SECTION 205 FEASIBILITY REPORT

ADA, MINNESOTA

WILD RICE AND MARSH RIVERS, MINNESOTA

ENVIRONMENTAL ASSESSMENT

DRAFT
ENVIRONMENTAL ASSESSMENT
ADA, NORMAN COUNTY, MINNESOTA
FLOOD RISK MANAGEMENT

INTRODUCTION

The St. Paul District, Corps of Engineers, has prepared this assessment of the environmental effects that may result from the proposed construction of flood protection measures at Ada, Minnesota. This assessment of the Corps of Engineers proposal is required by the National Environmental Policy Act of 1969 (NEPA), Council on Environmental Quality Regulations (40 CFR 1500-1508), and Corps of Engineers regulation ER 200-2-2.

PROJECT AUTHORITY

The authorization for the planning and design of the proposed actions was given in the Flood Control Act of 1948 (Public Law 80-858), as amended. This legislation allows the Corps of Engineers to provide flood protection to communities.

PROJECT LOCATION

The proposed action would be located in and around the city of Ada, Norman County, Minnesota. Ada is located in northwestern Minnesota 265 miles northwest of St. Paul, Minnesota, and 65 miles southeast of Grand Forks, North Dakota.

MAJOR FINDINGS AND CONCLUSIONS

The purpose of this environmental evaluation is to assess the impacts of various measures to provide improved flood risk management to the city of Ada in Norman County, Minnesota.

Alternatives considered to protect the city include various alignments and levels of protection and the selected plan.

An environmental review of the proposed action indicates that the project would not result in significant effects to the environment and that probable effects in the area would be short-term and minor. Therefore, an environmental impact statement will not be prepared. If the public review identifies significant issues, a revised NEPA document may be prepared. A 404(b)(1) evaluation has been prepared. A State Water Quality Certificate (Section 401) has been applied for and will be obtained before construction.

Relationship to Environmental Requirements

The proposed action would comply with Federal environmental laws, Executive Orders and policies, and State and local laws and policies including the Clean Air Act, as amended; the Clean Water Act, as amended; the Endangered Species Act of 1973, as amended; the Fish and

Wildlife Coordination Act of 1958, as amended; the Land and Water Conservation Fund Act of 1965, as amended; the National Historic Preservation Act of 1966, as amended; the National Environmental Policy Act of 1969, as amended; Executive Order 11988 - Floodplain Management; and Executive Order 11990 - Protection of Wetlands and Executive Order – 12898. The proposed action would not result in the conversion of farmland to nonagricultural uses. Therefore, the Farmland Protection Policy Act of 1981 does not apply to this project.

PURPOSE AND NEED FOR THE PROPOSED ACTION

The proposed action is necessary because the existing conditions leave the community of Ada subject to flooding from high stages on the Marsh and Wild Rice Rivers.

ALTERNATIVES

Alternatives considered for providing flood protection for the city of Ada included no action, nonstructural measures and variations of a structural plan.

No Action

The no-action alternative, or future without-project condition, depicts existing conditions in the area and assumes the continuation of existing trends. This includes the rate of housing development in the northwest part of town. Flooding blocks ingress to and egress from the city, causes isolation of the regional hospital and high school, results in discharge of untreated waste water into surrounding floodwaters, and blocks discharge of city storm sewers.

Nonstructural Alternatives

Nonstructural alternatives are measures that could include flood proofing, structure raising, relocation, ring dikes, and acquisition and demolition. Nonstructural flood control features were considered for the Ada project, but they were not found to be feasible because of their cost and because they would not prevent isolation of the city from the surrounding area nor would they prevent the interruption of wastewater treatment or stormwater discharge.

Structural Alternatives

It was determined early in the study that the disposition of Judicial Ditch (JD) 51 flows, would affect the development of all other flood risk management features. Currently, JD 51 passes through the city of Ada, where it must flow through a narrow channel adjacent to a residential area and then through a concrete underpass beneath Highway 9. The JD 51 side slopes are nearly vertical in some areas and the channel bank is sloughing. The proposed project features must include stabilization of JD 51 in its present location or relocating it to a more stable regime. All potential locations for JD 51 would encroach on farmland to varying degrees. All alignments would be equal in having minimal effects on natural resources because the project would be built where the land use is urban or agricultural. Four alignments for JD 51 were considered, as described below: Alternative 3, the most economical, was included in the selected plan.

1. Alignment 1 would follow the current alignment for JD 51.

2. Alignment 2 would follow a portion of the current alignment, and then divert JD 51 around the northeast portion of the city.

3. Alignment 3 would divert JD 51 northward, nearer to the eastern city limits.

4. Alignment 4 would divert JD 51 completely away from its current alignment.

Selected Plan

The proposed action includes: relocation of a portion of JD 51 on the northeast side of Ada, construction of a levee system designed to provide protection against the 200-year flood event and appurtenant interior and exterior drainage facilities including ponding areas, connective ditches and gated outlet structures.

a. Starting from a point approximately 600 feet east of the eastern Ada city limits, JD 51 would be diverted northwestward from its present course, through an existing agricultural field. The relocated JD 51 channel would turn northward as it nears the Norman County Maintenance facility. The relocated JD 51 would pass beneath County-State Aid Highway (CSAH 63) (210th Avenue) via three 12-foot by 12-foot box culverts and then turn westward, passing beneath Trunk Highway 9 via three additional 12-foot by 12-foot box culverts. The relocated JD 51 channel would rejoin the existing JD 51 channel near the northern Ada city limits. The portion of the old JD 51 that passes through the city of Ada would be abandoned as a judicial ditch but would still remain to handle stormwater runoff from the city of Ada. The upstream end of the abandoned ditch would be plugged near the eastern Ada city limits, where the proposed levee would cross the ditch alignment. Stormwater from the city would continue to empty into the abandoned portion of the ditch, which would be used as a temporary ponding area. A flap-gated culvert would be placed at the downstream end of the abandoned portion of the ditch where the proposed levee crosses the ditch alignment to allow for continued drainage of stormwater from the city of Ada.

b. The proposed levee system would incorporate both new and existing levees. Starting from a point on Highway 200, east of the current eastern city limits of Ada, the levee would run northward and then would turn westward, providing protection to several businesses adjacent to Highway 200. The levee would join an existing north-south levee that was constructed by the city of Ada in 1997, with additions constructed in 1998. The proposed levee would continue northward from this existing levee, where it would cross the existing JD 51 channel, effectively blocking flow from the existing JD 51 into the city of Ada. After crossing the existing JD 51 channel, the new levee would turn northwestward, running parallel and to the south and west of the newly relocated JD 51 channel, and to the east of the Norman County Maintenance facility. Near the northern city limits, the levee would turn westwards. A portion of CSAH 63 would need to be

raised and would run coincident with the levee near its intersection with Highway 9. Highway 9 would also be raised so that it crosses over the levee. From Highway 9, continuing westward, the levee would be built coincident with a roadway across JD 51. Where it crosses the existing JD 51 channel, flap-gated culverts would pass beneath the levee to allow interior flows from the city of Ada to continue to drain into the downstream portions of JD 51. Continuing westward, the levee would cross an abandoned railroad bed. The railroad bed would be ramped over the levee to allow for recreational usage. The levee would continue west intersecting 210th Avenue, a portion of which would be raised to the desired levee height. Turning southward, the levee would run near the western city limits, passing between two agricultural fields. Near the health care facility, the levee would turn west to wrap around two farmsteads located near the western city limits, adjacent to Highway 200. Highway 200 would be raised so that it crosses over the levee. South of the second farmstead, south of Highway 200, the levee would meander eastward around the new industrial park and the fairgrounds until it meets up with Jamison Road. A small portion of Jamison Road would be raised over the levee. The levee would continue east of Jamison Road, turning northward briefly to align with the existing southern levee. The existing southern levee was originally constructed in 1997, with additions constructed in 1998, 2002 and 2003. Improvements in drainage were made in 2004. The proposed levee alignment would follow this existing levee alignment, tying into high ground on the east side of an existing oxbow. This portion of the existing southern levee would have to be raised slightly, and an existing field access would have to be ramped over the levee. On the east side of Highway 9, near the southern city limits, the levee would continue from high ground at Highway 9, and would follow the existing southern levee alignment, which passes to the north of Bosworth park and south of residences along the south side of Highway 200. The height of this levee will remain essentially the same, but the slopes may be flattened in some locations to ensure stability. This existing levee currently terminates near the cemetery. An additional portion of levee will be extended around the cemetery and will wrap around the south and east side of one commercial property located on the south side of Highway 200 near the eastern Ada city limits. The levee will tie into high ground at Highway 200, east of the eastern city limits.

c. In the northwestern portion of the protected area, a sediment-filtering stormwater retention pond would be constructed. Drainage from this pond would empty into the abandoned JD 51 channel, similar to other stormwater runoff from the city.

d. The existing gravity sanitary sewer line leading from the city to the wastewater pumping station, located south of the city on Jamison Avenue, would be modified to allow for continuity of operation during flooding. This will involve construction of a sanitary sewer pumping station within the levee alignment and modification to the city's existing sanitary sewer lines to direct flows towards the new sanitary pumping station.

e. All borrow material for construction of levees and road raises would be obtained from the excavation of the new alignment of JD 51. Material in excess of construction needs would be disposed of in an isolated upland area adjacent to the old JD 51. This area

would be planted with native species that may include riparian trees. This area would then be allowed to revert to natural conditions.

f. Fill material, primarily riprap, would be placed around the outlets of nine gate wells that would convey interior drainage from inside the levee area during nonflood events.

ENVIRONMENTAL SETTING

The project area is located in northwest Minnesota near the Marsh River in the city of Ada, Norman County (Exhibit1). The existing conditions are described in the following paragraphs.

The project area, within the bed of glacial Lake Agassiz is extremely flat and, aside from stream courses, devoid of woody vegetation. Native prairie is rare and confined to small remnant patches, many of which are along railroad right-of-way. Water resources include JD 51, which drains to the west on the north side of the city of Ada and the Marsh River which borders the city to the south. A few small temporarily or seasonally flooded wetlands are within the project area.

Natural Resources

The city of Ada is within the northern floodplain forest and prairie ecosystems. Because of agricultural development, few prairie areas remain. Wooded areas are limited primarily to areas along the river. The most common tree species present are American elm, box elder, and green ash. Other species include cottonwood, basswood, and willow.

Terrestrial wildlife in the area includes white-tailed deer, fox, raccoon, squirrels, rabbits, and a variety of songbirds. Habitat is limited by agriculture to the riparian corridors of JD51 and the Marsh and Wild Rice rivers. Numerous waterfowl pass through the area during migration.

The Marsh River, adjacent to Ada on the south, receives excess flow from the Wild Rice River. Few fish are present because aquatic habitat is limited by low winter flows. The Wild Rice River, a short distance south of the city has primarily sand and silt substrates. Aquatic vegetation is sparse along the river, except in some oxbows. Northern redhorse, white sucker, carp and various minnows are the predominant fish species. Northern pike, walleye, and rock bass also occur, primarily in the deeper pools.

A few small temporarily or seasonally flooded wetlands are within the project area,; most are primarily remnant oxbows of the Marsh River

Based on a review of the Minnesota Natural Heritage Database and the Federal Endangered Species List, no Federally-listed or State-listed threatened or endangered species are present in the project area. However, the bald eagle (*Haliaeetus leucocephalus*) may be sighted occasionally in the area. Although no longer listed on the Endangered Species list, the bald eagle is protected by the Bald and Golden Eagle Protection Act.

Cultural Resources

This portion of Minnesota contains numerous cultural resources indicating continual human occupation for approximately 12,000 years. Cultural resource sites within the region exist on a variety of landforms, including uplands, terraces, floodplains and glacial beach ridges. Precontact cultural resources include lithic and artifact scatters and burial mounds. Historic cultural resources include Euro-American structural ruins, standing structures, cemeteries, roads and trails.

Interest in the archaeological record of northwestern Minnesota has been ongoing since the late 19th century, where antiquarians examined several burial mounds in Norman County (e.g., Winchell 1911). However, scientific investigations in Norman County were not initiated until the middle of the 20th century when the University of Minnesota investigated several sites (Johnson 1974). Most of the archaeological inquiry in the county has been focused along the Red River (e.g., Johnson 1973; Michlovic 1986, 1987). By the later part of the 20th century, several compliance driven cultural resource investigations have been conducted for various flood control projects along the Wild Rice and Marsh Rivers. Several of these surveys were completed in the vicinity of Ada (Streiff 1974; Michlovic 1976, 1977; Stevenson 1986; Withrow and O'Mack 1989; Kinney 1996; Nienow 2002). The Corps recently commissioned a survey specifically for the Ada flood risk management project (Florin 2008).

Within the city of Ada, three historic structures are listed on the National Register of Historic Places (NRHP): the Ada City Hall/Fire Hall, Norman County Courthouse and the Ada Congregational Church. The Ada Public School has been determined eligible for listing on the NRHP. An additional 34 historic architectural properties have been identified in and around Ada (Florin 2008). Two precontact sites are located within the construction limits of the proposed project. Site 259-1 consists of a single artifact find spot and site 259-2 is a single piece of lithic debris (Florin 2008).

Socioeconomic Resources

Population - The population of Ada as of the latest census (2000) was 1,657. This represents a continuation of population decline in recent decades. Population was 2,076 in 1970, 1,971 in 1980, and 1,708 in 1990. In contrast, the nearest MSA, Fargo, North Dakota-Moorhead, Minnesota, located 40 miles to the southwest, has experienced population growth in recent years increasing from 137,574 in 1980 to 174,367 in 2000.

Income - Per capita income for Norman County in 2005 was $27,414. This was lower than that for the State of Minnesota ($37,290) and for the nation as a whole ($34,471). Income growth since 1990 was also lower than State and national figures. From 1990 to 2005, per capita income for Norman County grew 56.0 percent, while Minnesota's per capita income grew 87.5 percent and that of the U.S. grew 77.0 percent.

Employment - The employment profile for Norman County is shown in Table 1. Figures for the

State of Minnesota are presented also for perspective. Compared with State averages, the agricultural sector comprises a larger percentage of the local economy while manufacturing plays a much lesser role.

Table 1 - Employment by Industry (2005)				
Industry	Norman Co.	% of Total	Minnesota	% of Total
Farm employment	894	21.8%	100,539	2.9%
Forestry, fishing	*		14,094	0.4%
Mining	*		6,708	0.2%
Utilities	*		12,673	0.4%
Construction	*		200,591	5.7%
Manufacturing	10	0.2%	362,545	10.4%
Wholesale trade	119	2.9%	143,110	4.1%
Retail trade	396	9.7%	381,567	10.9%
Transportation & warehousing	*		108,389	3.1%
Information	126	3.1%	68,386	2.0%
Finance and insurance	204	5.0%	184,916	5.3%
Real Estate	94	2.3%	116,798	3.3%
Professional/technical services	119	2.9%	119,926	3.4%
Management	0	0.0%	64,510	1.8%
Administrative, waste services	*		165,371	4.7%
Educational services	> 10		71,854	2.1%
Health care, social assistance	500	12.2%	399,535	11.4%
Arts, entertainment, recreation	61	1.5%	72,726	2.1%
Accommodation, food services	*		218,673	6.3%
Other private services	260	6.3%	190,542	5.4%
Government	572	13.9%	415,134	11.9%
Total	4103	100.0%	3,498,587	100.0%
* Not shown to avoid disclosure of confidential information; estimates included in totals				
Source: BEA - Regional Economic Accounts				

ENVIRONMENTAL EFFECTS

No significant adverse impacts would result from construction of the proposed project. As specified in Section 122 of the 1970 Rivers and Harbors Act, potential project impacts on the parameters listed in Table 2 were considered in arriving at a final determination. In compliance with Section 404 of the Clean Water Act, a 404(b)(1) evaluation has been prepared (Enclosure A).

Natural Resources

Aquatic Habitat

The Marsh River is an established watercourse with habitat limited by periods of low to no flow. An existing levee is adjacent to the Marsh River. The levee is to be raised and expanded, on the city side, in an upland area between the city and the river. The levee would not encroach on Marsh River aquatic habitat.

JD51 is an intermittent/seasonal watercourse. Because it is wet for some portion of the year, it shows some characteristics of a wetland. However, as a legal ditch it is subject to maintenance, cleanout and alteration. The proximity of JD51 to residences limited alternatives for relocation of the ditch. It would be necessary to alter the course of JD51 to accommodate levee construction without removing homes. The new ditch would replicate the old in size and shape and would be allowed to naturally revegetate. The upland areas along the ditch alignment would be revegetated with native species to stabilize soils after construction. A portion of the ditch would remain within the levee and continue to drain runoff from the city. Because it would be isolated from agricultural runoff, it would be expected that wetland characteristics would be maintained or improved. This would offset temporary adverse effects from construction of the new ditch.

Wetlands

A few small temporarily or seasonally flooded wetlands are within the project area. These wetlands are primarily remnant oxbows of the Marsh River. Wetlands would be avoided by design of levee alignments. No mitigation would be required. A new sewer line that would cross one of the oxbows would be constructed with trenchless techniques (e.g., horizontal directional drilling) to avoid any effect on wetland habitat. The old JD 51 section would retain wetland characteristics. The new ditch would not be excavated through any wetlands. The stormwater detention pond would be built with some wetland characteristics.

Terrestrial/Woodland

The project area, within the bed of glacial Lake Agassiz is extremely flat and, aside from water courses, devoid of woody vegetation. Native prairie is rare and confined to small remnant patches, many of which are along railroad right-of-way.

Areas to be disturbed by the project include residential and public property and agricultural fields in active cultivation. Levee alignments would primarily affect cultivated fields and would be oriented to follow roads and property boundaries to minimize disruption.

There would little difference in impacts on natural resources and mitigation requirements among alternatives, because alternatives would vary primarily in the amount of agricultural land affected.

Some land adjacent to the section of old JD 51 within the levee would be set aside for placement

of excess fill. This area would be planted with native tree species and would also provide for

replacement of trees removed during construction. The area would be isolated and would be allowed to develop as a natural riparian area.

Air Quality

The operation of construction equipment may result in a short-tem localized reduction in air quality. Contractors would be required to maintain their equipment in proper working order to minimize any adverse effect. As mentioned elsewhere in this document, the operation of this equipment would also result in an increased noise level during operations. Adverse effects would be limited and short-term because they are associated with construction.

Threatened and Endangered Species

As part of this analysis, it has been concluded that the project would have no adverse effects on any listed endangered or threatened species. The U.S. Fish and Wildlife Service concurred with this determination (Attachment B).

Cultural Resources

The proposed project will have no impact on the three historic structures listed on the NRHP (the Ada City Hall/Fire Hall, Norman County Courthouse and the Ada Congregational Church) or the Ada Public School which has been determined eligible for listing. These structures are within, or proximal to, the center of the city, and no direct or indirect impacts from the proposed project will occur.

The recent cultural resources survey completed for the project identified 34 historic architectural properties within the area of potential effects of the project, encompassing an area 100 meters adjacent to project features. Of these, seven are recommended for Phase II evaluation (Florin 2008).

The two precontact archaeological sites (sites 259-1 and 259-2) consist of single artifact find spots. At each location, a series of shovel tests were excavated, and no additional cultural materials or other phenomenon were encountered. Both sites appear to lack the potential to provide important information on the history of the region and are considered not eligible for listing on the NRHP (Florin 2008). Therefore, the proposed project will have no adverse impact to sites 259-1 and 259-2.

Because the Phase I cultural resources survey for the proposed project was completed before the final design was completed, an additional cultural resources survey is required. In addition, the survey of the historic architectural properties recommended for Phase II evaluations remain to be completed. It is anticipated that the Phase II evaluations and additional Phase I survey will be completed based on the final design in 2008. During the course of these additional investigations, additional cultural resources sites identified in the project construction limits will be evaluated for eligibility to the NRHP. Potential project impacts to eligible properties will be mitigated prior to construction, if said impacts cannot be avoided. If necessary, a Memorandum of Agreement (MOA) with the Minnesota State Historic Preservation Office (SHPO) will be

negotiated to cover the St. Paul District's Section 106 responsibilities for this project. A copy of the signed MOA will be included in the final Environmental Assessment.

Socioeconomic Effects

Under the No Action alternative, flooding would continue until some action was taken by local units of government. Without action, there would be a high potential for continued flooding of the city, interruption of city services and isolation of the regional hospital and high school. One of the purposes of the levee project is to minimize the risk of flood damage and threat to public safety associated with the no-action alternative. Without a project in place, average annual flood damage is estimated at $704,000. The recommended levee project is intended to provide a 200-year level of protection. Without the project in place, a flood of this size would cause an estimated $25 million in damage and directly affect approximately 500 residential and 30 commercial structures.

Even though the proposed project will provide protection against the 200-year flood event, the community is still at risk from damages from larger floods. The 200-year level of protection provides the maximum net benefits, and Corps policy mandates that this be the recommended plan. A higher level of protection is feasible and would reduce residual risk, but the incremental costs are higher than the incremental benefits to implement the higher-level plan. This residual risk was discussed with the city of Ada on December 19, 2007, and those present are aware of the limitations of the project. After this discussion, the recommended project was discussed at a city council meeting, and a resolution was passed supporting the proposed project. While awareness of the project benefits and residual risks is high at this time, over time, city leaders will change, and the residents may become less aware of the limitations of the project. To prevent this, measures will have to be taken to ensure that the community is aware of flood risk and has an emergency action plan for larger floods.

Also discussed at the December 19, 2007, meeting were the anticipated social effects of the proposed project on local properties. It was felt that the project had positive effects for properties within the levee system, including several properties outside the city limits on the east end of town and two farmsteads outside the city limits on the west end of town, all abutting Highway 200, because they will be within the line of protection.

Ada residents and businesses may experience the usual temporary inconveniences inherent in any construction project, such as the increased traffic, construction noise, and disruptions to daily routines. This effect may be minimized through restrictions on construction work hours, added traffic control measures and a good plan for public awareness.

Landowners whose property must be purchased to construct the project features (such as levees, ponding areas and the relocated JD 51) will lose the use of the purchased property. However, through the acquisition process, they would receive monetary compensation including fair market value for the acquired property. The project will be designed to ensure that the property owners will retain access to their remaining property, should any access be removed as part of the project. The Federal land acquisition process was explained at a public information meeting that was held in the city of Ada on October 1, 2008. Additional meetings with landowners will be held prior to acquisition of lands for the project.

The project may have some negative social effects on property owners who are facing similar flooding challenges, but are not protected by the project. The levee will be a visible barrier between the community of Ada and properties located outside of the levee.

The project would have a negative hydraulic impact on a limited area along the Marsh River on the south side of town, south of the proposed levee, between Highway 9 and Jamison Avenue. The hydraulic analysis contained in Appendix B indicates an increase in flooding elevations for this area of 0.1 to 0.3 foot.

Communities downstream of Ada on JD 51 may be concerned about flows being conveyed more quickly down JD 51. However, it is intended that the realigned JD 51 be designed to ensure that the JD 51 flows downstream of Ada are not increased.

There may be other landowners whose property will be acquired for construction of the project that have not been separately enumerated in this discussion. These property owners will experience the inconvenience of losing use of a portion of their property. These losses will be mitigated via monetary compensation during the real estate acquisition process. The project will ensure that the property owners will retain access to their remaining property, should any accesses be removed as part of the project.

Among the benefits accounted for in the economic analysis, is the potential cost savings in flood insurance policies. While the residents' risk of flood damage will be reduced to the point where their mortgage holders may not require flood insurance, each property owner within the area of protection will have to assess his/her willingness to accept the risk of not carrying additional flood insurance.

Executive Orders

The provisions of Executive Orders 11988 (Activities in Floodplains) and 11990 (Wetland Protection) would be satisfied. The project would prevent damage to existing facilities rather than encourage floodplain development. This alternative does comply with Executive Order 11988, because it does not encourage new development in the floodplain. The floodplain is defined as any lowland areas subject to a 1-percent or greater chance of flooding in any given year. While the proposed levee does encompass a large, undeveloped area, this area is not located in the defined floodplain. With respect to Executive Order 11990, wetlands in the vicinity are limited and seasonal or temporary and most are remnant oxbows of the Marsh River. Levee alignments were designed to avoid disrupting wetlands. The new alignment of JD 51 would not be excavated through any wetlands. The provisions of Executive Order 12898 (Environmental Justice) would be satisfied because the project would not have adverse effects on any particular group but would benefit all local residents equally.

Cumulative Effects

In the city of Ada, emergency levees have been constructed and removed and permanent levees have been constructed. The proposed project supplements existing levees, and adds new sections along the same basic alignment.

COORDINATION

Coordination with the SHPO and appropriate Native American groups will be completed as needed. If cultural resources investigations are not completed prior to signing of the finding of no significant impact (FONSI), a MOA with the SHPO may need to be negotiated. With this agreement in place, project planning may move ahead before cultural resources investigations have been completed, although no construction would occur until all issues related to cultural resources have been addressed.

Coordination with the public and government agencies has been maintained during the planning process. The U.S. Fish and Wildlife Service and the Minnesota Department of Natural Resources were contacted (Enclosure B).

During the planning process, no special concerns were identified by the U.S. Fish and Wildlife Service or the Minnesota Department of Natural Resources.

This report was sent to interested citizens and the following agencies:

Federal
Environmental Protection Agency
U.S. Fish and Wildlife Service
Natural Resource Conservation Service

State of Minnesota
Department of Natural Resources
Pollution Control Agency
Board of Soil and Water Conservation
State Historic Preservation Officer
Department of Transportation

Others
City of Ada
Norman County Engineer
Wild Rice Watershed District
Ada Public Library
Norman County Index
Local utilities

Table 2. Environmental Assessment Matrix

Section 122 of the River and Harbor and Flood Control Act of 1970 (Public Law 91-611)														
	No Action Alternative							**Preferred Alternative**						
	BENEFICIAL				ADVERSE			BENEFICIAL				ADVERSE		
PARAMETER	SIGNIFICANT	SUBSTANTIAL	MINOR	NO EFFECT	MINOR	SUBSTANTIAL	SIGNIFICANT	SIGNIFICANT	SUBSTANTIAL	MINOR	NO EFFECT	MINOR	SUBSTANTIAL	SIGNIFICANT
A. SOCIAL EFFECTS				X							X			
1. Noise Levels				X								T		
2. Aesthetic Values				X							X			
3. Recreational Opportunities				X							X			
4. Transportation				X							X			
5. Public Health and Safety						X			X					
6. Community Cohesion (Sense of Unity)				X							X			
7. Community Growth and Development				X							X			
8. Business and Home Relocations				X							X			
9. Existing/Potential Land Use				X							X			
10. Controversy				X							X			
B. ECONOMIC EFFECTS														
1. Property Values				X							X			
2. Tax Revenue				X							X			
3. Public Facilities and Services						X			X					
4. Regional Growth				X							X			
5. Employment				X							X			
6. Business Activity				X							X			
7. Farmland/Food Supply				X							X			
8. Commercial Navigation				X							X			
9. Flooding Effects				X							X			
10. Energy Needs and Resources				X							X			
C. NATURAL RESOURCE EFFECTS														
1. Air Quality				X								T		
2. Terrestrial Habitat				X							X			
3. Wetlands				X							X			
4. Aquatic Habitat				X							X			
5. Habitat Diversity and Interspersion				X							X			
6. Biological Productivity				X							X			
7. Surface Water Quality				X							X			
8. Water Supply				X							X			
9. Groundwater				X							X			
10. Soils				X							X			
11. Threatened or Endangered Species				X							X			
D. CULTURAL RESOURCE EFFECTS														
1. Historic Architectural Values				X							X			
2. Prehistoric & Historic Archeological Values				X							X			

T: Temporary Effect

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Enclosure A

Section 404(b)(1) Evaluation

Preliminary
Section 404(b)(1) Evaluation
Flood Risk Management
Ada, Minnesota

I. PROJECT DESCRIPTION

A. Location - The proposed fill activity would take place in Judicial Ditch 51 (JD 51) in Norman County, Minnesota, in and near the northeast area of the city of Ada, Minnesota (Exhibit 1) and adjacent to the Marsh River on the south side of the city. JD 51, although excavated, appears to have originated as a natural watercourse upstream of Ada.[1]

B. General Description - This evaluation addresses the impacts resulting from the placement of fill material in waters of the United States in compliance with Section 404 of the Clean Water Act, as amended. The proposed fill activities would consist of placing material into Judicial Ditch 51 to provide levee protection for the city of Ada. A new ditch would be constructed outside the levee alignment, and the old ditch would continue to function within the levee, joining the new ditch, through a gate well, northwest of the city limits.

C. Authority and Purpose - Federal authority for this project is provided in Section 205 of the Flood Control Act of 1948 (Public Law 80-858), as amended. The purpose of the project is flood risk management. The fill is necessary to construct a continuous levee around portions of the city that are not adequately protected.

D. General Description of Dredged or Fill Material

1. General Characteristics of Material - In all cases, the fill material would consist of clean rock of various sizes and clay excavated from the alignment of the new ditch.

2. Quantity of Material - The fill material would be 4,045 cubic yards (downstream) and 9,770 cubic yards (upstream) of impervious fill placed within the channel of JD 51. The 10 gate wells would be armored with approximately 240 cubic yards of riprap and bedding each.

3. Source of Material - The fill for JD51 would be obtained from excavation of the new ditch. The riprap and bedding would be obtained from an existing quarry.

---

1 A full jurisdictional review of JD51 has not been completed, but for purposes of this analysis, Section 404 jurisdiction is assumed.

E. Description of the Proposed Discharge Sites

1. Location - The proposed fill activities would take place along the alignment of JD 51 in the north and northeast portions of the city of Ada and along the outside of the levee alignment, near the Marsh River at Ada (Exhibit 2).

2. Size - The total area to be affected by the fill activities would be approximately 0.33 acre.

3. Type of Site - The fill activities would take place in a riverine setting. The material would be placed from above the waterline to the bottom of the riverbed approximately 10 to 15 feet. The top of the rock would be 5 to 15 feet from the top of the bank.

4. Types of Habitat - The habitat is ditch bank and bottom and levee side slopes with vegetative cover. The ditch is an intermittent/seasonal watercourse with limited habitat. No wetlands would be affected by the action.

5. Timing and Duration - Subject to approval, construction could begin in the year 2009.

F. Description of Disposal Method - The fill material would be moved and placed mechanically (Exhibit 3).

II. FACTUAL DETERMINATIONS

A. Physical Substrate Determinations

1. Substrate Elevation and Slope - The fill material would be placed mechanically and constructed with side slopes of 1 vertical on 3 horizontal above existing ground. The fill material for the gate wells would extend around the outlet pipe to provide erosion protection.

2. Sediment Type - Sediment in the proposed fill area is clay.

3. Dredged/Fill Material Movement - The fill material would be placed directly into the ditch and on the levee side slopes around the pipe. No fill material movement would be expected.

4. Physical Effects on Benthos - Any organisms in the placement area would be covered but additional ditch area would be constructed and expected to recolonize rapidly.

5. Actions Taken to Minimize Impacts - Standard construction procedures in compliance with Federal and State requirements would be employed to minimize impacts.

Because the placement of the material would affect a small area and have minimal impacts, no special actions to minimize adverse impacts would be taken.

B. Water Circulation, Fluctuation, and Salinity Determinations

1. Water

a. Salinity - The fill activities would not affect salinity.

b. Water Chemistry - The use of clean fill material and mechanical placement procedures would preclude any significant impacts on water chemistry.

c. Clarity - Some minor, short-term decreases in clarity are expected from the proposed fill activities.

d. Color - The proposed fill activities should have no impact on water color.

e. Odor - The proposed fill activities should have no impact on water odor.

f. Taste - The proposed fill activities should have no impact on water taste.

g. Dissolved Gas Levels - The proposed fill activities should have no impact on dissolved gas levels in the water.

h. Nutrients - The proposed fill activities should have no impact on nutrient levels in the water.

i. Eutrophication - The proposed fill activities should have no impact on the level or rate of eutrophication of the water.

j. Temperature - The proposed fill activities would have little impact on water temperature.

2. Current Patterns and Circulation

a. Current Patterns and Flow - Because the proposed fill activities would take place at the shoreline and adjacent upland areas, they would have little long-term effect on current patterns and flow.

b. Velocity - The proposed fill activities would have no effect on water velocity.

c. Stratification - The proposed fill activities would have no effect on the development of stratified conditions in the river.

d. Hydrologic Regime - The proposed fill activities would have little impact on the hydrologic regime.

3. Normal Water Level Fluctuations - The proposed fill activities would have no effect on normal water level fluctuations.

4. Salinity Gradient - The fill activities would have no effect on the salinity gradient.

5. Actions Taken to Minimize Impact - Standard construction procedures in compliance with Federal and State requirements would be used. The material would be placed mechanically.

C. Suspended Particulate/Turbidity Determination - Turbidity and suspended solids may increase during construction. This effect would be short-term.

1. Expected Changes in Suspended Particulates and Turbidity Levels in the Vicinity of the Disposal Site - Although minor temporary increases in suspended particulates and turbidity would occur during project construction, the long-term effect would be to maintain the status quo.

2. Effects on Chemical and Physical Properties of the Water Column - No effects are expected on light penetration, dissolved oxygen, toxic metals and organisms, pathogens, or the aesthetics of the water column after the project is in place.

3. Effects on Biota - Biota would be lost or displaced during the placement of the fill material. The effects would be limited because the ditch is intermittent.

4. Actions Taken to Minimize Impacts - No special actions are anticipated. Fill would be placed by standard equipment such as backhoes, trucks, and loaders.

D. Contaminant Determinations - The fill material would be large and small clean rock and clean fill and would not introduce contaminants into the aquatic system. Neither the material nor its placement would cause relocation or increases of contaminants in the aquatic systems.

E. Aquatic Ecosystem and Organism Determinations - Approximately 0.33 acre would be covered by riprap.

1. Effects on Plankton - The proposed action would not affect plankton because the ditch is intermittent.

2. Effects on Benthos - Those benthic communities in the area of the proposed fill activities would be disturbed but would quickly colonize the newly added riprap.

3. Effects on Nekton - None expected.

4. Effects on Aquatic Food Web - The long-term effect on total productivity of the area is expected to be a minor increase, although the existing aquatic biota would be temporarily disrupted.

5. Effects on Special Aquatic Sites - No special aquatic sites would be affected by the project.

6. Threatened and Endangered Species - No Federal or State listed species would be affected by the project.

7. Other Wildlife - The fill activities would not result in the significant loss of aquatic or terrestrial habitat. The general diversity and productivity of the affected areas would be maintained or possibly increased by the creation of a more stable habitat.

8. Actions Taken to Minimize Impacts - No special actions are required.

F. Proposed Disposal Site Determinations

1. Mixing Zone Determination - The proposed fill activity would have a minimal mixing zone. The mixing zone would be small and would not constitute a significant problem because of the nature of the fill material and its placement by mechanical means. No liquid material would be discharged during construction. For these reasons, the mixing zone was not analyzed further.

2. Determination of Compliance with Applicable Water Quality Standards - The nature of the fill material and the type of construction should avoid violation of State water quality standards by project-related activities. The long-term environmental or water quality effects of the placement of fill material would be a reduction in erosion and associated turbidity.

3. Potential Effects on Human Use Characteristics - Because of the present and projected human use characteristics, the existing physical conditions, the proposed construction methods, and the nature of the fill material, this proposed action would have no significant effects on human use characteristics.

G. Determination of Cumulative Effects on the Aquatic Ecosystem - Implementation of the proposed action would cause no significant cumulative impact on the aquatic ecosystem.

H. Determination of Secondary Effects on the Aquatic Ecosystem - No significant secondary effects would be expected.

III. FINDING OF COMPLIANCE WITH RESTRICTIONS ON DISCHARGE

The proposed fill activity would comply with Section 404(b)(1) guidelines of the Clean Water Act, as amended. No significant adaptations of the guidelines were made for this evaluation. The placement of fill is required to provide the desired benefits. Other alternatives would vary in size and level of protection but would have essentially the same footprint and effects. The most cost-effective level of protection was selected. Nonstructural alternatives would not provide sufficient protection from flooding. The realignment of JD 51 was the most economical alignment but all alternatives had equivalent effects on natural resources, and no other practicable alternative is less environmentally damaging than the selected alternative.

The proposed fill activities would comply with all State water quality standards, Section 307 of the Clean Water Act, and the Endangered Species Act of 1973, as amended. The proposed fill activity would not have significant adverse effects on human health and welfare, including municipal and private water supplies, recreation and commercial fishing, plankton, fish, shellfish, wildlife, and special aquatic sites. The life stages of aquatic life and other wildlife would not be adversely affected. Significant adverse effects on aquatic ecosystem diversity, productivity, and stability and on recreational, aesthetic, and economic values would not occur. Stabilization of the eroded site would not harm any endangered species or their critical habitat.

The purpose of the action is to stabilize the bank and reduce the potential for erosion. Minor and short-term impacts are associated with the placement of the fill material. The long-term effects would be a reduction in erosion and turbidity. Since the proposed action would result in few adverse effects, no additional measures to minimize impacts would be required.

On the basis of this evaluation, I specify that the proposed action complies with the requirements of the guidelines for discharge or placement of fill material.

_____

Date

Jon L. Christensen
Colonel, Corps of Engineers
District Engineer

Enclosure B

Correspondence

RECORD OF TELEPHONE CONVERSATION

March 04, 2008

PERSON CALLING: John T. Shyne	MVPPM-E	651-290-5270
PERSON CALLED: Paul Stolen	MNDNR	218-308-2672

Subject: Ada, Norman County Flood Risk Management

1. I described the nature of the proposed action to Mr. Stolen.

2. Mr. Stolen said that he was familiar with the proposed plan and supported it as a reasonable solution for flooding in Ada. He did not have any specific concerns at this time but will review the EA when it is provided for public and agency review.

RECORD OF TELEPHONE CONVERSATION

March 20, 2008

PERSON CALLING: John T. Shyne MVPPM-E 651-290-5270
PERSON CALLED: Laurie Fairchild USFWS 612-725-3548

Subject: Ada, Norman County, Section 205

1. I discussed the project with Ms. Fairchild.

2. She indicated that it is likely that she had no specific comments at this time but did concur with our determination that the project would have no effect on endangered or threatened species.

Enclosure C

Finding of No Significant Impact

DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
SIBLEY SQUARE AT MEARS PARK
190 FIFTH STREET EAST, SUITE 401
ST. PAUL, MN 55101-1638

REPLY TO
ATTENTION OF

Planning, Programs and Project Management Division
Environmental and Economic Analysis Branch

DRAFT
FINDING OF NO SIGNIFICANT IMPACT

In accordance with the National Environmental Policy Act, the St. Paul District, Corps of Engineers, has assessed the environmental impacts of the following project:

FLOOD RISK MANAGEMENT,
ADA, NORMAN COUNTY, MINNESOTA

The intent of this project is to provide flood risk management in the city of Ada, Norman County, Minnesota. The proposed project involves the protection from flooding using levee raises and levee construction with associated interior and exterior drainage. This finding of no significant impact is based on the following factors: the project would have no adverse impacts on fish and wildlife resources or on air and water quality; the project would have short-term minor impacts on the social environment; the project would have no impact on the cultural environment; and continued coordination would be maintained with appropriate State and Federal agencies.

The environmental review process indicates that the proposed action does not constitute a major Federal action significantly affecting the environment. Therefore, an environmental impact statement will not be prepared.

_____
Date

Jon L. Christensen
Colonel, Corps of Engineers
District Engineer

Figure 1 - Location of Ada, Mn.

.

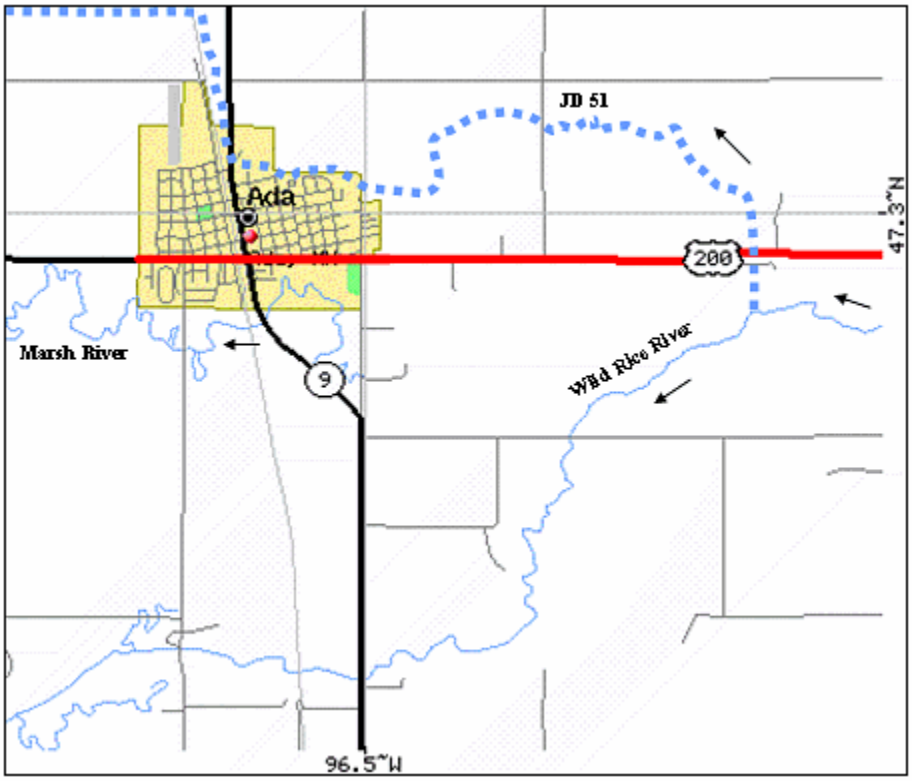
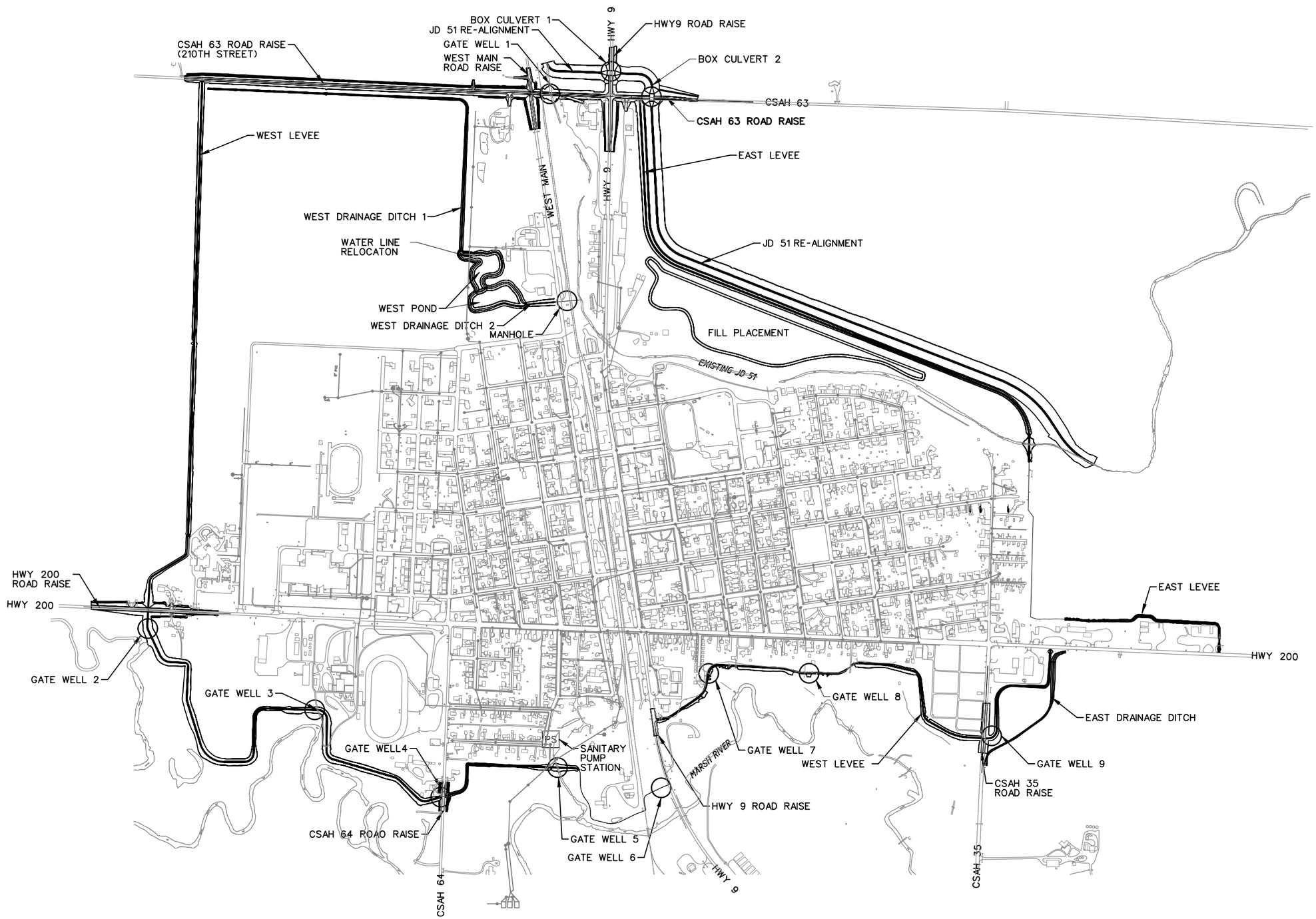


Figure 2 - Location of Judicial Ditch 51, Wild Rice River, and Marsh River



GENERAL PLAN VIEW

N

0 500' 1000'

SCALE:1"=500'

US Army Corps of Engineers
St. Paul District

MARK	DESCRIPTION	DATE	APPR.
MARK	DESCRIPTION	DATE	APPR.

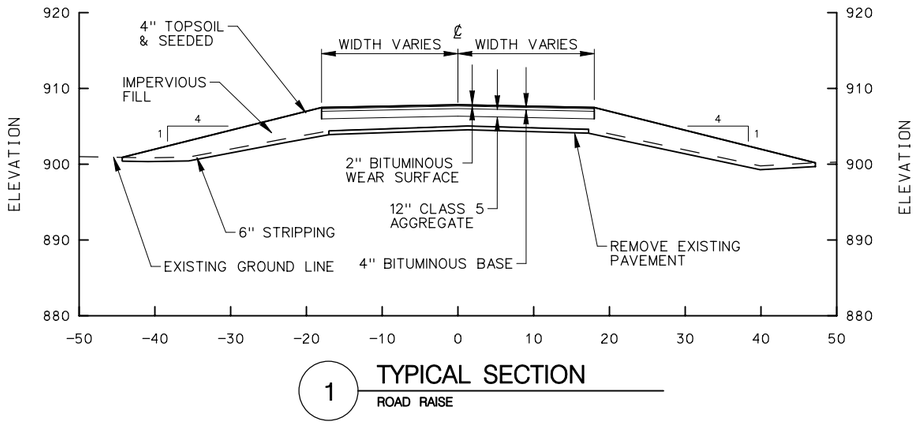
DESIGNED BY: EPP
DWN BY: EPP
CKD BY: JBM
SUBMITTED BY:
DATE: 20091208
SOLICITATION NO.:
CONTRACT NO.:
PLOT SCALE: 1" = 500'
PLOT DATE: N/A
FILE NUMBER:
SIZE: ANSI B
FILE NAME: ADA_drafting_cov4.dgn

SECTION 205 FEASIBILITY STUDY
WILD RICE AND MARSH RIVERS
ADA, MINNESOTA

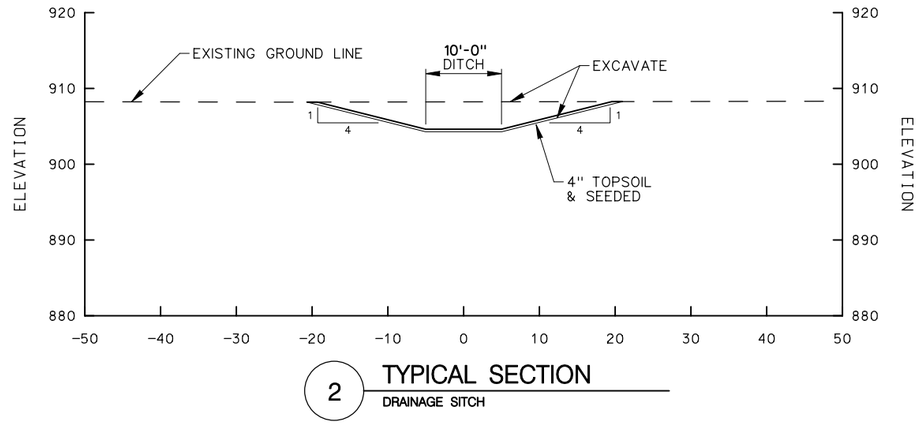
SITE DESIGN
GENERAL PLAN

SHEET IDENTIFICATION
C-001

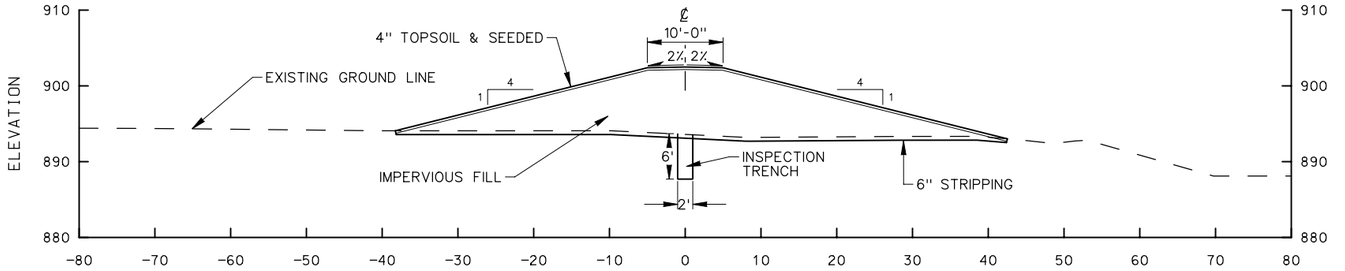
auto_time



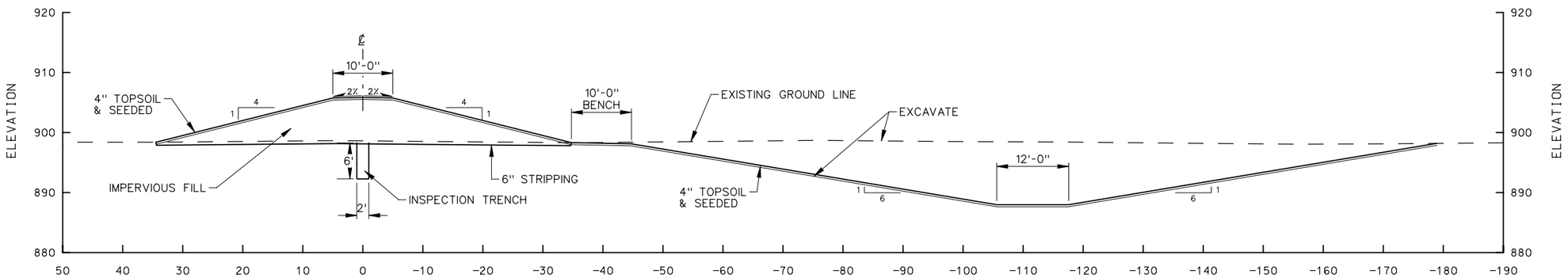
1 TYPICAL SECTION
ROAD RAISE



2 TYPICAL SECTION
DRAINAGE SITCH



3 TYPICAL SECTION
LEVEE



4 TYPICAL SECTION
LEVEE & DITCH

US Army Corps of Engineers®
St. Paul District

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: EPP	DATE: 20090728		
DWN BY: EPP	CKD BY: JBM	SOLICITATION NO.:	
SUBMITTED BY:		CONTRACT NO.:	
PLOT SCALE: N/A	PLOT DATE:	FILE NUMBER:	
SIZE:	FILE NAME: ADA_details_sec205.dgn		

SECTION 205 FEASIBILITY STUDY
WILD RICE AND MARSH RIVERS
ADA, MINNESOTA

SITE DESIGN
TYPICAL SECTIONS

SHEET IDENTIFICATION
C-002

auto_time

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request 4/9/08
Name Of Project Ada Flood Control	Federal Agency Involved U.S. Army Corps of Engineers, St. Paul Dist.
Proposed Land Use Levees for Flood Control	County And State Norman County, MN
PART II *(To be completed by NRCS)*	Date Request Received By NRCS 04/15/2008

Does the site contain prime, unique, statewide or local important farmland? *(If no, the FPPA does not apply -- do not complete additional parts of this form).*	Yes	No	Acres Irrigated	Average Farm Size
	☒	☐	N/A	600

Major Crop(s)	Farmable Land In Govt. Jurisdiction	Amount Of Farmland As Defined in FPPA
SMALL GRAINS/ROW CROPS	Acres: 546,630 % 97.5	Acres: 546,630 % 97.5
Name Of Land Evaluation System Used: LESA	Name Of Local Site Assessment System: N/A	Date Land Evaluation Returned By NRCS: 04/22/2008

PART III *(To be completed by Federal Agency)*	Alternative Site Rating: Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	82.8			
B. Total Acres To Be Converted Indirectly	0.0			
C. Total Acres In Site	82.8	0.0	0.0	0.0
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	80.4			
B. Total Acres Statewide And Local Important Farmland	.2			
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted	7.01			
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value	67			
PART V *(To be completed by NRCS)* Land Evaluation Criterion Relative Value Of Farmland To Be Converted *(Scale of 0 to 100 Points)*	93	0	0	0

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(These criteria are explained in 7 CFR 658.5(b)*	Maximum Points				
1. Area In Nonurban Use	15	15			
2. Perimeter In Nonurban Use	10	10			
3. Percent Of Site Being Farmed	20	20			
4. Protection Provided By State And Local Government	20	20			
5. Distance From Urban Builtup Area	0	0			
6. Distance To Urban Support Services	0	0			
7. Size Of Present Farm Unit Compared To Average	10	10			
8. Creation Of Nonfarmable Farmland	25	0			
9. Availability Of Farm Support Services	25	25			
10. On-Farm Investments	20	20			
11. Effects Of Conversion On Farm Support Services	25	0			
12. Compatibility With Existing Agricultural Use	10	0			
TOTAL SITE ASSESSMENT POINTS	160	120	0	0	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland *(From Part V)*	100	93	0	0	0
Total Site Assessment *(From Part VI above or a local site assessment)*	160	120	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	213	0	0	0

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes ☐ No ☐

Reason For Selection:

(See Instructions on reverse side)

Form AD-1006 (10-83)

This form was electronically produced by National Production Services Staff

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request 4/9/08
Name Of Project Ada Flood Control	Federal Agency Involved U.S. Army Corps of Engineers, St. Paul Dist.
Proposed Land Use Levees for Flood Control	County And State Norman County, MN
PART II *(To be completed by NRCS)*	Date Request Received By NRCS

Does the site contain prime, unique, statewide or local important farmland? *(If no, the FPPA does not apply -- do not complete additional parts of this form).*	Yes ☐	No ☐	Acres Irrigated	Average Farm Size
Major Crop*(s)*	Farmable Land In Govt. Jurisdiction Acres: %		Amount Of Farmland As Defined in FPPA Acres: %	
Name Of Land Evaluation System Used	Name Of Local Site Assessment System		Date Land Evaluation Returned By NRCS	

PART III *(To be completed by Federal Agency)*	Alternative Site Rating Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	82.8			
B. Total Acres To Be Converted Indirectly	0.0			
C. Total Acres In Site	82.8	0.0	0.0	0.0
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value				
PART V *(To be completed by NRCS)* Land Evaluation Criterion Relative Value Of Farmland To Be Converted *(Scale of 0 to 100 Points)*	0	0	0	0

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(These criteria are explained in 7 CFR 658.5(b)*	Maximum Points				
1. Area In Nonurban Use					
2. Perimeter In Nonurban Use					
3. Percent Of Site Being Farmed					
4. Protection Provided By State And Local Government					
5. Distance From Urban Builtup Area					
6. Distance To Urban Support Services					
7. Size Of Present Farm Unit Compared To Average					
8. Creation Of Nonfarmable Farmland					
9. Availability Of Farm Support Services					
10. On-Farm Investments					
11. Effects Of Conversion On Farm Support Services					
12. Compatibility With Existing Agricultural Use					
TOTAL SITE ASSESSMENT POINTS	160	0	0	0	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland *(From Part V)*	100	0	0	0	0
Total Site Assessment *(From Part VI above or a local site assessment)*	160	0	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	0	0	0	0

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes ☐ No ☐

Reason For Selection:

(See Instructions on reverse side)

This form was electronically produced by National Production Services Staff

Clear Form

Form AD-1006 (10-83)

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 – Federal agencies involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form.

Step 2 – Originator will send copies A, B and C together with maps indicating locations of site(s), to the Natural Resources Conservation Service (NRCS) local field office and retain copy D for their files. (Note: NRCS has a field office in most counties in the U.S. The field office is usually located in the county seat. A list of field office locations are available from the NRCS State Conservationist in each state).

Step 3 – NRCS will, within 45 calendar days after receipt of form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland.

Step '4 – In cases where farmland covered by the FPPA will be converted by the proposed project, NRCS field offices will complete Parts II, IV and V of the form.

Step 5 – NRCS will return copy A and B of the form to the Federal agency involved in the project. (Copy C will be retained for NRCS records).

Step 6 – The Federal agency involved in the proposed project will complete Parts VI and VII of the form.

Step 7 – The Federal agency involved in the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA and the agency's internal policies.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

Part I: In completing the "County And State" questions list all the local governments that are responsible for local land controls where site(s) are to be evaluated.

Part III: In completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them.

2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities) that will cause a direct conversion.

Part VI: Do not complete Part VI if a local site assessment is used.

Assign the maximum points for each site assessment criterion as shown in § 658.5 (b) of CFR. In cases of corridor-type projects such as transportation, powerline and flood control, criteria #5 and #6 will not apply and will, be weighed zero, however, criterion #8 will be weighed a maximum of 25 points, and criterion #11 a maximum of 25 points.

Individual Federal agencies at the national level, may assign relative weights among the 12 site assessment criteria other than those shown in the FPPA rule. In all cases where other weights are assigned relative adjustments must be made to maintain the maximum total weight points at l60.

In rating alternative sites, Federal agencies shall consider each of the criteria and assign points within the limits established in the FPPA rule. Sites most suitable for protection under these criteria will receive the highest total scores, and sites least suitable, the lowest scores.

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, adjust the site assessment points to a base of 160. Example: if the Site Assessment maximum is 200 points, and alternative Site "A" is rated 180 points:

$$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site "A."}$$

Site Assessment Scoring for the Twelve Factors Used in FPPA

The Site Assessment criteria used in the Farmland Protection Policy Act (FPPA) rule are designed to assess important factors other than the agricultural value of the land when determining which alternative sites should receive the highest level of protection from conversion to non agricultural uses.

Twelve factors are used for Site Assessment and ten factors for corridor-type sites. Each factor is listed in an outline form, without detailed definitions or guidelines to follow in the rating process. The purpose of this document is to expand the definitions of use of each of the twelve Site Assessment factors so that all persons can have a clear understanding as to what each factor is intended to evaluate and how points are assigned for given conditions.

In each of the 12 factors a number rating system is used to determine which sites deserve the most protection from conversion to non-farm uses. The higher the number value given to a proposed site, the more protection it will receive. The maximum scores are 10, 15 and 20 points, depending upon the relative importance of each particular question. If a question significantly relates to why a parcel of land should not be converted, the question has a maximum possible protection value of 20, whereas a question which does not have such a significant impact upon whether a site would be converted, would have fewer maximum points possible, for example 10.

The following guidelines should be used in rating the twelve Site Assessment criteria:

1. How much land is in non-urban use within a radius of 1.0 mile from where the project is intended?

More than 90 percent:	15 points
90-20 percent:	14 to 1 points
Less than 20 percent:	0 points

This factor is designed to evaluate the extent to which the area within one mile of the proposed site is non-urban area. For purposes of this rule, "non-urban" should include:

- Agricultural land (crop-fruit trees, nuts, oilseed)
- Range land
- Forest land
- Golf Courses
- Non paved parks and recreational areas
- Mining sites
- Farm Storage
- Lakes, ponds and other water bodies
- Rural roads, and through roads without houses or buildings
- Open space
- Wetlands
- Fish production
- Pasture or hayland

Urban uses include:

- Houses (other than farm houses)
- Apartment buildings
- Commercial buildings
- Industrial buildings
- Paved recreational areas (i.e. tennis courts)
- Streets in areas with 30 structures per 40 acres
- Gas stations

- Equipment, supply stores
- Off-farm storage
- Processing plants
- Shopping malls
- Utilities/Services
- Medical buildings

In rating this factor, an area one-mile from the outer edge of the proposed site should be outlined on a current photo; the areas that are urban should be outlined. For rural houses and other buildings with unknown sizes, use 1 and 1/3 acres per structure. For roads with houses on only one side, use one half of road for urban and one half for non-urban.

The purpose of this rating process is to insure that the most valuable and viable farmlands are protected from development projects sponsored by the Federal Government. With this goal in mind, factor S1 suggests that the more agricultural lands surrounding the parcel boundary in question, the more protection from development this site should receive. Accordingly, a site with a large quantity of non-urban land surrounding it will receive a greater
number of points for protection from development. Thus, where more than 90 percent of the area around the proposed site (do not include the proposed site in this assessment) is non-urban, assign 15 points. Where 20 percent or less is
non-urban, assign 0 points. Where the area lies between 20 and 90 percent non-urban, assign appropriate points from 14 to 1, as noted below.

Percent Non-Urban Land within 1 mile	**Points**
90 percent or greater	15
85 to 89 percent	14
80 to 84 percent	13
75 to 79 percent	12
70 to 74 percent	11
65 to 69 percent	10
60 to 64 percent	9
55 to 59 percent	8
50 to 54 percent	7
45 to 49 percent	6
40 to 44 percent	5
35 to 39 percent	4
30 to 24 percent	3
25 to 29 percent	2
21 to 24 percent	1
20 percent or less	0

2. How much of the perimeter of the site borders on land in non-urban use?

More than 90 percent:	l0 points
90 to 20 percent:	9 to 1 point(s)
Less than 20 percent:	0 points

This factor is designed to evaluate the extent to which the land adjacent to the proposed site is non-urban use. Where factor #1 evaluates the general location of the proposed site, this factor evaluates the immediate perimeter of the site. The definition of urban and non-urban uses in factor #1 should be used for this factor.

In rating the second factor, measure the perimeter of the site that is in non-urban and urban use. Where more than 90 percent of the perimeter is in non-urban use, score this factor 10 points. Where less than 20 percent, assign 0 points. If a road is next to the perimeter, class the area according to the

use on the other side of the road for that area. Use 1 and 1/3 acre per structure if not otherwise known. Where 20 to 90 percent of the perimeter is non-urban, assign points as noted below:

Percentage of Perimeter Bordering Land	Points
90 percent or greater	10
82 to 89 percent	9
74 to 81 percent	8
65 to 73 percent	7
58 to 65 percent	6
50 to 57 percent	5
42 to 49 percent	4
34 to 41 percent	3
27 to 33 percent	2
21 to 26 percent	1
20 percent or Less	0

3. How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last ten years?

More than 90 percent:	20 points
90 to 20 percent:	19 to 1 point(s)
Less than 20 percent:	0 points

This factor is designed to evaluate the extent to which the proposed conversion site has been used or managed for agricultural purposes in the past 10 years.

Land is being farmed when it is used or managed for food or fiber, to include timber products, fruit, nuts, grapes, grain, forage, oil seed, fish and meat, poultry and dairy products.

Land that has been left to grow up to native vegetation without management or harvest will be considered as abandoned and therefore not farmed. The proposed conversion site should be evaluated and rated according to the percent, of the site farmed.

If more than 90 percent of the site has been farmed 5 of the last 10 years score the site as follows:

Percentage of Site Farmed	Points
90 percent or greater	20
86 to 89 percent	19
82 to 85 percent	18
78 to 81 percent	17
74 to 77 percent	16
70 to 73 percent	15
66 to 69 percent	14
62 to 65 percent	13
58 to 61 percent	12
54 to 57 percent	11
50 to 53 percent	10
46 to 49 percent	9
42 to 45 percent	8
38 to 41 percent	7
35 to 37 percent	6
32 to 34 percent	5
29 to 31 percent	4
26 to 28 percent	3

23 to 25 percent	2
20 to 22 percent percent or Less	1
Less than 20 percent	0

4. Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected:	20 points
Site is not protected:	0 points

This factor is designed to evaluate the extent to which state and local government and private programs have made efforts to protect this site from conversion.

State and local policies and programs to protect farmland include:

State Policies and Programs to Protect Farmland

1. Tax Relief:

   A. Differential Assessment: Agricultural lands are taxed on their agricultural use value, rather than at market value. As a result, farmers pay fewer taxes on their land, which helps keep them in business, and therefore helps to insure that the farmland will not be converted to nonagricultural uses.

      1. Preferential Assessment for Property Tax: Landowners with parcels of land used for agriculture are given the privilege of differential assessment.

      2. Deferred Taxation for Property Tax: Landowners are deterred from converting their land to nonfarm uses, because if they do so, they must pay back taxes at market value.

      3. Restrictive Agreement for Property Tax: Landowners who want to receive Differential Assessment must agree to keep their land in - eligible use.

   B. Income Tax Credits

   Circuit Breaker Tax Credits: Authorize an eligible owner of farmland to apply some or all of the property taxes on his or her farmland and farm structures as a tax credit against the owner's state income tax.

   C. Estate and Inheritance Tax Benefits

   Farm Use Valuation for Death Tax: Exemption of state tax liability to eligible farm estates.

2. "Right to farm" laws:

   Prohibits local governments from enacting laws which will place restrictions upon normally accepted farming practices, for example, the generation of noise, odor or dust.

3. Agricultural Districting:

   Wherein farmers voluntarily organize districts of agricultural land to be legally recognized geographic areas. These farmers receive benefits, such as protection from annexation, in exchange for keeping land within the district for a given number of years.

4. Land Use Controls: Agricultural Zoning.

Types of Agricultural Zoning Ordinances include:

A. Exclusive: In which the agricultural zone is restricted to only farm-related dwellings, with, for example, a minimum of 40 acres per dwelling unit.

B. Non-Exclusive: In which non-farm dwellings are allowed, but the density remains low, such as 20 acres per dwelling unit.

Additional Zoning techniques include:

A. Slidinq Scale: This method looks at zoning according to the total size of the parcel owned. For example, the number of dwelling units per a given number of acres may change from county to county according to the existing land acreage to dwelling unit ratio of surrounding parcels of land within the specific area.

B. Point System or Numerical Approach: Approaches land use permits on a case by case basis.

LESA: The LESA system (Land Evaluation-Site Assessment) is used as a tool to help assess options for land use on an evaluation of productivity weighed against commitment to urban development.

C. Conditional Use: Based upon the evaluation on a case by case basis by the Board of Zoning Adjustment. Also may include the method of using special land use permits.

5. Development Rights:

A. Purchase of Development Rights (PDR): Where development rights are purchased by Government action.

Buffer Zoning Districts: Buffer Zoning Districts are an example of land purchased by Government action. This land is included in zoning ordinances in order to preserve and protect agricultural lands from non-farm land uses encroaching upon them.

B. Transfer of Development Rights (TDR): Development rights are transferable for use in other locations designated as receiving areas. TDR is considered a locally based action (not state), because it requires a voluntary decision on the part of the individual landowners.

6. Governor's Executive Order: Policy made by the Governor, stating the importance of agriculture, and the preservation of agricultural lands. The Governor orders the state agencies to avoid the unnecessary conversion of important farmland to nonagricultural uses.

7. Voluntary State Programs:

A. California's Program of Restrictive Agreements and Differential Assessments: The California Land Conservation Act of 1965, commonly known as the Williamson Act, allows cities, counties and individual landowners to form agricultural preserves and enter into contracts for 10 or more years to insure that these parcels of land remain strictly for agricultural use. Since 1972 the Act has extended eligibility to recreational and open space lands such as scenic highway corridors, salt ponds and wildlife preserves. These contractually restricted lands may be taxed differentially for their real value. One hundred-acre districts constitute the minimum land size eligible.

Suggestion: An improved version of the Act would state that if the land is converted after the contract expires, the landowner must pay the difference in the taxes between market value for the land and the agricultural tax value which he or she had been

paying under the Act. This measure would help to insure that farmland would not be converted after the 10 year period ends.

B. Maryland Agricultural Land Preservation Program: Agricultural landowners within agricultural districts have the opportunity to sell their development rights to the Maryland Land Preservation Foundation under the agreement that these landowners will not subdivide or develop their land for an initial period of five years. After five years the landowner may terminate the agreement with one year notice.

   As is stated above under the California Williamson Act, the landowner should pay the back taxes on the property if he or she decides to convert the land after the contract expires, in order to discourage such conversions.

C. Wisconsin Income Tax Incentive Program: The Wisconsin Farmland Preservation Program of December 1977 encourages local jurisdictions in Wisconsin to adopt agricultural preservation plans or exclusive agricultural district zoning ordinances in exchange for credit against state income tax and exemption from special utility assessment. Eligible candidates include local governments and landowners with at least 35 acres of land per dwelling unit in agricultural use and gross farm profits of at least $6.000 per year, or $18,000 over three years.

8. Mandatory State Programs:

A. The Environmental Control Act in the state of Vermont was adopted in 1970 by the Vermont State Legislature. The Act established an environmental board with 9 members (appointed by the Governor) to implement a planning process and a permit system to screen most subdivisions and development proposals according to specific criteria stated in the law. The planning process consists of an interim and a final Land Capability and Development Plan, the latter of which acts as a policy plan to control development. The policies are written in order to:

   - prevent air and water pollution;
   - protect scenic or natural beauty, historic sites and rare and irreplaceable natural areas; and
   - consider the impacts of growth and reduction of development on areas of primary agricultural soils.

B. The California State Coastal Commission: In 1976 the Coastal Act was passed to establish a permanent Coastal Commission with permit and planning authority The purpose of the Coastal Commission was and is to protect the sensitive coastal zone environment and its resources, while accommodating the social and economic needs of the state. The Commission has the power to regulate development in the coastal zones by issuing permits on a case by case basis until local agencies can develop their own coastal plans, which must be certified by the Coastal Commission.

C. Hawaii's Program of State Zoning: In 1961, the Hawaii State Legislature established Act 187, the Land Use Law, to protect the farmland and the welfare of the local people of Hawaii by planning to avoid “unnecessary urbanization”. The Law made all state lands into four districts: agricultural, conservation, rural and urban. The Governor appointed members to a State Land Use Commission, whose duties were to uphold the Law and form the boundaries of the four districts. In addition to state zoning, the Land Use Law introduced a program of Differential Assessment, wherein agricultural landowners paid taxes on their land for its agricultural use value, rather than its market value.

D. The Oregon Land Use Act of 1973: This act established the Land Conservation and Development Commission (LCDC) to provide statewide planning goals and guidelines.

Under this Act, Oregon cities and counties are each required to draw up a comprehensive plan, consistent with statewide planning goals. Agricultural land preservation is high on the list of state goals to be followed locally.

If the proposed site is subject to or has used one or more of the above farmland protection programs or policies, score the site 20 points. If none of the above policies or programs apply to this site, score 0 points.

5. How close is the site to an urban built-up area?

The site is 2 miles or more from an urban built-up area	15 points
The site is more than 1 mile but less than 2 miles from an urban built-up area	10 points
The site is less than 1 mile from, but is not adjacent to an urban built-up area	5 points
The site is adjacent to an urban built-up area	0 points

This factor is designed to evaluate the extent to which the proposed site is located next to an existing urban area. The urban built-up area must be 2500 population. The measurement from the built-up area should be made from the point at which the density is 30 structures per 40 acres and with no open or non-urban land existing between the major built-up areas and this point. Suburbs adjacent to cities or urban built-up areas should be considered as part of that urban area.

For greater accuracy, use the following chart to determine how much protection the site should receive according to its distance from an urban area. See chart below:

Distance From Perimeter of Site to Urban Area	Points
More than 10,560 feet	15
9,860 to 10,559 feet	14
9,160 to 9,859 feet	13
8,460 to 9,159 feet	12
7,760 to 8,459 feet	11
7,060 to 7,759 feet	10
6,360 to 7,059 feet	9
5,660 to 6,359 feet	8
4,960 to 5,659 feet	7
4,260 to 4,959 feet	6
3,560 to 4,259 feet	5
2,860 to 3,559 feet	4
2,160 to 2,859 feet	3
1,460 to 2,159 feet	2
760 to 1,459 feet	1
Less than 760 feet (adjacent)	0

6. How close is the site to water lines, sewer lines and/or other local facilities and services whose capacities and design would promote nonagricultural use?

None of the services exist nearer than 3 miles from the site	15 points
Some of the services exist more than one but less than 3 miles from the site	10 points
All of the services exist within 1/2 mile of the site	0 points

This question determines how much infrastructure (water, sewer, etc.) is in place which could facilitate nonagricultural development. The fewer facilities in place, the more difficult it is to develop an area. Thus, if a proposed site is further away from these services (more than 3 miles distance away), the site should be awarded the highest number of points (15). As the distance of the parcel of land to services decreases, the number of points awarded declines as well. So, when the site is equal to or further than 1 mile but less than 3 miles away from services, it should be given 10 points. Accordingly, if this distance is 1/2 mile to less than 1 mile, award 5 points; and if the distance from land to services is less than 1/2 mile, award 0 points.

Distance to public facilities should be measured from the perimeter of the parcel in question to the nearest site(s) where necessary facilities are located. If there is more than one distance (i.e. from site to water and from site to sewer), use the average distance (add all distances and then divide by the number of different distances to get the average).

Facilities which could promote nonagricultural use include:

- Water lines
- Sewer lines
- Power lines
- Gas lines
- Circulation (roads)
- Fire and police protection
- Schools

7. Is the farm unit(s) containing the site (before the project) as large as the average-size farming unit in the county? (Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage of Farm Units in Operation with $1,000 or more in sales.)

As large or larger:	10 points
Below average: Deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more is below average	9 to 0 points

This factor is designed to determine how much protection the site should receive, according to its size in relation to the average size of farming units within the county. The larger the parcel of land, the more agricultural use value the land possesses, and vice versa. Thus, if the farm unit is as large or larger than the county average, it receives the maximum number of points (10). The smaller the parcel of land compared to the county average, the fewer number of points given. Please see below:

Parcel Size in Relation to Average County Size	Points
Same size or larger than average (l00 percent)	10
95 percent of average	9
90 percent of average	8
85 percent of average	7
80 percent of average	6
75 percent of average	5
70 percent of average	4
65 percent of average	3
60 percent of average	2
55 percent of average	1
50 percent or below county average	0

State and local Natural Resources Conservation Service offices will have the average farm size information, provided by the latest available Census of Agriculture data

8. If this site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project	10 points
Acreage equal to between 25 and 5 percent of the acres directly converted by the project	9 to 1 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project	0 points

This factor tackles the question of how the proposed development will affect the rest of the land on the farm The site which deserves the most protection from conversion will receive the greatest number of points, and vice versa. For example, if the project is small, such as an extension on a house, the rest of the agricultural land would remain farmable, and thus a lower number of points is given to the site. Whereas if a large-scale highway is planned, a greater portion of the land (not including the site) will become non-farmable, since access to the farmland will be blocked; and thus, the site should receive the highest number of points (10) as protection from conversion

Conversion uses of the Site Which Would Make the Rest of the Land Non-Farmable by Interfering with Land Patterns

Conversions which make the rest of the property nonfarmable include any development which blocks accessibility to the rest of the site Examples are highways, railroads, dams or development along the front of a site restricting access to the rest of the property.

The point scoring is as follows:

Amount of Land Not Including the Site Which Will Become Non-Farmable	Points
25 percent or greater	10
23 - 24 percent	9
21 - 22 percent	8
19 - 20 percent	7
17 - 18 percent	6
15 - 16 percent	5
13 - 14 percent	4
11 - 12 percent	3
9 - 11 percent	2
6 - 8 percent	1
5 percent or less	0

9. Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available	5 points
Some required services are available	4 to 1 point(s)
No required services are available	0 points

This factor is used to assess whether there are adequate support facilities, activities and industry to keep the farming business in business. The more support facilities available to the agricultural

landowner, the more feasible it is for him or her to stay in production. In addition, agricultural support facilities are compatible with farmland. This fact is important, because some land uses are not compatible; for example, development next to farmland cam be dangerous to the welfare of the agricultural land, as a result of pressure from the neighbors who often do not appreciate the noise, smells and dust intrinsic to farmland. Thus, when all required agricultural support services are available, the maximum number of points (5) are awarded. When some services are available, 4 to 1 point(s) are awarded; and consequently, when no services are available, no points are given. See below:

Percent of Services Available	Points
100 percent	5
75 to 99 percent	4
50 to 74 percent	3
25 to 49 percent	2
1 to 24 percent	1
No services	0

10. Does the site have substantial and well-maintained on farm investments such as barns, other storage buildings, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High amount of on-farm investment	20 points
Moderate amount of non-farm investment	19 to 1 point(s)
No on-farm investments	0 points

This factor assesses the quantity of agricultural facilities in place on the proposed site. If a significant agricultural infrastructure exists, the site should continue to be used for farming, and thus the parcel will receive the highest amount of points towards protection from conversion or development. If there is little on farm investment, the site will receive comparatively less protection. See-below:

Amount of On-farm Investment	Points
As much or more than necessary to maintain production (100 percent)	20
95 to 99 percent	19
90 to 94 percent	18
85 to 89 percent	17
80 to 84 percent	16
75 to 79 percent	15
70 to 74 percent	14
65 to 69 percent	13
60 to 64 percent	12
55 to 59 percent	11
50 to 54 percent	10
45 to 49 percent	9
40 to 44 percent	8
35 to 39 percent	7
30 to 34 percent	6
25 to 29 percent	5
20 to 24 percent	4
15 to 19 percent	3
10 to 14 percent	2
5 to 9 percent	1
0 to 4 percent	0

11. Would the project at this site, by converting farmland to nonagricultural use, reduce the support for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted	10 points
Some reduction in demand for support services if the site is converted	9 to 1 point(s)
No significant reduction in demand for support services if the site is converted	0 points

This factor determines whether there are other agriculturally related activities, businesses or jobs dependent upon the working of the pre-converted site in order for the others to remain in production. The more people and farming activities relying upon this land, the more protection it should receive from conversion. Thus, if a substantial reduction in demand for support services were to occur as a result of conversions, the proposed site would receive a high score of 10; some reduction in demand would receive 9 to 1 point(s), and no significant reduction in demand would receive no points.

Specific points are outlined as follows:

Amount of Reduction in Support Services if Site is Converted to Nonagricultural Use	**Points**
Substantial reduction (100 percent)	10
90 to 99 percent	9
80 to 89 percent	8
70 to 79 percent	7
60 to 69 percent	6
50 to 59 percent	5
40 to 49 percent	4
30 to 39 percent	3
20 to 29 percent	2
10 to 19 percent	1
No significant reduction (0 to 9 percent)	0

12. Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of the surrounding farmland to nonagricultural use?

Proposed project is incompatible with existing agricultural use of surrounding farmland	10 points
Proposed project is tolerable of existing agricultural use of surrounding farmland	9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland	0 points

Factor 12 determines whether conversion of the proposed agricultural site will eventually cause the conversion of neighboring farmland as a result of incompatibility of use of the first with the latter. The more incompatible the proposed conversion is with agriculture, the more protection this site receives from conversion. Therefor-, if the proposed conversion is incompatible with agriculture, the site receives 10 points. If the project is tolerable with agriculture, it receives 9 to 1 points; and if the proposed conversion is compatible with agriculture, it receives 0 points.

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor-type site or design alternative for protection as farmland along with the land evaluation information.

For Water and Waste Programs, corridor analyses are not applicable for distribution or collection networks. Analyses are applicable for transmission or trunk lines where placement of the lines are flexible.

(1) How much land is in nonurban use within a radius of 1.0 mile form where the project is intended?

(2)	More than 90 percent	(3)	15 points
(4)	90 to 20 percent	(5)	14 to 1 point(s).
(6)	Less than 20 percent	(7)	0 points

(2) How much of the perimeter of the site borders on land in nonurban use?

(3)	More than 90 percent	(4)	10 point(s)
(5)	90 to 20 percent	(6)	9 to 1 points
(7)	less than 20 percent	(8)	0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

(4)	More than 90 percent	(5)	20 points
(6)	90 to 20 percent	(7)	19 to 1 point(s)
(8)	Less than 20 percent	(9)	0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected	20 points
Site is not protected	0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County? (Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage of Farm Units in Operation with $1,000 or more in sales.)

As large or larger	10 points
Below average deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average	9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project	25 points
Acreage equal to between 25 and 5 percent of the acres directly convened by the project	1 to 24 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project	0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available	5 points
Some required services are available	4 to 1 point(s)
No required services are available	0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

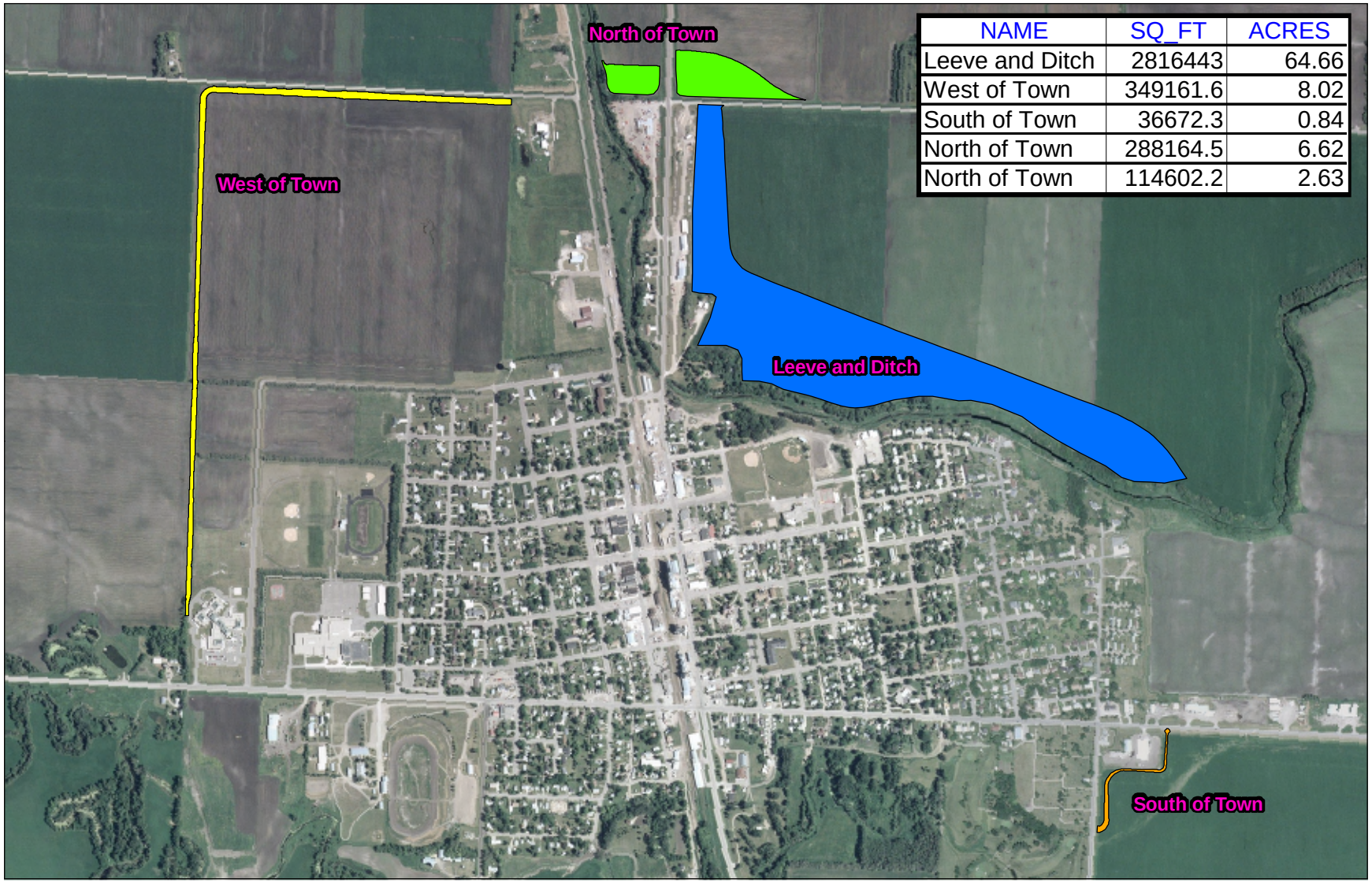
High amount of on-farm investment	20 points
Moderate amount of on-farm investment	19 to 1 point(s)
No on-farm investment	0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is convened	25 points
Some reduction in demand for support services if the site is convened	1 to 24 point(s)
No significant reduction in demand for support services if the site is converted	0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

Proposed project is incompatible to existing agricultural use of surrounding farmland	10 points
Proposed project is tolerable to existing agricultural use of surrounding farmland	9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland	0 points



NAME	SQ_FT	ACRES
Leeve and Ditch	2816443	64.66
West of Town	349161.6	8.02
South of Town	36672.3	0.84
North of Town	288164.5	6.62
North of Town	114602.2	2.63

City of Ada - Norman County - Impacted Farmland

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