PUBLIC NOTICE

US Army Corps of Engineers
Rock Island District

Applicant: Mr. Chris Bowersox

Date: September 30, 2004

Expires: October 29, 2004

CEMVR-OD-P-2004-57

Section: 404

Joint Public Notice
US Army Corps of Engineers
Iowa Department of Natural Resources

1. Applicant. Mr. Chris Bowersox, 1311 Falcon Avenue NW, Swisher, Iowa, 52338-9786.

2. Project Location.

Site #1: Section 19, Township 84 North, Range 9 West, near Shellsburg, Benton County, Iowa; Wildcat Creek.

Site #2: Section 27, Township 84 North, Range 9 West, near Shellsburg, Benton County, Iowa; unnamed tributary of Little Bear Creek.

3. Project Description. The applicant proposes to channelize two meandered streams on separate farms. The Corps of Engineers performed onsite visits to both sites, on July 28, 2004, to gather information and to determine if wetlands are present. No wetlands were found along the active flowing channels or in the vicinity of the proposed excavated channels.

Site #1 Existing Conditions. The existing stream channel is a natural channel which meanders through and along a woodland corridor. The presently active channel flows generally along the south edge of the woodland corridor. The woodlands, north of the active stream channel, contain a network of old channels and oxbows, and likely include wetlands. These areas will not be disturbed. The length of stream channel in the project area is 4200 feet. The active stream channel has a bottom width of 12 to 20 feet. Bank height from streambed to top-of-bank is 6 to 8 feet. Top width is 30 to 50 feet. The bank slope averages 1.67 (horizontal) to 1 (vertical). Severe bank erosion and lateral migration is occurring along the stream bends. The majority of the stream meanders are migrating south into the grassed buffer strip and adjacent cropland. Several sharp bends have migrated into the toe of the sideslope where the exposed banks are 8 to 10 feet high. One sharp bend had migrated into the sideslope where the exposed bank is 20 feet high. There are generally seven (7) major, right turning, meanders migrating southward throughout this reach of stream. The stream has numerous pools and riffle complexes throughout this reach. At the time of the site visit, the entire reach of Wildcat Creek, on this farm, was heavily populated with small fish including adults, young, and hatchlings. Depositions, composed of silt, fine sand, and small gravel, were serving as hatcheries from which hatchlings were then emerging. The woodland includes saplings, and trees 10 to 50 years old. Dominant species included Black Willow, Cottonwood, Cherry, Hackberry, Elm, Silver Maple, Mulberry, Boxelder, and Black Locust. Existing grass buffers are primarily Reed Canarygrass, mixed with Smartweed, Mint, and Bromegrass. Benton County recently replaced the bridge on 65th Street at the north (downstream) end of the project site.

Site #1 Channel Construction. The new channel will be excavated on the same general alignment as the presently active flow channel and bypassing the meandered segments. Tree removal will be minimized. The majority of the active meanders are migrating southward into the cropland. The new channel will be approximately 3000 feet long. The net loss of stream channel is 1200 feet. This represents a 28% reduction in channel length. The new channel will have a bottom width of 12 to 20 feet, bank height of 6 to 8 feet from channel bottom to top-of-bank, and bank slope no steeper than 2 (h) to 1 (v). Top width will be 40 to 52 feet. Excavated soil material will be placed in the bypassed meanders south of the new channel. These bypassed meanders will be filled to the surface and graded to

blend with surrounding topography. The old channels, oxbows, wetlands and woodland corridor, on the north side of the new channel will not be disturbed. Rock riffles will be installed as needed or as required. Rock riffles will be constructed of quarry rock, clean broken concrete, or field stone. The banks of the new channel will be seeded to establish permanent grass cover. Permanent grassed buffer strips will be reseeded and re-established along the south side of the new channel. Disturbed areas along the north side of the new channel will be seeded to re-establish vegetative cover for erosion control.

Site #2 Existing Conditions. The existing stream is a small stream which flows for a long duration during the majority of the season. On the project site, the stream flows through farmland. Immediately downstream, the stream flows through a woodland corridor and outlets into Little Bear Creek approximately ¼ mile from the project site.. The length of the stream channel in the project area is 2000 feet. The existing streambed is narrowly incised approximately 4 feet wide. Depth from top-of-bank to streambed is 8 to 10 feet. Top width is 20 to 25 feet. The banks are generally 1 (horizontal) to 1 (vertical). The majority of the banks are grass covered. The grassed buffer on the north side of the channel is generally 25 feet wide. The grass buffer on the south side is narrowed less than 25 feet wide. The buffers are Reed Canarygrass, Bromegrass, and other vegetation. Lateral migration of the channel has been moderate, and has stayed within the existing grass buffers. The meanders are short and abrupt. The severest problem is the streambed has been downcutting resulting in bank undercutting and sluffing, and lateral gullies advancing through the grass buffers into the cropland. As streambed downcutting continues, bank sluffing and channel meandering will advance into the cropland. Downstream of the project site, in the woodland corridor, the streambed downcutting has been less severe. Normal streambed width is 6 to 8 feet.

Site #2 Channel Construction. Channel excavation work will be on the same general alignment as the existing stream. The overall length of the excavated channel will be 1800 feet. The net loss of stream channel will be 200 feet. This represents an 11% reduction in channel length. Streambanks will be regraded no steeper than 2 (h) to 1 (v). Streambed width will remain at 4 feet or may be widened, to a 6 to 8 foot width, depending on the topography. Depth will remain at 8 to 10 feet. Top width of the channel will be 38 to 48 feet. Sharp bends will be realigned where needed. Rock riffles will be installed in the stream channel as needed or as required. Lateral gullies will be backfilled with soil from the channel excavation, and reshaped as grassed waterways. Grade stabilization structures may be needed to stabilize the lateral waterways. This may include applying blanket riprap over the waterway outlet, or constructing rock or block chutes at the waterway outlet. The graded channel banks, buffers, and lateral waterways will be seeded to re-establish permanent grass cover.

4. Agency Review and Where to Reply.

a. Department of the Army, Corps of Engineers. The Department of the Army application is being processed under the provisions of Section 404 of the Clean Water Act (33 U.S.C. 1344).

b. State of Iowa. The project plans have been submitted to the Iowa Department of Natural Resources for state certification of the proposed work in accordance with Section 401 of the Clean Water Act. The certification, if issued, will express the Department's opinion that the proposed activity will comply with Iowa's water quality standards (Chapter 61 IAC). The applicant has also applied for authorization of work in the floodplain pursuant to Chapter 455B of the Iowa Code and other applicable state permits. Written comments concerning possible impacts to waters of Iowa should be addressed to: Iowa Department of Natural Resources, 900 East Grand Avenue, Des Moines, Iowa 50319. A copy of the comments should be provided to the Corps of Engineers office (see paragraph 11. of this public notice for address).

5. Historical/Archaeological. The Corps consulted with the State of Iowa geographic information systems (GIS) archeological site and survey databases as maintained by the Office of the State Archaeologist of Iowa and the State Historical Society of Iowa and current as of May 2004. No archaeological sites are located in the permit area although the very southwestern portion of the Site #1 permit area has been surveyed previously with negative results (State Historical Society of Iowa R&C #900400076. The permit is for creek straightening which is confined to these two active meanderbelts and has low potential for intact cultural resources. The Corps has determined that no historic properties are affected by issuance of this permit based upon the fact that “the nature, scope, and magnitude of the work, and/or structures to be permitted are such that there is little likelihood that a historic property exists or may be affected” (33 CFR Part 325, Appendix C.3.b).

6. Endangered Species. District staff have performed a preliminary review of this application for the potential impact on threatened or endangered species pursuant to Section 7 of the Endangered Species Act as amended. Benton County is within the breeding range of the Threatened species, Bald eagle (*Haliaeetus leucocephalus*). However there are no known nests, or critical habitat, within the project sites. Based upon the information provided and available at this time, our preliminary determination is that the proposed activity is not likely to adversely affect any federally-listed endangered or threatened species or critical habitat. While no consultation has been initiated with the United States Fish and Wildlife Service (FWS) at this time, we are further coordinating this application with the FWS and the respective resource agencies through this public notice. Accordingly, our preliminary determination is subject to change should further information become available.

7. Dredge/Fill Material Guidelines. The evaluation of the impact of the proposed activity on the public interest will also include application of the guidelines promulgated by the Administrator of the United States Environmental Protection Agency under authority of Section 404(b) of the Clean Water Act (40 CFR Part 230).

8. Public Interest Review. The decision whether to issue the Corps permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

9. Who Should Reply. The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity. These statements should be submitted on or before the expiration date specified at the top of page 1. These statements should bear upon the adequacy of plans and suitability of locations and should, if appropriate, suggest any changes considered desirable.

10. Public Hearing Requests. Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. A request may be denied if substantive reasons for holding a hearing are not provided.

11. Reply to the Corps. Comments concerning the Corps permit should be addressed to the District Engineer, US Army Corps of Engineers, Rock Island District, ATTN: OD-P, Clock Tower Building - Post Office Box 2004, Rock Island, Illinois 61204-2004. **Mr. Marlyn W. Schafer (309/794-5377)** may be contacted for additional information (email: marlyn.schafer@usace.army.mil).

Attach
Plan

Marlyn W. Schafer
Project Manager
Regulatory Branch

REQUEST TO POSTMASTERS: Please post this notice conspicuously and continuously until the expiration date specified at the top of page 1.

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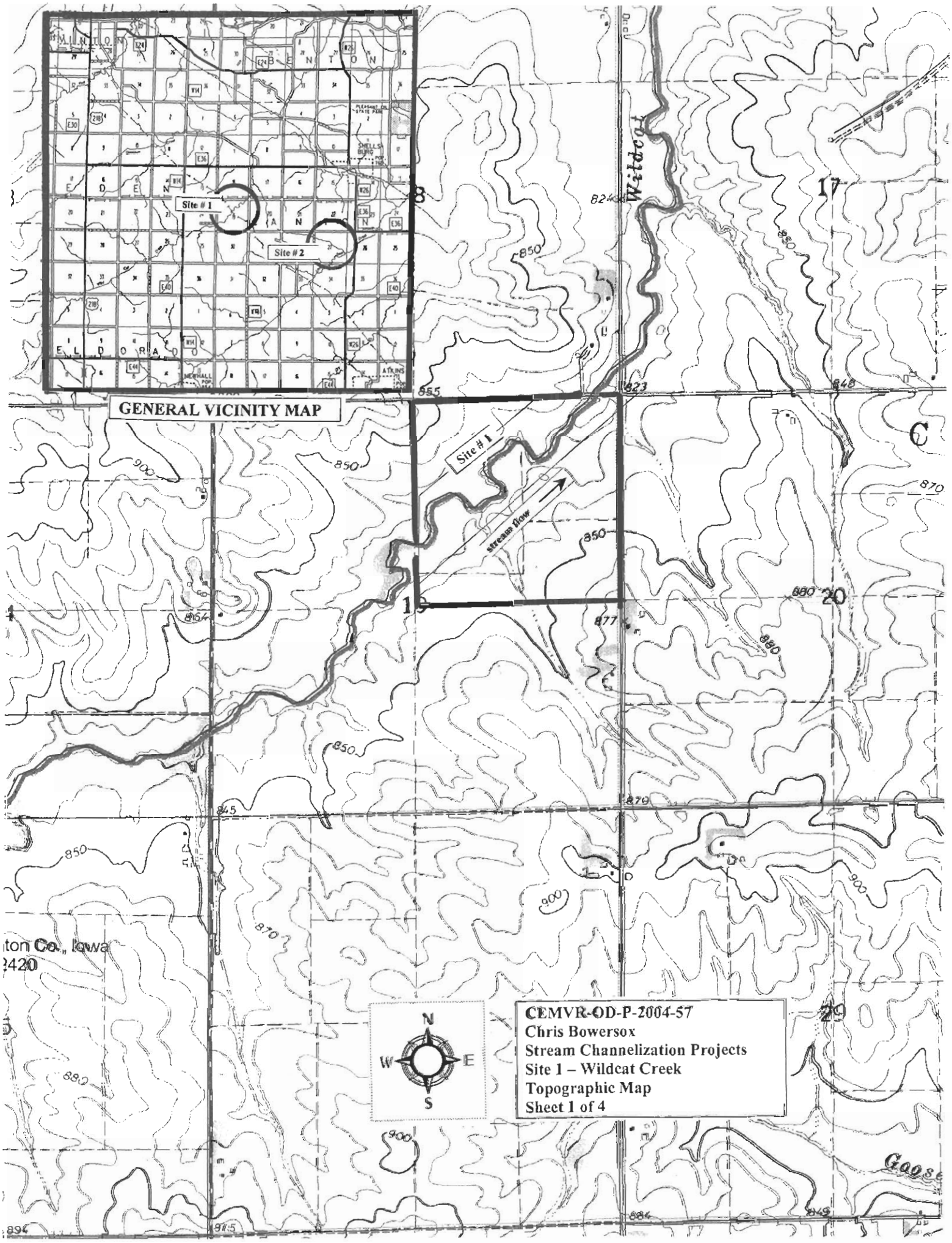
GENERAL VICINITY MAP
Site # 1
Site # 2
Wildcat
Site # 1
stream flow
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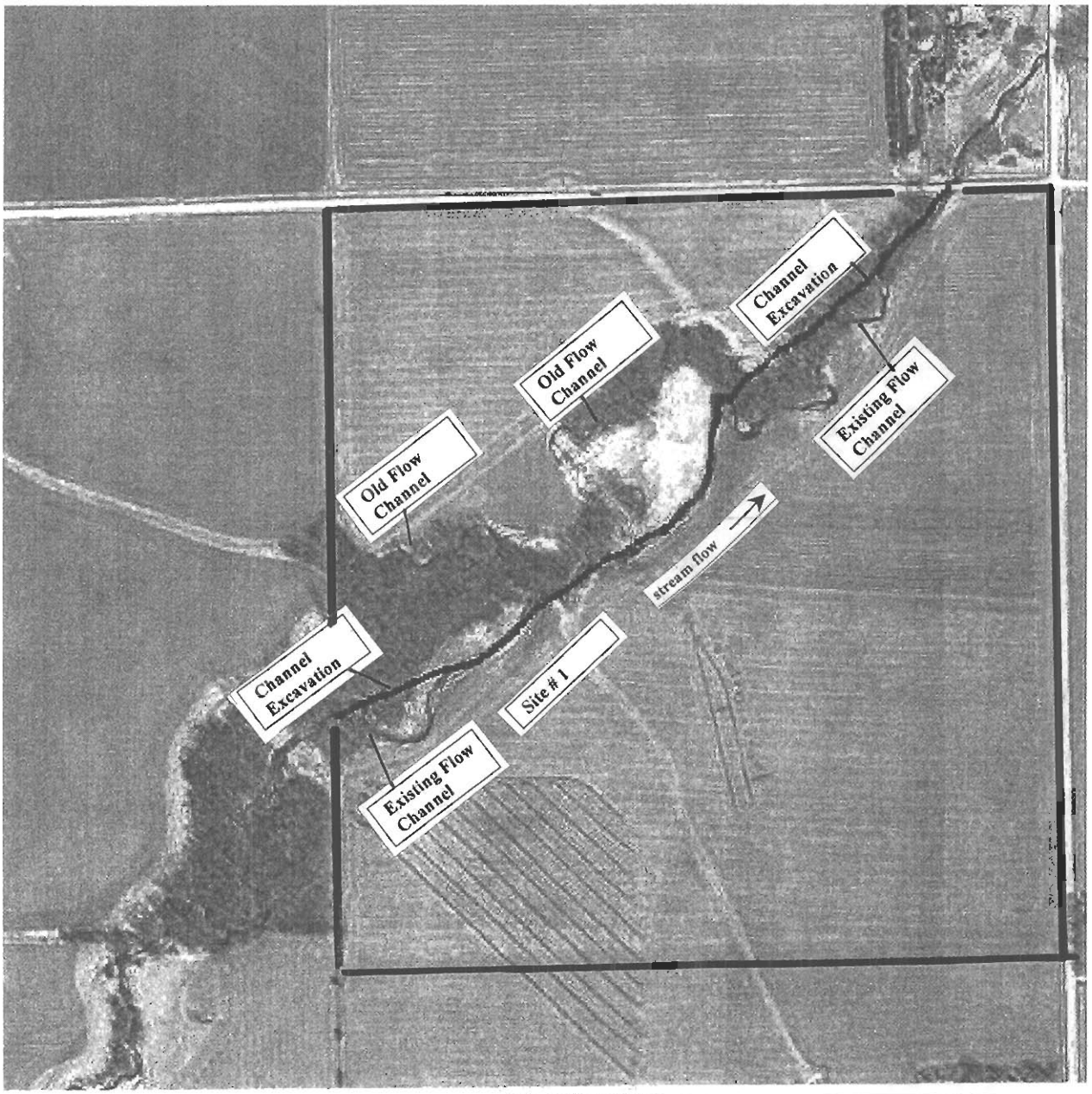
CEMVR-OD-P-2004-57
Chris Bowersox
Stream Channelization Projects
Site 1 – Wildcat Creek
Topographic Map
Sheet 1 of 4



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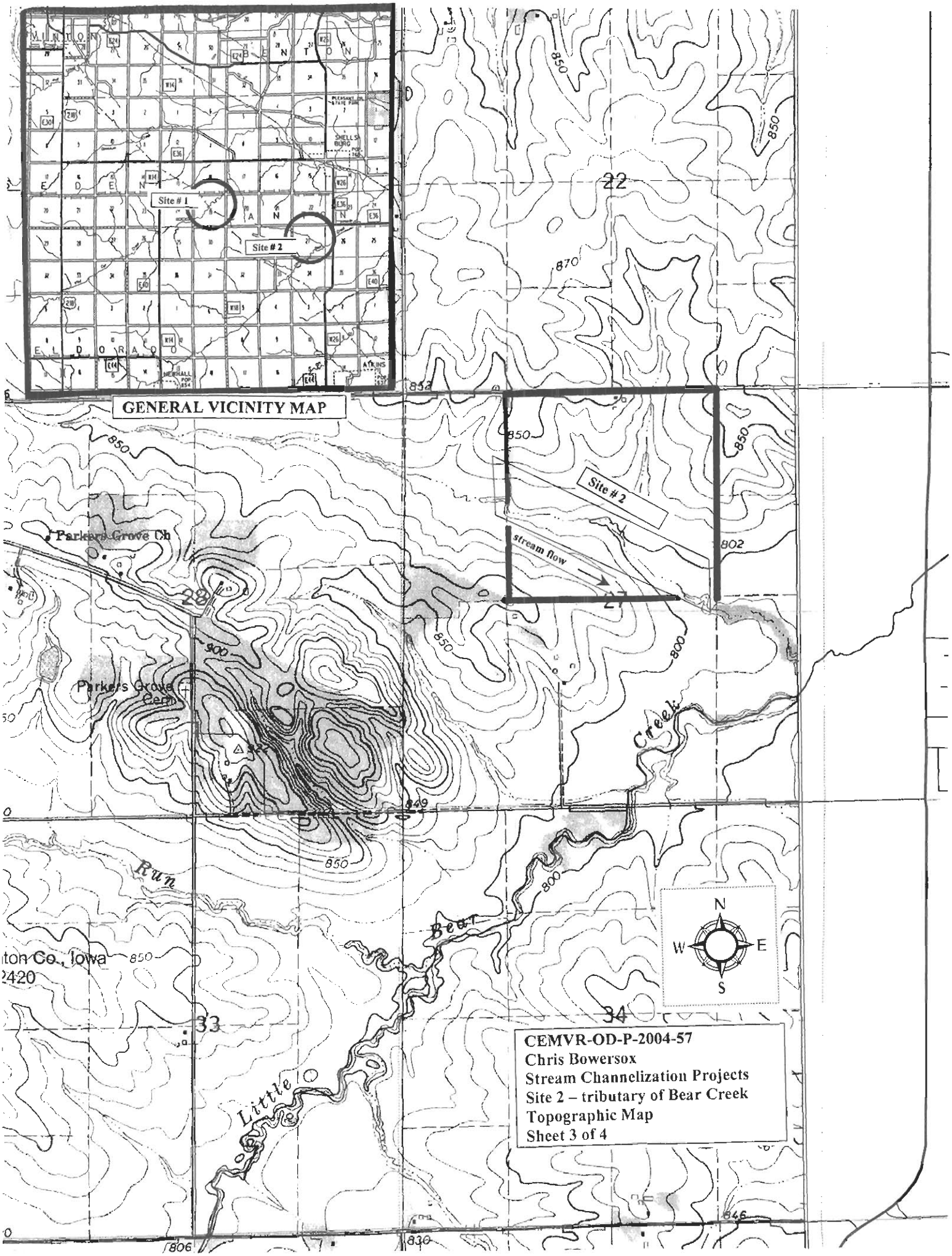
Stream Channelization Projects
Site 1 – Wildcat Creek
Aerial Photo
Sheet 2 of 4


GENERAL VICINITY MAP
Site # 1
Site # 2
Site # 2
stream flow
Parkers Grove Ch
Parkers Grove Cem
Creek
Run
Bear
Little
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2420
22
27
28
33
34
850
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800
849
806
830
846
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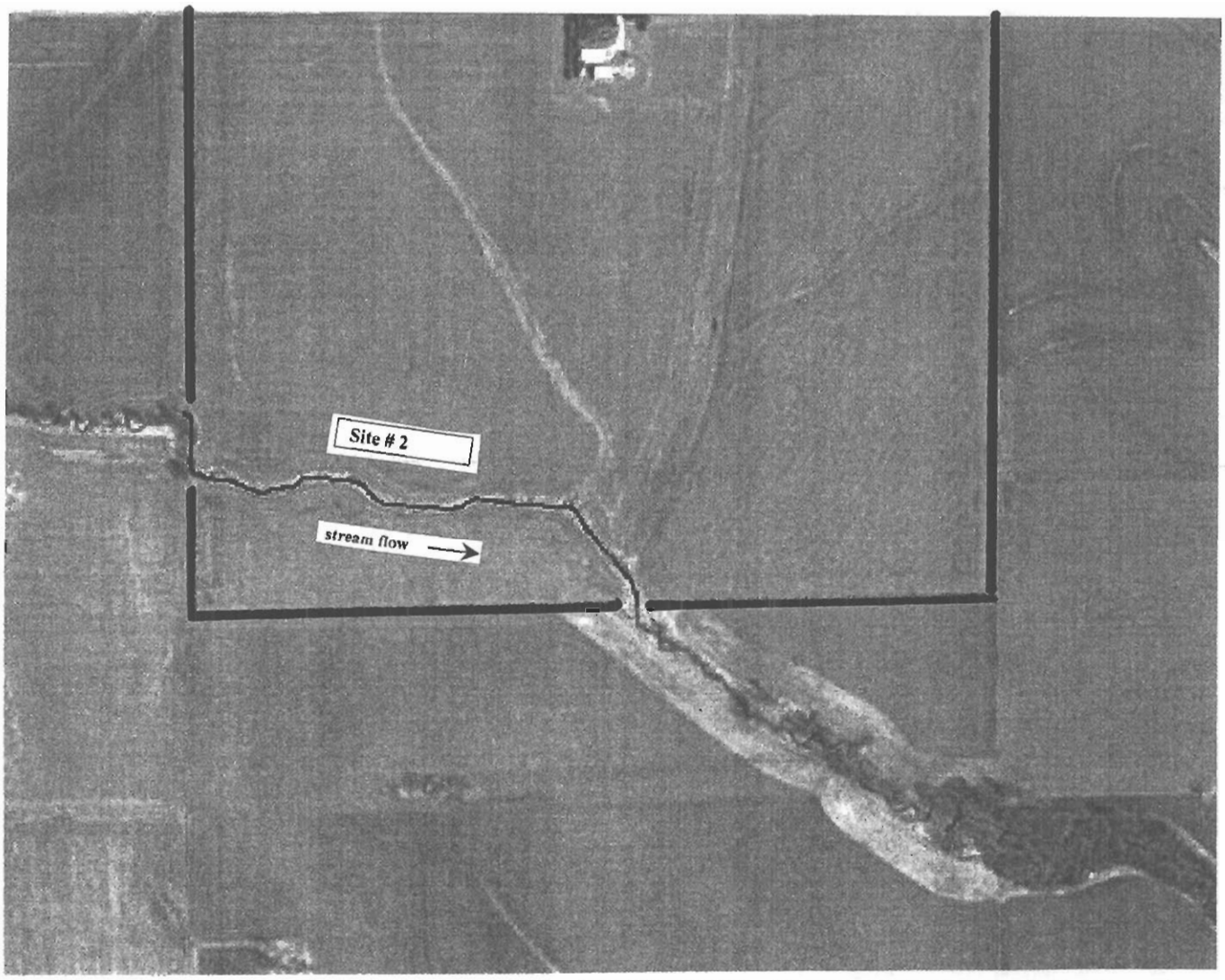
CEMVR-OD-P-2004-57
Chris Bowersox
Stream Channelization Projects
Site 2 – tributary of Bear Creek
Topographic Map
Sheet 3 of 4



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Stream Channelization Projects
Site 2 – tributary of Bear Creek
Aerial Photo
Sheet 4 of 4