CONST. CONCRETE CURB & GUTTER PER STD. 105-L TYPE A.
3.
4. CONST. 8" TO 6" C.F. CURB ONLY.
5. CONST. 12" A.C. WATER MAIN. (CLASS 200)
6. CONST. 8" V.C.P. SEWER
7. CONST. 48" DIA. SEWER MANHOLE PER STD. 402-L.
8. CONST. 36" R.C.P. ("D" LOAD AS SHOWN ON THESE PLANS)
9. CONST. 24" R.C.P. ("D" LOAD AS SHOWN ON THESE PLANS)
10. CONST. 15" R.C.P. ("D" LOAD AS SHOWN ON THESE PLANS)
11. CONST. MANHOLE #4 PER STD. PLAN NO. 308-L
12. CONST. CATCH BASIN CURB INLET 'OL' PER STD. PLAN 306-L.
13. CONST. CATCH BASIN CURB INLET 'OL-A' PER STD. PLAN 305-L.
14. REMOVE STREET BARRICADE.
15. CONST. CONC. SIDEWALK PER STD. PLAN 110 -L.
16. CONST. LOCAL DEPRESSION PER STD. PLAN 304-L.
17. CONST. CURB INLET TYPE 'OS' PER STD. PLAN 306-L.
18. PLACE FIREHYDRANT ASSEMBLY PER STD. PLAN 501-L.
19. PLACE GATE VALVES AS INDICATED.
20. FEATHER AS REQUIRED BY FIELD ENGINEER.
21. REMOVE EXISTING CLEARANCE MARKERS.
22. CONST. 8" A.C.P. WATER. (CLASS 200)
23. CONST. STANDARD SURVEY MONUMENT PER STD. PLAN 124-L.
24. CONST. 4" A.C.P. WATER LINE, CLASS 200.
25. CONST. CONC CURB & GUTTER PER STD. 105-L TYPE "A" VARYING CURB FACE FROM 8" C.F. TO 6" C.F.
26. CONST. COMMERCIAL DRIVEWAY APPROACH, TYPE II, PER STD. 112-L, WIDTH AND CURB RETURN RADII AS SHOWN.
27. CONST. 6" V.C.P. SEWER LATERAL.
28. REMOVE EXIST. CONC. CURB, GUTTER & SIDEWALK.

SPECIAL NOTES

1. ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE OCCUPATIONAL SAFETY AND HEALTH REGULATION OF THE U.S. DEPARTMENT OF LABOR AND WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS' CONSTRUCTION SAFETY ORDERS.
   THE CITY, THE CIVIL ENGINEER AND THE SOILS ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS AND SUBCONTRACTORS COMPLIANCE WITH THE OCCUPATIONAL SAFTEY AND HEALTH REGULATIONS OF THE U.S. DEPARTMENT OF LABOR, OR WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS CONSTRUCTION SAFETY ORDERS
2. STREET STRUCTURAL PAVEMENT SECTIONS SHOWN ARE MINIMUM AND ARE SUBJECT TO REVISION AFTER APPROPRIATE TESTING OF THE SUBGRADE MATERIALS HAS BEEN COMPLETED.
3. FIRE HYDRANTS SHALL BE RICH - VANGUARD # 6615 A.
4. ALL SEWER LINES SHALL HAVE PLASTIC COMPRESSION JOINTS.



INDEX MAP

LEGEND

WATER LINE ..... W, G.V., EX. F.H., F.H.
SEWER LINE ..... S, M.H.
STORM DRAIN ..... SD, S.D., C.B.
STREET LIGHT .....
STREET SIGN .....
TELEPHONE CONDUIT .. T

LOCATION MAP
NO SCALE

STREET IMPROVEMENTS

1. CONST. 4" A.C. OVER 8" A.B.
2. CONST. CONCRETE CURB & GUTTER PER STD. 105-L TYPE "A".
3.
4. CONST. 8" TO 6" C.F. CURB ONLY.
14. REMOVE STREET BARRICADE.
19. CONST. CONCRETE SIDEWALK PER STD. PLAN, 110-L.
16. CONST. LOCAL DEPRESSION PER STD. PLAN 304-L
20. FEATHER AS REQUIRED BY FIELD ENGINEER.
21. REMOVE EXISTING CLEARANCE MARKERS.
23. CONST. STD. SURVEY MONUMENT PER STD 124-L.
25. CONST. CONC. CURB & GUTTER PER STD. 105-L TYPE "A" VARYING CURB FACE FROM 8" C.F TO 6" C.F.
26. CONST. COMMERCIAL DRIVEWAY APPROACH, TYPE II, PER STD. 112-L, WIDTH AND CURB RETURN RADII AS SHOWN.
28. REMOVE EXIST. CONC. CURB, GUTTER & SIDEWALK.
29. CONST. WHEEL CHAIR RAMP PER DETAIL ON SHEET NO. 2.
30. CONST. WHEEL CHAIR RAMP FOR DRIVEWAYS PER DETAIL ON SHEET NO. 2.

WATER SYSTEM

5. CONST. 12" A.C.P. WATER MAIN. (CLASS 200)
18. PLACE FIRE HYDRANT ASSEMBLY PER STD. PLAN 501-L.
19. PLACE GATE VALVES AS INDICATED.
22. CONST. 8" A.C.P. WATER. (CLASS 200)
24. CONST. 4" A.C.P. WATER LINE CLASS 200.

SEWER SYSTEM

6. CONST. 8" V.C.P. SEWER.
7. CONST. 48" DIA. SEWER MANHOLE PER STD. 402-L
27. CONST. 6" V.C.P. SEWER LATERAL.

STORM DRAIN SYSTEM

8. CONST. 36" R.C.P. ("D" LOAD AS SHOWN ON PLANS)
9. CONST. 24" R.C.P. ("D" LOAD AS SHOWN ON PLANS)
10. CONST. 15" R.C.P. ("D" LOAD AS SHOWN ON PLANS)
11. CONST. M.H. #4 PER STD. NO 308-L.
12. CONST. C.B. CURB INLET 'OL' PER STD. PLAN 306-L.
13. CONST. C.B. CURB INLET 'OL-A' PER STD. PLAN 305-L.
17. CONST. CURB INLET TYPE 'OS' PER STD. PLAN 306-L.

PRIVATE ENGINEERS NOTICE TO CONTRACTORS

THE EXISTENCE & LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN AND ANY OTHER UTILITIES OR STRUCTURES NOT SHOWN ON THESE PLANS

NOTE:
ALL IMPROVEMENTS TO BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF NEWPORT BEACH STANDARD SPECIFICATIONS (ADOPTED 9-10-73) & APPLICABLE STANDARD DRAWINGS (LATEST REVISIONS)

BENCH MARK:
O.C.B.M. 37-68-G3
2" I.P. WITH COPPER NAIL, 1' DEEP, EST'LY SIDE OF MACARTHUR BLVD WHITE PADDLE BOARD 2'± SO. MARKED 1/4 SEC. BENCH MARK 2.5' WEST
ELEV. = 227.050 (1964) M.S.L.

PREPARED BY THE OFFICE OF
R.W. Williamson 10,180 11-14-73
R.W. WILLIAMSON R.C.E. 10180 DATE
JOB NO. 72-890 FILE NO.

DATE	BY	DESCRIPTION	APP'D
4/14/74		ADD DRAINAGE CONTROL FILL N'LY SIDE OF BRIDGE AND ADD 24" R.C.P.	DBM 4-8-74
5-7-74	Y.M.K.	ADDED WHEELCHAIR RAMP DETAILS ON SHEETS 2, 3 & 4.	J-1-12 4/22/74

REVISIONS

APPROVED
B. A. Nolan
ASST. PUBLIC WORKS DIR.
R.E. NO. 12802
DATE Feb. 1, 1974

DESIGNED A.T.R. | DRAWN E.J.C.
CHECKED E.G.S. | DATE 1-15-73

IMPROVEMENT PLANS FOR
SANTA BARBARA DRIVE

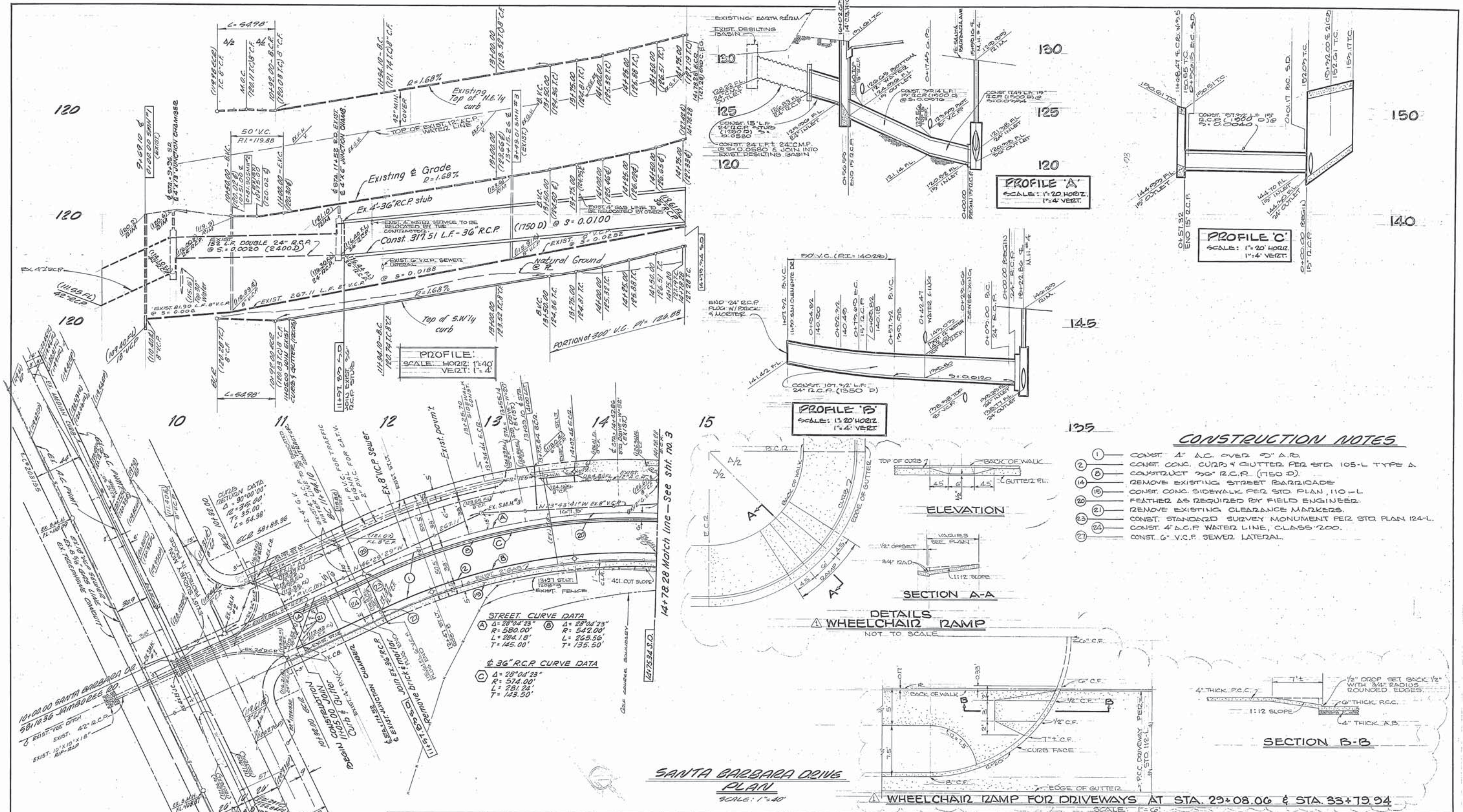
CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

ISSUED DIVISION NO. 505
SHEET 1 OF 4

R-5273-3 (REISUE. 3of3)
TRACT
Sht 1 of 4

R-5273-5
(RESUB. 305)

TRACT ___
Sht 2 of 4



STREET CURVE DATA

Ⓐ Δ=28°04'23"
R=580.00'
L=284.18'
T=145.00'

Ⓑ Δ=28°04'23"
R=542.00'
L=265.56'
T=135.50'

℄ 36" R.C.P. CURVE DATA

Ⓒ Δ=28°04'23"
R=574.00'
L=281.24'
T=143.50'

CONSTRUCTION NOTES

① CONST. 4" A.C. OVER 9" A.B.
② CONST. CONC. CURB & GUTTER PER STD 105-L TYPE A
⑧ CONSTRUCT 36" R.C.P. (1750 D).
⑭ REMOVE EXISTING STREET BARRICADE
⑮ CONST. CONC. SIDEWALK PER STD PLAN, 110-L
⑳ FEATHER AS REQUIRED BY FIELD ENGINEER.
㉑ REMOVE EXISTING CLEARANCE MARKERS.
㉓ CONST. STANDARD SURVEY MONUMENT PER STD PLAN 124-L.
㉔ CONST. 4" A.C.P. WATER LINE, CLASS 200.
㉗ CONST. 6" V.C.P. SEWER LATERAL.

NOTE: ALL IMPROVEMENTS TO BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF NEWPORT BEACH STANDARD SPECIFICATIONS. (ADOPTED 3-10-73) & APPLICABLE STANDARD DRAWINGS. (LATEST REVISION)

BENCH MARK:
O.C.B.M. 3T-68-63
2" I.P. WITH COPPER NAIL, 1' DEEP, EST'LY SIDE OF MACARTHUR BLVD. WHITE PADDLEBOARD 2'± SO. MARKED 1/4 SEC. BENCH MARK 2.5' WEST
ELEV. = 227.050 (1964)

PREPARED BY THE OFFICE OF
WILLIAMSON & SCHMID
CIVIL ENGINEERS
1535 EAST FIRST ST. SANTA ANA, CALIF.
5473986
B.W. Williamson 11-14-73
B.W. WILLIAMSON R.C.E. 10180 DATE
JOB NO. 72-596 F.B. NO.

DATE	BY	DESCRIPTION	APP'D.
5-7-74	V.M.K.	ADDED WHEELCHAIR RAMP DETAIL △	B.J.D. 5/22/74

REVISIONS

APPROVED
B.J. Nolan
ASS'T. PUBLIC WORKS DIRECTOR
R.E. NO. 12806
DATE Feb. 1, 1974

DESIGNED A.R.R.
DRAWN E.J.C.
CHECKED E.G.S.
DATE 1-15-73

IMPROVEMENT PLANS FOR
SANTA BARBARA DRIVE

CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

RESUBDIVISION NO. 305
SHEET 2 OF 4

LIETZ 1386 ARKWRIGHT 12-66

R-5273-S (RESUB. 305)

TRACT — Sht 2 of 4

PROFILE
SCALE H. 1"=40'
V. 1"= 0'

CONSTRUCTION NOTES CONT.

(23) CONST. WHEELCHAIR RAMP PER DETAIL ON SHEET 2

CONSTRUCTION NOTES

1. CONST. 4" A.C. OVER 6" A.B.
2. CONST. CONCRETE CURB AND GUTTER PER STD. 105-L TYPE A.
3. CONST. CONCRETE CROSS GUTTER PER STD. 109-L.
4. CONST. 5" TO 6" C.F. CURB ONLY
5. CONST. 12" A.C.P. WATER MAIN. (CLASS 200)
6. CONST. 8" VCP SEWER
7. CONST. 48" DIA. SEWER MANHOLE PER STD. 402-L.
8. CONST 36" R.C.P. ('D' LOAD AS SHOWN)
9. CONST. 24" R.C.P. ('D' LOAD AS SHOWN)
10. CONST. 15" R.C.P. ('D' LOAD AS SHOWN)
11. CONST. M.H. #4 PER STD. PLAN Nº 308-L
12. CONST. C.B. CURB INLET 'OL' PER STD PLAN 300-L
13. CONST. C.B. CURB INLET 'OL-A' PER STD. PLAN 305-L
14. REMOVE STREET BARRICADE
15. CONST. CONC. SIDEWALK PER STD. PLAN, 110-L
16. CONST LOCAL DEPRESSION PER STD. PLAN 304-L
17. CONST. CURB INLET TYPE 'DS' PER STD. PLAN 306-L
18. PLACE FIREHYDRANT ASSEMBLY PER STD. PLAN, 501-L
19. PLACE GATE VALVES AS INDICATED
20. FEATHER AS REQUIRED BY FIELD ENGINEER.
21. CONST 8" R.C.P. WATER. (CLASS 200).
22. CONST. STANDARD SURVEY MONUMENT PER STD. PLAN 124-L.

PLAN • SANTA BARBARA DRIVE

SCALE: 1"=40'

NOTE:
ALL IMPROVEMENTS TO BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF NEWPORT BEACH STD. SPECIFICATIONS ADOPTED 9-10-73, AND APPLICABLE STANDARD DRAWINGS. LATEST REVISION.

BENCH MARK:
O.C.B.M. 37-66-63
2" I.P. WITH COPPER NAIL 1' DEEP ESTLY SIDE OF MACARTHUR BLVD. WHITE PAINTBOARD 2' ± SO. MARKED 1/4 SECTION BENCH MARK 2.5' WEST. ELEV. 227.060 (1964)

PREPARED BY THE OFFICE OF
WILLIAMSON & SCHMID
CIVIL ENGINEERS
1535 EAST FIRST ST. SANTA ANA, CALIF.
547-3986
B.W. Williamson 12-14-73
B.W. WILLIAMSON R.C.E. 10180 DATE
JOB NO. 72-596 F.B. NO.

DATE	BY	DESCRIPTION	APP'D
4/1/74		ADD DRAINAGE, CONTROL FILL NEAR STA. 21+00 ON SHEET 2	BBM 4-8-74
5-7-74	V.M.K.	ADDED WHEELCHAIR RAMPS	ATTD 5-22-74

REVISIONS

APPROVED
B.B. Nolan
ASST PUBLIC WORKS DIRECTOR
R.E. NO. 12806
DATE Feb. 1, 1974

DESIGNED A.12.12. DRAWN E.J.C.
CHECKED E.G.S. DATE 1-15-74

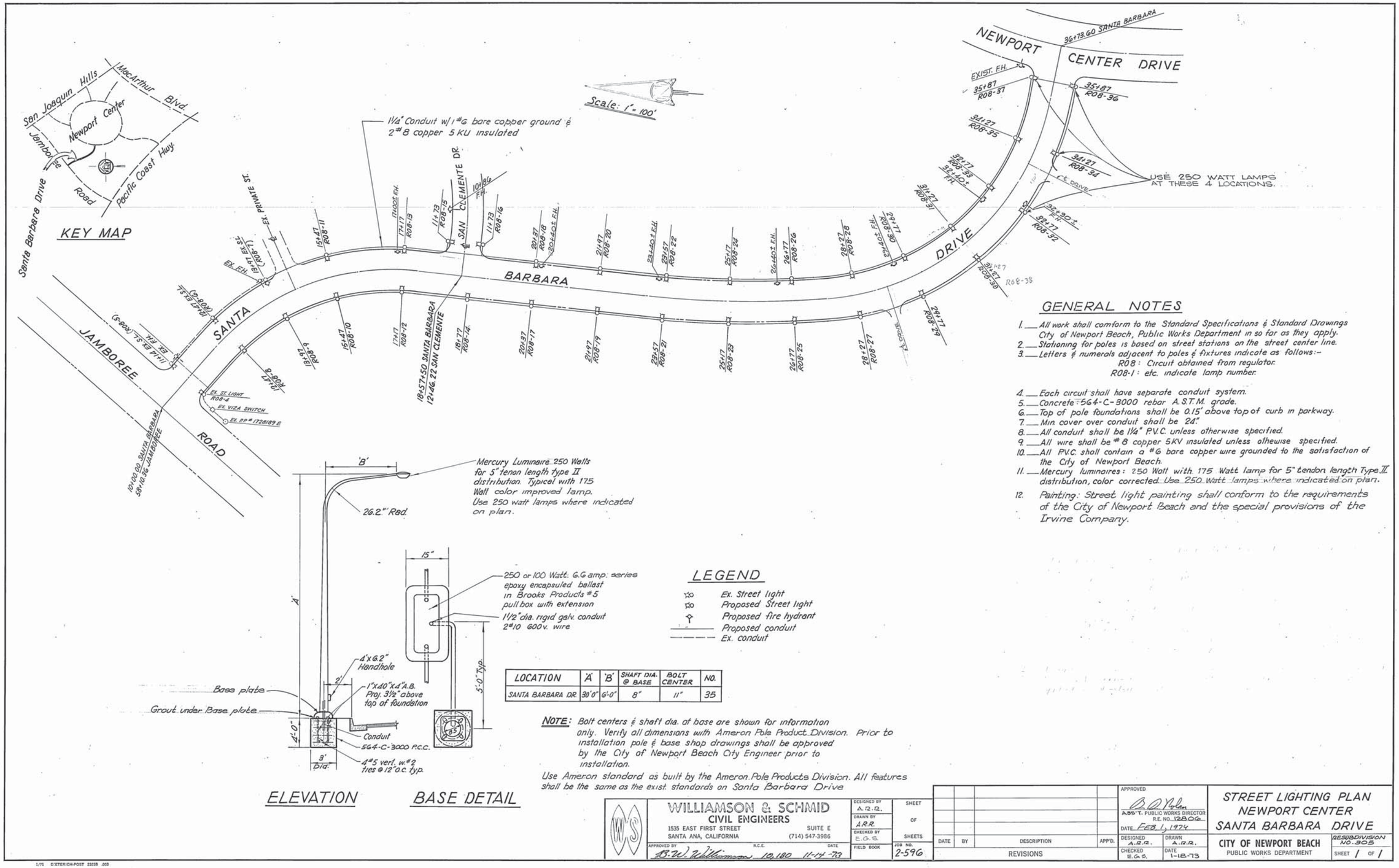
IMPROVEMENT PLAN FOR
SANTA BARBARA DR.

JOB 72-596

CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

DESIGN DIVISION NO. 305
SHEET 3 OF 4

R-9273-S
(RESUB. 305)
TRACT ____
Sht 19 of ____



LEGEND

- Ex. Street light
- Proposed Street light
- Proposed fire hydrant
- Proposed conduit
- Ex. conduit

LOCATION	'A'	'B'	SHAFT DIA. @ BASE	BOLT CENTER	NO.
SANTA BARBARA DR.	30'0"	6'-0"	8"	11"	35

NOTE: Bolt centers & shaft dia. of base are shown for information only. Verify all dimensions with Ameron Pole Product Division. Prior to installation pole & base shop drawings shall be approved by the City of Newport Beach City Engineer prior to installation.

Use Ameron standard as built by the Ameron Pole Products Division. All features shall be the same as the exist. standards on Santa Barbara Drive

GENERAL NOTES

1. All work shall comform to the Standard Specifications & Standard Drawings City of Newport Beach, Public Works Department in so far as they apply.
2. Stationing for poles is based on street stations on the street center line.
3. Letters & numerals adjacent to poles & fixtures indicate as follows:-
   R08 : Circuit obtained from regulator.
   R08-1 : etc. indicate lamp number.
4. Each circuit shall have separate conduit system.
5. Concrete: 564-C-3000 rebar A.S.T.M. grade.
6. Top of pole foundations shall be 0.15' above top of curb in parkway.
7. Min. cover over conduit shall be 24".
8. All conduit shall be 1¼" P.V.C. unless otherwise specified.
9. All wire shall be # 8 copper 5KV insulated unless otherwise specified.
10. All P.V.C. shall contain a # 6 bare copper wire grounded to the satisfaction of the City of Newport Beach.
11. Mercury luminaires: 250 Watt with 175 Watt lamp for 5" tendon length Type II distribution, color corrected. Use 250 Watt lamps where indicated on plan.
12. Painting: Street light painting shall conform to the requirements of the City of Newport Beach and the special provisions of the Irvine Company.

WILLIAMSON & SCHMID
CIVIL ENGINEERS
1535 EAST FIRST STREET SUITE E
SANTA ANA, CALIFORNIA (714) 547-3986

APPROVED BY: R.C.E. DATE
R.W. Williamson 10,180 11-14-73

DESIGNED BY A.R.R.
DRAWN BY A.R.R.
CHECKED BY E.G.S.
FIELD BOOK

SHEET OF SHEETS
JOB NO. 2-596

DATE	BY	DESCRIPTION	APP'D.
		REVISIONS	

APPROVED
ASS'T. PUBLIC WORKS DIRECTOR
R.E. NO. 12806
DATE FEB. 1, 1974

DESIGNED A.R.R. DRAWN A.R.R.
CHECKED E.G.S. DATE 1-18-73

STREET LIGHTING PLAN NEWPORT CENTER SANTA BARBARA DRIVE

CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

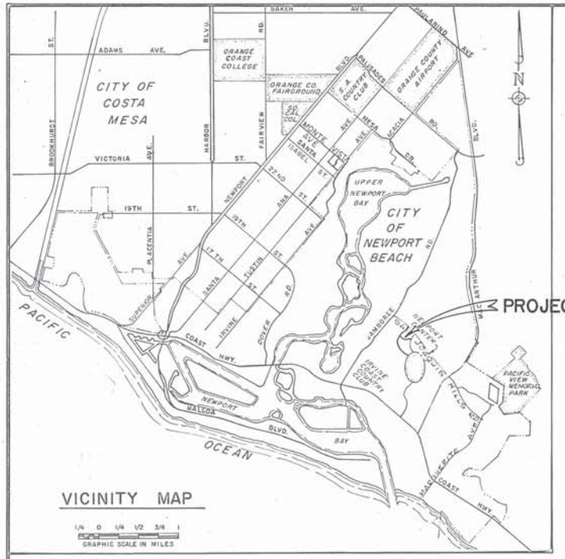
RESUBDIVISION NO. 305
SHEET 1 OF 1

1/71 D'ETERICH-POST 2101B .003

M-11

R-5272-S
SHT. 1 OF 6

CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT
IMPROVEMENT PLANS
FOR
SAN CLEMENTE DRIVE
FROM SANTA CRUZ DRIVE TO SANTA BARBARA DRIVE



VICINITY MAP

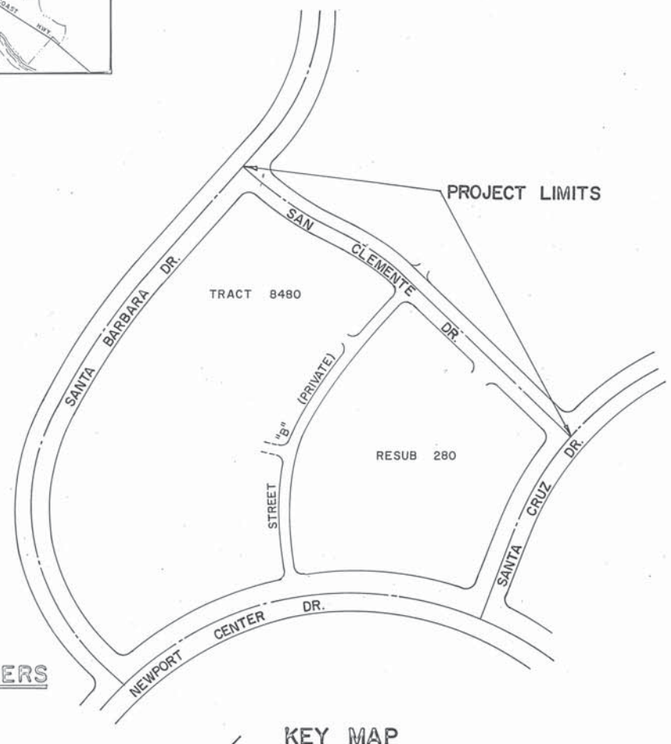
1/4 0 1/4 1/2 3/4 1
GRAPHIC SCALE IN MILES

SYMBOL LEGEND

- POWER POLE
- MANHOLE
- FIRE HYDRANT
- METER BOX
- VALVE
- POWER POLE ANCHOR
- FENCE
- BLOCK WALL
- TREE
- SHRUBBERY
- ASPHALT PAVEMENT
- CONCRETE
- BUILDING
- CENTER LINE
- SEWER LINE
- WATER LINE
- GAS LINE
- EXISTING CONSTRUCTION
- NEW CONSTRUCTION
- BRICK WALK
- COMMUNITY T.V.

EMERGENCY TELEPHONE NUMBERS

AGENCY	NUMBER
SOUTHERN COUNTIES GAS COMPANY	536-0211
SOUTHERN CALIF. EDISON COMPANY	835-3633
PACIFIC TELEPHONE COMPANY	673-0046
CITY OF NEWPORT BEACH (SEWER & WATER)	673-2110, Ext. 267-69
COUNTY SANITATION DISTRICTS	962-2411, Ext. 38
COMMUNITY CABLEVISION	545-3556



KEY MAP

SCALE: 1" = 200'

SHEET INDEX

SHEET NO.	DESCRIPTION
1.	TITLE SHEET
2.	SAN CLEMENTE DR. STREET IMPROVEMENT PLAN & PROFILE
3.	SAN CLEMENTE DR. SEWER & WATER PLAN & PROFILE
4.	SAN CLEMENTE DR. STORM DRAIN PLAN & PROFILE
5.	DETAILS
6.	SAN CLEMENTE DR. STREET LIGHTING PLAN

GENERAL NOTES

1. THE CONSTRUCTION OF ALL PUBLIC IMPROVEMENTS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPROPRIATE STANDARD DRAWINGS OF THE CITY OF NEWPORT BEACH.
2. STATIONING REFERS TO THE CENTERLINES OF STREETS EXCEPT WHERE OTHERWISE NOTED.
3. CURB DATA REFERS TO FACE OF CURB.
4. ALL CONCRETE CURBS, GUTTERS, SIDEWALKS, CROSS GUTTERS AND DRIVEWAYS SHALL BE CONSTRUCTED OF CLASS 564-C-3000 P.C.C.
5. ALL EXPOSED CONCRETE SURFACES SHALL CONFORM IN GRADE, COLOR, AND FINISH TO ALL ADJOINING CURBS AND SIDEWALKS.
6. PAVEMENT SECTIONS SHOWN ARE MINIMUM AND SUBJECT TO REVISION AND APPROVAL OF THE CITY AS REQUIRED BY SOILS TESTS TAKEN AFTER COMPLETION OF THE ROUGH GRADING.
7. ALL UNDERGROUND WORK SHALL BE COMPLETED PRIOR TO PAVING OF STREETS.
8. EXISTING UNDERGROUND UTILITIES ARE SHOWN AS PER AVAILABLE RECORDS; THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION AND ELEVATION IN THE FIELD.
9. ALL REINFORCED CONCRETE DRAINAGE STRUCTURES SHALL BE CONSTRUCTED OF 564-B-3000 P.C.C.
10. STORM DRAIN PIPE SHALL BE CAST OR SPUN REINF. CONCRETE PIPE. "D" LOADS SHOWN ON R.C.P. STORM DRAIN PROFILES APPLY ONLY TO TRENCH CONDITION BEDDING. (SEE NOTE 11).
11. STORM DRAIN PIPE SHALL BE BEDDED IN ACCORDANCE WITH DETAIL ON SHEET 4.
12. ALL EXPOSED FERROUS METAL PARTS TO BE GALVANIZED FER ASTM A 123 AFTER FABRICATION.
13. ALL WATER MAINS AND LATERALS SHALL BE ASBESTOS CEMENT PIPE, CLASS 200 MINIMUM, UNLESS OTHERWISE NOTED.
14. WATER PIPE LAID ON CURVES WITH RADII BETWEEN 80' AND 185' SHALL USE 6.5' PIPE LENGTHS. CONSTRUCT THRUST BLOCKS PER CITY STD.-509-L. PIPE SHALL NOT BE DEFLECTED MORE THAN 3° PER JOINT. WHEN NECESSARY, SHORT SECTIONS OF PIPE SHALL BE USED TO ACCOMPLISH THE DESIRED DEFLECTION. THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS GREATER THAN 5°.
15. FIRE HYDRANTS SHALL BE RICH-VANGUARD NO. 665-A.
16. ALL SEWER LINES SHALL HAVE PLASTIC COMPRESSION JOINTS.
17. V.C.P. STUBS AND THE FIRST JOINT OUT OF ALL MANHOLES TO BE ONE FOOT MAXIMUM MEASURED FROM THE INSIDE FACE OF THE MANHOLE.
18. SEWER AND WATER PIPE SHALL BE BEDDED IN ACCORDANCE WITH DETAIL ON SHEET 3.
19. ~~WROUGHT IRON STEPS IN SEWER MANHOLES WILL BE ALLOWED PROVIDED THAT THE MANHOLE MANUFACTURER CERTIFIES IN WRITING THAT THE STEPS INSTALLED ARE WROUGHT IRON FABRICATED FROM 3/4" DIAMETER ROUND BAR AND CONFORMS TO THE REQUIREMENTS OF ASTM A 207 LATEST REVISION.~~
20. UTILITY AND STORM DRAIN LINE DISTANCES SHOWN IN PROFILE ARE HORIZONTAL

BENCH MARK

ORANGE COUNTY BENCH MARK 3T-68-63 2" I.P. WITH COPPER NAIL 8" DEEP E'LY SIDE OF MACARTHUR BLVD. 1' E'LY OF GUTTER WITH WHITE PADDLEBOARD MARKED 1/4 SECTION B.M. 2.5' W. NEAR 1/4 CORNER OF BLOCK 9293 IRVINE SUBDIVISION.

ELEV. 227.050 (1964) M.S.L.

BASIS OF BEARING

CENTERLINE OF SANTA CRUZ DRIVE FROM STATION 23+27.01 TO STATION 20+01.38 BEING N 9° 10' 26" W.

APPROVALS

CITY OF NEWPORT BEACH

APPROVED Benjamin A. Nolan DATE 11-29-73

ASSISTANT PUBLIC WORKS DIRECTOR
R.C.E. 12806

SHUIRMAN - SIMPSON
CONSULTING CIVIL ENGINEERS
PREPARED UNDER THE SUPERVISION OF

Donald C. Simpson DATE 2-26-73

DONALD C. SIMPSON R.C.E. 10595

TRACT NO. 8480
SHEET 1 OF 6 SHEETS

M-11

R-5272-S
SHT. 2 OF 6

PORTION OF 300'V.C. P.I.=154.32

PORTION OF 300'V.C. P.I.=154.26

PORTION OF 100'V.C.

300'V.C. P.I.=154.32

400'V.C. P.I.=185.36

400'V.C. P.I.=185.30

400'V.C. P.I.=185.36

TOP OF N'LY CURB

TOP OF PVMT. @ ℄

TOP OF S'LY CURB

100'V.C. P.I.=191.11

CONSTRUCTION NOTES

1. CONST. 4" A.C. ON SS-1H SEAL COAT (SEAL COAT TO BE APPLIED AT THE RATE OF 0.10 GAL./SQ.YD.) OVER 8" A.B. W/ S.C.-250 PRIME COAT.
2. CONST. TYPE "A" F.C.G. CURB & GUTTER PER CITY STD.-105-L.
3. CONST. CONC. SIDEWALK PER CITY STD-110-L.
4. CONST. CONC. DRIVEWAY PER DETAILS SHT. 5.
5. CONST. CONC. APRON PER DETAILS ON SHT. 5.
6. CONST. 3" A.C. AND SS-1H SEALCOAT (0.10 GAL. PER SQ./YD.) OVER 6" A.B. W/ SC-250 PRIME COAT.
7. REMOVE & SALVAGE EXIST. PARKWAY TREE. CONTACT CITY DEPT. OF PARKS, BEACH AND RECREATION FOR DISPOSITION.
8. RELOCATE EXIST. LIGHT STD. AS SHOWN ON SHEET 6.
9. REMOVE EXIST. DRIVEWAY AND CONST. NEW IMPROVEMENTS PER DETAIL ON SHT. 5.
10. REMOVE EXIST. CURB & GUTTER, CONC. SIDEWALK & 10' STRIP OF A.C. PVMT. SAW CUT AT JOIN LINES.
11. CONST. SIDEWALK ACCESS RAMP PER DETAILS SHT. 5

SAN CLEMENTE DRIVE

HORIZ. 1"=40'
VERT. 1"=8'

SANTA BARBARA DRIVE (NO IMPROVEMENT PLANS) (SEE S. RESUB 305 IMPROVEMENT PLANS)

SANTA CRUZ DRIVE (EXISTING)

G+44.86 SAN CLEMENTE
10+66.29 ROAD "B"

9+00 - RD "B"

EXIST. CURB & GUTTER TYPE "A"

EXIST. PAVEMENT 3"A.C./6"A.B.

LIGHT STD. (TYP.)

1.5:1 CUT BANK

1.5:1 FILL BANK

SCALE 1"=40'

EXISTING ROAD "B" (PRIVATE)

PACIFIC MUTUAL PROPERTY

NOTE: ⊕ INDICATES THE INSTALLATION OF STANDARD SURVEY MONUMENT PER STD.-124-L.

GHURMAN • DIMPSON
CONSULTING CIVIL ENGINEERS
NEWPORT CENTER BUILDING
359 San Miguel Drive
Newport Beach, California 92660
(714) 644-0583
R.C.E. 10595

DATE	BY	DESCRIPTION	APP'D.
5/3/74	F.S.	⚠ ADDED "SDWLK. ACCESS RAMP	GSU 5-3-74

REVISIONS

APPROVED
ASS'T. PUBLIC WORKS DIRECTOR
R.E. NO. 13909
DATE 11-29-73

DESIGNED J.H. DRAWN F.S.
CHECKED D.C.S. DATE 11-28-73

SAN CLEMENTE DRIVE STREET IMPROVEMENT PLAN AND PROFILE

CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

TRACT NO. 84.80
SHEET 2 OF 6

R-5272-S

1/71 D'ETERICH-POST 2101B .003

CONSTRUCTION NOTES

1. CONST. 4" A.C. ℄ SS-1H SEAL COAT (SEAL COAT TO BE APPLIED AT THE RATE OF 0.10 GAL./SQ.YD.) OVER 8" A.B. W/ 5 C-250 PRIME COAT.
2. CONST. TYPE "A" P.C.C. CURB ℄ GUTTER PER CITY STD.-105-L
3. CONST. CONC. SIDEWALK PER CITY STD-110-L.
4. CONST. CONC. DRIVEWAY PER DETAILS SHT. 5.
5. CONST. CONC. APRON PER DETAILS ON SHT. 5.
6. CONST. 3" A.C. AND SS-1H SEALCOAT (0.10 GAL. PER SQ./YD.) OVER 6" A.B. W/ SC-250 PRIME COAT.
7. REMOVE ℄ SALVAGE EXIST. PARKWAY TREE. CONTACT CITY DEPT. OF PARKS, BEACH AND RECREATION FOR DISPOSITION.
8. RELOCATE EXIST. LIGHT STD. AS SHOWN ON SHEET 6.
9. REMOVE EXIST. DRIVEWAY AND CONST. NEW IMPROVEMENTS PER DETAIL ON SHT. 5.
10. REMOVE EXIST. CURB ℄ GUTTER, CONC. SIDEWALK ℄ 10' STRIP OF A.C. PVMT. SAW CUT AT JOIN LINES.
11. CONST. SIDEWALK ACCESS RAMP PER DETAILS SHT. 5

SAN CLEMENTE DRIVE

HORIZ. 1"=40'
VERT. 1"=8'

SCALE 1"=40'

EXISTING ROAD "B" (PRIVATE)

SANTA BARBARA DRIVE (SEE RESCUE 305 IMPROVEMENT PLANS)

SANTA CRUZ DRIVE

PACIFIC MUTUAL PROPERTY

NOTE: ⚠ INDICATES THE INSTALLATION OF STANDARD SURVEY MONUMENT PER STD.-124-L.

⚠ CONSTRUCTION NOTES:

12. CONSTRUCT 4" THICK CONCRETE SIDEWALK PER STD. 180-L (8' WIDE)
13. REMOVE EXIST. CURB & GUTTER AND CONST. COMM. DRIVEWAY APPROACH PER DTL. ON SHT. 5
14. CONSTRUCT SIDEWALK ACCESS RAMP PER DETAIL ON SHEET 5.

⚠ CONST. NOTES

15. INSTALL 4"ø SLEEVE UNDER DRIVEWAYS WITH 18" MIN. COVER.

CHAMBLESS • CHAPPELL
CIVIL ENGINEERING CONSULTING

NEWPORT CENTER BUILDING
359 San Miguel Drive
Newport Beach, California 92660
(714) 644-0660

Donald C. Thompson
R.C.E. 16395

DATE	BY	DESCRIPTION	APP'D.
5/6/77	C.B.	⚠ ADDED DRIVEWAY @ STA 9+28.18 & IRRIG. LINE SLEEVES UNDER DWYS.	JTD
3/10/77	P.B.	⚠ ADDED SIDEWALK & DRWY. N'LY SIDE ⚠ ADDED CONST. NOTES 12, 13 & 14	JTD
5/3/74	F.S.	⚠ ADDED 6" ONLY. ACCESS RAMP	

REVISIONS

APPROVED
ASS'T. PUBLIC WORKS DIRECTOR
R.E. NO. 12899
DATE 11-29-73

DESIGNED J.H. | DRAWN F.S.
CHECKED D.C.S. | DATE 11-28-73

SAN CLEMENTE DRIVE STREET IMPROVEMENT PLAN AND PROFILE

CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

TRACT NO. 8480
SHEET 2A OF 6

1/71 D'ETERICH-POST 2311B .033

M-11

R-2272-3
SHT. 3 OF 6

INVERT OF PIPE = 4.33' BELOW FLOW LINE OF N'LY CURB

TOP OF PVM'T OVER PIPE

FLOW LINE OF N'LY CURB

TOP OF PVM'T.

EXIST. 8" A.C.P.

12" A.C.P

R=1.20%

R=2.05%

94.27'

8.30'

FINISHED SURFACE OVER PIPE

R=3.00%

R=5.80%

R=7.20%

203.33'

270.06'

107.07'

63.00' BY OTHERS

NOTE: SURVEYOR TO SET TOP OF SEWER & STORM DRAIN M.H.'S FLUSH WITH PROP. PVMT. SURFACE. VERIFY TOP OF M.H. ELEV. SHOWN ON PLAN.

PROFILE

SCALES: HORIZ. 1"=40'
VERT. 1"=8'

CONSTRUCTION NOTES

1. CONSTRUCT FIRE HYDRANT ASSEMBLY, STD.-501-L
2. CONSTRUCT 12" GATE VALVE PER STD.-508-L.
3. CONSTRUCT MANHOLE PER STD.-402-L.
4. CONSTRUCT 8" GATE VALVE PER STD.-508-L.
5. CONSTRUCT 2-3" A.C.P. SLEEVES, 30" MIN. COVER, EXTENDING & CAPPED 12" BEYOND CURB OR SIDEWALK AS APPLICABLE.
6. INSTALL STD. 2" WATER SERVICE & METER BOX PER STD.-503-L.

SANTA BARBARA DRIVE (SEE RESUB NO. 905 IMPROVEMENT PLANS)

SANTA CRUZ DRIVE

N79°22'01"W 534.20'

N56°52'01"W 94.27'

N80°37'27"W 60.50'

NOTE: SEWER LINE STATIONING SHOWN THUS (0+00) ON PLAN. OTHER STATIONING SHOWN ON PLAN REFERS TO CENTERLINE OF STREET.

PACIFIC MUTUAL PROPERTY

EXISTING ROAD "B" (PRIVATE)

SCALE 1"=40'

PIPE BEDDING DETAILS

NO SCALE

COMPACTED NATIVE BACKFILL
6" MIN. 8" MAX.
CLEAN SAND
12"
O.D.
SEWER
WATER
4"

SHURMAN + SIMPSON
CONSULTING CIVIL ENGINEERS
NEWPORT CENTER BUILDING
359 San Miguel Drive
Newport Beach, California 92660
(714) 644-0563
Donald Shurman R.C.E. 10595

DATE	BY	DESCRIPTION	APP'D.
		REVISIONS	

APPROVED
ASS'T. PUBLIC WORKS DIRECTOR
R.E. NO. 12806
DATE 11-29-73

DESIGNED J.H.
DRAWN G.T.
CHECKED D.C.S.
DATE 11-28-73

SAN CLEMENTE DRIVE SEWER AND WATER PLAN AND PROFILE

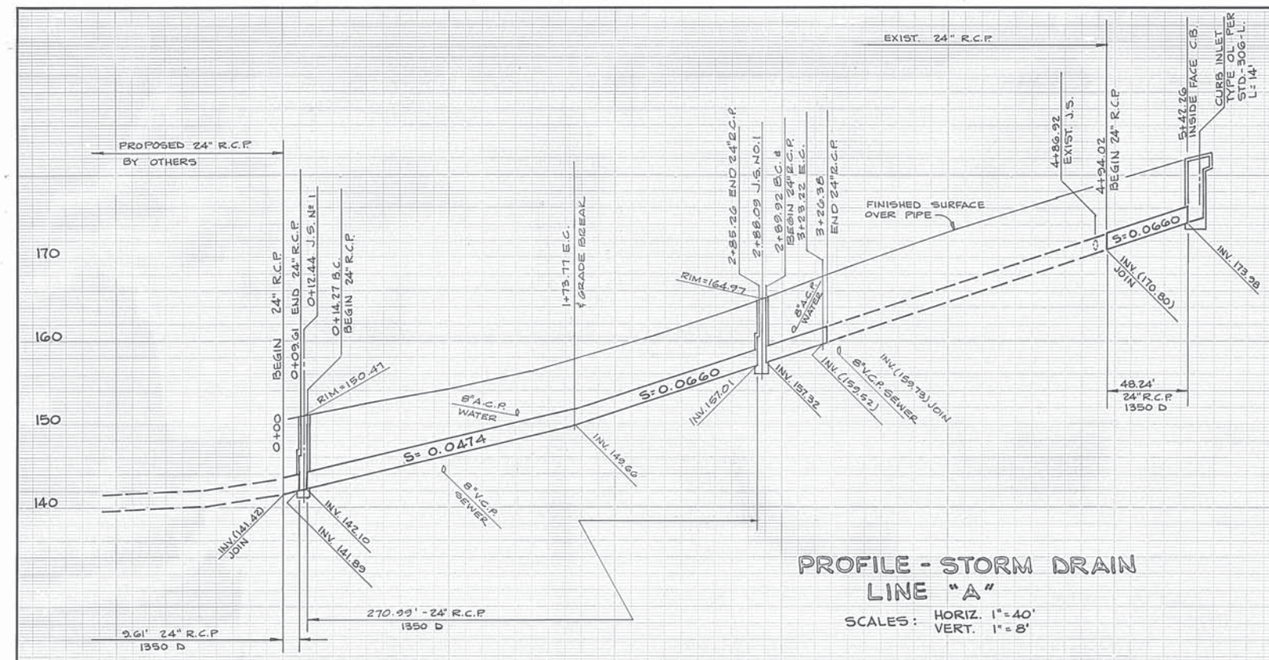
CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

TRACT NO. 8480
SHEET 3 OF 6

1/71 D'ETERICH-POST 2101B .003

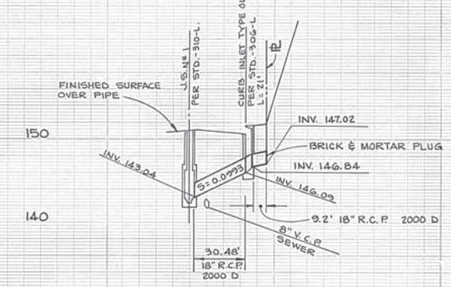
M-11

R-5272-S
SHT. 4 OF 6



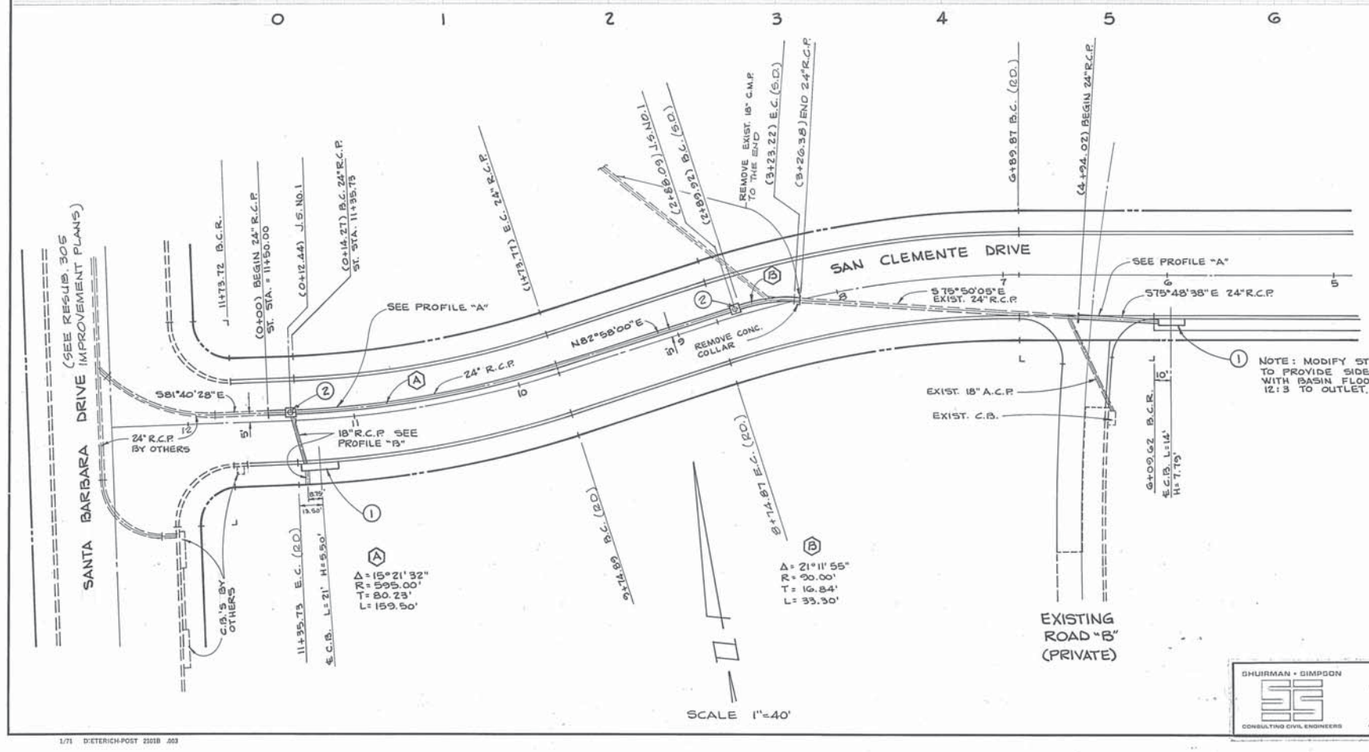
PROFILE - STORM DRAIN LINE "A"

SCALES: HORIZ. 1"=40'
VERT. 1"=8'



PROFILE - STORM DRAIN LINE "B"

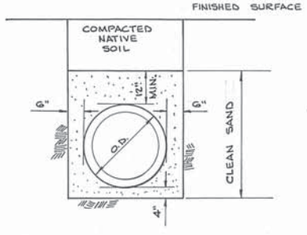
SCALES: HORIZ. 1"=40'
VERT. 1"=8'



CONSTRUCTION NOTES

1. CONSTRUCT CURB INLET TYPE OL PER CITY STD.-306-L. WITH LOCAL DEPRESSION PER CITY STD.-304-L. SEE PLAN FOR "L" & "H" DIMENSIONS.
2. CONSTRUCT JUNCTION STRUCT. NO. 1 PER STD.-310-L

NOTE: STORM DRAIN STATIONING SHOWN THUS (0+00) ON PLAN. OTHER STATIONING SHOWN ON PLAN REFERS TO CENTERLINE OF STREET.



PIPE BEDDING DETAIL

NO SCALE

SHURMAN • GIMPSON
CONSULTING CIVIL ENGINEERS
NEWPORT CENTER BUILDING
359 San Miguel Drive
Newport Beach, California 92660
(714) 644-0563
Ronald Simpson R.C.E. 10595

DATE	BY	DESCRIPTION	APP'D.
		REVISIONS	

APPROVED
ASS'T. PUBLIC WORKS DIRECTOR
R.E. NO. 12806
DATE 11-29-73

DESIGNED J.H. | DRAWN G.T.
CHECKED D.C.S. | DATE 11-28-73

SAN CLEMENTE DRIVE STORM DRAIN PLAN AND PROFILE

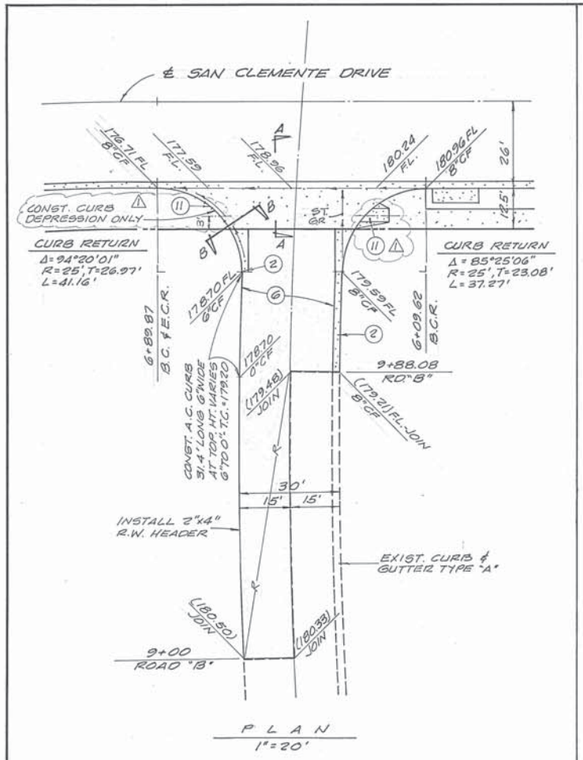
CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

TRACT NO. 8410
SHEET 4 OF 6

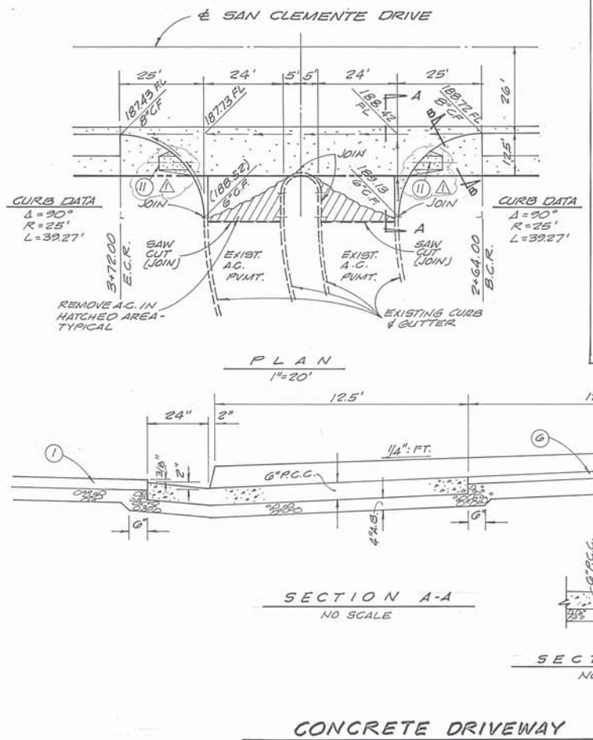
1/71 DIETERICH-POST 2101B .003

M-11

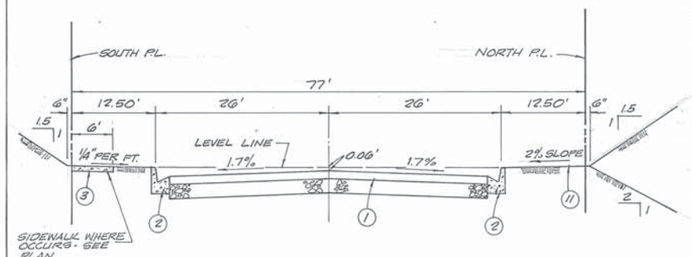
R-2272-3
SHT. 5 OF 6



CONCRETE APRON
SCALE AS SHOWN



CONCRETE DRIVEWAY
SCALE AS SHOWN



TYP. SECTION SAN CLEMENTE DR.
NO SCALE

CONSTRUCTION NOTES

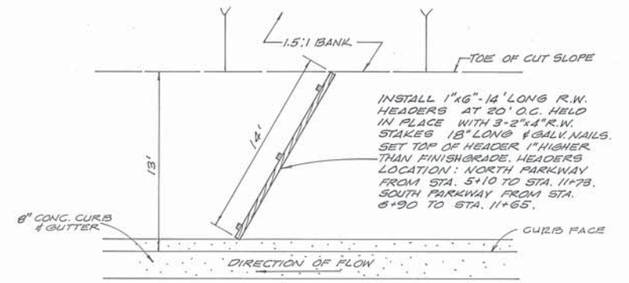
(1) — CONST. 4" A.C. & SS-1H SEAL COAT (0.10 GAL. PER SQ/YD.) OVER 8" A.B. W/SC-250 PRIME COAT.

(2) — CONST. TYPE "A" P.C.C. CURB & GUTTER PER CITY STD-105-L.

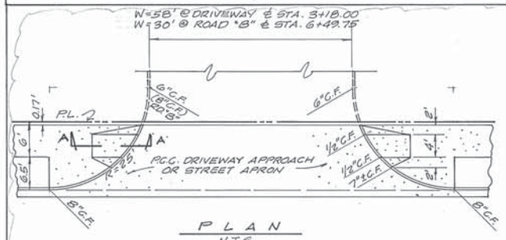
(3) — CONST. CONC. SIDEWALK PER CITY STD-110-L.

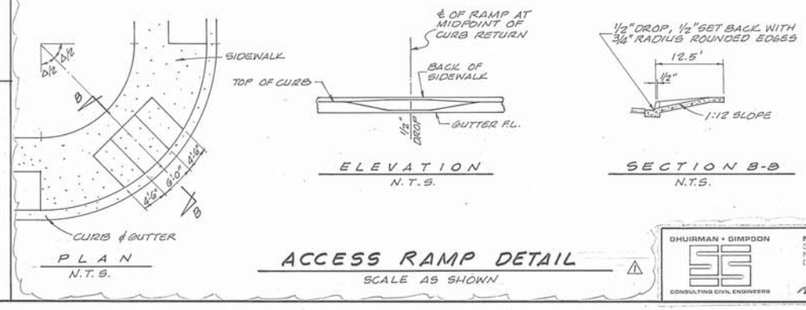
(6) — CONST. 3" A.C. AND SS-1H SEAL COAT (0.10 GAL. PER SQ/YD.) OVER 6" A.B. W/SC-250 PRIME COAT.

(11) — INSTALL EROSION CONTROL DEVICES PER DETAIL HEREON.

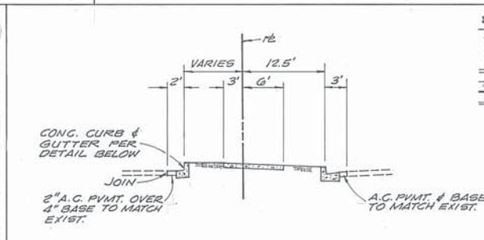


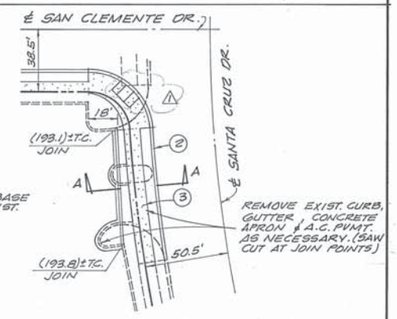
TYP. EROSION CONTROL DEVICE
NO SCALE





ACCESS RAMP DETAIL
SCALE AS SHOWN





NOTE: CONTRACTOR SHALL NOT REMOVE EXIST. DRIVEWAY UNTIL SUCH TIME AS NEW DRIVEWAY ON SAN CLEMENTE DR. (BETWEEN STA. 2+64 & 3+72) IS BUILT & OPERATIONAL.

EXIST. DRIVEWAY CLOSURE
SCALE AS SHOWN

DATE	BY	DESCRIPTION	APPD.
6/13/74	F.S.	⚠ ADDED SDWLK. ACCESS RAMP	BBW 5-7-74

REVISIONS

APPROVED
ASS'T. PUBLIC WORKS DIRECTOR
R.E. NO. 12804
DATE 11-29-77

DESIGNED J.H. | DRAWN F.S.
CHECKED D.C.S. | DATE 11-28-73

DETAILS

CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

TRACT NO. 8480
SHEET 5 OF 6

BHUIRMAN + SIMPSON
CONSULTING CIVIL ENGINEERS
NEWPORT CENTER BUILDING
359 San Miguel Drive
Newport Beach, California 92660
(714) 644-0563
R.C.E. 10995

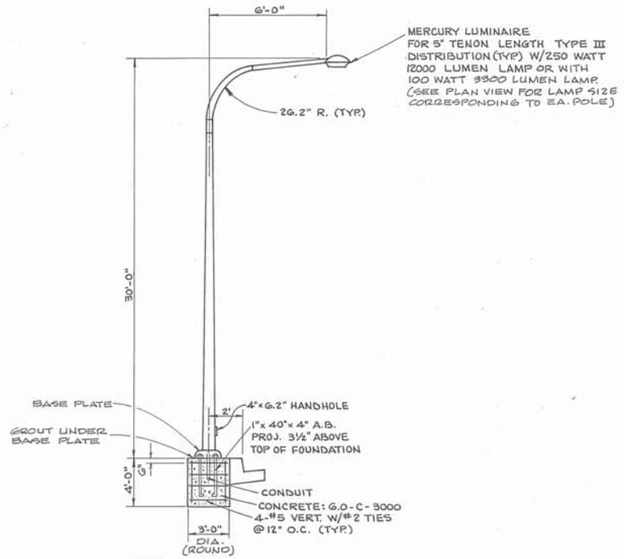
1/71 DIETERICH-POST 2001B .003

M-11

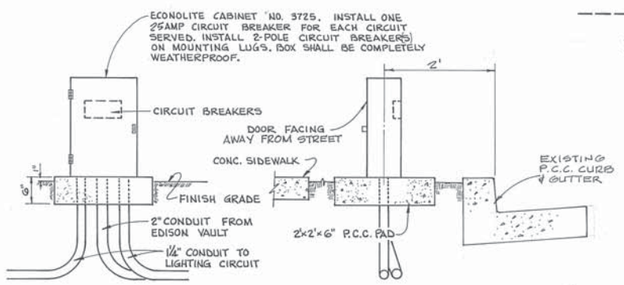
R-5272-S
SHT. 6 OF 6

GENERAL NOTES:

1. STATIONING FOR POLES IS BASED ON STREET STATIONS ON THE STREET.
2. LUMINAIRE : GENERAL ELECTRIC M-400 WITH 250 WATT LAMP OR M-250-A WITH 100 WATT LAMP, 240 VOLT DUAL WATTAGE INTEGRAL BALLAST & 240 VOLT PHOTO-ELECTRIC SWITCH. SET LAMP SOCKET FOR TYPE III DISTRIBUTION.
3. CONDUIT SHALL BE 1¼" NOMINAL DIAMETER P.V.C. CONDUCTORS SHALL BE COPPER, TYPE TW OF AWG. SIZE INDICATED. GROUND SHALL BE BARE COPPER OF SIZE INDICATED.
4. CONDUCTORS FROM PULLBOX AT BASE OF STANDARD TO THE LUMINAIRE SHALL BE NO. 12 AWG. TYPE TW COPPER.
5. CONNECT A NO. 12 AWG. BARE COPPER GROUND WIRE FROM EACH LUMINAIRE TO A GROUND ROD IN THE PULLBOX AT THE BASE OF EACH STANDARD.
6. SPLICES SHALL BE MADE IN PULLBOXES BY MEANS OF END-TO-END CRIMP TYPE CONNECTORS.
7. PULL BOXES SHALL BE BROOKS PRODUCTS OR EQUAL.
8. INSTALL A PAIR OF IN-LINE FUSES IN THE PULLBOX ON EACH BRANCH CIRCUIT IMMEDIATELY ADJACENT TO THE MAIN CIRCUIT.
9. CONCRETE: CLASS 564-C 3000 PER STD. SPEC. SECT. 307-2-2.
10. TOP OF POLE FOUNDATIONS SHALL BE 0.15' ABOVE TOP OF CURB IN PARKWAY.
11. TOP OF POLE FOUNDATIONS IN SIDEWALK SHALL BE LEVEL WITH SIDEWALK
12. MINIMUM COVER OVER CONDUIT & CONDUIT LOCATION PER STD.-101-L
13. BOLT CENTERS & SHAFT DIAMETERS AT BASE ARE SHOWN FOR INFORMATION ONLY VERIFY ALL DIMENSIONS WITH WELDRITE MFG. CO. PRIOR TO INSTALLATION
14. POLE & BASE SHOP DRAWINGS SHALL BE APPROVED BY THE CITY OF NEWPORT BEACH CITY ENGINEER PRIOR TO INSTALLATION.
15. USE WELDRITE STANDARD AS BUILT BY AMERON- ALL FEATURES SHALL BE THE SAME AS THE EXISTING SIMILAR STANDARDS IN NEWPORT CENTER.
16. PAINTING OF THE STREET LIGHT STANDARDS TO BE IN STRICT CONFORMANCE WITH THE SPECIAL PROVISIONS.
17. INSTALL BROOKS PRODUCTS NO. 3½ PULLBOX ADJACENT TO BASE OF EACH POLE BASE PER STD.-203-L.



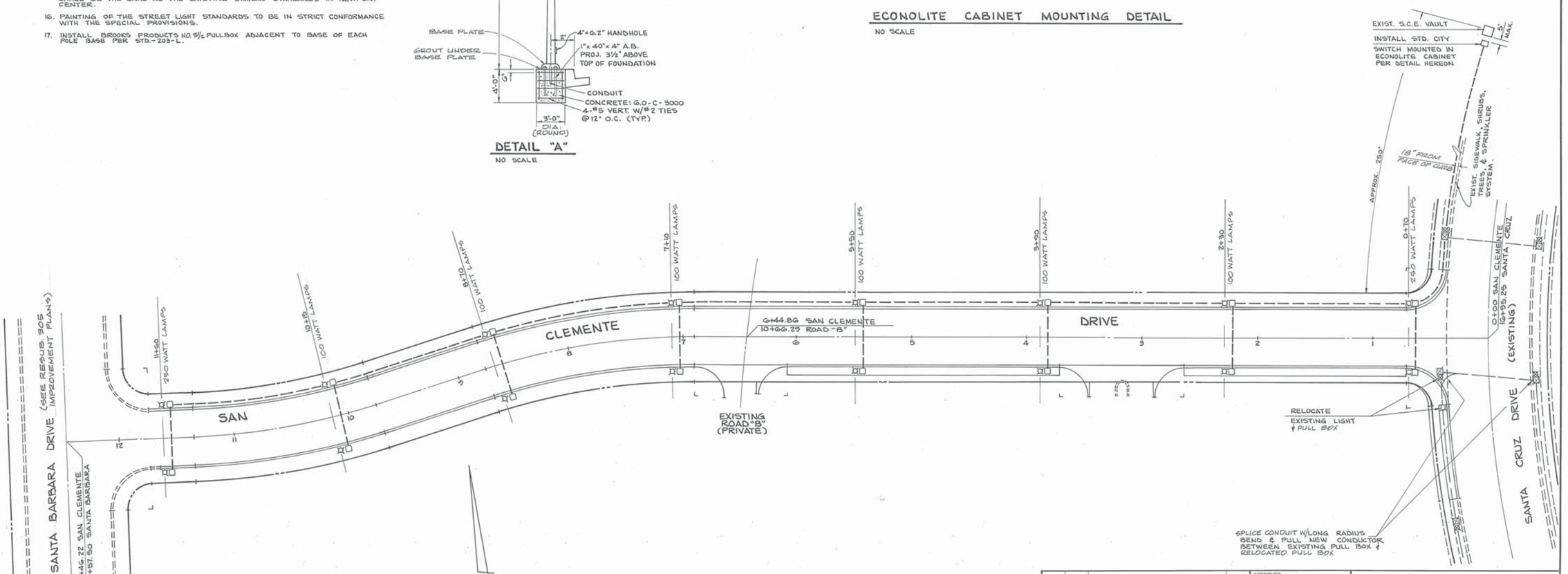
DETAIL "A"
NO SCALE



ECONOLITE CABINET MOUNTING DETAIL
NO SCALE

LEGEND

- EXIST. STREET LIGHT
- NEW STREET LIGHT PER DETAIL "A"
- NO. 3½ PULL BOX
- NEW 1¼" P.V.C. CONDUIT WITH #8 CONDUCTORS & #8 GROUND
- EXIST. PULL BOX



SHURMAN • SIMPSON
CONSULTING CIVIL ENGINEERS
NEWPORT CENTER BUILDING
359 San Miguel Drive
Newport Beach, California 92660
(714) 644-0580
Donald C. Simpson R.C.E. 10996

DATE	BY	DESCRIPTION	APP'D.
		REVISIONS	

APPROVED
ASS'T. PUBLIC WORKS DIRECTOR R.E. NO. 12806
DATE 11-29-73

DESIGNED J.H. | DRAWN G.T.
CHECKED D.C.S. | DATE 11-28-73

SAN CLEMENTE DRIVE STREET LIGHTING PLAN

CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

TRACT NO. 8480
SHEET 6 OF 6

1/71 D'ETERICH-POST 2101B .003

PUBLIC WORKS DEPARTMENT

IMPROVEMENT PLAN FOR

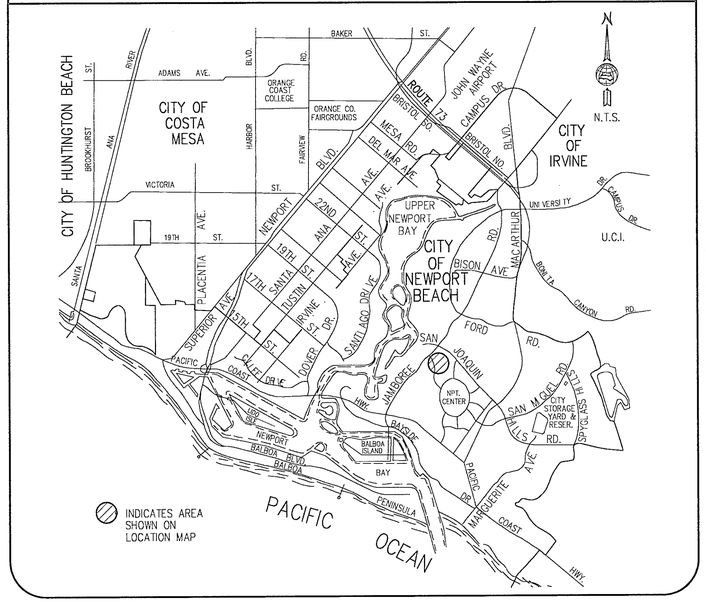
888 SAN CLEMENTE DRIVE

APPROVED: _____ DATE: 1-14-99
PUBLIC WORKS DIRECTOR

APPROVED: _____ DATE: 1-11-99
UTILITIES MANAGER R.C.E. 25533

APPROVED: _____ DATE: 1/12/99
FIRE MARSHAL (FOR PRIVATE UNDERGROUND FIRE SYSTEM)

VICINITY MAP



GENERAL NOTES

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED IN THE CITY'S STANDARD SPECIAL PROVISIONS, OR IN THIS CONTRACT'S SPECIAL PROVISIONS, BE CONSTRUCTED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION," 1997 EDITION AND SUPPLEMENTS TO DATE.
2. EXISTING UNDERGROUND UTILITIES ARE SHOWN AS PER AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION, AND ELEVATION IN THE FIELD, PRIOR TO BEGINNING OF CONSTRUCTION.
3. STATIONING REFERS TO CENTERLINE OF STREET.
4. EXISTING UNDERGROUND UTILITIES ARE SHOWN AS PER AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION AND ELEVATION IN THE FIELD PRIOR TO BEGINNING CONSTRUCTION OF THE NEW FACILITIES.
5. ALL EXPOSED CONCRETE SURFACES SHALL CONFORM IN GRADE, COLOR AND FINISH TO ALL ADJOINING CURBS AND WALKS.
6. ALL UNDERGROUND WORK SHALL BE COMPLETED PRIOR TO PAVING OF STREET AND DRIVEWAYS.
7. SEWER, WATER AND STORM DRAIN LINE DISTANCES SHOWN IN PROFILE AND IN ESTIMATED QUANTITIES ARE HORIZONTAL DISTANCES.
8. THE CONTRACTOR SHALL REQUEST INSPECTION FROM THE PUBLIC WORKS DEPARTMENT 48 HOURS IN ADVANCE OF PERFORMING ANY WORK AT (949) 644-3311. THE PUBLIC WORKS DEPARTMENT INSPECTOR SHALL ALSO BE NOTIFIED AFTER PLACEMENT OF FORMS AND PRIOR TO PLACEMENT OF ANY CONCRETE FOR CURB & GUTTER SO THAT THE FORMS CAN BE CHECKED FOR LINE AND GRADE AND COMPARABILITY WITH EXISTING CONSTRUCTION.
9. THE WALLS AND FACE OF ALL EXCAVATIONS GREATER THAN FIVE (5) FEET IN DEPTH SHALL BE EFFECTIVELY GUARDED BY A SHORING SYSTEM, SLOPING OF THE GROUND OR OTHER EQUIVALENT MEANS. TRENCHES OR EXCAVATIONS LESS THAN FIVE (5) FEET IN DEPTH SHALL ALSO BE GUARDED WHEN EXAMINATION INDICATED THAT HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED.
10. THE CONTRACTOR(S) SHALL OBTAIN A PERMIT TO PERFORM EXCAVATION OR TRENCH WORK AS DESCRIBED IN No. 9 ABOVE.
11. ALL SEWER PIPES SHALL BE BEDDED IN ACCORD WITH CITY OF NEWPORT BEACH STD-106-L.
12. WATER MAINS SHALL HAVE A MINIMUM OF 30" OF COVER FROM SUBGRADE.
13. ALL CONCRETE SHALL BE 540-C-3250.
14. THE FIRE DEPARTMENT SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF ALL LANE CLOSURES.
15. VCP SEWER PIPE MAY BE USED IN LIEU OF PVC BY SPECIAL PERMISSION PIPE SHALL BE MANUFACTURED PER ASTM D-3034 SDR OR ASTM F-789. ALL FITTINGS SHALL BE PREFABRICATED FULL-BODY FITTINGS. PVC SEWER PIPE BEDDING SHALL BE 3/4" CRUSHED ROCK FROM 6" BELOW THE PIPE TO 12" ABOVE THE TOP OF PIPE AND SHALL BE CONSOLIDATED BY JETTING JETTING PRIOR TO COMPLETION OF TRENCH BACKFILL.
16. ALL SEWER LINES TO BE OWNED, OPERATED AND MAINTAINED BY THE CITY OF NEWPORT BEACH SHALL BE VIDEO INSPECTED AFTER CLEANING, AIR TESTING AND MANDRILLING. ALL VIDEO INSPECTION SHALL BE PERFORMED BY THE CITY UTILITIES DIVISION. THE DEVELOPER SHALL PAY THE CURRENT RATE ESTABLISHED BY THE CITY FOR VIDEO INSPECTION. ANY SEWER LINE FOUND TO BE INSTALLED INCORRECTLY, DEFECTIVE, DAMAGED OR OTHERWISE SHALL BE REPAIRED/REPLACED AND REINSPECTED, INCLUDING AIR TEST, MANDRIL AND VIDEO, PRIOR TO ACCEPTANCE.
17. SIX SETS OF SHOP DRAWINGS FOR ALL MATERIALS SHALL BE SUBMITTED TO TH CITY PRIOR TO CONSTRUCTION . NO WORK SHALL BEGIN UNTIL APPROVED SHOP DRAWINGS ARE OBTAINED.

FIRE/SPRINKLER SYSTEM NOTES

1. PRIOR TO INSTALLATION, REQUIRED PERMITS SHALL BE SECURED FROM THE CITY BUILDING DEPARTMENT.
2. INSTALLATION, INSPECTION AND TESTING SHALL CONFORM WITH THE 1994 EDITION OF NFPA STANDARD 13 AND THE 1992 ADDITION OF NFPA STANDARD 24, INCLUDING ANY AMENDMENTS BY THE CITY OF NEWPORT BEACH FIRE DEPT. WHERE THE WATER AUTHORITY REQUIRES BACKFLOW PROTECTION THE FOLLOWING METHODS OR ASSEMBLIES ARE ACCEPTABLE:
   A. AN ABOVE GROUND ASSEMBLY APPROVED BY THE WATER AUTHORITY, PAINTED WHITE, AND WITH THE VALVES LOCKED IN THE OPEN POSITION. VALVES CONTROLLING MORE THAN 100 SPRINKLER HEADS SHALL BE MONITORED TO AN APPROVED LOCATION.
   B. A BELOW GROUND ASSEMBLY APPROVED BY THE WATER AUTHORITY AND LOCATED IN AN APPROVED VAULT. THE LAST VALVE ON THE ASSEMBLY SHALL BE CONTROLLED BY AN APPROVED POST INDICATOR DEVICE. THE POST INDICATOR DEVICE SHALL BE PAINTED WHITE, LOCKED IN THE OPEN POSITION AND IF CONTROLLING MORE THAN 100 SPRINKLER HEADS MONITORED TO AN APPROVED LOCATION.
   C. THE LOCATION OF CONTROL DEVICES SHALL BE APPROVED BY THE CITY FIRE DEPT. AND THE WATER AUTHORITY.
4. APPROVED FIRE DEPARTMENT CONNECTIONS (FDC) SHALL BE LOCATED WITHIN 25' OF A PUBLIC FIRE HYDRANT. THE FDC SHALL BE ORIENTED TO FACE THE FIRE DEPARTMENT ACCESS ROAD. THE FDC SHALL BE PROPERLY SUPPORTED AND SHALL BE PROTECTED FROM MECHANICAL INJURY. THE SIZE OF PIPING AND THE NUMBER OF INLETS SHALL BE APPROVED BY THE FIRE DEPT. FIRE DEPARTMENT CONNECTIONS SHALL BE PAINTED WHITE.
5. PER NEWPORT BEACH FIRE DEPARTMENT STANDARD NO. F-1, REQUIREMENTS FOR IDENTIFICATION SIGNS AT FIRE DEPARTMENT CONNECTIONS, ARE AS FOLLOWS:
   A. SIGNS SHALL BE CONSTRUCTED OF A DURABLE MATERIAL, PREFERABLY METAL.
   B. SIGNS SHALL BE A MINIMUM OF FOUR INCHES HIGH BY EIGHT INCHES WIDE.
   C. LETTERING ON THE SIGN SHALL BE AT LEAST ONE INCH IN HEIGHT ON A CLEARLY CONTRASTING BACKGROUND.
   D. SIGNS ARE TO BE PERMANENTLY MOUNTED ON THE BUILDING ADJACENT TO THE F.D.C. OR ON THE F.D.C. AND MUST BE VISIBLE FROM THE ADJACENT ROADWAY.
   E. ALL SIGNS MUST STATE THE ADDRESS OF THE BUILDING BEING SERVED AND IDENTIFY THE TYPE OF SYSTEM SERVING THE BUILDING. SEE FIRE DEPT. STD. NO. F-1 FOR SIGN DETAILS.
6. EVERY SPRINKLER SYSTEM SHALL HAVE A SEPARATE CONNECTION FROM THE PRIVATE FIRE MAIN.
7. WHERE IT IS IMPRACTICAL TO PROVIDE A POST INDICATOR VALVE, VALVES SHALL BE PERMITTED TO BE PLACED IN VALVE ROOMS ACCESSIBLE FROM EXTERIOR, ON EXTERIOR RISERS OR ON INTERIOR RISERS WITH INDICATING POSTS ARRANGED FOR OUTSIDE OPERATIONS, OR IN PITS WITH PERMISSION OF THE AUTHORITY HAVING JURISDICTION.
8. PRIVATE FIRE HYDRANTS SHALL BE AN APPROVED WET BARREL STYLE WITH A MINIMUM OF ONE 2-1/2" AND ONE 4" OUTLET. ALL OUTLETS SHALL BE PROVIDED WITH NATIONAL STANDARD THREADS. ALL FIRE HYDRANTS SHALL BE INSTALLED ON A 6" RISER. 4" OUTLET(S) SHALL FACE TOWARD FIRE DEPARTMENT ACCESS ROADS. THE LOWEST OPERATING NUT SHALL BE LOCATED A MINIMUM OF 18" ABOVE GRADE AND HYDRANT FLANGE(S) A MINIMUM OF 7" ABOVE GRADE. FIRE HYDRANTS SHALL BE LOCATED A MINIMUM 40' FROM ALL STRUCTURES. A KEYED GATE VALVE SHALL BE PROVIDED FOR EACH HYDRANT IN AN ACCESSIBLE LOCATION (VALVES SHALL NOT BE LOCATED IN PARKING STALLS).
9. LARGE PRIVATE FIRE SERVICE MAIN SYSTEMS SHALL HAVE POST INDICATOR TYPE SECTIONAL CONTROLLING VALVES AT APPROPRIATE POINTS IN ORDER TO PERMIT SECTIONALIZING THE SYSTEM IN THE EVENT OF A BREAK, OR FOR THE MAKING OF REPAIRS OR EXTENSIONS.
10. ALL PIPE SHALL BE APPROVED FOR USE IN "FIRE SERVICE SYSTEMS", CLASS 200 MINIMUM. ALL FERROUS METAL PIPE SHALL BE LINED. ALL FERROUS PIPE AND FITTINGS SHALL BE PROTECTED WITH A LOOSE 8-MIL POLYETHYLENE TUBE. THE ENDS OF THE TUBES SHALL BE SEALED WITH 2" TAPE APPROVED FOR UNDERGROUND USE. ALL BOLTED JOINT ACCESSORIES SHALL BE CLEANED AND THOROUGHLY COATED WITH ASPHALT OR OTHER CORROSION RETARDING MATERIAL AFTER ASSEMBLY AND PRIOR TO POLY-TUBE INSTALLATION.
11. A MINIMUM OF 36" OF COVER FROM FINISHED GRADE TO TOP OF PIPE SHALL BE PROVIDED ABOVE PIPE. BACKFILL SHALL BE FREE OF ANY DEBRIS TO THE SATISFACTION OF THE CITY INSPECTOR.
12. APPROVED PIPE AND FITTINGS SHALL BE INSTALLED UNDER BUILDING FOOTINGS. ADEQUATE CLEARANCE SHALL BE PROVIDED OVER PIPE AND FITTINGS THAT RUN UNDER FOOTINGS TO PREVENT DAMAGE FROM BUILDING SETTLING. A MINIMUM OF 2" CLEARANCE SHALL BE PROVIDED WHERE PIPE PASSES THROUGH THE FLOOR OR WALL. UNDERGROUND PIPING SERVING FIRE SPRINKLER RISER SHALL TERMINATE WITHIN 18" OF AN EXTERIOR WALL AND 6" ABOVE FINISHED FLOOR.
13. THRUST BLOCKS OR OTHER APPROVED METHOD OF THRUST RESTRAINT SHALL BE PROVIDED WHEREVER PIPE CHANGES DIRECTION. SEE CITY OF N.B. STD-510-L-A FOR DETAILS.

UNDERGROUND FIRE SYSTEM CONTRACTOR:
KANA PIPELINE · 172 E. ORANGETHORPE, PLACENTIA
"A" LIC. # 461987 · CONTACT: DAVE KOURY (714)986-1400

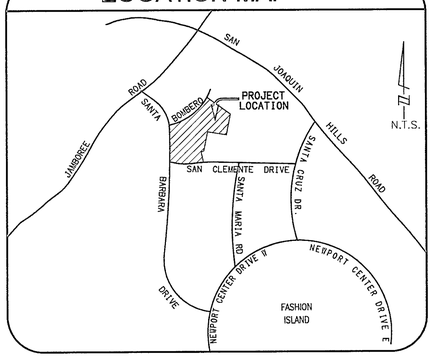
FIELD INSPECTION NOTES AND REQUIREMENTS

1. A FINAL INSPECTION IS REQUIRED. SCHEDULE ALL INSPECTIONS AND TESTS FORTY-EIGHT (48) HOURS IN ADVANCE BY PHONING (949) 644-3107.
2. THE TRENCH SHALL BE EXCAVATED FOR THRUST BLOCKS AND INSPECTED PRIOR TO POUR. ALL CORROSION PROTECTION SHALL BE IN PLACE. CARE SHALL BE TAKEN WHEN FORMING AND POURING THRUST BLOCKS THAT FITTINGS AND JOINTS ARE NOT BURIED IN CONCRETE.
3. A HYDROSTATIC TEST (TWO HUNDRED PSI PRESSURE FOR TWO HOURS OR FIFTY PSI OVER THE MINIMUM STATIC PRESSURE WHEN IT IS OVER ONE HUNDRED AND FIFTY PSI) SHALL BE WITNESSED BY AN INSPECTOR BEFORE BACKFILL AND SOIL COMPACTION. THE TRENCH SHALL BE BACKFILLED BETWEEN JOINTS BEFORE TESTING TO PREVENT MOVEMENT OF PIPE.
4. THE SYSTEM SHALL BE FLUSHED THOROUGHLY BEFORE CONNECTION IS MADE TO EXISTING SYSTEM STUB OUTS. FLOW RATE SHALL BE A MINIMUM OF 10 FT/SEC THROUGH NOT LESS THAN 4 INCH PIPE OR HOSE. APPROVED EQUIPMENT SHALL BE PROVIDED BY THE CONTRACTOR TO ENSURE SAFETY. THE FLUSH SHALL BE WITNESSED BY AN INSPECTOR.
5. PRIVATE FIRE HYDRANTS, SPRINKLER CONTROL VALVES, DETECTOR CHECK ASSEMBLIES POST INDICATOR VALVES, AND FIRE DEPARTMENT CONNECTIONS SHALL BE PAINTED WITH 2 COATS OF WHITE, RUSTOLEUM #2766 PAINT.
6. ALL CONTROL VALVES SHALL BE PROVIDED WITH PERMANENT SIGNS THAT CLEARLY INDICATE THE BUILDING, SYSTEM AND FUNCTION THE VALVE SERVES.
7. ALL FIRE SPRINKLER SYSTEM CONTROL VALVES (INCLUDING DETECTOR CHECK ASSEMBLY VALVES), SHALL BE SUPERVISED BY A CENTRAL ALARM SYSTEM APPROVED BY THE CITY OF NEWPORT BEACH FIRE DEPT.

EMERGENCY TELEPHONE NUMBERS

AGENCY	NUMBERS
SOUTHERN CALIFORNIA GAS COMPANY	(800) 427-2000
SOUTHERN CALIFORNIA EDISON COMPANY	(714) 895-0221
PACIFIC TELEPHONE COMPANY	611
CITY OF NEWPORT BEACH (SEWER & WATER)	(949) 644-3011
COX COMMUNICATIONS	(949) 716-2344

LOCATION MAP



SHEET INDEX

RECORD DRAWING

CONSTRUCTION NOTES AND QUANTITIES

NO.	DESCRIPTION	QUANTITY	UNIT
	GRADING AND PAVING CONSTRUCTION NOTES		
5	REPLACE SIDEWALK PER CITY OF N.B. STD-180-L	4,303	S.F.
22	REMOVE AND DISPOSE OF EXISTING WALK (1 PANEL MIN.)	4,635	S.F.
23	SAWCUT, REMOVE AND DISPOSE OF EXISTING A.C. PAVEMENT	620	S.F.
25	REMOVE & DISPOSE OF EXIST. CURB & GUTTER AS NEEDED TO CONST. UTILITY CONNECTION	40	L.F.
27	SLURRY BACKFILL AND REPLACE A.C. PER CITY OF N.B. STD-105-L-A	620	S.F.
28	REPLACE 8" CURB & GUTTER PER CITY OF N.B. STD-182-L	40	L.F.
29	SLURRY SEAL & RESTRIPE TO LIMITS SHOWN	3,980	S.F.
	STORM DRAIN CONSTRUCTION NOTES		
30	INSTALL 18" RCP WITH PIPE BEDDING PER CITY OF N.B. STD-106-L	390	L.F.
30A	INSTALL 18" RCP WITH EXTRA 1 1/2" CONC. ADDED TO INVERT, PIPE BEDDING PER CITY OF N.B. STD-106-L	66	L.F.
31	CONSTRUCT CURB ACCESS RAMP PER CITY STD 181-L-A & DETAILS ON SHT. 6A	2	EA.
35	CONSTRUCT 21' CURB INLET TYPE 0L PER CITY OF N.B. STD-306-L. CONSTRUCT CATCH BASIN MONOLITHICALLY WITH DECORATIVE SIDEWALK. SEE LANDSCAPE PLANS FOR JOINTING, FINISH AND COLOR.	1	EA.
36	CONSTRUCT 3.5' CURB INLET TYPE 0S PER CITY OF N.B. STD-306-L. CONSTRUCT CATCH BASIN MONOLITHICALLY WITH DECORATIVE SIDEWALK. SEE LANDSCAPE PLANS FOR JOINTING, FINISH AND COLOR.	3	EA.
37	CONSTRUCT REINFORCED CONCRETE COLLAR PER CITY OF N.B. STD-313-L	3	EA.
38	CONSTRUCT JUNCTION STRUCTURE TYPE 1 PER CITY OF N.B. STD-310-L	2	EA.
39	CONNECTION ASSEMBLY (SEE LOW FLOW PLAN-SHEET C3 OF PRECISE GRADING PLANS)	3	.
41	NOT USED	.	.
50	CONSTRUCT CONCRETE PIPE SLOPE ANCHORS PER CITY OF N.B. STD-314-L	2	EA.
51	INSTALL CONCRETE FILLED MANHOLE COVER, ALHAMBRA FOUNDRY #A-1533	4	EA.
53	CONSTRUCT 4" PVC (SDR 35) STUB (4 L.F.) AND CAP FOR FUTURE TREE SUBDRAIN CONNECTION. SEE LANDSCAPE PLANS FOR CONTINUATION.	1	EA.
54	CONSTRUCT 8" PVC (SDR 35) STUB (4 L.F.) AND CAP FOR FUTURE TREE SUBDRAIN CONNECTION. SEE LANDSCAPE PLANS FOR CONTINUATION.	1	EA.
	WATER CONSTRUCTION NOTES		
60	INSTALL 2 1/2" TYPE "K" COPPER TUBING TO LIMITS SHOWN	57	L.F.
61	INSTALL 2" DOMESTIC WATER SERVICE AND METER PER CITY OF N.B. STD-503-L	2	EA.
62	INSTALL 2" BACKFLOW PREVENTOR PER CITY OF N.B. STD-520-L	2	EA.
63	INSTALL 4" PVC WATER LINE, SDR-14 (CLASS 200) PER CITY OF N.B. STD'S.	11	L.F.
64	INSTALL 8" PVC WATER LINE, SDR-14 (CLASS 200) PER CITY OF N.B. STD'S.	514	L.F.
65	PLUG END FOR FUTURE BUILDING CONNECTION	2	EA.
66	INSTALL FIRE HYDRANT ASSEMBLY PER CITY OF N.B. STD-500-L, WITH RESILIENT WEDGE GATE VALVE	1	EA.
67	REMOVE VALVE AND INSTALL BLIND FLANGE AT CROSS	1	EA.
68	SLURRY FILL ABANDONED PIPE WITH 1 SACK SLURRY	16	L.F.
69	CONSTRUCT DUCTILE IRON BEND, (FITTING TYPE PER PLANS) AND THRUST BLOCK PER CITY OF N.B. STD-510-L-A	5	EA.
70	CONSTRUCT 8"x 4" DUCTILE IRON TEE, MJxMJ WITH RETAINER GLANDS AND THRUST BLOCK PER CITY OF N.B. STD-510-L-A	1	EA.
71	INSTALL 8" POST INDICATOR VALVE ASSEMBLY PER CITY OF N.B. FIRE DEPT. STDS.	2	EA.
72	CONSTRUCT 8"x 8" DUCTILE IRON TEE, MJxMJ WITH RETAINER GLANDS AND THRUST BLOCK PER CITY OF N.B. STD-510-L-A	1	EA.
73	INSTALL 8" DOUBLE CHECK DETECTOR PER CITY OF N.B. STD-517-L	1	EA.
74	INSTALL 6"x 2½" FOUR-WAY FIRE DEPARTMENT CONNECTION PER DETAIL ON SHEET 2	1	EA.
75	REMOVE EXISTING FIRE HYDRANT ASSEMBLY AND GATE VALVE. INSTALL BLIND FLANGE AT TEE. RETURN ABANDONED MATERIALS TO CITY UTILITIES YARD AT 949 W. 16th STREET	1	EA.
76	HOT TAP AND JOIN EXISTING 12" WATER PER CITY OF N.B. STD-507-L	1	EA.
77	CUT & CAP EXIST. 8" WATER STUB AT METER SHUT-OFFS PER CITY OF N.B. STDS.	1	EA.
	SEWER CONSTRUCTION NOTES		
80	CONSTRUCT 8" V.C.P. EXTRA STRENGTH SEWER LINE PER CITY OF N.B. SPECIFICATIONS	169	L.F.
81	CONSTRUCT 48" STANDARD MANHOLE PER CITY OF N.B. STD-401-L	3	EA.
82	CONSTRUCT 6" PVC (SDR 35) SEWER LATERAL PER CITY OF N.B. STD-406-L	27	L.F.
83	CONSTRUCT SEWER CLEANOUT PER CITY OF N.B. STD 406-L	1	EA.
84	CONSTRUCT CITY-SUPPLIED 8" CAST IRON CLEANOUT PER CITY OF N.B. STD-406-L	1	EA.
85	CONSTRUCT 8" V.C.P. TERMINAL CLEANOUT PER CITY OF N.B. STD-400-L	2	EA.
86	INSTALL PVC SEWER CAP FOR FUTURE BUILDING CONNECTION	2	EA.
87	JOIN EXISTING 8" VCP SEWER MAIN	2	EA.
88	REMOVE AND DISPOSE OF EXISTING 8" VCP SEWER MAIN AFTER CONSTRUCTION, INSPECTION AND ACCEPTANCE OF NEW MAIN.	97	L.F.
89	REMOVE AND DISPOSE OF EXISTING SEWER MANHOLE	1	EA.
90	REMOVE AND DISPOSE OF EXISTING SEWER CLEANOUT	1	EA.
91	REMOVE AND DISPOSE OF EXISTING 6" VCP SEWER LATERAL	63	L.F.

NOTE TO CONTRACTOR: QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE INTENDED TO ILLUSTRATE SCOPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT QUANTITIES INVOLVED.

SYMBOL LEGEND

POWER POLE	TREE		CENTERLINE
MANHOLE	SHRUBBERY		SEWER LINE
FIRE HYDRANT	ASPHALT PAVEMENT		WATER LINE
METER BOX	BRICKWALK		GAS LINE
VALVE	CONCRETE		POWER LINE
POWER POLE ANCHOR	BUILDING		TELEPHONE LINE
MONUMENT	EXISTING CONSTRUCTION		CABLEVISION LINE
FENCE	PROPERTY LINE		SPRINKLER SYSTEM
BLOCKWALL	NEW CONSTRUCTION		STREET LIGHT

BENCHMARK:

O. C. S. 3N-38-70

0.45 MILE ALONG JAMBOREE ROAD, FROM THE INTERSECTION OF THE PACIFIC COAST HIGHWAY, TO THE BEGINNING OF A CURVE GOING NORTHEAST, 18.5 FT. NORTHEAST OF THE CENTERLINE BEGINNING OF CURVE MONUMENT, WHICH IS A BRASS CAP SET IN A CAPPED WELL MONUMENT IN THE CENTER OF THE MEDIAN, 7 FT. NORTHWEST OF THE CENTER OF THE MEDIAN, SET AT THE NORTHEAST CORNER OF A 4 FT. BY 4.5 FT. CONCRETE CATCH BASIN, 0.4 FT. HIGHER THAN THE GUTTER.

1995 ADJ. ELEV. = 48.834

BASIS OF BEARINGS

A PORTION OF THE CENTERLINE OF SAN CLEMENTE DRIVE BEING N81°42'03"W AS SHOWN ON P.M. 82-712, IN BOOK 175, PAGE 23 OF PARCEL MAPS OF THE COUNTY OF ORANGE, CALIFORNIA

SITE AREA= 4.07 ACRES

IMPORTANT NOTICE

SECTION 4216/4217 OF THE GOVERNMENT CODE REQUIRES A DIGALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIGALERT TOLL FREE 1-800-422-4131 TWO WORKING DAYS BEFORE YOU DIG.

DIGALERT

DIAL TOLL FREE 1-800-227-2600 AT LEAST TWO DAYS BEFORE YOU DIG

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

NO.	DATE	REVISIONS	APP.	DATE
			CITY OF NEWPORT BEACH	
2	5-22-00	AS-BUILT PLANS. REVISED 8" FIRE LINE ALIGNMENT ON SHEET 2. AS-BUILT SIDEWALK ACCESS RAMPS ON SHEET 6A.		
	11-10-99	REVISED QUANTITIES FOR NOTES 5 & 22. ADDED CONST. NOTE 31 ~ SHEET 1		
1		ADDED OFF-SITE SIDEWALK PLAN TO SET ~ SHEET 6A		

CITY OF NEWPORT BEACH

THIS PLAN IS SIGNED BY THE CITY OF NEWPORT BEACH FOR CONCEPT AND ADHERENCE TO CITY STANDARDS AND REQUIREMENTS ONLY. THE CITY IS NOT RESPONSIBLE FOR DESIGN ASSUMPTIONS AND ACCURACY.

APPROVED _____ PUBLIC WORKS ENGINEER — DATE 1/14/99

APPROVED _____ UTILITIES ENGINEER — DATE 1/11/99

REGISTERED PROFESSIONAL ENGINEER — DOUGLAS J. JOHNSON — No. 47447 — Exp. 12/31/99 — CIVIL — STATE OF CALIFORNIA

PREPARED BY:
THE KEITH COMPANIES
Civil Engineering • Land Surveying • Mapping • Environmental Services • Water Resources • Land Planning
2955 Red Hill Avenue, Costa Mesa, CA 92626, (714)540-0800
PATRICK K. OSBORNE, PROJECT MANAGER
DOUGLAS J. JOHNSON R.C.E. 47447 (EXP. 12/31/99) — 12/30/98

DEVELOPER:
THE IRVINE COMPANY
550 NEWPORT CENTER DRIVE
NEWPORT BEACH, CALIFORNIA
(949)720-2200

TITLE SHEET
888 SAN CLEMENTE DRIVE IMPROVEMENT PLAN
PARCELS 1-3 OF P.M. 82-712 AND PARCEL 1 OF N.B.L.L.A. 95-3
CITY OF NEWPORT BEACH PUBLIC WORKS DEPARTMENT
ENCROACHMENT PERMIT NO. XXXXXXX
SHEET 1 OF 6

N-22

NOTE:
SEE SHEET 6 FOR SEWER/WATER CONSTRUCTION TRAFFIC CONTROL

PARKING GARAGE BY OTHERS

NEWPORT BEACH ART MUSEUM

SAN CLEMENTE DRIVE

BOMBERO DRIVE

888 SAN CLEMENTE DRIVE

F.F.=153.00

EXISTING 15' WIDE WATER EASEMENT TO BE MAINTAINED

PROPOSED 7'x10' EASEMENT

EXIST. 15' WATER ESMT. TO BEQUITCLAIMED

PROPOSED 22' WIDE WATER EASEMENT

EXISTING 15' SEWER EASEMENT

EXISTING SEWER EASEMENT TO BE QUITCLAIMED

(124.60) B.O.P. – EXIST. 12" W. (D.I.P.)
123.80 T.O.P. – PROPOSED 18" R.C.P.

PROPOSED TREES (TYP)

(65) SEE PARKING STRUCTURE PLANS FOR FIRE LINE CONTINUATION

(65) SEE BUILDING SPRINKLER PLANS FOR CONTINUATION

SEE PLUMBING PLANS FOR CONTINUATION

SEE LANDSCAPE PLANS FOR CONTINUATION

EXISTING 8" SEWER TO BE REMOVED. SEE SHEET 3

EXISTING PAC TEL VAULT

PRIVATE | PUBLIC

8" FIRE

(69) 22.5° BEND (MJxJ)

(69) 11.25° BEND (MJxMJ)

(69) 90° BEND (MJxMJ)

(77) EXIST. 8" W STUB–ABANDON IN PLACE

DW

IRR

6" x 2½" FOUR–WAY FIRE DEPT. CONNECTION POTTER–ROEMER MODEL 5781 OR APPROVED EQUIVALENT

SIGN SHALL READ:
SPRINKLER SYSTEM
888 SAN CLEMENTE DRIVE

METAL SIGN WITH 1" HIGH LETTERING ON A CLEARLY CONTRASTING BACKGROUND; PERMANENTLY MOUNTED

4" MIN.
8" MIN.

FIRE DEPT. CONNECTION
NOT TO SCALE

GRADING AND PAVING CONSTRUCTION NOTES

(5) REPLACE SIDEWALK PER CITY OF N.B. STD–180–L
(22) REMOVE AND DISPOSE OF EXISTING WALK (1 PANEL MIN.)
(23) SAWCUT, REMOVE AND DISPOSE OF EXISTING A.C. PAVEMENT
(25) REMOVE AND DISPOSE OF EXIST. CURB & GUTTER AS NEEDED TO CONSTRUCT UTILITY CONNECTION
(27) SLURRY BACKFILL TRENCH AND REPLACE A.C. PAVEMENT PER CITY OF N.B. STD–105–L–A
(28) REPLACE 8" CURB AND GUTTER PER CITY OF N.B. STD–182–L

WATER CONSTRUCTION NOTES

(60) INSTALL 2" TYPE "K" COPPER TUBING TO LIMITS SHOWN
(61) INSTALL 2" DOMESTIC WATER SERVICE AND METER PER CITY OF N.B. STD–503–L
(62) INSTALL 2" BACKFLOW PREVENTOR PER CITY OF N.B. STD–520–L
(63) INSTALL 4" PVC WATER LINE, SDR–14 (CLASS 200) PER CITY OF N.B. STD'S.
(64) INSTALL 8" PVC WATER LINE, SDR–14 (CLASS 200) PER CITY OF N.B. STD'S.
(65) PLUG END FOR FUTURE BUILDING CONNECTION
(66) INSTALL FIRE HYDRANT ASSEMBLY PER CITY OF N.B. STD–500–L, WITH RESILIENT WEDGE GATE VALVE
(67) REMOVE VALVE AND INSTALL BLIND FLANGE AT CROSS
(68) SLURRY FILL ABANDONED PIPE WITH 1 SACK SLURRY
(69) CONSTRUCT DUCTILE IRON BEND, (FITTING TYPE PER PLANS) AND THRUST BLOCK PER CITY OF N.B. STD–510–L–A
(70) CONSTRUCT 8"x 4" DUCTILE IRON TEE, MJxMJ WITH RETAINER GLANDS AND THRUST BLOCK PER CITY OF N.B. STD–510–L–A
(71) INSTALL 8" POST INDICATOR VALVE ASSEMBLY PER CITY OF N.B. FIRE DEPT. STDS.
(72) CONSTRUCT 8"x 8" DUCTILE IRON TEE, MJxMJ WITH RETAINER GLANDS AND THRUST BLOCK PER CITY OF N.B. STD–510–L–A
(73) INSTALL 8" DOUBLE CHECK DETECTOR PER CITY OF N.B. STD–517–L
(74) INSTALL 6"x 2½" FOUR–WAY FIRE DEPT. CONNECTION PER DETAIL ABOVE
(75) REMOVE EXISTING FIRE HYDRANT ASSEMBLY AND GATE VALVE. INSTALL BLIND FLANGE AT TEE. RETURN ABANDONED MATERIALS TO CITY UTILITIES YARD AT 949 W. 16th STREET.
(76) HOT TAP AND JOIN EXISTING 12" WATER PER CITY OF N.B. STD–507–L
(77) CUT AND CAP EXIST. 8" WATER STUB AT METER SHUT–OFFS PER CITY OF N.B. STDS.

GRAPHIC SCALE
20' 0 10' 20' 40' 80'
(IN FEET)
1 inch = 20' ft.

RECORD DRAWING

NOTES TO CONTRACTOR

1. DRY UTILITIES ARE SCHEMATIC AND SHOWN FOR REFERENCE ONLY. SEE UTILITY COMPANY PLANS FOR FINAL DESIGN AND SPECIFICATIONS.

NO.	DATE	REVISIONS	NO.	APP.	DATE
2	5/22/00	AS-BUILT 8" FIRE LINE ADJACENT TO SAN CLEMENTE DRIVE			

CITY OF NEWPORT BEACH

CITY OF NEWPORT BEACH

THIS PLAN IS SIGNED BY THE CITY OF NEWPORT BEACH FOR CONCEPT AND ADHERENCE TO CITY STANDARDS AND REQUIREMENTS ONLY. THE CITY IS NOT RESPONSIBLE FOR DESIGN ASSUMPTIONS AND ACCURACY.

APPROVED _____ PUBLIC WORKS ENGINEER — DATE 1/11/99

APPROVED _____ UTILITIES ENGINEER — DATE 1/11/99

REGISTERED PROFESSIONAL ENGINEER — DOUGLAS J. JOHNSON — No. 47447 — Exp. 12/31/99 — CIVIL — STATE OF CALIFORNIA

PREPARED BY:
THE KEITH COMPANIES
Civil Engineering • Land Surveying • Mapping • Environmental Services • Water Resources • Land Planning
2955 Red Hill Avenue, Costa Mesa, CA 92626, (714)540–0800
DOUGLAS J. JOHNSON R.C.E. 47447 (EXP. 12/31/99) 12/30/98

888 SAN CLEMENTE DRIVE IMPROVEMENT PLAN WATER

PARCELS 1–3 OF P.M. 82–712 AND PARCEL 1 OF N.B.L.L.A. 95–3

CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

SHEET 2 OF 6

PARKING GARAGE BY OTHERS

NEWPORT BEACH ART MUSEUM

NOTE: SEE SHEET 6 FOR SEWER/WATER CONSTRUCTION TRAFFIC CONTROL

888 SAN CLEMENTE DRIVE

F.F.=153.00

SAN CLEMENTE DRIVE

BOMBERO DRIVE

SANTA BARBARA DRIVE

LINE "S" SEE PROFILE ON SHEET 5

PROPOSED TREES (TYP)

PROPOSED 15' WIDE SEWER EASEMENT

EXISTING 15" SEWER EASEMENT

EXISTING EASEMENT TO BE QUIT-CLAIMED

EXIST. 15' WATER ESMT.

PROPOSED ELECTRICAL CAISSON

EXISTING TUNNEL

PINCO (2-3")

3-4" TEL

(138.50 INV) 6" VCP

(1.68%)

35 LF (91)

(138.50 INV) 6" VCP (90)

133.66 INV 6" PVC (86)

140.92 FS RIM (83)

28 LF (91)

9+00.00 (29)

155.8 B.O.P. - 8"W
149.0 T.O.P. - 8"S
155.9 B.O.P. - 3"G
148.7 T.O.P. - 8"S
154.1 B.O.P. - 12"W
148.6 T.O.P. - 8"S

11+88.82 (81)(87) ℄ M.H. #4 RIM=158.00

N04°24'30"W (80) 68.15'

11+20.67 (81) ℄ M.H. #3 RIM=158.82

(23)(27)

N65°55'00"E 59.98'

80 LF (88)

151.1 B.O.P. - 12"W
145.6 T.O.P. - 8"S

(143.88 INV) 8" VCP (82)

RIM=152.2 FG (85)

20.18' N11°57'34"E (89)

29.99'

50.17'

17 LF (88)

N75°48'03"W (82) L=22.61' S=0.0200

RIM=155.0 FG (84)

10+00.00 ℄ EXIST. M.H. #1 (RIM=153.73)

10+20.71 (81)(87) ℄ M.H. #2 RIM=154.00

PRIVATE PUBLIC

10+75.00 (29)

145.20' INV. 6" PVC

145.50 INV 6" PVC (86)

N07°36'30"E (82) L=3.53'

152.6 FG RIM (85)

GRADING AND PAVING CONSTRUCTION NOTES

(23)(27) SAWCUT, REMOVE AND DISPOSE OF EXISTING A.C. PAVEMENT
SLURRY BACKFILL TRENCH AND REPLACE A.C. PER CITY OF N.B. STD-105-L-A
(29) SLURRY SEAL & RESTRIPE TO LIMITS SHOWN

SEWER CONSTRUCTION NOTES

(80) CONSTRUCT 8" V.C.P. EXTRA STRENGTH SEWER LINE PER CITY OF N.B. SPECIFICATIONS
(81) CONSTRUCT 48" STANDARD MANHOLE PER CITY OF N.B. STD-401-L
(82) CONSTRUCT 6" PVC (SDR 35) SEWER LATERAL PER CITY OF N.B. STD-406-L
(83) CONSTRUCT SEWER CLEANOUT PER CITY OF N.B. STD 406-L
(84) CONSTRUCT CITY-SUPPLIED 8" CAST IRON CLEANOUT ASSEMBLY PER CITY OF N.B. STD-406-L
(85) CONSTRUCT 8" V.C.P. TERMINAL CLEANOUT PER CITY OF N.B. STD-400-L
(86) INSTALL PVC SEWER CAP FOR FUTURE BUILDING CONNECTION
(87) JOIN EXISTING 8" V.C.P. SEWER MAIN
(88) REMOVE AND DISPOSE OF EXISTING 8" V.C.P. SEWER MAIN AFTER CONSTRUCTION, INSPECTION AND ACCEPTANCE OF NEW MAIN.
(89) REMOVE AND DISPOSE OF EXISTING SEWER MANHOLE
(90) REMOVE AND DISPOSE OF EXISTING SEWER CLEANOUT
(91) REMOVE AND DISPOSE OF EXISTING 6" V.C.P. SEWER LATERAL

GRAPHIC SCALE

20' 0 10' 20' 40' 80'

(IN FEET)
1 inch = 20' ft.

RECORD DRAWING

NOTES TO CONTRACTOR

1. DRY UTILITIES ARE SCHEMATIC AND SHOWN FOR REFERENCE ONLY. SEE UTILITY COMPANY PLANS FOR FINAL DESIGN AND SPECIFICATIONS.

NO.	DATE	REVISIONS	NO.	APP.	DATE
2	5/22/00	AS-BUILT: NO CHANGES			

CITY OF NEWPORT BEACH

CITY OF NEWPORT BEACH

THIS PLAN IS SIGNED BY THE CITY OF NEWPORT BEACH FOR CONCEPT AND ADHERENCE TO CITY STANDARDS AND REQUIREMENTS ONLY. THE CITY IS NOT RESPONSIBLE FOR DESIGN ASSUMPTIONS AND ACCURACY.

APPROVED _____ PUBLIC WORKS ENGINEER — DATE 12/30/98

APPROVED _____ UTILITIES ENGINEER — DATE 1/11/99

REGISTERED PROFESSIONAL ENGINEER DOUGLAS J. JOHNSON No. 47447 Exp. 12/31/99 CIVIL STATE OF CALIFORNIA

PREPARED BY:

THE KEITH COMPANIES

Civil Engineering • Land Surveying ▷ 2955 Red Hill Avenue
Mapping • Environmental Services Costa Mesa, CA 92626
Water Resources • Land Planning (714)540-0800

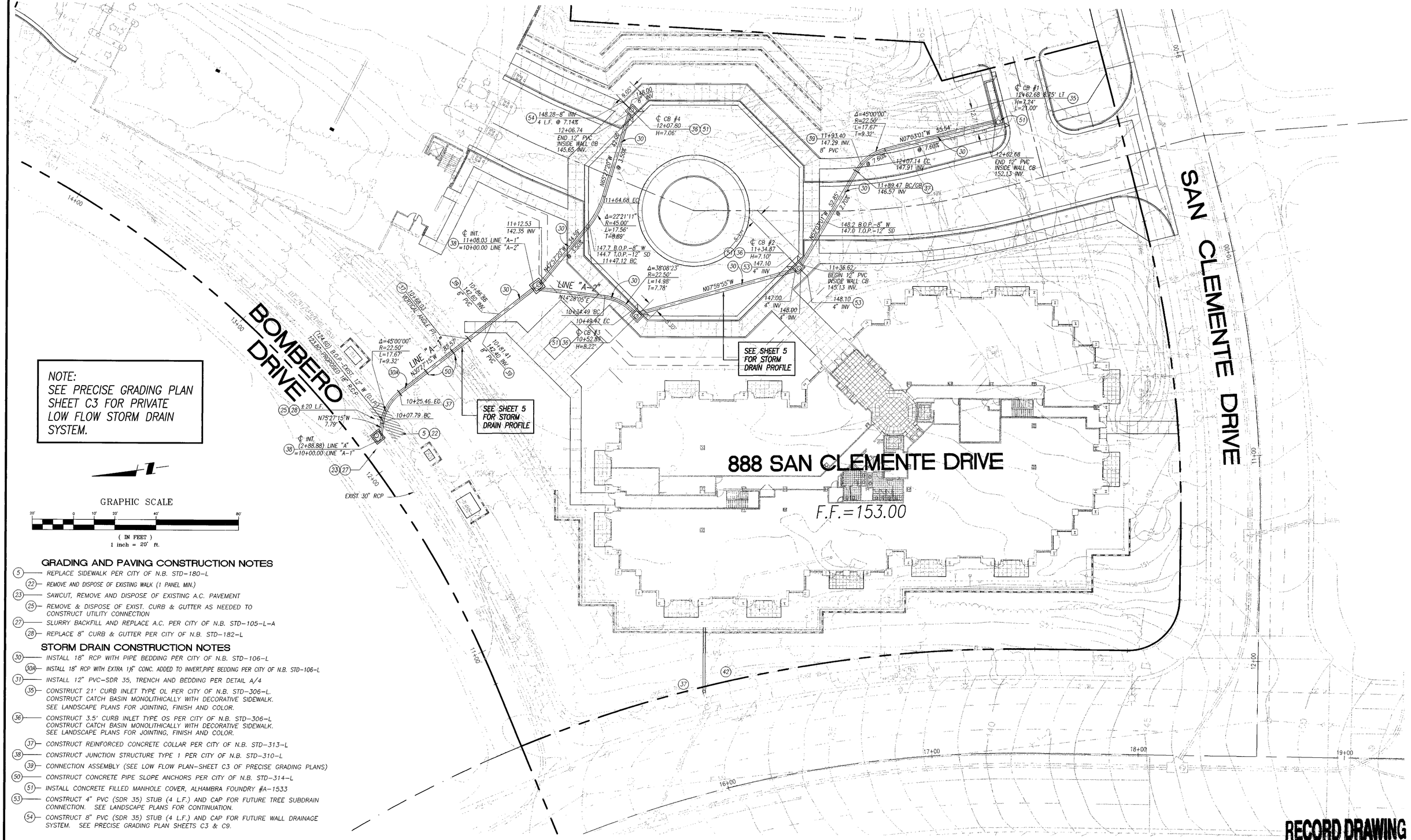
DOUGLAS J. JOHNSON R.C.E. 47447 (EXP. 12/31/99) 12/30/98

888 SAN CLEMENTE DRIVE IMPROVEMENT PLAN SEWER

PARCELS 1-3 OF P.M. 82-712 AND PARCEL 1 OF N.B.L.L.A. 95-3

CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

SHEET 3 OF 6



GRADING AND PAVING CONSTRUCTION NOTES

(5) REPLACE SIDEWALK PER CITY OF N.B. STD-180-L

(22) REMOVE AND DISPOSE OF EXISTING WALK (1 PANEL MIN.)

(23) SAWCUT, REMOVE AND DISPOSE OF EXISTING A.C. PAVEMENT

(25) REMOVE & DISPOSE OF EXIST. CURB & GUTTER AS NEEDED TO CONSTRUCT UTILITY CONNECTION

(27) SLURRY BACKFILL AND REPLACE A.C. PER CITY OF N.B. STD-105-L-A

(28) REPLACE 8" CURB & GUTTER PER CITY OF N.B. STD-182-L

STORM DRAIN CONSTRUCTION NOTES

(30) INSTALL 18" RCP WITH PIPE BEDDING PER CITY OF N.B. STD-106-L

(30A) INSTALL 18" RCP WITH EXTRA 1½" CONC. ADDED TO INVERT,PIPE BEDDING PER CITY OF N.B. STD-106-L

(31) INSTALL 12" PVC-SDR 35, TRENCH AND BEDDING PER DETAIL A/4

(35) CONSTRUCT 21' CURB INLET TYPE OL PER CITY OF N.B. STD-306-L. CONSTRUCT CATCH BASIN MONOLITHICALLY WITH DECORATIVE SIDEWALK. SEE LANDSCAPE PLANS FOR JOINTING, FINISH AND COLOR.

(36) CONSTRUCT 3.5' CURB INLET TYPE OS PER CITY OF N.B. STD-306-L CONSTRUCT CATCH BASIN MONOLITHICALLY WITH DECORATIVE SIDEWALK. SEE LANDSCAPE PLANS FOR JOINTING, FINISH AND COLOR.

(37) CONSTRUCT REINFORCED CONCRETE COLLAR PER CITY OF N.B. STD-313-L

(38) CONSTRUCT JUNCTION STRUCTURE TYPE 1 PER CITY OF N.B. STD-310-L

(39) CONNECTION ASSEMBLY (SEE LOW FLOW PLAN-SHEET C3 OF PRECISE GRADING PLANS)

(50) CONSTRUCT CONCRETE PIPE SLOPE ANCHORS PER CITY OF N.B. STD-314-L

(51) INSTALL CONCRETE FILLED MANHOLE COVER, ALHAMBRA FOUNDRY #A-1533

(53) CONSTRUCT 4" PVC (SDR 35) STUB (4 L.F.) AND CAP FOR FUTURE TREE SUBDRAIN CONNECTION. SEE LANDSCAPE PLANS FOR CONTINUATION.

(54) CONSTRUCT 8" PVC (SDR 35) STUB (4 L.F.) AND CAP FOR FUTURE WALL DRAINAGE SYSTEM. SEE PRECISE GRADING PLAN SHEETS C3 & C9.

NO.	DATE	REVISIONS	NO.	APP.	DATE
2	5/22/00	AS-BUILT: NO CHANGES.			

CITY OF NEWPORT BEACH

CITY OF NEWPORT BEACH

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APPROVED _____ PUBLIC WORKS ENGINEER — DATE 4/6/99

APPROVED _____ UTILITIES ENGINEER — DATE 1/4/99

REGISTERED PROFESSIONAL ENGINEER — DOUGLAS J. JOHNSON — No. 47447 — Exp. 12/31/99 — CIVIL — STATE OF CALIFORNIA

PREPARED BY:

THE KEITH COMPANIES

Civil Engineering • Land Surveying • Mapping • Environmental Services • Water Resources • Land Planning

2955 Red Hill Avenue, Costa Mesa, CA 92626, (714)540-0800

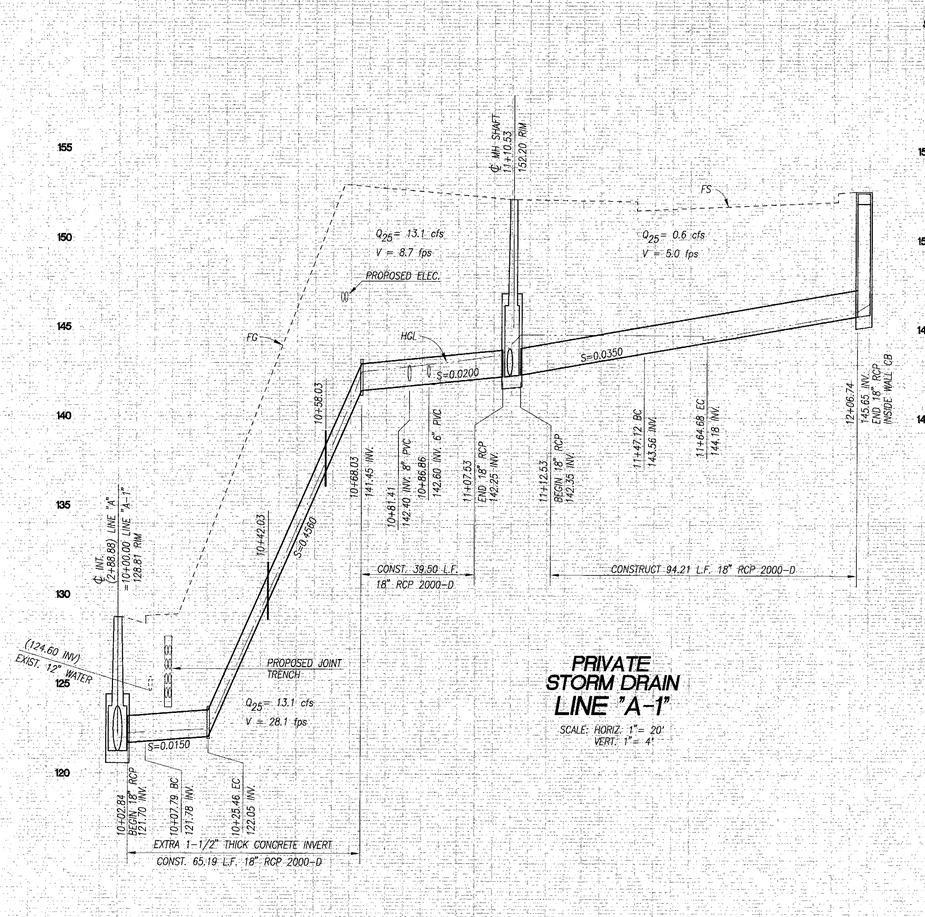
DOUGLAS J. JOHNSON R.C.E. 47447 (EXP. 12/31/99) — 12/30/98

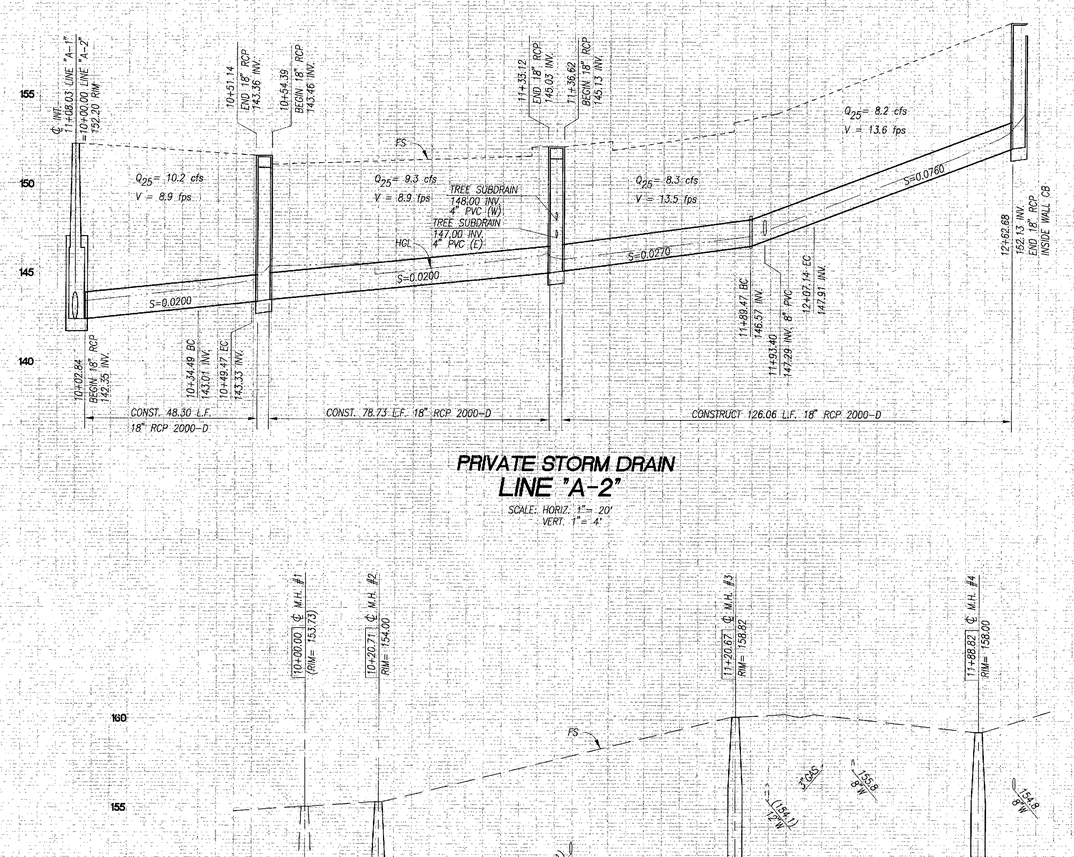
888 SAN CLEMENTE DRIVE IMPROVEMENT PLAN PRIVATE STORM DRAIN

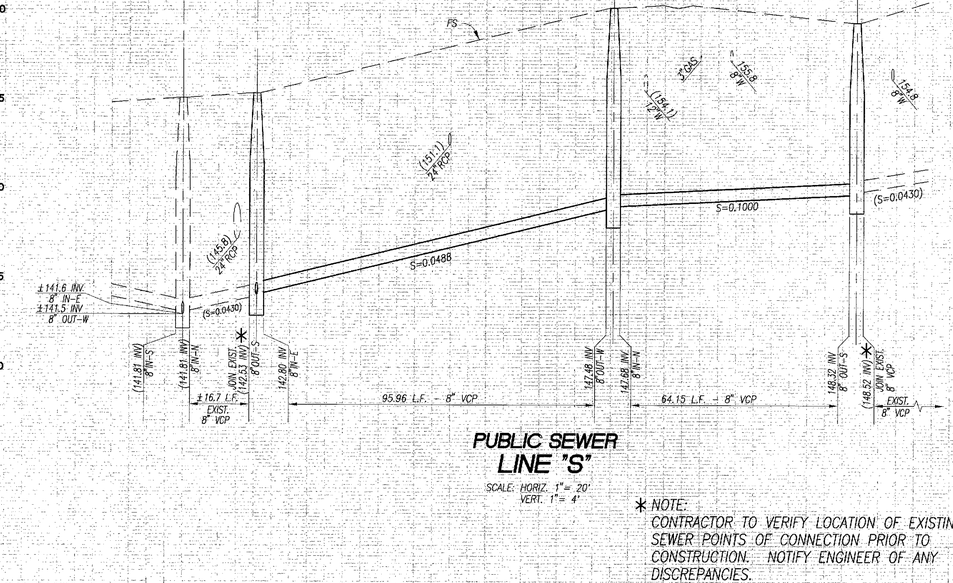
PARCELS 1-3 OF P.M. 82-712 AND PARCEL 1 OF N.B.L.L.A. 95-3

CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

SHEET 4 OF 6







✳ NOTE:
CONTRACTOR TO VERIFY LOCATION OF EXISTING SEWER POINTS OF CONNECTION PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.

RECORD DRAWING

PROFILE
HORIZ. 1" = 20'
VERT. 1" = 4'

NO.	DATE	REVISIONS	NO.	APP.	DATE
2	9/22/00	AS-BUILT: NO CHANGES		CITY OF NEWPORT BEACH	

CITY OF NEWPORT BEACH

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APPROVED _____ PUBLIC WORKS ENGINEER DATE 1/12/99

APPROVED _____ UTILITIES ENGINEER DATE 1/11/99

REGISTERED PROFESSIONAL ENGINEER DOUGLAS J. JOHNSON No. 47447 Exp. 12/31/99 CIVIL STATE OF CALIFORNIA

PREPARED BY:
THE KEITH COMPANIES
Civil Engineering • Land Surveying
Mapping • Environmental Services
Water Resources • Land Planning
2955 Red Hill Avenue
Costa Mesa, CA 92626
(714)540-0800

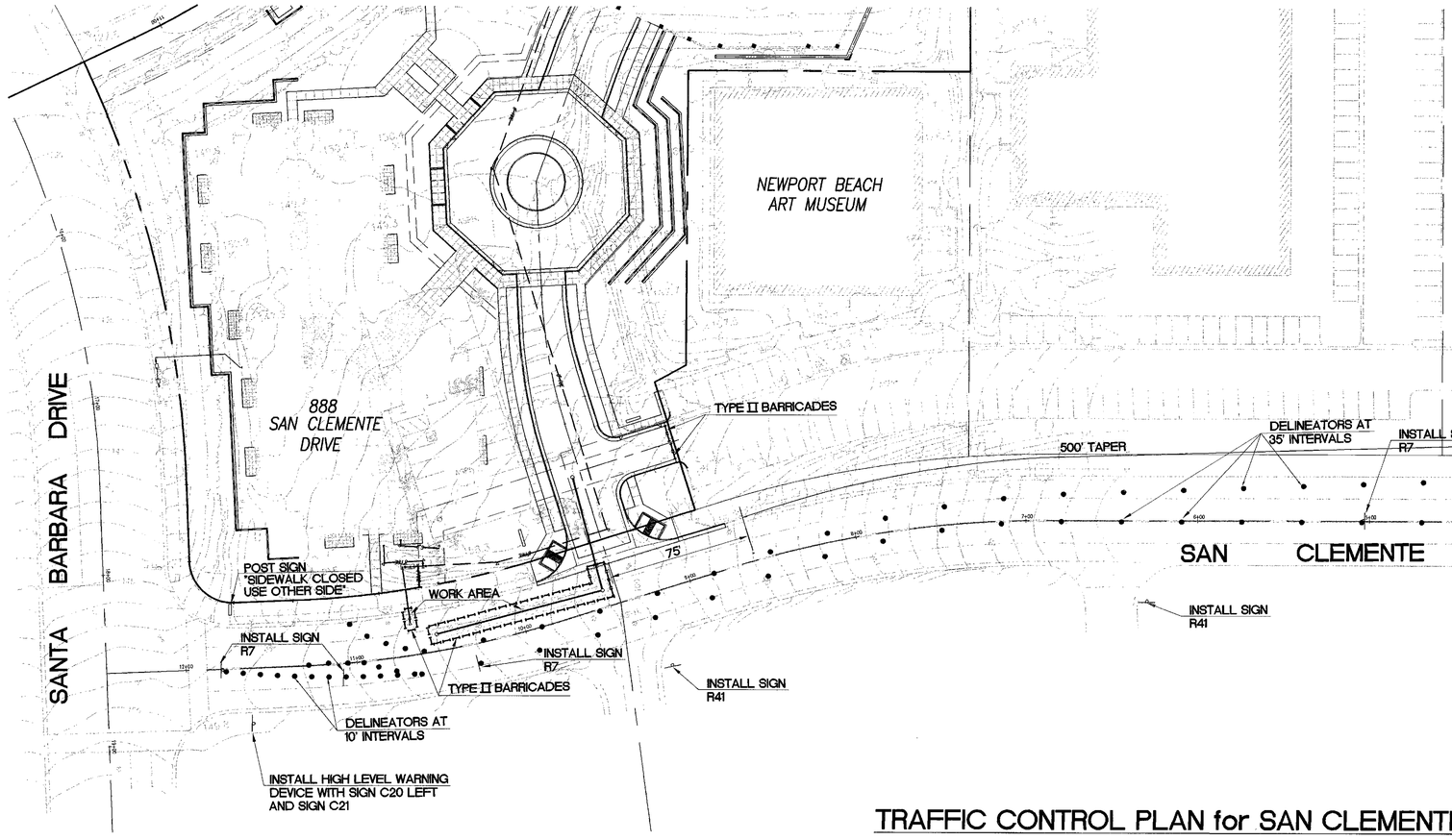
12/30/98
DOUGLAS J. JOHNSON R.C.E. 47447 (EXP. 12/31/99)

888 SAN CLEMENTE DRIVE IMPROVEMENT PLAN
STORM DRAIN and SEWER PROFILES
PARCELS 1-3 OF P.M. 82-712 AND PARCEL 1 OF N.B.L.L.A. 95-3

CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

SHEET 5 OF 6

PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REVISED BY THO
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
MODIFIED BY NUMBER 07548
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
MODIFIED BY NUMBER 07548
rsm0005.dwg 12-28-98 9:01:25
2nd SUBMITTAL - DECEMBER 21, 1998



NOTES:

1) TRAFFIC CONTROL TO BE PLACED IN CONFORMANCE WITH W.A.T.C.H. MANUAL SPECIFICATIONS.
2) WORK HOURS SHALL BE BETWEEN 9:00 A.M. AND 3:00 P.M. ONLY.
3) CONTRACTOR MUST PLATE OR TEMPORARILY BACKFILL WORK AREAS DURING NON-CONSTRUCTION HOURS.
4) ALL TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE ROADWAY BY 3:00 P.M. EACH DAY OF OPERATION.

TRAFFIC CONTROL PLAN for SAN CLEMENTE DRIVE

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

RECORD DRAWING

NO.	DATE	REVISIONS	NO.	APP.	DATE
			CITY OF NEWPORT BEACH		

APPROVED:
Richard M. Edmonston
TRAFFIC ENGINEER
January 14, 1999
DATE

REGISTERED PROFESSIONAL ENGINEER — DOUGLAS J. JOHNSON — No. 47447 — Exp. 12/31/99 — CIVIL — STATE OF CALIFORNIA

PREPARED BY:
THE KEITH COMPANIES
Civil Engineering • Land Surveying • Mapping • Environmental Services • Water Resources • Land Planning
2955 Red Hill Avenue, Costa Mesa, CA 92626, (714)540-0800
DOUGLAS J. JOHNSON R.C.E. 47447 (EXP. 12/31/99)

888 SAN CLEMENTE DRIVE
IMPROVEMENT PLAN
TRAFFIC CONTROL
PARCELS 1-3 OF P.M. 82-712 AND PARCEL 1 OF N.B.L.L.A. 95-3
CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT
SHEET 6 OF 6

PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
RECORDED BY: NUMBER 07SAR
PROWOOOE.DWG 11-10-98 15:24:11

NEWPORT BEACH ART MUSEUM

SAN CLEMENTE DRIVE

888 SAN CLEMENTE DRIVE

F.F.=153.00

SANTA BARBARA DRIVE

BOMBERO - DRIVE

PIMCO TELE/TELECOM/CATV

PIMCO (2-3")

PROPOSED PLANTER

12"x18" STREET LIGHT PULL BOX PROTECT IN PLACE

PROPOSED SIDEWALK 6' WIDE

EXISTING SIDEWALK 8' WIDE

6.5' PLANTER SEE LANDSCAPE PLANS

RETAINING CURB PER DETAIL "B"

PEDESTRIAN X-ING DEVICE PROTECT IN PLACE

12"x18" TRAFFIC SIGNAL PULL BOX PROTECT IN PLACE

DETAIL "B"

12"x18" STREET LIGHT PULL BOX PROTECT IN PLACE

2.5'x4' EDISON VAULT PROTECT IN PLACE

20"x31" WATER METER BOXES PROTECT IN PLACE

PAC BELL MANHOLE PROTECT IN PLACE

EXIST. SIDEWALK 5' WIDE

RETAINING CURB PER DETAIL "A"

12"x18" PULL BOX PROTECT IN PLACE

DETAIL "A"

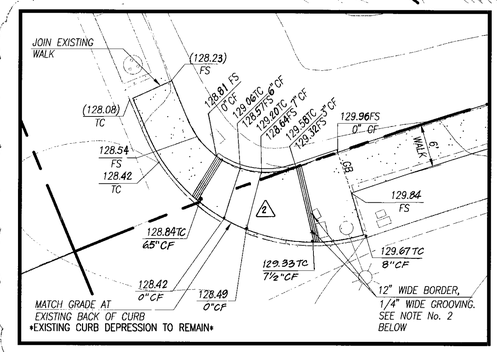
18"x28" PULL BOX PROTECT IN PLACE

ONE PANEL

+45 LF

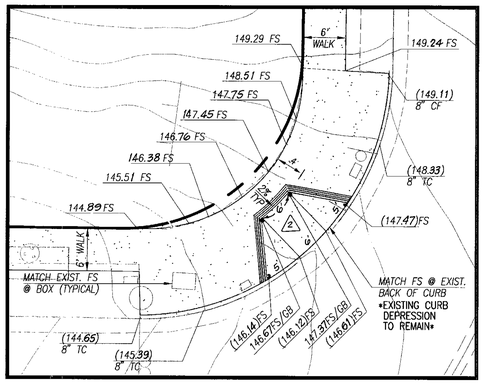
+72 LF

161.03 FS
161.47 FS
161.84 FS
162.48 TC 8" CF
162.09 FS
161.99 TC 7.5" CF
161.03 TC 9" CF
160.91 TC 9" CF
161.23 TC 6.5" CF
160.98 TC 6" CF
158.83 FS
159.15 TC 6" CF
159.01 TC 6.5" CF
158.29 TC 9" CF
158.54 FS
158.29 FS
157.94 FS
158.00 TC 9" CF
157.83 TC 7.5" CF
157.18 TC 9" CF



BOMBERO ACCESS RAMP (A) 2

SCALE: 1" = 10'



SAN CLEMENTE ACCESS RAMP (B) 2

SCALE: 1" = 10'

CONSTRUCTION NOTES

(5) CONSTRUCT SIDEWALK PER CITY OF N.B. STD-180-L

(22) REMOVE AND DISPOSE OF EXISTING SIDEWALK

(31) CONSTRUCT CURB ACCESS RAMP PER DETAILS HEREON

GRAPHIC SCALE

20' 0 10' 20' 40' 80'

(IN FEET)
1 inch = 20' ft.

NOTES:

1) PROTECT EXISTING CURB AND PULL BOXES IN PLACE.
2) CONSTRUCT CASE "B" RAMP PER CITY OF N.B. STD-181-L-A (MODIFIED PER DETAIL ABOVE).
3) DO NOT CONSTRUCT GROOVING ON SLOPED PORTION OF RAMP (HERRINGBONE). DISREGARD NOTE No. 11 OF STANDARD PLAN.

NO.	DATE	REVISIONS	NO.	APP.	DATE
2	5/22/00	AS-BUILT SIDEWALK ACCESS RAMPS. REVISED DETAILS A & B.			
1	11/10/99	ADDED SHEET 6A (THIS SHEET) TO PLAN SET.			

CITY OF NEWPORT BEACH

CITY OF NEWPORT BEACH

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APPROVED _____ PUBLIC WORKS ENGINEER — DATE 11-15-99

APPROVED _____ UTILITIES ENGINEER — DATE 11-15-99

REGISTERED PROFESSIONAL ENGINEER DOUGLAS J. JOHNSON No. 47447 Exp. 12/31/99 CIVIL STATE OF CALIFORNIA

PREPARED BY:
The Keith Companies TKC
2955 Red Hill Avenue, Costa Mesa, CA 92626 (714) 540-0800

_____ 11/10/99
DOUGLAS J. JOHNSON R.C.E. 47447 (EXP. 12/31/99)

888 SAN CLEMENTE DRIVE IMPROVEMENT PLAN OFF-SITE SIDEWALK

LOT 1 OF N.B.L.L.A. 98-12

CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

SHEET 6A OF 6

RECORD DRAWING

S-5176-5

888 San Clemente Dr.

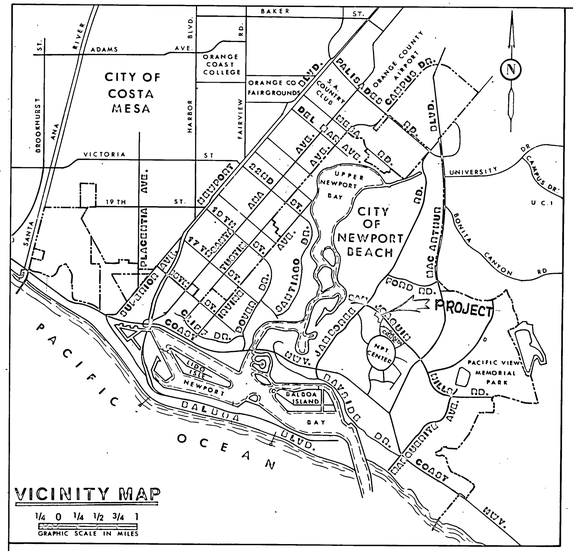
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
RECORDED BY NUMBER 07341

PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
RECORDED BY NUMBER 07341

PLAN HOLD CORPORATION
RECORDED BY

CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

PLANS FOR
WATER MAIN
CIVIC PLAZA



VICINITY MAP

1/4 0 1/4 1/2 3/4 1
GRAPHIC SCALE IN MILES

SYMBOL LEGEND

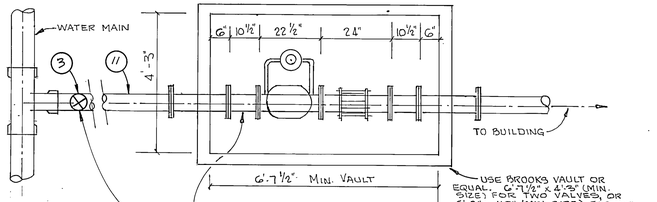
- POWER POLE
- MANHOLE
- FIRE HYDRANT
- METER BOX
- VALVE
- POWER POLE ANCHOR
- MONUMENT
- FENCE
- BLOCK WALL
- TREE
- SHRUBBERY
- ASPHALT PAVEMENT
- BRICK WALK
- CONCRETE
- BUILDING
- EXISTING CONSTRUCTION
- NEW CONSTRUCTION
- CENTERLINE
- SEWER LINE
- WATER LINE
- GAS LINE
- POWER LINE
- TELEPHONE LINE
- CABLEVISION LINE
- SPRINKLER SYSTEM
- STREET LIGHT

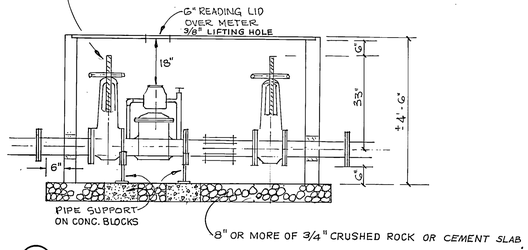
GENERAL NOTES

1. THE CONSTRUCTION OF ALL PUBLIC IMPROVEMENTS SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION (1979 EDITION) AND APPROPRIATE STANDARD DRAWINGS OF THE CITY OF NEWPORT BEACH (STANDARD DRAWINGS ARE THOSE DATED 3-1-73 OR LATER).
2. ALL UNDERGROUND WORK SHALL BE COMPLETED PRIOR TO PAVING.
3. EXISTING UNDERGROUND UTILITIES ARE AS PER AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION AND ELEVATION IN THE FIELD.
4. ALL WATER MAINS AND LATERALS SHALL BE DUCTILE IRON PIPE, CLASS 50 MINIMUM, UNLESS OTHERWISE NOTED WITH 8 MIL POLYETHYLENE ENCASEMENT.
5. WATER PIPE LAID ON CURVES WITH RADII BETWEEN 80' AND 185' SHALL USE 6.5' PIPE LENGTHS. CONSTRUCT THRUST BLOCKS PER CITY STD. 510-L. PIPE SHALL NOT BE DEFLECTED MORE THAT 3° PER JOINT. WHEN NECESSARY, SHORT SECTIONS OF PIPE SHALL BE USED TO ACCOMPLISH THE DESIRED DEFLECTION. THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS GREATER THAN 5°.
6. UTILITY AND STORM DRAIN LINE DISTANCES SHOWN IN PROFILE ARE HORIZONTAL DISTANCES.
7. THE WALLS AND FACES OF ALL EXCAVATIONS GREATER THAN FIVE (5) FEET IN DEPTH SHALL BE EFFECTIVELY GUARDED BY A SHORING SYSTEM. SLOPING OF THE GROUND OR OTHER EQUIVALENT MEANS. TRENCHES LESS THAN FIVE (5) FEET IN DEPTH SHALL ALSO BE GUARDED WHEN EXAMINATION INDICATES HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED.
8. THE CONTRACTOR(S) SHALL OBTAIN A PERMIT TO PERFORM EXCAVATION OR TRENCH WORK AS DESCRIBED IN NOTE NO. 7 ABOVE FROM CAL/OSHA.
9. BEDDING MATERIAL SHALL BE USED IN ALL UTILITY TRENCHES, INCLUDING WATER MAINS.

EMERGENCY TELEPHONE NUMBERS

AGENCY	NUMBER	NAME
SOUTHERN CALIFORNIA GAS COMPANY	634-3128	
SOUTHERN CALIFORNIA EDISON COMPANY	835-3633	
PACIFIC TELEPHONE COMPANY	1-800-422-4133	
CITY OF NEWPORT BEACH (SEWER & WATER).	640-2221	JOE DEVLIN
COUNTY SANITATION DISTRICTS	962-2411 EXT. 241	
TELEPROMPTER CORP. OF NEWPORT BEACH	642-3260	
COMMUNITY CABLEVISION	644-4471	



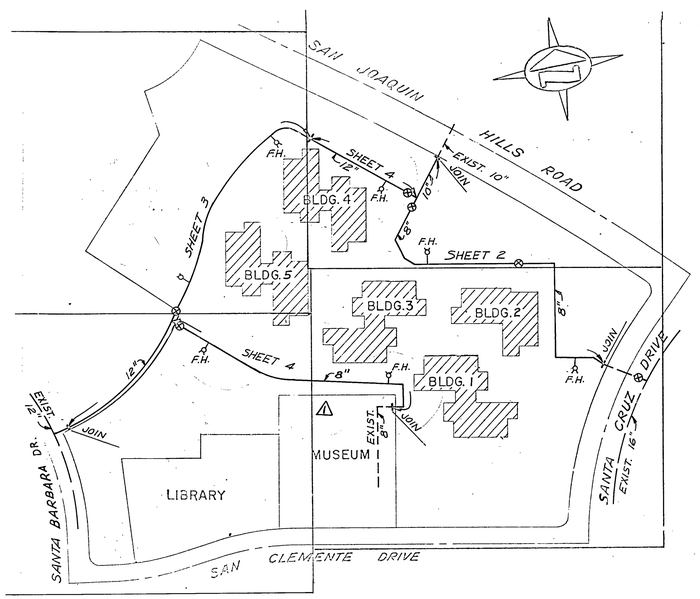


⑦ PRIVATE FIRE SERVICE
PER CITY STD. 512-L
SCALE 1" = 2'

CONSTRUCTION NOTES & QUANTITY ESTIMATE

	ITEM	UNIT	QUANTITY
* ①	INSTALL 10" D.I.P. WATER MAIN (CLASS 50)	L.F.	58.5
* ②	INSTALL 8" D.I.P. WATER MAIN (CLASS 50)	L.F	1446
③	INSTALL 6" GATE VALVE } OR BUTTERFLY VALVE APPROVED	EA.	5
④	INSTALL 8" GATE VALVE } OR BUTTERFLY VALVE APPROVED	EA.	3
⑤	INSTALL FIRE HYDRANT PER CITY STD.-500-L	EA.	6
⑥	INSTALL 2" STANDARD WATER SERVICE PER CITY STD-503-L.	EA.	6
⑦	INSTALL PRIVATE FIRE SERVICE PER CITY STD-512-L AND DETAIL HEREON.	EA.	5
⑧	INSTALL 12" GATE VALVE OR APPROVED BUTTERFLY VALVE.	EA.	2
* ⑨	INSTALL 12" D.I.P. WATER MAIN (CLASS 50)	L.F.	1427
⑩	INSTALL AIR AND VACUUM RELEASE VALVE PER CITY STD. 515-L.	EA.	1
* ⑪	INSTALL 6" D.I.P. WATER MAIN (CLASS 50)	L.F.	185 ±

* IN LOOSE POLYETHYLENE 8 MIL ENCASEMENT PER STD. SPEC. SECTION 207-9.2.6.



INDEX MAP

RESUB. 501

STEPPAT & ASSOCIATES, INC. CONSULTING CIVIL ENGINEERS
18001 Skypark Circle Suite M Irvine, California 92714 (714) 545-8401
Fritz C. Heppat 7-11-80
RCE 19249

CITY OF NEWPORT BEACH
APPROVED BY:
Benjamin C. Nolan 2-1-80
PUBLIC WORKS DIRECTOR DATE
R.C.E NO. 12896

PLAN AND PROFILE
WATER MAIN
CIVIC PLAZA

SHEET 1 OF 4

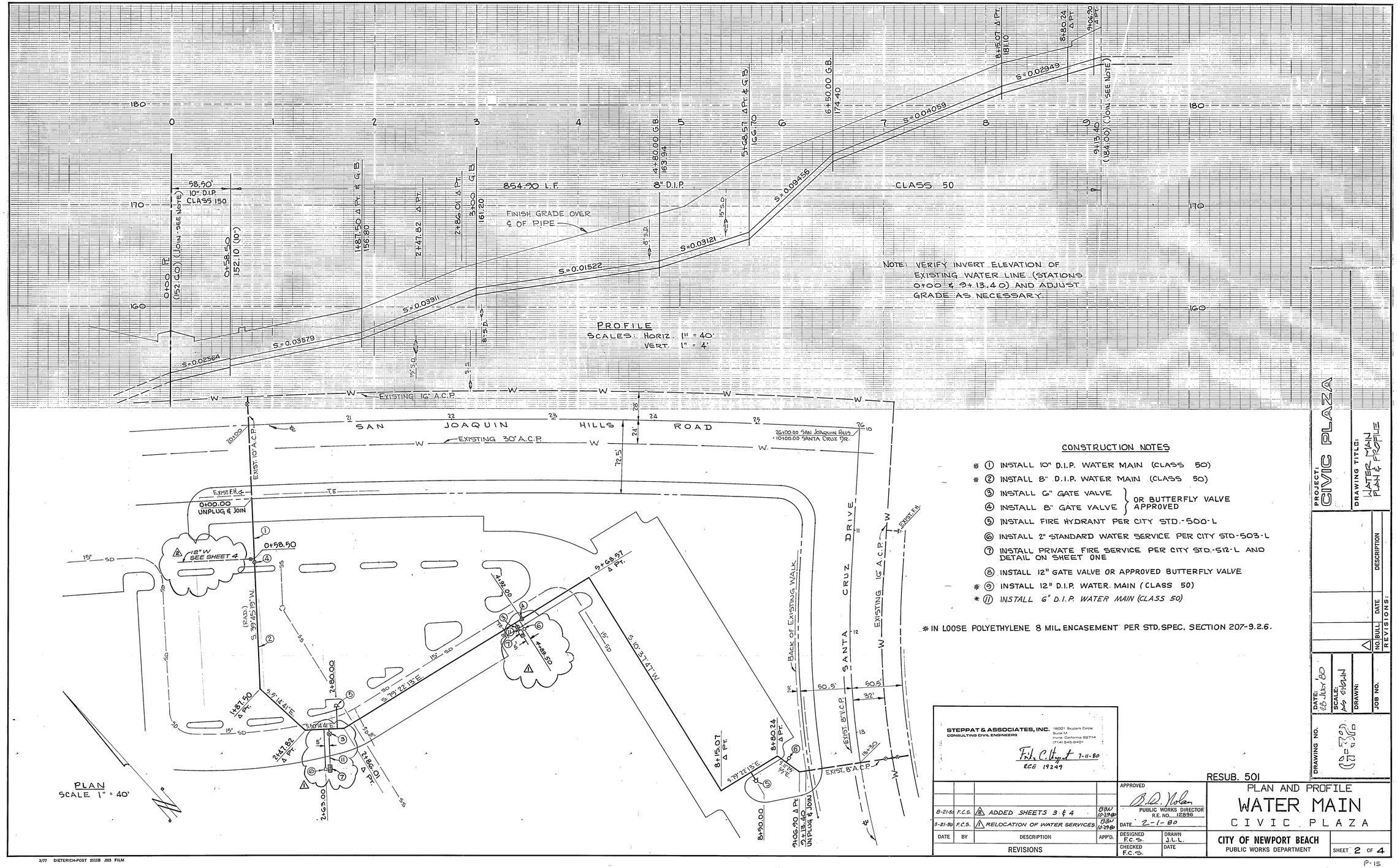
PROJECT: CIVIC PLAZA
DRAWING TITLE: WATER MAIN NOTES & DETAILS

NO.	DATE	DESCRIPTION
1	8-21-80	ADDED SHEETS 3 & 4
2	8-21-80	ADDITION OF WATER LINE

DATE: 23 JULY 80
SCALE: AS SHOWN
DRAWN:
JOB NO.
DRAWING NO. 501

RESUB. 501
SHEET 1 of 4

P-15
6983-4



CONSTRUCTION NOTES

* ① INSTALL 10" D.I.P. WATER MAIN (CLASS 50)
* ② INSTALL 8" D.I.P. WATER MAIN (CLASS 50)
③ INSTALL 6" GATE VALVE
④ INSTALL 8" GATE VALVE
} OR BUTTERFLY VALVE APPROVED
⑤ INSTALL FIRE HYDRANT PER CITY STD.-500-L
⑥ INSTALL 2" STANDARD WATER SERVICE PER CITY STD-503-L
⑦ INSTALL PRIVATE FIRE SERVICE PER CITY STD.-512-L AND DETAIL ON SHEET ONE
⑧ INSTALL 12" GATE VALVE OR APPROVED BUTTERFLY VALVE
* ⑨ INSTALL 12" D.I.P. WATER MAIN (CLASS 50)
* ⑪ INSTALL 6" D.I.P. WATER MAIN (CLASS 50)

* IN LOOSE POLYETHYLENE 8 MIL ENCASEMENT PER STD. SPEC. SECTION 207-9.2.6.

STEPPAT & ASSOCIATES, INC.
CONSULTING CIVIL ENGINEERS
18001 Skypark Circle
Suite M
Irvine, California 92714
(714) 545-8401
Fred C. Hyatt 7-11-80
RCE 19249

DATE	BY	DESCRIPTION	APP'D.
8-21-80	F.C.S.	⚠ ADDED SHEETS 3 & 4	BBU 10398
8-21-80	F.C.S.	⚠ RELOCATION OF WATER SERVICES	BBU 10398

REVISIONS

APPROVED
O. D. Nolan
PUBLIC WORKS DIRECTOR
R.E. NO. 12896
DATE 2-1-80

DESIGNED	DRAWN
F.C.S.	J.L.L.
CHECKED	DATE
F.C.S.	

RESUB. 501

PLAN AND PROFILE
WATER MAIN
CIVIC PLAZA

CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

SHEET 2 OF 4

PROJECT: CIVIC PLAZA
DRAWING TITLE: WATER MAIN PLAN & PROFILE

NO.	BULL	DATE	DESCRIPTION
⚠			

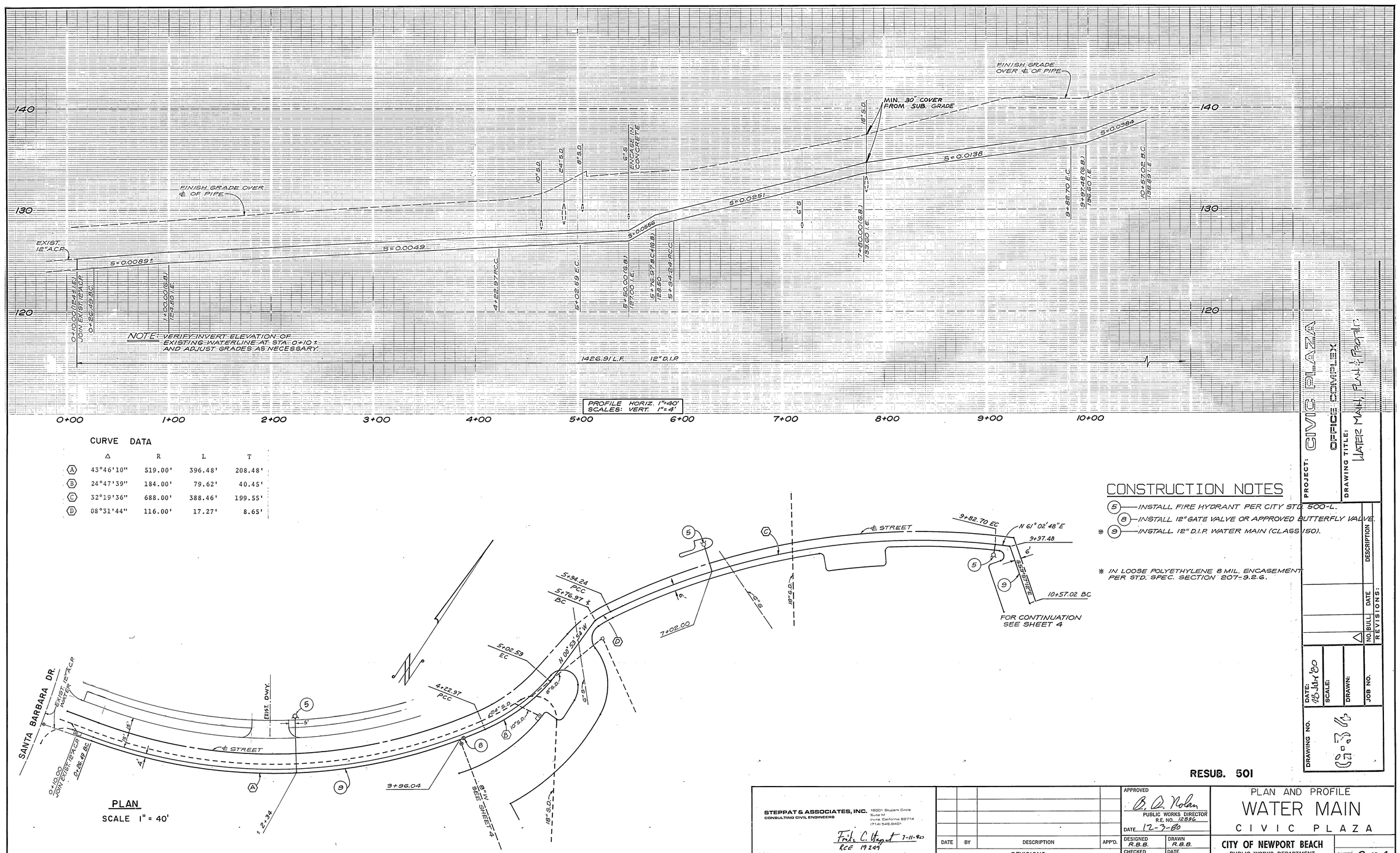
REVISIONS:

DATE: 28 July 80
SCALE: As shown
DRAWN:
JOB NO.
DRAWING NO. (17 of 75)

RESUB. 501
SHEET 2 of 4

3/77 DIETERICH-POST 2111B .003 FILM

P-15
6483-4



CURVE DATA

	Δ	R	L	T
(A)	43°46'10"	519.00'	396.48'	208.48'
(B)	24°47'39"	184.00'	79.62'	40.45'
(C)	32°19'36"	688.00'	388.46'	199.55'
(D)	08°31'44"	116.00'	17.27'	8.65'

PLAN
SCALE 1" = 40'

CONSTRUCTION NOTES

(5) INSTALL FIRE HYDRANT PER CITY STD. 500-L.
(6) INSTALL 12" GATE VALVE OR APPROVED BUTTERFLY VALVE.
* (9) INSTALL 12" D.I.P. WATER MAIN (CLASS 150).

* IN LOOSE POLYETHYLENE 8 MIL. ENCASEMENT PER STD. SPEC. SECTION 207-9.2.6.

RESUB. 501

STEPPAT & ASSOCIATES, INC. CONSULTING CIVIL ENGINEERS
18001 Skypark Circle, Suite M, Irvine California 92714, (714) 545-8401
Fritz C. Heppt 7-11-80
RCE 19249

DATE	BY	DESCRIPTION	APP'D.
		REVISIONS	

APPROVED
B. A. Nolan
PUBLIC WORKS DIRECTOR
R.E. NO. 12896
DATE 12-3-80

DESIGNED R.B.B. | DRAWN R.B.B.
CHECKED F.C.S. | DATE 7-11-80

PLAN AND PROFILE
WATER MAIN
CIVIC PLAZA

CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

SHEET 3 OF 4

PROJECT: CIVIC PLAZA OFFICE COMPLEX
DRAWING TITLE: WATER MAIN PLAN & PROFILE

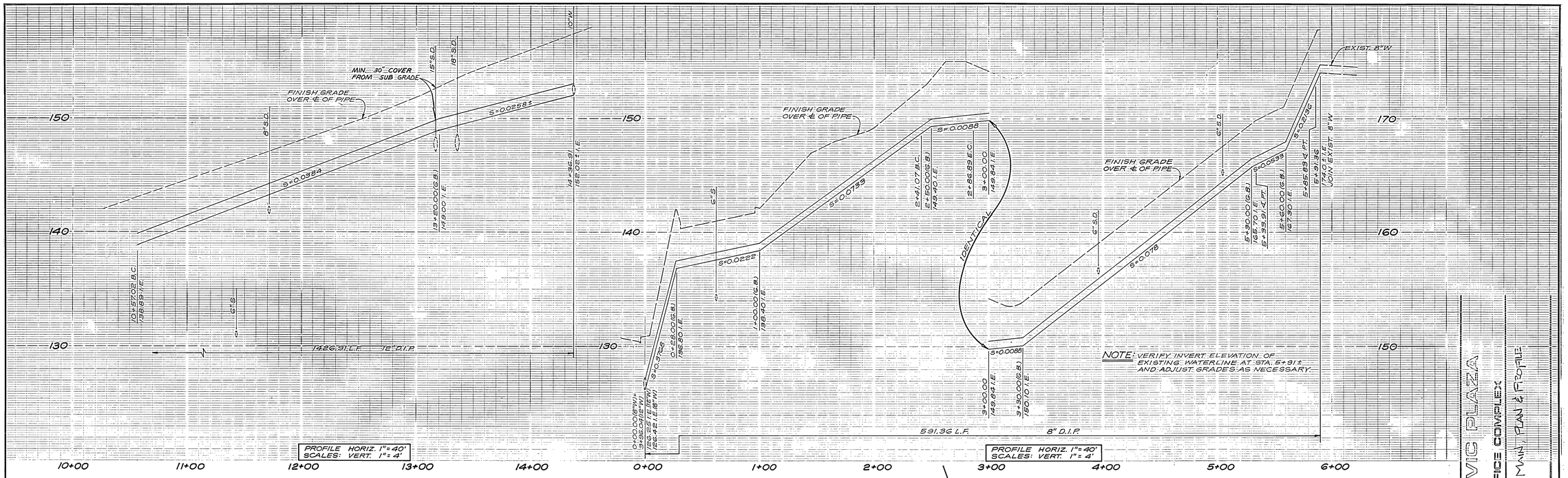
NO.	BULL	DATE	DESCRIPTION
			REVISIONS:

DATE: 28 JULY 80
SCALE:
DRAWN:
JOB NO.
DRAWING NO. W-3

RESUB. 501
SHEET 3 of 4

3/77 DIETERICH-POST 2111B .003 FILM

P-15
6483-4



CONSTRUCTION NOTES:

* (2) INSTALL 8" D.I.P. WATER MAIN (CLASS 50).
(4) INSTALL 8" GATE VALVE OR APPROVED BUTTERFLY VALVE.
(5) INSTALL FIRE HYDRANT PER CITY STD. 500-L.
(6) INSTALL 2" STANDARD WATER SERVICE PER CITY STD. 503-L.
(7) INSTALL PRIVATE FIRE SERVICE PER CITY STD. 512-L AND DETAIL ON SHEET 1.
(8) INSTALL 12" GATE VALVE OR APPROVED BUTTERFLY VALVE.
(10) INSTALL AIR AND VACUUM RELEASE VALVE PER CITY STD. 515-L.
(3) INSTALL 6" GATE VALVE OR APPROVED BUTTERFLY VALVE.
* (9) INSTALL 12" D.I.P. WATER MAIN (CLASS 50)
* (11) INSTALL 6" D.I.P. WATER MAIN (CLASS 50)

* IN LOOSE POLYETHYLENE 8 MIL. ENCASEMENT PER STANDARD SPEC. SECTION 207-9.2.6.

STEPPAT & ASSOCIATES, INC.
CONSULTING CIVIL ENGINEERS
18001 Skypark Circle
Suite M
Irvine, California 92714
(714) 545-8401
Fred C. Steppat 7-11-80
RCE 19249

DATE	BY	DESCRIPTION	APP'D.
		REVISIONS	

APPROVED
R. A. Nolan
PUBLIC WORKS DIRECTOR
R.E. NO. 12690
DATE 12-3-80

DESIGNED R.B.B. | DRAWN R.B.B.
CHECKED F.C.S. | DATE 7-11-80

PLAN AND PROFILE
WATER MAIN
CIVIC PLAZA

CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

SHEET 4 OF 4

PROJECT: CIVIC PLAZA OFFICE COMPLEX
DRAWING TITLE: WATER MAIN PLAN & PROFILE

NO.	BULL	DATE	DESCRIPTION
			REVISIONS:

DATE: 18 July 80
SCALE:
DRAWN:
JOB NO.
DRAWING NO. 53

RESUB 501

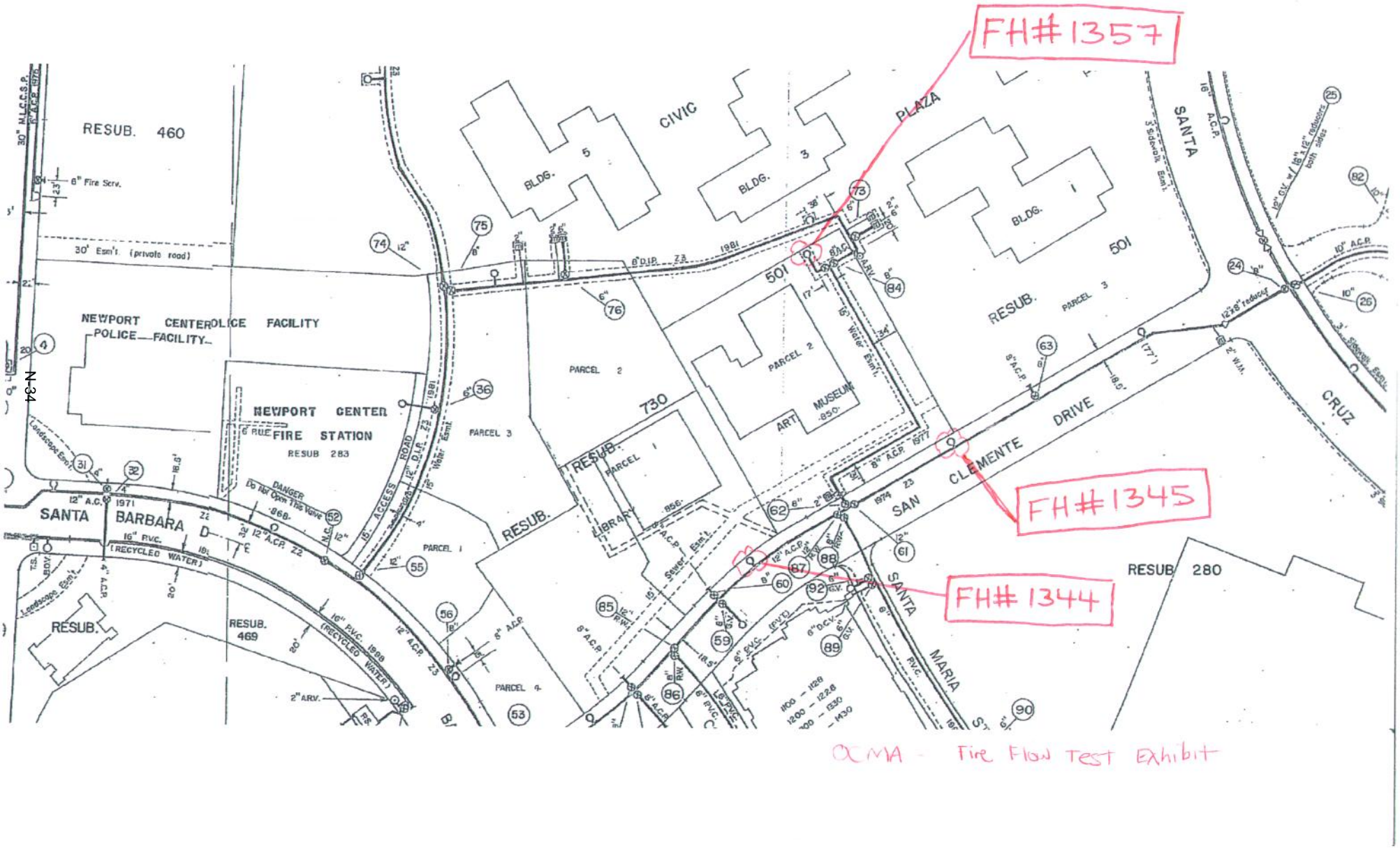
RESUB 501
SHEET 4 of 4

3/77 DIETERICH-POST 2111B .003 FILM

Appendix 3

Fire Hydrant Flow Test Results

Test #1 Flow FH 1345
Test #2 Flow FH 1344
Test #3 Flow FH 1357



OCMA - Fire Flow Test Exhibit

CITY OF NEWPORT BEACH
UTILITIES DEPARTMENT

FIRE HYDRANT FLOW TEST

AMOUNT PAID: $343.00 DATE: 09/15/2015
CHECK NO: TIME: 8:00 AM
TEST NO: WEATHER: CLOUDY

PROJECT:
PROJECT LOCATION: OCMA
TEST CONDUCTED FOR: FUSCOE ENGINEERING
TEST PERFORMED BY: BULLMAN, O'SULLIVAN
TEST WITNESSED BY:

FIELD OBSERVATIONS AND FLOW DATA

STATIC HYDRANT # : 1344 LOCATION: 856 SAN CLEMENTE DR
F/H MANUFACTURER: JONES NUMBER & SIZE OF OUTLETS: 2-2.5" 1-4"
STATIC PRESSURE, (Ps , psi), PRE-FLOW: 117
RESIDUAL PRESSURE, (Pr , psi) FLOWING: 102
FLOW HYDRANT # : 1345 LOCATION: 850 SAN CLEMENTE DR
F/H MANUFACTURER: JONES NUMBER & SIZE OF OUTLETS: 2- 2.5" 1-4 "
STATIC PRESSURE, PRE-FLOW (INFO ONLY, NOT FOR TEST CALCS) :
F/H OUTLET SIZE (2.5 or 4.0): 2.5 (d, inches)
FLOW LOSS COEFFICIENT - TUBE C=1.0 / BUTT C=0.9 0.9
PITOT GAUGE READING (p, psi): 80

OBSERVED FLOW: THE OBSERVED FLOW FROM A HYDRANT OUTLET IS CALCULATED FROM THE FOLLOWING EQUATION:

$$Q_s = 29.83(Cd^2)\sqrt[2]{p}$$

WHERE; Q IS THE OBSERVED FLOW IN GPM; d IS THE OUTLET DIAMETER IN INCHES; p IS THE PITOT GAUGE PRESSURE IN PSI; AND C IS THE FLOW LOSS COEFFICIENT (C = 1.0 FOR FLOW TUBES AND C = 0.9 FOR BUTT FLOW READINGS).

5

OBSERVED FLOW (Qs, gpm): 1501 GPM

DISCHARGE CALCS: THE DISCHARGE FOR A GIVEN FIRE HYDRANT CAN BE DETERMINED FROM THE FOLLOWING EQUATION USING THE INITIAL (STATIC) WATER PRESSURE AND THE RESIDUAL (DYNAMIC) WATER PRESSURE:

$$Q_r = Q_s\left(\frac{P_s - 20}{P_s - P_r}\right)^{0.54}$$

WHERE; Q (STATIC OR RESIDUAL) IS THE FLOW IN GPM; AND P (STATIC OR RESIDUAL) IS THE PRESSURE IN PSI. NOTE: A 10 PSI DROP IS REQUIRED FOR VALID TEST!

CALCULATED FLOW AT 20 psi (Qr, gpm): 4112 GPM

CITY OF NEWPORT BEACH
UTILITIES DEPARTMENT

FIRE HYDRANT FLOW TEST

AMOUNT PAID: $343.00 DATE: 09/15/2015
CHECK NO: TIME: 8:00 AM
TEST NO: WEATHER: CLOUDY

PROJECT:
PROJECT LOCATION: OCMA
TEST CONDUCTED FOR: FUSCOE ENGINEERING
TEST PERFORMED BY: BULLMAN, O'SULLIVAN
TEST WITNESSED BY:

FIELD OBSERVATIONS AND FLOW DATA

STATIC HYDRANT # : 1345 LOCATION: 850 SAN CLEMENTE DR
F/H MANUFACTURER: JONES NUMBER & SIZE OF OUTLETS: 2-2.5" 1-4"
STATIC PRESSURE, (Ps , psi), PRE-FLOW: 113
RESIDUAL PRESSURE, (Pr , psi) FLOWING: 95
FLOW HYDRANT # : 1357 LOCATION: 850 SAN CLEMENTE DR
F/H MANUFACTURER: JONES NUMBER & SIZE OF OUTLETS: 2- 2.5" 1-4 "
STATIC PRESSURE, PRE-FLOW (INFO ONLY, NOT FOR TEST CALCS) :
F/H OUTLET SIZE (2.5 or 4.0): 2.5 (d, inches)
FLOW LOSS COEFFICIENT - TUBE C=1.0 / BUTT C=0.9 0.9
PITOT GAUGE READING (p, psi): 82

OBSERVED FLOW: THE OBSERVED FLOW FROM A HYDRANT OUTLET IS CALCULATED FROM THE FOLLOWING EQUATION:

$$Q_s = 29.83(Cd^2)\sqrt[2]{p}$$

WHERE; Q IS THE OBSERVED FLOW IN GPM; d IS THE OUTLET DIAMETER IN INCHES; p IS THE PITOT GAUGE PRESSURE IN PSI; AND C IS THE FLOW LOSS COEFFICIENT (C = 1.0 FOR FLOW TUBES AND C = 0.9 FOR BUTT FLOW READINGS).

5

OBSERVED FLOW (Qs, gpm): 1519 GPM

DISCHARGE CALCS: THE DISCHARGE FOR A GIVEN FIRE HYDRANT CAN BE DETERMINED FROM THE FOLLOWING EQUATION USING THE INITIAL (STATIC) WATER PRESSURE AND THE RESIDUAL (DYNAMIC) WATER PRESSURE:

$$Q_r = Q_s\left(\frac{P_s - 20}{P_s - P_r}\right)^{0.54}$$

WHERE; Q (STATIC OR RESIDUAL) IS THE FLOW IN GPM; AND P (STATIC OR RESIDUAL) IS THE PRESSURE IN PSI. NOTE: A 10 PSI DROP IS REQUIRED FOR VALID TEST!

CALCULATED FLOW AT 20 psi (Qr, gpm): 3688 GPM

CITY OF NEWPORT BEACH
UTILITIES DEPARTMENT

FIRE HYDRANT FLOW TEST

AMOUNT PAID: $343.00 DATE: 09/15/2015
CHECK NO: TIME: 8:00 AM
TEST NO: WEATHER: CLOUDY

PROJECT:
PROJECT LOCATION: OCMA
TEST CONDUCTED FOR: FUSCOE ENGINEERING
TEST PERFORMED BY: BULLMAN, O'SULLIVAN
TEST WITNESSED BY:

FIELD OBSERVATIONS AND FLOW DATA

STATIC HYDRANT # : 1345 LOCATION: 850 SAN CLEMENTE DR
F/H MANUFACTURER: JONES NUMBER & SIZE OF OUTLETS: 2-2.5" 1-4"
STATIC PRESSURE, (Ps , psi), PRE-FLOW: 113
RESIDUAL PRESSURE, (Pr , psi) FLOWING: 95
FLOW HYDRANT # : 1344 LOCATION: 856 SAN CLEMENTE DR
F/H MANUFACTURER: JONES NUMBER & SIZE OF OUTLETS: 2- 2.5" 1-4 "
STATIC PRESSURE, PRE-FLOW (INFO ONLY, NOT FOR TEST CALCS) :
F/H OUTLET SIZE (2.5 or 4.0): 2.5 (d, inches)
FLOW LOSS COEFFICIENT - TUBE C=1.0 / BUTT C=0.9 0.9
PITOT GAUGE READING (p, psi): 85

OBSERVED FLOW: THE OBSERVED FLOW FROM A HYDRANT OUTLET IS CALCULATED FROM THE FOLLOWING EQUATION:

$$Q_s = 29.83(Cd^2)\sqrt[2]{p}$$

WHERE; Q IS THE OBSERVED FLOW IN GPM; d IS THE OUTLET DIAMETER IN INCHES; p IS THE PITOT GAUGE PRESSURE IN PSI; AND C IS THE FLOW LOSS COEFFICIENT (C = 1.0 FOR FLOW TUBES AND C = 0.9 FOR BUTT FLOW READINGS).

5

OBSERVED FLOW (Qs, gpm): 1547 GPM

DISCHARGE CALCS: THE DISCHARGE FOR A GIVEN FIRE HYDRANT CAN BE DETERMINED FROM THE FOLLOWING EQUATION USING THE INITIAL (STATIC) WATER PRESSURE AND THE RESIDUAL (DYNAMIC) WATER PRESSURE:

$$Q_r = Q_s\left(\frac{P_s - 20}{P_s - P_r}\right)^{0.54}$$

WHERE; Q (STATIC OR RESIDUAL) IS THE FLOW IN GPM; AND P (STATIC OR RESIDUAL) IS THE PRESSURE IN PSI. NOTE: A 10 PSI DROP IS REQUIRED FOR VALID TEST!

CALCULATED FLOW AT 20 psi (Qr, gpm): 3755 GPM

Appendix 4

Conceptual Site Plan

PROJECT INFORMATION

Site Address:
850 San Clemente Drive
Newport Beach, CA 92660

OWNERSHIP	ARCHITECT	DESIGN ARCHITECT
Related California 18201 Von Karman Avenue, Suite 900 Irvine, CA 92612 Contact: Steven Oh. T:949.660.7272	MVE + Partners 1900 Main St, Suite 800 Irvine, CA 92614 Contact: Matthew F. McLarand T:949.809.3388 F:949.809.3399	Robert A.M. Stern Architects, LLP 460 West 34th Street New York, NY 10001 Contact: Daniel Lobitz T:212.967.5100 F:212.967.5588
CIVIL	**LANDSCAPE**	**LAND USE CONSULTANT**
Fuscoe Engineering Inc. 16795 Von Karman, Suite 100 Irvine, California 92606 Contact: John Olivier T:213.673.4400 F:213.673.4410	Pamela Burton & Company 1430 Olympic Boulevard Santa Monica, CA 90404 Contact: Pamela Burton T:310.828.6373 F:310.828.8054	Manatt, Phelps & Phillips, LLP 695 Town Center Drive 14th Floor Costa Mesa, CA 92626 Contact: Sean Matsler T: 714.371.2500 F:714.371.2550

PROJECT DESCRIPTION
THE PROJECT CONSISTS OF (1) MULTI-STORY RESIDENTIAL BUILDING.
25 STORIES OF RESIDENTIAL
2 LEVELS OF UNDERGROUND PARKING
BUILDING SHALL BE COMPLETELY SPRINKLERED.

LEGAL DESCRIPTION

PARCEL 2 OF THE PARCEL MAP, IN THE CITY OF NEWPORT BEACH, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS SHOWN ON A MAP RECORDED IN BOOK 81, PAGES 8 AND 9, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT THEREFROM ALL OIL, OIL RIGHTS, MINERALS, MINERAL RIGHTS, NATURAL GAS RIGHTS, AND OTHER HYDROCARBONS BY WHATSOEVER NAME KNOWN, GEOTHERMAL STEAM AND ALL PRODUCTS DERIVED FROM ANY OF THE FOREGOING, THAT MAY BE WITHIN OR UNDER SAID LAND, TOGETHER WITH THE PERPETUAL RIGHT OF DRILLING, MINING, EXPLORING AND OPERATING THEREFORE, AND STORING IN AND REMOVING THE SAME FROM SAID LAND OR ANY OTHER LANDS, INCLUDING THE RIGHT TO WHIPSTOCK OR DIRECTIONALLY DRILL AND MINE FROM LANDS OTHER THAN THE SAID LAND, OIL OR GAS WELLS, TUNNELS AND SHAFTS INTO, THROUGH OR ACROSS THE SUBSURFACE OF THE SAID LAND AND TO BOTTOM SUCH WHIPSTOCKED OR DIRECTIONALLY DRILLED WELLS, TUNNELS AND SHAFTS UNDER AND BENEATH OR BEYOND THE EXTERIOR LIMITS THEREOF, AND TO REDRILL, RETUNNEL, EQUIP, MAINTAIN, REPAIR, DEEPEN AND OPERATE ANY SUCH WELLS OR MINES, WITHOUT, HOWEVER, THE RIGHT TO DRILL, MINE, STORE, EXPLORE AND OPERATE THROUGH THE SURFACE OR THE UPPER 500 FEET OF THE SUBSURFACE OF SAID LAND, AS RESERVED BY THE IRVINE COMPANY IN THE DEED RECORDED FEBRUARY 28, 1977, IN BOOK 12085, PAGE 1561, OF OFFICIAL RECORDS.

BUILDING CODE: CALIFORNIA BUILDING CODE 2013
*NOTE: CBC 2016 & IBC 2015 CODES EFFECTIVE JAN. 01,2017

BUILDING TYPE OF CONSTRUCTION:
TYPE I-A - FULLY SPRINKLERED

GOVERNING AGENCY:
CITY OF NEWPORT BEACH

ZONE
CURRENT ZONE

LOT	ZONE	GENERAL PLAN DESIGNATION
Lot 1 of Huber Tract APN: 442-261-05)	PC-19	San Joaquin Plaza

PROPOSED ZONE - RM-100

LOT AREA AND LOT AREA COVERAGE

Lot Area	86,924 sf (2.00 acre)
Lot Coverage -	86,924 sf (2.00 acre)
Tower (33%) -	25,753 sf (0.59 acre)
Subterranean Garage (69%) -	60,259 sf (1.38 acre)
Subtotal -	**86,012 sf (1.97 acre)**

SETBACKS

REQUIRED:	
SAN CLEMENTE DR -	**15 FT**
SIDE YARD -	**5 FT**
REAR YARD -	**5 FT**
PROVIDED:	
SAN CLEMENTE DR -	**25 FT**
SIDE YARD -	**(MIN.) 10 FT**
REAR YARD -	**10 FT**

HEIGHT
Height District (Per Blocks: 400,500,600) - Max. Height Allowed 295 FT

Proposed Building Height: 291'-6" ft (Roof of Last Occupied Space)
(25 Stories of Residential over 2 Levels of Parking)

RESIDENTIAL DENSITY
100 / 2.00 ac = 50 Units per Acre

PARKING:

REQUIRED:	**238 STALLS**
RESIDENTIAL	200 STALLS
GUEST	37.5 STALLS
PROVIDED:	**238 STALLS**
RESIDENTIAL	200 STALLS
GUEST	38 STALLS
ADDITIONAL TEMPORARY/VALET QUEUE PARKING	*12 STALLS*
SUBTOTAL:	***250 STALLS***

*PER GENERAL PLAN PC-56: 2 SPACES PER UNIT INCLUDES 1 COVERED: PLUS 0.5 SPACES PER UNIT UP TO 50 UNITS, THEN 0.25 SPACES PER UNIT THEREAFTER FOR GUEST PARKING

FLOOR AREA

1ST FLOOR AREA:	20,273 SF	14TH FLOOR AREA:	15,085 SF
2ND FLOOR AREA:	15,886 SF	15TH FLOOR AREA:	14,875 SF
3RD FLOOR AREA:	16,461 SF	16TH FLOOR AREA:	14,875 SF
4TH FLOOR AREA:	16,461 SF	17TH FLOOR AREA:	13,400 SF
5TH FLOOR AREA:	16,461 SF	18TH FLOOR AREA:	13,414 SF
6TH FLOOR AREA:	15,079 SF	19TH FLOOR AREA:	13,414 SF
7TH FLOOR AREA:	15,193 SF	20TH FLOOR AREA:	13,317 SF
8TH FLOOR AREA:	15,193 SF	21TH FLOOR AREA:	12,811 SF
9TH FLOOR AREA:	15,193 SF	22ND FLOOR AREA:	11,909 SF
10TH FLOOR AREA:	15,193 SF	23RD FLOOR AREA:	11,509 SF
11TH FLOOR AREA:	15,193 SF	24TH FLOOR AREA:	10,582 SF
12TH FLOOR AREA:	15,193 SF	25TH FLOOR AREA:	10,585 SF
13TH FLOOR AREA:	15,193 SF	**TOTAL:**	**362,750 SF**

PARKING STRUCTURE GROSS AREA:	115,828 SF
LEVEL P1 -	60,259 SF
LEVEL P2 -	55,569 SF
TOTAL GROSS BUILDING AREA:	478,578 SF
TOTAL PROPOSED FLOOR AREA:	
RESIDENTIAL BUILDING:	362,750 SF

***NOTE:** TOTAL ENCLOSED AREA OF ALL FLOORS PER PLANNED COMMUNITY DEVELOPMENT PLAN
(PC 19 AMENDMENT)

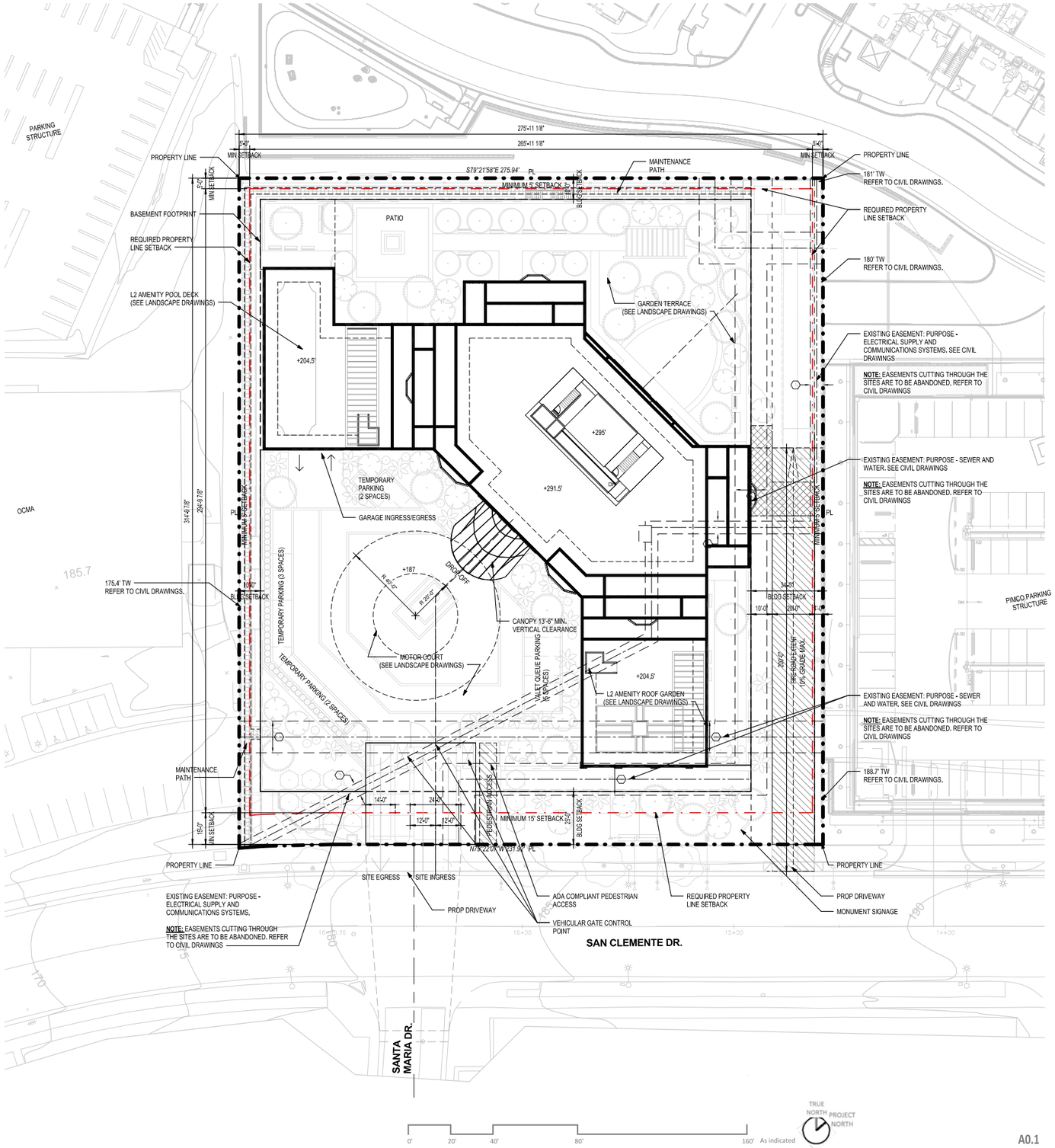
DWELLING UNITS (BEDROOM / FIXTURE COUNT):

2 BR / 3 BA	53 UNITS
3 BR / 4 BA	47 UNITS
TOTAL:	**100 UNITS**

OPEN SPACE:

REQUIRED		
COMMON OPEN SPACE	75 S.F. PER UNIT	7,500 SF
COMMON INDOOR SPACE	500 S.F.	500 SF
PRIVATE OPEN SPACE	30 S.F. PER 50% OF UNITS	1,500 SF
TOTAL REQUIRED:		**9,500 SF**
PROVIDED		
COMMON OPEN SPACE:		**25,255 SF**
GROUND LEVEL OUTDOOR AMENITIES -		17,097 SF
LEVEL 2 OUTDOOR AMENITY -		8,158 SF
TOTAL LANDSCAPING (10% MIN) -		*8,995 SF*
TOTAL NON-LANDSCAPED SPACE -		*16,260 SF*
COMMON INDOOR SPACE:		**20,855 SF**
GROUND LEVEL INDOOR AMENITY -		9,001 SF
LEVEL 2 INDOOR AMENITY -		11,854 SF
PRIVATE OPEN SPACE:		**21,444 SF**
UNIT INSTANCES (50% MIN) -		99 UNITS
TOTAL PROVIDED:		**67,554 SF**

***NOTE:** PROVIDED OPEN SPACE MAY CHANGE. THE PROJECT DESIGN WILL EXCEED THE REQUIREMENTS.



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Appendix 5

Excerpt from City of Newport Beach

WATER SUPPLY ASSESSMENT (WSA)

Analysis and Conclusions

The proposed Project evaluated in this Water Supply Assessment is a request to convert permitted development intensity associated with 79 un-built hotel rooms in the City of Newport Beach's Statistical Area L1 from "hotel rooms" to "multi-family residential units" and transfer those units to the San Joaquin Plaza portion of the NNCPC. The proposed Project also involves assigning previously unassigned development intensity for 15 un-built multi-family residential units permitted by the General Plan in MU-H3 designated areas to the NNCPC in San Joaquin Plaza. If the requested development intensity conversion, transfer, and assignment is approved by the City of Newport Beach, a total of 524 units would be permitted in San Joaquin Plaza (94 additional residential units and 430 units already permitted by the General Plan and NNCPC Development Plan).

Buildout of the City of Newport Beach's General Plan was considered in the water demand projections calculated by Metropolitan, MWDOC and OCWD. Therefore, Metropolitan's Regional Urban Water Management Plan. (2010), MWDOC's Regional Urban Water Management Plan (2011), and OCWD's Groundwater Management Plan 2009 Update evaluate the supply that would be required to service the 430 residential units already permitted in San Joaquin Plaza and the 15 un-built units allowed by the General Plan that are proposed to be assigned to San Joaquin Plaza. Metropolitan, MWDOC and OCWD all conclude that there will be adequate supplies in the average year, dry year, and multiple dry year scenarios through 2035. Therefore, Metropolitan's Regional Urban Water Management Plan (2010), MWDOC's Regional Urban Water Management Plan (2011), and OCWD's Groundwater Management Plan 2009 Update evaluate the supply that would be required to service the 430 residential units already permitted in San Joaquin Plaza and the 15 un-built units allowed by the General Plan that are proposed to be assigned to San Joaquin Plaza. Thus, the focus of this Assessment primarily involves the proposed conversion of 79 hotel units to 79 multi-family residential units, and whether supplies are sufficient to service 524 units of multi-family residential development that would be vested to the location of San Joaquin Plaza.

The water demand for this Project is calculated below for planning purposes only. This estimate is for planning purposes and shall not be construed as guaranteed water rights for the project. Actual water use would likely be reduced through water conservation programs being implemented in the City of Newport Beach and the continued use of recycled water where possible. The demand calculation is based on 228.1 GPCD, which is the City's target goal for year 2015. Because no specific development project is proposed as part of the Project, this Assessment assumes that the number of persons expected to reside in each multi-family residential is 2.19 persons per household, which is the average number of persons per household cited in the General Plan EIR.

Table 9, Water Demand for 79 Multi-Family Residential Units (not considered by the General Plan)

	Units/Population	Gallons/Day/Capita	Gallons/Day	Acre-Feet/Year
Multi-Family Residential Units	79 units/173 persons	228.1	39,463	44.20

Table 10, Water Demand for 15 Multi-Family Residential Units (considered by the General Plan)

	Units/Population	Gallons/Day/Capita	Gallons/Day	Acre-Feet/Year
Multi-Family Residential Units	15 units/33 persons	228.1	7,527	8.43

Table 11, Water Demand for 430 Multi-Family Residential Units (considered by the General Plan)

	Units/Population	Gallons/Day/Capita	Gallons/Day	Acre-Feet/Year
Multi-Family Residential Units	430 units/942 persons	228.1	214,870	240.58

Table 12, Total Residential Water Demand Projected in San Joaquin Plaza

	Units	Gallons/Day/Capita	Gallons/Day	Acre-Feet/Year
Multi-Family Residential Units	524/1,148 persons	228.1	261,858	293.2

As mentioned above, the proposed Project involves a request to convert permitted development intensity associated with 79 un-built hotel rooms in Statistical Area L1 from "hotel rooms" to "multi-family residential units" and transfer those units to the San Joaquin Plaza portion of the NNCPC. Therefore, this analysis also calculates the projected demand reduction associated with the elimination of 79 hotel rooms. Water use in hotels is highly dependent on occupancy rate, the number of persons occupying each room, the water conservation features incorporated into the hotel building, the water conservation operational practices of the hotel's management and the amount of water conservation practiced by hotel guests. In the City of Newport Beach, the MWDOC encourages water use reduction conservation programs for hotels in its service area, which has some effect on water use reduction. For purposes of this analysis, it is assumed that the water demand of a hotel room equates to the same demand as a residential unit housing one (1) person.

Table 13, Anticipated Water Demand Eliminated from Hotel Rooms (considered by the General Plan)

	Rooms	Gallons/Day/Unit	Gallons/Day	Acre-Feet/Year
Hotel Rooms	-79/-79 persons	228.1	-18,019	-20.18

Comparing Table 9 and Table 13, the proposed Project would result in an increased water demand of 24.02 acre-feet per year (AFY), which is less than one-tenth of one percent of the City's projected year 2035 total demand of 17,474 AFY. Based on the information contained in this Water Supply Assessment regarding the existing and future availability and reliability of imported water supplies as surmised from the Urban Water Management Plans of Metropolitan (2010), MWDOC (2011) and the City of Newport Beach (2010), and the OCWD Groundwater Management Plan (2009), there is an availability of sufficient supplies from imported water, local groundwater, and recycled water to service the proposed Project and other existing and projected development in the City of Newport Beach in normal year, single dry year and multiple dry year conditions. Additionally, there has been a trend of per capita water use reduction since 2005 and that trend is expected to continue to reach the City's water usage reduction goal of 202.8 GPCD by year 2020. These further reductions are not reflected in the calculated water demands above.

Appendix 6

IRWD Design Criteria

Table 3-1 Land Use and Water Use Factors

Code	Land Use description	Land Use: Agency	Land Use: Average Density	Local Demands: Local Interior	Local Demands: Local Exterior	Local Demands: Total	Irrigation Demands: % Irrigated Area	Irrigation Demands: Irrigation Factor
1100	***Residential***		*DU/Ac*		*Gal/DU/Day*			*Gal/Ac/Day*
1111	Res - Rural Density	Orange	0.30	300	750	1,050	5	2,800
1121	Res - Estate Density	Orange	1.20	300	300	600	8	2,900
1131	Res - Low Density	Orange	4.00	300	300	600	15	2,900
1141	Res - Low-Medium Density	Orange	10.50	200	100	300	22	3,300
1161	Res - Medium Density	Orange	19.50	225	185	410	17	3,100
1122	Res - Estate Density	Irvine	0.50	300	600	900	7	2,800
1132	Res - Low Density	Irvine	3.00	225	180	405	16	3,000
1162	Res - Medium Density	Irvine	7.50	200	110	310	20	3,100
1172	Res - Medium-High Density	Irvine	17.50	165	15	180	25	3,600
1182	Res - High Density	Irvine	32.50	180	20	200	20	3,300
1192	Res - High-Rise Density	Irvine	40	180	20	200	20	3,300
1133	Res - Low Density	Newport Beach	1.00	250	190	440	17	3,100
1153	Res - Medium-Low Density	Newport Beach	2.75	250	200	450	10	2,800
1163	Res - Medium Density	Newport Beach	5.00	190	60	250	22	3,300
1183	Res - High Density	Newport Beach	12.25	155	20	175	25	3,600
1134	Res - Low Density PC	Tustin	4.50	225	185	410	17	3,100
1164	Res - Medium Density PC	Tustin	11.80	155	15	170	25	3,600
1184	Res - High Density PC	Tustin	17.40	135	15	150	15	3,700
1115	Res - Rural Density	County	0.26	300	750	1,050	5	2,800
1135	Res - Suburban Density	County	9.25	225	180	405	16	3,000
1175	Res - Urban Density	County	29.00	165	15	180	25	3,600
1126	Res - Estate Density	Lake Forest	0.50	300	600	900	7	2,800
1136	Res - Low Density	Lake Forest	3.00	225	180	405	16	3,000
1166	Res - Medium Density	Lake Forest	7.50	200	110	310	20	3,100
1176	Res - Medium-High Density	Lake Forest	17.50	165	15	180	25	3,600
1186	Res - High Density	Lake Forest	32.50	180	20	200	20	3,300
1200	***Commercial***		*KSF/Ac*		*Gal/KSF/Day*			*Gal/Ac/Day*
1210	Comm - General Office		25.00	56	4	60	30	4,000
1221	Comm - Community		9.09	209	11	220	30	3,500
1222	Comm - Regional		10.53	180.5	9.5	190	20	5,000
1230	Comm - Recreation		8.33	54	6	60	30	4,500
1240	Comm - Institutional		8.88	39.38	5.62	45	50	2,750
1244	Comm - Hospital		8.70	218.50	11.50	230	25	2,850
1260	Comm - School		13.33	14.25	0.75	15	50	2,500
1273	Comm - Military Air Field							
1300	***Industrial***		*KSF/Ac*		*Gal/KSF/Day*			*Gal/Ac/Day*
1310	Industrial - Light		25.00	56	4	60	25	4,000
1320	Industrial - Heavy		25.00	4,500	500	5,000	25	4,000
	Open Space & Other							*Gal/Ac/Day*
1820	Park - Community						90	3,400
1830	Park - Regional						85	2,100
2100	AG - Low-Irrigated						100	1,800
2110	AG - Low-Irrigated (TIC)						100	1,800
2200	AG - High-Irrigated						100	3,100
2210	AG - High-Irrigated (TIC)						100	3,100

Note: The database includes the following land use codes that do not use set factors or do not generate water demands:
0 = area not served by IRWD; 1411 = Airports; 1413 = Freeway and Major Roads; 1850 = Park-Wildlife Preserve;
1880 = Park-Open Space (Rec); 1900 = Vacant; 4100 = Water Body; 9100-9199 = Mixed Use (uses a combination of factors)

Appendix 7

Water Demand Calculations

Newport Beach Condominiums
Newport Beach

Water Demand
Residential

Number Of Units	Avg Daily Flow (gpcd) *	Avg Persons Per DU	Daily Average Demand (gpd)	Annual Water Demand ac-ft/year
100	228.1	2.19	49,954	55.96

* 228.1 gpcd is representative of multi-family residential use per City of Newport Beach WSA (See Appendix 5)
gpcd = gallons per capita (person) per day

Water Demand
Amenities

Amenity	Size (sf)	Avg Daily Flow (gal/ksf/day)**	Avg Water Demand (gpd)	Annual Water Demand ac-ft/year
Fitness Center	500	300	150	0.168
Pool	500	300	150	0.168
Club Room	500	300	150	0.168
			sum	sum
			450	0.50

**Amenities - Avg Daily Flow Per IRWD Water Resources Master Plan
(See Apendix 6)

Total Project Demand 56 ac-ft/yr

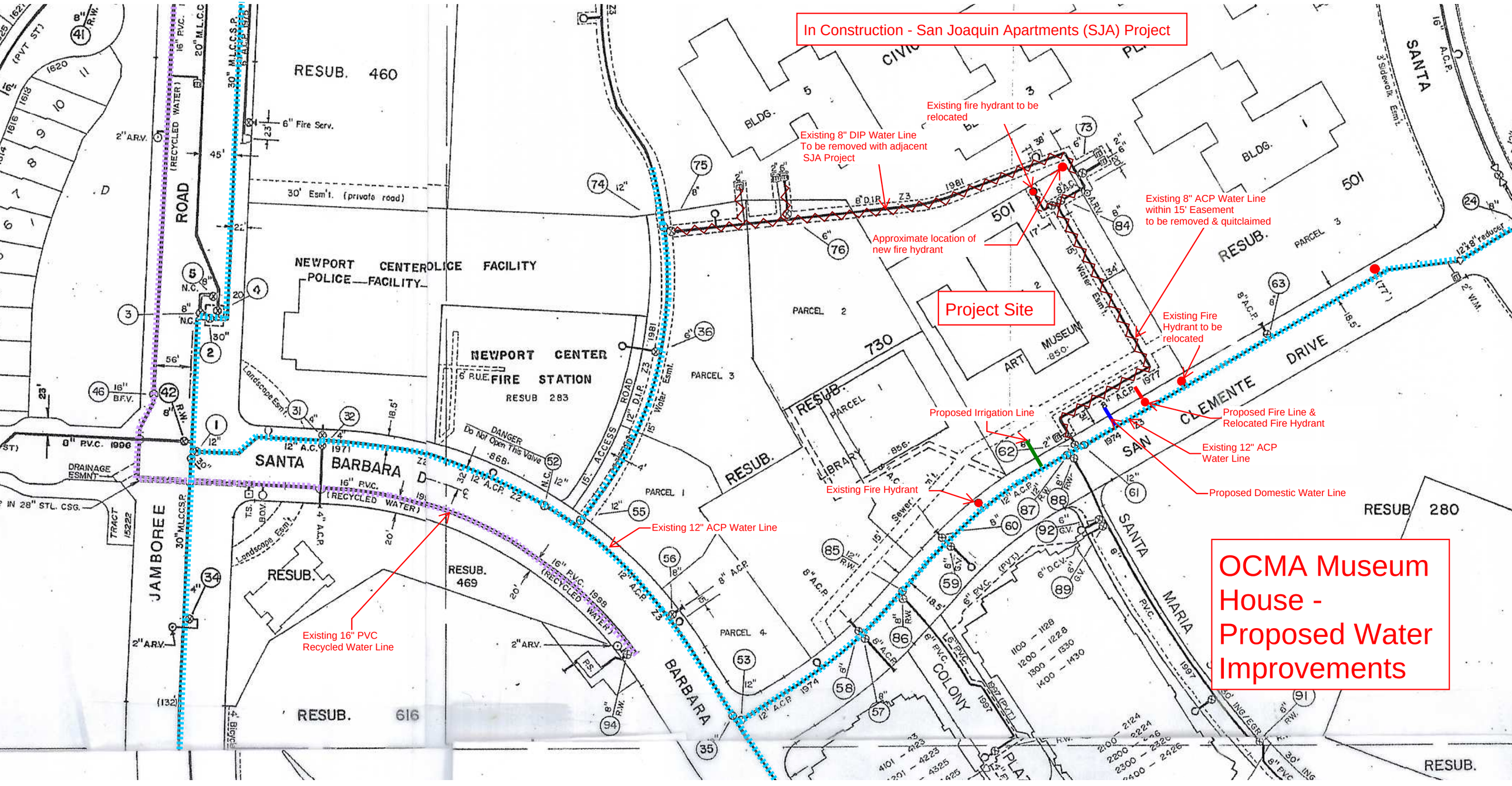
Water Demand
Existing Museum (Credit)

Amenity	Size (sf)	Avg Daily Flow (gal/ksf/day)**	Avg Water Demand (gpd)	Annual Water Demand ac-ft/year	
Museum (Credit)	23,395	300	7,019	8	(Credit)

Net Water Demand 48 ac-ft/yr

Appendix 8

Proposed Water Improvements Exhibit


In Construction - San Joaquin Apartments (SJA) Project
Existing fire hydrant to be relocated
Existing 8" DIP Water Line To be removed with adjacent SJA Project
Approximate location of new fire hydrant
Existing 8" ACP Water Line within 15' Easement to be removed & quitclaimed
Project Site
Existing Fire Hydrant to be relocated
Proposed Irrigation Line
Proposed Fire Line & Relocated Fire Hydrant
Existing 12" ACP Water Line
Proposed Domestic Water Line
Existing Fire Hydrant
Existing 12" ACP Water Line
Existing 16" PVC Recycled Water Line
OCMA Museum House - Proposed Water Improvements
RESUB. 460
NEWPORT CENTER POLICE FACILITY
NEWPORT CENTER FIRE STATION
RESUB 283
RESUB. 469
RESUB. 616
RESUB 280
PARCEL 1
PARCEL 2
PARCEL 3
PARCEL 4
SANTA BARBARA
SANTA CLEMENTE DRIVE
SANTA MARIA
JAMBOREE ROAD
NEWPORT CENTER ROAD
MUSEUM
LIBRARY
ART
BLDG.
501
730
6" Fire Serv.
30' Esm't. (private road)
8" P.V.C. 1996
16" P.V.C. (RECYCLED WATER) 1998
12" A.C.P. 1971
12" A.C.P. 1974
8" A.C.P. 1977
8" A.C.P. 1981
6" A.C.P.
8" D.I.P.
6" P.V.C.
8" P.V.C.
16" Water Esm't.
15' ACCESS
12" D.I.P.
DANGER Do Not Open This Valve
Landscape Esm't.
3' Sidewalk Esm't.
DRAINAGE ESMNT
2" A.R.V.
T.S.
B.O.V.
P.S.
Sewer
Bicycle
TRACT 15222