

By: TC
Permit Section

ENCROACHMENT PERMIT GENERAL PROVISIONS

13-1

1. This permit is issued under and subject to all laws and ordinances of agencies governing the encroachment herein permitted. See the following references:
STREETS AND HIGHWAYS CODE
 1. Division 1, Chapter 3
 2. Division 2, Chapter 2, Section 942
 3. Division 2, Chapter 4, Section 1126
 4. Division 2, Chapter 5.5 and Chapter 6
SAN JOAQUIN COUNTY ORDINANCES NUMBERED: 324, 441, 648, 662, 672, 695, 700, 860, 892, 3339, and 3675.
2. It is understood and agreed by the Permittee that the performance of any work under this permit shall constitute an acceptance of all the provisions contained herein and failure on the Permittee's part to comply with any provision will be cause for revocation of this permit. Except as otherwise provided for public agencies and franchise holders, this permit is revocable on five days notice.
3. All work shall be done subject to the supervision of and the satisfaction of the grantor. The Permittee shall at all times during the progress of the work keep the County Highway in as neat and clean condition as is possible and upon completion of the work authorized herein, shall leave the County Highway in a thoroughly neat, clean and usable condition.
4. The Permittee also agrees by the acceptance of this permit to properly maintain any encroachment structure placed by the Permittee on any part of the County Highway and to immediately repair any damage to any portion of the highway, which occurs as a result of the maintenance of the said encroachment structure, until such time as the Permittee may be relieved of the responsibility for such maintenance by the County of San Joaquin.
5. The Permittee also agrees by the acceptance of this permit to make, at its own expense, such repairs as may be deemed necessary by the County Department of Public Works.
6. It is further agreed by the Permittee that whenever construction, reconstruction or maintenance work upon the highway is necessary, the installation provided for herein shall, upon request of the County Department of Public Works, be immediately moved or removed by and at the sole expense of the Permittee.
7. No material used for fill or backfill in the construction of the encroachment shall be borrowed or taken from within the County right of way.
8. All work shall be planned and carried out with as little inconvenience as possible to the traveling public. No material shall be stacked within eight feet (8') of the edge of the pavement or traveled way unless otherwise provided herein. Adequate provision shall be made for the protection of the traveling public. Traffic control standards shall be utilized including barricades; approved signs and lights; and flagmen, as required by the particular work in progress.
9. The Permittee, by the acceptance of this permit, shall assume full responsibility for all liability for personal injury or damage to property which may arise out of the work herein permitted or which may arise out of the failure of the part of the Permittee to properly perform the work provided under this permit. In the event any claim of such liability is made against the County of San Joaquin or any department, official or employee thereof, the Permittee shall defend, indemnify, and hold each of them harmless for such claim.
10. All backfill material is to be moistened as necessary and thoroughly compacted with mechanical means. If required by the County Director of Public Works, such backfill shall consist of gravel or crushed rock. The Permittee shall maintain the surface over structures placed hereunder as may be necessary to insure the return of the roadway to a completely stable condition and until relieved of such responsibility by the County Department of Public Works. Wherever a gravel, crushed rock or asphalt surface is removed or damaged in the course of work related to the permitted encroachment, such material shall either be separately stored and replaced in the roadway as nearly as possible in its original state or shall be replaced in kind, and the roadway shall be left in at least as good a condition as it was before the commencement of operations of placing the encroachment structure.
11. Whenever it becomes necessary to secure permission from abutting property owners for the proposed work, such authority must be secured by the Permittee prior to starting work.
12. The current and future safety and convenience of the traveling public shall be given every consideration in the location and methods of construction utilized.
13. The Permittee is responsible for the preservation of survey monuments located within the area of work herein permitted. Prior to the start of construction, survey monuments that potentially may be disturbed shall be located and referenced by a Licensed Land Surveyor, and a Corner Record filed with the County Surveyor. Any Survey Monuments disturbed during the course of construction shall be reestablished by a Licensed Land Surveyor and another Corner Record filed with the County Surveyor. (Land Surveyors' Act Section 8771)
14. Prior to any excavation, the Permittee shall notify USA North (Underground Service Alert of Northern California and Nevada) at 811 or 800-227-2600 forty-eight (48) hours in advance.

APPLICATION FOR ENCROACHMENT PERMIT

PLEASE PRINT:

Date 12/29/17

To: San Joaquin County
Department of Public Works
CHRISTIAN SILVA
ASIAN BROADBAND LLC, DBA WAVE
(Applicant Name)

215 MASON CIRCLE
(Mailing Address)

CONCORD, CA, 94513
(City, State, Zip Code)

415-516-3902
(Area Code - Telephone Number)
CSILVA@WAVEBROADBAND.COM
(Email Address)

OFFICE USE ONLY

JOB # 110005 REF # _____
APN _____ CR # _____
EXP. DATE 3-1-18
VALID 1-23-18 TO 3-1-18 DRIVEWAYS:
STREET Alpine *
AREA Stockton QUAD N/S *
TYPE _____ *
FORMS _____
NOTES _____

Sketch (Detailed plans may be submitted)

SEE SUBMITTED PLANS FOR DETAILS

The undersigned hereby applies for permission to excavate, construct and/or otherwise encroach on County Highway Right-of-Way on the WEST LN side of E ALPINE AVE approximately _____ feet/mile of _____, by performing the following work (description of work):
TRENCHING 95' ALONG WEST LN FROM EXISTING MANHOLE TO EXISTING WAVE VAULT IN THE SW CORNER OF E ALPINE AVE (CITY ROW)

(TRAFFIC CONTROL COUNTY ONLY!)

Work will commence on or after ASAP for approximately 30 days.

I, the undersigned, certify that I am the owner of the respective property, or am qualified to represent the owner and agree to do the work described above in accordance with the rules and regulations of San Joaquin County and subject to inspection and approval.


Signature of Applicant - Title

12/29/17
Date

GENERAL PROVISIONS
GOVERNING INSTALLATION OF SUBSURFACE STRUCTURES AND PIPELINES WITHIN COUNTY ROAD RIGHTS-OF-WAY

PUBLIC CONVENIENCE AND SAFETY:

- A. Before obstructing any private driveway entrance or County road traveled way with a trench, spoil bank, equipment or other barrier permitted for any prolonged period of time, the Permittee shall notify the known users of the respective thoroughfare(s) involved, and shall provide access for vehicular and pedestrian traffic to and from the road.
 1. Unless otherwise permitted, all work shall be conducted in such a manner that no less than one lane of the existing County road traveled way will be maintained open to public traffic during working hours in a smooth and safe riding condition(s). Two lanes shall be open after working hours.
 2. In cases where road closure is permitted, the permission to close the road will be granted under the condition that the Permittee notify the following persons and/or agencies of the time, the period of closure, and the detour route at least twenty-four (24) hours prior to said road closure.
 - a. The County of San Joaquin Public Works Department
 - b. The County of San Joaquin Sheriff's Office
 - c. The local postal service
 - d. The local fire district
 - e. The local school district
 - f. The local residents involved
- B. Should hazardous conditions relative to the installation operations warrant flagmen, as many capable flagmen as may be necessary shall be provided by the Permittee and stationed in advance of work to warn and direct traffic.
- C. Lights, signs and barricades shall be furnished, erected and maintained by the Permittee for the adequate warning and convenience of the public, with particular attention to be taken in this regard after dark.
- D. Any excess dirt and/or debris which might be a hazard to either automobile or pedestrian traffic, uncontrollable by lights, signs and barricades, shall be removed from the jobsite daily.

STRUCTURES:

- A. Walls of structures shall be such quality and strength that they will resist all pressures and will not crack or be deformed in such a way as to create a hazard or maintenance problem at any time. Therefore, the minimum structural requirements for concrete pipe placed under county road rights-of-way shall conform to the following American Association of State Highway and Transportation Officials (AASHTO) designations.
 1. For concrete pipe up to and including thirty-three inches (33") inside diameter, extra strength concrete conforming to AASHTO Designation M 170M.
 2. For concrete pipe thirty-six inches (36") inside diameter and larger, reinforced concrete pipe conforming to AASHTO Designation M 170M Class III.
 3. Plastic pipe conforming to AASHTO Designation M294.
- B. All concrete pipe joints within County road rights-of-way shall be sealed against leakage and/or infiltration with rubber gasket in conformance with Section 65-1.06 of the California Standard Specifications, or with other methods as may be permitted under the Special Provisions.
- C. Cast-in-place concrete pipe, vitrified clay pipe, spiral welded steel pipe, or corrugated aluminum alloy pipe shall not be installed within the County road rights-of-way unless specifically so stated in the Special Provisions, and only under the conditions as provided.
- D. All structures to be buried within the County rights-of-way shall be set at such elevations as to allow minimum coverage of thirty inches (30") to the centerline of the roadways and twelve inches (12") at the bottoms of borrow ditches each side of the roadways. The depths of structures shall be established below a flat plane extending across the rights-of-way, no part of which shall extend above the elevations stated above; manholes, lampholes, valves, etc. not included. Future surface elevations shall be anticipated as nearly as possible and structure elevations shall be established for future adjustments accordingly.
- E. The County hereby reserves the right to specify in the Special Provisions the gage and surface treatment of any galvanized corrugated metal pipe that is to be installed.
- F. All longitudinal utility facilities are to be established (and dimensioned on sketches) from surveyed centerline of road right-of-way, not from right-of-way (border) lines.

REPAIRS OF THE COUNTY RIGHT-OF-WAY:

- A. All excavations shall be backfilled and compacted immediately after work therein has been completed.
- B. Trenched shall not be left open farther than 300 feet in advance of pipe laying operations, or 200 feet to the rear thereof, unless otherwise permitted by the Engineer.
- C. Unless otherwise permitted under the Special Provisions, backfill shall be placed and mechanically compacted in such a manner that the relative compaction throughout the entire fill within the County road right-of-way shall conform to the percentages of compaction as shown on the Trench detail.
- D. Backfill material shall be placed in horizontal uniform layers not to exceed in thickness, before compaction, 0.67 foot in the bedding region, one-foot where 90% compaction is required, and two-feet where 80% compaction is required.
- E. No portion of the excavation(s) shall be compacted by ponding or jetting unless a maintenance bond is provided.
- F. Gravel backfill material shall be utilized only where specifically so stated on the face of the permit. It shall be compacted by means of a high-frequency internal vibrator, the compactor to be a size and type approved by the Engineer. Points of compaction shall not be greater than 18" centers and to the full depth of the lift.
- G. All pavements, curbs, gutters, sidewalks, borrow ditches, pipes, head walls, road signs, trees, shrubbery, and/or other permanent road facilities impaired by or as a result of construction operations at the construction site(s) occupied by materials and/or equipment, shall be restored immediately upon backfilling of the excavation to the original grades and cross sections, and to a condition as good as, or better than existing prior to construction.
- H. All surfacing materials of roadways and driveway approaches cut or damaged by or as a result of construction operations, shall be replaced within ONE WEEK following the backfilling of excavation, weather permitting, with compacted layers of surfacing materials at least as thick as the existing, and no less than two inches (2") of asphalt concrete over six inches (6") of aggregate base, both as specified below.
 1. Asphalt Concrete: Combined mineral aggregate shall conform to the quality and gradation requirements for Type "B" one-half inch (1/2") maximum aggregate, coarse or medium gradation as specified in Section 39 of the California Standard Specifications. The bituminous binder to be mixed with mineral aggregate shall be paving asphalt having (Grade PG 64-10), unless otherwise directed by the Engineer. Placement of asphalt concrete surfacing shall conform to the applicable provisions of Section 39 of the California Standard Specifications.
 2. Aggregate Base: Combined mineral aggregates shall conform to the quality and the grading for three-quarter inch (3/4") maximum size aggregate Class 2 Aggregate Base specified in Section 26 of the California Standard Specifications.
- I. Before acceptance of repairs to the County road rights-of-way, all unsightly and detrimental dirt, dust and/or debris shall be removed and the construction areas left in a neat and presentable condition(s).
 1. If necessary, County road traveled way and driveway pavements shall be washed with water to remove dirt and dust.
 2. Driveway approaches and field entrance pavements damaged by equipment or spoil banks shall be repaired as directed by the Engineer.
- J. Upon request by the County, any settlement, sagging of surface, or cracking of pavement shall be repaired immediately by and at the sole expense of the Permittee for a period of one year following acceptance of the work.

SPECIAL PROVISIONS

Winter Weather Utility Work

1. SUPERVISION: The utility company (permittee) shall furnish full-time supervision of all work to insure compliance with the permit provision.
2. START OF WORK: No work within the County right-of-way shall be started until the utility company representative has made an evaluation of weather conditions and has determined the work can be accomplished under the provisions of the permit.
3. CLEAN PAVEMENT: Dirt and mud shall not be deposited on the pavement outside the area of work, and if inadvertently tracked onto the road travel way shall be removed immediately.
4. DAILY RESTORATION: Private driveways and road intersections shall be restored daily.
5. WEATHER-TIGHT CONDITIONS: All trenches shall be filled and compacted, ditches and other drainage facilities regarded and opened, and the entire work area restored to weather-tight condition prior to any rain.

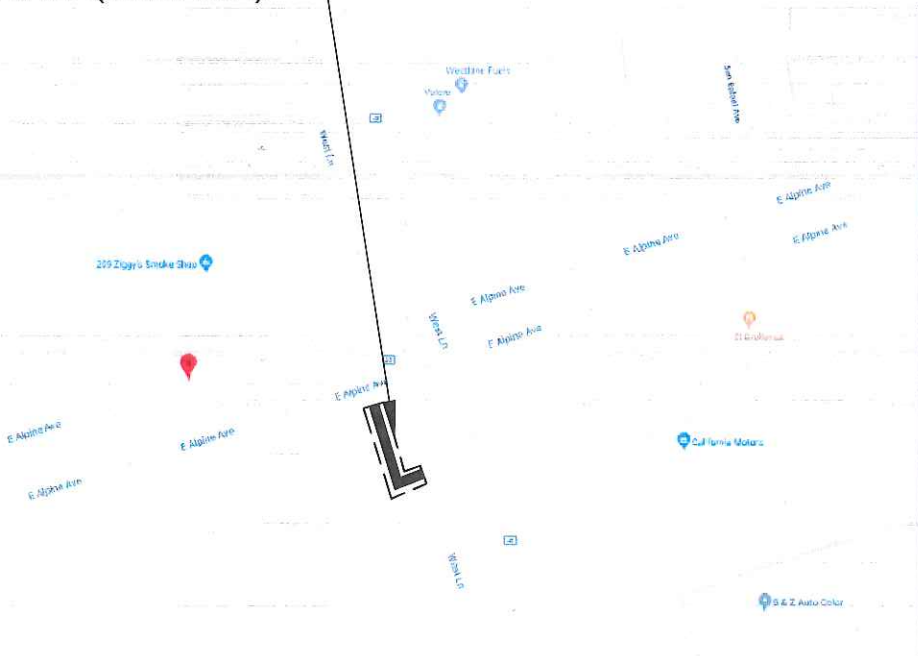
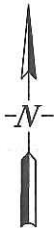
WAVE PROJECT
TRAFFIC CONTROL PLAN FOR
OPEN TRENCH ON
1528 E ALPINE AVE &
WEST LN,
STOCKTON, CALIFORNIA, 95204.

WORK AREA(TRENCH)

WAVE TO PLACE CONDUIT VIA OPEN
TRENCH ON WEST LN & E ALPINE
AVE, STOCKTON, CALIFORNIA, 95204.

PROJECT SCOPE

DEC 28, 2017
VERSION-1



VICINITY MAP

1	TITLE SHEET, INDEX
2	LEGEND AND GENERAL NOTES
3	LAYOUT PLAN
4	TRAFFIC CONTROL PLAN
5	TRAFFIC CONTROL NOTES
6	TRENCH PAVING DETAILS
7-8	CONSTRUCTION DETAILS
9	STORM WATER PROTECTION DETAIL

DRAWING INDEX

CALL BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
1-800-227-2600



4746 Clayton Rd.,
Concord, CA., 94521
(925) 408-2159
e- splaneng@gmail.com
www.planneng.com

Rev.	Description	Date
0	ISSUE TO CONSTRUCTION	12/28/2017



AGENCY / CITY

TITLE SHEET, INDEX
TRENCH
1528 E ALPINE AVE, STOCKTON, CA.

Designed By :
PlannEng
Drawn By :
PlannEng
Checked By :
PlannEng
Scale :
AS SHOWN
Date :
12/28/17
Job No. :
100015654

DWG. NO.

1

SHEET. NO.

1 OF 9

SYMBOLS

	NEW POWER SUPPLY		POTHOLE LOCATION
	NEW LOW PROFILE POWER SUPPLY W/ METER		STREET LIGHT
	NEW VAULT		TRAFFIC SIGNAL COMBINATION
	NEW PEDESTAL		FIRE HYDRANT
	BORE PIT		MONUMENT
	NEW VLT		CATCH BASIN
	EXISTING POLE		STORM DRAIN MANHOLE
	EXISTING VAULT		WATER MANHOLE
	EXISTING PEDESTAL		SANITARY SEWER MANHOLE
	EXISTING IRRIGATION VAULT		SEWER CLEAN OUT
	EXISTING UTILITY VAULT/PEDESTAL		ELECTRIC MANHOLE
	GAS/WATER VALVE		UNIDENTIFIED MANHOLE
	TREE/BUSHES		WATER METER
			GAS MFTFR

ABBREVIATIONS

CL	CENTER LINE	PL	PROPERTY LINE
(E)	EXISTING	PUE	PUBLIC UTILITY EASEMENT
FOC	FACE OF CURB	R/W	RIGHT OF WAY
MIN	MINIMUM	SD	EXISTING STORM DRAIN
MAX	MAXIMUM	SS	EXISTING SANITARY SEWER
CDT	CONDUIT	T	EXISTING TELEPHONE
		W	EXISTING WATER

LINETYPES

	PROPOSED TRENCH ROUTE
	PROPOSED TRENCH/BORE ROUTE
	OVERLASH/OVERRIDE
	EXISTING ROUTE
	EXISTING TELEPHONE SYSTEM
	EXISTING ELECTRICAL SYSTEM
	EXISTING GAS SYSTEM
	EXISTING TV SYSTEM
	EXISTING IRRIGATION SYSTEM
	EXISTING JOINT BORE
	EXISTING SANITARY SEWER
	EXISTING STORM DRAIN
	EXISTING WATER LINE
	EXISTING FENCELINE
	ROADWAY CENTER LINE
	PROPERTY LINE

GENERAL NOTES

- ALL GENERAL NOTES SHALL APPLY TO ALL DRAWINGS, PLANS AND DETAILS.
- CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA), AT LEAST 48 HOURS (AND NOT MORE THAN 14 DAYS) PRIOR TO THE START OF CONSTRUCTION BY CALLING (800) 227-2600.
- CONTRACTOR SHALL POTHOLE/HAND DIG AND VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. ALL UTILITY LOCATIONS ON PLANS ARE APPROXIMATE, CONTRACTOR MUST VERIFY.
- CONTRACTOR SHALL VERIFY ALL FOOTAGES ON SITE, PRIOR TO THE START OF CONSTRUCTION. ALL DIMENSIONS SHOWN ON PLANS ARE APPROXIMATE.
- CONTRACTOR SHALL KEEP A COPY OF APPROVED PLAN(S) AND PERMIT(S) AT THE JOB SITE AT ALL TIMES AND PRESENT IT TO AN AUTHORIZED AGENT OF THE CITY OF STOCKTON AND/OR LAW ENFORCEMENT UPON REQUEST.
- CONTRACTOR SHALL ENSURE THAT ANY EXISTING FACILITIES DAMAGED OR REMOVED SHALL BE REPLACED IN KIND OR BETTER, INCLUDING BUT NOT LIMITED TO REPLACING EXISTING STRIPING AND REMOVING UNNECESSARY "USA" MARKINGS.
- CONTRACTOR SHALL WORK ONLY DURING APPROVED HOURS, UNLESS OTHERWISE APPROVED IN WRITING BY THE "CITY ENGINEER."
- CONTRACTOR SHALL PERFORM ALL WORK AND TRAFFIC CONTROL IN ACCORDANCE WITH THE CITY OF STOCKTON AND STATE OF CALIFORNIA STANDARD PLANS AND SPECIFICATIONS, AND CURRENT CALIFORNIA DEPARTMENT OF TRANSPORTATION "MANUAL OF TRAFFIC CONTROLS AND MAINTENANCE OF HAZARD ZONE" AND "MANUAL OF WARNING SIGNS, LIGHTS AND DEVICES" FOR USE IN PERFORMANCE OF WORK UPON HIGHWAYS. FLASHING ARROW SIGNS SHALL BE REQUIRED FOR ALL LANE CLOSURES.
- CONTRACTOR SHALL ENSURE ALL WORK PERFORMED IS IN ACCORDANCE WITH REGULATIONS AND STANDARDS SET BY ANY AND ALL REGULATORY AGENCIES HAVING JURISDICTION AT THIS WORK SITE, INCLUDING BUT NOT LIMITED TO THE STATE OF CALIFORNIA PUBLIC UTILITY COMMISSION (CPUC), THE STATE OF CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ACT (CAL OSHA), THE COUNTY OF SAN JOAQUIN, ALL WORK SHALL BE ACCESSIBLE AND SUBJECT TO INSPECTION BY CITY ENGINEER AND/OR AN AUTHORIZED AGENT OF WAVE
- CONTRACTOR SHALL "RED-LINE" ALL LAYOUTS, PLANS AND DETAILS, ON THE DAY OF CONSTRUCTION AND SUBMIT A COMPLETE SET OF "AS-BUILT" PLANS TO WAVE UPON COMPLETION OF THE PROJECT, AND TO CITY.
- CONTRACTOR SHALL NOTIFY RESIDENTS AFFECTED BY THE WORK IN LANDSCAPED AREA IN ADVANCE OF CONSTRUCTION.
- CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS INSPECTOR 48 HOURS IN ADVANCE OF WORK COMMENCING.
- LANE CLOSURES ARE PROHIBITED BEFORE 8:30 AM AND AFTER 4:00 PM (3:00 PM OF FRIDAYS AND ON DAYS PRECEDING DESIGNATED LEGAL HOLIDAYS). NO LANE CLOSURES ARE PERMITTED ON WEEKENDS AND HOLIDAYS.

PROPOSED

THIS PROJECT PROPOSE TO OPEN TRENCH THROUGH EXISTING MANHOLE TO EXISTING WAVE VAULT. INSTALLATION OF (3) 1 1/4" HDPE CONDUIT. TRAFFIC CONTROL. FROM EXISTING MANHOLE NO: 1119 ON WEST LN TRENCH APPROX 95' TO EXISTING WAVE VAULT ON WEST LN.

CONTACT LIST

PLANNENG ENGINEERING INC
SUMAIR SYED ARIF
4746 CLAYTON RD,
CONCORD, CA, 94521
(925) 408-2159
splanneng@gmail.com
www.planneng.com



WAVE
Christian Silva
FDC Fiber Permit Technician III
215 Mason Circle
Concord, CA 94520
wavebroadband.com
925-459-1028 Ext 21028 (Office)
415-516-3902 (Cell)
csilva@wavebroadband.com

CITY OF STOCKTON
22 E, WEBER AVENUE, ROOM 301
STOCKTON, CA 95202
PHONE: (209) 937-8411
FAX: (209) 937-8277
FAX: (209) 937-7115

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1-800-227-2600



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AGENCY / CITY

LEGEND AND GENERAL NOTES
TRENCH
1528 E ALPINE AVE, STOCKTON, CA.

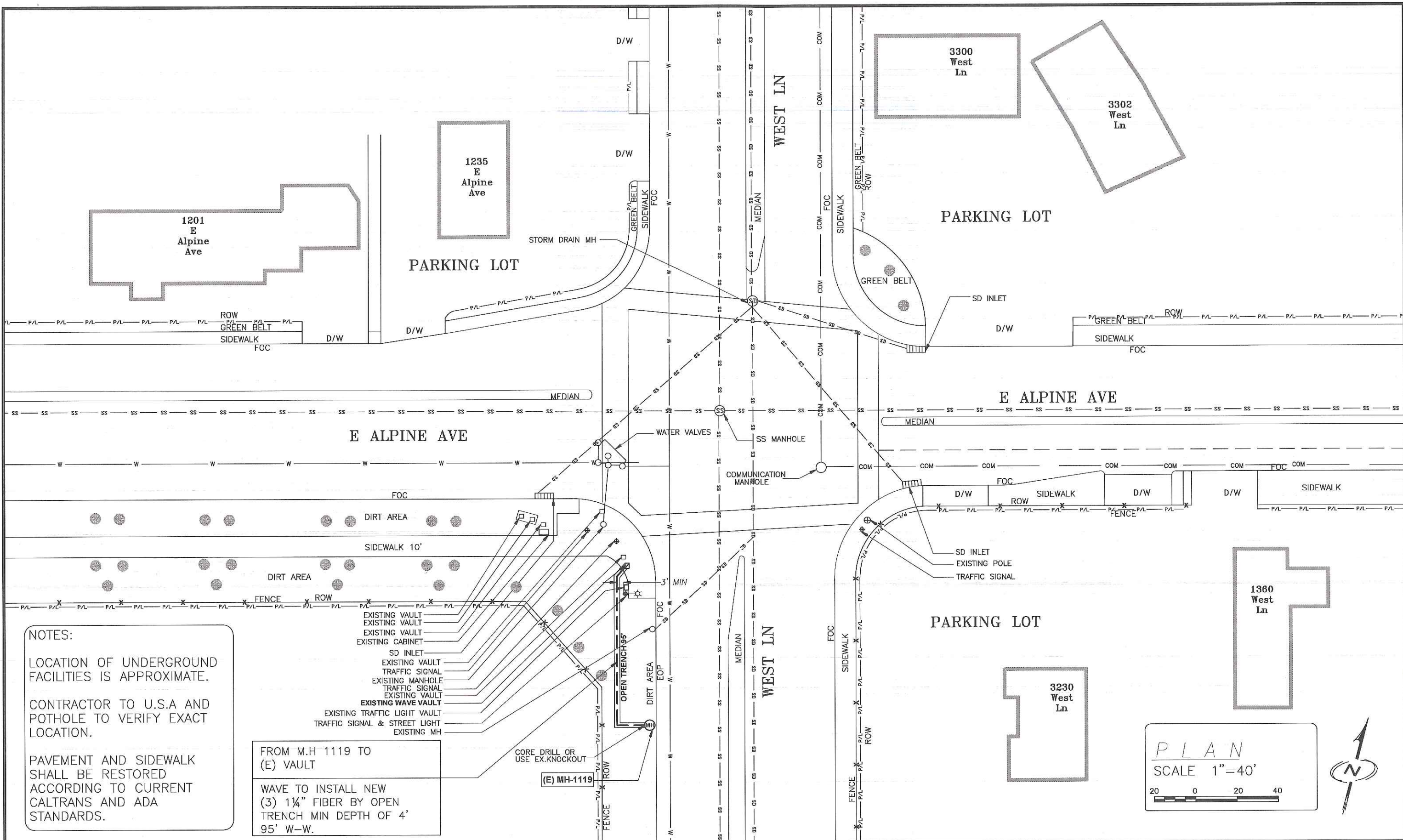
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Drawn By : PlannEng	Date : 12/28/17
Checked By : PlannEng	Job No. : 100015654

DWG. NO.

2

SHEET. NO.

2 OF 9



NOTES:

LOCATION OF UNDERGROUND FACILITIES IS APPROXIMATE.

CONTRACTOR TO U.S.A AND POT HOLE TO VERIFY EXACT LOCATION.

PAVEMENT AND SIDEWALK SHALL BE RESTORED ACCORDING TO CURRENT CALTRANS AND ADA STANDARDS.

FROM M.H 1119 TO (E) VAULT

WAVE TO INSTALL NEW (3) 1 1/4" FIBER BY OPEN TRENCH MIN DEPTH OF 4' 95' W-W.

- EXISTING VAULT
- EXISTING VAULT
- EXISTING VAULT
- EXISTING CABINET
- SD INLET
- EXISTING VAULT
- TRAFFIC SIGNAL
- EXISTING MANHOLE
- TRAFFIC SIGNAL
- EXISTING VAULT
- EXISTING WAVE VAULT
- EXISTING TRAFFIC LIGHT VAULT
- TRAFFIC SIGNAL & STREET LIGHT
- EXISTING MH

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AGENCY / CITY

LAYOUT PLAN
TRENCH
1528 E ALPINE AVE, STOCKTON, CA.

Designed By : PlannEng
Scale : AS SHOWN
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Date : 12/28/17
Checked By : PlannEng
Job No. : 100015654

DWG. NO. 3
SHEET. NO. 3 OF 9

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WORKING HOURS;
ALL TRAFFIC CONTROL
INCLUDING SET UP
AND REMOVAL TO BE
BETWEEN 9:00 AM
AND 3:30 PM

NOTE TO CONTRACTOR:
IF SIDEWALK AND/OR ANY PEDESTRIAN TRAFFIC ARE TO
BE RESTRICTED AND/OR AFFECTED, USE THE FOLLOWING
SIGNS TO BLOCK AND REDIRECT FOOT TRAFFIC.

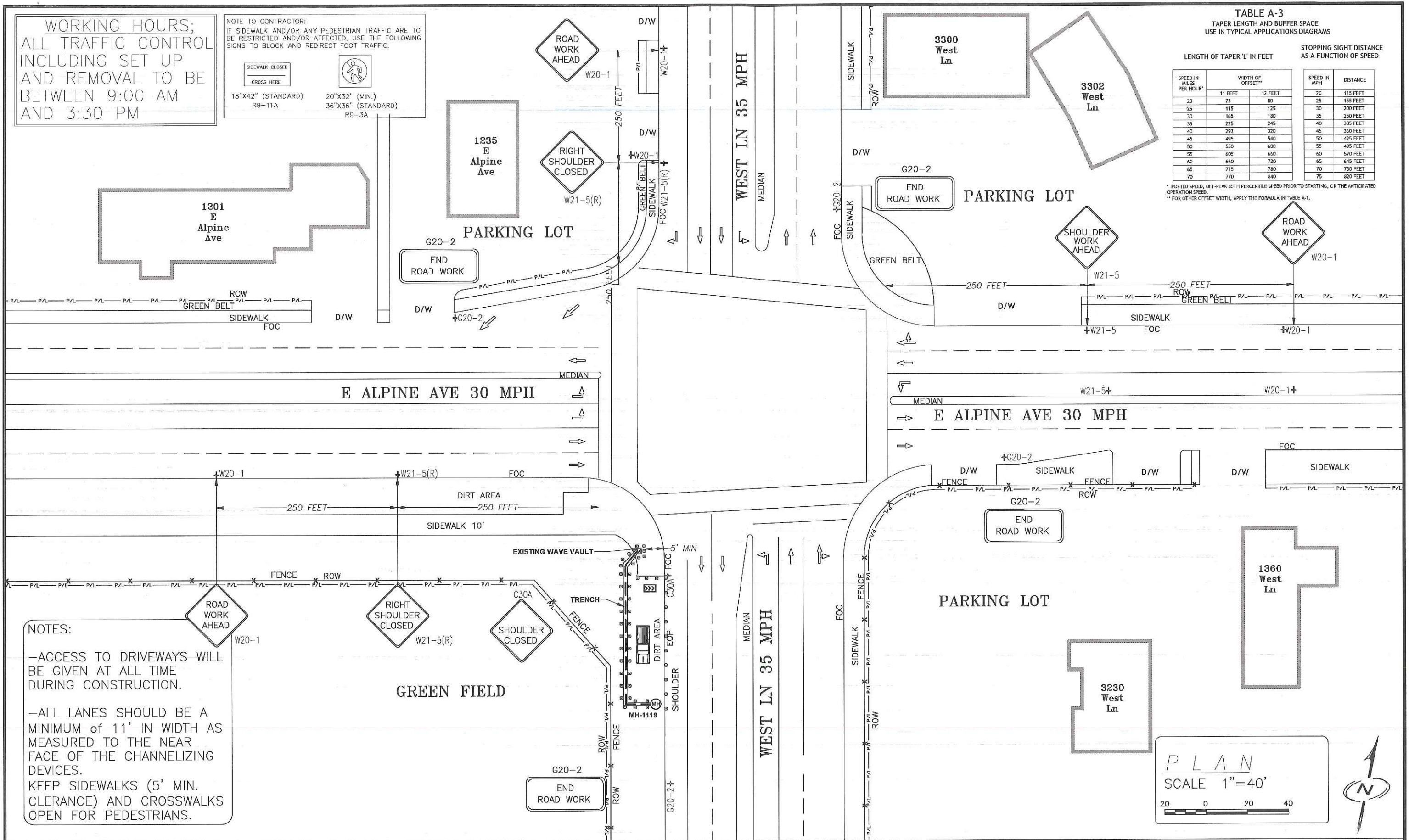
SIDEWALK CLOSED
CROSS HERE
18"x42" (STANDARD)
R9-11A

20"x32" (MIN.)
36"x36" (STANDARD)
R9-3A

TABLE A-3
TAPER LENGTH AND BUFFER SPACE
USE IN TYPICAL APPLICATIONS DIAGRAMS

SPEED IN MILES PER HOUR*	LENGTH OF TAPER 'L' IN FEET		STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED
	11 FEET	12 FEET	
20	73	80	20 115 FEET
25	115	125	25 155 FEET
30	165	180	30 200 FEET
35	225	245	35 250 FEET
40	293	320	40 305 FEET
45	360	400	45 360 FEET
50	425	475	50 425 FEET
55	495	550	55 495 FEET
60	560	620	60 570 FEET
65	630	700	65 645 FEET
70	700	780	70 730 FEET
75	770	860	75 820 FEET

* POSTED SPEED, OFF-PEAK 85TH PERCENTILE SPEED PRIOR TO STARTING, OR THE ANTICIPATED
OPERATION SPEED.
** FOR OTHER OFFSET WIDTH, APPLY THE FORMULA IN TABLE A-1.



NOTES:

-ACCESS TO DRIVEWAYS WILL
BE GIVEN AT ALL TIME
DURING CONSTRUCTION.

-ALL LANES SHOULD BE A
MINIMUM OF 11' IN WIDTH AS
MEASURED TO THE NEAR
FACE OF THE CHANNELIZING
DEVICES.
KEEP SIDEWALKS (5' MIN.
CLERANCE) AND CROSSWALKS
OPEN FOR PEDESTRIANS.

CALL BEFORE YOU DIG
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astound
by wave

AGENCY / CITY

TRAFFIC CONTROL PLAN
TRENCH
1528 E ALPINE AVE, STOCKTON, CA.

Designed By :
Planneng
Drawn By :
Planneng
Checked By :
Planneng

Scale :
AS SHOWN
Date :
12/28/17
Job No. :
100015654

DWG. NO.
4
SHEET. NO.
4 OF 9

LEGEND

- Traffic Cone or Delineator
- Sign
- ← Direction of Travel
(Not a pavement marking)
- ◀◀◀ Flashing Arrow Sign (Where Required)
Refer to Page 7 of Caltrans manual
Type A, Type I, or Type II.
- Y High Level Warning Device (Flagtree)
- |— Barricade (For Excavation Only)
Refer to Page 12 of Caltrans manual
to select for Details on
Type I, Type II, or Type III.
- Flagger

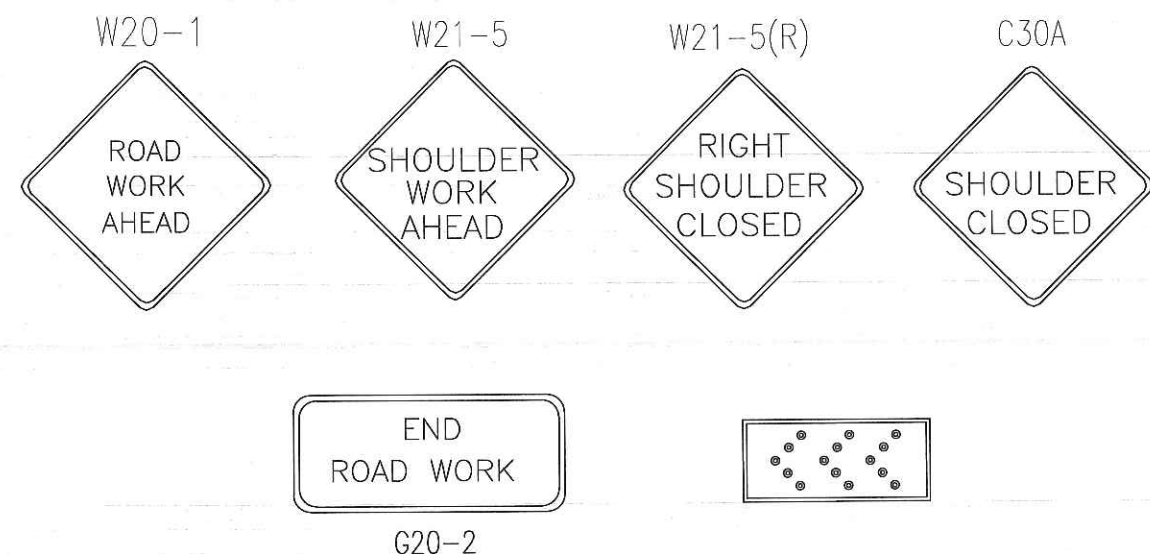
NOTES:

1. Flaggers will be used to control traffic at non-signalized intersections.
Flaggers will use 2 way radios when a 24' (min) road way cannot be maintained.
2. No Parking/Tow Away signs will be posted 48 hours in advance to clear
Work Zone
3. All construction zone signs/directional signs will conform to caltrans specs.
Signs will be spaced 150 feet apart where applicable.
4. Same traffic control plan will apply at other similar location and
opposite
side of street
5. Use flag trees on all c-18/c-23 signs.

TABLE 6C-1
RECOMMENDED ADVANCE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS*		
	A	B	C
URBAN (LOW SPEED) – 25 MPH OR LESS	100 FEET	100 FEET	100 FEET
URBAN (HIGH SPEED) – MORE THAN 25 MPH TO 40 MPH	250 FEET	250 FEET	250 FEET
URBAN (HIGH SPEED) – MORE THAN 40 MPH	350 FEET	350 FEET	350 FEET
RURAL	500 FEET	500 FEET	500 FEET
EXPRESSWAY / FREEWAY	1,000 FEET	1,500 FEET	2,640 FEET

THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN.
THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS.
THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "FIRST SIGN" IS THE SIGN
IN A THREE-SIGN SERIES THAT IS CLOSEST TO THE TTC ZONE. THE "THIRD SIGN" IS THE SIGN THAT IS
FURTHEST UPSTREAM FROM THE TTC ZONE.)



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AGENCY / CITY

TRAFFIC CONTROL NOTES
TRENCH
1528 E ALPINE AVE, STOCKTON, CA.

Designed By :
PlannEng
Scale :
AS SHOWN
Drawn By :
PlannEng
Date :
12/28/17
Checked By :
PlannEng
Job No. :
100015654

DWG. NO.

5

SHEET. NO.

5 OF 9

SMOOTHWALL

www.duraline.com



Customer Service
800-847-7661



FEATURES:

- Available from 1/2" to 16" diameters
- Manufactured from flexible HDPE, makes gradual bends without special equipment
- Continuous lengths reduce joining costs
- Excellent low temperature properties, allows installation in cold climates
- Outstanding long term cable protection from shifting ground, rock and root impingement
- Provides a permanent pathway, simplifies future cable repairs or replacement
- Available with UV protectant for aerial/lash placement
- UL Listing Available from 1/2" - 6" for SDR 13.5, SCH 40 and SCH 80

Existing Conduit, Plow, Direct Burial, Aerial

Telecom CATV Enterprise C&I Energy DOT

(Custom)

FOOTAGE MARKINGS Sequential foot or markings. Custom print streams available.

SILICORE™ SILICORE is co-extruded with the tough HDPE jacket creating a super, slick permanent lining. SILICORE lined ducts allow for higher speed cable jetting and longer cable pulls.

PREINSTALLED TAPE Factory pre-installed Bull-Line™ Pull Tape with EVEN-LOAD™ ensures extra slack at any access point throughout the reel. Available 500lb-6,000lb tensile strength or locatable.

PREINSTALLED CABLE Specify single or multiple cables to be factory pre-installed.
Cable types: Service Drops, Fiber, Coaxial, 600Volt Cu, Medium Voltage.

dura line

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SMOOTHWALL SPECS

WALL TYPE	PIPE SIZE											
	Nom OD (in)	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"
SDR-9	OD Tolerance +/-	0.004	0.005	0.007	0.008	0.010	0.012	0.014	0.018	0.023	0.028	0.033
	Bend Radius (in)-Supported	8	10	13	17	19	24	29	39	50	61	73
	Bend Radius (in)-Unsupported	16	20	26	34	38	48	58	78	100	122	146
	Safe Working Load	525	821	1,288	2,052	2,688	4,200	6,155	9,122	15,080	23,045	33,045
SDR-11	Min. Wall (in)	0.093	0.117	0.146	0.184	0.211	0.264	0.319	0.389	0.500	0.618	0.736
	Wall Tolerance +	0.020	0.020	0.020	0.022	0.025	0.032	0.038	0.047	0.060	0.074	0.088
	Avg ID (in)	0.634	0.796	1.003	1.270	1.453	1.815	2.199	2.675	3.440	4.253	5.065
	Weight (#/ft)	0.098	0.152	0.234	0.370	0.485	0.759	1.110	1.648	2.723	4.161	5.901
SDR-13.5	Min. Wall (in)	0.076	0.095	0.120	0.151	0.173	0.216	0.261	0.318	0.409	0.506	0.602
	Wall Tolerance +	0.020	0.020	0.020	0.021	0.026	0.031	0.038	0.049	0.061	0.072	0.084
	Avg ID (in)	0.668	0.840	1.055	1.338	1.533	1.917	2.322	2.826	3.633	4.490	5.349
	Weight (#/ft)	0.084	0.128	0.199	0.312	0.408	0.636	0.930	1.380	2.282	3.490	4.944
SDR-15.5	Min. Wall (in)	0.062	0.078	0.097	0.123	0.141	0.176	0.213	0.259	0.333	0.412	0.491
	Wall Tolerance +	0.020	0.020	0.020	0.020	0.021	0.026	0.031	0.040	0.049	0.059	0.072
	Avg ID (in)	0.696	0.874	1.101	1.394	1.598	2.002	2.423	2.951	3.794	4.690	5.584
	Weight (#/ft)	0.072	0.110	0.167	0.263	0.342	0.528	0.775	1.146	1.895	2.896	4.112
SDR-17	Min. Wall (in)	0.062	0.068	0.084	0.107	0.123	0.153	0.185	0.226	0.290	0.359	0.427
	Wall Tolerance +	0.018	0.020	0.020	0.020	0.020	0.020	0.022	0.027	0.035	0.043	0.051
	Avg ID (in)	0.698	0.894	1.127	1.426	1.634	2.049	2.483	3.021	3.885	4.802	5.720
	Weight (#/ft)	0.071	0.098	0.149	0.234	0.304	0.467	0.680	1.011	1.669	2.552	3.615

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astound
by wave

CONSTRUCTION DETAILS
TRENCH
1528 E ALPINE AVE, STOCKTON, CA.

Designed By :
PlannEng
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AS SHOWN
Drawn By :
PlannEng
Date :
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PlannEng
Job No. :
100015654

DWG. NO.
7
SHEET. NO.
7 OF 9

LEGEND

- Traffic Cone or Delineator

■ Sign

← Direction of Travel
(Not a pavement marking)

⚡ Flashing Arrow Sign (Where Required)
Refer to Page 7 of Caltrans manual
Type A, Type I, or Type II.

Y High Level Warning Device (Flagtree)

— Barricade (For Excavation Only)
Refer to Page 12 of Caltrans manual
to select for Details on
Type I, Type II, or Type III.

■ Flagger

NOTES:

1. Flaggers will be used to control traffic at non-signalized intersections.

Flaggers will use 2 way radios when a 24' (min) road way cannot be maintained.

2. No Parking/Tow Away signs will be posted 48 hours in advance to clear

Work Zone

3. All construction zone signs/directional signs will conform to caltrans specs.

Signs will be spaced 150 feet apart where applicable.

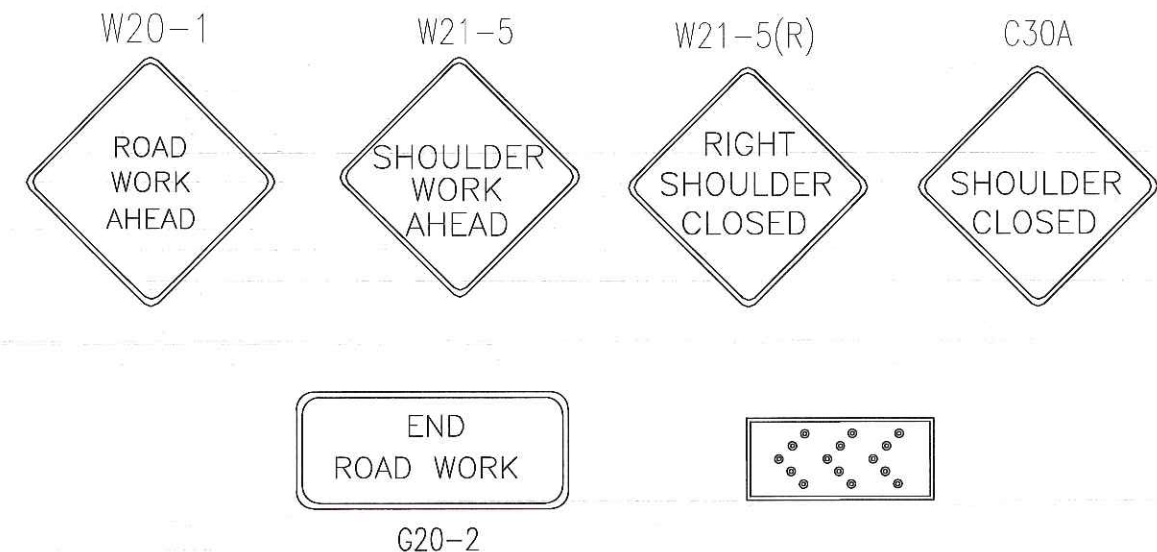
4. Same traffic control plan will apply at other similar location and opposite side of street

5. Use flag trees on all c-18/c-23 signs.

TABLE 6C-1
RECOMMENDED ADVANCE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS*		
	A	B	C
URBAN (LOW SPEED) – 25 MPH OR LESS	100 FEET	100 FEET	100 FEET
URBAN (HIGH SPEED) – MORE THAN 25 MPH TO 40 MPH	250 FEET	250 FEET	250 FEET
URBAN (HIGH SPEED) – MORE THAN 40 MPH	350 FEET	350 FEET	350 FEET
RURAL	500 FEET	500 FEET	500 FEET
EXPRESSWAY / FREEWAY	1,000 FEET	1,500 FEET	2,640 FEET

THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN.
THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS.
THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "FIRST SIGN" IS THE SIGN IN A THREE-SIGN SERIES THAT IS CLOSEST TO THE TTC ZONE. THE "THIRD SIGN" IS THE SIGN THAT IS FURTHEST UPSTREAM FROM THE TTC ZONE.)



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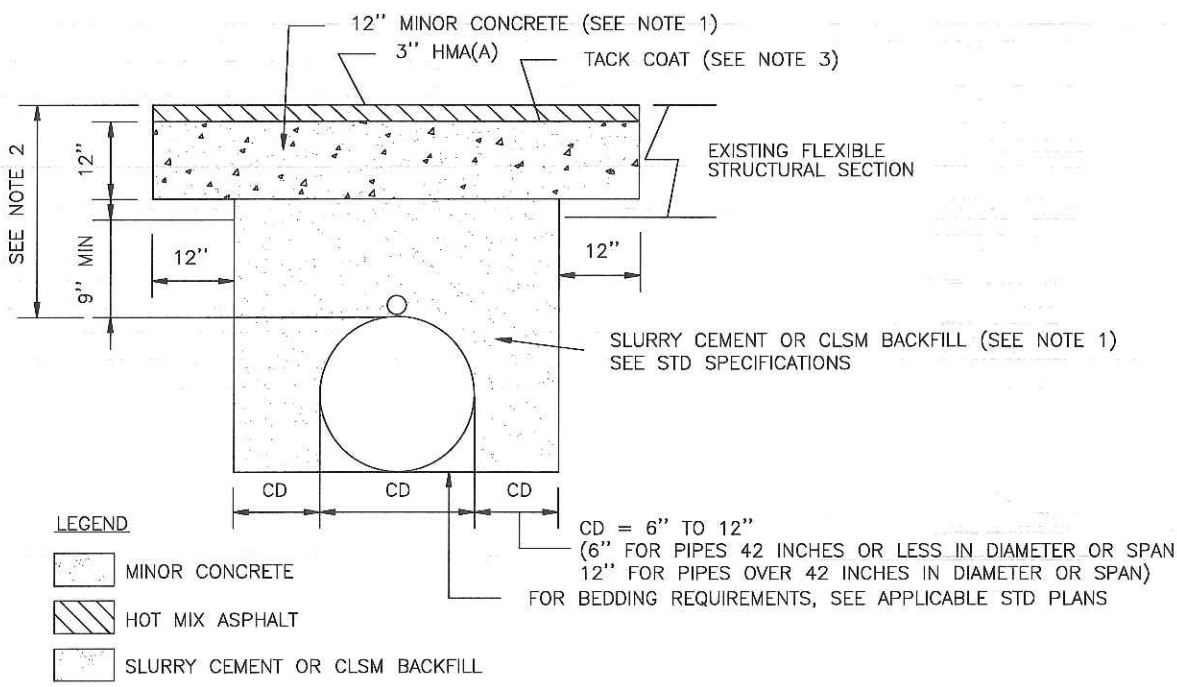
DWG. NO.

5

SHEET. NO.

5 OF 9

CASE 1 : FOR TRAFFIC INDEX (TI) LESS THAN OR EQUAL TO THAN 12

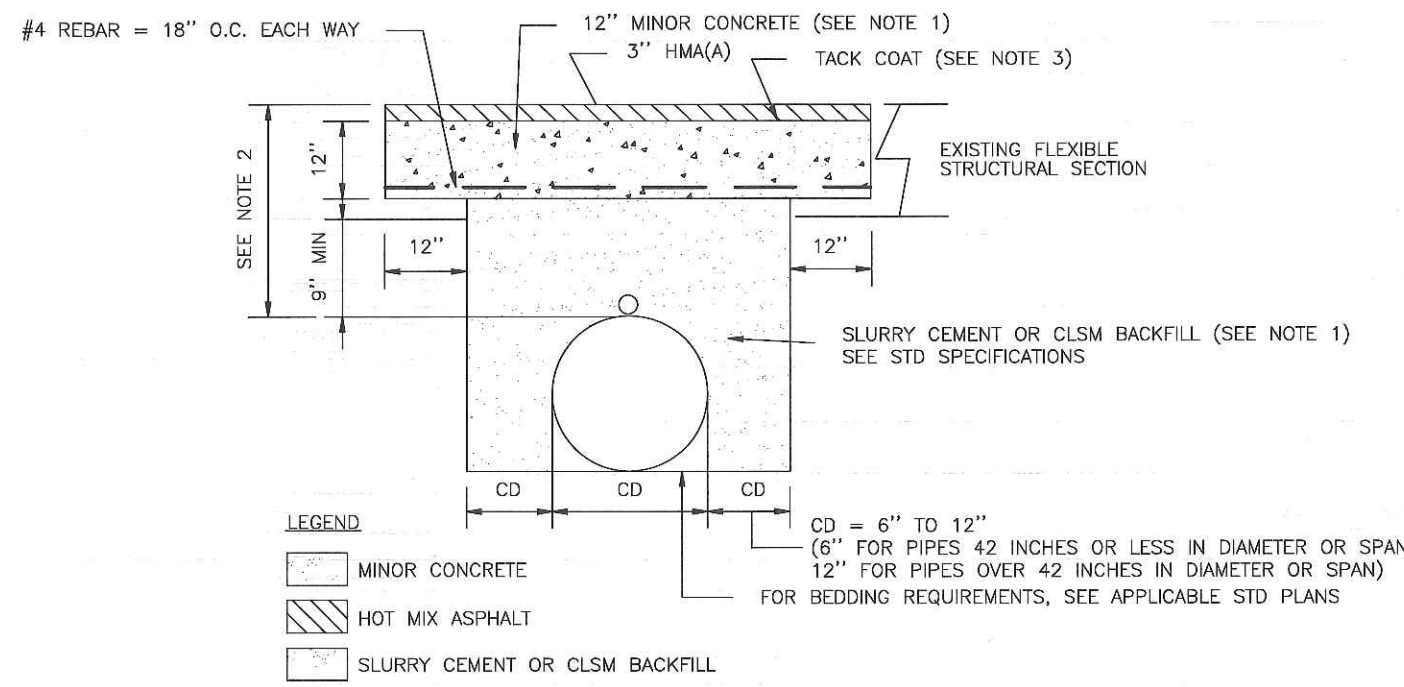


- LEGEND**
- MINOR CONCRETE
 - HOT MIX ASPHALT
 - SLURRY CEMENT OR CLSM BACKFILL
- NOTES**
- CONCRETE CAP MAY BE RAPID STRENGTH CONCRETE (RSC); IF RSC IS USED, REPLACE THE SLURRY CEMENT OR CLSM BACKFILL WITH LEAN CONCRETE BACKFILL OR RSC DEPENDING UPON THE PROJECT'S TIME CONSTRAINTS.
 - FOR NEW INSTALLATIONS, MINIMUM DEPTH OF COVER REQUIREMENTS ARE TO FOLLOW GUIDELINES IN THE ENCROACHMENT PERMITS MANUAL OR HIGHWAY DESIGN MANUAL. WHEN COVER OVER A REPLACEMENT PIPE/ENCASEMENT PIPE IS LESS THAN 24", A SPECIAL DESIGN IS NECESSARY (FOR IN-HOUSE PROJECTS, REFER TO HD DRAINAGE DETAIL LIBRARY).
 - TACK COAT (ASPHALTIC EMULSION) SHALL BE APPLIED PRIOR TO PLACING HMA(A).
 - ALL MATERIALS, WORKMANSHIP, TESTING, AND INSPECTIONS SHALL COMPLY WITH CALTRANS STANDARD SPECIFICATIONS AND PROJECT-SPECIFIC SPECIAL PROVISIONS.

ABBREVIATIONS:

CD = CLEAR DISTANCE
CLR = CLEARANCE
HMA(A) HOT MIX ASPHALT TYPE A
O.C. = ON CENTER
(X) OUTSIDE DIAMTER OF UTILITY OR CULVERT
CLSM CONTROLLED LOW-STRENGHT MATERIAL

CASE 2 : FOR TRAFFIC INDEX (TI) GREATER THAN 12



- LEGEND**
- MINOR CONCRETE
 - HOT MIX ASPHALT
 - SLURRY CEMENT OR CLSM BACKFILL
- NOTES**
- CONCRETE CAP MAY BE RAPID STRENGTH CONCRETE (RSC); IF RSC IS USED, REPLACE THE SLURRY CEMENT OR CLSM BACKFILL WITH LEAN CONCRETE BACKFILL OR RSC DEPENDING UPON THE PROJECT'S TIME CONSTRAINTS.
 - FOR NEW INSTALLATIONS, MINIMUM DEPTH OF COVER REQUIREMENTS ARE TO FOLLOW GUIDELINES IN THE ENCROACHMENT PERMITS MANUAL OR HIGHWAY DESIGN MANUAL. WHEN COVER OVER A REPLACEMENT PIPE/ENCASEMENT PIPE IS LESS THAN 24", A SPECIAL DESIGN IS NECESSARY (FOR IN-HOUSE PROJECTS, REFER TO HD DRAINAGE DETAIL LIBRARY).
 - TACK COAT (ASPHALTIC EMULSION) SHALL BE APPLIED PRIOR TO PLACING HMA(A).
 - ALL MATERIALS, WORKMANSHIP, TESTING, AND INSPECTIONS SHALL COMPLY WITH CALTRANS STANDARD SPECIFICATIONS AND PROJECT-SPECIFIC SPECIAL PROVISIONS.

ABBREVIATIONS:

CD = CLEAR DISTANCE
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(X) OUTSIDE DIAMTER OF UTILITY OR CULVERT
CLSM CONTROLLED LOW-STRENGHT MATERIAL

TRENCH PAVING DETAILS
PAVED TRAVEL WAY WITHIN STATE'S RIGHT-OF-WAY

SCALE: N.T.S.

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TRENCH PAVING DETAILS
TRENCH
1528 E ALPINE AVE, STOCKTON, CA.

Designed By : PlannEng	Scale : AS SHOWN
Drawn By : PlannEng	Date : 12/28/17
Checked By : PlannEng	Job No. : 100015654

DWG. NO.	SHEET. NO.
6	6 OF 9

..... SMOOTHWALL SPECS

PIPE SIZE		½"	¾"	1"	1 ¼"	1 ½"	2"	2 ½"	3"	4"	5"	6"	8"	10"	12"
WALL TYPE	Nom OD (in)	0.840	1.050	1.315	1.660	1.900	2.375	2.875	3.500	4.500	5.563	6.625	8.625	10.750	12.750
	OD Tolerance +/-	0.004	0.005	0.007	0.008	0.010	0.012	0.014	0.018	0.023	0.028	0.033	0.043	0.054	0.064
	Bend Radius (in)-Supported	8	10	13	17	19	24	29	39	50	61	73	155	194	230
	Bend Radius (in)-Unsupported	16	20	26	34	38	48	58	78	100	122	146	233	290	344
SCH-40	Min. Wall (in)	0.109	0.113	0.133	0.140	0.145	0.154	0.203	0.216	0.237	0.258	0.280	0.322	0.365	0.406
	Wall Tolerance +	0.020	0.020	0.020	0.020	0.020	0.020	0.024	0.026	0.028	0.031	0.034	0.039	0.044	0.049
	Avg ID (in)	0.620	0.804	1.029	1.360	1.590	2.047	2.445	3.042	3.998	5.016	6.031	7.942	9.976	11.889
	Weight (#/ft)	0.111	0.148	0.217	0.293	0.350	0.469	0.740	0.969	1.380	1.872	2.432	3.661	5.215	6.846
	Safe Working Load	610	798	1,340	1,604	1,919	2,579	4,090	5,348	7,618	10,320	13,395	20,158	28,580	5,348
SCH-80	Min. Wall (in)	0.147	0.154	0.179	0.191	0.200	0.218	0.276	0.300	0.337	0.375	0.432			
	Wall Tolerance +	0.020	0.020	0.021	0.023	0.024	0.026	0.033	0.036	0.040	0.045	0.052			
	Avg ID (in)	0.526	0.722	0.936	1.255	1.476	1.913	2.290	2.864	3.786	4.768	5.709			
	Weight (#/ft)	0.139	0.188	0.276	0.382	0.463	0.641	0.978	1.310	1.914	2.657	3.656			
	Safe Working Load	768	1,040	1,533	2,116	2,564	3,545	5,409	7,238	10,578	14,669	20,172			

DL_SMOOTH_5.2017

NOTES:

1. Bend Radius
- ½" through 2½" Supported Bend Radius 10 times the OD Unsupported Bend Radius 20 times the OD
- 3" through 6" Supported Bend Radius 11 times the OD Unsupported Bend Radius 22 times the OD
- 8" through 16" Supported Bend Radius 18 times the OD Unsupported Bend Radius 27 times the OD
2. During cable placement, large sweeping bends are recommended over tighter bends. Pre-formed sweeps are recommended for conduit size 8" through 16" diameters.
3. "Safe Working Load" is calculated using a 20% safety factor with the minimum resin tensile strength of 3,000 psi, the average OD and minimum wall thickness.
4. Product Specifications
- All Smoothwall conduit dimensions meets or exceeds one or more of the following specifications:
- ASTM F-2160, ASTM D-3035, ASTM D-2239, ASTM D-3485, NEMA TC-7, UL 651, UL 19990, Bellcore GR-356
5. Internal or external ribs are in addition to the average wall and for determining OD and ID dimensions. The average rib height to be added is 0.020"
6. Add 0.016 #/ft ribbed products 1 1/2" and less. For 2" and large, add 0.025 #/ft

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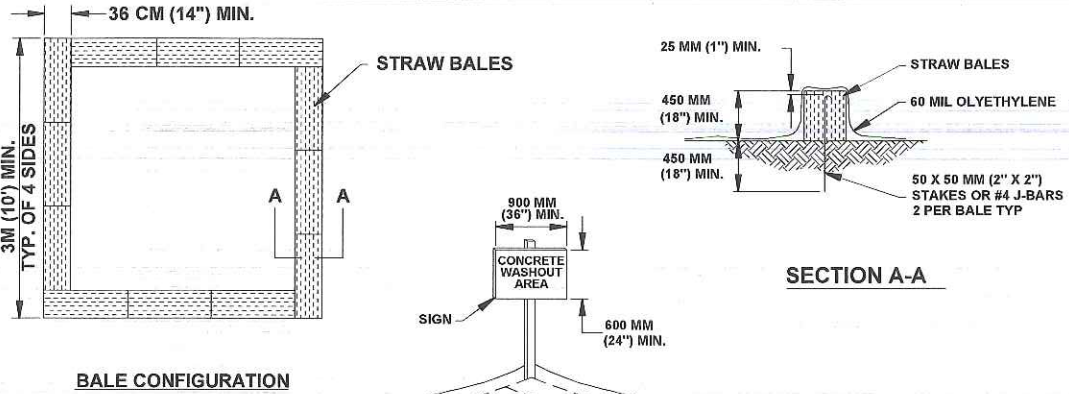
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CONSTRUCTION DETAILS
TRENCH
1528 E ALPINE AVE, STOCKTON, CA.

Designed By : PlannEng	Scale : AS SHOWN
Drawn By : PlannEng	Date : 12/28/17
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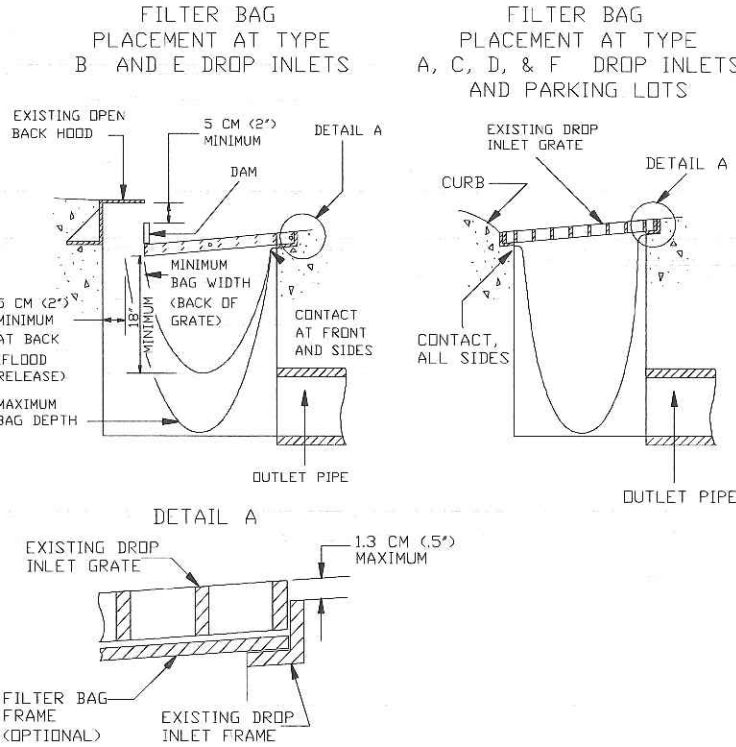
DWG. NO.	SHEET. NO.
8	8 OF 9

STORM WATER
PROTECTION PLAN



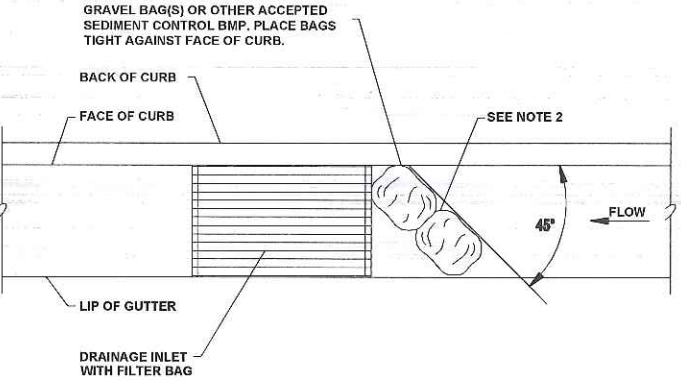
- NOTES:
- 1.) FACE SIGN TOWARD NEAREST STREET OR ACCESS POINT.
 - 2.) CONCRETE WASHOUT SHALL BE LOCATED BEHIND THE CURB AND 15 M (50 FT.) MINIMUM FROM DRAINAGE INLETS OR WATERCOURSES.

CONCRETE WASHOUT



- NOTES:
1. THE MAXIMUM DRAINAGE AREA PER FILTER BAG SHALL BE NO MORE THAN 0.8 HECTARES (2 ACRES).
 2. THE FILTER BAG SHALL BE MANUFACTURED FROM UV RESISTANT POLYPROPYLENE, NYLON, POLYESTER, OR ETHYLENE FABRIC WITH A MINIMUM TENSILE STRENGTH OF 50 LBS PER LINEAL FOOT, AN EQUIVALENT OPENING SIZE NOT GREATER THAN 20 SIEVE AND WITH A MINIMUM FLOW RATE OF 40 GALLONS/MINUTE/SQ. FT.
 3. THE FILTER BAG MAY BE SUSPENDED FROM OR HELD IN PLACE BY THE EXISTING INLET GRATE (OR OTHER APPROVED METHOD), PROVIDING NO MODIFICATION OR DAMAGE SHALL BE DONE TO THE INLET GRATE OR FRAME. THE INLET GRATE SHALL NOT BE CAUSED TO REST MORE THAN 13MM (.5\") ABOVE THE INLET FRAME (SEE DETAIL A).
 4. THE FILTER BAG MAY EXTEND TO THE BOTTOM OF THE INLET BOX PROVIDED THE OUTLET PIPE IS UNOBSTRUCTED.
 5. FLOWS SHALL NOT BE ALLOWED TO BYPASS THE BAG. THE BAG OR ITS FRAME SHALL CATCH FLOWS AT ALL SIDES OF THE INLET, EXCEPT AS SHOWN FOR FLOOD RELEASE.
 6. INLET FILTER BAGS SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINFALL DURING THE WET SEASON AND MONTHLY DURING THE DRY SEASON. SEDIMENT AND DEBRIS SHALL BE REMOVED BEFORE ACCUMULATIONS HAVE REACHED ONE THIRD THE DEPTH OF THE BAG. BAGS SHALL BE REPAIRED OR REPLACED AS SOON AS DAMAGE OCCURS.

STORM DRAIN INLET
FILTER BAG



- NOTES:
- 1.) SEDIMENT TRAPPED UPSTREAM OF SEDIMENT CONTROL BMP SHALL BE REMOVED WEEKLY AND PRIOR TO A RAINFALL EVENT
 - 2.) PLACE BMP'S TIGHTLY TOGETHER AT JOINTS TO PREVENT OR MINIMIZE SEEPAGE AT JOINTS.

PLAN VIEW

INLET SEDIMENT
CONTROL

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TRENCH
STORM WATER PROTECTION DETAIL

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