

GENERAL NOTES

- ALL UNDERGROUND UTILITIES AND LATERALS TO BE INSTALLED BEFORE CONSTRUCTION OF CURB, SIDEWALK, OR SURFACING OF STREETS.
- SIDEWALK IS TO BE SIX INCHES THICK THROUGH ALL DRIVEWAYS.
- ALL WORK SHALL BE COMPLETED PER THESE PLANS AND APPROVED REVISIONS. ALL CHANGES OR REVISIONS THERETO, MUST BE APPROVED BY THE CITY ENGINEER, IN WRITING, PRIOR TO ANY REQUEST FOR INSPECTION.
- THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITY PIPES AND STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS, TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN HEREON, HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING UTILITIES OR STRUCTURES LOCATED AT THE WORK SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UNDERGROUND SERVICE ALERT (PHONE 1-800-422-4133) TWO (2) WORKING DAYS IN ADVANCE OF ANY EXCAVATION OF COMMENCEMENT OF WORK. FOR ANY QUESTIONS REGARDING THE MARK OUT OF UNDERGROUND UTILITIES, THE CONTRACTOR SHOULD CONTACT THE RESPECTIVE UTILITY COMPANY:
 - A. STREET LIGHT OR SIGNAL LIGHT CONDUIT CITY OF CHULA VISTA (619) 397-6166
 - B. SEWER OR STORM DRAIN CITY OF CHULA VISTA VERIFICATION CITY OF CHULA VISTA NOTIFICATION (619) 397-6000 (619) 397-6000
 - C. GAS AND ELECTRIC SAN DIEGO GAS & ELECTRIC (619) 230-7800
 - D. WATER OTAY WATER DISTRICT SAN DIEGO COUNTY WATER AUTHORITY (619) 670-2222 (858) 522-6900
 - E. TELEPHONE PACIFIC BELL (619) 266-4683
 - F. TELEVISION COX CABLE OF SAN DIEGO ULTRONICS (619) 263-9251 (619) 476-0177
- CITY OF CHULA VISTA INSPECTION NOTICE:
 - A. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM THE CITY ENGINEER 2 WORKING DAYS IN ADVANCE OF COMMENCEMENT OF WORK. PHONE: (619)397-6128.
 - B. THE CONTRACTOR SHALL GIVE 24 HOURS NOTICE (ONE WORKING NOTICE ON ALL CALLS FOR INSPECTION, PHONE: (619)397-6128.
 - C. ANY WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL AT CONTRACTOR'S EXPENSE.
 - D. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND WORK PRIOR TO THE EXCAVATION FOR INSTALLATION OF NEW UNDERGROUND WORK.
- STREET LIGHT NOTE: THE STREET LIGHTS AND SERVICE POINTS SHOWN HEREON ARE APPROXIMATE ONLY. SERVICE POINTS ARE SUBJECT TO REVISION BY SAN DIEGO GAS AND ELECTRIC COMPANY FINAL PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE PROPER SERVICES TO THE STREET LIGHTS SHOWN ON THE PLAN ACCORDING TO ALL THE APPLICABLE CITY OF CHULA VISTA PLANS AND SPECIFICATIONS. THE DEVELOPER SHALL BE RESPONSIBLE FOR PROVIDING CONDUIT AND CONDUCTORS FROM STREET LIGHTS TO APPROVED SERVICE POINTS FURNISHED BY THE SAN DIEGO GAS AND ELECTRIC COMPANY. CONDUIT RUNS AND CONDUCTOR SIZE FROM STREET LIGHTS TO SERVICE POINTS SHALL BE SHOWN ON THESE PLANS AND APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION. STREET LIGHTING CONDUIT SHALL BE 1 1/2" MIN. PVC (SCHEDULE 80). FINAL LOCATION AND SIZE OF STREET LIGHTS, CONDUIT, WIRE AND PULL BOXES SHALL BE APPROVED PRIOR TO BEGINNING OF CONSTRUCTION.
- NEITHER THE OWNER NOR THE ENGINEER OF WORK WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS DURING CONSTRUCTION OPERATIONS.
- LOCATION AND TYPE OF STREET TREES FOR EACH LOT TO BE DETERMINED BY THE GENERAL SERVICES AND PUBLIC WORKS OPERATIONS DEPARTMENTS-STREET OPERATIONS.
- MAXIMUM DISTANCE BETWEEN PULL BOXES IS 190 FEET.
- ALL UTILITIES SHALL HAVE A MINIMUM OF 90% RELATIVE COMPACTION IN ALL TRENCH BACKFILL.
- AS-BUILT DRAWINGS: A SET OF BLUELINE PRINTS AND A SET OF SPECIFICATIONS SHALL BE KEPT ON-SITE BY THE CONTRACTOR AT ALL TIMES ON WHICH ALL CHANGES OR VARIATIONS IN THE WORK, INCLUDING ALL UTILITIES, ARE TO BE RECORDED.
- CONTRACTOR SHALL FURNISH TO THE ENGINEER OF WORK AS-BUILT PLANS FOR ALL NEW IMPROVEMENTS SHOWN ON THESE PLANS FOR SUBMITTAL TO THE CITY ENGINEER FOR APPROVAL.
- THE OWNER MUST OBTAIN AN EXCAVATION PERMIT FROM THE DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (D.O.S.H.) PRIOR TO THE START OF CONSTRUCTION.
- ALL STORM DRAIN PIPE SHALL BE 1500 D-LOAD UNLESS OTHERWISE SHOWN ON THESE PLANS.
- DUST GENERATED BY CONSTRUCTION ACTIVITIES SHALL COMPLY WITH THE LOCAL DUST CONTROL AND UNIFORM BUILDING CODE (UBC) REQUIREMENTS WHICH INCLUDE DUST CONTROL MEASURES FOR CONSTRUCTION SITES. DUST REDUCING MEASURES SHALL INCLUDE REGULAR WATERING OF GRADED SURFACES AND RESTRICTION OF ALL CONSTRUCTION VEHICLES AND EQUIPMENT TO TRAVEL ALONG ESTABLISHED AND REGULARLY WATERED ROADWAYS.

NOTE

WHERE LOCAL STATIC WATER PRESSURE IS IN EXCESS OF (80) POUND PER SQUARE INCH, AN APPROVED TYPE PRESSURE REGULATOR PRECEDED BY AN ADEQUATE STRAINER SHALL BE INSTALLED AND THE STATIC PRESSURE REDUCED TO (80) POUNDS PER SQUARE INCH OR LESS (2013 CPC 608.2). SEE PLUMBING PLANS FOR ADDITIONAL INFORMATION.

DIG ALERT

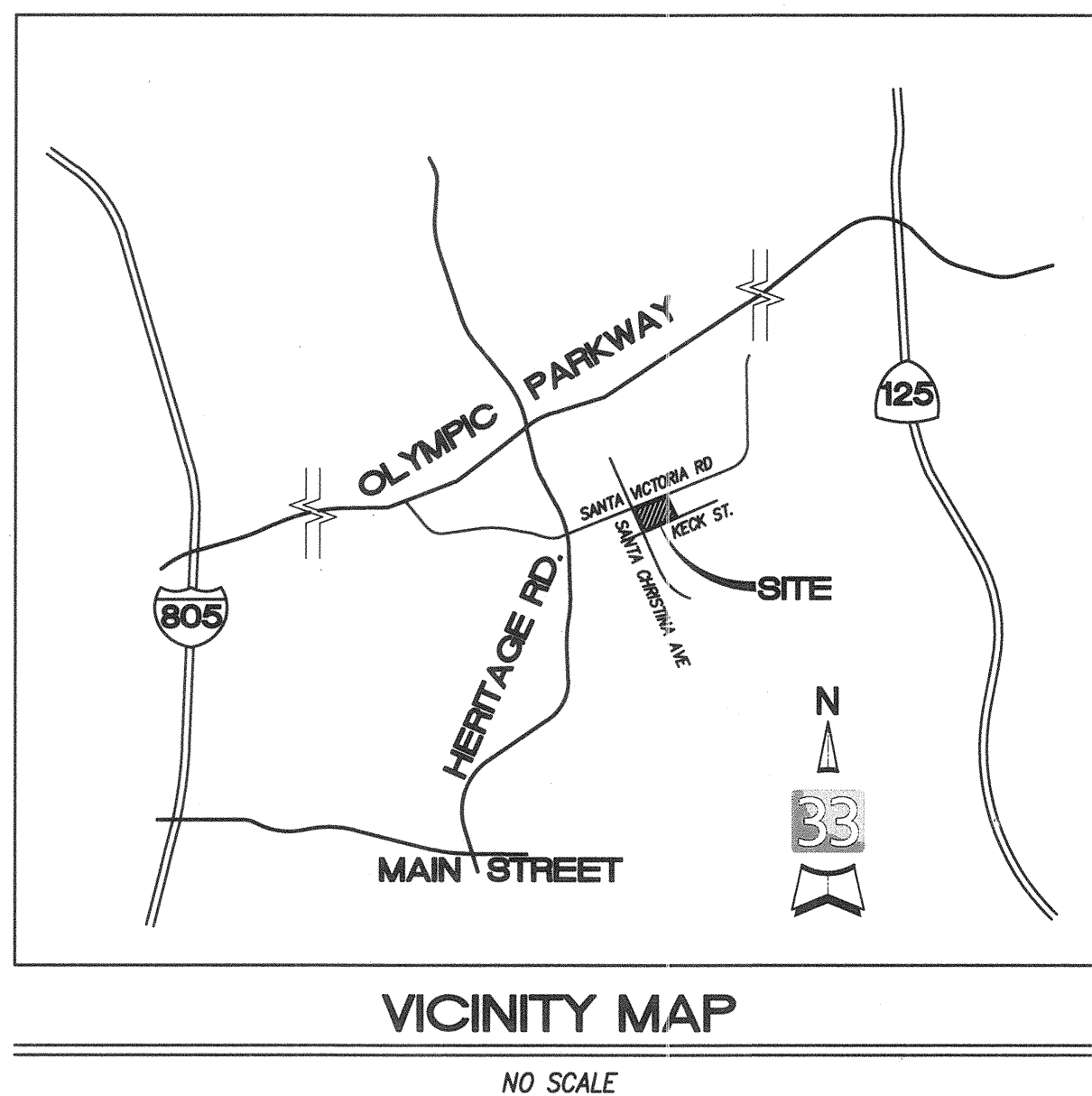
SECTION 4216/4217 OF THE GOVERNMENT CODE REQUIRED THAT DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT TOLL FREE 1-422-4133 AT LEAST TWO WORKING DAYS BEFORE YOU DIG.

Underground Service Alert
 Call: TOLL FREE "811"
 TWO WORKING DAYS BEFORE YOU DIG

PRIVATE IMPROVEMENT PLANS FOR: OTAY RANCH VILLAGE II R-17B(b) CHULA VISTA, CALIFORNIA

SPECIAL NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE TO INSURE THAT ALL SLOPES, STREETS, UTILITIES, AND STORM DRAINS ARE BUILT IN ACCORDANCE WITH THESE PLANS. IF THERE IS ANY QUESTION REGARDING THESE PLANS OR FIELD STAKES, THE CONTRACTOR SHALL REQUEST AN INTERPRETATION BEFORE DOING ANY WORK BY CALLING THE ENGINEER OF WORK AT (619)397-6000 AND THE CITY INSPECTOR. CONTRACTOR SHALL ALSO TAKE THE NECESSARY STEPS TO PROTECT THE PROJECT AND ADJACENT PROPERTY FROM ANY EROSION AND SILTATION THAT RESULT FROM CONTRACTOR'S OPERATIONS BY APPROPRIATE MEANS (SAND BAGS, HAY BALES, TEMPORARY DESILTING BASINS, SILT FENCES, DIKES, SHORING, ETC.) UNTIL SUCH TIME THAT THE TOTAL PROJECT IS COMPLETED AND ACCEPTED FOR MAINTENANCE BY WHATEVER OWNER, AGENCY OR ASSOCIATION IS TO BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE.
- CONTRACTOR WILL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING UNDERGROUND UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES.
- LOCATION AND ELEVATIONS OF IMPROVEMENTS TO BE MET (OR AVOIDED) BY WORK TO BE DONE SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK. CONTRACTOR SHALL REPORT TO THE ENGINEER OR CITY INSPECTOR ANY DISCREPANCIES BETWEEN FIELD MEASUREMENTS AND THE PLANS.
- BEFORE EXCAVATING FOR THIS CONTRACT, THE CONTRACTOR SHALL FIELD VERIFY LOCATION OF UNDERGROUND UTILITIES. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO OTHER EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS.
- CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER EXISTING LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
- CONTRACTOR AGREES: TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, THE ENGINEER AND THE CITY OF CHULA VISTA HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING THEREFROM LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER OR THE CITY OF CHULA VISTA.
- CONTRACTOR IS RESPONSIBLE FOR HAVING TRAFFIC CONTROL PLANS APPROVED BY THE CITY ENGINEER PRIOR TO COMMENCING ANY WORK IN THE PUBLIC RIGHT OF WAY.
- CONTRACTOR SHALL REPAIR ALL DESTROYED OR DAMAGED EXISTING SURFACE IMPROVEMENTS WITH IMPROVEMENTS EQUAL OR SUPERIOR.
- ALL DEMOLISHED MATERIAL SHALL BE REMOVED FROM THE JOB SITE TO AN APPROVED DISPOSAL SITE.
- THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL PROPOSED CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS AND THE CITY ENGINEER.
- STOP SIGN AND STREET NAME SIGN POLES SHALL BE CONSTRUCTED CONCURRENT WITH SIDEWALK CONSTRUCTION IN ACCORDANCE WITH CVDS-TROS & TROSA.



SHEET INDEX

- SHEET 1 TITLE SHEET
- SHEET 2 NOTES AND KEY MAP
- SHEET 3 CROSS SECTIONS AND DETAILS
- SHEET 4-10 IMPROVEMENT PLANS
- SHEET 11 LATERAL TABLE
- SHEET 12-14 CHULA VISTA FIRE DEPARTMENT DETAILS AND NOTES

LEGAL DESCRIPTION

A PORTION OF LOT 30 & 31 OF CHULA VISTA TRACT NO. 06-05 OTAY RANCH VILLAGE 2 AND PORTIONS OF VILLAGE 4 "A" MAP, IN THE CITY OF CHULA VISTA, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 15350 FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY MAY 26, 2006.

ASSESSORS PARCEL NUMBER

APN 644-313-03-00

BASIS OF BEARINGS

THE BASIS OF BEARING FOR THIS SURVEY IS A LINE IN THE WESTERLY SUBDIVISION BOUNDARY OF MAP NO. 15350. (I.E. N02°20'50"W)

(FOR COMPLETE PROCEDURE OF SURVEY, SEE CHULA VISTA TRACT NO. 06-05, OTAY RANCH VILLAGE 2 AND PORTIONS OF VILLAGE 4 "A" MAP, IMAO NO. 15350.)

BENCHMARK

DESCRIPTION: BRASS DISK MKD. "SD CITY ENGR." IN 3/4" IRON PIPE 0.5 MI SLY OF INTX LA MEDIA RD & BIRCH RD SO SIDE OF GRAVEL RD 225'±W OF GATE TO A.V.R. TRACKING STA 15± E OF METAL GATE. (PT # 1344 PER R.O.S. 14841) ELEVATION = 520.425 (NAVD '88)

OWNER/DEVELOPER

BALDWIN & SONS
 610 WEST ASH, SUITE 1500
 SAN DIEGO, CA 92101
 TEL: (619) 515-9114 | FAX: (619) 234-4088

OWNER'S CERTIFICATE

IT IS AGREED THAT THE FIELD CONDITIONS MAY REQUIRE CHANGES TO THESE PLANS. IT IS FURTHER AGREED THAT THE OWNER (DEVELOPER) SHALL HAVE THE ENGINEER OF WORK MAKE SUCH CHANGES, ALTERATIONS OR ADDITIONS TO THESE PLANS WHICH THE ENGINEER OF WORK DETERMINES ARE NECESSARY AND DESIRABLE FOR THE PROPER COMPLETION OF THE IMPROVEMENTS. ALL PLAN CHANGES SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION.

I FURTHER AGREE TO COMMENCE WORK ON ANY IMPROVEMENTS SHOWN ON THESE PLANS WITHIN EXISTING CITY RIGHT-OF-WAY WITHIN 60 DAYS AFTER ISSUANCE OF THE CONSTRUCTION PERMIT AND TO PURSUE SUCH WORK ACTIVELY ON EVERY NORMAL WORKING DAY UNTIL COMPLETED, IRRESPECTIVE AND INDEPENDENT OF ANY OTHER WORK ASSOCIATED WITH THIS PROJECT OR UNDER MY CONTROL.

NAME: BALDWIN & SONS
 ADDRESS: 610 WEST ASH, SUITE 1500
 SAN DIEGO, CA 92101
 PHONE: TEL: (619) 515-9114 | FAX: (619) 234-4088

BY: *[Signature]* DATE: 12/14/2016

NICK LEE
 VICE PRESIDENT
 BALDWIN & SONS

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

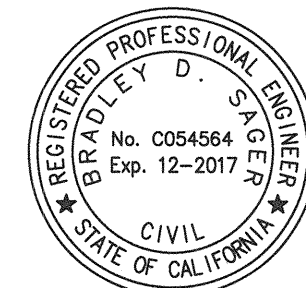
I UNDERSTAND THAT THE CHECK OF THE PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF CHULA VISTA AND WATER DISTRICT IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME AS ENGINEER OF WORK, OF MY RESPONSIBILITY FOR THE PROJECT DESIGN.

LATITUDE 33 PLANNING AND ENGINEERING
 9988 HIBERT STREET, 2ND FLOOR
 SAN DIEGO, CA 92131

SIGNED: *[Signature]*

DATE: 12/14/16

PRINTED NAME: BRADLEY D. SAGER
 P.E. NO. C054564
 DISCIPLINE: CIVIL



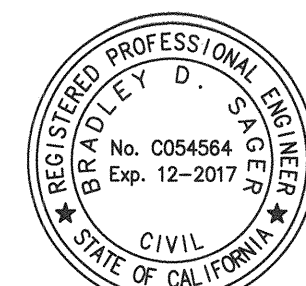
ENGINEER OF WORK CERTIFICATE

I HEREBY CERTIFY THAT IN MY BEST OPINION ALL WORK INCORPORATED IN PLAN SHEETS 1 THROUGH 14 AND AUTHORIZED UNDER GRADING PERMIT NO. 08-8621 HAS BEEN CONSTRUCTED TO THE LINES AND GRADES IN SUBSTANTIAL CONFORMANCE WITH SAID PLANS AND ANY APPROVED REVISIONS.

SIGNED: *[Signature]*

DATE: 12/14/16

PRINTED NAME: BRADLEY D. SAGER
 P.E. NO. C054564
 DISCIPLINE: CIVIL



SOILS ENGINEER'S CERTIFICATE

I, SHAWN WEEDON, A REGISTERED GEOTECHNICAL ENGINEER OF THE STATE OF CALIFORNIA PRINCIPALLY DOING BUSINESS IN THE FIELD OF APPLIED SOILS MECHANICS, HEREBY VERIFY THAT A SAMPLING AND STUDY OF THE SOIL CONDITIONS PREVALENT WITHIN THIS SITE WAS MADE BY GEOCON, INC. ONE COMPLETE COPY OF THE SOILS REPORT DATED FEBRUARY 24, 2016 WITH MY RECOMMENDATIONS, HAS BEEN SUBMITTED TO THE OFFICE OF THE CITY ENGINEER.

THESE IMPROVEMENT PLANS HAVE BEEN REVIEWED BY ME OR UNDER MY DIRECTION AND CONFORM TO THE RECOMMENDATIONS MADE IN THE SOILS REPORT MENTIONED ABOVE.

COMPANY NAME: GEOCON, INC.
 ADDRESS: 6960 FLANDERS DRIVE, SAN DIEGO, CA 92121

SIGNED: *[Signature]*

DATE: 12/14/2016

PRINTED NAME: SHAWN WEEDON
 P.E. NO. 2714
 DISCIPLINE: GEOTECHNICAL



WORK TO BE DONE

THE WORK TO BE DONE CONSISTS OF THE ITEMS INDICATED UNDER THE "LEGEND" SHOWN ON THIS SHEET AND IS TO BE DONE IN ACCORDANCE WITH THESE PLANS AND THE FOLLOWING LIST OF PRINTED MATERIALS AS CURRENTLY ADOPTED BY THE CHULA VISTA CITY COUNCIL INCLUDING THE FOLLOWING:

- 2012 STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION ("GREENBOOK") AND 2012 REGIONAL SUPPLEMENTS AMENDMENTS (TO THE GREENBOOK)
- 2012 SAN DIEGO AREA REGIONAL STANDARD DRAWINGS
- 2015 CITY OF CHULA VISTA STANDARD SPECIAL PROVISIONS (TO THE GREENBOOK)
- 2002 DESIGN AND CONSTRUCTION STANDARDS OF THE CITY OF CHULA VISTA
- PORTION OF THE STATE STANDARD SPECIFICATIONS, STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, DATED JULY 2010 AND ALL SUBSEQUENT ADDITIONS AND REVISIONS
- PORTION OF THE STATE STANDARD PLANS, STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, DATED JULY 2010 AND ALL SUBSEQUENT ADDITIONS AND REVISIONS
- 2010 CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES ("CA-MUTCD") AND ALL SUBSEQUENT ADDITIONS AND REVISIONS

ALL REFERENCES ARE TO BE MADE PART OF THESE PLANS. ANY CHANGES OR REVISIONS THEREFROM SHALL BE APPROVED BY THE CITY ENGINEER, OR HIS DESIGNEE, PRIOR TO ANY REQUEST FOR INSPECTION.

PROPOSED ITEMS

LEGEND	DRAWING NO.	SYMBOL
PROPERTY BOUNDARY		---
EASEMENT LINE		---
STREET CENTERLINE		---
PROPOSED CONTOURS		--- 95 ---
STREET GRADE		2.00%
STREET STATION AND ELEVATION		1+00 472.93
SEWER LINE (8" PVC)		S
60" SEWER MANHOLE	SM-01	○
SEWER CLEANOUT	SC-01	○
4" SEWER LATERAL	SS-01	---
WATER LINE (6" PVC)		W
1" WATER SERVICE LATERAL	WS-02	---
FIRE LINE (4" PVC)		FW
1" FIRE SERVICE LATERAL		---
CONCRETE THRUST BLOCK	WT-01	⊥
BLOWOFF VALVE	WB-03	⊥
AIR/VACUUM RELEASE VALVE	WA-05	⊥
BACKFLOW PREVENTER	WR-02/WF-05 PER SEPARATE PLANS	⊥
RESILIENT SEATED GATE VALVE	WV-01 & WV-03	⊥
6" PCC CURB	SDRSD NO. G-1	---
0" PCC CURB		---
6" PCC CURB & GUTTER	SDRSD NO. G-2	---
PCC SIDEWALK	SDRSD NO. G-7	---
PCC CROSS GUTTER	CVCS-2	---
PEDESTRIAN RAMP	CVCS-25	---
STORM DRAIN PIPE		---
STORM DRAIN CLEANOUT		---
STORM DRAIN CURB INLET		---
PCC PAVING PER PCC PAVEMENT SECTION, SHEET 3		---
AC PAVING PER AC PAVEMENT SECTION, SHEET 3		---

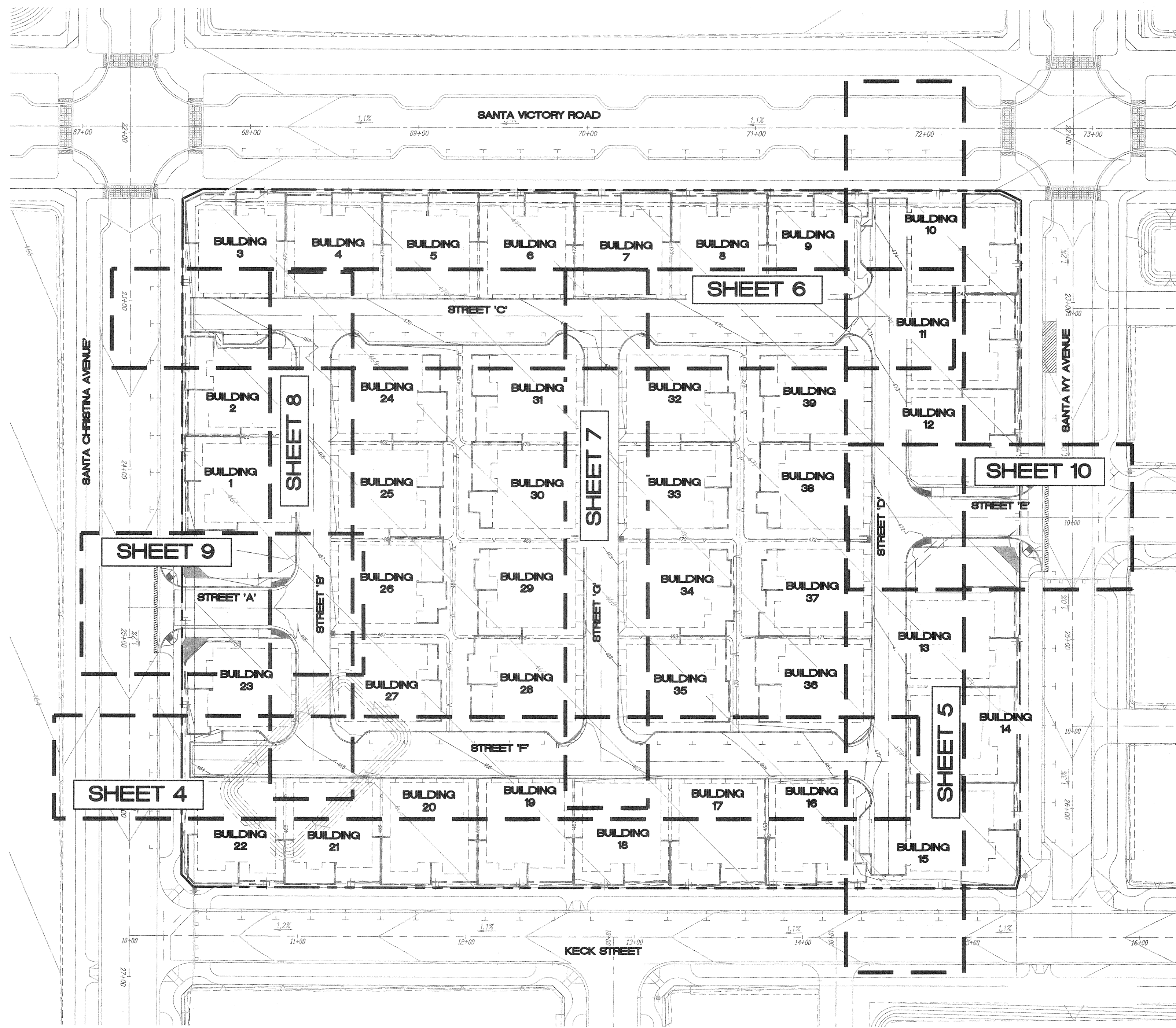
EXISTING ITEMS

LEGEND	SYMBOL
EXISTING STREET LIGHT	⊥
EXISTING SEWER MAIN	S
EXISTING WATER MAIN	W
EXISTING STORM DRAIN PIPE	---
EXISTING CONTOURS	--- 95 ---

AS BUILT | **UTILITY NOTE**
 ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM RECORD DATA AT THEIR APPROXIMATE LOCATIONS. UNDERGROUND FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED OR ARE NOT OF RECORD. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PERTINENT UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.

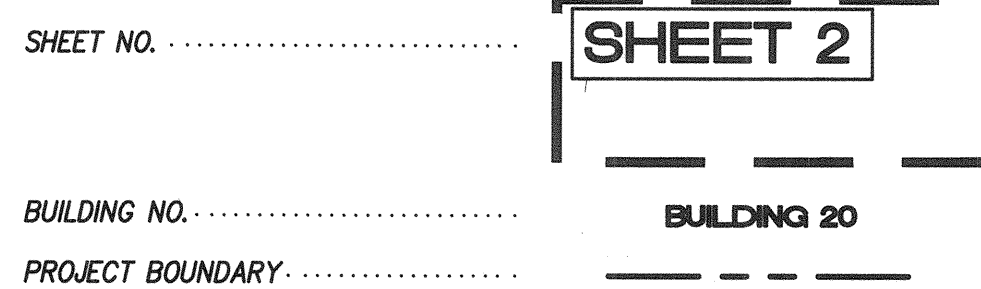
latitude 33
 PLANNING & ENGINEERING
 9988 HIBERT STREET, 2ND FLOOR, SAN DIEGO, CA 92131
 TEL 858.751.0833

CONTRACTOR:	DWG NO. 14024 (W.O. NO. 088386)	By:	REVISIONS:	Date:	App'd:	SCALE:	Designed By:	Drawn By:	Checked By:	Submitted:	Approved:	CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT	DRAWING NO.
INSPECTOR:	DWG NO. 14031, MAP NO. 15350	LAT33	CITY AS-BUILT			HORIZONTAL	BRADLEY D. SAGER			12/15/16	12/14/16	IMPROVEMENT PLANS FOR:	16019-01
DATE COMPLETED:	DWG NO. 16017, DWG NO. 16013, OMD NO. D0965-090259					VERTICAL					Tom Allen	OTAY RANCH VILLAGE TWO - R-17B(b)	W.O. NO. OR-8621
										PLANNING: sd	LANDSCAPE: mr	TOTAL NUMBER OF SHEETS = 14	



KEY MAP
NTS

KEY MAP LEGEND:



AS BUILT

DATE _____
SIGNATURE _____
Printed Name _____ P.E. No. _____
My Registration Expires _____ Discipline _____

UTILITY NOTE

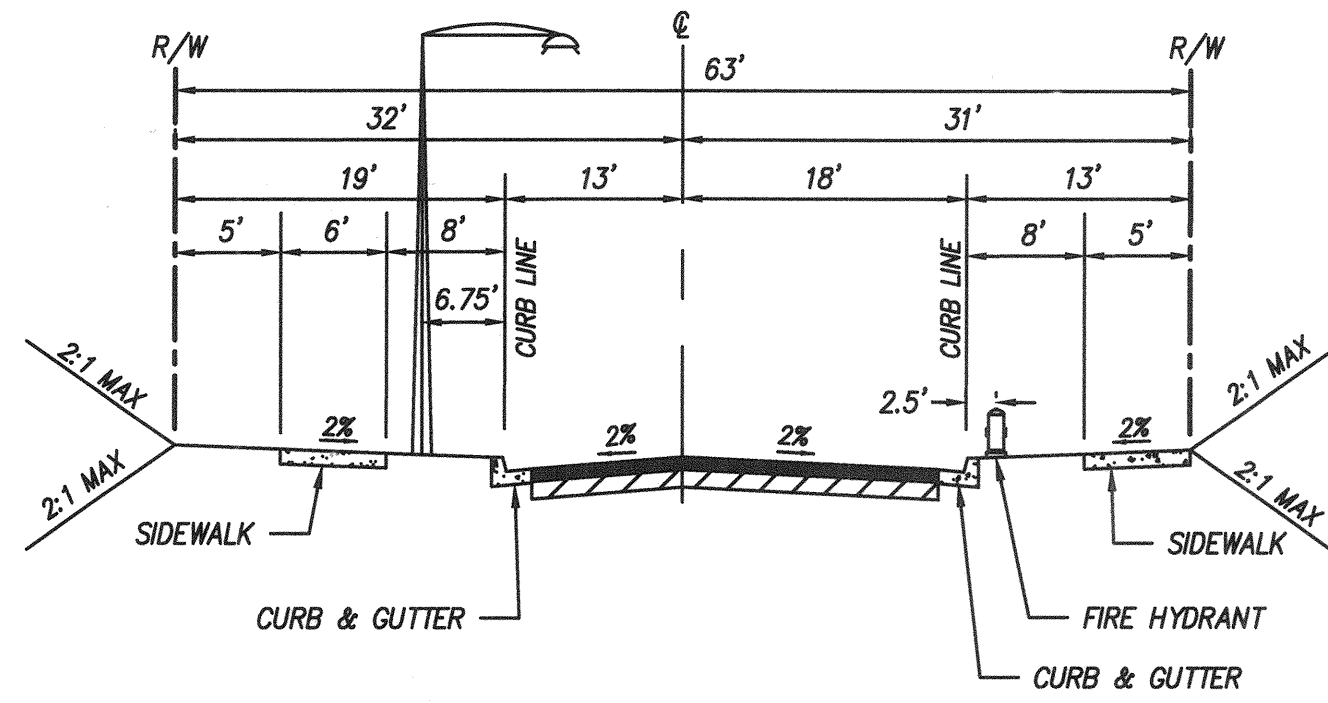
ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM RECORD DATA AT THEIR APPROXIMATE LOCATIONS. UNDERGROUND FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED OR ARE NOT OF RECORD. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PERTINENT UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.



TOTAL NUMBER OF SHEETS = 14

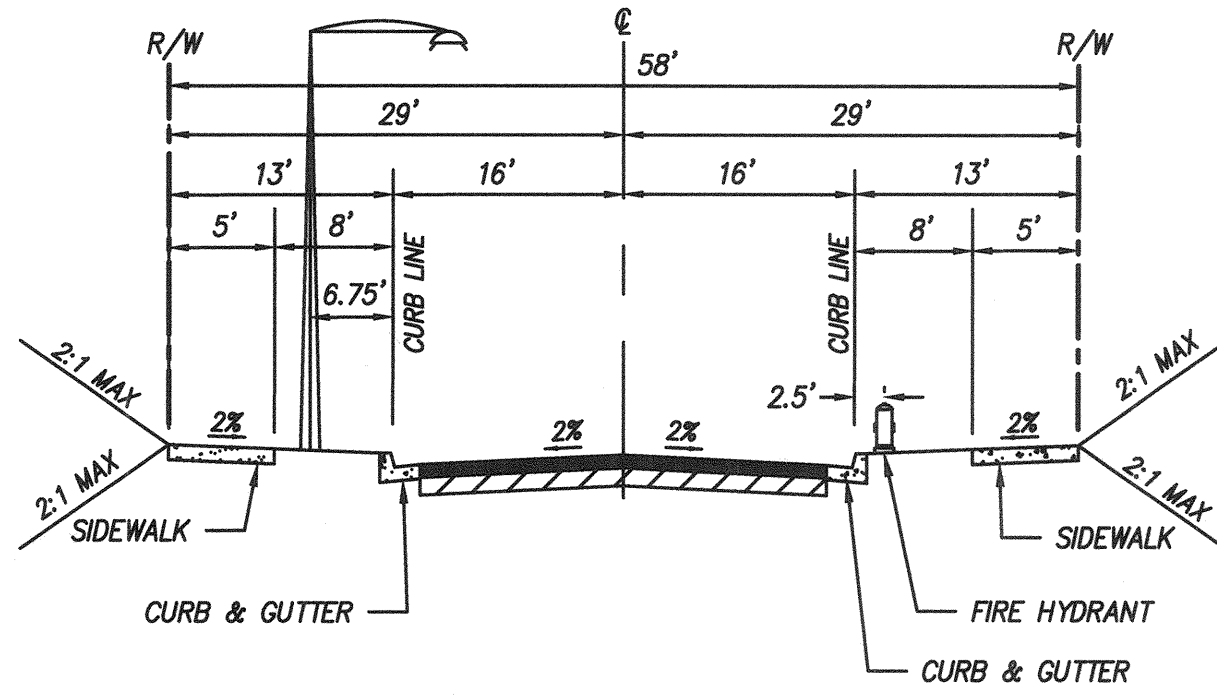
CONSTRUCTION RECORD		REFERENCES		By		REVISIONS		Date	App'd	BENCH MARK		SCALE	Designed By:	Drawn By:	Checked By:	Submitted:	Approved:	CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT		DRAWING NO.
CONTRACTOR:	DWG NO. 14024 (W.O. NO. 0R839G)	LAT33	CITY AS-BUILT							DESCRIPTION: BRASS DISK AND "30 CITY ENGINE" IN 3/4" IRON PIPE 0.5 IN SLY OF NIX LA MESA RD & BIRCH RD SO SIDE OF GRAVEL RD 225' +/- W OF GATE TO A.V.R. TRACKING STA 151'- E OF METAL GATE. (PT# 1344 PER P.L.S. 14044)	HORIZONTAL	Bradley D. Sager				12/15/16	12/19/16	IMPROVEMENT PLANS FOR: OTAY RANCH VILLAGE TWO - R-17B(b)		16019-02
INSPECTOR:	DWG NO. 14031, MAP NO. 15350,									ELEVATION = 520.425 (MVD 788)	VERTICAL	By: <i>Bradley D. Sager</i>	By: <i>Tom Adler</i>				City Engineer	W.O. NO. OR-8621		
DATE COMPLETED:	DWG NO. 16017, DWG NO. 16013, OWD NO. D0965-090259										N/A	PLANNING: <i>sd</i>	LANDSCAPE: <i>mr</i>							

X:\000\046126 - City Ranch R-17B(b)\Engineering\Plan\Improvement\046126 017.dwg (6/26/16)



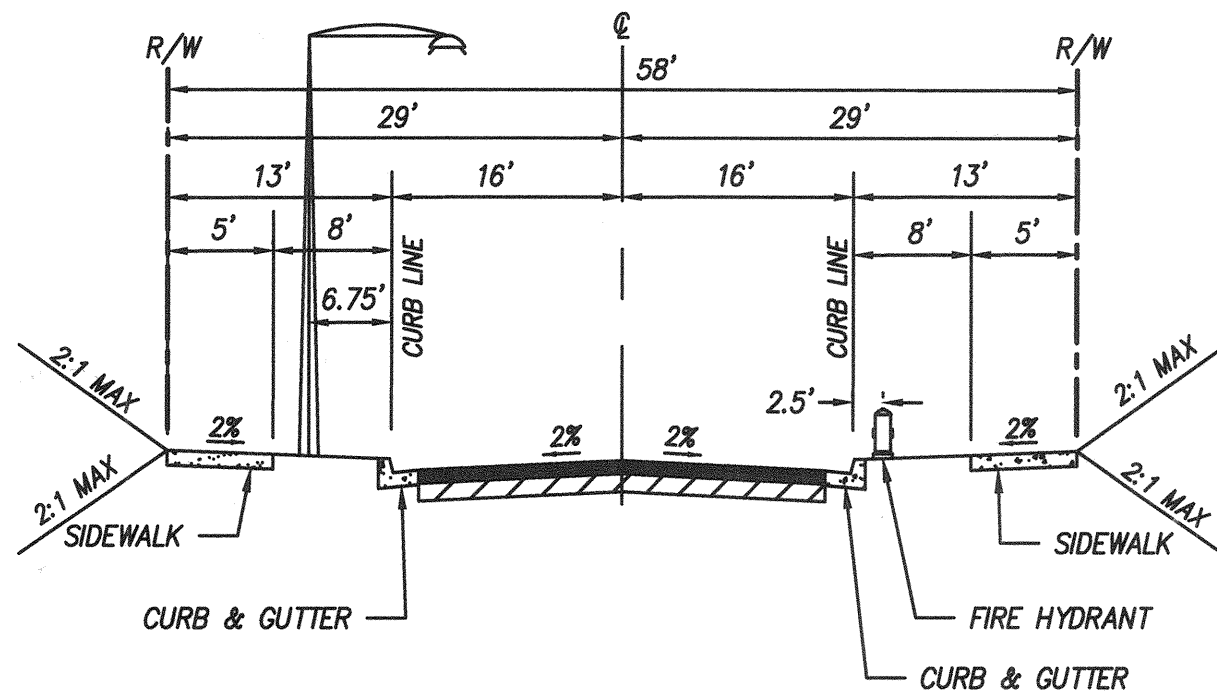
**SANTA IVY AVENUE
(EXISTING PUBLIC ROAD)**

NO SCALE



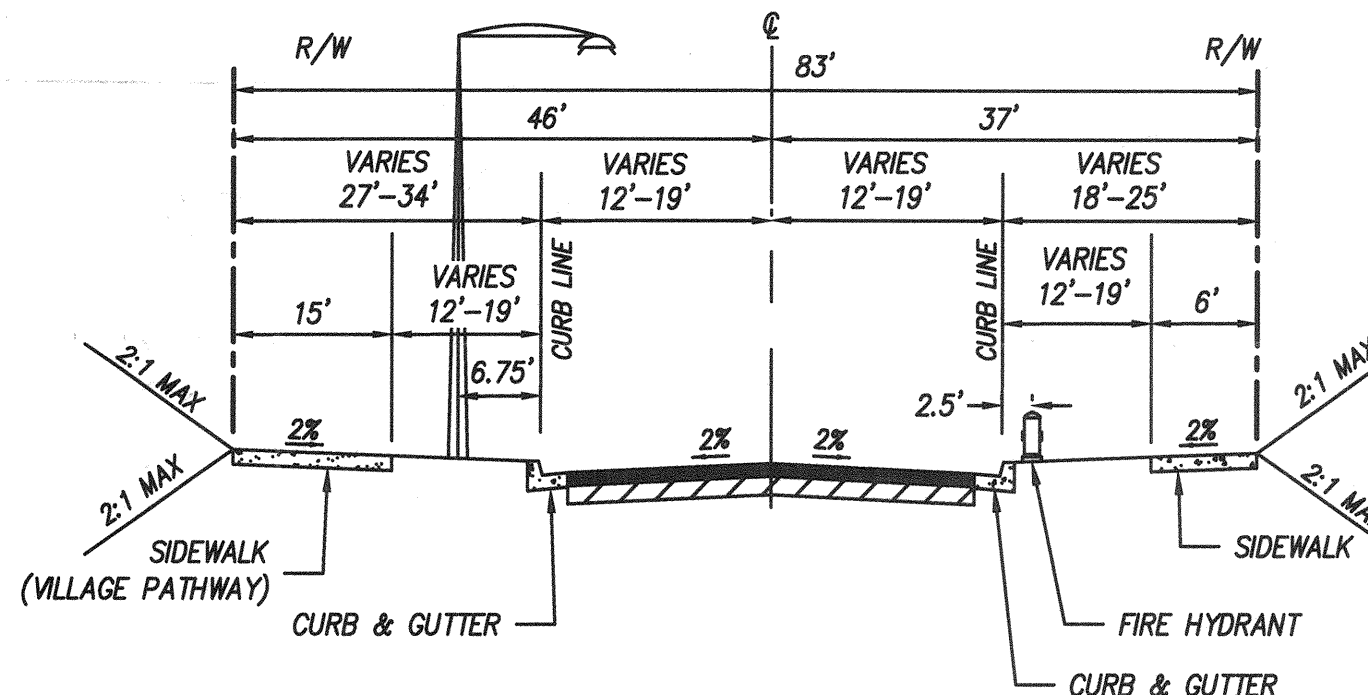
**KECK ROAD
(EXISTING PUBLIC ROAD)**

NO SCALE



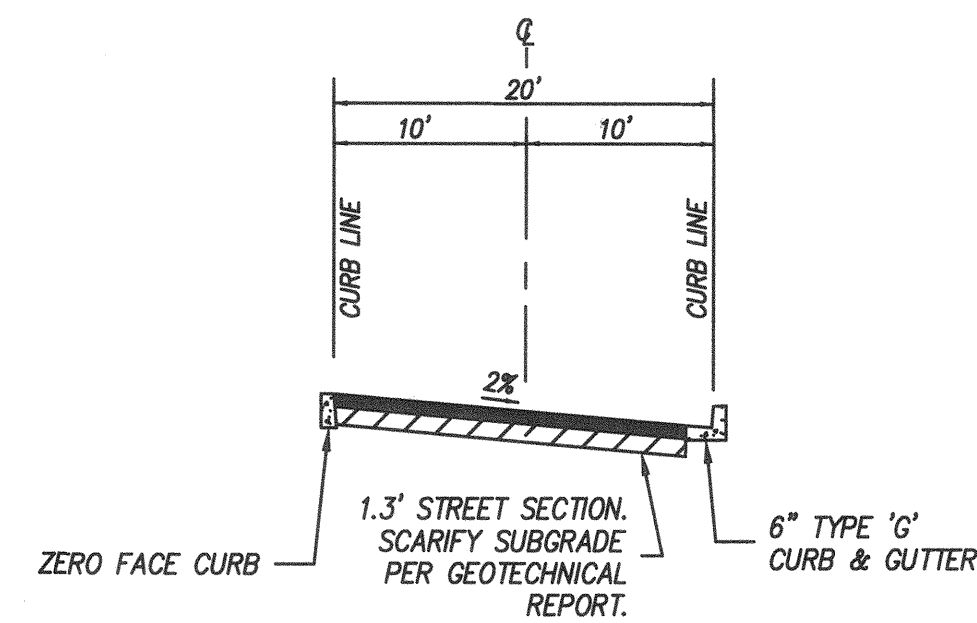
**SANTA CHRISTINA AVENUE
(EXISTING PUBLIC ROAD)**

NO SCALE



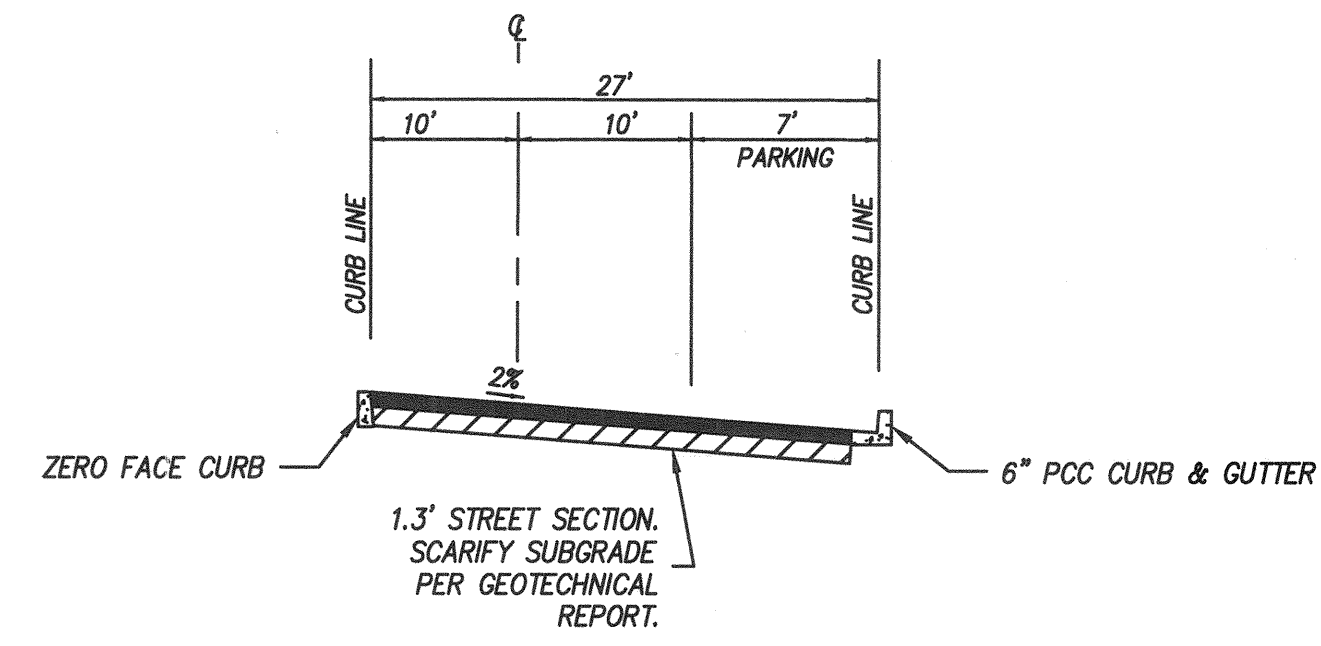
**SANTA VICTORIA ROAD
(EXISTING PUBLIC ROAD)**

NO SCALE



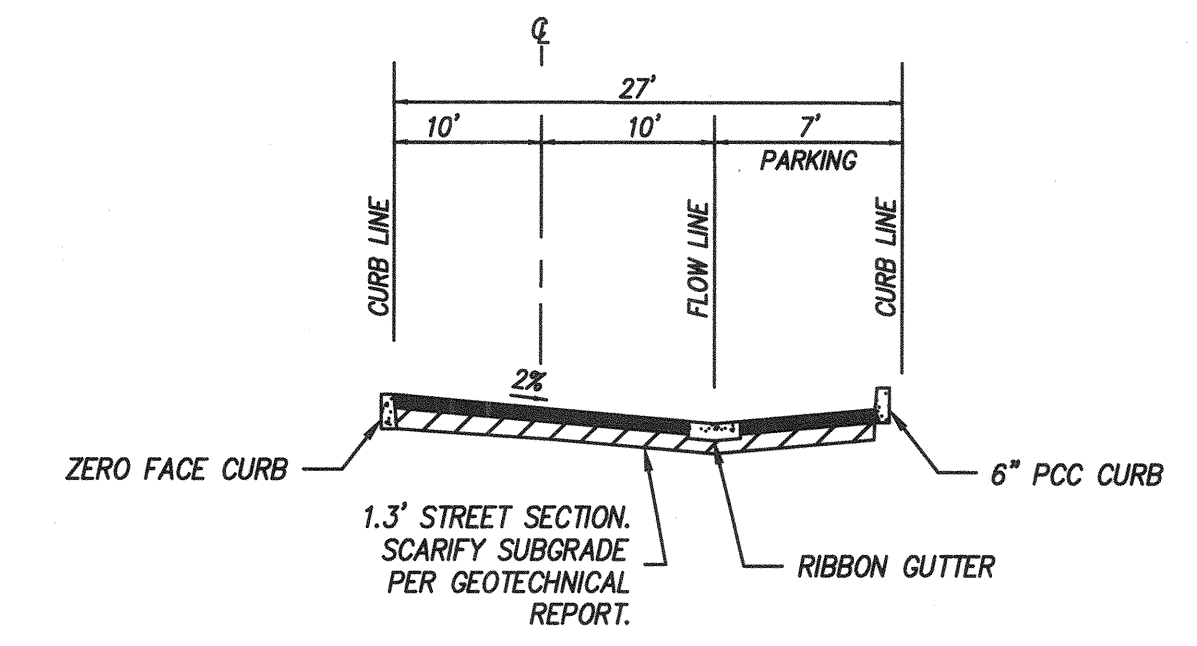
**PRIVATE STREET 'C'
(STREET 'C' STA. 1+01.67-1+21.02)**

NO SCALE



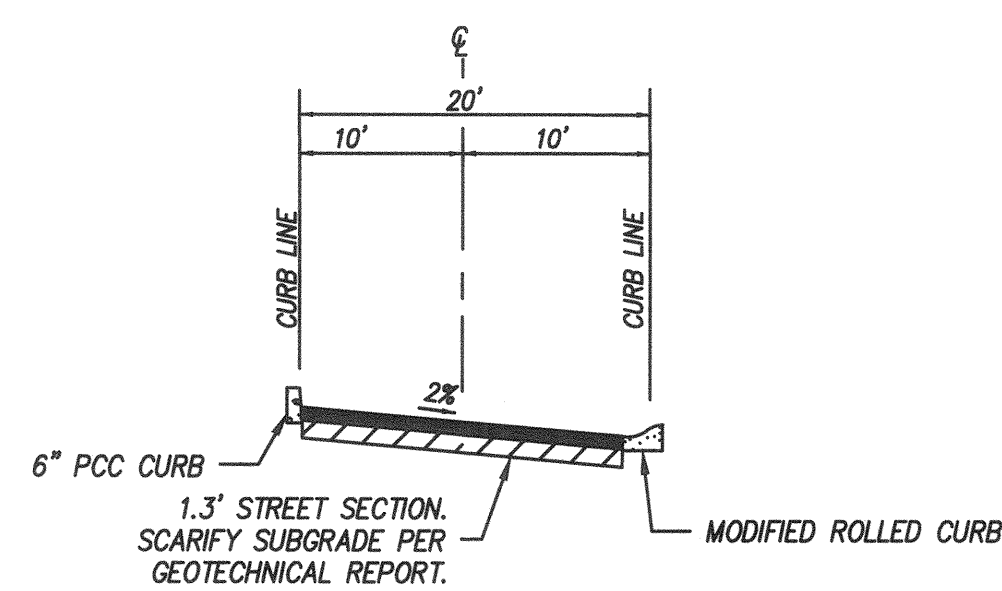
**PRIVATE STREET 'C' WITH PARALLEL PARKING
(STREET 'C' STA. 2+07.98-3+11.98, 3+78.94-4+82.94)**

NO SCALE



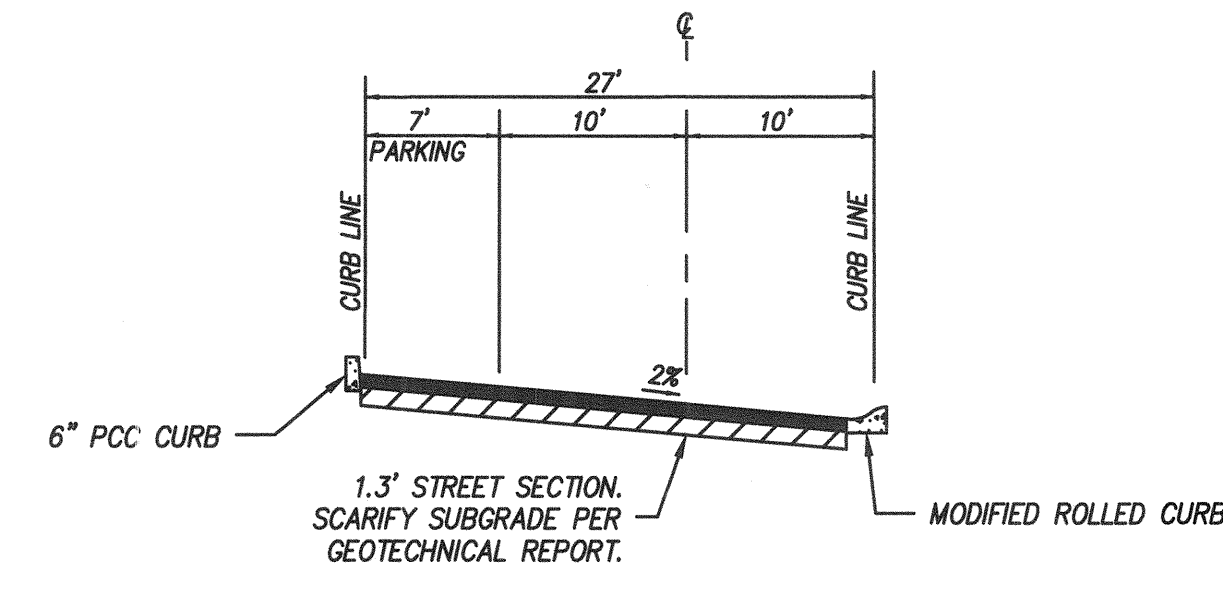
**PRIVATE STREET 'C' WITH PARALLEL PARKING
(STREET 'C' STA. 1+21.02-1+41.02)**

NO SCALE



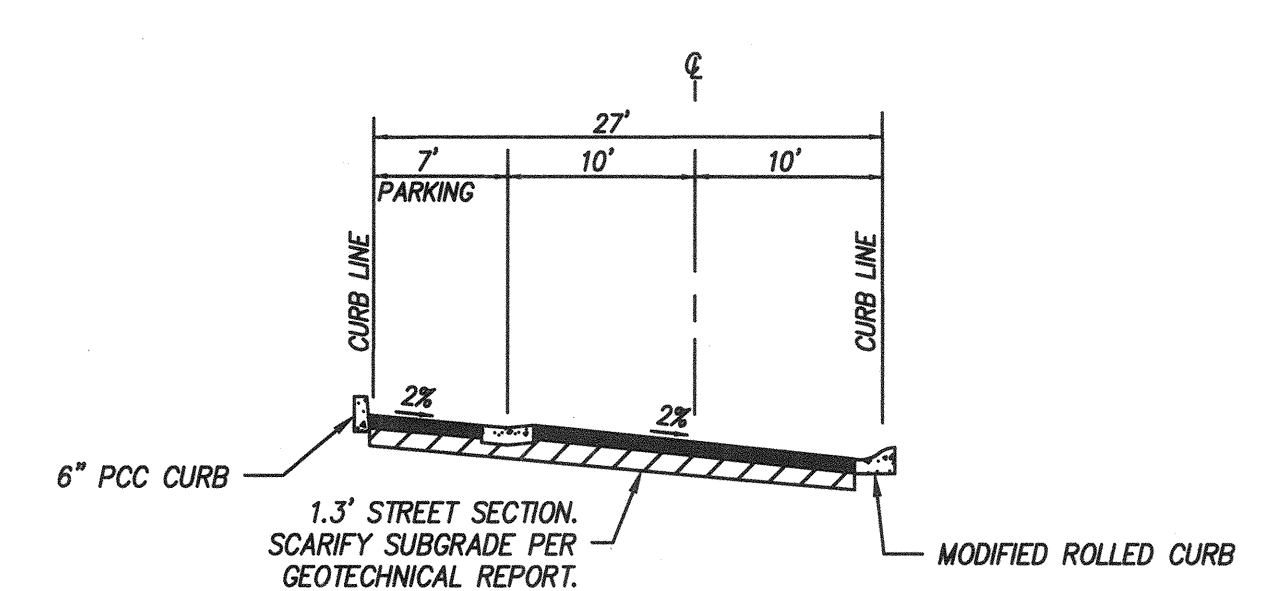
**PRIVATE STREET 'F'
(STREET 'F' STA. 1+01.67-1+21.02)**

NO SCALE



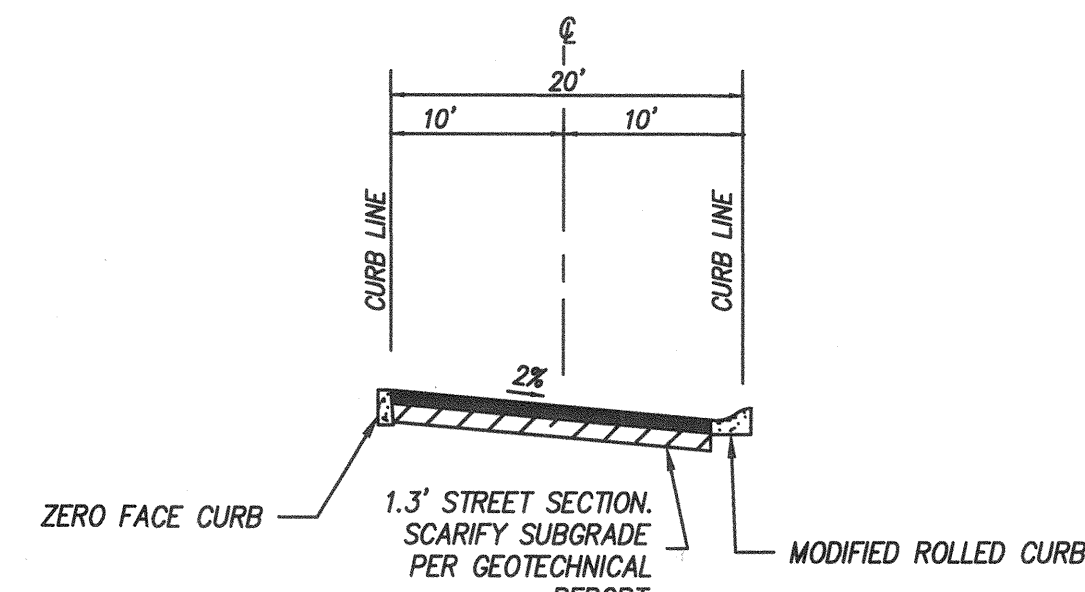
**PRIVATE STREET 'F' WITH PARALLEL PARKING
(STREET 'F' STA. 2+07.98-3+11.98, 3+78.94-4+82.94)**

NO SCALE



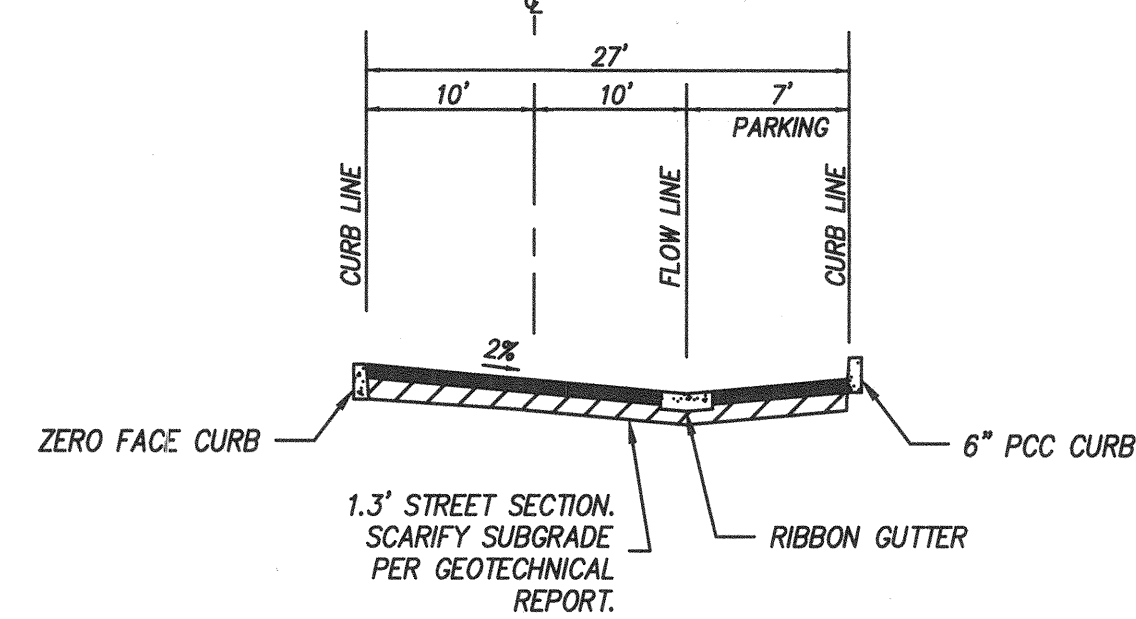
**PRIVATE STREET 'F' WITH PARALLEL PARKING
(STREET 'F' STA. 1+21.02-1+41.02)**

NO SCALE



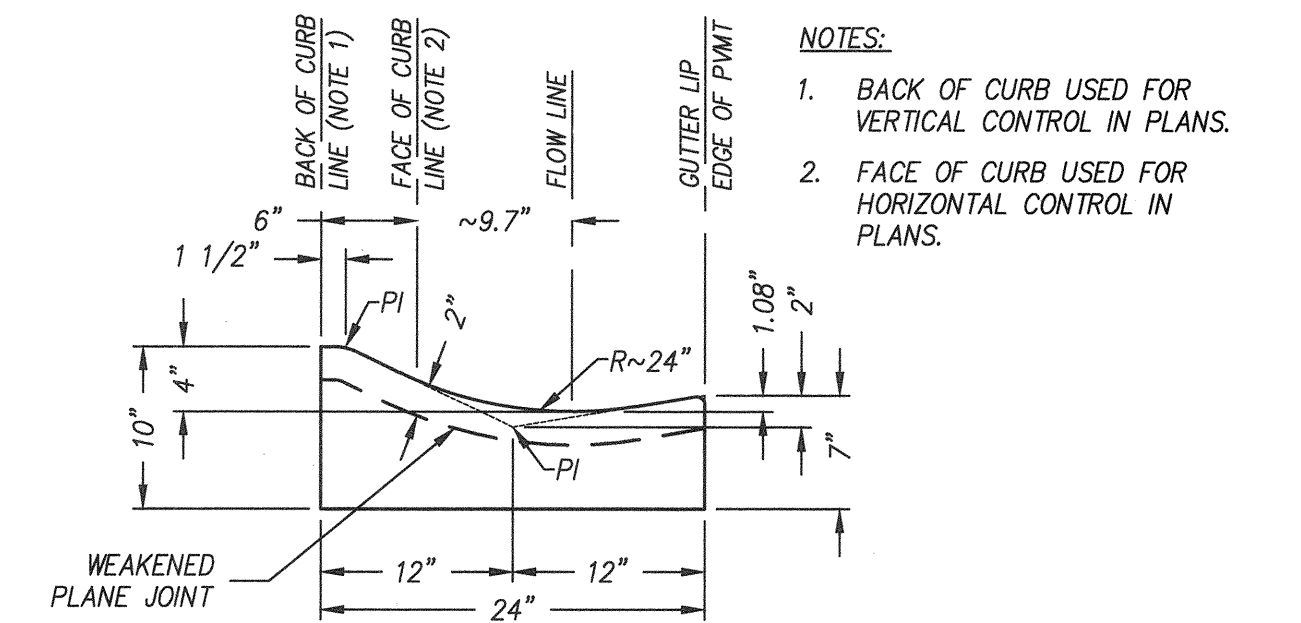
**PRIVATE STREET 'D'
(STREET 'D' STA. 1+01.67-1+16.56)**

NO SCALE



**PRIVATE STREET 'D' WITH PARALLEL PARKING
(STREET 'D' STA. 1+16.56-1+36.56, 4+67.68-4+87.48)**

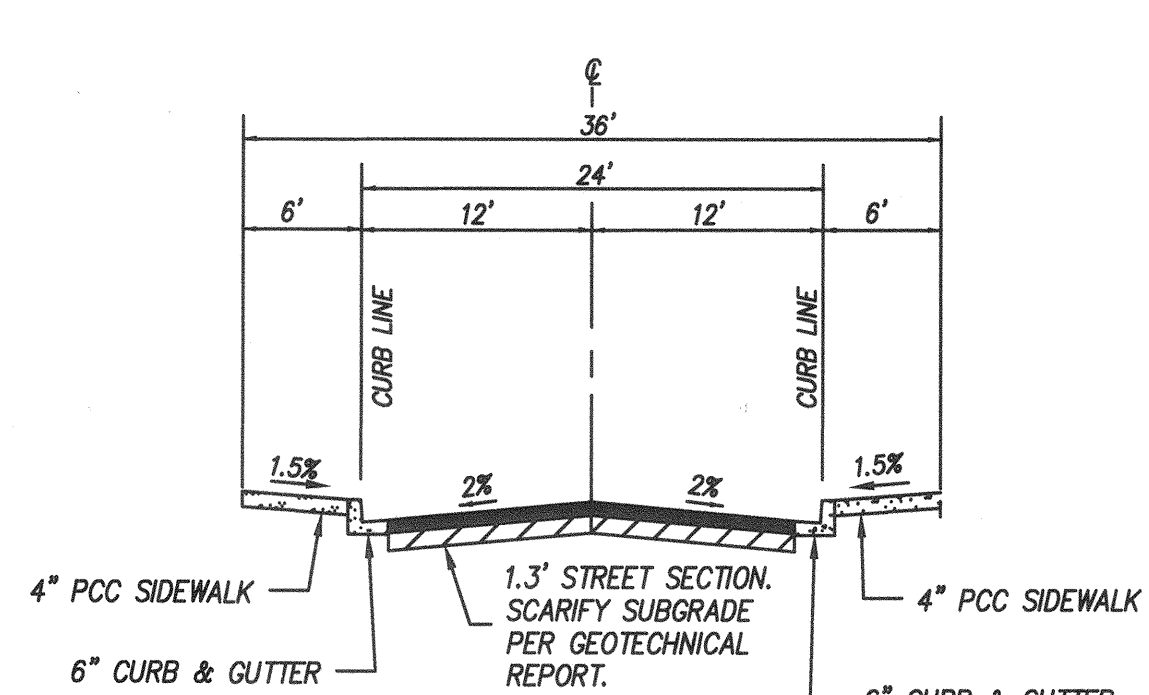
NO SCALE



MODIFIED ROLLED CURB

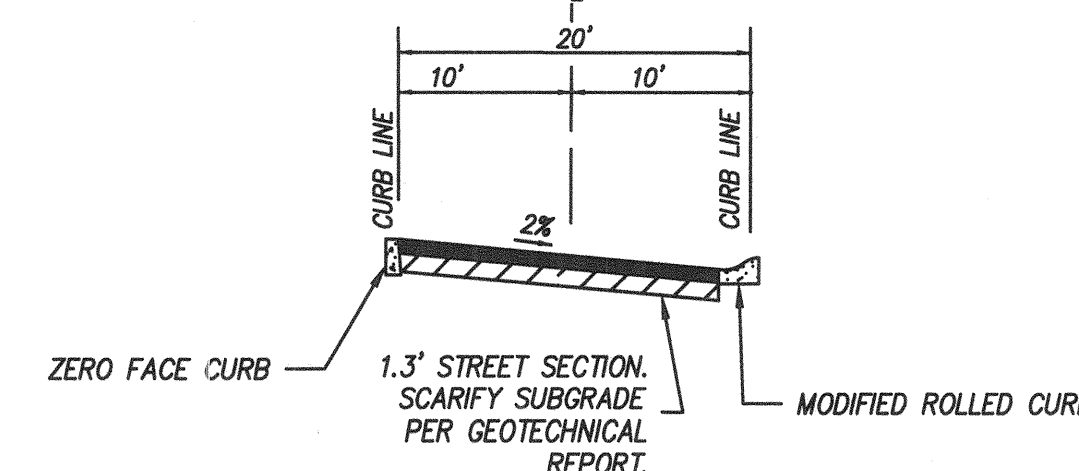
NO SCALE

- NOTES:
- BACK OF CURB USED FOR VERTICAL CONTROL IN PLANS.
 - FACE OF CURB USED FOR HORIZONTAL CONTROL IN PLANS.



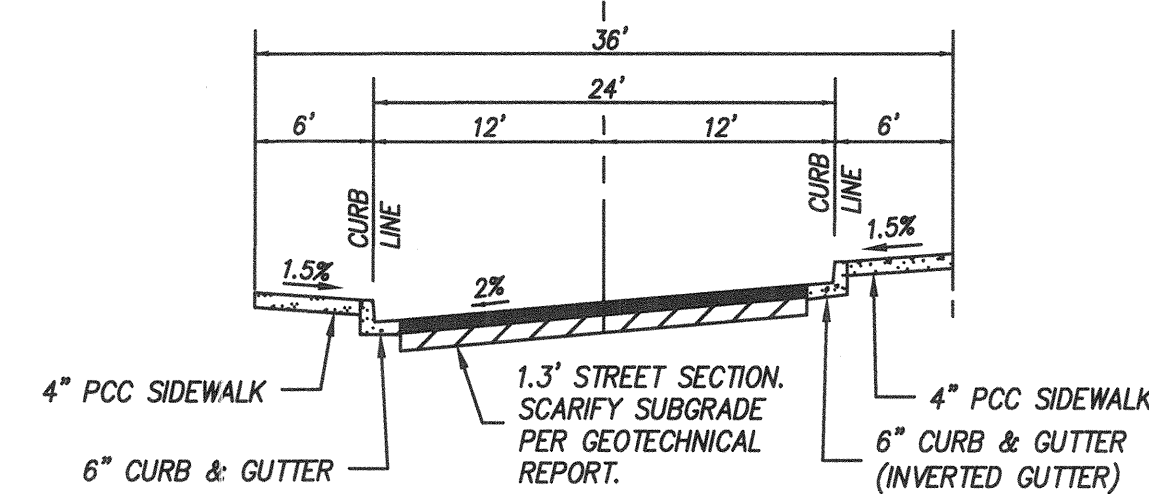
PRIVATE STREET 'A'

NO SCALE



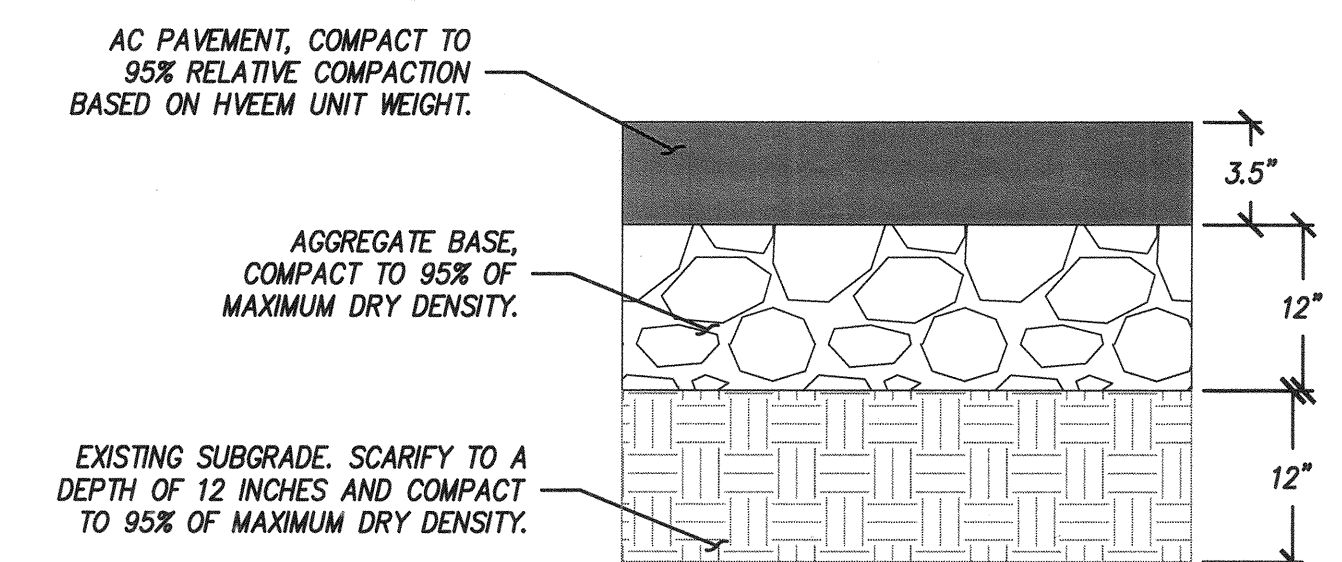
PRIVATE STREETS 'B', 'G'

NO SCALE



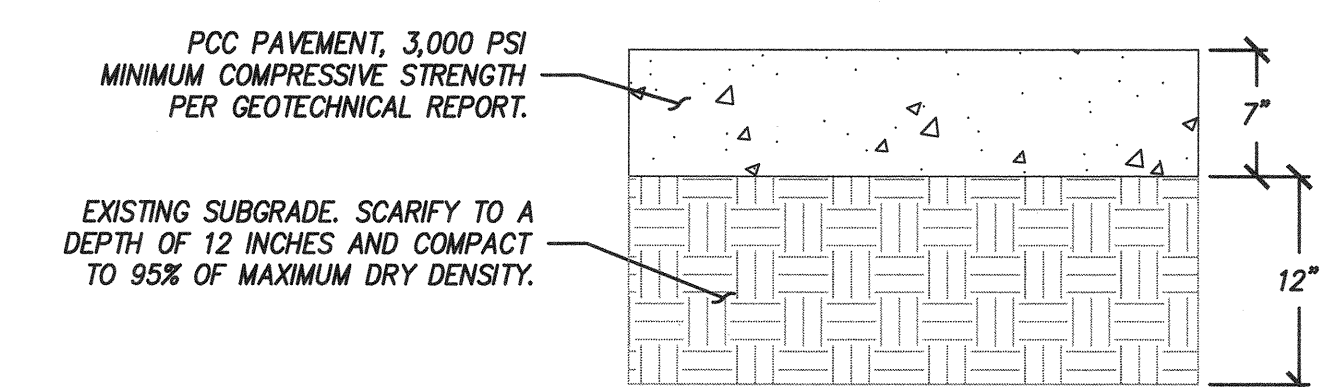
PRIVATE STREET 'E'

NO SCALE



AC PAVEMENT SECTION

NO SCALE



PCC PAVEMENT SECTION

NO SCALE

AS BUILT

UTILITY NOTE

SIGNATURE _____ DATE _____
 P.E. No. _____
 My Registration Expires _____ Discipline _____

ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM RECORD DATA AT THEIR APPROXIMATE LOCATIONS. UNDERGROUND FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED OR ARE NOT OF RECORD. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PERTINENT UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.

latitude 33
 PLANNING & ENGINEERING
 9998 Hilbert Street, 2nd Floor, San Diego, CA 92131
 Tel 858.751.0883

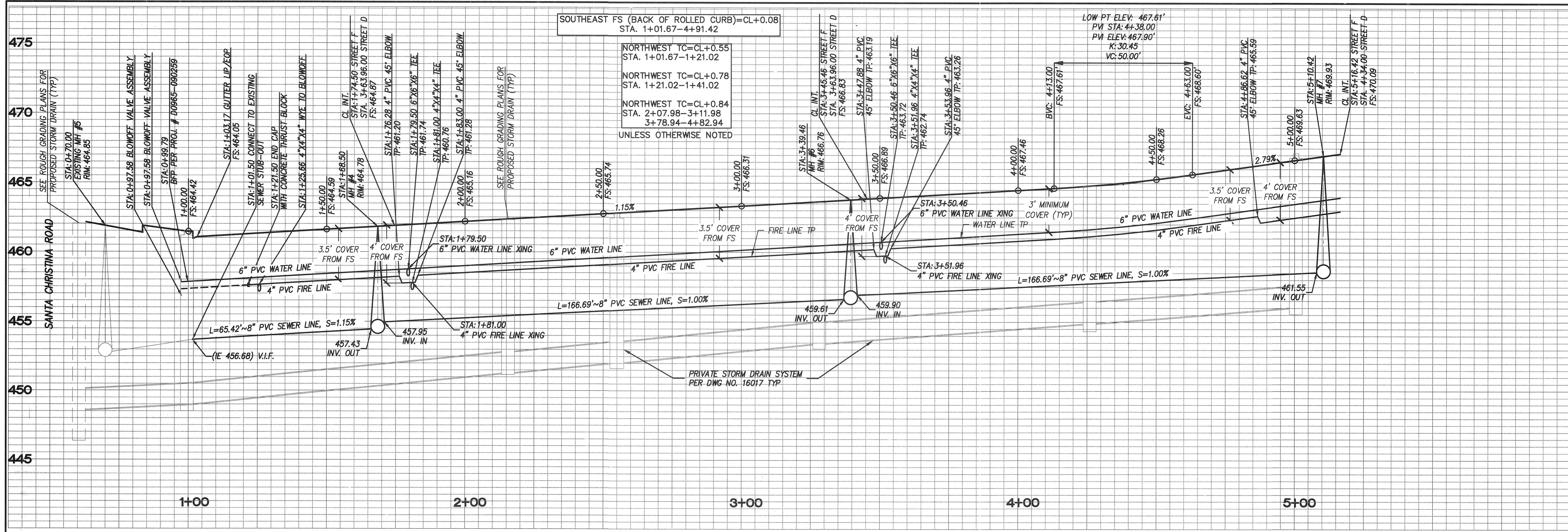
CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd
CONTRACTOR: _____	DWG NO. 14024 (W.O. NO. 088396)	LAT33	CITY AS-BUILT		
INSPECTOR: _____	DWG NO. 14031, MAP NO. 15350,				
DATE COMPLETED: _____	DWG NO. 18017, DWG NO. 18013, OWD NO. D0985-090259				

DESCRIPTION	SCALE	Designed By:	Drawn By:	Checked By:	Submitted:	Approved:
BENCH MARK DESCRIPTION: BRASS DISK W/ "30 CITY ENGINE" IN 3/4" IRON PIPE 0.5 IN SLY OF NTH LA VIEIRA RD & BRUSH RD SO SIDE OF GRAVEL RD 225' +/- W OF GATE TO A.V.R. TRACKING STA 15+/- E OF METAL GATE. (PT# 1344 PER R.O.S. 14841) ELEVATION = 520.425 (NAD 83)	SCALE HORIZONTAL N/A VERTICAL N/A	Bradley D. Sager	Bradley D. Sager	Bradley D. Sager	12/15/16	Tom Adick

PLANS PREPARED UNDER SUPERVISION OF:	DATE:	PLANNING:	LANDSCAPE:
Bradley D. Sager	12/14/16	SA	M.R.

CITY OF CHULA VISTA	DEVELOPMENT SERVICES DEPARTMENT	DRAWING NO.
IMPROVEMENT PLANS FOR:		16019-03
OTAY RANCH VILLAGE TWO - R-17B(b)		W.O. NO. OR-8621

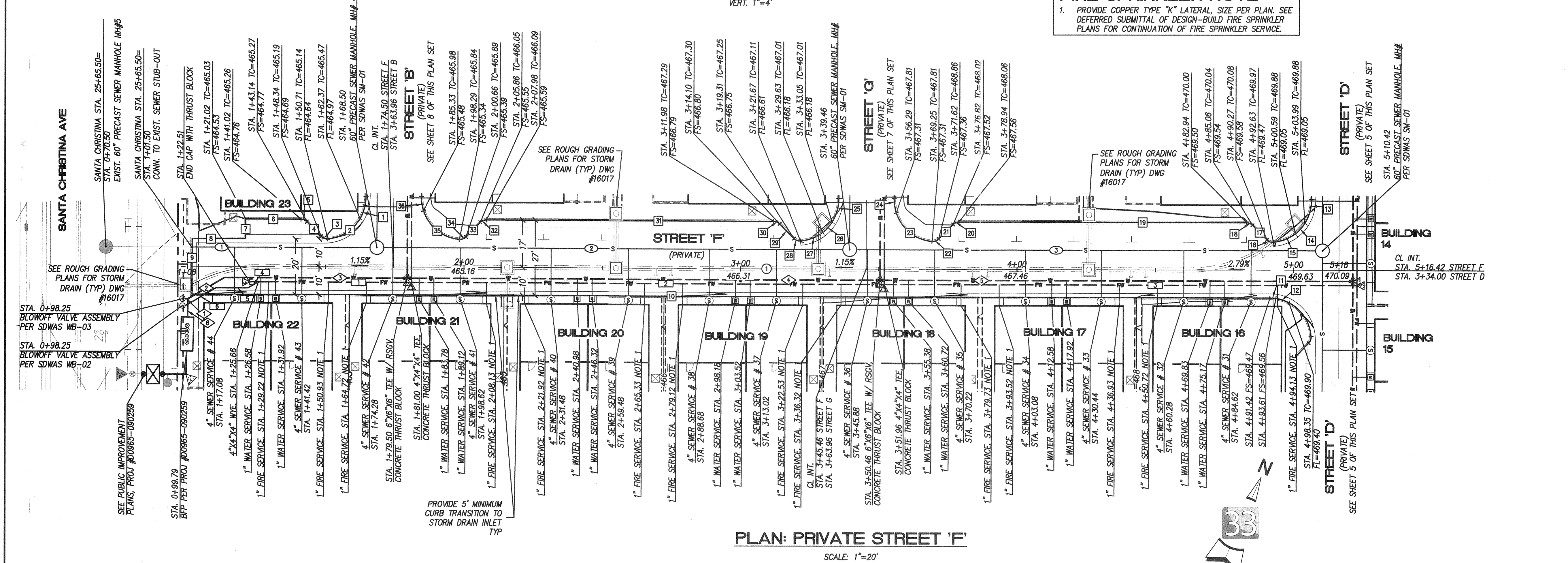
TOTAL NUMBER OF SHEETS = 14



PROFILE: PRIVATE STREET 'F'

SCALE: HORIZ. 1"=20'
VERT. 1"=4'

FIRE SPRINKLER NOTE
1. PROVIDE COPPER TYPE "K" LATERAL, SIZE PER PLAN. SEE DEFERRED SUBMITTAL OF DESIGN-BUILD FIRE SPRINKLER PLANS FOR CONTINUATION OF FIRE SPRINKLER SERVICE.



PLAN: PRIVATE STREET 'F'

SCALE: 1"=20'

PRIVATE CENTER LINE DATA				
NO.	DELTA OR BRG.	RADIUS(ft)	LENGTH(ft)	REMARKS
①	N66°17'20"E	-----	414.76	STREET 'F'

PRIVATE FIRE WATER DATA				
NO.	DELTA OR BRG.	RADIUS(ft)	LENGTH(ft)	REMARKS
1	N66°17'20"E	-----	58.49	4" PVC
2	N66°17'20"E	-----	170.96	"
3	N66°17'20"E	-----	170.96	"
4	N36°17'20"E	-----	4.37	"
5	N66°17'20"E	-----	11.54	"
6	N36°17'20"E	-----	12.80	"

PRIVATE WATER DATA				
NO.	DELTA OR BRG.	RADIUS(ft)	LENGTH(ft)	REMARKS
1	N66°17'20"E	-----	1.00	6" PVC
2	N36°17'20"E	-----	15.17	"
3	N66°17'20"E	-----	66.12	"
4	N66°17'20"E	-----	170.96	"
5	N66°17'20"E	-----	170.96	"
6	N22°18'17"W	-----	6.65	"

PRIVATE SEWER DATA				
NO.	DELTA OR BRG.	RADIUS(ft)	LENGTH(ft)	REMARKS
①	N66°17'20"E	-----	64.50	8" PVC
②	N66°17'20"E	-----	165.96	"
③	N66°17'20"E	-----	165.96	"

PRIVATE CURB DATA *				
NO.	DELTA OR BRG.	RADIUS(ft)	LENGTH(ft)	REMARKS
1	19°05'55"	15.00	5.00	MODIFIED ROLLED CURB
2	66°17'12"	15.00	17.35	6" PCC CURB & GUTTER
3	49°36'53"	3.00	2.60	"
4	N68°42'40"W	-----	7.36	"
5	45°00'00"	3.00	2.36	"
6	N66°17'20"E	-----	20.00	"
7	N23°42'40"W	-----	7.00	"
8	N66°17'20"E	-----	19.35	6" PCC CURB & GUTTER
9	N23°42'40"W	-----	20.00	"
10	N66°17'20"E	-----	389.76	MODIFIED ROLLED CURB
11	82°25'4"	15.00	2.19	"
12	19°05'55"	15.00	5.00	TRANSITION
13	33°04'49"	15.00	8.66	"
14	19°14'58"	15.00	5.04	10" CURB INLET
15	33°04'44"	15.00	8.65	TRANSITION
16	49°36'53"	3.00	2.60	6" PCC CURB
17	N68°42'40"W	-----	7.36	"
18	45°00'00"	3.00	2.36	"
19	N66°17'20"E	-----	104.00	"
20	45°00'00"	3.00	2.36	"
21	N21°17'20"E	-----	7.36	"
22	49°36'53"	3.00	2.60	"
23	66°17'12"	15.00	17.35	"
24	19°05'55"	15.00	5.00	"
25	33°05'28"	15.00	8.66	TRANSITION
26	19°12'55"	15.00	5.03	10" CURB INLET
27	33°04'44"	15.00	8.66	TRANSITION
28	49°36'53"	3.00	2.60	6" PCC CURB
29	N68°42'40"W	-----	7.36	"
30	45°00'00"	3.00	2.36	"
31	N66°17'20"E	-----	104.00	"
32	45°00'00"	3.00	2.36	"
33	N21°17'20"E	-----	7.36	"
34	49°36'53"	3.00	2.60	"
35	66°17'12"	15.00	17.35	"
36	19°05'55"	15.00	5.00	"

* SEE SHEET 14 FOR RED CURB FIRE LANE STRIPING WHERE OCCURS
** ROLLED CURB AND GUTTER NOTE: BACK OF CURB USED FOR VERTICAL CONTROL AND FACE OF CURB USED FOR HORIZONTAL CONTROL. SEE MODIFIED ROLLED CURB AND GUTTER DETAIL ON SHEET 3.

AS BUILT		UTILITY NOTE	
SIGNATURE _____	DATE _____	ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM RECORD DATA AT THEIR APPROXIMATE LOCATIONS. UNDERGROUND FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED OR ARE NOT OF RECORD. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PERTINENT UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.	
Printed Name _____	P.E. No. _____	latitudo 33 PLANNING & ENGINEERING 9888 Hubert Street, 2nd Floor, San Diego, CA 92131 Tel: 619.751.0833	
My Registration Expires _____	Discipline _____	CONSTRUCTION RECORD	
CONTRACTOR: _____	REFERENCES: _____	By: _____	REVISIONS: _____
INSPECTOR: _____	DWG NO. 14024 (W.O. NO. 083386)	LAT33	CITY AS-BUILT
DATE COMPLETED: _____	DWG NO. 14031, MAP NO. 15350	Date: _____	App'd: _____
	DWG NO. 16017, DWG NO. 16013		
	OND NO. 00965-090259		

SCALE: HORIZONTAL N/A	VERTICAL N/A	Designed By: _____	Drawn By: _____	Checked By: _____	Submitted: 12/15/14	Approved: 12/16/16
BENCH MARK: DESCRIPTION: BRASS DISK 100 "80 CITY CORNER" IN 3/4" IRON PIPE 0.5 IN STY OF INTX LA MEZRA RD & BENCH RD SO SIDE OF GRAVEL RD 225' +/- W OF GATE TO A.V.R. TRACKING STA 194'- E OF METAL GATE. (P19 1344 PER R.G.S. 1486)		Plans Prepared Under Supervision Of: _____		Date: 12/14/16	By: _____	By: _____
ELEVATION = 520.425 (MAY 20)		R.C.E. No. C054584		PLANNING: _____	LANDSCAPE: MR	City Engineer

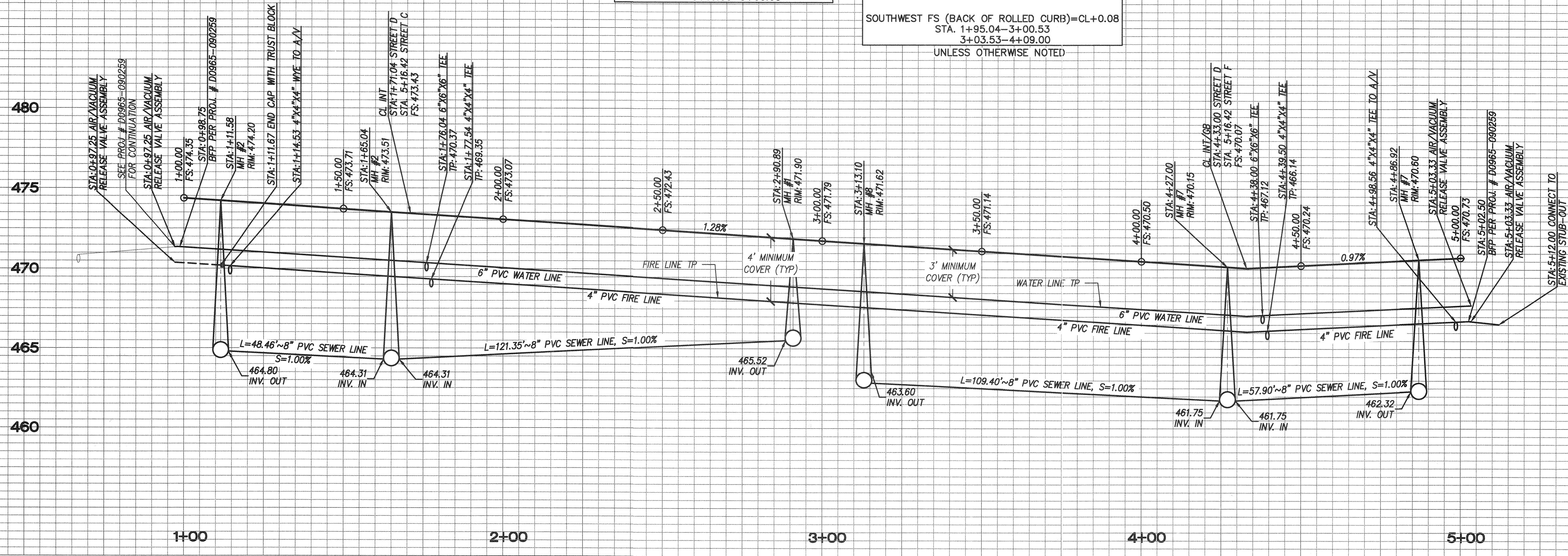
CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT		DRAWING NO. 16019-04
IMPROVEMENT PLANS FOR: OTAY RANCH VILLAGE TWO - R-17B(b)		W.O. NO. OR-8621
TOTAL NUMBER OF SHEETS = 14		

NORTHEAST TC (0° CURB FACE)=CL+0.20
STA. 1+00.00-2+62.00
3+16.00-5+00.08

SOUTHWEST TC=CL+0.21
STA. 1+00.00-1+16.56
4+87.48-5+00.08

SOUTHWEST FS (BACK OF ROLLED CURB)=CL+0.08
STA. 1+95.04-3+00.53
3+03.53-4+09.00

UNLESS OTHERWISE NOTED



PROFILE: PRIVATE STREET 'D'

FIRE SPRINKLER NOTE
1. PROVIDE COPPER TYPE "K" LATERAL, SIZE PER PLAN. SEE DEFERRED SUBMITTAL OF DESIGN-BUILD FIRE SPRINKLER PLANS FOR CONTINUATION OF FIRE SPRINKLER SERVICE.

PRIVATE CENTER LINE DATA			
NO.	DELTA OR BRG.	RADIUS(ft) LENGTH(ft) REMARKS	
1	N23°42'40"W	400.08	STREET 'D'

PRIVATE WATER DATA			
NO.	DELTA OR BRG.	RADIUS(ft) LENGTH(ft) REMARKS	
1	N66°17'20"E	7.55	6" PVC
2	N21°17'20"E	11.48	"
3	N23°42'40"W	78.04	"
4	N23°42'40"W	261.96	"
5	N23°42'40"W	56.72	"
6	N66°17'20"E	11.75	"
7	N23°42'40"W	9.86	"

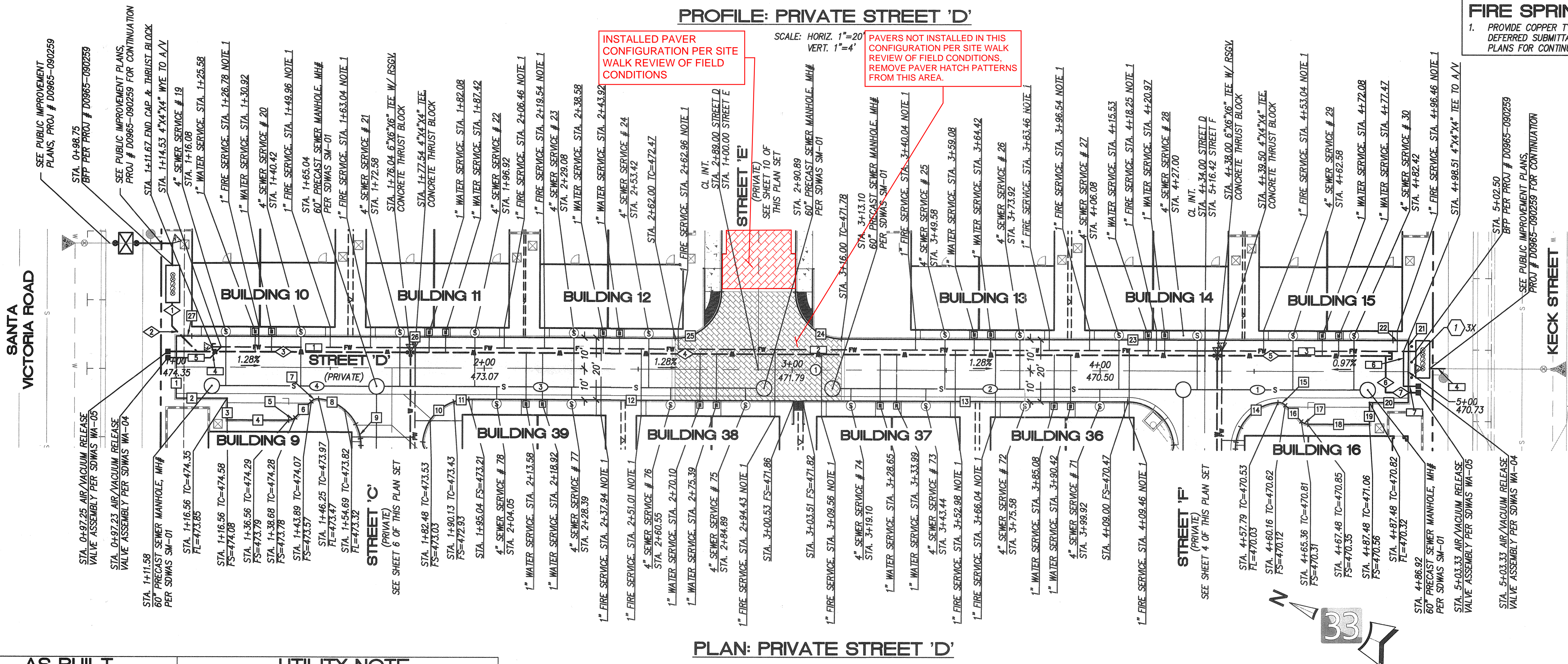
PRIVATE FIRE WATER DATA			
NO.	DELTA OR BRG.	RADIUS(ft) LENGTH(ft) REMARKS	
1	N23°42'40"W	65.87	4" PVC
2	N23°42'40"W	261.96	"
3	N23°42'40"W	61.08	"
4	N68°42'40"W	5.00	"
5	N23°42'40"W	13.03	"
6	N66°17'20"E	11.25	"
7	N23°42'40"W	4.08	"

PRIVATE SEWER DATA			
NO.	DELTA OR BRG.	RADIUS(ft) LENGTH(ft) REMARKS	
1	N23°42'40"W	54.92	8" PVC
2	N23°42'40"W	104.90	"
3	N23°42'40"W	110.85	"
4	N23°42'40"W	48.46	"

PRIVATE CURB DATA *			
NO.	DELTA OR BRG.	RADIUS(ft) LENGTH(ft) REMARKS	
1	N66°17'20"E	20.00	6" PCC CURB
2	N23°42'40"W	16.56	6" PCC CURB & GUTTER
3	N66°17'20"E	7.00	6" PCC CURB
4	N23°42'40"W	20.00	"
5	45°00'00"	3.00	"
6	N68°42'40"W	7.36	"
7	49°36'53"	3.00	"
8	57°54'18"	15.00	15.16
9	19°05'55"	15.00	5.00
10	66°17'20"	15.00	17.35
11	19°05'55"	15.00	5.00
12	N23°42'40"W	105.49	MODIFIED ROLLED CURB
13	N23°42'40"W	105.49	"
14	57°54'18"	15.00	15.16
15	49°36'53"	3.00	2.60
16	N21°17'20"E	7.36	6" PCC CURB
17	45°00'00"	3.00	"
18	N23°42'40"W	20.00	"
19	N66°17'20"E	7.00	"
20	N23°42'40"W	12.60	6" PCC CURB & GUTTER
21	N66°17'20"E	20.00	6" PCC CURB
22	N23°42'40"W	5.00	TRANSITION
23	N23°42'40"W	179.08	0" PCC CURB
24	90°00'00"	15.00	23.56
25	90°00'00"	15.00	23.56
26	N23°42'40"W	157.00	"
27	N23°42'40"W	5.00	TRANSITION

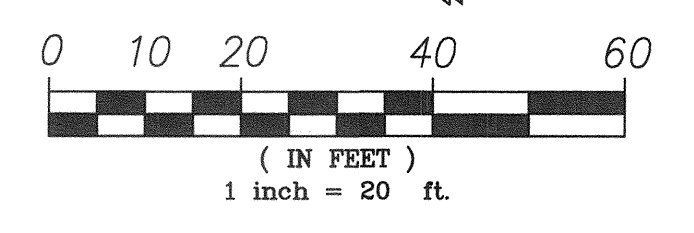
* SEE SHEET 14 FOR RED CURB FIRE LANE STRIPING WHERE OCCURS

** ROLLED CURB AND GUTTER NOTE: BACK OF CURB USED FOR VERTICAL CONTROL AND FACE OF CURB USED FOR HORIZONTAL CONTROL. SEE MODIFIED ROLLED CURB AND GUTTER DETAIL ON SHEET 3.



PLAN: PRIVATE STREET 'D'

1 DENOTES STEEL PROTECTION POST PER SDRSD WM-04

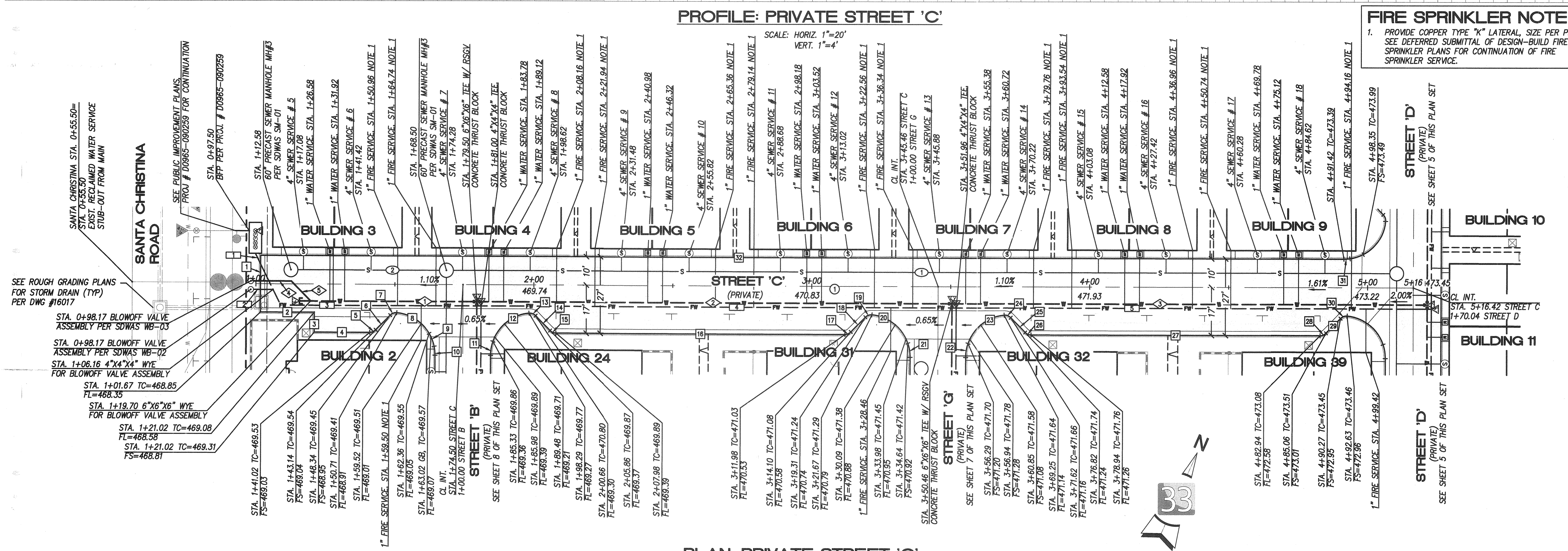
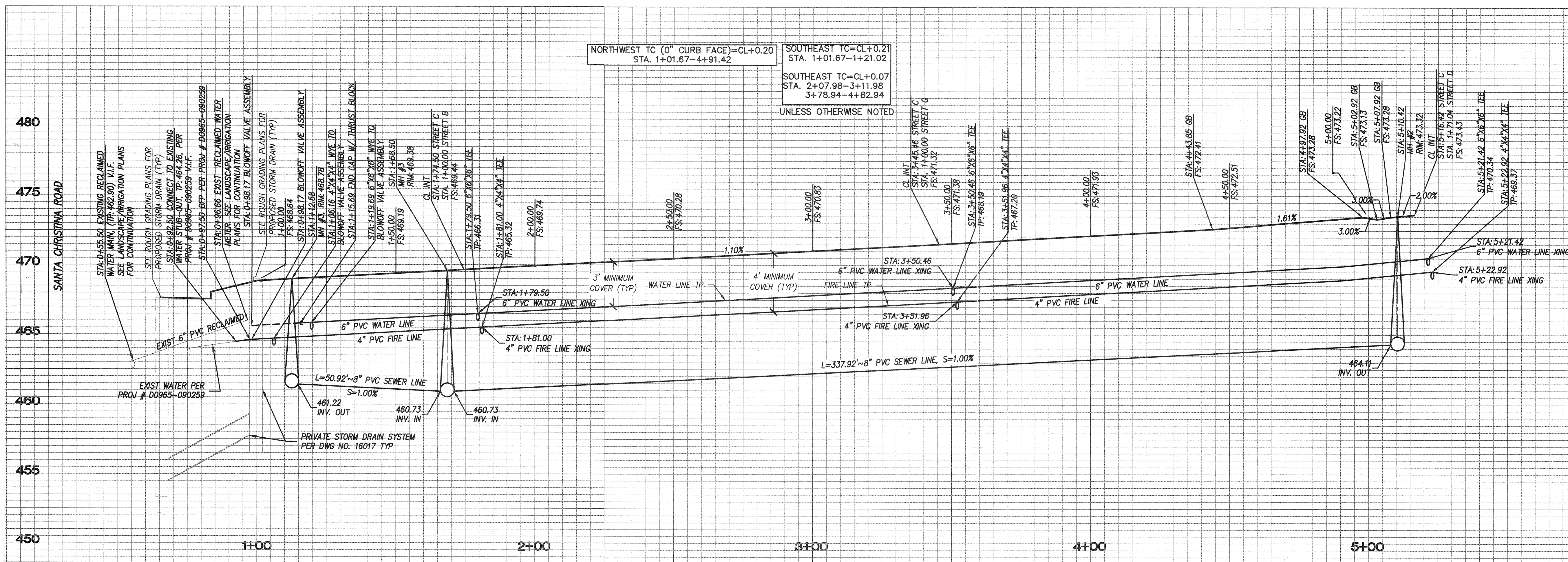


AS BUILT		UTILITY NOTE	
SIGNATURE _____	DATE _____	ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM RECORD DATA AT THEIR APPROXIMATE LOCATIONS. UNDERGROUND FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED OR ARE NOT OF RECORD. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PERTINENT UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.	
Printed Name _____	P.E. No. _____		
My Registration Expires _____	Discipline _____		

latitude 33
PLANNING & ENGINEERING
9888 Hilbert Street, 2nd Floor, San Diego, CA 92131
Tel: 619.751.0833

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd	BENCH MARK	SCALE	Designed By	Drawn By	Checked By	Submitted	Approved
CONTRACTOR: _____	DWG NO. 14024 (W.O. NO. 088386)	LAT33	CITY AS-BUILT			DESCRIPTION: BRASS DISK (80) 3/4" CITY CENTER IN 3/4" IRON PIPE 0.5 IN SLY OF INTX LA MEDIA RD & BIRCH RD 50 SIDE OF GRAVEL RD 225' +/- W OF GATE TO A.V.R. TRAILING SIGN 15'-E OF METAL GATE. (11/19/14 PER P.L.S. 14841)	HORIZONTAL N/A VERTICAL N/A	Bradley D. Sager	_____	_____	12/15/14	12/14/14
INSPECTOR: _____	DWG NO. 14031, MAP NO. 15350, DWG NO. 16017, DWG NO. 16013, OND NO. 00965-080259					ELEVATION = 320.425 (MAD 98)		Plans Prepared Under Supervision Of: _____	_____	_____	By: _____	By: _____
DATE COMPLETED: _____								BRADLEY D. SAGER	R.C.E. No. C054584	PLANNING: sd	LANDSCAPE: MR	City Engineer

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT DRAWING NO. 16019-05
IMPROVEMENT PLANS FOR: OTAY RANCH VILLAGE TWO - R-17B(b)
W.O. NO. 08-8621

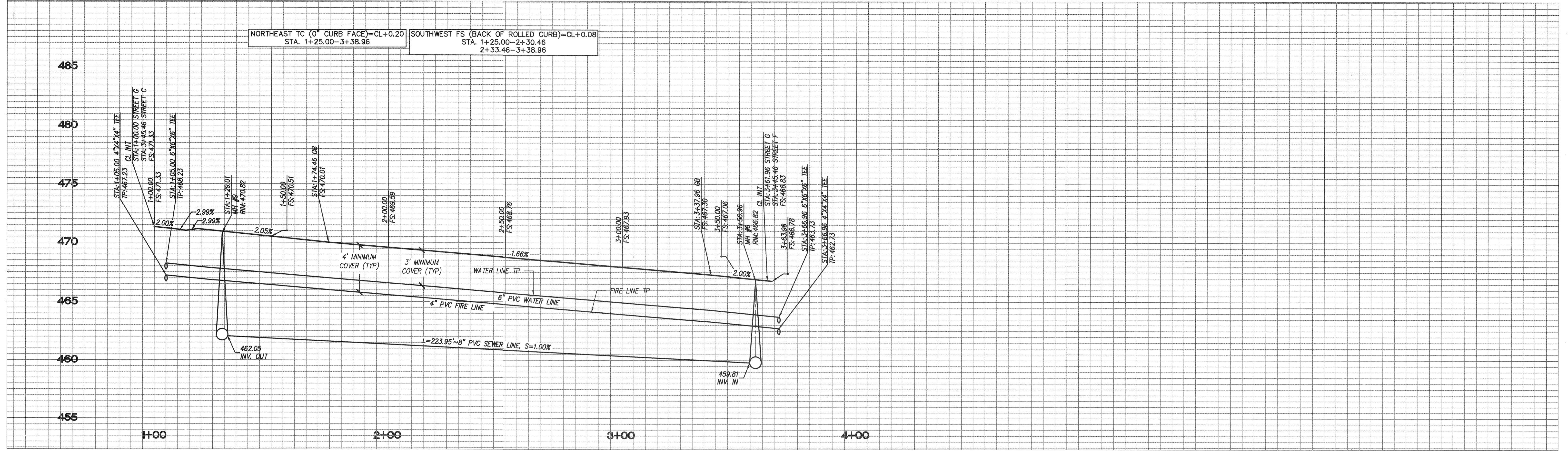


AS BUILT	UTILITY NOTE
SIGNATURE _____ DATE _____ P.E. No. _____ Printed Name _____ My Registration Expires _____ Discipline _____	ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM RECORD DATA AT THEIR APPROXIMATE LOCATIONS. UNDERGROUND FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED OR ARE NOT OF RECORD. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PERTINENT UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.

latitude 33
PLANNING & ENGINEERING
9898 Hilbert Street, 2nd Floor, San Diego, CA 92131
Tel 858.751.0833

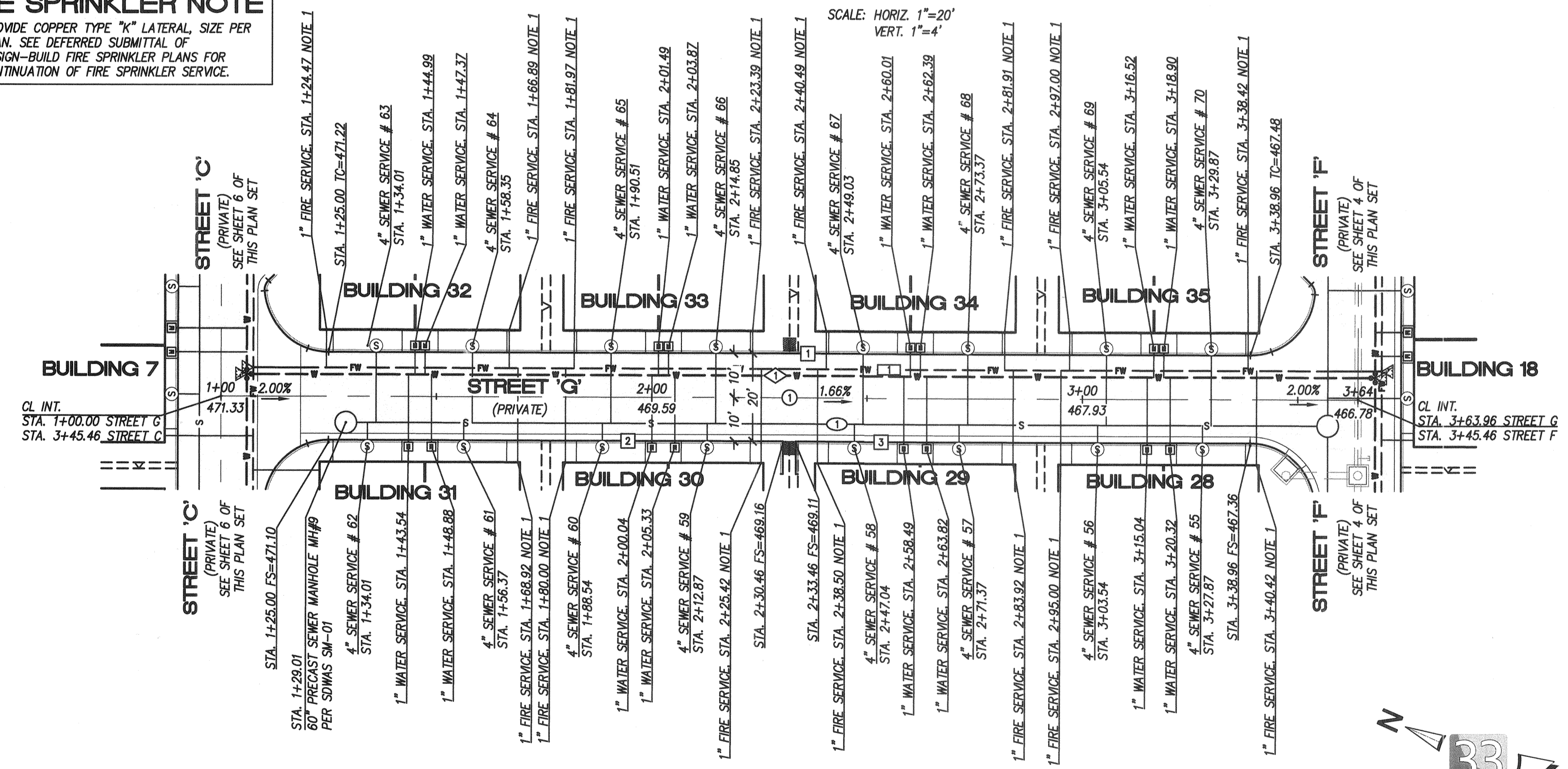
CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd	BENCH MARK	SCALE	Designed By	Drawn By	Checked By	Submitted	Approved	
CONTRACTOR: _____ INSPECTOR: _____ DATE COMPLETED: _____	DWG NO. 14024 (W.O. NO. 08238C) DWG NO. 14031, MAP NO. 15350, DWG NO. 16017, DWG NO. 16013, OWD NO. D0965-090259	LAT33	CITY AS-BUILT			DESCRIPTION: BRASS DISK MKD. "50 CITY ENGR." IN 3/4" IRON PIPE 0.5 IN SLY OF INTX LA MEDIA RD & BRICH RD 30 SIDE OF GRAVEL RD 225' +/- W OF GATE TO A.V.R. TRACKING STA 105'- E OF METAL GATE. (134' FROM R.O.S. 1494')	HORIZONTAL N/A VERTICAL N/A	Plans Prepared Under Supervision Of: <i>R. D. Sager</i> BRADLEY D. SAGER				12/15/16 <i>Dan Patel</i>	12/14/16 <i>Tom Adler</i>

PRIVATE CENTER LINE DATA	PRIVATE WATER DATA	PRIVATE FIRE WATER DATA	RECLAIMED WATER DATA	PRIVATE SEWER DATA	PRIVATE CURB DATA *
NO. DELTA OR BRG. RADIUS(R) LENGTH(L) REMARKS 1 N66°17'20"E 416.42 STREET 'C'	NO. DELTA OR BRG. RADIUS(R) LENGTH(L) REMARKS 1 N66°17'20"E 68.81 6" PVC 2 N66°17'20"E 170.96 " 3 N66°17'20"E 170.96 " 4 N66°17'20"E 13.53 " 5 N68°42'40"W 9.90 "	NO. DELTA OR BRG. RADIUS(R) LENGTH(L) REMARKS 1 S50°27'07"E 20.42 4" PVC 2 N66°11'24"E 6.99 " 3 N66°17'20"E 72.06 " 4 N66°17'20"E 170.96 " 5 N66°17'20"E 170.96 "	NO. DELTA OR BRG. RADIUS(R) LENGTH(L) REMARKS 1 N66°17'20"E 41.16 6" PVC	NO. DELTA OR BRG. RADIUS(R) LENGTH(L) REMARKS 1 N66°17'20"E 337.92 8" PVC 2 N66°17'20"E 50.92 "	NO. DELTA OR BRG. RADIUS(R) LENGTH(L) REMARKS 1 N23°42'40"W 20.00 6" PCC CURB & GUTTER 2 N66°17'20"E 19.35 " 3 N23°42'40"W 7.00 6" PCC CURB 4 N66°17'20"E 20.00 " 5 45°00'00" 3.00 2.36 " 6 N211°7'20"E 7.36 " 7 49°36'53" 3.00 2.60 " 8 54°25'43" 15.00 14.25 " 9 19°05'54" 15.00 5.00 TRANSITION 10 11°51'30" 15.00 3.10 MODIFIED ROLLED CURB 11 19°05'55" 15.00 5.00 TRANSITION 12 66°17'12" 15.00 17.35 6" PCC CURB 13 49°36'53" 3.00 2.60 " 14 N68°42'40"W 7.36 " 15 45°00'00" 3.00 2.36 " 16 N66°17'20"E 104.00 " 17 45°00'00" 3.00 2.36 " 18 N211°7'20"E 7.36 " 19 49°36'53" 3.00 2.60 " 20 66°17'12" 15.00 17.35 " 21 19°05'55" 15.00 5.00 TRANSITION 22 19°05'55" 15.00 5.00 " 23 66°17'12" 15.00 17.35 6" PCC CURB 24 49°36'53" 3.00 2.60 " 25 N68°42'40"W 7.36 " 26 45°00'00" 3.00 2.36 " 27 N66°17'20"E 104.00 " 28 45°00'00" 3.00 2.36 " 29 N211°7'20"E 7.36 " 30 49°36'53" 3.00 2.60 " 31 8°22'54" 15.00 2.19 0" PCC CURB 32 N66°17'20"E 389.76 "



PROFILE: PRIVATE STREET 'G'

FIRE SPRINKLER NOTE
 1. PROVIDE COPPER TYPE "K" LATERAL SIZE PER PLAN. SEE DEFERRED SUBMITTAL OF DESIGN-BUILD FIRE SPRINKLER PLANS FOR CONTINUATION OF FIRE SPRINKLER SERVICE.



PLAN: PRIVATE STREET 'G'

PRIVATE CENTER LINE DATA				
NO.	DELTA OR BRG.	RADIUS(R)	LENGTH(L)	REMARKS
①	N23°42'40"W	-----	263.96	STREET 'G'

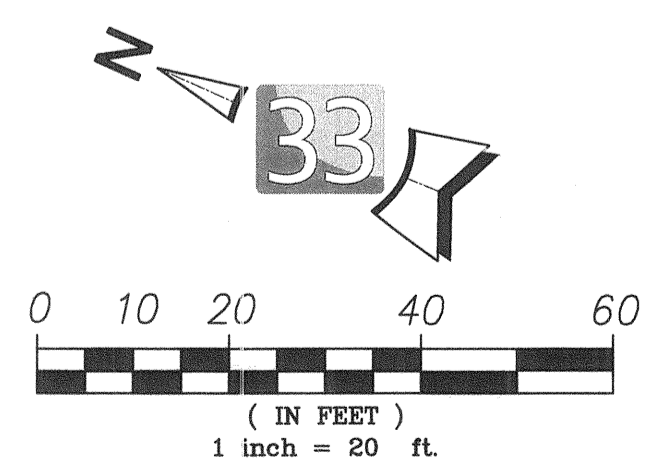
PRIVATE WATER DATA				
NO.	DELTA OR BRG.	RADIUS(R)	LENGTH(L)	REMARKS
①	N23°42'40"W	-----	261.96	6" PVC

PRIVATE FIRE WATER DATA				
NO.	DELTA OR BRG.	RADIUS(R)	LENGTH(L)	REMARKS
①	N23°42'40"W	-----	261.96	4" PVC

PRIVATE SEWER DATA				
NO.	DELTA OR BRG.	RADIUS(R)	LENGTH(L)	REMARKS
①	N23°42'40"W	-----	223.95	8" PVC

PRIVATE CURB DATA *				
NO.	DELTA OR BRG.	RADIUS(R)	LENGTH(L)	REMARKS
1	N23°42'40"W	-----	213.96	0" PCC CURB
2	N23°42'40"W	-----	105.46	MODIFIED ROLLED CURB
3	N23°42'40"W	-----	105.50	"

* SEE SHEET 14 FOR RED CURB FIRE LANE STRIPING WHERE OCCURS
 ** ROLLED CURB AND GUTTER NOTE: BACK OF CURB USED FOR VERTICAL CONTROL AND FACE OF CURB USED FOR HORIZONTAL CONTROL. SEE MODIFIED ROLLED CURB AND GUTTER DETAIL ON SHEET 3.



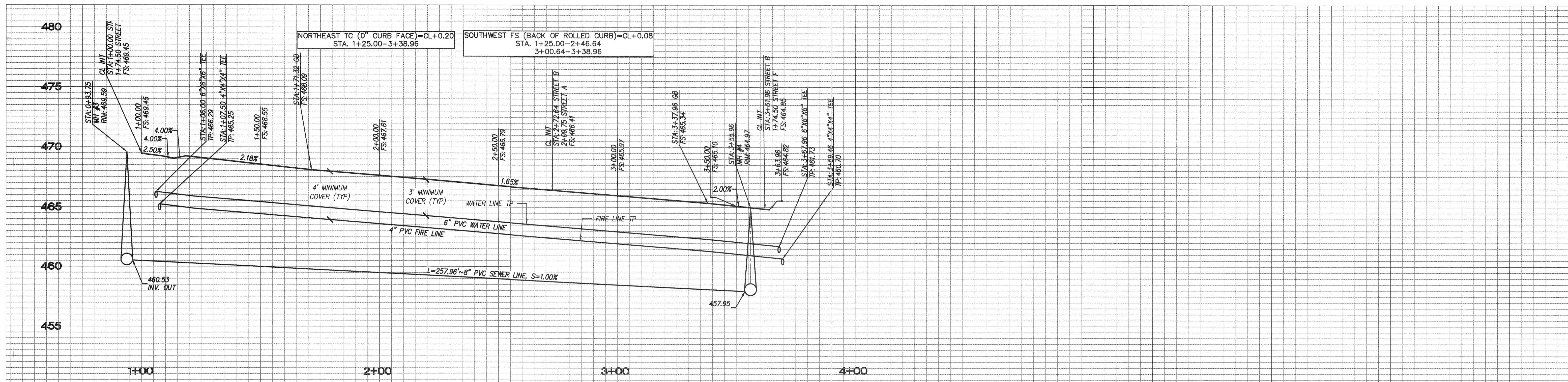
AS BUILT
 SIGNATURE _____ DATE _____
 P.E. No. _____
 My Registration Expires _____ Discipline _____

UTILITY NOTE
 ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM RECORD DATA AT THEIR APPROXIMATE LOCATIONS. UNDERGROUND FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED OR ARE NOT OF RECORD. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PERTINENT UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.



CONSTRUCTION RECORD		REFERENCES		By		REVISIONS		Date	App'd	BENCH MARK	SCALE	Designed By:	Drawn By:	Checked By:	Submitted:	Approved:	CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT		DRAWING NO.
CONTRACTOR: _____		DWG NO. 14024 (W.O. NO. 088386)		LAT33		CITY AS-BUILT				DESCRIPTION: BRASS DISK (80) 3/4" CITY CORN" IN 3/4" IRON PIPE 0.5 MI SLY OF INTX LA MEDIA RD & BIRCH RD 30 SIDE OF GRAVEL RD 225' +/- W OF GATE TO A.V.R. TRACKING STA 15+/- E OF METAL GATE (PI# 1344 PER P.L.S. 1486)	HORIZONTAL	Bradley D. Sager	_____	_____	12/15/16	12/16/16	IMPROVEMENT PLANS FOR: OTAY RANCH VILLAGE TWO - R-17B(b)		16019-07
INSPECTOR: _____		DWG NO. 14031, MAP NO. 15350								ELEVATION = 520.425 (NAVD 88)	VERTICAL	_____	_____	_____	By: Tom Adell	City Engineer		W.O. NO. 08621	
DATE COMPLETED: _____		DWG NO. 16017, DWG NO. 16013, OWD NO. D0965-080259									N/A	PLANS PREPARED UNDER SUPERVISION OF: _____	_____	_____	R.C.E. No. C054584				

TOTAL NUMBER OF SHEETS = 14



PROFILE: PRIVATE STREET 'B'

SCALE: HORIZ. 1"=20'
VERT. 1"=4'

PAVERS NOT INSTALLED IN THIS CONFIGURATION PER SITE WALK REVIEW OF FIELD CONDITIONS. REMOVE PAVEMENT HATCH PATTERNS FROM THIS AREA.

FIRE SPRINKLER NOTE

1. PROVIDE COPPER TYPE "K" LATERAL, SIZE PER PLAN. SEE DEFERRED SUBMITTAL OF DESIGN-BUILD FIRE SPRINKLER PLANS FOR CONTINUATION OF FIRE SPRINKLER SERVICE.

PRIVATE CENTER LINE DATA				
NO.	DELTA OR BRG.	RADIUS(ft)	LENGTH(ft)	REMARKS
①	N23°42'40"W	-----	263.96	STREET 'B'

PRIVATE WATER DATA				
NO.	DELTA OR BRG.	RADIUS(ft)	LENGTH(ft)	REMARKS
◇	N23°42'40"W	-----	261.96	6" PVC

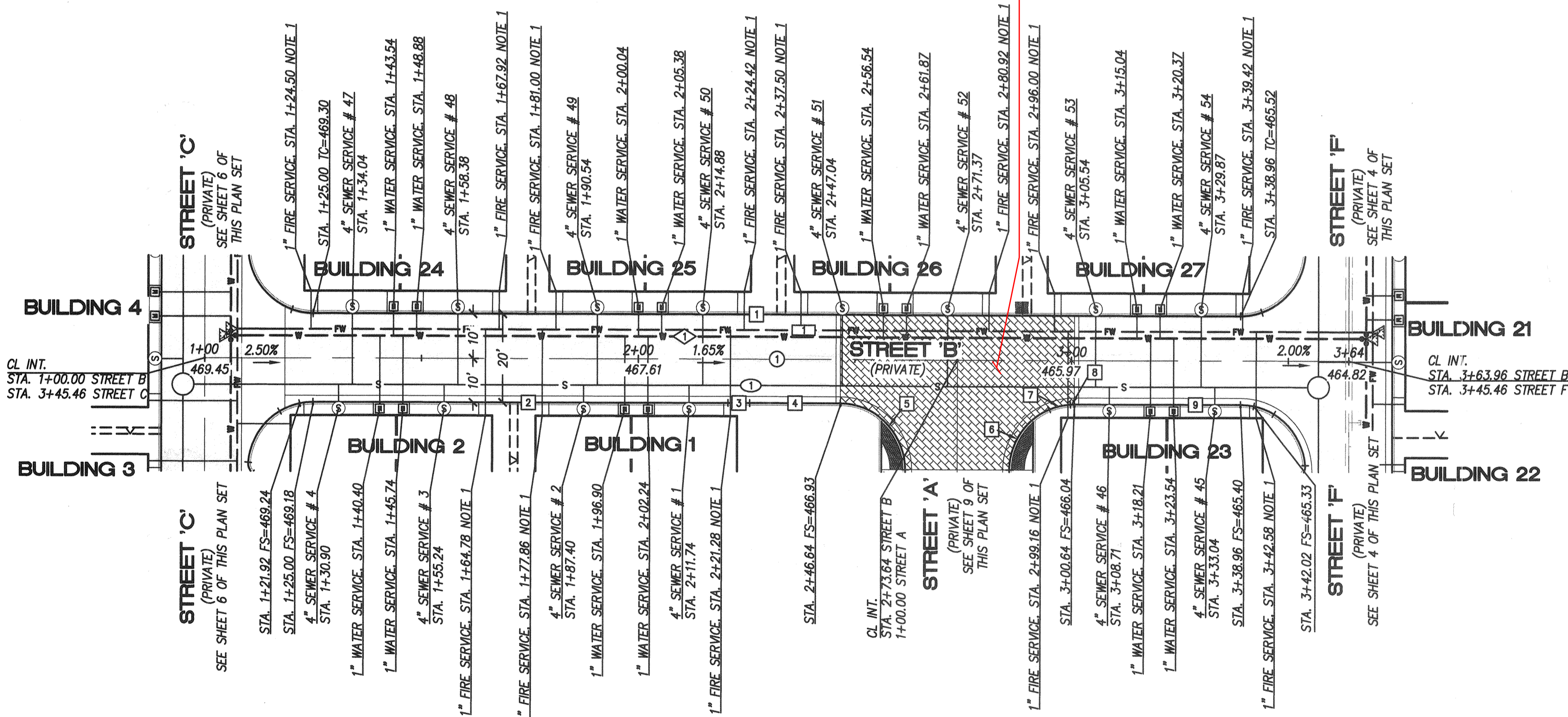
PRIVATE FIRE WATER DATA				
NO.	DELTA OR BRG.	RADIUS(ft)	LENGTH(ft)	REMARKS
□	N23°42'40"W	-----	261.96	4" PVC

PRIVATE SEWER DATA				
NO.	DELTA OR BRG.	RADIUS(ft)	LENGTH(ft)	REMARKS
⊙	N23°42'40"W	-----	257.96	8" PVC

PRIVATE CURB DATA *				
NO.	DELTA OR BRG.	RADIUS(ft)	LENGTH(ft)	REMARKS
1	N23°42'40"W	-----	213.96	0" PCC CURB
2	N23°42'40"W	-----	95.74	MODIFIED ROLLED CURB
3	N23°42'40"W	-----	5.00	TRANSITION
4	N23°42'40"W	-----	20.90	6" PCC CURB & GUTTER
5	90°00'00"	15.00	23.56	"
6	67°20'50"	15.00	17.63	"
7	19°05'55"	15.00	5.00	TRANSITION
8	3°33'15"	15.00	0.93	MODIFIED ROLLED CURB
9	N23°42'40"W	-----	38.32	"

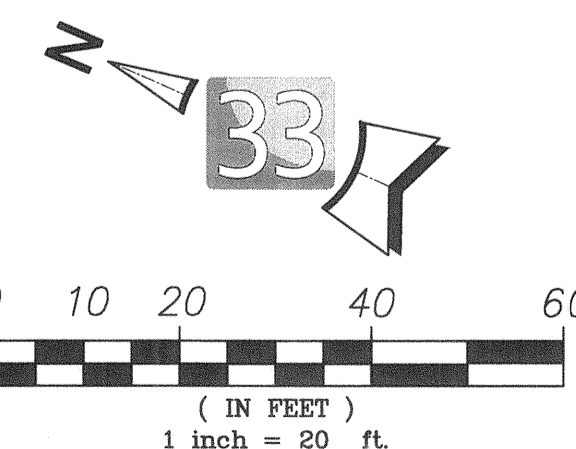
* SEE SHEET 14 FOR RED CURB FIRE LANE STRIPING WHERE OCCURS

** ROLLED CURB AND GUTTER NOTE: BACK OF CURB USED FOR VERTICAL CONTROL AND FACE OF CURB USED FOR HORIZONTAL CONTROL. SEE MODIFIED ROLLED CURB AND GUTTER DETAIL ON SHEET 3.



PLAN: PRIVATE STREET 'B'

SCALE: 1"=20'



AS BUILT

UTILITY NOTE

SIGNATURE _____ DATE _____
 P.E. No. _____
 Printed Name _____
 My Registration Expires _____ Discipline _____

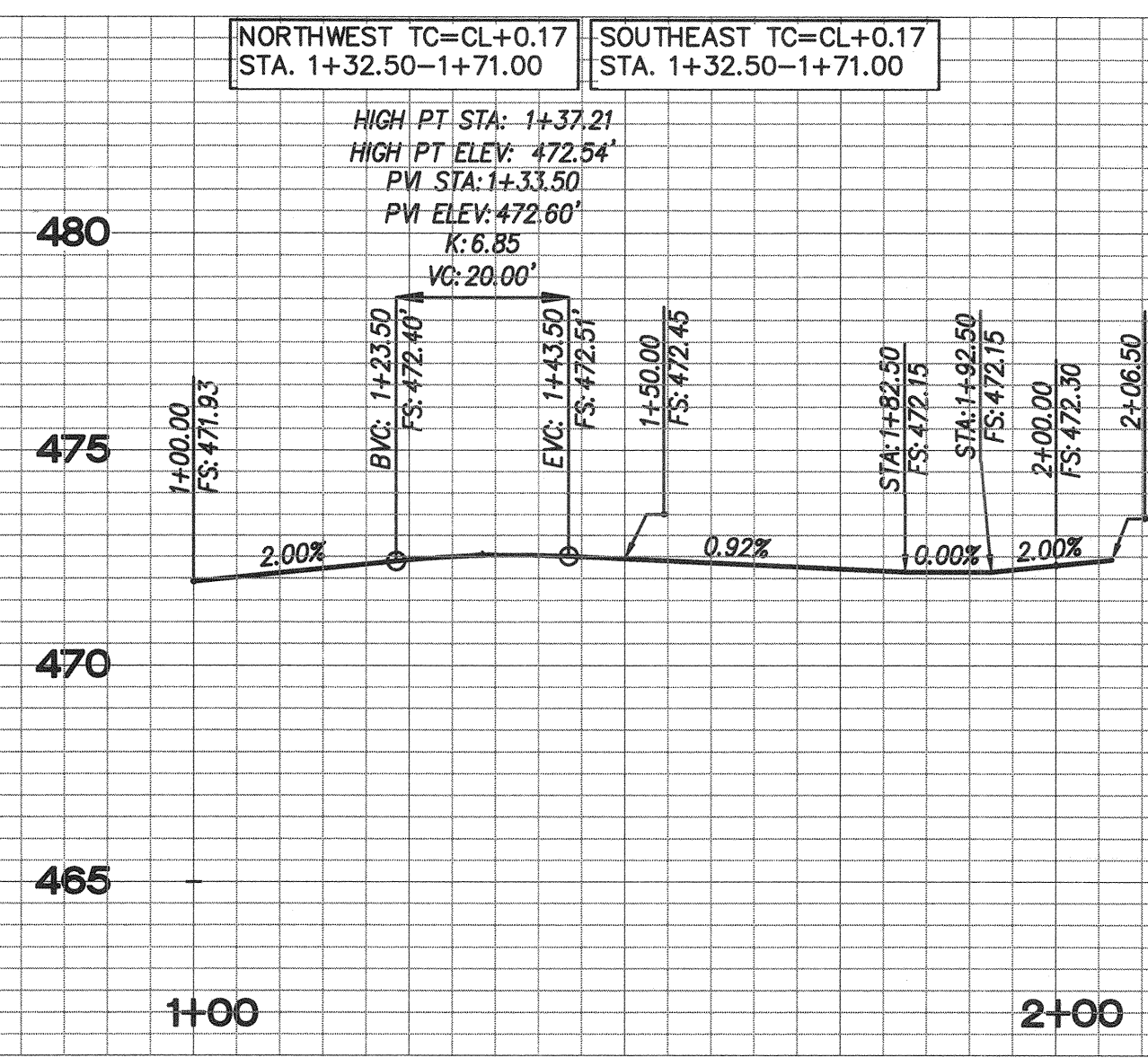
ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM RECORD DATA AT THEIR APPROXIMATE LOCATIONS. UNDERGROUND FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED OR ARE NOT OF RECORD. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PERTINENT UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.

latitude 33
 PLANNING & ENGINEERING
 9800 116th Street, 2nd Floor, San Diego, CA 92131
 Tel: 619.751.0833

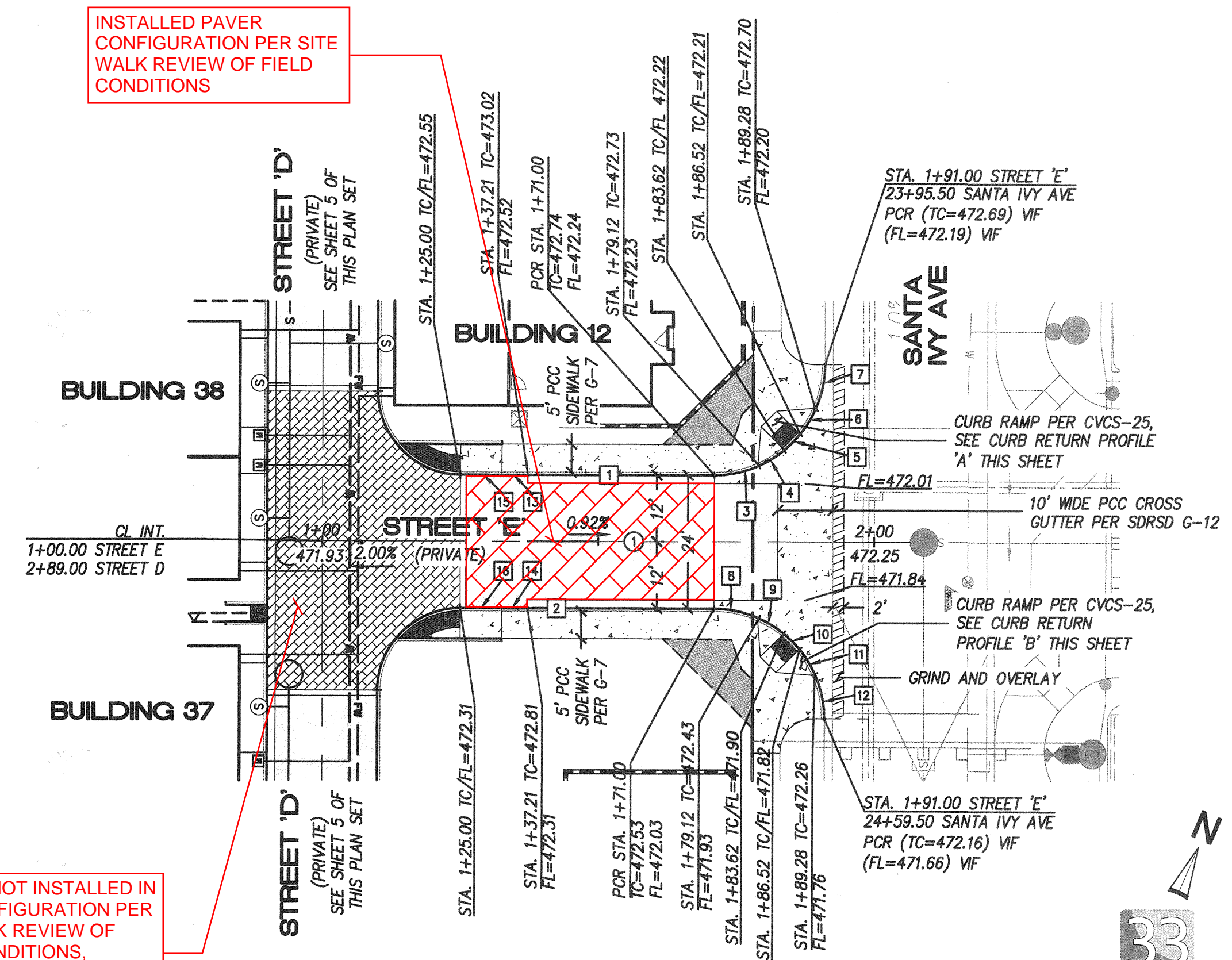
CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd	BENCH MARK	SCALE	Designed By:	Drawn By:	Checked By:	Submitted:	Approved:	CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT	DRAWING NO.	
CONTRACTOR: INSPECTOR: DATE COMPLETED:	DWG NO. 14024 (W.O. NO. 088386) DWG NO. 14031, MAP NO. 15350, DWG NO. 16017, DWG NO. 16013, OWD NO. D0965-090259	LAT33	CITY AS-BUILT			BRASS DISK MARK "33" CITY ENGINEER IN 3/4" IRON PIPE 0.5 IN STY OF INTX LA MEDIA RD & BIRCH RD SO SIDE OF GRAVEL RD 225' +/- W OF GATE TO A/R. TRACING STA 187+ - E OF METAL GATE. (1/18 1344 PER P.L.S. 1486) ELEVATION = 520.425 (MAD 78)	HORIZONTAL N/A VERTICAL N/A	Bradley D. Sager	Bradley D. Sager	Bradley D. Sager	12/14/16	12/14/16	Tom Allen	OTAY RANCH VILLAGE TWO - R-17B(b)	16019-08

TOTAL NUMBER OF SHEETS = 14

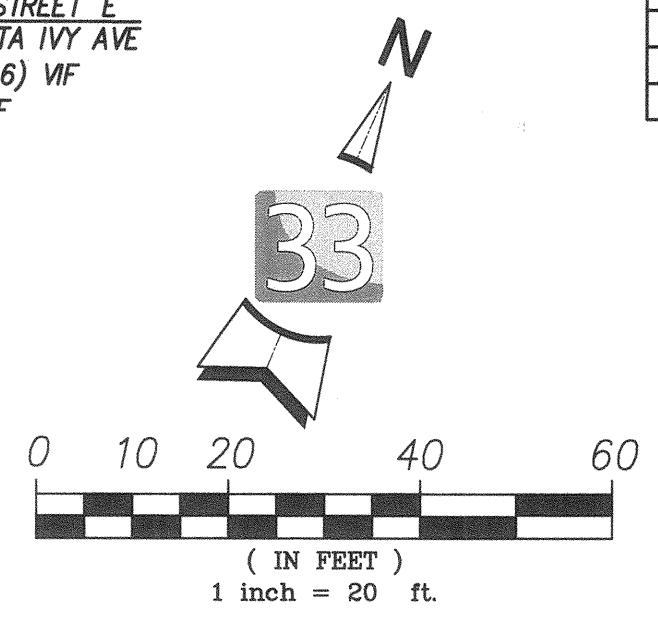
W.O. NO. OR-8621



PROFILE: PRIVATE STREET 'E'
SCALE: HORIZ. 1"=20'
VERT. 1"=4'



PLAN: PRIVATE STREET 'E'
SCALE: 1"=20'



PRIVATE CENTER LINE DATA

NO.	DELTA OR BRG.	RADIUS(R)	LENGTH(L)	REMARKS
1	N66°17'20"E	-----	106.50	STREET 'E'

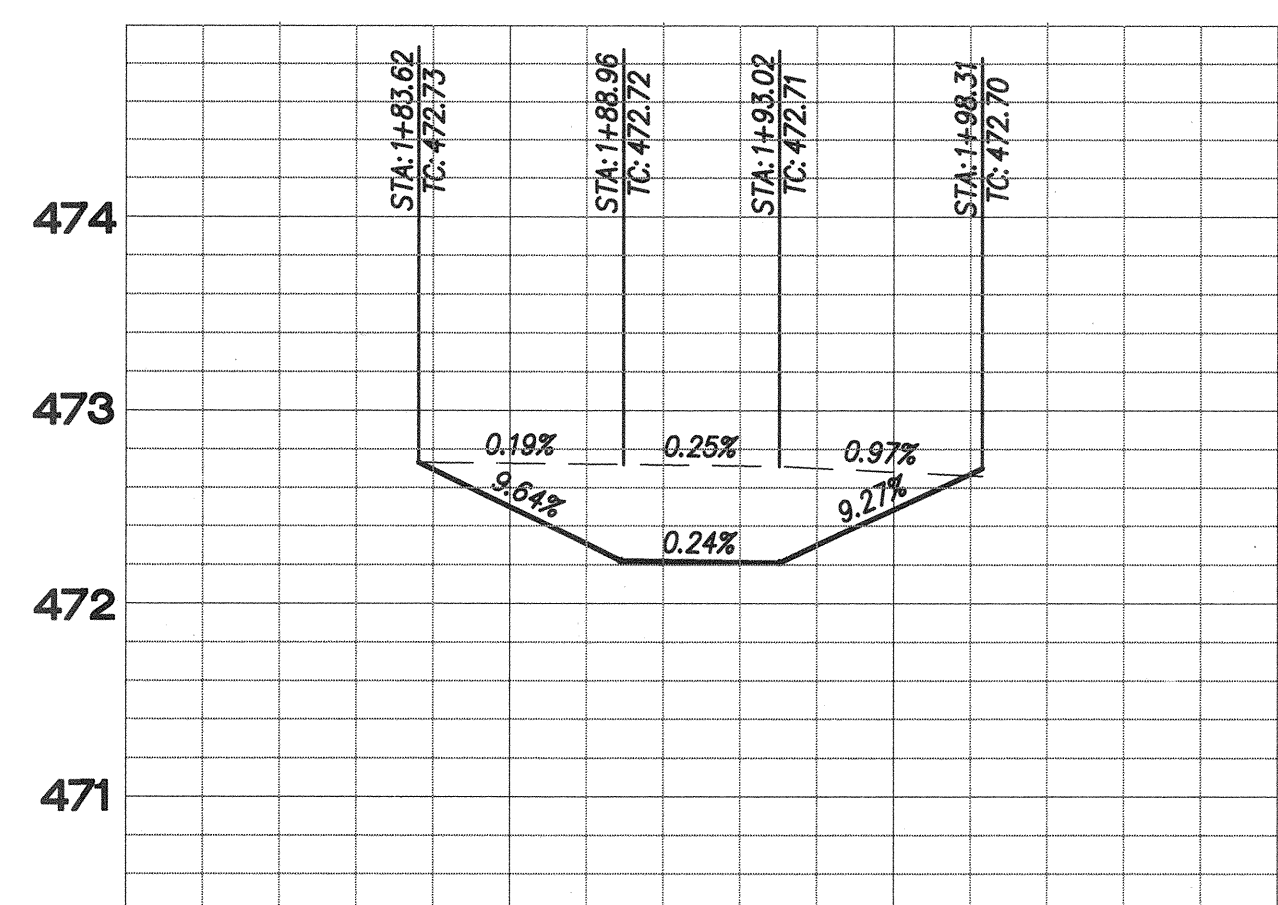
PRIVATE CURB DATA *

NO.	DELTA OR BRG.	RADIUS(R)	LENGTH(L)	REMARKS
1	N66°17'20"E	-----	33.79	6" PCC CURB & GUTTER
2	N66°17'20"E	-----	33.79	"
3	N66°17'20"E	-----	4.71	6" PCC CURB
4	N66°17'20"E	-----	4.71	"
5	N66°17'20"E	-----	7.50	TRANSITION
6	N66°17'20"E	-----	7.50	"

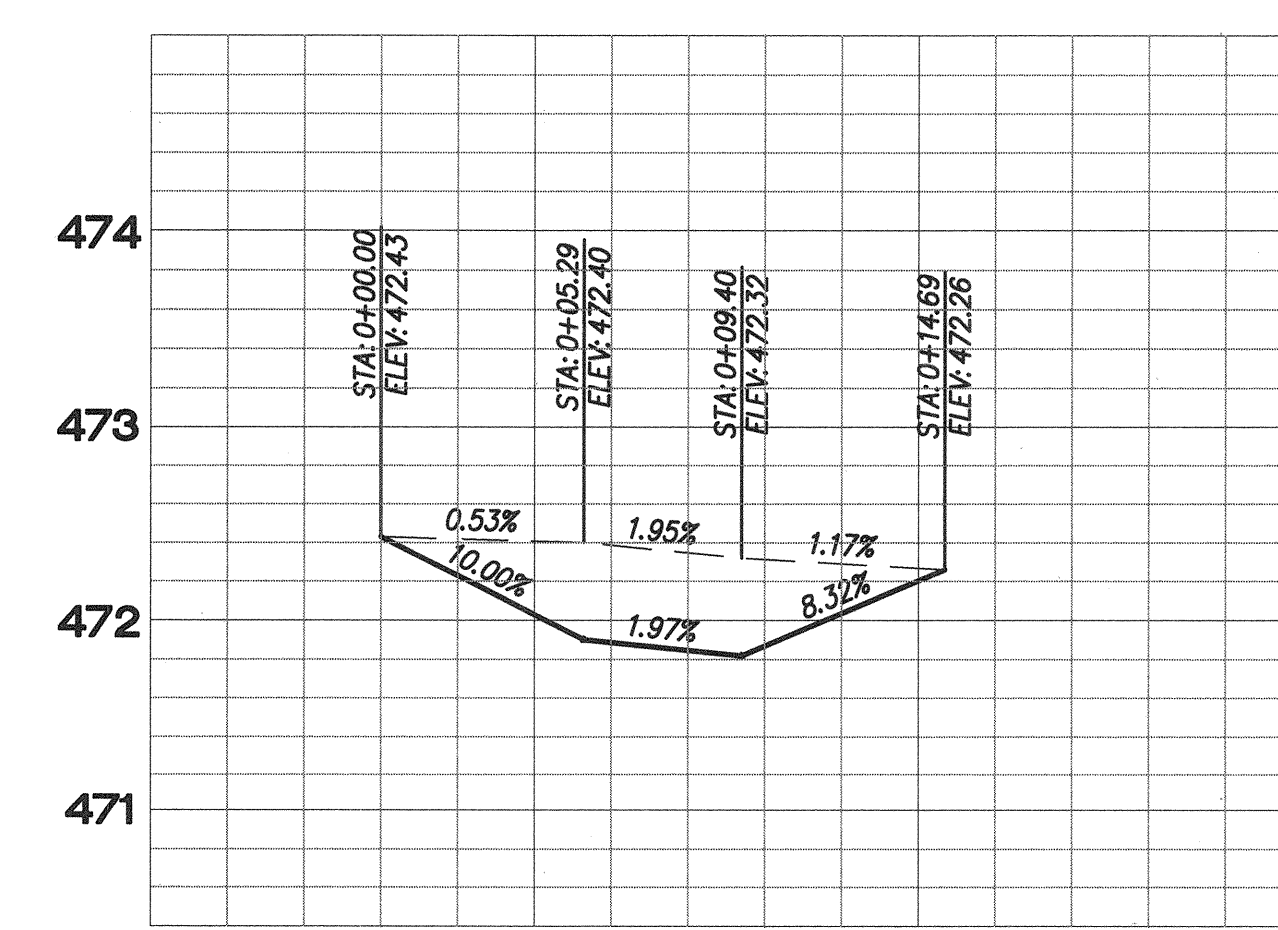
* SEE SHEET 14 FOR RED CURB FIRE LANE STRIPING WHERE OCCURS

PUBLIC CURB DATA

NO.	DELTA OR BRG.	RADIUS(R)	LENGTH(L)	REMARKS
1	23°57'46"	20.00	8.36	6" PCC CURB
2	15°09'01"	20.00	5.29	TRANSITION
3	11°46'25"	20.00	4.11	ZERO FACE CURB
4	15°09'01"	20.00	5.29	TRANSITION
5	23°57'46"	20.00	8.36	6" PCC CURB
6	23°57'46"	20.00	8.36	"
7	15°09'01"	20.00	5.29	TRANSITION
8	11°46'25"	20.00	4.11	ZERO FACE CURB
9	15°09'01"	20.00	5.29	TRANSITION
10	23°57'46"	20.00	8.36	6" PCC CURB



PROFILE: CURB RETURN 'A'
SCALE: HORIZ. 1"=5'
VERT. 1"=1'



PROFILE: CURB RETURN 'B'
SCALE: HORIZ. 1"=5'
VERT. 1"=1'

PAVERS NOT INSTALLED IN THIS CONFIGURATION PER SITE WALK REVIEW OF FIELD CONDITIONS. REMOVE PAVER HATCH PATTERNS FROM THIS AREA.

INSTALLED PAVER CONFIGURATION PER SITE WALK REVIEW OF FIELD CONDITIONS

AS BUILT
SIGNATURE _____ DATE _____
Printed Name _____ P.E. No. _____
My Registration Expires _____ Discipline _____

UTILITY NOTE
ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM RECORD DATA AT THEIR APPROXIMATE LOCATIONS. UNDERGROUND FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED OR ARE NOT OF RECORD. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PERTINENT UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.

latitude 33
PLANNING & ENGINEERING
9885 Hilbert Street, 2nd Floor, San Diego, CA 92131
Tel 619.751.0833

CONSTRUCTION RECORD

CONTRACTOR:	DWG NO. 14024 (W.O. NO. 083386)	By:	REVISIONS
INSPECTOR:	DWG NO. 14031, MAP NO. 15350	LAT33	CITY AS-BUILT
DATE COMPLETED:	DWG NO. 16017, DWG NO. 16013, OMD NO. D0965-090259		

REFERENCES

Date	App'd	BENCH MARK
		DESCRIPTION: BRASS DISK MARK "33" CITY ENGINEER IN 3/4" IRON PIPE 0.5 IN SLY OF INTX LA MEDIA RD & BIRCH RD SO SIDE OF GRAVEL RD 225' +/- W OF GATE TO A V&E TRAILING STA 184'- E OF METAL GATE (PT# 1344 PER R.O.S. 1484)
		ELEVATION = 581.425 (HMD '88)

SCALE

HORIZONTAL	N/A
VERTICAL	N/A

Designed By: _____ Drawn By: _____ Checked By: _____
Plans Prepared Under Supervision Of: _____ Date: 12/14/16
By: _____
B. D. SAGER R.C.E. No. C054564

Submitted: 12/15/16
Approved: 12/14/16
By: Tom Adler
City Engineer

PLANNING: sd LANDSCAPE: M.L.

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT
IMPROVEMENT PLANS FOR:
OTAY RANCH VILLAGE TWO - R-17B(b)

DRAWING NO. 16019-10
W.O. NO. OR-8621

PRIVATE LATERAL NO.	BUILDING NO.	PRIVATE LATERAL INV. ELEV. AT MAIN	DROP TO MAIN IN FEET	LENGTH IN FEET	INV. ELEV. AT CURB LINE	TOP OF CURB ELEV.	DEPTH BELOW TC AT CURB LINE IN FEET	SLOPE OF PRIVATE SEWER LATERAL
1	BUILDING 1	460.58	1.2	2	460.62	467.5	6.88	2.00%
2	SEE SHEET 8	460.83	1.2	2	460.87	467.9	7.03	2.00%
3	BUILDING 2	461.15	1.2	2	461.19	468.52	7.33	2.00%
4	SEE SHEET 8	461.39	1.2	2	461.43	469.05	7.62	2.00%
5	BUILDING 3	462.42	1.2	3	462.48	469.03	6.55	2.00%
6	SEE SHEET 6	462.18	1.2	3	462.24	469.29	7.05	2.00%
7	BUILDING 4	461.92	1.2	3	461.98	469.65	7.67	2.00%
8	SEE SHEET 6	462.21	1.2	3	462.27	469.92	7.65	2.00%
9	BUILDING 5	462.54	1.2	3	462.6	470.28	7.68	2.00%
10	SEE SHEET 6	462.78	1.2	3	462.84	470.55	7.71	2.00%
11	BUILDING 6	463.11	1.2	3	463.17	470.91	7.74	2.00%
12	SEE SHEET 6	463.36	1.2	3	463.42	471.18	7.76	2.00%
13	BUILDING 7	463.68	1.2	3	463.74	471.54	7.8	2.00%
14	SEE SHEET 6	463.93	1.2	3	463.99	471.8	7.81	2.00%
15	BUILDING 8	464.26	1.2	3	464.32	472.16	7.84	2.00%
16	SEE SHEET 6	464.5	1.2	3	464.56	472.43	7.87	2.00%
17	BUILDING 9	464.83	1.2	3	464.89	472.87	7.98	2.00%
18	SEE SHEET 6	465.07	1.2	3	465.13	473.27	8.14	2.00%
19	BUILDING 10	465.98	1.2	14	466.26	474.34	8.08	2.00%
20	SEE SHEET 5	465.74	1.2	14	466.02	474.03	8.01	2.00%
21	BUILDING 11	465.56	1.2	14	465.84	473.62	7.78	2.00%
22	SEE SHEET 5	465.81	1.2	14	466.09	473.31	7.22	2.00%
23	BUILDING 12	466.13	1.2	14	466.41	472.9	6.49	2.00%
24	SEE SHEET 5	466.37	1.2	14	466.65	472.58	5.93	2.00%
25	BUILDING 13	463.71	1.2	14	463.99	471.35	7.36	2.00%
26	SEE SHEET 5	463.47	1.2	14	463.75	471.04	7.29	2.00%
27	BUILDING 14	463.15	1.2	14	463.43	470.62	7.19	2.00%
28	SEE SHEET 5	462.99	1.2	14	463.27	470.36	7.09	2.00%
29	BUILDING 15	463.3	1.2	14	463.58	470.57	6.99	2.00%
30	SEE SHEET 5	463.53	1.2	14	463.81	470.8	6.99	2.00%
31	BUILDING 16	462.53	1.2	15	462.83	469.28	6.45	2.00%
32	SEE SHEET 4	462.28	1.2	15	462.58	468.6	6.02	2.00%
33	BUILDING 17	461.98	1.2	15	462.28	467.89	5.61	2.00%
34	SEE SHEET 4	461.71	1.2	15	462.01	467.58	5.57	2.00%
35	BUILDING 18	461.38	1.2	15	461.68	467.2	5.52	2.00%
36	SEE SHEET 4	461.14	1.2	15	461.44	466.92	5.48	2.00%
37	BUILDING 19	460.57	1.2	15	460.87	466.54	5.67	2.00%
38	SEE SHEET 4	460.33	1.2	15	460.63	466.26	5.63	2.00%
39	BUILDING 20	460	1.2	15	460.3	465.88	5.58	2.00%
40	SEE SHEET 4	459.75	1.2	15	460.05	465.6	5.55	2.00%
41	BUILDING 21	459.43	1.2	15	459.73	465.23	5.5	2.00%
42	SEE SHEET 4	459.18	1.2	15	459.48	464.95	5.47	2.00%
43	BUILDING 22	458.34	1.2	15	458.64	464.57	5.93	2.00%
44	SEE SHEET 4	458.06	1.2	15	458.36	464.29	5.93	2.00%
45	BUILDING 23	459.37	1.2	2	459.41	465.5	6.09	2.00%
46	SEE SHEET 8	459.61	1.2	2	459.65	465.9	6.25	2.00%
47	BUILDING 24	461.36	1.2	14	461.64	469.1	7.46	2.00%
48	SEE SHEET 8	461.12	1.2	14	461.4	468.57	7.17	2.00%
49	BUILDING 25	460.8	1.2	14	461.08	467.97	6.89	2.00%
50	SEE SHEET 8	460.55	1.2	14	460.83	467.57	6.74	2.00%
51	BUILDING 26	460.23	1.2	14	460.51	467.04	6.53	2.00%
52	SEE SHEET 8	459.99	1.2	14	460.27	466.64	6.37	2.00%
53	BUILDING 27	459.65	1.2	14	459.93	466.08	6.15	2.00%
54	SEE SHEET 8	459.4	1.2	14	459.68	465.67	5.99	2.00%
55	BUILDING 28	461.28	1.2	2	461.32	467.55	6.23	2.00%
56	SEE SHEET 7	461.52	1.2	2	461.56	467.95	6.39	2.00%
57	BUILDING 29	461.85	1.2	2	461.89	468.48	6.59	2.00%
58	SEE SHEET 7	462.09	1.2	2	462.13	468.89	6.76	2.00%
59	BUILDING 30	462.43	1.2	2	462.47	469.45	6.98	2.00%
60	SEE SHEET 7	462.67	1.2	2	462.71	469.86	7.15	2.00%
61	BUILDING 31	463	1.2	2	463.04	470.46	7.42	2.00%
62	SEE SHEET 7	463.22	1.2	2	463.26	470.92	7.66	2.00%
63	BUILDING 32	463.2	1.2	14	463.48	471.04	7.56	2.00%
64	SEE SHEET 7	462.98	1.2	14	463.26	470.54	7.28	2.00%
65	BUILDING 33	462.65	1.2	14	462.93	469.94	7.01	2.00%
66	SEE SHEET 7	462.41	1.2	14	462.69	469.54	6.85	2.00%
67	BUILDING 34	462.07	1.2	14	462.35	468.98	6.63	2.00%
68	SEE SHEET 7	461.83	1.2	14	462.11	468.57	6.46	2.00%
69	BUILDING 35	461.5	1.2	14	461.78	468.04	6.26	2.00%
70	SEE SHEET 7	461.26	1.2	14	461.54	467.63	6.09	2.00%
71	BUILDING 36	463.21	1.2	2	463.25	473.1	9.85	2.00%
72	SEE SHEET 5	463.45	1.2	2	463.49	472.78	9.29	2.00%
73	BUILDING 37	463.78	1.2	2	463.82	472.37	8.55	2.00%
74	SEE SHEET 5	464.02	1.2	2	464.06	472.06	8	2.00%
75	BUILDING 38	466.69	1.2	2	466.73	474.24	7.51	2.00%
76	SEE SHEET 5	466.44	1.2	2	466.48	473.93	7.45	2.00%
77	BUILDING 39	466.12	1.2	2	466.16	473.51	7.35	2.00%
78	SEE SHEET 5	465.88	1.2	2	465.92	473.2	7.28	2.00%

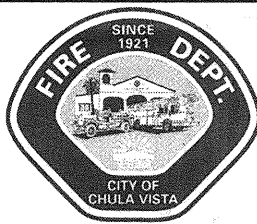
TOTAL NUMBER OF SHEETS = 14

AS BUILT		UTILITY NOTE	
SIGNATURE _____	DATE _____	ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM RECORD DATA AT THEIR APPROXIMATE LOCATIONS. UNDERGROUND FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED OR ARE NOT OF RECORD. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PERTINENT UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.	
Printed Name _____	P.E. No. _____		
My Registration Expires _____	Discipline _____		
CONSTRUCTION RECORD	REFERENCES	By	REVISIONS
CONTRACTOR:	DWG NO. 14024 (W.O. NO. OR8386)	LAT33	CITY AS-BUILT
INSPECTOR:	DWG NO. 14031, MAP NO. 15350, DWG NO. 16017, DWG NO. 16013, DWG NO. 00965-090259		
DATE COMPLETED:			



DESCRIPTION: BRASS DISK MARK "33" CITY ENGINEER IN 3/4" IRON PIPE 0.5 IN SLY OF INTX LA MEDIA RD & BIRCH RD SO SIDE OF GRAVEL RD 225' +/- W OF GATE TO A.V.R. TRACKING STA 157+ - E OF METAL GATE. 1719 1344 PER R.G.S. 14841) ELEVATION = 320.425 (MAY 20)	SCALE: HORIZONTAL N/A VERTICAL N/A	Designed By: _____	Drawn By: _____	Checked By: _____	Submitted: 12/15/16	Approved: 12/14/16	CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT	DRAWING NO. 16019-11
		Plans Prepared Under Supervision Of: _____	Date: 12/14/16		By: _____	By: _____	IMPROVEMENT PLANS FOR: OTAY RANCH VILLAGE TWO - R-17B(b) SEWER LATERAL TABLE	W.O. NO. OR-8621
		BRADLEY D. SAGER	R.C.E. No. C054564		PLANNING: sd	LANDSCAPE: MK		

11/15/16 (16) - City of Chula Vista (16) Engineering/Planning Department (16) 08 01 16 (16) 16/16



FIRE LANE IDENTIFICATION

Fire Lanes shall be identified in accordance with one of the details below:

Detail A - No Stopping Sign

Diagram of a 'NO STOPPING FIRE LANE' sign with dimensions (12" wide, 18" high) and a list of notes regarding sign placement and materials.

Detail B - Curb Painting - Both sides of fire lane unless otherwise approved

Diagram of a curb with 'NO STOPPING - FIRE LANE' painted on it, accompanied by notes on painting requirements and lettering specifications.

Detail C - Striping (with no curb) - Both sides of fire lane unless otherwise approved

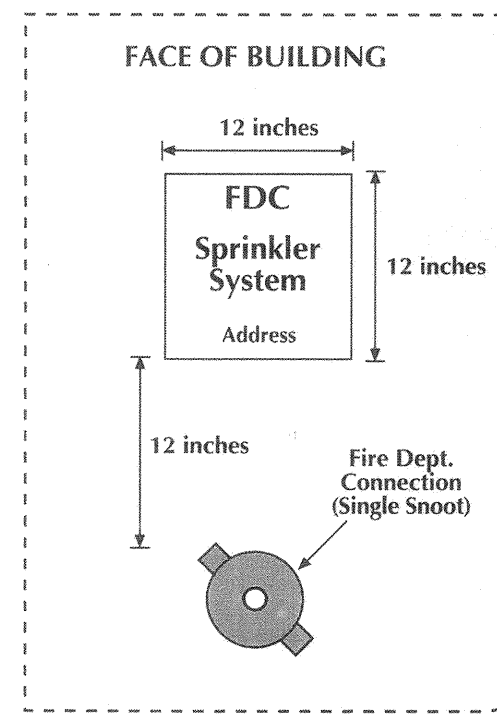
Diagram of a fire lane with 'NO STOPPING - FIRE LANE' striping, including notes on stripe width, lettering, and spacing.



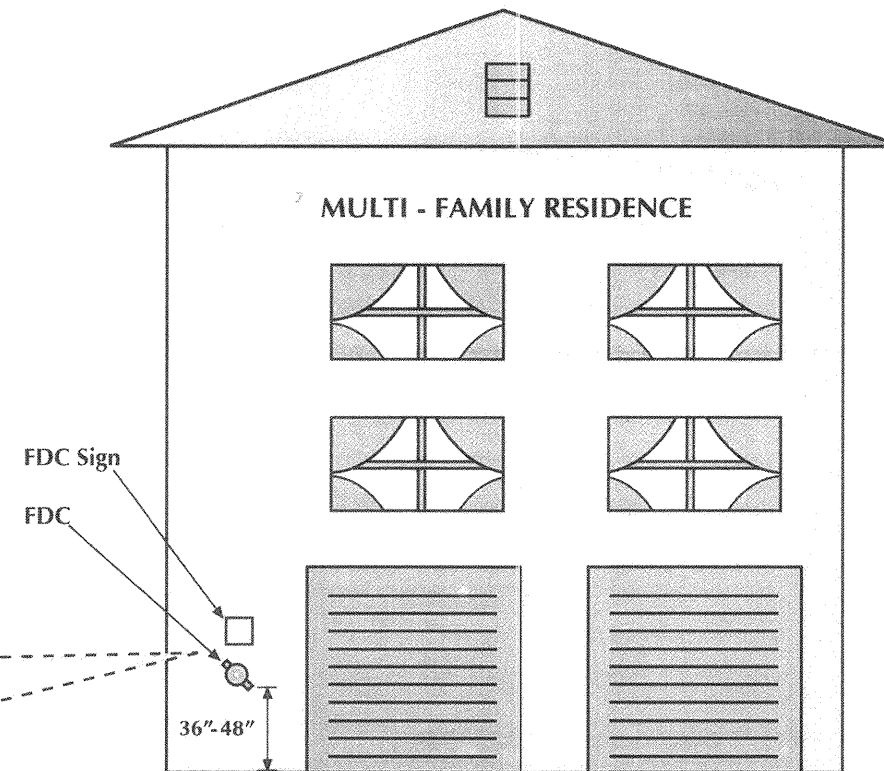
Multi-Family Sprinkler Connection (FDC*) Detail

*FDCs located on the building must have prior approval from the Fire Marshal

Detail A - Sign Only



Detail B - Sign and Building



Sign Specifications

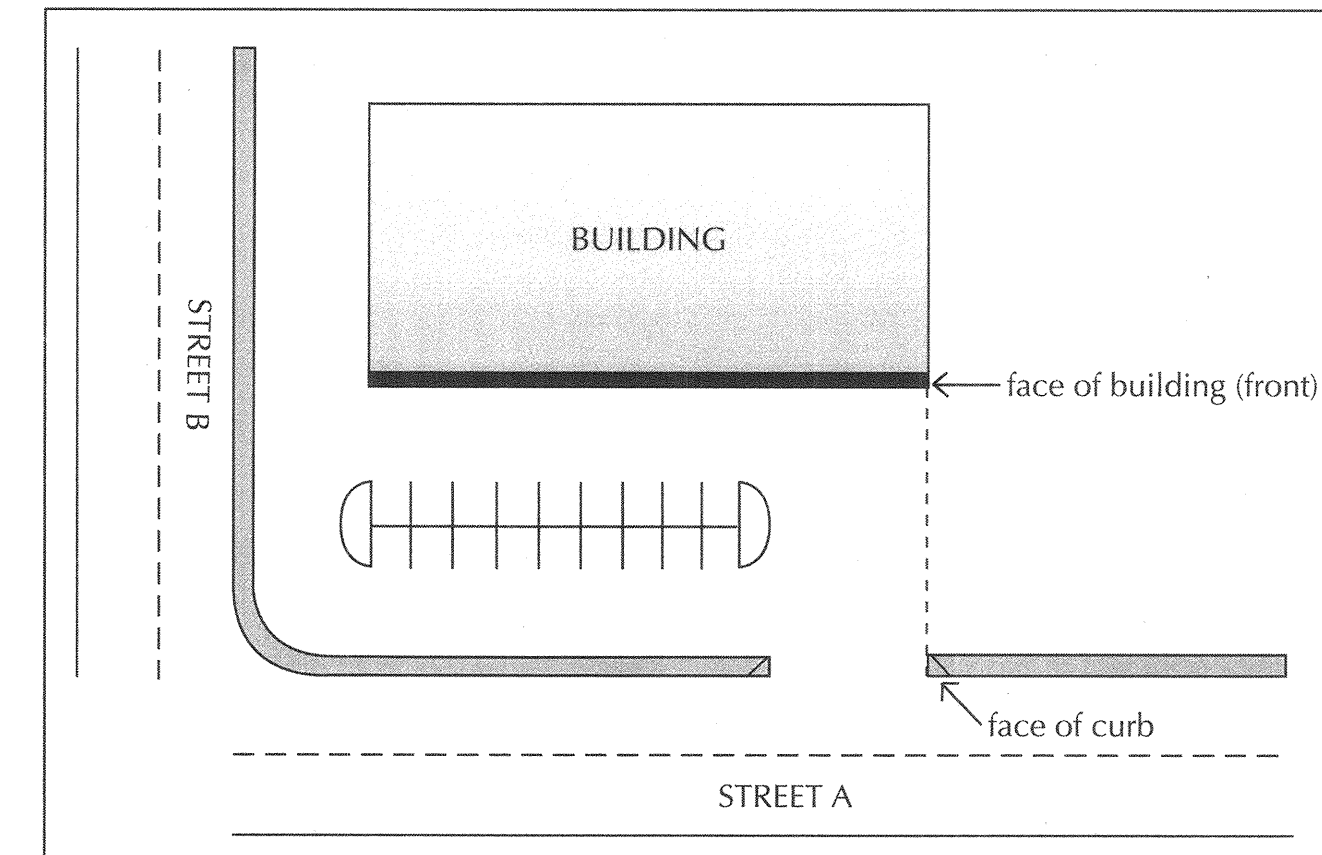
- 1. Measurements MUST be exact and will be subject to a field inspection.
2. Sign must be .080 gauge aluminum.
3. Sign shall have ASTM TYPE IV high intensity reflective sheeting.
4. Protective overlay film on sign [P.O.F.].
5. Signage letter height:
- FDC = 3 inches tall and Address = 1 1/4 inches tall
6. White background with black lettering
7. Sign must be permanently attached to the building (12 inches) above the FDC.



PREMISE IDENTIFICATION

Building address numbers shall be plainly visible and legible from the street or main access to the building. Numbers shall contrast with their background and comply with the following:

Table with 3 columns: Distance from Building to Face of Curb, Minimum Number Height, Minimum Stroke. Rows show requirements for distances from 0-50 feet to over 151 feet.



- Specifications:
- This policy will also apply to monument signs.
- Buildings may be required to have their address posted in multiple locations.



Thrust Block Area Calculations

4-INCH PIPE

- 1. Min. Soil Bearing Capacity (PSF) = 1500
2. Min. Working Pressure (PSI) = 200

THRUST FROM NFPA 24 TABLE A-8-6.2 A BEND FOR:

DEAD END = 1,810 LB @ 100 PSI
FOR 200 PSI = 200/100 * 1,810 = 3,620 LB
Ab = T/Sb = 3,620/1,500 = 2.41 S.F.
Ab*S.F. = 2.41 X 1.5 = 3.62 S.F. USE 2' WIDE X 2' HIGH THRUST BLOCK

90° BEND = 2,559 LB @ 100 PSI
FOR 200 PSI = 200/100 * 2,559 = 5,118 LB
Ab = T/Sb = 5,118/1,500 = 3.41 S.F.
Ab*S.F. = 3.41 X 1.5 = 5.12 S.F. USE 2.5' WIDE X 2.5' HIGH THRUST BLOCK

45° BEND = 1,385 LB @ 100 PSI
FOR 200 PSI = 200/100 * 1,385 = 2,770 LB
Ab = T/Sb = 2,770/1,500 = 1.85 S.F.
Ab*S.F. = 1.85 X 1.5 = 2.77 S.F. USE 2' WIDE X 1.5' HIGH THRUST BLOCK

22 1/2° BEND = 706 LB @ 100 PSI
FOR 200 PSI = 200/100 * 706 = 1,412 LB
Ab = T/Sb = 1,412/1,500 = 0.94 S.F.
Ab*S.F. = 0.94 X 1.5 = 1.41 S.F. USE 1.5' WIDE X 1' HIGH THRUST BLOCK

11 1/4° BEND = 355 LB @ 100 PSI
FOR 200 PSI = 200/100 * 355 = 710 LB
Ab = T/Sb = 710/1,500 = 0.47 S.F.
Ab*S.F. = 0.47 X 1.5 = 0.71 S.F. USE 1' WIDE X 1' HIGH THRUST BLOCK



Thrust Block Area Calculations

6-INCH PIPE

- 1. Min. Soil Bearing Capacity (PSF) = 1500
2. Min. Working Pressure (PSI) = 200

THRUST FROM NFPA 24 TABLE A-8-6.2 A BEND FOR:

DEAD END = 3,739 LB @ 100 PSI
FOR 200 PSI = 200/100 * 3,739 = 7,478 LB
Ab = T/Sb = 7,478/1,500 = 4.99 S.F.
Ab*S.F. = 4.99 X 1.5 = 7.48 S.F. USE 3' WIDE X 2.5' HIGH THRUST BLOCK

90° BEND = 5,288 LB @ 100 PSI
FOR 200 PSI = 200/100 * 5,288 = 10,576 LB
Ab = T/Sb = 10,576/1,500 = 7.05 S.F.
Ab*S.F. = 7.05 X 1.5 = 10.58 S.F. USE 4' WIDE X 3' HIGH THRUST BLOCK

45° BEND = 2,862 LB @ 100 PSI
FOR 200 PSI = 200/100 * 2,862 = 5,724 LB
Ab = T/Sb = 5,724/1,500 = 3.82 S.F.
Ab*S.F. = 3.82 X 1.5 = 5.72 S.F. USE 2.5' WIDE X 2.5' HIGH THRUST BLOCK

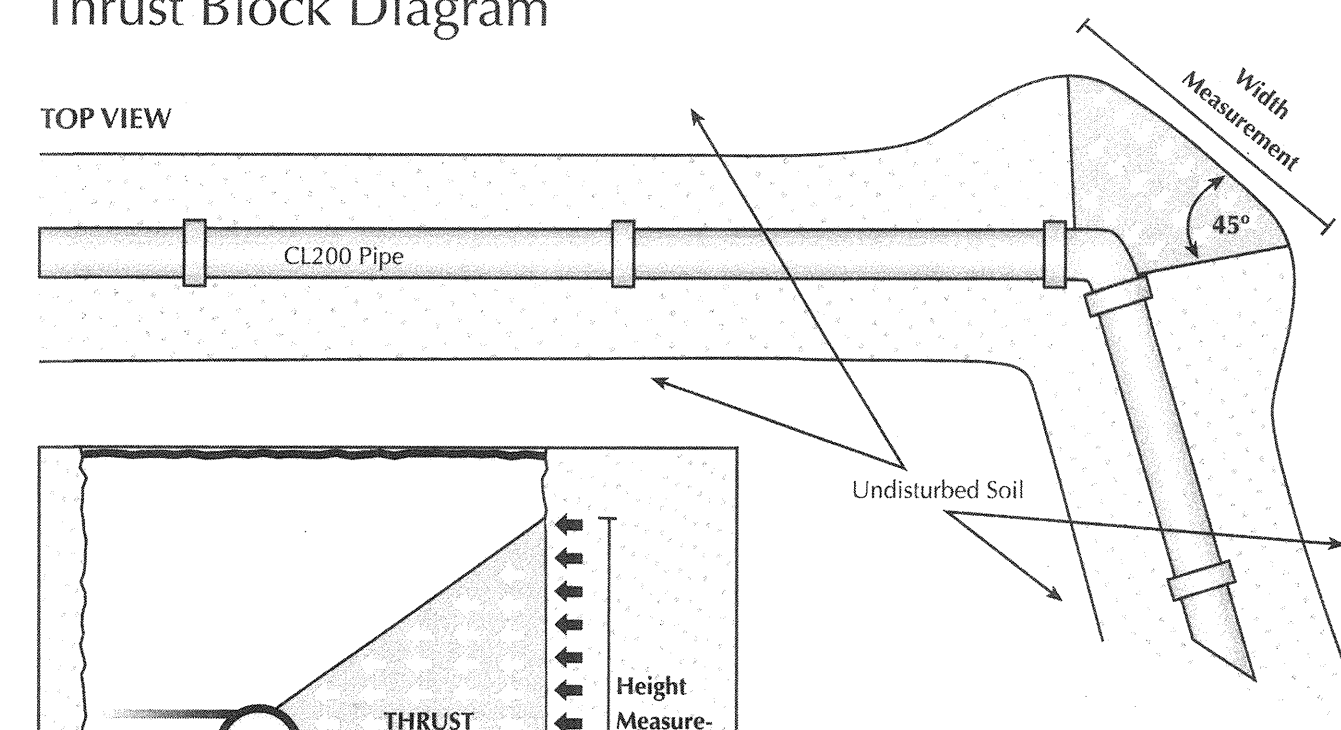
22 1/2° BEND = 1,459 LB @ 100 PSI
FOR 200 PSI = 200/100 * 1,459 = 2,918 LB
Ab = T/Sb = 2,918/1,500 = 1.95 S.F.
Ab*S.F. = 1.95 X 1.5 = 2.92 S.F. USE 2' WIDE X 1.5' HIGH THRUST BLOCK

11 1/4° BEND = 733 LB @ 100 PSI
FOR 150 PSI = 200/100 * 733 = 1,466 LB
Ab = T/Sb = 1,466/1,500 = 0.98 S.F.
Ab*S.F. = 0.98 X 1.5 = 1.47 S.F. USE 1' WIDE X 1.5' HIGH THRUST BLOCK

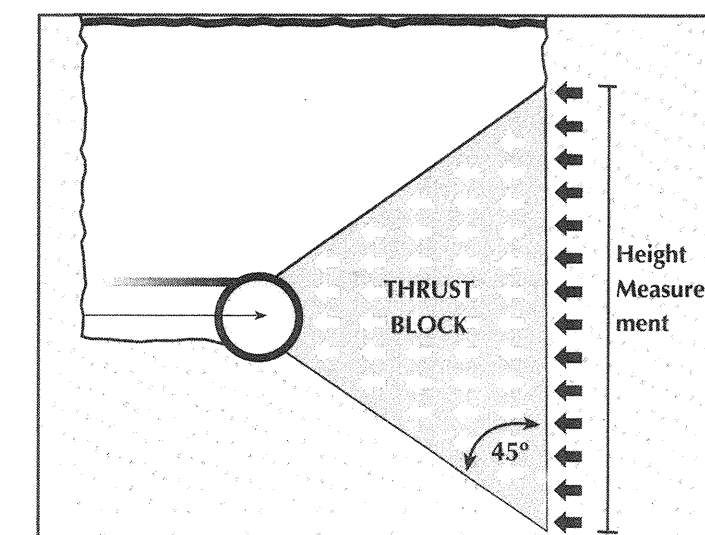


Thrust Block Diagram

TOP VIEW



SIDE VIEW



Notes

- 1. Underground fire service utilities shall be AWWA C-900 Class 200 pipe
2. Pipe joints shall be exposed at the time of hydrostatic test
3. Hydrostatic test shall be 200 psi for 2 hours
4. Tracer wire and tape are required and shall be in accordance with AWWA
5. Thrust blocks shall be Class 560-C-32.50 concrete, unless specified otherwise
6. For thrust block dimensions, see thrust block calculation detail.
7. Pipe shall be buried a minimum of 3 feet
8. Pipe shall be sleeved per NFPA for penetrating foundations
9. Provide an underground pipe certification at the time of the underground final

AS BUILT

UTILITY NOTE

Signature and date fields for AS BUILT and Utility Note sections.



Table with columns for Scale, Date, App'd, and Design/Draw/Check By.

Table with columns for Submitted, Approved, City Engineer, and Drawing No.



CHULA VISTA FIRE DEPARTMENT

FIRE PREVENTION DIVISION

STANDARD OPERATIONAL GUIDELINES

Table with 3 columns: Section, Subject, and Revision Date. Section: 3104.00 - FPD - Plan Checks; Subject: Guidelines For Underground Fire Service Utilities; Pages: 4; Origin Date: 07/01/07; Revision Date:

SCOPE
These codes and standards shall provide the minimum requirements for the design installation, testing, and inspection of underground fire service utility systems in the City of Chula Vista:

- City of Chula Vista Fire Prevention Standard Operating Guidelines
California Fire Code 2007 Edition
California Building Code 2007 Edition
NFPA 13 Current Edition
NFPA 14 Current Edition
NFPA 24 Current Edition
Standard Drawings and Specifications and approved materials list of the appropriate Water District having jurisdiction for public systems when applicable.
American Water Works Association

SYSTEM DESIGN, PLANS, PERMITS, CALCULATIONS, AND MATERIAL SUBMITTALS SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

- Complete plans for underground components shall be submitted for approval well in advance of installation. Approval shall be obtained from the Chula Vista Fire Prevention Division prior to any installation.
To receive an expedited review of 10 working days by the CVFD, an additional fee will be required per the master fee schedule.
The Chula Vista Fire Department will only accept computer-generated plans for underground fire service utilities.
The contractor shall provide an electronic copy of the plans and calculations for laserfiche importing in the Multi-page tiff group 4 format at the time of final plan approval with a minimum resolution of 400 dpi.
For all fees associated with the review and/or inspection of fire and life safety systems please see OPS # 3100.01.
http://www.chulavistaca.gov/City_Services/Public_Safety/Fire_Department/Safety/prevention.asp
If a 2nd plan resubmittal and/or if a re-inspection is required, a fee shall be charged to cover expenses.

- Plans shall indicate all necessary engineering features, including all hydraulic reference nodes, thrust block sizes, pipe lengths and pipe diameters as required by the above named codes and standards.
The associated building permit project-tracking number (example: B07-1234).
Complete listings and manufacturers technical data sheets for all system materials shall be included with all underground system submittals.
The California Contractors License number shall be provided with each submittal and/or stamped and signed by a licensed professional engineer.
City of Chula Vista Business License/Fire and Life Safety Contractor License: Installing contractors will have both a City Business License and a Chula Vista Fire Department's Fire and Life Safety Contractor License.
A hydraulic water flow analysis shall accompany the plans.
The system shall be designed and sized such that the maximum velocity in the pipe shall be 10fps at fire demand or sprinkler demand, whichever ever is greater.
Calculations shall extend to the point at which the water supply data was determined.
Water supply data is required to accompany an underground submittal.
All thrust blocks on private fire hydrant lines and fire sprinkler laterals shall be calculated and constructed in accordance with NFPA 24.
Control valves must be provided in each source of water supply, such as tanks and pumps.
Provide class 200 pipe for all underground fire service utilities.
Special design considerations may also be required with excessive high static pressures or lines in which fire pumps are installed.
Any piping not shown on this approved plan is not a part of this approval.

- The City of Chula Vista Fire Prevention Division will require the following inspections and tests as a minimum:
Thrust block pre-pour, trench and backfill inspection.
Components and wrap inspection
Tracer wire and continuity test
Underground hydrostatic test.
Underground flush.
Underground final
No joints shall be installed under the building.
Minimum fire hydrant size required (6" x 4" x 2 1/2" x 2 1/2").
The civil engineer who designed the water system hereby certifies that this water system is in accordance with the requirements as prescribed by the Chula Vista Fire Prevention Division, the CFC and NFPA 24.
Breakaway spools or breakaway bolts are required.
Fire Department Connections (FDC's) shall not be located on any backflow device
Fire Department Connections (FDC's) shall not be located on buildings unless approved by the Fire Marshal.
Fire service laterals serving sprinkler systems shall have their own Post Indicating Valve (PIV).
Post Indicating Valves shall be physically secured to an underground concrete anchor block via restraining rods.
The Fire Prevention Division shall approve the location of the post indicator valve and the fire department connection.
Additional check valves are required on private systems.
All post indicator valves shall be installed with a supervisory switch, which sounds a supervisory alarm at a U.L. listed central receiving station.
All post indicator valves shall be provided with a breakaway security lock.
Post indicator valves, and fire department connections shall be painted red (Rust-oleum safety red #2163 or equivalent).
Fire Department Connections and Post Indicating Valves shall have a sign to indicate what buildings they serve.

- Fire sprinkler system underground piping with on-site fire hydrants shall be designed so that on-site fire hydrants will not be shut off when the sprinkler system is shut off from the post indicator valve.
Fire hydrants shall be arranged so that when the Fire Department Connection is pressurized the on-site hydrants are not pressurized.
The Fire Prevention Division shall require, from the installing contractor, a completed "Contractors Material & Test Certificate for Underground Piping" at the time of underground final inspection.
Blue reflective markers shall be installed to identify location of fire hydrants.
On site fire hydrants, post indicator valves, and fire department connections located less than three feet behind the inside face of a curb or when no curb is provided, shall then be protected by guard posts set in concrete.
Each sprinklered building will require its own separate post indicator valve and fire department connections.
Fire department connections shall be equipped with listed plugs or caps.
Private fire service lines when supplying three (3) or more fire hydrants are required to be provided with two (2) points of connection with the public main.
Private fire service lines shall be no less than eight (8) inches in diameter when serving fire hydrants and automatic fire sprinkler systems.
Underground lateral supplies for sprinkler systems shall be a minimum of 6 inches for commercial properties and a minimum of 4 inches for residential properties.
Fire hydrant control valves shall be provided on the lateral in a road box at ten (10) feet from the fire hydrant.
City of Chula Vista Fire Department job card shall be kept on the project site at all times.
Working plans shall be submitted for approval to the authority having jurisdiction before any equipment is installed, improved, or demolished.

AS BUILT

UTILITY NOTE

Signature and Date fields, P.E. No., and My Registration Expires Discipline.



ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM RECORD DATA AT THEIR APPROXIMATE LOCATIONS. UNDERGROUND FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED OR ARE NOT OF RECORD. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PERTINENT UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.

Table with columns: CONSTRUCTION RECORD, REFERENCES, By, REVISIONS, Date, App'd. Includes contractor and inspector information.

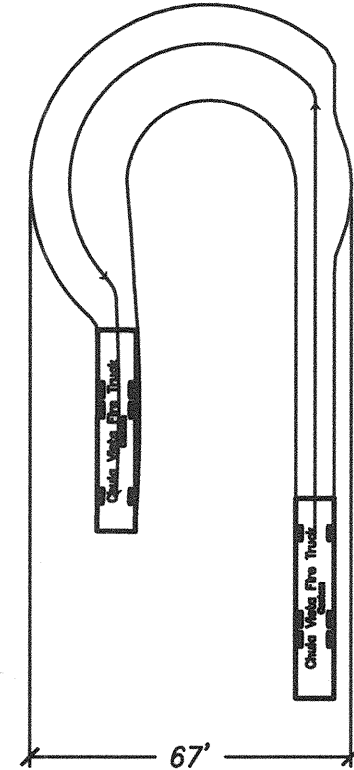
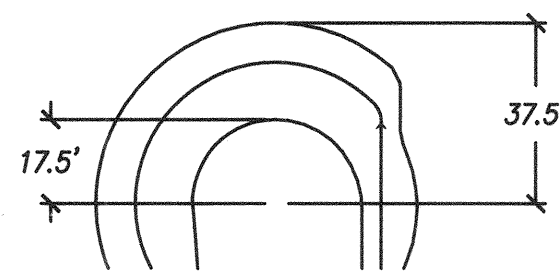
BENCH MARK DESCRIPTION: BRASS DISK MARK, "SD" CITY ENGINEER IN 3/4" IRON PIPE 0.5 IN STY OF INTX LA MEZA RD & BIRCH RD...

SCALE: HORIZONTAL N/A, VERTICAL N/A

Designed By: Drawn By: Checked By: Submitted: 12/15/16, Approved: 12/14/16, By: Bradley D. Sager, R.C.E. No. C054584

PLANNING: sd, LANDSCAPE: MJC, City Engineer

Table with columns: CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT, IMPROVEMENT PLANS FOR: OTAY RANCH VILLAGE TWO - R-17B(b), FIRE SERVICE DETAILS AND NOTES, DRAWING NO. 16019-13, W.O. NO. OR-8621



FIRE TRUCK PER CITY OF CHULA VISTA FIRE DEPARTMENT STANDARD OPERATIONAL GUIDELINES

NOTE:
SYSTEM DESIGN, PLANS, PERMITS, CALCULATIONS AND MATERIAL SUBMITTALS SHALL BE IN ACCORDANCE WITH THE CHULA VISTA FIRE DEPARTMENT "STANDARD OPERATIONAL GUIDELINES"

FIRE DEPARTMENT NOTES:

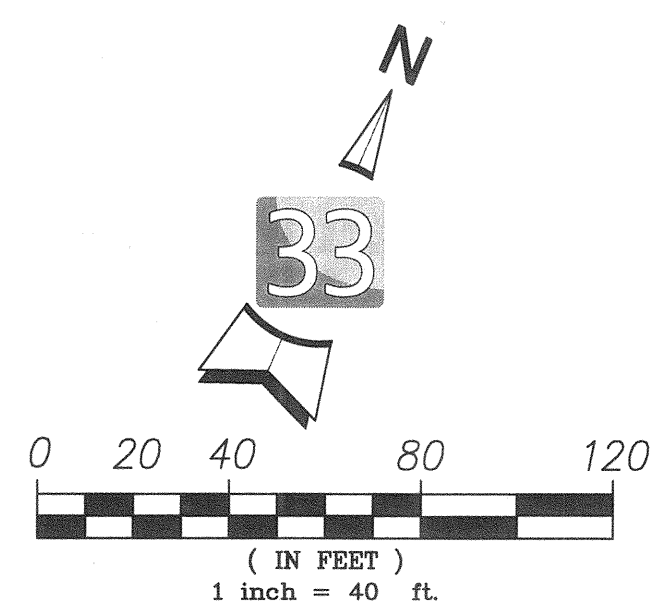
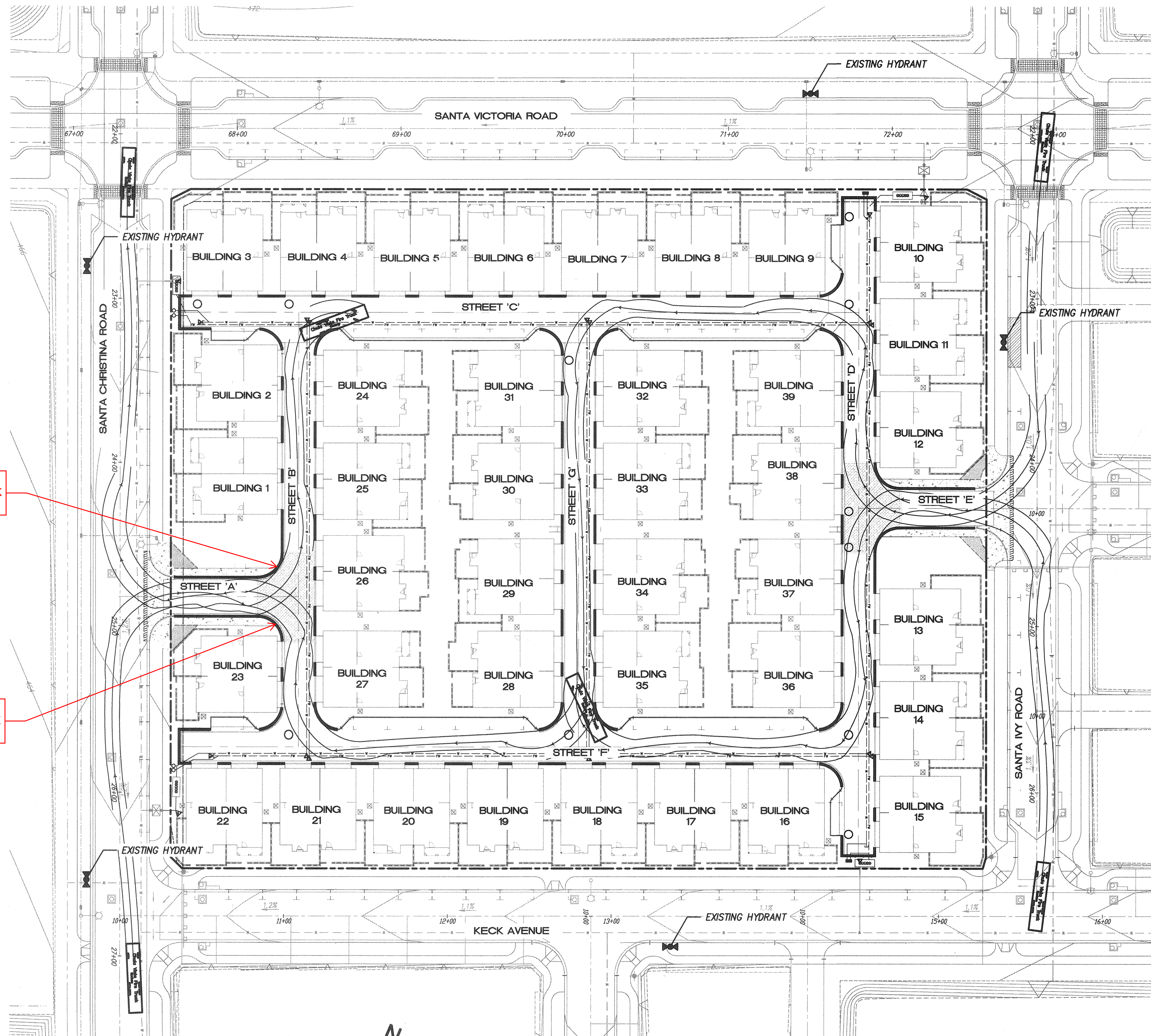
1. INDICATE ILLUMINATED DIRECTORY ARE REQUIRED AT EACH ENTRANCE.
2. FIRE LANE SIGNAGE SHALL BE INSTALLED PER CITY OF CHULA VISTA FIRE DEPARTMENT STANDARDS.
3. THE ACCESS ROAD SHALL BE DESIGNED FOR AASHTO H-20 VEHICLE LOADING.
4. EACH BUILDING SHALL BE PROVIDED WITH A KNOX BOX AT THE FIRE CONTROL ROOM, WHICH SHALL BE NORMALLY LOCKED.
5. ALL BUILDINGS SHALL HAVE ADDRESSES LABELED IN ACCORDANCE WITH THE CITY OF CHULA VISTA FIRE DEPARTMENT GUIDELINES.
6. ALL BUILDINGS SHALL BE PROTECTED BY AN AUTOMATIC FIRE ALARM AND SPRINKLER SYSTEM.
7. EVERY BUILDING WILL BE PROVIDED WITH A SURFACE MOUNTED FDC IN ACCORDANCE WITH CVFD DETAIL. PIV NOT REQUIRED FOR MULTI-FAMILY PROJECTS.
8. THE CVFD REQUIRES A MINIMUM 1" SERVICE SIZE FOR ALL NFPA13D FIRE SPRINKLER SYSTEMS. FOR SUBMITTAL OF FIRE SPRINKLER PLANS REVIEW, DELIVER TO 276 FOURTH AVE BUILDING C B-143, CHULA VISTA CA 91911.

LEGEND:

PROJECT BOUNDARY	---
FIRE BACKFLOW PREVENTER	⊠
PVC WATER MAIN	- - - -
FIRE HYDRANT	⊠
RED "NO PARKING" PCC CURB	---

0" CURB IS NOT PAINTED RED FOR FIRE LANE PER SITE WALK REVIEW OF FIELD CONDITIONS

0" CURB IS NOT PAINTED RED FOR FIRE LANE PER SITE WALK REVIEW OF FIELD CONDITIONS



AS BUILT		UTILITY NOTE	
SIGNATURE _____	DATE _____	ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM RECORD DATA AT THEIR APPROXIMATE LOCATIONS. UNDERGROUND FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED OR ARE NOT OF RECORD. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PERTINENT UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.	
Printed Name _____	P.E. No. _____		
My Registration Expires _____	Discipline _____		
CONSTRUCTION RECORD	REFERENCES	By	REVISIONS
CONTRACTOR:	DWG NO. 14024 (W.O. NO. 0R839C)	LAT33	CITY AS-BUILT
INSPECTOR:	DWG NO. 14031, MAP NO. 15350,		
DATE COMPLETED:	DWG NO. 18017, DWG NO. 18013, OWD NO. 00865-090259		

latitude 33
PLANNING & ENGINEERING
9968 Hilbert Street 2nd Floor, San Diego, CA 92131
Tel 858.751.0833

SCALE	Horizontal	N/A
Vertical	N/A	

Designed By:	Drawn By:	Checked By:
Plans Prepared Under Supervision Of:	Date:	12/14/16
BRADLEY D. SAGER	R.C.E. No. C054564	

Submitted:	12/15/16
By:	[Signature]
Approved:	12/14/16
By:	Tom Adler
City Engineer	

PLANNING:	sd
LANDSCAPE:	MK

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT
IMPROVEMENT PLANS FOR:
OTAY RANCH VILLAGE TWO - R-17B(b)
FIRE SERVICE DETAILS AND NOTES

DRAWING NO. 16019-14
W.O. NO. OR-862

TOTAL NUMBER OF SHEETS = 14