

NO SCALE



# STATE OF CALIFORNIA

KEYES ROAD BRIDGE AT T.I.D. CERES MAIN CANAL KEYES, CALIFORNIA

COVER SHEET

JOB NO 35820

DATE 03/16/2020

DR BY VDF/TT/JJB

CK BY MP

SCALE N/A

SHEET NUMBER

OF 17 SHEETS

## **GENERAL NOTES:**

- 1. CONTRACTOR AGREES THAT HE SHALL 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, ENGINEER AND THE COUNTY HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
- 2. THESE PLANS HAVE BEEN CHECKED BY STANISLAUS COUNTY, BUT SUCH CHECKING AND/OR APPROVAL DOES NOT RELIEVE THE CONTRACTOR FROM HIS/HER RESPONSIBILITY TO CORRECT ERRORS, OMISSIONS OR MAKE CHANGES REQUIRED BY CONDITIONS DISCOVERED IN THE FIELD DURING THE COURSE OF CONSTRUCTION.
- 3. UNLESS OTHERWISE STATED, ALL STATIONS INDICATED ON THE IMPROVEMENT PLANS ARE REFERENCED TO THE CENTER LINE OF THE STREET. ALL STATIONS ON THE CURBS ARE PERPENDICULAR TO OR RADIALLY OPPOSITE CENTER LINE STATIONS, UNLESS OTHERWISE NOTED.
- 4. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGMEN OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY IN ACCORD WITH THE CURRENT EDITION OF "MANUAL OF TRAFFIC CONTROLS WARNING SIGNS, LIGHTS AND DEVICES FOR USE IN PERFORMANCE OF WORK UPON HIGHWAYS" PUBLISHED BY THE STATE OF CALIFORNIA TRANSPORTATION AGENCY, DEPARTMENT OF TRANSPORTATION.
- 5. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT STANISLAUS COUNTY STANDARDS AND SPECIFICATIONS AND THE LATEST EDITION OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS.
- 6. THE OWNER IS RESPONSIBLE FOR ARRANGEMENTS TO PAY FOR ALL MATERIAL TESTING REQUIRED BY THE PUBLIC WORKS INSPECTOR. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE TO IT THAT ALL TESTING REQUIRED BY THE PUBLIC WORKS INSPECTOR IS PERFORMED.
- 7. THE CONTRACTOR SHALL MEET WITH STANISLAUS COUNTY AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION WITH 24 HOURS NOTICE REQUIRED BEFORE ALL INSPECTIONS. ALL ARRANGEMENTS FOR SITE INSPECTION ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- 8. ALL CONSTRUCTION SHALL BE LIMITED TO BETWEEN THE HOURS OF 7:00 A.M. AND 6:00 P.M., MONDAY THROUGH FRIDAY AND INSPECTION REQUESTS SHALL BE LIMITED TO NORMAL BUSINESS HOURS: 8:00 A.M. THROUGH 5:00 P.M. MONDAY THROUGH THURSDAY. ARRANGEMENTS FOR ANY OVERTIME INSPECTION SERVICES AND PAYMENT OF FEES FOR SAME SHOULD BE MADE 48 HOURS IN ADVANCE AND ARE SUBJECT TO INSPECTION AVAILABILITY AND APPROVAL BY THE COUNTY.
- 9. CONSTRUCTION EQUIPMENT SHALL UTILIZE E KEYES RD AND ESMAR RD FOR ACCESS.
- 10. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS FROM DAMAGE. COST OF REPLACING EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS REQUIRING REMOVAL AND REPLACEMENT OF EXISTING IMPROVEMENTS.
- 11. THE CONTRACTOR IS RESPONSIBLE FOR COMPACTION OF ALL UTILITY TRENCHES AND FOR THE SPOILS GENERATED BY THESE SAME UTILITY TRENCHES.
- 12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE DESIGN ENGINEER OF ANY ANTICIPATED SOILS IMBALANCE SO GRADES CAN BE ADJUSTED. ADJUSTMENTS REQUIRE THE APPROVAL OF THE COUNTY ENGINEER.
- THE STANISLAUS COUNTY STANDARDS AND SPECIFICATIONS, SHOWN THUS; (I. E. PLATE NO: 3-D7).
- 14. CONTRACTOR SHALL FURNISH CERTIFICATES OF COMPLIANCE TO THE COUNTY FOR CRUSHED MISCELLANEOUS BASE MATERIAL PRIOR TO PAVING.
- 15. IN AREAS WHICH ARE TO RECEIVE A.C. OR AGGREGATE BASE, THE CONTRACTOR SHALL MAINTAIN SUBGRADE AT THE AS-GRADED WATER CONTENT. IF THE SUBGRADE IS ALLOWED TO DRY, THE WATER CONTENT OF SOIL SHOULD BE RAISED TO THE RECOMMENDED VALUE SPECIFIED FOR THE PROJECT.
- 16. THE CONTRACTOR SHALL SECURE A TRENCH PERMIT FROM THE CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS, DIVISION OF OCCUPATIONAL HEALTH AND SAFETY PRIOR TO EXCAVATION OF ANY PRIOR TO THE EXCAVATION OF ANY TRENCH OVER FIVE FEET IN DEPTH.
- 17. ALL TRENCHES ON MAJOR AND COLLECTOR STREETS AND CROSS TRENCHES ON ALL STREETS SHALL BE PAVED WITH TEMPORARY PAVING THE SAME DAY THE PAVEMENT CUT IS MADE.
- 18. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES AND SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PRESERVATION OF ALL SUCH FACILITIES IN THE AREA OF CONSTRUCTION AND SHALL NOTIFY UTILITIES FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY CONSTRUCTION.
- 19. THE TURLOCK IRRIGATION DISTRICT OR ASSOCIATED UTILITY COMPANY AND RESIDENCES TO BE AFFECTED SHALL BE NOTIFIED IMMEDIATELY UPON ANY UTILITY SERVICE DISRUPTION OTHER THAN SPECIFIED ON THESE IMPROVEMENT PLANS AND A 48 HOUR NOTICE SHALL BE GIVEN FOR ANY PLANNED DISRUPTION.
- 20. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF THE REMOVAL OR RELOCATIONS OF ALL EXISTING UTILITIES WITH RESPECTIVE UTILITY COMPANIES.
- 21. MANHOLE RIMS, VALVES, CLEANOUTS, ETC. SHALL BE BROUGHT TO FINISH GRADE BY THE UNDERGROUND CONTRACTOR AFTER THE FINAL PAVING COURSE IS PLACED.
- 22. IT IS INTENDED THAT THESE PLANS AND SPECIFICATIONS REQUIRE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES OR AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. THE ENGINEER'S INTERPRETATION OR CORRECTION THEREOF SHALL BE CONCLUSIVE.
- 23. FOR ALL WORK WITHIN PUBLIC RIGHT-OF-WAYS, THE CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT AND SHALL PRESERVE THE INTEGRITY AND LOCATION OF ANY AND ALL PUBLIC UTILITIES, STREET IMPROVEMENTS AND PROVIDE NECESSARY CONSTRUCTION TRAFFIC CONTROL. THE CONTRACTOR SHALL THROUGH THE ENCROACHMENT PERMIT PROCESS, VERIFY WITH STANISLAUS COUNTY THE NEED FOR ANY DETOUR PLAN. IF A PLAN IS REQUIRED. CONTRACTOR SHALL PROVIDE PLAN AND RECEIVE APPROVAL PRIOR TO CONSTRUCTION.

- 24. THE CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF ALL ELECTRICAL, PIPING AND CONDUITS, STRUCTURES AND OTHER FACILITIES.
- 25. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO THE ENGINEER, ONE SET OF NEATLY MARKED AS-BUILT RECORD DRAWINGS INCLUDING THE INFORMATION REQUIRED ABOVE. AS-BUILT RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE AS-BUILT RECORD DRAWINGS SET SHALL BE CURRENT WITH ALL CHANGES AND DEVIATIONS REDLINED AS A PRECONDITIONED TO THE FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL COUNTY ACCEPTANCE. THE ENGINEER SHALL PROVIDE THE COUNTY WITH A COMPLETE REPRODUCIBLE AS-BUILTS RECORD DRAWING SET.
- 26. WHERE THE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.
- 27. THE CONTRACTOR SHALL EXERCISE DUE CAUTION AND SHALL CAREFULLY PRESERVE BENCH MARKS, REFERENCE POINTS AND ALL SURVEY STAKES, AND SHALL BEAR ALL EXPENSES FOR REPLACEMENT AND/OR ERRORS CAUSED BY THEIR UNNECESSARY LOSS OR DISTURBANCE.
- 28. THE CONTRACTOR SHALL NOTIFY MEMBERS OF THE UNDERGROUND SERVICE ALERT (USA) 48 HOURS IN ADVANCE OF PERFORMING ANY EXCAVATION WORK BY CALLING THE TOLL FREE NUMBER (800) 642-2444. THE CONTRACTOR SHALL RECORD THE U.S.A. ORDER NUMBER AND FURNISH ORDER NUMBER TO OWNER PRIOR TO ANY EXCAVATION. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES SO THAT NO DAMAGE RESULTS TO THEM DURING THE PERFORMANCE OF THIS CONTRACT. ANY REPAIRS NECESSARY TO DAMAGED UTILITIES SHALL BE PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO COOPERATE WITH OTHER CONTRACTORS AND UTILITY COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE DEVELOPMENT.
- 29. WHENEVER PAVEMENT IS BROKEN OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE SPECIFICATIONS. THE PAVEMENT SHALL BE REPLACED. AFTER PROPER BACKFILLING, WITH PAVEMENT MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL PAVING. THE FINISHED PAVEMENT SHALL BE SUBJECT TO THE APPROVAL OF THE PUBLIC WORKS DIRECTOR.
- 30. PAYMENT FOR PAVEMENT WILL BE MADE ONLY FOR AREAS SHOWN ON PLANS, REPLACEMENT OF PAVEMENT WHICH IS BROKEN OR CUT DURING THE INSTALLATION OF THE WORK COVERED BY THESE SPECIFICATIONS, AND WHICH LIES OUTSIDE OF SAID AREAS, SHALL BE INCLUDED IN THE CONTRACTOR'S UNIT PRICE FOR PAVEMENT, AND NO ADDITIONAL PAYMENT SHALL BE MADE FOR SUCH WORK.
- 31. WE CALL YOUR ATTENTION TO TITLE 8 CALIFORNIA ADMINISTRATION CODE SECTION 1540 (A) (1) OF THE CONSTRUCTION SAFETY ORDERS ISSUED BY THE OCCUPATION SAFETY AND HEALTH STANDARDS BOARD PURSUANT TO THE CALIFORNIA OCCUPATIONS SAFETY AND HEALTH ACT OF 1973 AS AMENDED WHICH STATES: (1) PRIOR TO OPENING AND EXCAVATION, EFFORT SHALL BE MADE TO DETERMINE WHETHER UNDERGROUND INSTALLATIONS; I.E., SEWER, WATER, FUEL, ELECTRIC LINES, ETC., WILL BE ENCOUNTERED AND IF SO, WHERE SUCH UNDERGROUND INSTALLATIONS ARE LOCATED WHEN THE EXCAVATION APPROACHES THE APPROXIMATE LOCATION OF SUCH AN INSTALLATION, THE EXACT LOCATION SHALL BE DETERMINED BY CAREFUL PROBING OR HAND DIGGING; AND, WHEN IT IS UNCOVERED ADEQUATE PROTECTION SHALL BE PROVIDED FOR THE EXISTING INSTALLATION. ALL KNOWN OWNERS OF UNDERGROUND FACILITIES IN THE AREA CONCERNED SHALL BE ADVISED OF PROPOSED WORK AT LEAST 48 HOURS PRIOR TO THE START OF ACTUAL
- 13. DRAWING NUMBERS SHOWN ON THE PLANS REFER TO DRAWINGS CONTAINED IN 32. STREET STRIPING SHALL INCLUDE CENTERLINE STRIPING OR MARKERS AND ALL OTHER MARKINGS REQUIRED BY THE COUNTY ENGINEER. STRIPING SHALL BE DONE WITH THERMOPLASTIC AND REFLECTIVE MARKERS.
  - 33. STREET CLOSURE OR LANE CLOSURE WILL REQUIRE A TRAFFIC CONTROL PLAN AND THE DESIGNATION OF A QUALIFIED INDIVIDUAL FOR ITS IMPLEMENTATION AND SAFE MAINTENANCE.

# MONUMENT PRESERVATION NOTES

- 1. THE CONTRACTOR SHALL EXERCISE DUE CAUTION AND SHALL CAREFULLY PRESERVE BENCH MARKS, MONUMENTS, SURVEY CONTROL, REFERENCE POINTS AND ALL SURVEY STAKES, AND SHALL BEAR ALL EXPENSES FOR REPLACEMENT AND/OR ERRORS CAUSED BY THEIR UNNECESSARY LOSS OR DISTURBANCE.
- 2. CONTRACTOR SHALL COMPLY WITH BUSINESS AND PROFESSIONS CODE SECTION 8771(b) REGARDING REFERENCING, PRESERVING, AND RECONSTRUCTING MONUMENTS, WHETHER OR NOT MONUMENTS ARE SHOWN

# **GRADING NOTES**

- 1. ALL GRADING ACTIVITIES SHALL BE COMPLETED IN STRICT ACCORDANCE WITH GEOTECHNICAL REPORT, "DRAFT FOUNDATION REPORT KEYES ROAD BRIDGE OVER CERES CANAL (REPLACEMENT) BRIDGE NO. 38C-NEW" DATED JUNE 14, 2019.
- 2. THE GRADING AREAS SHOULD BE PREPARED FOR GRADING BY REMOVING EXISTING VEGETATION, LARGE ROOTS, DEBRIS, AND OTHER POTENTIALLY DELETERIOUS MATERIALS. THE SITE PREPARATION OPERATIONS SHOULD BE OBSERVED BY THE GEOTECHNICAL ENGINEER.
- 3. CUT AND FILL SLOPES SHOULD NOT BE STEEPER THAN 2:1, MEASURED HORIZONTALLY TO VERTICALLY.

### **CLEARING NOTES:**

1. THE CONTRACTOR SHALL REVIEW SITE PRIOR TO BIDDING. ALL VEGETATION, STRUCTURES, TREES, DELETERIOUS MATERIAL, ETC. SHALL BE REMOVED FROM THE SITE AT THE EXPENSE OF THE CONTRACTOR AND SHALL BE INCLUDED IN THE LUMP SUM CLEARING COST. ALL WORK SHALL COMPLY WITH THE GEOTECHNICAL ENGINEERING INVESTIGATION COMPLETED FOR THIS PROJECT.

## **DUST CONTROL NOTES:**

- 1. DUST SHALL BE CONTROLLED BY THE CONTRACTOR AS PER SECTION 10 OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS. WATER FOR DUST CONTROL AND USE FOR COMPACTION MAY BE PURCHASED FROM THE APPROPRIATE AGENCY PRIOR TO START OF ANY WORK, AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR FOR ANY FEES OR DEPOSITS. IT IS ALSO THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN CLEANLINESS OF THE EXISTING IMPROVED STREETS IN THE CONSTRUCTION
- 2. SPRAY WATER ON ALL EXPOSED EARTH SURFACED DURING CLEARING, GRADING, EARTH MOVING AND OTHER SITE PREPARATION ACTIVITIES THROUGHOUT THE DAY TO MINIMIZE DUST. USE TARPAULINS OR OTHER EFFECTIVE COVERS ON ALL STOCKPILED EARTH MATERIAL AND ON ALL HAUL TRUCKS TO MINIMIZE DUST. SWEEP THE ADJACENT STREET FRONTAGES AT LEAST ONCE A DAY OR AS NEEDED TO REMOVE SILT AND OTHER DIRT WHICH IS EVIDENT FROM CONSTRUCTION ACTIVITIES. ENSURE THAT CONSTRUCTION VEHICLES ARE CLEANED PRIOR TO LEAVING THE SITE TO PREVENT DUST AND DIRT FROM BEING TRACKED OFF SITE.
- 3. ALL EXPOSED SURFACES SHALL BE WATERED A MINIMUM OF TWICE DAILY UNLESS DEEMED UNNECESSARY DUE TO WEATHER. WATER SHALL BE APPLIED AS PROVIDED IN SECTION 17 OF CALTRANS STANDARD SPECIFICATIONS.
- 4. DUST PALLIATIVES MAY BE SUBSTITUTED FOR WATERING UPON THE APPROVAL OF THE CITY ENGINEER. DUST PALLIATIVES SHALL BE APPLIED AS PROVIDED IN SECTION 18 OF CALTRANS STANDARD SPECIFICATIONS.
- 5. ALL EXPOSED EARTH SURFACES SHALL BE PLANTED AT THE EARLIEST POSSIBLE TIME.

## **BENCHMARK:**

DATUM:	NAD83
NAME:	TID #127

ELEVATION: 90.22 US SURVEY FEET

A T.I.D. 2" BD STAMPED "T.I.D. 127 90.22" ON THE KEYES ROAD BRIDGE OVER CERES MAIN CANAL ON THE WALL ON UPSTREAM RAILING, CENTERLINE.

# GEOTECHNICAL REPORT:

FIRM:	KLEINFELDER

JUNE 14, 2019 DRAFT FOUNDATION REPORT KEYES ROAD BRIDGE OVER

CERES CANAL (REPLACEMENT) BRIDGE NO. 38C-NEW

# **ABBREVIATIONS**

± AB	PLUS OR MINUS AGGREGATE BASE	EVC EX or EXIST	END VERTICAL CURVE EXISTING	R RCP	RADIUS REINFORCED CONCRETE
AC	ASPHALT CONCRETE	FF FF	FINISH FLOOR	PIPE	NEINI ONCED CONCINETE
ADA	AMERICANS WITH DISABILITY	FG	FINISH GRADE	RET	RETURN
ACT	AMENICANS WITH DISABILITY	FH	FIRE HYDRANT		
3C	BEGINNING OF CURVE			R/W	RIGHT OF WAY
BDRY	BOUNDARY	£	FLOW LINE	S/W	SIDEWALK
		GB	GRADE BREAK	S or SS	SANITARY SEWER
3M	BENCH MARK	HORIZ	HORIZONTAL	SD	STORM DRAIN
30	BLOW-OFF	HP.	HIGH POINT	SHT	SHEET
30C	BACK OF CURB	INV.	INVERT	SNS	STREET NAME SIGN
BSL BY 0	BUILDING SETBACK LINE	IRR	IRRIGATION	SP	STANDPIPE
BVC	BEGIN VERTICAL CURVE	JP	JOINT POLE	STA	STATION
BW .	BACK OF WALK	LF	LINEAL FEET	STD	STANDARD
C&G	CURB AND GUTTER	MAX	MAXIMUM	TBM	TEMPORARY BENCH MARK
CB	CATCH BASIN	MH	MANHOLE	TC	TOP OF CURB
CO	CLEANOUT	MIN	MINIMUM	TEMP	TEMPORARY
Ĺ	CENTER LINE	N.T.S.	NOT TO SCALE	THRU	THROUGH
C or CONC.	CONCRETE	P.C.C.A.	PORTLAND CEMENT CONCRETE	T.I.D.	TURLOCK IRRIGATION DISTRICT
CR	CROWN	PCC	POINT OF COMPOUND	TPE	TREE PLANTING EASEMENT
	STORM DRAIN	CURVE		TYP.	TYPICAL
D.I.P.	DUCTILE IRON PIPE	P	PROPERTY LINE	U.N.O	UNLESS NOTED OTHERWISE
YWC	DRIVEWAY	PP	POWER POLE	UP	UTILITY POLE
EC	END OF CURVE	PRC	POINT OF REVERSE CURVE	VAR	VARIES
ΞG	EXISTING GRADE	PRVC	POINT OF REVERSE	VC	VERTICAL CURVE
ELEV.	ELEVATION	VERTICAL CURY	√E	VCP	VITRIFIED CLAY PIPE
ΞP	EDGE OF PAVEMENT	PUE	PUBLIC UTILITY EASEMENT	VERT	VERTICAL
ESMT	EASEMENT	PVC	POLYVINYL CHLORIDE PIPE	W	WATER
ETW	EDGE OF TRAVELED WAY	P or PVMT	PAVEMENT		

# LEGEND

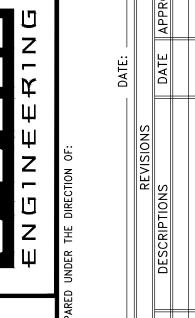
FYISTING

EXISTING	PROPOSED	
•	<b>*</b>	BENCHMARK
•	•	BOLLARD
10_	10_	CONTOUR
× 100.65 EP	× 100.65 × EP	ELEVATION W/ DESCRIPTION
$\bowtie$	$\bowtie$	IRRIGATION VALVE
MB	MB	MAILBOX
		MANHOLE
	<del>-</del> o-	SIGN
		TREES W/ DRIP LINE
,56	ø	UTILITY POLE
		PAVEMENT
		GRAVEL
	14+24.32 P 86.74	STATION ELEVATION
	5+25.00	STATION

PROPOSED

Pri CA 65 Sce Mode

No. C44908

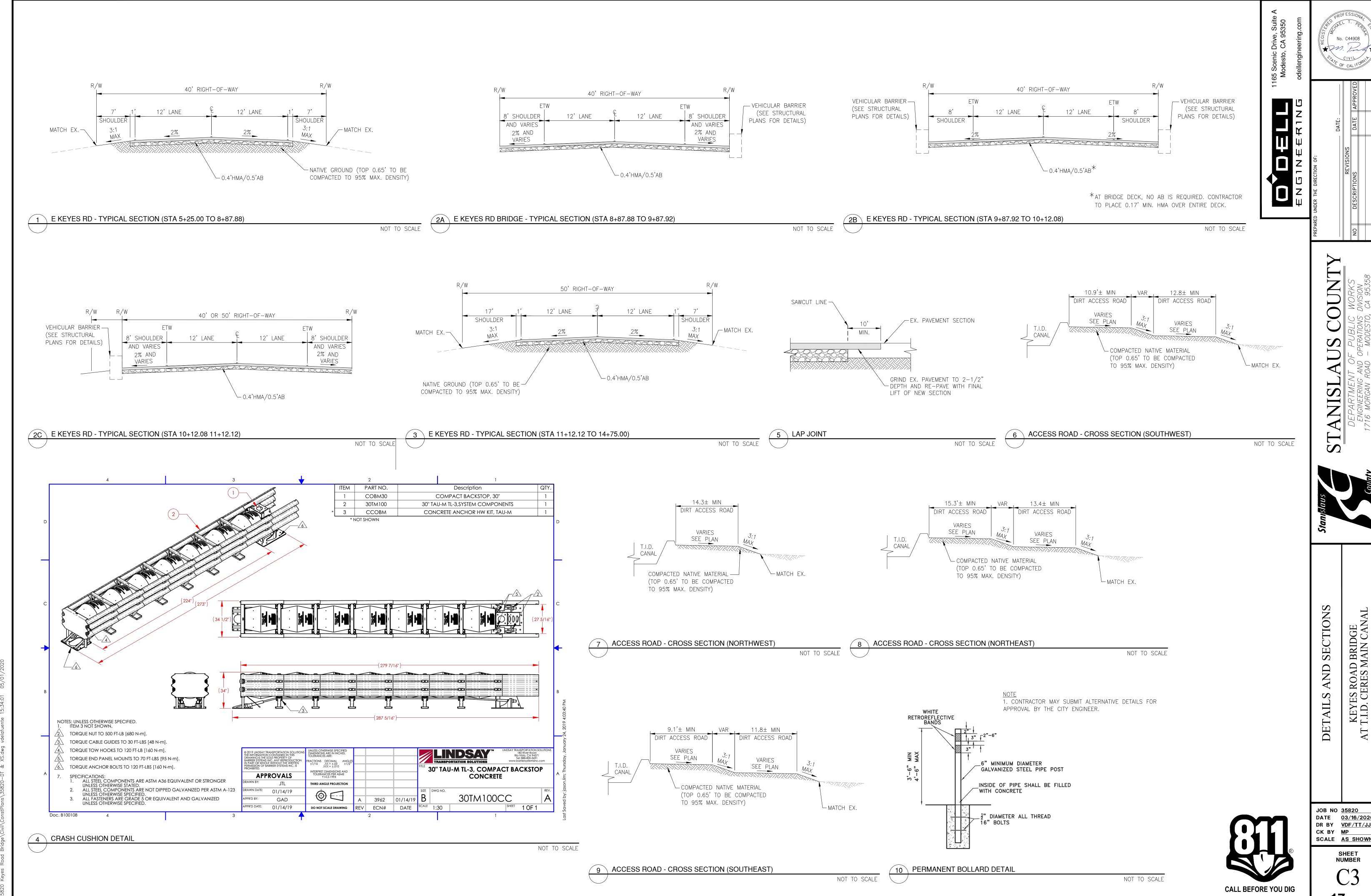




KEYES ROAD BRIDGE T.I.D. CERES MAIN CANA KEYES, CALIFORNIA

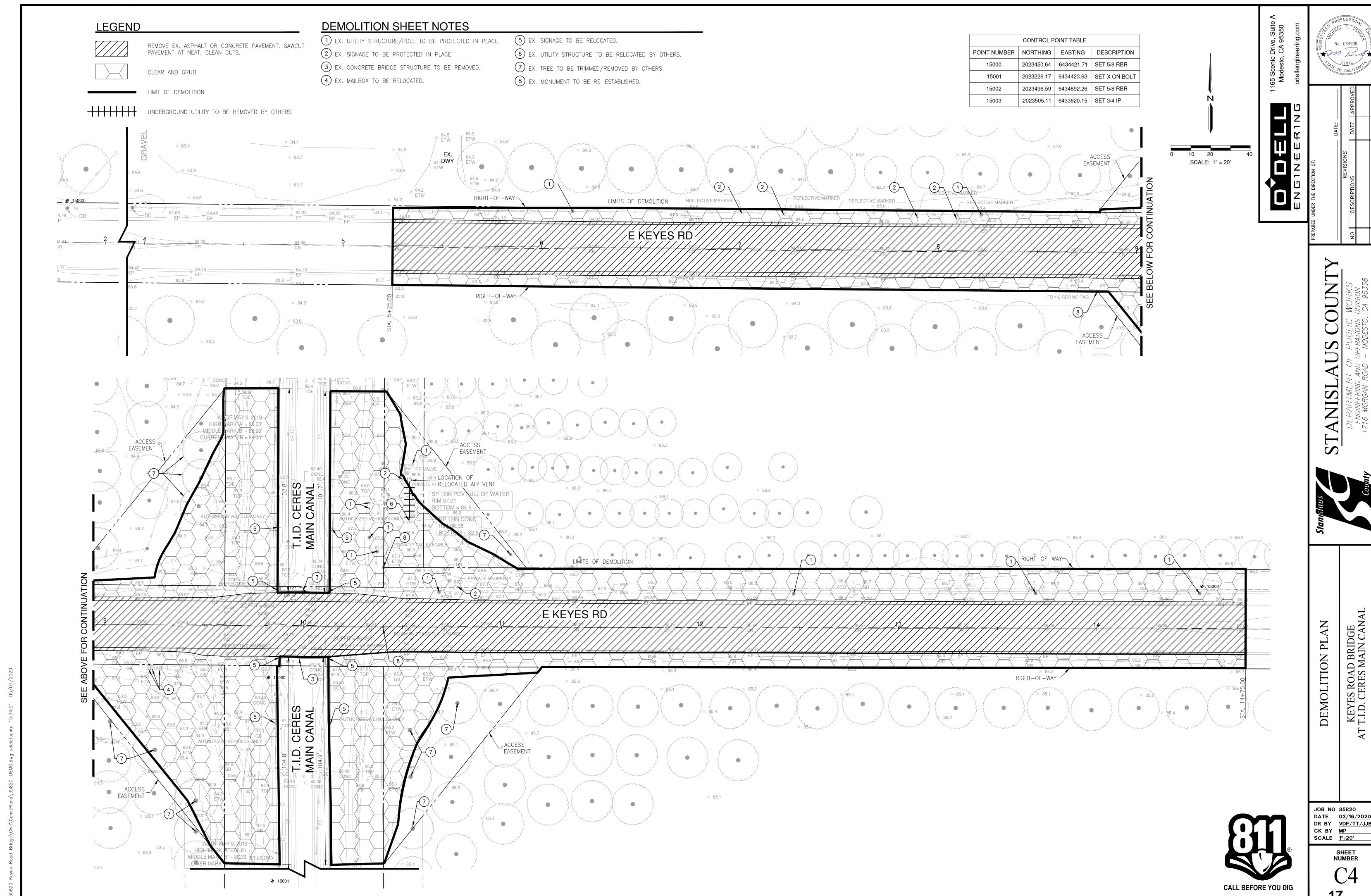
**JOB NO 35820** DATE <u>03/16/2020</u> DR BY <u>VDF/TT/JJB</u> CK BY MP SCALE N/A

SHEET NUMBER of 17 SHEETS



JOB NO <u>35820</u> DATE <u>03/16/2020</u> DR BY <u>VDF/TT/JJB</u> SCALE AS SHOWN SHEET NUMBER

of 17 SHEETS



JOB NO 35820

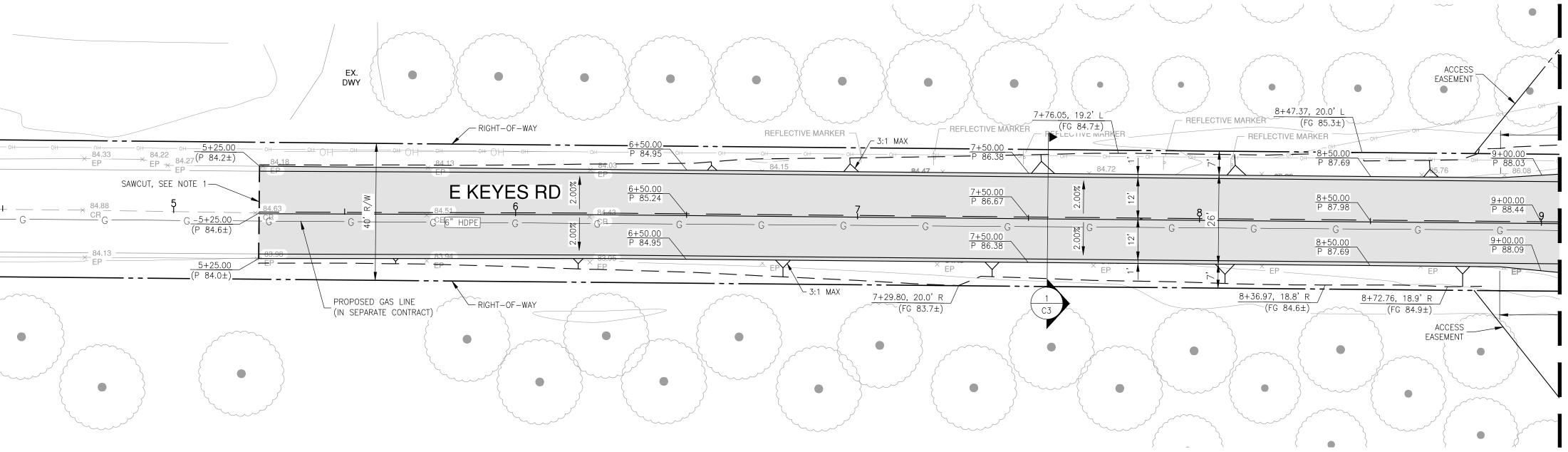
DATE 03/16/2020

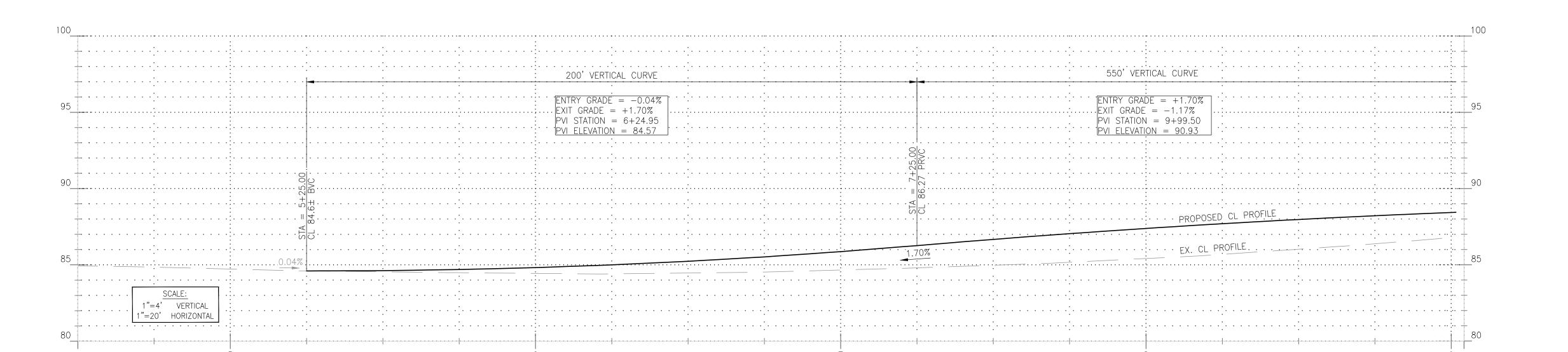
DR BY VDF/TT/JJB

CK BY MP

SCALE 1":=20'

SHEET NUMBER OF 17 SHEETS





E KEYES RD

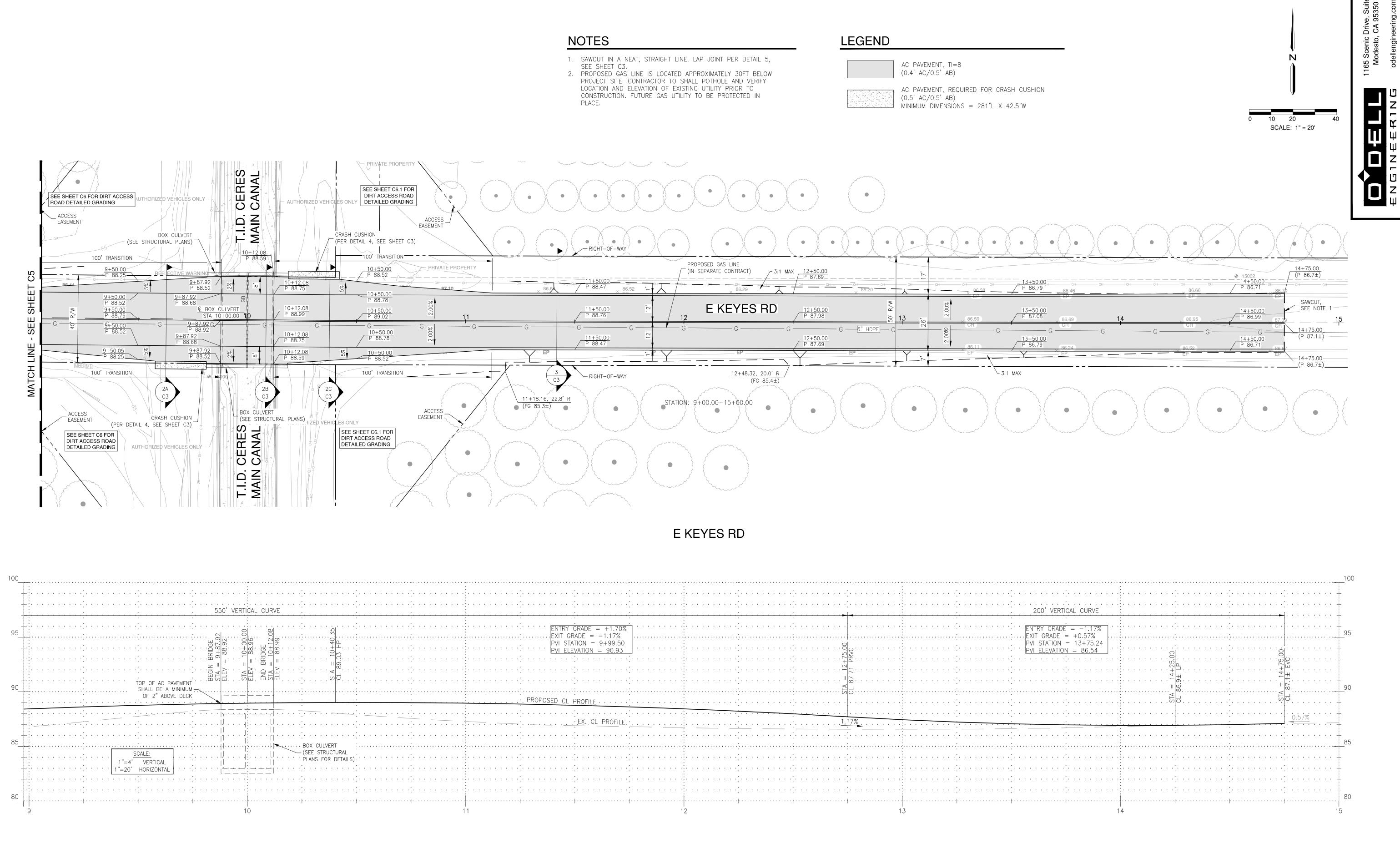


1165 Scenic l Modesto,

Drive, Suite , CA 95350

SCALE: 1" = 20'

DATE <u>03/16/2020</u> DR BY <u>VDF/TT/JJB</u> CK BY MP SCALE <u>1"=20'</u>





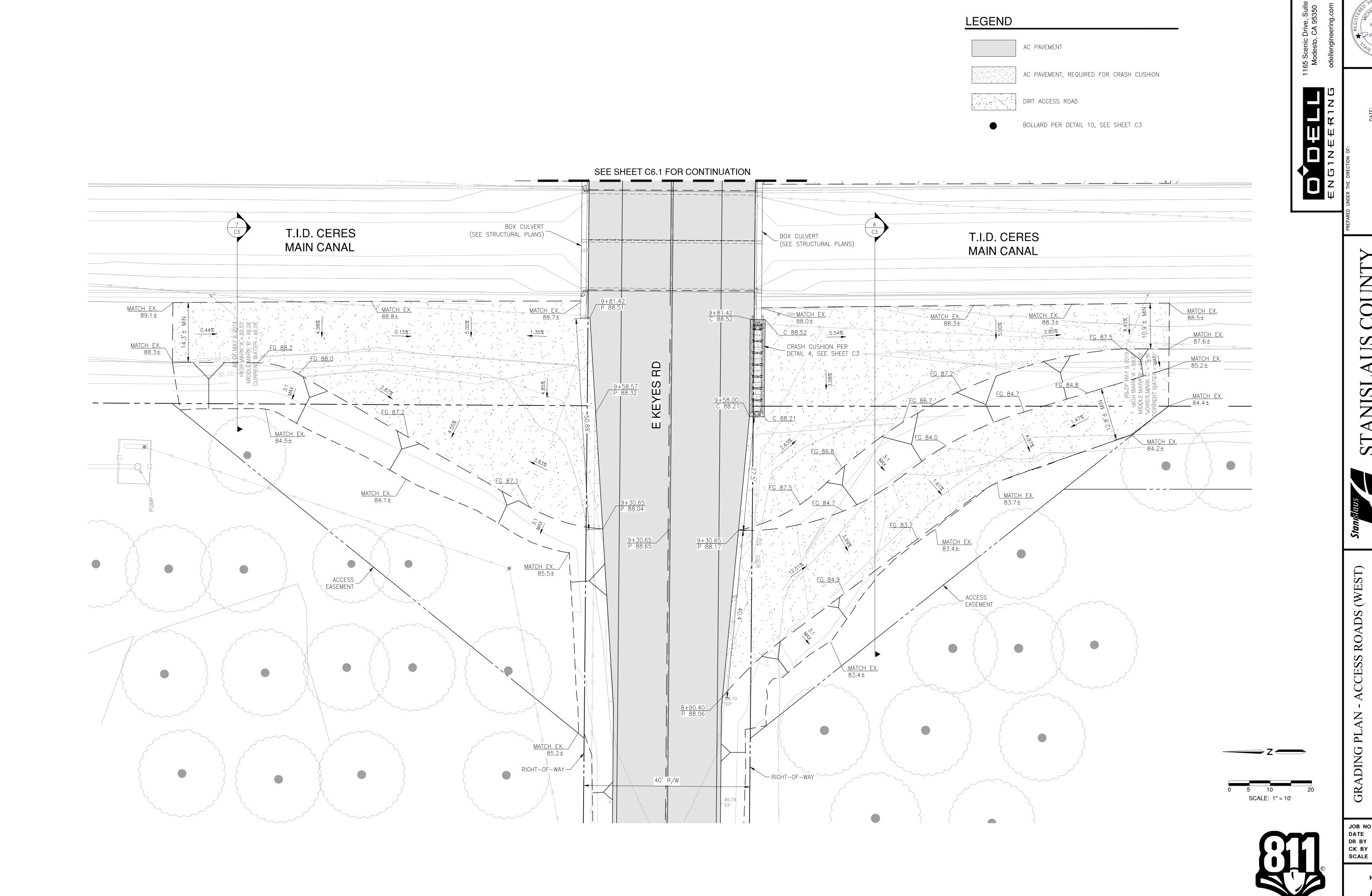
JOB NO 35820
DATE 03/16/2020
DR BY VDF/TT/JJB
CK BY MP
SCALE 1"=20'

8

KEYES RD (9+00-15

C5.1

17 SHEET NUMBER





KEYES ROAD BRIDGE AT T.I.D. CERES MAIN CANAL KEYES, CALIFORNIA

JOB NO 35820

DATE 03/16/2020

DR BY VDF/TT/JJB

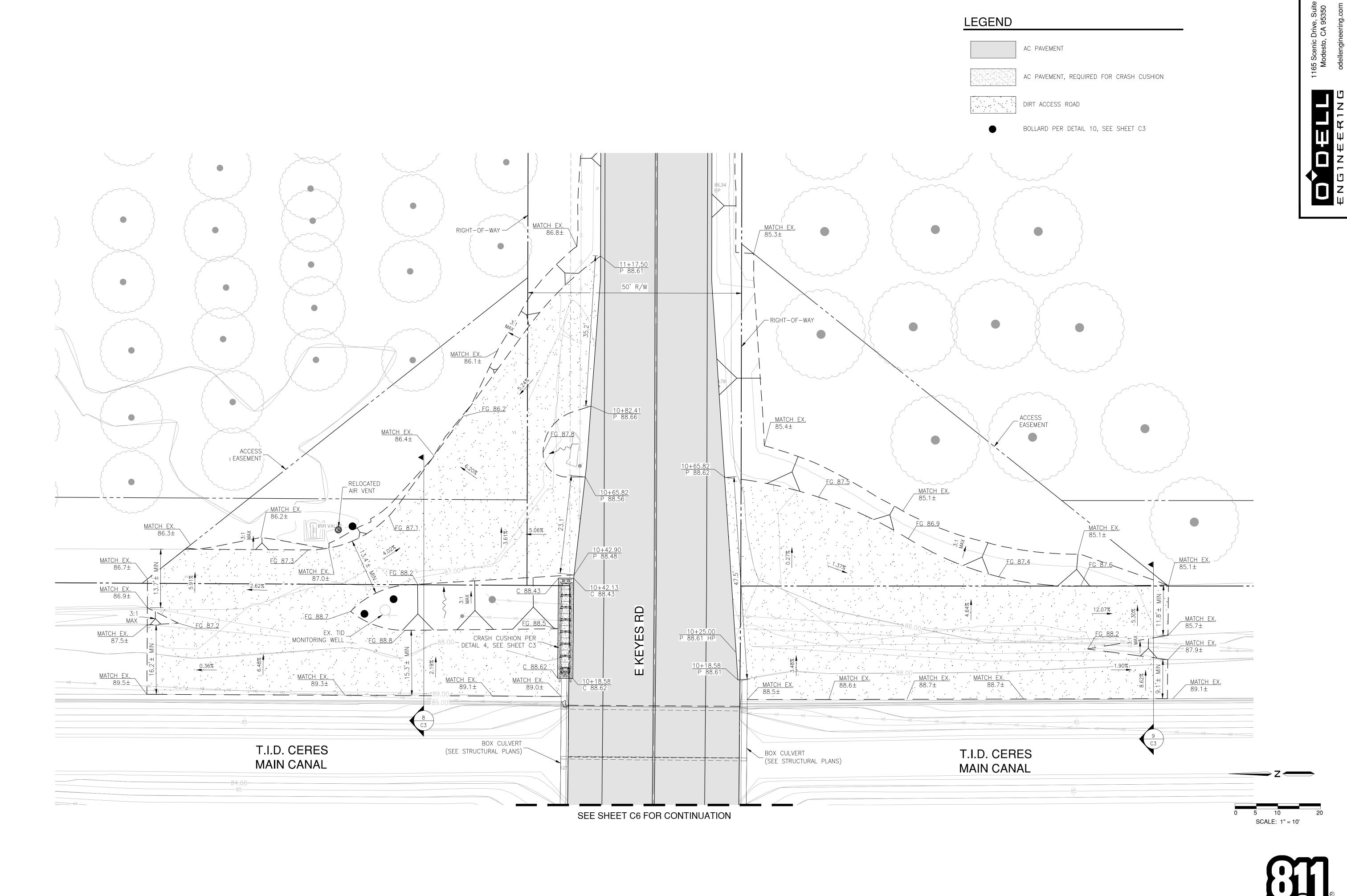
CK BY MP

SCALE 1"=10'

CALL BEFORE YOU DIG

SHEET NUMBER

OF 17 SHEETS





GRADING PLAN - ACCESS ROADS (EAST)

JOB NO 35820

DATE 03/16/2020

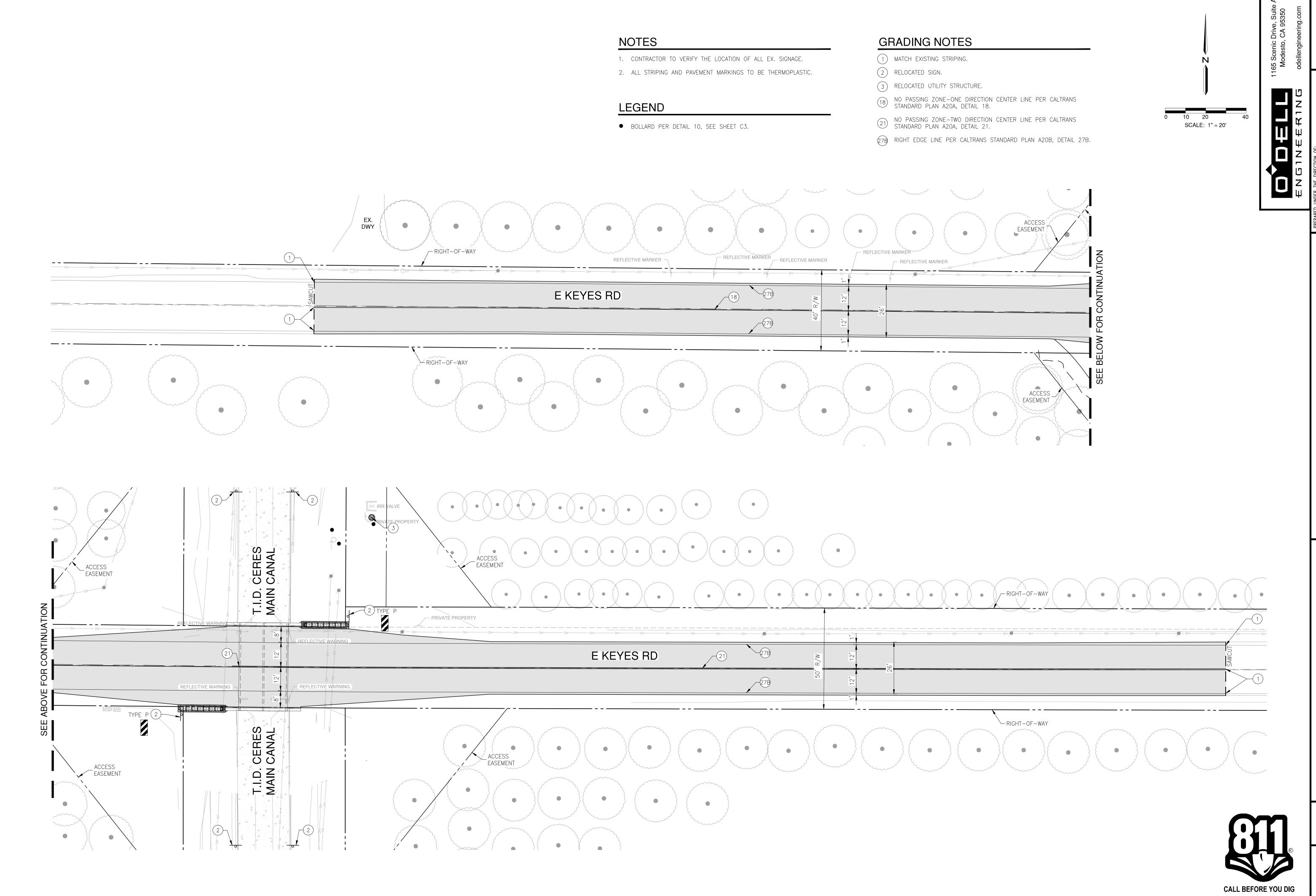
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CK BY MP

SCALE 1"=10'

CALL BEFORE YOU DIG

SHEET NUMBER C6.1 of 17 SHEETS



PAVEMENT DELINEATION & STRIPING PLAN JOB NO 35820

DATE 03/16/2020

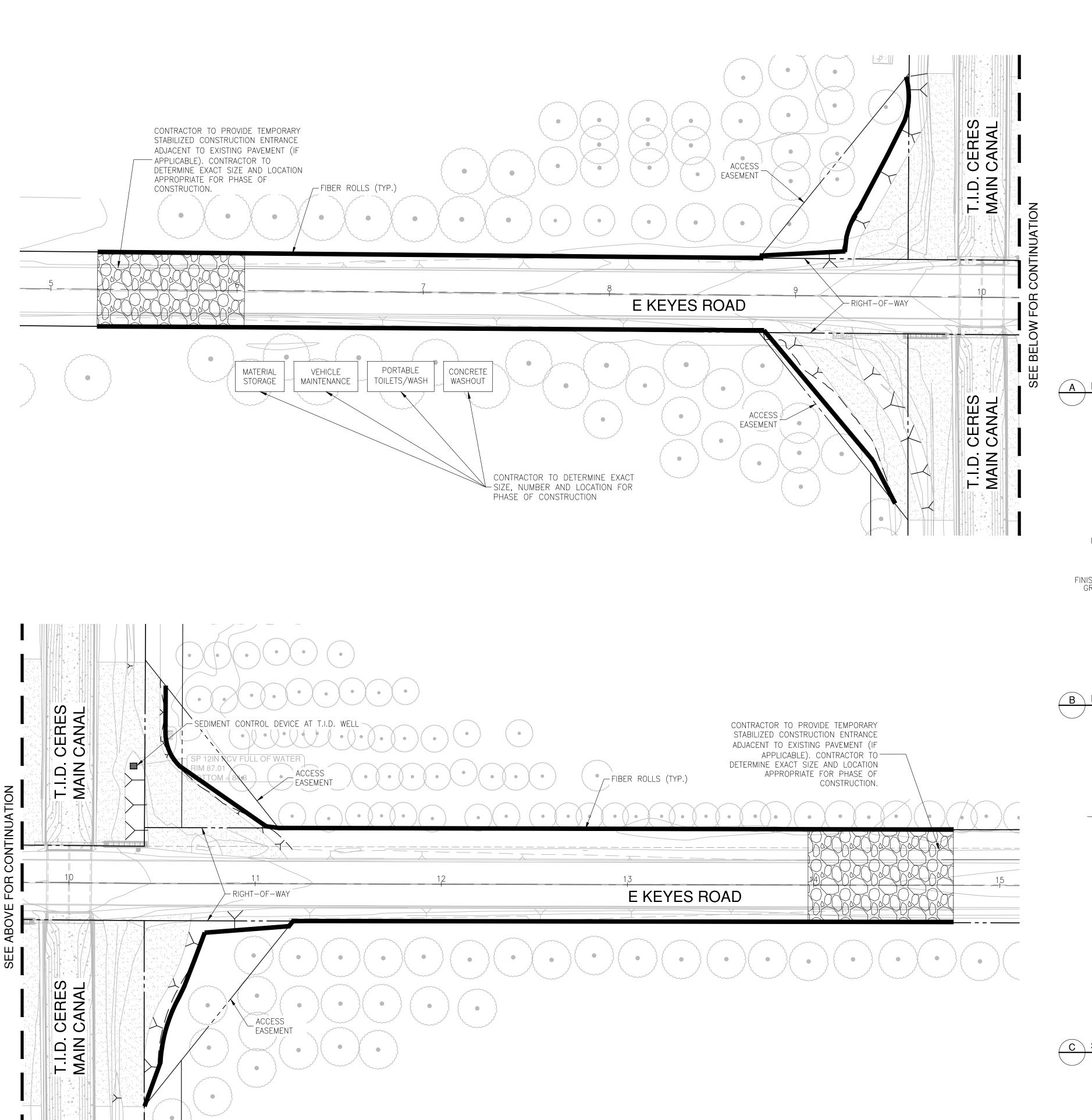
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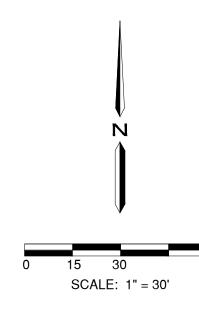
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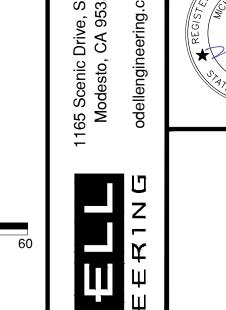
SCALE 1"=20'

KEYES ROAD BRIDGE AT T.I.D. CERES MAIN CANAL KEYES, CALIFORNIA

SHEET NUMBER of 17 SHEETS







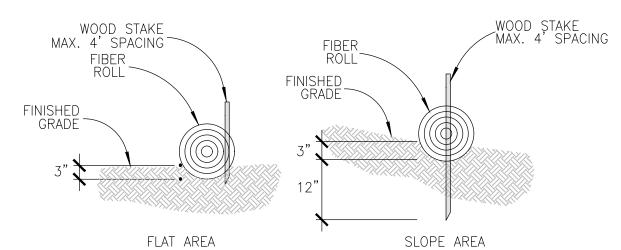
A ENTRANCE/EXIT WASH AREA

WASH AREA

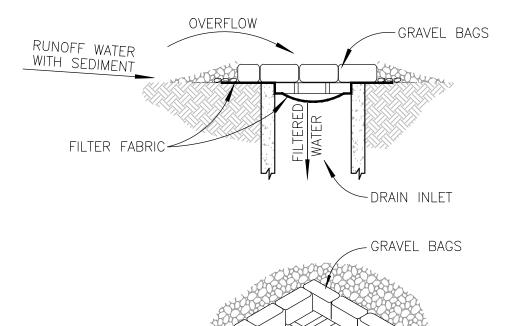
50' OF 1"-3" FRACTURED STONE AGGREGATE 6"MINIMUM

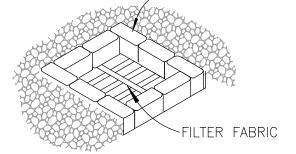
EXISTING STREET

NOT TO SCALE



B FIBER ROLL





SEDIMENT CONTROL DEVICE

NOT TO SCALE

ALL WINTERIZATION MATERIALS SHOULD BE CHECKED BEFORE EACH WEEKEND AND EACH STORM. THIS PLAN IS INTENDED TO BE USED FOR EROSION CONTROL ONLY. OTHER INFORMATION SHOWN HEREIN MAY NOT BE THE MOST

IF ANY GRAVEL BAGS ARE MOVED AND/OR RELOCATED IN GAINING

ACCESS TO THE SITE DURING THE WINTER MONTHS, THEY SHALL BE REPLACED IF THEY ARE NO LONGER STABLE. ONCE INSTALLED,

# SEDIMENT CONTROL DEVICES

**EROSION CONTROL NOTES:** 

\*GROUND HAS BEEN ROUGH GRADED

WINTERIZATION NOTES

AT THE SITE COMPLETED BY OCTOBER 15.

MANAGEMENT PRACTICES.

FIBER COLLECTION POINTS.

FOR SEEDING.

THIS PLAN PROVIDES EROSION CONTROL AND SEDIMENTATION INFORMATION AND DESIGN USING THE FOLLOWING ASSUMPTIONS:

CONTRACTOR SHALL ADJUST THE SEDIMENTATION AND EROSION

CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE INSTALLED

EROSION CONTROL AND SEDIMENTATION IMPROVEMENTS ARE IN

CONFORMANCE WITH THE STATE OF CALIFORNIA STORM WATER

CONTROL METHODS AS THE PROJECT DEVELOPS. IT SHALL BE THE

POLLUTION PREVENTION PLAN GUIDELINES AND THE CALIFORNIA BEST

ALL MATERIALS NECESSARY FOR WINTERIZATION SHALL BE AVAILABLE

WINTERIZATION SHALL BE INSTALLED ACCORDING TO THIS PLAN AND

FILL SLOPES: AVOID LEAVING SHINY, SMOOTH GRADED SURFACES.

THE LAST GRADING OPERATION SHALL BE TO WALK A TRACK-TYPE

TRACTOR UP AND DOWN THE SLOPE, CREATING CLEAT MARKS ON THE SLOPE WITH CONTOURS. THESE WILL PROVIDE SEED AND

<u>CUT SLOPES:</u> AVOID LEAVING SHINY, SMOOTH GRADED SURFACES. THE LAST GRADING OPERATION SHALL LEAVE THE SLOPE IN A

ROUGHENED CONDITION WITH 2 INCHES OF LOOSENED MATERIAL

EACH FIBER ROLL SHALL BE SECURELY HELD WITH 1"X1"X18"

AS DIRECTED BY THE QUALIFIED SWPPP PRACTITIONER (QSP).

CONTRACTOR TO PROVIDE TEMPORARY SEDIMENT CONTROL DEVICE AS SHOWN IN DETAIL. CONTRACTOR MAY SUBSTITUTE OTHER SEDIMENT CONTROL DEVICES (GRAVEL BAGS, SILT TRAPS, ETC.) UNDER THE DIRECTION OF THE QSP. MODIFICATIONS TO THIS PLAN NEED TO BE APPROVED BY QSD, AND LOGGED IN THE SWPPP AMENDMENT LOG.

# **DUST CONTROL MEASURES**

CONTRACTOR TO PRACTICE DUST CONTROL MEASURES IN ACCORDANCE WITH STANISLAUS COUNTY STANDARDS THROUGHOUT CONSTRUCTION.

# EROSION CONTROL LEGEND

FIBER ROLL

GRAVEL BAGS

STORM DRAIN DRAIN INLET PROTECTION

NOTE:

CONTRACTOR TO ESTABLISH DI PROTECTION FOR ALL DOWNSTREAM DI'S





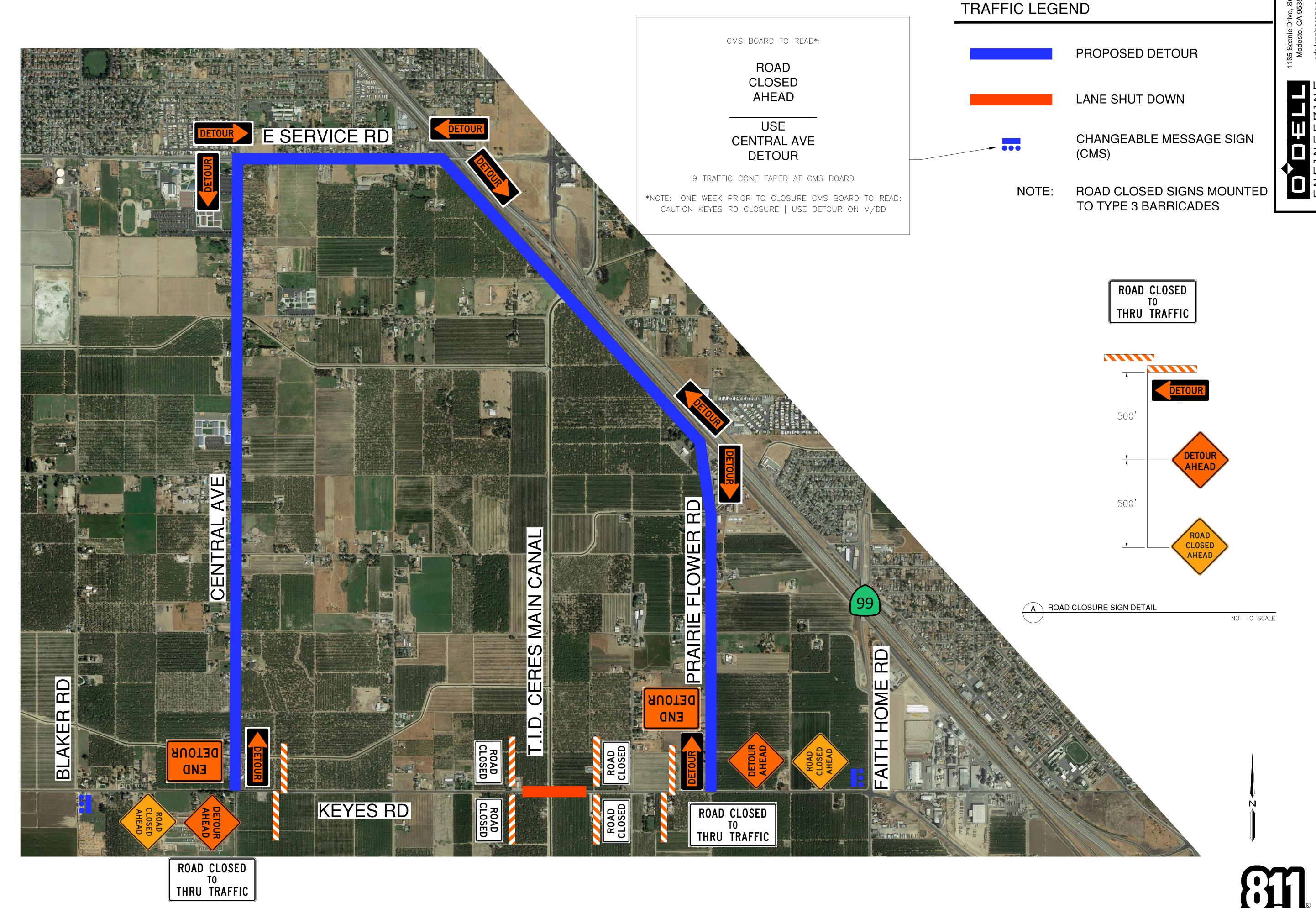
EROSION CONTROL PLAN

KEYES ROAD BRIDGE F T.I.D. CERES MAIN CANA KEYES, CALIFORNIA

JOB NO <u>35820</u> DATE <u>03/16/2020</u> DR BY <u>VDF/TT/JJB</u> CK BY MP SCALE <u>1"=30'</u>

> SHEET NUMBER

of 17 SHEETS



JOB NO 35820

DATE 03/16/2020

DR BY VDF/TT/JJB

CK BY MP

SCALE NTS

KEYES ROAD BRIDGE AT T.I.D. CERES MAIN CANAL

SHEET NUMBER

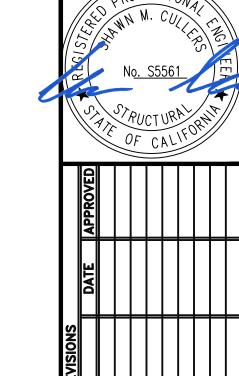
CALL BEFORE YOU DIG

of 17 SHEETS

Fresno, California 93711

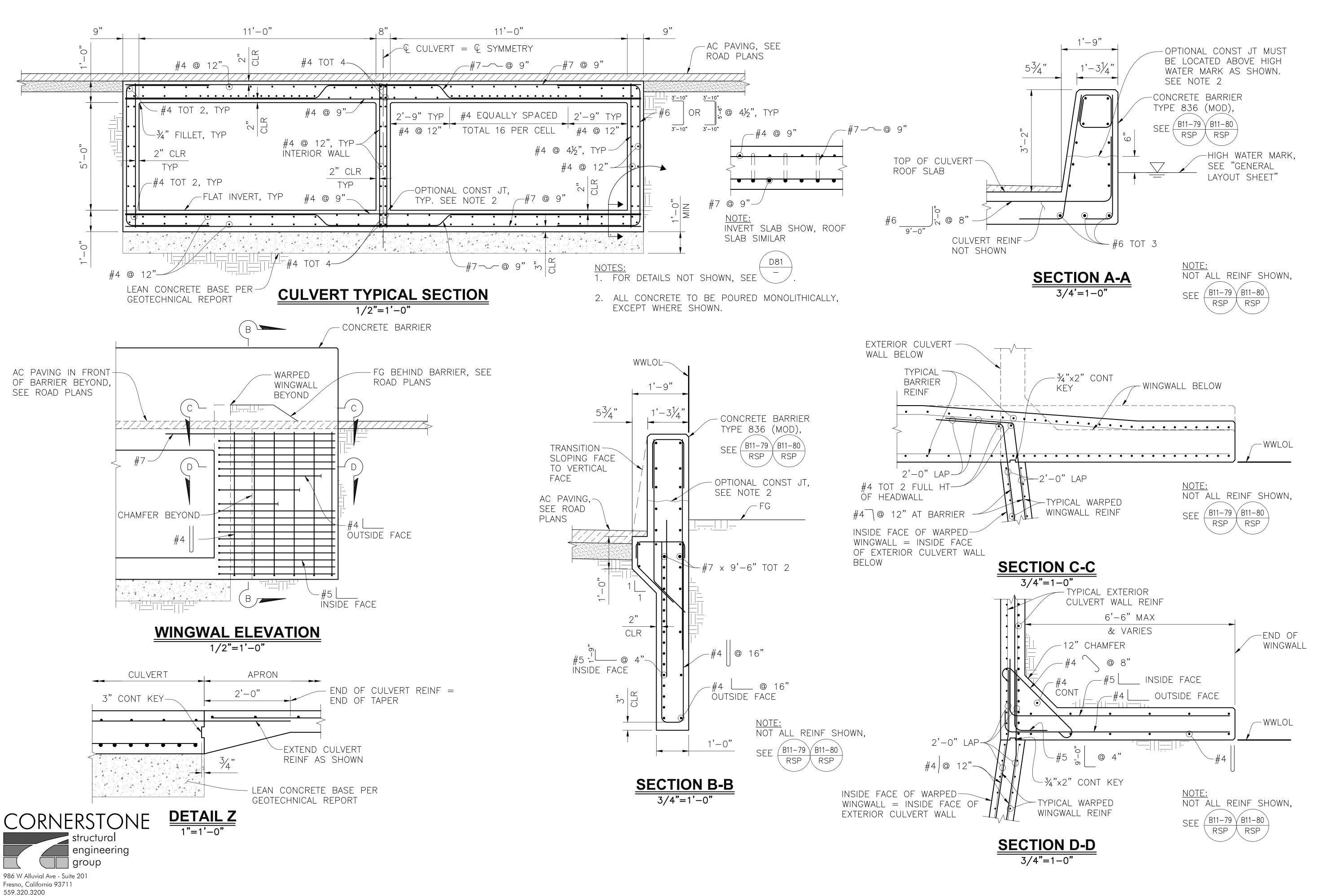
559.320.3200

fax 559.320.3201

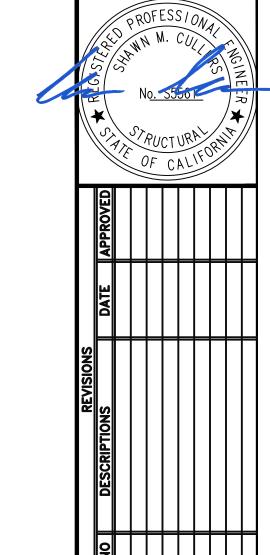


JOB NO. 2019010 DATE 05/08/2020 DATE DR BY TZE CK BY JPJ SURVEY \_\_\_ CONST. \_-HOZ. SCALE:-VERT. SCALE:\_\_

SHEET NUMBER of 17 sheets



fax 559.320.3201



NISLAUS COUNT PARTMENT OF PUBLIC WORKS NGINEERING AND OPERATIONS DIVISION



IMPROVEMENT PLANS FOR: COAD BRIDGE OVER CERES MAIN C

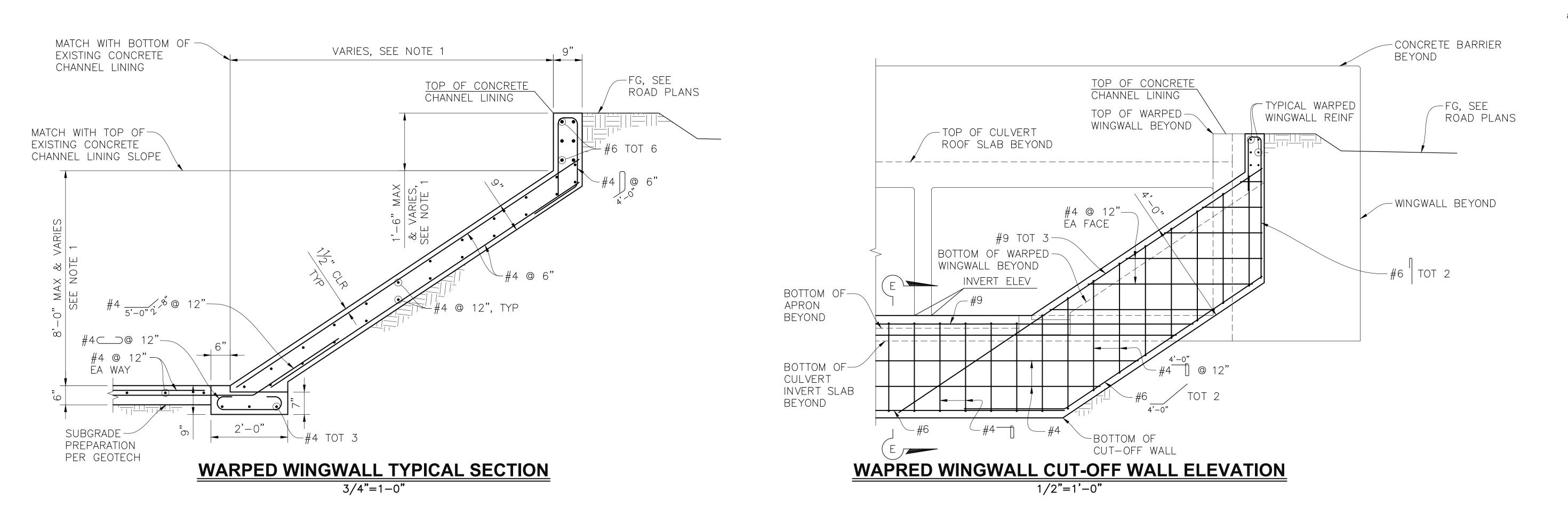
**DETAILS** 

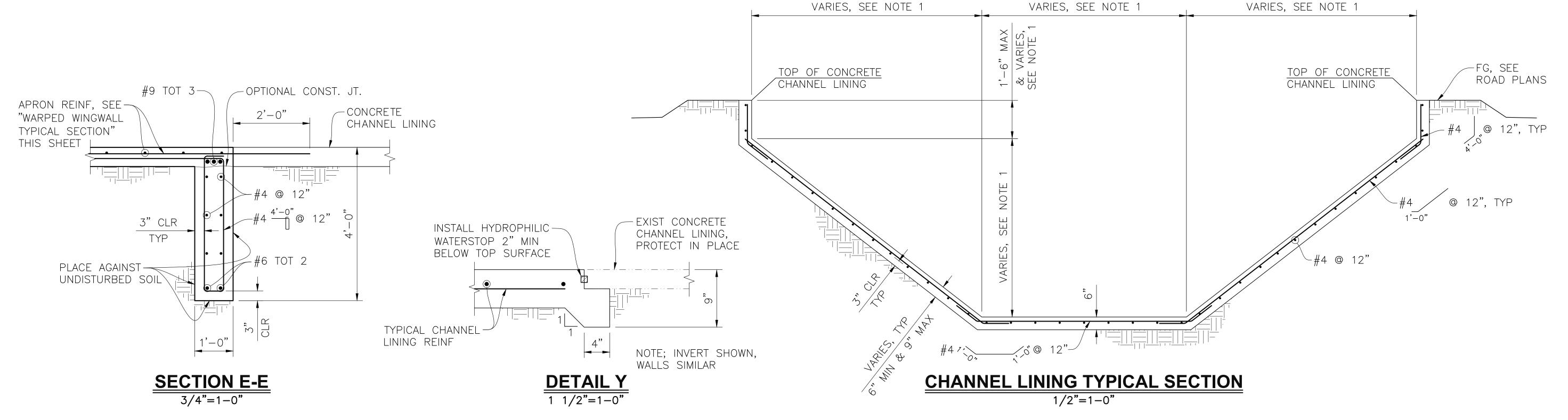
BOX

Know What's below.
Call before you dig.

JOB NO. 2019010
DATE 03/16/2020
DR BY TZE
CK BY JPJ
SURVEY CONST. HOZ. SCALE:VERT. SCALE:-

 $\begin{array}{c} \text{SHEET} \\ \text{NUMBER} \\ S2 \\ \text{Of} \quad 17 \quad \text{SHEETS} \end{array}$ 



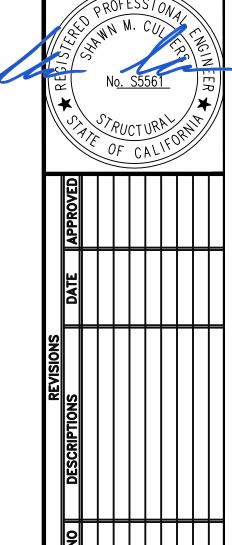




986 W Alluvial Ave - Suite 201 Fresno, California 93711 559.320.3200 fax 559.320.3201

- NOTE:

  1. CONTRACTOR SHALL PROVIDE A SMOOTH TRANSITION FROM EXISTING CONCRETE CHANNEL LINING TO NEW WARPED CONCRETE WINGWALL. VERIFY ALL DIMENSIONS ARE IN CONFORMANCE WITH TURLOCK IRRIGATION DISTRICT STANDARD PLAN CS127B. NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
- 2. A REPRESENTATIVE OF TURLOCK IRRIGATION DISTRICT SHALL INSPECT THE FINISH GRADING OF THE CHANNEL PRIOR TO PLACEMENT OF CONCRETE AND SHALL PROVIDE THE ENGINEER A WRITTEN STATEMENT OF CONFORMANCE.





CULVERT

BOX

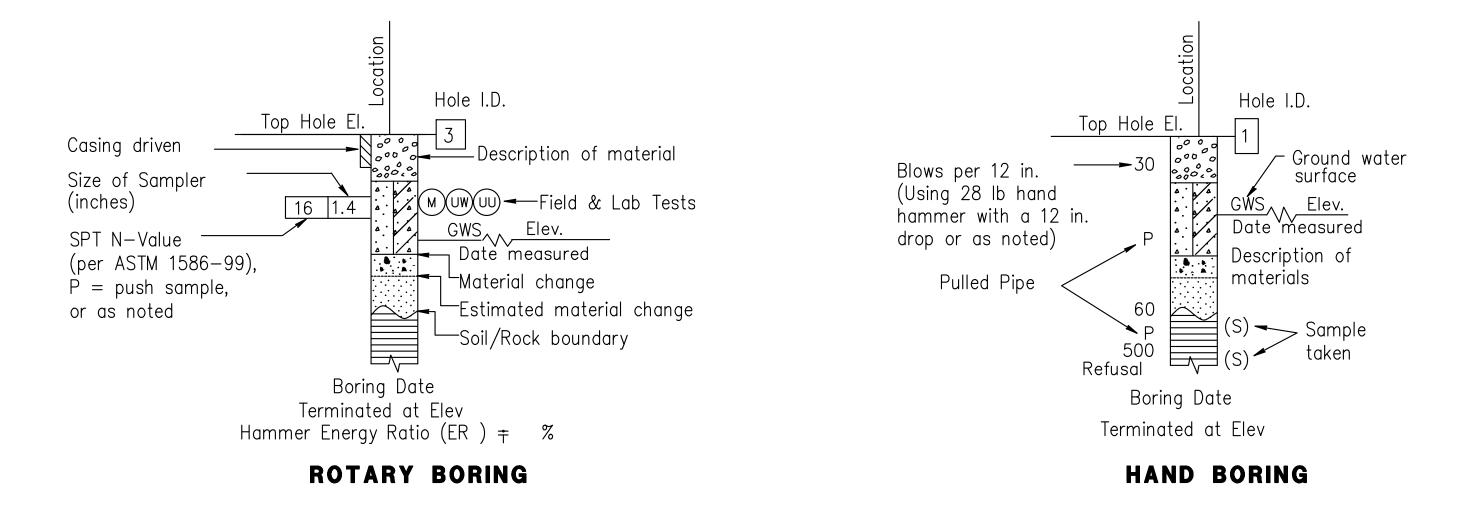
JOB NO. 2019010 DATE 03/16/2020 DR BY TZE
CK BY JPJ SURVEY \_-CONST. \_-HOZ. SCALE:-VERT. SCALE:-

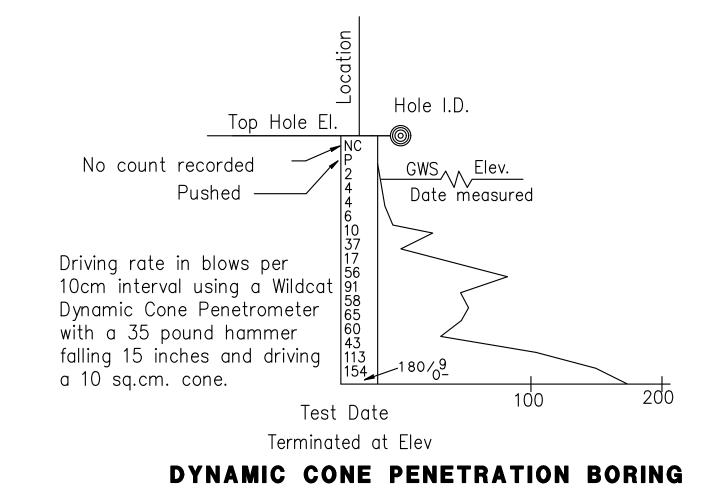
SHEET NUMBER **S**3 of 17 sheets

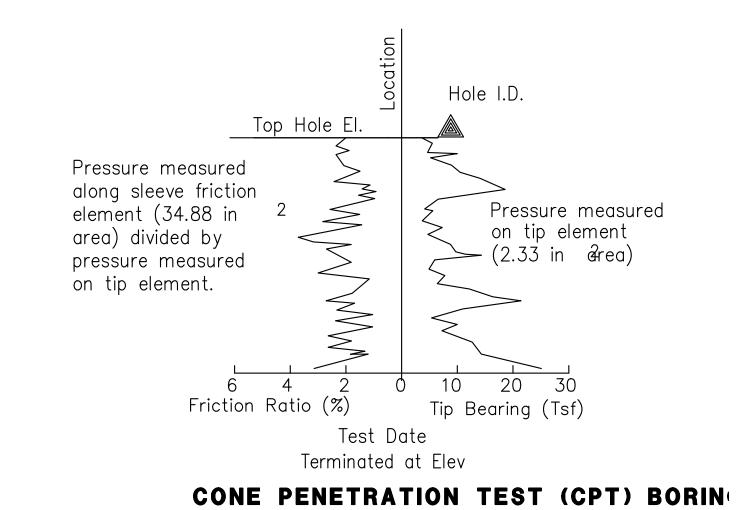
CEMENTATION OF SOILS		
Description	Criteria	
Weak	Crumbles or breaks with handling or little finger pressure.	
Moderate	Crumbles or breaks with considerable finger pressure.	
Strong	Will not crumble or break with finger pressure.	

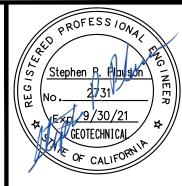
		BOREHOLE IDENTIFICATION		
Symbol	Hole Type	Description		
Size	А	Auger Boring (hollow or solid stem bucket)		
Size	R RW RC P	Rotary drilled boring (conventional) Rotary drilled with self—casing wire—line Rotary core with continuously—sampled, self—casing wire—line Rotary percussion boring (air)		
Size	R	Rotary drilled diamond core		
Size	HD HA	Hand driven (1—inch soil tube) Hand Auger		
•	D	Dynamic Cone Penetration Boring		
	CPT	Cone Penetration Test (ASTM D 5778)		
	0	Other (note on LOTB)		
	Note: Size in inches.			

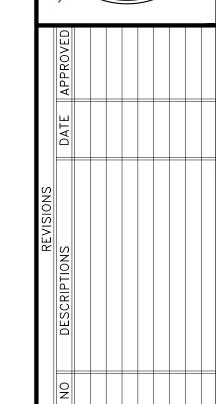
	CONSISTENCY OF COHESIVE SOILS				
Description	Shear Strength (tsf)	Pocket Penetrometer Measurement, PP, (tsf)	Torvane Measurement, TV, (tsf)	Vane Shear Measurement, VS, (tsf)	
Very Soft	Less than 0.12	Less than 0.25	Less than 0.12	Less than 0.12	
Soft	0.12 - 0.25	0.25 - 0.5	0.12 - 0.25	0.12 - 0.25	
Medium Stiff	0.25 - 0.5	0.5 - 1	0.25 - 0.5	0.25 - 0.5	
Stiff	0.5 - 1	1 - 2	0.5 - 1	0.5 - 1	
Very Stiff	1 – 2	2 - 4	1 – 2	1 – 2	
Hard	Greater than 2	Greater than 4	Greater than 2	Greater than 2	











ANISLAUS COUNT

DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO CA 95358



LOG OF TEST BORINGS
SOIL LEGEND 1 OF 2
KEYES ROAD BRIDGE
AT T.I.D. CERES MAIN CANAL
STANISLAUS COUNTY, CALIFORNIL



JOB NO. 20200375

DATE 3/16/2020

DR BY DMF

CK BY VT

SURVEY

CONST. \_\_\_\_

HOZ. SCALE: NTS

VERT. SCALE: NTS

SHEET NUMBER S4

OF 17 SHEETS

		GROUP SYMBOLS	AND	NAMES	<b>S</b>
Graphic,	/Symbol	Group Names	Graphic	/Symbol	Group Names
	GW	Well-graded GRAVEL Well-graded GRAVEL with SAND		CL	Lean CLAY Lean CLAY with SAND Lean CLAY with GRAVEL SANDY lean CLAY
00000	GP	Poorly—graded GRAVEL Poorly—graded GRAVEL with SAND		OL .	SANDY lean CLAY with GRAVEL GRAVELLY lean CLAY GRAVELLY lean CLAY with SAND
	GW-GM	Well—graded GRAVEL with SILT Well—graded GRAVEL with SILT and SAND		CL-ML	SILTY CLAY SILTY CLAY with SAND SILTY CLAY with GRAVEL SANDY SILTY CLAY
	GW-GC	Well—graded GRAVEL with CLAY (or SILTY CLAY) Well—graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)			SANDY SILTY CLAY with GRAVEL GRAVELLY SILTY CLAY GRAVELLY SILTY CLAY with SAND
	GP-GM	Poorly—graded GRAVEL with SILT Poorly—graded GRAVEL with SILT and SAND		ML	SILT SILT with SAND SILT with GRAVEL SANDY SILT
	GP-GC	Poorly—graded GRAVEL with CLAY (or SILTY CLAY) Poorly—graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)			SANDY SILT with GRAVEL GRAVELLY SILT GRAVELLY SILT with SAND
	GM	SILTY GRAVEL SILTY GRAVEL with SAND		OL	ORGANIC lean CLAY ORGANIC lean CLAY with SAND ORGANIC lean CLAY with GRAVEL SANDY ORGANIC lean CLAY
	GC	CLAYEY GRAVEL CLAYEY GRAVEL with SAND			SANDY ORGANIC lean CLAY with GRAVEL GRAVELLY ORGANIC lean CLAY GRAVELLY ORGANIC lean CLAY with SAND
× 9 0	GC-GM	SILTY, CLAYEY GRAVEL SILTY, CLAYEY GRAVEL with SAND		OL	ORGANIC SILT ORGANIC SILT with SAND ORGANIC SILT with GRAVEL SANDY ORGANIC SILT
	SW	Well—graded SAND Well—graded SAND with GRAVEL			SANDY ORGANIC SILT with GRAVEL GRAVELLY ORGANIC SILT GRAVELLY ORGANIC SILT with SAND
	SP	Poorly—graded SAND Poorly—graded SAND with GRAVEL		CH	Fat CLAY Fat CLAY with SAND Fat CLAY with GRAVEL SANDY fat CLAY
	SW-SM	Well-graded SAND with SILT Well-graded SAND with SILT and GRAVEL			SANDY fat CLAY with GRAVEL GRAVELLY fat CLAY GRAVELLY fat CLAY with SAND
	SW-SC	Well—graded SAND with CLAY (or SILTY CLAY) Well—graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)		MH	Elastic SILT Elastic SILT with SAND Elastic SILT with GRAVEL SANDY elastic SILT
	SP-SM	Poorly—graded SAND with SILT  Poorly—graded SAND with SILT and GRAVEL			SANDY elastic SILT with GRAVEL GRAVELLY elastic SILT GRAVELLY elastic SILT with SAND
	SP-SC	Poorly—graded SAND with CLAY (or SILTY CLAY) Poorly—graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)		ОН	ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY
	SM	SILTY SAND SILTY SAND with GRAVEL			SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND
	SC	CLAYEY SAND CLAYEY SAND with GRAVEL		OH	ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY ORGANIC elastic SILT
	SC-SM	SILTY, CLAYEY SAND SILTY, CLAYEY SAND with GRAVEL			SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND
	PT	PEAT	\f_\f_\ \f_\f_\ \f_\f_\	OL/OH	ORGANIC SOIL ORGANIC SOIL with SAND ORGANIC SOIL with GRAVEL SANDY ORGANIC SOIL
		COBBLES COBBLES and BOULDERS BOULDERS	J J J J J J J J J	52, 511	SANDY ORGANIC SOIL with GRAVEL GRAVELLY ORGANIC SOIL GRAVELLY ORGANIC SOIL with SAND

# FIELD AND LABORATORY TESTING

- (C) Consolidation (ASTM D 2435)
- (CL) Collapse Potential (ASTM D 5333)
- (CP) Compaction Curve (CTM 216)
- CR Corrosivity Testing (CTM 643, CTM 422, CTM 417)
- CU Consolidated Undrained Triaxial (ASTM D 4767)
- (DS) Direct Shear (ASTM D 3080)
- (EI) Expansion Index (ASTM D 4829)
- M Moisture Content (ASTM D 2216)
- OC) Organic Content-% (ASTM D 2974)
- P Permeability (CTM 220)
- (PA) Particle Size Analysis (ASTM D 422)
- Plasticity Index (AASHTO T 90) Liquid Limit (AASHTO T 89)
- (PL) Point Load Index (ASTM D 5731)
- (PM) Pressure Meter
- R -Value (CTM 301)
- (SE) Sand Equivalent (CTM 217)
- (SG) Specific Gravity (AASHTO T 100)
- (SL) Shrinkage Limit (ASTM D 427)
- (SW) Swell Potential (ASTM D 4546)
- Unconfined Compression—Soil
  (ASTM D 2166)
  Unconfined Compression—Rock
  (ASTM D 2938)
- UU Unconsolidated Undrained Triaxial (ASTM D 2850)
- UW) Unit Weight (ASTM D 4767)

APPARENT DENSI	TY OF COHESIONLESS SOILS
Description	SPT N <sub>60</sub> (Blows / 12 in.)
Very Loose	0 - 5
Loose	5 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	Greater than 50

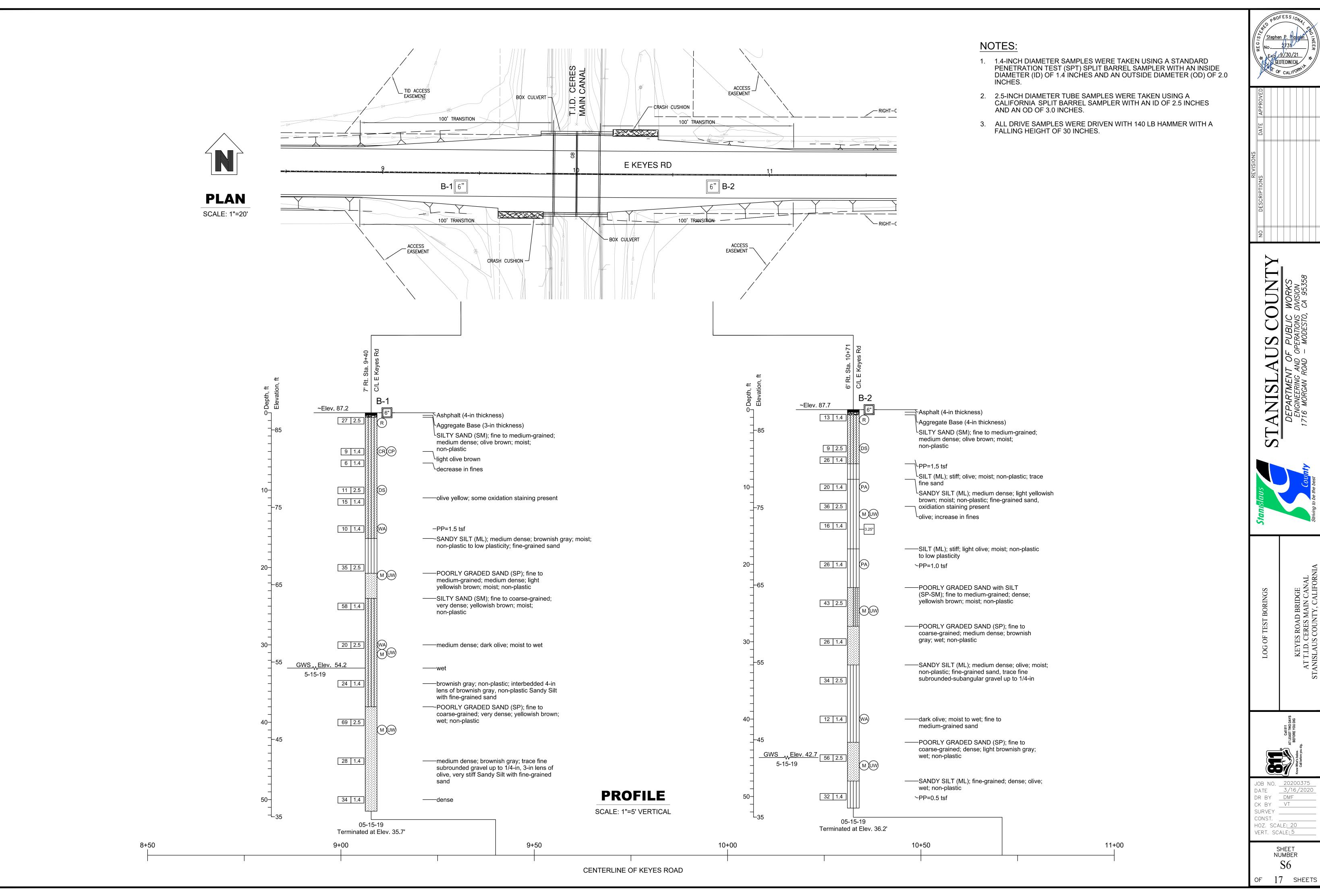
	MOISTURE			
Description	Criteria			
Dry	No discernable moisture			
Moist	Moisture present, but no free water			
Wet	Visible free water			

PERCENT OR PROPORTION OF SOILS		
Description	Criteria	
Trace	Particles are present but estimated to be less than 5%	
Few	5% - 10%	
Little	15% - 25%	
Some	30% - 45%	
Mostly	50% - 100%	

PARTICLE SIZE			
Des	cription	Size (in.)	
Boulder		Greater than 12	
Cobble		3 - 12	
Gravel	Coarse	3/4 - 3	
Gravei	Fine	1/5 - 3/4	
	Coarse	1/16 - 1/5	
Sand	Medium	1/64 - 1/16	
	Fine	1/300 - 1/64	
Silt and Clay		Less than 1/300	

SHEET NUMBER S5

OF 17 SHEETS



GEOTECHNICAL



JOB NO. \_\_20200375 DATE <u>3/16/2020</u> DR BY DMF CK BY <u>VT</u> SURVEY \_\_\_ CONST. HOZ. SCALE: 20 VERT. SCALE: 5

SHEET NUMBER