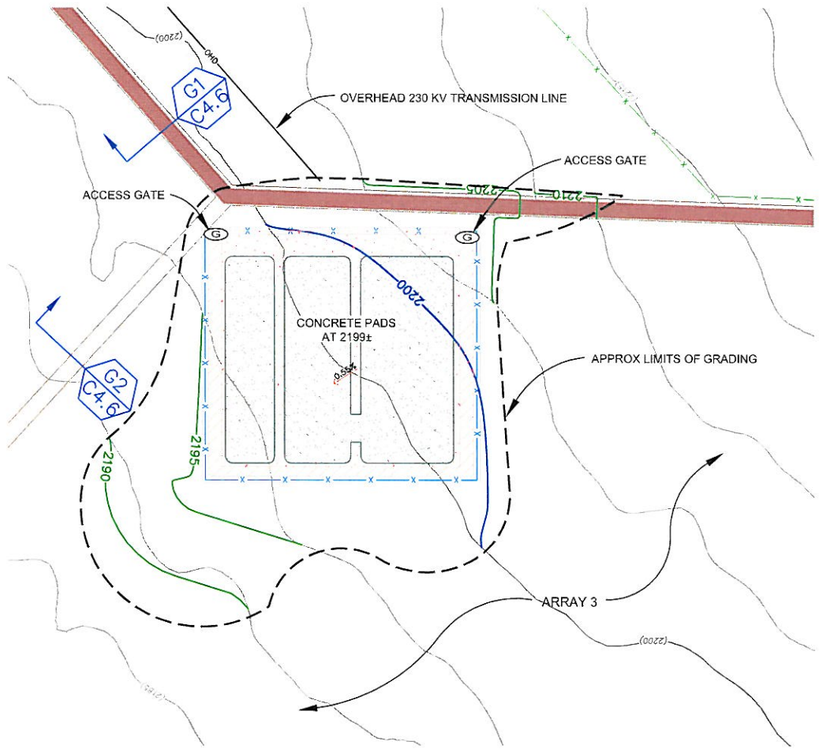
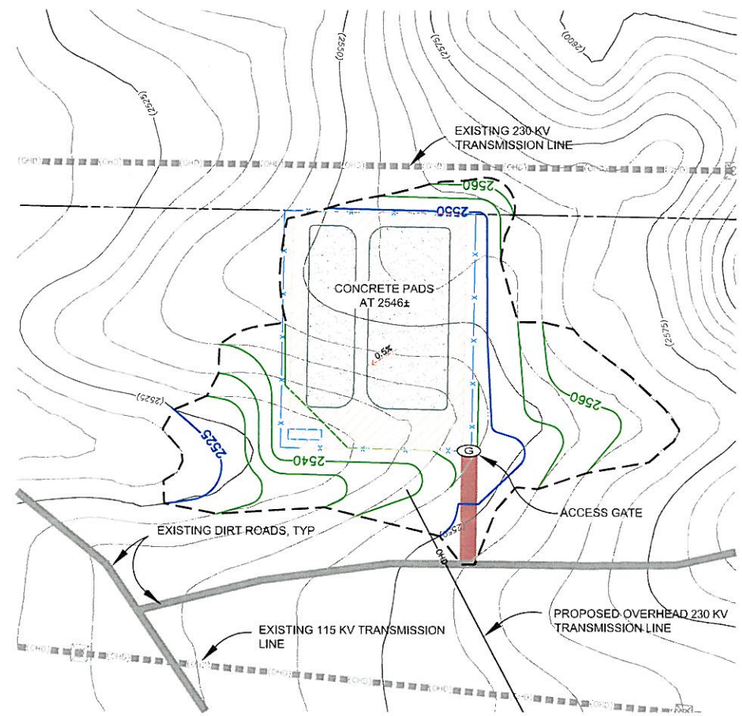


SUBSTATION



SWITCHYARD

N

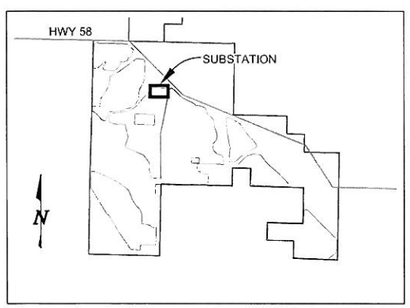
0 50' 100' 200'

SCALE: 1"=100'

IF THE SCALE BAR ABOVE IS NOT TWO INCHES LONG, THIS DRAWING IS NOT TO SCALE

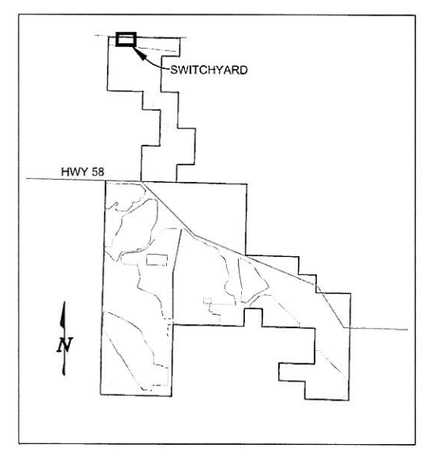
EARTHWORK		
MAX DEPTH CUT	FT	6
MAX DEPTH FILL	FT	4
AREA OF DISTURBANCE	AC	6
EARTHWORK QUANTITY:		
CUT	CU YD	16,000
FILL	CU YD	13,250

EARTHWORK		
MAX DEPTH CUT	FT	13
MAX DEPTH FILL	FT	16
AREA OF DISTURBANCE	AC	5.7
EARTHWORK QUANTITY:		
CUT	CU YD	15,000
FILL	CU YD	20,000



KEY MAP

(N.T.S.)



KEY MAP

(N.T.S.)

LEGEND

- APPROXIMATE LIMITS OF GRADING
- (2125) EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- 2125 PROPOSED MAJOR FG CONTOUR
- PROPOSED MINOR FG CONTOUR
- SITE CONCRETE
- SITE AGG BASE
- AGG BASE ACCESS DRIVE
- OHD PROPOSED OVERHEAD
- EXISTING OVERHEAD
- G ACCESS GATE
- CONTOUR INTERVAL = 5'

CALIFORNIA VALLEY SOLAR RANCH

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SOLAR RANCH
SAN LUIS OBISPO COUNTY, CA.

PROPOSED SUBSTATION & SWITCH-YARD GRADING AND DRAINAGE

REVISIONS:

REV	DATE	DESCRIPTION
1	5/4/09	PROJECT UPDATE

PROJECT	08131
DATE DRAWN	5/4/2009
DRAWN BY	SKY/KSB

0 ½" 1"

IF BAR IS NOT ONE INCH, DRAWING IS NOT TO SCALE

SHEET

C4.2

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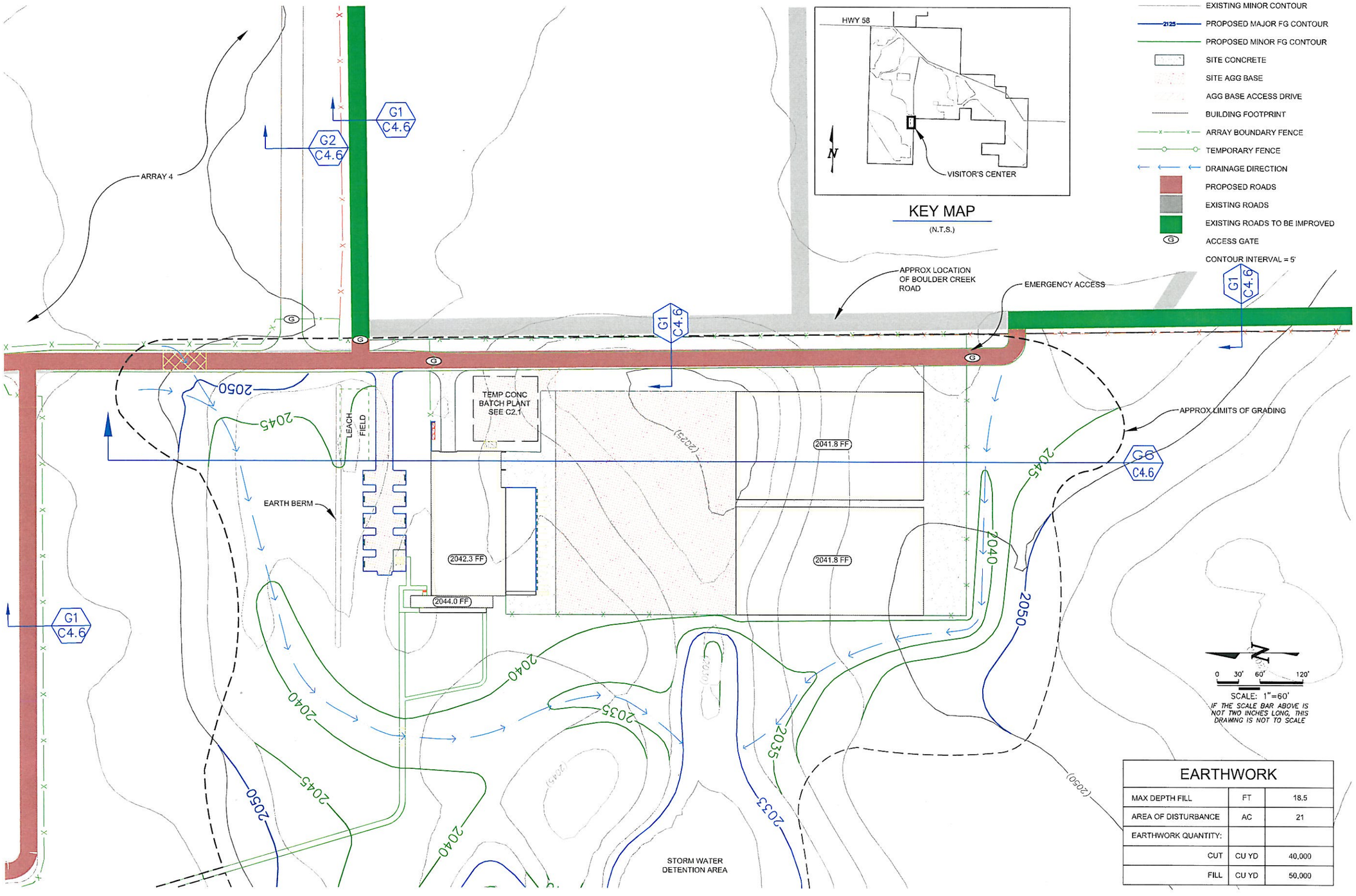

LEGEND

- APPROXIMATE LIMITS OF GRADING
- (2125) EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- 2125 PROPOSED MAJOR FG CONTOUR
- PROPOSED MINOR FG CONTOUR
- SITE CONCRETE
- SITE AGG BASE
- AGG BASE ACCESS DRIVE
- BUILDING FOOTPRINT
- ARRAY BOUNDARY FENCE
- TEMPORARY FENCE
- DRAINAGE DIRECTION
- PROPOSED ROADS
- EXISTING ROADS
- EXISTING ROADS TO BE IMPROVED
- G ACCESS GATE
- CONTOUR INTERVAL = 5'

KEY MAP

(N.T.S.)

EARTHWORK

MAX DEPTH FILL	FT	18.5
AREA OF DISTURBANCE	AC	21
EARTHWORK QUANTITY:		
CUT	CU YD	40,000
FILL	CU YD	50,000

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PROPOSED BUILDINGS GRADING & DRAINAGE

REVISIONS:

REV	DATE	DESCRIPTION
1	5/4/09	PROJECT UPDATE

PROJECT	08131
DATE DRAWN	5/4/2009
DRAWN BY	KSB

0 ½" 1"
IF BAR IS NOT ONE INCH, DRAWING IS NOT TO SCALE

SHEET C4.3
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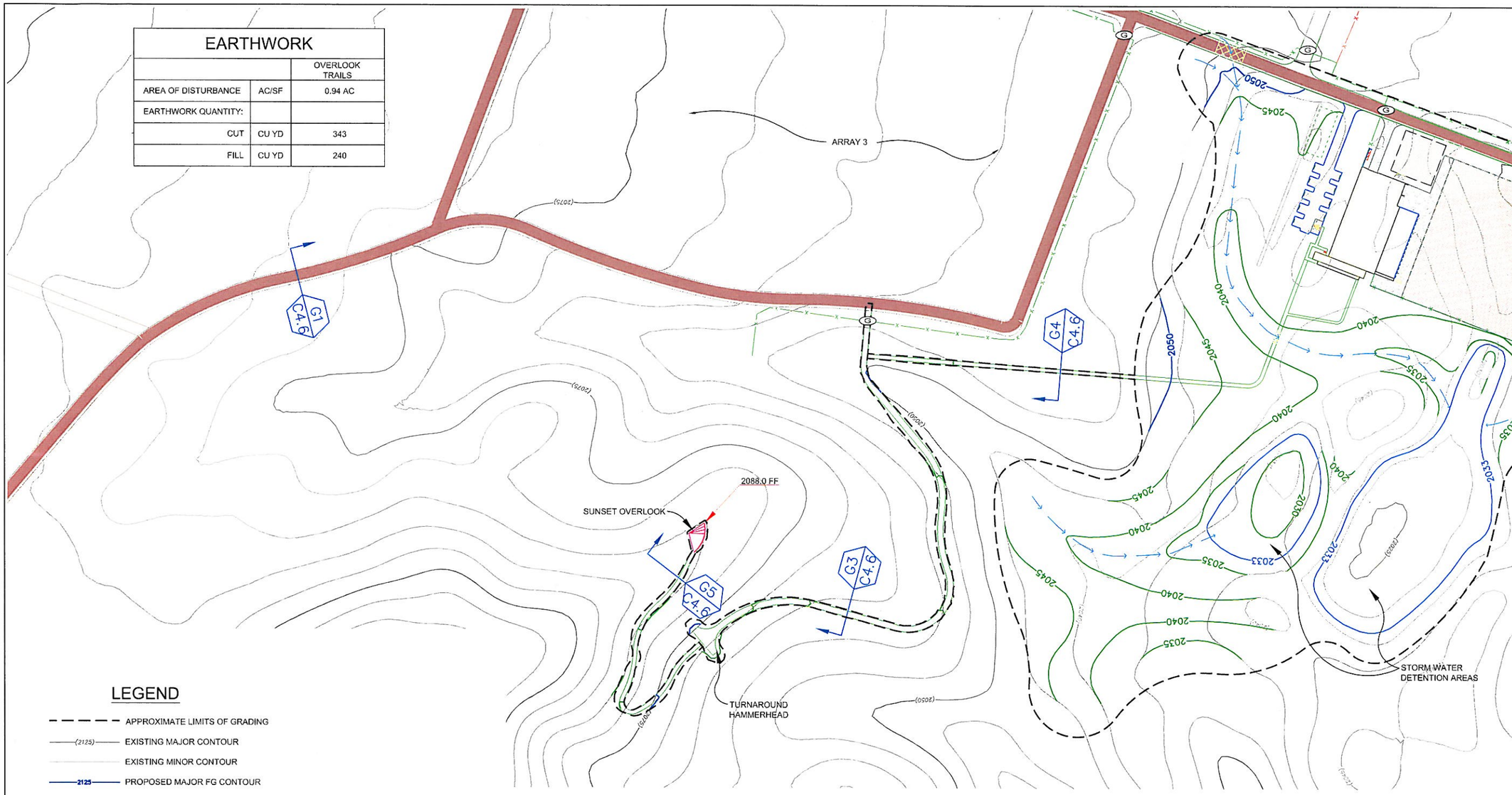
EARTHWORK

		OVERLOOK TRAILS
AREA OF DISTURBANCE	AC/SF	0.94 AC
EARTHWORK QUANTITY:		
CUT	CU YD	343
FILL	CU YD	240



LEGEND

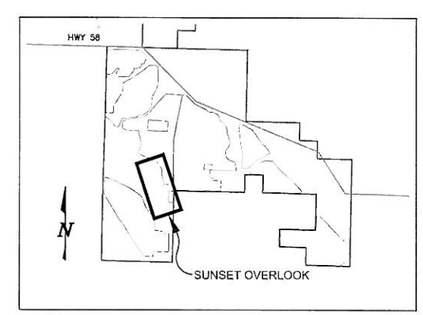
- APPROXIMATE LIMITS OF GRADING
- (2125) EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- 2125 PROPOSED MAJOR FG CONTOUR
- PROPOSED MINOR FG CONTOUR
- SITE CONCRETE
- SITE AGG BASE
- AGG BASE ACCESS DRIVE
- ARRAY BOUNDARY FENCE
- TEMPORARY FENCE
- DRAINAGE DIRECTION
- PROPOSED ROADS
- EXISTING ROADS
- ACCESS GATE
- CONTOUR INTERVAL = 5'

N

0 50' 100' 200'

SCALE: 1"=100'

IF THE SCALE BAR ABOVE IS NOT TWO INCHES LONG, THIS DRAWING IS NOT TO SCALE



KEY MAP

(N.T.S.)

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SAN LUIS OBISPO COUNTY, CA.

PROPOSED SUNSET OVERLOOK GRADING & DRAINAGE

REVISIONS:

REV	DATE	DESCRIPTION
1	5/4/09	PROJECT UPDATE

PROJECT	08131
DATE DRAWN	5/4/2009
DRAWN BY	KSB

0 ½" 1"

IF BAR IS NOT ONE INCH, DRAWING IS NOT TO SCALE

SHEET

C4.4

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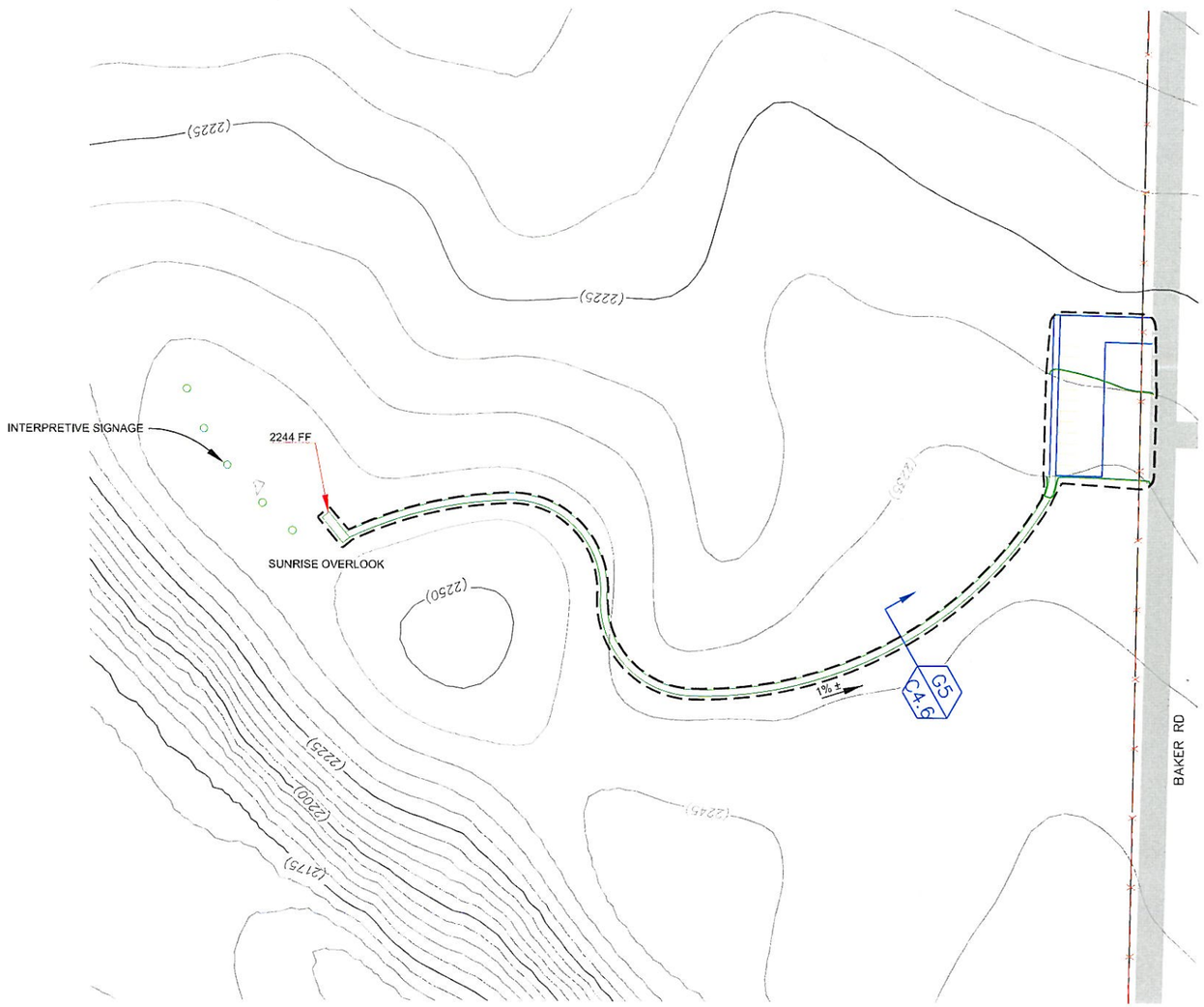


LEGEND

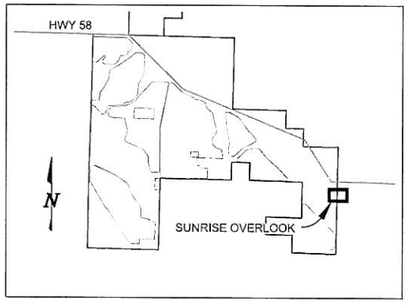
- APPROXIMATE LIMITS OF GRADING
- (2125) EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- 2125 PROPOSED MAJOR FG CONTOUR
- PROPOSED MINOR FG CONTOUR
- SITE CONCRETE
- SITE AGG BASE
- AGG BASE ACCESS DRIVE
- ARRAY BOUNDARY FENCE
- TEMPORARY FENCE
- DRAINAGE DIRECTION
- PROPOSED ROADS
- EXISTING ROADS
- G ACCESS GATE
- CONTOUR INTERVAL = 5'

N

0 50' 100' 200'

SCALE: 1"=100'

IF THE SCALE BAR ABOVE IS NOT TWO INCHES LONG, THIS DRAWING IS NOT TO SCALE



KEY MAP

(N.T.S.)

EARTHWORK

MAX DEPTH CUT	FT	1
AREA OF DISTURBANCE	AC	0.5
EARTHWORK QUANTITY:		
CUT	CU YD	355
FILL	CU YD	25

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SAN LUIS OBISPO COUNTY, CA.

SUNRISE OVERLOOK GRADING & DRAINAGE

REVISIONS:

REV	DATE	DESCRIPTION
1	5/4/09	PROJECT UPDATE

PROJECT	08131
DATE DRAWN	5/4/2009
DRAWN BY	SKY/KSB

0 ½" 1"

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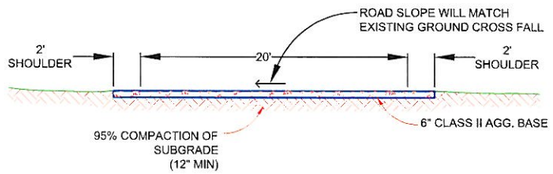
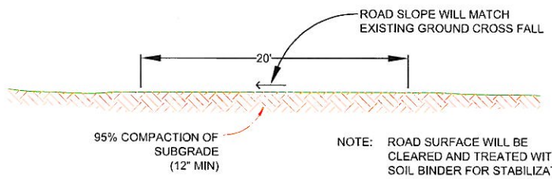


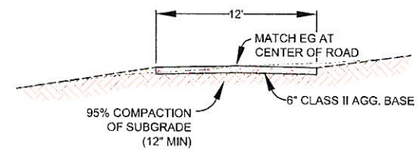
NOTE: ACTUAL SECTION TO BE BASED ON "R" VALUES DETERMINED AT THE TIME OF CONSTRUCTION AND AS DETERMINED BY THE SOILS ENGINEER.

G1 FIRE ACCESS ROAD CROSS SECTION
1"=5'



NOTE: ROAD SURFACE WILL BE CLEARED AND TREATED WITH A SOIL BINDER FOR STABILIZATION

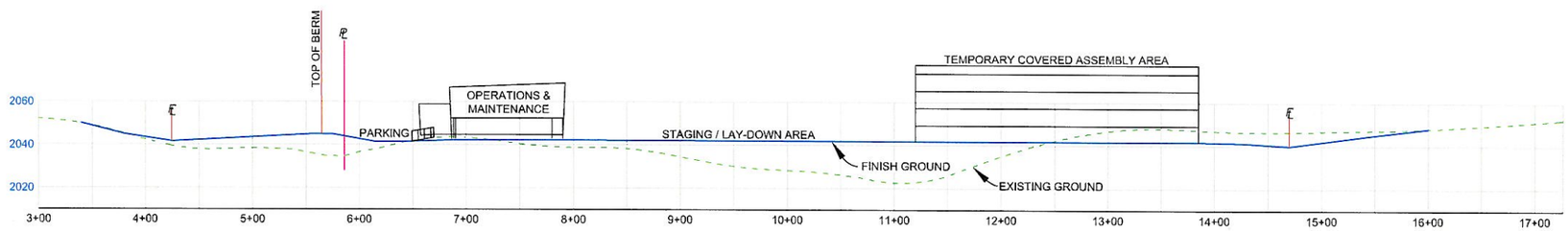
G2 ACCESS ROAD CROSS SECTION
1"=5'



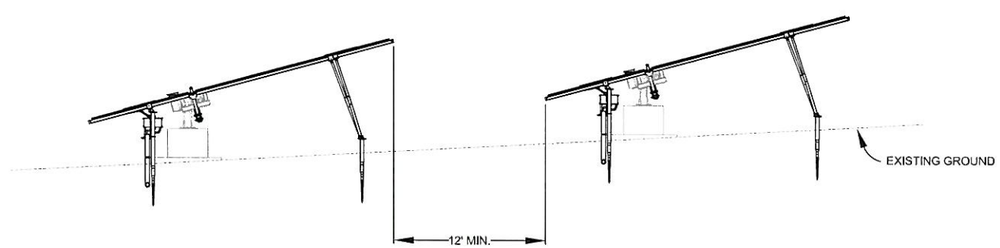
G3 12' WIDE OVERLOOK / TANK ACCESS ROAD
1"=5'

G4 WALKING PATH
1"=5'

G5 HIKING TRAIL
1"=5'



G6 SITE SECTION - OPERATIONS & MAINTENANCE
VERTICAL 1" = 30'
HORIZONTAL 1" = 60'



G7 TYPICAL TRACKER SECTION
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SAN LUIS OBISPO COUNTY, CA.

GRADING DETAILS

REVISIONS:

REV	DATE	DESCRIPTION
1	5/4/09	PROJECT UPDATE

PROJECT	08131
DATE DRAWN	5/4/2009
DRAWN BY	SKY/KSB

0 ½" 1"
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C4.6
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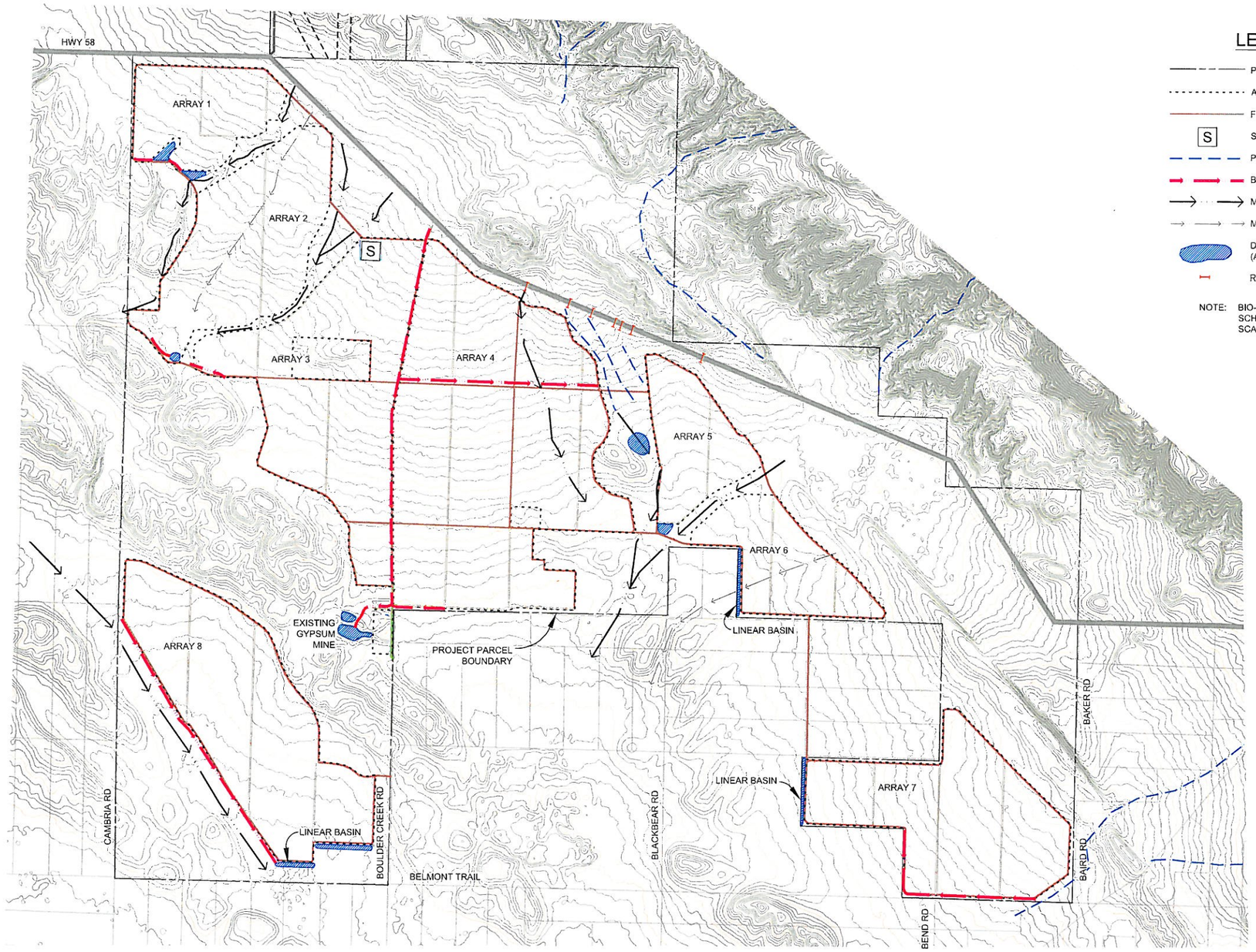

LEGEND

- PROJECT PARCEL BOUNDARY
- ARRAY BOUNDARY
- FIRE ACCESS ROADS
- S SUBSTATION
- POTENTIAL JURISDICTIONAL DRAINAGE CHANNEL
- BIO-SWALE PER D1/ C4.9 AND B/L5.1
- MAJOR DRAINAGE CHANNELS
- MINOR DRAINAGE CHANNEL
- DETENTION/RETENTION BASIN (APPROXIMATE FOOTPRINT & LOCATION)
- RCP CULVERT

NOTE: BIO-SWALES AND BASINS ARE SHOWN SCHEMATICALLY AND ARE NOT DRAWN TO SCALE

N

0 500' 1000' 2000'

SCALE: 1"=1000'

IF THE SCALE BAR ABOVE IS NOT TWO INCHES LONG, THIS DRAWING IS NOT TO SCALE

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SAN LUIS OBISPO COUNTY, CA.

PROPOSED SITE DRAINAGE PLAN

REVISIONS:

REV	DATE	DESCRIPTION
1	5/4/09	PROJECT UPDATE

PROJECT	08131
DATE DRAWN	5/4/2009
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0 ½" 1"
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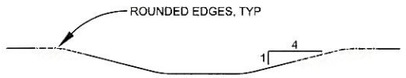
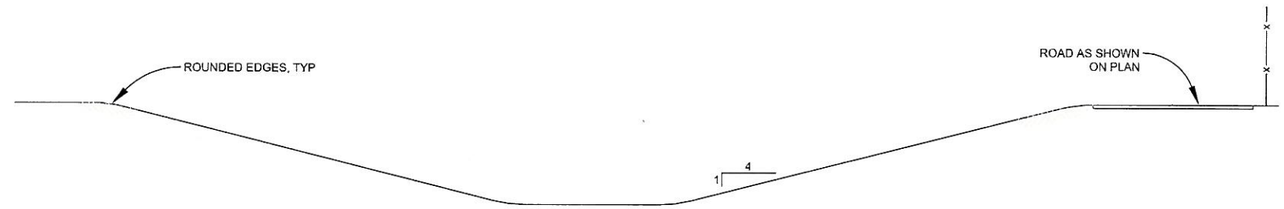


D1 TYPICAL BIOSWALE/LINEAR BASIN



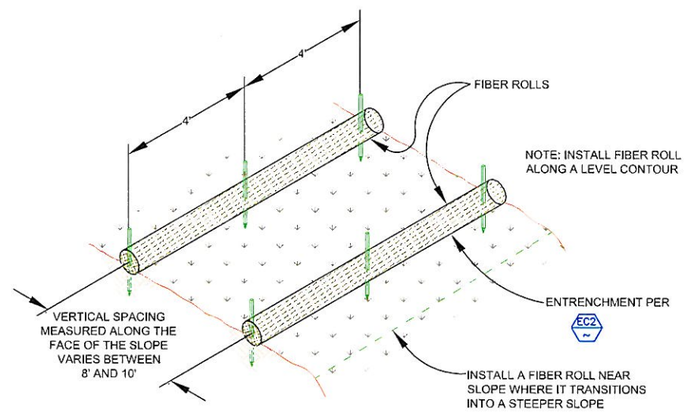
D2 TYPICAL RETENTION/DETENTION BASIN

GENERAL EROSION CONTROL NOTES:

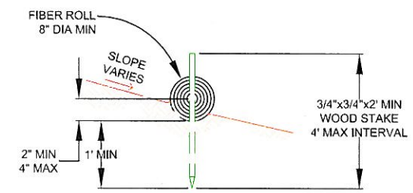
1. THE CONTRACTOR SHALL MEET WITH THE OWNER OR THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION OF ANY EROSION CONTROL DEVICES TO DETERMINE ACTUAL LOCATIONS AND LIMITS OF THE PROPOSED EROSION CONTROL DEVICES.
2. THE OWNER SHALL IMPLEMENT THE PROVISIONS OF THE EROSION AND SEDIMENT CONTROL PLAN AND STORM WATER POLLUTION PREVENTION PLAN AS NECESSARY TO PREVENT SEDIMENTATION OF WATER COURSES.
3. ALL EROSION CONTROL DEVICES SHALL BE CHECKED AND REPAIRED AFTER EACH STORM EVENT.
4. THE OWNER SHALL HAVE ALL NECESSARY EQUIPMENT STORED AND ADDITIONAL MATERIALS STOCKPILES AT A LOCATION CONVENIENT TO THE SITE.
5. A MINIMUM OF ONE OPERATOR AND ONE LABORER SHALL BE AVAILABLE FOR MAINTENANCE AND REPAIR OF ALL EROSION CONTROL DEVICES.
6. MONITORING REPORTS SHALL BE FILED SPECIFYING THE STATUS OF THE BEST MANAGEMENT PRACTICES (BMP) REPAIRS AND FAILURES.

DUST CONTROL NOTES:

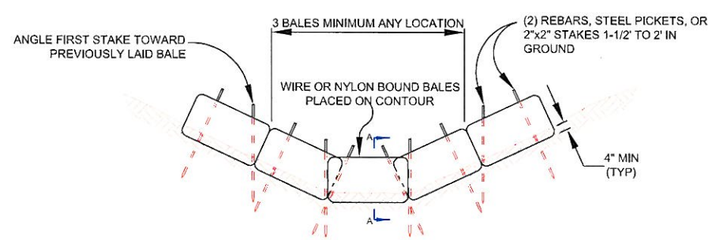
1. WATER TRUCKS OR SPRINKLER SYSTEMS SHALL BE USED TO PREVENT AIRBORNE DUST FROM LEAVING THE SITE. WATERING FREQUENCY SHALL BE INCREASED WHEN WIND SPEEDS EXCEED 15 MPH.
2. ALL DIRT STOCKPILES SHALL BE SPRAYED DAILY AS NEEDED.
3. PERMANENT DUST CONTROL MEASURES IDENTIFIED IN APPROVED LANDSCAPE PLAN SHALL BE IMPLEMENTED AS SOON AS POSSIBLE FOLLOWING COMPLETION OF ANY SOIL DISTURBING ACTIVITES.
4. EXPOSED GROUND AREAS THAT ARE PLANNED TO BE REWORKED AT DATES GREATER THAN ONE MONTH AFTER INITIAL GRADING SHALL BE PLANTED WITH A FAST-GERMINATING NATIVE GRASS SEED AND WATERED UNTIL VEGETATION IS ESTABLISHED.
5. ALL DISTURBED SOIL AREAS NOT SUBJECT TO REVEGETATION SHALL BE STABILIZED USING APPROVED SOIL CHEMICAL BINDERS, JUTE NETTING, OR OTHER METHODS APPROVED IN ADVANCE BY THE APCD.
6. VEHICLE SPEEDS FOR ALL CONSTRUCTION VEHICLES SHALL NOT EXCEED 15 MPH ON ANY UNPAVED SURFACE AT CONSTRUCTION SITE.
7. ALL TRUCKS HAULING DIRT, SAND, SOIL, OR OTHER LOOSE MATERIALS ARE TO BE COVERED OR MAINTAIN A MINIMUM OF TWO FEET OF FREEBOARD (MINIMUM VERTICAL DISTANCE BETWEEN TOP OF LOAD AND TOP OF TRAILER).
8. DEVELOPMENTAL BURNING OF VEGETATIVE MATERIAL IS PROHIBITED IN SAN LUIS OBISPO COUNTY.

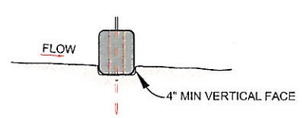


EC1 TYPICAL FIBER ROLL INSTALLATION
NTS



EC2 FIBER ROLL ENTRENCHMENT
NTS



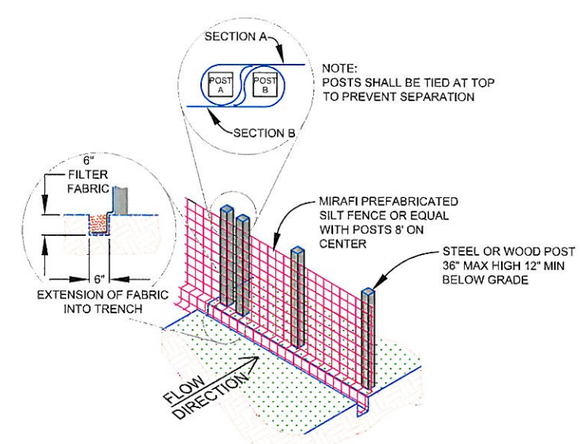


SECTION A-A

CONSTRUCTION NOTES

1. BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHWISE, ORIENTED PERPENDICULAR TO THE CONTOUR, WITH ENDS ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.
2. THE BARRIER SHALL BE EXTENDED TO SUCH A LENGTH THAT THE BOTTOMS OF THE END BALES ARE HIGHER IN ELEVATION THAN THE TOP OF THE LOWEST MIDDLE BALE TO ASSURE THAT SEDIMENT-LADEN RUNOFF WILL FLOW EITHER THROUGH OR OVER THE BARRIER BUT NOT AROUND IT.

EC3 STRAW BALE CHECK DAM
NTS



SILT FENCE CONSTRUCTION NOTES

1. A 6"x6" ANCHOR TRENCH SHALL BE EXCAVATED ON THE UPSTREAM SIDE OF THE SILT FENCE ALONG ITS ENTIRE LENGTH.
2. THE SILT FENCE SHALL BE UNROLLED ONE SECTION AT A TIME WITH POSTS POSITIONED ON THE DOWNSTREAM SIDE OF THE SILT FENCE.
3. POSTS SHALL BE DRIVEN INTO THE GROUND AND THE FILTER FABRIC SHALL BE LAID ALONG THE BOTTOM OF THE ANCHOR TRENCH. THE ANCHOR TRENCH SHALL BE BACKFILLED AND COMPACTED.
4. THE FABRIC SHALL BE OVERLAPPED AT ROLL-ENDS AND THE POSTS SHALL BE DRIVEN FIRMLY TOGETHER. THE TOPS OF THE POSTS AT OVERLAPS SHALL BE TIED TO PREVENT SEPARATION.
5. PROVIDE A 5' BREAK IN SILT FENCE EVERY 300' PER SPACING DETAIL. RIGHT

EC4 SILT FENCE DETAIL
NTS

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DRAINAGE & EROSION CONTROL DETAILS

REVISIONS:

REV	DATE	DESCRIPTION
1	5/4/09	PROJECT UPDATE

PROJECT	08131
DATE DRAWN	5/4/2009
DRAWN BY	SKY/KSB

0 ½" 1"
IF BAR IS NOT ONE INCH, DRAWING IS NOT TO SCALE

SHEET
C4.8
26 OF 61

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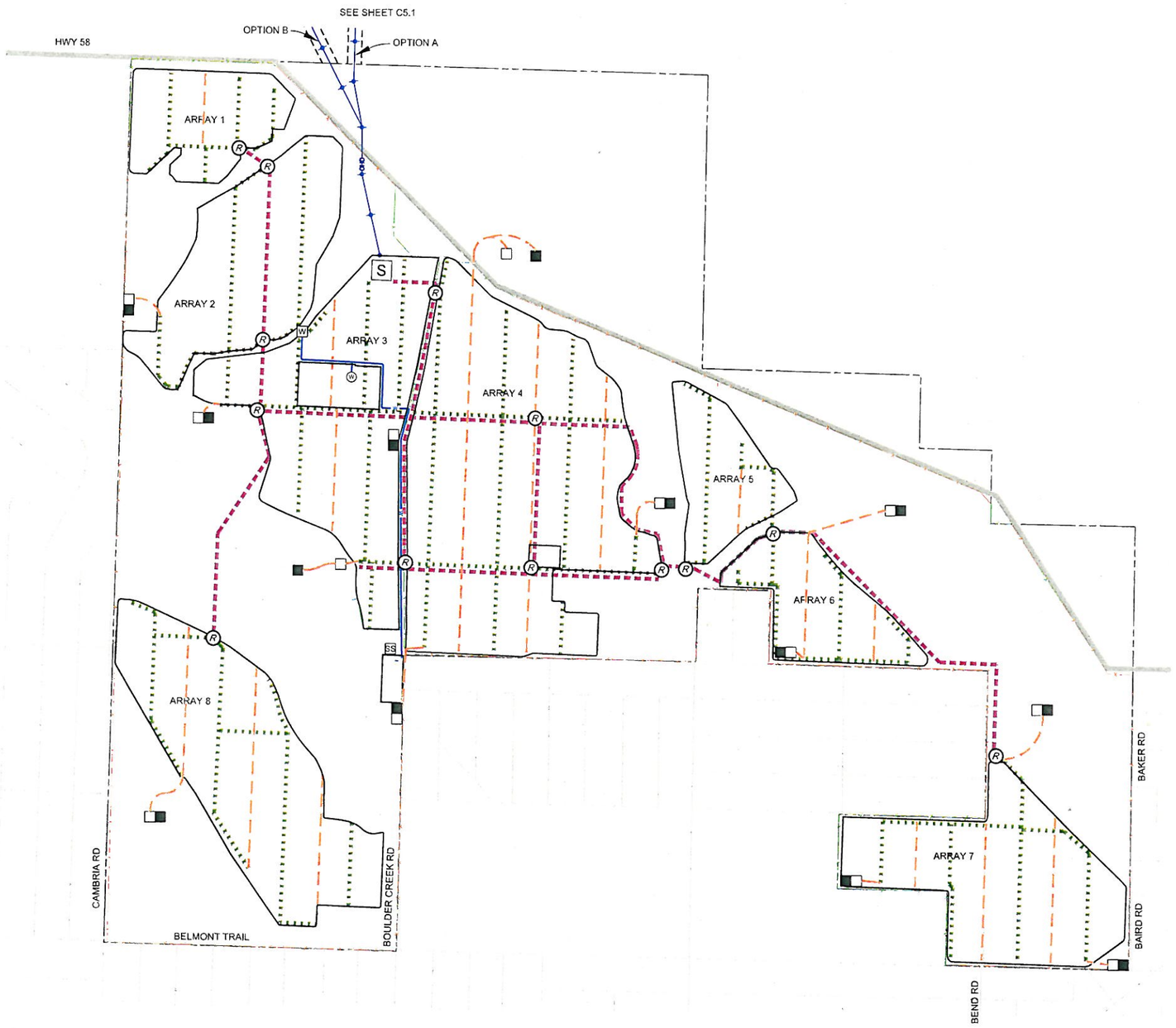

LEGEND

- RISER TO 34.5 KV OVERHEAD
- 34.5 KV OVERHEAD LINE
- 46-INCH TRENCH
- 23-INCH TRENCH
- ARRAY BOUNDARY
- 230 KV OVERHEAD TRANSMISSION LINE
- SUBSTATION
- 200,000 GALLON WATER TANK
- PROPOSED WATER LINE
- PROPOSED WATER WELL
- PROPOSED SEPTIC SYSTEM
- PROPOSED 230KV POLE LOCATIONS
- PAD-MOUNTED SECURITY EQUIPMENT
- POLE-MOUNTED SECURITY EQUIPMENT

N

0 500' 1000' 2000'

SCALE: 1"=1000'

IF THE SCALE BAR ABOVE IS NOT TWO INCHES LONG, THIS DRAWING IS NOT TO SCALE

CALIFORNIA VALLEY SOLAR RANCH

NCE NORTH COAST ENGINEERING INC.
CIVIL ENGINEERING · LAND SURVEYING · PROJECT DEVELOPMENT
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CALIFORNIA VALLEY SOLAR RANCH
SAN LUIS OBISPO COUNTY, CA.

PROPOSED UTILITY PLAN

REVISIONS:

REV	DATE	DESCRIPTION
1	5/4/09	PROJECT UPDATE

PROJECT	08131
DATE DRAWN	5/4/2009
DRAWN BY	SKY/KSB

0 ½" 1"
IF BAR IS NOT ONE INCH, DRAWING IS NOT TO SCALE

SHEET C5.0

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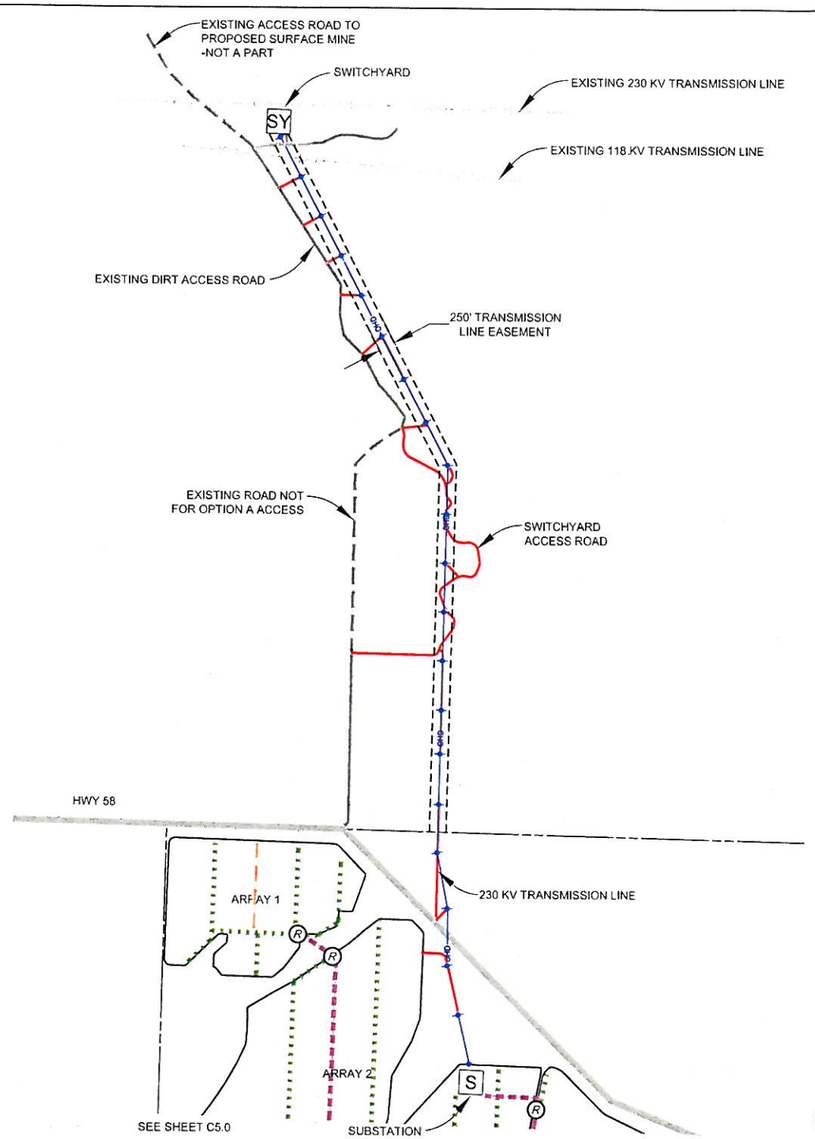
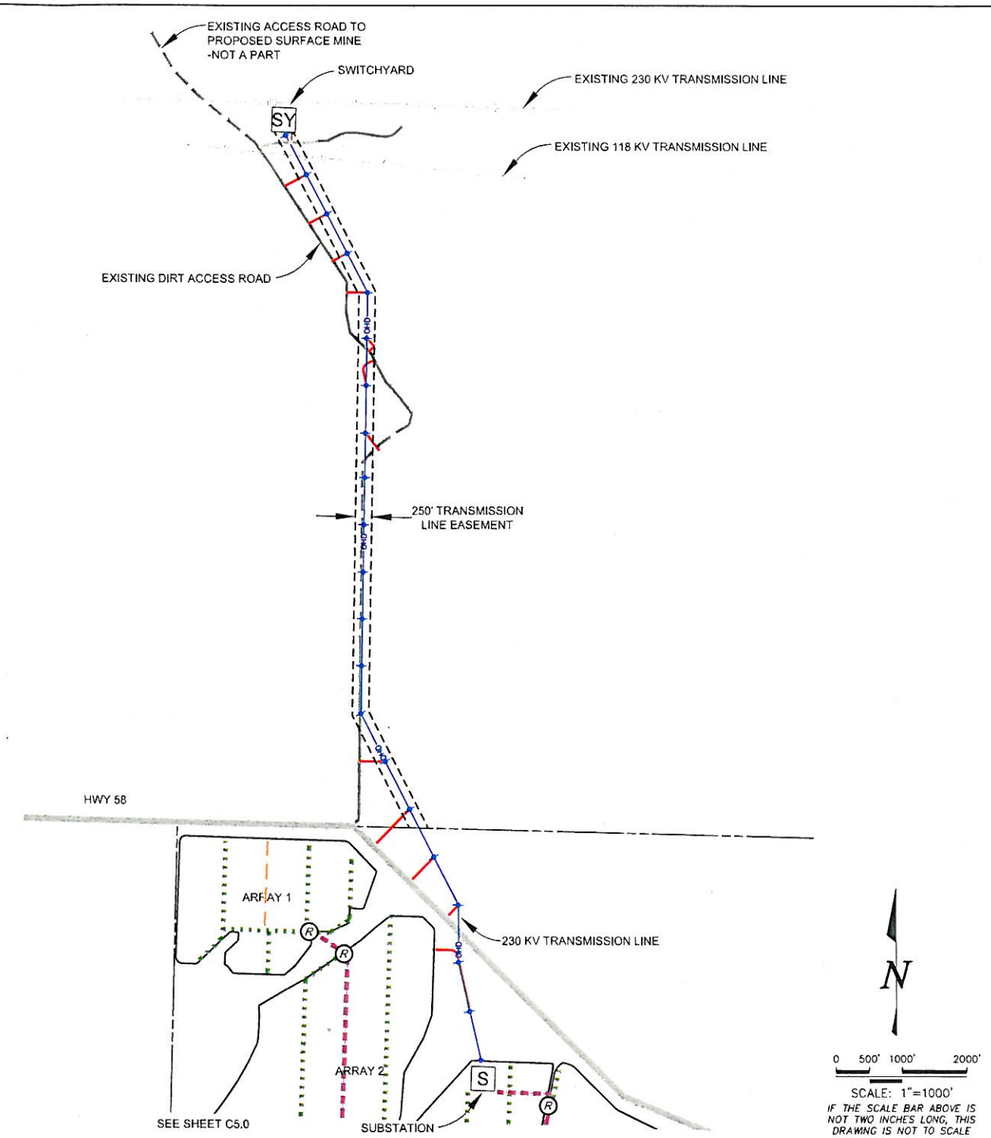


OPTION A



OPTION B

N

0 500' 1000' 2000'

SCALE: 1"=1000'

IF THE SCALE BAR ABOVE IS NOT TWO INCHES LONG, THIS DRAWING IS NOT TO SCALE

LEGEND

- (R) RISER TO 34.5 KV OVERHEAD
- PROPOSED 230KV POLE LOCATIONS (SEE ELECTRICAL SHEETS FOR DETAILS)
- 230 KV OVERHEAD TRANSMISSION LINE
- 34.5 KV OVERHEAD LINE
- 46-INCH TRENCH
- 23-INCH TRENCH
- ARRAY BOUNDARY
- TRANSMISSION LINE ACCESS ROAD
- EXISTING DIRT ACCESS ROADS
- SY SWITCHYARD
- S SUBSTATION

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TRANSMISSION CONCEPT PLAN

REVISIONS:

REV	DATE	DESCRIPTION
1	5/4/09	PROJECT UPDATE

PROJECT	08131
DATE DRAWN	5/4/2009
DRAWN BY	SKY/KSB

0 ½" 1"

IF BAR IS NOT ONE INCH, DRAWING IS NOT TO SCALE

SHEET C5.1

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