

**APPENDIX 5, Detailed Project Plans**



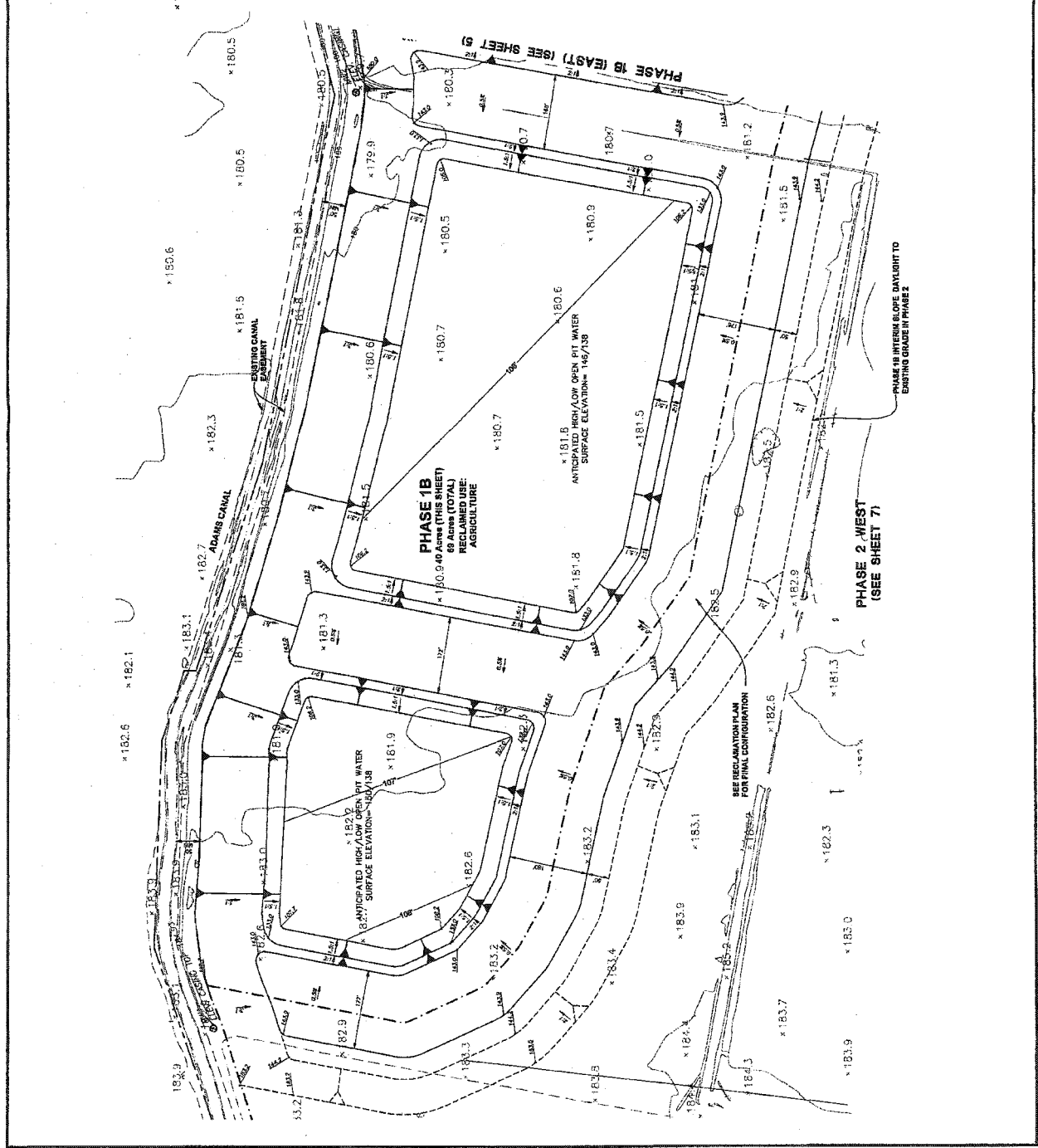
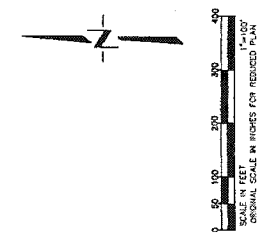




DATE	10/12/07
DRAWN BY	SP
CHECKED BY	SP
SCALE	1" = 100'

CONCRETE JOB  
 DATE  
 REVISIONS  
 BY  
 APPROV.  
 PROJECT NUMBER  
 PROJECT NAME  
 2010 Boulder Street, Suite 200  
 Boulder, CO 80502  
 303.440.1234  
 303.440.1235  
 303.440.1236  
 303.440.1237  
 303.440.1238  
 303.440.1239  
 303.440.1240  
 303.440.1241  
 303.440.1242  
 303.440.1243  
 303.440.1244  
 303.440.1245  
 303.440.1246  
 303.440.1247  
 303.440.1248  
 303.440.1249  
 303.440.1250

**NOTES**  
 1. 1-2' BURNS TO BE ADDED ALONG PHASE 1B AS ENTERING INTO THE DESIGNATED OPEN WATER AREAS.  
 2. BOTTOM MARKS ELEVATIONS ARE ±10' DEPENDENT ON ACTUAL BOTTOM OF GRAVEL DEEPS. ELEVATIONS SHOWN ON PLAN ASSUME BOTTOM OF GRAVEL TO BE 75' BELOW EXISTING GROUNDING.

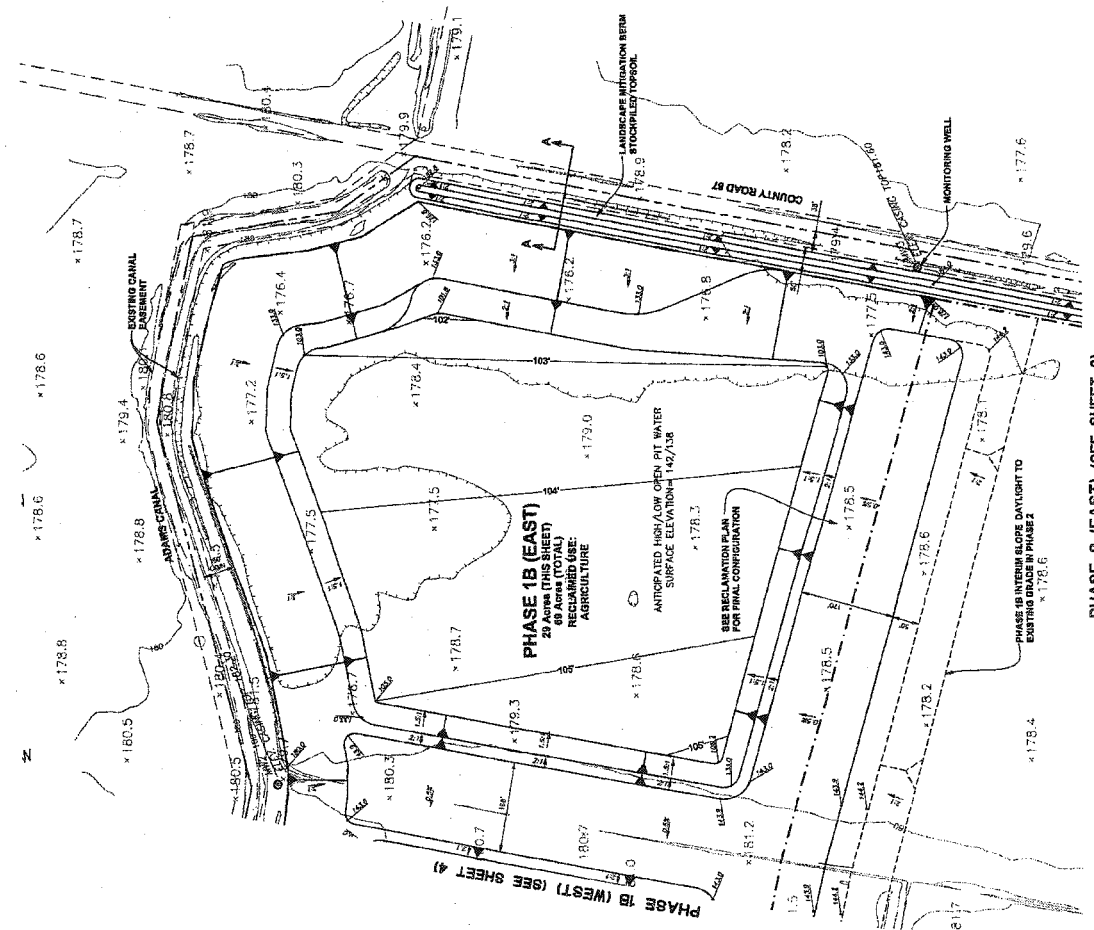
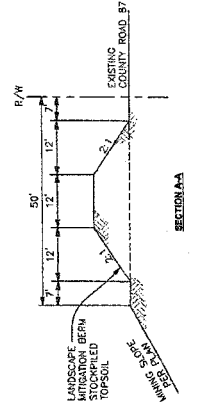


DATE	10/12/07
SHEET	5
OF	13
DATE	10/12/07
JOB NO.	66307

GRANITE CONSTRUCTION  
MINING PLAN  
PHASE 1B (EAST)

Steven M. Smith  
Professional Engineer  
License No. 50518  
State of California  
1200 22nd Street, Suite 100  
Berkeley, CA 94710  
949-851-0200  
www.sm-smith.com

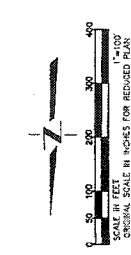
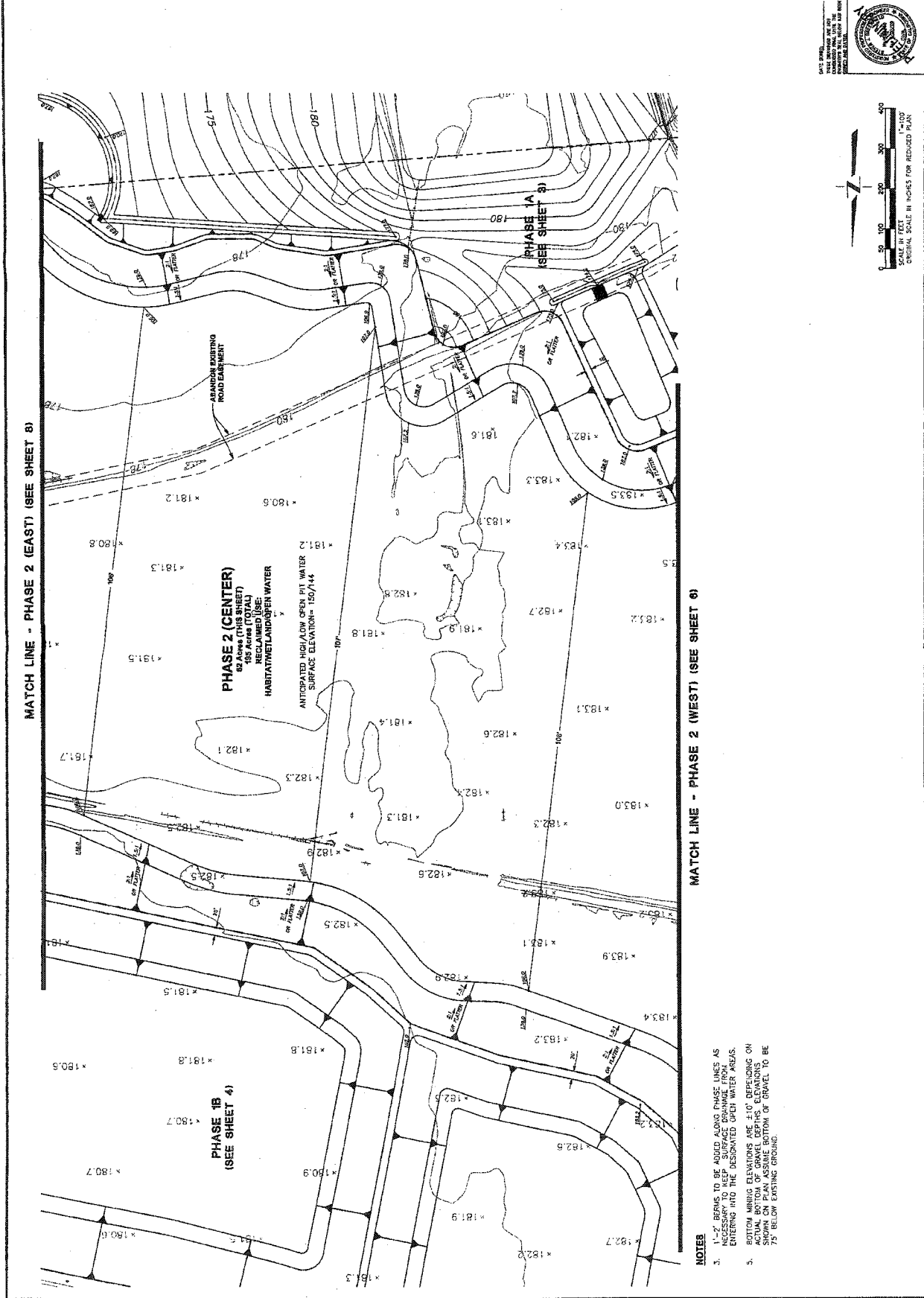
- NOTES**
1. 1'-2' BERMS TO BE ADDED ALONG PHASE LINES AS SHOWN. EXISTING AND PROPOSED OPEN WATER AREAS, EXCEPTING INTO THE DESIGNATED OPEN WATER AREAS.
  2. ELEVATION MARKINGS ARE ALSO REFLECTING ON ACTUAL NOTION OF GRAVEL DEPTHS, ELEVATIONS SHOWN ON PLAN ASSUME BOTTOM OF GRAVEL TO BE 75' BELOW EXISTING GROUND.



PHASE 2 (EAST) (SEE SHEET 6)

PHASE 1B (WEST) (SEE SHEET 4)





MATCH LINE - PHASE 2 (WEST) (SEE SHEET 6)

MATCH LINE - PHASE 2 (EAST) (SEE SHEET 8)

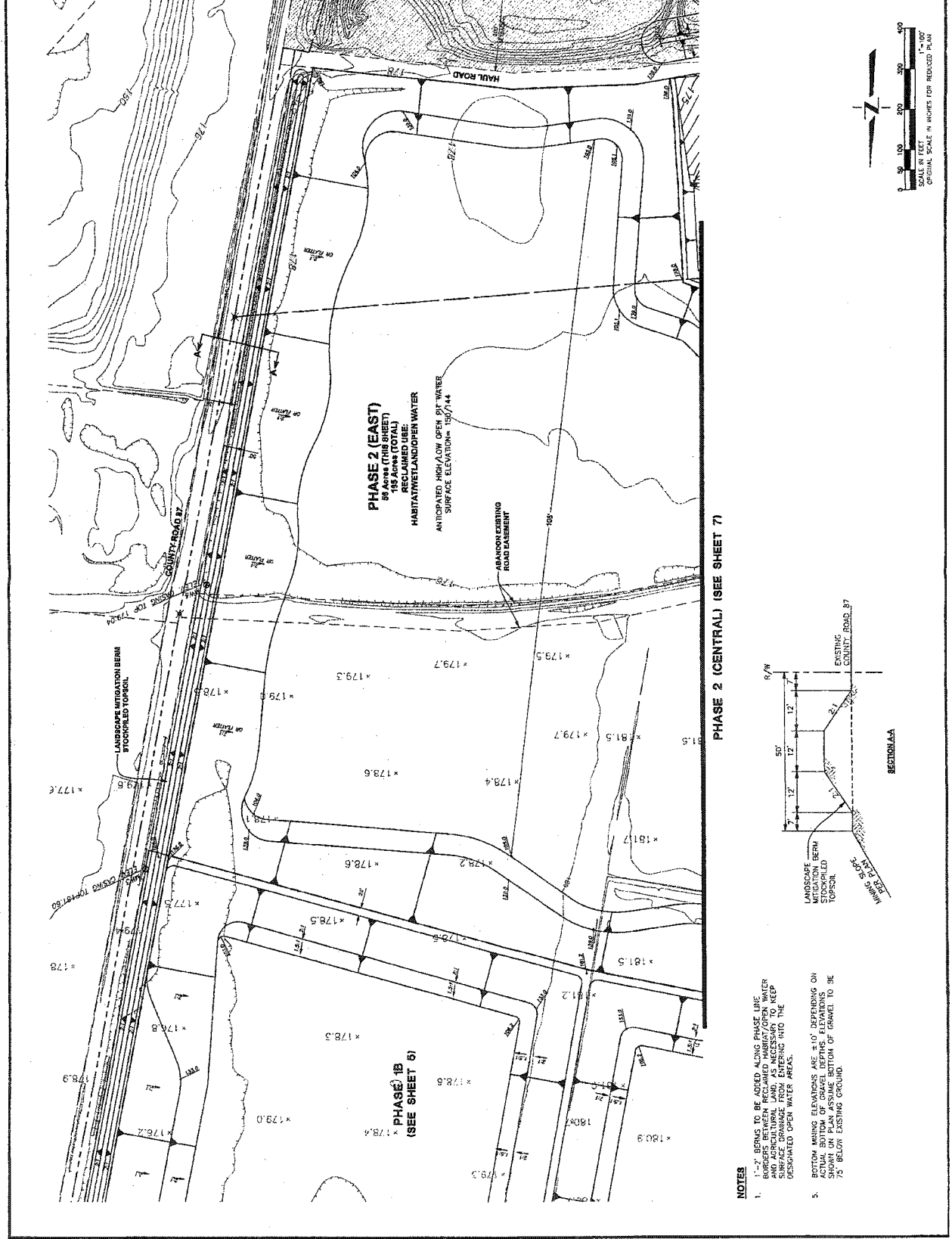
**PHASE 2 (CENTER)**  
 AS SHOWN (THIS SHEET)  
 RECLAIMED USE:  
 HABITAT/METALADSORBENT WATER

ANTICIPATED HIGH/LOW OPEN PIT WATER  
 SURFACE ELEVATION - 150/144

- NOTES**
- 1'-2" BENCH TO BE ADDED ALONG PHASE LINES AS ENTERING INTO THE DESIGNATED OPEN WATER AREAS.
  - BOTTOM MINING ELEVATIONS ARE 1.0' DEPLETION ON ACTUAL BOTTOM OF GRAVEL DEPTHS. ELEVATIONS SHOWN ON PLAN ASSUME BOTTOM OF GRAVEL TO BE 75' BELOW EXISTING GROUND.



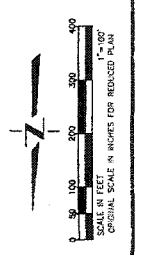
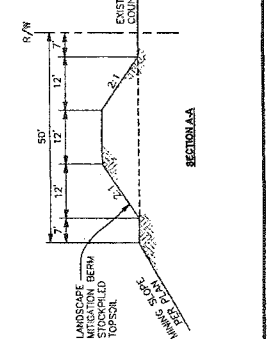
GRANITE CONSTRUCTION PHASE 2 (EAST)  
 MINING PLAN  
 PROJECT ENGINEER: [Signature]  
 CHECKED BY: [Signature]  
 DATE: [Date]  
 SCALE: 1" = 100'  
 ORIGINAL SCALE IN INCHES FOR REDUCED PLAN



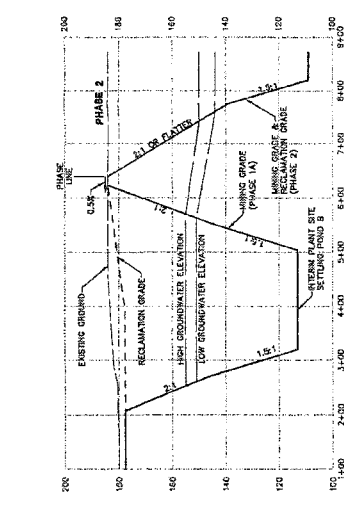
**PHASE 2 (EAST)**  
 89 Acres (THIS SHEET)  
 189 Acres (TOTAL)  
 HABITAT WETLAND/OPEN WATER  
 ANTICIPATED HIGH/LOW OPEN PIT WATER  
 SURFACE ELEVATION = 180.7/144

PHASE 2 (CENTRAL) (SEE SHEET 7)

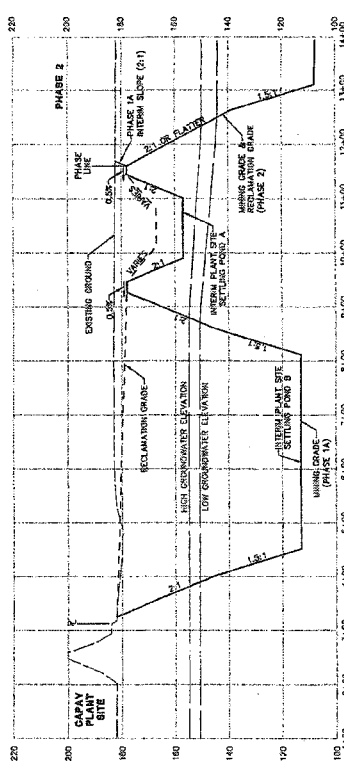
- NOTES**
1. ALL BERM TO BE ADDED IN THIS PHASE. THE SURFACE ELEVATION BEHIND A HURDLE/OPEN WATER AND AGRICULTURAL LAND, AS NECESSARY TO KEEP SURFACE DRAINAGE FROM ENTERING INTO THE DESIGNATED OPEN WATER AREAS.
  2. BOTTOM MINING ELEVATIONS ARE ±10' DEPENDING ON ACTUAL BOTTOM OF GRAVEL (BEHIND ELEVATIONS SHOWN ON PLAN ASSUME BOTTOM OF GRAVEL TO BE 75' BELOW EXISTING GROUND).



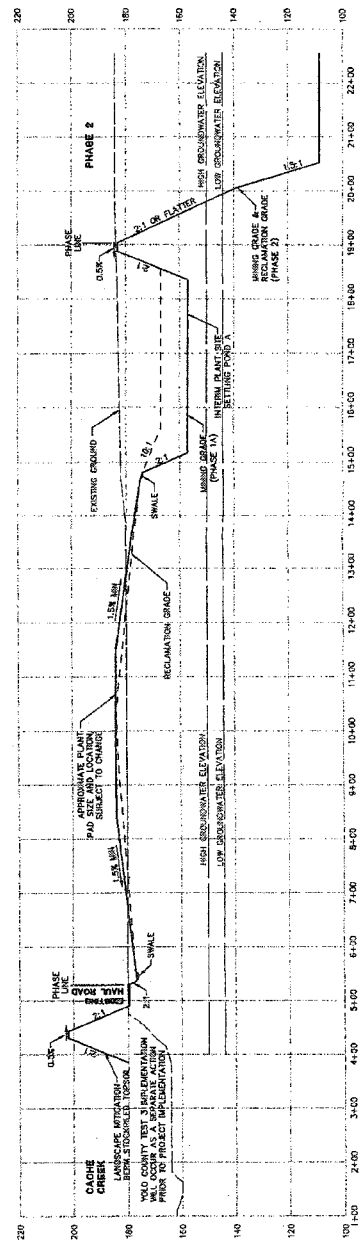
**NOTE:**  
1. ELEVATIONS AND DISTANCES ARE APPROXIMATE. EXISTING GROUND BASED AROUND TOPOGRAPHY FROM MAY 2007. MINING GRADIENTS AND DISTANCES PROVIDED BY GRANITE CONSTRUCTION COMPANY ON AUGUST 16, 2007.  
2. HIGH AND LOW AVERAGE GROUNDWATER ELEVATIONS BASED ON DATA PROVIDED BY WILLIAMS NGL & ASSOCIATES, INC. DATED JULY 2007.



SECTION 1-1 (PHASE 1A)  
N1°=100' V1°=20'



SECTION 2-2 (PHASE 1A)  
N1°=100' V1°=20'



SECTION 3-3 (PHASE 1A)  
N1°=100' V1°=20'







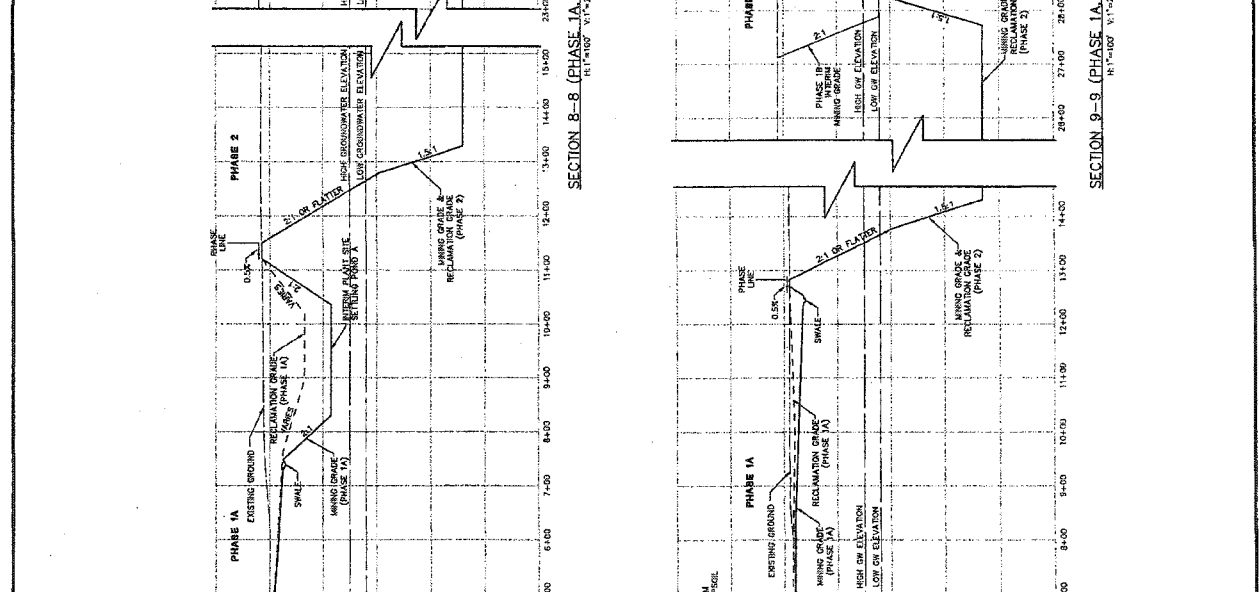
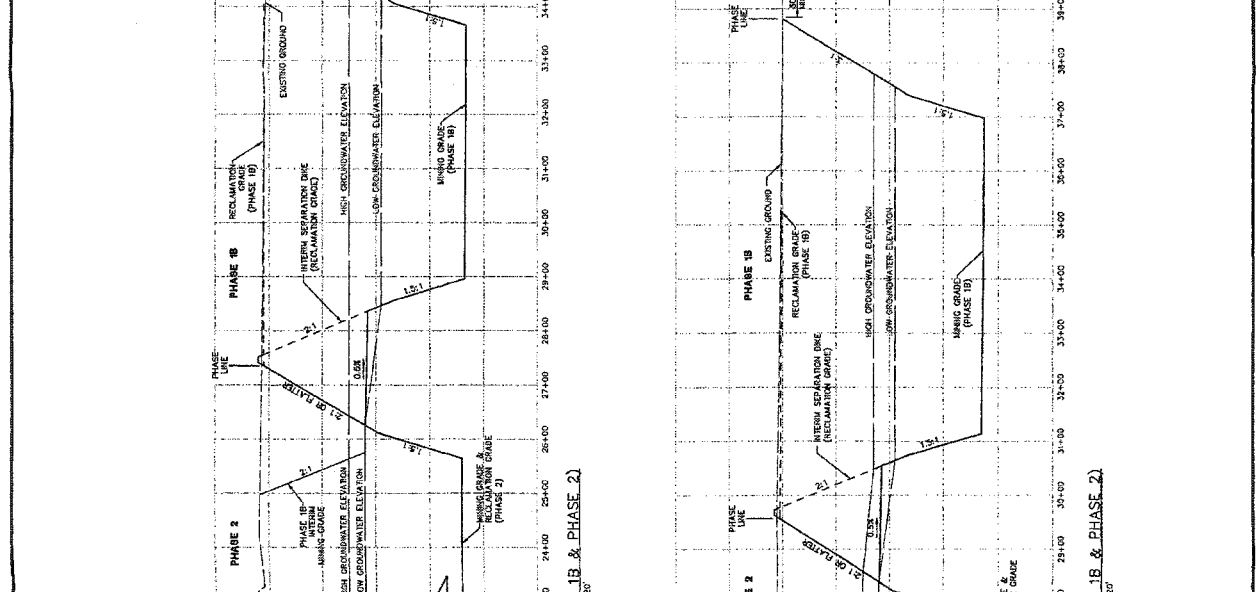
**GRANITE CONSTRUCTION**  
**MINING PLAN**  
**CROSS SECTIONS**

Professional Engineer  
 License No. 10000  
 State of Nevada

DATE: 10/20/07  
 SHEET NO. 13 OF 12

**NOTE:**

1. PHASES AND DISTANCES ARE APPROXIMATE. ELEVATION IS BASED ON THE ADAMS TRIANGULAR POINT, MAY 2007. PROVIDED BY STEWART GEOTECHNOLOGIES, VALLEJO COUNTY, CALIFORNIA. GRANITE CONSTRUCTION COMPANY ON AUGUST 18, 2007.
2. HIGH AND LOW AVERAGE GROUNDWATER ELEVATIONS BASED ON GROUNDWATER MAPS BY WALLACE KUIHL & ASSOCIATES, INC. DATED JAN. 2007.



**GRANITE CONSTRUCTION**  
**MINING PLAN**  
**CROSS SECTIONS**

Professional Engineer  
 License No. 10000  
 State of Nevada

DATE: 10/20/07  
 SHEET NO. 13 OF 12

**GRANITE CONSTRUCTION  
MINING PLAN  
CROSS SECTIONS**

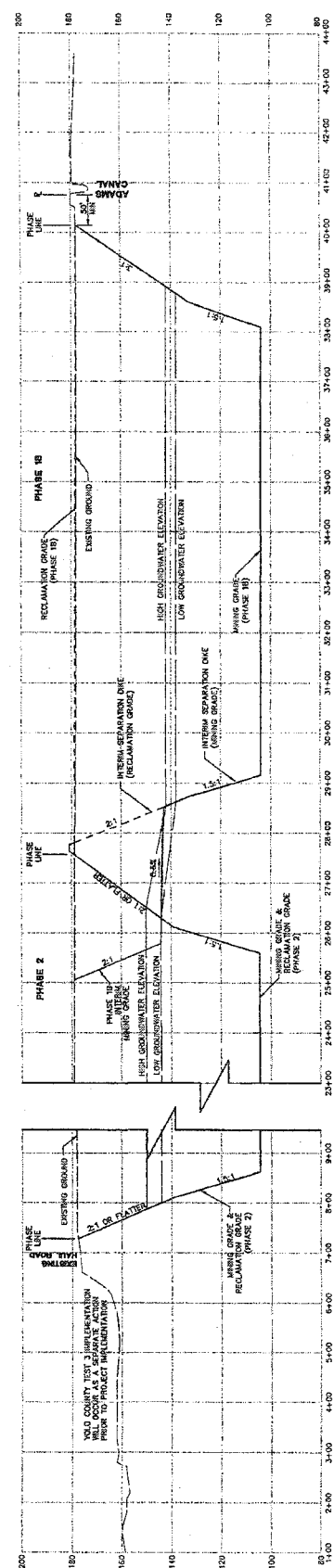
SHEET  
**13**  
OF  
**13**  
DATE: 10/20/07  
JOB NO. 843.02



Wallace R. H. & Associates, Inc.  
1220 Park Street, Suite 100  
Reno, NV 89502  
Tel: 775.784.2000  
Fax: 775.784.2001  
www.wrh.com

DESIGNED BY: MS	DATE: 10/20/07
CHECKED BY: MS	DATE: 10/20/07
APPROVED BY: MS	DATE: 10/20/07
SCALE:	
AS NOTED	

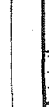
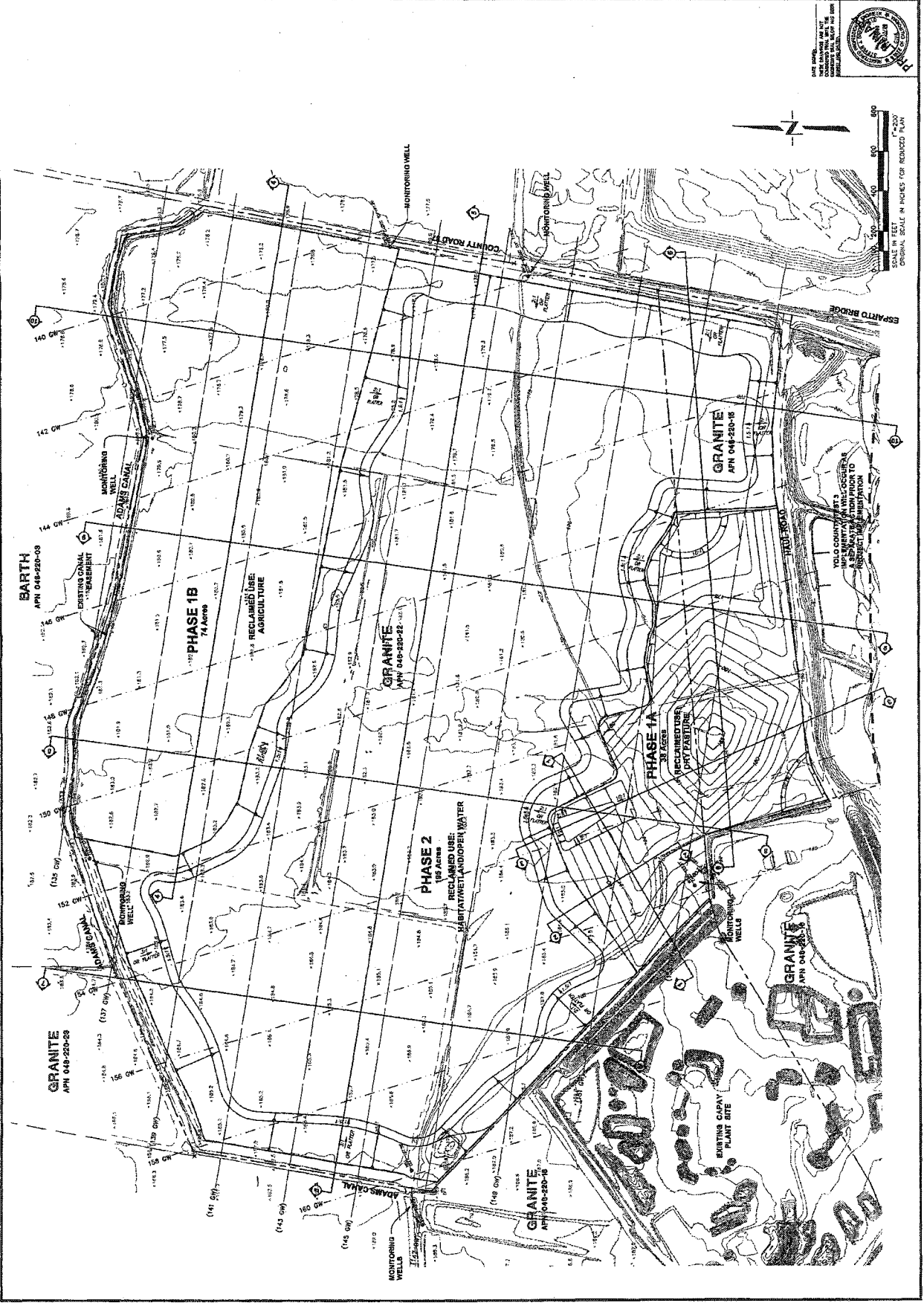
**NOTE:**  
1. ELEVATIONS AND DISTANCES ARE APPROXIMATE. EXISTING GROUND BASED AROUND THE PERIMETER OF THE GRANITE CONSTRUCTION. ALL DISTANCES AND ELEVATIONS IN THIS COUNTY AND INFORMATION PROVIDED BY GRANITE CONSTRUCTION COMPANY ON AUGUST 16, 2007.  
2. THIS PLAN WAS PREPARED BY WALLACE R. H. & ASSOCIATES, INC. DATED JULY 2007.



**SECTION 10-10 (PHASE 1B & PHASE 2)**  
HORIZONTAL SCALE: 1" = 100'  
VERTICAL SCALE: 1" = 20'







PROJECT NO. 2  
 DATE: 10/12/07  
 JOB NO.: 95302

1" = 200'

SCALE IN FEET  
 ORIGINAL SCALE IN INCHES FOR REDUCED PLAN

GRANITE CONSTRUCTION RECLAMATION PLAN  
 OVERALL MINING SITE PLAN

PROJECT NO. 2  
 DATE: 10/12/07  
 JOB NO.: 95302





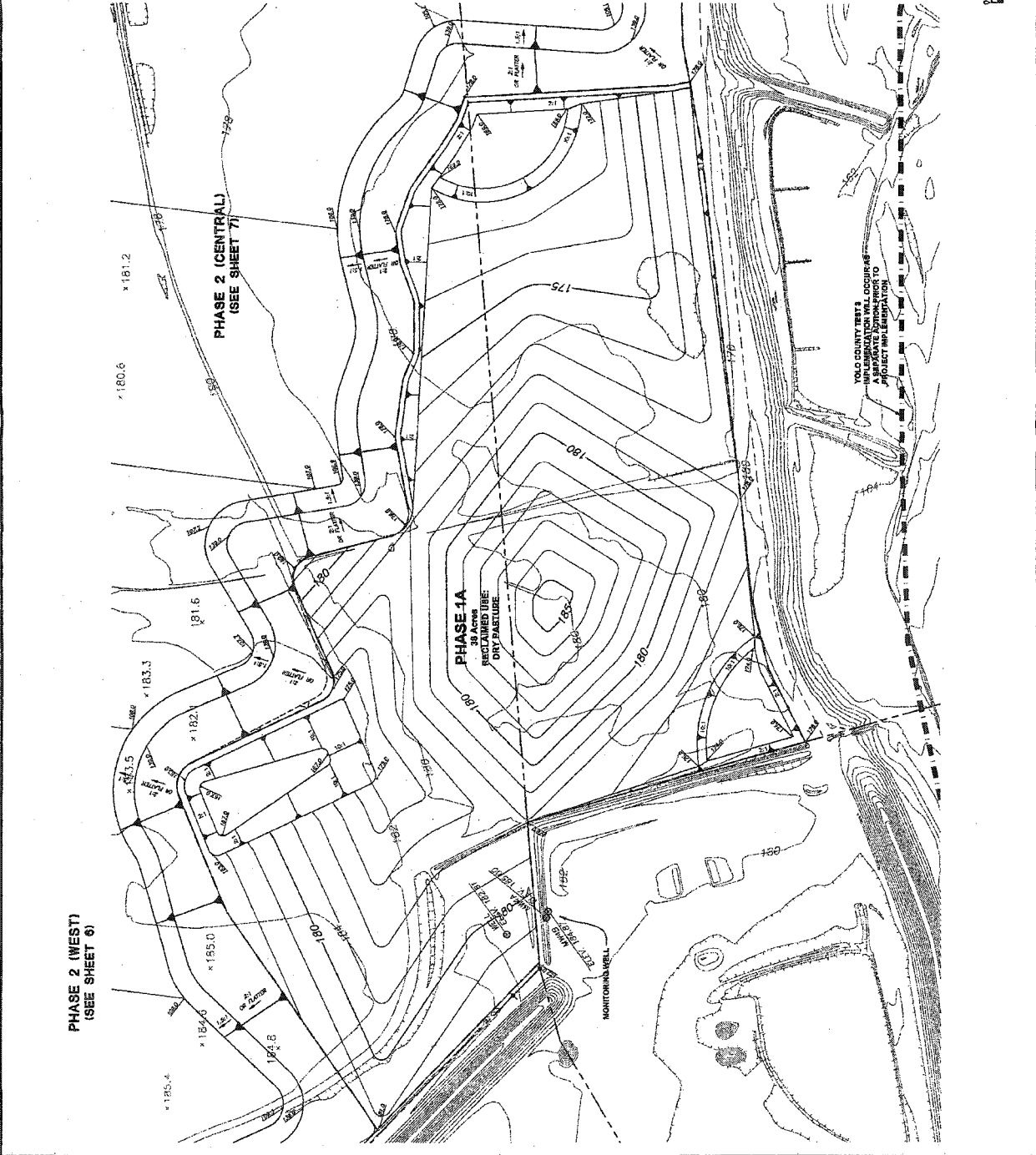
- NOTES**
- PHASE 1A TO BE GRADED APPROXIMATELY TWO FEET OF FILL AND BE REGRADED AS SHOWN.
  - 1'-3" BENCHES TO BE ADDED ALONG PHASE LINES AS NECESSARY TO KEEP SURFACE DRAINAGE FROM ENTERING INTO THE DESIGNATED OPEN WATER AREAS.
  - BOTTOM ELEVATIONS ARE ±10' DEPENDING ON ACTUAL BOTTOM OF GRAVEL DEPTHS. ELEVATIONS ON THIS PLAN ARE BASED ON A FINISH GRADE OF 75' BELOW EXISTING GROUND.
  - CONTOUR INTERVAL FOR EXISTING TOPOGRAPHY EQUALS 2'. CONTOUR INTERVAL FOR PROPOSED RECLAMATION PLAN EQUALS 1'.

**PHASE 2 (WEST)  
(SEE SHEET 6)**

**PHASE 2 (CENTRAL)  
(SEE SHEET 7)**

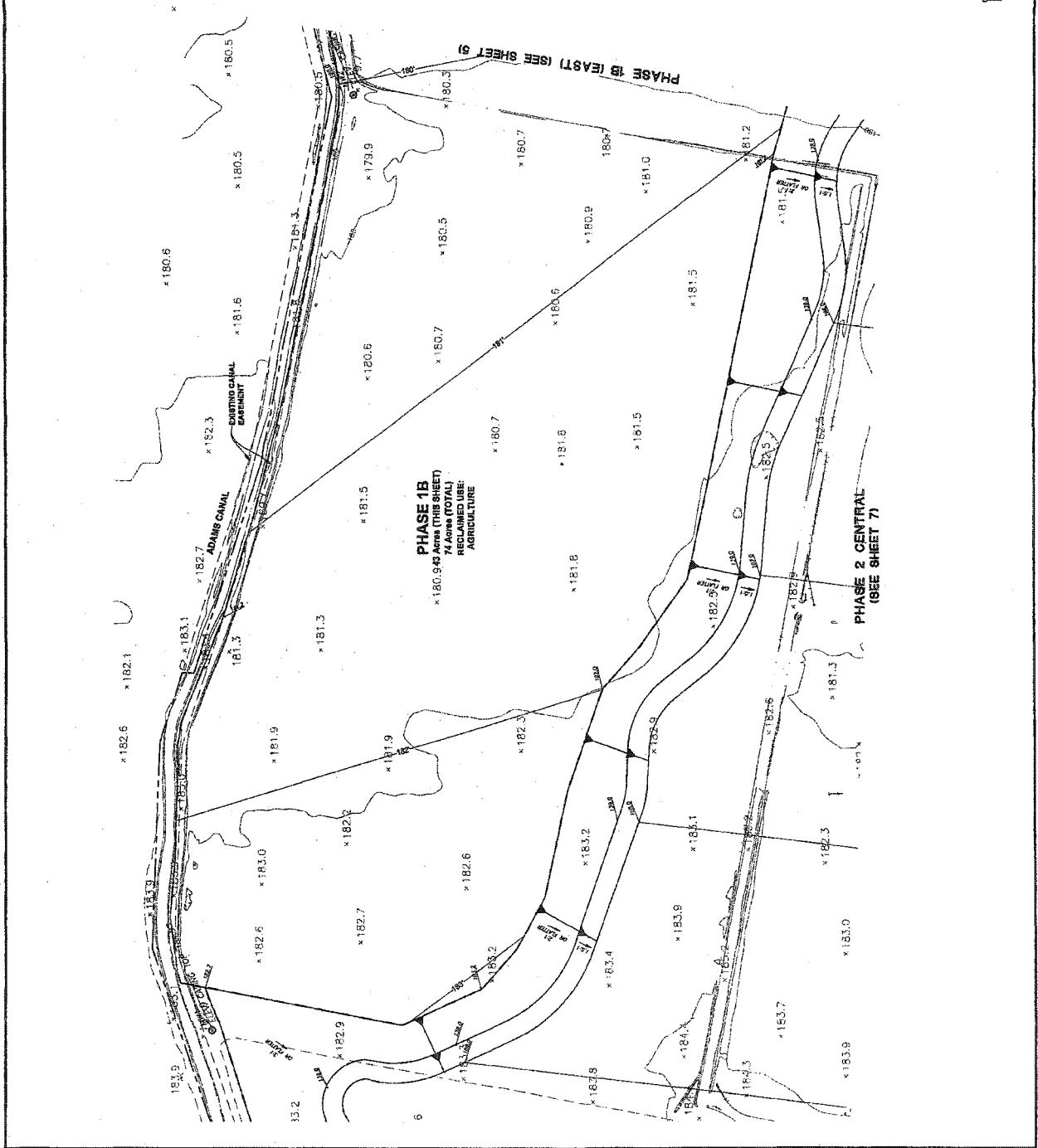
**PHASE 1A  
38 Acres  
RURAL USE  
DRY PASTURE**

YUBA COUNTY SETS A IMPLEMENTATION WILL OCCUR AS A SEPARATE SUBMITTAL TO PROJECT IMPLEMENTATION



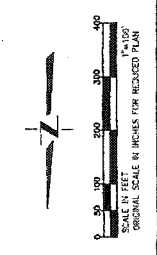
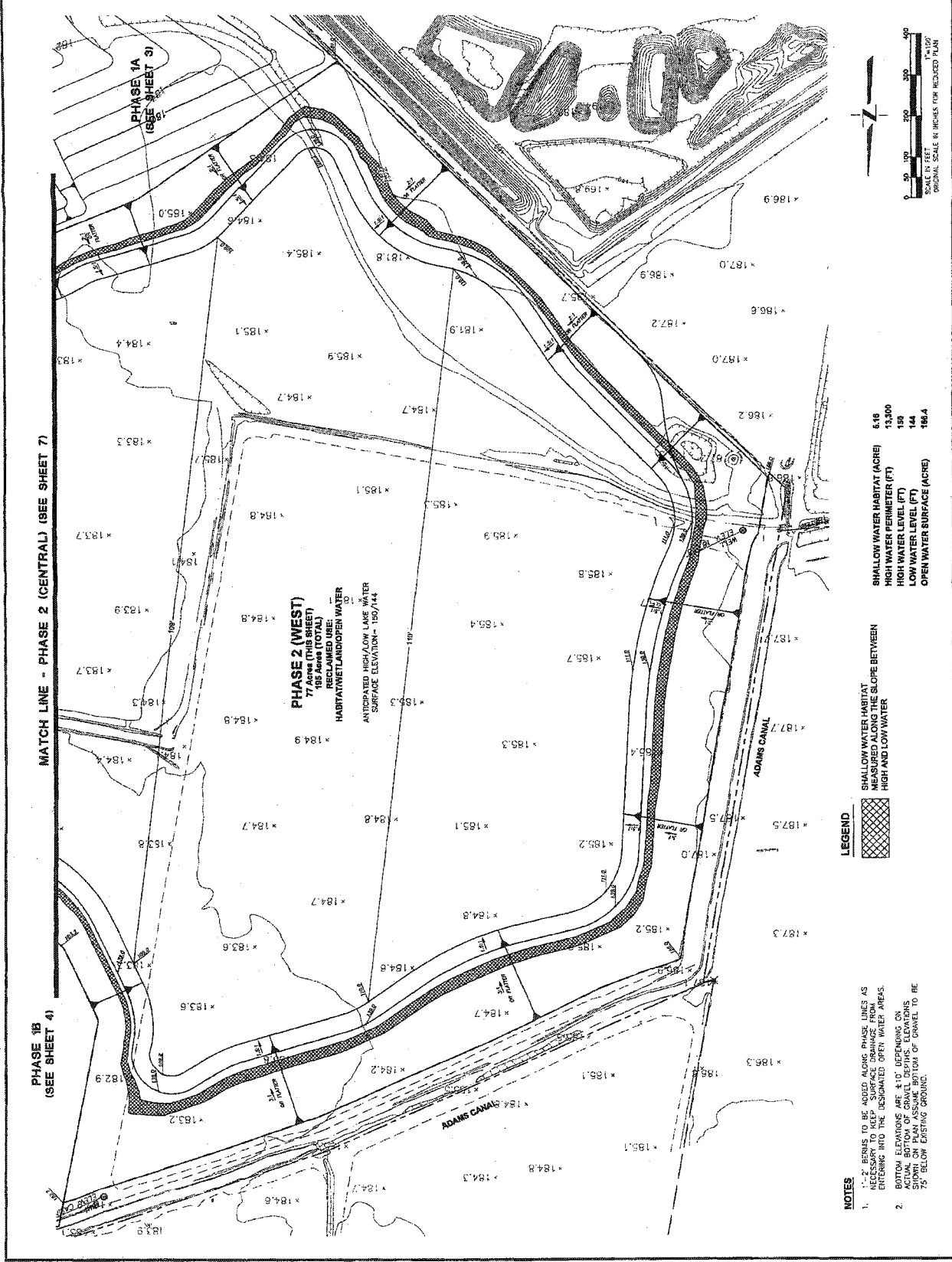
DATE: 10/12/07  
 DRAWN BY: [Blank]  
 CHECKED BY: [Blank]  
 SCALE: 1" = 100'  
 PROJECT NO.: 050332  
 SHEET NO.: 4 OF 13

**NOTES**  
 1. 1'-2" SPACING TO BE ADDED ALONG PHASE LINES AS NECESSARY TO KEEP SURFACE DRAINAGE FROM ENTERING INTO THE DESIGNATED OPEN WATER AREAS.  
 2. BOTTOM ELEVATIONS ARE ±1'0" DEPENDING ON ACTUAL BOTTOM OF GRAVEL DEPTHS. ELEVATIONS SHOWN IN EXISTING GROUND TO BE 2' BELOW EXISTING GROUND.





PROJECT: Granite Construction Reclamation Plan  
 CLIENT: Granite Construction  
 DATE: 10/12/07  
 SCALE: 1" = 100'  
 DRAWN BY: JLM  
 CHECKED BY: JLM  
 DESIGNED BY: JLM



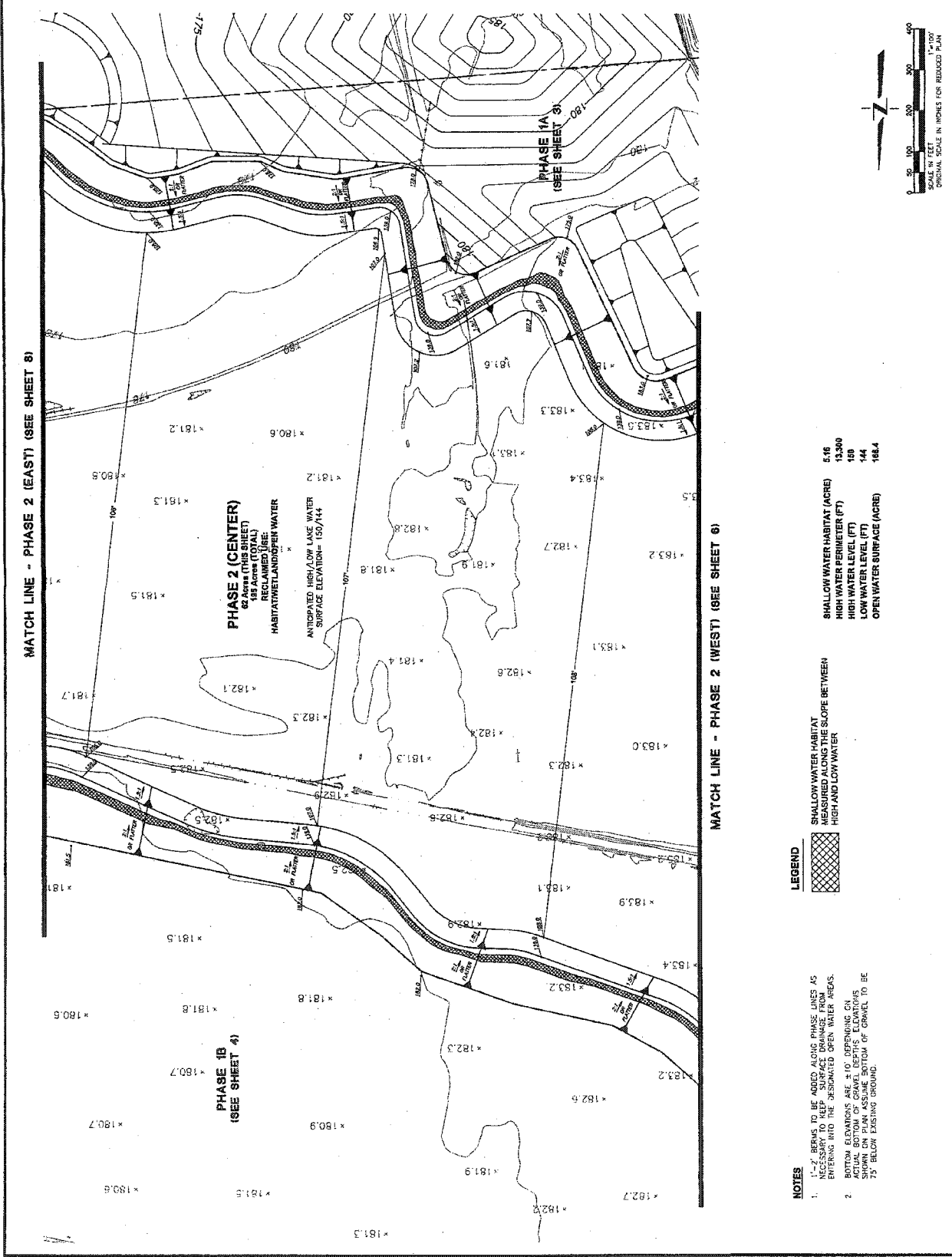
SHALLOW WATER HABITAT (ACRE)	6.16
HIGH WATER PERIMETER (FT)	13,300
LOW WATER PERIMETER (FT)	150
LOW WATER LEVEL (FT)	144
OPEN WATER SURFACE (ACRE)	188.4

**LEGEND**  
 SHALLOW WATER HABITAT  
 SHALLOW WATER HABITAT SLOPE BETWEEN HIGH AND LOW WATER


- NOTES**
1. STAKES TO BE PLACED ALONG CANAL LINES AS NECESSARY TO KEEP SURFACE DRAINAGE FROM ENTERING INTO THE DESIGNATED OPEN WATER AREAS.
  2. BOTTOM ELEVATIONS ARE ±10' DEPENDENT ON ACTUAL BOTTOM OF GRAVEL DEPTHS. ELEVATIONS SHOWN ON PLAN ASSUME BOTTOM OF GRAVEL TO BE 75' BELOW EXISTING GROUND.

PROJECT: Granite Construction Reclamation Plan  
 200 South Street, Suite 200  
 San Francisco, CA 94108  
 TEL: 415.774.2200  
 FAX: 415.774.2205  
 WWW: www.graniteconstruction.com

PREPARED BY: [Blank]  
 CHECKED BY: [Blank]  
 DATE: [Blank]



SHALLOW WATER HABITAT (ACRE)	516
HIGH WATER PERIMETER (FT)	15300
HIGH WATER LEVEL (FT)	150
LOW WATER LEVEL (FT)	144
OPEN WATER SURFACE (ACRE)	168.4

**LEGEND**  

 SHALLOW WATER HABITAT  
 MEASURED ALONG THE SLOPE BETWEEN  
 HIGH AND LOW WATER

- NOTES**
1. "±" SHALL BE USED ALONG PHASE LINES AS NECESSARY TO KEEP SURFACE DRAINAGE FROM ENTERING INTO THE DESIGNATED OPEN WATER AREAS.
  2. BOTTOM ELEVATIONS ARE ± 10' DEPENDING ON ACTUAL BOTTOM OF GRAVEL DEPTHS; ELEVATIONS SHOWN ON PLAN ASSUME BOTTOM OF GRAVEL TO BE 75' BELOW EXISTING GROUND.



**GRANITE CONSTRUCTION RECLAMATION PLAN**

**CROSS SECTIONS**

SHEET **9**

**13**

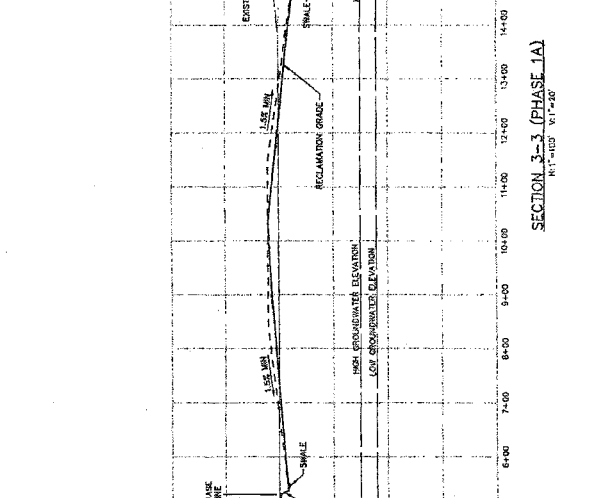
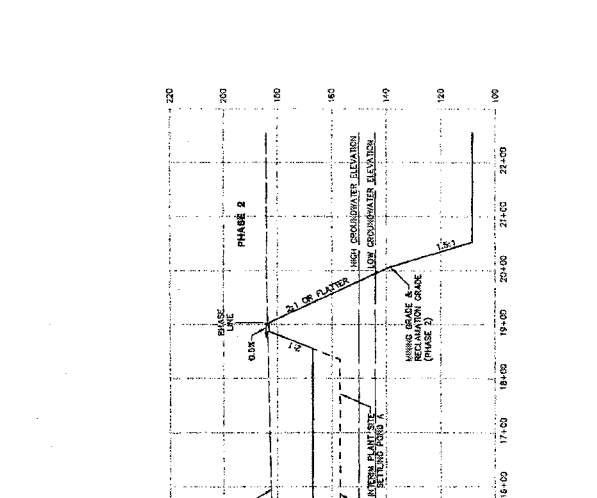
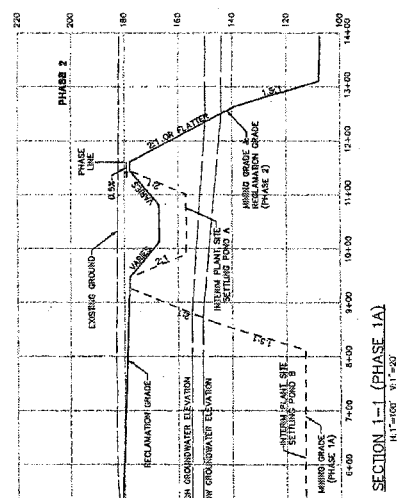
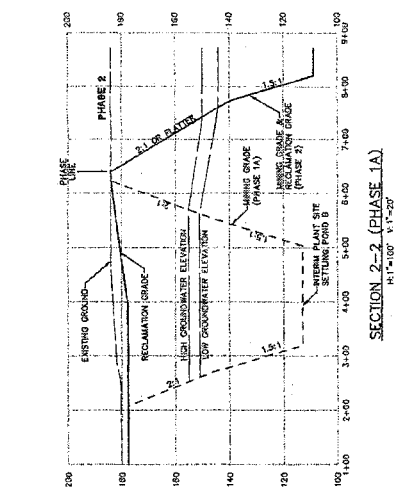
DATE: 10/20/07

JOB NO.: 93.02

**NOTE:**

1. ELEVATIONS AND DIMENSIONS ARE APPROXIMATE. FINISHING ELEVATIONS AND DIMENSIONS ARE BASED ON THE RECLAMATION PLAN PROVIDED BY STEWART GEOTECHNICALS, INC. ON MAY 2007. THE RECLAMATION PLAN WAS PROVIDED BY STEWART GEOTECHNICALS, INC. ON MAY 2007. THE RECLAMATION PLAN WAS PROVIDED BY STEWART GEOTECHNICALS, INC. ON MAY 2007.

2. HIGH AND LOW AVERAGE GROUNDWATER ELEVATIONS BASED ON GROUNDWATER MAPS BY WALLACE KUBR & ASSOCIATES, INC. DATED JUNE 2007.



WALLACE KUBR & ASSOCIATES, INC.  
REGISTERED PROFESSIONAL ENGINEERS  
STATE OF VIRGINIA  
LICENSE NO. 60000









AS NOTED

SCALE

DESIGNED BY: MS

CHECKED BY: SS

DATE

REVISIONS

NO. DATE

DESCRIPTION

DATE

BY

APPROV.

DATE

BY

APPROV.

DATE

BY



# GRANITE CONSTRUCTION RECLAMATION PLAN CROSS SECTIONS

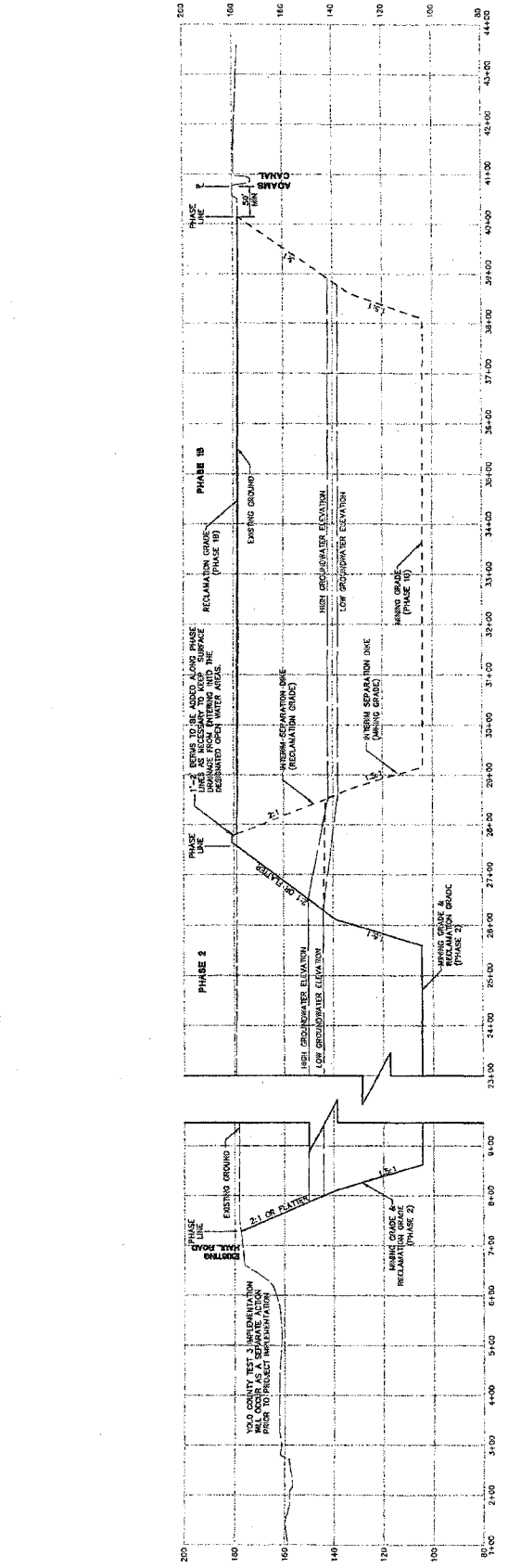
SHEET  
**13**

OF  
**13**

DATE: 10/26/07

JOB NO. 98302

**NOTE:**  
1. ELEVATIONS AND DISTANCES ARE APPROXIMATE. EXISTING ELEVATIONS AND DISTANCES WERE OBTAINED FROM THE RECORD DRAWINGS PROVIDED BY STEWART GEOTECHNOLOGIES VIA TULLO COUNTY RECORDS. GRANITE CONSTRUCTION COMPANY ON JULY 16, 2007.  
2. HIGH AND LOW WEDGE GROUNDWATER ELEVATIONS BASED ON GROUNDWATER MAPS BY WALLACE NIHIL & ASSOCIATES, INC. DATED JULY 2007.



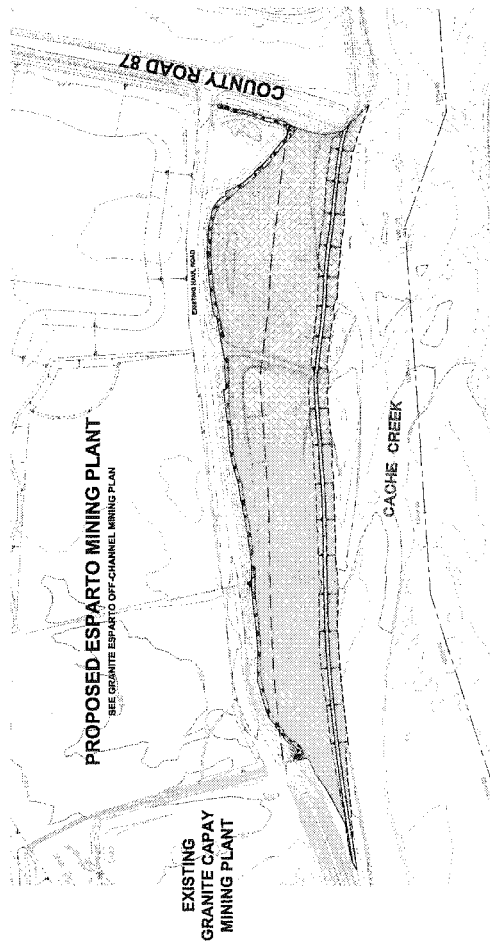
SECTION 10-10 (PHASE 1B & PHASE 2)  
H:V = 100' : 1' = 20'

DATE PLOTTED: 10/26/07  
PLOTTER: PLOT



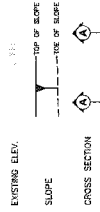
# GRANITE CONSTRUCTION STREAMBANK STABILIZATION PLAN ESPARTO PLANT, YOLO COUNTY CALIFORNIA

APRIL 2010



### LEGEND:

- BEST ROAD
- PAVED ROAD
- FENCE
- TREES
- GROUND COVER
- EXISTING STREAMBANK
- PROPOSED STREAMBANK
- EXISTING GROUND INTERMEDIATE CONTOUR (CONTOUR INTERVAL = 2')
- STREAMBANK STABILIZATION
- COBBLED SWALE

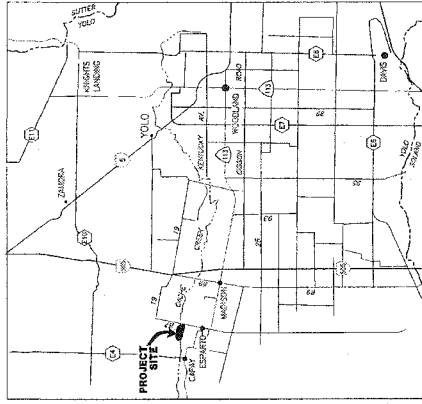


### GENERAL NOTES:

1. THE INTENT OF THESE PLANS IS TO SHOW A TYPICAL STREAMBANK STABILIZATION FOR FLOOD PROTECTION AND MAINTAIN THE MINIMUM MINING SETBACK AS IDENTIFIED IN THE CORMP AND YOLO CO. OFF-CHANNEL MINING ORDINANCE.
2. ALL WORK SHALL CONFORM TO THE YOLO COUNTY OFF-CHANNEL MINING ORDINANCE, AND THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP), CSHA, WQA, AND OTHER APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.
3. EXISTING TOPOGRAPHY BASED ON AERIAL TOPOGRAPHY FLOWY SPRING 2007. VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
4. WITHIN SETBACKS, ALL WORK SHALL BE CONFINED TO THE CORNER OF THE EXISTING CHANNEL. A 100 FOOT MEDIAN SETBACK SHALL BE MAINTAINED. ALL WORK SHALL BE NOTED WITHIN THIRTY-FOUR (36) HOURS OF ANY CULTURAL RESOURCES, PALAEONTOLOGICAL MATERIALS ARE ENCOUNTERED DURING EXCAVATION. THEN ALL WORK SHALL BE STOPPED IMMEDIATELY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING AND REPORTING ANY CULTURAL RESOURCES FOUND ON THE SITE SHALL BE SECURED BY A QUALIFIED ARCHAEOLOGIST AND THE INFORMATION SHALL BE SUBMITTED TO THE COUNTY HISTORIC PRESERVATION DEPARTMENT.
5. MATERIALS SPECIFICATIONS ON THESE PLANS BASED ON HYDRAULIC ANALYSIS PREPARED BY CHANGSHAM ENGINEERING, OCTOBER 2007.
6. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO MAINTAIN THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND INSURANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND INSURANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND INSURANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND INSURANCE.
7. CHANGSHAM ENGINEERING COMPANY HAS EXPENSED A REASONABLE AND ACCEPTABLE AMOUNT OF MONEY IN THE PREPARATION OF THESE PLANS. THESE ACTIVITIES SHOULD BE CONSIDERED AS PART OF THE PROJECT'S BUDGET. THESE ACTIVITIES SHOULD BE CONSIDERED AS PART OF THE PROJECT'S BUDGET. THESE ACTIVITIES SHOULD BE CONSIDERED AS PART OF THE PROJECT'S BUDGET.
8. UNAUTHORIZED CHANGES & USES: THE ENGINEER PREPARED THESE PLANS WILL NOT BE RESPONSIBLE FOR OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ANY SUCH CHANGES OR USES MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.
9. ALL EARTHWORK OPERATIONS AND TESTING OF SOILS COMPACTION SHALL BE IN ACCORDANCE WITH GRANTE CAPAY FACILITY AND GRANTE ESPARTO FACILITY. SLOPE STABILIZATION SHALL BE IN ACCORDANCE WITH THE YOLO COUNTY OFF-CHANNEL MINING ORDINANCE DATED JUNE 23, 2007 AND (LOR #247106) DATED AUGUST 16, 2007. COPIES OF THE ORDINANCE AND LOR SHALL BE PROVIDED TO THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND INSURANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND INSURANCE.
10. THE GRADING OF FINAL SLOPES, THE REPLACEMENT OF SOIL AND ASSOCIATED EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE YOLO COUNTY OFF-CHANNEL MINING ORDINANCE. ALL SLOPES SHALL BE GRADUALLY SLOPED TO THE GRASS FIELD WITH THE GRASS SEED PREVIOUSLY APPROVED FOR EROSION CONTROL ON-SITE. AS SOON AS IS PRACTICABLE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND INSURANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND INSURANCE.
11. CONTRACTOR TO OBTAIN ENCROACHMENT PERMIT FOR ALL WORK WITHIN THE COUNTY RIGHT OF WAY.

### BENCHMARK:

EXISTING TOPOGRAPHY BASED ON AERIAL TOPOGRAPHY FLOWY SPRING 2007. VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND INSURANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND INSURANCE.



### VICINITY MAP

### ABBREVIATIONS:

- CORMP CACHE CREEK RESOURCES MANAGEMENT PLAN
- FEDERAL FEDERAL REGULATIONS
- ELEV ELEVATION
- H HORIZONTAL
- INC INCORPORATED
- INC INCOMPATIBLE
- MAN MANDATORY
- MIN MINIMUM
- MSHA MINE SAFETY AND HEALTH ADMINISTRATION
- N NORTH
- NW NORTHWEST
- OSHA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
- R.C. RELATIVE COMPACTION IN ACCORDANCE WITH ASTM-D-1587.
- RELOCAL RELOCALIZATION
- RWCSB REGIONAL WATER QUALITY CONTROL BOARD
- SWPPP STORM WATER POLLUTION PREVENTION PLAN
- V VERTICAL
- YR YEAR

### INDEX TO SHEETS:

1. TITLE, NOTES AND ABBREVIATIONS
2. PLAN AND CROSS SECTION
3. PLAN AND CROSS SECTION



**GRANITE CONSTRUCTION**  
**CACHE CREEK**  
**STREAMBANK STABILIZATION PLAN**  
**TITLE SHEET**

DATE: 11/25/07  
CHECK: SSG/BJP  
DESIGN: BJP/BJP  
SHEET 1 OF 3



**DRAWING STATUS:**

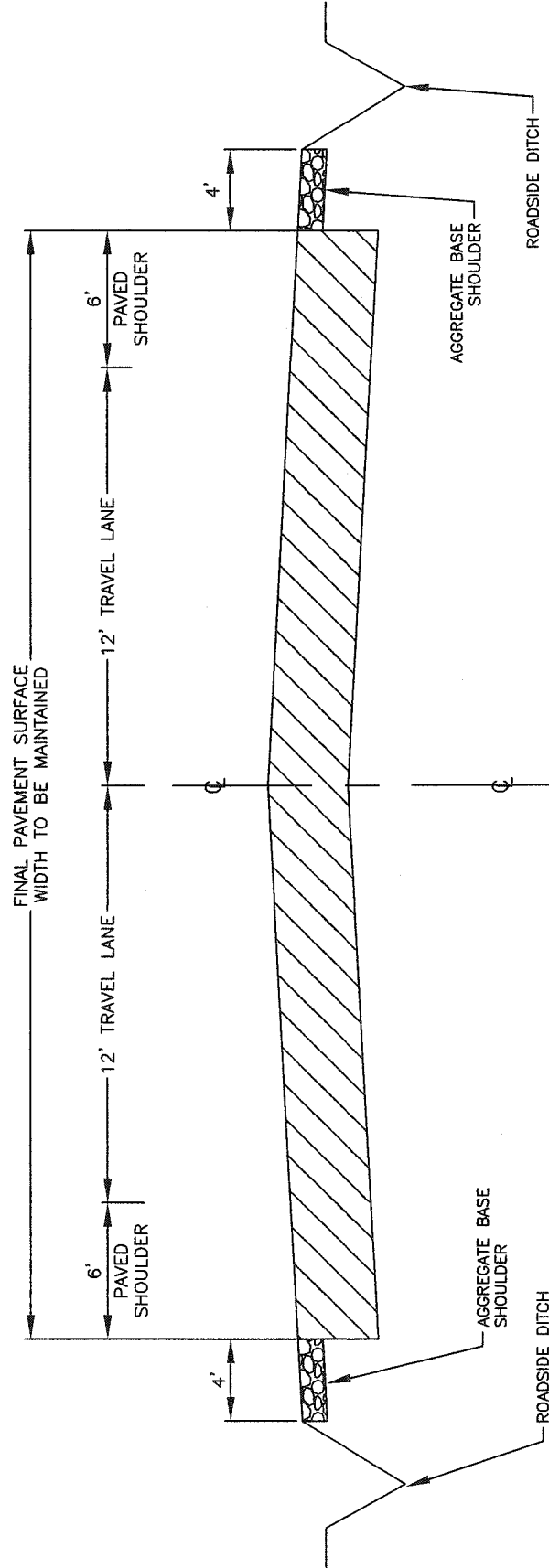
- PLAN REVIEW
- PERMIT SET
- SOI SET
- CONSTRUCTION SET





**APPENDIX 6, Mitigation 4.13-1 Exhibit #1**

EXHIBIT #1



COUNTY ROAD 87  
INITIAL IMPROVEMENTS

NTS