O

COUNTY OF SANTA BARBARA STATE OF CALIFORNIA DEPARTMENT OF PUBLIC WORKS

PLANS FOR THE CONSTRUCTION OF

# **GOLETA BEACH PARK ACCESS** ROAD AT GOLETA SLOUGH

REPLACEMENT PROJECT BRIDGE No. 51C-0158 COUNTY PROJECT No. 862319 FEDERAL AID PROJECT No. BRLO-5951 (120)

TO BE SUPPLEMENTED BY THE STATE OF CALIFORNIA STANDARD PLANS DATED 2010

#### INDEX TO SHEETS

APPROVED - CHAIRMAN, BOARD OF SUPERVISORS

APPROVAL RECOMMENDED - ENGINEERING SECTION MANAGER

APPROVED - DIRECTOR OF PUBLIC WORKS

ROAD PLANS
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# **VICINITY MAP**

SANTA BARBARA AIRPORT

Call 811 before you dig CONSTRUCTION STARTED PROJECT MANAGER CONSTRUCTION COMPLETED MARK L. RENO RECORD DRAWING APPROVED BY SURVEY CHECKED BY:

COUNTY OF SANTA BARBARA DEPARTMENT OF PUBLIC WORKS

DESIGN BY: G. MCLAUGHLIN CHECKED BY: DRAWN BY:

GOLETA SLOUGH

TO SANTA BARBARA

**GOLETA** 

ONSTRUCTABILITY REVIEW BY:

PROJECT NO. NO SCALE 862319

HOLLISTER AVE

GOLETA BEACH PARK ACCESS ROAD BRIDGE REPLACEMENT TITLE SHEET

1 OF X FILE NO.

BARBARA

SACRAMENTO

SANTA BARBARA COUNTY

SANTA MARIA

INDEX TO STD DETAILS AND PLANS

Abbreviations (sheet 1 of 2) Abbreviations (sheet 2 of 2) Lines and Symbols (sheet 1 of 3) Lines and Symbols (sheet 2 of 3) A10E Lines and Symbols (sheet 3 of 3) Legend - Soil (Sheet 1 of 2) Legend - Soil (Sheet 2 of 2) A10G Legend - Rock A10H Limits of Payment for Excavation A62C and Backfill- Bridge Bridge Details B0 - 3Bridge Details B0 - 5

Bridge Details Bridge Details B6 - 21

Joint Seals (Maximum Movement Rating = 2") Box Girder Details B7-6

Deck Drains - Types D-1 and D-2R7-8 Deck Drainage Details

B7-10 Utility Opening - Box Girder Utility Details Cast-in-Place Prestressed Girder Details

B11-54 Concrete Barrier Type 26 B11-55 Concrete Barrier Type 732

Communication and Sprinkler Control Conduits (Conduits less than 4")

-STANDARD PLAN SHEET NO.

-DETAIL NO.

Know what's **below**.

No.C47756

Exp.\_

EL COLEGIO RD

BRIDGE No. 51C-0158

TRANSPORTATION DIVISION FOR REDUCED PLANS ORIGINAL SCALE IN INCHES

. POLGLASE

PACIFIC OCEAN

END CONSTRUCTION

STA "S" 10+00.00

BEGIN CONSTRUCTION

STA "S" 6+65.69

DISREGARD PRINTS BEARING

GENERAL PLAN

, MARK L. RENO

PARK

BEACH ⋖ Ħ GOL

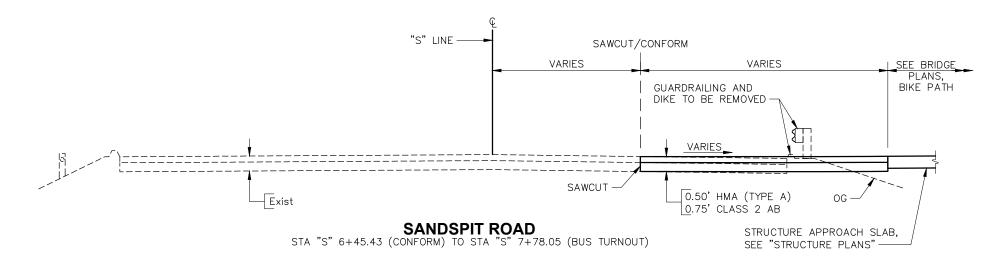
#### **DESIGN DESIGNATION** (GOLETA PARK ACCESS RD.)

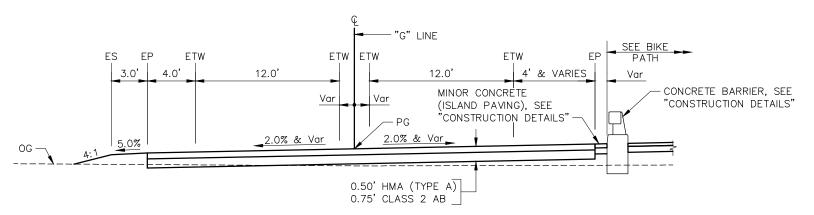
2028 ADT = 3051T = 1%V = 25 MPHTI = 7R = TBD

<u>LEGEND:</u> SR = SUPERELEVATION RATE

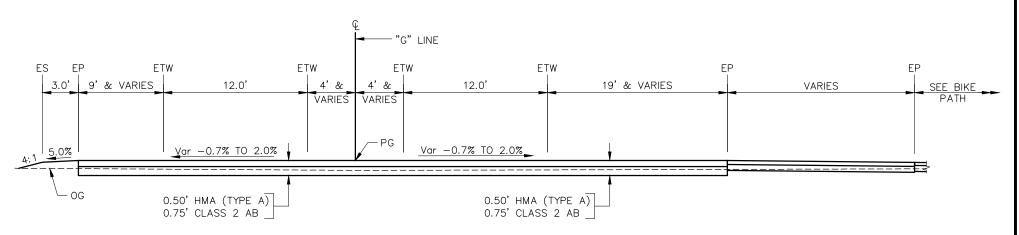
#### NOTES:

- DIMENSIONS OF THE STRUCTURAL SECTION ARE SUBJECT TO THE TOLLERANCES IN THE STANDARD SPECIFICATIONS.
- 2. SUPERELEVATION IS SHOWN ON THE SUPERELEVATION DIAGRAM OR AS DIRECTED BY THE ENGINEER.





## **GOLETA PARK ACCESS**



#### **GOLETA PARK ACCESS** STA "G" 6+79.03 TO STA "G" 7+24.92

#### TYPICAL CROSS SECTIONS

X-1

COUNTY OF SANTA BARBARA CHECKED BY: SCALE: PROJECT NO. SHEET NO. GOLETA BEACH PARK ACCESS ROAD G. MCLAUGHLIN 2 OF X BRIDGE REPLACEMENT DEPARTMENT OF PUBLIC WORKS CHECKED BY: DETAILS BY: FILE NO. TRANSPORTATION DIVISION 862319 NO SCALE D. POLGLASE FOR REDUCED PLANS ORIGINAL SCALE IN INCHES DISREGARD PRINTS BEARING EARLIER REVISION DATES —

CONSTRUCTION STARTED:	PROJECT ENGINEER:
CONSTRUCTION COMPLETED:	GARRETT MCLAUGHLIN
RECORD DRAWING APPROVED BY:	67687 DATE

GARRETT MCLAUGHLIN

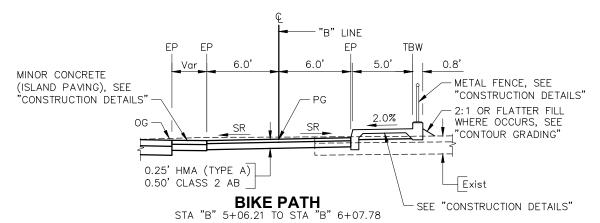
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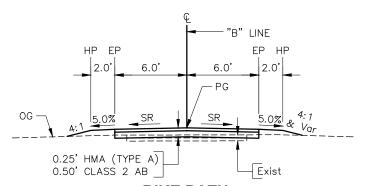
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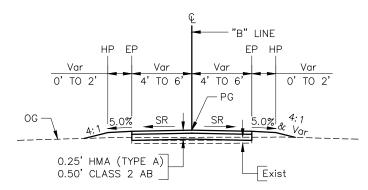
1. DIMENSIONS OF THE STRUCTURAL SECTION ARE SUBJECT TO THE TOLLERANCES IN THE STANDARD SPECIFICATIONS.

- 2. SUPERELEVATION IS SHOWN ON THE SUPERELEVATION DIAGRAM OR AS DIRECTED BY THE ENGINEER.
- 3. FOR DESIGN DESIGNATION, SEE DRAWING X-1.

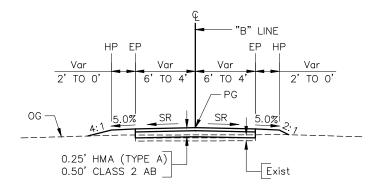




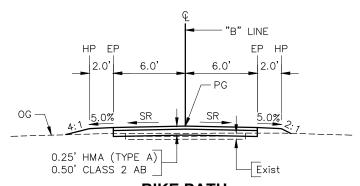
**BIKE PATH** STA "B" 2+58.89 TO STA "B" 4+39.84



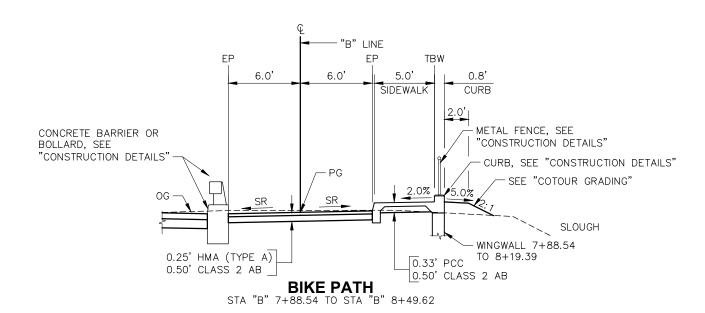
**BIKE PATH** STA "B" 1+93.08 TO STA "B" 2+58.89



#### **BIKE PATH** STA "B" 8+72.69 TO STA "B" 9+18.90



**BIKE PATH** STA "B" 8+49.62 TO STA "B" 8+72.69



#### TYPICAL CROSS SECTIONS

X-2

3 OF X

CONSTRUCTION STARTED:	PROJECT ENGINEER:	
CONSTRUCTION COMPLETED:	GARRETT MCLAUGHLIN	
RECORD DRAWING APPROVED BY:	67687 DA	ATE

		_
_	GARRETT MCLAUGHLIN	
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COUNTY	OF	SA	NTA	BAF	RBARA	_
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TRAN	SPOR	TAT	ON DI	VISION	l	

FOR REDUCED PLANS ORIGINAL SCALE IN INCHES

	G. MCLAUGHLIN
)	DETAILS BY: D. POLGLASE
3	

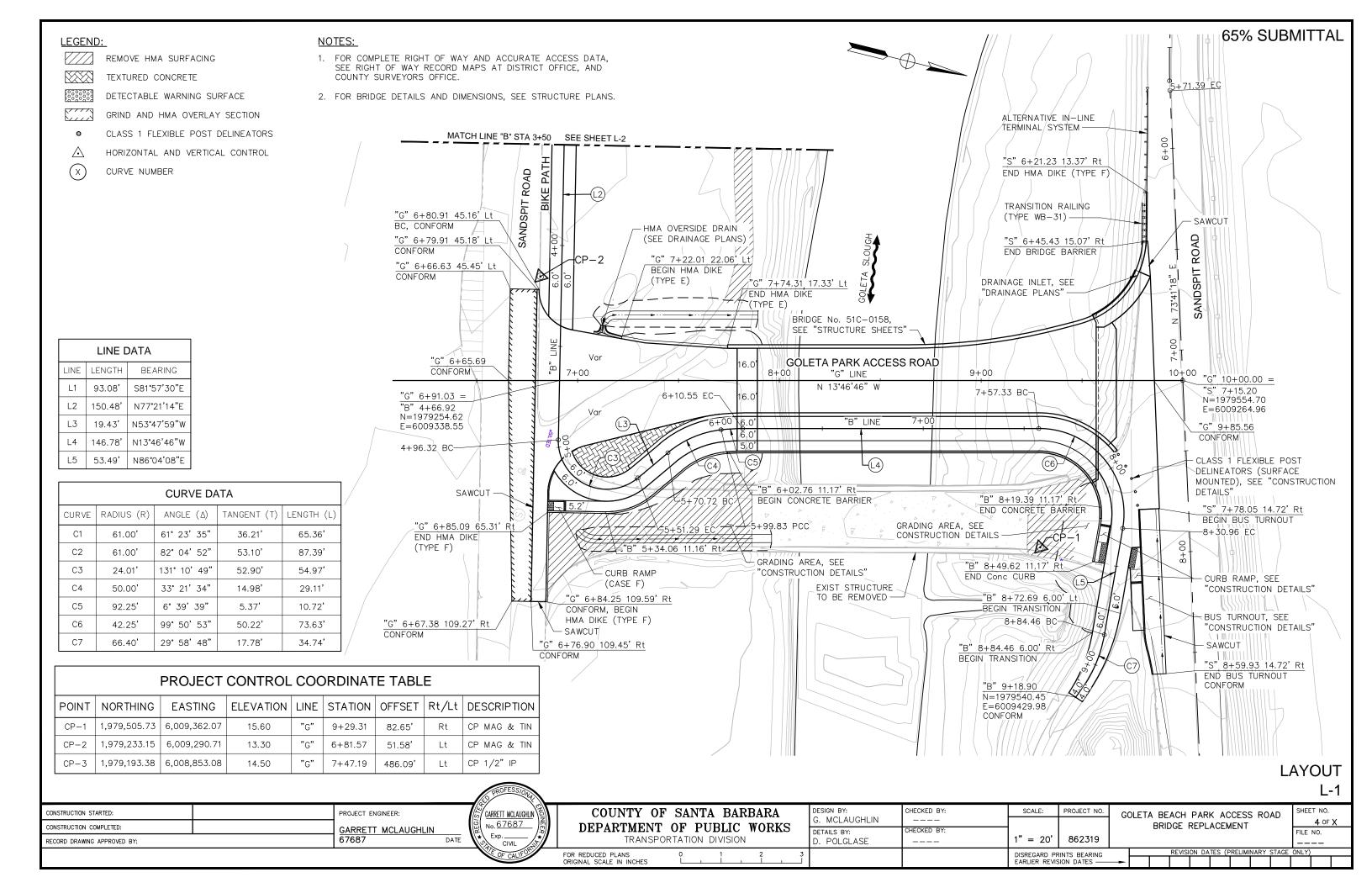
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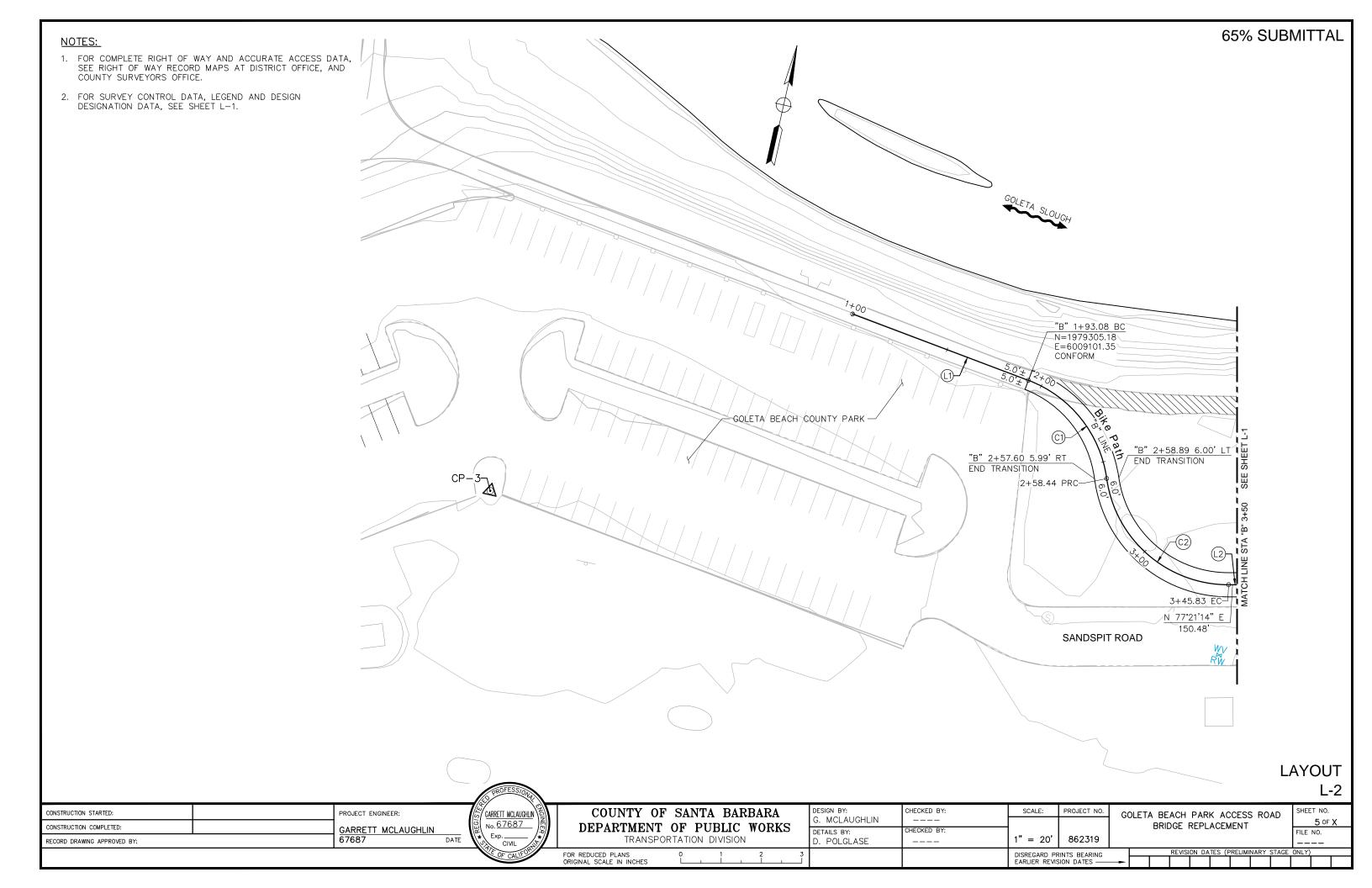
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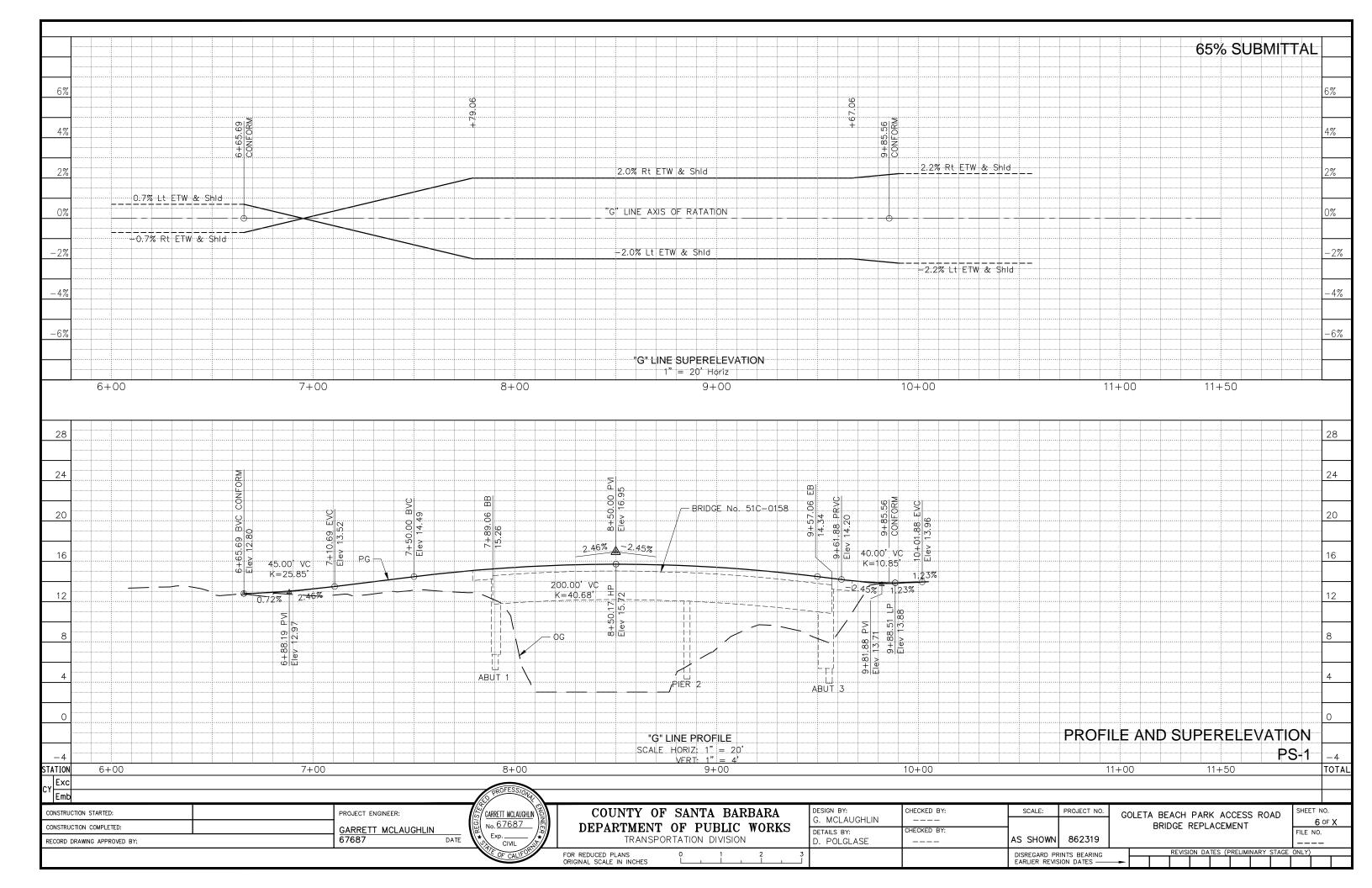
DISREGARD PRINTS BEARING EARLIER REVISION DATES —

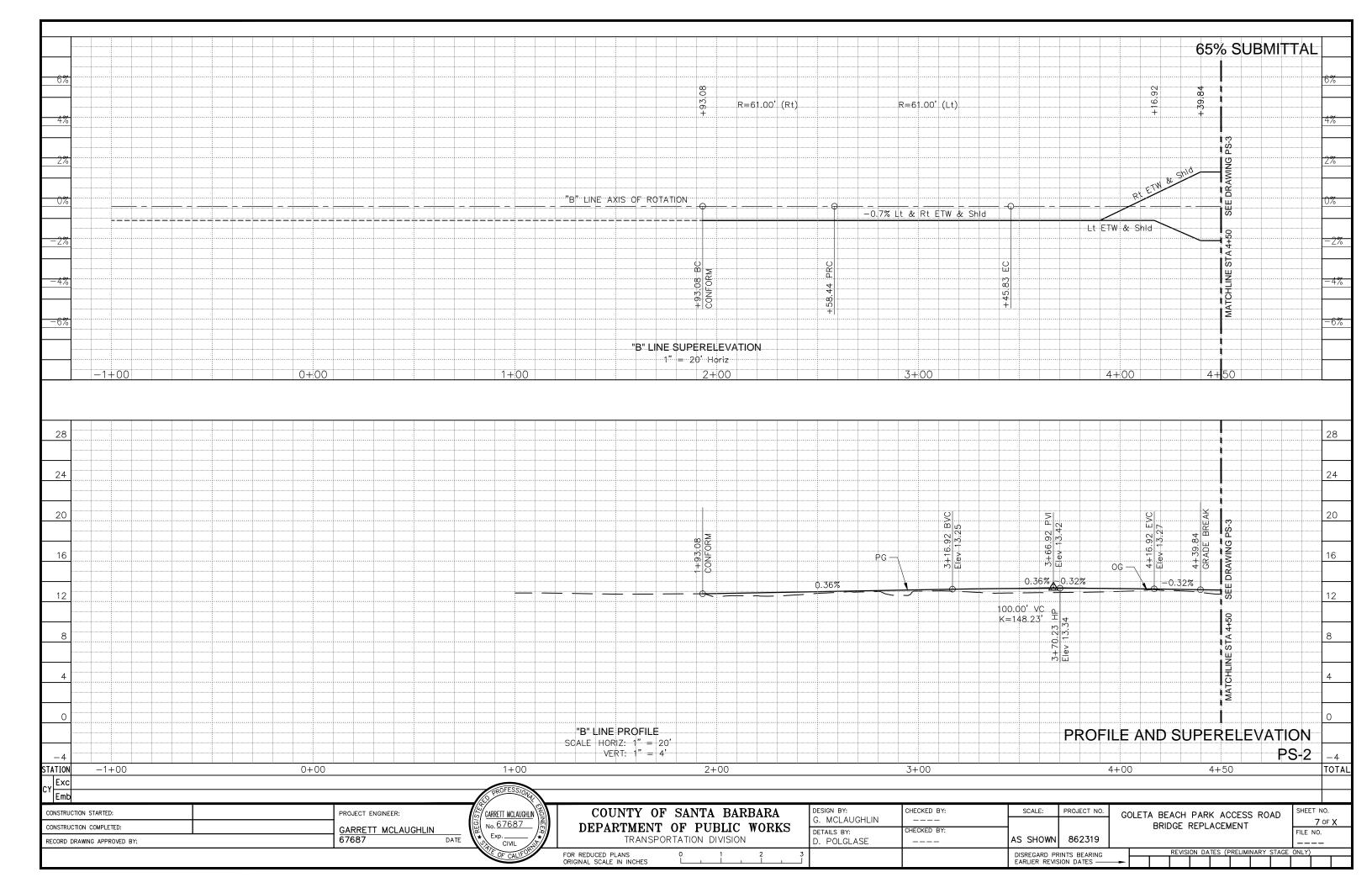
GOLETA BEACH PARK ACCESS ROAD	SHEET NO.
BRIDGE REPLACEMENT	3 OF )
	FILE NO.

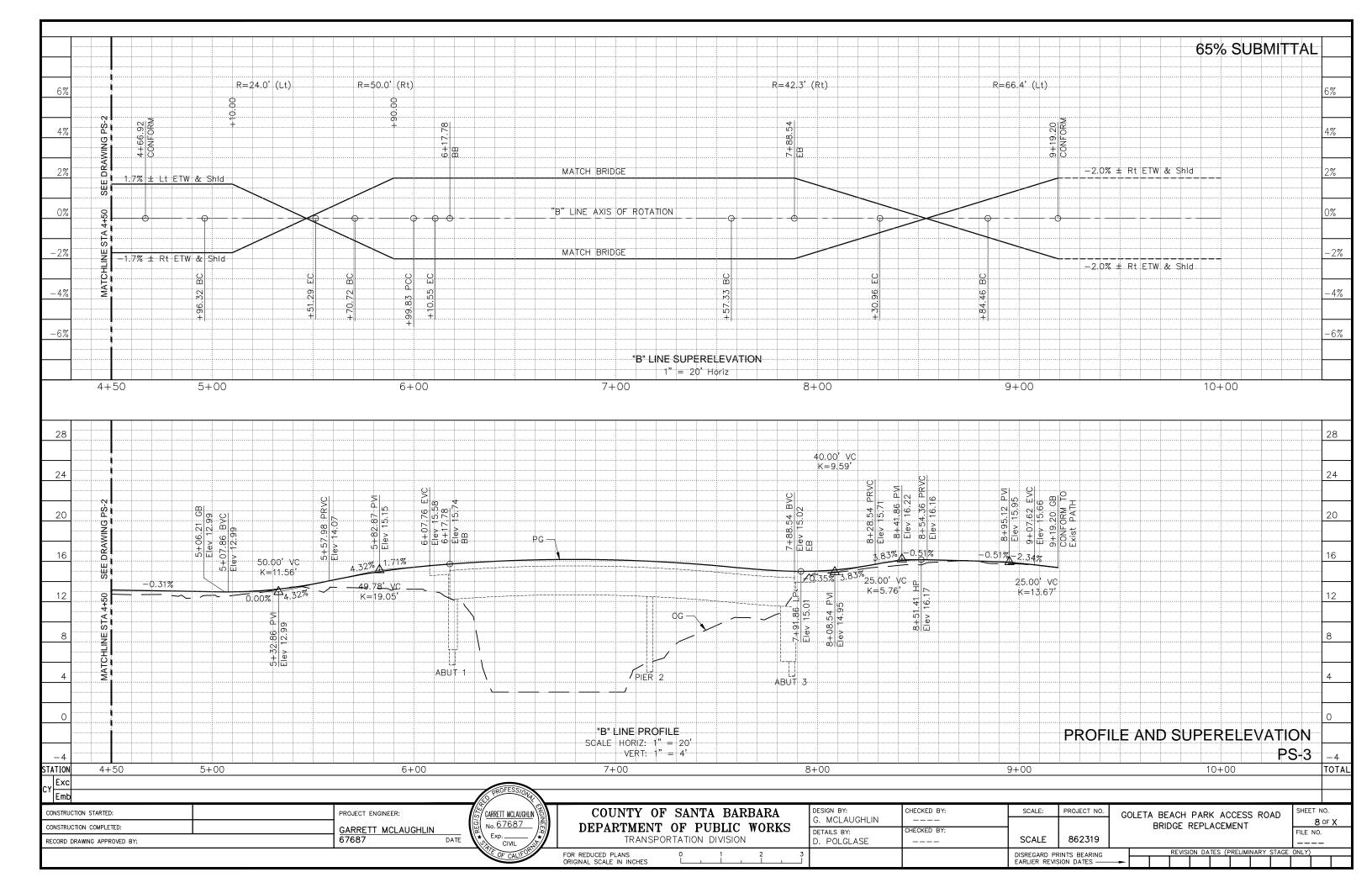
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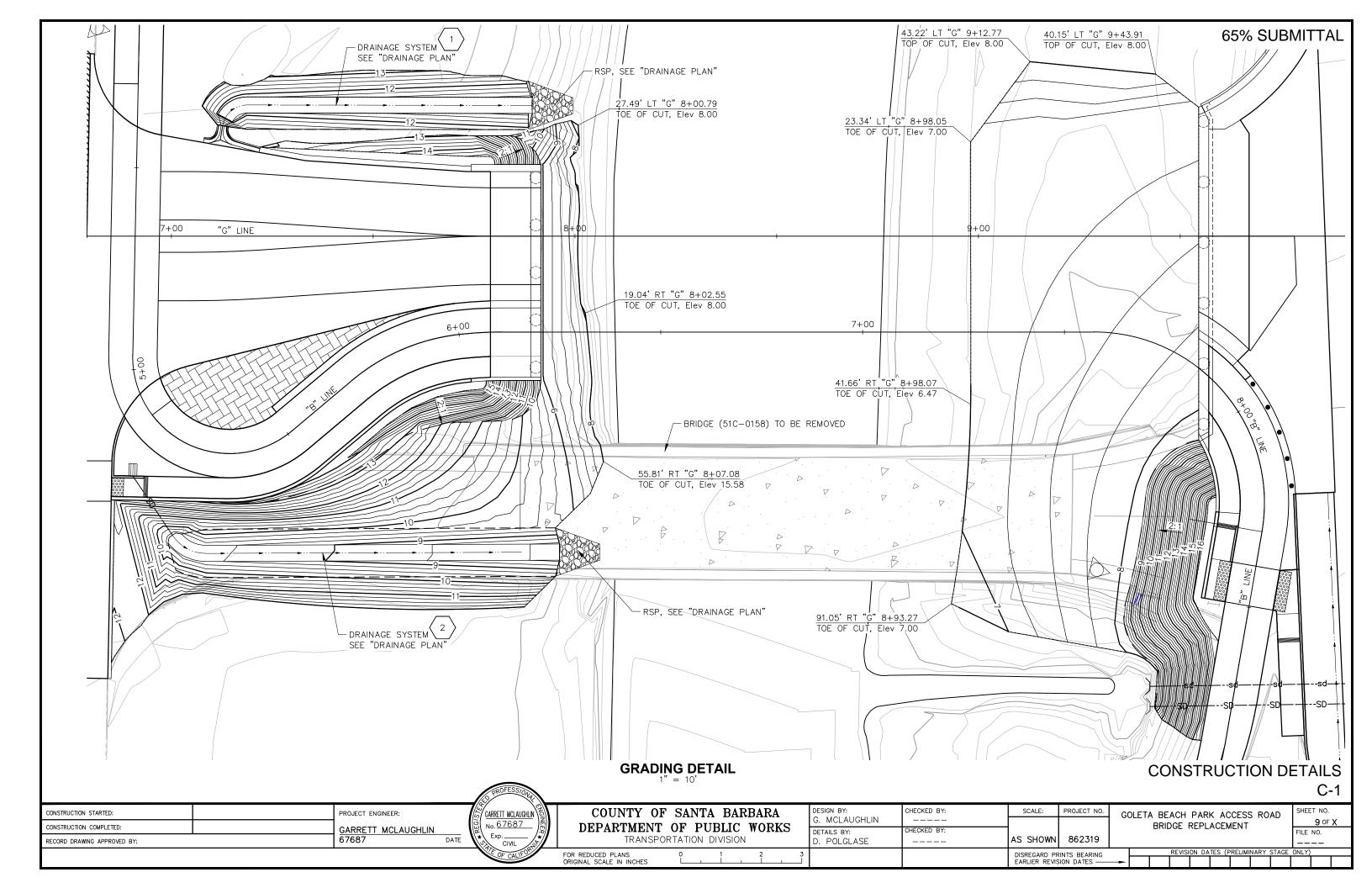


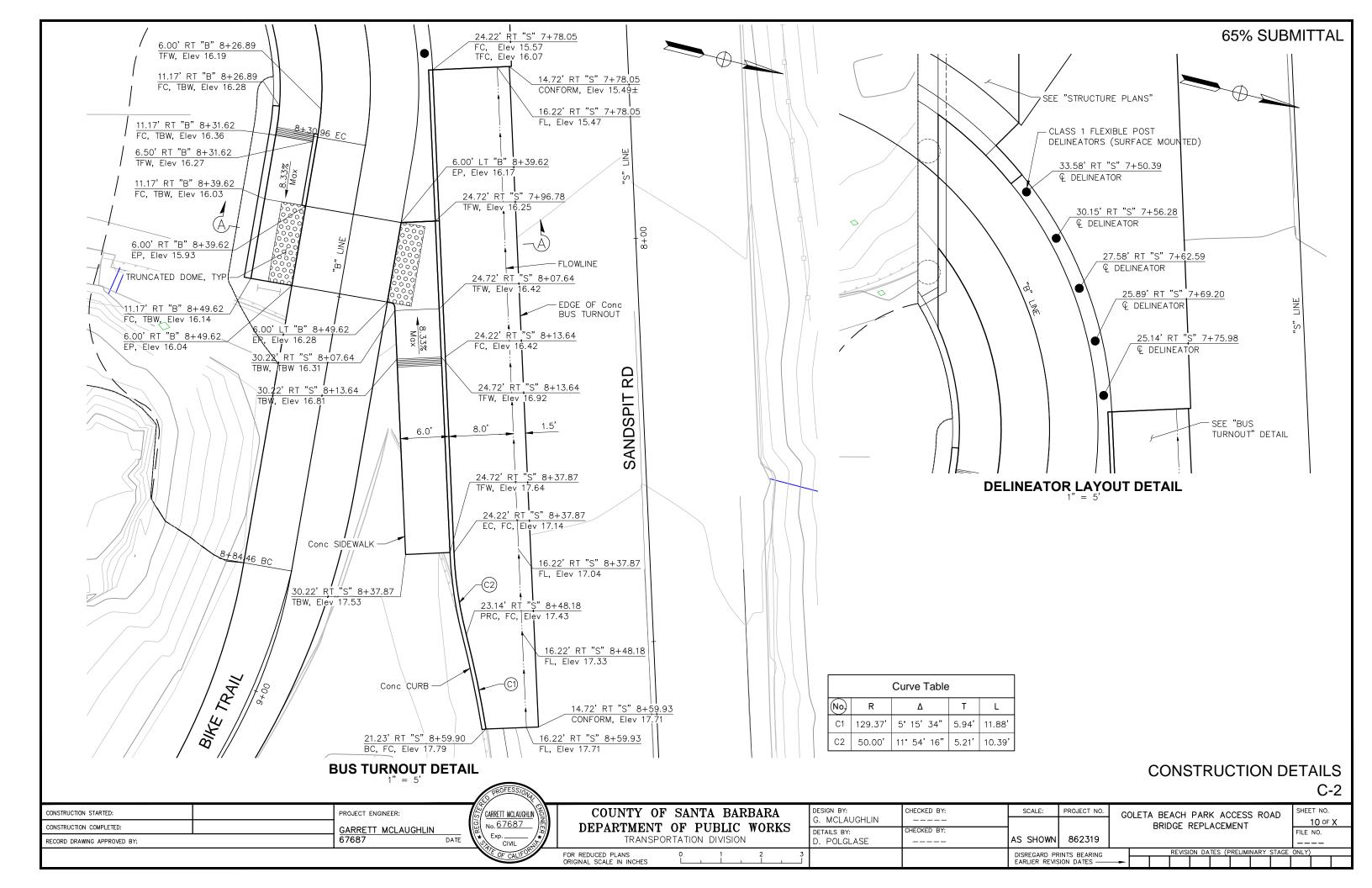


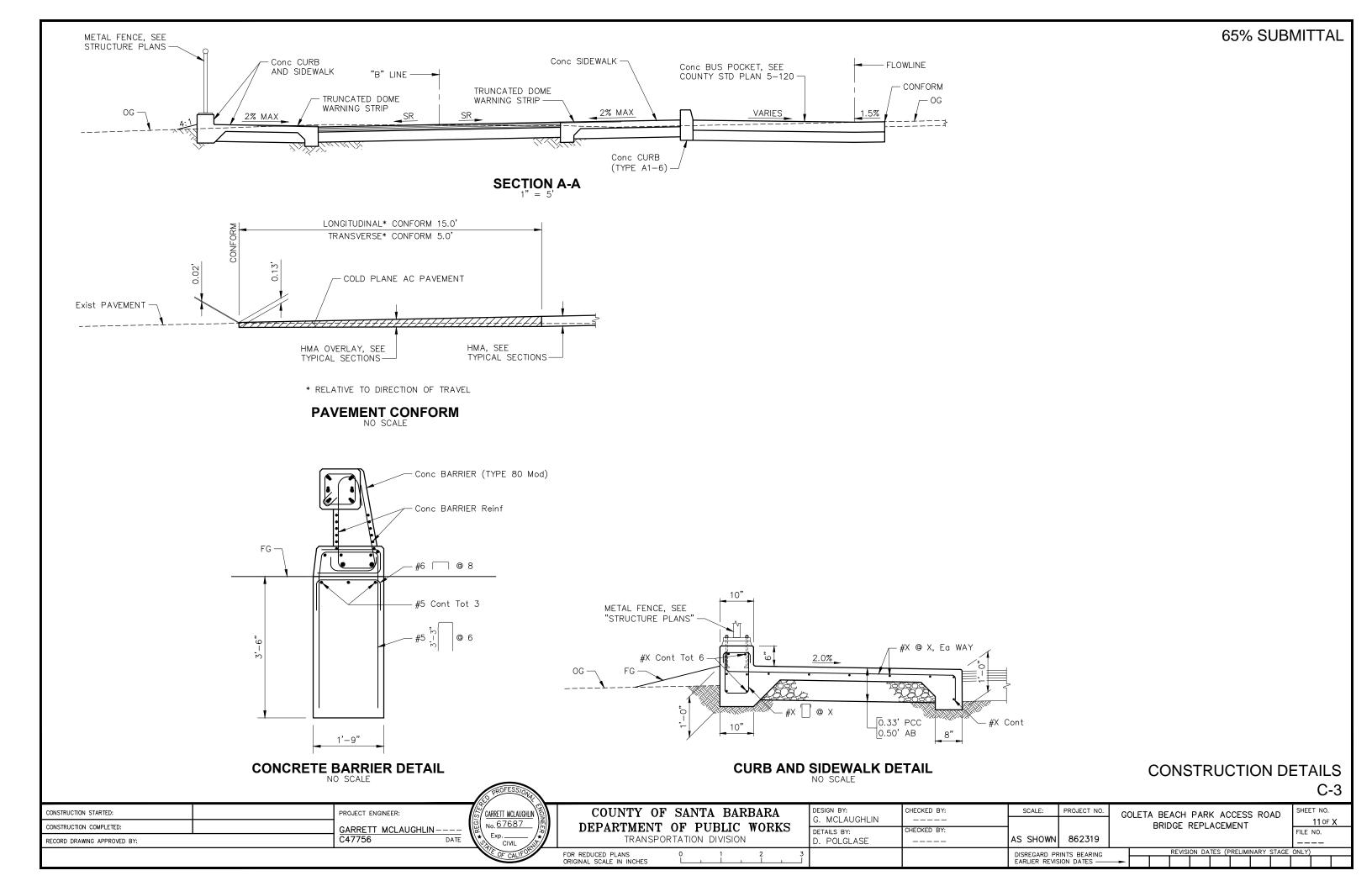


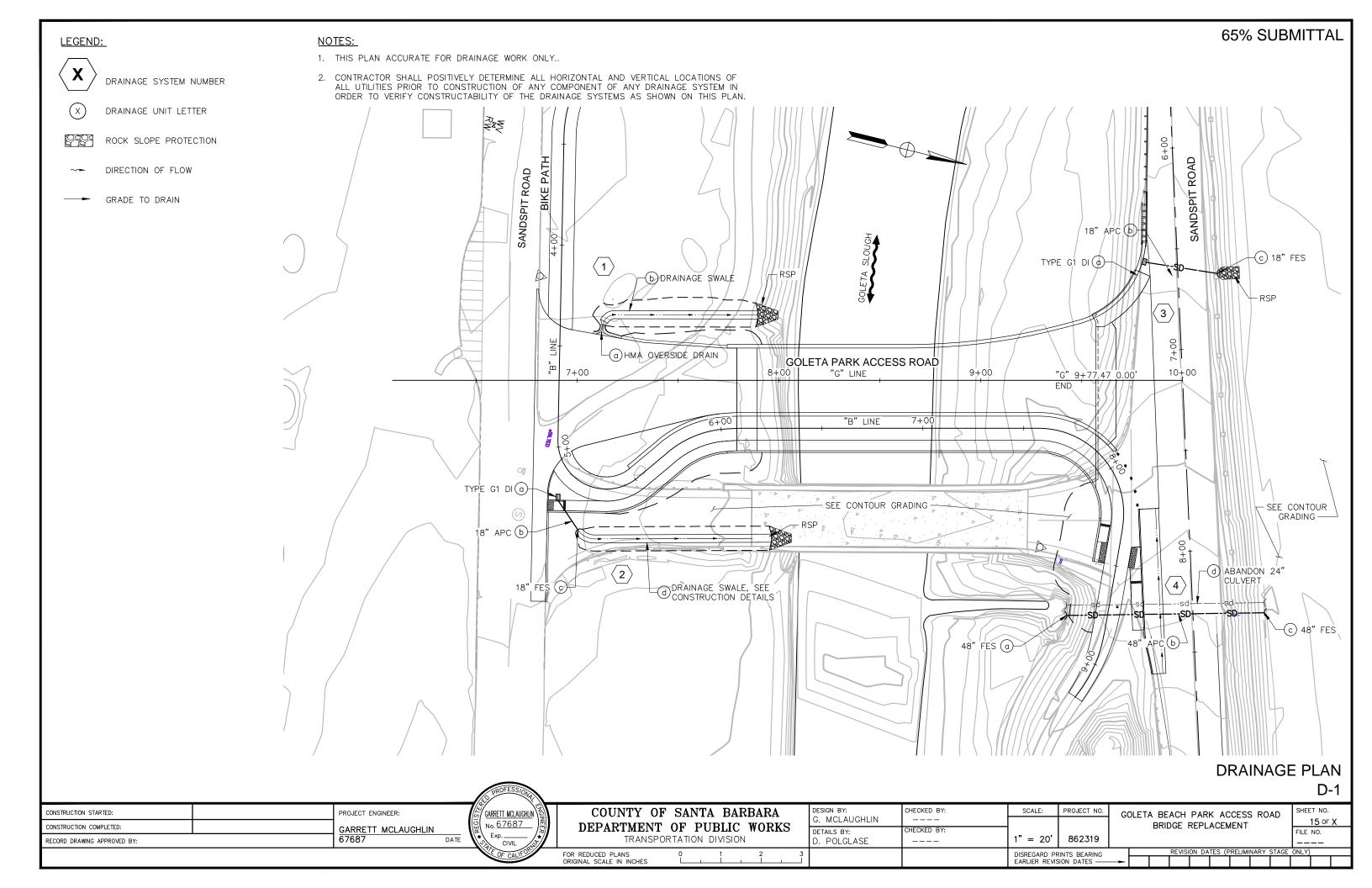


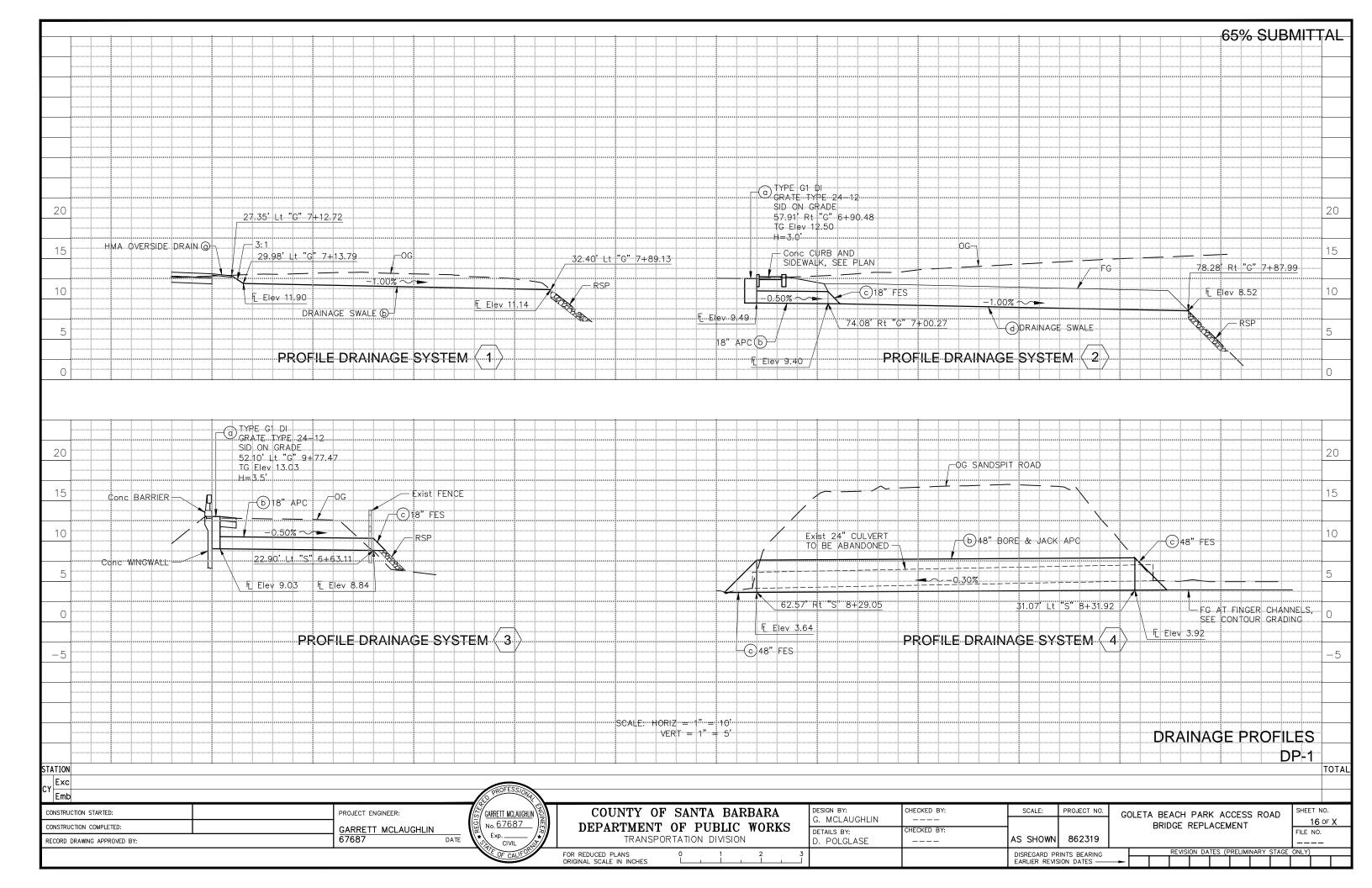




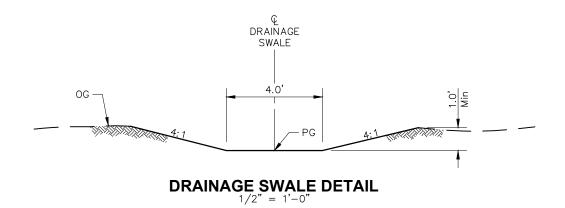








65% SUBMITTAL



# DRAINAGE DETAILS

DD-1

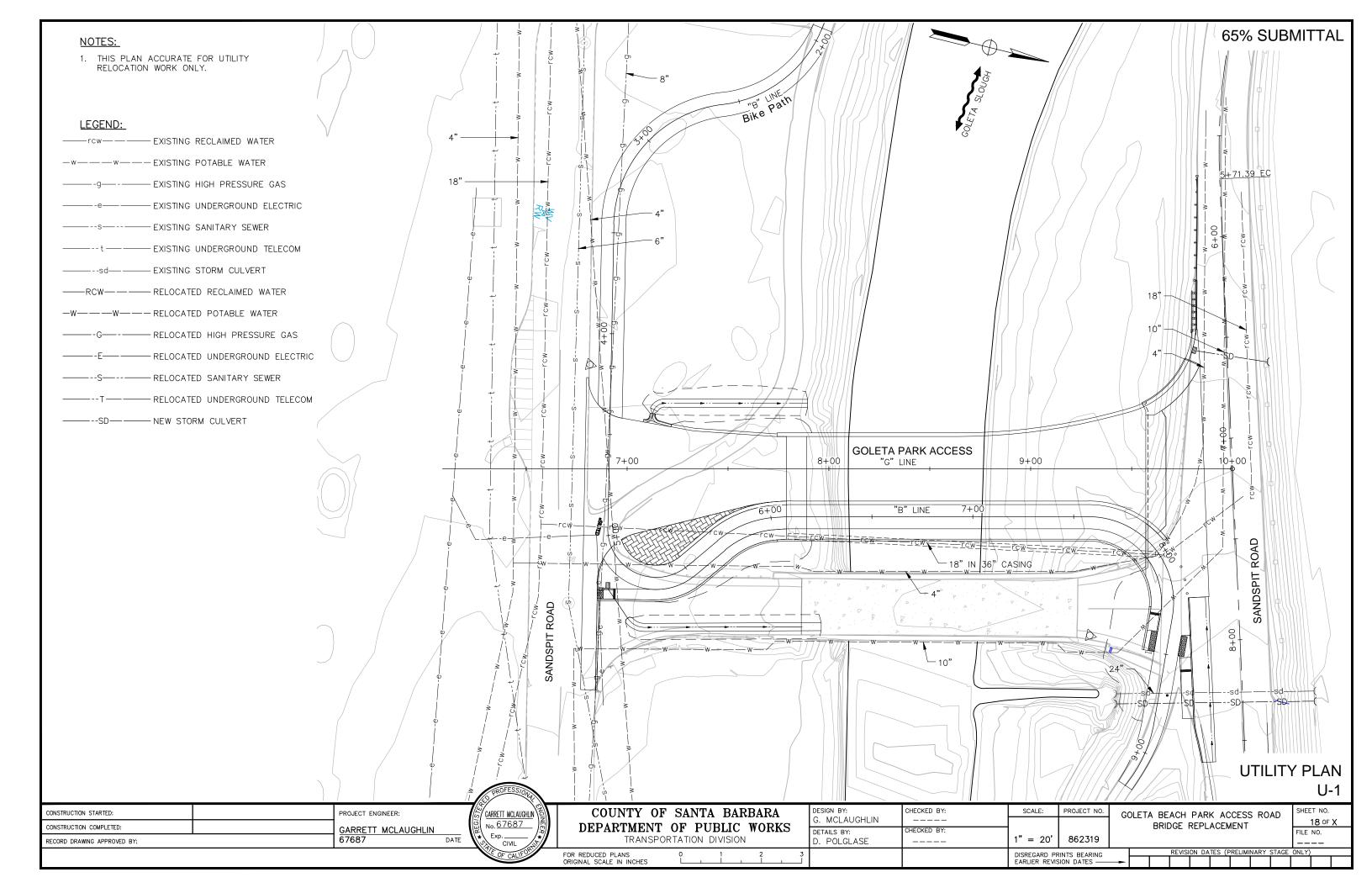
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CONSTRUCTION COMPLETED:	GARRETT MCLAUGHLIN	
RECORD DRAWING APPROVED BY:	67687	DATE

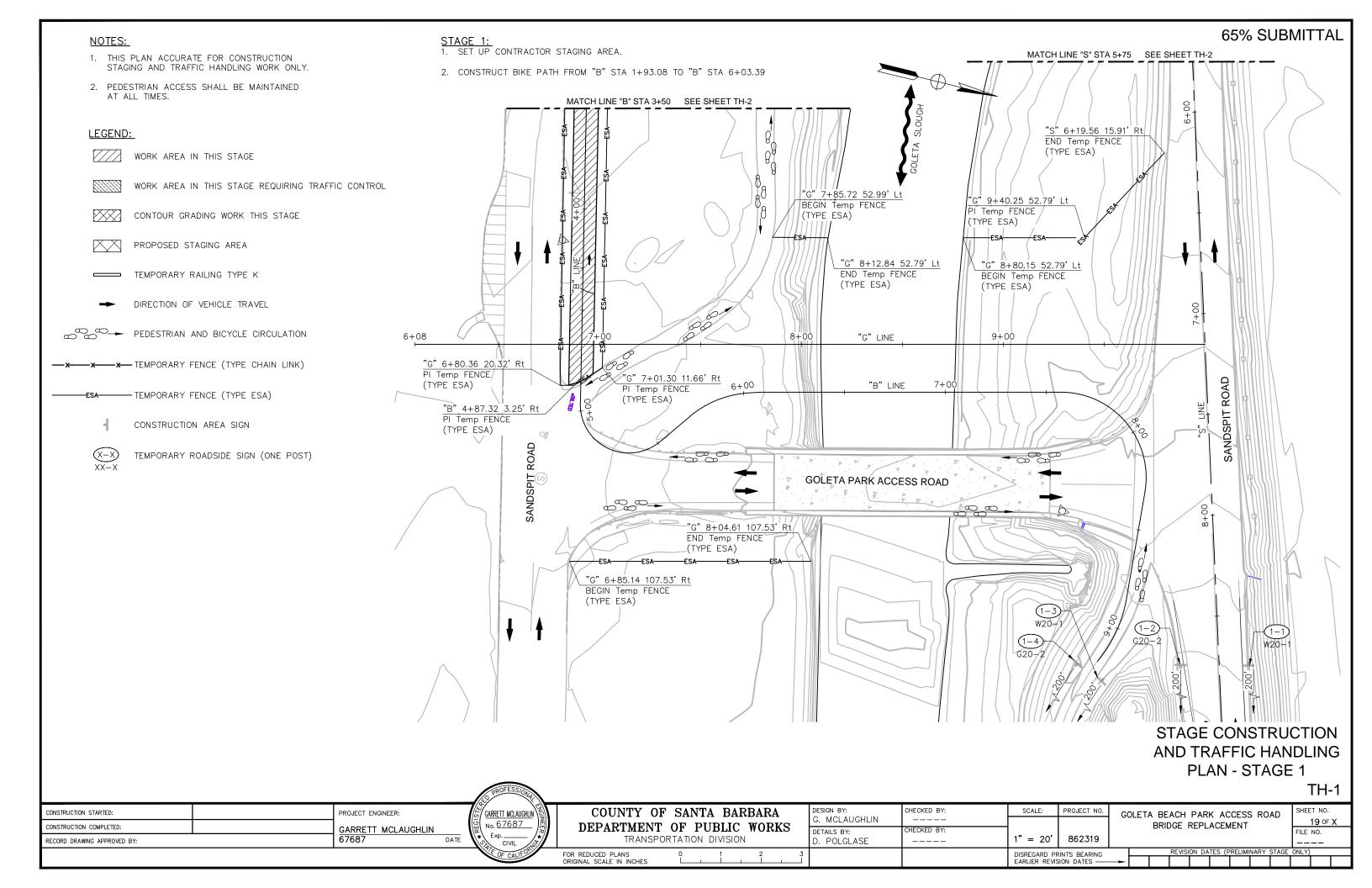
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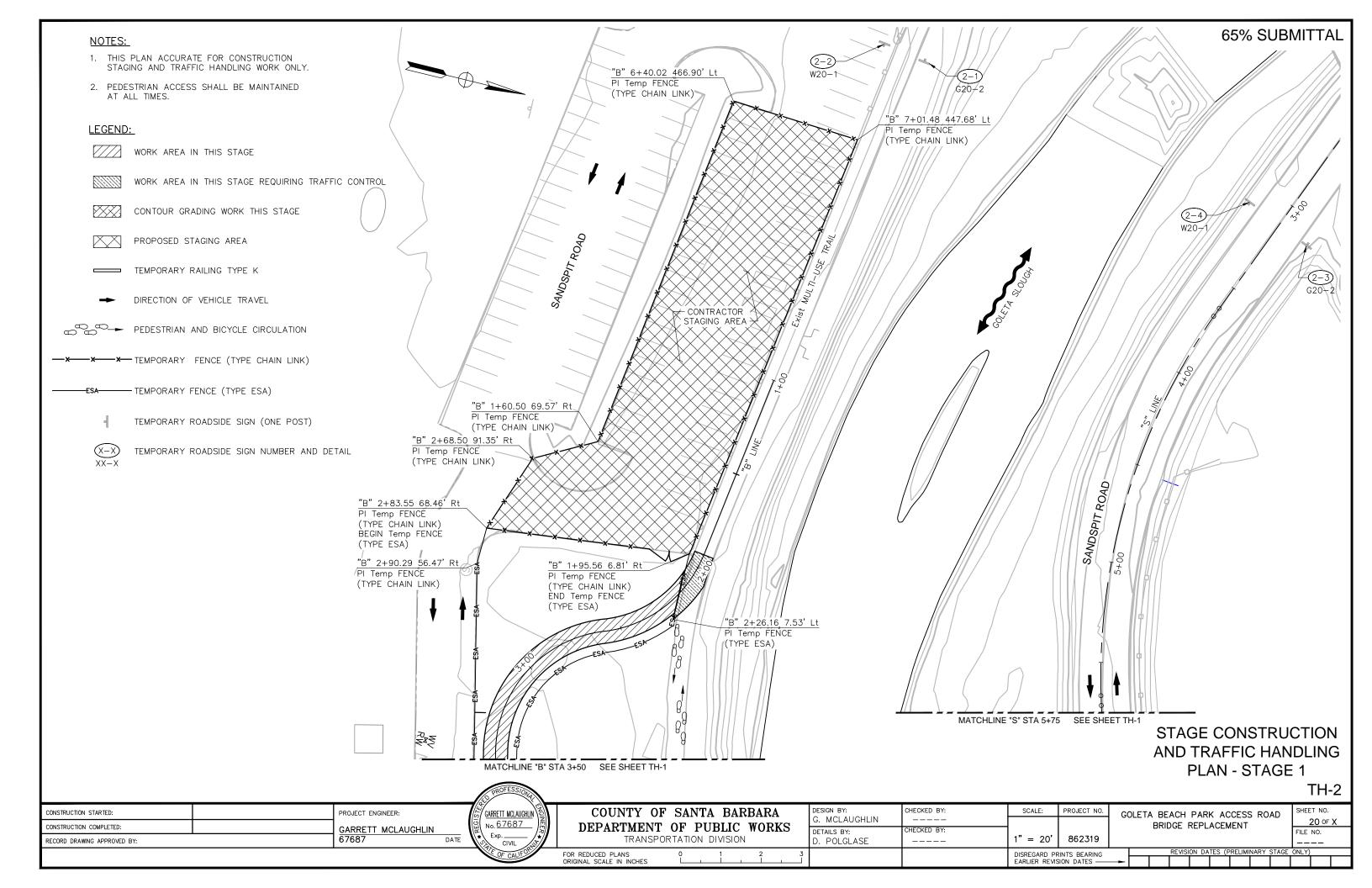
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I	DEPARTMENT	OF PUBLIC WOR	RKS
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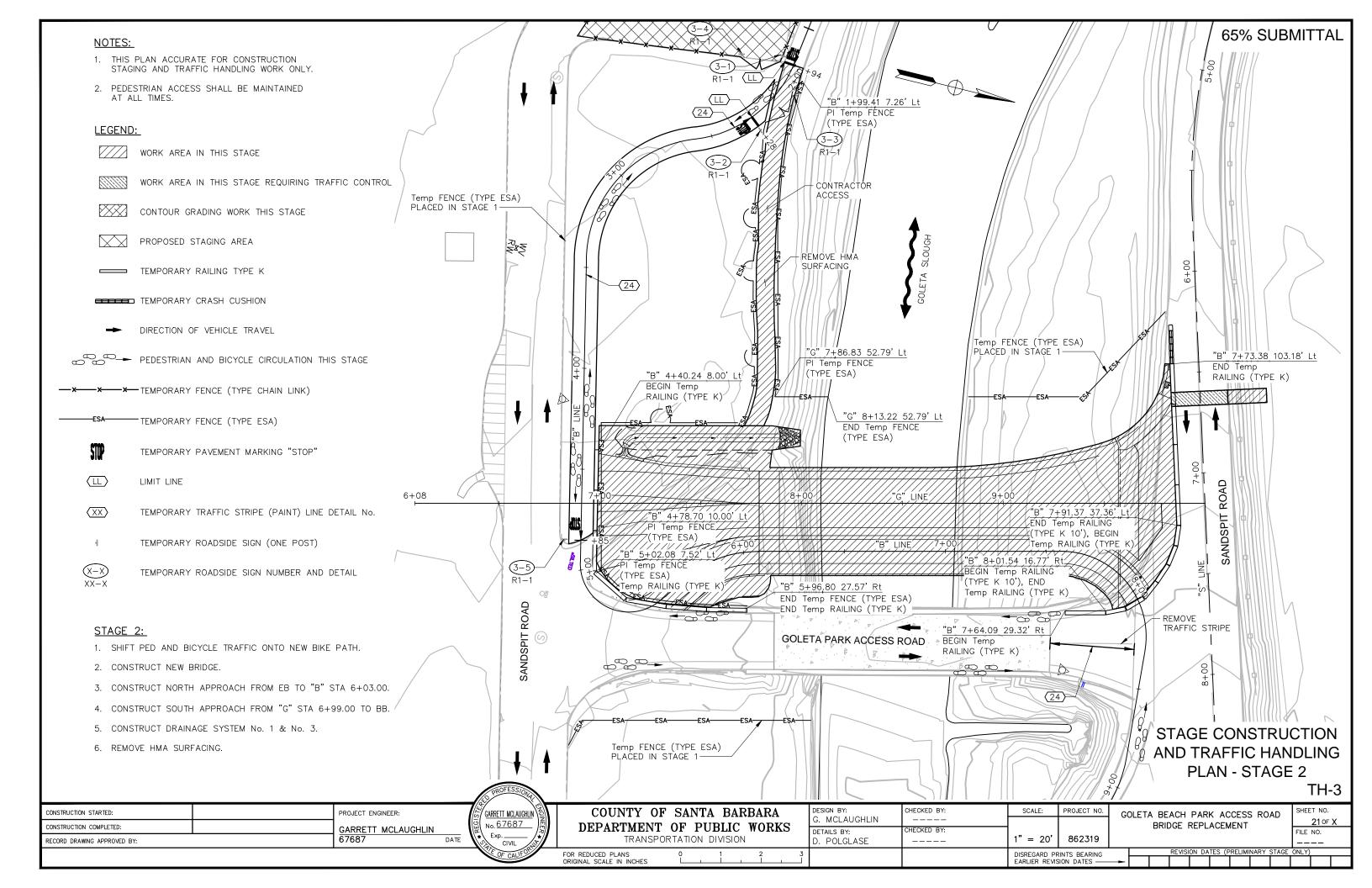
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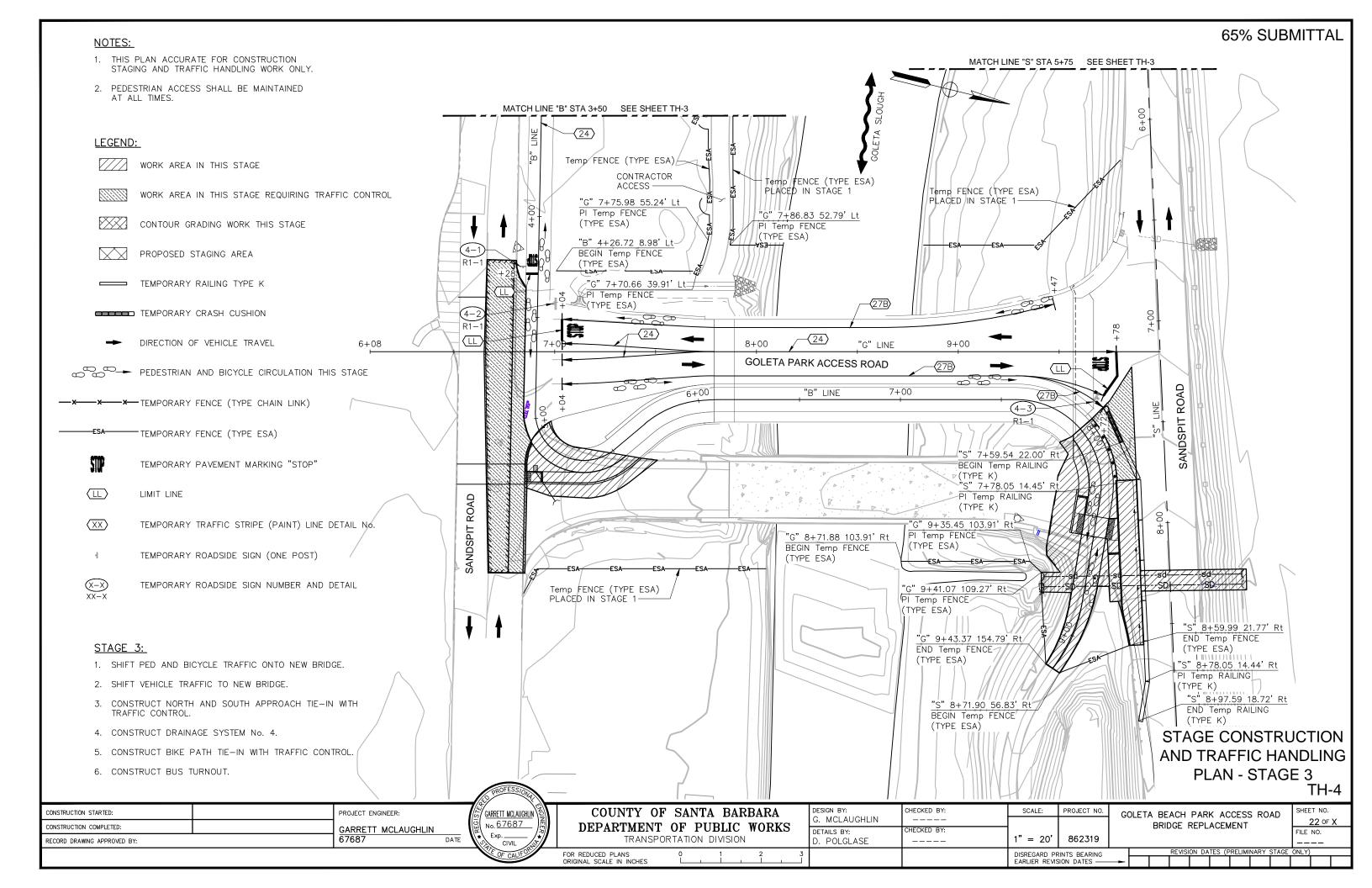
GOLETA BEACH PARK ACCESS ROAD BRIDGE REPLACEMENT	SHEET NO. 17 OF X
	FILE NO.
REVISION DATES (PRELIMINARY STAGE	ONLY)

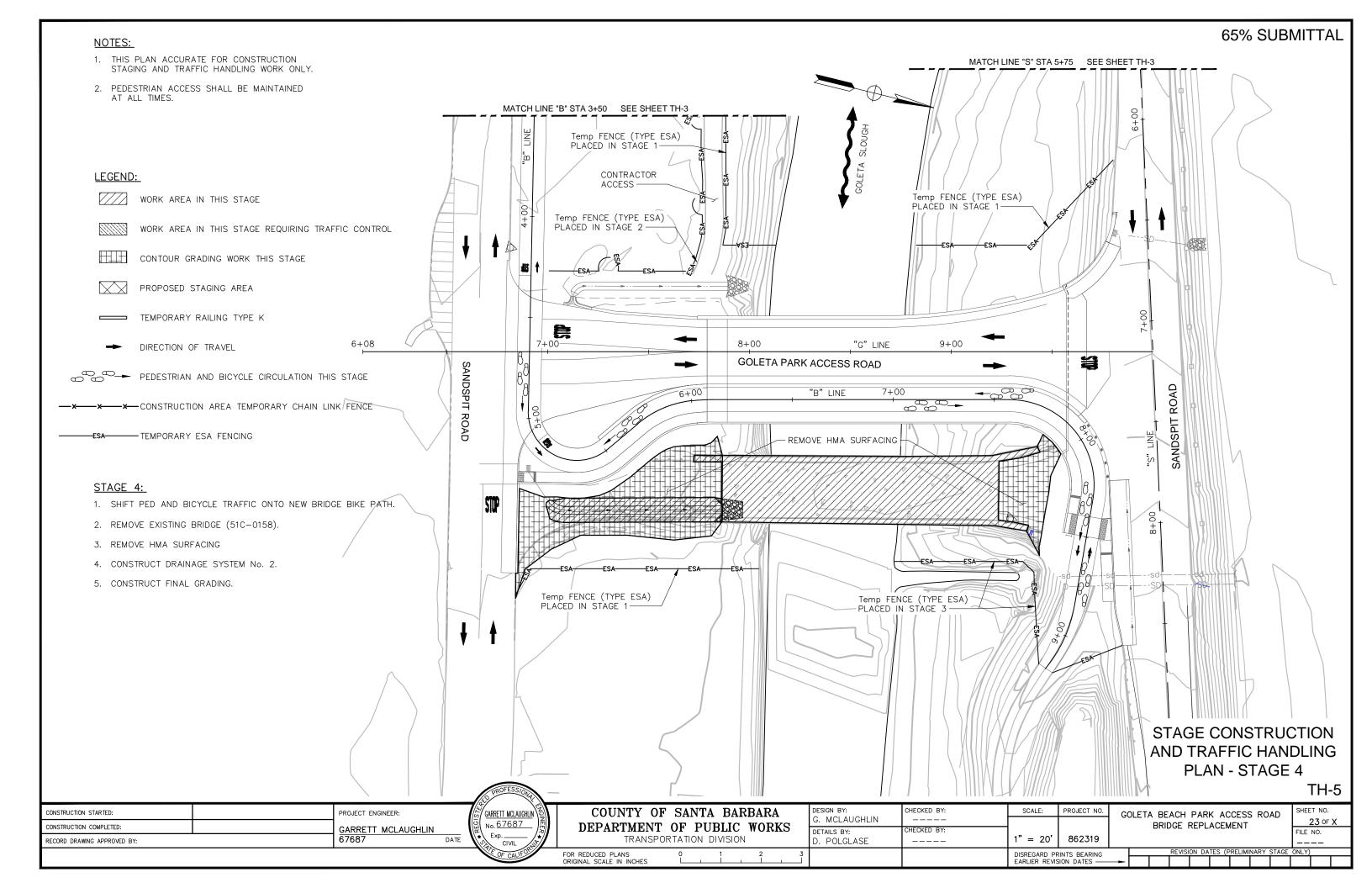


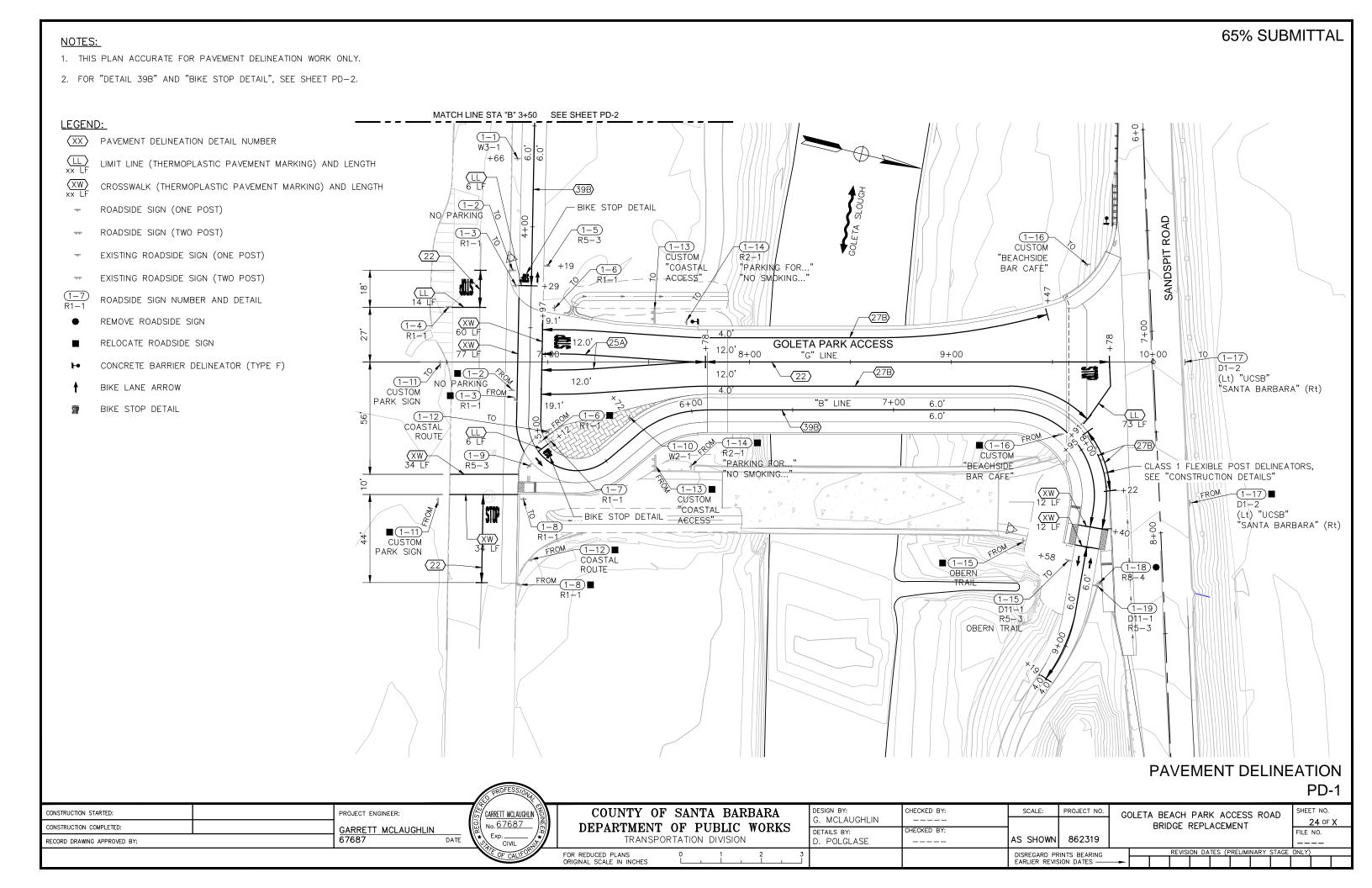


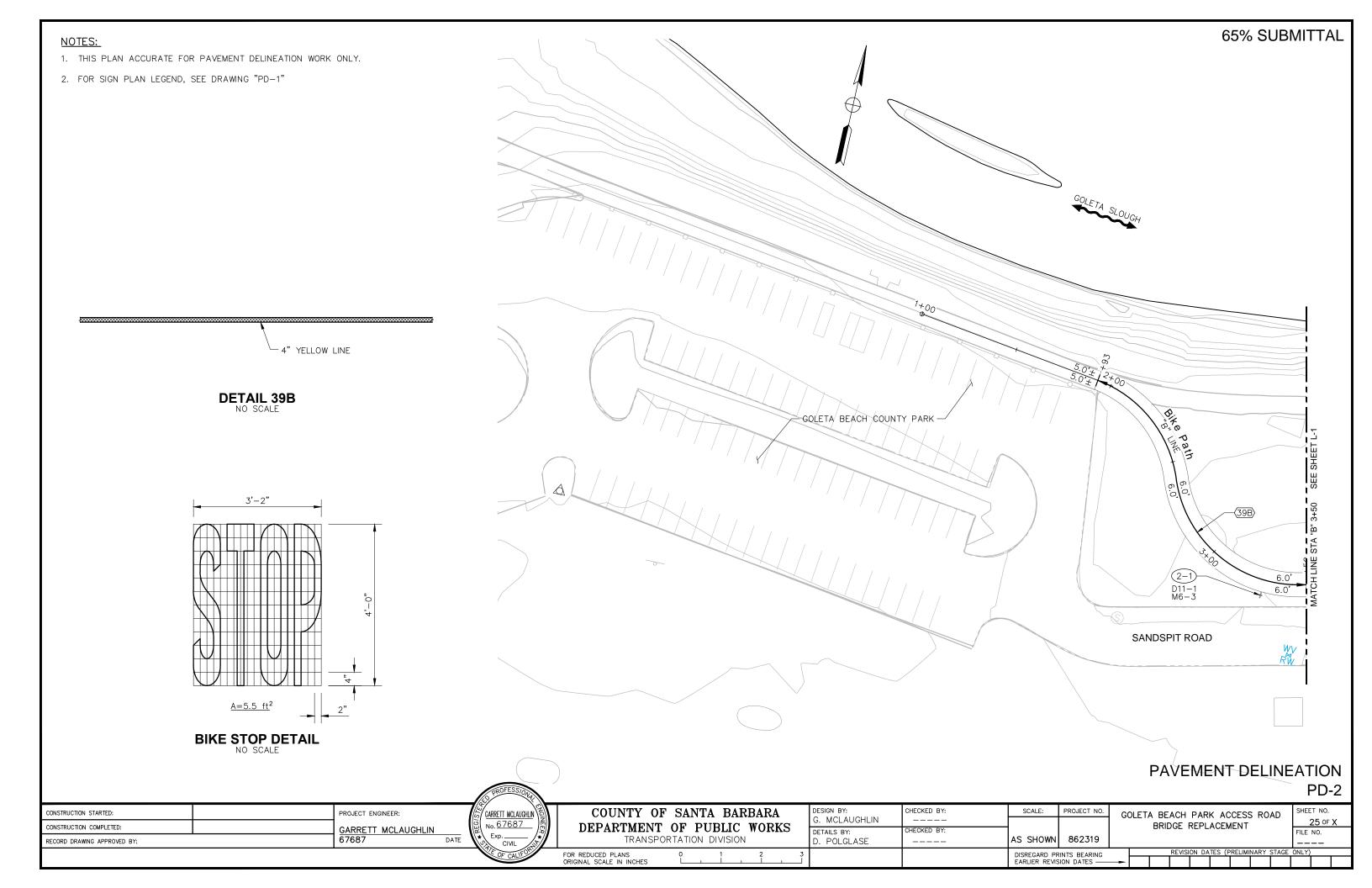


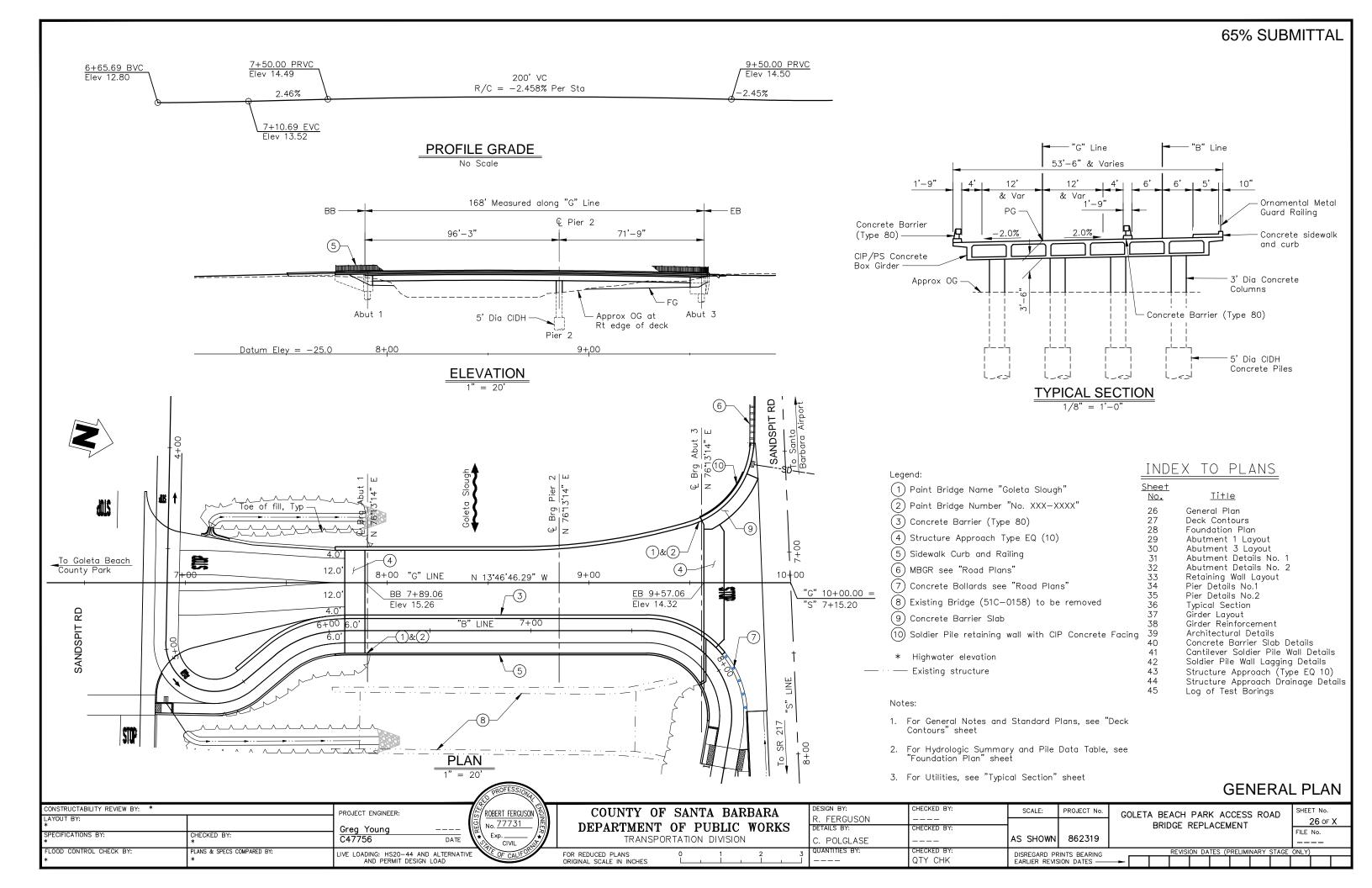


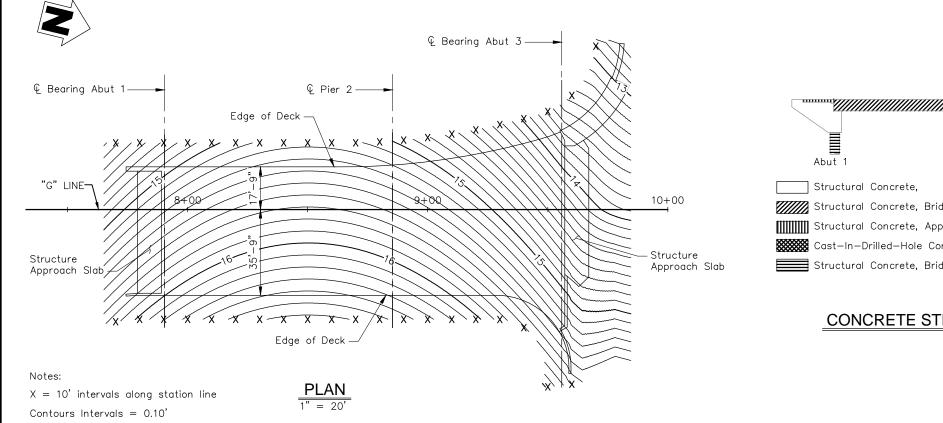


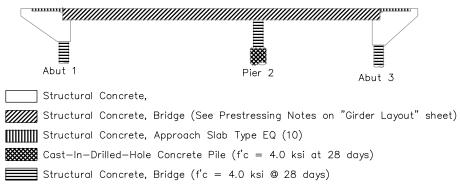












#### CONCRETE STRENGTH AND TYPE LIMITS

Scale

# GENERAL NOTES LOAD AND RESISTANCE FACTOR DESIGN

DESIGN:

AASHTO LRFD Bridge Design Specifications, 4th edition with interims through 2009 and with the Caltrans Amendments, preface dated November 2011.

preface dated November 201

SEISMIC DESIGN:

Contours do not include camber

Caltrans Seismic Design Criteria (SDC), version 1.7, dated April 2013.

DEAD LOAD:

Includes 35 psf for future wearing surface.

LIVE LOADING:

HL93 W/Low-Boy and permit design load.

SEISMIC LOADING:

Soil profile  $V_{30}=350~\text{m/s}$ Moment Magnitude  $M_{\text{max}}=8.0$ Peak Ground Acceleration = 0.23 g

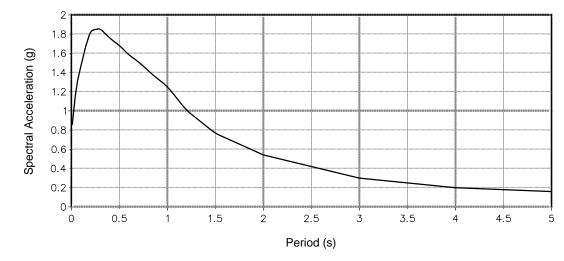
CONCRETE:

 $f_y = 60 \text{ ksi}$  $f_c = 3.6 \text{ ksi}$ 

n = 8

PRESTRESSED CONCRETE:

See "Prestressing Notes" on "Girder Layout" sheet.

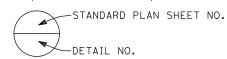


#### ACCELERATION RESPONSE SPECTRA CURVE

No Scale

#### STANDARD PLANS DATED 2010

A10A	Abbreviations (sheet 1 of 2)
A10B	Abbreviations (sheet 2 of 2)
A10C	Lines and Symbols (sheet 1 of 3)
A10D	Lines and Symbols (sheet 2 of 3)
A10E	Lines and Symbols (sheet 3 of 3)
A10F	Legend — Soil (Sheet 1 of 2)
A10G	Legend — Soil (Sheet 2 of 2)
A10H	Legend — Rock
A62C	Limits of Payment for Excavation
	and Backfill— Bridge
B0-1	Bridge Details
B0-3	Bridge Details
B0-5	
B0-13	
B6-21	,
B7-1	
B7-6	<i>3</i> 1
B7-8	3
B7-10	, i
B7-11	
	Cast-in-Place Prestressed Girder Details
	Concrete Barrier Type 26
	Concrete Barrier Type 732
B14-3	l
	(Conduits less than 4")



# **DECK CONTOURS**

DC-1

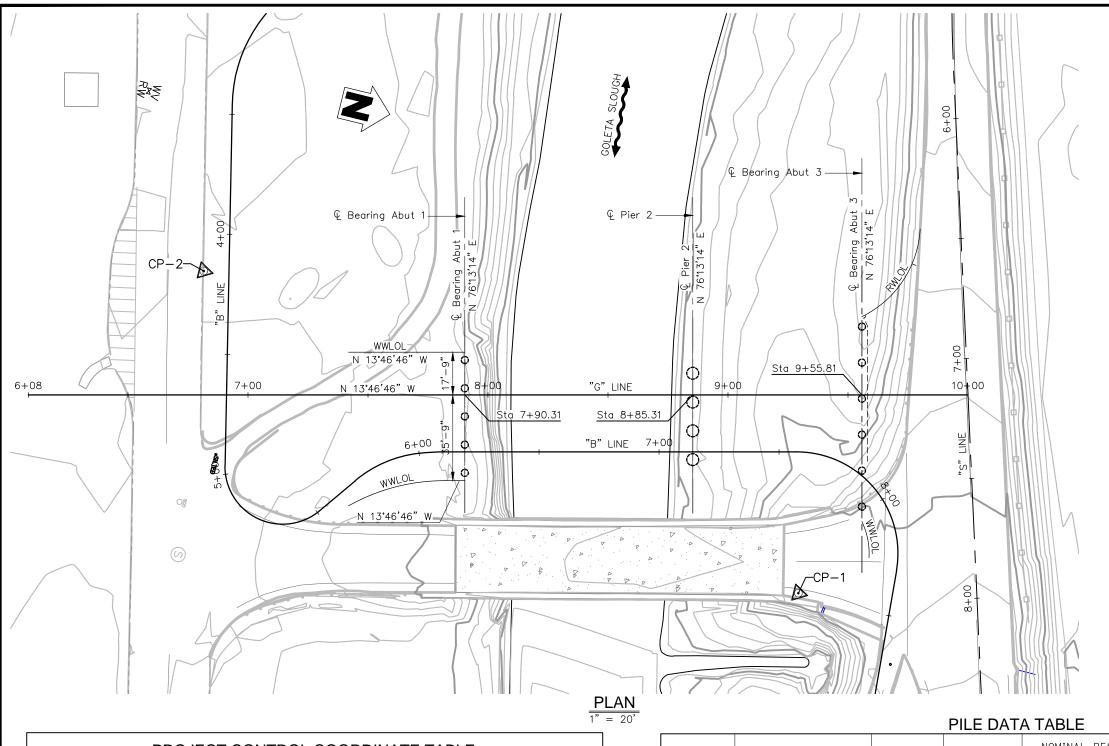
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CONSTRUCTION STARTED:		PROJECT ENGINEER:	37.5	1
CONSTRUCTION COMPLETED:		Greg Young	REG/	
RECORD DRAWING APPROVED BY:		C47756	DATE (	% '/
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ERGUSON E	COUNTY OF SANTA BARBARA
731 原	DEPARTMENT OF PUBLIC WORKS
/IL	TRANSPORTATION DIVISION

FOR REDUCED PLANS ORIGINAL SCALE IN INCHES

DESIGN BY:		CHECKED BY:	SCALE:	PROJECT NO.	
	R. FERGUSON				
	DETAILS BY:	CHECKED BY:			
	D. POLGLASE		AS SHOWN	862319	
	QUANTITIES BY:	CHECKED BY:	DISREGARD PRINTS BEARIN		
			EARLIER REVIS	SION DATES	

3(	DLETA BEACH PARK ACCESS ROAD BRIDGE REPLACEMENT	SHEET NO. <b>27</b> OF
		FILE NO.
	REVISION DATES (PRELIMINARY STAGE	ONLY)



65% SUBMITTAL

Indicates CIDH Concrete Pile

Legend:

#### HYDROLOGIC SUMMARY

Drainage area: XXX.XX Square Miles Design Overtopping Base Flood Flood Flood Frequency (years) 50 XXXXXXDischarge (cubic feet per second) XXX XXX XXXWater Surface Elev at Bridge (ft) 7.0 XXX XXX

Flood plain data based upon information available when the plans were prepared and are shown to meet Federal requirements. The accuracy of said information is not warranted by the County and interested or affected parties should make their own investigations.

## **QUANTITIES**

Structural Concrete, Bridge	CY
Structural Concrete, Approach Slab (Type EQ)	CY
Prestressing Cast—In—Place Concrete	LS
Bar Reinforcing Steel (Bridge)	LB
Structural Excavation (Bridge)	CY
Structural Excavation (Type D)	CY
Structural Backfill (Bridge)	CY
Joint Seal (Type B MR=2")	LF
36" Cast—In—Drilled—Hole Concrete Piling	LF
Concrete Barrier (Type 80)	LF
Concrete Sidewalk	LF
Tubular Bicycle Railing	LF
Ornamental Metal Guardrailing	LF
Bridge Removal	LS

	PROJECT CONTROL COORDINATE TABLE									
POINT	POINT NORTHING EASTING ELEVATION LINE STATION OFFSET Rt/Lt DESCRIPTION									
CP-1	1,979,505.73	6,009,362.07	15.60	"G"	9+29.31	82.65'	RT	CP MAG & TIN		
CP-2	CP-2 1,979,233.15 6,009,290.71 13.30 "G" 6+81.57 51.58' LT CP MAG & TIN									

2							
LOCATION	PILE TYPE	CUT-OFF	DESIGN	NOMINAL RE	SISTANCE	DESIGN TIP	SPECIFIED TIP
LOCATION	ELEVATION	LOADING	COMPRESSION	TENSION	ELEVATION	ELEVATION	
Abu† 1	36" CIDH	N/A	250	540	N/A	-36(1), -37(2)	-37
Pier 2	60" CIDH	-7	1500	2700	N/A	-89(1), -50(2)	-89
Abut 3	36" CIDH	N/A	250	460	N/A	-37(1), -48(2)	-48

Design Tip Elevation is controlled by the following demands:
(1) Compression, (2) Lateral Loads.
Tip elevations are controlled by liquifaction and should not be raised. For seismic load combinations consider post liquefaction downdrag of 85 kips per pile at abutments and 85 kips per pile at piers. Design scour at piers is Elev xxxx

FOUNDATION PLAN	
FP-1	

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CONSTRUCTION STARTED:	PROJECT ENGINEER:	STE	ROBERT FERGUSON
CONSTRUCTION COMPLETED:	Greg Young	REGION	\ _
RECORD DRAWING APPROVED BY:	C47756 DATE		CIVIL CIVIL
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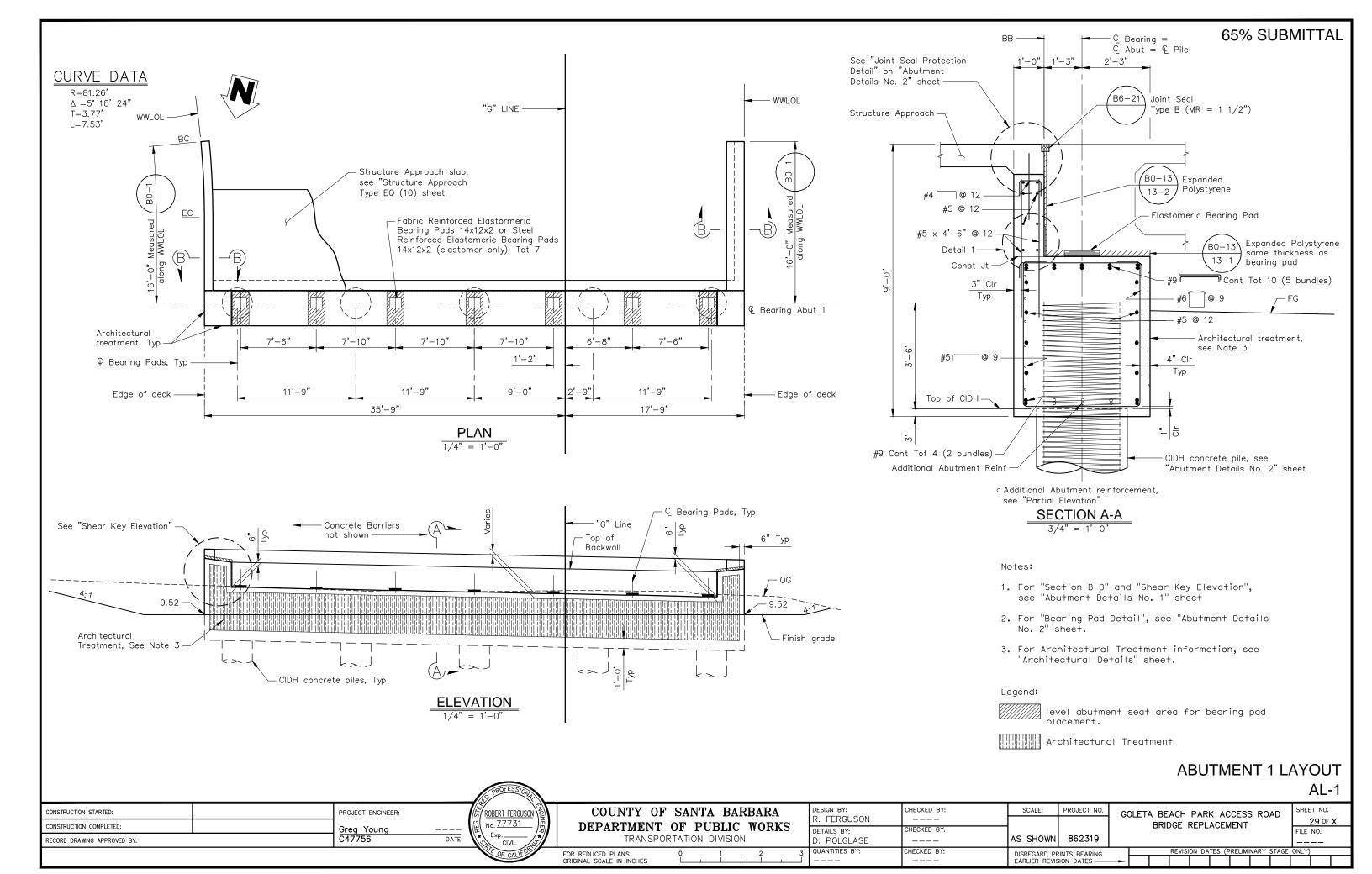
COUNTY	OF	SA	NTA	BAF	RBARA
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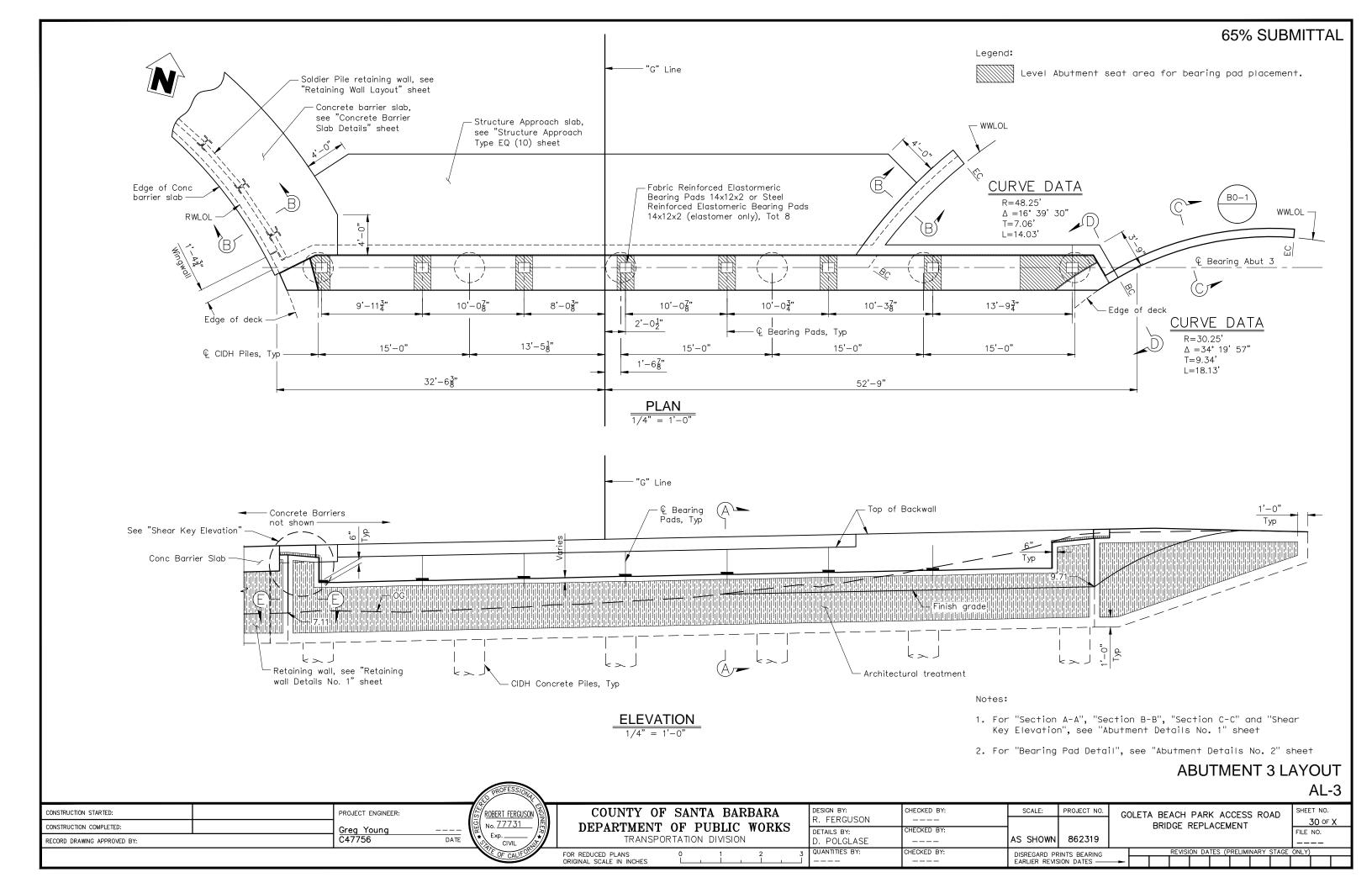
FOR REDUCED PLANS ORIGINAL SCALE IN INCHES

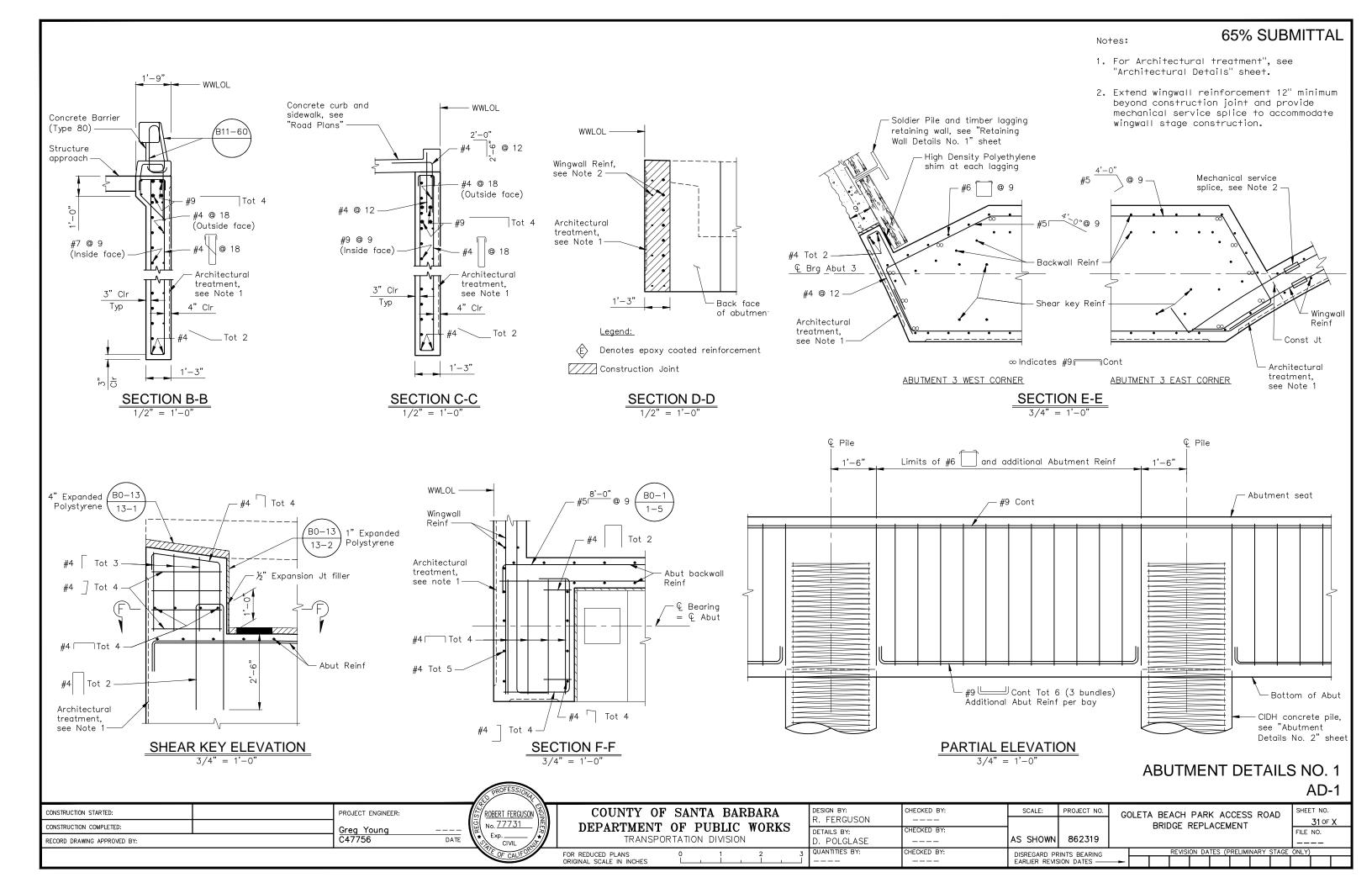
DESIGN BY:	CHECKED BY:	SCALE:	PROJECT NO.		
R. FERGUSON					
DETAILS BY:	CHECKED BY:				
D. POLGLASE		AS SHOWN	862319		
QUANTITIES BY:	CHECKED BY: QTY CHK		RD PRINTS BEARING REVISION DATES ——		

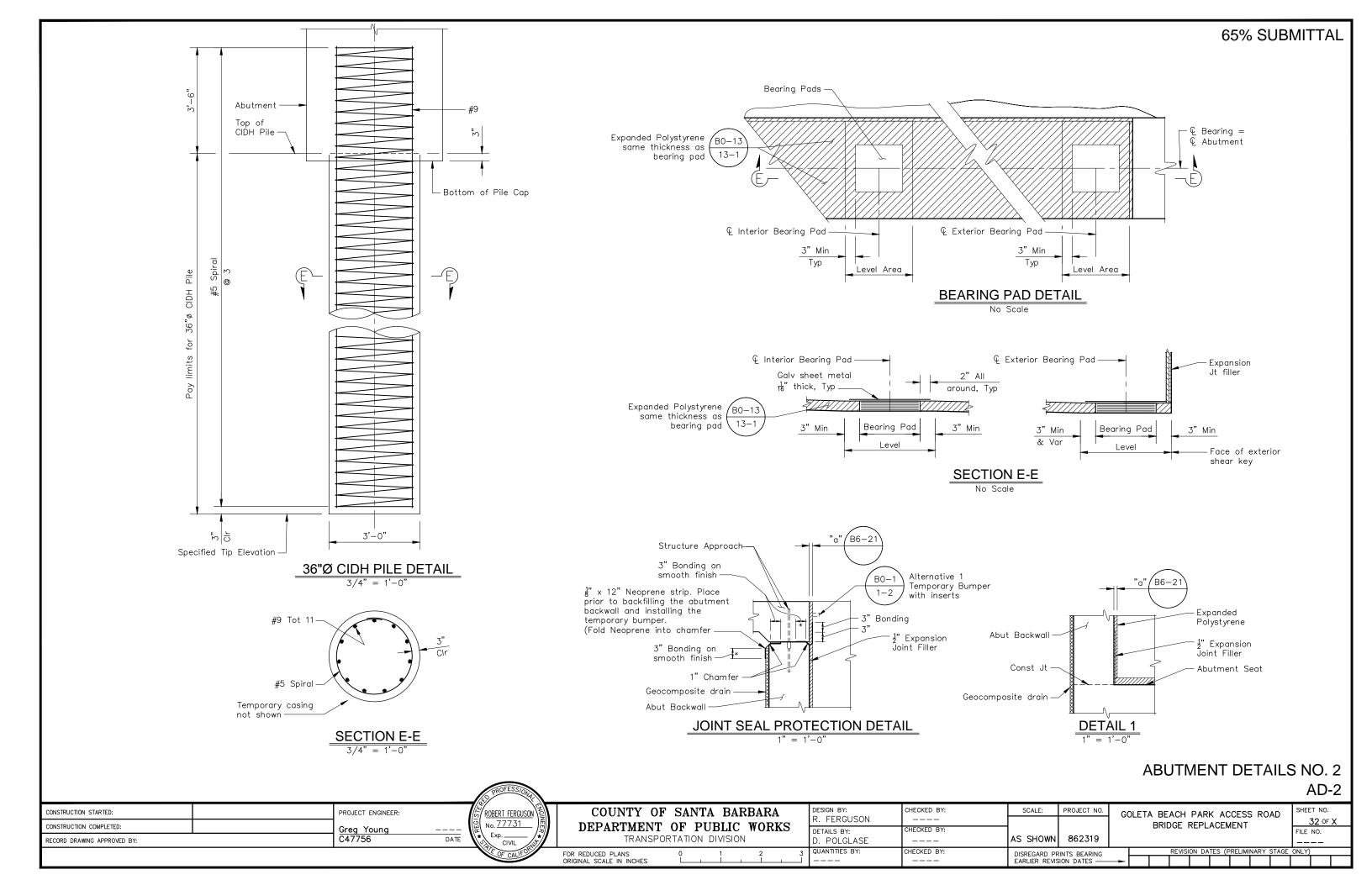
GOLETA BEACH PARK ACCESS ROAD	SHEET NO.
BRIDGE REPLACEMENT	28 OF >
	FILE NO.

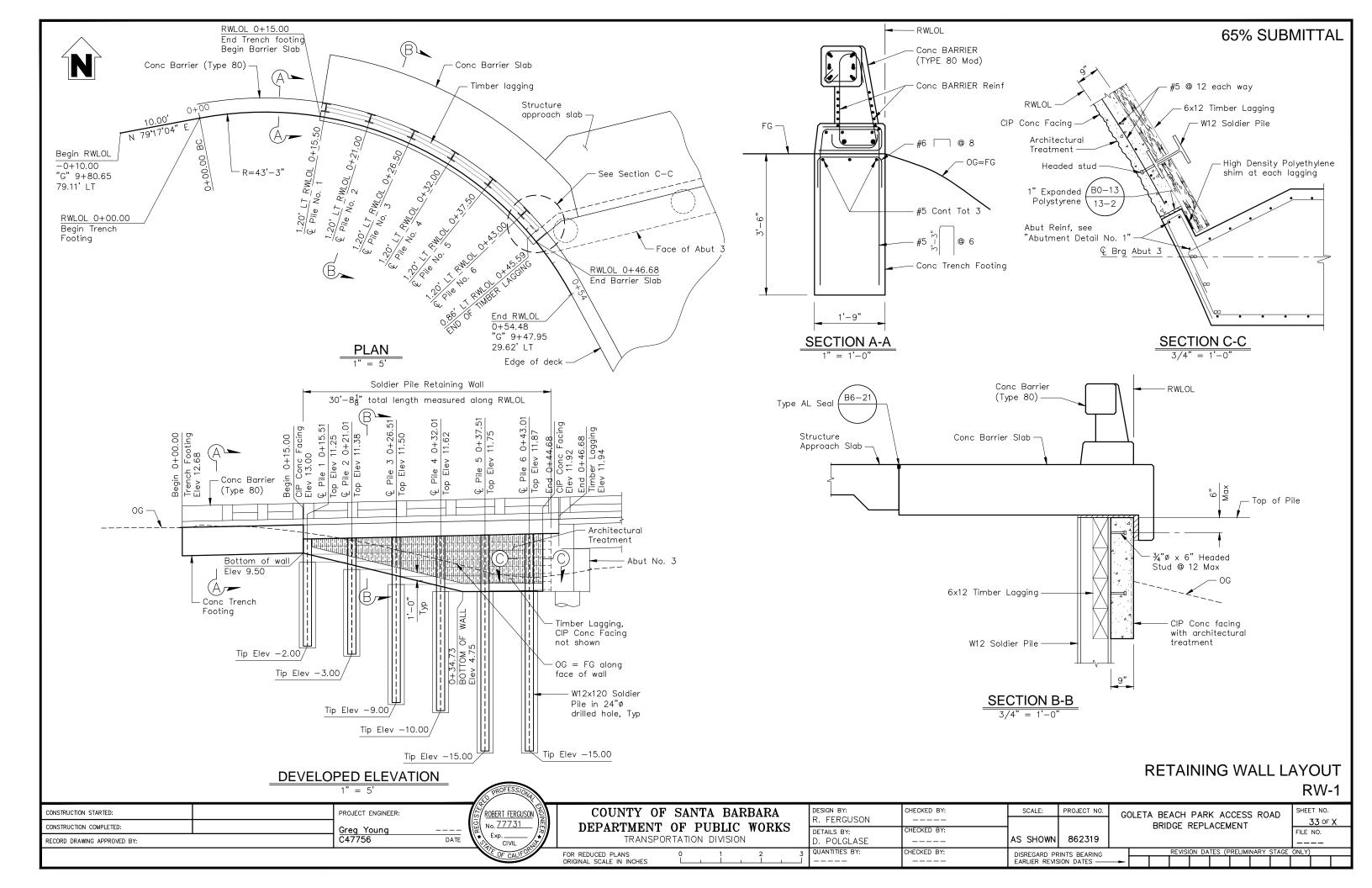
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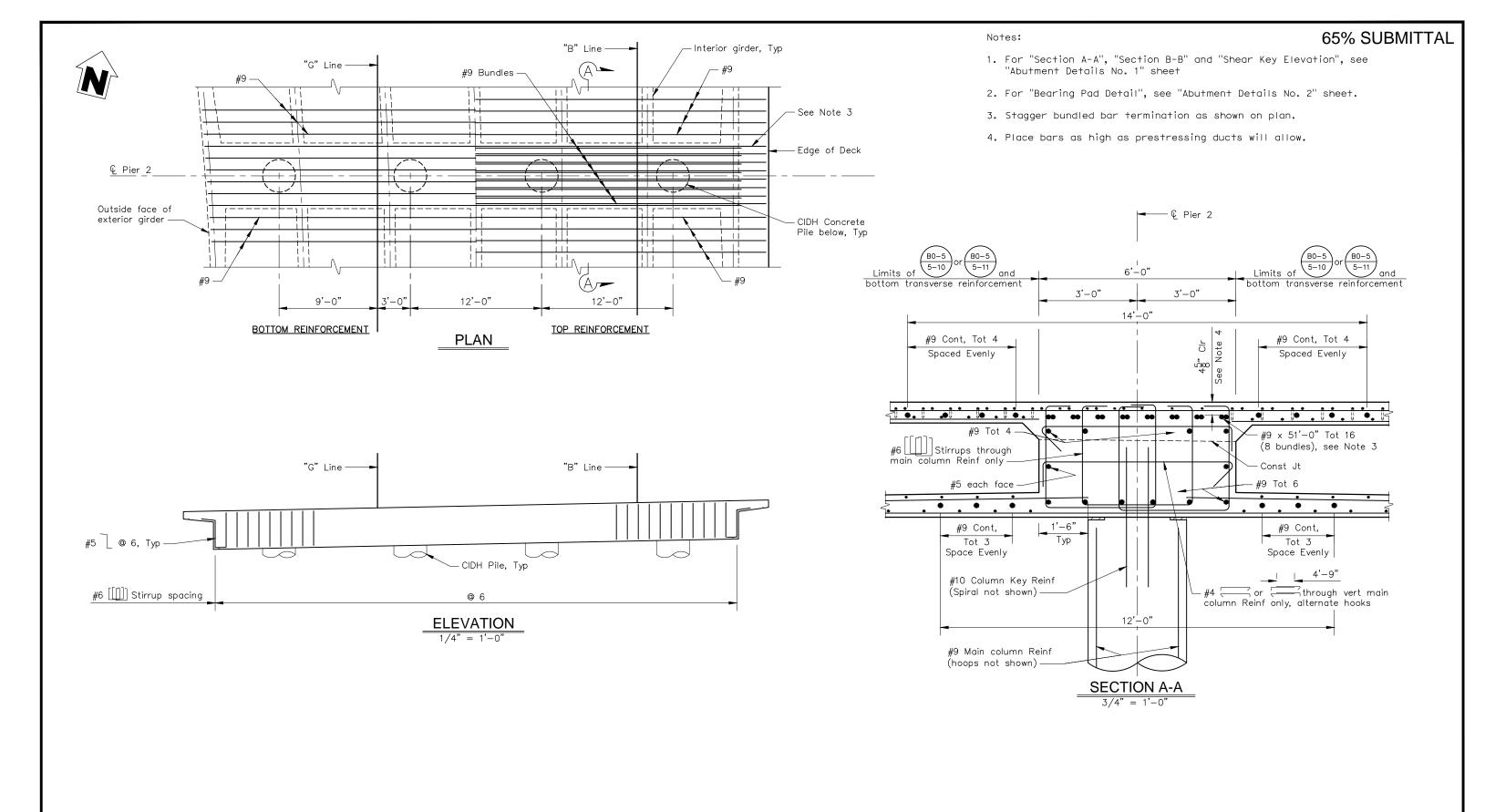












#### PIER DETAILS NO. 1

GOLETA BEACH PARK ACCESS ROAD

BRIDGE REPLACEMENT

PROJECT NO.

862319

SCALE:

AS SHOWN

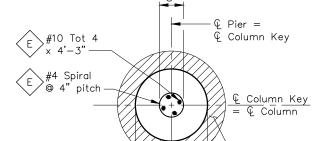
DISREGARD PRINTS BEARING EARLIER REVISION DATES — PD-1

34 OF X

FILE NO.

CONSTRUCTION STARTED:	PROJECT ENGINEER:	[5] ROBERT FERGUSON (회	COUNTY OF	' SANTA BARBARA	R. FERGUSON	CHECKED BY:	⊢
CONSTRUCTION COMPLETED:	Grea Young		DEPARTMENT	OF PUBLIC WORKS	DETAILS BY:	CHECKED BY:	$\dashv$
RECORD DRAWING APPROVED BY:	C47756	DATE EXP	TRANSPO	DRTATION DIVISION	D. POLGLASE		1
		OF CALIFOR	FOR REDUCED PLANS	0 1 2	QUANTITIES BY:	CHECKED BY:	Т

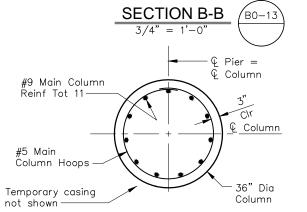
#### 65% SUBMITTAL



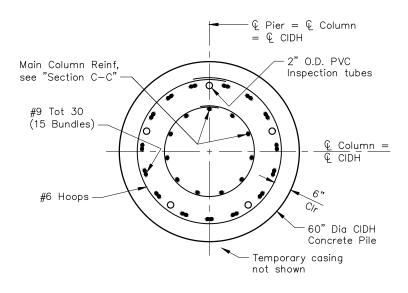
-3" Expanded Polystyrene

#### Denotes Epoxy Coated Reinforcement

2'-0" Column Key



# SECTION C-C

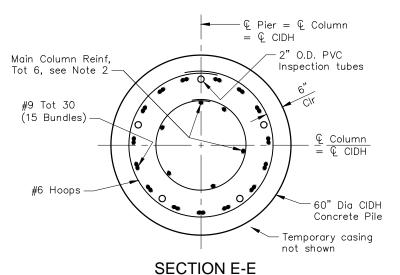


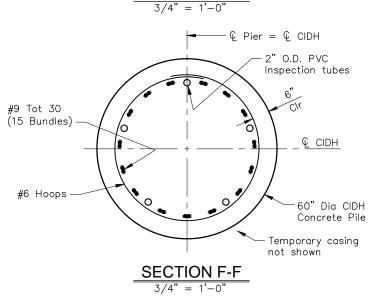
SECTION D-D

3/4" = 1'-0"

#### Notes:

- 1. For "Pier "Section A-A", see "Pier Details No. 1" sheet
- 2. Stagger length of alternating main longitudinal column bars into shaft.
- 3. All hoops shall be "Ultimate" butt splice continuous.
- 4. No splices allowed in any region of main column reinforcement.





#### PIER DETAILS NO. 2

PD-2

COUNTY OF SANTA BARBARA
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

FOR REDUCED PLANS ORIGINAL SCALE IN INCHES 
 DESIGN BY:
 CHECKED BY:
 SCALE:
 PROJECT NO.

 R. FERGUSON
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 DETAILS BY:
 CHECKED BY:
 AS SHOWN
 862319

 QUANTITIES BY:
 CHECKED BY:
 DISREGARD PRINTS BEARING EARLIER REVISION DATES

GOLETA BEACH PARK ACCESS ROAD
BRIDGE REPLACEMENT

REVISION DATES (PRELIMINARY STAGE ONLY)

SHEET NO.
35 OF X
FILE NO.
----

CONSTRUCTION STARTED:	PROJECT ENGINEER:	
CONSTRUCTION COMPLETED:	Greg Young	
RECORD DRAWING APPROVED BY:	C47756	DATE

TYPE 2 CIDH PILE DETAIL

€ Pier —

Expanded polystyrene

Approx FG

ROBERT FERGUSON

CIVIL

No. <u>77731</u>

Pier Cap -

Top of Column Pile -

ts #6

Cut-off Elev

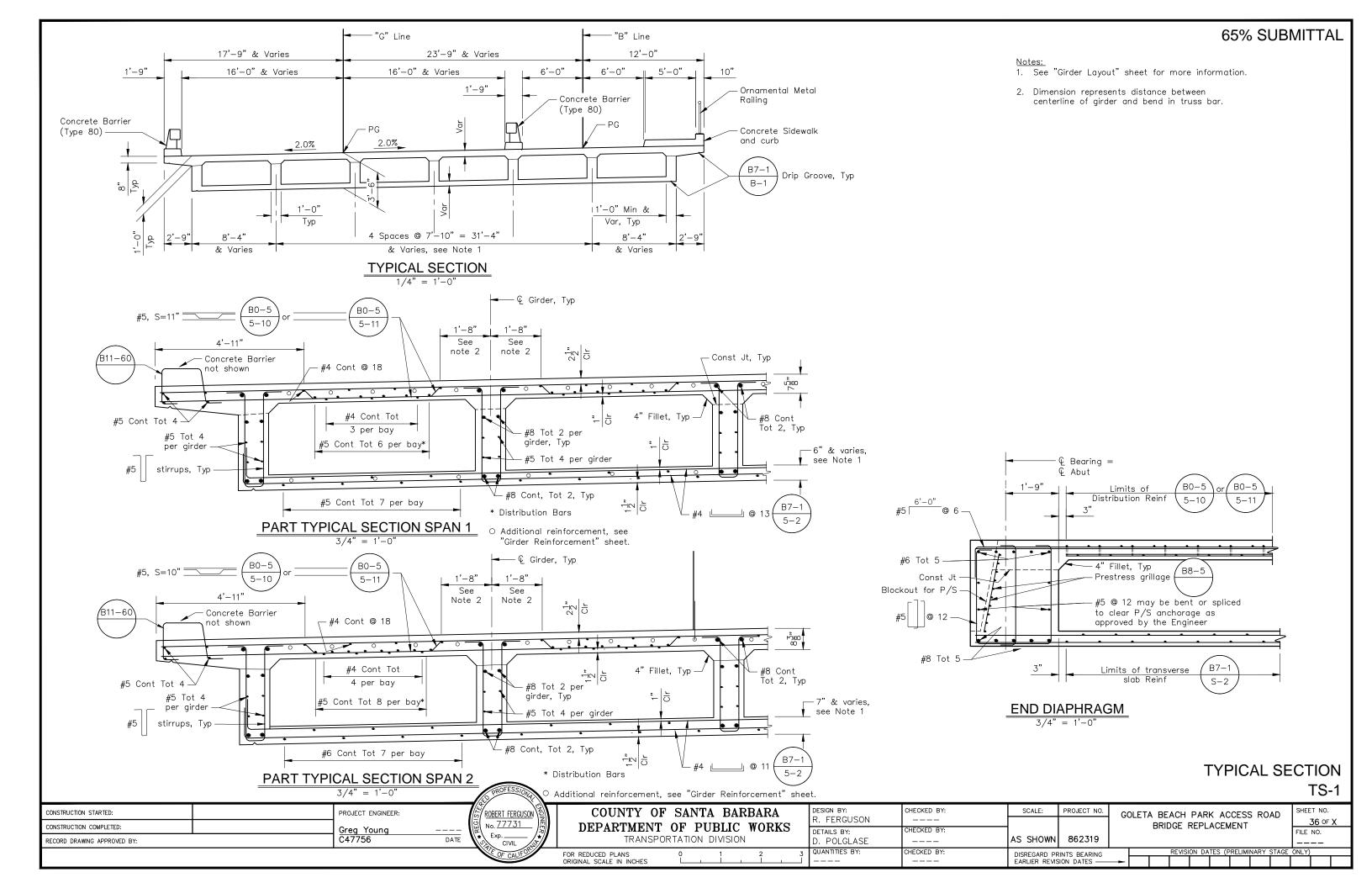
of 60"ø CIDH Concrete

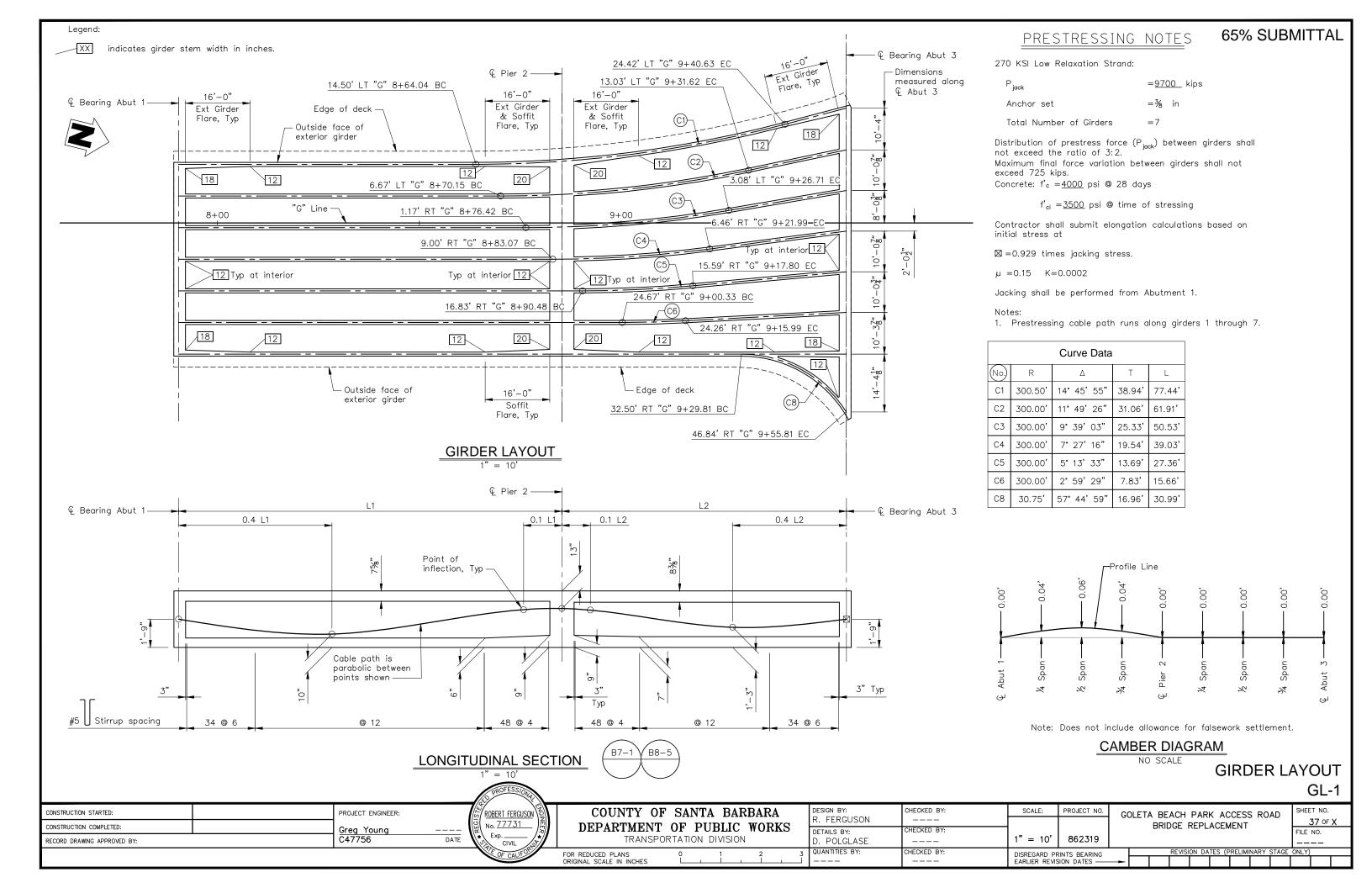
Hoops © 6

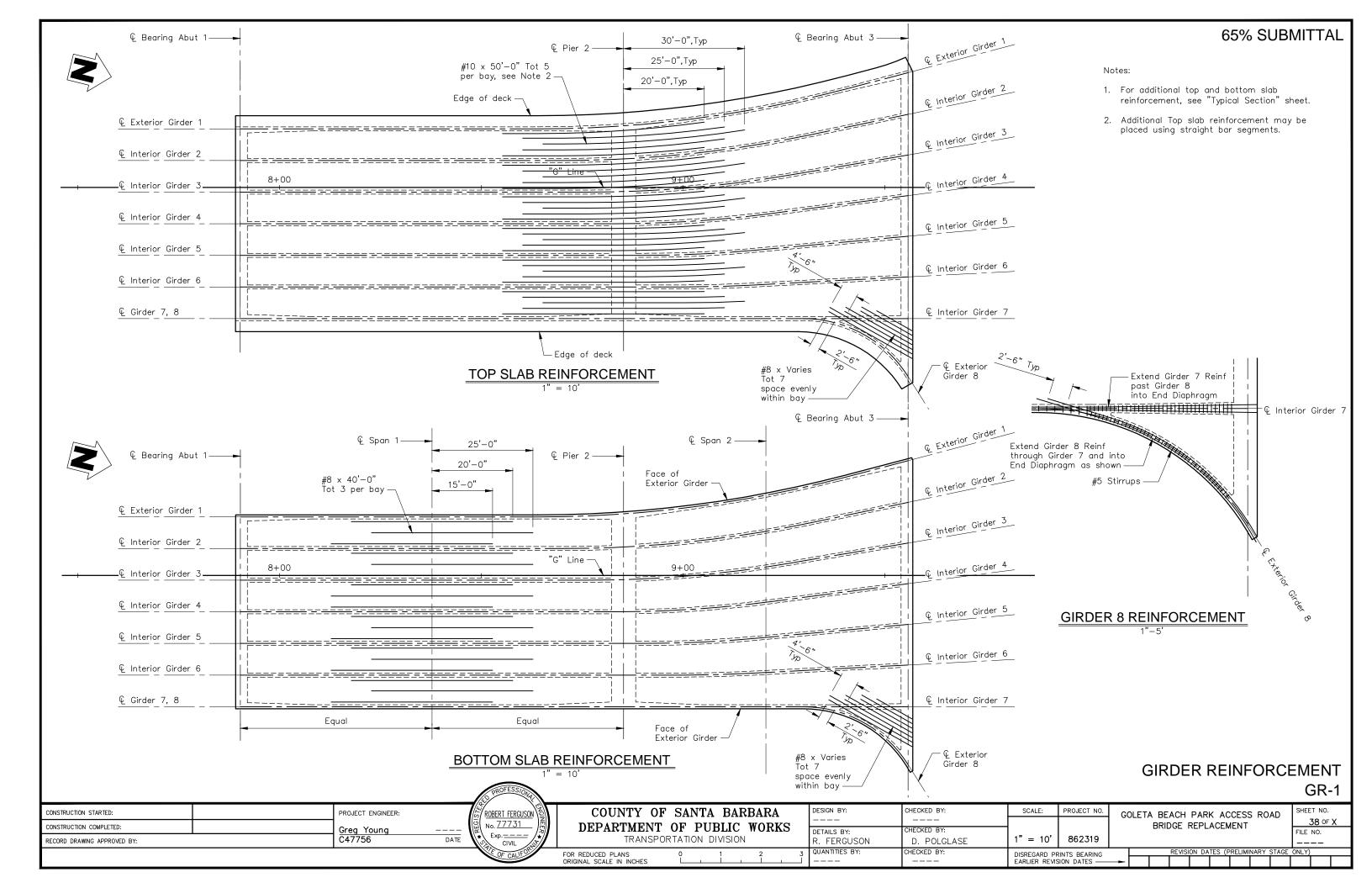
9#

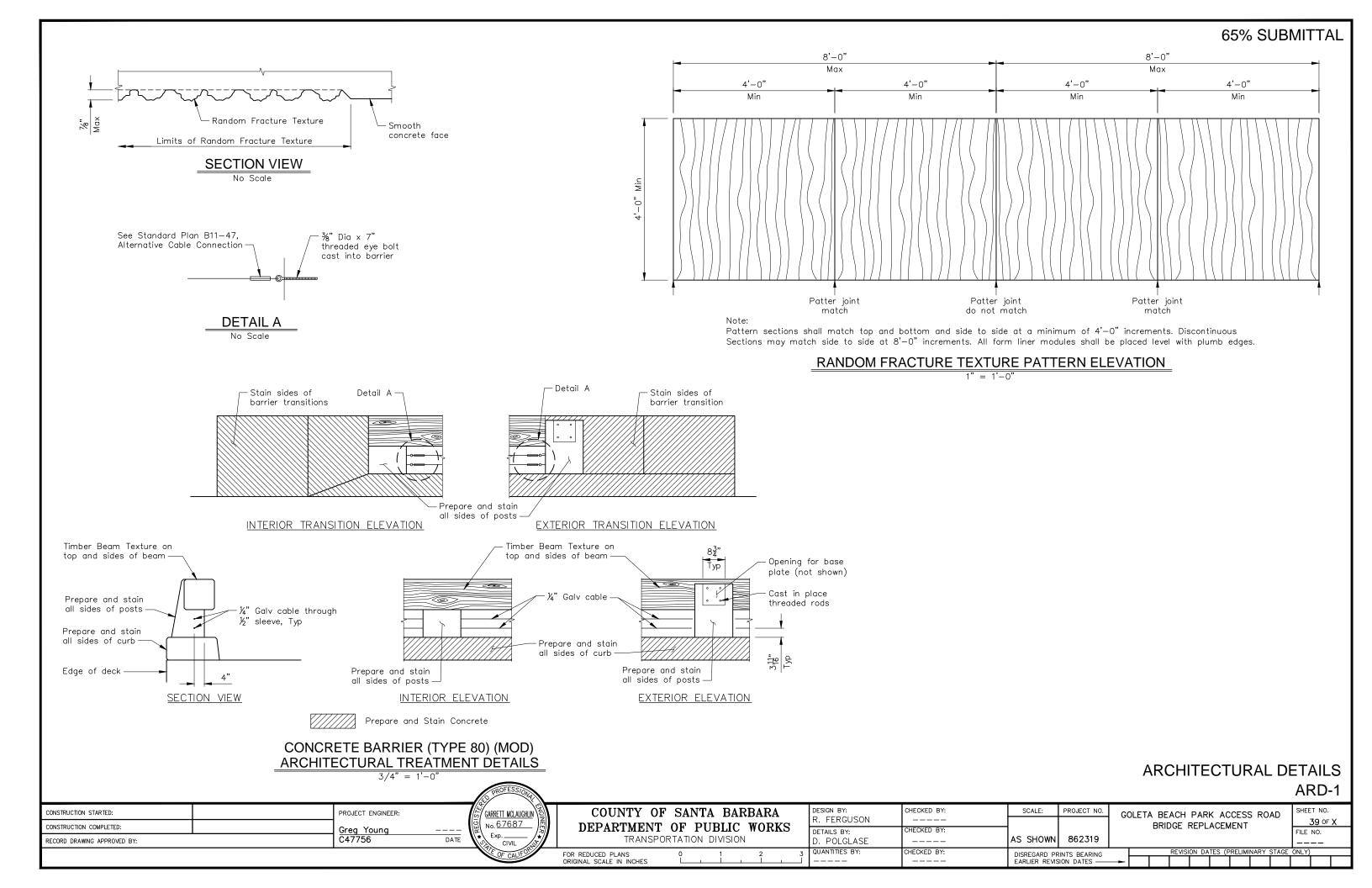
3. S

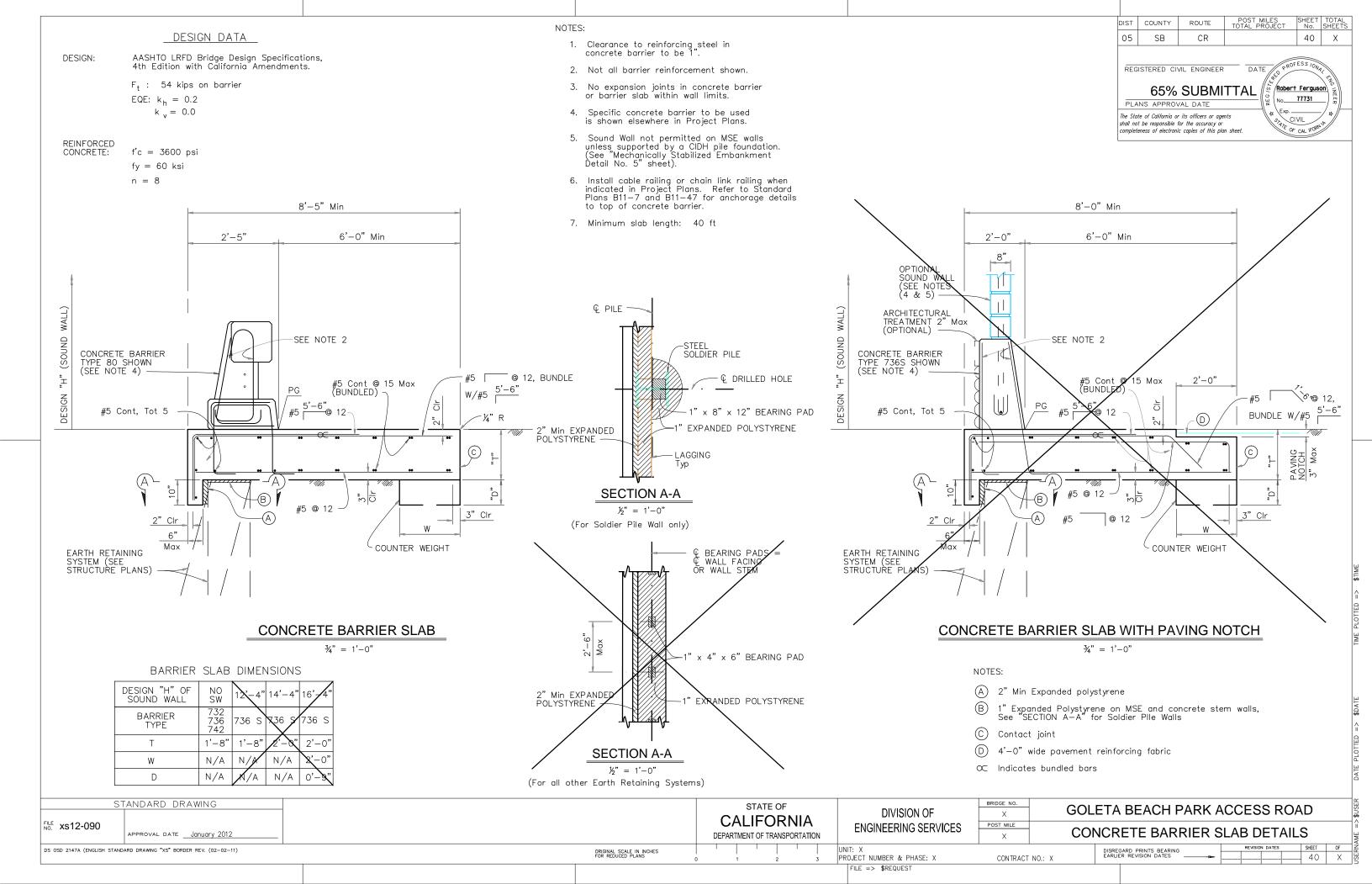
Specified Tip Elevation —









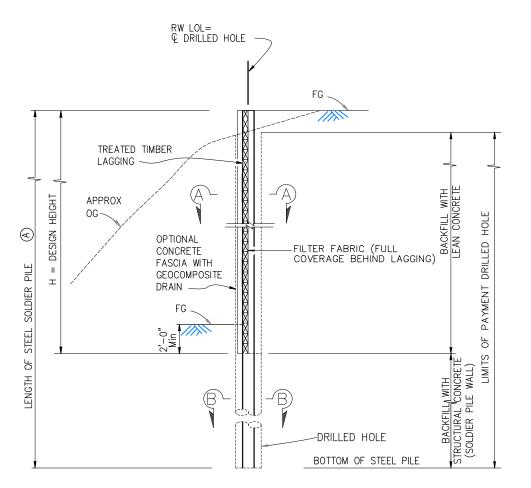


PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

77731

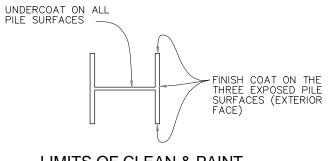
CIVIL



#### NOTE:

Clean and paint Steel Soldier Pile from top of pile to 5 feet, Min below bottom of lagging.

> For lagging details see "SOLDIER PILE WALL LAGGING DETAILS"



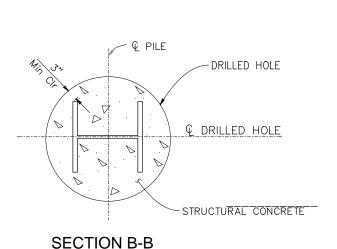
LIMITS OF CLEAN & PAINT STEEL SOLDIER PILE

NO SCALE

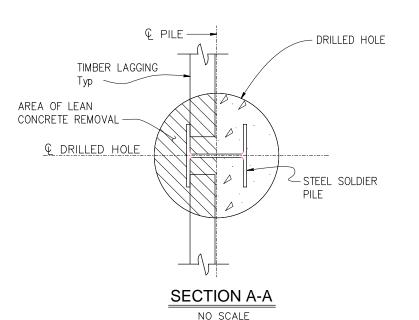
FOR DETAILS NOT SHOWN, SEE "PROJECT PLANS"

# TYPICAL SECTION

NO SCALE



NO SCALE



### **GENERAL NOTES**

DESIGN: AASHTO LRFD Bridge Design Specifications,

4th Edition with California Amendments.

LIVE LOAD: 240 psf equivalent to 2 feet soil weight

SOIL PARAMETERS: (For determination of Design Lateral Earth Pressures)

Backfill soil weight = 125 lb/ft<sup>3</sup> Friction Angle = 31° Active Pressure coefficent, Ka = 0.32

STEEL SOLDIER PILES:

ASTM A572/A, ASTM 572M Grade 50 Min

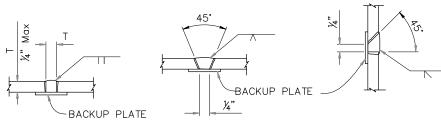
REINFORCED CONCRETE:

f'c = 4000 psify = 60 ksi

STRUCTURAL TIMBER:

Treated Douglas Fir, Grade No. 1 or better

Timber to be full sawn



SQUARE GROOVE

SINGLE VEE-GROOVE

SINGLE BEVEL-GROOVE

#### PILE WELDING DETAIL-BUTT JOINTS

NO SCALE

#### NOTES:

1. Single vee-groove and square groove permitted for all positions

2. Single bevel-groove permitted for horizonal joints only

STANDARD DRAWING BRIDGE NO. STATE OF **GOLETA BEACH PARK ACCESS ROAD** DIVISION OF X **CALIFORNIA** FILE xs12-050 **ENGINEERING SERVICES** CANTILEVER SOLDIER PILE WALL DETAILS APPROVAL DATE \_\_\_January 2012 DEPARTMENT OF TRANSPORTATION DS OSD 2147A (ENGLISH STANDARD DRAWING "XS" BORDER REV. (02-02-11) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

PROJECT NUMBER & PHASE: X CONTRACT NO.: X FILE => \$REQUEST

