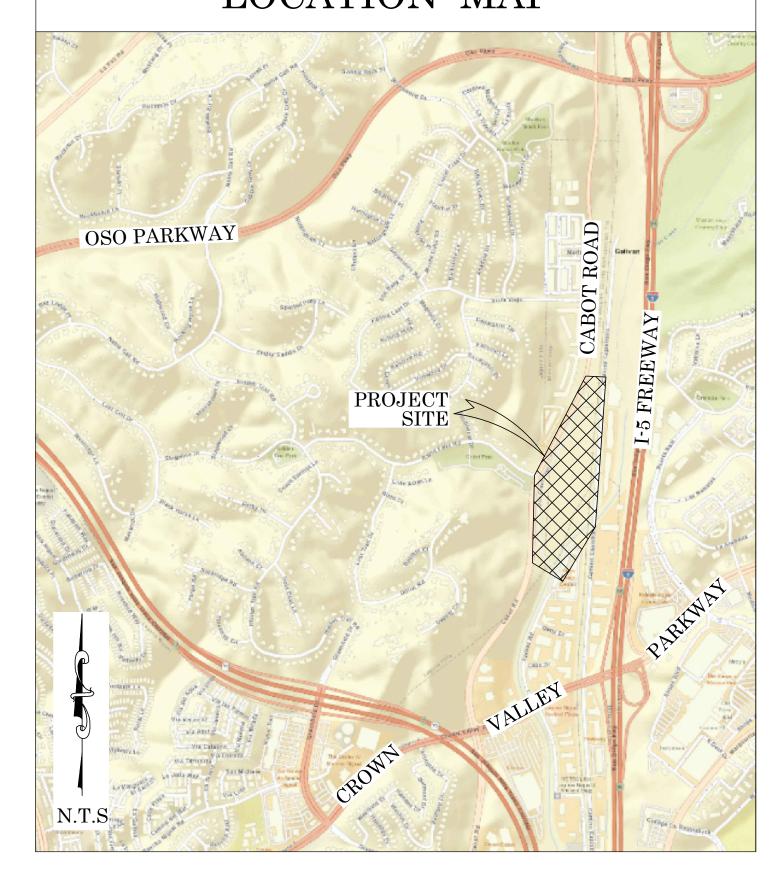
LOCATION MAP



SENIOR LAND SURVEYOR'S CERTIFICATE:

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYOR'S ACT; THIS 6 DAY OF APRIL, 2020.

JESOM MORENO, PLS. SENIOR LAND SURVEYOR



DEPUTY COUNTY SURVEYOR'S STATEMENT:

THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH THE PROFESSIONAL LAND SURVEYOR'S ACT; THIS 6 DAY OF APRIL, 2020.

WADE WEAVER, PLS. DEPUTY COUNTY SURVEYOR

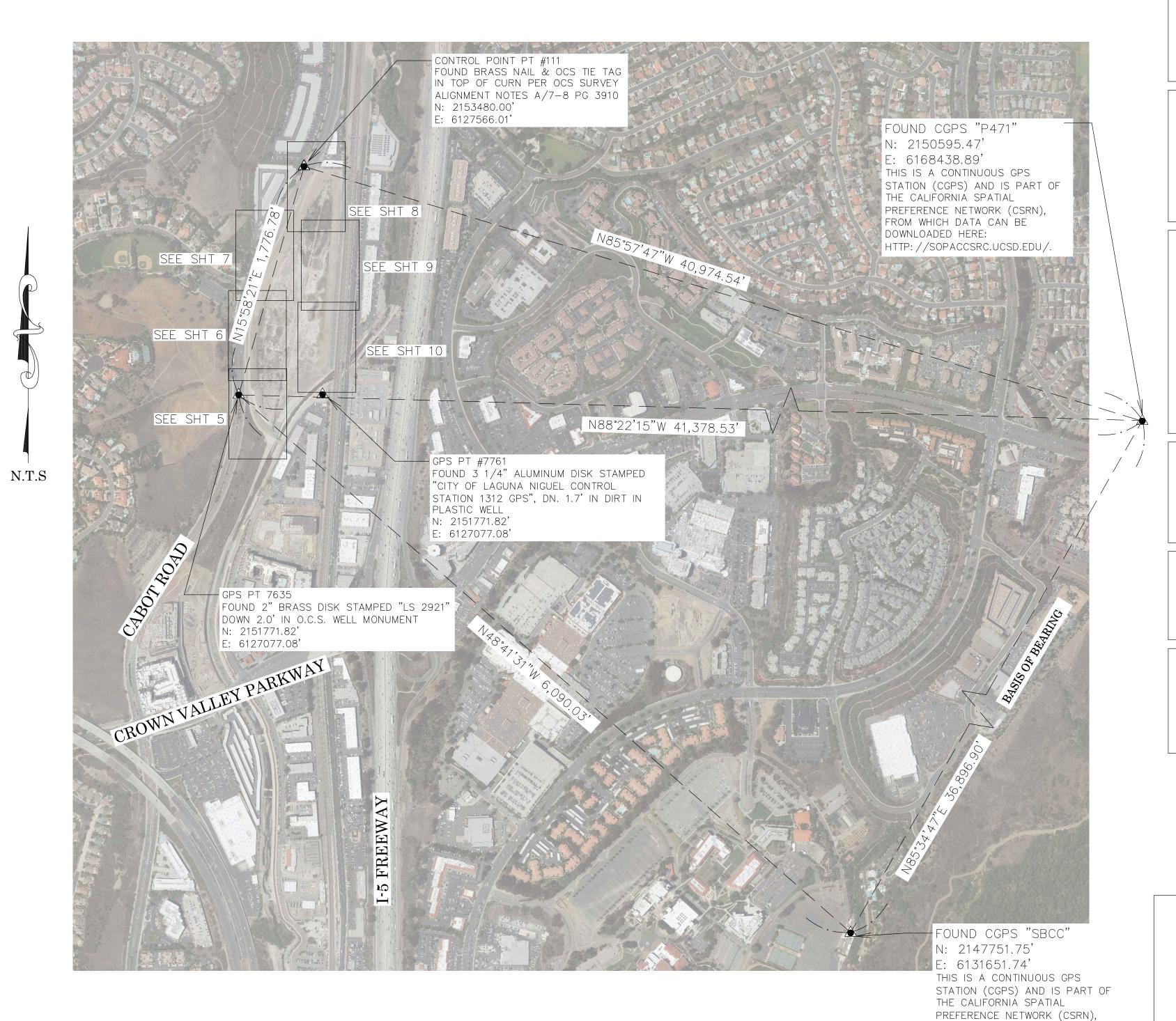




OC PUBLIC WORKS DEPARTMENT

KHALID BAZMI, INTERIM DIRECTOR KEVIN HILLS, COUNTY SURVEYOR GALIVAN RETARDING BASIN

> MAINTENANCE ROAD IMPROVEMENTS



TOPOGRAPHIC MAPPING PROJECT



BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS SURVEY IS BASED ON THE CALIFORNIA GLOBAL POSITIONING STATIONS CGPS STATIONS (P471) AND (SBCC) BEING NORTH 85°34'47" EAST AS DERIVED FROM THE COORDINATES PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) ALONG WITH DATA SHEETS ON FILE IN THE OFFICE OF THE ORANGE COUNTY SURVEYOR.

HORIZONTAL DATUM

COORDINATES SHOWN ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM (CCS83), ZONE VI, NAD 83, OCS (2017.50) EPOCH ADJUSTMENT.

ALL DISTANCES SHOWN ARE GRID, UNLESS OTHERWISE NOTED. TO OBTAIN GROUND DISTANCES MULTIPLY GRID BY 1.00004611 ALL DISTANCES ARE BASED ON THE U.S. SURVEY FOOT.

VERTICAL DATUM

O.C.S. BM. 3U-41-70 ELEV. = 264.878' YEAR LEVELED: 1991

NAVD 1988 (O.C.S. 1995 ADJUSTMENT)

DESCRIPTION: FOUND 3 3\4" OCS ALUMINUM BENCHMARK DISK STAMPED "3U-41-70", SET IN THE NORTHWESTERLY CORNER OF A CONCRETE BRIDGE ABUTMENT. MONUMENT IS LOCATED IN THE NORTHWESTERLY CORNER OF THE INTERSECTION OF FORBES ROAD AND CROWN VALLEY PARKWAY, 150 FT. WESTERLY OF THE CENTERLINE OF FORBES, 22.6 FT. NORTHERLY OF THE WESTERLY ABUTMENT. MONUMENT IS SET LEVEL WITH THE BRIDGE DECK.

NOTES

THE SURVEY INFORMATION SHOWN HEREON IS TO BE USED FOR TOPOGRAPHIC RELATIONSHIPS ONLY AND IS NOT INTENDED FOR LAND ACQUISITION OR BOUNDARY PURPOSES.

PARCELS SHOWN WITHOUT BEARING AND DISTANCES ARE FOR GRAPHICAL PURPOSES AND ARE PENDING RECEIPT OF TITLE REPORT.

SHEET INDEX

SHEET 2-4

FROM WHICH DATA CAN BE

HTTP: //SOPACCSRC.UCSD.EDU/.

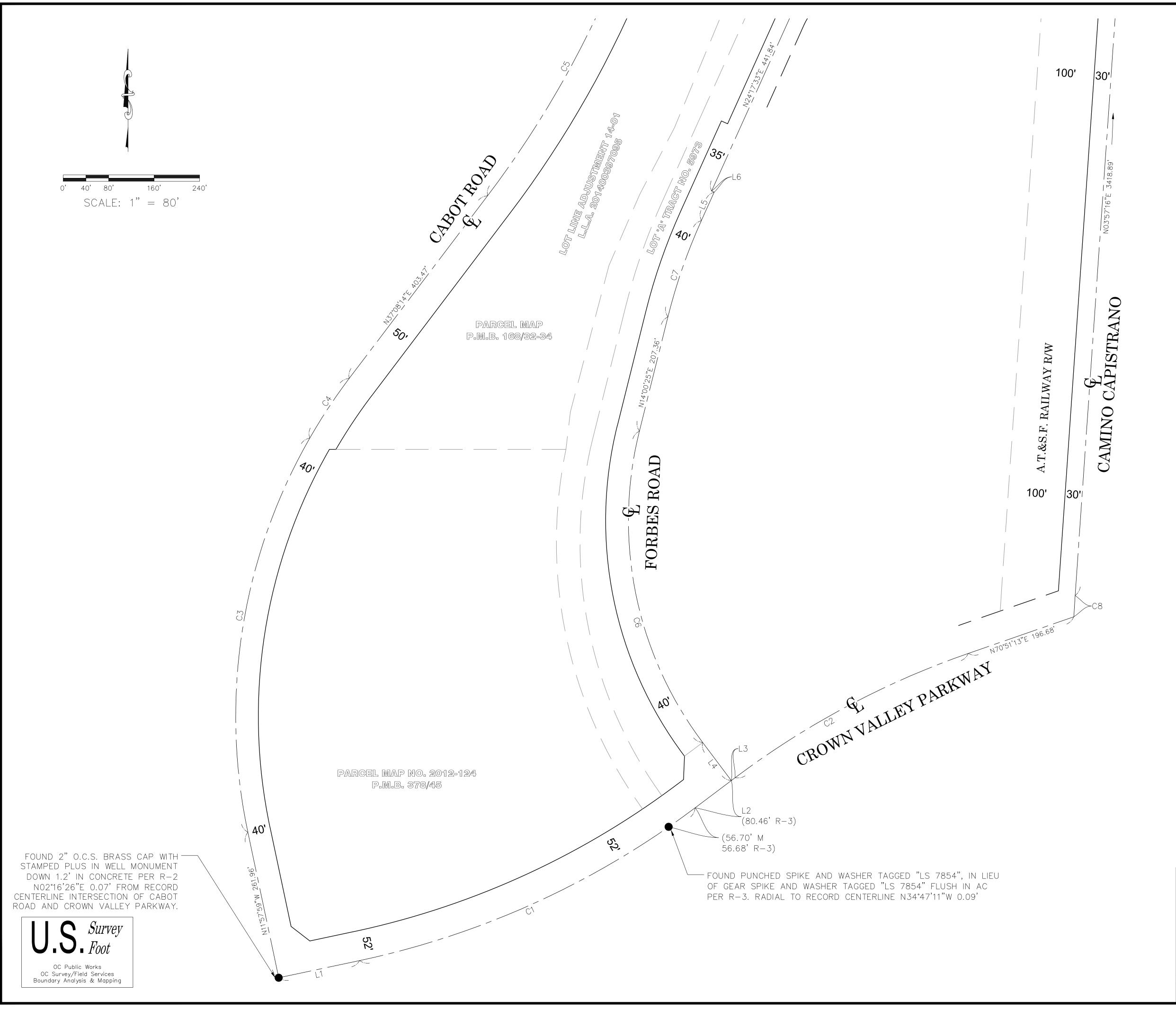
TITLE SHEET BOUNDARY MAP SHEETS 5-10 TOPOGRAPHIC MAP

PURPOSE OF SURVEY

CREATE A TOPOGRAPHIC MAP OF THE ENTIRE GALIVAN RETARDING BASIN MAINTENANCE ROAD IN ORDER TO CONSTRUCT AC BERMS AND CONCENTRATE RUNOFF INTO V-DITCHES DOWN THE BASIN SLOPE. THIS PROPOSED WORK WILL REDUCE THE SURFACE RUNOFF THAT IS ERODING THE INTERIOR BASIN SLOPES.

| | | | | | /ENGINEERING SERVICE: /BOUNDARY ANALYSIS | | | |
|---|------|------------|---|--|---|---------------|--|--|
| | | | GALI MAINT | | | | | |
| | | 1 | | TITLE SHEET | | | | |
| | | 1 | PROJECT LIMITS: WIT | PROJECT LIMITS: WITHIN THE GAVLIVAN RETARDING BASIN RIGHT OF WAY | | | | |
| | | 1 | DATE OF SURVEY: 2 | DATE OF SURVEY:2/6/2020 BY: J. RUSSO | | | | |
| | | 1 | TOPOGRAPHIC MAPE | PING | BY: A. VU | SHEET NO. | | |
| | | 1 | OFFICE CHECK | | BY: J. MORENO, PLS | $\mid 1 \mid$ | | |
| < | DATE | ITEM | FIELD CHECK | | BY: J. RUSSO | of | | |
| | | REVISIONS | SCALE: N.T.S. | W.O. #EF21468 | FILE #1920PW-IN0017 | 10 | | |
| | | KE VISIONS | FILE: GALIVAN RETARDING BASIN_TOPO_2020.DWG | | | | | |

COUNTY OF ORANGE



NOTES

BOUNDARY AND RIGHT OF WAY SHOWN BASED ON RECORD DATA PER RECORD OF SURVEY 94-1072 R.S.B. 154/32-35 UNLESS OTHERWISE NOTED. A BOUNDARY SURVEY OR TITLE SEARCH WAS NOT PERFORMED. BOUNDARY AND RIGHT OF WAY LINES SHOWN FOR GRAPHICAL REPRESENTATION ONLY.

BASIS OF BEARINGS

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HORIZONTAL DATUM

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ALL MEASURED DISTANCES SHOWN ARE GRID, UNLESS OTHERWISE NOTED. TO OBTAIN GROUND DISTANCE MULTIPLY A GRID DISTANCE BY 1.00004611.

COMBINATION FACTOR WAS HELD AT GPS POINT NUMBER 7635 N: 2151771.82', E: 6127077.08', ELEVATION= 285.98'

RECORD DISTANCES SHOWN HEREON ARE AS THEY APPEAR ON THE DOCUMENT OF RECORD. DISTANCES MAY BE EITHER GRID OR GROUND, AS PER SAID RECORD.

ALL DISTANCES ARE BASED ON THE U.S. SURVEY FOOT.

REFERENCES

R-1 = RECORD OF SURVEY 94-1072 R.S.B. 154/32-35

R-2 = CORNER RECORD, C.R. 2017-1873B

R-3 = PARCEL MAP NO. 2014-133 P.M.B. 387/14-19

R-4 = RECORD OF SURVEY 93-1057 R.S.B. 143/36-39

LEGEND

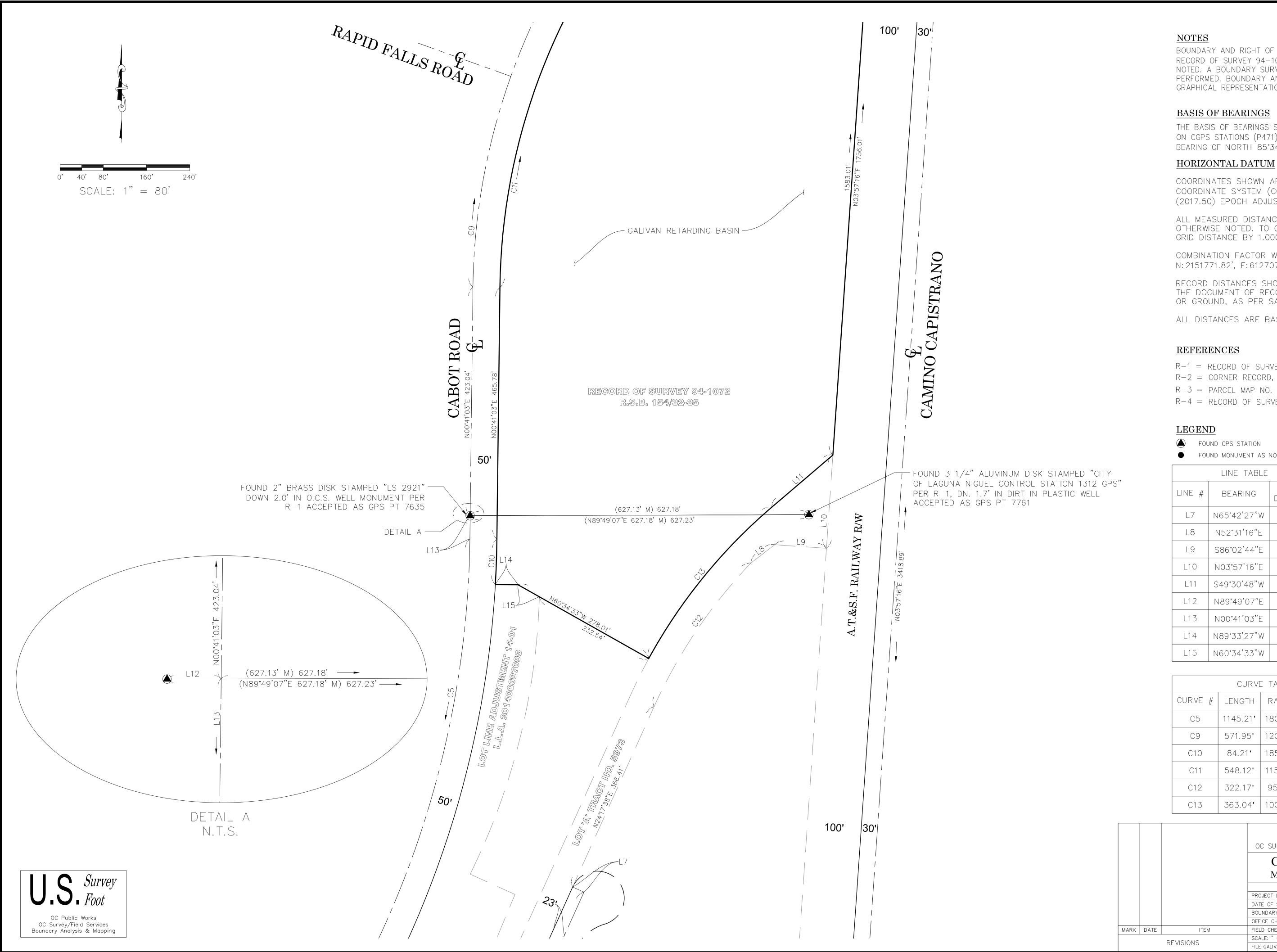
FOUND GPS STATION

FOUND MONUMENT AS NOTED

| LINE TABLE | | | | |
|------------|-------------|--------------------|--|--|
| LINE # | BEARING | RECORD DISTANCE | | |
| L1 | N78°00'04"E | 145.66' | | |
| L2 | N53°01'02"E | 79.66' | | |
| L3 | N53°01'02"E | 8.36' | | |
| L4 | N36°57'54"W | 83.92' | | |
| L5 | N24°17'33"E | 55.01' | | |
| L6 | N65°42'27"W | 5.01' | | |

| CURVE TABLE | | | | | | |
|-------------|----------------|-----------------|------------|--|--|--|
| CURVE # | LENGTH | RADIUS | DELTA | | | |
| C1 | 654.08' | 1500.00' | 024°59'02" | | | |
| C2 | 466.96' | 1500.00' | 017°50'11" | | | |
| С3 | 718.22' | 985.00' | 041°46'40" | | | |
| C4 | 125.94' | 985.00' | 007°19'33" | | | |
| C5 | 1145.21' | 1800.00' | 036°27'11" | | | |
| C6 | 578.26' | 650.00 ' | 050°58'19" | | | |
| С7 | 179.52' | 1000.00' | 010°17'08" | | | |
| C8 | 37.40 ' | 2784.93' | 000°46'10" | | | |

| | | | | OC OC SURVEY/F | | | | |
|----|-----------|------|------|---|--|---------------------|-----------|--|
| | | | | GALIVAN RETARDING BASI MAINTENANCE ROAD IMPROVEMENT | | | | |
| | | | | | | | | |
| | | | | PROJECT LIMITS: WI | PROJECT LIMITS: WITHIN THE GAVLIVAN RETARDING BASIN RIGHT OF WAY | | | |
| | | | | DATE OF SURVEY: 2/6/2020 BY: J. RUSSO | | | SHEET NO. | |
| | | | | BOUNDARY MAPPIN | IG | BY: A. VU | SHEET NO. | |
| | | | | OFFICE CHECK BY: J. MORENO, PLS | | | 2 | |
| MA | 4RK | DATE | ITEM | FIELD CHECK BY: J. RUSSO | | of | | |
| | DEVISIONS | | | SCALE:1" = 80' | W.O. #EF21468 | FILE #1920PW-IN0017 | 10 | |
| | REVISIONS | | | FILE: GALIVAN RETARDING BASIN_BOUNDARY_2020.DWG | | | | |



BOUNDARY AND RIGHT OF WAY SHOWN BASED ON RECORD DATA PER RECORD OF SURVEY 94-1072 R.S.B. 154/32-35 UNLESS OTHERWISE NOTED. A BOUNDARY SURVEY OR TITLE SEARCH WAS NOT PERFORMED. BOUNDARY AND RIGHT OF WAY LINES SHOWN FOR GRAPHICAL REPRESENTATION ONLY.

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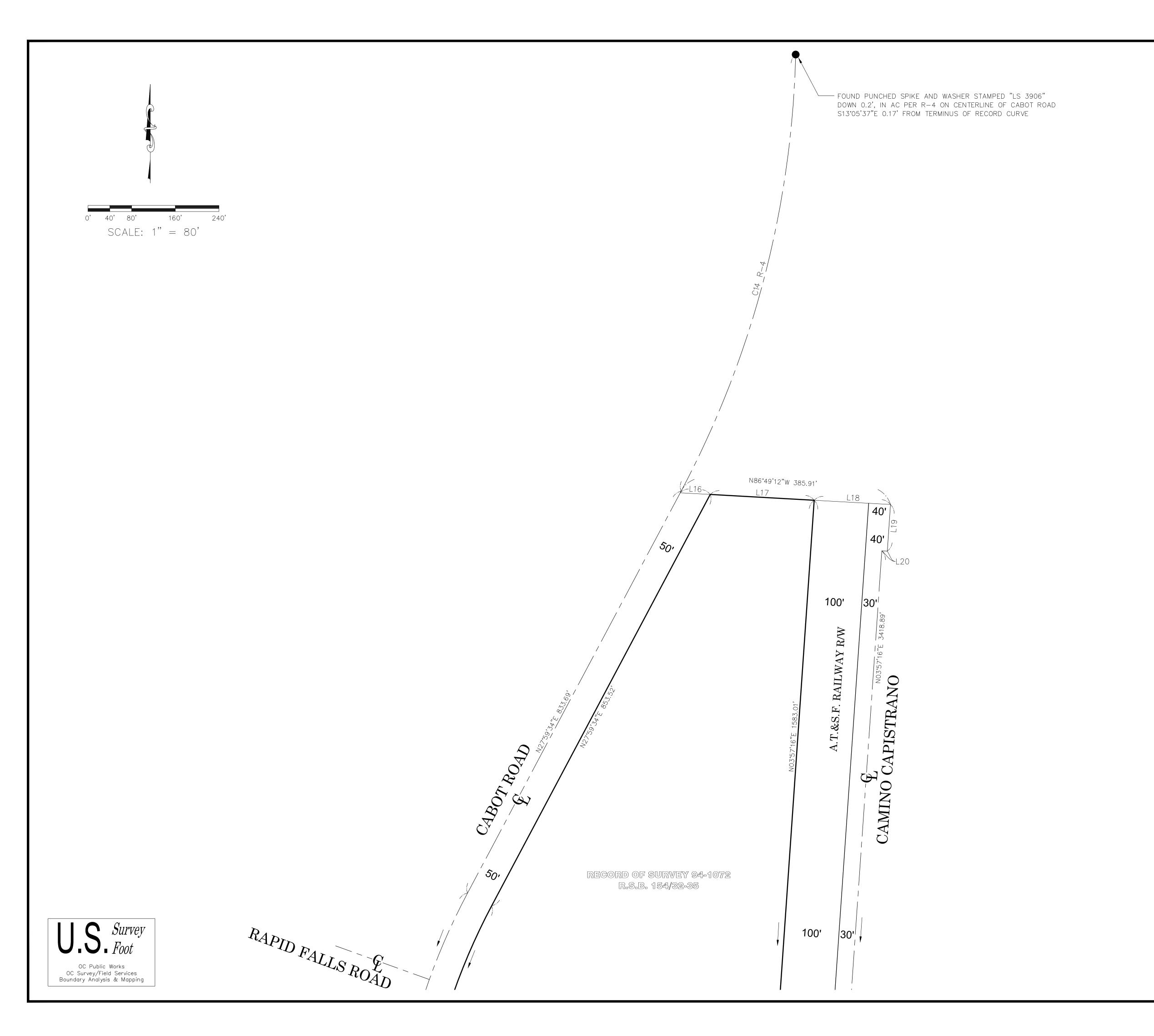
R-4 = RECORD OF SURVEY 93-1057 R.S.B. 143/36-39

FOUND MONUMENT AS NOTED

LINE TABLE RECORD LINE # | BEARING DISTANCE 23.00' N65°42'27"W N52°31'16"E 55.69' S86°02'44"E 95.91**'** 173.00' N03°57'16"E S49°30'48"W 148.68**'** N89°49'07"E 0.05' N00°41'03"E 42.74' 41.90' N89°33'27"W L15 N60°34'33"W 45.48'

| | CURVE TABLE | | | | | | |
|---------|-------------|----------|------------|--|--|--|--|
| CURVE # | LENGTH | RADIUS | DELTA | | | | |
| C5 | 1145.21' | 1800.00' | 036°27'11" | | | | |
| C9 | 571.95' | 1200.00' | 027°18'31" | | | | |
| C10 | 84.21' | 1850.00' | 002°36'29" | | | | |
| C11 | 548.12' | 1150.00' | 027°18'31" | | | | |
| C12 | 322.17' | 951.50' | 019°23'59" | | | | |
| C13 | 363.04' | 1000.00' | 020°48'02" | | | | |

| | | | | COUNTY OF ORANGE OC PUBLIC WORKS/ENGINEERING SERVICES OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & | | | |
|-------------|------|------|--|--|-----------------------------|-----------|--|
| | | | GAL MAINT | | | | |
| | | | | BOUN | IDARY MAP | | |
| | | | PROJECT LIMITS: WI | THIN THE GAVLIVAN F | RETARDING BASIN RIGHT OF WA | Υ | |
| | | | DATE OF SURVEY: 2 | 2/6/2020 | BY: J. RUSSO | SHEET NO. | |
| | | | BOUNDARY MAPPING BY: A. VU OFFICE CHECK BY: J. MORENO, PLS | | _ | | |
| | | | | | BY: J. MORENO, PLS |] 3 | |
| MARK | DATE | ITEM | FIELD CHECK BY: J. RUSSO | | of | | |
| REVISIONS - | | | SCALE:1" = 80' | W.O. #EF21468 | FILE #1920PW-IN0017 | 10 | |
| KE VISIUNS | | | FILE: GALIVAN RETARDING BASIN_BOUNDARY_2020.DWG | | | | |



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LEGEND

FOUND GPS STATION

FOUND MONUMENT AS NOTED

| LINE TABLE | | | | |
|------------|-------------|--------------------|--|--|
| LINE # | BEARING | RECORD DISTANCE | | |
| L16 | N86°49'12"W | 55.09' | | |
| L17 | N86°49'12"W | 190.81' | | |
| L18 | N86°49'12"W | 140.01' | | |
| L19 | N03°57'16"E | 85.79 ' | | |
| L20 | N86°02'44"W | 10.00' | | |

| CURVE TABLE | | | | | | |
|-------------|-----------------|----------|------------|--|--|--|
| CURVE # | LENGTH | RADIUS | DELTA | | | |
| C9 | 571.95' | 1200.00' | 027°18'31" | | | |
| C11 | 548.12 ' | 1150.00' | 027°18'31" | | | |
| C14 | 834.93 ' | 1800.00' | 026°34'36" | | | |

| _ | | | | + | | | | |
|---|------|------|-----------|---|---|---------------------|------------|--|
| | | | | OC OC SURVEY/F | | | | |
| | | | | | GALIVAN RETARDING BAS MAINTENANCE ROAD IMPROVEME | | | |
| | | | | | BOUN | NDARY MAP | | |
| | | | | PROJECT LIMITS: WI | PROJECT LIMITS: WITHIN THE GAVLIVAN RETARDING BASIN RIGHT OF WA | | | |
| | | | | DATE OF SURVEY: 2 | DATE OF SURVEY:2/6/2020 BY: J. RUSSO | | | |
| | | | | BOUNDARY MAPPIN | G | BY: A. VU | SHEET NO. | |
| | | | | OFFICE CHECK FIELD CHECK | | BY: J. MORENO, PLS | 4 | |
| Ī | MARK | DATE | ITEM | | | BY: J. RUSSO | of | |
| Ī | | | DEVICIONS | SCALE:1" = 80' | W.O. #EF21468 | FILE #1920PW-IN0017 | 10 | |
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