

BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY, KANSAS

WEDNESDAY, AUGUST 28, 2013

6:35 p.m.

CONSENT AGENDA

- (1) (a) Consider approval of Commission Orders;
- (b) Consider acquisition of right of way for culvert replacement project at 5.76N-15.50E (Michael Kelly)

REGULAR AGENDA

- (2) Consider Conditional Use Permit final approval for proposed Penny's Sand excavation and extraction facility near N 1500 Road/E 1850 Road; CUP-12-00099 (Keith Browning)

- (3) (a) Consider approval of Accounts Payable (if necessary)
- (b) Appointments
- (c) Public Comment
- (d) Miscellaneous

- (4) Adjourn

WEDNESDAY, SEPTEMBER 4, 2013

- Proclamation to declare September 8, 2013 as "International Literacy Day" (Karen Wycoff)
- Proclamation to proclaim September 2013 as "National Preparedness Month" (Teri Smith)

WEDNESDAY, SEPTEMBER 11, 2013

- Agritourism assembly item (Linda Finger)

WEDNESDAY, SEPTEMBER 18, 2013- 4:00 p.m. ONLY

- Consent: Consider awarding bridge painting contract for Project No. 2013-14, Bridge Nos. 07.83N-17.50E and 19.00N-15.90E (Keith Browning)

WEDNESDAY, SEPTEMBER 25, 2013

Note: The Douglas County Commission meets regularly on Wednesdays at 4:00 P.M. for administrative items and 6:35 P.M. for public items at the Douglas County Courthouse. Specific regular meeting dates that are not listed above have not been cancelled unless specifically noted on this schedule.



DOUGLAS COUNTY PUBLIC WORKS

1242 Massachusetts Street
Lawrence, KS 66044-3350
(785) 832-5293 Fax (785) 841-0943
dgcopubw@douglas-county.com
www.douglas-county.com

Keith A. Browning, P.E.
Director of Public Works/County Engineer

MEMORANDUM

TO : Board of County Commissioners

FROM : Keith A. Browning, P.E., Director of Public Works
Michael D. Kelly, P.S., County Surveyor

DATE : August 22, 2013

RE : Drainage Structure Replacement; Structure No. 5.76N – 15.50E
Acquisition of Easement; Consent agenda

A project has been designed to replace a deficient drainage structure located approximately 3 miles northwest of Baldwin City on E1550 Road. Plans were developed in-house and negotiations with the pertinent landowners for permanent and temporary easement have been completed.

Construction is planned for fall 2013 or spring 2014, weather depending, and will be accomplished using county personnel.

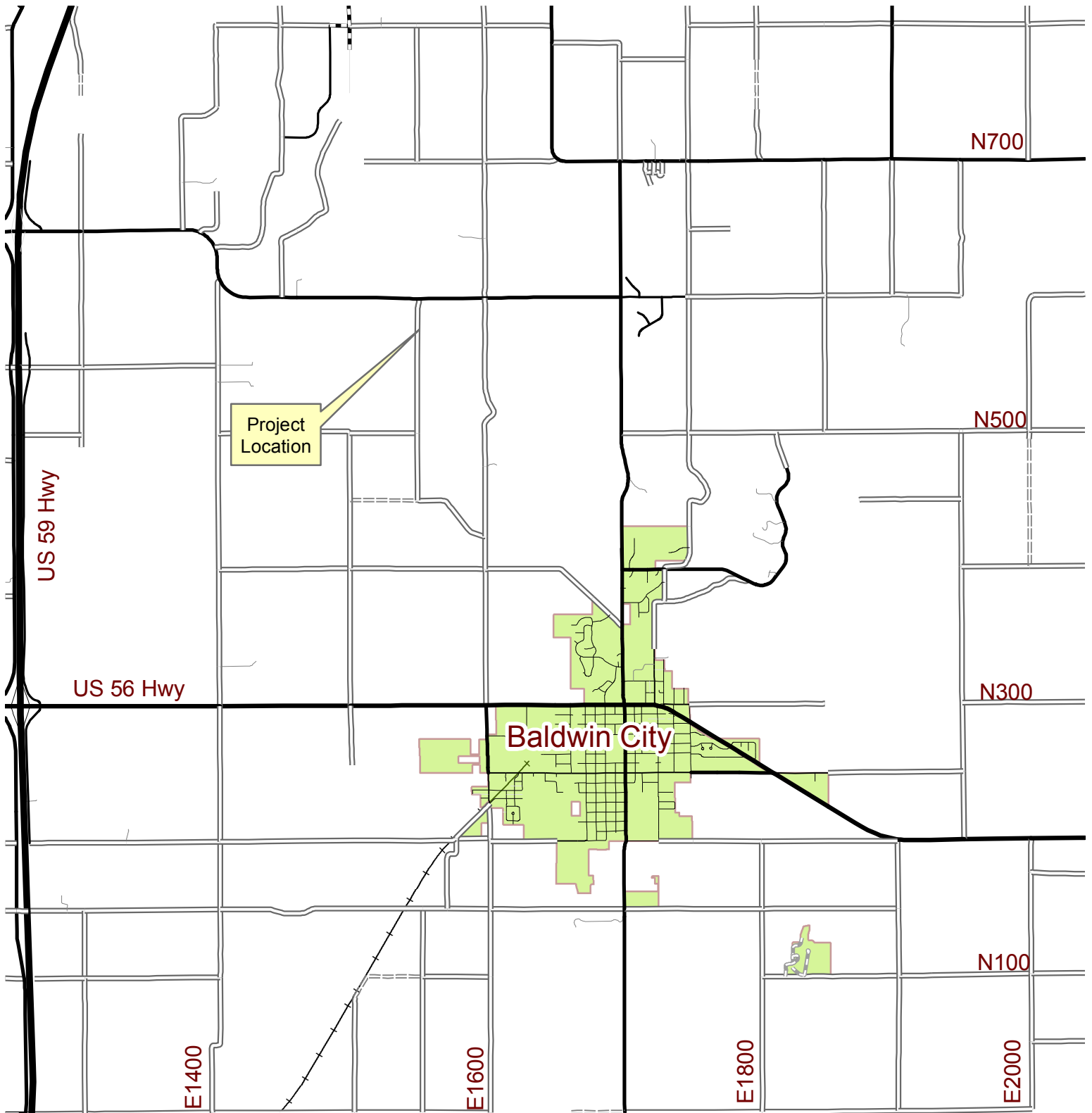
To ensure the proper completion of a necessary construction project approval is recommended for the attached CONTRACT's FOR HIGHWAY PURPOSES.

ACTION REQUIRED: Consent agenda approval of the CONTRACT's FOR HIGHWAY PURPOSES for Drainage Structure No. 5.76N – 15.50E.

Str. No. 5.76N - 15.50E

General Location Map

1 inch = 1 miles
1 0.5 0 1 Miles

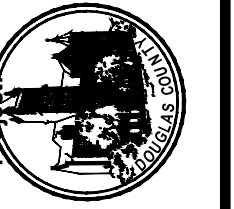


PHYLLIS J. GIBLER
569 E. 1550 RD.
BALDWIN CITY, KS. 66006

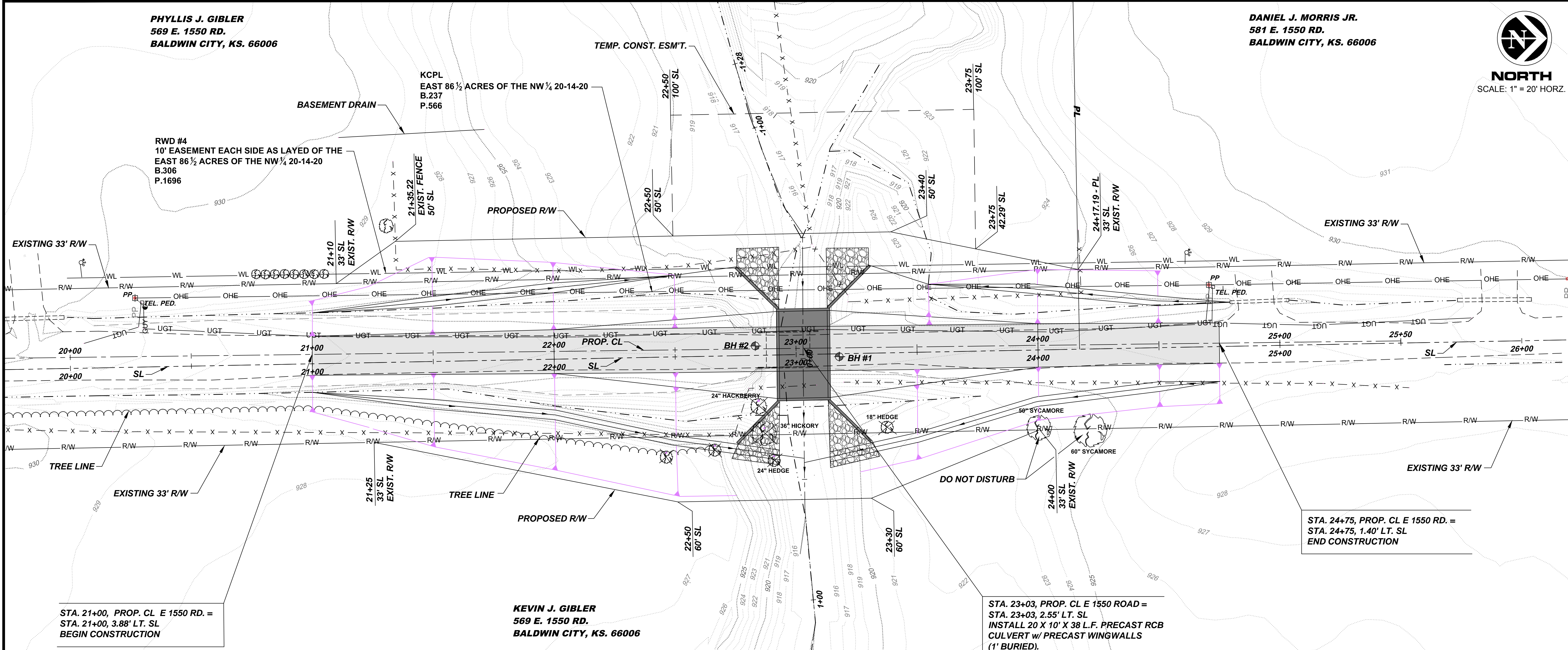
DANIEL J. MORRIS JR.
581 E. 1550 RD.
BALDWIN CITY, KS. 66006



Douglas County Public Works
1242 Massachusetts
Lawrence, Kansas 66044



Project No.: 0571550E
Designed By: A.S.
Checked By: T.G.
Drawn By: L.H.
Date: 12/2012



STA. 21+00, PROP. CL E 1550 RD. =
STA. 21+00, 3.88' LT. SL
BEGIN CONSTRUCTION

KEVIN J. GIBLER
569 E. 1550 RD.
BALDWIN CITY, KS. 66006

STA. 23+03, PROP. CL E 1550 ROAD =
STA. 23+03, 2.55' LT. SL
INSTALL 20 X 10' X 38 L.F. PRECAST RCB
CULVERT w/ PRECAST WINGWALLS
(1' BURIED).

STA. 24+75, PROP. CL E 1550 RD. =
STA. 24+75, 1.40' LT. SL
END CONSTRUCTION

CFS Engineers BORING LOG
Rd 1550 B-1

Project Name: Structure 0571550E
Douglas County, Kansas
Date of Boring: 12/19/12
Project No.: 12-5122

DEPTH	ELEV.	SAMPLE	N	P	M _c	REMARKS
0	928					Gravel Road
5	921	SS-1	6	1.0	25.2	Grey-brown, moist, stiff, silty, sandy CLAY(8)
10	916	SS-2			18.5	UU - 91.164 psi DD - 105.6 pcf Approximate Flow Line
15	911	SS-3	6	1.3	26.9	Dark grey with tan mottling, alluvial, moist, firm, silty CLAY
20	906	SS-4	6	0.8	30.0	
25	901	SS-5	13	1.5	29.8	
30	896	SS-6	12	1.0	28.8	Water at 29' during drilling
35	891					
40	886					
45						Auger Refusal at 41 feet

N - Standard Penetration Value (ASTM D 1586) P - pocket penetrometer, lbf/square foot SS-Split Spoon (ASTM D 1587)
MC - Moisture Content, % (ASTM D 2216) LL - Liquid Limit, PL-Plastic Limit (ASTM D 4318) ST=Undisturbed (ASTM D 1586)

CFS Engineers BORING LOG
Boring: B-2

Project Name: Structure 0571550E
Douglas County, Kansas
Date of Boring: 12/19/12
Project No.: 12-5122

DEPTH	ELEV.	SAMPLE	N	P	M _c	REMARKS
0	928					Gravel Road
5	921	SS-1				Grey-brown, moist, stiff, silty CLAY(8)
10	916	SS-2	7	1.0	28.2	Approximate Flow Line
15	911	SS-3	5	1.0	27.4	
20	906	SS-4	5	0.5	29.9	previous creek bed face gravel
25	901	SS-5	12	1.3	28.3	Water at 25' during drilling
30	896	SS-6	13	0.8	28.3	
35	891					
40	886					
45						Auger Refusal at 42.5 feet Limestone at refusal

N - Standard Penetration Value (ASTM D 1586) P - pocket penetrometer, lbf/square foot SS-Split Spoon (ASTM D 1587)
MC - Moisture Content, % (ASTM D 2216) LL - Liquid Limit, PL-Plastic Limit (ASTM D 4318) ST=Undisturbed (ASTM D 1586)

SECTION CORNER INFORMATION

STATION	SECTION CORNER	R CODE	SECTION CORNER COORDINATE	ELEVATION	CORNER STATUS
10+00	CENTER SEC. 20-T14S-R20E	T07P	N. 188990.39 E. 2105908.088	977.147	FOUND RECORD
36+45.94	NL 1/4 CORNER SEC. 20-T14S-R20E	T07N	N. 191635.845 E. 2105857.629	968.029	FOUND RECORD

BM #1
STA. 24+71 - PROP. CL E 1550 RD.
23.68' LT.
TRIPLE 60d NAIL IN PP
ELEV. = 928.91

PROPOSED R/W & BORING LOGS
SHEET 3 OF 9
CULVERT REPLACEMENT FOR E 1550 ROAD
STRUCTURE NO. 05.76N 15.50E



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Keith A. Browning, P.E.
Director of Public Works/County Engineer

MEMORANDUM

To : Board of County Commissioners

From : Keith A. Browning, P.E., Director of Public Works/County Engineer

Date : August 22, 2013

Re : Pre-dredging report on hydrogeologic study associated with CUP-12-00099
Conditional Use Permit for Penny's Sand facility

Douglas County's consultant, Conestoga-Rovers & Associates (CRA), has completed a pre-dredging report on the hydrogeologic assessment of the proposed open pit mining operation for Penny's Sand and Concrete, LLC. The pre-dredging report was distributed to commissioners on July 29, and was placed on the Douglas County website on August 5 for public review.

During the March 13, 2013 meeting, the BoCC voted 2-1 to conditionally approve the CUP contingent upon the ability to add conditions or deny the CUP based on the results of the pre-dredging report. On April 10, 2013 the BoCC approved an agreement with Penny's to reimburse the full cost of the study and pre-dredging report, and approved an agreement with CRA to conduct the study and provide the pre-dredging report.

The primary purpose of the study was to determine the effects of the proposed open pit sand mining facility on groundwater quality and quantity and the resulting effects, if any, on private water wells in the vicinity and the City of Eudora's municipal wells located approximately 7,000 feet east-southeast of the proposed facility. The study was to determine groundwater flow direction and average velocity in the vicinity of the proposed sand pit.

Modeling conducted as part of the study determined that groundwater in the vicinity of the sand pit flows northeast towards the Kansas River at an average flow velocity of 0.1 feet/day in the upper portion of the aquifer. The study concluded the proposed sand mining facility is not anticipated to have any appreciable or deleterious effects on the City of Eudora's municipal water wells, private water wells in the vicinity, or the Kansas River.

Kirk Hoeffner and Richard Murphy with CRA will attend the August 28 commission meeting to answer any questions concerning the study and report.

Action Required: Consider the pre-dredging report in determining action on CUP-12-00099, Conditional Use Permit for Penny's sand mining facility.

Memorandum

City of Lawrence – Douglas County Planning & Development Services

TO: Board of County Commissioners

CC: Craig Weinaug, County Administrator

FROM: Mary Miller, City/County Planner

Date: For August 28, 2013 Meeting

RE: Conditions of approval for CUP-12-00099: Conditional Use Permit for Penny Sand Pit; N 1500 Rd and E 1850 Rd (MKM)

Attachments:

Attachment A: Revised CUP plans

Attachment B: Detail and photo of proposed perimeter ditch

The applicant provided a set of revised CUP plans which addressed several of the conditions of approval. Some of the conditions have been met with the preparation of the pre-dredging report. The list of conditions as revised at the March 13, 2013 County Commission meeting are listed below. The conditions which have been met with the revised plans and the completion of the pre-dredging report are shown as ~~struckthrough~~.

Revisions to 2 conditions have been requested by the applicant and one revision is being suggested by staff. The conditions which have been requested for revision are noted in the following list in **red**.

REVISED CONDITIONS

1. CONTINGENT APPROVAL.

- a. ~~If the Board of County Commissioners vote to contingently approve the CUP, this approval is contingent upon the evaluation of the results of the pre-dredging report to be prepared by an independent 3rd party consultant.~~
- b. ~~The County Commission will contract with a 3rd party independent consultant, to conduct the necessary studies and prepare the pre-dredging report following the execution of an agreement between the property owner and the County Commission which specifies that the property owner shall reimburse the County Commission for the expense following completion of a pre-dredging report which is accepted by the County Engineer. This agreement shall be executed and recorded prior to the commencement of work on the pre-dredging report.~~

c. The Conditional Use Permit will be returned to the County Commission following the completion of the pre-dredging report. Based on the results of the pre-dredging report and the recommendations of the consultant, the Commission may take one of the following actions:

- 1) Approve the CUP with revised conditions,
- 2) Approve the CUP with additional conditions,
- 3) Withdraw the contingent approval of the CUP.

2. **PRE-DREDGING REPORT.**

a. The independent 3rd party consultant shall provide a pre-dredging report to the County Engineer for review. The CUP will be placed back on the County Commission's agenda for discussion of the results of the pre-dredging report and recommendations provided by the 3rd party consultant. The County Commission may revise the conditions of the CUP based on the results of this report. The pre-dredging report shall:

b. Determine the potential zone of influence through the following steps:

- i. Take field measurements to determine the current groundwater table and flow direction.
- ii. Determine the anticipated maximum dewatering influence from maximum rate of sand and water extraction, evaporation, and any other water consumption. The information provided should include the proposed rate of sand and water extraction or taking from the pond while recognizing the recycling of water. (Page 5 of Conestoga-Rovers Assoc.'s independent review report explains that this assessment could be completed based on existing information.)
- iii. The results and an exhibit of the potential zone of influence shall be included with the pre-dredging report.

c. Confirm existing groundwater and/or soil quality to ensure there is no significant contamination from existing site area and operations, including an initial environmental site assessment (ESA) of potential sources and existence of contamination (if an ESA has not already been conducted) through the following:

- i. Installation and sampling of groundwater wells in down-gradient area in locations approved by the County Engineer.
- ii. Soil assessment to determine suitability of soils for placement below water with reclamation.
- iii. The results shall be included in the pre-dredging report.

The County Engineer will determine if further investigation and remedial actions are necessary based on the results. Should potential contaminant sources be identified during the ESA process, the test pits shall be installed and additional soil testing shall be conducted per the County Engineer's recommendation.

- d. Establish baseline water quality and quantity conditions within potential zone of influence through a private water well survey of both up-gradient and down-gradient wells. Such survey is subject to landowner access permission. This information shall be included in the pre-dredging report.
 - e. Determine the location and number of groundwater monitoring wells to be installed by the applicant. The location of these wells must be approved by the County Engineer and an exhibit showing their location included in the pre-dredging report.
3. The applicant shall prepare and submit a fuel/chemical handling and spill response plan for the County Engineer's approval.

Ongoing conditions – Best Management Practices and Precautionary Measures:

(these conditions are to be listed on the CUP plan)

4. Document the sand production levels and effective water consumption on an annual basis to aid in interpretation of monitoring data. Provide an annual report to the Zoning and Codes Department.
5. Monitor groundwater levels in adjacent private water supply wells (subject to property owner's permission) within the potential zone of influence on a quarterly basis. This information shall be provided to the Zoning and Codes Department in a quarterly report.
6. Monitoring of groundwater levels in monitoring wells on a quarterly basis. (In early years, monitoring while extraction is occurring in the NW part of the site will help confirm the zone of influence.) This information shall be provided to the Zoning and Codes Department in a quarterly report.
 - a. If any changes are determined in the potential zone of influence, adjustments will be made to the monitoring wells as deemed necessary by the County Engineer.
7. **Install berms along the perimeter of the pit to prevent runoff from entering the pit.*** (Revision proposed. See discussion following this list of conditions.)
8. The Zoning and Codes Department shall be notified if any fill import is proposed throughout the operation of the pit. Any fill import must be sampled and analyzed for chemical suitability and the results provided to the Zoning and Codes Department for approval prior to installation.

9. Remediate/report any spills in accordance with the fuel/chemical handling and response plan.
10. Continue river bank monitoring along the east bank of the KS River. Extend monitoring points north to the point the river bends from north to east, and also extend monitoring points east from the river bend along the north side of applicant's property. The locations of these monitoring points shall allow for surveying the river bank along the west and north sides of applicant's property. The river bank along the west and north side of applicant's property shall be surveyed by a licensed land surveyor following all overbank flooding events lasting more than one week in duration, and the results of the survey shall be conveyed to County Engineer.
11. The applicant will be responsible for the cost of any mitigation measures needed, as determined by County Engineer, as a result of river bank movement on applicant's property. The cost of mitigation includes the cost of engineering design of the mitigation measures as well as the construction cost of the measures. Any mitigation measures are subject to USACE-KCD approval.
12. The revetment in the northwest portion of property breached in 1993 shall be studied by a competent engineer experienced in fluvial geomorphology hired by the applicant, and removed or modified and additional revetments on the east bank shall be installed following river engineering study if the County Engineer, the United States Army Corps of Engineers-Kansas City District (USACE-KCD), and other permitting agencies find the changes appropriate. The applicant shall hire the engineer, and the study shall be commenced, prior to any excavation for the sand pit.

Other Conditions:

13. The approval is contingent upon the issuance of all State and/or Federal permits which are required for this operation.
14. An affidavit designating responsibility for the ongoing maintenance of the berms and lake to the property owner and outlining the ongoing maintenance and protection measures shall be executed and recorded with the Register of Deeds prior to the release of the CUP plans to the Zoning and Codes Office. This affidavit shall note that the future use of the lake will be 'private recreation' and that no boats with larger than 10 horsepower engines will be permitted on the lake. The removal of these restrictions would require approval of a Conditional Use Permit. A copy of the affidavit shall be provided to the Planning Office for the file.

With the transfer of property ownership of any land containing the water feature or surrounding berms, the new owner shall file a maintenance bond, or similar protection means acceptable to the Board, to insure maintenance/protection of the berms and water feature.

- ~~15. A copy of the easement for the off-site access drive shall be provided to the Planning Office for the file prior to the release of the CUP plans to the Zoning and Codes Office.~~
16. The applicant shall obtain a Flood Plain Development Permit from the Director of Zoning and Codes prior to the release of the CUP plans.
17. The reclamation plan shall be revised with the following changes prior to release of the CUP plans:
 - a. The plan shall note the requirement that the lake that is being created will have a varied shoreline and will appear natural in appearance.
 - ~~b. The plan shall note that the intended use of the lake, when mining and reclamation is complete, is to be a private recreational feature and note that boats with larger than 10 horsepower engines will not be permitted on the lake. The removal of these restrictions would require approval of a Conditional Use Permit.~~
 - ~~c. The plan shall note the maximum slope of the lake shoreline for a specified depth to insure that the slopes are of a grade that it would be possible for a person or animal that accidentally entered the lake to exit.~~
 - ~~d. The plan shall explain the sequential nature of the reclamation process; that overburden produced in one phase will be used to reclaim previously excavated areas.~~
 - e. The reclamation plan shall note that topsoil will be placed over the overburden in areas that are to be reclaimed as farmland, shoreline, or berms. ~~If topsoil is to be stockpiled and stored it must be vegetated to prevent erosion.~~
 - ~~f. The reclamation plan shall be revised to reflect the increased setback and vegetated riparian buffer required on the north/northwest side of the property and the reduced area on the south, with Phase 20 being the final phase.~~
18. The applicant shall submit a revised CUP plan with the following changes:
 - ~~a. The additional setback and vegetated riparian buffer area shown on the north/northwest corner of the property per the County Engineer's approval.~~
 - i. The applicant will develop a general landscaping plan for the buffer area with assistance of the KS Forestry Service and/or the United States Army Corps of Engineers-Kansas City District (USACE-KCD) and provided with the CUP plan. The buffer area vegetation shall be planted and maintained per this plan.
 - ii. The general landscape plan must be approved prior to the release of the CUP to the Zoning and Codes Office.

- iii. Planting shall commence in accordance with the landscaping plan when the weather is appropriate and shall be completed prior to any earthmoving occurring in the CUP area.
- b. ~~The sand pit will terminate with Phase 20* with no dredging activities to occur south of this phase. The CUP plan shall be revised to reflect the reduced area of the sand pit. The operation plans shall also be revised to reflect the reduced area of the sand pit and the additional buffer area.~~ (Revision proposed. See discussion following this list of conditions.)
- c. ~~A detailed landscaping plan for the buffer area surrounding the McElwee house will be submitted.~~
- d. ~~The Book and Page number of the recorded easement for the off-site access road shall be noted on the CUP plan.~~
- e. ~~The ownership shall be noted as Van, LLC as well as Penny's Concrete Inc. on the CUP plan.~~
- f. ~~The on-site residential structure on the east side of the property will be shown on the CUP plan as on the reclamation plan.~~
- g. ~~If stockpiling of overburden is to occur on the subject property, the CUP or operation plan should note the maximum height and approximate location. The stockpiles should be placed as far from the existing residences as possible.~~
- h. List the following CUP conditions on the plan:
 - i. ~~Hours of operation are 6:30 AM to 6:30 PM, Monday through Friday. No removal, transfer, or placement of overburden is permitted outside these operating hours; however dredging and extraction of sand may exceed these hours when necessary.~~
 - ii. ~~A muffler system shall be installed, operated, and maintained on the dredge engine to reduce the noise levels associated with the dredging activity.~~
 - iii. ~~The approval for this Conditional Use is valid for 30 years. An extension request for the CUP must be submitted prior to the expiration date or a new CUP application must be submitted. The Zoning and Codes office shall conduct 5 year administrative reviews to insure compliance with the CUP, operation, and reclamation plans.~~
 - iv. ~~Only exterior lighting in the areas to be excavated will be the dredge lighting as required by the U.S. Coast Guard.~~
 - v. ~~The scale house, processing plant, sediment pond, and stockpile area, approved with CUP-2-2-79, will be used to serve the subject property.~~

- ~~vi. Sales of overburden, topsoil, sand or aggregate products will occur only on the portion of the property that contains the scale house on the CUP plan.~~
 - ~~vii. Truck traffic will utilize Noria Road (E 1750 Road), and is restricted from using N 1500 Road or E 1850 Road.~~
 - ~~viii. If any jurisdictional wetlands are located on the property, the applicant shall work with the Army Corps of Engineers to determine how the existing wetlands will be treated. The applicant will provide documentation to the Planning Office on the wetlands indicating whether the wetlands will be maintained on site or if they will be mitigated elsewhere. If the wetlands will be maintained on site, the operation plan will be revised to include the protection measures and the property owner shall submit a revised CUP plan for administrative review/approval of the wetland setbacks. If the wetlands are to be mitigated, a revised CUP plan shall be submitted to note the removal of the wetlands.~~
19. The following improvements to nearby roads and intersections shall be completed per the County Engineer's approval before issuance of a permit for the Conditional Use*.* (Revision proposed. See discussion following this list of conditions.) :
- a. Realignment of the entrance to the sand facility so that it opposes the Noria Road intersection at N 1500 Road.
 - b. Pavement of a 100 ft long section of the site access drive just north of N 1500 Road, as recommended in the TIS.
 - c. Reconstruction of pavement in the Noria Road (E 1750 Road)/N 1500 Road intersection. The existing surfacing is likely a crushed rock base that has been chip sealed. This will not stand up to the increased truck traffic crossing N 1500 Road.
 - d. Construction of an eastbound right turn lane on Route 442 (N 1400 Road) at Route 1057 (E 1900 Road). This is mentioned as a desirable improvement in the TIS. Pavement on the existing shoulder at this location is not adequate for the projected amount of truck traffic.
20. The applicant shall install monitoring wells as recommended by an independent 3rd party consultant in the pre-dredging report. These wells shall be installed prior to the release of the Conditional Use Permit. The City of Eudora shall be allowed to monitor those wells on an ongoing basis.
- ~~21. Dredging on the subject property shall not occur concurrently with dredging on the property to the north as approved with CUP-2-2-79.~~

PROPOSED REVISIONS:

Revisions have been requested from Condition 7 and 19. Staff recommends revising Condition 18(b) to clarify that the southern boundary of the quarry is defined by the boundary as shown on the August 22, 2013 plan rather than the particular phase. The Conditions are listed below in bold, with the proposed revisions and staff's recommendation. Staff's recommendation is in *italics*.

Condition 7. Install berms along the perimeter of the pit to prevent runoff from entering the pit.

The applicant is requesting this condition be revised to allow the use of a perimeter ditch rather than a berm to prevent stormwater from entering the pit. The proposed ditch would be 8 ft wide and would vary in depth from 6 in to 8 ft. Pictures of a similar ditch used with the Lecompton Quarry are included in Attachment B along with a detail of the proposed ditch. This request was forwarded to the County Engineer on August 23rd for review.

Staff recommends that if the Commission moves ahead with their contingent approval based on the results of the pre-dredging report that the final approval of the CUP be deferred to provide adequate time to evaluate this proposal.

Condition 18(b) The sand pit will terminate with Phase 20* with no dredging activities to occur south of this phase. The CUP plan shall be revised to reflect the reduced area of the sand pit. The operation plans shall also be revised to reflect the reduced area of the sand pit and the additional buffer area.

The CUP plan was revised to show the dredging activities ending at the boundary of Phase 20; however, with the reduction in area the phases were revised so the previous Phase 20 is now Phase 19. The boundary of the CUP is shown on the 8.22.13 revised CUP plan and was not affected by the change in phasing.

*Staff recommends that Condition 18(b) be revised to read:
"The sand pit will terminate at the area identified as the south boundary of Phase 19 on the August 13, 2013 revised CUP plan."*

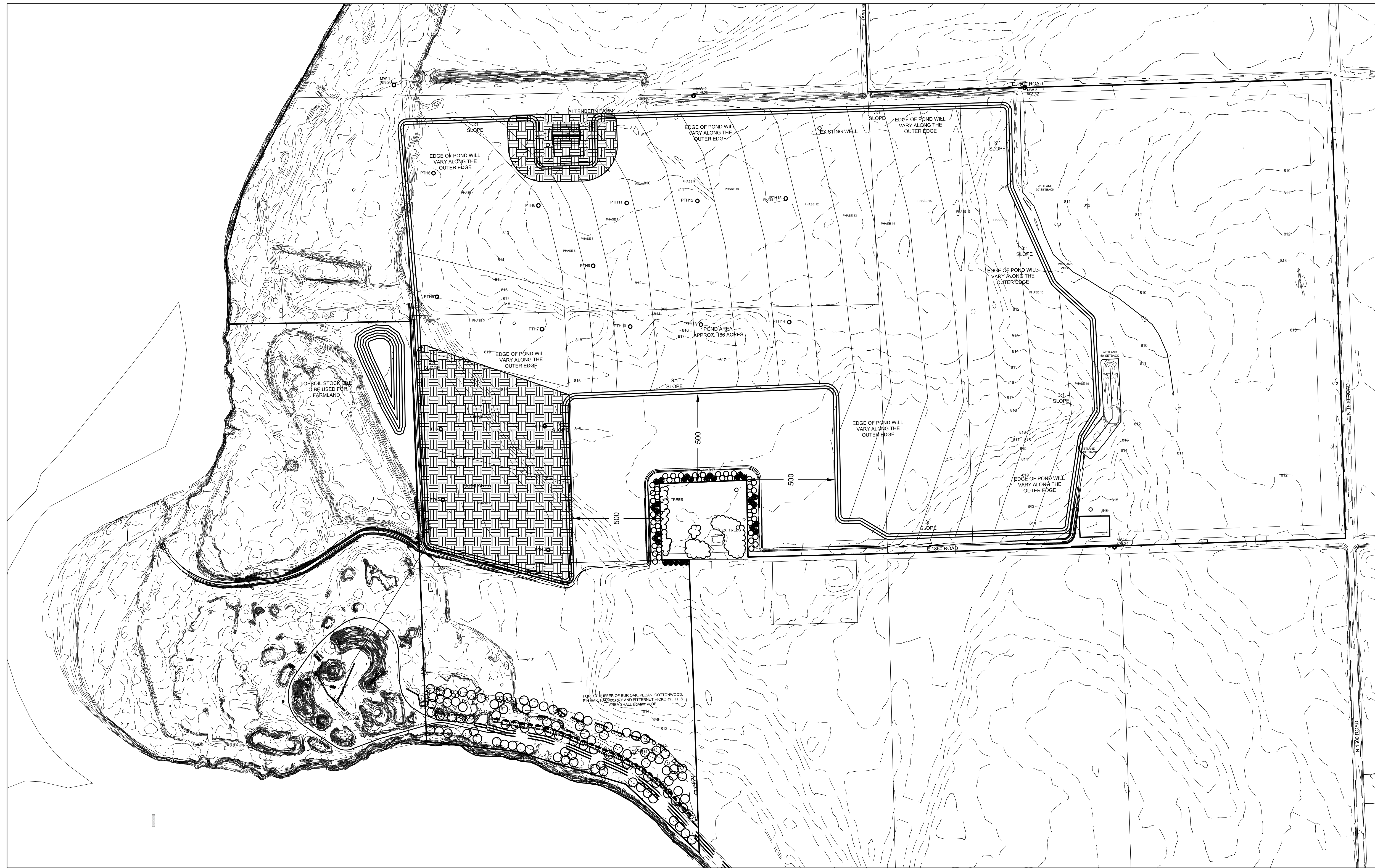
Condition 19. The following improvements to nearby roads and intersections shall be completed per the County Engineer's approval before issuance of a permit for the Conditional Use:

The applicant is working with the County Public Works Department to develop plans for the road improvements that are required with this CUP. However, for safety reasons, the roadwork may not commence until the first of November due to a pumpkin patch in the area which attracts large numbers of visitors through October. The applicant is requesting that this condition be revised to allow them to begin earthwork and preparation of the site for dredging prior to the road improvements being completed.

The County Engineer indicated that he had no objections to allowing the Conditional Use permit to be issued once a road improvement contract and arrangements on how Penny's will pay for the improvements are in place; but dredging activity should not commence until after road improvements are completed.

Staff recommends that Condition 19 be revised to read:

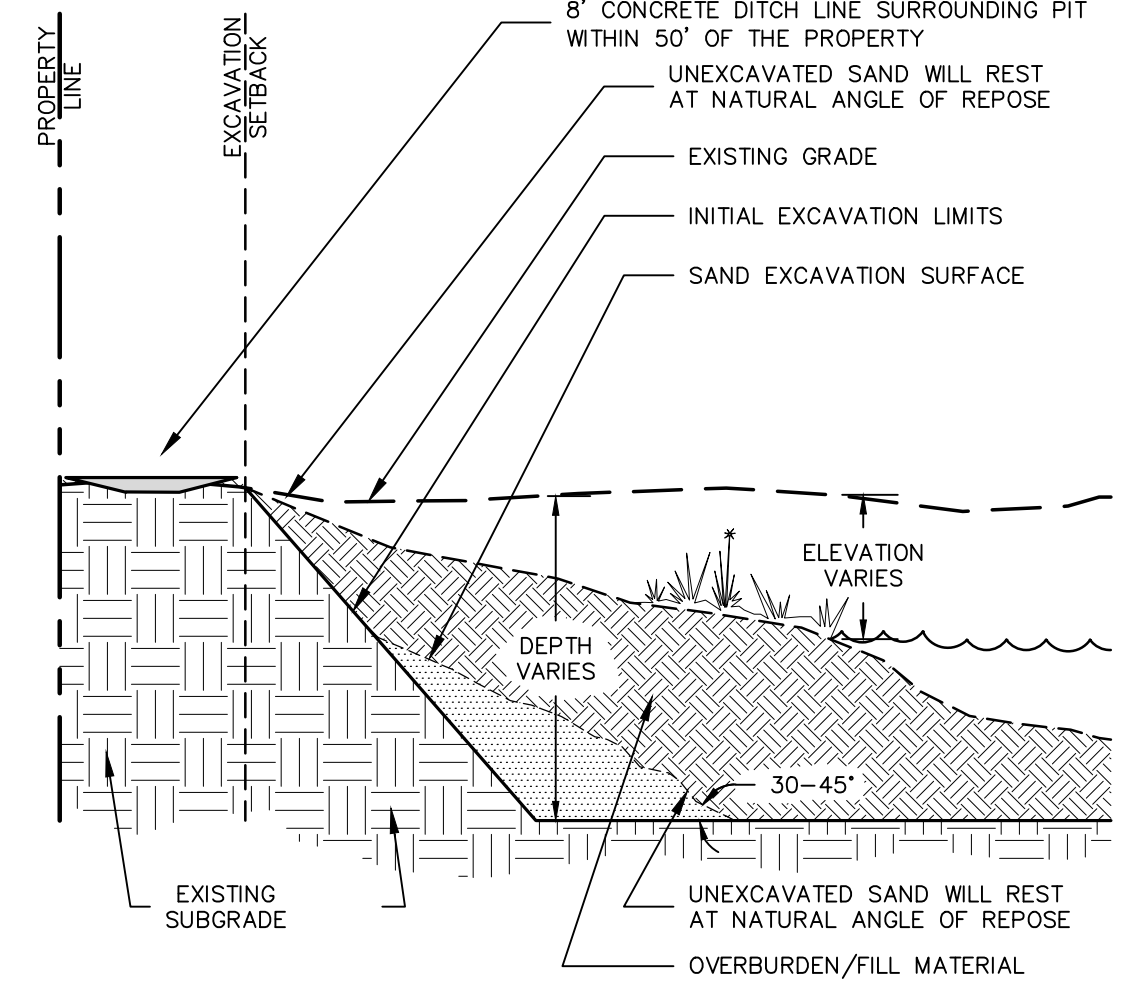
"The road and intersection improvements listed below are required with this CUP. A permit for the Conditional Use may be issued when a road improvement contract for these improvements is in place and the County has accepted Penny's arrangements to finance the improvements. Dredging activities may not commence until after the road improvements are completed."



Approx. Reclamation Schedule

PHASE 1 - 4	APPROX. 2017-2027
PHASE 4 - 10	APPROX. 2027-2037
PHASE 10 - 17	APPROX. 2037-2047
PHASE 17 - 20	APPROX. 2047-2057

1. RECLAMATION TIME FRAMES ARE APPROXIMATE. TIME FRAMES AND SEQUENCE OF RECLAMATION MAY VARY DUE TO VARIABILITY OF UNDERGROUND DEPOSITS AND THE DEMAND FOR MATERIALS.
2. RECLAMATION WILL TYPICALLY BEGIN ONLY AFTER THE PERIMETER OF THE EXCAVATION HAS REACHED THE EXCAVATION LIMITS AND A SUFFICIENT LENGTH OF BANK IS READY FOR RESTORATION.
3. A MINIMUM OF 12" OF SOIL FROM THE PROCESSING PLANT AND STOCKPILE AREAS TO BE REMOVED AND REPLACED WITH TOPSOIL, SEEDED, MULCHED AND FERTILIZED OR RETURNED TO AGRICULTURAL PURPOSES.



Typical Reclamation/Restoration Outer Edges of Lake

NOT TO SCALE

GENERAL NOTES

1. TOPSOIL SHALL BE REMOVED FROM THE FIRST PHASE OF THE SAND EXCAVATION AREA. THIS TOPSOIL SHALL BE STOCKPILED ON ADJACENT PROPERTY. THE CONCRETE DITCH SHALL BE INSTALLED AROUND THE PERIMETER OF THE PIT. AS THE EXCAVATION OF SAND MOVES ALONG THE PHASES THE TOPSOIL SHALL BE STOCK PILED AND THE OVERBURDEN WILL BE MOVED AND PLACED IN PREVIOUS EXCAVATED AREA. THE TOP 18" TO 24" OF THIS AREA WILL HAVE TOPSOIL PLACED AND THIS AREA WILL BE USED AS FARM LAND.
2. OVERBURDEN WILL BE PLACED ON THE EDGE OF THE POND THIS AREA WILL VARY THE SHORELINE. THE SHORELINE SHALL BE 3:1 IN DIFFERENT AREAS. THIS ALL DEPENDS ON THE AMOUNT OF OVERBURDEN.
3. TOPSOIL STOCKPILED AND STORED MUST BE VEGETATED TO PREVENT EROSION. THE INTENDED USE OF THE LAKE WILL BE A PRIVATE RECREATIONAL USE. BOATS WITH LARGER THAN 10 HORSEPOWER ENGINES WILL NOT BE PERMITTED ON THE LAKE. REMOVAL OF THESE RESTRICTIONS WOULD REQUIRE APPROVAL OF A CONDITIONAL USE PERMIT.

Civil Engineering
Landscape Architecture
Community Planning
Surveying

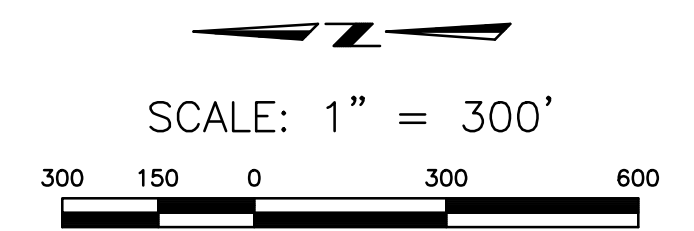
Landplan Engineering, P.A.
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PENNY SAND FACILITY CONDITIONAL USE PERMIT RECLAMATION PLAN

REV	DATE	DESCRIPTION
1	9.17.12	POND SIZE
2	1.24.13	PLANNING STAFF COMMENTS
3	2.28.13	PLANNING COMMENTS
4	3.22.13	REVISED CONDS.
5	4.24.13	TOPSOIL NOTES



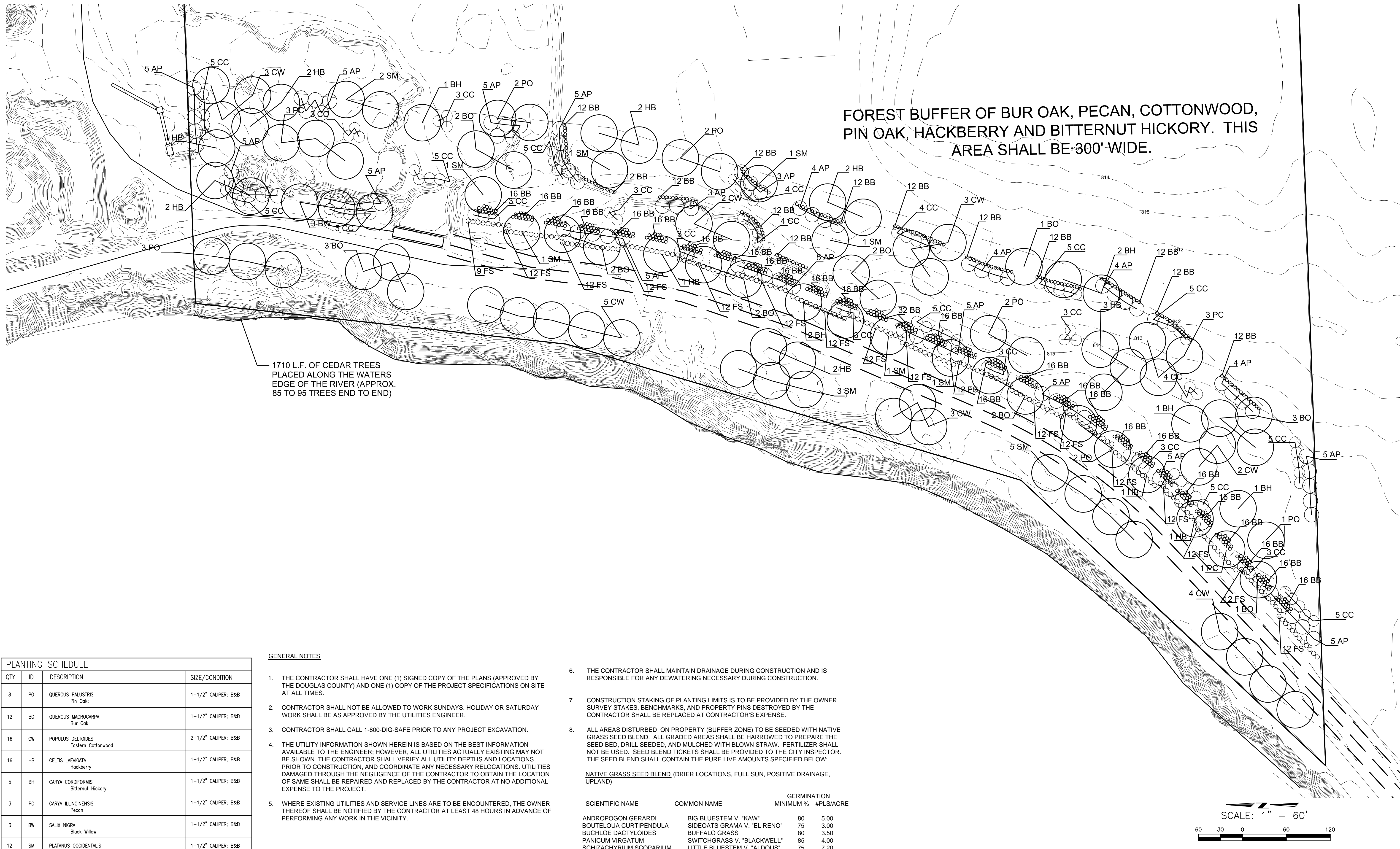
A Reclamation Plan for

Penny Sand Lawrence Facility

Douglas County, Kansas

DATE:	7.2.12
PROJECT NO.:	20121146
DESIGNED BY:	CLM
DRAWN BY:	CLMRK
CHECKED BY:	CLM

ISSUE	SHEET NO.
A	R-001



QTY	ID	DESCRIPTION	SIZE/CONDITION
8	PO	QUERCUS PALUSTRIS Pin Oak	1-1/2" CALIPER; B&B
12	BO	QUERCUS MACROCARPA Bur Oak	1-1/2" CALIPER; B&B
16	CW	POPULUS DELTOIDES Eastern Cottonwood	2-1/2" CALIPER; B&B
16	HB	CELTIS LAEVIGATA Hackberry	1-1/2" CALIPER; B&B
5	BH	CARYA CORDIFORMIS Bitternut Hickory	1-1/2" CALIPER; B&B
3	PC	CARYA ILLINOENSIS Pecan	1-1/2" CALIPER; B&B
3	BW	SALIX NIGRA Black Willow	1-1/2" CALIPER; B&B
12	SM	PLATANUS OCCIDENTALIS Sycamore	1-1/2" CALIPER; B&B
0	DB	SALIX EXIGUA Sandbar Willow	5 GAL. CONT.
84	AP	PRUNUS AMERICANA American Plum	5 GAL. CONT.
540	BB	CEPHALANTHUS OCCIDENTALIS Buttonbush	5 GAL. CONT.
102	CC	PRUNUS VIRGINIA Choke Cherry	5 GAL. CONT.
201	FS	RHUS AROMATICA Fragrant Sumac	5 GAL. CONT.

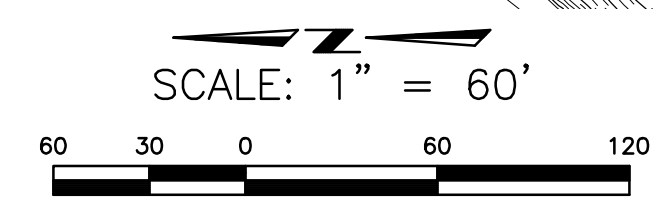
GENERAL NOTES

- THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE PLANS (APPROVED BY THE DOUGLAS COUNTY) AND ONE (1) COPY OF THE PROJECT SPECIFICATIONS ON SITE AT ALL TIMES.
- CONTRACTOR SHALL NOT BE ALLOWED TO WORK SUNDAYS, HOLIDAY OR SATURDAY WORK SHALL BE AS APPROVED BY THE UTILITIES ENGINEER.
- CONTRACTOR SHALL CALL 1-800-DIG-SAFE PRIOR TO ANY PROJECT EXCAVATION.
- THE UTILITY INFORMATION SHOWN HEREIN IS BASED ON THE BEST INFORMATION AVAILABLE TO THE ENGINEER; HOWEVER, ALL UTILITIES ACTUALLY EXISTING MAY NOT BE SHOWN. THE CONTRACTOR SHALL VERIFY ALL UTILITY DEPTHS AND LOCATIONS PRIOR TO CONSTRUCTION, AND COORDINATE ANY NECESSARY RELOCATIONS. UTILITIES DAMAGED THROUGH THE NEGLIGENCE OF THE CONTRACTOR TO OBTAIN THE LOCATION OF SAME SHALL BE REPAIRED AND REPLACED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE PROJECT.
- WHERE EXISTING UTILITIES AND SERVICE LINES ARE TO BE ENCOUNTERED, THE OWNER THEREOF SHALL BE NOTIFIED BY THE CONTRACTOR AT LEAST 48 HOURS IN ADVANCE OF PERFORMING ANY WORK IN THE VICINITY.
- THE CONTRACTOR SHALL MAINTAIN DRAINAGE DURING CONSTRUCTION AND IS RESPONSIBLE FOR ANY DEWATERING NECESSARY DURING CONSTRUCTION.
- CONSTRUCTION STAKING OF PLANTING LIMITS IS TO BE PROVIDED BY THE OWNER. SURVEY STAKES, BENCHMARKS, AND PROPERTY PINS DESTROYED BY THE CONTRACTOR SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.
- ALL AREAS DISTURBED ON PROPERTY (BUFFER ZONE) TO BE SEEDDED WITH NATIVE GRASS SEED BLEND. ALL GRADED AREAS SHALL BE HARROWED TO PREPARE THE SEED BED, DRILL, SEED, AND MULCHED WITH BLOWN STRAW. FERTILIZER SHALL NOT BE USED. SEED BLEND TICKETS SHALL BE PROVIDED TO THE CITY INSPECTOR. THE SEED BLEND SHALL CONTAIN THE PURE LIVE AMOUNTS SPECIFIED BELOW:

NATIVE GRASS SEED BLEND (DRIER LOCATIONS, FULL SUN, POSITIVE DRAINAGE, UPLAND)

SCIENTIFIC NAME	COMMON NAME	GERMINATION	
		MINIMUM %	#PLS/ACRE
ANDROPOGON GERARDI	BIG BLUESTEM V. "KAW"	80	5.00
BOULETELLOJA CURTIPENDULA	SIDEOATS GRAMA V. "EL RENO"	75	3.00
BUCHLOE DACTYLOIDES	BUFFALO GRASS	80	3.50
PANICUM VIRGATUM	SWITCHGRASS V. "BLACKWELL"	85	4.00
SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM V. "ALDOUS"	75	7.20
SORCHASTRUM NUTANS	INDIANGRASS V. "OSAGE"	85	3.00
AMORPHA CANESCENS	LEADPLANT AMORPHA	50	0.40
CASSIA FASCICULATA	PARTRIDGE PEA	50	0.16
DALEA PURPUREA	PURPLE PRAIRIE CLOVER	50	0.32
ECHINACEA PURPUREA	PURPLE CONEFLOWER	50	1.20
HELIANTHUS ANNUUS	COMMON SUNFLOWER	50	0.08
HELIANTHUS MAXIMILIANII	MAXIMILIAN SUNFLOWER	50	0.32
LIATRIS PYNCHOSTACHYA	BLASINGSTAR	50	0.32
RHUS AROMATICA	FRAGRANT SUMAC	50	0.08
RUDBECKIA HIRTA	BLACK-EYED SUSAN	85	0.15
TRITICUM AESTIVUM	REGREEN STERILE WHEAT	85	23.00
TOTAL SEED			51.73

- ALL OTHER AREAS DISTURBED DURING CONSTRUCTION SHALL BE FERTILIZED, SEED, AND MULCHED BY THE CONTRACTOR.



A Planting Plan for
Penny Sand Lawrence Facility
Douglas County, Kansas

Civil Engineering
Landscape Architecture
Community Planning
Surveying

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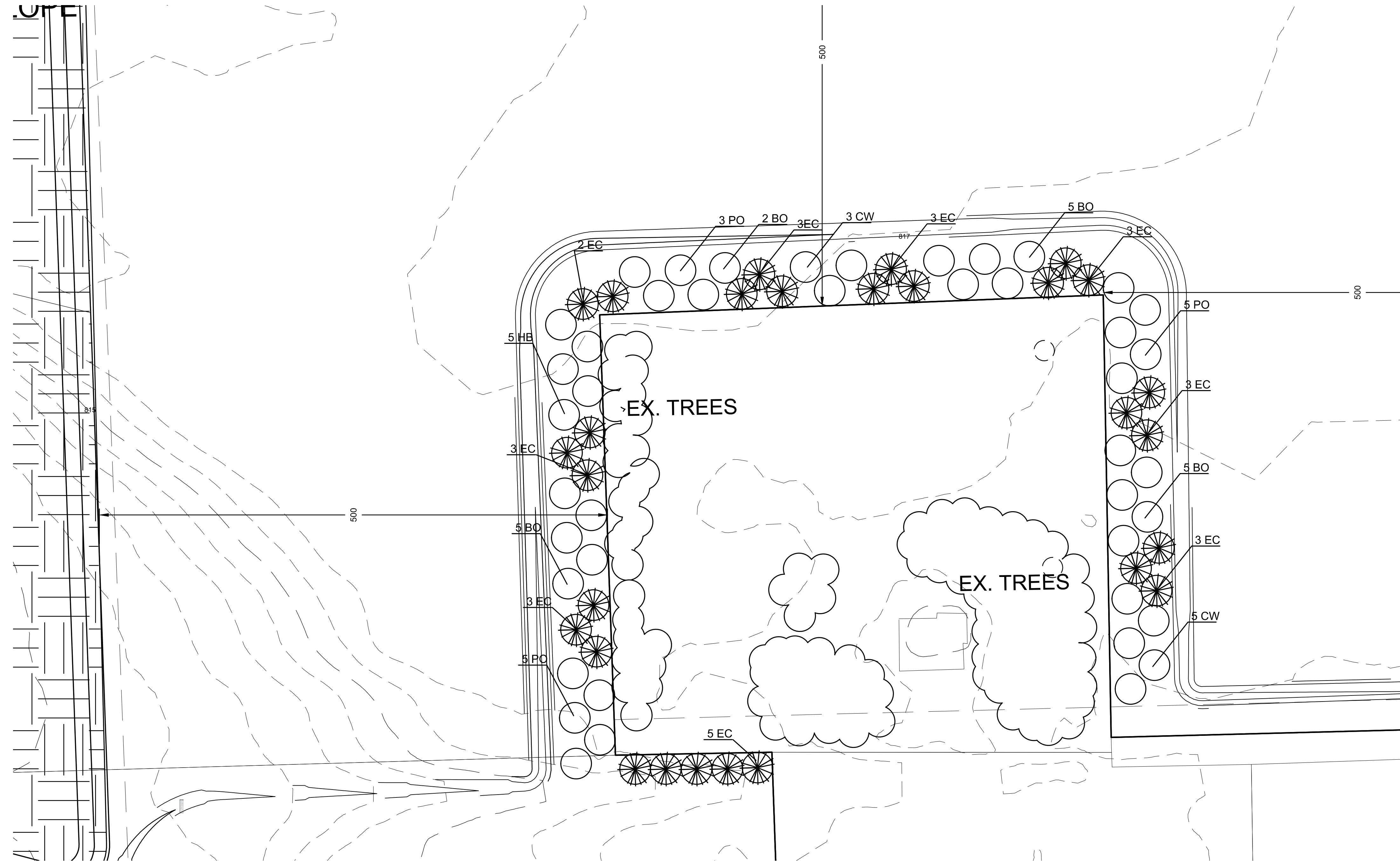
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**PENNY SAND FACILITY
RIPARIAN AREA
PLANTING PLAN**

REV	DATE	DESCRIPTION

DATE: 4/24/13
PROJECT NO.: 20121146
DESIGNED BY: CLM
DRAWN BY: CLM
CHECKED BY: CLM

ISSUE: **A** SHEET NO.: **R-002**
OF 4 SHEETS

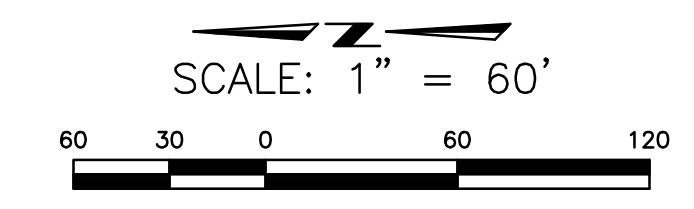


QTY	ID	DESCRIPTION	SIZE/CONDITION
13	PO	QUERCUS PALLISTRIS Pin Oak	1-1/2" CALIPER; B&B
17	BO	QUERCUS MACROCARPA Bur Oak	1-1/2" CALIPER; B&B
8	CW	POPULUS DELTOIDES Eastern Cottonwood	2-1/2" CALIPER; B&B
5	HB	CELTIS LAEVIGATA Hackberry	1-1/2" CALIPER; B&B
28	EC	JUNIPERUS VIRGINIANA EASTERN RED CEDAR	4' TO 6' HT. B & R

GENERAL NOTES

- THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE PLANS (APPROVED BY THE DOUGLAS COUNTY) AND ONE (1) COPY OF THE PROJECT SPECIFICATIONS ON SITE AT ALL TIMES.
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NATIVE GRASS SEED BLEND (DRIER LOCATIONS, FULL SUN, POSITIVE DRAINAGE, UPLAND)
- | SCIENTIFIC NAME | COMMON NAME | GERMINATION MINIMUM % | #PLS/ACRE |
|-------------------------|-----------------------------|-----------------------|-----------|
| ANDROPOGON GERARDI | BIG BLUESTEM V. "KAW" | 80 | 5.00 |
| BOUTELOUA CURTIPENDULA | SIDEOATS GRAMA V. "EL RENO" | 75 | 3.00 |
| BUCHLOE DACTYLOIDES | BUFFALO GRASS | 80 | 3.50 |
| PANICUM VIRGATUM | SWITCHGRASS V. "BLACKWELL" | 85 | 4.00 |
| SCHIZACHYRIUM SCOPARIUM | LITTLE BLUESTEM V. "ALDOUS" | 75 | 7.20 |
| SORCHASTRUM NUTANS | INDIANGRASS V. "OSAGE" | 85 | 3.00 |
| AMORPHA CANESCENS | LEADPLANT AMORPHA | 50 | 0.40 |
| CASSIA FASCICULATA | PARTRIDGE PEA | 50 | 0.15 |
| DALEA PURPUREA | PURPLE PRAIRIE CLOVER | 50 | 0.32 |
| ECHINACEA PURPUREA | PURPLE CONEFLOWER | 50 | 1.20 |
| HELIANTHUS ANNUUS | COMMON SUNFLOWER | 50 | 0.08 |
| HELIANTHUS MAXIMILIANII | MAXIMILIAN SUNFLOWER | 50 | 0.32 |
| LIATRIS PACHYSTACHYA | BLASINGSTAR | 50 | 0.32 |
| RHUS AROMATICA | FRAGRANT SUMAC | 50 | 0.08 |
| RUDBECKIA HIRTA | BLACK-EYED SUSAN | 85 | 0.15 |
| TRITICUM AESTIVUM | REGREEN STERILE WHEAT | 85 | 23.00 |
| TOTAL SEED | | | 51.73 |
- ALL OTHER AREAS DISTURBED DURING CONSTRUCTION SHALL BE FERTILIZED, SEEDED, AND MULCHED BY THE CONTRACTOR.



A Planting Plan for
**Penny Sand
 Lawrence Facility**
 Douglas County, Kansas

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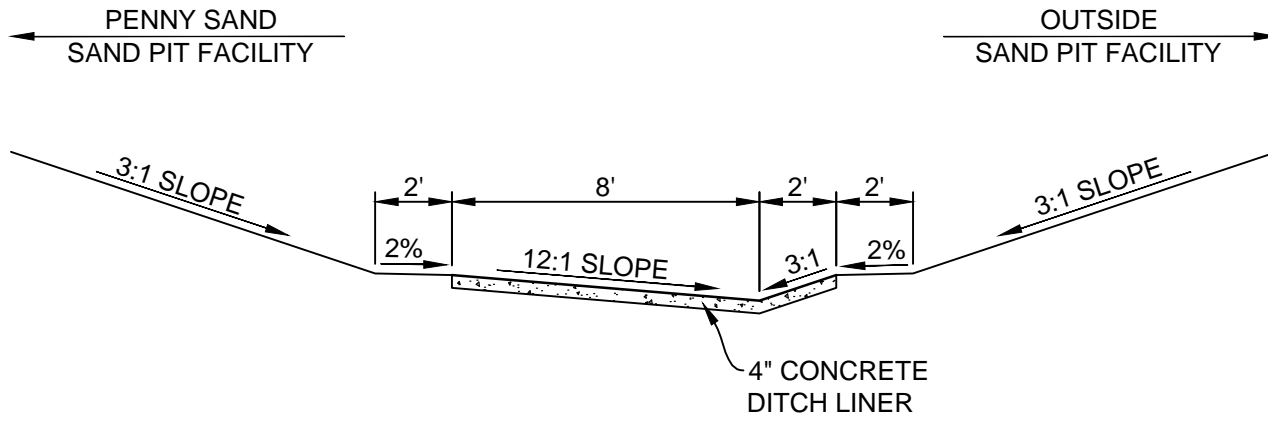
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**PENNY SAND FACILITY
 McELWEE SCREEN
 PLANTING PLAN**

REV	DATE	DESCRIPTION

DATE:	4/24/13
PROJECT NO.:	20121146
DESIGNED BY:	CLM
DRAWN BY:	CLM
CHECKED BY:	CLM

ISSUE SHEET NO.
A M-001
 OF 4 SHEETS



CONCRETE DITCH LINER

SCALE: 1" = 5'



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Landscape Architecture
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Memorandum

City of Lawrence – Douglas County Planning & Development Services

TO: Board of County Commissioners

CC: Craig Weinaug, County Administrator

FROM: Mary Miller, City/County Planner

Date: For August 28, 2013 Meeting

RE: Pre-dredging report associated with CUP-12-00099: Conditional Use Permit for Penny Sand Pit; N 1500 Rd and E 1850 Rd (MKM)

Attachments:

Attachment A: Background of CUP

Attachment B: Conditions of approval and restrictions of use / March 13, 2013

Conestoga Rovers and Associates (CRA) have completed the pre-dredging report for the proposed sand pit referenced above as directed by the Board of County Commissioners. The pre-dredging report was distributed to the Commissioners for review on July 29th and placed on the County web-site for public review on August 5th. Notice was provided to members of the public who had expressed interest in the pre-dredging report and to the City of Eudora administrator. The Penny Sand Pit Conditional Use Permit application, CUP-12-00099, is before the Board of County Commissioners at this time for consideration of the pre-dredging report prepared by Conestoga Rovers and Associates and action on the Commission's contingent approval of the Conditional Use Permit.

Action options:

- 1) Approve the Conditional Use Permit subject to the conditions and restrictions of use as revised at the March 13, 2013 BoCC meeting. (attached)
- 2) Approve the Conditional Use Permit with revised conditions and restrictions of use based on the results of the CRA Pre-dredging Report.
- 3) Withdraw the contingent approval of the Conditional Use Permit based on the results of the CRA Pre-dredging Report.

BACKGROUND:

DATE	BODY	ACTION
4/10/13	Board of County Commissioners	Approved agreement with Conestoga Rovers and Associates to provide a pre-dredging study and report.
3/13/13	Board of County Commissioners	Board voted 2 to 1 to adopt the Findings of Fact, and approve the CUP subject to all conditions which have been established in the reports submitted to the Board, including the conditions which are contingent upon the ability to add additional conditions based or to deny the item based upon the results of the pre-dredging report.
2/27/13	Board of County Commissioners	Heard comment and considered the item. Board deferred action to March 13, 2013 and directed staff to bring back wording for the Board to consider contingent approval of the CUP based upon the results of the pre-dredging report (further analysis of the ground water impacts as outlined in the CRA written review of the hydrology reports) and language that reflects the reduction of the project size.
1/31/2013	Eudora and Lawrence-Douglas County Planning Commissions	Returned to Planning Commissions after notification error was identified. Report from independent hydrologist provided to the Commission. Eudora PC voted 4-0 to recommend denial. Lawrence-Douglas County PC voted 4-3 to recommend denial.
11/28/2012	Board of County Commissioners	Board voted 3-0 to defer the item to the January 2, 2013 meeting to allow time for the evaluation of information provided regarding possible impacts on ground water in the area. Directed staff to contract with an independent hydrologist to review the hydrology reports and provide a written report to the Commission. <i>(Notification error required the CUP to be returned to the Planning Commission for a new public hearing so the item was not considered by the BoCC on January 2.)</i>
10/22/2012	Eudora and Lawrence-Douglas County Planning Commissions	Eudora PC voted 4-1 to recommend deferral of the application until additional data is collected to determine the impact on Eudora's wells. Lawrence-Douglas County PC voted 4-3-1 to recommend approval of the CUP with additional condition regarding observation and monitoring wells.

Memorandum

City of Lawrence – Douglas County Planning & Development Services

TO: Board of County Commissioners

FROM: Mary Miller, Planner

Date: For March 13, 2013 County Commission Meeting

RE: REVISED CONDITIONS FOR THE CONDITIONAL USE PERMIT FOR PENNY SAND PIT; N 1500 RD & E 1850 RD; CUP-12-00099

The Board of County Commissioners accepted public comment and discussed the CUP referenced above at their February 27, 2013 meeting. The Commission deferred action on the item and directed staff to draft a set of revised conditions based on their discussion for their consideration at the March 13, 2013 meeting. The changes required by the Commission are noted below followed by a list of the revised conditions. The revised conditions are provided below with deleted text shown as ~~struck-through~~ and new language in **bold** print.

County Commission Direction

At the February 27, 2013 meeting, the County Commission directed staff to add or revise the following conditions:

1. Addition of a condition requiring that a hospital grade muffler system be installed, operated, and maintained on the dredge engine to reduce the noise levels associated with the dredging activity.
2. The hours of operation, 6:30 AM to 6:30 PM Monday through Friday revised to include the dredging equipment as well as the heavy earth moving equipment.
3. The note regarding the future use of the property following reclamation shall be revised to note that the lake will be used for 'private recreation' and no boats with more than 10 horsepower will be permitted on the lake without approval of a Conditional Use Permit.
4. The Commission indicated that an affidavit spelling out the ongoing maintenance and protection measures for the berm and lake be recorded so it would run with the land and provide notice for future property owners. This affidavit shall note that the future use of the lake will be 'private recreation' and that no boats with more than

10 horsepower engines will be permitted on the lake without approval of a Conditional Use Permit. The Commission discussed the possibility of a bond for the ongoing maintenance/protection of the berms and water feature.

5. Pre-Dredging Report
 - a. If the Board of County Commissioners vote to contingently approve the CUP on March 13, 2013, this approval will be contingent upon the pre-dredging report to be prepared by an independent 3rd party consultant. The Commission will pay for the analysis and report as they have contracted with the independent 3rd party consultant and the applicant shall reimburse the Commission when the report is complete. The applicant shall sign an agreement to reimburse the Commission prior to the commencement of work on the pre-dredging report.
 - b. The Conditional Use Permit will be returned to the County Commission following the completion of the pre-dredging report. Based on the pre-dredging report, the Commission may take one of the following actions:
 1. Approve the CUP with revised the CUP conditions.
 2. Approve the CUP with additional conditions.
 3. Withdraw the contingent approval of the CUP.
6. The size of the pit dredging operation shall be reduced from that originally proposed by the additional setback on the northwest and west sides and shall end at Phase 20 on the south. Revised CUP, operation, and reclamation plans showing the setback, riparian buffer and the southern limits of the dredging activity as Phase 20 shall be provided to the Planning Office prior to the release of the CUP.)
7. River Channel Stability (based on GBA report)
 - a. A vegetated riparian buffer/ setback will be provided along the west and north sides of the property. This buffer is to be a minimum of 300 ft wide.
 - b. A general landscape plan for the riparian buffer shall be developed with the assistance of someone knowledgeable in the field. This plan shall be provided to the County Commission for approval. The vegetation shall be planted and maintained per this plan.
8. The revetment in the northwest portion of property breached in 1993 shall be studied by a competent engineer experienced in fluvial geomorphology hired by the applicant, and removed or modified and additional revetments on the east bank shall be installed following river engineering study if the County Engineer, the United States Army Corps of Engineers-Kansas City District (USACE-KCD), and other permitting agencies find the changes appropriate. The applicant shall hire the engineer, and the study shall be commenced, prior to any excavation for the sand pit.

REVISED CONDITIONS

1. CONTINGENT APPROVAL.

- a. **If the Board of County Commissioners vote to contingently approve the CUP, this approval is contingent upon the evaluation of the results of the pre-dredging report to be prepared by an independent 3rd party consultant.**
- b. **The County Commission will contract with a 3rd party independent consultant, to conduct the necessary studies and prepare the pre-dredging report following the execution of an agreement between the property owner and the County Commission which specifies that the property owner shall reimburse the County Commission for the expense following completion of a pre-dredging report which is accepted by the County Engineer. This agreement shall be executed and recorded prior to the commencement of work on the pre-dredging report.**
- c. **The Conditional Use Permit will be returned to the County Commission following the completion of the pre-dredging report. Based on the results of the pre-dredging report and the recommendations of the consultant, the Commission may take one of the following actions:**
 - 1) **Approve the CUP with revised conditions,**
 - 2) **Approve the CUP with additional conditions,**
 - 3) **Withdraw the contingent approval of the CUP.**

2. PRE-DREDGING REPORT.

- a. **The independent 3rd party consultant shall provide a pre-dredging report to the County Engineer for review. The CUP will be placed back on the County Commission's agenda for discussion of the results of the pre-dredging report and recommendations provided by the 3rd party consultant. The County Commission may revise the conditions of the CUP based on the results of this report. The pre-dredging report shall:**
- b. **Determine the potential zone of influence through the following steps:**
 - i. **Take field measurements to determine the current groundwater table and flow direction.**
 - ii. **Determine the anticipated maximum dewatering influence from maximum rate of sand and water extraction, evaporation, and any other water consumption. The information provided should include the proposed rate of sand and water extraction or taking from the pond while recognizing the recycling of water. (Page 5 of Conestoga-Rovers Assoc.'s independent review report explains that this assessment could be completed based on existing information.)**

- iii. The results and an exhibit of the potential zone of influence shall be included with the pre-dredging report.
- c. Confirm existing groundwater and/or soil quality to ensure there is no significant contamination from existing site area and operations, including an initial environmental site assessment (ESA) of potential sources and existence of contamination (if an ESA has not already been conducted) through the following:
 - i. Installation and sampling of groundwater wells in down-gradient area in locations approved by the County Engineer.
 - ii. Soil assessment to determine suitability of soils for placement below water with reclamation.
 - iii. The results shall be included in the pre-dredging report.

The County Engineer will determine if further investigation and remedial actions are necessary based on the results. Should potential contaminant sources be identified during the ESA process, the test pits shall be installed and additional soil testing shall be conducted per the County Engineer's recommendation.

- d. Establish baseline water quality and quantity conditions within potential zone of influence through a private water well survey of both up-gradient and down-gradient wells. Such survey is subject to landowner access permission. This information shall be included in the pre-dredging report.
 - e. Determine the location and number of groundwater monitoring wells to be installed by the applicant. The location of these wells must approved by the County Engineer and an exhibit showing their location included in the pre-dredging report.
3. The applicant shall prepare and submit a fuel/chemical handling and spill response plan for the County Engineer's approval. **This plan will be provided to the Commission when the CUP is returned following completion of the pre-dredging report.**

Ongoing conditions – Best Management Practices and Precautionary Measures:

(these conditions are to be listed on the CUP plan)

- 4. Document the sand production levels and effective water consumption on an annual basis to aid in interpretation of monitoring data. Provide an annual report to the Zoning and Codes Department.

5. Monitor groundwater levels in adjacent private water supply wells (subject to property owner's permission) within the potential zone of influence on a quarterly basis. This information shall be provided to the Zoning and Codes Department in a quarterly report.
6. Monitoring of groundwater levels in monitoring wells on a quarterly basis. (In early years, monitoring while extraction is occurring in the NW part of the site will help confirm the zone of influence.) This information shall be provided to the Zoning and Codes Department in a quarterly report.
 - a. If any changes are determined in the potential zone of influence, adjustments will be made to the monitoring wells as deemed necessary by the County Engineer.
7. Install berms along the perimeter of the pit to prevent runoff from entering the pit.
8. The Zoning and Codes Department shall be notified if any fill import is proposed throughout the operation of the pit. Any fill import must be sampled and analyzed for chemical suitability and the results provided to the Zoning and Codes Department for approval prior to installation.
9. Remediate/report any spills in accordance with the fuel/chemical handling and response plan.
- 10. Continue river bank monitoring along the east bank of the KS River. Extend monitoring points north to the point the river bends from north to east, and also extend monitoring points east from the river bend along the north side of applicant's property. The locations of these monitoring points shall allow for surveying the river bank along the west and north sides of applicant's property. The river bank along the west and north side of applicant's property shall be surveyed by a licensed land surveyor following all overbank flooding events lasting more than one week in duration, and the results of the survey shall be conveyed to County Engineer.**
- 11. The applicant will be responsible for the cost of any mitigation measures needed, as determined by County Engineer, as a result of river bank movement on applicant's property. The cost of mitigation includes the cost of engineering design of the mitigation measures as well as the construction cost of the measures. Any mitigation measures are subject to USACE-KCD approval.**
12. The revetment in the northwest portion of property breached in 1993 shall be studied by a competent engineer experienced in fluvial geomorphology hired by the applicant, and removed or modified and additional revetments on the east bank shall be installed following river engineering study if the County Engineer, the United States Army Corps of Engineers-Kansas City District (USACE-KCD), and other

permitting agencies find the changes appropriate. The applicant shall hire the engineer, and the study shall be commenced, prior to any excavation for the sand pit.

Other Conditions:

13. The approval is contingent upon the issuance of all State and/or Federal permits which are required for this operation.
14. An **affidavit** designating responsibility for the ongoing maintenance of the berms **and lake** to the property owner **and outlining the ongoing maintenance and protection measures** shall be executed and recorded with the Register of Deeds prior to the release of the CUP plans to the Zoning and Codes Office. **This affidavit shall note that the future use of the lake will be 'private recreation' and that no boats with larger than 10 horsepower engines will be permitted on the lake. The removal of these restrictions would require approval of a Conditional Use Permit.** A copy of the **affidavit** shall be provided to the Planning Office for the file.

With the transfer of property ownership of any land containing the water feature or surrounding berms, the new owner shall file a maintenance bond, or similar protection means acceptable to the Board, to insure maintenance/protection of the berms and water feature.

15. A copy of the easement for the off-site access drive shall be provided to the Planning Office for the file prior to the release of the CUP plans to the Zoning and Codes Office.
16. The applicant shall obtain a Flood Plain Development Permit from the Director of Zoning and Codes prior to the release of the CUP plans.
17. The reclamation plan shall be revised with the following changes prior to release of the CUP plans:
 - a. The plan shall note the requirement that the lake that is being created will have a varied shoreline and will appear natural in appearance.
 - b. The plan shall note that the intended use of the lake, when mining and reclamation is complete, is to be a **private** recreational feature **and note that boats with larger than 10 horsepower engines will not be permitted on the lake. The removal of these restrictions would require approval of a Conditional Use Permit.**
 - c. The plan shall note the maximum slope of the lake shoreline for a specified depth to insure that the slopes are of a grade that it would be possible for a person or animal that accidentally entered the lake to exit.

- d. The plan shall explain the sequential nature of the reclamation process; that overburden produced in one phase will be used to reclaim previously excavated areas.
 - e. The reclamation plan shall note that topsoil will be placed over the overburden in areas that are to be reclaimed as farmland, shoreline, or berms. If topsoil is to be stockpiled and stored it must be vegetated to prevent erosion.
 - f. **The reclamation plan shall be revised to reflect the increased setback and vegetated riparian buffer required on the north/northwest side of the property and the reduced area on the south, with Phase 20 being the final phase.**
18. The applicant shall submit a revised CUP plan with the following changes:
- a. **The additional setback and vegetated riparian buffer area shown on the north/northwest corner of the property per the County Engineer's approval.**
 - i. **The applicant will develop a general landscaping plan for the buffer area with assistance of the KS Forestry Service and/or the United States Army Corps of Engineers-Kansas City District (USACE-KCD) and provided with the CUP plan. The buffer area vegetation shall be planted and maintained per this plan.**
 - ii. **The general landscape plan must be approved prior to the release of the CUP to the Zoning and Codes Office.**
 - iii. **Planting shall commence in accordance with the landscaping plan when the weather is appropriate and shall be completed prior to any earthmoving occurring in the CUP area.**
 - b. **The sand pit will terminate with Phase 20 with no dredging activities to occur south of this phase. The CUP plan shall be revised to reflect the reduced area of the sand pit. The operation plans shall also be revised to reflect the reduced area of the sand pit and the additional buffer area.**
 - c. A detailed landscaping plan for the buffer area surrounding the McElwee house will be submitted.
 - d. The Book and Page number of the recorded easement for the off-site access road shall be noted on the CUP plan.
 - e. ~~The ownership shall be noted as Van, LLC as well as Penny's Concrete Inc. on the CUP plan.~~

- f. The on-site residential structure on the east side of the property will be shown on the CUP plan as on the reclamation plan.
- g. If stockpiling of overburden is to occur on the subject property, the CUP or operation plan should note the maximum height and approximate location. The stockpiles should be placed as far from the existing residences as possible.
- h. List the following CUP conditions on the plan:
 - i. Hours of operation are 6:30 AM to 6:30 PM, Monday through Friday. ~~No removal, transfer, or placement of overburden is permitted outside these operating hours; however dredging and extraction of sand may exceed these hours when necessary.~~
 - ii. A hospital grade muffler system shall be installed, operated, and maintained on the dredge engine to reduce the noise levels associated with the dredging activity.
 - iii. The approval for this Conditional Use is valid for 30 years. An extension request for the CUP must be submitted prior to the expiration date or a new CUP application must be submitted. The Zoning and Codes office shall conduct 5 year administrative reviews to insure compliance with the CUP, operation, and reclamation plans.
 - iv. Only exterior lighting in the areas to be excavated will be the dredge lighting as required by the U.S. Coast Guard.
 - v. The scale house, processing plant, sediment pond, and stockpile area, approved with CUP-2-2-79, will be used to serve the subject property.
 - vi. Sales of overburden, topsoil, sand or aggregate products will occur only on the portion of the property that contains the scale house on the CUP plan.
 - vii. Truck traffic will utilize Noria Road (E 1750 Road), and is restricted from using N 1500 Road or E 1850 Road.
 - viii. If any jurisdictional wetlands are located on the property, the applicant shall work with the Army Corps of Engineers to determine how the existing wetlands will be treated. The applicant will provide documentation to the Planning Office on the wetlands indicating whether the wetlands will be maintained on site or if they will be mitigated elsewhere. If the wetlands will be maintained on site, the operation plan will be revised to include the protection measures and the property owner shall submit a revised CUP plan for administrative review/approval of the wetland setbacks. If the wetlands are to be mitigated, a revised CUP plan shall be submitted to note the removal of the wetlands.

19. The following improvements to nearby roads and intersections shall be completed per the County Engineer's approval before issuance of a permit for the Conditional Use :
 - a. Realignment of the entrance to the sand facility so that it opposes the Noria Road intersection at N 1500 Road.
 - b. Pavement of a 100 ft long section of the site access drive just north of N 1500 Road, as recommended in the TIS.
 - c. Reconstruction of pavement in the Noria Road (E 1750 Road)/N 1500 Road intersection. The existing surfacing is likely a crushed rock base that has been chip sealed. This will not stand up to the increased truck traffic crossing N 1500 Road.
 - d. Construction of an eastbound right turn lane on Route 442 (N 1400 Road) at Route 1057 (E 1900 Road). This is mentioned as a desirable improvement in the TIS. Pavement on the existing shoulder at this location is not adequate for the projected amount of truck traffic.
20. The applicant shall install monitoring wells as recommended by an independent 3rd party consultant in the pre-dredging report. These wells shall be installed prior to the release of the Conditional Use Permit. The City of Eudora shall be allowed to monitor those wells on an ongoing basis.
21. Dredging on the subject property shall not occur concurrently with dredging on the property to the north as approved with CUP-2-2-79.

Douglas County Commission
1100 Massachusetts Street,
Douglas County Courthouse, 2nd Level
Lawrence, KS 66044

Dear Douglas County Commissioners,

As a ground water professional, I have reviewed the Conestoga-Rovers & Associates (CRA) report requested by the Douglas County Commission. It is a reasonable report but has several shortcomings that I will explore below. Also, it seems the main body of the report has failed to reference some important details buried in the appendices. It is very long and would be hard for a layman to grasp the most important parts.

The report does establish the expected overburden at about an average of 20 feet more in some areas and less in others.

“OVERBURDEN GEOLOGY

Surficial geology at the Site consists of alluvium deposited by the Kansas River during the late Pleistocene time period and more specifically during Wisconsinan time. The alluvium is chiefly sand and silt similar to the sediments carried by the river at the present time. Sediments are typical of an alluvial valley with finer grained materials encountered below clay and silt overburden and coarsening with depth to sands and gravel deposits with cobbles and boulders at the bedrock contact.”

This report confirms the existence of a high conductivity lower layer in the aquifer, both by drilling and model calibration. These facts are important because they indicate the intensity of operation at this site to remove so much overburden and that any pollutants entering the pit will be able to move quickly in the high conductivity layer at the base of the aquifer.

Slug testing was done at monitoring wells surrounding the site. However, generally they only tested the lower conductivity upper part of the aquifer as evidenced by the relatively lower values of hydraulic conductivity obtained. The slug testing methods they used were very crude, using a solid slug of PVC material and raising and lowering it. A much more accurate method would have used pneumatic methods to raise and lower the water table. These slug tests are over in a matter of 10 seconds or so. It is difficult to raise and lower a slug fast enough, not to mention frictional effects as the slug obscures much of the borehole. Also, data should be recorded very fast to get complete data. It appears they only sampled about twice a second. When I do slug tests in the Kansas River valley alluvium a sample rate of 20 samples per second is used. It appears that the slug test techniques used for the 69 foot deep Monitoring Well 4 rendered the data practically useless. The rising and falling responses are vastly different, probably because of frictional effects. The initial change of water level is so fast that it can not be accurately captured by data sampled twice per second. So, I conclude that the hydraulic conductivity value obtained for MW 4 is greatly in error. The values that they do obtain seem representative of the upper part of the main aquifer just under the overburden. In the modeling section they only use the slug test conductivity values for the upper part of the aquifer.

I would like to take exception to two of the points stated in the summary and conclusions section of the report.

- “Groundwater in the area of the Site flows to the northeast and the Kansas River at an average horizontal hydraulic gradient of approximately 1.12 feet/mile, and at an average groundwater velocity of about 0.1 feet/day in the upper portion of the aquifer.”

This statement is very misleading because it implies this information is important to a general understanding of the aquifer as a whole. In fact it is very site specific and related to the area where water level measurements were made and then only in the upper part of the aquifer. In fact, the general groundwater gradient between the Penny site and the Eudora Well field is about 2.5 feet/mile and water moves at an average velocity of about 3.5 feet/day. This is shown by the head contour maps produced by CRA in the modelling study and will be more fully discussed later.

- “Operation of the proposed aggregate mining operation is not anticipated to have any appreciable or unacceptable effect on the City of Eudora municipal water supply wells, private water supply wells, or the Kansas River.”

This statement is based solely on the drawdown maps produced by the modelling study, showing drawdowns of about a foot near the site and tapering off to a fraction of a foot some distance away. CRA totally ignores the flow paths of water particles moving from the Penny Site to the Eudora Well field. This point will be explored in much more detail below.

The modelling study is an important part of the report and is buried in appendix M and is only briefly discussed in the main part of the report. Again, I would say the modelling study is reasonable but has some issues.

“The western boundary is comprised of no flow cells representing bedrock outcrop at surface, and specified head cells which represent lateral flow to the model domain. Boundary conditions applied in the model are provided on Figure M.2.”

“The domain is extended 7,000 ft to the west of Penny’s to reduce the potential for interference from the specified head boundary condition to the west. The specified head boundary is applied with a gradient of increasing or decreasing head in the north-south direction, and was adjusted during calibration.”

The specified head used on the western boundary in Figure M.2 seems totally arbitrary and was not justified by any referenced data. This seems to be the weakest assumption in the modelling study. The rest of the boundary conditions using bedrock outcrop for barrier boundaries and river elevations known head boundaries are reasonable. However, the western specified head boundary can have significant influence on the general flow pattern and probably should be justified based on some reasonable assumptions.

Next CRA proceeds to calibrate their numerical model. Which, in this case means matching the 5 ground water levels measured in the monitoring wells. Groundwater literature is full of information on calibrating models. It is well known that calibration of a groundwater model is

highly non-unique. Which means that calibration can be achieved with many different values of the parameters. The usual case of calibration involves many (perhaps hundreds) measured water level values over an extended area of the model. Even in these cases it is recognized that the calibration is non-unique and must be conditioned with other information. So what we have here is a model calibrated with 5 water level values over a small area of the model. The conclusion must be that the model and its result must be used cautiously. It can't be relied on for exact answers, only general indications. The resulting water level maps produced by CRA are generally reasonable and are similar to the field data rich maps produced by the Kansas Geological Survey years ago (and referenced in earlier correspondences). However, these CRA maps must be used cautiously. This is especially true since water level measurements used to calibrate this model were taken during and after an unusually wet spring period. As can be seen in the CRA report, the values vary considerably over the three measurement times and are going to be representative of a wetter than normal weather period. During wet periods we have more water entering the river from the groundwater system and flow lines will bend toward the river. During dryer time periods the flow lines will bend away from the river since less water is entering the river from the groundwater system. This should be kept in mind as we analyze the water level maps produced by the modelling study.

The modelling calibration did find it necessary to use a high value of hydraulic conductivity for the lower part of the aquifer as indicated by the following quote.

“The calibrated hydraulic conductivity of the lower aquifer is 1100 ft/day (3.9×10^{-1} cm/s), and is considered a representative value for sand and gravel. The lower aquifer is highly permeable, and is capable of providing more than 500 gallons per minute (gpm) with minimal drawdown. A pumping test at Eudora Well 8 indicates 4 ft of drawdown after 11 hours of pumping at 521 gpm (Kansas Geological Survey, 1998). The calibrated hydraulic conductivity also agrees with the analyses performed by Carl Nuzman (Nuzman, 2012) (transmissivity of 220,000 gpd/ft, saturated thickness of 25 ft, conductivity of 1170 ft/day), and Carl McElwee (McElwee, 2012) (1000 ft/day).”

The modelling study considered 5 scenarios and produced water level maps for each. I would like to look only at the last scenario.

“Scenario 5 (Post Mining Operations)”

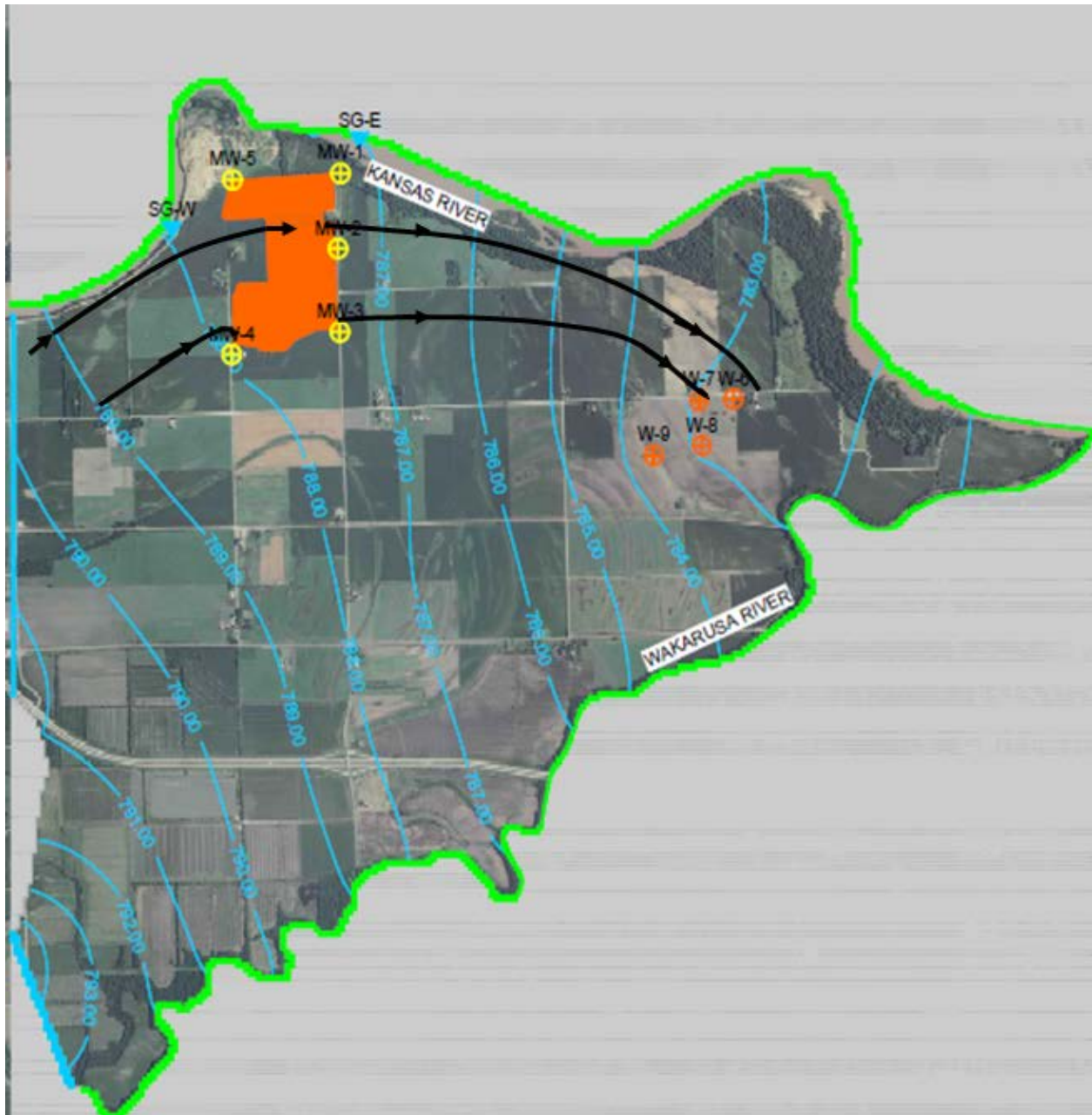
Figure M.10 shows the simulated groundwater contours associated with Scenario 5, which is modeling the effects of long term dewatering and drawdown after mining operations have ceased and the northern portion of the pit has been backfilled. This figure is similar to M.9, in that the pond area becomes one static elevation, which has the effect of stretching the elevation contours in the area of the pond. The Site has a northeast flow direction upgradient of the pond and shifts to an easterly flow direction on the east side of the Site.”

“Simulated steady-state pond elevations vary by less than 1 ft in Scenarios 2 to 5, and have an average long term elevation of 787.19 ft.”

“Based on Site survey data, the elevation ranges from 800 to 815 feet above mean sea level (USGS 1963).”

Based on the above quotes from the CRA report, water will be about 28 feet below land surface in part of the pond, less toward the river. This fact is also shown on the WWC5 form for monitoring well MW 4, which shows a water level in the well of 29 feet below land surface. This is not going to be a very attractive lake with water levels so far below the land surface. It is hard to see how it can later be used effectively for a recreation facility.

Figure M.10, the water level contour map for scenario 5 produced by the CRA modelling study is shown below.



In groundwater theory and practice, it is well established that flow lines can be drawn perpendicular to contours of water levels. I have done this in Figure M.10 above for two flow lines going through the proposed completed sand pit. It can be seen that water from the pit will impinge on at least 2 of the Eudora wells. Remember that this model was calibrated for a wet period and that during dry time periods the flow lines will shift away from the river. This means that it is very likely that water from the pit will impinge on more Eudora wells as the flow lines move to the south during dry periods.

This figure with the flow lines establishes another point that I have made repeatedly in correspondence and meetings about this CUP. The pit is a flow through lake with water from up the valley flowing into the pit on the west and leaving the pit on the east. This means that groundwater will mix with surface water in the pit and then be sent further down the valley toward the Eudora Well Field. This underlines the fact that this pit must be kept forever clean or else pollutants can make their way along the flow lines to the Eudora Well Field. One of the most common pollutants in this area is nitrate from fertilizers, which is a conservative tracer meaning that it moves easily with the water and is not adsorbed by the aquifer. Establishment of this pit creates a potential pollution source which must be monitored forever.

In order to calculate the travel times of a conservative tracer like nitrate, one must use an equation from the groundwater literature known as Darcy's Law. It states that the average groundwater velocity is given by the product of the hydraulic conductivity (K), the hydraulic gradient (I), and divided by the effective porosity (n).

$$v = \frac{-KI}{n}$$

The calibrated model produced a K of 1100 ft/day, the gradient I can be inferred from Figure M.10 to be 2.5 ft/mile along the flow lines shown, and a typical value for effective porosity is .15. Using these values in the above equation gives

$$v = \frac{1100 \frac{ft}{day} \times 2.5 \frac{ft}{mi} \times \frac{1.0}{5280 \frac{ft}{mi}}}{.15} = 3.47 \frac{ft}{day}$$

At this flow rate, a molecule of water or conservative pollutant from the pit would travel the 7000 feet to the Eudora Well Field in 5.5 years.

These results were obtained from using Figure M.10 for scenario 5, however, only minor changes would result from using water level maps from the other 4 scenarios. So these results can be considered generally for any of the presented scenarios.

In summary although having some weaknesses, the CRA report confirms three points that I have made repeatedly during the consideration of this CUP:

- The pit becomes a flow through lake sending surface water mixed with groundwater down the valley toward the Eudora Well Field and is a potential pollution source.
- The flow lines of the groundwater system connect the pit and the Eudora Well Field.
- The water from the pit can be captured by the Eudora Well Field in the 5-6 year time frame.

For these reasons I request that you deny the CUP for the Penny Sand Pit.

Dr. Carl McElwee
Emeritus Professor of Geology
University of Kansas
785-843-4164
cmcelwee@ku.edu

Memorandum

City of Lawrence – Douglas County Planning & Development Services

TO: Board of County Commissioners

CC: Craig Weinaug, County Administrator

FROM: Mary Miller, City/County Planner

Date: For August 28, 2013 Meeting

RE: UPDATED MEMO_Conditions of approval for CUP-12-00099:
Conditional Use Permit for Penny Sand Pit; N 1500 Rd and E 1850
Rd (MKM)

Attachments:

Attachment A: August 23rd Revised CUP plans

This memo is accompanied by a new set of revised CUP plans. The applicant indicated that they would provide the berm as originally required and rescinded their request to revise Condition No. 7. The staff memo which was provided as part of your agenda packet has been updated to remove the applicant's request to revise Condition No 7. New language with this memo is included in bold underlined print.

REVISED CONDITIONS

1. CONTINGENT APPROVAL.

- ~~a. If the Board of County Commissioners vote to contingently approve the CUP, this approval is contingent upon the evaluation of the results of the pre-dredging report to be prepared by an independent 3rd party consultant.~~
- ~~b. The County Commission will contract with a 3rd party independent consultant, to conduct the necessary studies and prepare the pre-dredging report following the execution of an agreement between the property owner and the County Commission which specifies that the property owner shall reimburse the County Commission for the expense following completion of a pre-dredging report which is accepted by the County Engineer. This agreement shall be executed and recorded prior to the commencement of work on the pre-dredging report.~~

c. The Conditional Use Permit will be returned to the County Commission following the completion of the pre-dredging report. Based on the results of the pre-dredging report and the recommendations of the consultant, the Commission may take one of the following actions:

- 1) Approve the CUP with revised conditions,
- 2) Approve the CUP with additional conditions,
- 3) Withdraw the contingent approval of the CUP.

2. **PRE-DREDGING REPORT.**

a. The independent 3rd party consultant shall provide a pre-dredging report to the County Engineer for review. The CUP will be placed back on the County Commission's agenda for discussion of the results of the pre-dredging report and recommendations provided by the 3rd party consultant. The County Commission may revise the conditions of the CUP based on the results of this report. The pre-dredging report shall:

b. Determine the potential zone of influence through the following steps:

- i. Take field measurements to determine the current groundwater table and flow direction.
- ii. Determine the anticipated maximum dewatering influence from maximum rate of sand and water extraction, evaporation, and any other water consumption. The information provided should include the proposed rate of sand and water extraction or taking from the pond while recognizing the recycling of water. (Page 5 of Conestoga-Rovers Assoc.'s independent review report explains that this assessment could be completed based on existing information.)
- iii. The results and an exhibit of the potential zone of influence shall be included with the pre-dredging report.

c. Confirm existing groundwater and/or soil quality to ensure there is no significant contamination from existing site area and operations, including an initial environmental site assessment (ESA) of potential sources and existence of contamination (if an ESA has not already been conducted) through the following:

- i. Installation and sampling of groundwater wells in down-gradient area in locations approved by the County Engineer.
- ii. Soil assessment to determine suitability of soils for placement below water with reclamation.
- iii. The results shall be included in the pre-dredging report.

The County Engineer will determine if further investigation and remedial actions are necessary based on the results. Should potential contaminant sources be identified during the ESA process, the test pits shall be installed and additional soil testing shall be conducted per the County Engineer's recommendation.

- d. Establish baseline water quality and quantity conditions within potential zone of influence through a private water well survey of both up-gradient and down-gradient wells. Such survey is subject to landowner access permission. This information shall be included in the pre-dredging report.
 - e. Determine the location and number of groundwater monitoring wells to be installed by the applicant. The location of these wells must be approved by the County Engineer and an exhibit showing their location included in the pre-dredging report.
3. The applicant shall prepare and submit a fuel/chemical handling and spill response plan for the County Engineer's approval.

Ongoing conditions – Best Management Practices and Precautionary Measures:

(these conditions are to be listed on the CUP plan)

4. Document the sand production levels and effective water consumption on an annual basis to aid in interpretation of monitoring data. Provide an annual report to the Zoning and Codes Department.
5. Monitor groundwater levels in adjacent private water supply wells (subject to property owner's permission) within the potential zone of influence on a quarterly basis. This information shall be provided to the Zoning and Codes Department in a quarterly report.
6. Monitoring of groundwater levels in monitoring wells on a quarterly basis. (In early years, monitoring while extraction is occurring in the NW part of the site will help confirm the zone of influence.) This information shall be provided to the Zoning and Codes Department in a quarterly report.
 - a. If any changes are determined in the potential zone of influence, adjustments will be made to the monitoring wells as deemed necessary by the County Engineer.
7. Install berms along the perimeter of the pit to prevent runoff from entering the pit.
8. The Zoning and Codes Department shall be notified if any fill import is proposed throughout the operation of the pit. Any fill import must be sampled and analyzed for chemical suitability and the results provided to the Zoning and Codes Department for approval prior to installation.

9. Remediate/report any spills in accordance with the fuel/chemical handling and response plan.
10. Continue river bank monitoring along the east bank of the KS River. Extend monitoring points north to the point the river bends from north to east, and also extend monitoring points east from the river bend along the north side of applicant's property. The locations of these monitoring points shall allow for surveying the river bank along the west and north sides of applicant's property. The river bank along the west and north side of applicant's property shall be surveyed by a licensed land surveyor following all overbank flooding events lasting more than one week in duration, and the results of the survey shall be conveyed to County Engineer.
11. The applicant will be responsible for the cost of any mitigation measures needed, as determined by County Engineer, as a result of river bank movement on applicant's property. The cost of mitigation includes the cost of engineering design of the mitigation measures as well as the construction cost of the measures. Any mitigation measures are subject to USACE-KCD approval.
12. The revetment in the northwest portion of property breached in 1993 shall be studied by a competent engineer experienced in fluvial geomorphology hired by the applicant, and removed or modified and additional revetments on the east bank shall be installed following river engineering study if the County Engineer, the United States Army Corps of Engineers-Kansas City District (USACE-KCD), and other permitting agencies find the changes appropriate. The applicant shall hire the engineer, and the study shall be commenced, prior to any excavation for the sand pit.

Other Conditions:

13. The approval is contingent upon the issuance of all State and/or Federal permits which are required for this operation.
14. An affidavit designating responsibility for the ongoing maintenance of the berms and lake to the property owner and outlining the ongoing maintenance and protection measures shall be executed and recorded with the Register of Deeds prior to the release of the CUP plans to the Zoning and Codes Office. This affidavit shall note that the future use of the lake will be 'private recreation' and that no boats with larger than 10 horsepower engines will be permitted on the lake. The removal of these restrictions would require approval of a Conditional Use Permit. A copy of the affidavit shall be provided to the Planning Office for the file.

With the transfer of property ownership of any land containing the water feature or surrounding berms, the new owner shall file a maintenance bond, or similar protection means acceptable to the Board, to insure maintenance/protection of the berms and water feature.

- ~~15. A copy of the easement for the off-site access drive shall be provided to the Planning Office for the file prior to the release of the CUP plans to the Zoning and Codes Office.~~
16. The applicant shall obtain a Flood Plain Development Permit from the Director of Zoning and Codes prior to the release of the CUP plans.
17. The reclamation plan shall be revised with the following changes prior to release of the CUP plans:
 - a. The plan shall note the requirement that the lake that is being created will have a varied shoreline and will appear natural in appearance.
 - ~~b. The plan shall note that the intended use of the lake, when mining and reclamation is complete, is to be a private recreational feature and note that boats with larger than 10 horsepower engines will not be permitted on the lake. The removal of these restrictions would require approval of a Conditional Use Permit.~~
 - ~~c. The plan shall note the maximum slope of the lake shoreline for a specified depth to insure that the slopes are of a grade that it would be possible for a person or animal that accidentally entered the lake to exit.~~
 - ~~d. The plan shall explain the sequential nature of the reclamation process; that overburden produced in one phase will be used to reclaim previously excavated areas.~~
 - e. The reclamation plan shall note that topsoil will be placed over the overburden in areas that are to be reclaimed as farmland, shoreline, or berms. ~~If topsoil is to be stockpiled and stored it must be vegetated to prevent erosion.~~
 - ~~f. The reclamation plan shall be revised to reflect the increased setback and vegetated riparian buffer required on the north/northwest side of the property and the reduced area on the south, with Phase 20 being the final phase.~~
18. The applicant shall submit a revised CUP plan with the following changes:
 - ~~a. The additional setback and vegetated riparian buffer area shown on the north/northwest corner of the property per the County Engineer's approval.~~
 - i. The applicant will develop a general landscaping plan for the buffer area with assistance of the KS Forestry Service and/or the United States Army Corps of Engineers-Kansas City District (USACE-KCD) and provided with the CUP plan. The buffer area vegetation shall be planted and maintained per this plan.
 - ii. The general landscape plan must be approved prior to the release of the CUP to the Zoning and Codes Office.

- iii. Planting shall commence in accordance with the landscaping plan when the weather is appropriate and shall be completed prior to any earthmoving occurring in the CUP area.
- b. ~~The sand pit will terminate with Phase 20* with no dredging activities to occur south of this phase. The CUP plan shall be revised to reflect the reduced area of the sand pit. The operation plans shall also be revised to reflect the reduced area of the sand pit and the additional buffer area.~~ (Revision proposed. See discussion following this list of conditions.)
- c. ~~A detailed landscaping plan for the buffer area surrounding the McElwee house will be submitted.~~
- d. ~~The Book and Page number of the recorded easement for the off-site access road shall be noted on the CUP plan.~~
- e. ~~The ownership shall be noted as Van, LLC as well as Penny's Concrete Inc. on the CUP plan.~~
- f. ~~The on-site residential structure on the east side of the property will be shown on the CUP plan as on the reclamation plan.~~
- g. ~~If stockpiling of overburden is to occur on the subject property, the CUP or operation plan should note the maximum height and approximate location. The stockpiles should be placed as far from the existing residences as possible.~~
- h. List the following CUP conditions on the plan:
 - i. ~~Hours of operation are 6:30 AM to 6:30 PM, Monday through Friday. No removal, transfer, or placement of overburden is permitted outside these operating hours; however dredging and extraction of sand may exceed these hours when necessary.~~
 - ii. ~~A muffler system shall be installed, operated, and maintained on the dredge engine to reduce the noise levels associated with the dredging activity.~~
 - iii. ~~The approval for this Conditional Use is valid for 30 years. An extension request for the CUP must be submitted prior to the expiration date or a new CUP application must be submitted. The Zoning and Codes office shall conduct 5 year administrative reviews to insure compliance with the CUP, operation, and reclamation plans.~~
 - iv. ~~Only exterior lighting in the areas to be excavated will be the dredge lighting as required by the U.S. Coast Guard.~~
 - v. ~~The scale house, processing plant, sediment pond, and stockpile area, approved with CUP-2-2-79, will be used to serve the subject property.~~

- ~~vi. Sales of overburden, topsoil, sand or aggregate products will occur only on the portion of the property that contains the scale house on the CUP plan.~~
 - ~~vii. Truck traffic will utilize Noria Road (E 1750 Road), and is restricted from using N 1500 Road or E 1850 Road.~~
 - ~~viii. If any jurisdictional wetlands are located on the property, the applicant shall work with the Army Corps of Engineers to determine how the existing wetlands will be treated. The applicant will provide documentation to the Planning Office on the wetlands indicating whether the wetlands will be maintained on site or if they will be mitigated elsewhere. If the wetlands will be maintained on site, the operation plan will be revised to include the protection measures and the property owner shall submit a revised CUP plan for administrative review/approval of the wetland setbacks. If the wetlands are to be mitigated, a revised CUP plan shall be submitted to note the removal of the wetlands.~~
19. The following improvements to nearby roads and intersections shall be completed per the County Engineer's approval before issuance of a permit for the Conditional Use*.* (Revision proposed. See discussion following this list of conditions.) :
- a. Realignment of the entrance to the sand facility so that it opposes the Noria Road intersection at N 1500 Road.
 - b. Pavement of a 100 ft long section of the site access drive just north of N 1500 Road, as recommended in the TIS.
 - c. Reconstruction of pavement in the Noria Road (E 1750 Road)/N 1500 Road intersection. The existing surfacing is likely a crushed rock base that has been chip sealed. This will not stand up to the increased truck traffic crossing N 1500 Road.
 - d. Construction of an eastbound right turn lane on Route 442 (N 1400 Road) at Route 1057 (E 1900 Road). This is mentioned as a desirable improvement in the TIS. Pavement on the existing shoulder at this location is not adequate for the projected amount of truck traffic.
20. The applicant shall install monitoring wells as recommended by an independent 3rd party consultant in the pre-dredging report. These wells shall be installed prior to the release of the Conditional Use Permit. The City of Eudora shall be allowed to monitor those wells on an ongoing basis.
- ~~21. Dredging on the subject property shall not occur concurrently with dredging on the property to the north as approved with CUP-2-2-79.~~

PROPOSED REVISIONS:

The applicant had requested revisions to Conditions 7 and 19. Condition 7 required the applicant to provide and maintain a berm around the perimeter of the property being dredged. The applicant had requested that this condition be revised to allow the installation of a concrete ditch rather than a berm. On August 23rd, the applicant rescinded their request for a revision to Condition 7 and provided the attached plans showing the berm. This updated memo removes the request to revise Condition 7 and has the updated revised CUP plans attached. The following is a discussion of the proposed revisions to Conditions 19 and 18(b):

Staff recommends revising Condition 18(b) to clarify that the southern boundary of the quarry is defined by the boundary as shown on the August 22, 2013 plan rather than the particular phase. The Conditions are listed below in bold, with the proposed revisions and staff's recommendation. Staff's recommendation is in *italics*.

Condition 7. Install berms along the perimeter of the pit to prevent runoff from entering the pit.

The applicant is requesting this condition be revised to allow the use of a perimeter ditch rather than a berm to prevent stormwater from entering the pit. The proposed ditch would be 8 ft wide and would vary in depth from 6 in to 8 ft. Pictures of a similar ditch used with the Lecompton Quarry are included in Attachment B along with a detail of the proposed ditch. This request was forwarded to the County Engineer on August 23rd for review.

Staff recommends that if the Commission moves ahead with their contingent approval based on the results of the pre-dredging report that the final approval of the CUP be deferred to provide adequate time to evaluate this proposal.

Condition 18(b) The sand pit will terminate with Phase 20* with no dredging activities to occur south of this phase. The CUP plan shall be revised to reflect the reduced area of the sand pit. The operation plans shall also be revised to reflect the reduced area of the sand pit and the additional buffer area.

The CUP plan was revised to show the dredging activities ending at the boundary of Phase 20; however, with the reduction in area the phases were revised so the previous Phase 20 is now Phase 19. The boundary of the CUP is shown on the 8.22.13 revised CUP plan and was not affected by the change in phasing.

*Staff recommends that Condition 18(b) be revised to read:
"The sand pit will terminate at the area identified as the south boundary of Phase 19 on the August 13, 2013 revised CUP plan."*

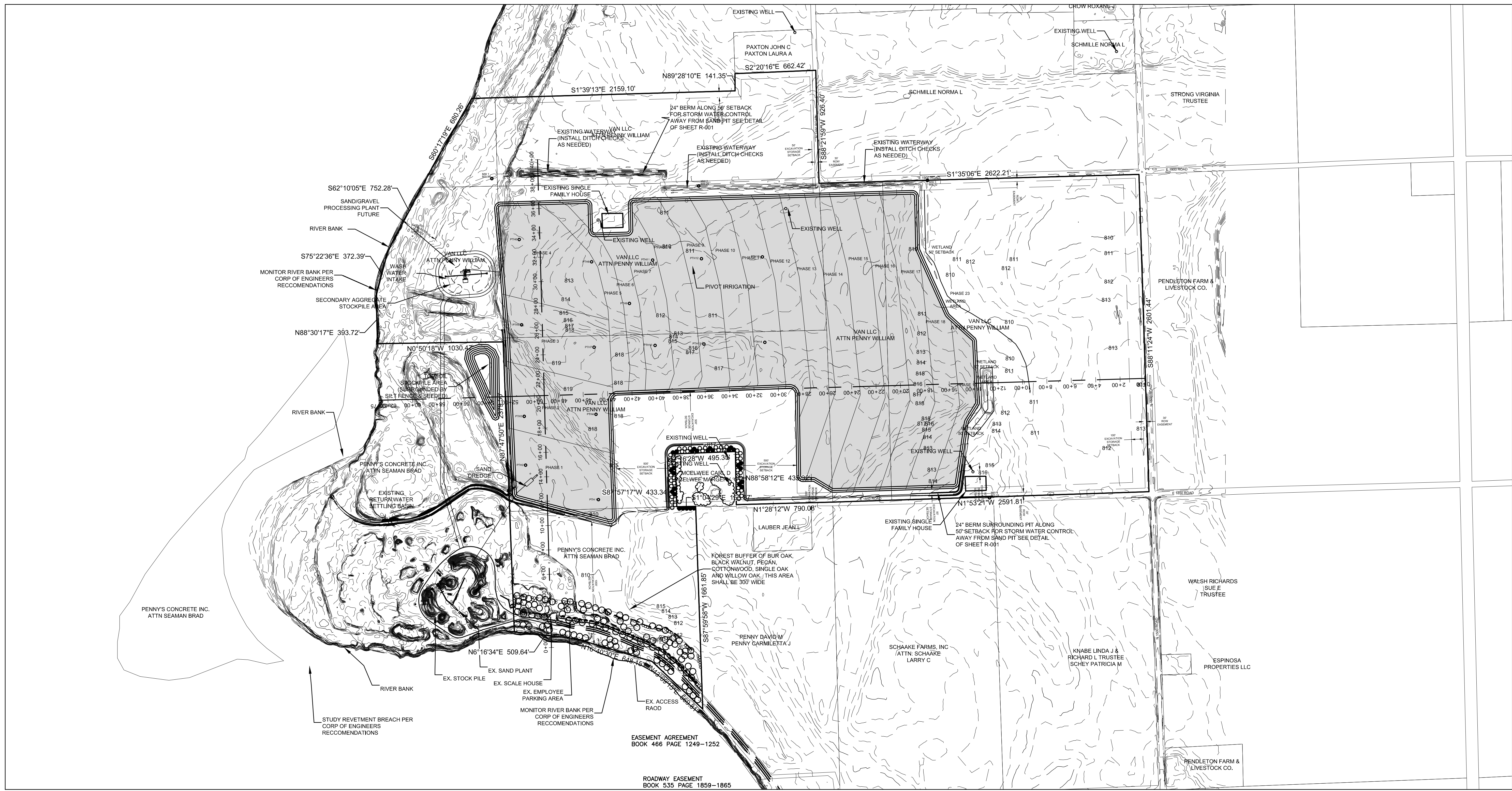
Condition 19. The following improvements to nearby roads and intersections shall be completed per the County Engineer's approval before issuance of a permit for the Conditional Use:

The applicant is working with the County Public Works Department to develop plans for the road improvements that are required with this CUP. However, for safety reasons, the roadwork may not commence until the first of November due to a pumpkin patch in the area which attracts large numbers of visitors through October. The applicant is requesting that this condition be revised to allow them to begin earthwork and preparation of the site for dredging prior to the road improvements being completed.

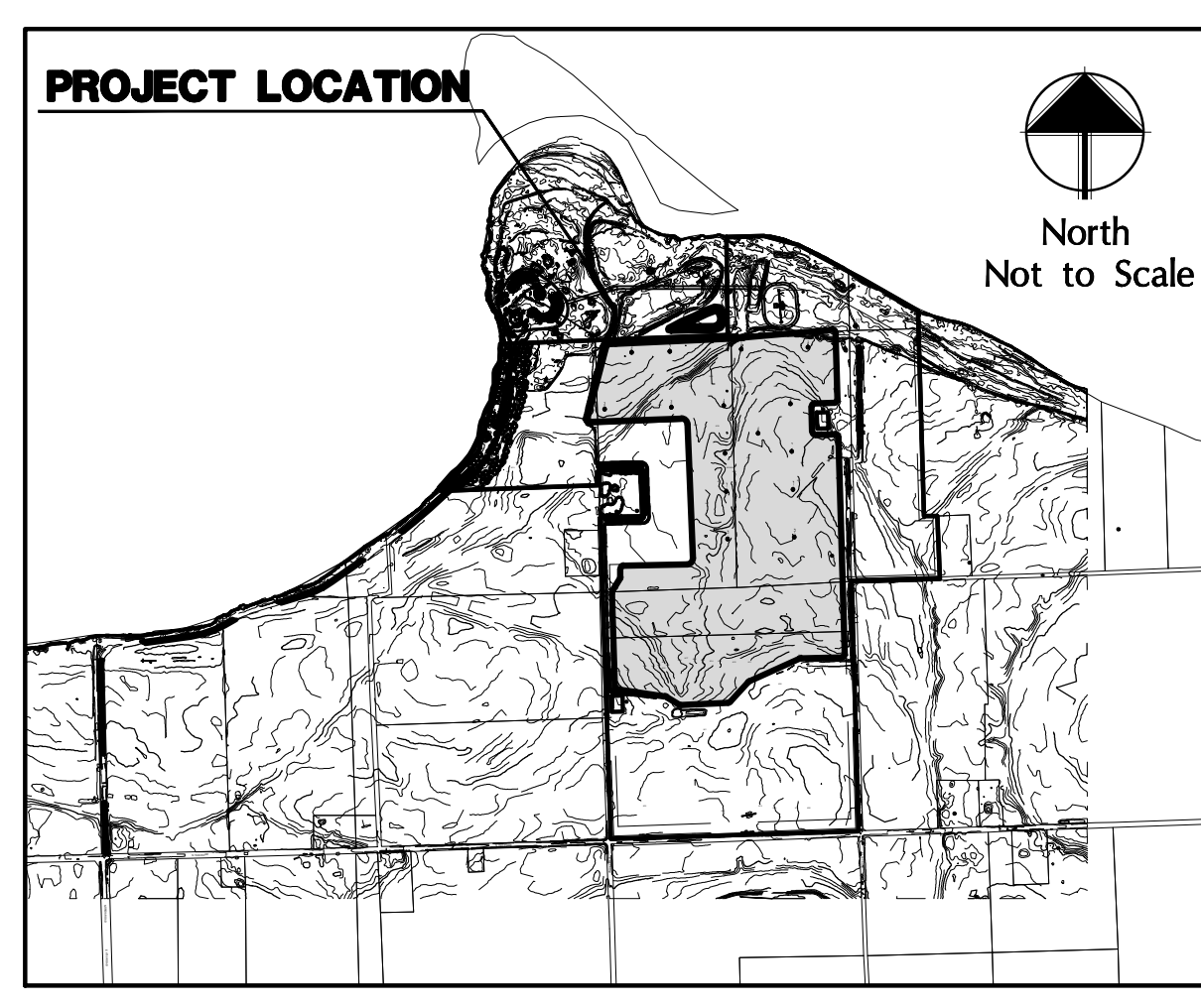
The County Engineer indicated that he had no objections to allowing the Conditional Use permit to be issued once a road improvement contract and arrangements on how Penny's will pay for the improvements are in place; but dredging activity should not commence until after road improvements are completed.

Staff recommends that Condition 19 be revised to read:

"The road and intersection improvements listed below are required with this CUP. A permit for the Conditional Use may be issued when a road improvement contract for these improvements is in place and the County has accepted Penny's arrangements to finance the improvements. Dredging activities may not commence until after the road improvements are completed."



Location Map



Legal Description

A TRACT OF LAND LOCATED IN PORTIONS OF SECTIONS 25, 26, 35 AND 36 IN TOWNSHIP 12 SOUTH, RANGE 20 EAST OF THE 6TH PRINCIPAL MERIDIAN, IN DOUGLAS COUNTY, KANSAS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF THE SOUTHWEST QUARTER OF SECTION 35, TOWNSHIP 12 SOUTH, RANGE 20 EAST; THENCE NORTH, ALONG THE WEST LINE OF SAID QUARTER SECTION TO THE CENTER OF SAID SECTION 35, THENCE NORTH ALONG THE WEST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 35, 785.00 FEET TO THE SOUTHWEST CORNER OF A TRACT RECORDED IN BOOK 307, PAGE 487; THENCE EAST 442.00 FEET ALONG THE SOUTH LINE OF SAID TRACT; THENCE NORTH 492.00 FEET ALONG THE EAST LINE OF SAID TRACT; THENCE WEST 442.00 FEET ALONG THE NORTH LINE OF SAID TRACT TO THE WEST LINE OF THE NORTHEAST QUARTER OF SECTION 35, TOWNSHIP 12 SOUTH, RANGE 20 EAST; THENCE SOUTH ALONG SAID WEST LINE, 126.40 FEET TO THE SOUTH LINE OF THE NORTH 77 ACRES OF THE EAST 134 ACRES OF THE NORTHWEST QUARTER OF SAID SECTION 35, TOWNSHIP 12 SOUTH, RANGE 20 EAST; THENCE NORTH, ALONG THE WEST LINE OF SAID EAST 11.53 ACRES, TO THE SOUTH BANK OF THE KANSAS RIVER; THENCE EASTERLY, ALONG THE SOUTH BANK OF THE KANSAS RIVER, TO THE WEST LINE OF SECTION 25, TOWNSHIP 12 SOUTH, RANGE 20 EAST; THENCE CONTINUING SOUTHEASTERLY, ALONG THE SOUTH BANK OF THE KANSAS RIVER, TO THE NORTHWEST CORNER OF A TRACT RECORDED IN BOOK 1056, PAGE 5024, SAID POINT LYING 739.2 FEET EAST OF THE WEST LINE OF THE NORTHWEST QUARTER SECTION 36, TOWNSHIP 12 SOUTH, RANGE 20 EAST; THENCE SOUTH, ALONG THE WEST LINE OF SAID TRACT, AND PARALLEL TO THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 36, TOWNSHIP 12 SOUTH, RANGE 20 EAST TO A POINT 151.78 FEET WEST OF THE NORTHWEST CORNER OF THE TRACT RECORDED IN BOOK 1000, PAGE 3430; THENCE EAST 151.78 FEET TO THE NORTHWEST CORNER OF SAID TRACT; THENCE SOUTH 660 FEET, ALONG THE WEST LINE OF SAID TRACT TO THE SOUTH LINE OF THE NORTHWEST QUARTER OF SECTION 36, TOWNSHIP 12 SOUTH, RANGE 20 EAST; THENCE WEST ALONG SAID SOUTH LINE, 890.98 FEET TO THE SOUTHWEST CORNER OF THE NORTHWEST QUARTER OF SECTION 36, TOWNSHIP 12 SOUTH, RANGE 20 EAST, ALSO KNOWN AS THE NORTHEAST CORNER OF THE SOUTHWEST QUARTER OF SECTION 35, TOWNSHIP 12 SOUTH, RANGE 20 EAST; THENCE SOUTH, ALONG THE EAST LINE OF SAID SOUTHWEST QUARTER TO THE SOUTHWEST CORNER OF SAID SECTION 35, TOWNSHIP 12 SOUTH, RANGE 20 EAST; THENCE WEST, ALONG THE SOUTH LINE OF SAID QUARTER, TO THE POINT OF BEGINNING. CONTAINS 465 ACRES, MORE OR LESS.

General Notes

- OWNER: PENNY'S CONCRETE, INC. VAN LLC
 800 EAST 8TH STREET SHAWNEE, KS 66227
 ATTN: SEAMAN BRAD ATTN: BILL PENNY
- LAND PLANNER/ENGINEER: LANDPLAN ENGINEERING, P.A. 1310 WAKARUSA DRIVE LAWRENCE, KS 66049
 - TOPOGRAPHIC INFORMATION OBTAINED FROM 2006 CITY OF LAWRENCE LIDAR AERIAL DATA.
 - EXISTING LAND USE: AGRICULTURAL
 - PROPOSED LAND USE: SAND EXCAVATION, PROCESSING PLANT AND EXTRACTION; AGRICULTURAL
 - EXISTING ZONING: A - VC
 - PROPOSED ZONING: A - VC
 - THIS SITE IS LOCATED WITHIN THE FLOODPLAIN PER FEMA MAP #20045C0203D, DATED AUGUST 5, 2010.
 - PHASE BOUNDARIES ARE ONLY AN APPROXIMATION DUE TO VARIABILITY OF UNDERGROUND DEPOSITS. SEQUENCES OF EXCAVATION MAY VARY. APPROXIMATELY 350,000 TONS TO 400,000 TON PER YEAR.
 - NO FOREIGN MATTER, RUBBISH, TREES, JUNK, SHALL BE DEPOSITED IN THE EXTRACTION AREA.
 - NO ON SITE STORAGE OF FUELS OR CHEMICALS.
 - THE ACCESS POINT AT NORIA ROAD AND N 1500 SHALL BE REALIGN AS REQUIRED BY COUNTY ENGINEER.
 - HOURS OF OPERATION 6:30 AM TO 6:30 PM MONDAY-FRIDAY.
 - THE APPROVAL FOR THIS CONDITIONAL USE IS VALID FOR 30 YEARS. AN EXTENSION REQUEST FOR THE CUP MUST BE SUBMITTED PRIOR TO THE EXPIRATION DATE OR A NEW CUP APPLICATION MUST BE SUBMITTED. THE ZONING AND CODE OFFICE SHALL CONDUCT 5 YEAR ADMINISTRATION REVIEWS TO INSURE COMPLIANCE WITH THE CUP, OPERATION AND RECLAMATION PLANS.
 - ONLY EXTERIOR LIGHTING IN THE AREAS TO BE EXCAVATED WILL BE THE DREDGE LIGHTING AS REQUIRED BY THE U.S. COAST GUARD.
 - THE SCALE HOUSE, PROCESSING PLANT, SEDIMENT POND, AND STOCKPILE AREA APPROVED WITH CUP 2-2-79, WILL SERVE THE SUBJECT PROPERTY.
 - SALES OF OVERBURDEN, TOPSOIL, SAND OR AGGREGATE PRODUCTS WILL OCCUR ONLY ON THE PORTION OF THE PROPERTY THAT CONTAINS THE SCALE HOUSE ON THE CUP PLAN.
 - TRUCK TRAFFIC WILL UTILIZE NORIA ROAD (E 1750 ROAD) AND IS RESTRICTED FROM USING N 1500 ROAD OR E 1850 ROAD.

- IF ANY JURISDICTIONAL WETLANDS ARE LOCATED ON THE PROPERTY, THE APPLICANT SHALL WORK WITH THE ARMY CORPS OF ENGINEERS TO DETERMINE HOW THE EXISTING WETLANDS ON THE PROPERTY WILL BE TREATED. THE APPLICANT WILL PROVIDE DOCUMENTATION TO THE PLANNING OFFICE ON THE WETLANDS INDICATING WHETHER THE WETLANDS WILL BE MAINTAINED ON SITE OR IF THEY MITIGATED ELSEWHERE. IF THE WETLANDS WILL BE MAINTAINED ON SITE, THE OPERATION PLAN WILL BE REVISED TO INCLUDE THE PROTECTION MEASURES AND THE PROPERTY OWNER SHALL SUBMIT A REVISED CUP PLAN FOR ADMINISTRATIVE REVIEW/APPROVAL OF THE WETLAND SETBACKS. IF THE WETLANDS ARE TO BE MITIGATED, A REVISED CUP PLAN SHALL BE SUBMITTED TO NOTE THE REMOVAL OF THE WETLANDS.
- THE FOLLOWING IMPROVEMENTS TO NEARBY ROADS AND INTERSECTIONS SHALL BE COMPLETED PER THE COUNTY ENGINEER'S APPROVAL BEFORE ISSUANCE OF A PERMIT FOR THE CONDITIONAL USE:
 - REALIGNMENT OF THE ENTRANCE TO THE EXISTING SAND FACILITY SO THAT IT OPPOSES THE NORIA ROAD INTERSECTION AT N 1500 ROAD.
 - PAVEMENT OF A 100 FT LONG SECTION OF THE SITE ACCESS DRIVE JUST NORTH OF N 1500 ROAD AS RECOMMENDED IN THE TIS.
 - RECONSTRUCTION OF PAVEMENT IN THE NORIA ROAD (E 1750 ROAD)/N 1500 INTERSECTION. THE EXISTING SURFACE IS LIKELY A CRUSHED ROCK BASE THAT HAS BEEN CHIP SEALED. THIS WILL NOT STAND UP TO THE INCREASED TRUCK TRAFFIC CROSSING N 1500 ROAD.
 - CONSTRUCTION OF AN EASTBOUND RIGHT TURN LANE ON ROUTE 442 (N 1400 ROAD) AT ROUTE 1057 (E 1900 ROAD). THIS IS MENTION AS A DESIRABLE IMPROVEMENT IN THE TIS. PAVEMENT ON THE EXISTING SHOULDER AT THIS LOCATION IS NOT ADEQUATE FOR THE PROJECT AMOUNT OF TRUCK TRAFFIC.
- DREDGING ON THE SUBJECT PROPERTY SHALL NOT OCCUR CONCURRENTLY WITH DREDGING ON THE PROPERTY TO THE NORTH AS APPROVED WITH CUP 2-2-79.
- MUFFLER SYSTEM INSTALLED, OPERATED, AND MAINTAINED ON THE DREDGE ENGINE.

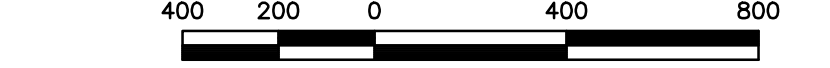
Site Summary

GROSS CUP/SITE AREA:	20,255,400 SF	465 AC
PUBLIC RIGHTS-OF-WAY:	0 SF	0.00 AC
PIT AREA:	7,253,552 SF	167 AC

Parking Summary

REQUIRED = 1 SPACE/2 EMPLOYEES; 8-10 TOTAL EMPLOYEES = 4-5 SPACES PROVIDED = 8 SPACES
 PARKING NEXT TO EXISTING SCALE HOUSE SHOWN ON CUP 06-04-08

SCALE: 1" = 400'



A CUP Site Plan for

Penny Sand Lawrence Facility

Douglas County, Kansas

Civil Engineering
 Landscape Architecture
 Community Planning
 Surveying

Landplan Engineering, P.A.
 Lawrence, KS • Kansas City, MO • Manhattan, KS
 Blue Springs, MO • The Woodlands, TX

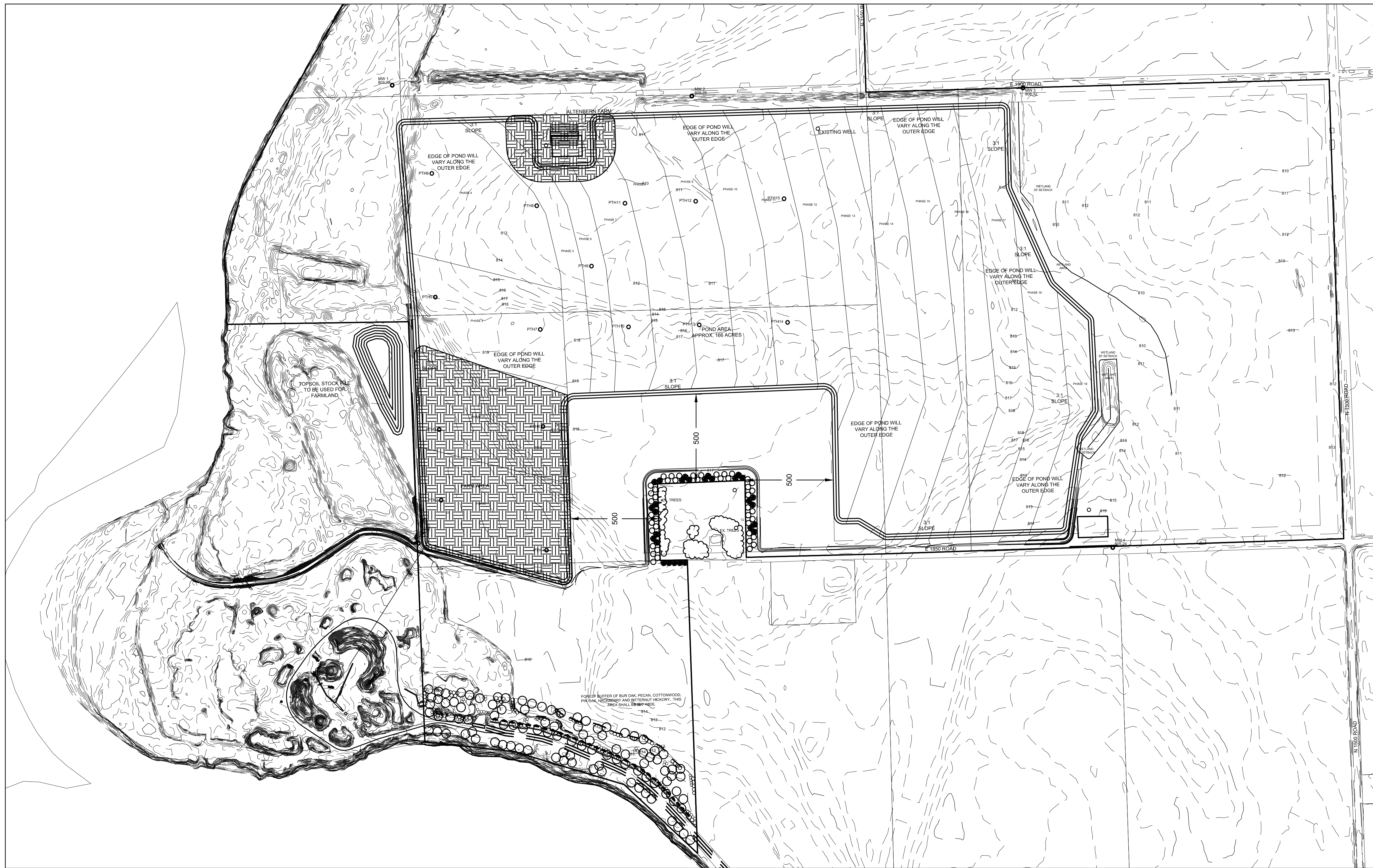
1115 Westwood Plaza
 Lawrence, Kansas 66049
 Tel: (785) 843-2410
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 Email: info@landplan-pa.com
 Web: www.landplan-pa.com

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**PENNY SAND FACILITY
 CONDITIONAL USE PERMIT
 CUP SITE PLAN**

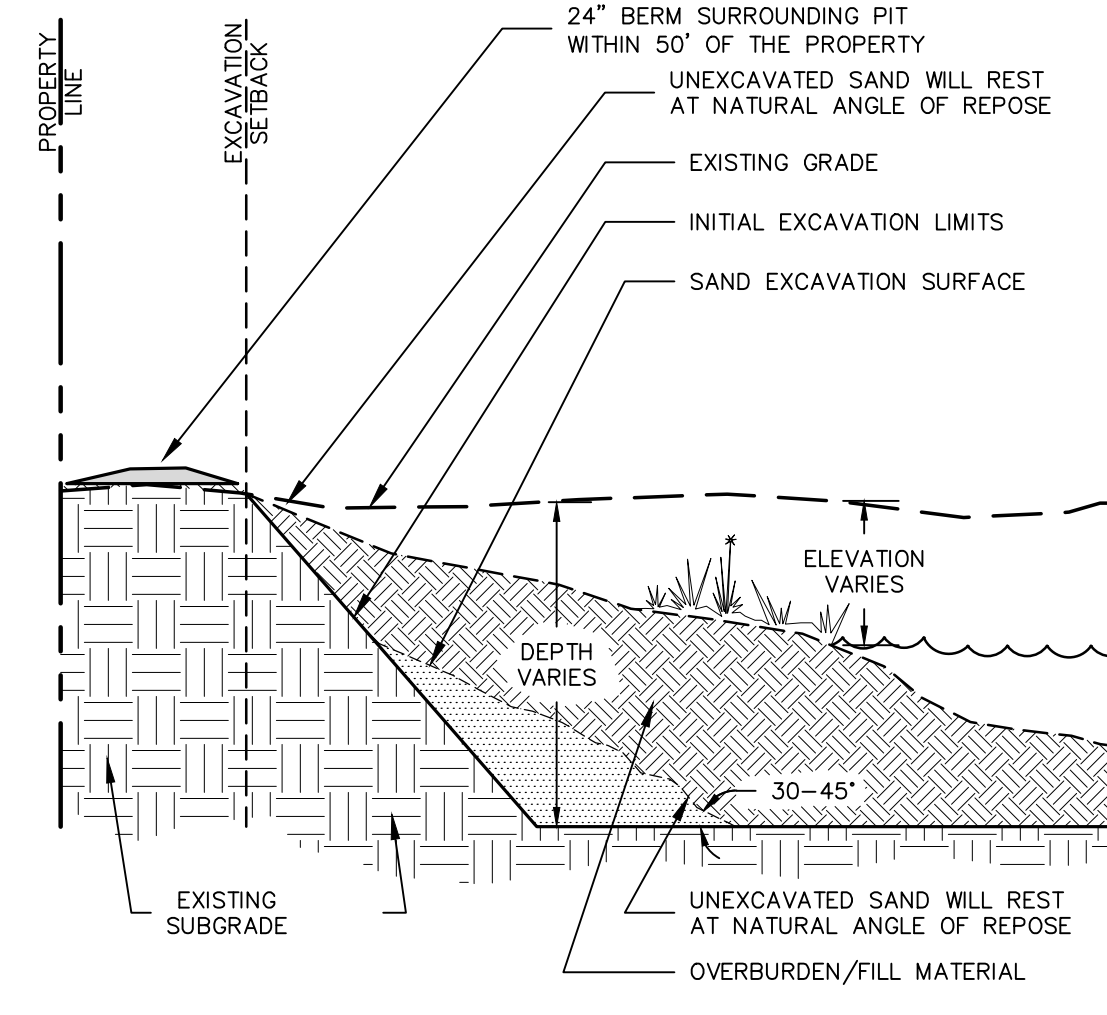
REV	DATE	DESCRIPTION
1	8/26/12	PLANNING COMMENTS
2	9/17/12	PLANNING STAFF CORRECTIONS
3	1/24/13	PLANNING NOTES
4	2/28/13	PLANNING NOTES
5	3/22/13	REVISED CONDS.
6	4/24/13	REVISED BUFFER AREA
7	8/23/13	REVISED NOTES

DATE:	7.2-12
PROJECT NO.:	20121146
DESIGNED BY:	CLM
DRAWN BY:	CLM
CHECKED BY:	CLM
ISSUE	SHEET NO.
A	C-001
OF 4 SHEETS	



Approx. Reclamation Schedule

- | | |
|---------------|-------------------|
| PHASE 1 - 4 | APPROX. 2017-2027 |
| PHASE 4 - 10 | APPROX. 2027-2037 |
| PHASE 10 - 17 | APPROX. 2037-2047 |
| PHASE 17 - 20 | APPROX. 2047-2057 |
1. RECLAMATION TIME FRAMES ARE APPROXIMATE.
 2. TIME FRAMES AND SEQUENCE OF RECLAMATION MAY VARY DUE TO VARIABILITY OF UNDERGROUND DEPOSITS AND THE DEMAND FOR MATERIALS.
 3. RECLAMATION WILL TYPICALLY BEGIN ONLY AFTER THE PERIMETER OF THE EXCAVATION HAS REACHED THE EXCAVATION LIMITS AND A SUFFICIENT LENGTH OF BANK IS READY FOR RESTORATION.
 4. A MINIMUM OF 12" OF SOIL FROM THE PROCESSING PLANT AND STOCKPILE AREAS TO BE REMOVED AND REPLACED WITH TOPSOIL, SEEDED, MULCHED AND FERTILIZED OR RETURNED TO AGRICULTURAL PURPOSES.

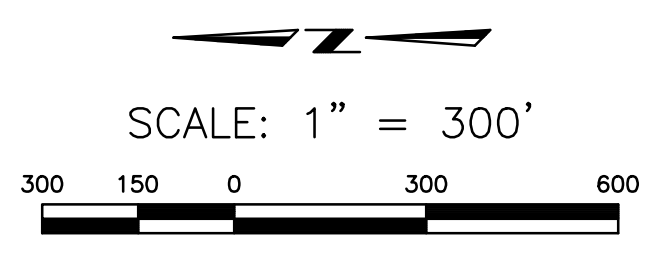


Typical Reclamation/Restoration Outer Edges of Lake

NOT TO SCALE

GENERAL NOTES

1. TOPSOIL SHALL BE REMOVED FROM THE FIRST PHASE OF THE SAND EXCAVATION AREA. THIS TOPSOIL SHALL BE STOCKPILED ON ADJACENT PROPERTY. THE CONCRETE DITCH SHALL BE INSTALLED AROUND THE PERIMETER OF THE PIT.
2. AS THE EXCAVATION OF SAND MOVES ALONG THE PHASES THE TOPSOIL SHALL BE STOCK PILED AND THE OVERBURDEN WILL BE MOVED AND PLACED IN PREVIOUS EXCAVATED AREA. THE TOP 18" TO 24" OF THIS AREA WILL HAVE TOPSOIL PLACED AND THIS AREA WILL BE USED AS FARM LAND.
3. OVERBURDEN WILL BE PLACED ON THE EDGE OF THE POND THIS AREA WILL VARY THE SHORELINE. THE SHORELINE SHALL BE 3:1 IN DIFFERENT AREAS. THIS ALL DEPENDS ON THE AMOUNT OF OVERBURDEN.
4. TOPSOIL STOCKPILED AND STORED MUST BE VEGETATED TO PREVENT EROSION.
5. THE INTENDED USE OF THE LAKE WILL BE A PRIVATE RECREATIONAL USE. BOATS WITH LARGER THAN 10 HORSEPOWER ENGINES WILL NOT BE PERMITTED ON THE LAKE. REMOVAL OF THESE RESTRICTIONS WOULD REQUIRE APPROVAL OF A CONDITIONAL USE PERMIT.



A Reclamation Plan for Penny Sand Lawrence Facility

Douglas County, Kansas

Civil Engineering
Landscape Architecture
Community Planning
Surveying

1115 Westwood Plaza
Lawrence, Kansas 66049
Tel: (785) 844-2410
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Landplan Engineering, P.A.
Lawrence, KS • Kansas City, MO • Manhattan, KS
Blue Springs, MO • The Woodlands, TX

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PENNY SAND FACILITY CONDITIONAL USE PERMIT RECLAMATION PLAN

REV	DATE	DESCRIPTION
1	9.17.12	POND SIZE
2	1.24.13	PLANNING STAFF COMMENTS
3	2.28.13	PLANNING COMMENTS
4	3.22.13	REVISED CONDS.
5	4.24.13	TOPSOIL NOTES
6	8.23.13	REVISED NOTES

DATE:	7.2.12
PROJECT NO.:	20121146
DESIGNED BY:	CLM
DRAWN BY:	CLMRK
CHECKED BY:	CLM

ISSUE	SHEET NO.
A	R-001

August 27, 2013

The Honorable Board of County Commissioners of Douglas County Kansas
1100 Massachusetts
Lawrence, Kansas 66044

Dear Commissioners,

At the regularly scheduled meeting of the City Commission of the City of Eudora on August 26th, 2013, the Commission voted unanimously to send this letter strongly opposing the proposed Conditional Use Permit final approval for the proposed Penny's Sand excavation and extraction facility near N 1500 Road/E 1850 Road.

As you know, the City has been very concerned about this sand pit dredging operation since it was first proposed. Our concerns primarily relate to the potential harm to the City's water wells that may be caused by the infiltration of pollutants as a result of this operation. We have heard from scientists as well as neighbors who have expressed serious concerns about this operation's effect on their quality of life as well as the City's future water supply. We take these concerns of our citizens very seriously.

We are aware of and have reviewed the Conestoga Rovers (CRA) report, particularly the findings which apparently conclude that the sand pit operation will not adversely affect the City's water supply. Based on scientific testimony we have received from Dr. Carl McElwee, Edward T. Marks with Terrane Resources, and officials with substantial credentials from water association interests, we disagree with the CRA report's major conclusions about impacts to our water supply. For reasons better explained by these experts, and we know Dr. McElwee will be providing testimony at your meeting, it is our belief that much of the methodology and testing conducted by CRA is fundamentally flawed, incomplete, or not appropriate for the function being tested. We therefore have concluded that we have no confidence in the report's findings and conclusions.

We, as the City Commission, firmly believe that the potential for permanent harm to the City's water supply in the next 5 to 7 years far outweighs any economic benefit to be derived in the short term from this operation. The potential for adverse impacts to the City's water supply in the long term, well after this potential operation has concluded, further compels us to recommend denial of this application in the strongest possible terms.

Representatives of the City plan to attend the meeting on August 28th, and will attempt to address any questions the Commission may have regarding the City's position on this most important matter.

Sincerely,

The Eudora City Commission

Ruth Hughs, Mayor