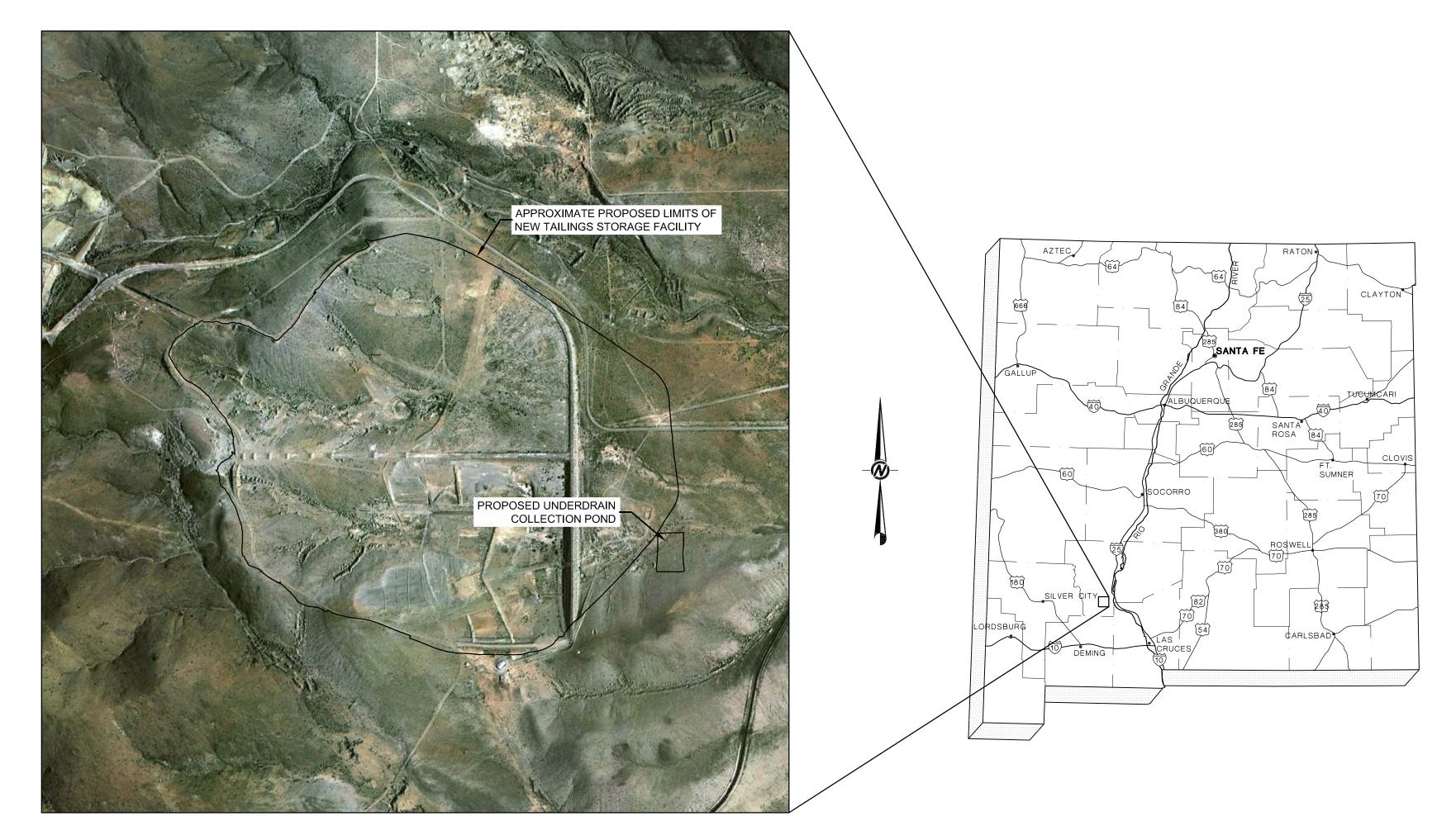






# COPPER FLAT PROJECT PREFEASIBILITY DESIGN TAILINGS STORAGE FACILITY SIERRA COUNTY, NEW MEXICO APRIL 2012



**LOCATION MAP** 

NOT TO SCALE

STATE OF NEW MEXICO

# **GENERAL REFERENCES**

- 1. 2-FOOT TOPOGRAPHY DEVELOPED BY COOPER AERIAL SURVEY CO. BASED ON JUNE 18, 2011 AERIAL SURVEY AND PROVIDED BY THEMAC RESOURCES.
- 2. COORDINATE SYSTEM IS NEW MEXICO STATE PLANE WEST NAD83 HARN.

# LIST OF DRAWINGS

### DRAWING No. DRAWING TITLE

TITLE SHEET AND LOCATION MAP

2 EXISTING CONDITIONS AND PROPOSED FACILITIES PL

TAILINGS STORAGE FACILITY GRADING PLAI

TAILINGS STORAGE FACILITY PHASE 1 PLAN
TAILINGS STORAGE FACILITY AT FINAL BUILDOUT

TAILINGS STORAGE FACILITY CROSS-SECTIONS AND DETAILS

UNDERDRAIN PLAN AND DETAILS

SEEPAGE COLLECTION POND PLAN, CROSS-SECTIONS, AND DETAILS
PROCESS FLOW DIAGRAM

10 TAILINGS DELIVERY AND DISTRIBUTION PIPING PLAN

11 CYCLONE PLANT AND PUMP STATION
12 TAILINGS DISTRIBUTION PLAN AND PROFILE

13 WATER RECLAIM SYSTEM PIPING PLAN

14 WATER RECLAIM BARGE

PREFEASIBILITY DESIGN NOT FOR CONSTRUCTION

THEMAC RESOURCES

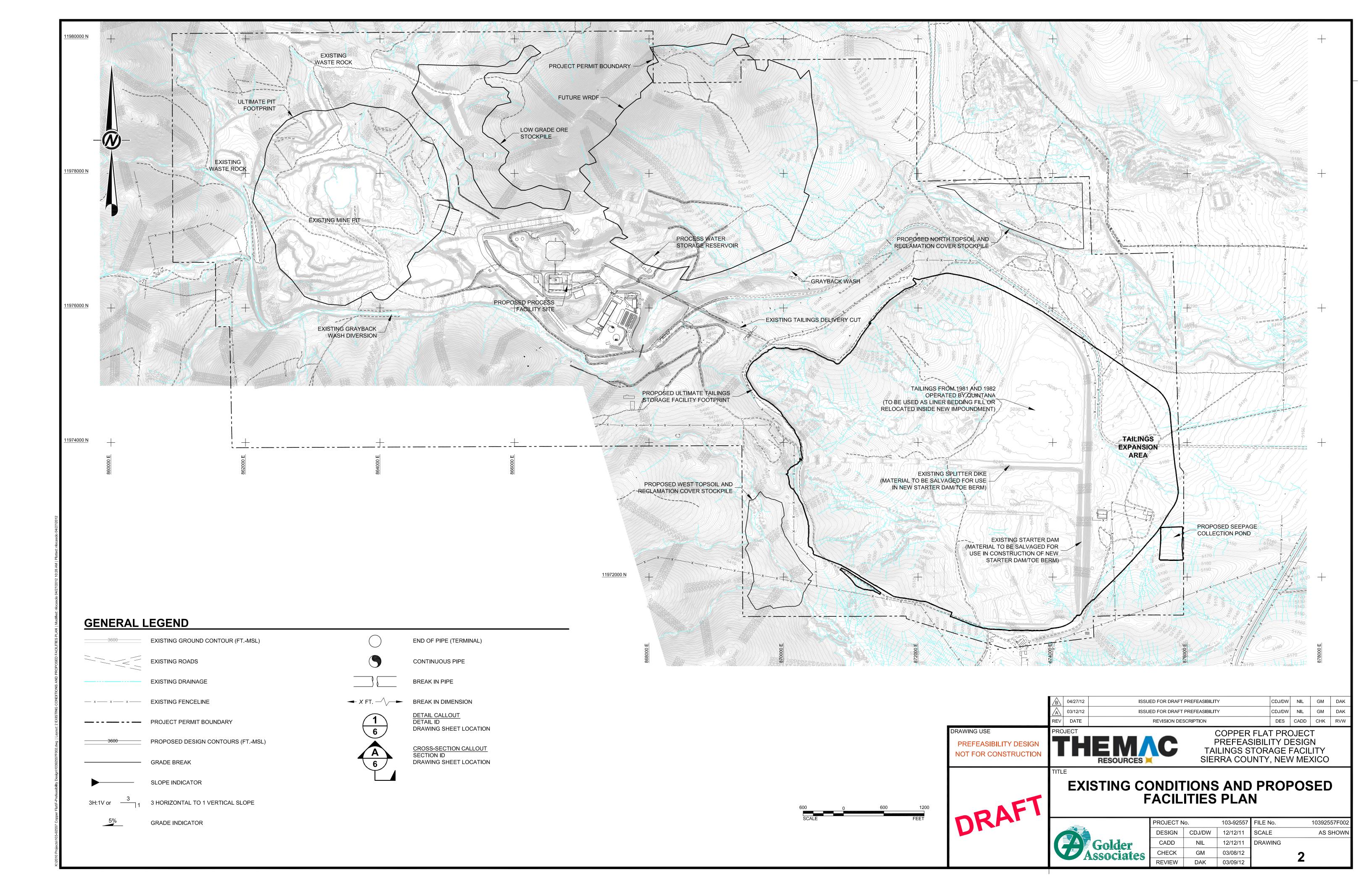
COPPER FLAT PROJECT
PREFEASIBILITY DESIGN
TAILINGS STORAGE FACILITY
SIERRA COUNTY, NEW MEXICO

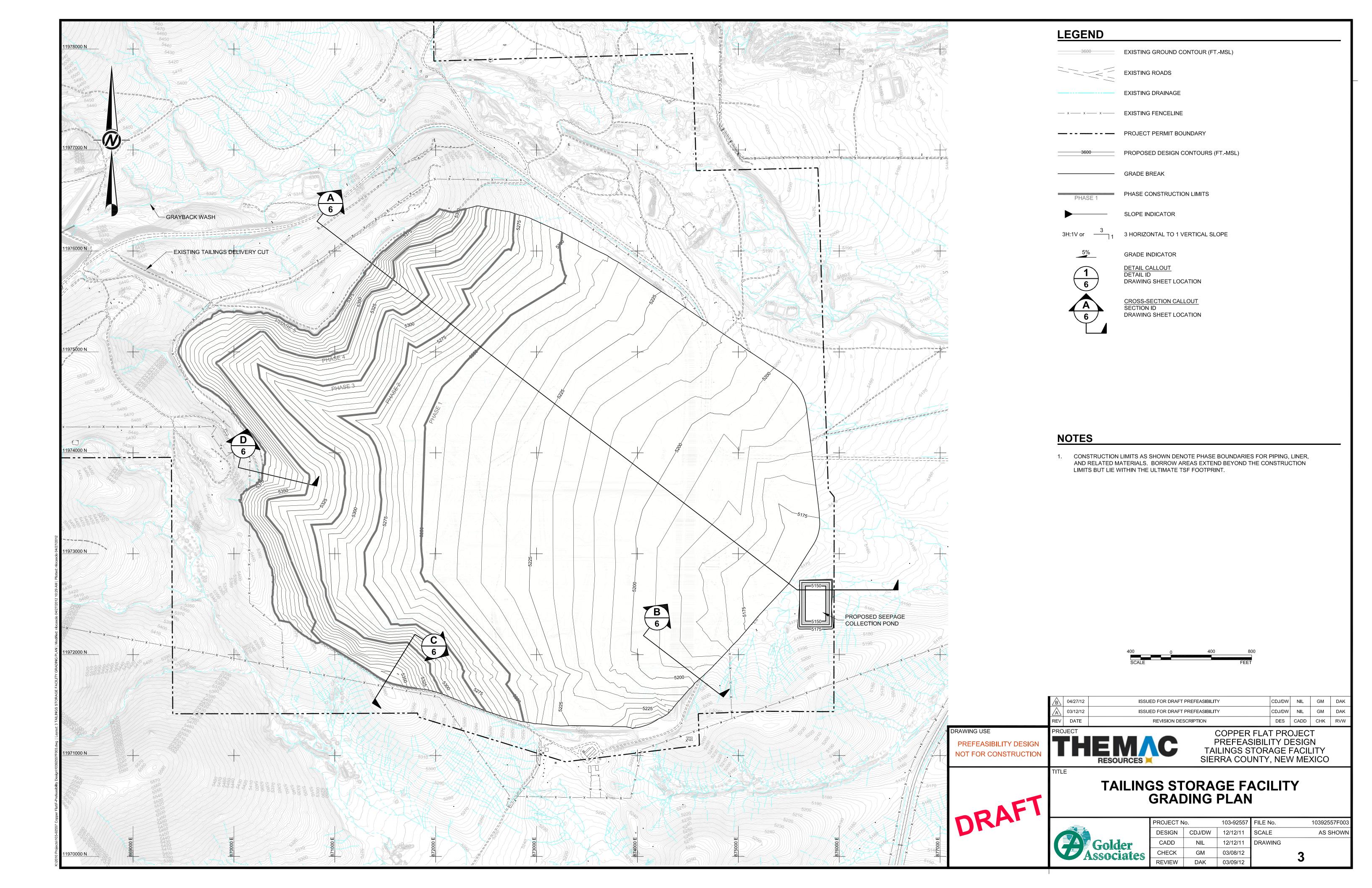
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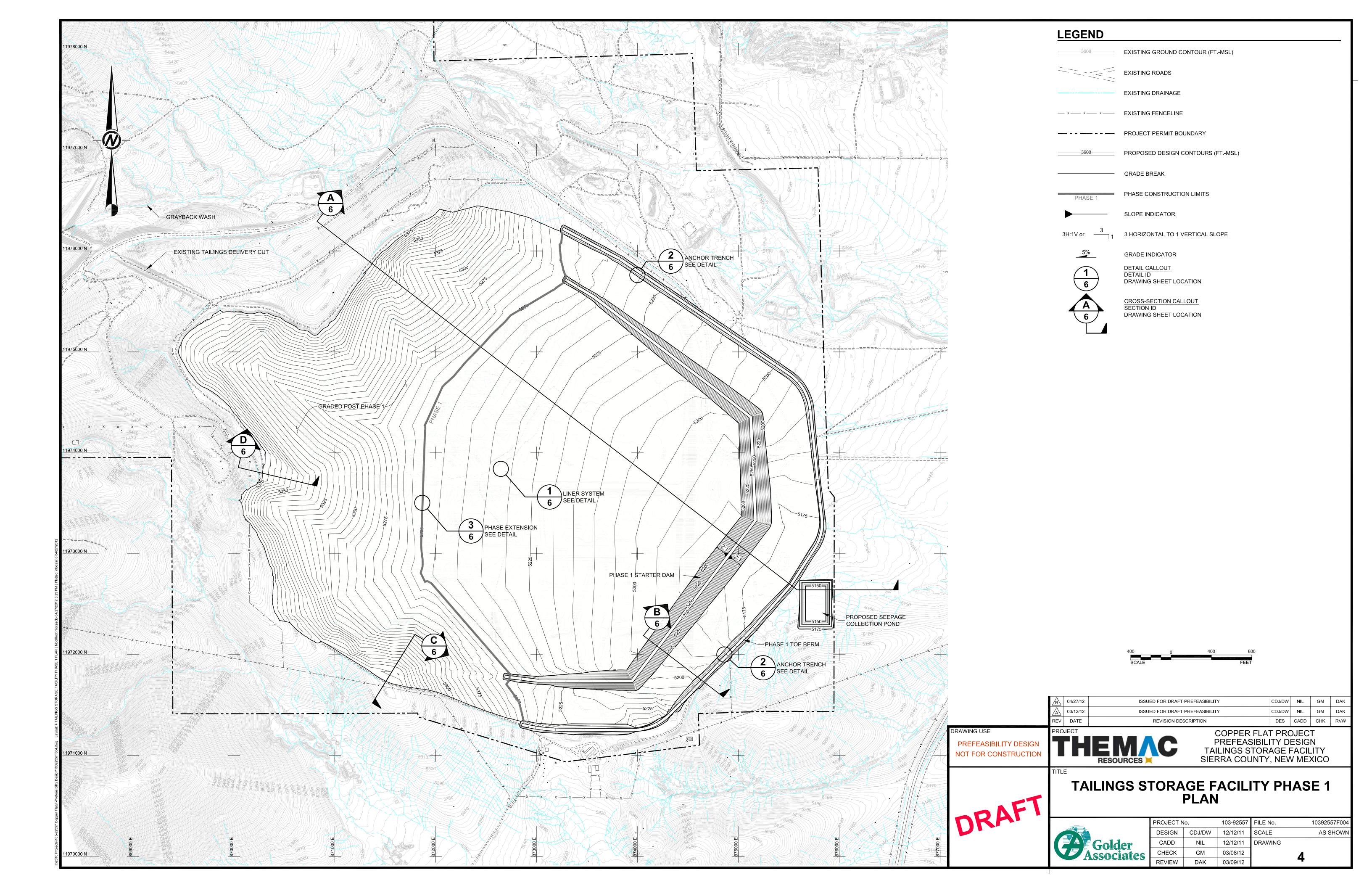


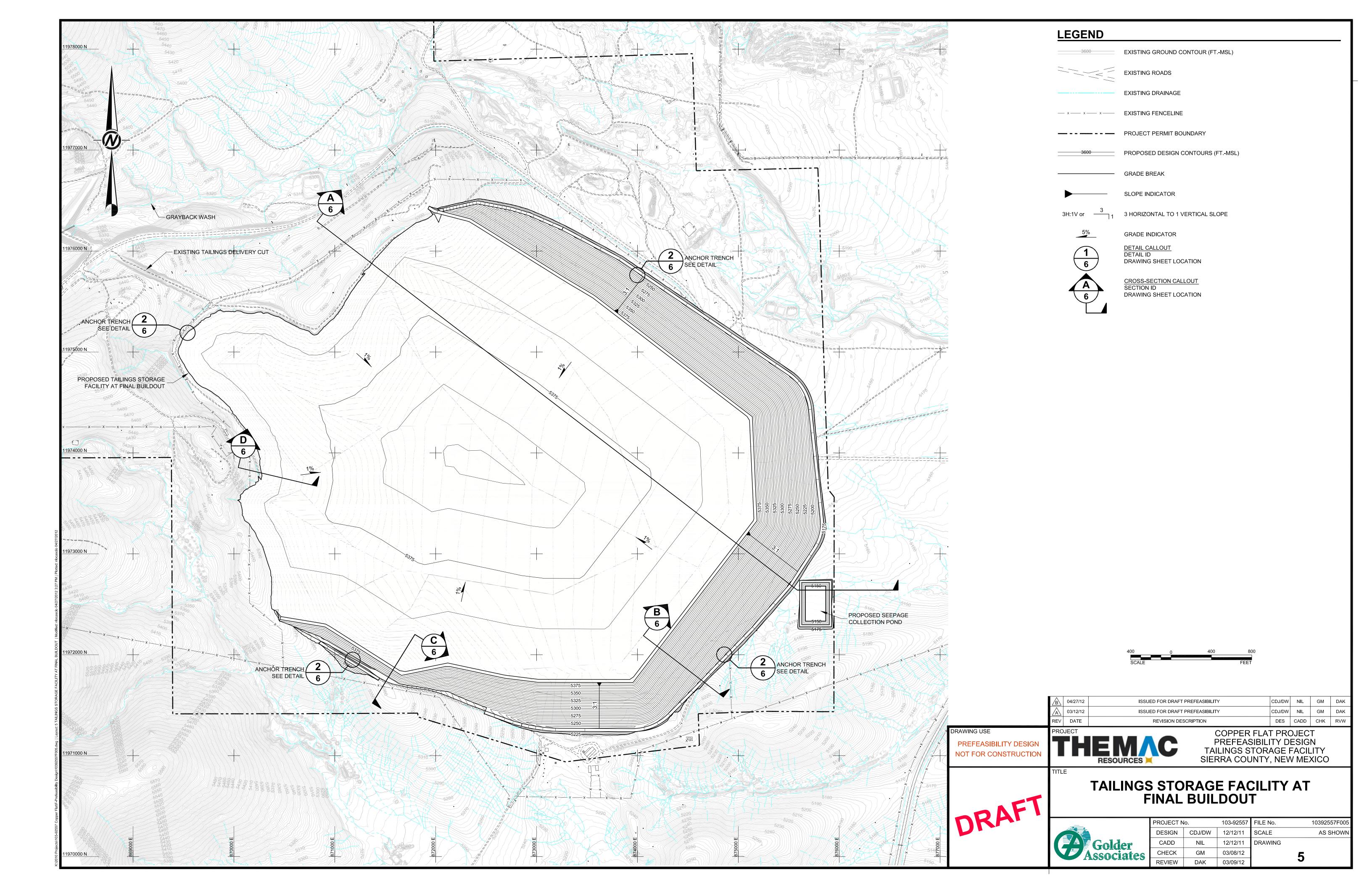


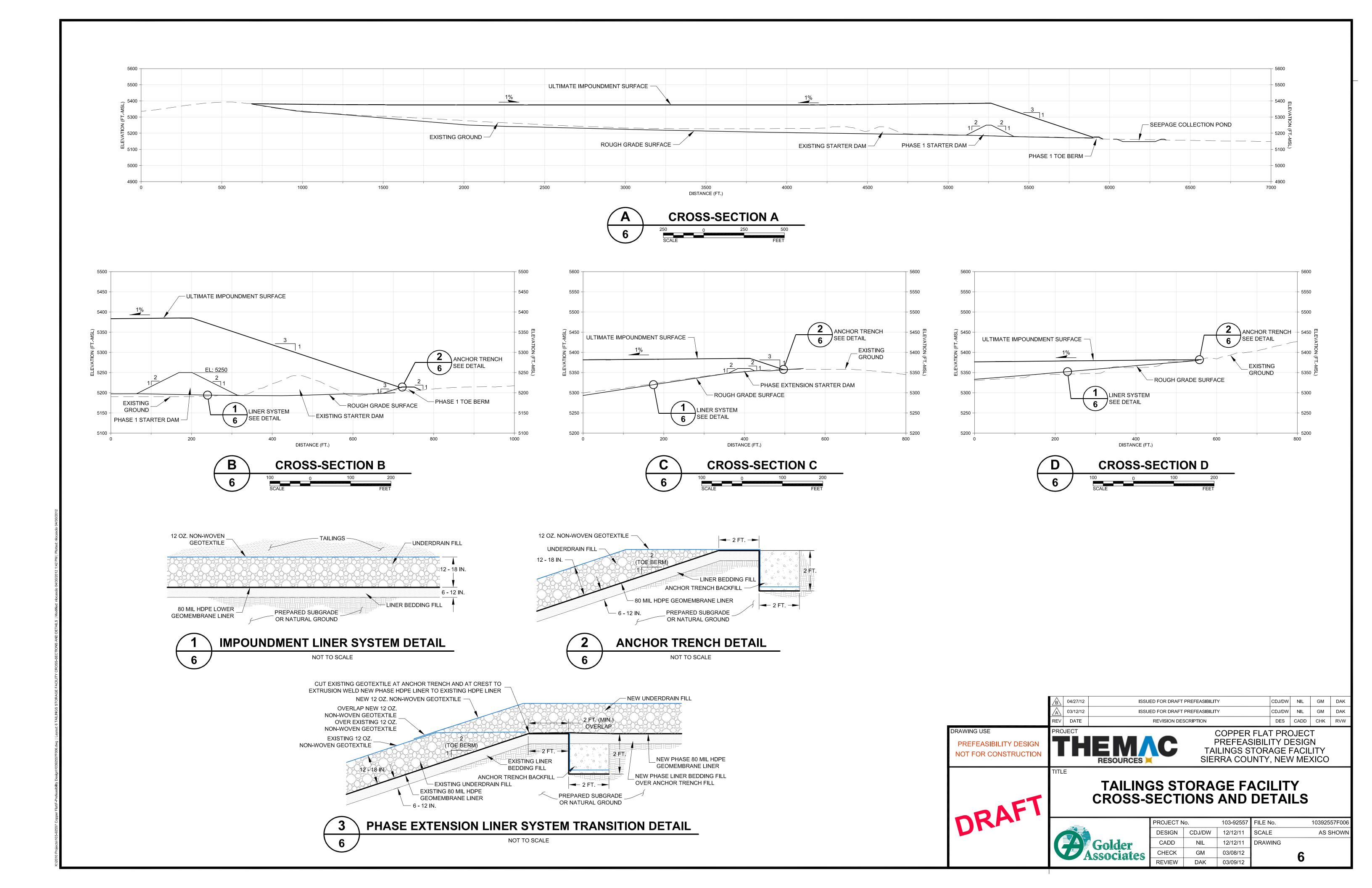
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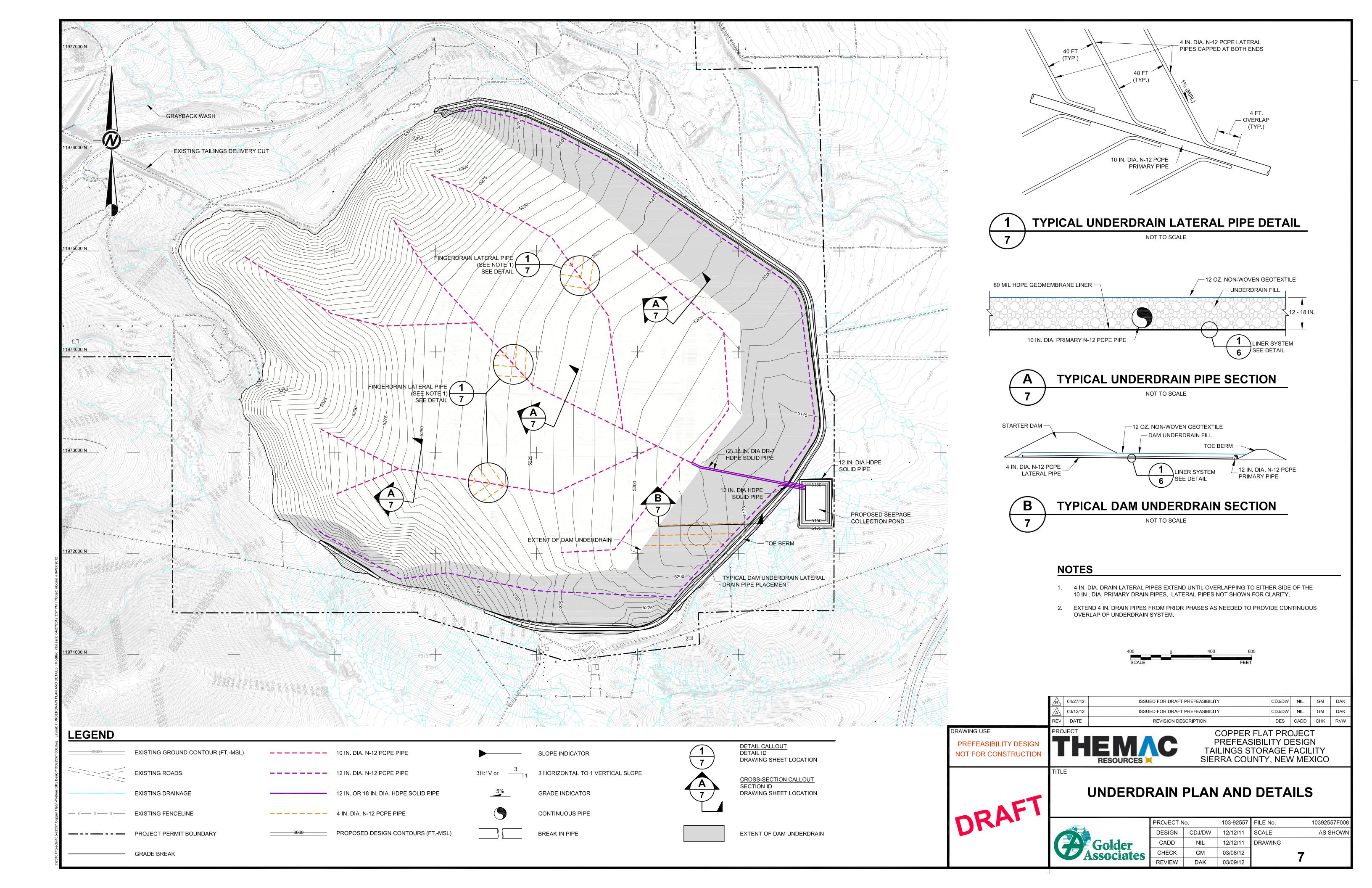


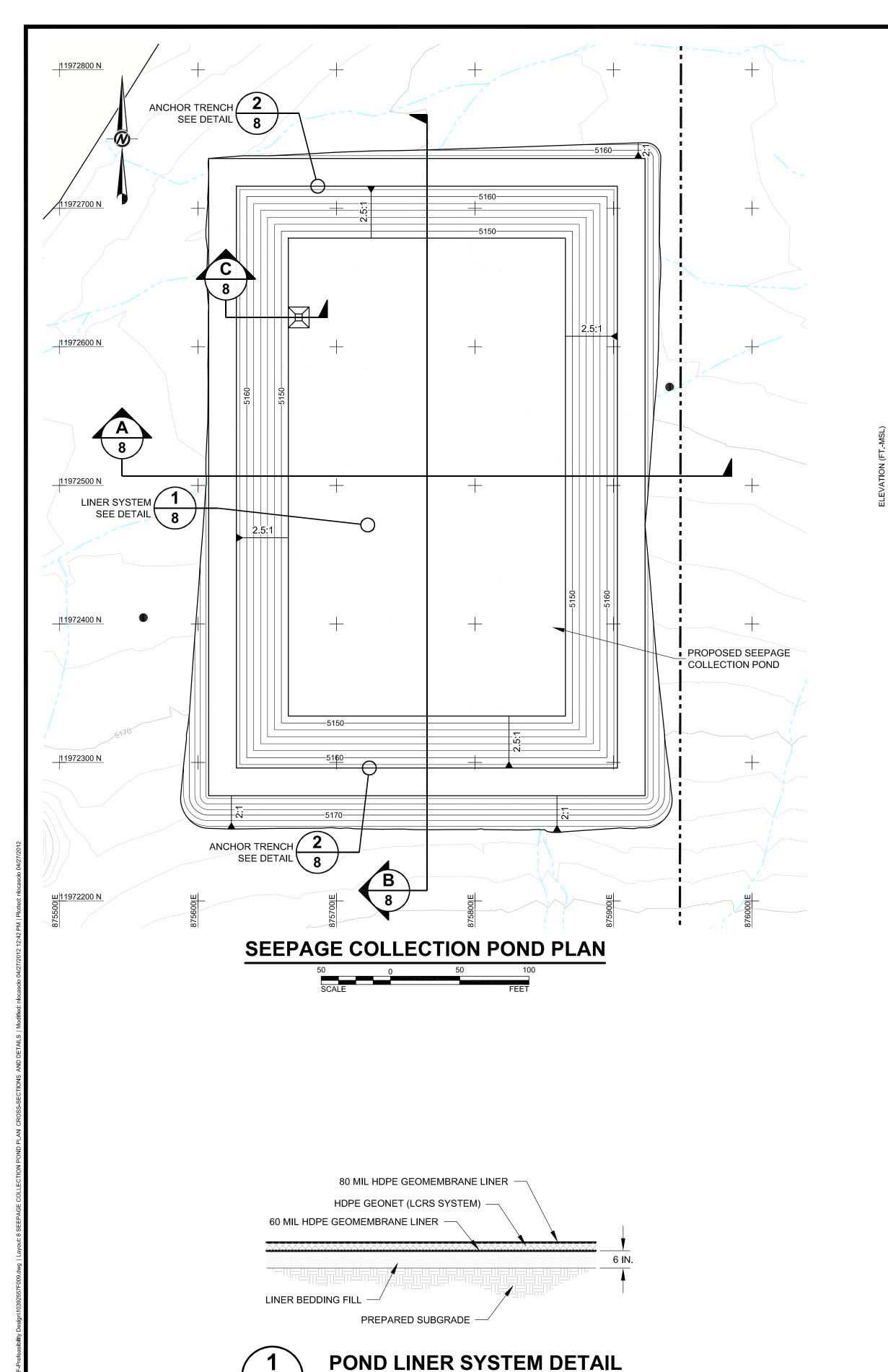




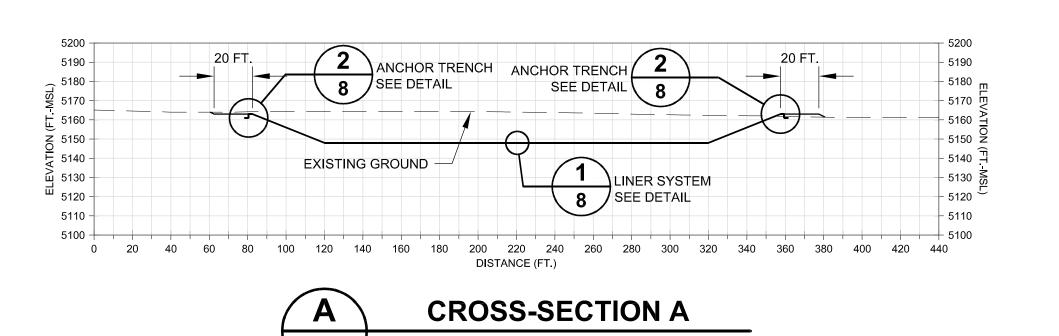


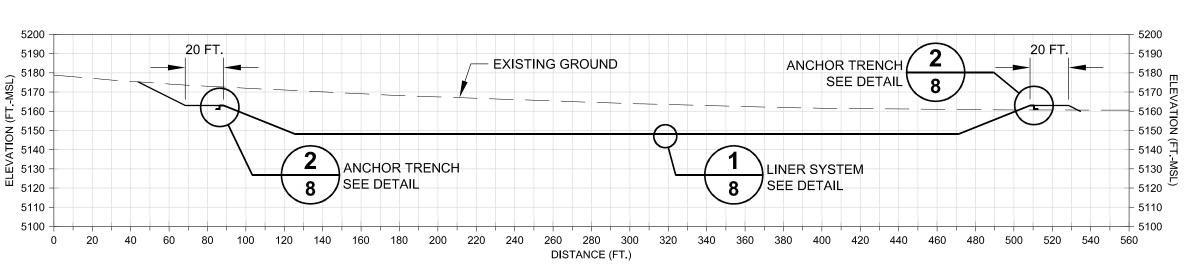




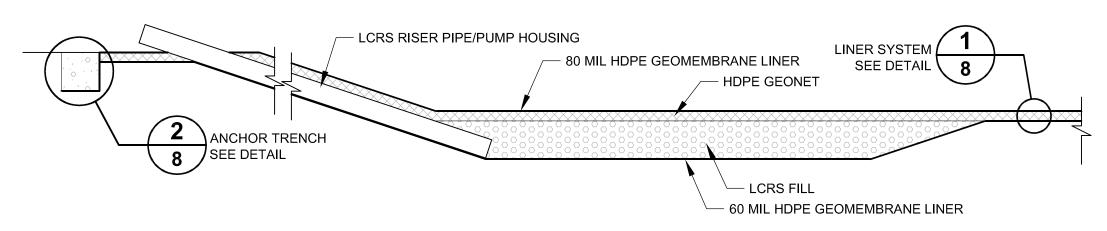


NOT TO SCALE

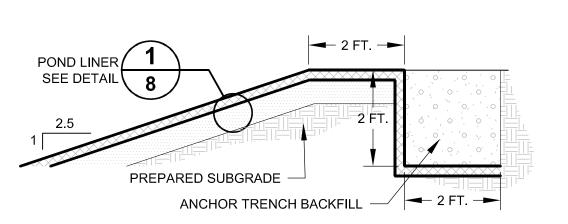




**CROSS-SECTION B** 



TYPICAL POND LCRS SUMP SECTION NOT TO SCALE



**ANCHOR TRENCH DETAIL** NOT TO SCALE

	B	04/27/12	ISSUED FOR DRAFT PRE	EFEASIBILITY	CDJ/DW	NIL	GM	DAK
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PREFEASIBILITY DESIGN				PREFEASIBIL				
NOT FOR CONSTRUCTION	•		RESOURCES	TAILINGS STORA SIERRA COUNTY				

**LEGEND** 

EXISTING GROUND CONTOUR (FT.-MSL)

EXISTING DRAINAGE

PROPOSED DESIGN CONTOURS (FT.-MSL)

— x — x — EXISTING FENCELINE

GRADE BREAK

SLOPE INDICATOR

3H:1V or 3 1 3 HORIZONTAL TO 1 VERTICAL SLOPE

GRADE INDICATOR

DRAWING SHEET LOCATION

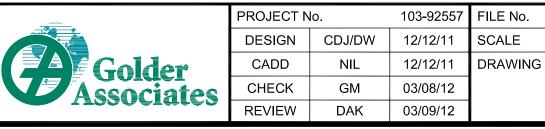
CROSS-SECTION CALLOUT

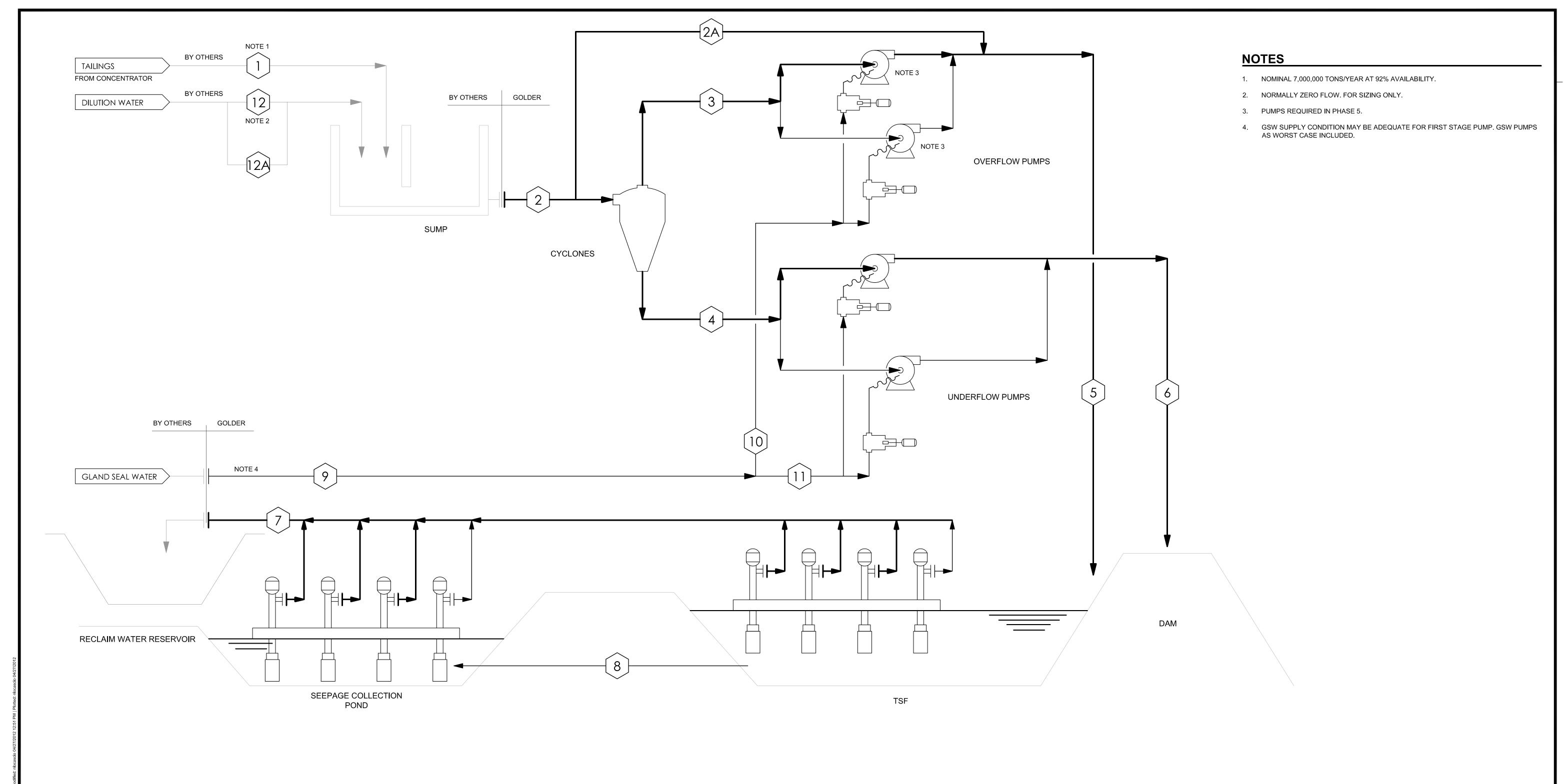
DRAWING SHEET LOCATION

THEMAC SEEPAGE COLLECTION POND PLAN, CROSS-SECTIONS, AND DETAILS

10392557F009

AS SHOWN





	TAILINGS SUMP FEED	TAILINGS SUMP OUTLET/ CYCLONE INLET	CYCLONE OVERFLOW	CYCLONE UNDERFLOW	CYCLONE OVERFLOW PUMP DISCHARGE	CYCLONE UNDERFLOW PUMP DISCHARGE	RECLAIM WATER	TSF UNDERFLOW	GLAND SEAL WATER SUPPLY	OVERFLOW PUMP GLAND SEAL WATER	UNDERFLOW PUMP GLAND SEAL WATER	FLUSH WATER NOTE 2	DILUTION WATER NOTE 2
POINT NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	12A
TPD (solids)	27174	27174	14245	12431	14245	12431							
SOLIDS (†/h)	1111.5	1111.5	593.5	518.0	593.5	518.0							
SOLUTION (†/h)	2749.7	2749.7	2506.0	243.7	2514.2	246.5	2514.2	2514.2	11.0	8.2	2.7	2748.9	199.9
SLURRY (t/h)	3861.2	3861.2	3099.5	761.7	3107.7	764.5							
SOLIDS (%) Cw	28.8%	28.8%	19.1%	68.0%	19.1%	67.8%							
SOLIDS (gpm)	1644.0	1644.0	879.7	767.7	879.7	767.7							
SOLUTION (gpm)	11021.0	11021.0	10027.8	975.4	10060.8	986.4	10060.8	10060.8	44.0	33.0	11.0	11000.0	800.0
SLURRY (gpm)	12665.0	12665.0	10907.5	1743.0	10940.5	1754.0							
SOLIDS (%) Cv	13.0%	13.0%	8.1%	44.0%	8.0%	43.8%							
SOLIDS SG	2.7	2.7	2.7	2.7	2.7	2.7							
SOLUTION SG	1	1	1	1	1	1	1	1	1	1	1	1	1
SLURRY SG	1.22	1.22	1.14	1.75	1.14	1.74							

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REV	DATE	REVISION DESCRIPTION	DES	CADD	СНК	RVW

PREFEASIBILITY DESIGN
NOT FOR CONSTRUCTION

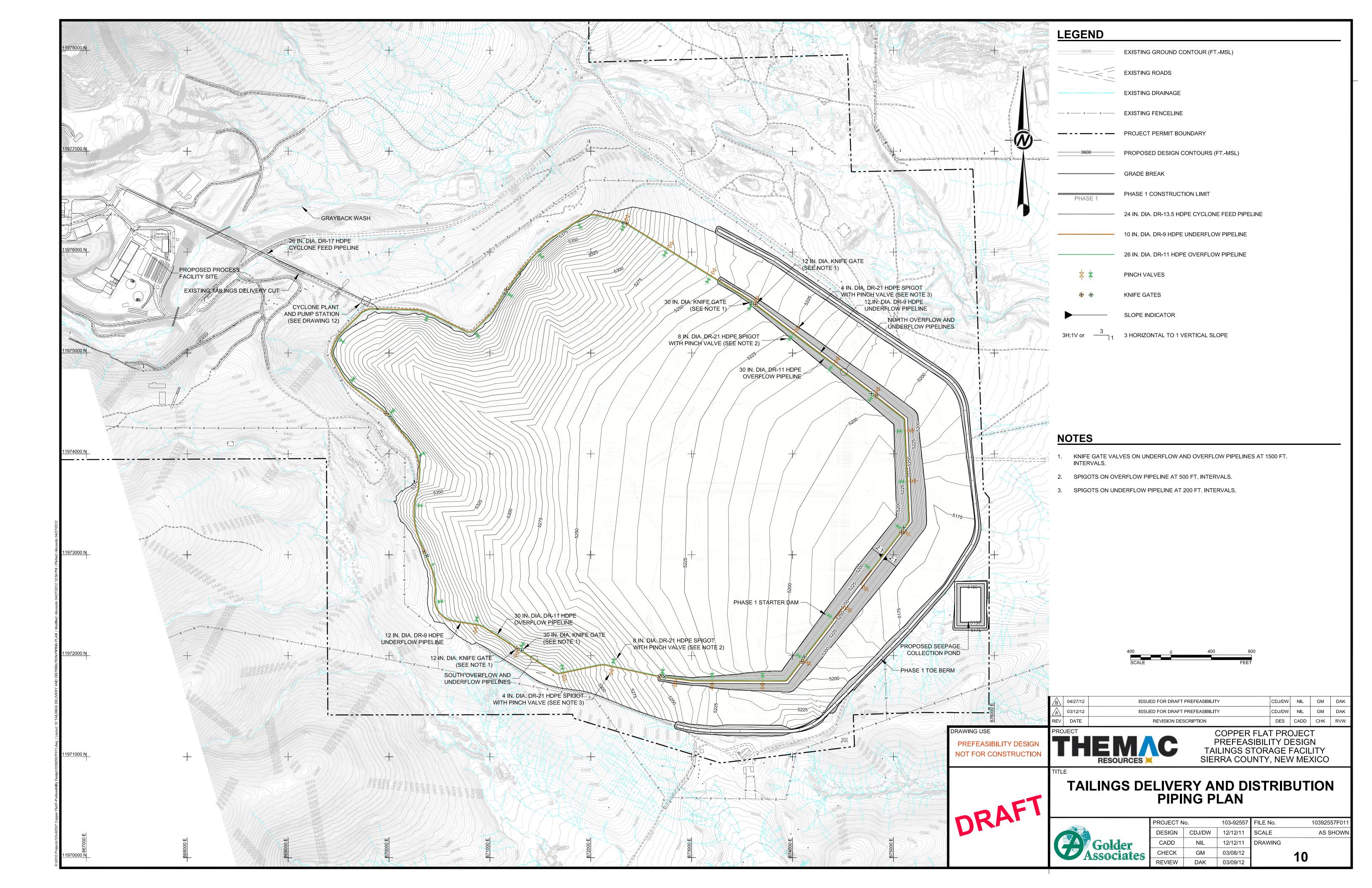
THEMAC

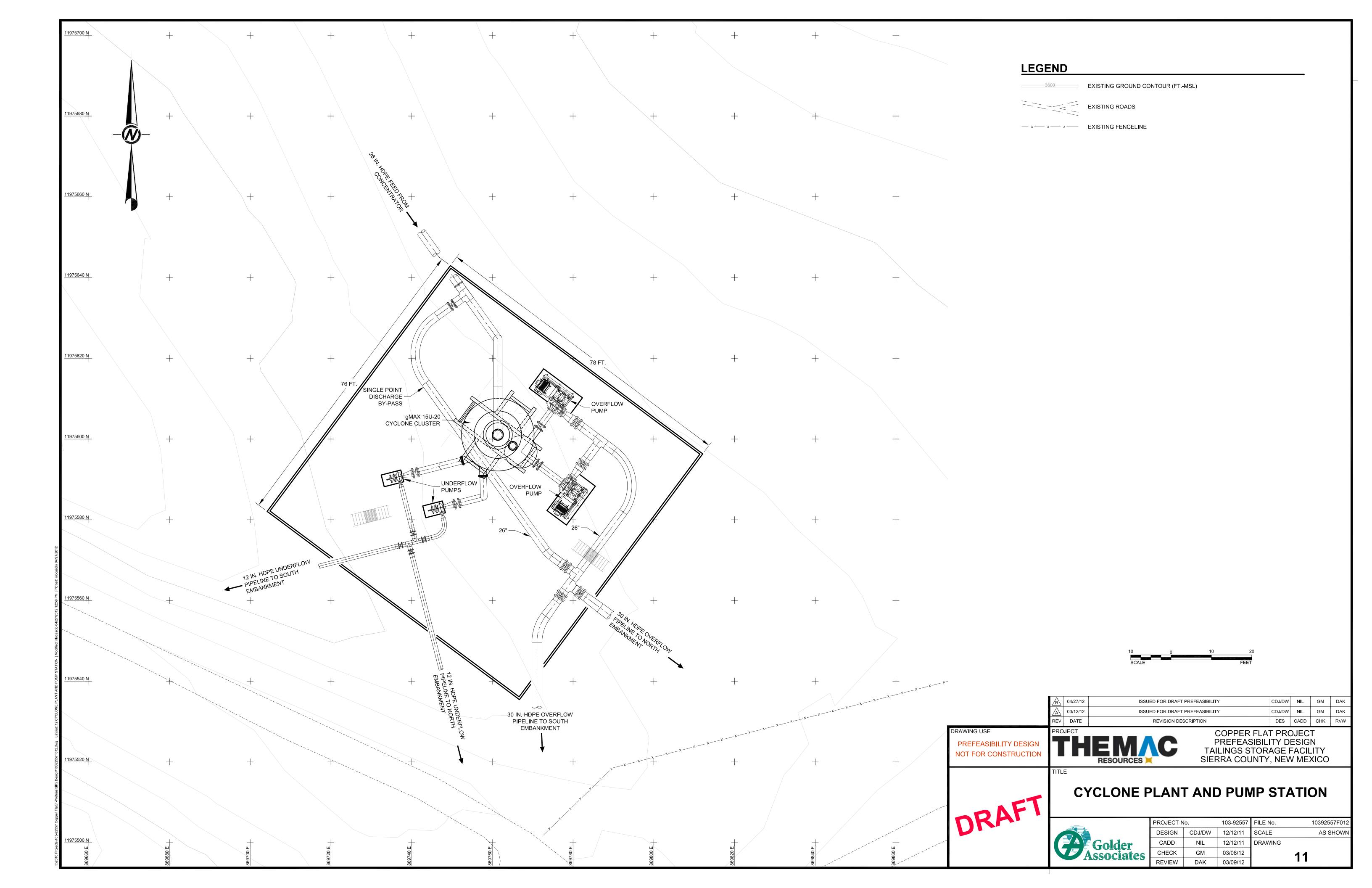
COPPER FLAT PROJECT PREFEASIBILITY DESIGN TAILINGS STORAGE FACILITY SIERRA COUNTY, NEW MEXICO

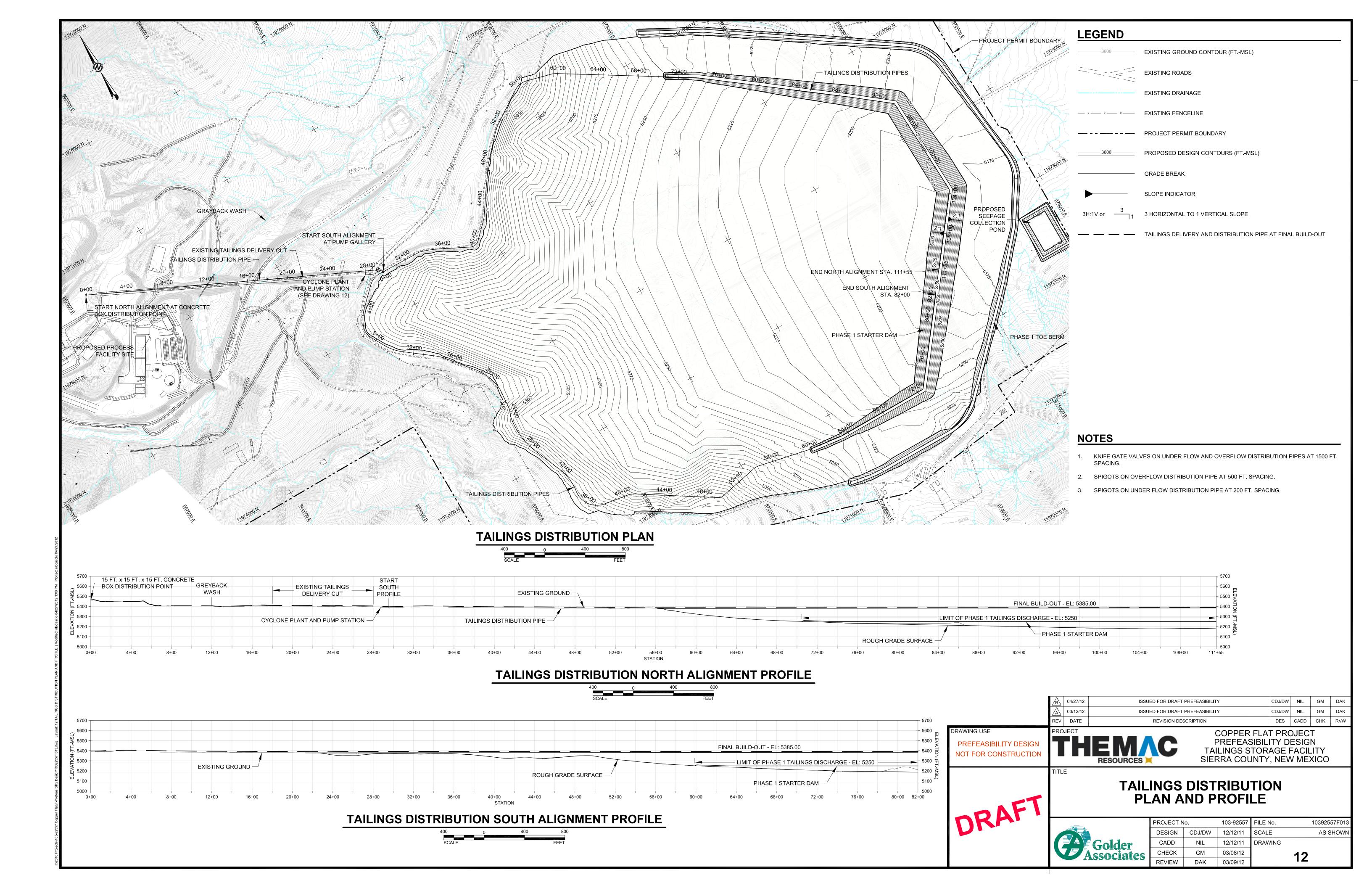


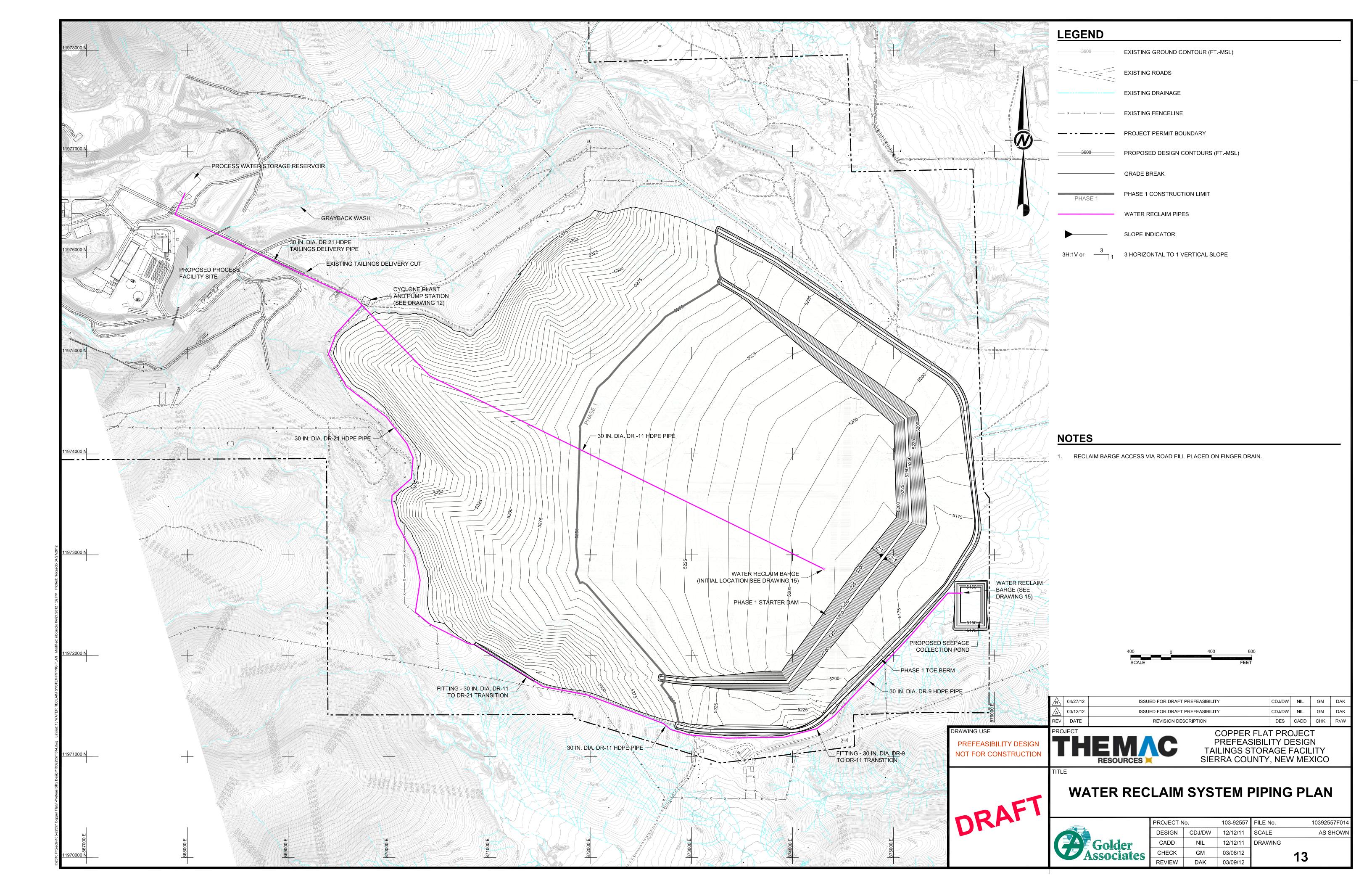
# PROCESS FLOW DIAGRAM

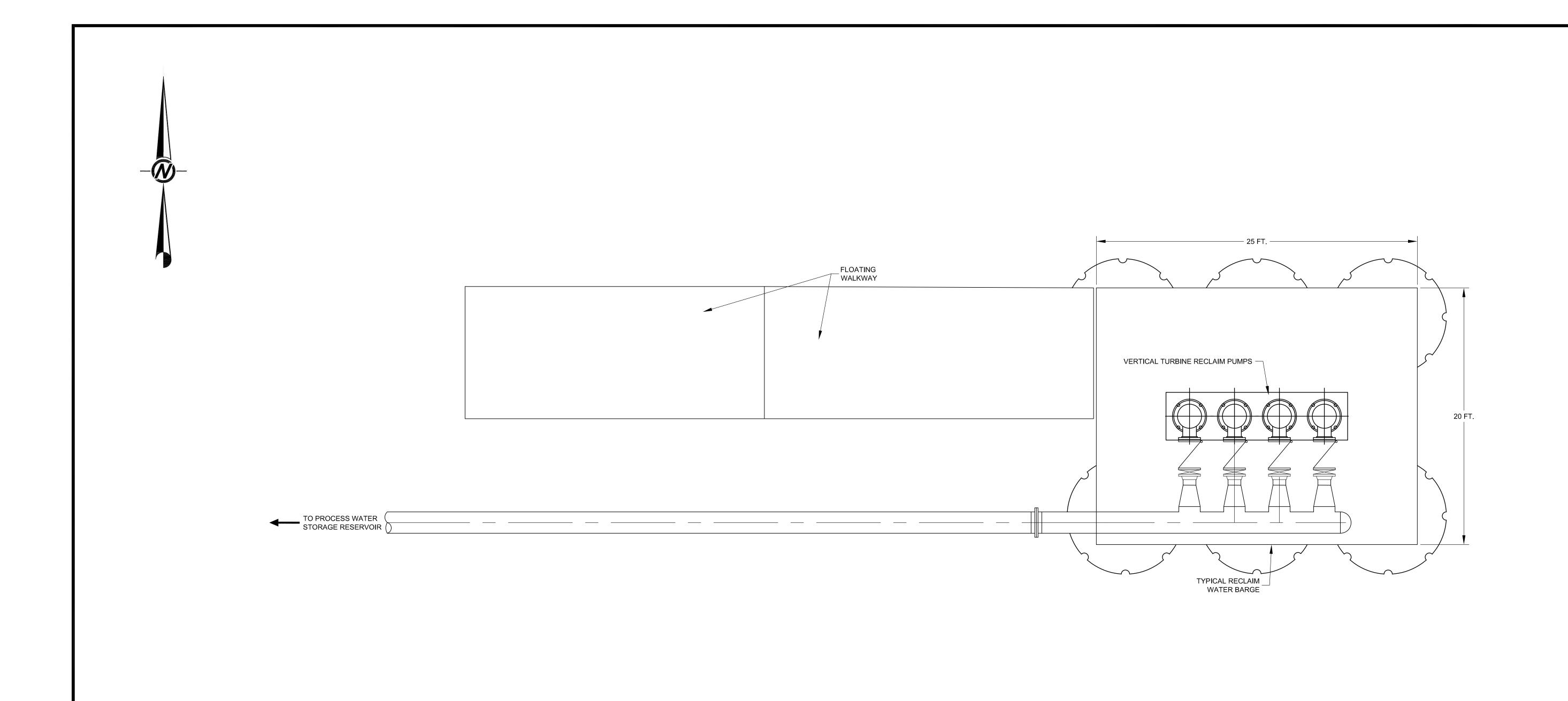
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REV	DATE	REVISION DESCRIPTION	DES	CADD	СНК	RVW

PREFEASIBILITY DESIGN
NOT FOR CONSTRUCTION

PROJECT

RESOURCES

RESOURCES

COPPER FLAT PROJECT PREFEASIBILITY DESIGN TAILINGS STORAGE FACILITY SIERRA COUNTY, NEW MEXICO

DRAFT

# **WATER RECLAIM BARGE**

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