



COUNTY OF SAN JOAQUIN

DEPARTMENT OF PUBLIC WORKS
P.O. BOX 1810-1810 E. HAZELTON AVENUE
STOCKTON, CALIFORNIA 95201
(209) 468-3000
FAX # (209) 468-9324

Permit No: **PS-1603467**
Date Issued: 10/31/2016
Start Date: 10/31/2016
Exp. Date: 12/01/2016
Project No: PWP7110005
Quad: SE

ENCROACHMENT PERMIT

To: WAVE BROADBAND
1225 E SUNSET DR 145 823
BELLINGHAM, WA 98226

Encroachment Type:

Trench			
--------	--	--	--

Location:

N/S ST RT 99 FRNG RD 3,000' S/O AUSTIN RD

In compliance with your request of 10/31/2016, permission is hereby granted to do work in County right-of-way as shown on attached application and subject to all the terms, conditions and restrictions written below or printed as general or special provisions on any part of this form. See reverse side and attached sheet, if any.

Trench excavations for service connections will not be permitted within ten feet (10') of pavement centerline unless otherwise approved by the Director. Surface of trench patches shall match in kind and be smooth and even with that of abutting surface. Special attention shall be given to depth of utilities through roadside area in anticipation of future drainage facilities, road profile and/or frontage development. All underground utility facilities are to be established and accurately dimensioned on sketches from surveyed centerline of road right of way, or from right of way (border) lines.

Permittee shall call the Department of Public Works, Field Engineering Division (Permit Inspections) at (209)953-7421 at least forty-eight hours prior to beginning any work within the County right of way. All work performed under this permit shall conform to the rules and regulations pertaining to safety established by the California Division of Industrial Safety and Cal-OSHA.

The jobsite shall be kept in a safe condition at all times by the daily removal of any excess dirt or debris which might be a hazard to either pedestrian or automobile traffic. All necessary traffic convenience and warning devices and personnel shall be provided, placed and maintained by and at the sole expense of the Permittee in accordance with the latest edition of the CALTRANS Manual of Traffic Control.

After completion of the work permitted herein, all debris, lumber, barricades, or any excess material shall be removed and the jobsite left in a neat workmanlike manner. Immediately following completion of construction permitted herein, Permittee shall fill out and mail notice of completion (see attached post card) provided by Grantor.

Special Comments:

Traffic Control Per MUTCD

FORMS:

SS/WW, R-29		
-------------	--	--

Est. Permit Fee: \$505.35

KRIS BALAJI, Director
Department of Public Works

WHITE -Permittee
GOLDENROD -PWD Central File
YELLOW -Field Inspection
PINK -Permit Section

By: 
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, 3359, 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

RECEIVED
SAN JOAQUIN COUNTY

2016 SEP 13 AM 8:36

PLEASE PRINT:

Date 9/13/16

To: San Joaquin County
Department of Public Works

Wave Broadband
(Applicant Name)

215 Mason Circle
(Mailing Address)

Concord, CA, 94520
(City, State, Zip Code)

(925) 459 1028 ext 21028
(Area Code - Telephone Number)

DEPT. OF PUBLIC WORKS OFFICE USE ONLY

JOB #	<u>110005</u>	REF #	
APN		CR #	
EXP. DATE	<u>12-1-16</u>		
VALID	<u>10-31-16</u> TO <u>12-1-16</u>	DRIVEWAYS:	
STREET	<u>St Rt 99 Frntg Rd</u>	*	
AREA	<u>Montecito</u> QUAD <u>SE</u>	*	
TYPE	<u>Trench</u>	*	
FORMS	<u>SS W/W R29</u>		
NOTES			

Sketch (Detailed plans may be submitted)
Please see attached construction permit drawing

The undersigned hereby applies for permission to excavate, construct and/or otherwise encroach on County Highway Right-of-Way on the 99 Frntage Rd N side of 99 Frntage Rd approximately 0.05 3,000 feet/mile 5 of 99 Frntage Rd Austin Rd, by performing the following work (description of work):
Trench or Bore 141' (1) 4" Conduit

Work will commence on or about 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

Date

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL CONTACT THE ADJACENT PROPERTY OWNERS A MINIMUM OF 10 DAYS IN ADVANCE AND AGAIN 2 DAYS IN ADVANCE OF CONSTRUCTION AT THE WORK SITE.
2. ALL TRAFFIC CONTROL DEVICES SHALL BE IN PLACE BEFORE WORK IS STARTED. DEVICES NO LONGER REQUIRED SHALL BE REMOVED AS SOON AS POSSIBLE.
3. PEDESTRIAN TRAFFIC MUST BE MAINTAINED AT ALL TIMES. PEDESTRIANS MAY BE RELOCATED ONTO PRIVATE PROPERTY WITH OWNERS PERMISSION ONLY.
4. NO EQUIPMENT OR MATERIALS SHALL BE STORED OR PERMITTED TO STAND UNPROTECTED WHERE TRAFFIC IS ENGINEERING IN WRITING.
5. NO EQUIPMENT OR MATERIALS SHALL BE STORED ON ROAD SURFACE DURING NON-WORKING PERIODS UNLESS IT IS ALLOWED BY CITY TRAFFIC ENGINEER IN WRITING.
6. NO EQUIPMENT OR MATERIALS SHALL BE STORED ON SIDEWALK UNLESS IT IS ALLOWED BY CITY ENGINEER.
7. EXCAVATION MATERIALS SHALL BE STORED AWAY FROM THE PAVED ROADWAY WHENEVER POSSIBLE. ALL SPILLED MATERIAL SHALL BE REMOVED TO AVOID SLIPPERY CONDITIONS.
8. EXISTING SIGNS, DELINEATION'S, GUARDRAILS, MARKERS, TREES, SHRUBS, FENCES, WALKS, STEPS, ETC. THAT ARE DISTURBED BY THIS CONSTRUCTION SHALL BE REPLACED OR RESTORED TO THEIR ORIGINAL CONDITION.
9. CONTRACTOR SHALL VERIFY EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES IN AREA OF WORK PRIOR TO CONSTRUCTION. CALL UNDERGROUND SERVICE ALERT (USCA 800-222-2600) AND ALL UTILITIES SHALL BE MAINTAINED AND PROTECTED PRIOR TO CONSTRUCTION.
10. CONTRACTOR SHALL HAND DIG AND USE EXTREME CARE WHEN WORKING IN CLOSE PROXIMITY TO EXISTING UTILITIES.
11. TRAFFIC SIGNAL DETECTOR LOOP CIRCUITS ARE NOT SHOWN. CONTRACTOR SHALL LOCATE ALL TRAFFIC SIGNAL DETECTOR LOOP CIRCUITS PRIOR TO TRENCHING OR BORING. ALL TRAFFIC LOOP DETECTOR CIRCUITS SHALL BE MAINTAINED AND PROTECTED. NOTIFY TRAFFIC DEPARTMENT 48 HOURS PRIOR TO ANY WORK IN THESE AREAS.
12. TRENCH TO PLACE
(1) 4" CONDUIT
- 12A. BORE TO PLACE
(1) 4" CONDUIT

GENERAL NOTES

1. THE LOCATIONS AND SAFE CROSSINGS OF ALL FOREIGN UTILITIES IS THE SUBCONTRACTOR'S RESPONSIBILITY.
13. A 12" SEPARATION BETWEEN WAVE BROADBAND CONDUIT AND OTHER UTILITIES WILL BE MAINTAINED AT CROSSINGS.
14. AT THE END OF EACH WORK DAY, CONDUIT CAPS WILL BE PLACED ON ALL VACANT DUCTS.
15. THE REMOVAL, STORAGE, AND REPLACEMENT OF ALL SHRUBBERY SHALL BE THE RESPONSIBILITY OF THE SUBCONTRACTOR.
16. CONDUITS WILL ACCESS MANHOLES IN A STRAIGHT LINE TO FACILITATE CABLE INSTALLATION.
17. PLACE 12" OF 3/4" GRAVEL BASE BED AT ALL HANDHOLE/SPUR/BOX LOCATIONS. POUR 2 SACK SMOOTH FINISHED CONCRETE SLAB FOR BASE, MORTAR ALL SEAMS, JOINTS AND CONDUIT OPENINGS.
18. MINIMIZE NUMBER OF POTHOLES WITHIN DRIP LINE OF A STREET TREE.
19. CONTRACTOR IS RESPONSIBLE TO ARRANGE A PRE-CONSTRUCTION MEETING WITH THE CITY INSPECTORS AT LEAST 72 HOURS BEFORE STARTING WORK.
20. SPARE CABLE IS TO ORDERED AT THE RATE OF 5% OR 1000' WHICH EVER IS GREATER BASED UPON THE TOTAL LENGTH OF THE CONSTRUCTION OF RGN AND WITH CONSIDERATION OF AVAILABLE STOCK.
21. SIGNAL WIRE: BORED CONDUITS SHALL INCLUDE A TRACER/SIGNAL WIRE OR OTHER METHOD FOR FACILITATING LOCATION OF THE COMPLETION OF INSTALLATION.
22. BORING PITS: EXCAVATION AND RESTORATION OF BORING PITS SHALL BE IN ACCORDANCE WITH THE CITY STANDARDS FOR UTILITY EXCAVATIONS AND LOCATED TO THE SATISFACTION OF THE CITY ENGINEER.
23. REMOVE AND REPLACE SIDEWALKS, CURBS AND GUTTERS AT CONSTRUCTION JOINTS, SEE UNDERGROUND TYPICALS.
24. MINIMUM 5 FT. RADIUS ON ALL BENDS UNLESS OTHERWISE NOTED.
25. CONCRETE ENCASE ALL BENDS.
26. A 2" SEPARATION SHALL BE MAINTAINED BETWEEN WAVE BROADBAND CONDUIT AND ALL CITY SANITARY SEWER AND STORM DRAIN FACILITIES. A VIDEO INSPECTION SHALL BE PROVIDED BY CONTRACTOR IF THE SEPARATION IS LESS THAN 2 FT. ANY DAMAGE TO THE UTILITY SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
27. CONTACT CITY INSPECTOR 24HRS BEFORE BEGINNING WORK.

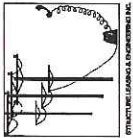
SAFETY

1. THE CONTRACTOR IS RESPONSIBLE FOR JOB-SITE SAFETY AND SHALL BE RESPONSIBLE FOR ALL LIABILITY IMPOSED BY THE LAW FOR PERSONAL INJURY OR PROPERTY DAMAGE WHICH MAY ARISE OF THE WORK. THE CONTRACTOR SHALL MAINTAIN A SAFE WORK AREA AND SHALL ARISE OUT OF THE SAFETY FAILURE ON THE PART OF THE PERMITTEE TO PERFORM HIS OBLIGATIONS UNDER THIS PERMIT IN RESPECT TO MAINTENANCE OF THE ENCROACHMENT.
2. ALL TRAFFIC CONTROL SHALL CONFORM TO THE CURRENT CALIFORNIA DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS (CALTRANS) (MANUAL OF PRACTICES AND SPECIFICATIONS FOR TRAFFIC CONTROL) (MANUAL OF WARNING SIGNS, LIGHTS AND DEVICES FOR USE IN PERFORMANCE OF WORK UPON HIGHWAYS).
3. ALL EXCAVATIONS SHALL CONFORM TO THE REQUIREMENT OF THE STATE OF CALIFORNIA DIVISION OF OCCUPATIONAL SAFETY AND HEALTH. THE PERMITTEE MAY BE REQUIRED TO OBTAIN A "PERMIT TO EXCAVATE" FROM THE DIVISION OF INDUSTRIAL SAFETY, DEPARTMENT OF INDUSTRIAL RELATIONS, STATE OF CALIFORNIA.
4. CONTRACTOR SHALL FURNISH AND MAINTAIN ALL DEVICES FOR PEDESTRIAN AND VEHICULAR TRAFFIC SAFETY. UNSAFE CONDITIONS WILL BE CORRECTED IMMEDIATELY. ALL PERSONNEL, EQUIPMENT AND COSTS SHALL BE RECOVERED FROM CASH DEPOSITS HELD FOR SUCH PURPOSES.

CONTACT LIST

NAME	PHONE #	EMAIL
ALFREDO MILANGO	(209)456-8422	AMILANGO@CLMANTECA.CA.US
ANTHONY ROSSETTI	(925)459-1174	AROSSETTI@WAVEBROADBAND.COM
RAY DELGADO	(408) 504-2466	RAYDELGADO@SLEGROUP.NET

STRUCTURE LEASING AND
ENGINEERING, INC.

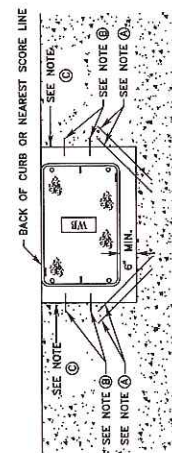


WAVE WIRELESS COMMUNICATIONS PROJECT AND OPERATIONAL INFORMATION		FILE NAME: 502201A (1-10)
COUNTY OF SAN JOAQUIN	DATE: 02/07/15 DRAWN BY:	SCALE: N.T.S.
CONSTRUCTION NOTES		3 OF 11

- A.C. SHALL BE REPLACED WITHIN 72 HOURS

WIDTH OF TRENCH	MINIMUM THICKNESS OF STEEL PLATE
1.0 FEET	1/2 INCH
1.5 FEET	3/4 INCH
2.0 FEET	7/8 INCH
3.0 FEET	1 INCH
4.0 FEET	1-1/4 INCH

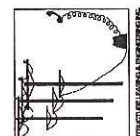
1 PLATE BRIDGING DETAIL
NTS



NOTE:

- Ⓐ PLACE 2 #4 REBAR AT CORNERS.
- Ⓑ PLACE #4 REBAR DOWELS AT 2' INTERVALS INTO EXISTING CONCRETE.
- Ⓒ SAWCUT CONCRETE AT NEAREST SCORE LINE.

② TYPICAL CONCRETE REPLACEMENT DETAIL
N.T.S.



STRUCTURE LIAISON & ENGINEERING INC.

FIBERGLASS / POLYMER CONCRETE
ASSEMBLY

Fiberglass / Polymer Concrete Assembly,
Tapered Sides, No Floor, WUC 3.6,
ANSI/SC77 "T15/20K," 3/8" Hex
Bolts, Standard Nameplate (Specify at
time of order) Installed

Incidental Traffic - Parking Lot, Sidewalk
Conforms to:

- WUC 3.6
- ASTM C 857
- ANSI/SCTE 77

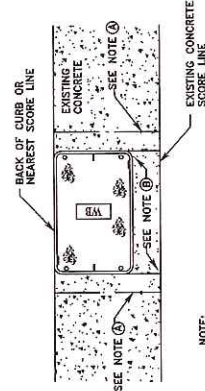
- UL classified polymer concrete
- Drop-In nameplate
- Shipped assembled
- Skid resistant cover
- Stainless steel bolts
- Cast-in floating nut box
- Integral drain holes

newbasis
Composites for Infrastructure

2826 Kinsale Avenue
Fremont, California 92507
951.787.0000
951.787.0632 (fax)
info@newbasin.com
newbasin.com

Inside Dimensions		
Length	Width	Depth
28 5/8"	15 5/8"	28"
37 3/8"	24 3/8"	

Rev: A.1



③ CONTRACTOR SHALL SAWCUT AT NEAREST SCORE LINE.

④ CONTRACTOR SHALL MATCH ALL COLORS AND FINISH TYPES OF ALL CONCRETE REMOVED OR DISTURBED DURING CONSTRUCTION.

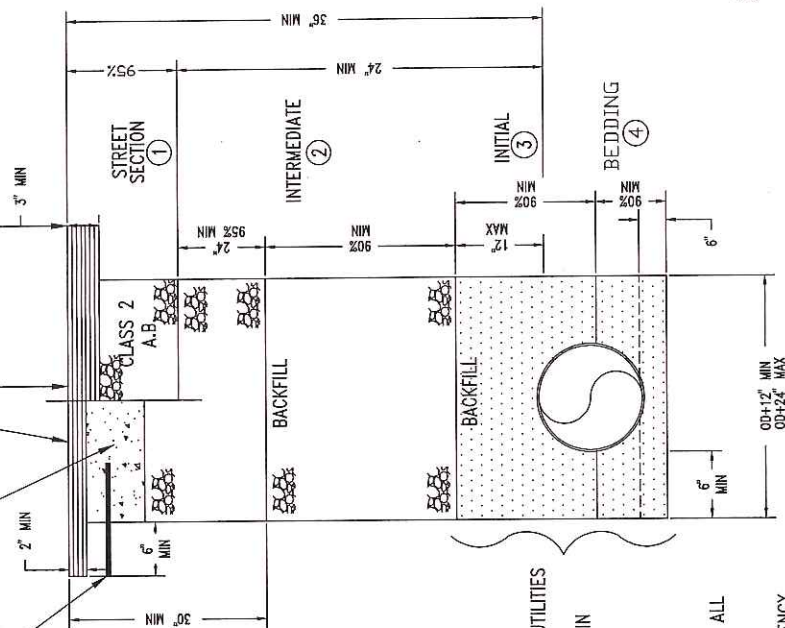
3 TYPICAL CONCRETE RESTORATION PLAN
N.T.S.

A.C. SHALL BE AR-4000 GRADE PAVING ASPHALT W/ TYPE B $\frac{1}{2}$ " MAX. AGGREGATE (PER CALTRANS STANDARD SPECIFICATIONS). TACK COAT SHALL BE APPLIED TO VERTICAL EDGES JUST PRIOR TO PLACING ASPHALT CONCRETE.

P.C. CONCRETE, CLASS A (PER CALTRANS STANDARD SPECIFICATIONS) OR FULL DEPTH A.C.

DOWEL WITH #4 BARS INTO EXISTING CONCRETE PAVEMENT OR GUTTERS

SAWCUT FULL THICKNESS OF EXISTING A.C. OR, IF THICKNESS IS GREATER THAN 4 INCHES GRIND EXISTING A.C. TO 1 INCH DEPTH



MATERIALS AND DIMENSIONS PER UTILITIES OWNER AND PIPE MANUFACTURER REQUIREMENTS OR AS CONTAINED IN SPECIFICATIONS

NOTES:

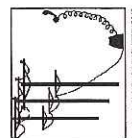
1. A STREET ENCROACHMENT PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
2. ALL WORK TO BE DONE IN ACCORDANCE WITH PUBLIC AGENCY STANDARDS AND SPECIFICATIONS.
3. UNDERGROUND SERVICE ALERT (U.S.A.) SHALL BE NOTIFIED PRIOR TO BEGINNING WORK.
4. ALL EXCAVATIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STATE OF CALIFORNIA DIVISION OF INDUSTRIAL SAFETY.

- ① THE STREET STRUCTURAL SECTION SHALL BE A MINIMUM OF 3" A.C. ON 12" A.B. OR SHALL MATCH EXISTING PAVEMENT SECTION PLUS 1" OF A.C. WHICHEVER IS GREATER. CONCRETE CAP OR FULL DEPTH A.C. TO BE USED AS DIRECTED BY PUBLIC AGENCY.

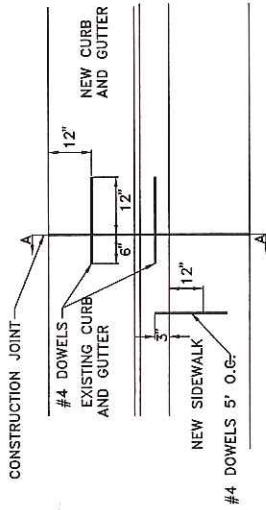
- ② AND ③ CALTRANS CL-2 AGGREGATE BASE. OTHER MATERIAL CAN BE USED ONLY WHEN APPROVED BY PUBLIC AGENCY.

- ④ CALTRANS CLASS 1, TYPE A PERMEABLE MATERIAL OR CALTRANS CLASS 2 A.B.

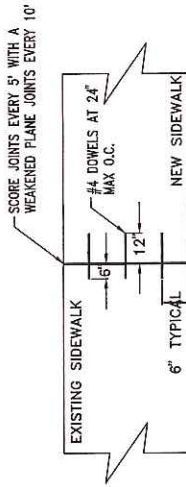
TYPICAL DETAILS



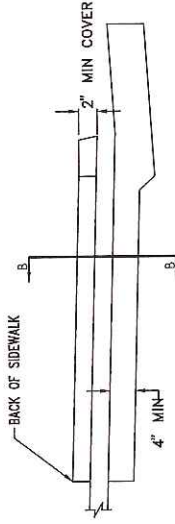
WAVE WAVE ENGINEERING 10000 WAVE DRIVE SAN JOAQUIN, CA 95235 (916) 426-1100	FILE NAME 202001A (1-10)	SCALE N.T.S.
LOCATION COUNTY OF SAN JOAQUIN	TYPICAL DETAILS	5 OF 11
DRAWN BY DATE 06/07/18	REFERENCE MAP NUMBER	APPROVED



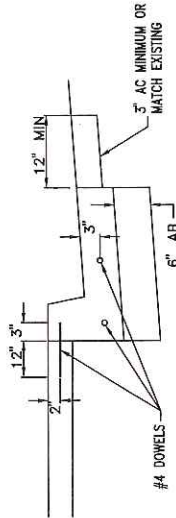
NEW CURB AND GUTTER



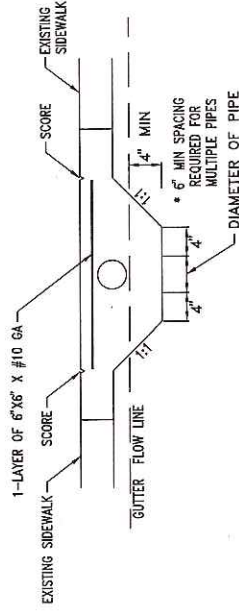
SIDEWALK PLAN VIEW



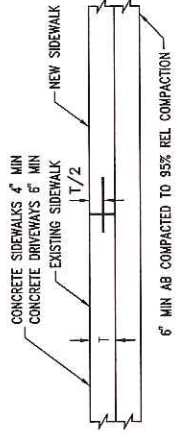
SIDEWALK UNDERDRAIN



SECTION A-A



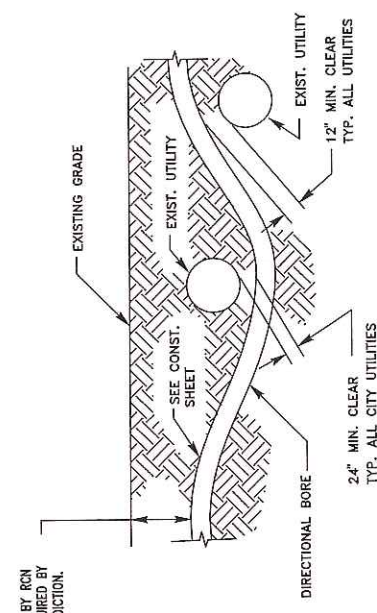
SECTION B-B



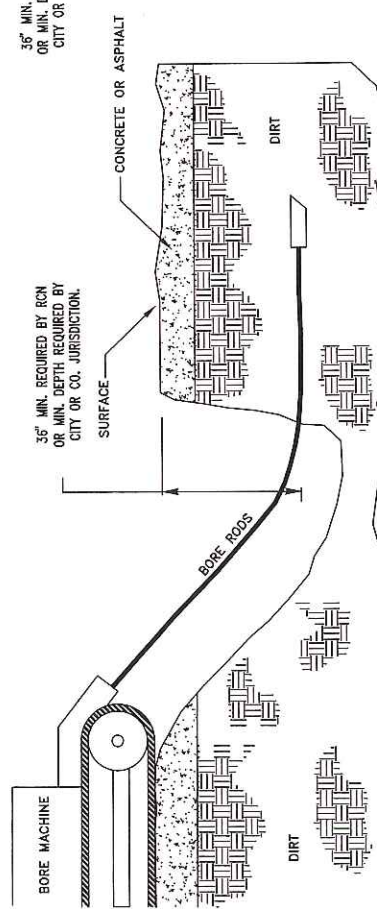
SIDEWALK ELEVATION VIEW



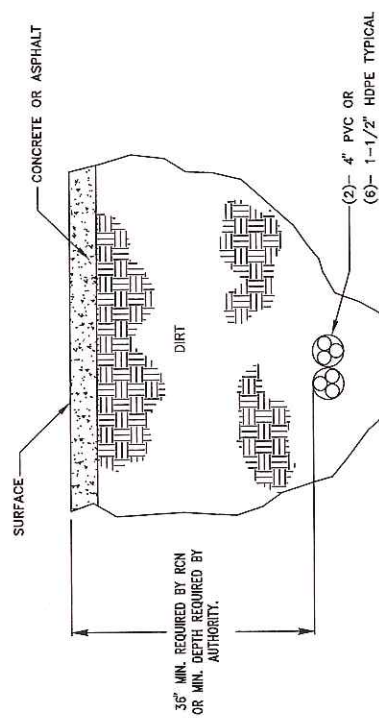
WAVE WAVE ENGINEERING 215 N. 10TH AVE. SUITE 100 DENVER, CO 80202	FILE NAME: 202001A (1-20)	SCALE: N.T.S. CITY TYPICALS
LOCATION: COUNTY OF SAN JOAQUIN	DATE: 05/19/18	REFERENCE MAP NUMBER: 6 OF 11



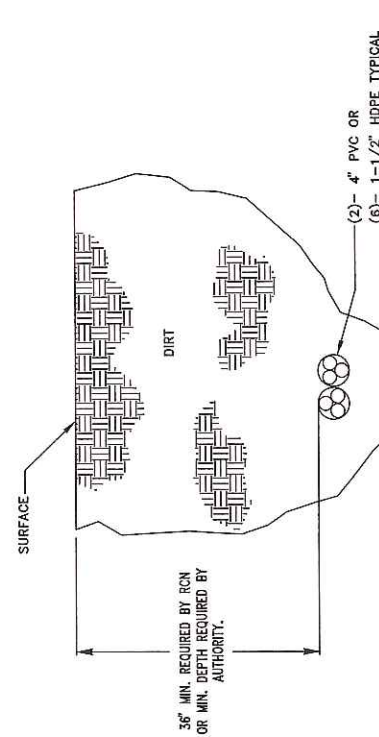
UTILITY CROSSING DETAIL
N.T.S.



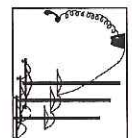
TYPICAL BORE PIT
N.T.S.



DIRECTIONAL BORE UNDER SIDEWALK OR ROADWAY.
N.T.S.



DIRECTIONAL BORE UNDER UNIMPROVED SURFACES.
N.T.S.



WAVE WAVE ENGINEERING & CONSTRUCTION, INC. 2500 MARIN AVENUE, SUITE 200 SAN JOAQUIN, CA 95776 (916) 486-1111 WWW.WAVE-ENGINEERING.COM	FILE NAME: 20250111 (1-16)	SCALE: N.T.S.	SHEET NO.: 7 OF 11
	LOCATION: COUNTY OF SAN JOAQUIN	TYPICAL DETAILS	REFERENCE MAP NUMBER: 7 OF 11

LEGEND — SYMBOLS — ABBREVIATIONS

SYMBOLS

FIRE HYDRANT	⊙
CITY SURVEY MONUMENT	⊠
GAS METER	⊠
GAS VALVE	⊠
REGULAR FLAT GRATE INLET	⊠
SEWER MANHOLE	⊠
SANITARY (STORM) SEWER MANHOLE	⊠
STORM MANHOLE	⊠
STREET SIGN	⊠
WATER METER	⊠
GAS LINE	—○—○—
WATER LINE	—W—W—
TELEPHONE FACILITIES	—T—T—
STORM DRAIN	—SD—SD—
SANITARY SEWER LINE	—SS—SS—
JOINT TRENCH	—JT—JT—
CENTER LINE	—C—C—
FENCE LINE	—X—X—
RAILROAD TRACKS	+++++
TOE OF SLOPE	▲▲▲
TOP OF SLOPE	▲▲▲

SYMBOLS

WAVE HANDHOLE	⊠
WAVE MANHOLE	⊠
POWER VAULT	⊠
R/R CROSSING GATE	⊠
R/R CROSSING SIGNAL	⊠
SIGNAL CONTROLLER	⊠
STREET LIGHT POLE	⊠
TELEPHONE VAULT	⊠
TRAFFIC SIGNAL POLE	⊠
TRAFFIC SIGNAL POLE W/LUMINAIRE	⊠
UTILITY BOX, SERVICE HANDHOLE	⊠
UTILITY POLE	⊠
WARNING SIGN	⊠
GUARD RAIL	—WAVE—WAVE—
WAVE RUNNING LINE	—WAVE—WAVE—
FACE OF CURB	—FOC—
POWER LINE	—P—P—
RIGHT OF WAY	—R/W—R/W—
P.U.E. LINE	—PUE—PUE—
STREET LIGHT	—SL—SL—
CULVERT	—C—C—
BRIDGE	—B—B—

SYMBOLS

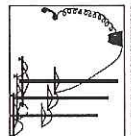
BENCH	⊠
CABLE TV LINE	⊠
CAL TRANS MANHOLE	⊠
CCCSD MANHOLE	⊠
CLEAN OUT	⊠
ELECTRICAL BOX	⊠
ELECTRICAL VAULT	⊠
ELECTRICAL HANDHOLE	⊠
GAS MARKER	⊠
GAS VAULT	⊠
GAS VENT	⊠
HIGH VOLTAGE POWER POLE	⊠
JOINT POLE	⊠
MILE MARKER	⊠
AT&T HANDHOLE	⊠
AT&T MANHOLE	⊠
AT&T MARKER	⊠
AT&T VAULT	⊠
PG&E HANDHOLE	⊠
PG&E MANHOLE	⊠
PG&E POWER VAULT	⊠
PEDESTRIAN CROSSING SIGN	⊠

ABBREVIATIONS

BEG	= BEGIN
BIP	= BLACK IRON PIPE
BOC	= BACK OF CURB
BSTOP	= BUS STOP
CATV	= CABLE TV LINE
CCCSD	= CONTRA COSTA CO. SANITARY DRAIN
CO	= COUNTY
CONC	= CONCRETE
C/L	= CENTER LINE
EOA	= EDGE OF ASPHALT
EOG	= EDGE OF GRAVEL
EOP	= EDGE OF PAVEMENT
EOW	= EDGE OF WATER
FOC	= FACE OF CURB
F/L	= FENCE LINE
F/H	= FIRE HYDRANT
G	= GAS LINE
GIP	= GALVANIZED IRON PIPE
GM	= GAS METER
GV	= GAS VALVE
GVault	= GAS VAULT
G/R	= GUARD RAIL
HH	= HANDHOLE
HVPP	= HIGH VOLTAGE POWER POLE
ID	= INSIDE DIAMETER
LT	= LEFT
MH	= MANHOLE
MKR	= MARKER
PCS	= PEDESTRIAN CROSS SIGNAL
QL	= QUAD LOCK

ABBREVIATIONS

PB	= POWER BOX
PP	= POWER POLE
PI	= POINT OF INVERSION
PVAULT	= POWER VAULT
R/R	= RAILROAD
RT	= RIGHT
R/L	= RUNNING LINE
R/W	= RIGHT OF WAY
SSCO	= SANITARY SEWER CLEANOUT
SSICO	= SS INLET AND CLEANOUT
SLHH	= STREET LIGHT HANDHOLE
SL	= STREET LIGHT POLE
SD	= STORM DRAIN MANHOLE
DI	= STORM DRAIN INLET
TFED	= TELEPHONE PEDESTAL
TSCB	= TRAFFIC SIGNAL CONTROL BOX
TSHH	= TRAFFIC SIGNAL HANDHOLE
TSP	= TRAFFIC SIGNAL POLE
TSPED	= TS PEDESTAL/ POWER METER
TVault	= TELEPHONE VAULT
GA	= UTILITY POLE ANCHOR, GUY
XING	= CROSSING
SW	= SIDEWALK
W	= WATER
WM	= WATER METER
WMH	= WATER MANHOLE
WV	= WATER VALVE
WYT	= WATER VAULT
WHH	= WATER HANDHOLE



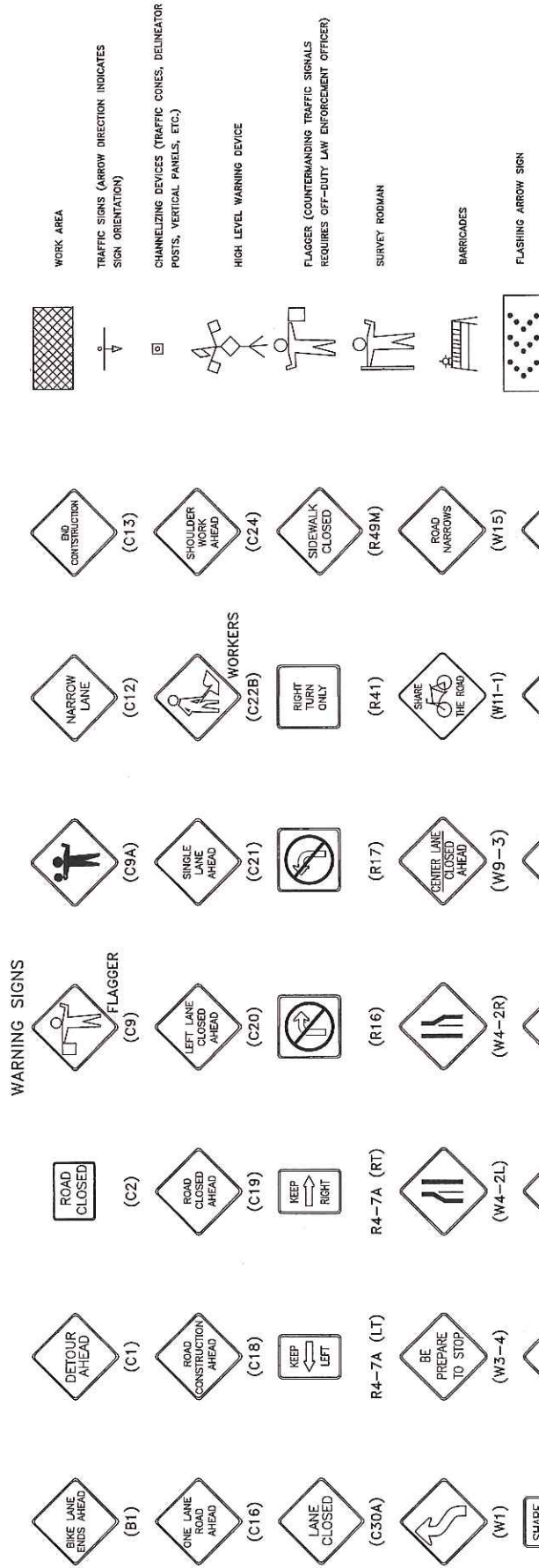


PAVUSIA

 wave 210 N. 1ST AVE. DENVER, CO 80202 PHONE: 303.733.8800 FAX: 303.733.8801 E-MAIL: info@wave.com	LOCATION: COUNTY OF SAN JOAQUIN	CONSTRUCTION PLANS	FILE NAME: S027091A (1-10)
			SCALE: 1" = 40'
QUOTED TO DATE: 09/01/14	REFERENCE MAP NUMBER: 9 OF 11		
PROVIDED: DATE:			

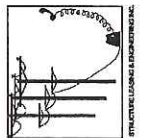
WARNING SIGNS AND GUIDE SIGNS

SYMBOLS AND LEGENDS

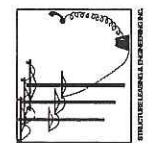


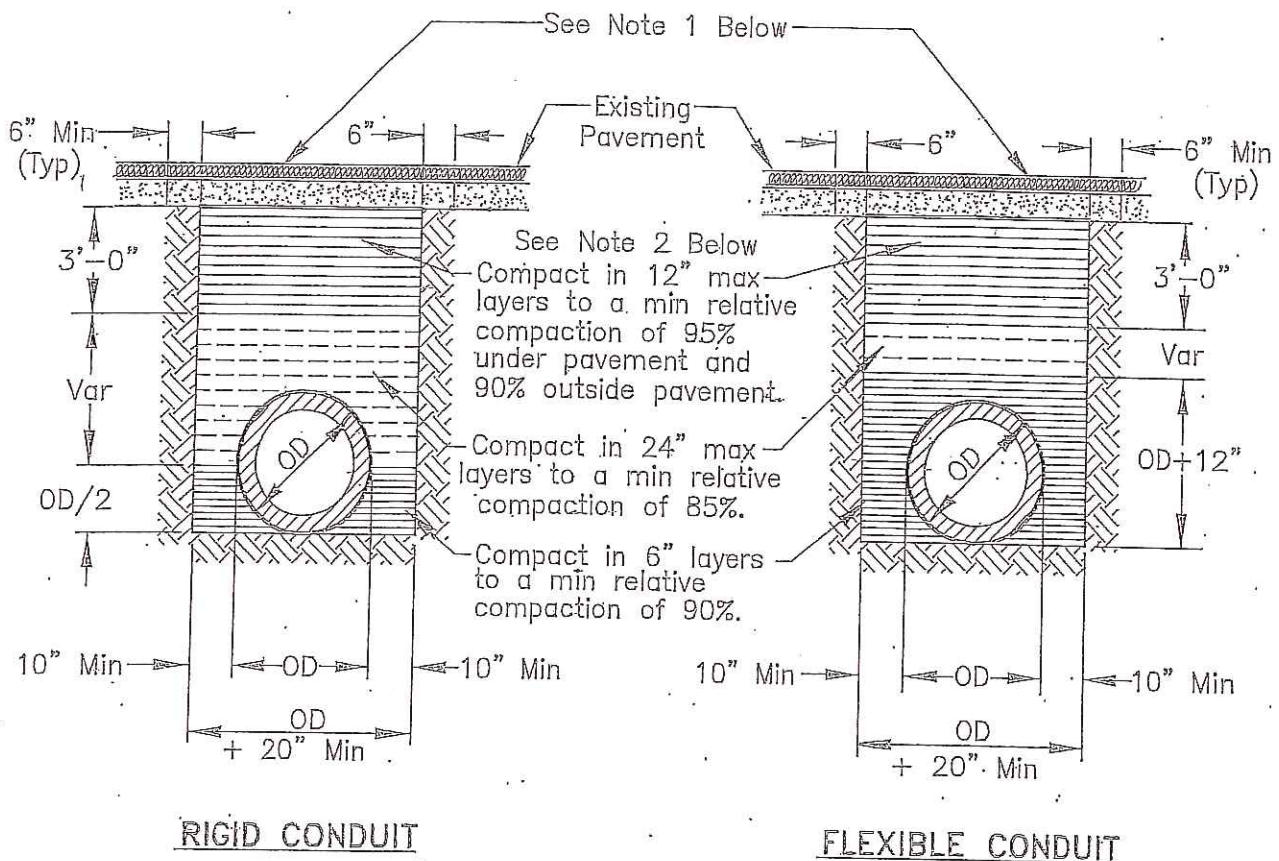
NOTES:

- FOR NIGHT TIME USAGE, REFER TO "WARNING LIGHT APPLICATIONS DURING NIGHT TIME OPERATIONS"
- ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES (SEQUENTIAL ARROWS, BARRICADES, STEEL PLATES) MAY BE REQUIRED.



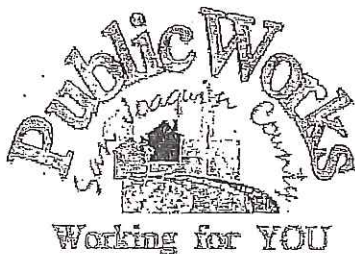
WAVE WAVE WAVE WAVE WAVE WAVE		SCALE: 1" = 100'	FILE NAME: 5070011 (1-09)
COUNTY OF SAN JOAQUIN	LOCATION: COUNTY OF SAN JOAQUIN	TRAFFIC CONTROL LEGEND	
DATE: 10 OF 11	REFERENCE MAP NUMBER: 10 OF 11		





NOTES:

1. New pavement shall be 1" thicker than existing pavement, minimum. of 0.25 Ft. New base shall be 1" thicker than existing base, min of 0.50 Ft.
2. Select native material or imported granular material as approved by the Director of Public Works. Backfill with materials equal to or better than the existing pavement and base in quality.
3. Relative compaction of materials shall be tested in accordance with the State of California, Dept. of Transportation Testing Manuals, test method No. California 216 or 231.
4. All existing pavement shall be neatly cut to line prior to trench excavation.
5. Jetting or ponding will be permitted within the street right-of-way with a 3 year bond, when approved by the Director of Public Works.
6. When shown by soil composition and compactability, ninety percent (90%) compaction may be used, when approved by the Director of Public Works.
7. Special bedding and backfill requirements may be shown on the plans or specified in the special provisions.



TYIPCAL TRENCH BACKFILL

COUNTY OF SAN JOAQUIN
DEPARTMENT OF PUBLIC WORKS

Approved by:

Thomas M. Gell

No.	Revision	Description	Date

Std. Dwg. No.

R-29

Date: DEC 2014

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 d. The local fire district
 - b. The County of San Joaquin Sheriff's Office e. The local school district
 - c. The local postal service 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 with 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.