

# Kern Fan Groundwater Storage Project

RESPONSE TO DEC REVIEW FINDINGS

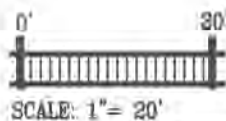
## Exhibit J: Conveyance Canal Cross-Sections

July 1, 2020

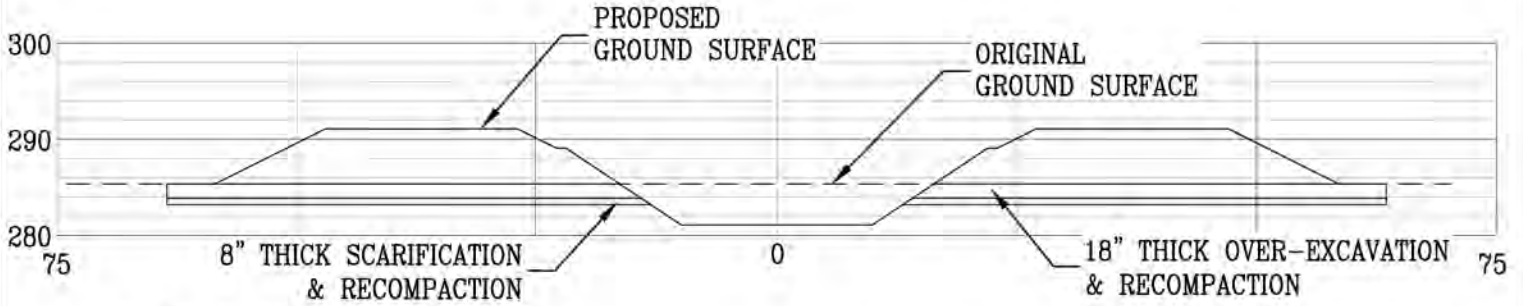


# REACH 1

Kern Fan Groundwater Storage Project  
CANAL CROSS-SECTIONS



	DEE JASPARS & ASSOCIATES, INC.	
	CIVIL ENGINEERS	
	2730 LINCOLN ROAD, BLDG A	PHONE 661 393-4796
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638 N. MAIN STREET, #B	PHONE 559 781-9286	
PORTERVILLE, CALIFORNIA 93257	FAX 559 783-9275	



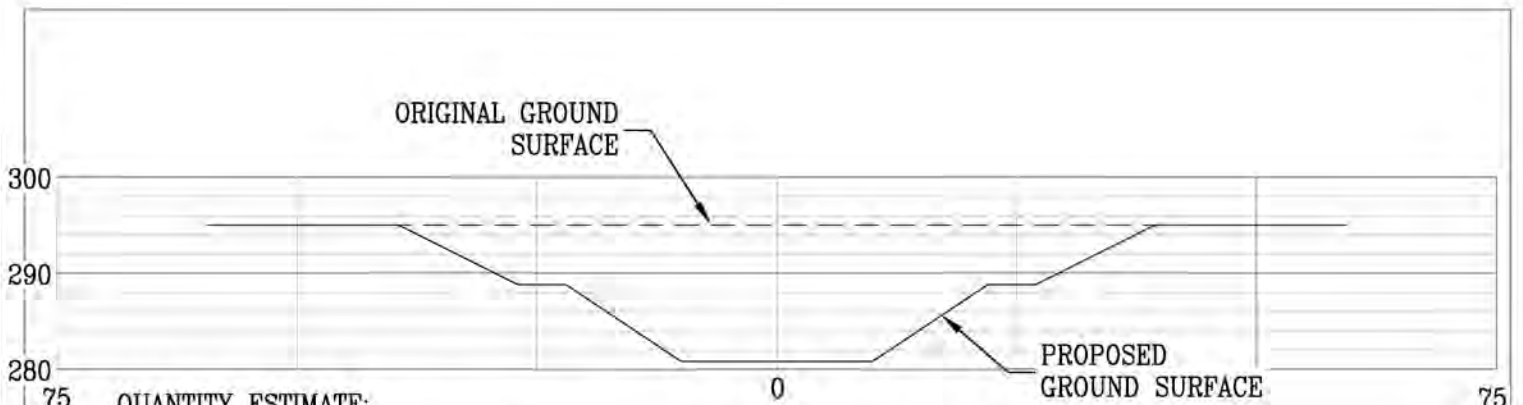
QUANTITY ESTIMATE:

"NEAT LINE" CUT AREA 112.1 CF/LF

"NEAT LINE" FILL AREA 362.7 CF/LF

OVER-EXCAVATION 144.8 CF/LF

STA 0+00



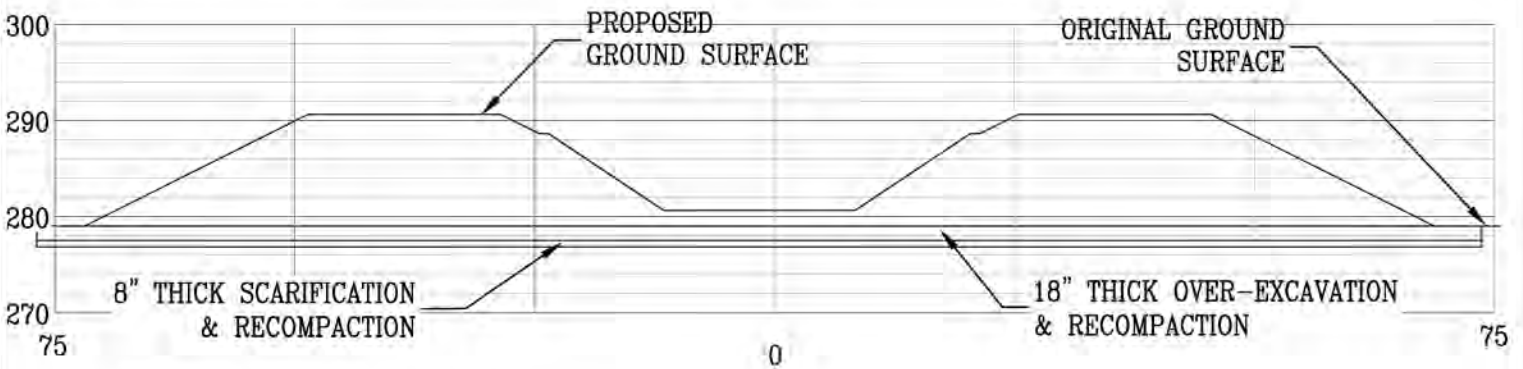
QUANTITY ESTIMATE:

"NEAT LINE" CUT AREA 667.7 CF/LF

"NEAT LINE" FILL AREA 0 CF/LF

OVER-EXCAVATION 0 CF/LF

STA 6+04



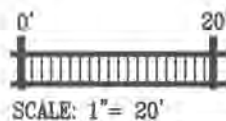
QUANTITY ESTIMATE:

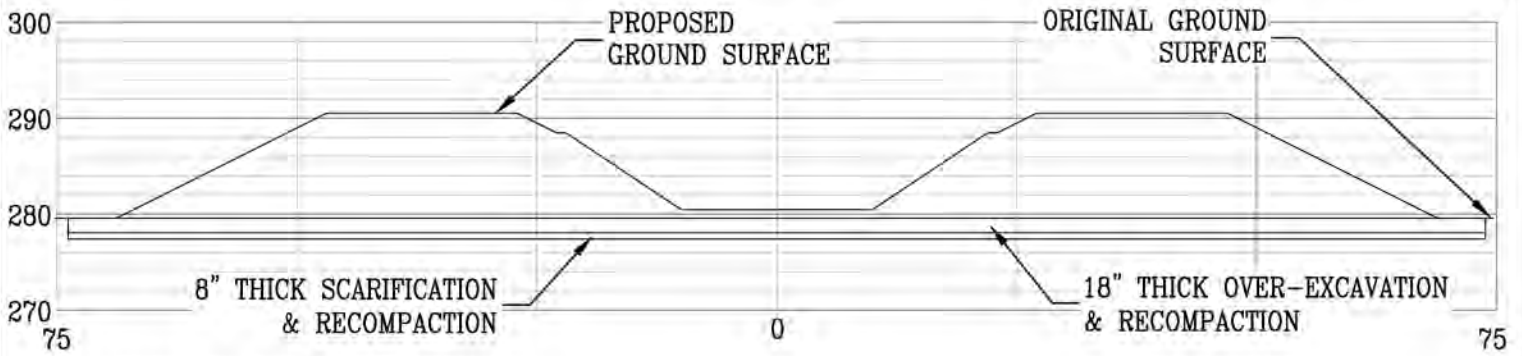
"NEAT LINE" CUT AREA 0 CF/LF

"NEAT LINE" FILL AREA 1007.7 CF/LF

OVER-EXCAVATION 225.8 CF/LF

STA 12+04

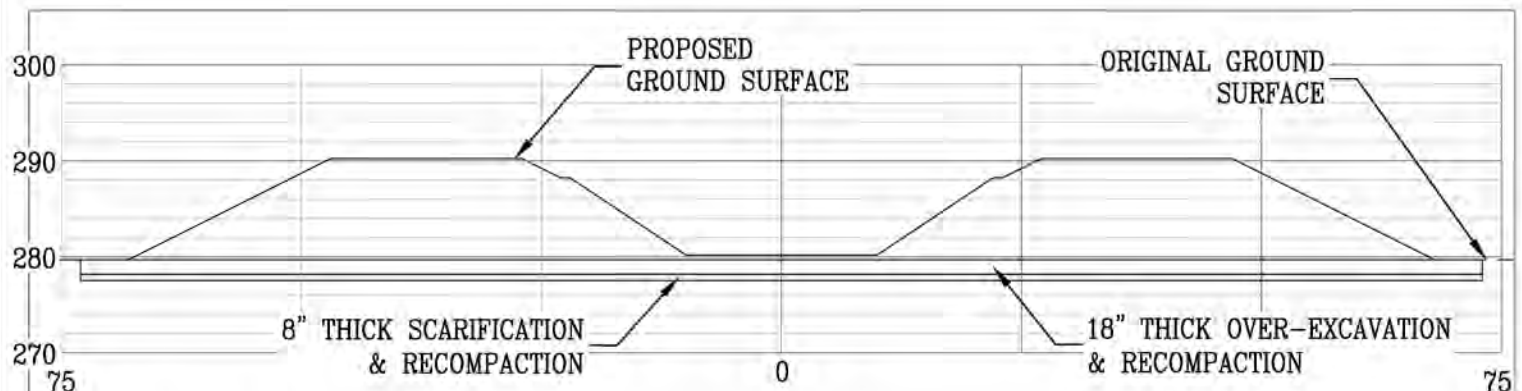




QUANTITY ESTIMATE:

"NEAT LINE" CUT AREA 0 CF/LF  
 "NEAT LINE" FILL AREA 906.2 CF/LF  
 OVER-EXCAVATION 221.4 CF/LF

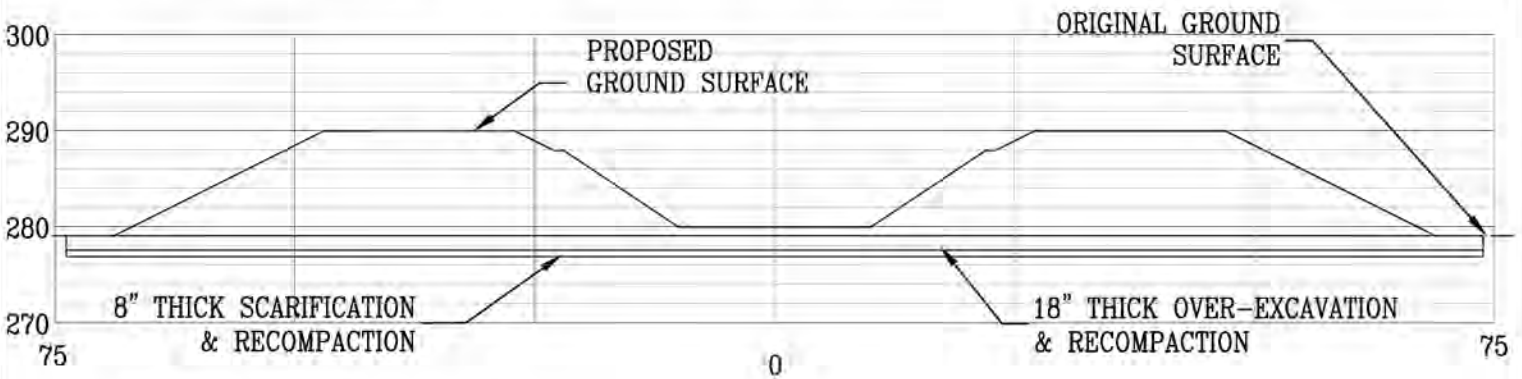
STA 18+04



QUANTITY ESTIMATE:

"NEAT LINE" CUT AREA 0 CF/LF  
 "NEAT LINE" FILL AREA 851.5 CF/LF  
 OVER-EXCAVATION 219.0 CF/LF

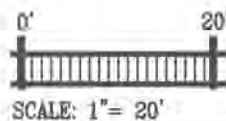
STA 28+04

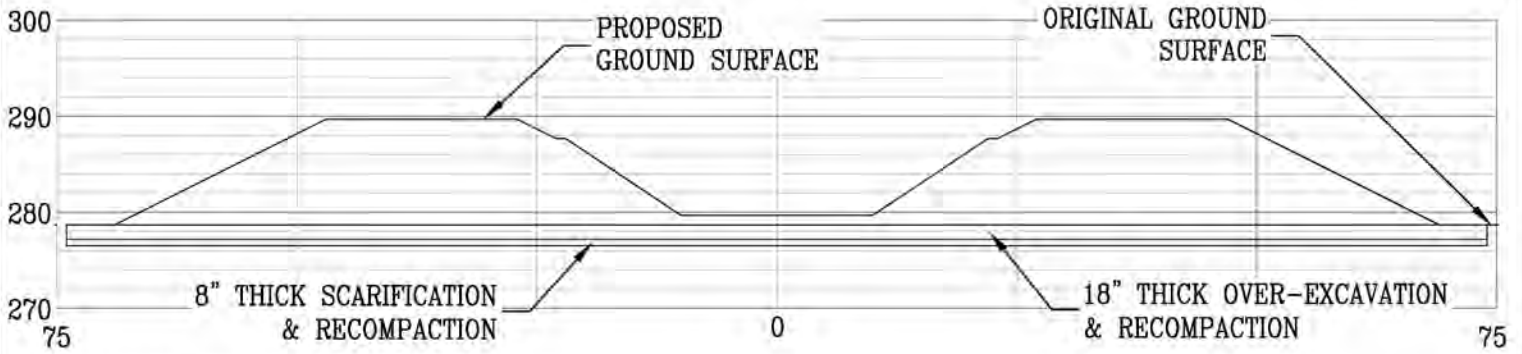


QUANTITY ESTIMATE:

"NEAT LINE" CUT AREA 0 CF/LF  
 "NEAT LINE" FILL AREA 906.2 CF/LF  
 OVER-EXCAVATION 221.4 CF/LF

STA 38+04

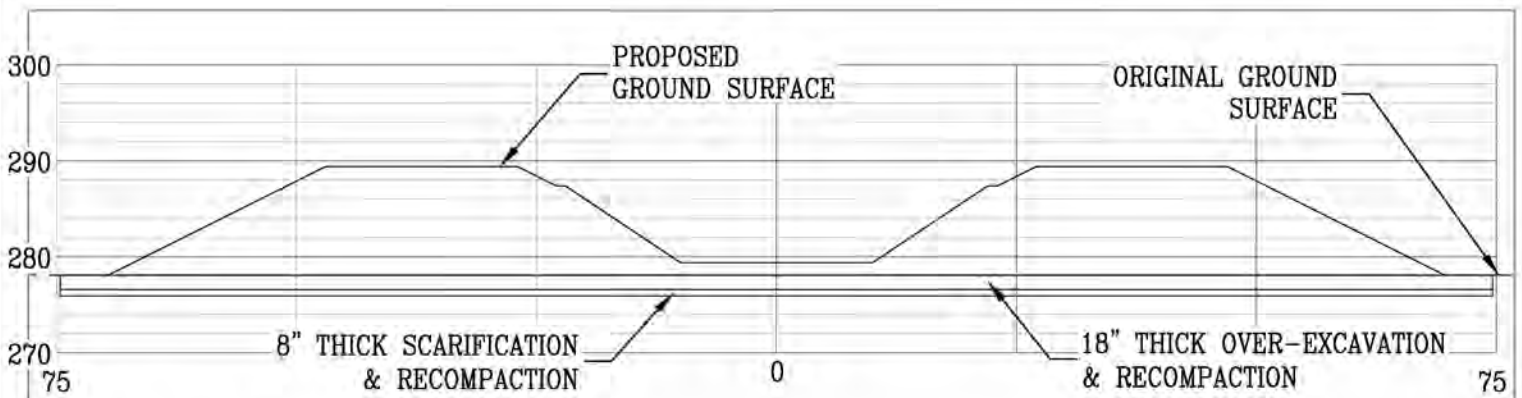




QUANTITY ESTIMATE:

"NEAT LINE" CUT AREA 0 CF/LF  
 "NEAT LINE" FILL AREA 920.0 CF/LF  
 OVER-EXCAVATION 222.0 CF/LF

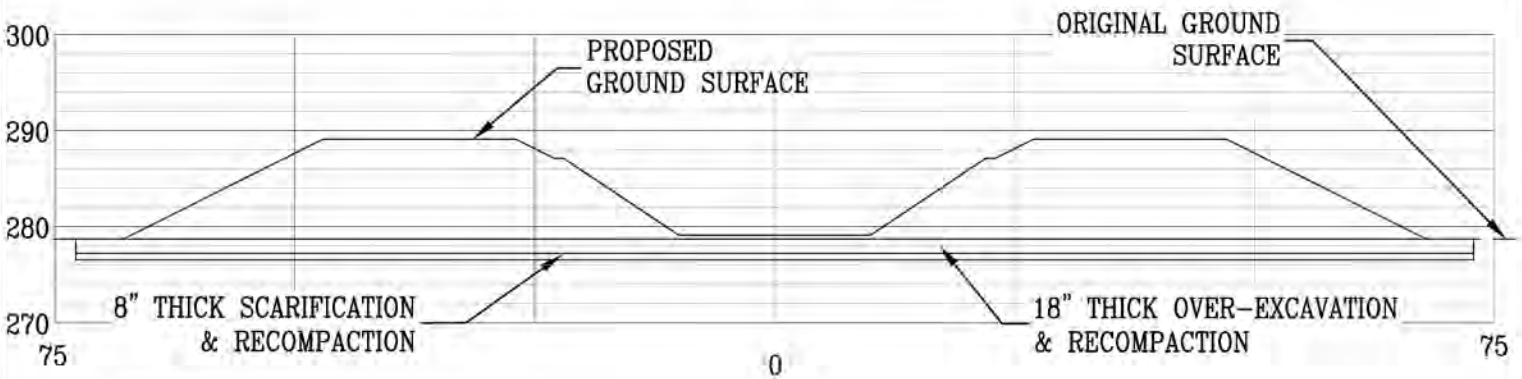
STA 48+04



QUANTITY ESTIMATE:

"NEAT LINE" CUT AREA 0 CF/LF  
 "NEAT LINE" FILL AREA 961.6 CF/LF  
 OVER-EXCAVATION 223.8 CF/LF

STA 58+04

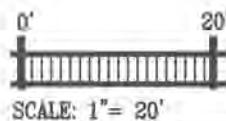


QUANTITY ESTIMATE:

"NEAT LINE" CUT AREA 0 CF/LF  
 "NEAT LINE" FILL AREA 837.9 CF/LF  
 OVER-EXCAVATION 218.4 CF/LF

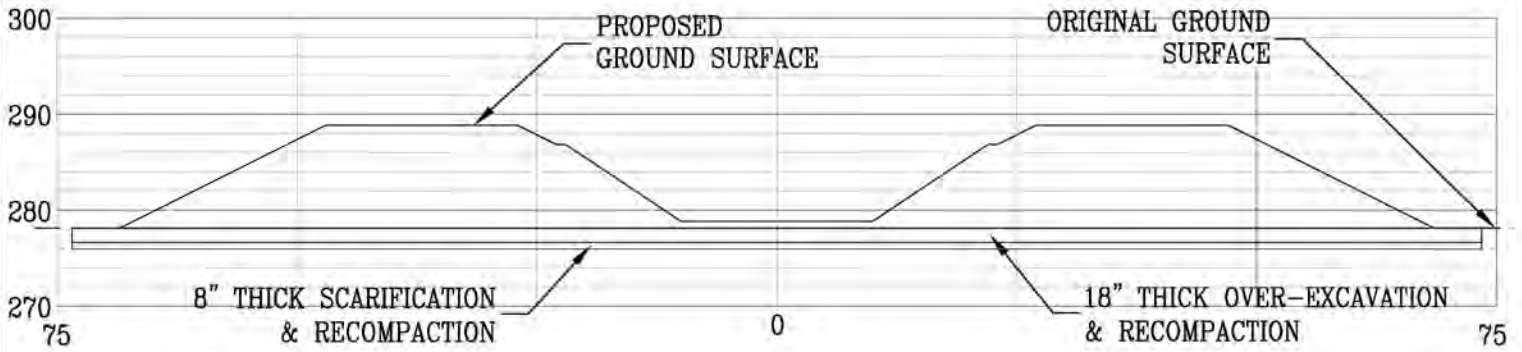
STA 68+04

Kern Fan Groundwater Storage Project  
 CANAL CROSS-SECTIONS



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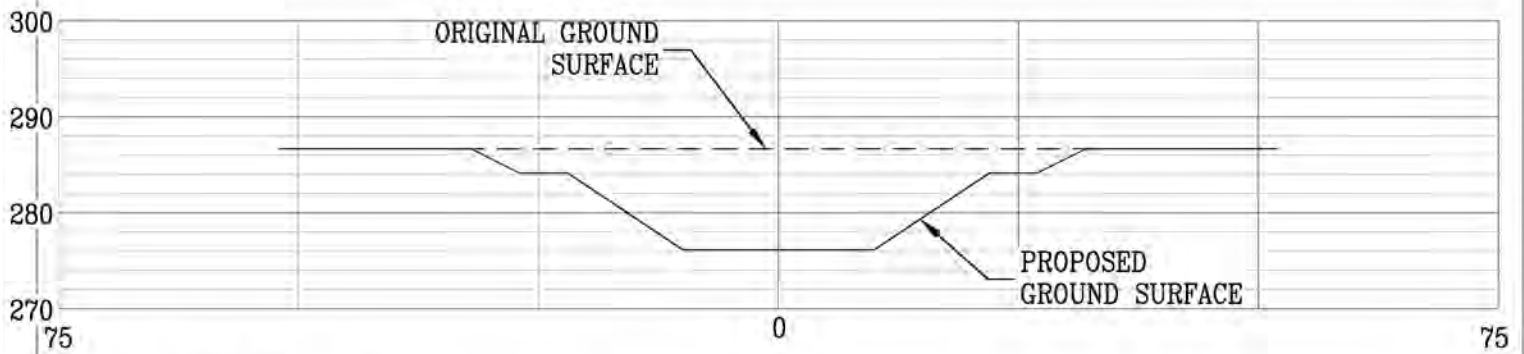
QUANTITY ESTIMATE:

"NEAT LINE" CUT AREA 0 CF/LF

"NEAT LINE" FILL AREA 878.8 CF/LF

OVER-EXCAVATION 220.2 CF/LF

STA 78+04



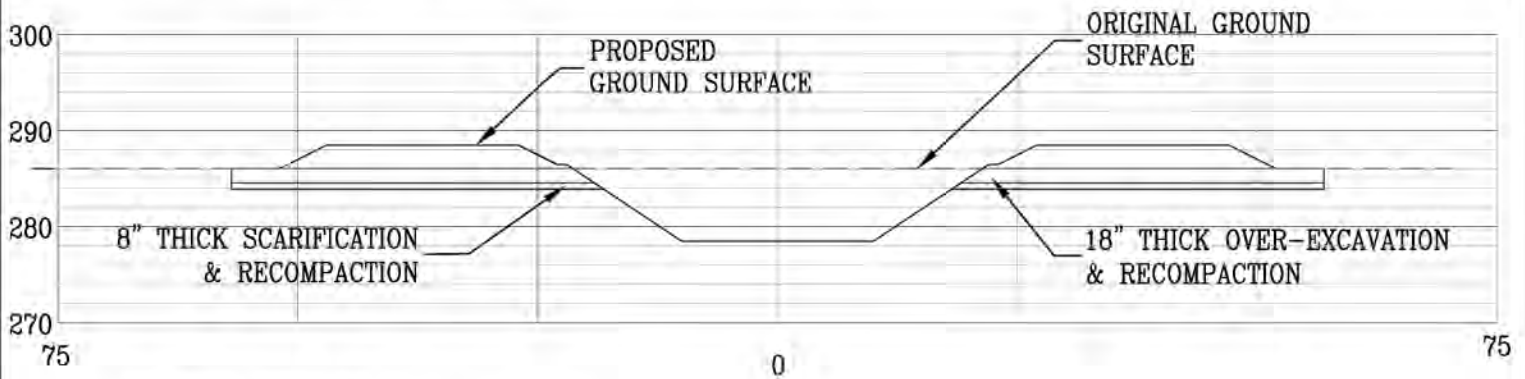
QUANTITY ESTIMATE:

"NEAT LINE" CUT AREA 403.5 CF/LF

"NEAT LINE" FILL AREA 0 CF/LF

OVER-EXCAVATION 0 CF/LF

STA 85+80



QUANTITY ESTIMATE:

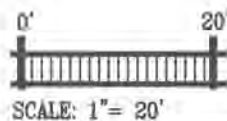
"NEAT LINE" CUT AREA 236.5 CF/LF

"NEAT LINE" FILL AREA 122.8 CF/LF

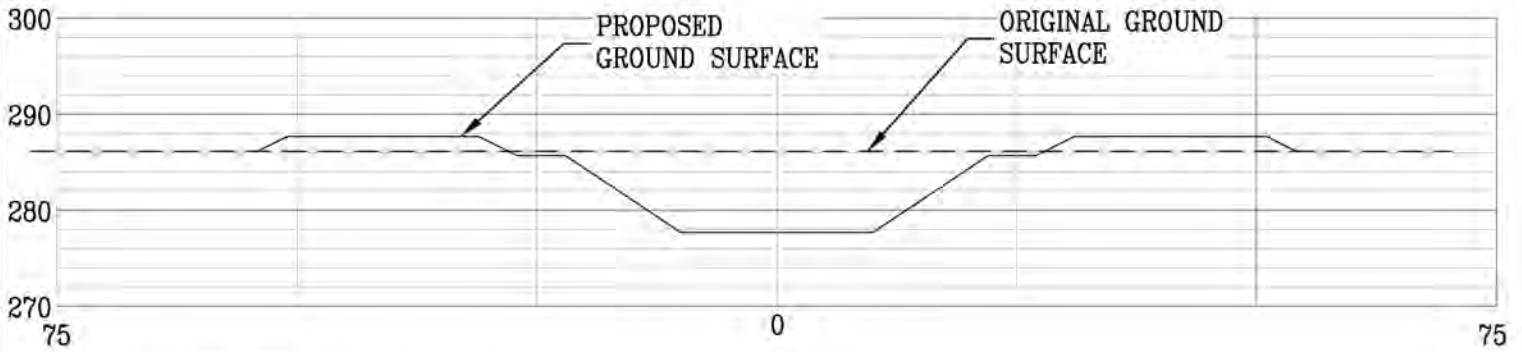
OVER-EXCAVATION 110.1 CF/LF

STA 89+00

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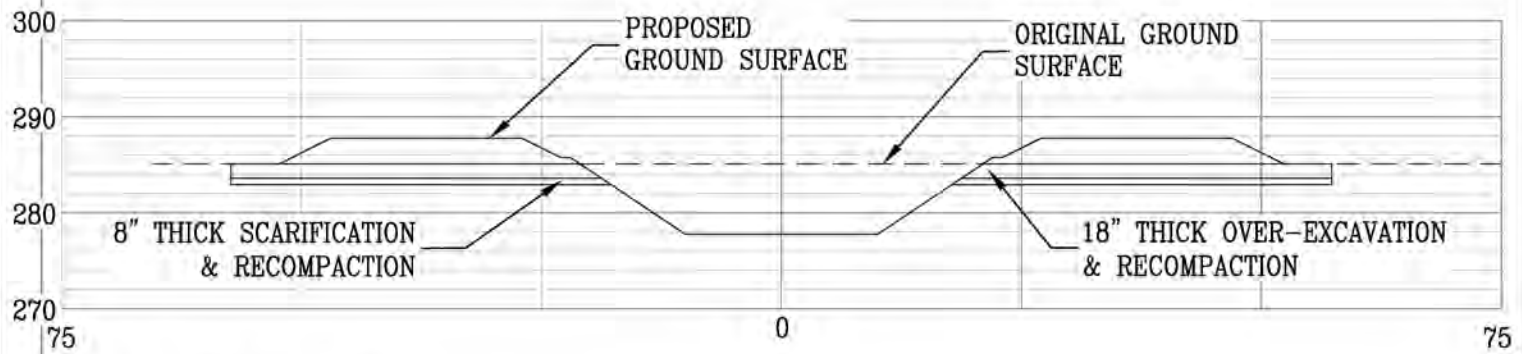
QUANTITY ESTIMATE:

"NEAT LINE" CUT AREA 281.3 CF/LF

"NEAT LINE" FILL AREA 71.0 CF/LF

OVER-EXCAVATION 0 CF/LF

STA 99+55



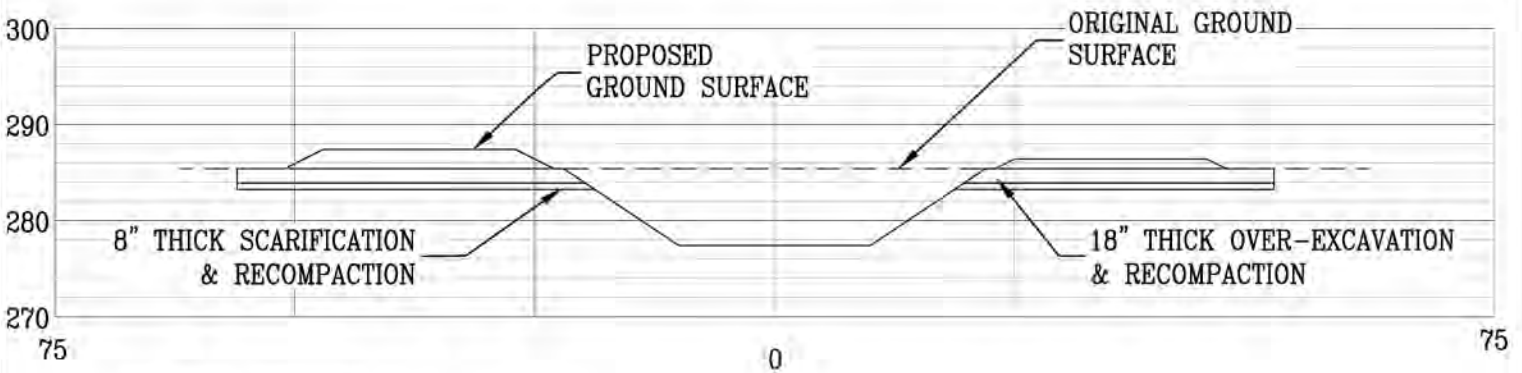
QUANTITY ESTIMATE:

"NEAT LINE" CUT AREA 227.2 CF/LF

"NEAT LINE" FILL AREA 136.4 CF/LF

OVER-EXCAVATION 112.4 CF/LF

STA 109+75



QUANTITY ESTIMATE:

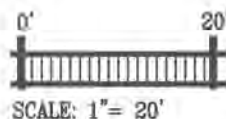
"NEAT LINE" CUT AREA 256.0 CF/LF

"NEAT LINE" FILL AREA 96.0 CF/LF

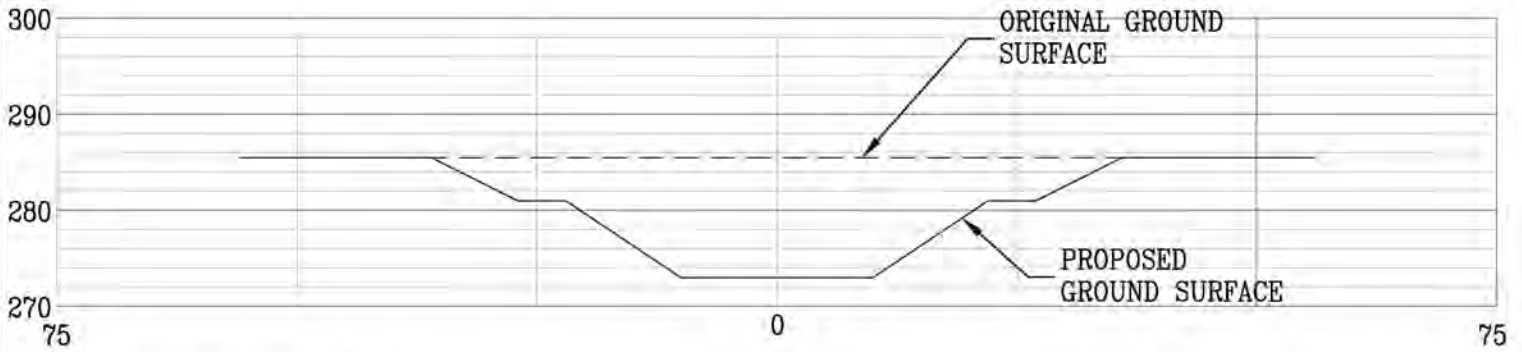
OVER-EXCAVATION 105.4 CF/LF

STA 119+75

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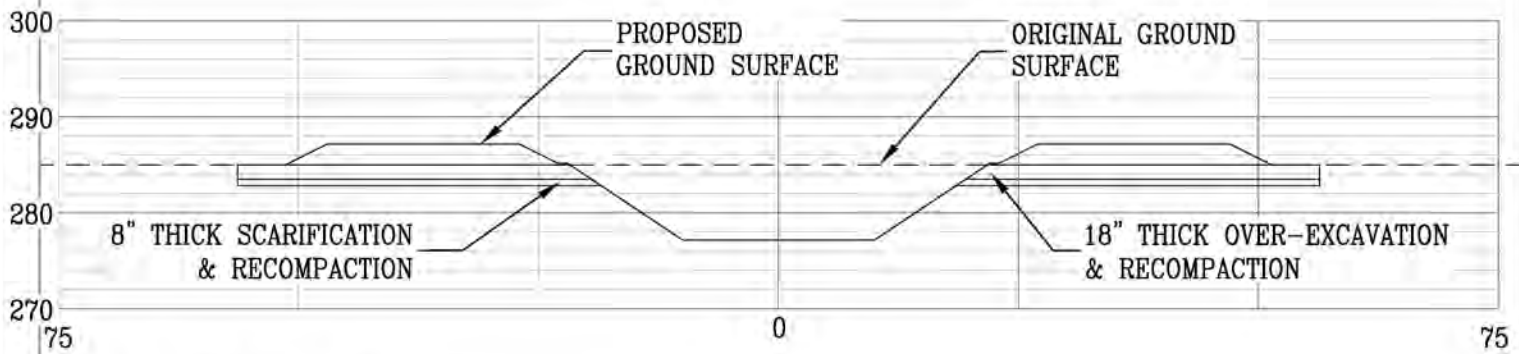
QUANTITY ESTIMATE:

"NEAT LINE" CUT AREA 539.5 CF/LF

"NEAT LINE" FILL AREA 0 CF/LF

OVER-EXCAVATION 0 CF/LF

STA 130+10



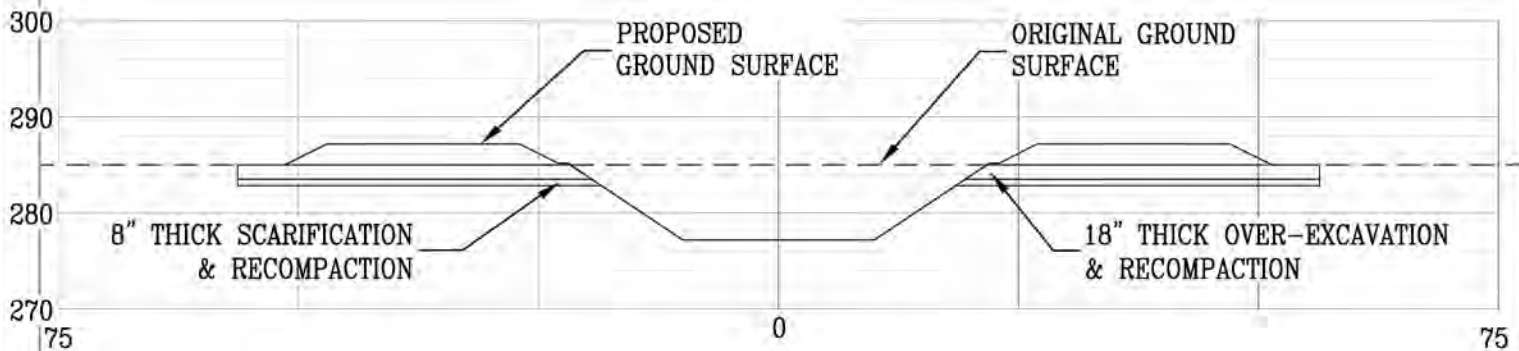
QUANTITY ESTIMATE:

"NEAT LINE" CUT AREA 248.6 CF/LF

"NEAT LINE" FILL AREA 106.0 CF/LF

OVER-EXCAVATION 107.2 CF/LF

STA 133+35



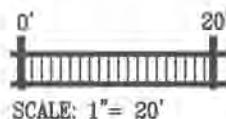
QUANTITY ESTIMATE:

"NEAT LINE" CUT AREA 248.6 CF/LF

"NEAT LINE" FILL AREA 106.0 CF/LF

OVER-EXCAVATION 107.2 CF/LF

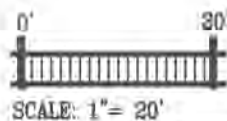
STA 138+60



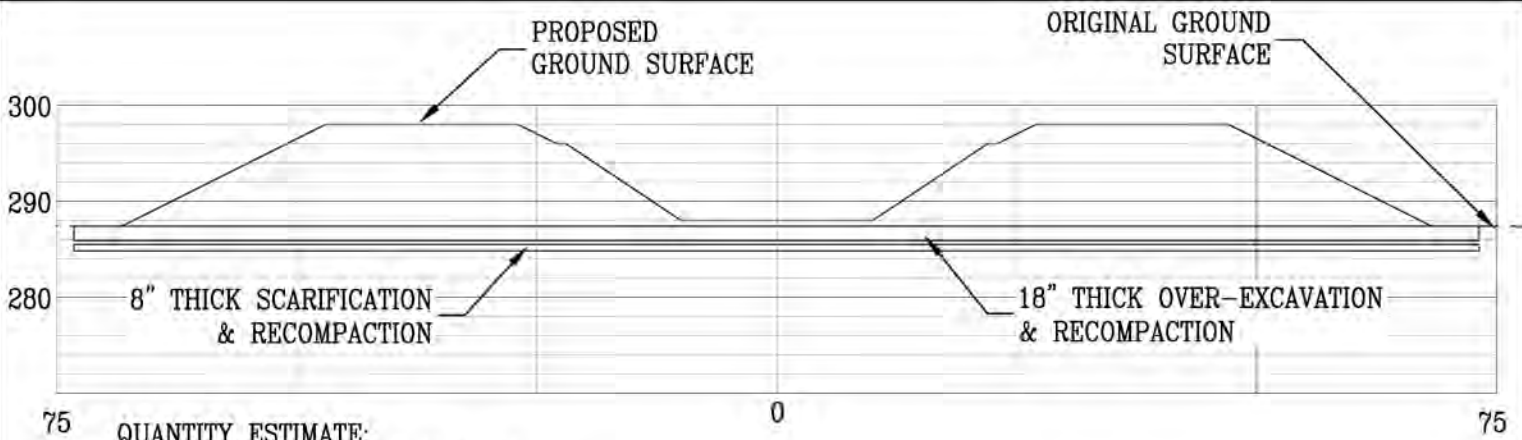


# REACH 2

Kern Fan Groundwater Storage Project  
CANAL CROSS-SECTIONS



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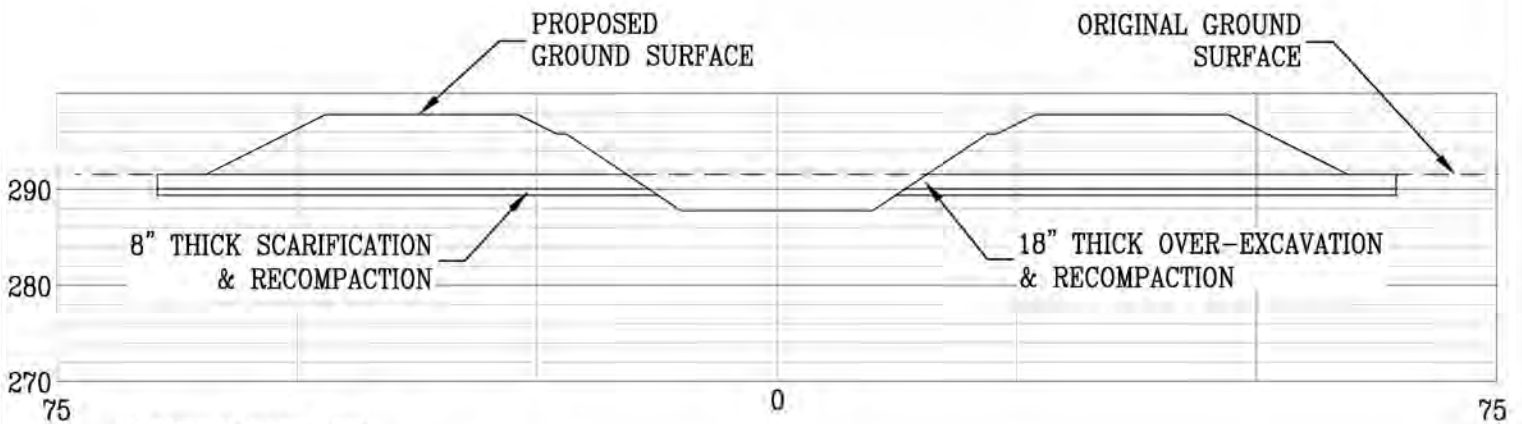
QUANTITY ESTIMATE:

"NEAT LINE" CUT AREA 0 CF/LF

"NEAT LINE" FILL AREA 865.4 CF/LF

OVER-EXCAVATION 219.6 CF/LF

STA 143+40



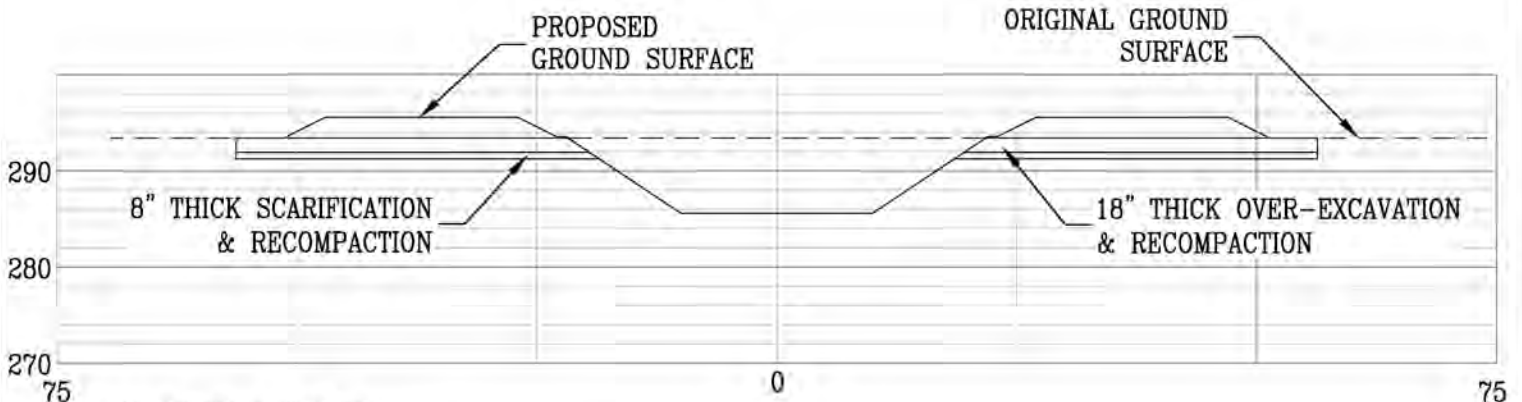
QUANTITY ESTIMATE:

"NEAT LINE" CUT AREA 96.1 CF/LF

"NEAT LINE" FILL AREA 405.7 CF/LF

OVER-EXCAVATION 150.0 CF/LF

STA 153+40



QUANTITY ESTIMATE:

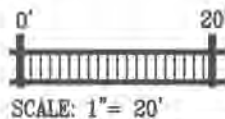
"NEAT LINE" CUT AREA 249.4 CF/LF

"NEAT LINE" FILL AREA 104.8 CF/LF

OVER-EXCAVATION 107.0 CF/LF

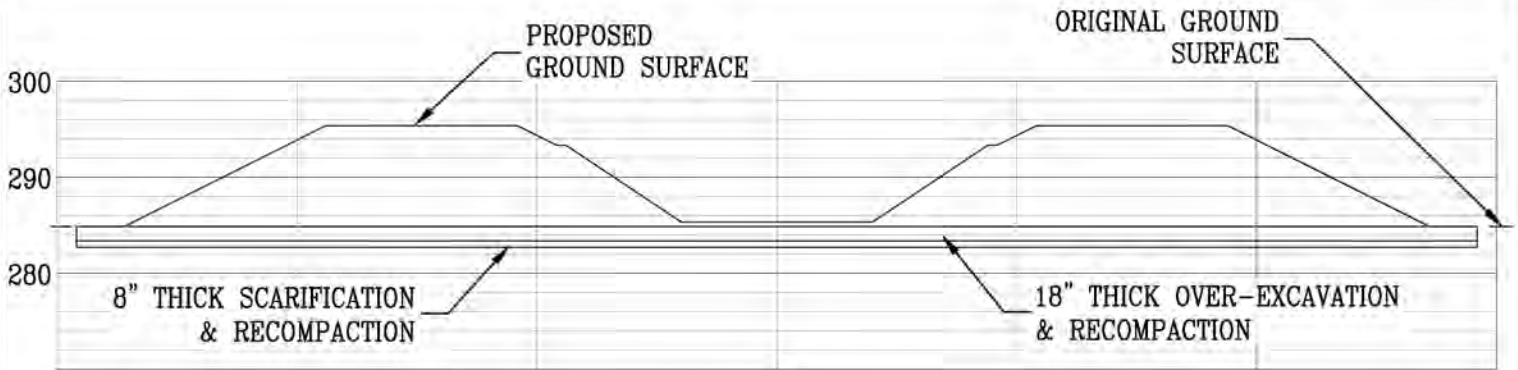
STA 163+40

Kern Fan Groundwater Storage Project  
CANAL CROSS-SECTIONS



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2730 LINCOLN ROAD, SUITE A  
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638 N. MAIN STREET, #8  
PORTERVILLE, CALIFORNIA 93257

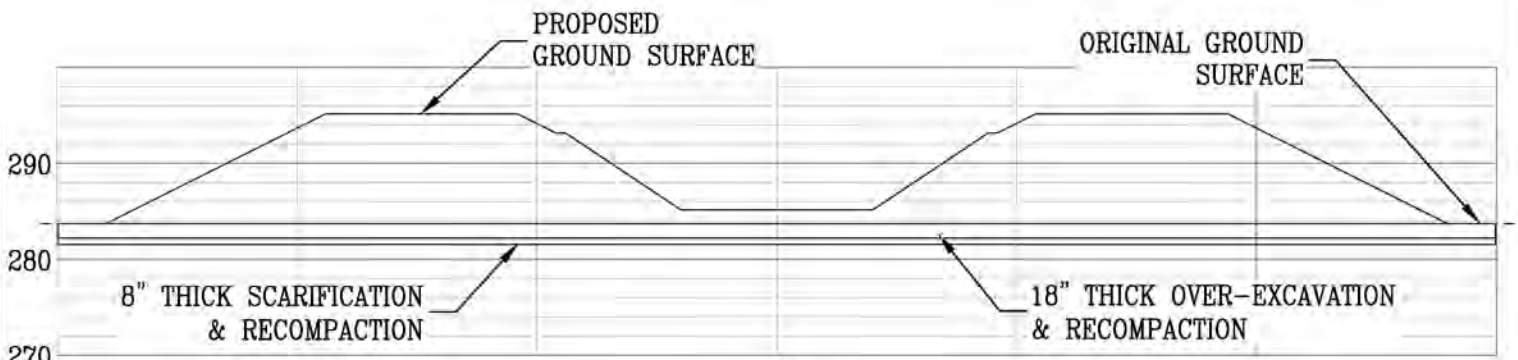
PHONE 661 393-4798  
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FAX 559 783-9275



75 0 75

QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 0 CF/LF  
 "NEAT LINE" FILL AREA 847.0 CF/LF  
 OVER-EXCAVATION 218.9 CF/LF

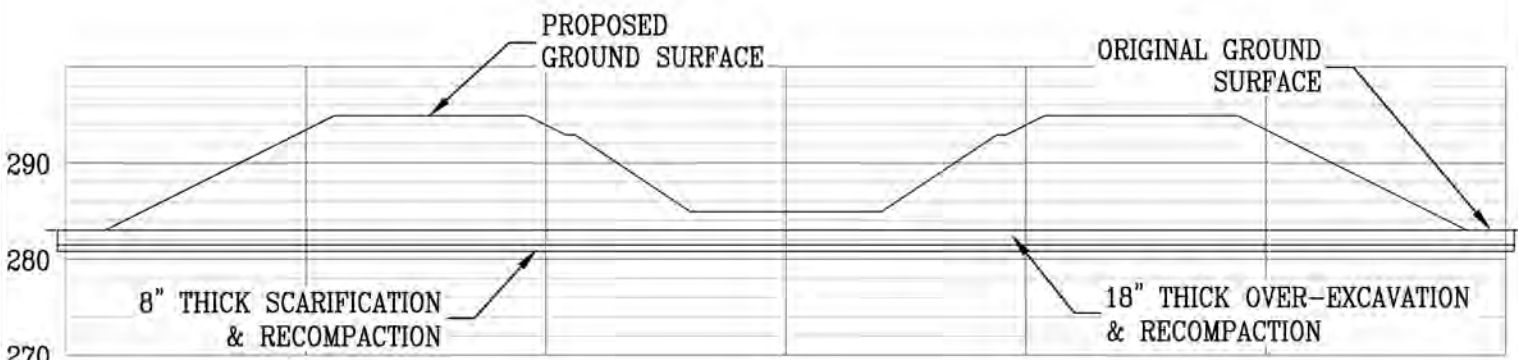
STA 173+40



75 0 75

QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 0 CF/LF  
 "NEAT LINE" FILL AREA 979.9 CF/LF  
 OVER-EXCAVATION 224.6 CF/LF

STA 183+40

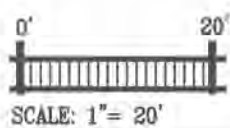


75 0 75

QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 0 CF/LF  
 "NEAT LINE" FILL AREA 1,051.5 CF/LF  
 OVER-EXCAVATION 287.4 CF/LF

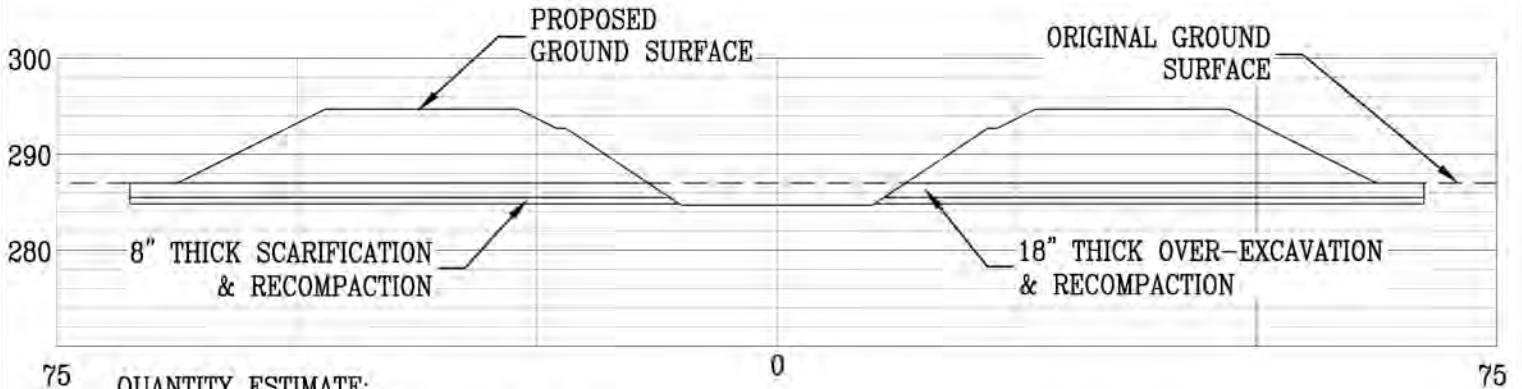
STA 193+40

**Kern Fan Groundwater Storage Project  
 CANAL CROSS-SECTIONS**



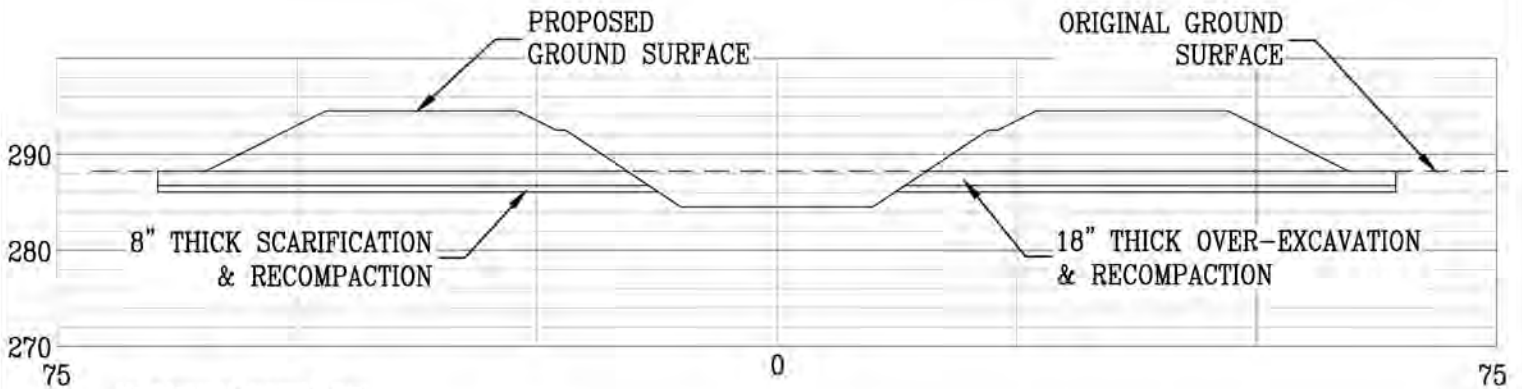
**DEE JASPAR & ASSOCIATES, INC.**  
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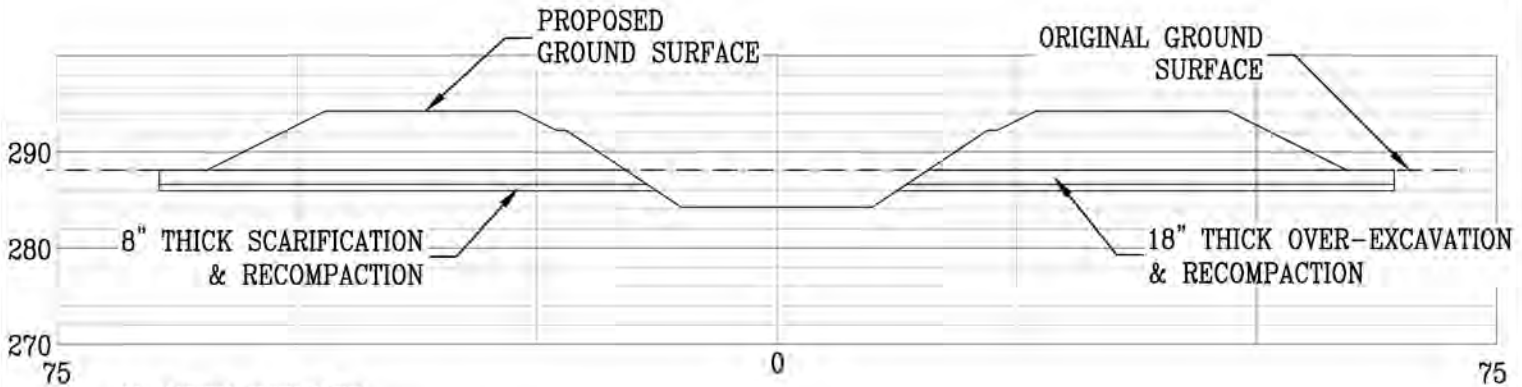
QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 53.9 CF/LF  
 "NEAT LINE" FILL AREA 540.0 CF/LF  
 OVER-EXCAVATION 165.2 CF/LF

STA 203+40



QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 96.1 CF/LF  
 "NEAT LINE" FILL AREA 405.7 CF/LF  
 OVER-EXCAVATION 150.0 CF/LF

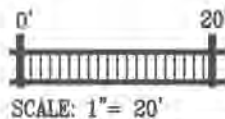
STA 217+70



QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 99.2 CF/LF  
 "NEAT LINE" FILL AREA 397.0 CF/LF  
 OVER-EXCAVATION 149.0 CF/LF

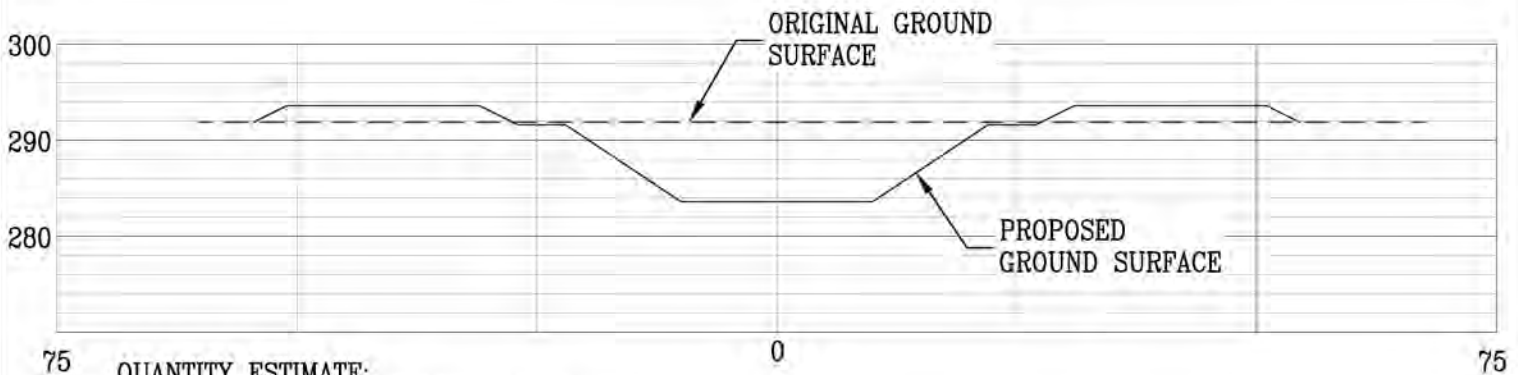
STA 221+90

**Kern Fan Groundwater Storage Project  
 CANAL CROSS-SECTIONS**



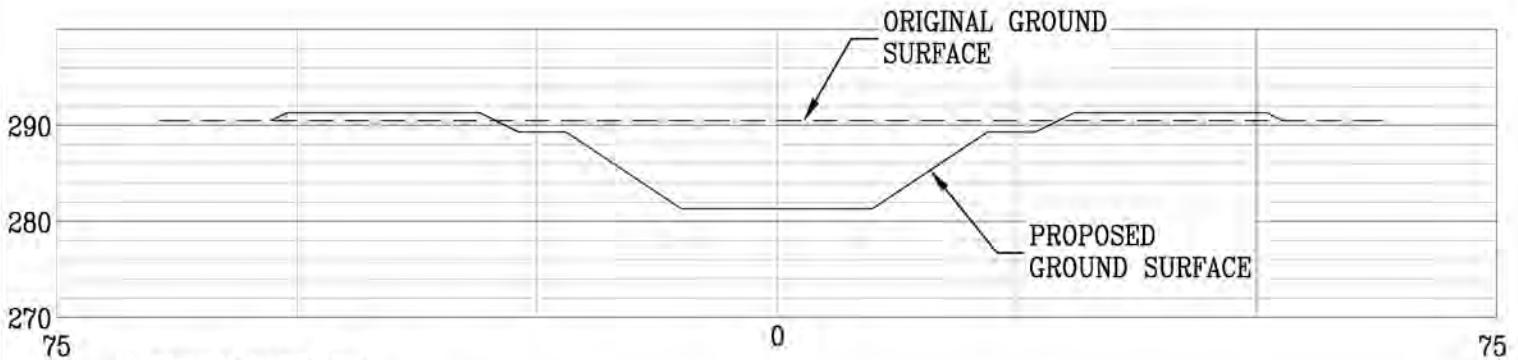
**DEE JASPAR & ASSOCIATES, INC.**  
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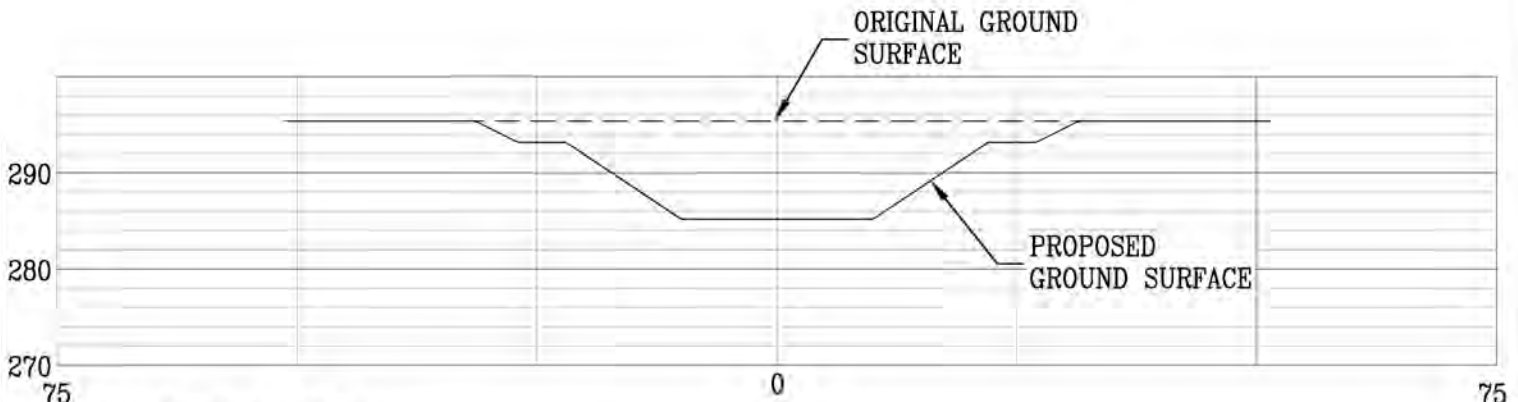
QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 269.6 CF/LF  
 "NEAT LINE" FILL AREA 82.2 CF/LF  
 OVER-EXCAVATION 0 CF/LF

STA 232+30



QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 320.7 CF/LF  
 "NEAT LINE" FILL AREA 36.9 CF/LF  
 OVER-EXCAVATION 0 CF/LF

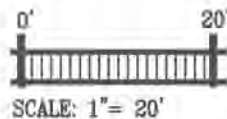
STA 242+30



QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 384.5 CF/LF  
 "NEAT LINE" FILL AREA 0 CF/LF  
 OVER-EXCAVATION 0 CF/LF

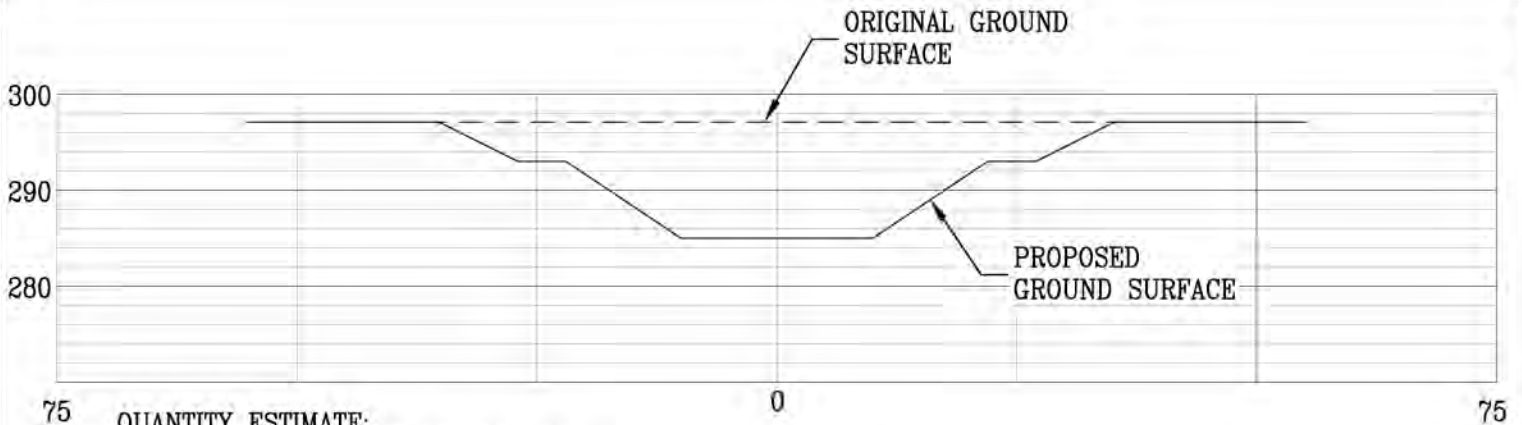
STA 252+70

**Kern Fan Groundwater Storage Project  
 CANAL CROSS-SECTIONS**



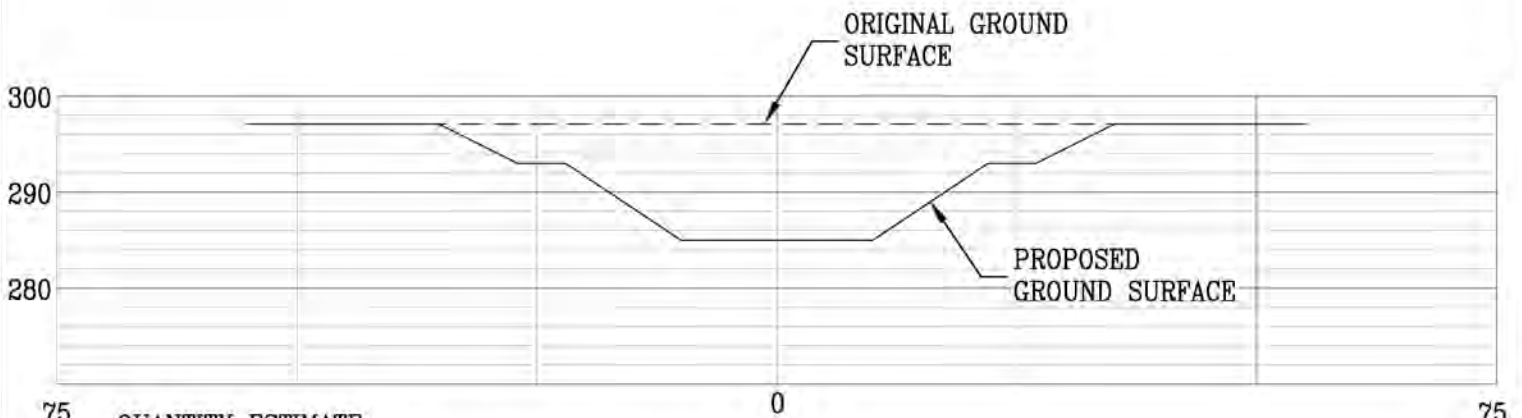
**DEE JASPAR & ASSOCIATES, INC.**  
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75 QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 511.0CF/LF  
 "NEAT LINE" FILL AREA 0 CF/LF  
 OVER-EXCAVATION 0 CF/LF

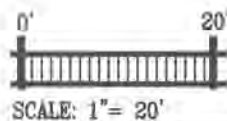
STA 256+90



75 QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 511.0CF/LF  
 "NEAT LINE" FILL AREA 0 CF/LF  
 OVER-EXCAVATION 0 CF/LF

STA 267+20

**Kern Fan Groundwater Storage Project  
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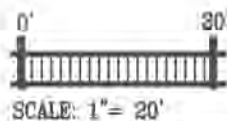


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 PORTERVILLE, CALIFORNIA 93257

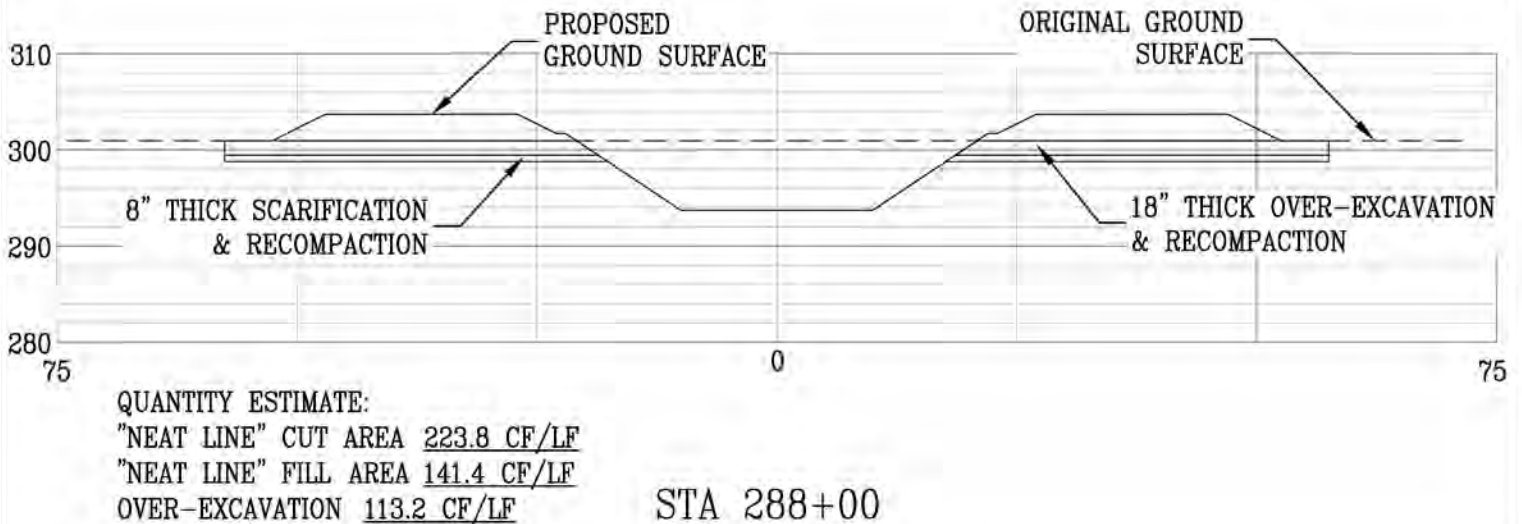
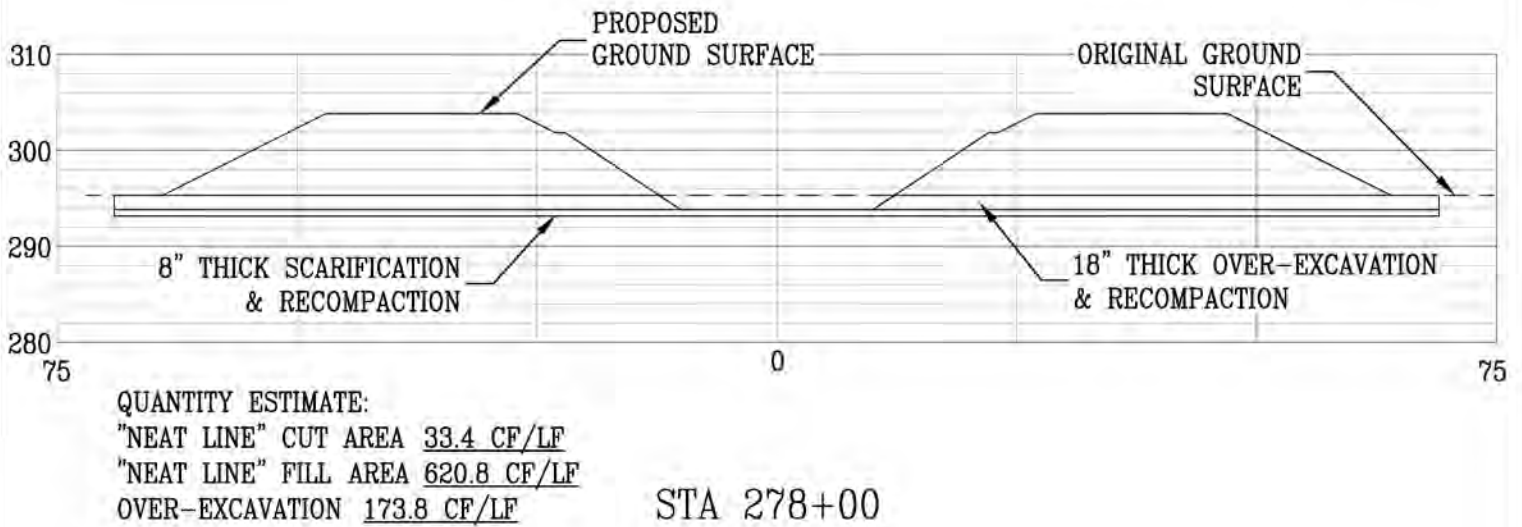
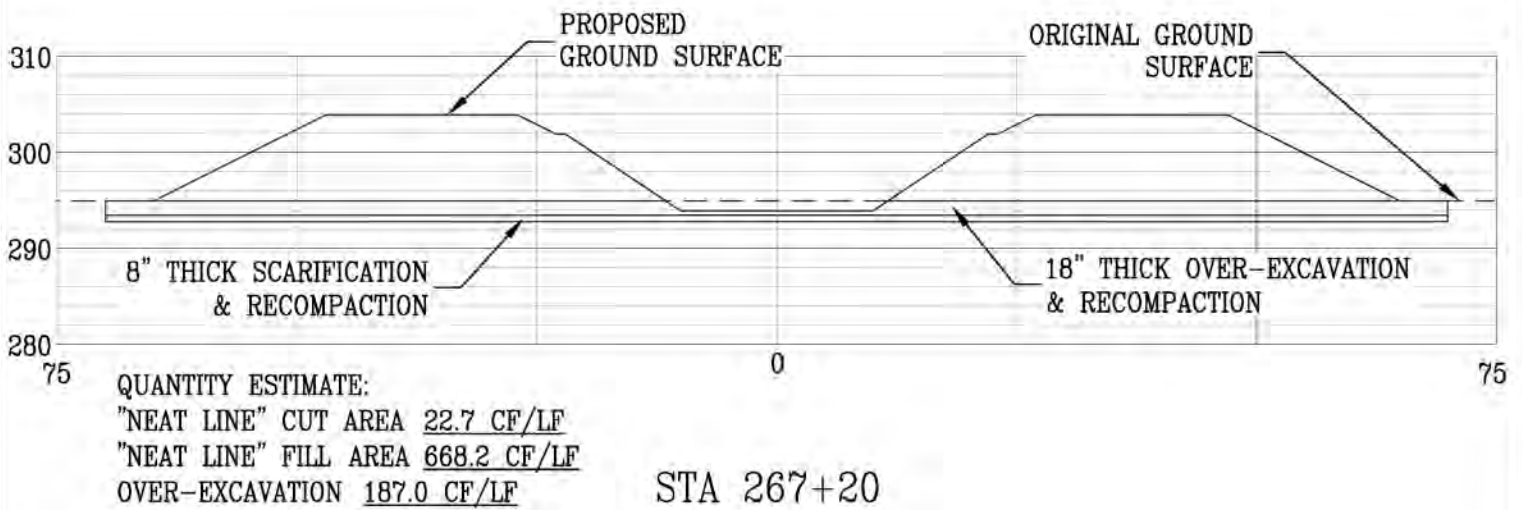
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# REACH 3

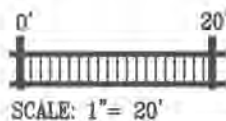
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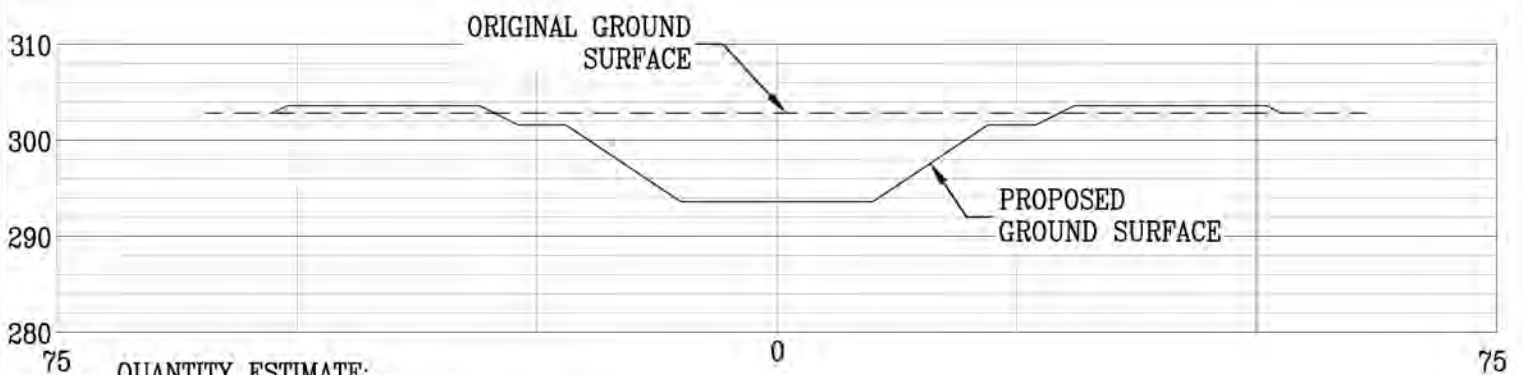
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 638 N. MAIN STREET, #8  
 PORTERVILLE, CALIFORNIA 93257

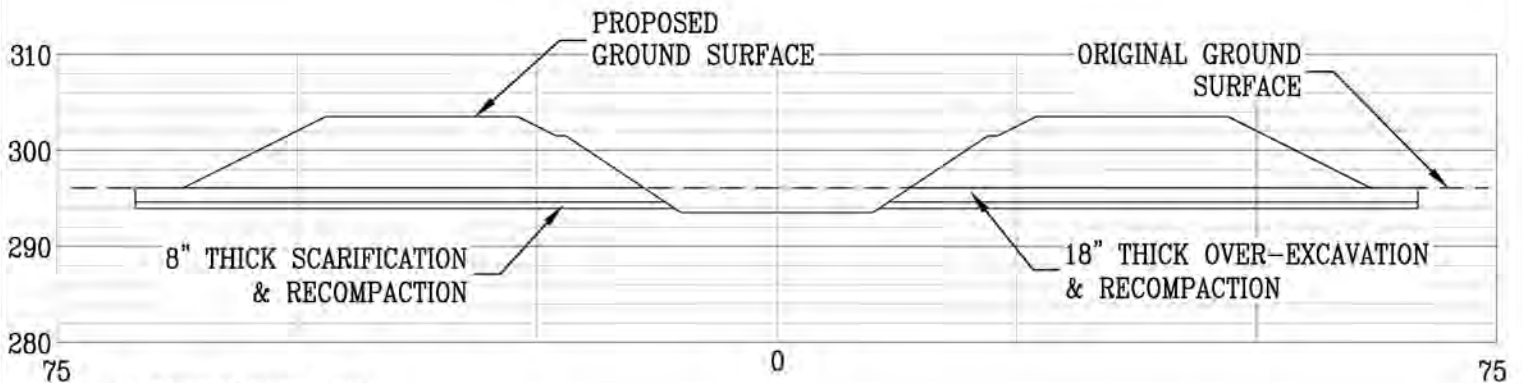
PHONE 661 393-4798  
 FAX 661 393-4799  
 PHONE 558 781-9286  
 FAX 558 783-9275





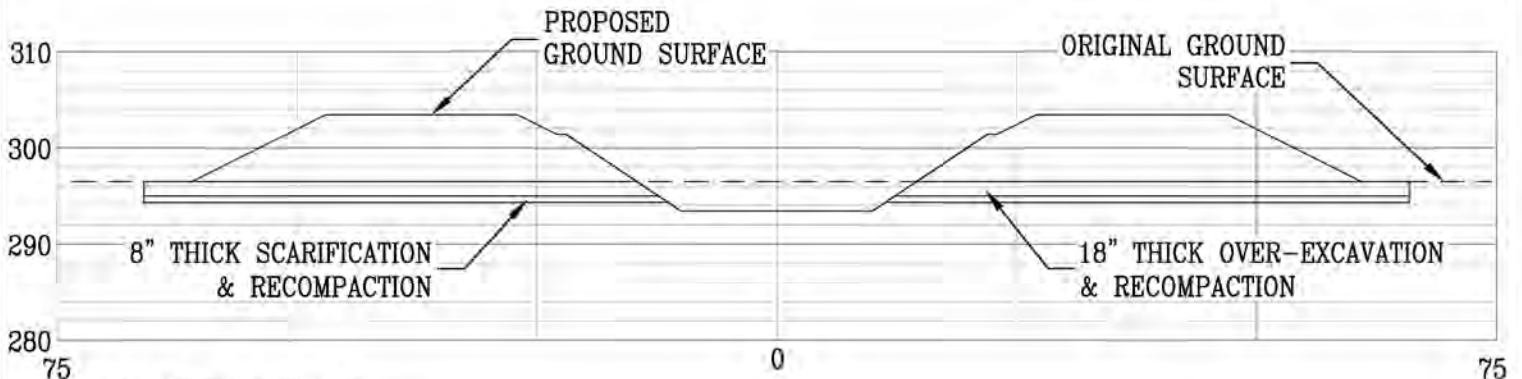
QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 326.6 CF/LF  
 "NEAT LINE" FILL AREA 32.2 CF/LF  
 OVER-EXCAVATION 0 CF/LF

STA 298+00



QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 62.1 CF/LF  
 "NEAT LINE" FILL AREA 511.2 CF/LF  
 OVER-EXCAVATION 162.0 CF/LF

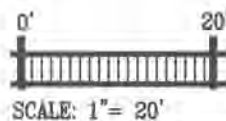
STA 308+00



QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 75.0 CF/LF  
 "NEAT LINE" FILL AREA 448.8 CF/LF  
 OVER-EXCAVATION 161.4 CF/LF

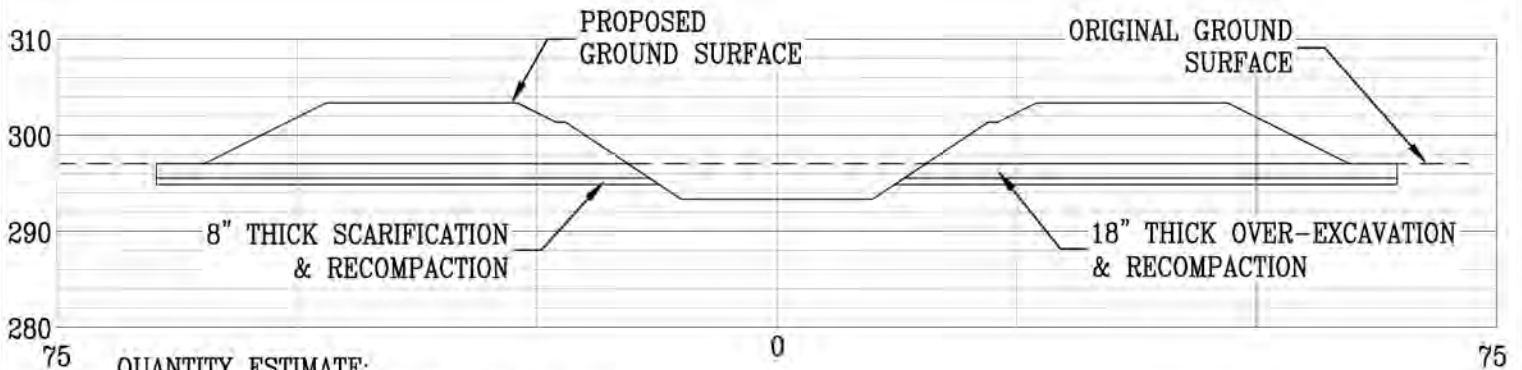
STA 318+00

**Kern Fan Groundwater Storage Project  
 CANAL CROSS-SECTIONS**



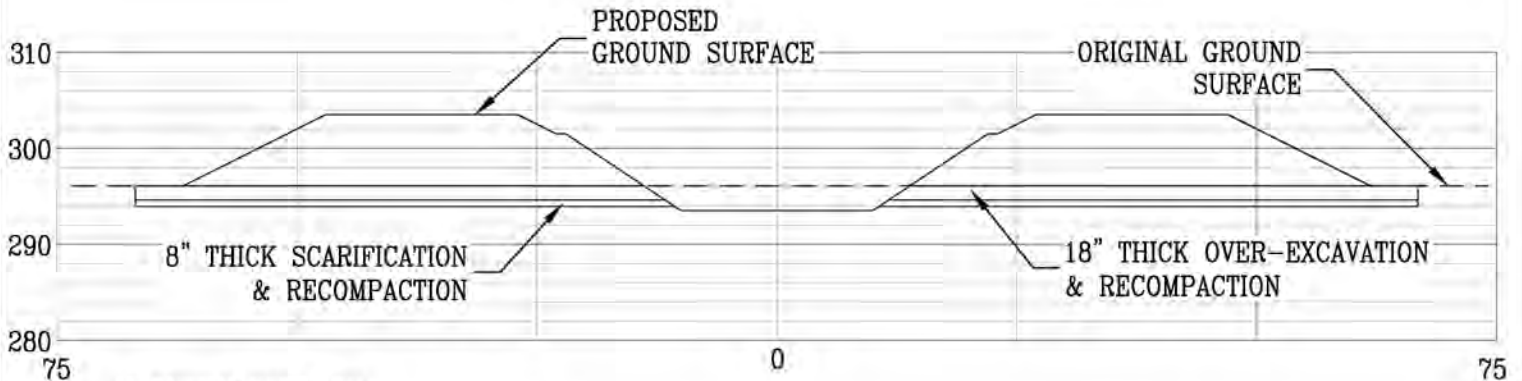
**DEE JASPAR & ASSOCIATES, INC.**  
 CIVIL ENGINEERS  
 2730 LINCOLN ROAD, SUITE A  
 BAKERSFIELD, CALIFORNIA 93308  
 638 N. MAIN STREET, #8  
 PORTERVILLE, CALIFORNIA 93257

PHONE 661 393-4798  
 FAX 661 393-4799  
 PHONE 558 781-9286  
 FAX 558 783-9275



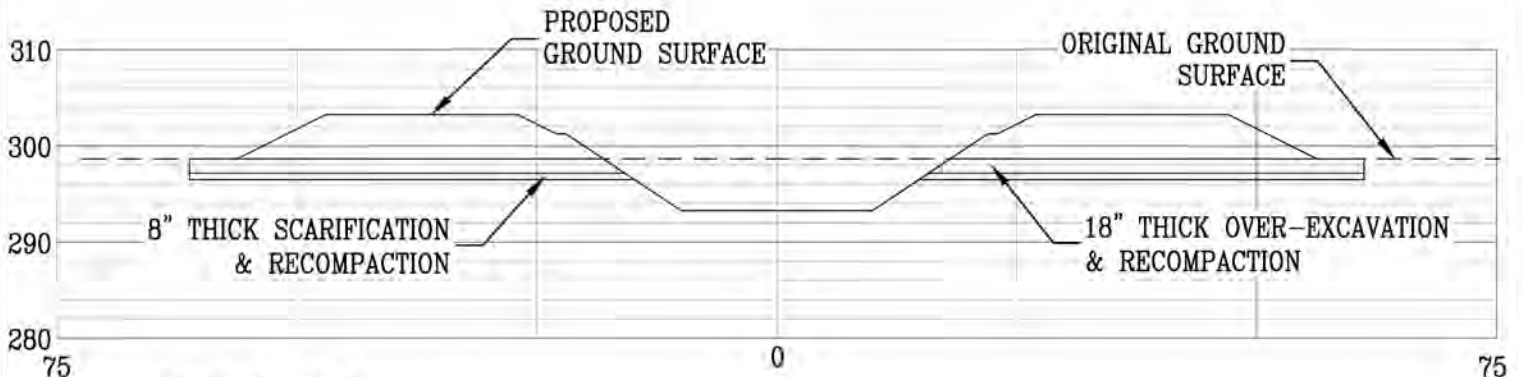
QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 94.5 CF/LF  
 "NEAT LINE" FILL AREA 410.1 CF/LF  
 OVER-EXCAVATION 150.5 CF/LF

STA 328+00



QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 91.4 CF/LF  
 "NEAT LINE" FILL AREA 419.0 CF/LF  
 OVER-EXCAVATION 151.6 CF/LF

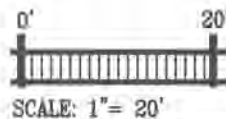
STA 338+00



QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 151.7 CF/LF  
 "NEAT LINE" FILL AREA 270.6 CF/LF  
 OVER-EXCAVATION 132.6 CF/LF

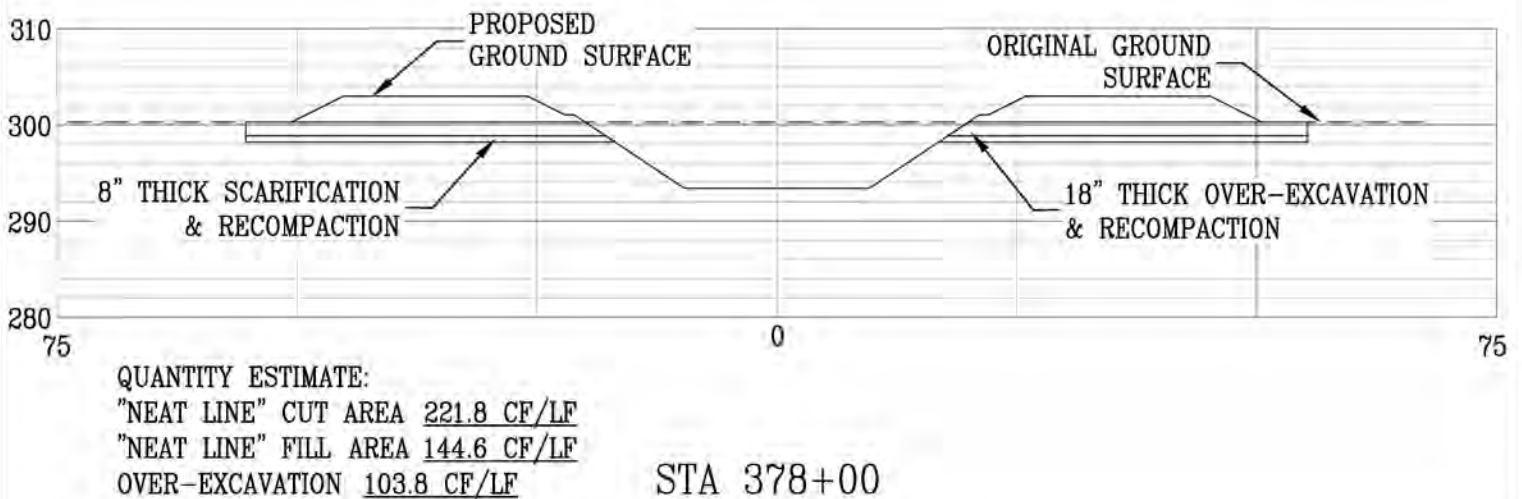
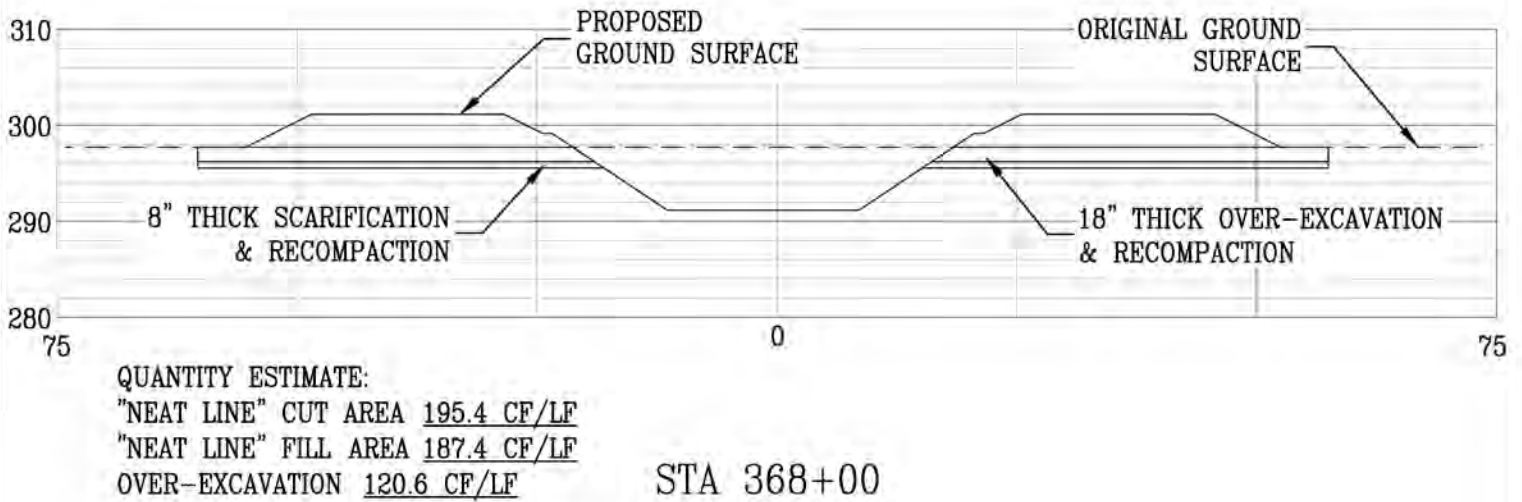
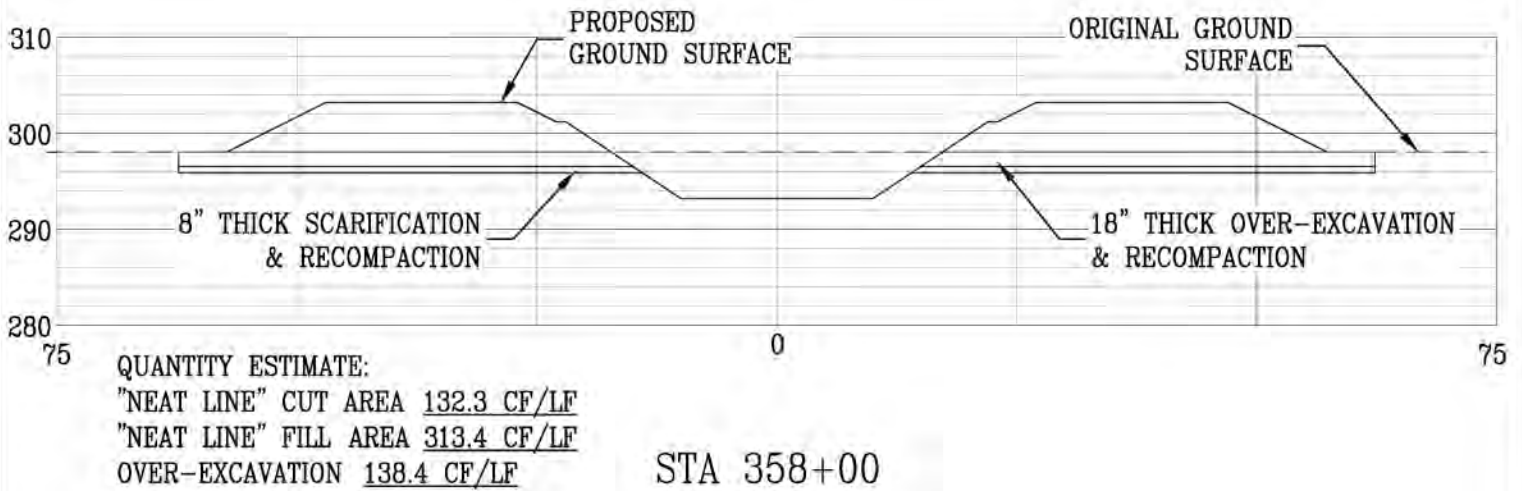
STA 348+00

**Kern Fan Groundwater Storage Project  
 CANAL CROSS-SECTIONS**

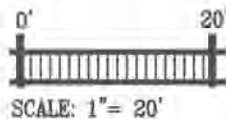


**DEE JASPAR & ASSOCIATES, INC.**  
 CIVIL ENGINEERS  
 2730 LINCOLN ROAD, BLDG A  
 BAKERSFIELD, CALIFORNIA 93308  
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PHONE 661 393-4798  
 FAX 661 393-4799  
 PHONE 558 781-9286  
 FAX 558 783-9275

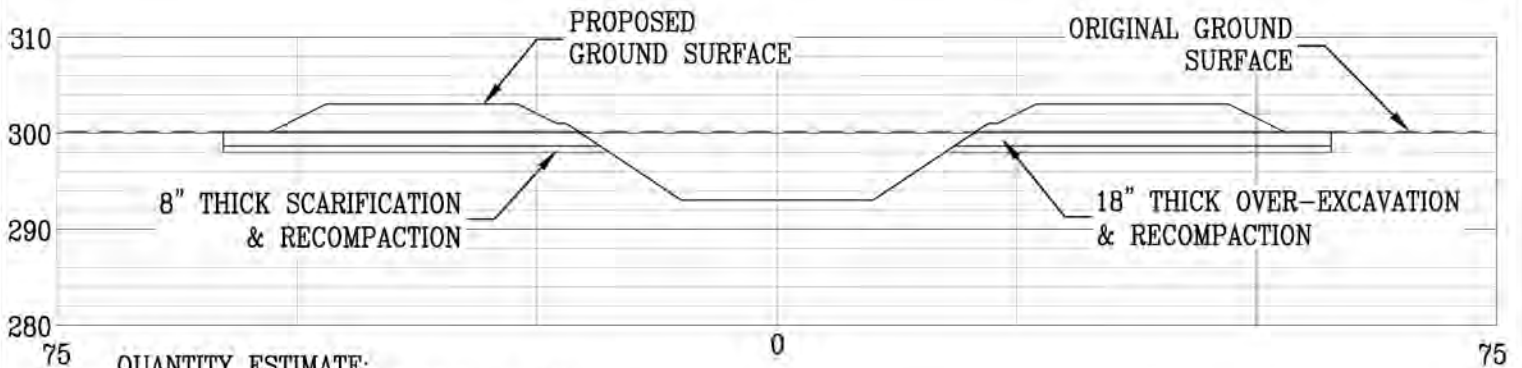


**Kern Fan Groundwater Storage Project  
 CANAL CROSS-SECTIONS**



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 CIVIL ENGINEERS  
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 638 N. MAIN STREET, #8  
 PORTERVILLE, CALIFORNIA 93257

PHONE 661 393-4798  
 FAX 661 393-4799  
 PHONE 558 781-9286  
 FAX 558 783-9275



QUANTITY ESTIMATE:

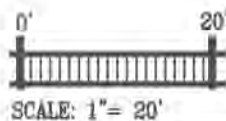
"NEAT LINE" CUT AREA 219.7 CF/LF

"NEAT LINE" FILL AREA 147.8 CF/LF

OVER-EXCAVATION 114.3 CF/LF

STA 392+80

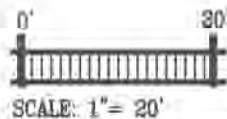
**Kern Fan Groundwater Storage Project  
CANAL CROSS-SECTIONS**



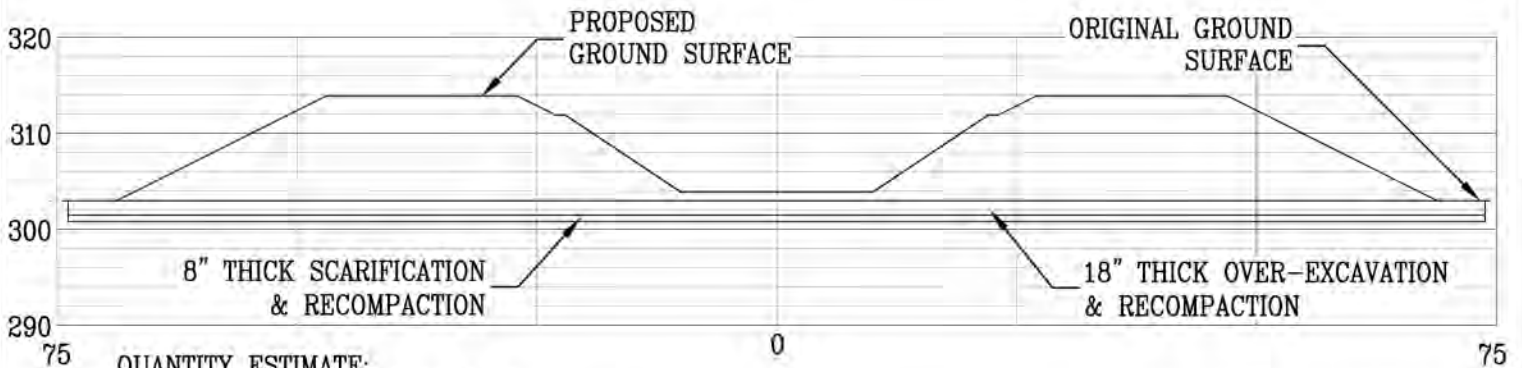
	<b>DEE JASPARS &amp; ASSOCIATES, INC.</b>		
	CIVIL • ENGINEERS		
	2730 LINCOLN ROAD, BLDG A		PHONE 661 393-4796
	BAKERSFIELD, CALIFORNIA 93308		FAX 661 393-4799
638 N. MAIN STREET, #8		PHONE 559 781-9286	
PORTERVILLE, CALIFORNIA 93257		FAX 559 783-9275	

# REACH 4

**Kern Fan Groundwater Storage Project  
CANAL CROSS-SECTIONS**

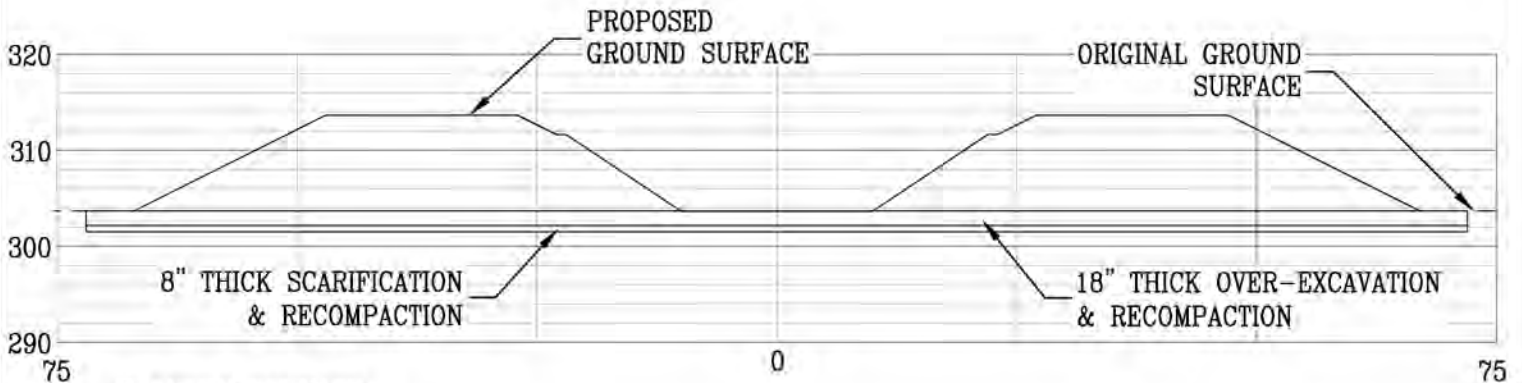


	<b>DEE JASPARS &amp; ASSOCIATES, INC.</b>	
	<b>CIVIL ENGINEERS</b>	
	2730 LINCOLN ROAD, BLDG A BAKERSFIELD, CALIFORNIA 93308	PHONE 661 393-4796 FAX 661 393-4799
	638 N. MAIN STREET, #B PORTERVILLE, CALIFORNIA 93257	PHONE 559 781-9286 FAX 559 783-9275



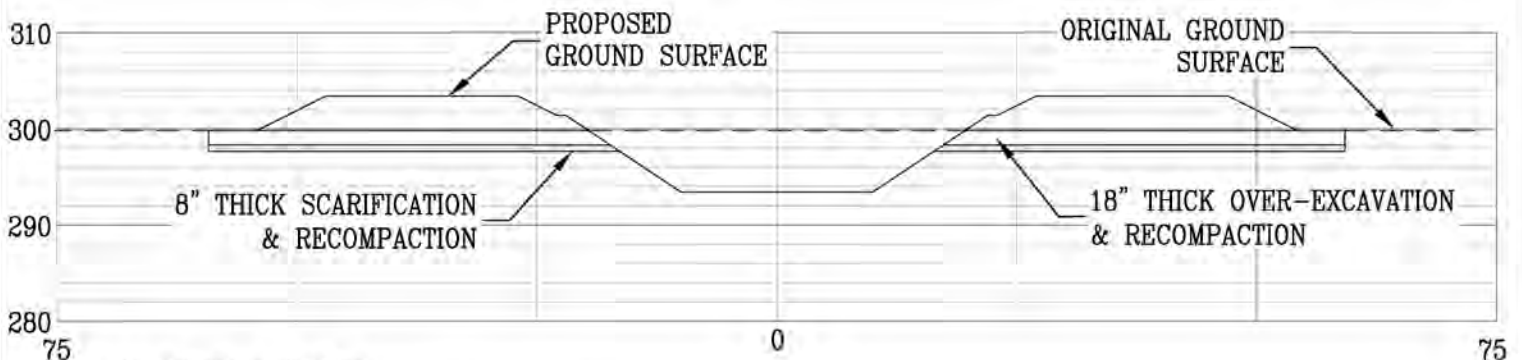
QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 0 CF/LF  
 "NEAT LINE" FILL AREA 906.2 CF/LF  
 OVER-EXCAVATION 221.4 CF/LF

STA 393+60



QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 0 CF/LF  
 "NEAT LINE" FILL AREA 781.7 CF/LF  
 OVER-EXCAVATION 215.9 CF/LF

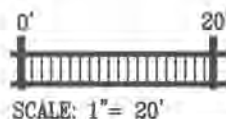
STA 406+00



QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 189.4 CF/LF  
 "NEAT LINE" FILL AREA 197.8 CF/LF  
 OVER-EXCAVATION 122.2 CF/LF

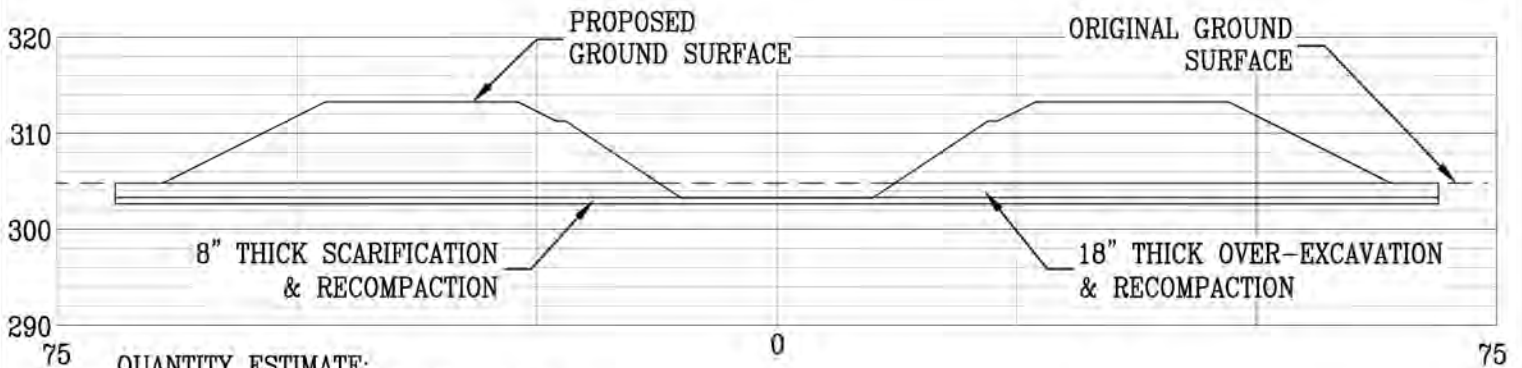
STA 416+00

**Kern Fan Groundwater Storage Project  
 CANAL CROSS-SECTIONS**



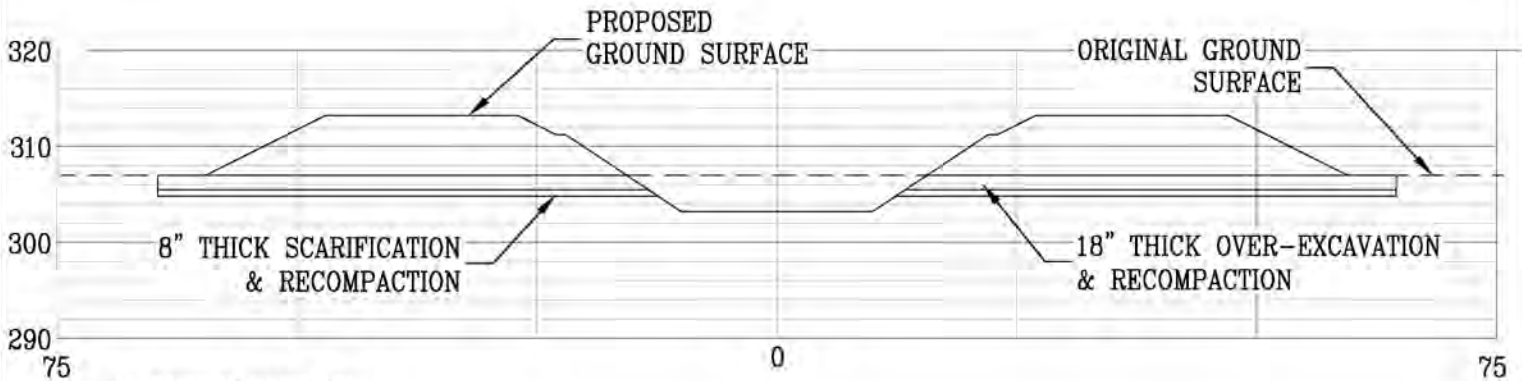
**DEE JASPAR & ASSOCIATES, INC.**  
 CIVIL ENGINEERS  
 2730 LINCOLN ROAD, SUITE A  
 BAKERSFIELD, CALIFORNIA 93308  
 638 N. MAIN STREET, #8  
 PORTERVILLE, CALIFORNIA 93257

PHONE 661 393-4798  
 FAX 661 393-4799  
 PHONE 558 781-9286  
 FAX 558 783-9275



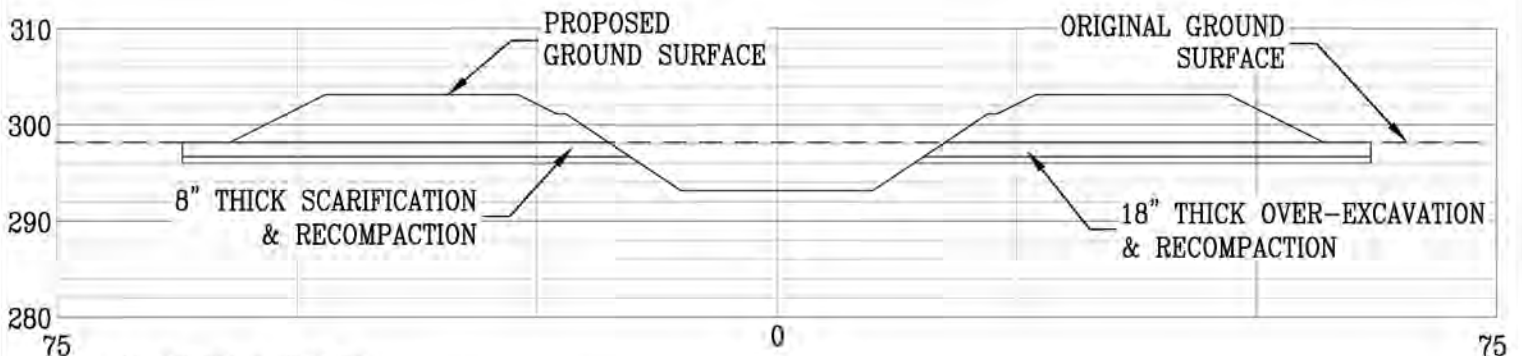
QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 34.4 CF/LF  
 "NEAT LINE" FILL AREA 616.7 CF/LF  
 OVER-EXCAVATION 161.2 CF/LF

STA 426+00



QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 96.1 CF/LF  
 "NEAT LINE" FILL AREA 405.7 CF/LF  
 OVER-EXCAVATION 150.0 CF/LF

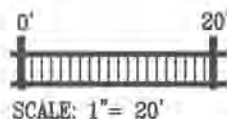
STA 436+00



QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 139.3 CF/LF  
 "NEAT LINE" FILL AREA 297.6 CF/LF  
 OVER-EXCAVATION 136.4 CF/LF

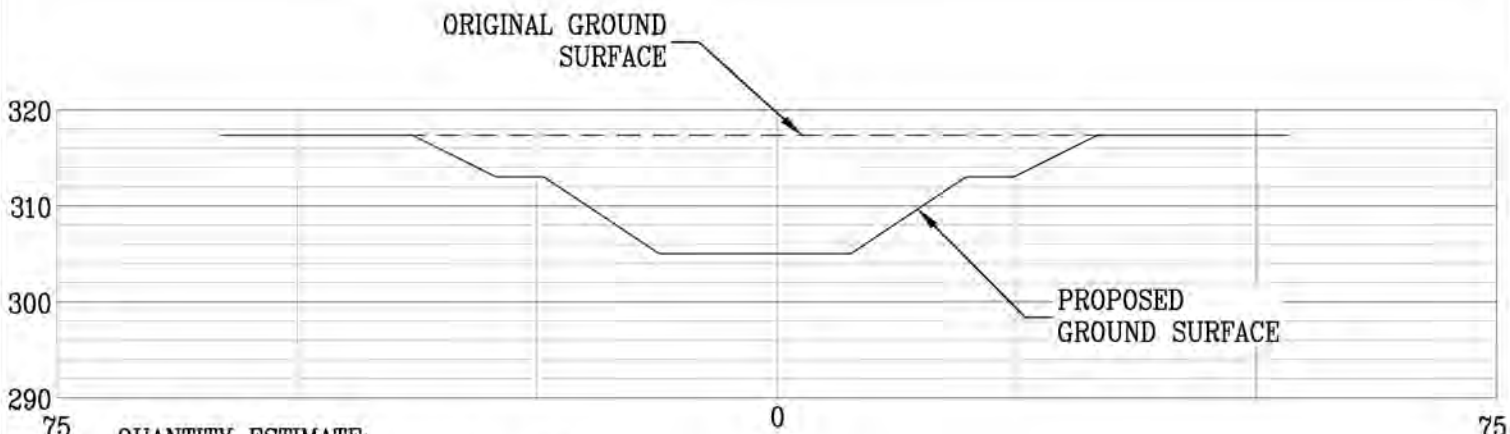
STA 446+00

Kern Fan Groundwater Storage Project  
 CANAL CROSS-SECTIONS



**DEE JASPAR & ASSOCIATES, INC.**  
 CIVIL ENGINEERS  
 2730 LINCOLN ROAD, BLDG A  
 BAKERSFIELD, CALIFORNIA 93308  
 638 N. MAIN STREET, #8  
 PORTERVILLE, CALIFORNIA 93257

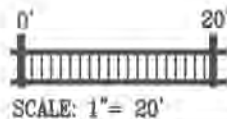
PHONE 661 393-4798  
 FAX 661 393-4799  
 PHONE 558 781-9286  
 FAX 559 783-9275



QUANTITY ESTIMATE:  
 "NEAT LINE" CUT AREA 528.7 CF/LF  
 "NEAT LINE" FILL AREA 0 CF/LF  
 OVER-EXCAVATION 0 CF/LF

STA 464+00

**Kern Fan Groundwater Storage Project  
 CANAL CROSS-SECTIONS**



	<b>DEE JASPARS &amp; ASSOCIATES, INC.</b>	
	CIVIL • ENGINEERS	
	2730 LINCOLN ROAD, BLDG. A BAKERSFIELD, CALIFORNIA 93308	
	638 N. MAIN STREET, #8 PORTERVILLE, CALIFORNIA 93257	
	PHONE 661-393-4796	FAX 661-393-4799
	PHONE 559-781-9286	FAX 559-783-9275