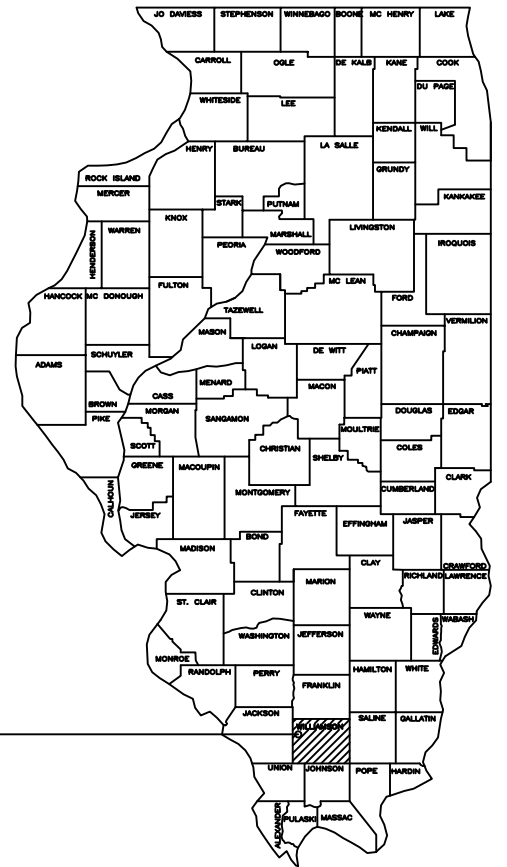


State of Illinois
Department of Natural Resources
 Office of Mines and Minerals
 Division of Abandoned Mined Lands Reclamation

Funded by the
 United States Department of Interior
 Federal Office of Surface Mining

S Coal Cambria Forfeiture
 Reclamation Project
 LRD-2015-304
 Williamson County
 1LR



S Coal Cambria Forfeiture
 Williamson County

Certified Copy

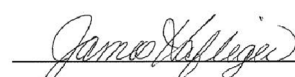
SCHEDULE OF DRAWINGS:

1. Cover Sheet
2. Summary of Quantities / General Notes / Location Map
3. Site Information
- 4-7. Existing and Proposed Conditions
8. Details

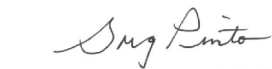
Prepared By IDNR Staff

CONTRACT NO. MF304


Approved for Bidding:


 James Haflinger, Acting Director
 Office of Mines and Minerals

Approved By:

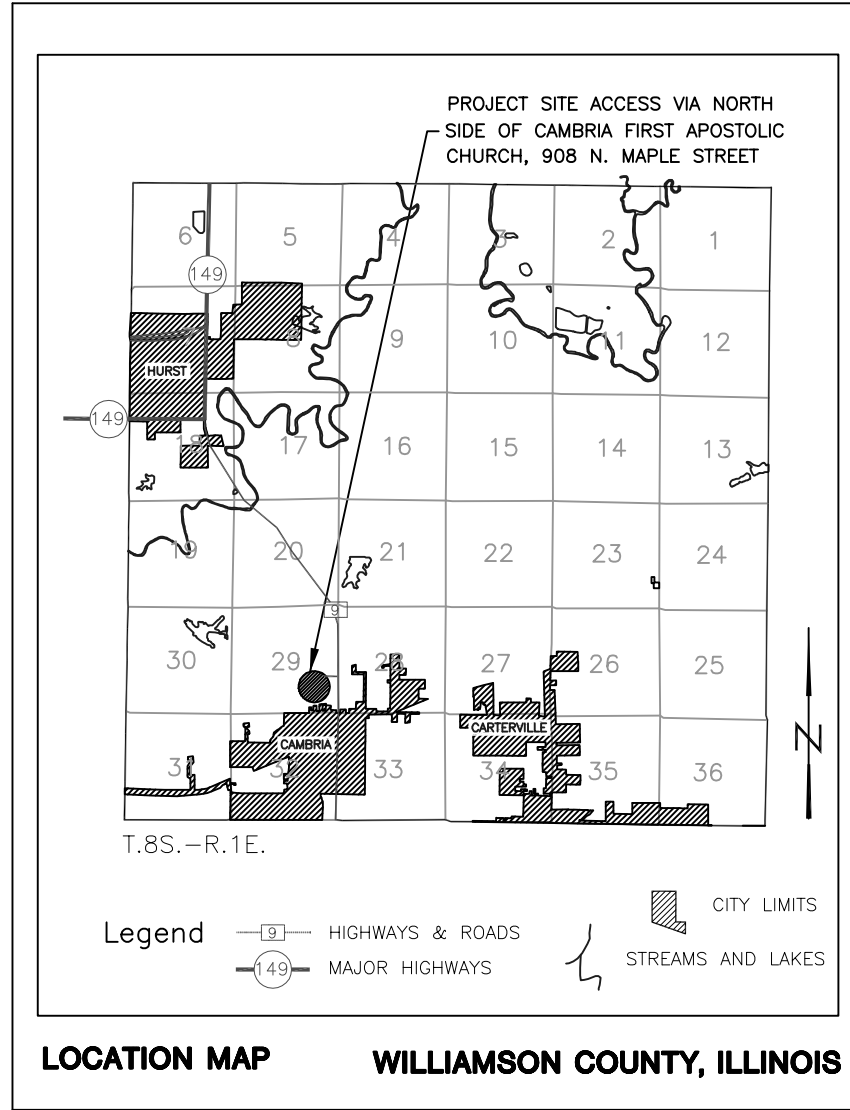

 J. Gregory Pinto, Acting Manager
 AMLR Division

Approved By:


 Janet L. Uglum, P.E.
 IL Licensed Professional Engineer
 No. 062-054108



Summary of Quantities						
Item No.	#	Item	Section	Quantity	Unit	Rates/Remarks
NRM20110	1	Special Clearing	201	1	L SUM	
NRM20210	2	Earth Excavation	202	6,230	CU YD	Compaction per Section 205
NRM20240	3	Earth Excavation and Haulage	202	4,120	CU YD	Compaction per Section 205
NRM25040	4	Nitrogen Fertilizer Nutrient	250	430	POUND	100 Pounds/Acre
NRM25050	5	Phosphorous Fertilizer Nutrient	250	516	POUND	120 Pounds/Acre
NRM25060	6	Potassium Fertilizer Nutrient	250	1,290	POUND	300 Pounds/Acre
NRM25070	7	Agricultural Ground Limestone	250	21.5	TON	5 Tons/Acre
NRM25090	8	Seeding	250	4.3	ACRE	
25100115	9	Mulch, Method 2, Procedure 1	IDOT 251	3.3	ACRE	2.0 Tons/Acre
NRM25610	10	Incorporation - Limestone	256	13.2	TON	20.0 Tons/Acre
28100207	11	Stone Riprap, Class A4	IDOT 281	3,407.2	TON	
NRM28610	12	Special Excelsior Blanket	286	4,800	SQ YD	
40200800	13	Aggregate Surface Course, Type B	IDOT 402	201.3	TON	CA-6
NRM67110	14	Mobilization (maximum 6% of bid)	671	1	L SUM	
NRM67410	15	Borehole Grout	674	3.0	CU YD	



GENERAL NOTES

Unless otherwise noted on the plans, all disturbed areas within the construction limits will be amended with agricultural ground limestone, fertilizer nutrients, seeded and mulched at the required rates specified in the plans.

The contractor is responsible for visiting the site and familiarizing himself with the existing conditions and the proposed reclamation work prior to submitting a bid.

The contractor shall provide and pay for all field engineering services to execute the project as specified in the Field Engineering section of the Special Provisions.

The contractor is responsible for locating and protecting all existing utility lines.

Unless noted on the plans, all onsite access roads may be used for construction and must be maintained during construction and restored to original or better condition at the completion of work by the contractor. Access roads to the site as designated in the plans are to be maintained to the satisfaction of the engineer.

The construction limits will be staked by the contractor prior to construction. The contractor is responsible for the repair and or restitution at his own expense for all damages done to any area outside the construction limits.

Application rates specified in the plans are shown in the Summary of Quantities—Rates/Remarks column.

CONSTRUCTION NOTES

BURIAL/REMOVAL OF MATERIAL—Concrete and masonry debris designated for burial by the engineer shall be buried at least three feet below proposed final grade. Onsite organic debris and trash shall be disposed of in an engineer approved offsite landfill in accordance with Section 201 of the Special Provisions.

TREE REMOVAL—Trees removed shall be disposed of onsite per Section 201 of the Special Provisions.

EROSION CONTROL—The contractor shall schedule his operations and take such precautions that may be necessary to prevent or minimize erosion. Failure to comply with this requirement shall cause the contractor to be fully responsible for repairing any eroded areas and cleaning up areas or drainage structures that have become silted in or damaged.

AGRICULTURAL GROUND LIMESTONE—Immediately prior to seed bed preparation, fertilizer nutrients and agricultural ground limestone shall be uniformly spread at the rates specified in the plans.

MULCHING—Within 24 hours from the time seeding has been performed, the seeded area shall be given a covering of mulch at the rates specified in the plans. The mulch is to be anchored into the soil in accordance with the requirements for method 2, procedure 1 of Article 251.03 of the Standard Specifications. If Excelsior or Special Excelsior Blanket is to be used, the blanket shall be placed the same day that the areas are seeded.

Schedule of Seeding, Fertilizer Nutrients and Mulch			
ITEM (unit)	INITIAL APPLICATION	FALL 2015 (AUG. 20 - SEPT. 30)	TOTAL QUANTITY
SEEDING (acres)		4.3 Acres	4.3 Acres
AGRICULTURAL GROUND LIMESTONE (tons)		21.5 Tons (5 Tons/Acre)	21.5 Tons
NITROGEN FERTILIZER NUTRIENT (pounds)		430 Lbs. (100 Lbs./Acre)	430 Lbs.
PHOSPHOROUS FERTILIZER NUTRIENT (pounds)		516 Lbs. (120 Lbs./Acre)	516 Lbs.
POTASSIUM FERTILIZER NUTRIENT (pounds)		1,290 Lbs. (300 Lbs./Acre)	1,290 Lbs.
MULCH, METHOD 2 PROCEDURE 1 (acres)		3.3 Acres (2 Tons/Acre)	3.3 Acres

SE1/4 of NW1/4 Sec 29 T8S R1E

SW1/4 of NE1/4 Sec 29 T8S R1E

CONTROL POINT INFORMATION			
POINT	NORTHING	EASTING	ELEVATION
SC-CP1	411,588.17	756,641.08	434.54
SC-CP2	411,939.50	756,071.23	420.14
SC-CP3	410,873.58	756,436.22	432.89
SC-CP4	411,582.34	757,077.05	443.76

LEGEND

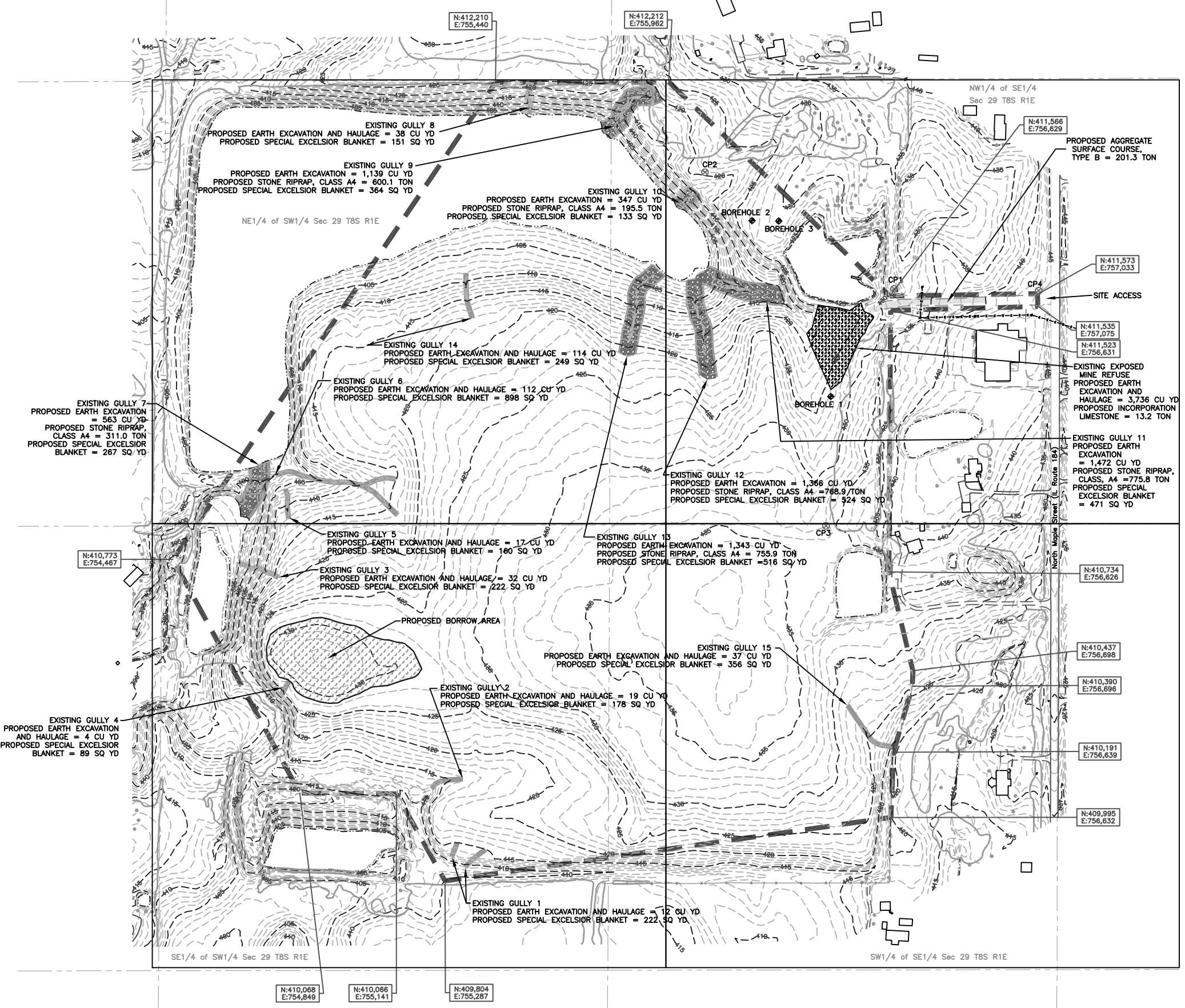
- SECTION LINE
- CONSTRUCTION LIMITS
- - - EDGE OF WATER
- - - FENCE
- - - UNPAVED ROAD
- - - TREE LINE
- - - EXISTING CONTOURS
- - - PROPOSED SPECIAL EXCELSIOR BLANKET
- ▨ PROPOSED STONE RIPRAP
- ▨ EXISTING MINE REFUSE
- ▨ PROPOSED BORROW AREA
- STRUCTURE
- ⊕ BOREHOLE
- ⊗ CONTROL POINT

S Coal Cambria

Sheet Layout

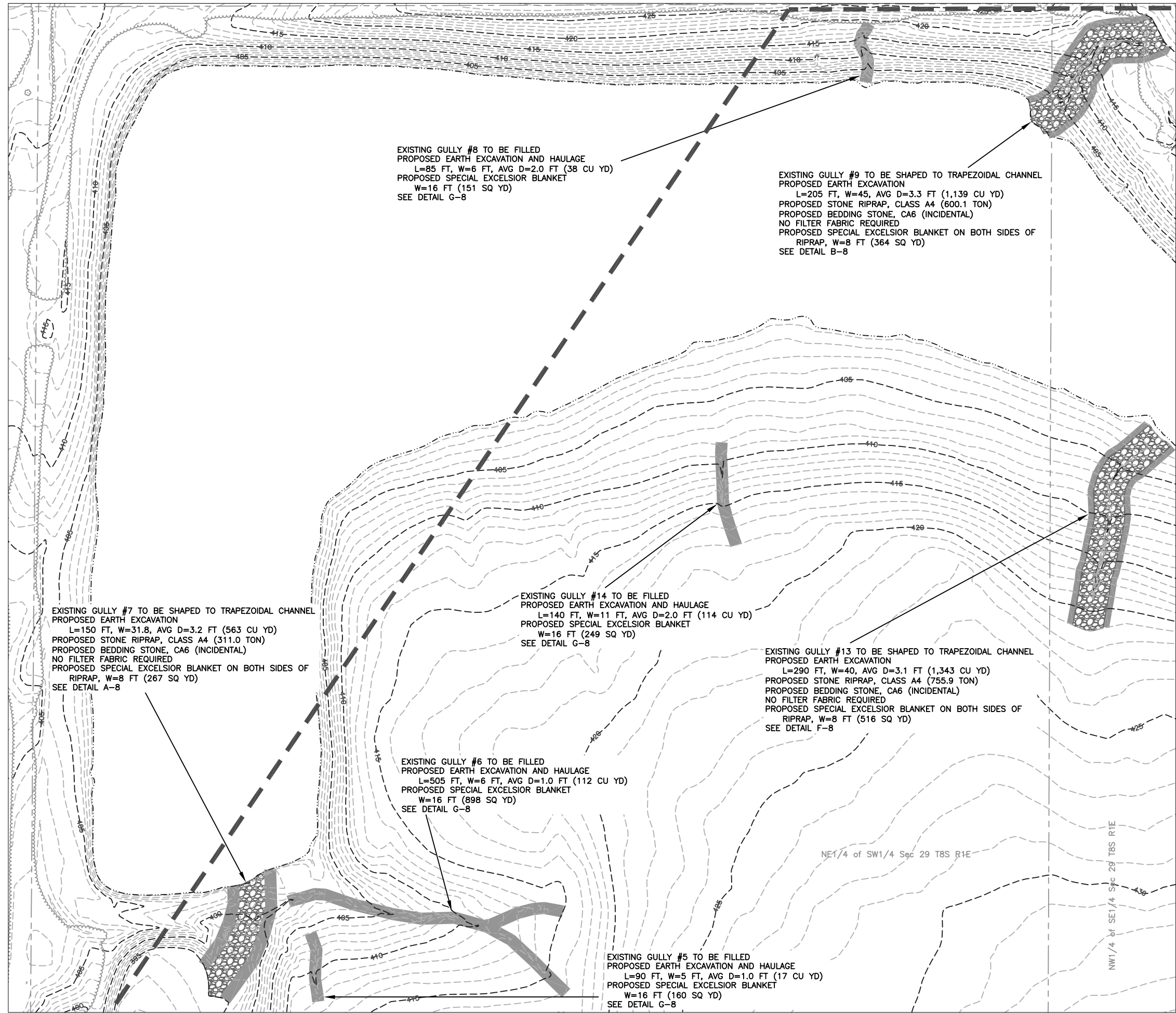
4	5
6	7

0 150 300
SCALE IN FEET



Drawn By: M.T. Date: 6/10/2016

Checked By:



EXISTING GULLY #8 TO BE FILLED
 PROPOSED EARTH EXCAVATION AND HAULAGE
 L=85 FT, W=6 FT, AVG D=2.0 FT (38 CU YD)
 PROPOSED SPECIAL EXCELSIOR BLANKET
 W=16 FT (151 SQ YD)
 SEE DETAIL G-8

EXISTING GULLY #9 TO BE SHAPED TO TRAPEZOIDAL CHANNEL
 PROPOSED EARTH EXCAVATION
 L=205 FT, W=45, AVG D=3.3 FT (1,139 CU YD)
 PROPOSED STONE RIPRAP, CLASS A4 (600.1 TON)
 PROPOSED BEDDING STONE, CA6 (INCIDENTAL)
 NO FILTER FABRIC REQUIRED
 PROPOSED SPECIAL EXCELSIOR BLANKET ON BOTH SIDES OF
 RIPRAP, W=8 FT (364 SQ YD)
 SEE DETAIL B-8

EXISTING GULLY #7 TO BE SHAPED TO TRAPEZOIDAL CHANNEL
 PROPOSED EARTH EXCAVATION
 L=150 FT, W=31.8, AVG D=3.2 FT (563 CU YD)
 PROPOSED STONE RIPRAP, CLASS A4 (311.0 TON)
 PROPOSED BEDDING STONE, CA6 (INCIDENTAL)
 NO FILTER FABRIC REQUIRED
 PROPOSED SPECIAL EXCELSIOR BLANKET ON BOTH SIDES OF
 RIPRAP, W=8 FT (267 SQ YD)
 SEE DETAIL A-8

EXISTING GULLY #14 TO BE FILLED
 PROPOSED EARTH EXCAVATION AND HAULAGE
 L=140 FT, W=11 FT, AVG D=2.0 FT (114 CU YD)
 PROPOSED SPECIAL EXCELSIOR BLANKET
 W=16 FT (249 SQ YD)
 SEE DETAIL G-8

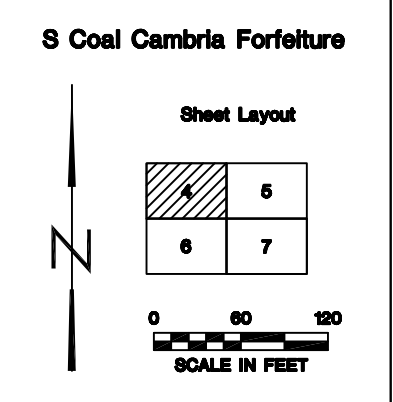
EXISTING GULLY #13 TO BE SHAPED TO TRAPEZOIDAL CHANNEL
 PROPOSED EARTH EXCAVATION
 L=290 FT, W=40, AVG D=3.1 FT (1,343 CU YD)
 PROPOSED STONE RIPRAP, CLASS A4 (755.9 TON)
 PROPOSED BEDDING STONE, CA6 (INCIDENTAL)
 NO FILTER FABRIC REQUIRED
 PROPOSED SPECIAL EXCELSIOR BLANKET ON BOTH SIDES OF
 RIPRAP, W=8 FT (516 SQ YD)
 SEE DETAIL F-8

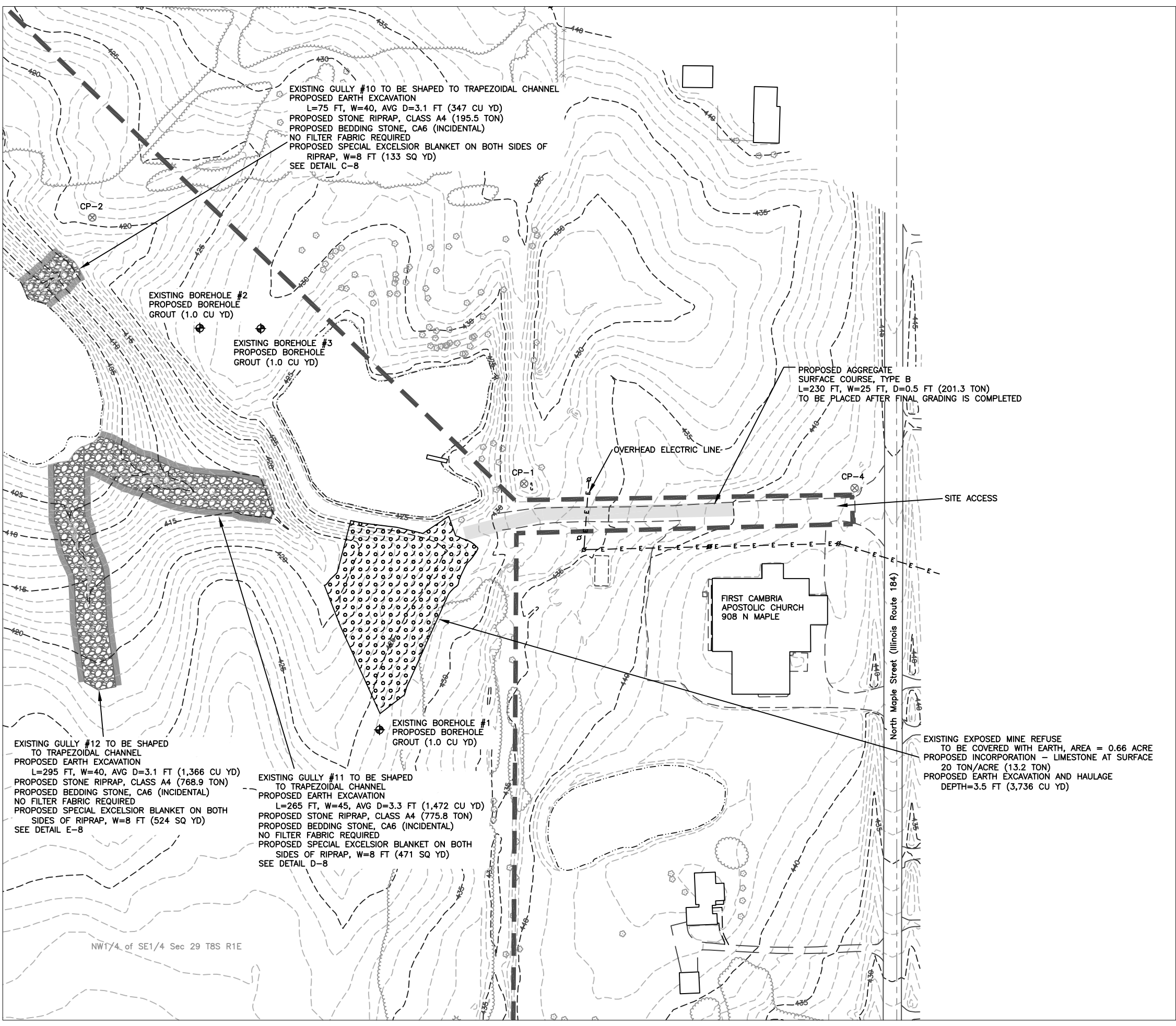
EXISTING GULLY #6 TO BE FILLED
 PROPOSED EARTH EXCAVATION AND HAULAGE
 L=505 FT, W=6 FT, AVG D=1.0 FT (112 CU YD)
 PROPOSED SPECIAL EXCELSIOR BLANKET
 W=16 FT (898 SQ YD)
 SEE DETAIL G-8

EXISTING GULLY #5 TO BE FILLED
 PROPOSED EARTH EXCAVATION AND HAULAGE
 L=90 FT, W=5 FT, AVG D=1.0 FT (17 CU YD)
 PROPOSED SPECIAL EXCELSIOR BLANKET
 W=16 FT (160 SQ YD)
 SEE DETAIL G-8

	SECTION LINE
	CONSTRUCTION LIMITS
	EDGE OF WATER
	FENCE
	UNPAVED ROAD
	TREE LINE
	EXISTING CONTOURS
	PROPOSED SPECIAL EXCELSIOR BLANKET
	PROPOSED RIPRAP
	EXISTING MINE REFUSE
	PROPOSED BORROW AREA
	STRUCTURE
	BOREHOLE
	CONTROL POINT

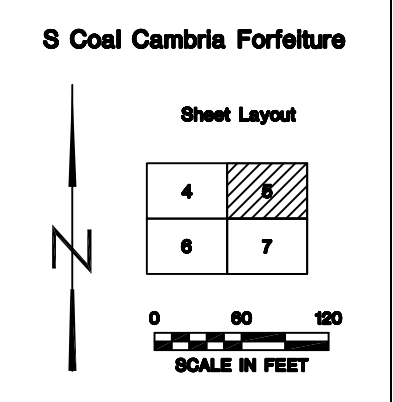
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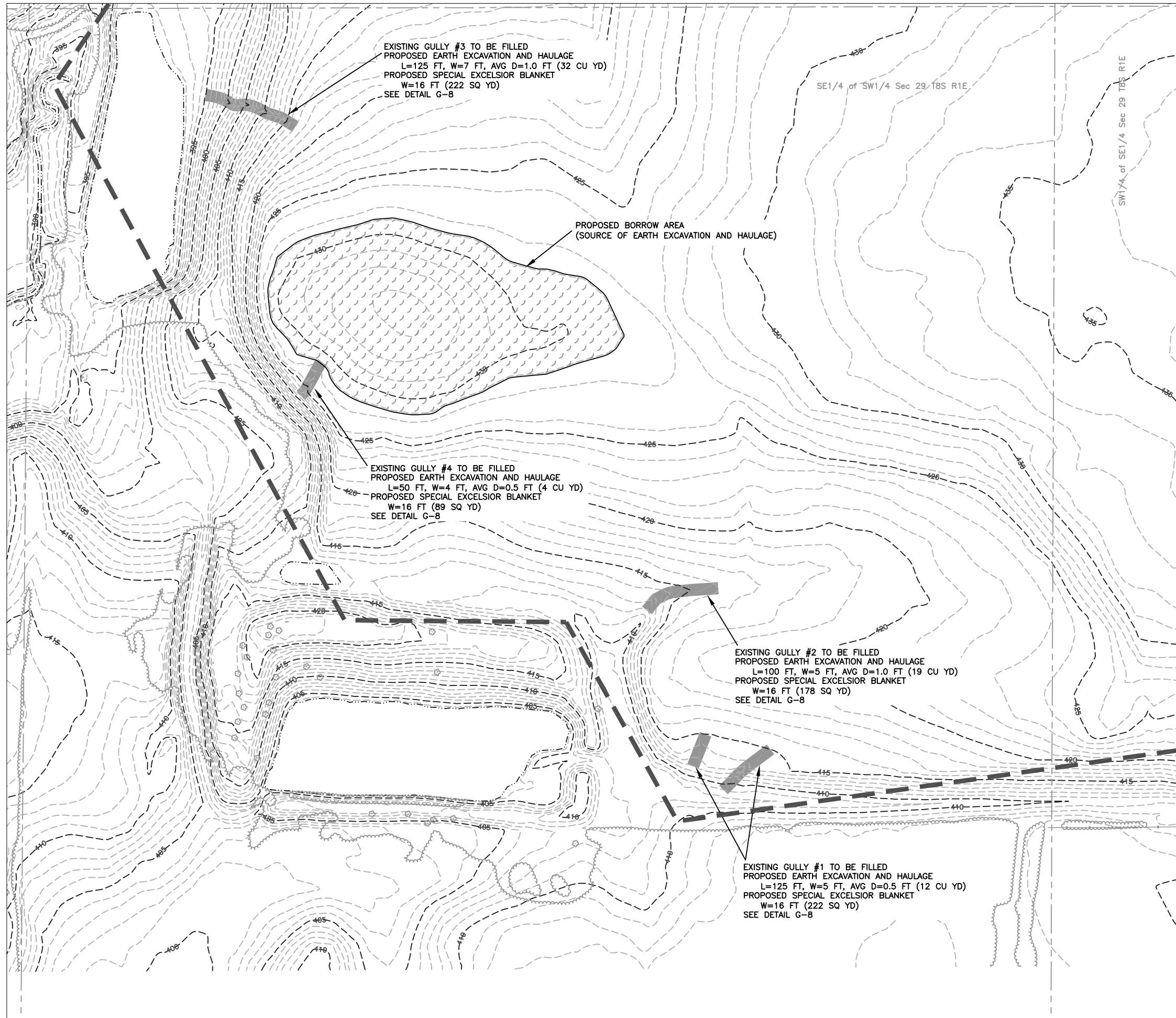




	SECTION LINE
	CONSTRUCTION LIMITS
	EDGE OF WATER
	FENCE
	UNPAVED ROAD
	TREE LINE
	EXISTING CONTOURS
	PROPOSED SPECIAL EXCELSIOR BLANKET
	PROPOSED RIPRAP
	EXISTING MINE REFUSE
	PROPOSED BORROW AREA
	STRUCTURE
	BOREHOLE
	CONTROL POINT

LEGEND





EXISTING GULLY #3 TO BE FILLED
 PROPOSED EARTH EXCAVATION AND HAULAGE
 L=125 FT, W=7 FT, AVG D=1.0 FT (32 CU YD)
 PROPOSED SPECIAL EXCELSIOR BLANKET
 W=16 FT (222 SQ YD)
 SEE DETAIL G-8

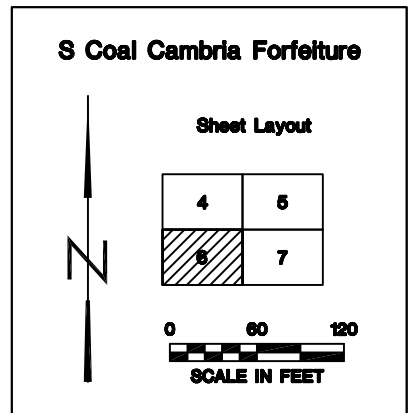
PROPOSED BORROW AREA
 (SOURCE OF EARTH EXCAVATION AND HAULAGE)

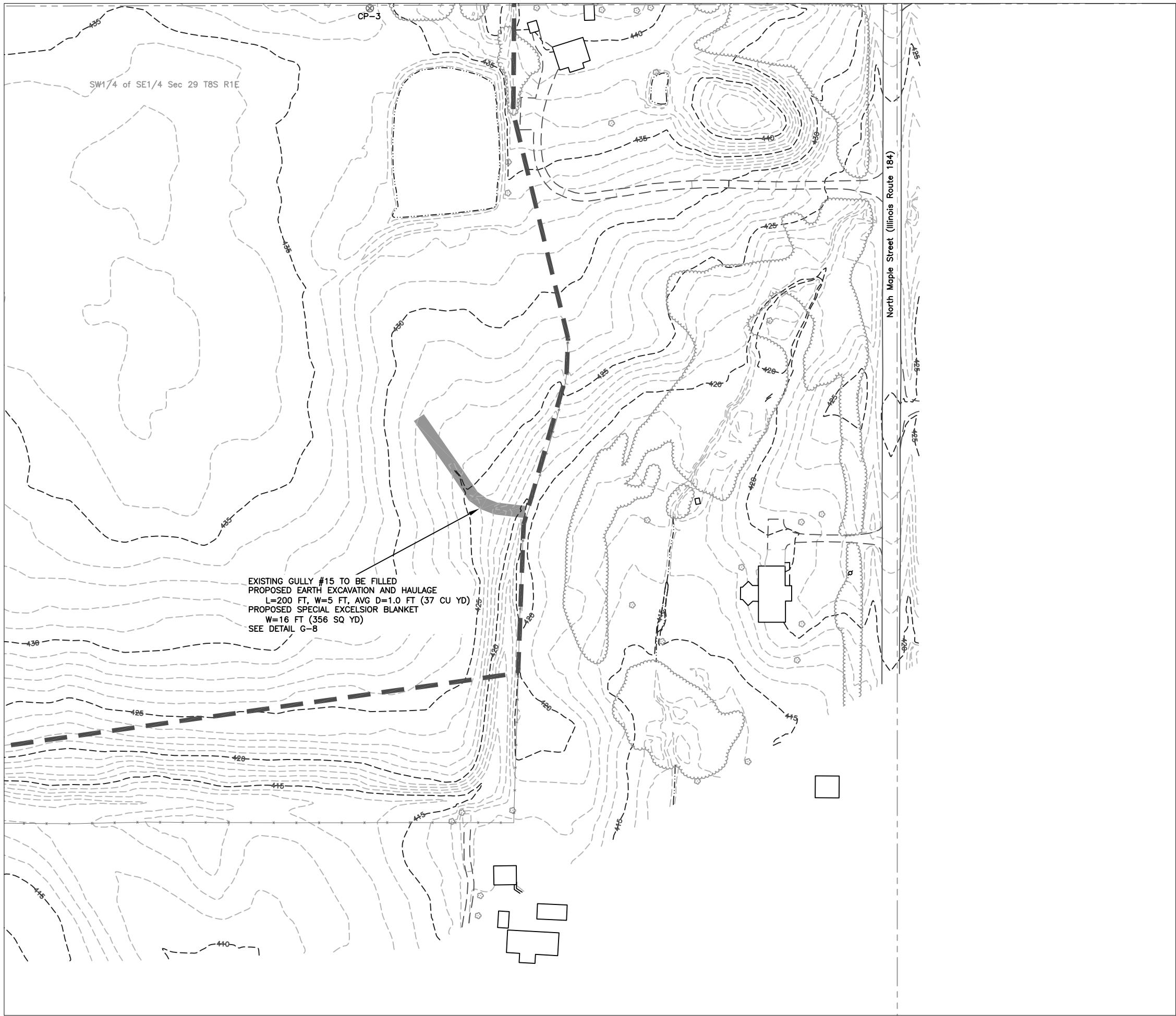
EXISTING GULLY #4 TO BE FILLED
 PROPOSED EARTH EXCAVATION AND HAULAGE
 L=50 FT, W=4 FT, AVG D=0.5 FT (4 CU YD)
 PROPOSED SPECIAL EXCELSIOR BLANKET
 W=16 FT (89 SQ YD)
 SEE DETAIL G-8

EXISTING GULLY #2 TO BE FILLED
 PROPOSED EARTH EXCAVATION AND HAULAGE
 L=100 FT, W=5 FT, AVG D=1.0 FT (19 CU YD)
 PROPOSED SPECIAL EXCELSIOR BLANKET
 W=16 FT (178 SQ YD)
 SEE DETAIL G-8

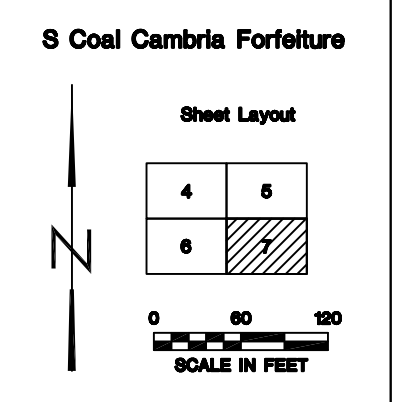
EXISTING GULLY #1 TO BE FILLED
 PROPOSED EARTH EXCAVATION AND HAULAGE
 L=125 FT, W=5 FT, AVG D=0.5 FT (12 CU YD)
 PROPOSED SPECIAL EXCELSIOR BLANKET
 W=16 FT (222 SQ YD)
 SEE DETAIL G-8

	SECTION LINE
	CONSTRUCTION LIMITS
	EDGE OF WATER
	FENCE
	UNPAVED ROAD
	TREE LINE
	EXISTING CONTOURS
	PROPOSED SPECIAL EXCELSIOR BLANKET
	PROPOSED RIPRAP
	EXISTING MINE REFUSE
	PROPOSED BORROW AREA
	STRUCTURE
	BOREHOLE
	CONTROL POINT
LEGEND	



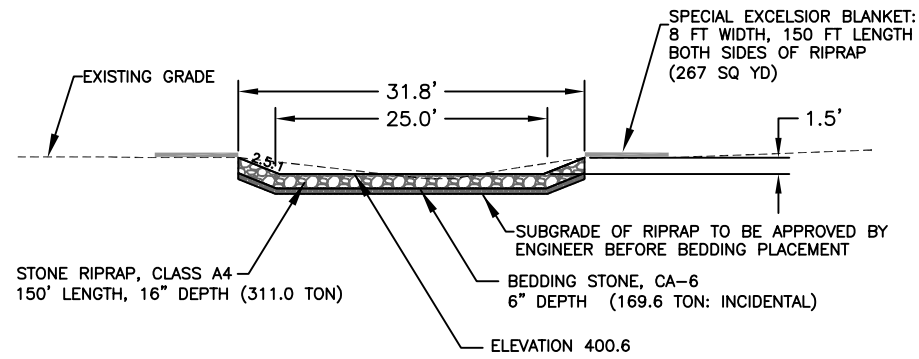


	SECTION LINE
	CONSTRUCTION LIMITS
	EDGE OF WATER
	FENCE
	UNPAVED ROAD
	TREE LINE
	EXISTING CONTOURS
	PROPOSED SPECIAL EXCELSIOR BLANKET
	PROPOSED RIPRAP
	EXISTING MINE REFUSE
	PROPOSED BORROW AREA
	STRUCTURE
	BOREHOLE
	CONTROL POINT
LEGEND	



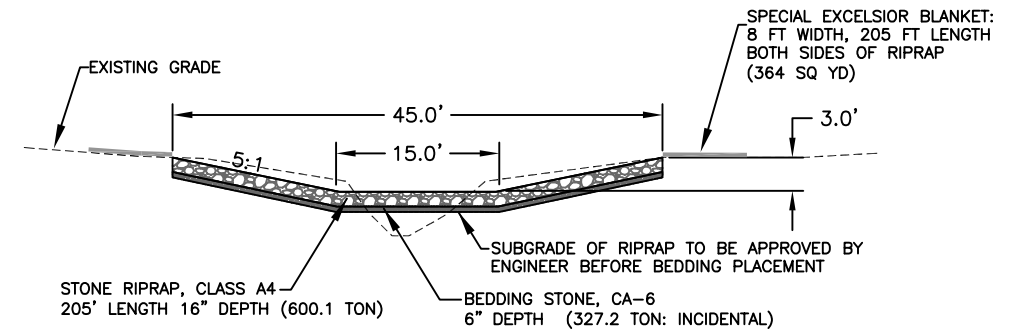
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NOTE: ELEVATION OF FINAL CUT WATER LEVEL ON MARCH 18TH, 2013 WAS 400.6. WATER LEVEL MAY VARY SEASONALLY. ALL WORK REQUIRED FOR WATER LEVEL CONTROL DURING EXCAVATION IS INCIDENTAL TO THE EARTH EXCAVATION AND HAULAGE PRICE.



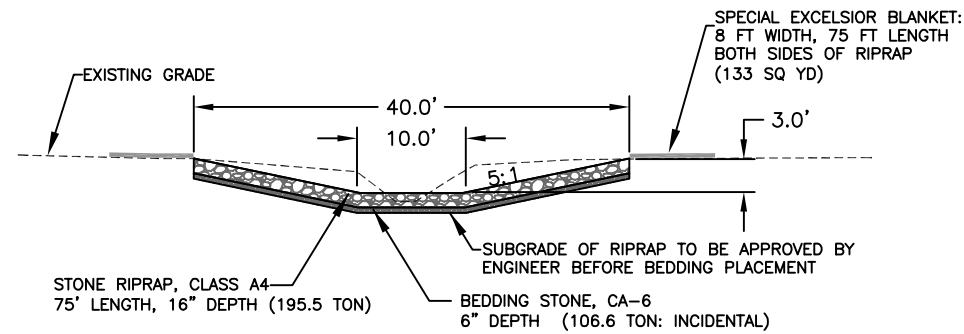
A-8 GULLY 7 DETAIL (FINAL CUT LAKE DISCHARGE)

NOT TO SCALE



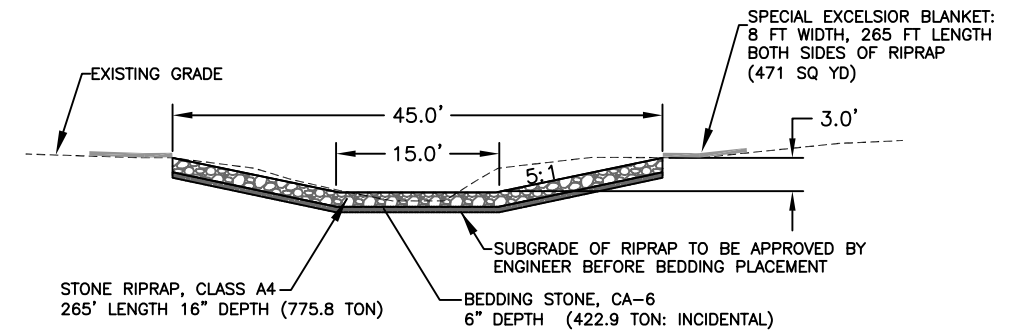
B-8 GULLY 9 DETAIL

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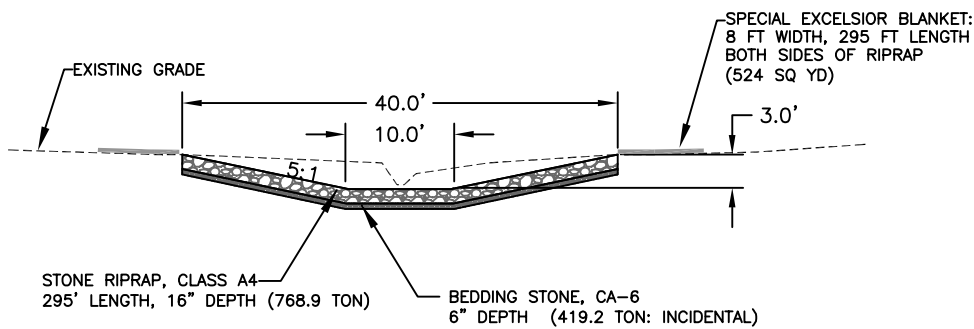
C-8 GULLY 10 DETAIL

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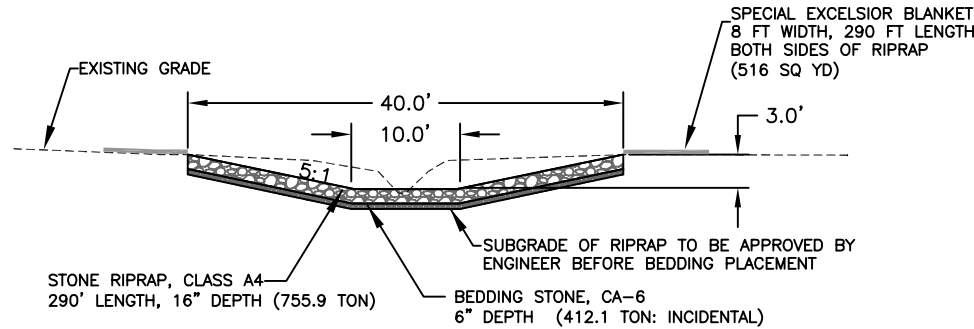
D-8 GULLY 11 DETAIL

NOT TO SCALE



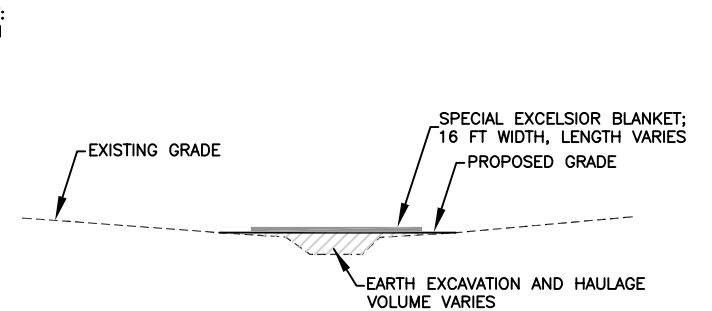
E-8 GULLY 12 DETAIL

NOT TO SCALE



F-8 GULLY 13 DETAIL

NOT TO SCALE



G-8 TYPICAL GULLY FILL DETAIL

NOT TO SCALE