ZONING COMMITTEE STAFF REPORT

1. **FILE NAME:** Archer Daniels Midland Co. **FILE #** 09-073-792
2. **APPLICANT:** Archer Daniels Midland Co. **HEARING DATE:** June 11, 2009
3. **TYPE OF APPLICATION:** Conditional Use Permit
4. **LOCATION:** 575 Drake St, area Southeast of Watson and Drake
5. **PIN & LEGAL DESCRIPTION:** 122823320012, SECTION 12 TOWN 28 RANGE 23 LOT 1 BLK 1 & LOT 1 BLK 2 NORTH WESTERN 1ST ADD & IN SD GOVT LOT 4 PART DESC AS BEG AT MOST WLY COR OF LOT 1 BLK 2 NORTH WESTERN ADD TH S 40 DEG 20 MN W 150 FT TH S 83 DEG 35 MN W 77 FT TH S 40 DEG 20 MN W 348.3 FT TO NELY COR
6. **PLANNING DISTRICT:** 9 **PRESENT ZONING:** I2, RC1
7. **ZONING CODE REFERENCE:** §61.501; §68.213; §68.214; §68.400; §68.402; §68.403; §68.404; §68.500; §68.501; §68.503; §68.504
8. **STAFF REPORT DATE:** June 4, 2009 **BY:** Sarah Zorn
9. **DATE RECEIVED:** May 18, 2009 **60-DAY DEADLINE FOR ACTION:** July 17, 2009

A. **PURPOSE:** Conditional use permit for addition to accessory structure in the floodway

B. **PARCEL SIZE:** Irregular parcel; 526,522 sq. ft. Project is located on an existing dock in the Mississippi River.

C. **EXISTING LAND USE:** W-Warehouse

D. **SURROUNDING LAND USE:**

North: Light Industrial (I1)

East: Vacant Industrial (TN3 and R4)

South: Mississippi River

West: Commercial and Residential (TN2)

E. **ZONING CODE CITATION:** §61.501 lists general conditions that must be met by all conditional uses; §68.213 indicates that docks and accessory structures are conditional uses in the RC1 Floodway District; §68.214 lists the standards and conditions for conditional uses in the RC1 Floodway District; §68.400 lists the River Corridor standards and criteria; §68.402 lists standards and criteria as they pertain to the protection of shorelands, floodplains, wetlands and bluffs; §68.403 lists standards and criteria as they pertain to the protection of wildlife and vegetation; §68.404 lists standards and criteria as they pertain to the protection of water quality; §68.500 list the standards for conditional uses within the River Corridor; §68.501 lists those elements required as part of a River Corridor conditional use permit application; §68.503 lists the factors considered by the planning commission when reviewing the conditional use permit application; §68.504 lists a number of conditions that the planning commission may impose.

F. **HISTORY/DISCUSSION:** There is no zoning history specific to this property.

G. **DISTRICT COUNCIL RECOMMENDATION:** The District 9 Council had not commented at the time this report was prepared.

H. **FINDINGS:**

1. The applicant is proposing to construct a two-level accessory structure for barge loading and operations. The proposed 10' X 12' structure will be attached to the existing dock located on the Mississippi River. The applicant is proposing to use the lower level for storage, while the upper level is to be used as the barge operations control room. The proposed construction is located within the RC1 Floodway, which requires a conditional use permit.
2. The structure will be cantilevered from the existing dock and designed to support the proposed use. The upper level will be a modular unit upon a support structure. The applicant is proposing to enclose the lower level support structure with a corrugated metal material with two 12" X 12"

screened openings on each of the structure's four sides to allow flood waters to pass through. Entrance to the lower level will be via a door off the dock and entrance to the upper level via a catwalk connecting to the existing stair.

3. §61.501 lists five standards that all conditional uses must satisfy:

   (1) *The extent, location and intensity of the use will be in substantial compliance with the Saint Paul Comprehensive Plan and any applicable subarea plans which were approved by the city council.* This condition is met. The proposed structure and its uses are supported by the Mississippi River Corridor chapter of the Comprehensive Plan, which states the following objective: 'Recognize the Mississippi as a working river and support the continued operation of commercial navigation facilities' (Objective 5.2, p.32).

   (2) *The use will provide adequate ingress and egress to minimize traffic congestion in the public streets.* This condition is met. Ingress and egress will be from within the ADM site and will not impact the public streets.

   (3) *The use will not be detrimental to the existing character of the development in the immediate neighborhood or endanger the public health, safety and general welfare.* This condition is partly met. The addition of the upper level accessory structure, which is elevated above the regulatory flood protection elevation, will not be detrimental to the character of development in the immediate industrial area, or endanger the public safety. Enclosing the lower level support structure, which is below the regulatory flood protection elevation, may endanger the pubic safety. There is insufficient information to determine that enclosing the support structure will not endanger the public safety.

   (4) *The use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.* This condition is met. The proposed accessory structure will have no impact on the development of surrounding industrial, commercial or residential property.

   (5) *The use shall, in all other respects, conform to the applicable regulations of the district in which it is located.* This condition is met. Accessory uses are permitted in the I2 zoning district.

4. §68.214 lists ten standards that all conditional uses located within the RC1 Floodway District must satisfy:

   (a) *No structure (temporary or permanent), fill deposit (including fill for roads and levees), obstruction, storage of materials or equipment, or other use may be allowed which will cause an increase in the height of the regional flood or cause an increase in flood damages in the reach or reaches affected.* This condition can be met. If the lower level is not enclosed and is simply structural framing for the upper level, this condition will be met. As proposed, the enclosure of the lower level constitutes an obstruction of flood waters. The applicant has not provided sufficient information to determine the effect of this obstruction on flood heights or flood damage.

   (b) *Fill shall be protected from erosion by vegetative cover, mulching, riprap or other acceptable method.* This condition does not apply as the applicant is not proposing the use of fill.

   (c) *Accessory structures shall not be designed for human habitation.* This condition is met. The proposed structure is not intended for human habitation.

   (d) *Accessory structures shall be constructed and placed on the building site so as to offer the minimum obstruction to the flow of floodwaters.*

      (1) *Whenever possible, structures shall be constructed with the longitudinal axis parallel to the direction of flood flow; and*

      (2) *So far as practicable, structures shall be placed approximately on the same flood flow lines as those of adjoining structures.*

This condition can be met. The proposed structure will be located parallel to the direction of flood flow; and will be aligned with an existing structure, minimizing the effect on flow lines. Although the obstruction caused by the enclosed lower level structure is minimal it still constitutes an obstruction under §68.214(a). If the lower level remains unenclosed, the obstruction is limited to the support structure, which can be considered negligible under the National Flood Insurance Program (NFIP) requirements.

(e) *All accessory structures must be elevated on fill*.... This condition does not apply as the applicant is proposing an alternative to elevation on fill as permitted in (f).

(f) *As an alternative to elevation on fill, accessory structures may be structurally dry floodproofed in accordance with the FP-1 or FP-2 floodproofing classification in the state building code or floodproofed to the FP-3 or FP-4 floodproofing classification in the state building code, provided the accessory structure constitutes a minimal investment, does not exceed five hundred (500) square feet in size and for a detached garage, the detached garage must be used solely for parking of vehicles and limited storage. All floodproofed accessory structures must meet the following additional standards, as appropriate:*

(1) *The structure must be adequately anchored to prevent flotation, collapse or lateral movement of the structure and shall be designed to equalize hydrostatic flood forces on exterior walls; and*

(2) *Any mechanical and utility equipment in a structure must be elevated to or above the regulatory flood protection elevation or properly floodproofed.*

This condition appears to be met for the control room portion of the project. The mechanical equipment will be located in the upper level control room, above the required flood protection elevation. The storage enclosure at dock level does constitute a minimal investment, is less than 500 square feet, and could be floodproofed to FP-4 standards. The structure appears to be adequately anchored but this requires verification by a structural engineer.

(g) *Storage of materials or equipment may be allowed if readily removable from the area within the time available after a flood warning and in accordance with a plan approved by the planning commission.* This condition may be met. If the lower level remains unenclosed with no storage space, this condition does not apply. If the lower level is enclosed, this condition is <u>not</u> met because no evacuation plan has been submitted.

(h) *Structural works for flood control that will change the course, current or cross-section of protected wetlands, or public waters shall be subject to the provisions of Minnesota Statutes, Chapter 103.G. Community-wide structural works for flood control intended to remove areas from the regulatory floodplain shall not be allowed in the floodway.* This condition does not apply as the proposed construction is not intended as flood control.

(i) *A levee, dike or floodwall constructed in the floodway shall not cause an increase to the regional flood and the technical analysis must assume equal conveyance or storage loss on both sides of a stream.* This condition does not apply.

(j) *No use shall be permitted which is likely to cause pollution of waters, as defined in Minnesota Statutes, Section 115.01, unless adequate safeguards, approved by the state pollution-control agency, are provided.* This condition appears to be met as long as only the following items (or similar) are stored on the lower level: barge line, spare wire rope for winches, life jackets and throw rings, assorted brooms and shovels, assorted hand tools, oil spill clean up kit, and a trash can. The upper level will be appropriately elevated and is unlikely to cause pollution.

5. §68.402 Protection of shorelands, floodplains, wetlands and bluffs.

(a) *Generally. Development shall be conducted so that the smallest practical area of land be developed at any one time and that each area be subjected to as little erosion or flood*

damage as possible during and after development. This condition does not apply as this application does not include the development of land.

(b) *Placement of structures.* Conditions 1-6 do not apply. The proposed use is an exception under 7(a) because the project is proposed to take place on an existing dock with existing access.

(7) Exceptions:

a. Location of piers and docks shall be controlled by applicable state and local regulations.

b. Commercial, industrial or permitted open space uses requiring location on public waters may be closer to such waters than the setbacks specified in the standard set out in subsection (3) above.

(c) Grading and filling. These conditions do not apply as the applicant is not proposing the use of fill.

6. §68.403 Protection of wildlife and vegetation.

These conditions do not apply as there will be no alteration of the natural environment.

7. §68.404 Protection of water quality.

(a) *Generally. Development shall occur so that surface and subsurface water is not adversely affected by contaminants. Water quality should meet or exceed state standards.* This condition may apply. If the applicant uses the lower level for storage purposes those items stored shall be limited to those listed in finding 4(j). If the lower level is unenclosed, this condition will not apply.

(b) *Contamination.* Standards (1), (2), and (3) do not apply.

(4) *Commercial or industrial land uses requiring the storage or production of materials or wastes that may create a pollution hazard for groundwater or surface water shall be prohibited unless the quality of both the groundwater and surface waters can conform to all applicable state and federal standards, criteria, rules and regulations.*
This condition is met. The applicant as agreed not to store anything that may result in pollution or a reduction in water quality.

(c) *Runoff.* This condition does not apply.

8. §68.501 Application.

Applications for conditional use permits shall be submitted and reviewed according to the provisions in section 64.300. The planning administrator shall determine whether to require any or all of the following six (6) items of information to be supplied by the applicant as a prerequisite to the consideration of the application:

(a) *Plans in triplicate drawn to scale, prepared by and signed by a registered engineer, architect and/or land surveyor as applicable, showing the nature, location, dimensions and elevation of the land; existing surface contours, structures, streets and utilities; proposed surface contours, structures, fill and the location and elevations of proposed streets, water supply, sanitary facilities and other utilities showing the relationship of the above to the channel and to the designated River Corridor District limits.* To date, signed plans have not been submitted. The applicant has stated that analysis of the project by a registered structural engineer will be provided.

(b) *Specifications for building construction and materials, floodproofing, filling, dredging, grading, channel improvements, storage of materials, water supply and sanitary facilities.* In

general this information has been supplied and is sufficient for the control room, although floodproofing documentation for the lower level storage has not yet been provided.

(c) *Typical valley cross-sections of areas to be occupied by the proposed development showing the channel of the stream, elevation of land areas, high water information, vegetation and soil types.* This information is not needed for this application.

(d) *Plan (surface view) of the proposed development showing the proposed use or uses of the area and structures and providing location, relationships and spatial arrangements of those uses and related structures to pertinent elevations, fill, storage location, utilities and other features.* Plan views have been submitted.

(e) *Profile showing the slope of the bottom of the channel and flow lines of the stream.* This information is not need for this application.

(f) *A written evaluation by a registered engineer or other expert person or agency of the proposed project in relationship to flood heights and velocities, the seriousness of flood damage to the use, the adequacy of plans for flood protection and other technical matters.* An evaluation has been requested, but has not yet been submitted to staff for review.

9. §Sec. 68.503 Factors considered.

In addition to the general standards and requirements in section 61.500 and all other relevant factors specified in other sections of this chapter, in reviewing conditional use permit applications, the planning commission or planning administrator shall consider the following:

(a) *The relationship of the proposed use to the comprehensive plan and floodplain management program for the city.* The proposed use is consistent with the Comprehensive Plan and is supported by Objective 5.2 (p. 32) which states: 'Recognize the Mississippi as a working river and support the continued operation of commercial navigation facilities.' This includes support for barge operations taking place at the ADM site.

(b) *The importance of the services provided by the proposed facility to the community.* Jobs at a key Saint Paul business are located at the barge operations control room. Barge service is important for the regional economy as well as the local community.

(c) *The ability of the existing topography, soils and geology to support and accommodate the proposed use.* This does not apply as the use is located on an existing dock on the river.

(d) *The compatibility of the proposed use with existing characteristics of biologic and other natural communities.* This does not apply as the use is located on an existing dock on the river.

(e) *The proposed water supply and sanitation systems and the ability of those systems to prevent disease, contamination and unsanitary conditions.* There are no water or sanitation systems proposed.

(f) *The requirements of the facility for a river-dependent location, if applicable.* Barge operations cannot be conducted without a river location.

(g) *The safety of access to the property for ordinary vehicles.* There will be no vehicle access to this facility.

(h) *The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.* The proposed facility is susceptible to damage. The structure must be designed to withstand flood-level velocities and a flood evacuation plan is required for the lower level storage.

(i) *The dangers to life and property due to increased flood heights or velocities caused by encroachments.* Encroachments are minimal without the enclosed storage area. The Department of Natural Resources (DNR) has been asked to review the submitted information.

(j) *The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters expected at the site.* This information was not provided as part of the

application. The applicant states it is not likely to change as a result of this project. This will require confirmation if the lower level is enclosed.

(k) *The danger that materials may be swept onto other lands or downstream to the injury of others.* If the lower level is enclosed a flood evacuation plan is required. A structural engineer will need to verify that the support structure for the control room is adequate and that any walls, doors, or screens on the lower level are adequately affixed to the structure.

(l) *The availability of alternative locations or configurations for the proposed use.* No others presented.

(m) *Such other factors as are relevant to the purposes of this chapter.* No other factors to consider.

10. §Sec. 68.504 Conditions imposed.

The planning commission or planning administrator may attach such conditions to the granting of conditional use permits as each deems necessary to fulfill the purposes of this chapter. Such conditions may include, but are not limited to, the following:

Relevant conditions include:

(a) *Modifications of design, site planning or site treatment.* There is currently not enough information to be certain that the lower level storage portion of the proposed structure is in compliance with the river corridor regulations.

(d) *Limitations on period of use and operation, a flood warning system and an evacuation plan.* If the lower level is enclosed and used for storage purposes, a flood warning plan and evacuation plan must be provided.

(g) *Floodproofing measures shall be designed consistent with state-established floodproofing standards and with the flood protection elevation for the particular area including flood velocities, duration and rate of rise, hydrostatic and hydrodynamic forces, and other factors associated with the regulatory flood. The commission shall require that the applicant submit a plan or documents certified by a registered professional engineer or architect that the floodproofing measures are consistent with the regulatory flood elevation and associated flood factors for the particular area. The floodproofing measures that may be required include, but are not limited to, the following:* Assurance that the engineering submittal is sufficient is needed from the DNR. Items 1-12 below are required as part of the As-built Certification required by §68.103(f) of the Code (although some will not apply). It is necessary to provide sufficient information so that City and State officials are satisfied that floodproofing measures are consistent with the river corridor regulations.

(1) *Anchorage to resist flotation and lateral movement.*
(2) *Installation of watertight doors, bulkheads and shutters, or similar methods of construction.*
(3) *Reinforcement of walls to resist water pressure.*
(4) *Use of paints, membranes or mortars to reduce seepage of water through walls.*
(5) *Addition of mass or weight to structures to resist flotation.*
(6) *Installation of pumps to lower water levels in structures.*
(7) *Construction of water supply and waste treatment systems to prevent the entrance of floodwaters.*
(8) *Installation of pumping facilities or comparable practice for subsurface drainage systems for buildings to relieve external foundation wall and basement floor pressures.*
(9) *Construction to resist rupture or collapse caused by water pressure or floating debris.*
(10) *Installation of valves or controls on sanitary and storm drainage which will permit the drains to be closed to prevent backup of sewage and stormwaters into the buildings or structures. Gravity draining of basements may be eliminated by mechanical devices.*
(11) *Location of all electrical equipment, circuits and installed electrical appliances such that they are not subject to the regional flood.*

(12) *Location of any structural storage facilities for chemicals, explosives, buoyant materials, flammable liquids or other toxic materials, which could be hazardous to public health, safety and welfare, above the flood protection elevation or provision of adequate floodproofing to prevent flotation of or damage to storage containers which could result in the escape of toxic materials into floodwaters.*

(h) *Specifications for building construction and materials, filling and grading, water supply, sanitary facilities, utilities and other work or construction to be submitted to the city division of housing and building code enforcement for review and approval prior to any development.* This information shall be provided and is required in order for the applicant to obtain a certificate of occupancy.

I. **STAFF RECOMMENDATION:** Based on the above findings, staff recommends approval of the conditional use permit for the barge operations control room and support structure portion of the accessory structure addition in the floodway, but not the enclosure of the support structure below the 100-year flood elevation level, subject to the following additional condition(s):

1. Applicant's structural engineer must provide a written evaluation on the plans for the support structure, including relationship to flood heights and velocities and the ability of the support structure to withstand these, the seriousness of flood damage to the use, the adequacy of plans for flood protection, and any other technical matters as required by City staff for approval of the site plan;
2. The DNR must determine that the support structure is considered a "minor project" per National Flood Insurance Program regulations; and,
3. The As-Built Certification is submitted to the Department of Safety and Inspections.

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MEMORANDUM

DATE: April 21, 2009

TO: Molly Shodeen, Minnesota DNR

FROM: Ryan Bluhm, P.E.

SUBJECT: ADM
Drainage and Retention Pond Calculations
Clark Project #C08010

ADM – Benson Quinn is proposing to add two small equipment and storage rooms on their existing barge loading dock at 575 Drake Street in St. Paul at Upper Mississippi River Mile Mark 841.7 L. The proposed improvements can be seen on the attached plan sheets S1 and S2.

All of the proposed improvements would be built on the surface and attached to the existing concrete dock. The existing surface of the dock has an elevation of 704.0, while the ordinary high water elevation of the river has an elevation of 695.5. The 100-year flood elevation of the river in this location is 711.0. A proposed modular building would be placed on top of support structure. The modular building will have dimensions of 10 feet x 12 feet, with a floor elevation of 713.0. The purpose of the modular building is to be used by Barge Loading personnel as an operations control room. The structure that supports this building will have a height of 9 feet (from 704.0 to 713.0). It is our intention to place 1" Deck Wall Panel around this structure, so that this space could be used for additional storage. This room would have screened openings to allow flood water to enter the room if the river were to exceed the 704.0 elevation (see attached plans).

In order to measure the amount of impact to the existing floodplain of the river, we have completed the calculation of the additional volume that this infrastructure would contribute in table 1.1

CLARK

Table 1.1 – Area & Volume of proposed improvements within the flood way.

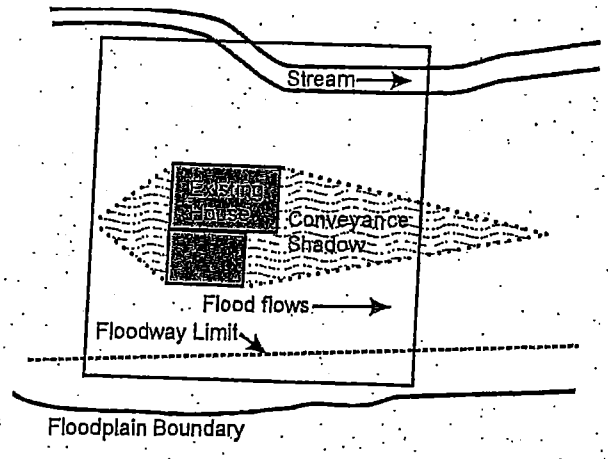
ADM River Structure			4/17/2008	Volume of added structure up to 100 yr high water level
Section	Quantity	Area (ft^2)	Length (ft)	Vol. (ft^3)
w 10X30	4	0.061	7.3	1.780
w 10X30	2	0.061	14.5	1.780
w 8X18	2	0.037	6.0	0.438
w 8X18	4	0.037	14.5	2.119
HSS 6X6X3/8	2	0.053	7.0	0.737
HSS 6X6X3/8	2	0.053	9.3	0.983
HSS 4X4X1/4	2	0.023	7.0	0.328
HSS 4X4X1/4	2	0.023	10.0	0.468
HSS 4X4X1/4	2	0.023	2.3	0.109
HSS 4X4X1/4	1	0.023	8.0	0.187
HSS 4X4X1/4	8	0.023	7.5	1.404
HSS 4X4X1/4	2	0.023	11.0	0.515
Wall Panel - E&W	2	4.375	NA	8.750
Wall Panel - N&S	2	6.417	NA	12.833
Floor Panel	1	1.719	1.0	1.719
L 3X3X1/4	4	0.010	58.0	2.320
L 3X3X1/4	8	0.010	9.5	0.760
WT 5X15	4	0.031	2.0	0.246
Connections	12	0.042	3.0	1.500
			Total Vol (ft^3)	38.98

As we can see, the additional infrastructure amounts to approximately **39 cubic feet** of volume impact below the 711.0 elevation. This is equivalent to a 28" square column with a height of seven feet. Also, approximately half of the proposed enclosure is located within the conveyance shadow of the existing structure (see attached figure 1-1). Therefore, we consider the impact of this project to be very minor and too small to warrant an additional engineering study. Attached is information from the National Flood Insurance Program (NFIP) requirements (pages 5-23 and 5-24). This information supports this finding for minor projects such as this one.

Please refer the attached structural plans and exhibits for more information.

Determining the limits of the conveyance shadow is illustrated in Figure 5-6. Small structures located completely within the shadow can be permitted without the engineering analysis needed for a no-rise certification.

Note: Just because a small structure can be located in the conveyance shadow, it is still preferable to keep all development out of the floodway. Don't forget: all buildings must be elevated or otherwise protected from the base flood.



Upstream of the existing obstruction: draw lines at a 1:1 ratio.

Downstream: draw lines at a 4:1 ratio

Figure 5-6. Determining the conveyance shadow

STREAMS WITHOUT FLOODWAY MAPS

If your community is subject to 44 CFR Section 60.3(c), you have a FIRM with base flood elevations but no mapped floodway. The following applies to you.

44 CFR 60.3(c)(10): [Communities must] Require until a regulatory floodway is designated, that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

For the purposes of administering your ordinance, you should treat the entire riverine floodplain as a floodway. You should require the same encroachment certification to ensure that a development project will not obstruct flood flows and cause increased flooding on other property. This approach is recommended for all other riverine floodplains without a mapped floodway.

In riverine floodplains where no floodway has been designated, the review must demonstrate that the *cumulative* effect of the proposed development, when combined with all other existing and anticipated development:

"NO-RISE" CERTIFICATION

This is to certify that I am a duly qualified registered professional engineer licensed to practice in the State of _____

It is further to certify that the attached technical data supports the fact that proposed _____ (Name of Development) will not impact the 100-year flood elevations, floodway elevations, or floodway widths on _____ ___ (Name of Stream) at published sections in the Flood Insurance Study for ___ _____ (Name of Community) dated _____ (Study Date) and will not impact the 100-year flood elevations, floodway elevations, or floodway widths at unpublished cross-sections in the vicinity of the proposed development.

Attached are the following documents that support my findings:

_____

_____

Date: _____

Signature: _____

Title: _____ {SEAL}

Figure 5-5: Example no-rise certification

Although your community is required to review and approve the encroachment review, you may request technical assistance and review from the FEMA Regional Office or state NFIP Coordinator. If this alternative is chosen, you must review the technical submittal package and verify that all supporting data are included in the package before sending it to FEMA.

Minor projects: Some projects are too small to warrant an engineering study and the certification. Many of these can be determined with logic: a sign post or telephone pole will not block flood flows. A driveway, road or parking lot at grade (without any filling) won't cause a problem, either.

Building additions, accessory buildings, and similar small projects can be located in the conveyance shadow. This is the area upstream and downstream of an existing building or other obstruction to flood flows. Flood water is already flowing around the larger obstruction, so the addition of a new structure will not change existing flood flow.

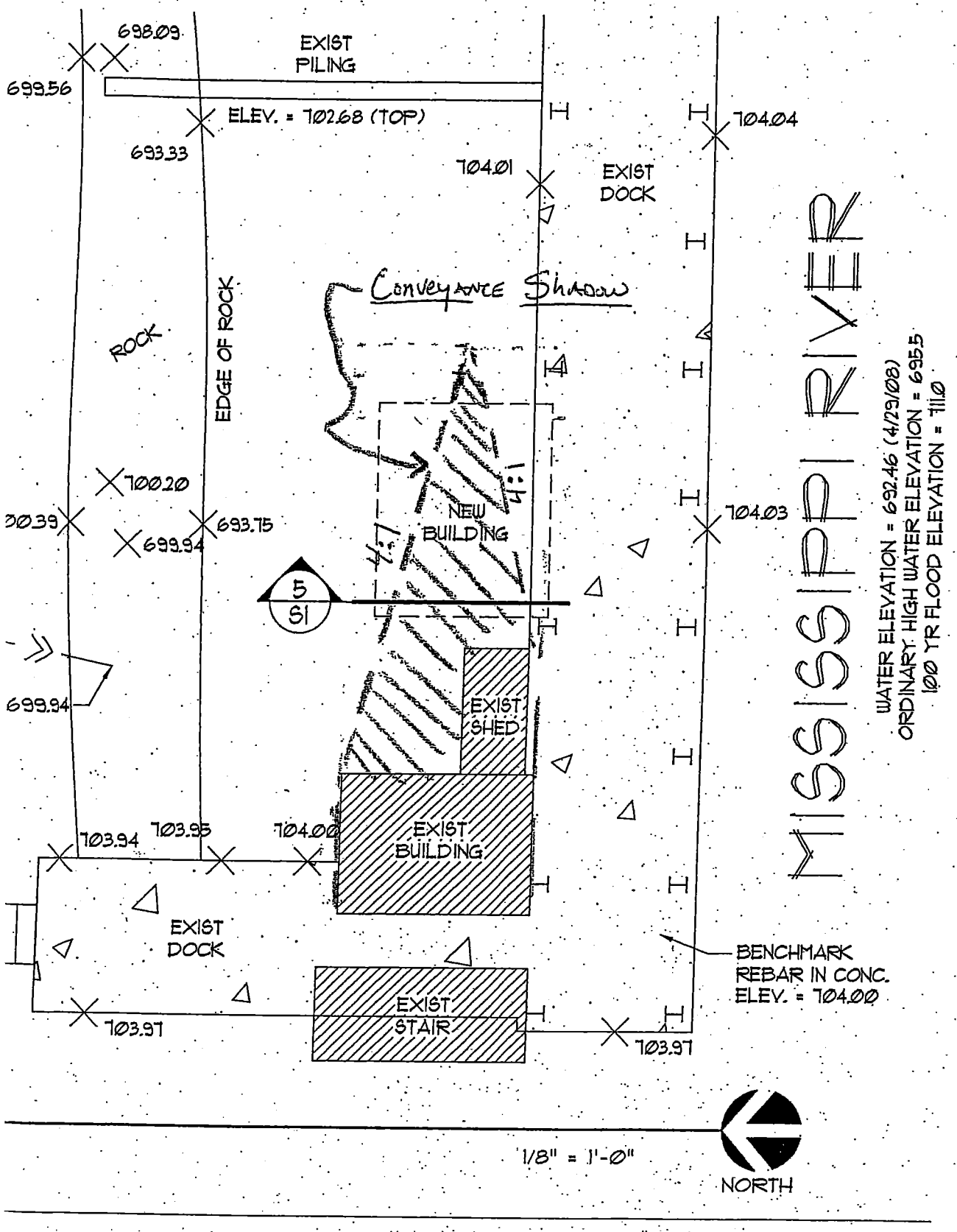


Figure 1-1 - Conveyance Shadow

SPEED SPACE

BUILDING LOCATION: ST. PAUL, MN.

OCCUPANCY GROUP: B

CONSTRUCTION TYPE: VB

MODEL	SIZE	SQ. FOOTAGE
SS1012	9'-9" X 12'-0"	117

DESIGN CODES

2007 MN STATE BUILDING CODE (2006 IBC W/ MN AMENDMENTS)
2007 MN STATE MECHANICAL CODE
2008 NATIONAL ELECTRIC CODE
1999 MN ENERGY CODE

INDEX	
0	COVER SHEET
1	FLOOR PLAN
2	CROSS SECTION

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Kevin M. Finn
Registration No. 24959
Date 3-10-09

DESIGN LOADS

GROUND SNOW LOAD: 60 PSF
WIND: SPEED: 90 MPH EXP. C
SITE CLASS: B

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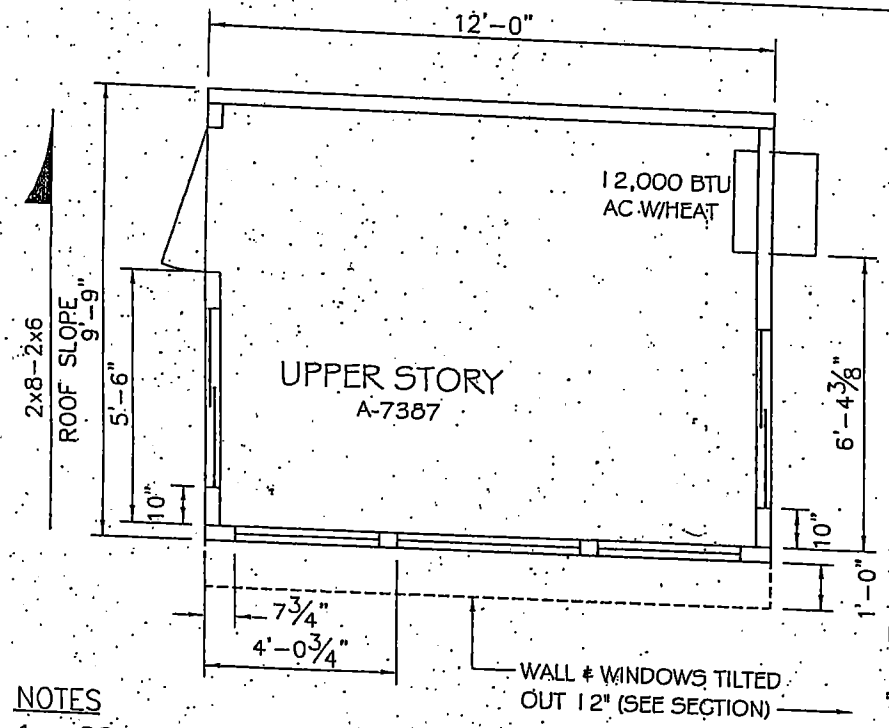
SPEED SPACE
65213 CR 31
GOSHEN, IN 46526

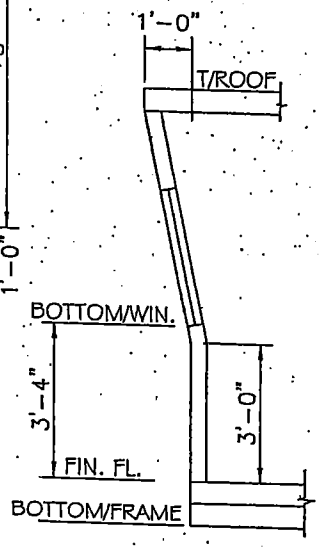
CUSTOMER: SPECIALTY STRUCTURES			
DRAWN BY: TAS	SCALE: N.T.S.	DATE: 2/25/09	
COVER SHEET	DRAWING NO. 0	SERIAL NO. A-7387	

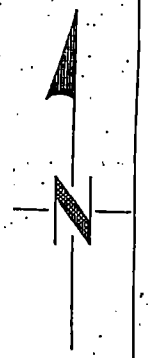
REVISIONS

NO.	DATE

Modular Building, to be placed on top of support structure.







NOTES

1. 26 GA. STEEL SIDING
2. CRANE LIFTING LUGS
3. R-19 FLOOR & ROOF INSULATION
4. 16 ga. GALVANIZED STEEL UNDERBELLY

DOOR & WINDOW SCHEDULE

1. 3680 STEEL W/STEEL DOOR 1/2 LITE/CLOSER/PANIC BAR (1)
2. 46"x36" H. SLIDING WINDOWS/LOW-E (2)
3. 36"x36" PICTURE WINDOWS/LOW-E (2)
4. 46"x36" PICTURE WINDOWS/LOW-E (1)

WALLS	*	2x6 @ 16" O.C. 8'-0" CEILING HEIGHT
FLOOR	*	2x6 @ 12" O.C.
SIDING	*	26ga. RIBBED STEEL
	COLOR	FRAMING

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Kevin M. Fina
Registration No. 24850
Date 3/6/09

DOORS MAY REQUIRE ADJUSTMENT DUE TO SHIFTING DURING TRANSPORT ADJUSTMENT IS RESPONSIBILTY OF CUSTOMER

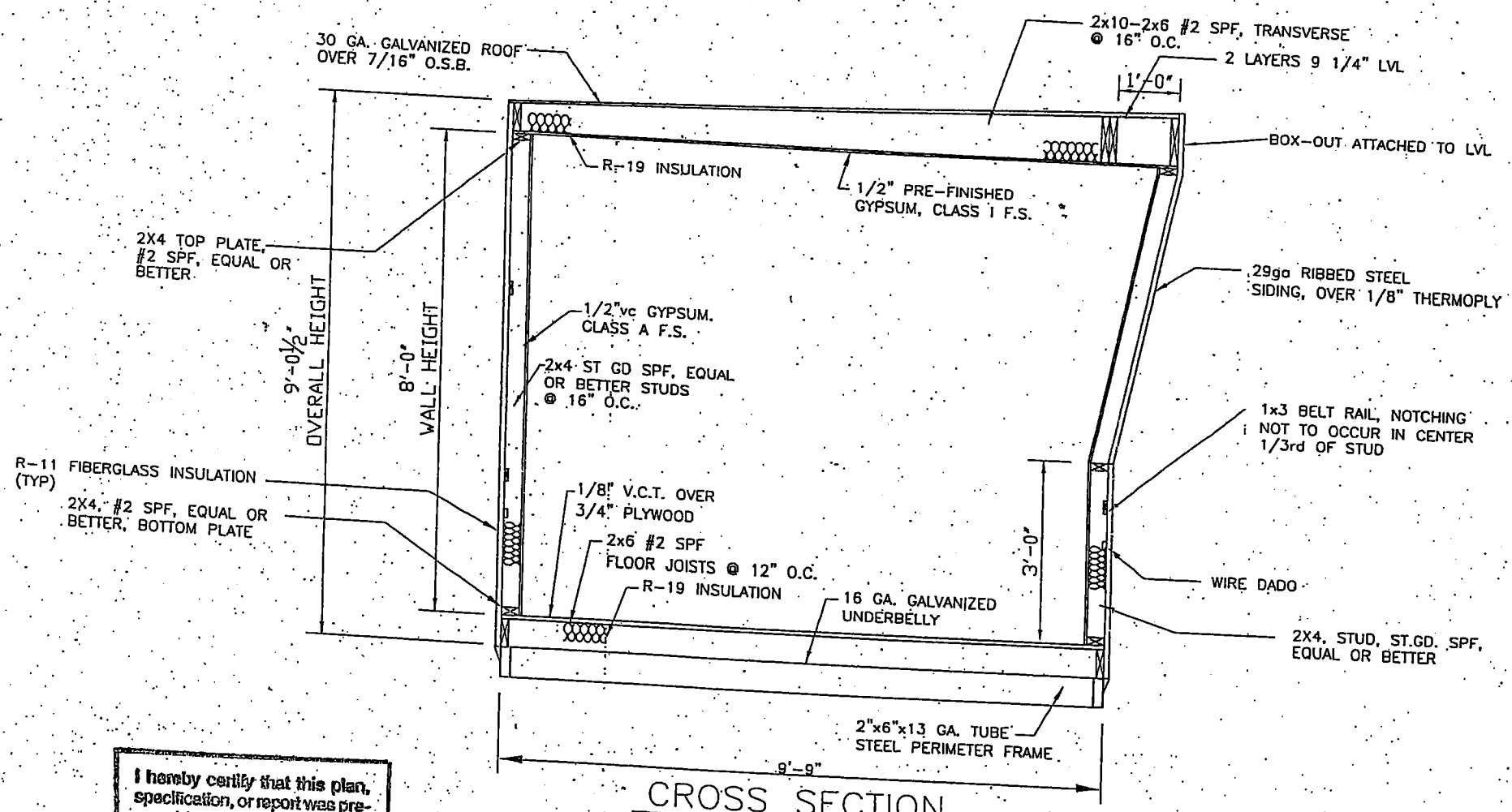
OVERALL DIMENSIONS ARE OUTSIDE OF FRAME TO OUTSIDE OF FRAME. DIMENSIONS DO NOT INCLUDE SHEATHING, SIDING, OR ANY OTHER PROTRUSION SUCH AS DOOR KNOBS, A/C SLEEVES, SPRINKLERS, ETC...

THESE DRAWINGS AND CONCEPTS ARE THE SOLE PROPERTIES OF COMMERCIAL STRUCTURES CORP. AND MAY NOT BE REPRODUCED IN ANY FORM WITHOUT THE EXPRESSED PERMISSION OF COMMERCIAL STRUCTURES CORP. THIS POLICY IS LEGALLY ENFORCED.

CUSTOMER:			
DEALER:	SPECIALTY STRUCTURES		
SIZE:	SS1012/9'-9"x12'-0"		
DRAWN BY: TAS	SCALE: NTS	DATE: 2/25/08	
PRODUCTION FLOOR PLAN	DWG #: 1	SERIAL #: A-7387	

REVISIONS

NO.	DATE
1	10/23/08
2	2/9/09



CROSS SECTION

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Kevin M. Fina

Registration No. 24558

Date 5-10-09

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SPEED SPACE®

65213 CR 31
GOSHEN, IN 46528

SS1012/9'-9"x12'-0"

CUSTOMER:	SPECIALTY STRUCTURES		
DRAWN BY: TAS	SCALE: 3/8"=1'-0"	DATE: 2/16/09	
CROSS SECTION	DRAWING NO. 2	SERIAL NO. A-7387	

REVISIONS	
NO.	DATE

CLARK
ENGINEERING CORPORATION

621 Lilac Drive North
Minneapolis, Minnesota 55422-4609
Telephone: (763) 545-9196
Fax: (763) 541-0056
www.clark-eng.com

April 23, 2009

Molly Shodeen
DNR Waters
1200 Warner Road
St. Paul, MN 55106

RE: ADM-Benson Quinn
Dock Improvements
575 Drake Street, St. Paul, MN 55102

Dear Ms. Shodeen:

Attached for your review is a permit application for the proposed improvements on the existing Barge Loading dock owned by ADM-Benson Quinn. We have included a permit fee in the amount of $250, proposed plans for the improvements, along with a letter from the owner explaining the reasoning behind the proposed project.

Prior to completing our submittals to the Capital Region Watershed district and the City of St. Paul, we wanted to make sure the DNR is comfortable with the proposed improvements. Please review the attached information and call me at 763-545-9196 with any questions you may have.

Sincerely,
CLARK ENGINEERING CORPORATION

Ryan Bluhm, P.E., LEED-AP
Civil Engineering Department Manager

ADM - Benson Quinn Co.

Division of the Archer Daniels Midland Co.

575 Drake Street

Saint Paul, MN 55102

Loc. #426, Elevator D

Phone 651-292-9796

Fax 651-292-9952

April 13, 2009

Ryan Bluhm, P.E.
Clark Engineering
621 Lilac Drive North
Minneapolis, MN 55422

RE: Building Description and Purpose
Proposed new Structure for ADM Grain Co.

Dear Ryan,

The Archer Daniels Midland Co. is proposing the construction and installation of a new building located adjacent to our existing structure located at 575 Drake Street in Saint Paul, Minnesota on Upper Mississippi River Mile Mark 841.7 L.

The purpose of this new construction is two fold;

The first level will provide additional storage for the equipment needed for use in our Barge Loading Operations. This unit will be a 10'x12' building which will be at the same elevation as the existing concrete dock and will have one access door. There will be no windows in this unit.

The second level, which will be directly above the storage room will also be 10'x12' and will be accessed from the existing stairway. It will be used by our Barge Loading Personnel as an Operations Control Room. This unit with windows will allow for better sight lines of the Barge loading process as well as providing increased visibility of the barge deck hands.

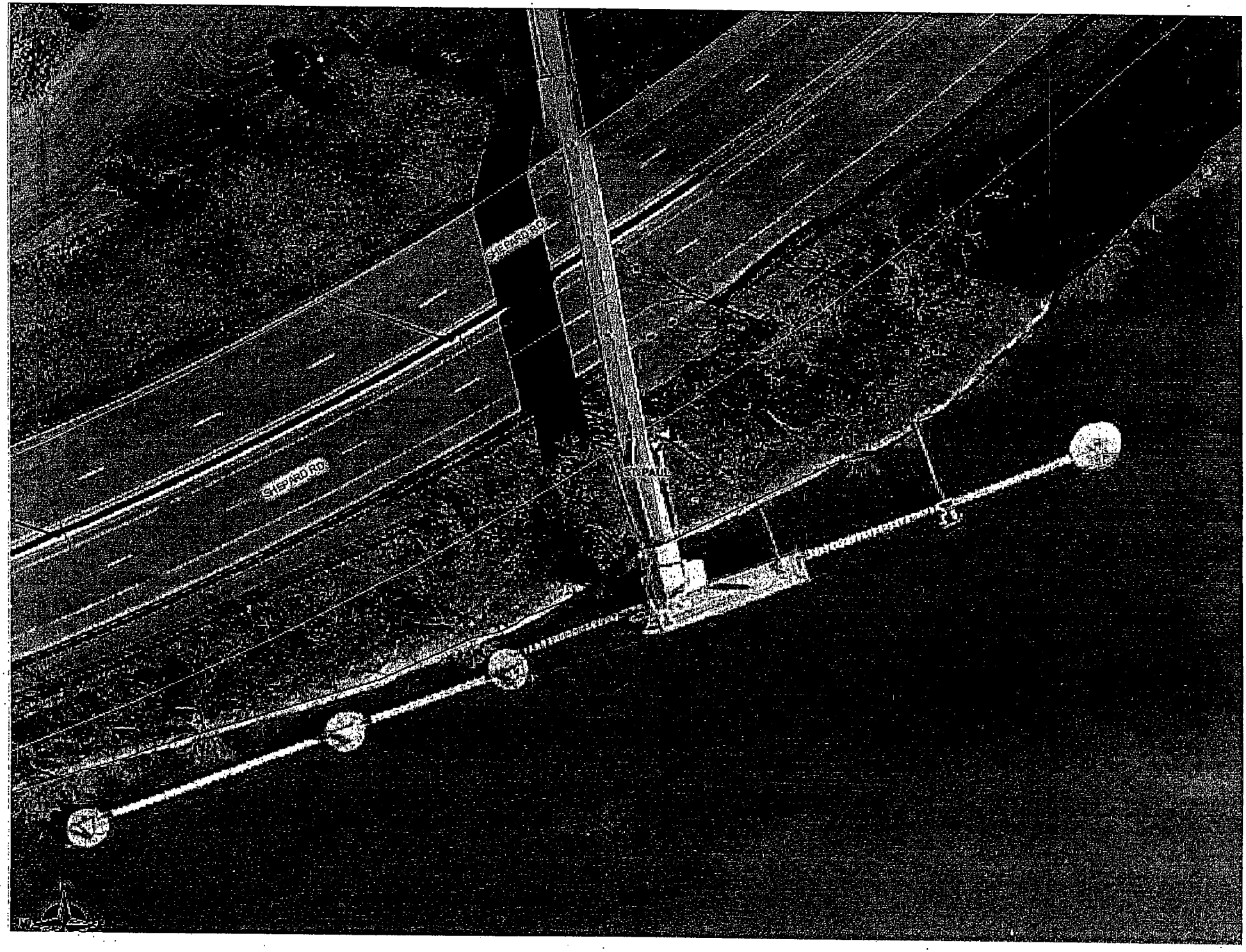
The Welfare of our Employees is extremely important to ADM, this new structure will provide for a safer and cleaner work environment for our dock personnel.

Archer Daniels Midland Co. built and has operated the Grain Elevator in St. Paul since 1954. The existing 7.5'x10.5' barge structure contains our Equipment Controls and USDA Grain sampling equipment. It also must house the 3 people that work there. Our plan is to continue to use it for our USDA Grain Sampling requirements.

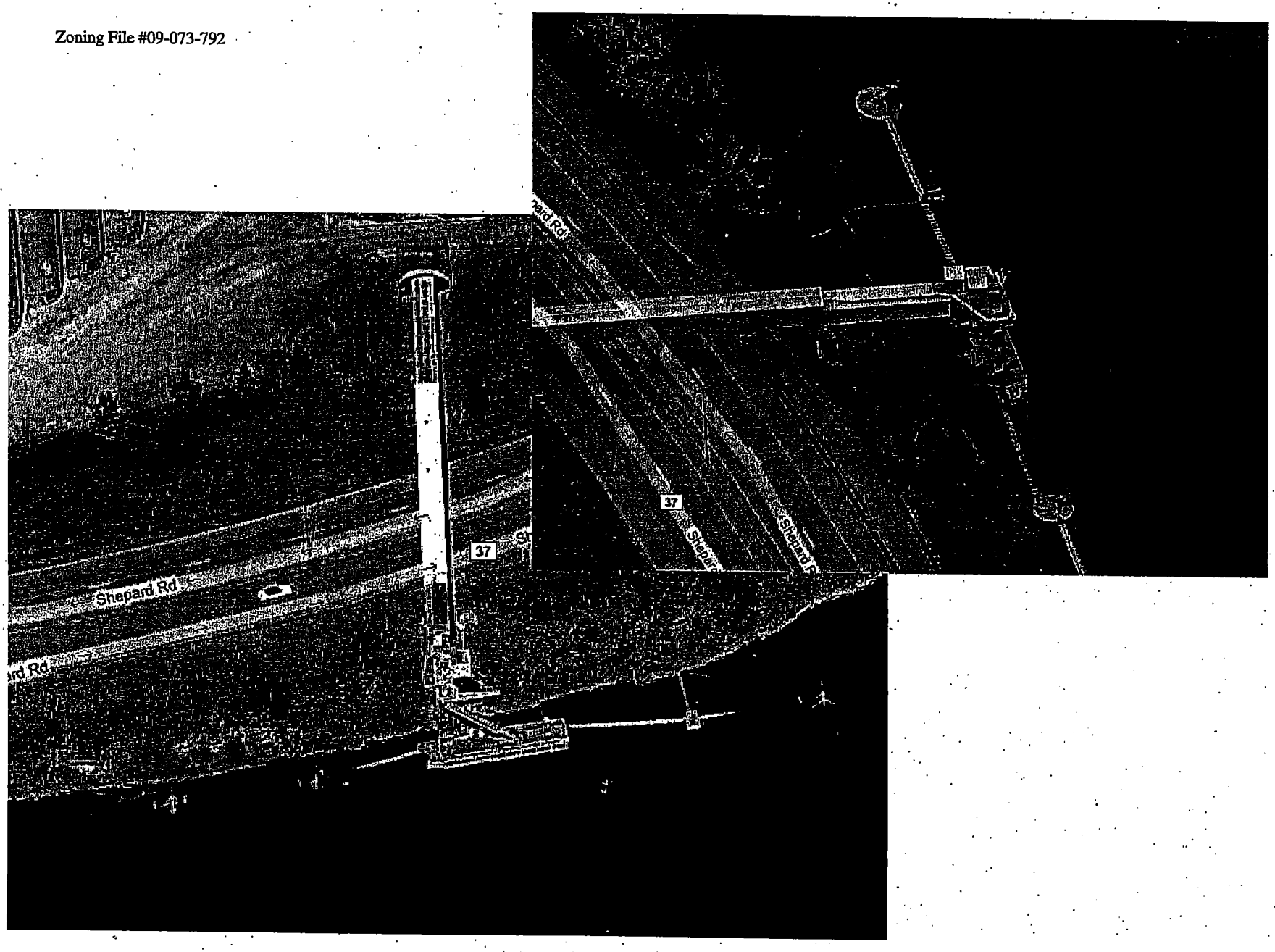
Please share this information with the appropriate Agencies so that we may receive approval for this project.

Sincerely,

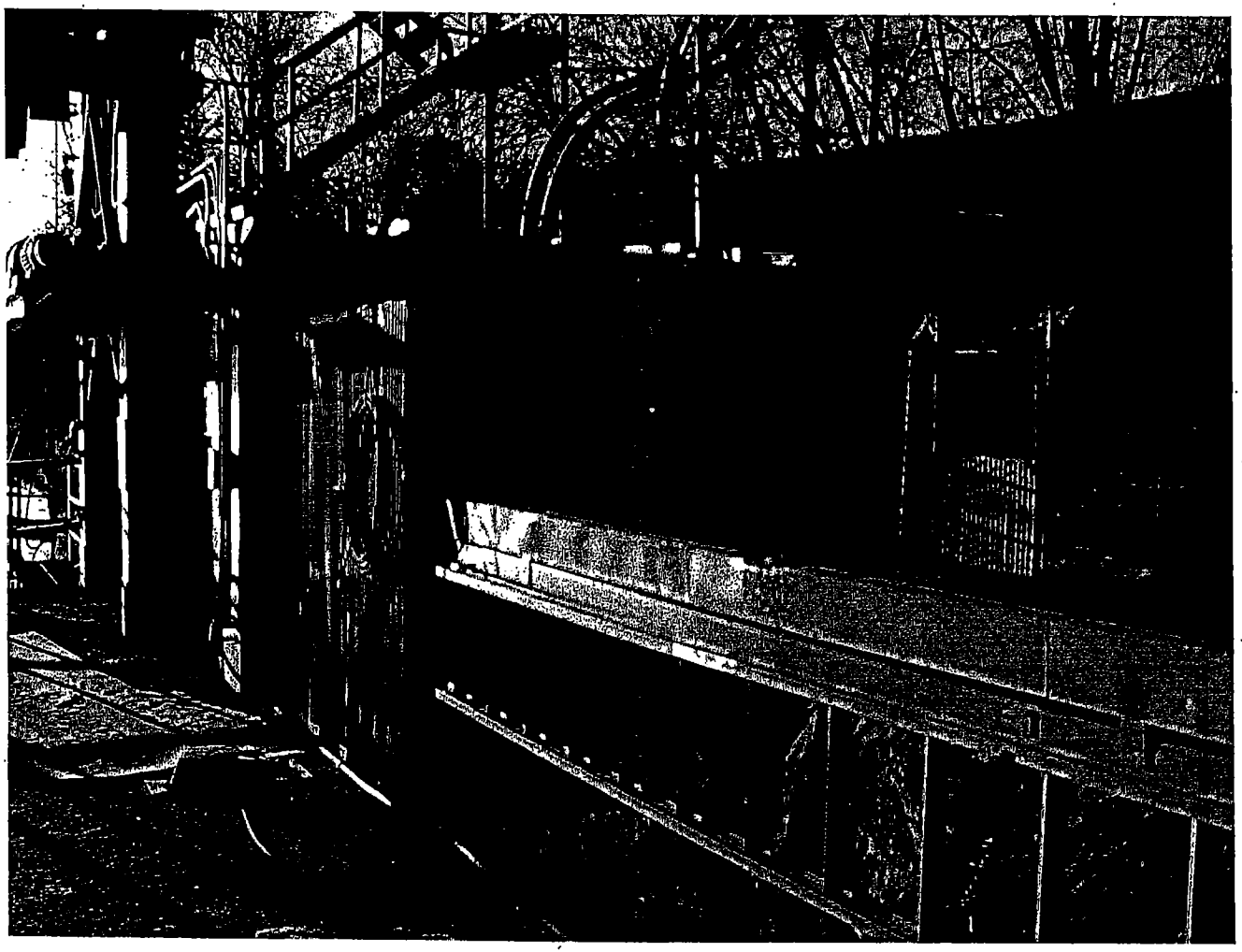
Bruce Jorgenson
Superintendent
Archer Daniels Midland Co.

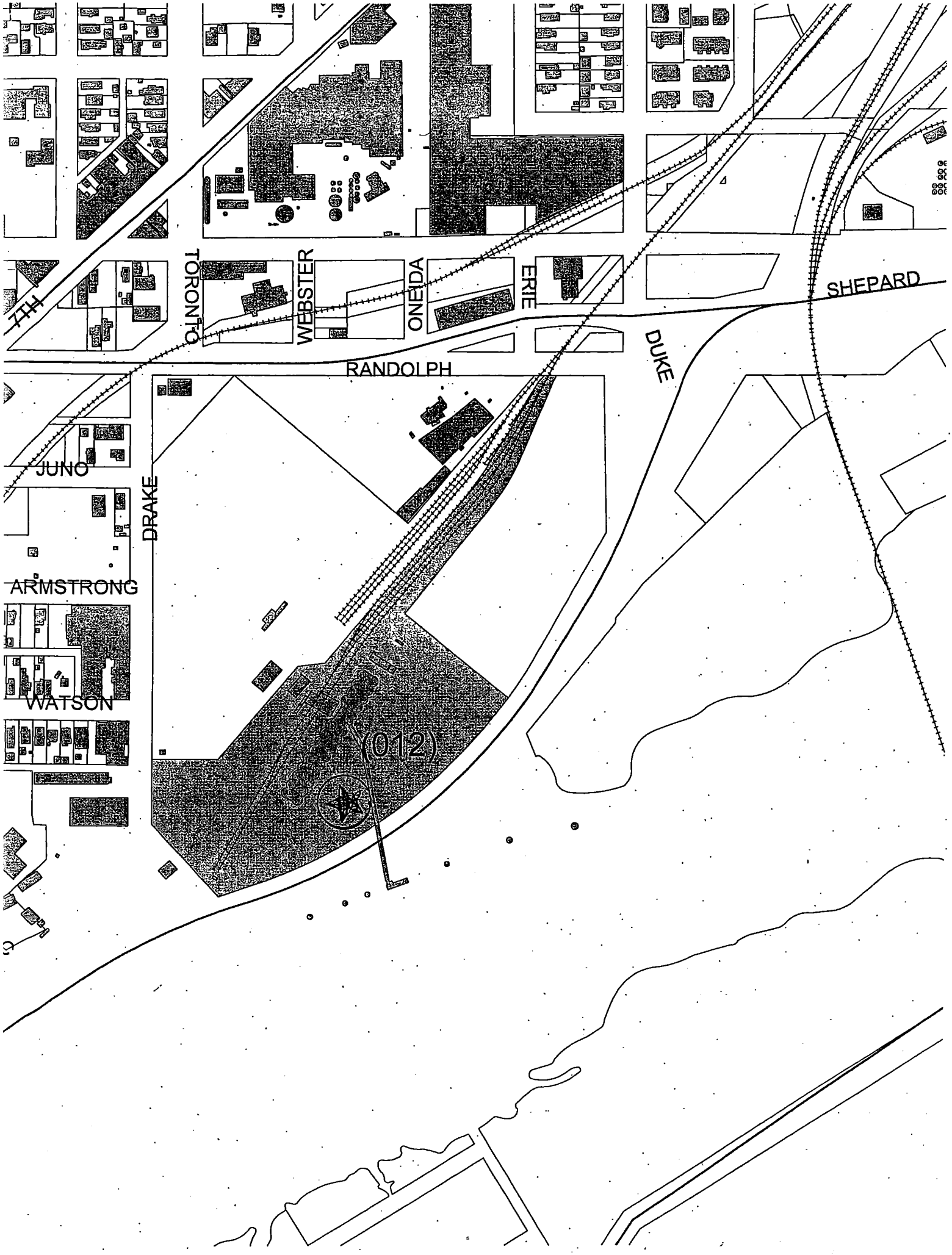

SHEPARD RD
SHEPARD RD
ST PAUL

Zoning File #09-073-792

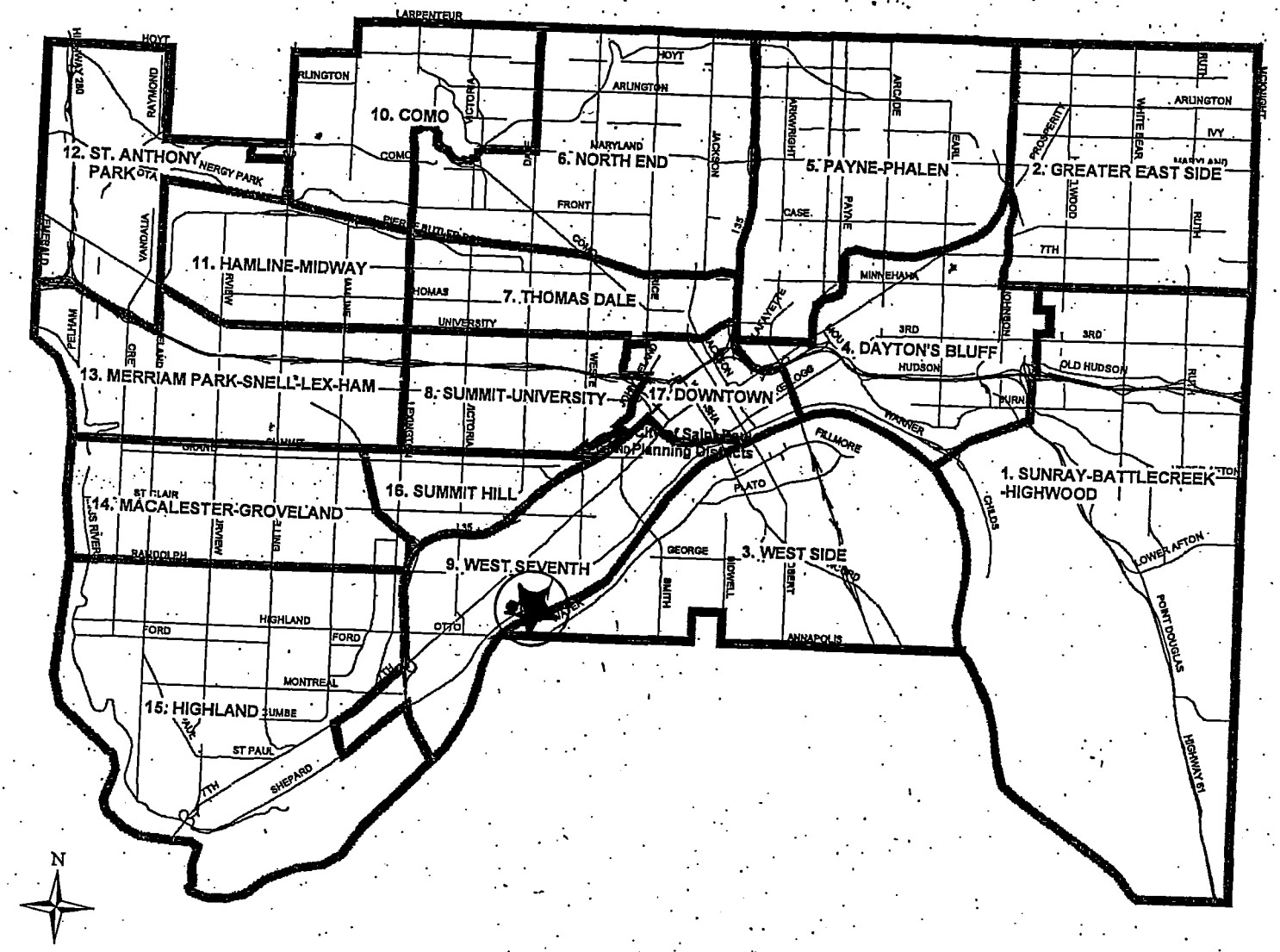


Zoning File #09-073-792




HILL
TORONTO
WEBSTER
ONEIDA
ERIE
SHEPARD
DUKE
RANDOLPH
JUNO
DRAKE
ARMSTRONG
WATSON
(012)

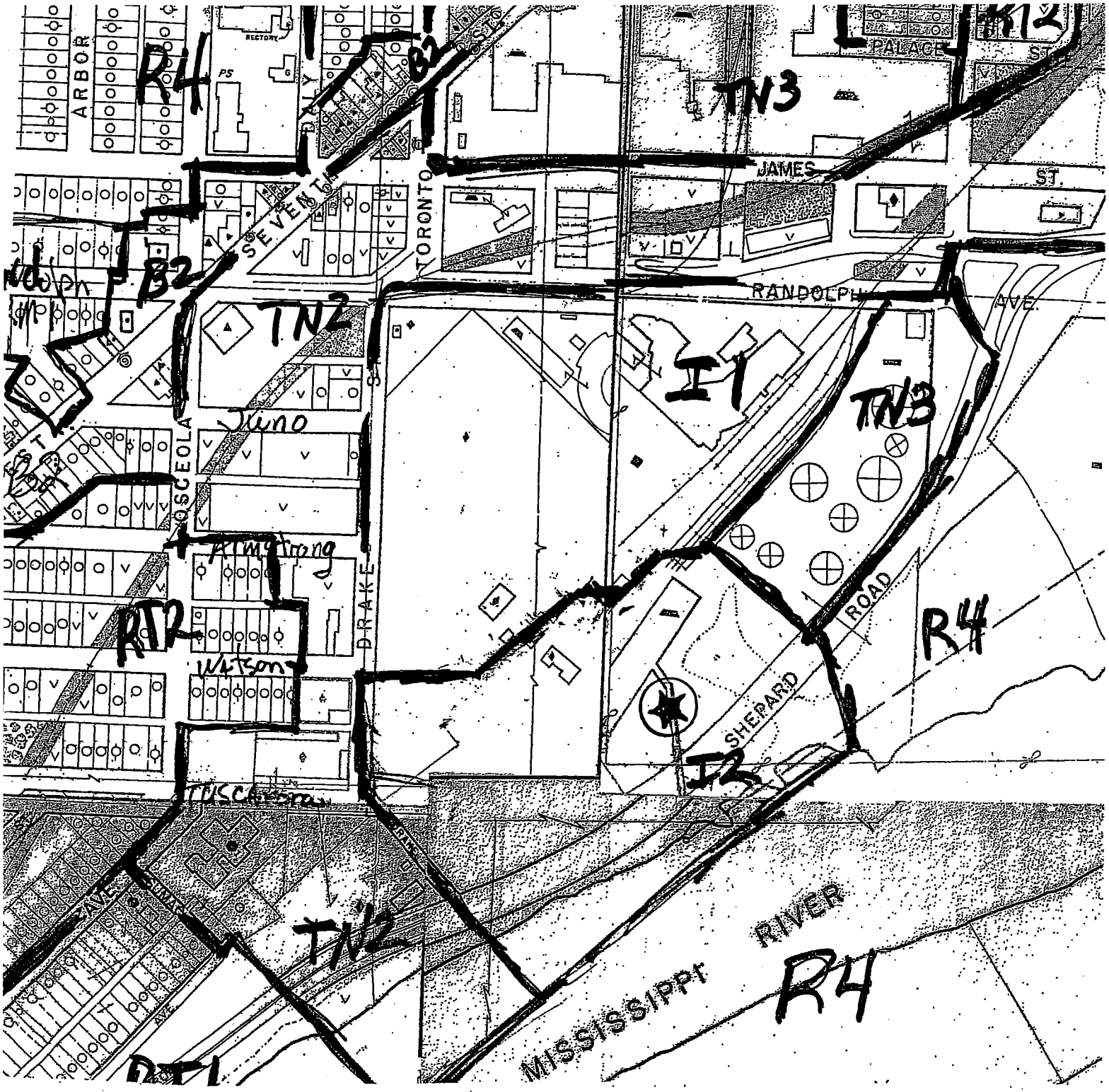
CITIZEN PARTICIPATION DISTRICTS



CITIZEN PARTICIPATION PLANNING DISTRICTS

1. SUNRAY-BATTLECREEK-HIGHWOOD
2. GREATER EAST SIDE
3. WEST SIDE
4. DAYTON'S BLUFF
5. PAYNE-PHALEN
6. NORTH END
7. THOMAS-DALE
8. SUMMIT-UNIVERSITY
9. WEST SEVENTH
10. COMO
11. HAMLINE-MIDWAY
12. ST. ANTHONY
13. MERRIAM PK.-LEXINGTON HAMLINE
14. GROVELAND-MACALESTER
15. HIGHLAND
16. SUMMIT HILL
17. DOWNTOWN

#09-073792



APPLICANT ADM

PURPOSE CUP

FILE # 09-073792 DATE 5-19-09

PLNG. DIST. 9 MAP # 27 + 28

~~SCALE 1" = 400'~~

PED

LEGEND

zoning district boundary

subject property

north

one family

two family

multiple family

commercial

industrial

V. vacant