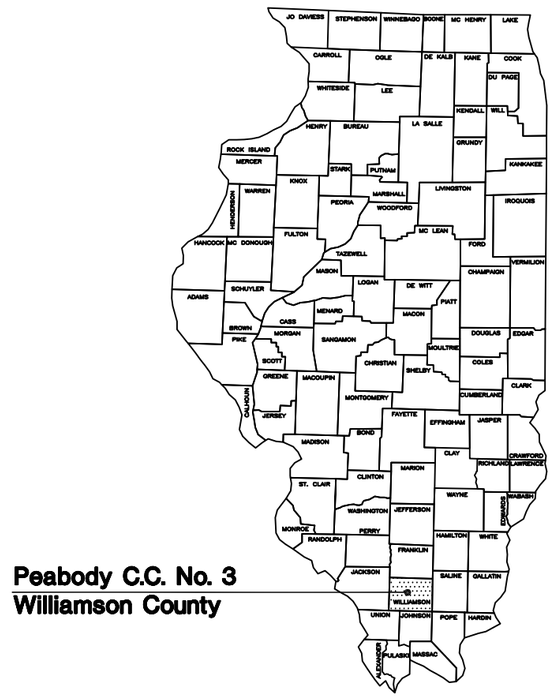
State of Illinois
Department of Natural Resources
Office of Mines and Minerals
Division of Abandoned Mined Lands Reclamation



Peabody C.C. No. 3
Williamson County

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

Peabody C.C. No. 3
Reclamation Project
AML-GWmE-1702
Williamson County
2LR

Certified Copy

SCHEDULE OF DRAWINGS:

1. Cover Sheet
2. Summary of Quantities/General Notes
3. Zeller Sinkholes - Site Layout & Details
4. Marks Sinkhole - Site Layout & Details
5. Peabody 3 Main Shaft - Site Location & Details
6. Jean Sinkholes - Site Layout & Details

CONTRACT NO. M1702

Prepared By IDNR Staff

Approved for Bidding:

Thomas A. Benner, Director
Office of Mines and Minerals

Approved By:

Greg Pinto, Acting Manager
AMLR Division

Approved By:

OLGA MOYA ARANZUBIA
062-062471
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

Olga Moya Aranzubia, P.E.
IL Licensed Professional Engineer
No. 062-062471

SUMMARY OF QUANTITIES

Item No.	#	Item	Section	Quantity	Unit	Rates/Remarks
NRM20110	1	SPECIAL CLEARING	201	1	L SUM	
NRM20480	2	FURNISHED EXCAVATION	204	1,667	CU YD	
NRM21510	3	SPECIAL EXCAVATION	215	5,066	CU YD	
NRM21644	4	ROCKFILL, RR4	216	60.0	TON	
NRM21661	5	CLASS SI CONCRETE PLUG	216	230.0	CU YD	
NRM25040	6	NITROGEN FERTILIZER NUTRIENT	250	480	POUND	100 POUNDS/ACRE
NRM25050	7	PHOSPHOROUS FERTILIZER NUTRIENT	250	480	POUND	100 POUNDS/ACRE
NRM25060	8	POTASSIUM FERTILIZER NUTRIENT	250	480	POUND	100 POUNDS/ACRE
NRM25070	9	AGRICULTURAL GROUND LIMESTONE	250	24.0	TON	5.0 TONS/ACRE
NRM25090	10	SEEDING	250	4.8	ACRE	
25100115	11	MULCH, METHOD 2	IDOT 251	4.8	ACRE	PROCEDURE 1, 2.0 TONS/ACRE
NRM42510	12	PORTLAND CEMENT CONCRETE CAP	425	4.5	CU YD	
NRM67110	13	MOBILIZATION (MAX 6% OF BID)	671	1	L SUM	

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 roods 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 restitiution 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

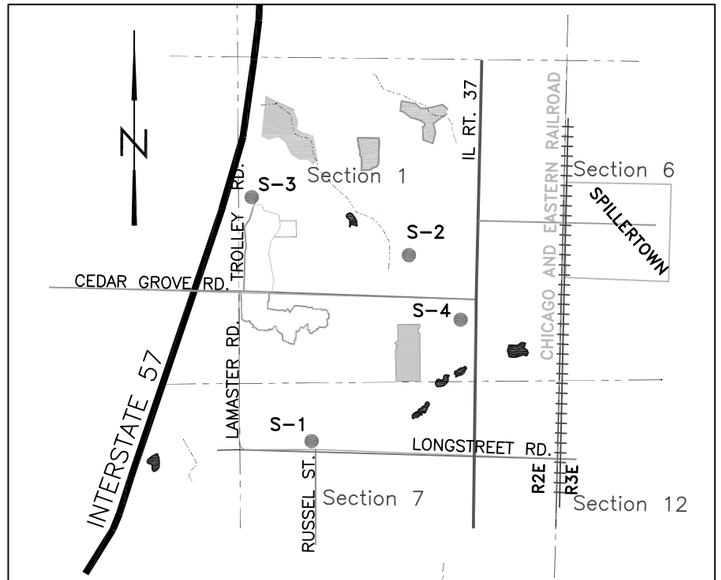
BURIAL/REMOVAL OF MATERIAL–Concrete and masonry debris designated for burial by the engineer shall be buried at least three feet below proposed final grade. Onsite organic debris and trash shall be disposed of in an engineer approved offsite landfill in accordance with Section 201 of the Special Provisions.

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.



LOCATION MAP - WILLIAMSON COUNTY, ILLINOIS

Schedule of Seeding, Fertilizer Nutrients and Mulch

ITEM (unit)	SPRING (MARCH 15 – APRIL 30, 2018)	TOTAL QUANTITY
SEEDING (acres)	4.8 Acres	4.8 Acres
AGRICULTURAL GROUND LIMESTONE (tons)	24.0 Tons (5.0 Tons/Acre)	24.0 Tons
NITROGEN FERTILIZER NUTRIENT (pounds)	480 Lbs. (100 Lbs./Acre)	480 Lbs.
PHOSPHOROUS FERTILIZER NUTRIENT (pounds)	480 (100 Lbs./Acre)	480 Lbs.
POTASSIUM FERTILIZER NUTRIENT (pounds)	480 Lbs. (100 Lbs./Acre)	480 Lbs.
MULCH, METHOD 2 PROCEDURE 1 (acres)	4.8 Acres (2 Tons/Acre)	4.8 Acres

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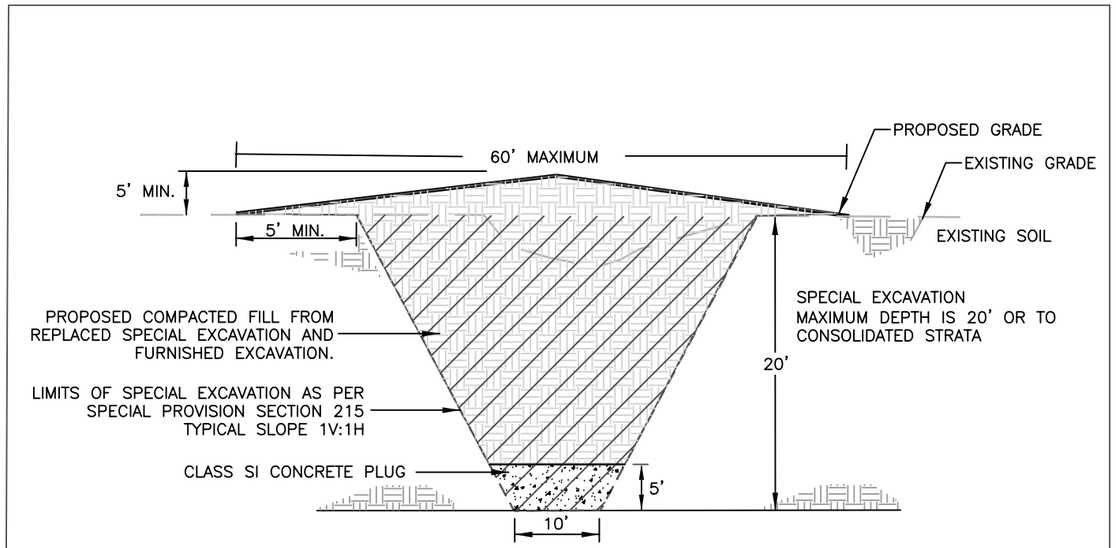
Drawn By: A.W. Date: 8/01/2016
Checked By: CMA 8/09/2017

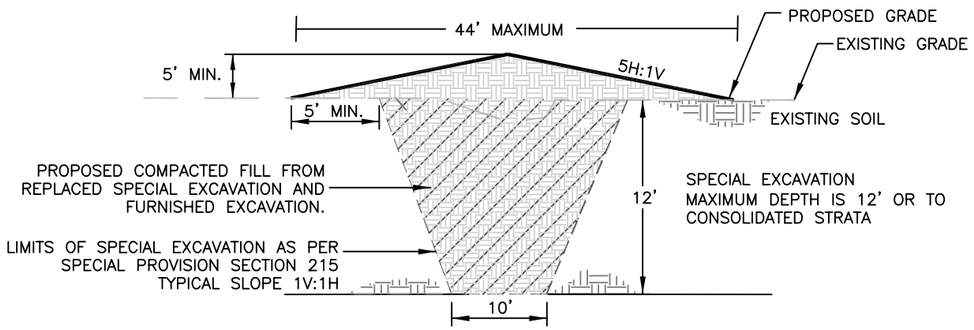
Summary of Quantities/ General Notes/Location Map

Sheet 2 of 6

THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE AREA OF THE SINKHOLES DUE TO THE UNKNOWN STABILITY OF THE AREA AROUND THE SINKHOLES AND THE POSSIBILITY OF MINE GASES. THE ENGINEER WILL VERIFY THE NATURE AND EXTENT OF THE OPEN VOIDS, IF ANY, IN THE STRATA AS SPECIAL EXCAVATION PROGRESSES. THE ENGINEER WILL MAKE THE DETERMINATION WHETHER TO INCREASE OR DECREASE VOLUMES OF MATERIALS REQUIRED DURING CONSTRUCTION BASED UPON THE EXACT CONDITIONS ENCOUNTERED DURING SPECIAL EXCAVATION PROCESS. COMPACTION SHALL BE TO THE SATISFACTION OF THE ENGINEER.

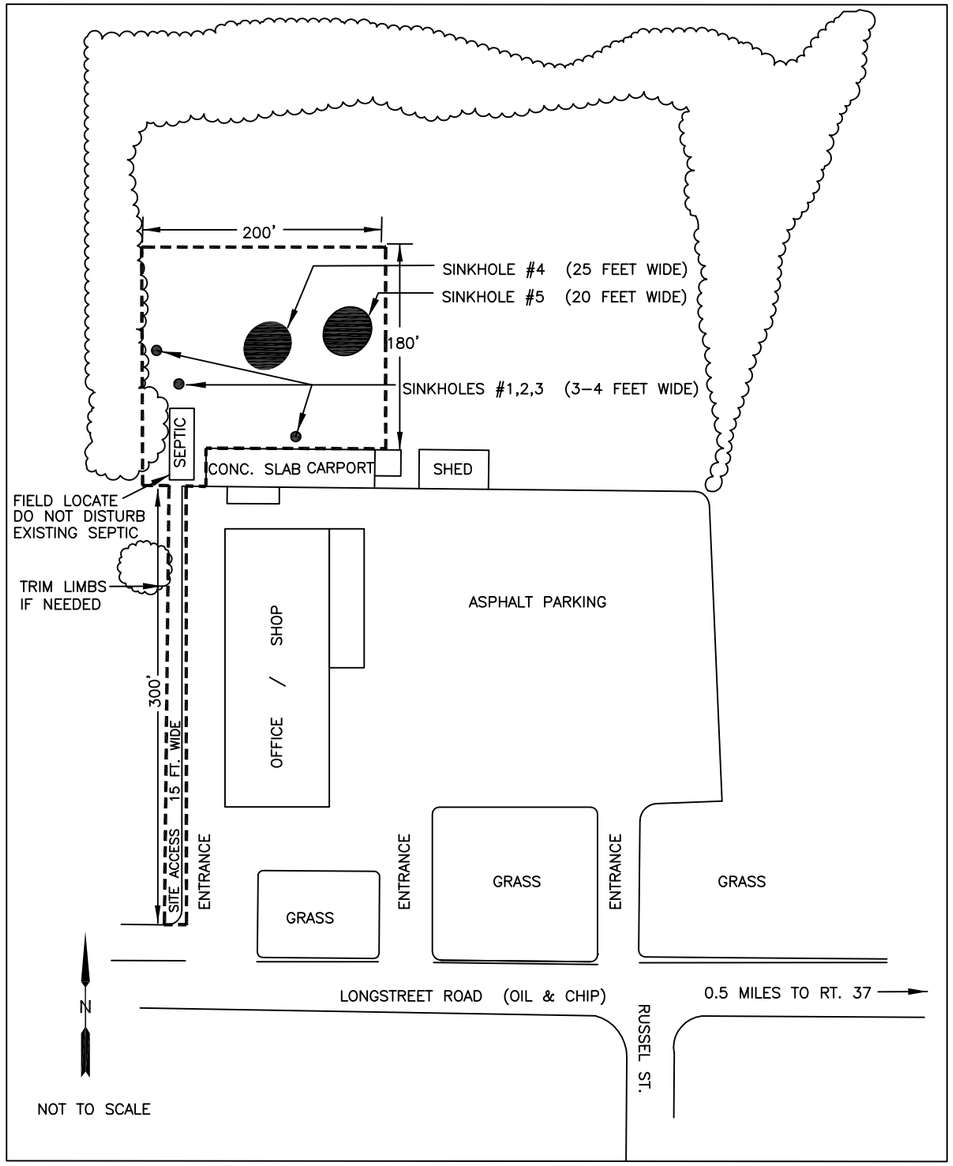


ZELLER SINKHOLE FILLING DETAIL– #4,#5
NOT TO SCALE, TYPICAL SECTION



ZELLER SINKHOLE FILLING DETAIL– #1,2,3
NOT TO SCALE, TYPICAL SECTION

#	ITEM	SECTION	QUANTITY	UNIT	RATES/REMARKS
1	SPECIAL CLEARING	201	0.25	L SUM	
2	FURNISHED EXCAVATION	204	838	CU YD	
3	SPECIAL EXCAVATION	215	2,238	CU YD	
4	CLASS SI CONCRETE PLUG	216	92.0	CU YD	
6	NITROGEN FERTILIZER NUTRIENT	250	100	POUND	100 POUNDS/ACRE
7	PHOSPHOROUS FERTILIZER NUTRIENT	250	100	POUND	100 POUNDS/ACRE
8	POTASSIUM FERTILIZER NUTRIENT	250	100	POUND	100 POUNDS/ACRE
9	AGRICULTURAL GROUND LIMESTONE	250	5.0	TON	5.0 TONS/ACRE
10	SEEDING	250	1.0	ACRE	
11	MULCH, METHOD 2	IDOT 251	1.0	ACRE	PROCEDURE 1, 2.0 TONS/ACRE



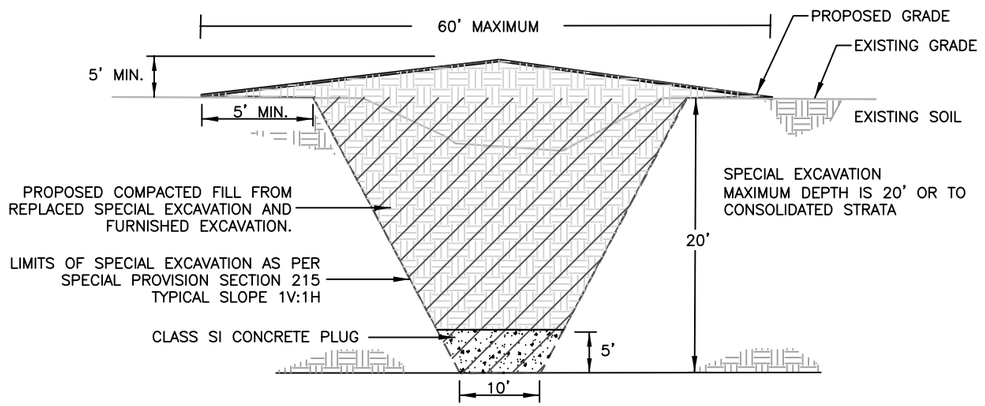
State of Illinois
Department of Natural Resources

Peabody C.C. No. 3
Reclamation Project
AML-GWmE-1702
Williamson County

Drawn By: A.W. Date: 8/01/2015
Checked By: CMA 8/09/2017

Site Plan and Details
Zeller Sinkholes
Sheet 3 of 6

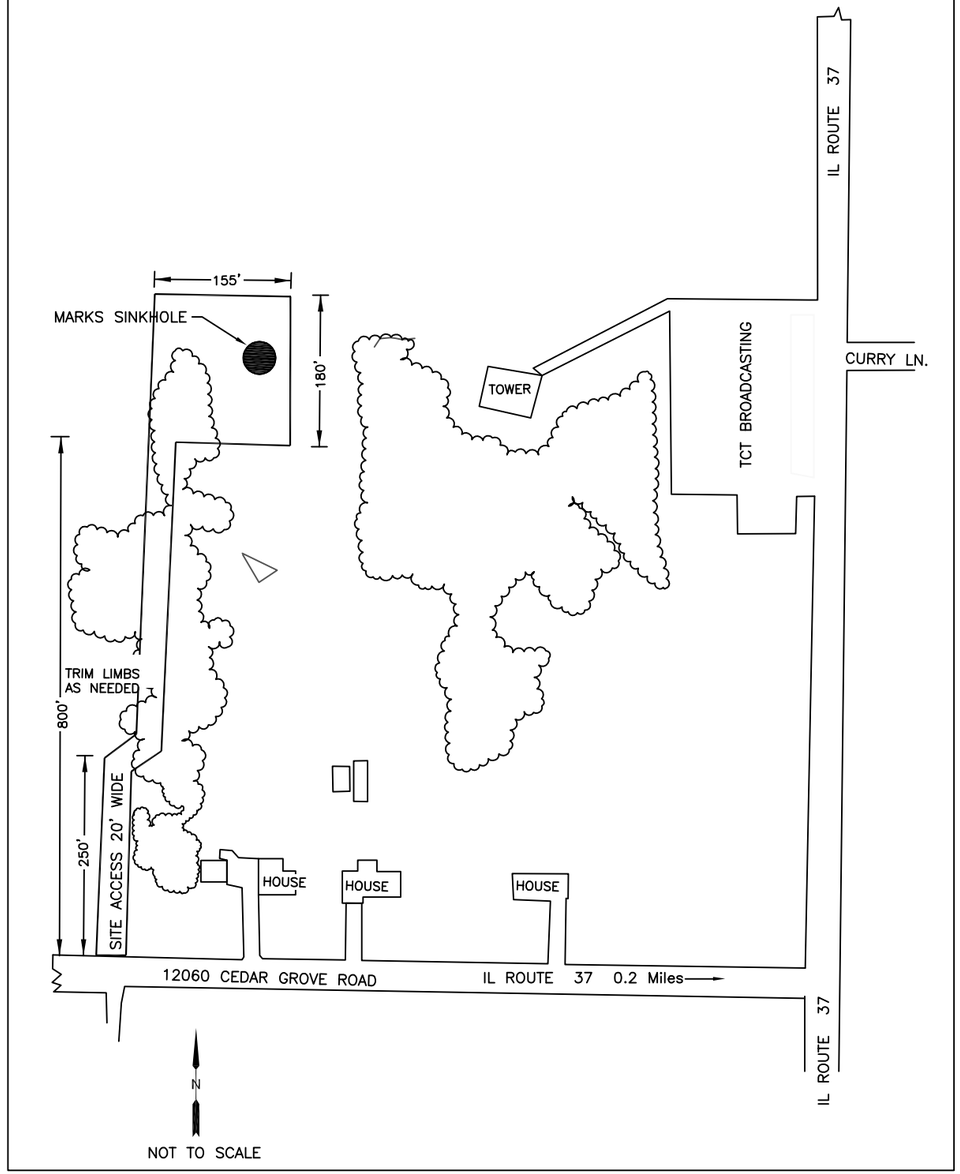
THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE AREA OF THE SINKHOLES DUE TO THE UNKNOWN STABILITY OF THE AREA AROUND THE SINKHOLES AND THE POSSIBILITY OF MINE GASES. THE ENGINEER WILL VERIFY THE NATURE AND EXTENT OF THE OPEN VOIDS, IF ANY, IN THE STRATA AS SPECIAL EXCAVATION PROGRESSES. THE ENGINEER WILL MAKE THE DETERMINATION WHETHER TO INCREASE OR DECREASE VOLUMES OF MATERIALS REQUIRED DURING CONSTRUCTION BASED UPON THE EXACT CONDITIONS ENCOUNTERED DURING SPECIAL EXCAVATION PROCESS. COMPACTION SHALL BE TO THE SATISFACTION OF THE ENGINEER.



MARKS SINKHOLE FILLING DETAIL

NOT TO SCALE

#	ITEM	SECTION	QUANTITY	UNIT	RATES/REMARKS
1	SPECIAL CLEARING	201	0.25	L SUM	
2	FURNISHED EXCAVATION	204	297	CU YD	
3	SPECIAL EXCAVATION	215	1,062	CU YD	
4	CLASS SI CONCRETE PLUG	216	46.0	CU YD	
6	NITROGEN FERTILIZER NUTRIENT	250	100	POUND	100 POUNDS/ACRE
7	PHOSPHOROUS FERTILIZER NUTRIENT	250	100	POUND	100 POUNDS/ACRE
8	POTASSIUM FERTILIZER NUTRIENT	250	100	POUND	100 POUNDS/ACRE
9	AGRICULTURAL GROUND LIMESTONE	250	5.0	TON	5.0 TONS/ACRE
10	SEEDING	250	1.0	ACRE	
11	MULCH, METHOD 2	IDOT 251	1.0	ACRE	PROCEDURE 1, 2.0 TONS/ACRE



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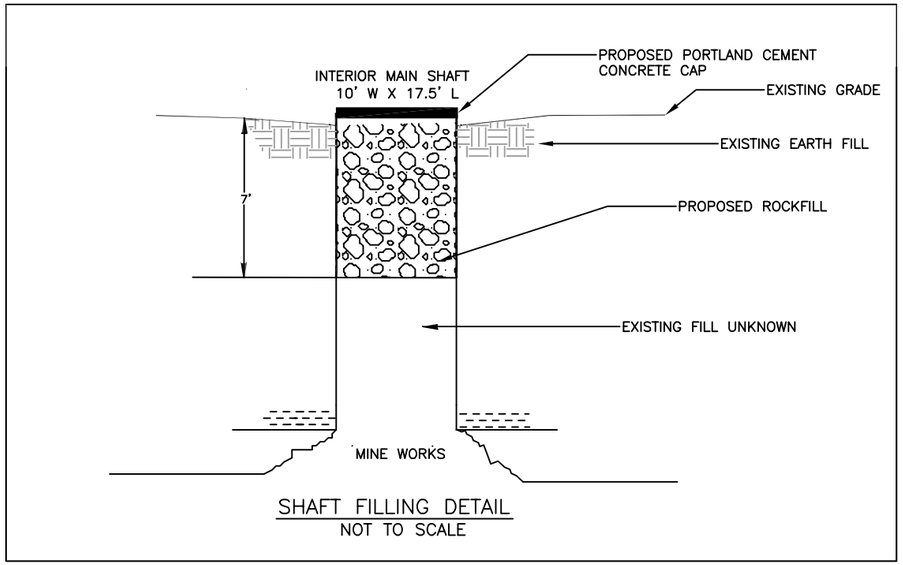
Peabody C.C. No. 3
Reclamation Project
AML-GWmE-1702
Williamson County

Drawn By: AW Date: 8/01/2016
Checked By: CMA 8/09/2017

Site Plan and Details
Marks Sinkholes

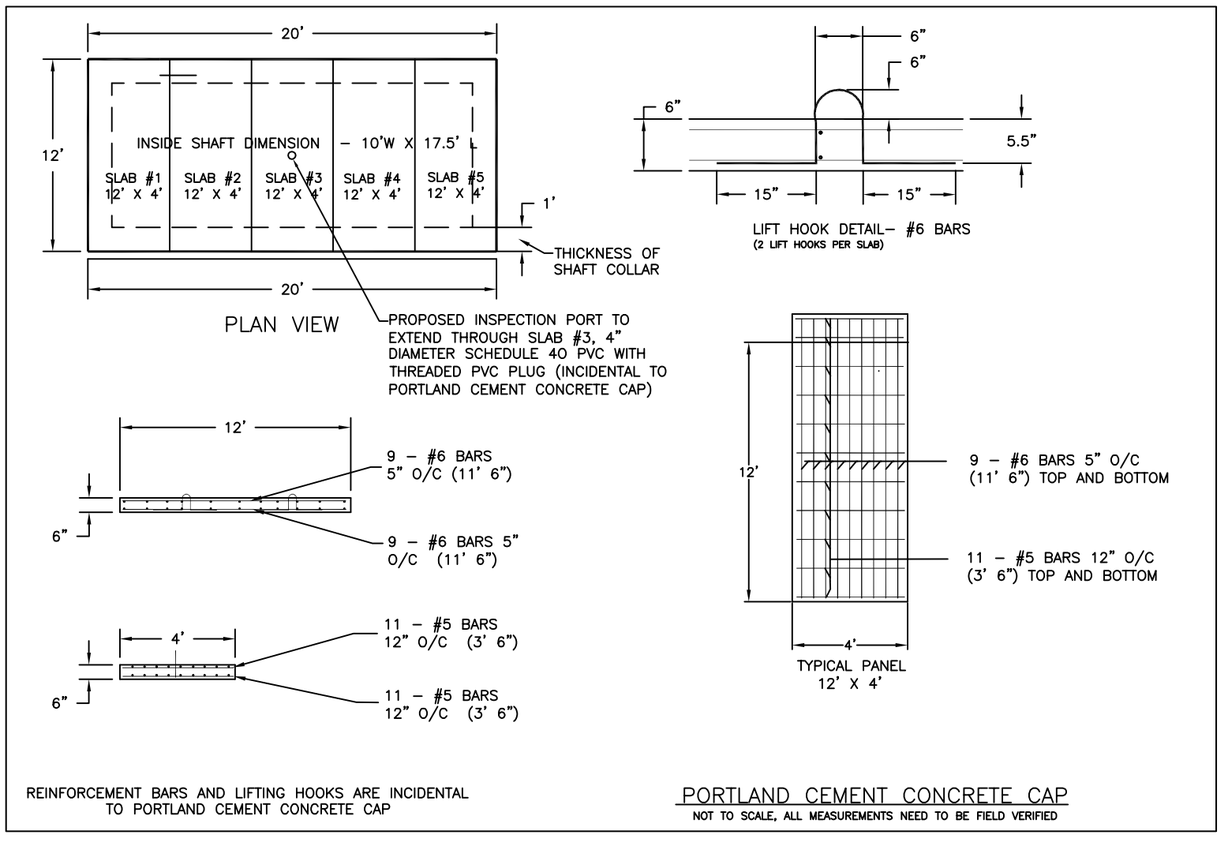
Sheet 4 of 6

THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE AREA OF THE SHAFT DUE TO THE UNKNOWN STABILITY OF THE AREA AROUND THE SHAFT AND THE POSSIBILITY OF MINE GASES. THE ENGINEER WILL VERIFY THE NATURE AND EXTENT OF THE OPEN VOIDS, IF ANY, IN THE STRATA AS SPECIAL EXCAVATION PROGRESSES. THE ENGINEER WILL MAKE THE DETERMINATION WHETHER TO INCREASE OR DECREASE VOLUMES OF MATERIALS REQUIRED DURING CONSTRUCTION BASED UPON THE EXACT CONDITIONS ENCOUNTERED DURING SPECIAL EXCAVATION PROCESS. COMPACTION SHALL BE TO THE SATISFACTION OF THE ENGINEER.



SHAFT FILLING DETAIL
NOT TO SCALE

#	ITEM	SECTION	QUANTITY	UNIT	RATES/REMARKS
1	SPECIAL CLEARING	201	0.25	L SUM	
5	ROCKFILL, RR4	216	60.0	TON	
6	NITROGEN FERTILIZER NUTRIENT	250	100	POUNDS	100 POUNDS/ACRE
7	PHOSPHOROUS FERTILIZER NUTRIENT	250	100	POUNDS	100 POUNDS/ACRE
8	POTASSIUM FERTILIZER NUTRIENT	250	100	POUND	100 POUNDS/ACRE
9	AGRICULTURAL GROUND LIMESTONE	250	5.0	TON	5.0 TONS/ACRE
10	SEEDING	250	1.0	ACRE	
11	MULCH, METHOD 2	IDOT 251	1.0	ACRE	PROCEDURE 1, 2.0 TONS/ACRE
12	PORTLAND CEMENT CONCRETE CAP	425	4.5	CU YD	



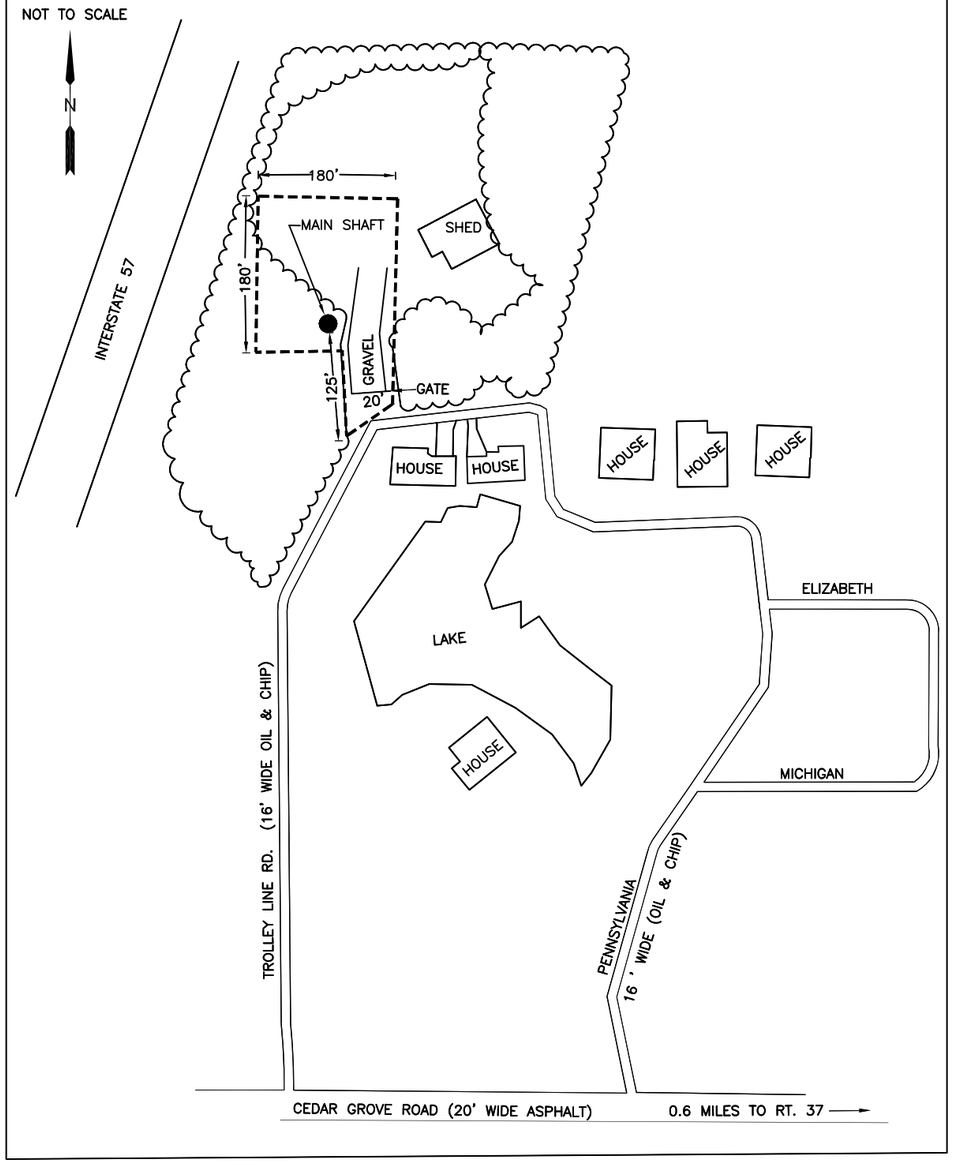
PLAN VIEW

REINFORCEMENT BARS AND LIFTING HOOKS ARE INCIDENTAL TO PORTLAND CEMENT CONCRETE CAP

PORTLAND CEMENT CONCRETE CAP
NOT TO SCALE, ALL MEASUREMENTS NEED TO BE FIELD VERIFIED

MAIN SHAFT
37.767591 N
88.946072 W

NOT TO SCALE



State of Illinois
Department of Natural Resources

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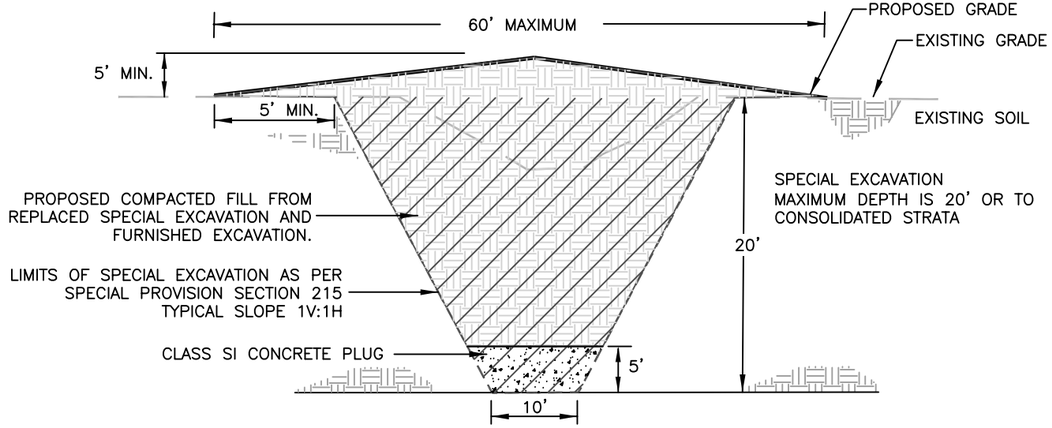
Reclamation Project
AMLGWmE-1702
Williamson County

Drawn By: AW Date: 8/01/2016
Checked By: OMA 8/09/2017

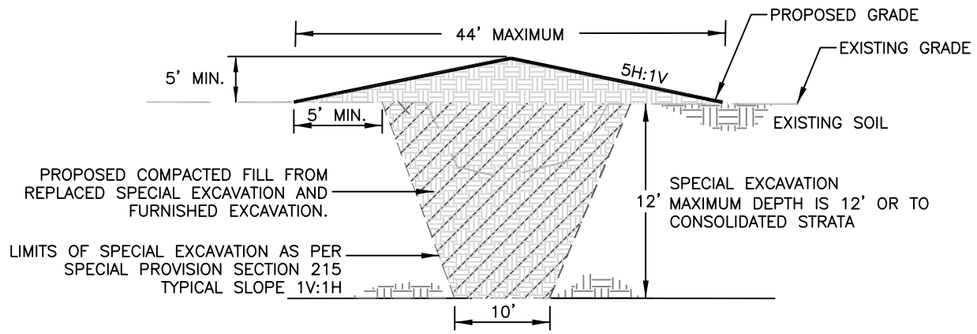
Site Plan and Details
Peabody C.C. No. 3 Main Shaft

Sheet 5 of 6

THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE AREA OF THE SINKHOLES DUE TO THE UNKNOWN STABILITY OF THE AREA AROUND THE SINKHOLES AND THE POSSIBILITY OF MINE GASES. THE ENGINEER WILL VERIFY THE NATURE AND EXTENT OF THE OPEN VOIDS, IF ANY, IN THE STRATA AS SPECIAL EXCAVATION PROGRESSES. THE ENGINEER WILL MAKE THE DETERMINATION WHETHER TO INCREASE OR DECREASE VOLUMES OF MATERIALS REQUIRED DURING CONSTRUCTION BASED UPON THE EXACT CONDITIONS ENCOUNTERED DURING SPECIAL EXCAVATION PROCESS. COMPACTION SHALL BE TO THE SATISFACTION OF THE ENGINEER.

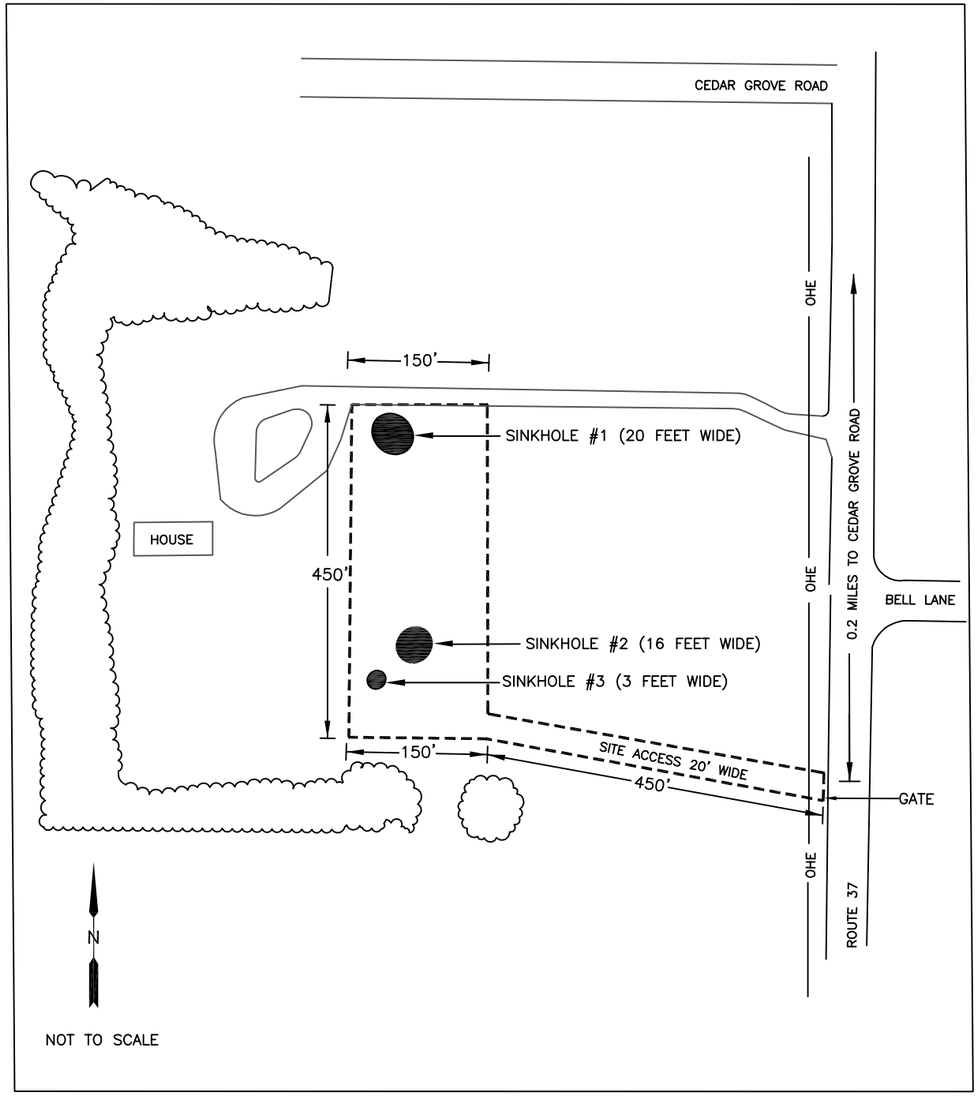


JEAN SINKHOLE FILLING DETAIL– #1,#2
NOT TO SCALE, TYPICAL SECTION



JEAN SINKHOLE FILLING DETAIL– #3
NOT TO SCALE, TYPICAL SECTION

#	ITEM	SECTION	QUANTITY	UNIT	RATES/REMARKS
1	SPECIAL CLEARING	201	0.25	L SUM	
2	FURNISHED EXCAVATION	204	532	CU YD	
3	SPECIAL EXCAVATION	215	1,766	CU YD	
4	CLASS SI CONCRETE PLUG	216	92.0	CU YD	
6	NITROGEN FERTILIZER NUTRIENT	250	180	POUND	100 POUNDS/ACRE
7	PHOSPHOROUS FERTILIZER NUTRIENT	250	180	POUND	100 POUNDS/ACRE
8	POTASSIUM FERTILIZER NUTRIENT	250	180	POUND	100 POUNDS/ACRE
9	AGRICULTURAL GROUND LIMESTONE	250	9.0	TON	5.0 TONS/ACRE
10	SEEDING	250	1.8	ACRE	
11	MULCH, METHOD 2	IDOT 251	1.8	ACRE	PROCEDURE 1, 2.0 TONS/ACRE



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Checked By: OMA 8/09/2017

Site Plan and Details
Jean Sinkholes

Sheet 6 of 6