

**IDOT
LDS
TECHNICAL
MEMORANDUM**



PROJECT SITE:

**ST. CHARLES ROAD BRIDGE
OVER SALT CREEK
VILLA PARK, DUPAGE COUNTY, ILLINOIS**

PREPARED FOR:

VILLAGE OF VILLA PARK
20 S. ARDMORE AVENUE
VILLA PARK, ILLINOIS 60181

PREPARED BY:

V3 COMPANIES
7325 JANES AVENUE
WOODRIDGE, ILLINOIS 60517
630.724.9200



Shauna Urlacher
9-1-2016

SEPTEMBER 2, 2016



**Illinois Department
of Transportation**

**Location Drainage Study
Technical Memorandum**

PROJECT ROUTE: FAU 1397 (St. Charles Road) over Salt Creek
LIMITS: Station 85+78 to 89+12
MUNICIPALITY/COUNTY: Village of Villa Park, DuPage County
JOB NUMBER: P-91-313-15

PREPARED FOR: Village of Villa Park &
IDOT District 1
Bureau of Local Roads

DATE: 9-2-16

PREPARED BY: V3 Companies

DATE: 9-2-16

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To: IDOT, Dist.1, Bureau of Local Roads
From: V3 Companies on behalf of the Village of Villa Park
Subject: Location Drainage Study Technical Memorandum
Date: 9-2-16

Route: St. Charles Road Bridge (FAU 1397) over Salt Creek
Limits: St. Charles Road Sta. 85+78 to 89+12
Municipality: Village of Villa Park
County: DuPage

Overview

The project limits extend along St. Charles Road from Monterey Ave to 390 feet west of the IL Route 83. The total project length is 360 ft (0.07 miles). The project is located within the Village of Villa Park and the City of Elmhurst in DuPage County, Illinois (Sections 3, T39N, R11E; Elmhurst quadrangle, see Exhibits 1 and 2). The existing St. Charles Road Bridge deck over Salt Creek will be replaced. The bridge abutments and piers will remain in place. The bridge deck and approach roadway are being replaced and widened by approximately 1 foot. The existing roadway storm sewer system will remain in place with rims to be adjusted as needed.

Existing Conditions:

Existing Drainage System:

St. Charles Road is a five lane roadway with B9.12 curb and gutter. Three of the five lanes are less than 11' wide. A 5' wide sidewalk runs along both sides of the roadway. Within the project limits there are 3 storm sewer systems all of which outlet to Salt creek. A 24" RCP system runs from west to east under the north side of St Charles Road west of the bridge. There is a large 78" RCP system that runs under the southern portion of St. Charles Road west of the bridge. Per a review of 1979 St. Charles Road IDOT engineering plans (see Appendix C) this 78" sewer extends west to Summit Avenue and outlets to Salt Creek by passing through the west abutment. The third storm sewer system is an 18" RCP running under the south side of St. Charles Road east of the bridge. The existing storm sewers within the project limits are shown on Exhibit 12B.

Exhibit 12A, the Overall Existing Drainage Plan (EDP), shows the drainage patterns within and adjacent to the project limits. DuPage County 2-foot contour information was used to delineate drainage patterns outside the project survey limits. Per this 2-foot contour information there is some off-site area that appears to drain to the roadway drainage system. The project site contains 1 drainage outlet which is to Salt Creek at the south side of the bridge. Salt Creek flows from north to south. A local drainage area of 6.55 acres has been delineated to this outlet. The total drainage area to this outlet however is much larger as it contains the entire area tributary to the 78" storm sewer as well as the other 2 storm sewer systems which extend outside the project limits. The existing curve number (CN) for the 6.55 acre local drainage area was calculated to be 93.2 (see Appendix B).

Major Drainage Features:

The St. Charles Road Bridge over Salt Creek is the major drainage feature associated with this project. The structure number (SN) for this bridge is 022-6950. The existing St. Charles Road Bridge over Salt Creek is a 3-span bridge with a length of 113' and a width of 68'. There is an existing concrete pedestrian path that runs under the eastern span. Per the Bridge Condition Report (prepared by V3 Companies under a separate cover) the substructure is in good condition and does not warrant replacement. The bridge superstructure however is in poor condition and will be replaced. A Hydraulic Report for this bridge has been prepared by V3 Companies under a separate cover. The hydraulic analysis indicates that the 500-year flow is conveyed under the bridge low chord and that the bridge has adequate capacity. The bridge low chord elevation and waterway opening will remain unchanged in the proposed condition.

No wetlands are identified in the project area on the National Wetlands Inventory (NWI) Map (see Exhibit 3) however one lake/pond with wetland fringe is identified within the project area on DuPage County Wetlands Map (see Exhibit 4). A Wetland Delineation and Assessment Report, dated October 8, 2015 and prepared by V3 Companies, was prepared for the project. One Waters of the U.S./Waters of DuPage (Area 1, see Exhibit 5) was delineated within the project area. Area 1 (~0.51 acres on-site, continues off-site to the north and south) is located in the center of the project area and consists of Salt Creek, a Waters of the U.S./Waters of DuPage. In V3's professional opinion, Area 1 is a non-HQAR Waters of the U.S./Waters of DuPage subject to USACE jurisdiction. No wetland areas were identified within 100-feet of the subject property per the DuPage County Ordinance. The delineated wetland boundary for Area 1 was field verified by Ms. Jenna Fahey of the DuPage County Stormwater Management Commission (SMC) on November 2, 2015. As part of the wetland delineation assessment, Illinois Department of Natural Resources (IDNR) and US Fish and Wildlife Service (USFSW) threatened and endangered species evaluations were conducted. The IDNR confirmed that the Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location.

The USGS Hydrologic Atlas (Exhibit 8) shows the presence of Salt Creek throughout the project area. The 12-Digit Hydrologic Unit Code (HUC) Map (Exhibit 9) shows that the subject property lies within the Lower Salt Creek sub watershed, which is associated with the larger Des Plaines River watershed.

Three soil series were mapped within the subject property by the Natural Resources Conservation Service (Exhibit 10). These soils include Orthents, clayey, undulating (805B), Markham-Ashkum-Beecher complex (854B), and Sawmill silty clay loam (3107A). The 805B soil is classified as hydrologic soil group D, while soils 3107A and 854B are classified as hydrologic soil group C.

Identified Base Floodplains:

The FEMA Flood Insurance Rate Map (FIRM), Exhibit 6, shows flood zones AE and X throughout the project area associated with Salt Creek. The DuPage County Regulatory Flood Map (RFM), Exhibit 7, depicts a regulatory floodway and special flood hazard areas associated with Salt Creek. See the Hydraulic Report for detailed hydraulic modeling and a more in depth discussion concerning the regulatory floodway and floodplain limits and elevations.

Proposed Conditions:

Proposed Drainage System & Design Criteria:

Due to the fact that the proposed roadway improvements are very minor the existing storm sewer systems will remain in place. The proposed improvements add only 292 square feet (0.007 acres) of new impervious area and therefore no significant amount of new runoff is being added to the existing storm sewer system (see Exhibit 14).

There are currently no scuppers or drainage structures within the existing bridge deck. Inlet spacing calculations were performed to determine if the bridge deck and associated roadway improvements required any new drainage structures. Per Section 1-304.02 of the IDOT Drainage Manual the spread of gutter flow for the 10-year storm event shall not exceed 3 feet for roadways with design speeds less than 50 mph. The design speed for St. Charles Road is 35 mph. The existing / proposed curb and gutter type is B9.12 therefor the total allowable flow spread is 4 feet (1' gutter flow + 3' pavement spread). The roadway profile high point is located approximately at the bridge centerline therefore half of the bridge deck drains to the west and half to the east. Inlet spacing calculations indicate that the maximum spread of 4 feet is not exceeded on the bridge deck and therefore no drainage structures are required along the bridge deck.

For the roadway improvements adjacent to the deck replacement the allowable pavement spread is the gutter width plus one half a traffic lane (lane width for this project = 11'). In this case the total allowable spread outside the bridge deck is 6.5 feet (1' gutter flow + 5.5'). See IDOT Drainage Manual Section 1-304.01. Inlet spacing calculations indicate that there are sufficient inlets east of the bridge however one additional inlet is needed west of the bridge along the north curb line to meet the current design standards. This additional inlet is shown on the Proposed Drainage Plan (PDP) Exhibit 13.

Within the project limits the maximum IDOT inlet spacing of 250 feet is not exceeded. The existing drainage structures within the proposed pavement improvement limits will be adjusted as needed.

In the proposed condition the St. Charles Road bridge deck and approach pavement will be replaced however the bridge piers and abutments will remain in place. The roadway profile is being raised between 2 and 4.3 inches however the bridge low chord elevation will remain unchanged. While this is not an IDOT roadway/bridge the IDOT criteria was used to evaluate the capacity of the bridge. Both the Village of Villa Park and DuPage County ordinances were reviewed however these documents did not specify any specific freeboard or capacity criteria for bridges. IDOT has two capacity criteria that would apply to this bridge:

1. For all bridge projects, there must be a minimum clearance of 2' between the design high water (50-year) elevation and the low beam elevation. This criterion applies to superstructure replacements. The 50-year natural high water elevation at the bridge is 666.30 which is 2.97' below the low beam elevation of 669.27.
2. A minimum roadway freeboard of 3' must be established between the design headwater (50-year) elevation and the lowest pavement elevation within the floodplain. The lowest pavement elevation within the floodplain is 671.32 which is 4.89' above the proposed 50-year headwater elevation of 666.43.

In summary, the existing / proposed bridge opening has sufficient hydraulic capacity and no waterway opening enlargement is required. See the Waterway Information Table (WIT) under Appendix C.

Outlet Evaluation & Storm Water Detention Analysis

There is one outlet within the project limits. All of the roadway storm sewer systems and the adjacent tributary area drain to Salt Creek as shown on Exhibit 12A. As mentioned previously the proposed improvements add only 292 square feet (0.007 acres) of new impervious area. Per section 15-72.A.4 of the DuPage County Stormwater & Floodplain Ordinance if the development is strictly limited to a roadway development intended for public use and the with-development impervious area is less than 25,000 square feet compared to pre-development conditions, then no stormwater detention volume is required. The Village of Villa Park has adapted the County Stormwater Ordinance and has no further stormwater detention requirements. Furthermore section 1-304.03 of the IDOT Drainage Manual specifies that no stormwater detention storage is required in urban areas so long as there are: 1) no diversions of flow, 2) no significant increases in the amount of runoff as a result of increased impermeability, 3) no reduced time of concentration or filling of natural storage areas. The 292 sf proposed increase in impervious area

is not enough to increase the CN for the 6.55 acre local project drainage area and therefore no significant increase in runoff will occur. See Appendix B for existing and proposed CN calculations. Therefore no stormwater detention is required for this project.

Right of Way Analysis:

No proposed right-of-way (ROW) is required for this project. As the bridge deck and roadway are only being widened by about 1 foot the improvements fit within the existing ROW. Proposed temporary easements between 5 and 25 feet wide will be required to construct the new bridge deck and adjacent roadway improvements. The temporary easements are shown on the PDP Exhibit 13.

Floodplain Encroachment & IDNR Permit:

Salt Creek has both a regulatory floodway and floodplain delineated north and south of St. Charles Road; see Exhibit 7, DuPage County Regulatory Flood Map (RFM). The RFM depicts a 100-yr water surface elevation (WSEL) of 668 at the upstream (north) face of the St. Charles Road Bridge. This is well below the existing/proposed bridge low chord elevation of 669.27.

Furthermore a new regulatory FEQ model for Salt Creek is currently going through the review and approval process. This model represents the most up to date modeling and survey information and was used as the basis of our HEC-RAS model and analysis of the St. Charles Road Bridge. This new model is expected to be the approved regulatory DuPage County model sometime in 2017. We expect that by the time this project is in the Phase 2 process and permits are being applied for, this will be the regulatory model. This model produces a 100-year WSEL of 666.74 at the upstream face of the St. Charles Road Bridge (about 1.3' lower than the current regulatory model). The 500-year WSEL of 667.35 at the upstream face of the bridge is also below the bridge low chord of 669.27. Therefore, due to the fact that the bridge deck is above the floodplain elevation, there is no floodplain or floodway fill associated with the roadway improvement or the bridge deck replacement. The proposed scour countermeasures will be installed below the current streambed elevation and will also not result in any floodway or floodplain fill.

All projects within designated floodways within the 6 county Chicagoland area are subject to the Floodway Construction in Northeastern Illinois Rules (17 Illinois Administrative Code Part 3708). IDOT District 1 administers Regional Permits 1 and 2 on behalf of IDNR-OWR. This work falls within the Regional Permit No. 2 guidelines however, due to the fact the proposed bridge deck and approach pavement replacement occurs above the 100-year flood profile, it's likely that no floodway permit will be required for this project. The scour countermeasures proposed will also not result in any fill within the floodway.

Water Quality:

Due to the limited nature of the proposed improvements there will be no proposed permanent water quality features. The appropriate erosion control measures should be utilized during construction to prevent sediment from entering the roadway storm sewer system, such as inlet filter baskets, and other erosion control measures as needed to prevent sediment or construction debris from entering Salt Creek.

Scour Evaluation:

A full scour analysis has been performed for the St. Charles Road Bridge. The following summarizes the calculated scour depths:

Design Scour Depths (ft)				
	West Abutment	West Pier	East Pier	East Abutment
Q100	9.32	4.74	4.76	6.23
Q200	9.54	4.79	4.81	6.46

Scour countermeasures are proposed for the piers and are discussed in the Hydraulic Report.

Summary:

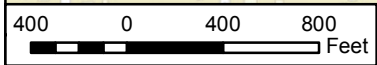
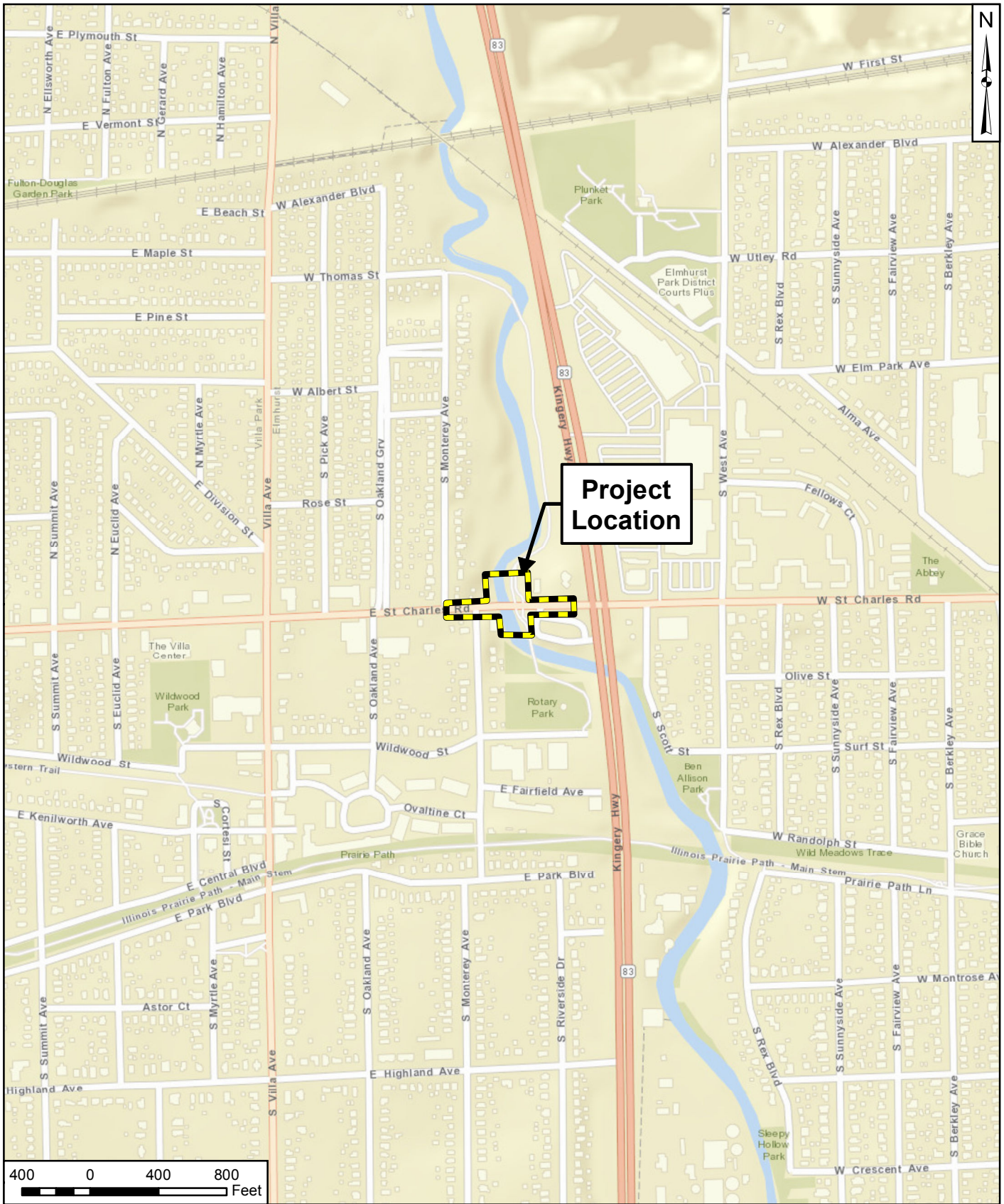
In conclusion the proposed improvements will not increase runoff rates to the Salt Creek outlet location and no stormwater detention is required. Only minor alterations to the existing storm sewer system will be required as a result of the roadway improvements and the bridge deck replacement. Due to the fact that the 500-year profile is conveyed under the bridge low chord, water surface elevations are not impacted as a result of the proposed improvements and the bridge is in compliance with the IDOT freeboard and clearance criteria.


IDOT LDS Technical Memorandum

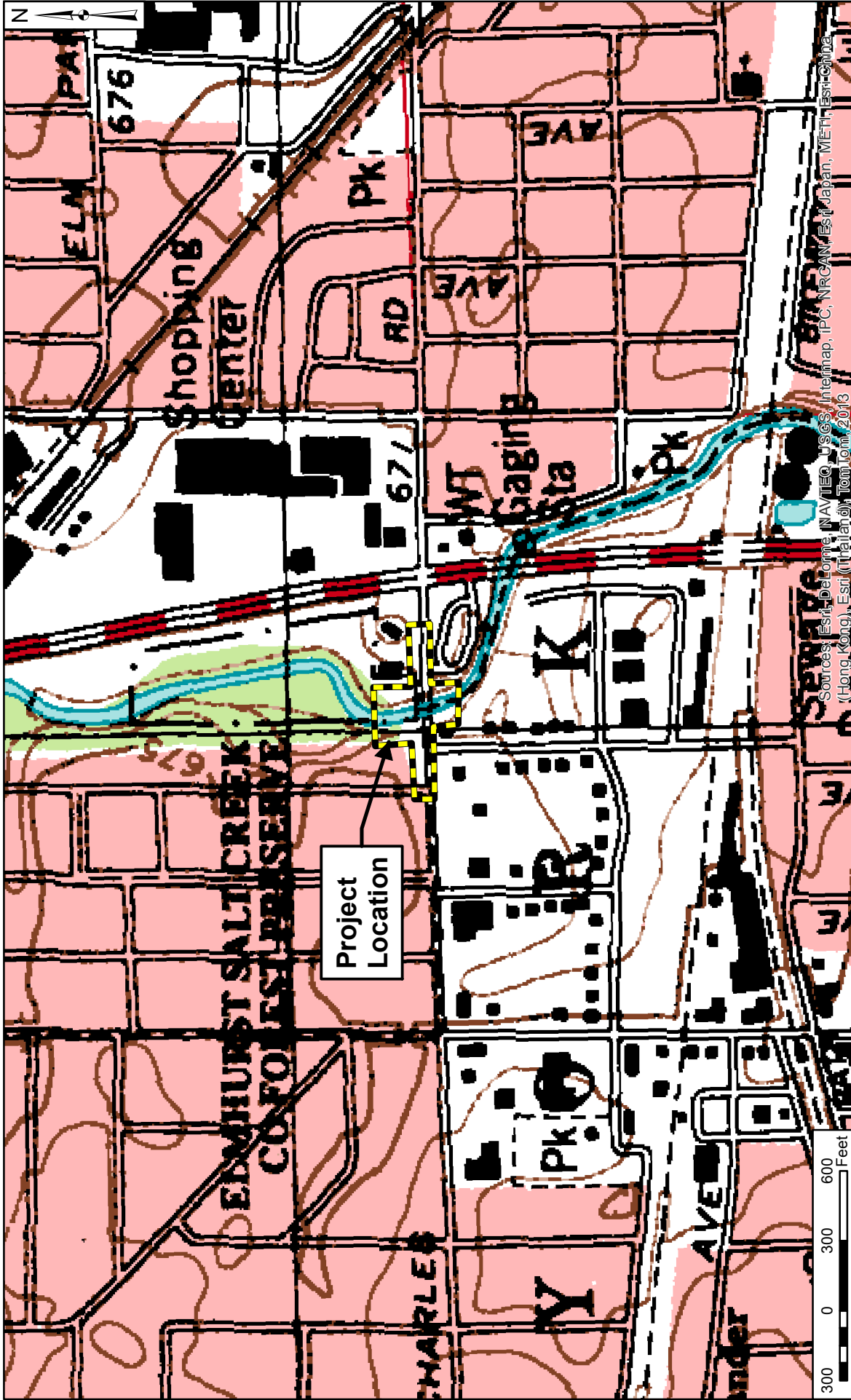
St. Charles Road Bridge over Salt Creek

Appendix A: Exhibits

- Exhibit 1: Location Map
- Exhibit 2: USGS Topographic Map
- Exhibit 3: National Wetlands Inventory (NWI) Map
- Exhibit 4: DuPage County Wetlands Map
- Exhibit 5: Wetland Delineation Map
- Exhibit 6: FEMA Flood Insurance Rate Map (FIRM)
- Exhibit 7: DuPage County Regulatory Flood Map (RFM)
- Exhibit 8: USGS Hydraulic Atlas
- Exhibit 9: 12-Digit Hydrologic Unit Code (HUC) Map
- Exhibit 10: Soil Survey of DuPage County Map
- Exhibit 11: Aerial Map
- Exhibit 12A: Overall Existing Drainage Plan
- Exhibit 12B: Plan & Profile Existing Drainage Plan
- Exhibit 13: Plan & Profile Proposed Drainage Plan
- Exhibit 14: New Impervious Area Exhibit
- Exhibit 15: St. Charles Road Typical Cross-Sections



 <p>V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com</p>	<p>PROJECT NO.: 15228</p>	<p>CLIENT: Village of Villa Park 20 S. Ardmore Avenue Villa Park, Illinois 60181</p>	<p>TITLE: PROJECT LOCATION MAP</p>		
	<p>CREATED BY: AMM</p>	<p>DATE: 10/08/15</p>	<p>BASE LAYER: ESRI World Street Map</p>	<p>SITE: St. Charles Road Bridge Over Salt Creek Villa Park, Illinois</p>	<p>FIGURE: 1</p>
<p>Visio, Vertere, Virtute... "The Vision To Transform with Excellence"</p>		<p>SCALE: See Scale Bar</p>			



Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013



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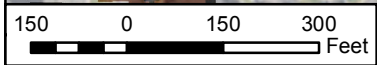
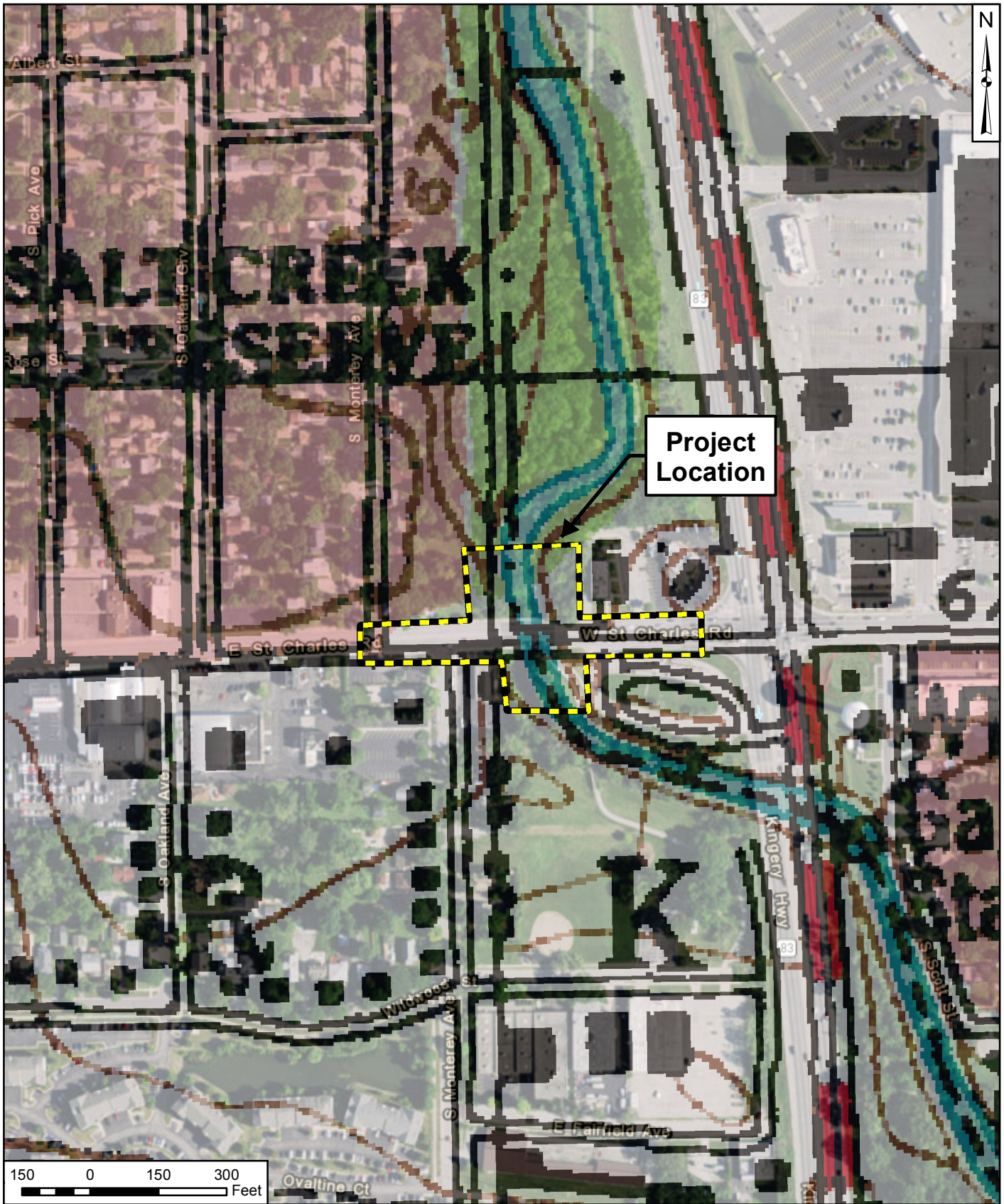
PROJECT NO.: 15228
 CREATED BY: BAO
 DATE: 08/31/16
 SCALE: See Scale Bar


CLIENT: Village of Villa Park
 20 S. Ardmore Avenue
 Villa Park, Illinois 60181
 BASE LAYER: USGS Topographic Map
 Elmhurst Quadrangle
 (1997)

USGS TOPOGRAPHIC MAP

SITE: St. Charles Road Bridge Over Salt Creek
 Villa Park, Illinois

FIGURE: 2

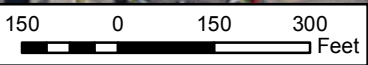



 <p>V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com</p>	<p>PROJECT NO.: 15228</p>	<p>CLIENT: Village of Villa Park 20 S. Ardmore Avenue Villa Park, Illinois 60181</p>	<p>TITLE: NATIONAL WETLANDS INVENTORY (NWI) MAP</p>		
	<p>CREATED BY: AMM</p>	<p>DATE: 08/31/16</p>	<p>BASE LAYER: USGS Topographic Map Elmhurst Quadrangle (1997)</p>	<p>SITE: St. Charles Road Bridge Over Salt Creek Villa Park, Illinois</p>	<p>FIGURE: 3</p>
<p>Visio, Vertere, Virtute... "The Vision To Transform with Excellence"</p>		<p>SCALE: See Scale Bar</p>			

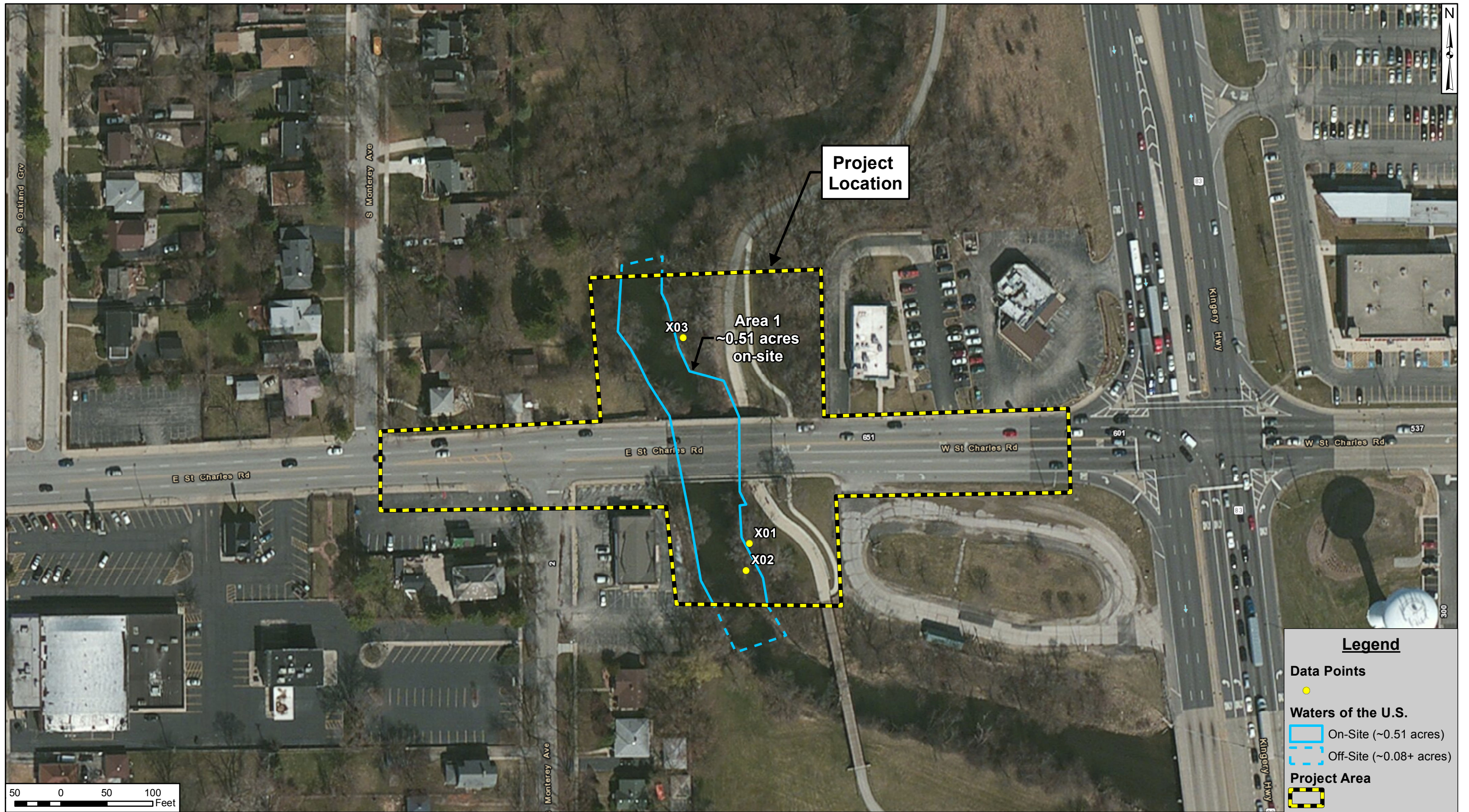


Legend

- LAKES_PONDS
- Wetlands



 <p>V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com</p>	<p>PROJECT NO.: 15228</p>	<p>CLIENT: Village of Villa Park 20 S. Ardmore Avenue Villa Park, Illinois 60181</p>	<p>TITLE: DUPAGE COUNTY WETLANDS MAP</p>		
	<p>CREATED BY: AMM</p>	<p>DATE: 08/31/16</p>	<p>BASE LAYER: DuPage County Online Wetland Maps (Accessed 10/08/15)</p>	<p>SITE: St. Charles Road Bridge Over Salt Creek Villa Park, Illinois</p>	<p>FIGURE: 4</p>
<p>Visio, Vertere, Virtute... "The Vision To Transform with Excellence"</p>		<p>SCALE: See Scale Bar</p>			



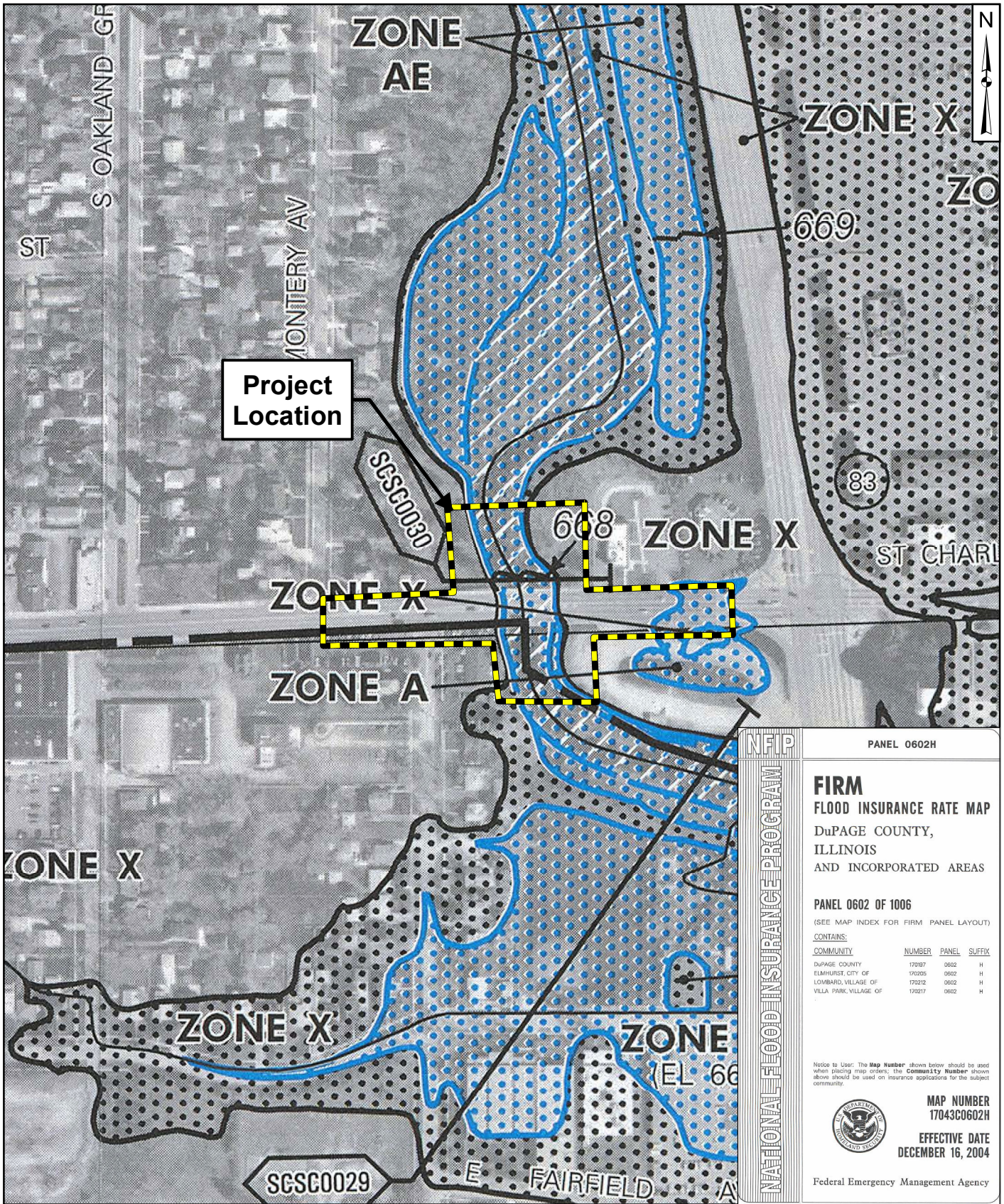
Legend

Data Points
●

Waters of the U.S.
— On-Site (~0.51 acres)
— Off-Site (~0.08+ acres)

Project Area

 V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com	PROJECT NO.: 15228	CLIENT: Village of Villa Park 20 S. Ardmore Avenue Villa Park, Illinois 60181	SITE: St. Charles Bridge Over Salt Creek Villa Park, Illinois	TITLE: WETLAND DELINEATION MAP	FIGURE: 5
	CREATED BY: AMM				
Visio, Vertere, Virtute... "The Vision To Transform With Excellence"	DATE: 08/31/16	SCALE: See Scale Bar			



PANEL 0602H

FIRM
FLOOD INSURANCE RATE MAP
 DuPAGE COUNTY,
 ILLINOIS
 AND INCORPORATED AREAS

PANEL 0602 OF 1006
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
DuPAGE COUNTY	17097	0602	H
ELMHURST, CITY OF	170205	0602	H
LOMBARD, VILLAGE OF	170212	0602	H
VILLA PARK, VILLAGE OF	170217	0602	H

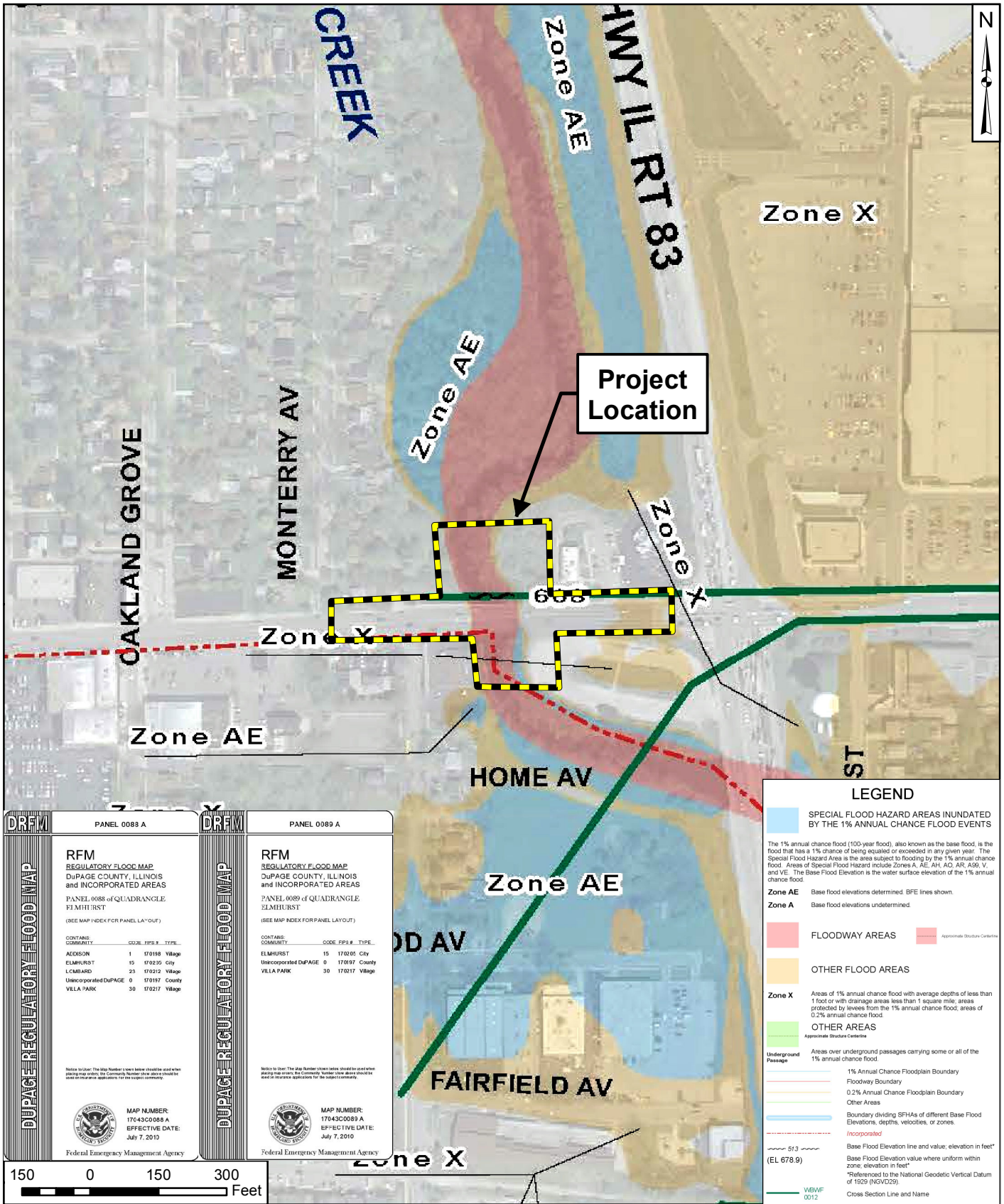
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
 17043C0602H

EFFECTIVE DATE
 DECEMBER 16, 2004

Federal Emergency Management Agency

 V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com	PROJECT NO.: 15228	CLIENT: Village of Villa Park 20 S. Ardmore Avenue Villa Park, Illinois 60181	FEMA FLOOD INSURANCE RATE MAP (FIRM)	
	CREATED BY: AMM	DATE: 08/31/16		
Visio, Vertere, Virtute... "The Vision To Transform with Excellence"	SCALE: NTS			FIGURE: 6



LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY THE 1% ANNUAL CHANCE FLOOD EVENTS

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equalled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, AV, X, Y, and VE. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.

Zone AE Base flood elevations determined. BFE lines shown.
Base flood elevations undetermined.

FLOODWAY AREAS — *Appropriate Structure Category*

OTHER FLOOD AREAS

Zone X Areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; areas protected by levees from the 1% annual chance flood; areas of 0.2% annual chance flood.

OTHER AREAS
Appropriate Structure Category

Underground Passage Areas over underground passages carrying some or all of the 1% annual chance flood.

1% Annual Chance Floodplain Boundary
Floodway Boundary
0.2% Annual Chance Floodplain Boundary
Other Areas

Boundary dividing SFHAs of different Base Flood Elevations, depths, velocities, or zones.

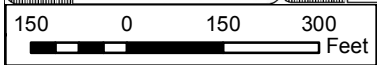
--- *Incorporated*

Base Flood Elevation line and value; elevation in feet*
Base Flood Elevation value where uniform within zone; elevation in feet*
*Referenced to the National Geodetic Vertical Datum of 1929 (NGVD29).

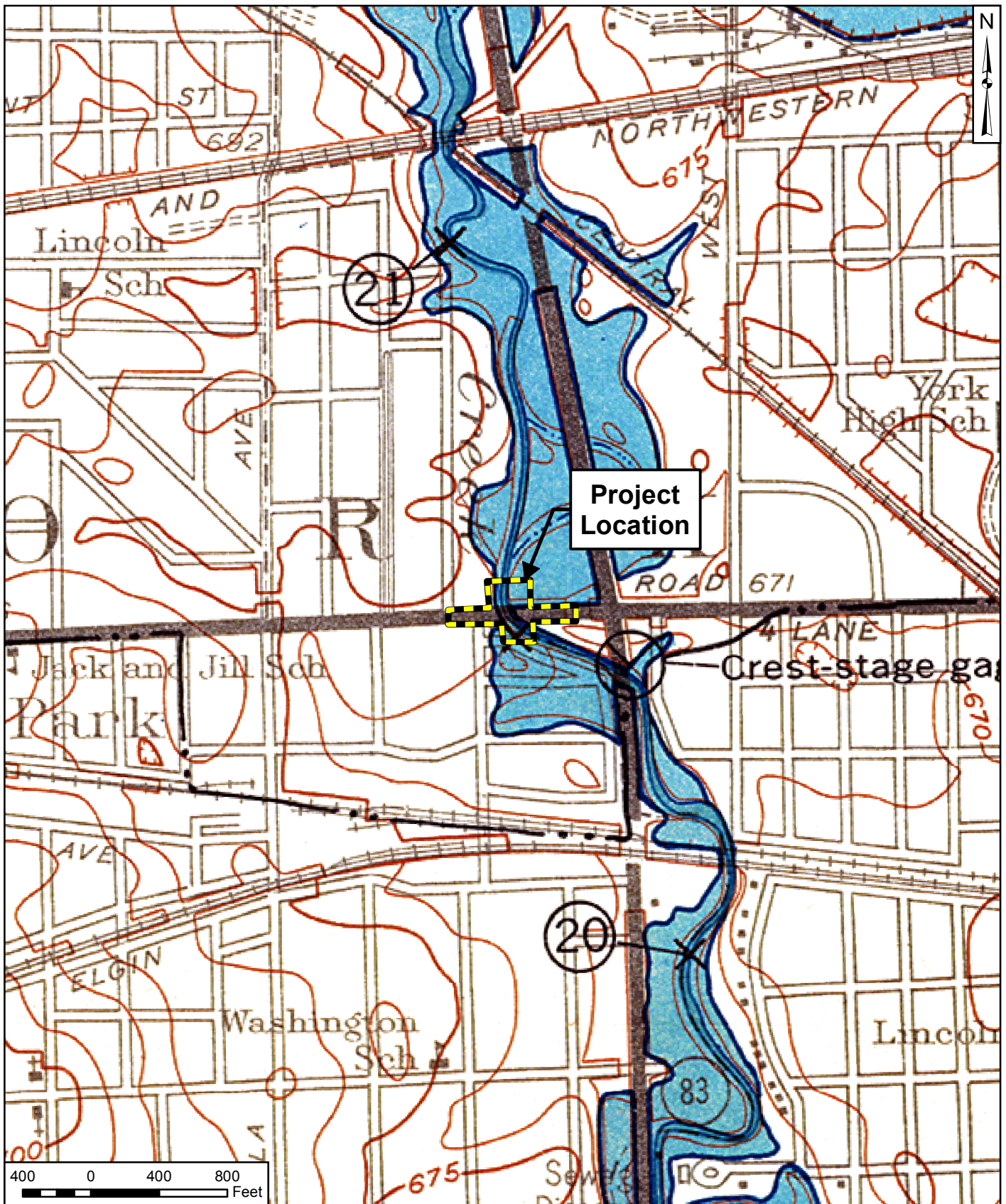
513
(EL 678.9)


WBWF
0012
Cross Section Line and Name

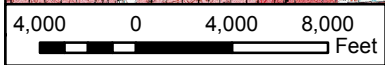
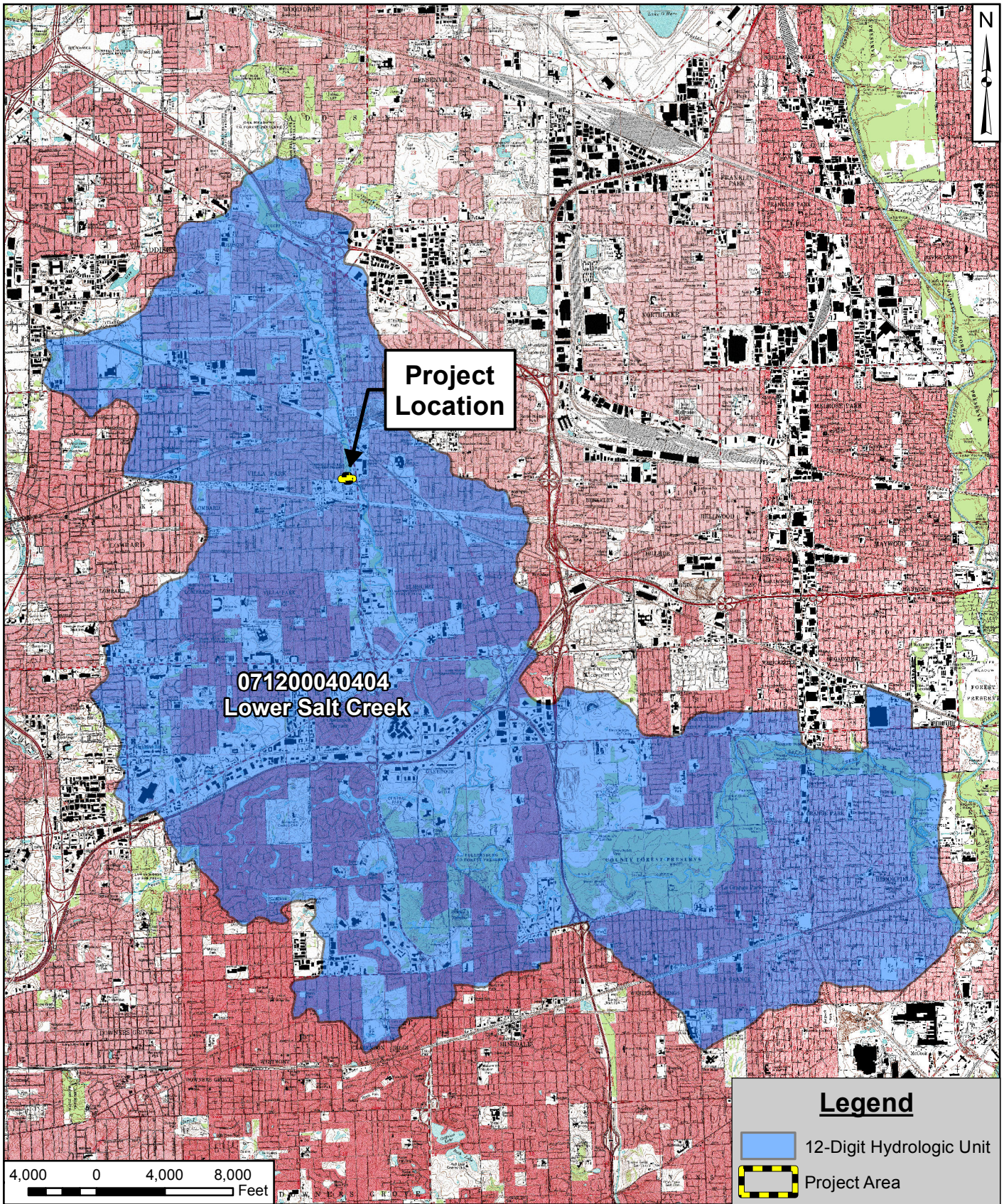
<p>DRFM</p> <p>PANEL 0088 A</p> <p>RFM REGULATORY FLOOD MAP DUPAGE COUNTY, ILLINOIS AND INCORPORATED AREAS</p> <p>PANEL 0088 of QUADRANGLE ELMHURST</p> <p>(SEE MAP INDEX FOR PANEL LAYOUT)</p> <p>CONTAINS:</p> <table border="1"> <thead> <tr> <th>COMMUNITY</th> <th>CODE</th> <th>FPS #</th> <th>TYPE</th> </tr> </thead> <tbody> <tr> <td>ADKINSON</td> <td>1</td> <td>170198</td> <td>Village</td> </tr> <tr> <td>ELMHURST</td> <td>15</td> <td>170230</td> <td>City</td> </tr> <tr> <td>LUMBARD</td> <td>23</td> <td>170232</td> <td>Village</td> </tr> <tr> <td>Unincorporated DUPAGE</td> <td>0</td> <td>170187</td> <td>County</td> </tr> <tr> <td>VELA PARK</td> <td>30</td> <td>170217</td> <td>Village</td> </tr> </tbody> </table> <p><small>Notice to User: The Map Number shown below should be used when ordering map copies. The Community Number shown above should be used in insurance applications for the subject community.</small></p> <p>MAP NUMBER: 17043C0088 A EFFECTIVE DATE: July 7, 2010</p> <p>Federal Emergency Management Agency</p>	COMMUNITY	CODE	FPS #	TYPE	ADKINSON	1	170198	Village	ELMHURST	15	170230	City	LUMBARD	23	170232	Village	Unincorporated DUPAGE	0	170187	County	VELA PARK	30	170217	Village	<p>DRFM</p> <p>PANEL 0089 A</p> <p>RFM REGULATORY FLOOD MAP DUPAGE COUNTY, ILLINOIS AND INCORPORATED AREAS</p> <p>PANEL 0089 of QUADRANGLE ELMHURST</p> <p>(SEE MAP INDEX FOR PANEL LAYOUT)</p> <p>CONTAINS:</p> <table border="1"> <thead> <tr> <th>COMMUNITY</th> <th>CODE</th> <th>FPS #</th> <th>TYPE</th> </tr> </thead> <tbody> <tr> <td>ELMHURST</td> <td>15</td> <td>170205</td> <td>City</td> </tr> <tr> <td>Unincorporated DUPAGE</td> <td>0</td> <td>170197</td> <td>County</td> </tr> <tr> <td>VILLA PARK</td> <td>30</td> <td>170217</td> <td>Village</td> </tr> </tbody> </table> <p><small>Notice to User: The Map Number shown below should be used when ordering map copies. The Community Number shown above should be used in insurance applications for the subject community.</small></p> <p>MAP NUMBER: 17043C0089 A EFFECTIVE DATE: July 7, 2010</p> <p>Federal Emergency Management Agency</p>	COMMUNITY	CODE	FPS #	TYPE	ELMHURST	15	170205	City	Unincorporated DUPAGE	0	170197	County	VILLA PARK	30	170217	Village
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Unincorporated DUPAGE	0	170187	County																																						
VELA PARK	30	170217	Village																																						
COMMUNITY	CODE	FPS #	TYPE																																						
ELMHURST	15	170205	City																																						
Unincorporated DUPAGE	0	170197	County																																						
VILLA PARK	30	170217	Village																																						



<p>V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com</p> <p>Visio, Vertere, Virtute... "The Vision To Transform with Excellence"</p>	<p>PROJECT NO.: 15228</p>	<p>CLIENT: Village of Villa Park 20 S. Ardmore Avenue Villa Park, Illinois 60181</p>	<p>DUPAGE COUNTY REGULATORY FLOOD MAP (RFM)</p>		
	<p>CREATED BY: AMM</p>	<p>DATE: 08/31/16</p>	<p>BASE LAYER: DuPage County RFM Panels 17043C0088 A and 17043C0089 A</p>	<p>SITE: St. Charles Road Bridge Over Salt Creek Villa Park, Illinois</p>	<p>FIGURE: 7</p>
	<p>SCALE: See Scale Bar</p>				




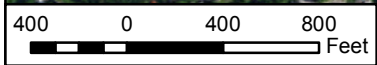
 <p>V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com</p> <p>Visio, Vertere, Virtute... "The Vision To Transform with Excellence"</p>	<p>PROJECT NO.: 15228</p> <p>CREATED BY: AMM</p> <p>DATE: 08/31/16</p> <p>SCALE: See Scale Bar</p>	<p>CLIENT: Village of Villa Park 20 S. Ardmore Avenue Villa Park, Illinois 60181</p> <p>BASE LAYER: USGS Hydrologic Atlas Elmhurst Quadrangle (1965)</p>	<p>TITLE: USGS HYDROLOGIC ATLAS</p> <p>SITE: St. Charles Road Bridge Over Salt Creek Villa Park, Illinois</p>	<p>FIGURE: 8</p>




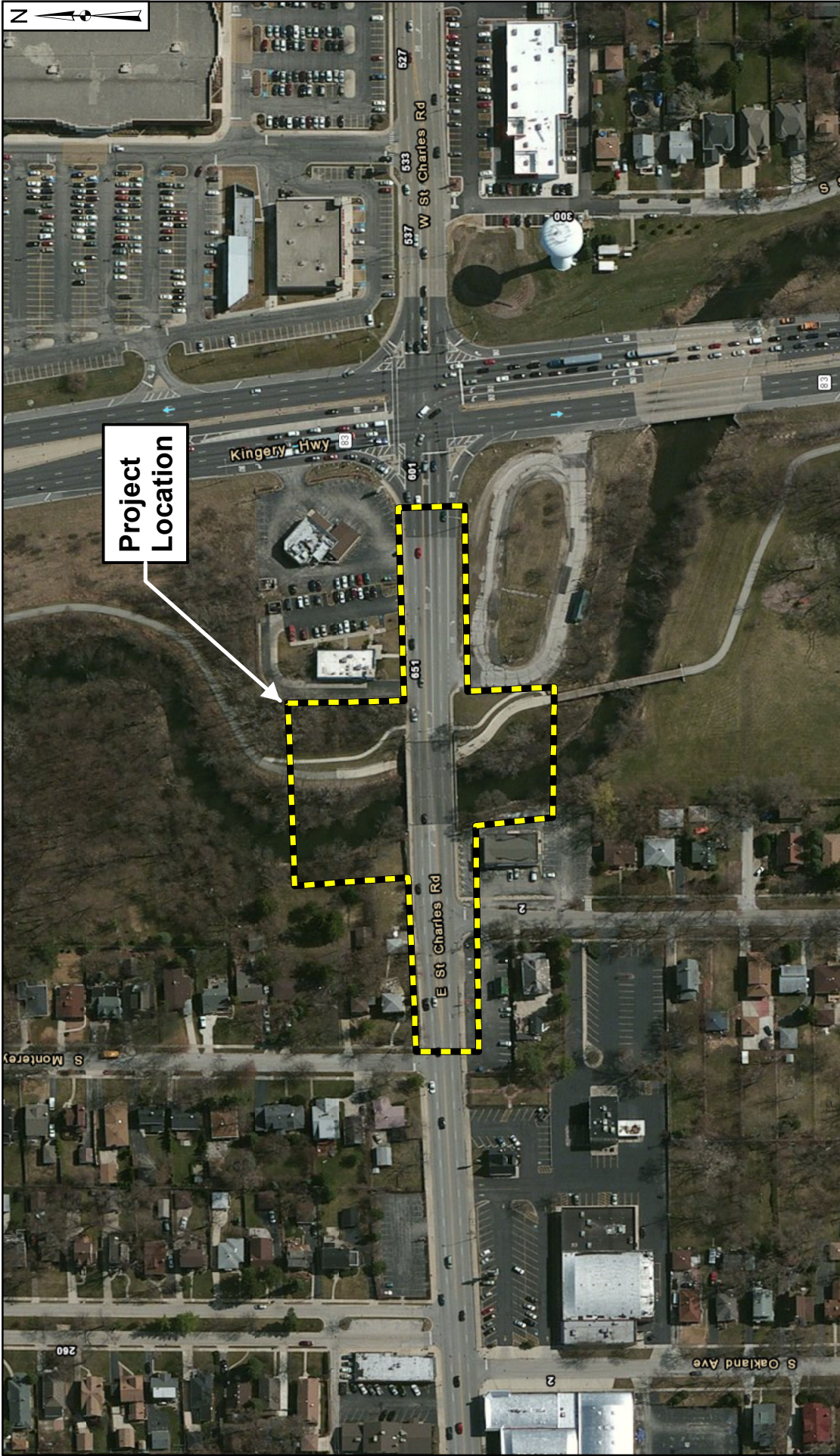
Legend

- 12-Digit Hydrologic Unit
- Project Area

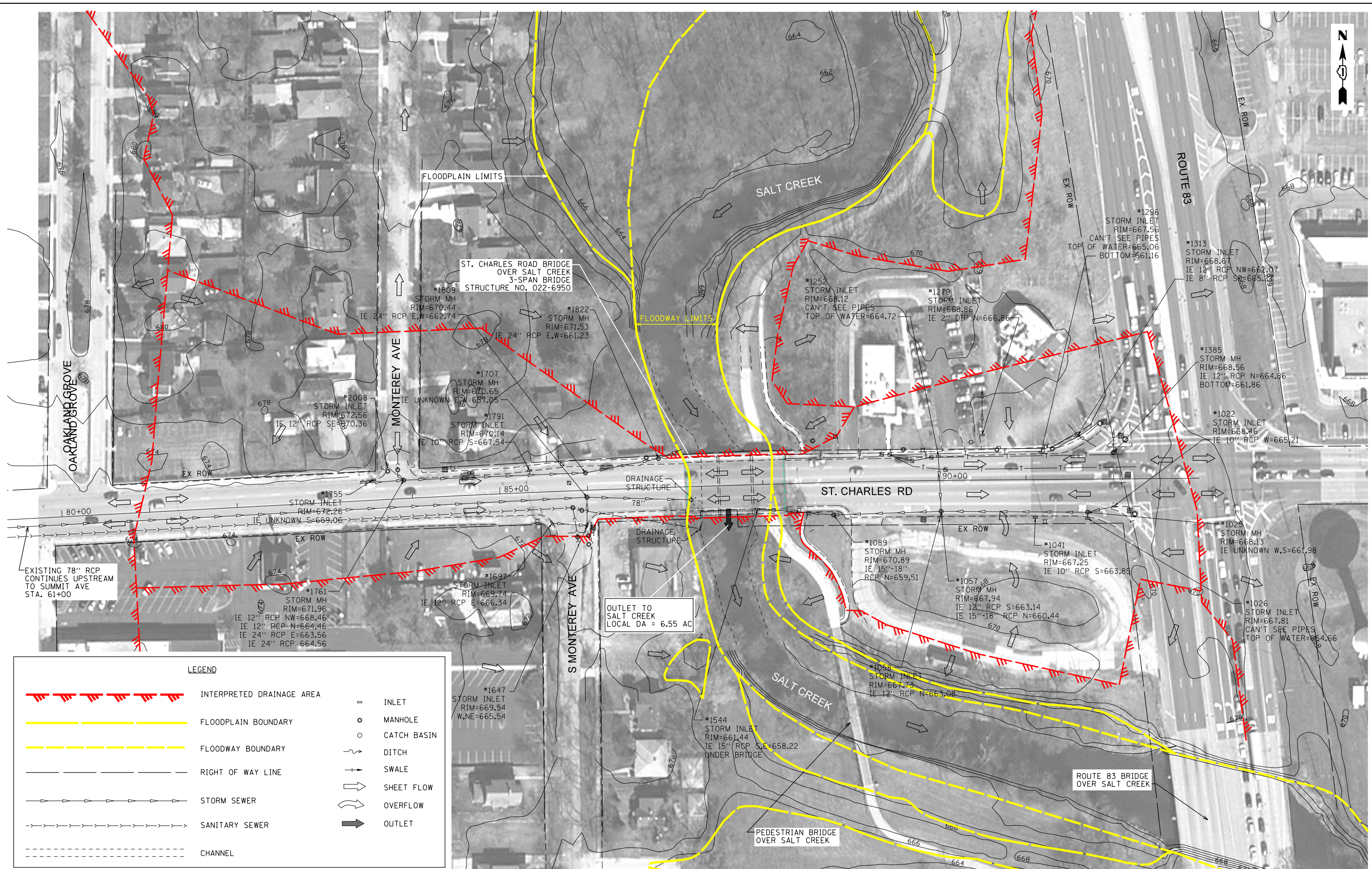
 <p>V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com</p> <p>Visio, Vertere, Virtute... "The Vision To Transform with Excellence"</p>	<p>PROJECT NO.: 15228</p>	<p>CLIENT: Village of Villa Park 20 S. Ardmore Avenue Villa Park, Illinois 60181</p>	<p>TITLE: 12-DIGIT HYDROLOGIC UNIT CODE (HUC) MAP</p>	
	<p>CREATED BY: AMM</p>	<p>DATE: 08/31/16</p>	<p>BASE LAYER: USGS Topographic Map DuPage County, Illinois (2002)</p>	<p>SITE: St. Charles Road Bridge Over Salt Creek Villa Park, Illinois</p>
<p>SCALE: See Scale Bar</p>				



 <p>V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com</p>	<p>PROJECT NO.: 15228</p>	<p>CLIENT: Village of Villa Park 20 S. Ardmore Avenue Villa Park, Illinois 60181</p>	<p>TITLE: SOIL SURVEY OF DUPAGE COUNTY, ILLINOIS (2014) MAP</p>	
	<p>CREATED BY: AMM</p>	<p>DATE: 08/31/16</p>	<p>BASE LAYER: NAIP Aerial Imagery (2014)</p>	<p>SITE: St. Charles Road Bridge Over Salt Creek Villa Park, Illinois</p>
<p>Visio, Vertere, Virtute... "The Vision To Transform with Excellence"</p>	<p>SCALE: See Scale Bar</p>			



 V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com	PROJECT NO.: 15228 CREATED BY: BAO DATE: 08/31/16 SCALE: See Scale Bar	CLIENT: Village of Villa Park 20 S. Ardmore Avenue Villa Park, Illinois 60181	TITLE: <h2 style="text-align: center;">AERIAL MAP</h2>
Visio, Vertere, Virtute... "The Vision To Transform With Excellence"		BASE LAYER: DigitalGlobe Aerial Imagery (2014)	SITE: St. Charles Road Bridge Over Salt Creek Villa Park, Illinois
Copyright © 2013 Esri, DeLorme, NAVTEQ, TomTom, Source: Esri, DigitalGlobe, GeoEye, Iacubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community			FIGURE: <h1 style="text-align: center;">11</h1>



LEGEND

	INTERPRETED DRAINAGE AREA		INLET
	FLOODPLAIN BOUNDARY		MANHOLE
	FLOODWAY BOUNDARY		CATCH BASIN
	RIGHT OF WAY LINE		DITCH
	STORM SEWER		SWALE
	SANITARY SEWER		SHEET FLOW
	CHANNEL		OVERFLOW
			OUTLET



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USER NAME = vsykes
DESIGNED - VAS
DRAWN - VAS
CHECKED - GJS
DATE - 08-19-16

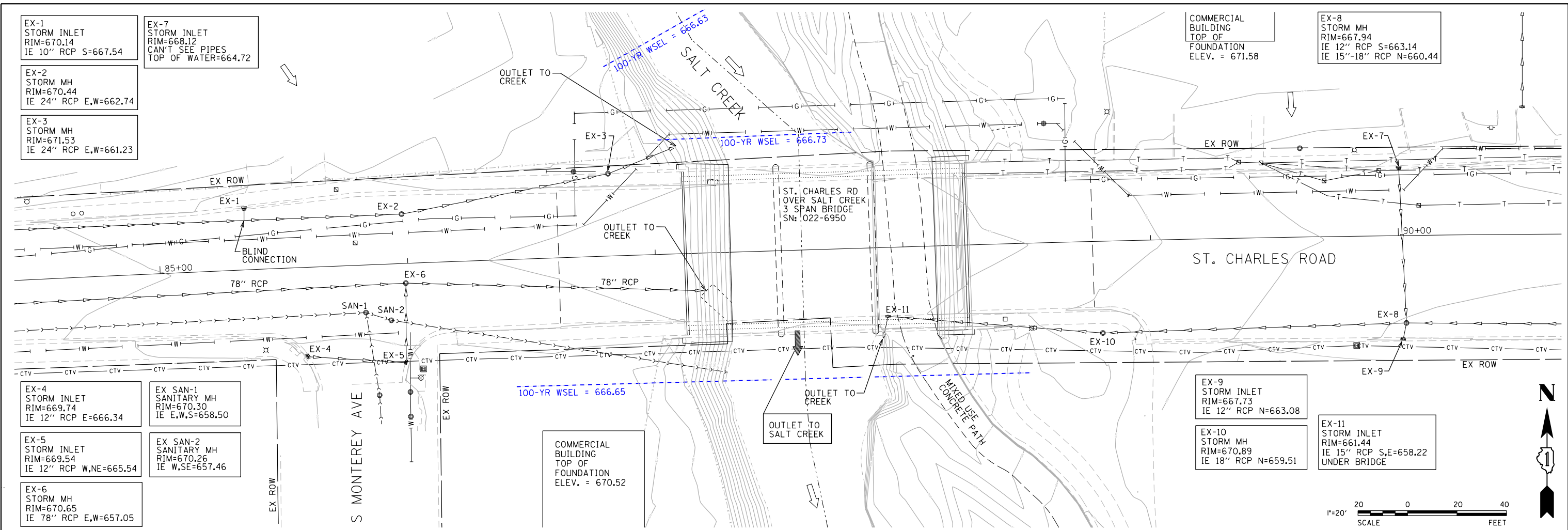
REVISED -
REVISED -
REVISED -
REVISED -

**ST. CHARLES ROAD BRIDGE
OVER SALT CREEK**

**EXHIBIT 12A
OVERALL EXISTING DRAINAGE PLAN (EDP)**

SCALE: 1" = 50' SHEET 1 OF 1 SHEETS STA. 80+00 TO STA. 92+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	1	1
PROJECT: BRM-4003(508)		JOB: P-91-313-15		
ILLINOIS		LOCAL ROADS PROJECT		



EX-1
STORM INLET
RIM=670.14
IE 10" RCP S=667.54

EX-2
STORM MH
RIM=670.44
IE 24" RCP E,W=662.74

EX-3
STORM MH
RIM=671.53
IE 24" RCP E,W=661.23

EX-7
STORM INLET
RIM=668.12
CAN'T SEE PIPES
TOP OF WATER=664.72

COMMERCIAL
BUILDING
TOP OF
FOUNDATION
ELEV. = 671.58

EX-8
STORM MH
RIM=667.94
IE 12" RCP S=663.14
IE 15"-18" RCP N=660.44

EX-4
STORM INLET
RIM=669.74
IE 12" RCP E=666.34

EX SAN-1
SANITARY MH
RIM=670.30
IE E,W,S=658.50

EX-5
STORM INLET
RIM=669.54
IE 12" RCP W,NE=665.54

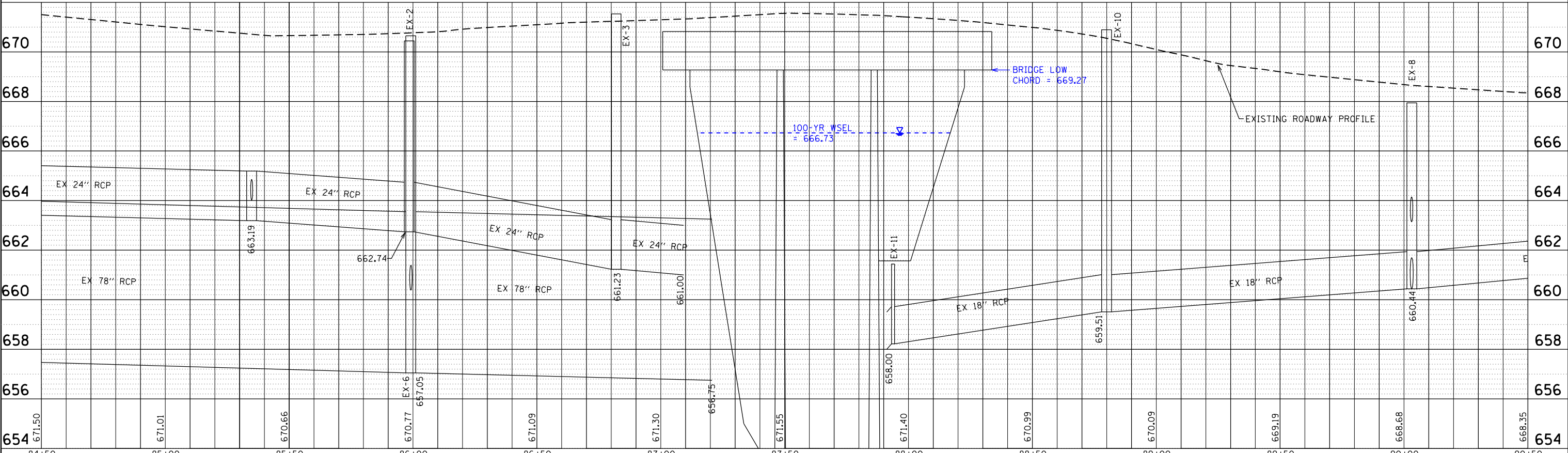
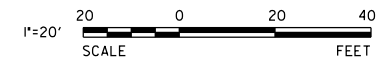
EX SAN-2
SANITARY MH
RIM=670.26
IE W,SE=657.46

EX-6
STORM MH
RIM=670.65
IE 78" RCP E,W=657.05

EX-9
STORM INLET
RIM=667.73
IE 12" RCP N=663.08

EX-10
STORM MH
RIM=670.89
IE 18" RCP N=659.51

EX-11
STORM INLET
RIM=661.44
IE 15" RCP S,E=658.22
UNDER BRIDGE



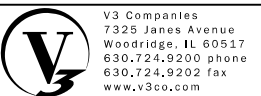
DESIGNED - EIH	REVISED - 08/12/16
DRAWN - EIH	REVISED -
CHECKED - GJS	REVISED -
DATE - 05/12/16	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXHIBIT 12B
EXISTING DRAINAGE PLAN (EDP)**

SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. 84+50.00 TO STA. 90+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	15-00094-00-BR	DUPAGE	1	1
PROJECT: BRM-4003(508); JOB: P-91-313-15				
EXHIBIT E-3.0 ILLINOIS FED. AID PROJECT				



EX-1 STORM INLET
RIM=670.14
IE 10" RCP S=667.54

EX-2 STORM MH
RIM=670.44
IE 24" RCP E,W=662.74
PR IE 666.66 N 12"

EX-3 STORM MH
RIM=671.53
IE 24" RCP E,W=661.23

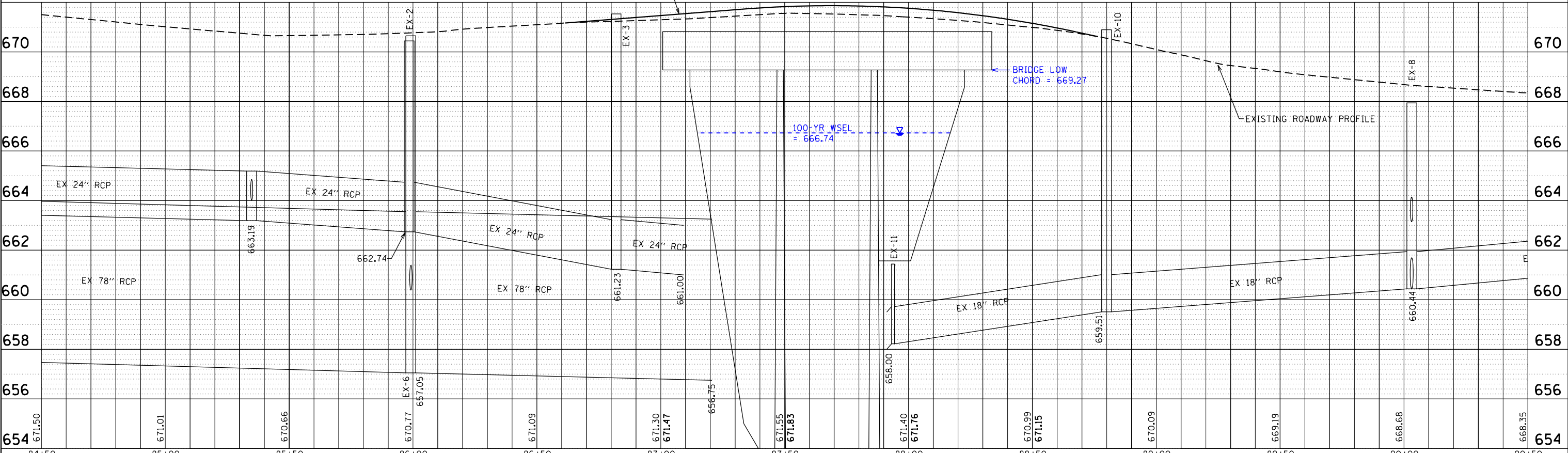
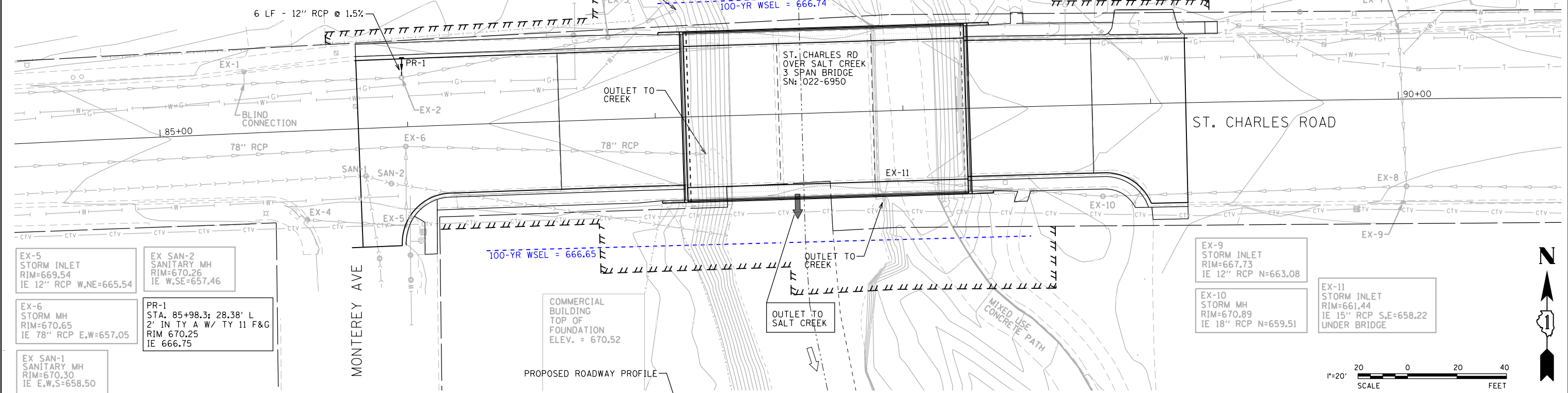
EX-4 STORM INLET
RIM=669.74
IE 12" RCP E=666.34

NOTES:
1. BRIDGE SUB-STRUCTURE (PIERS & ABUTMENTS) WILL REMAIN IN PLACE. BRIDGE DECK WILL BE REPLACED. BRIDGE LOW CHORD ELEVATION OF 669.27 WILL REMAIN UNCHANGED.
2. EXISTING STORM SEWER SYSTEM TO BE MAINTAINED, ADJUST RIMS AS NEEDED.
3. SEE EXHIBIT 12A FOR DRAINAGE PATTERNS AND FLOODWAY/FLOODPLAIN LIMITS.

COMMERCIAL BUILDING TOP OF FOUNDATION ELEV. = 671.58

EX-7 STORM INLET
RIM=668.12
CAN'T SEE PIPES TOP OF WATER=664.72

EX-8 STORM MH
RIM=667.94
IE 12" RCP S=663.14
IE 15"-18" RCP N=660.44



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USER NAME = vsjkes	DESIGNED - EIH	REVISED - 08/12/16
PLOT SCALE = 40.0000' / in.	DRAWN - EIH	REVISED -
PLOT DATE = 8/24/2016	CHECKED - GJS	REVISED -
	DATE - 05/12/16	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXHIBIT 13
PROPOSED DRAINAGE PLAN (PDP)

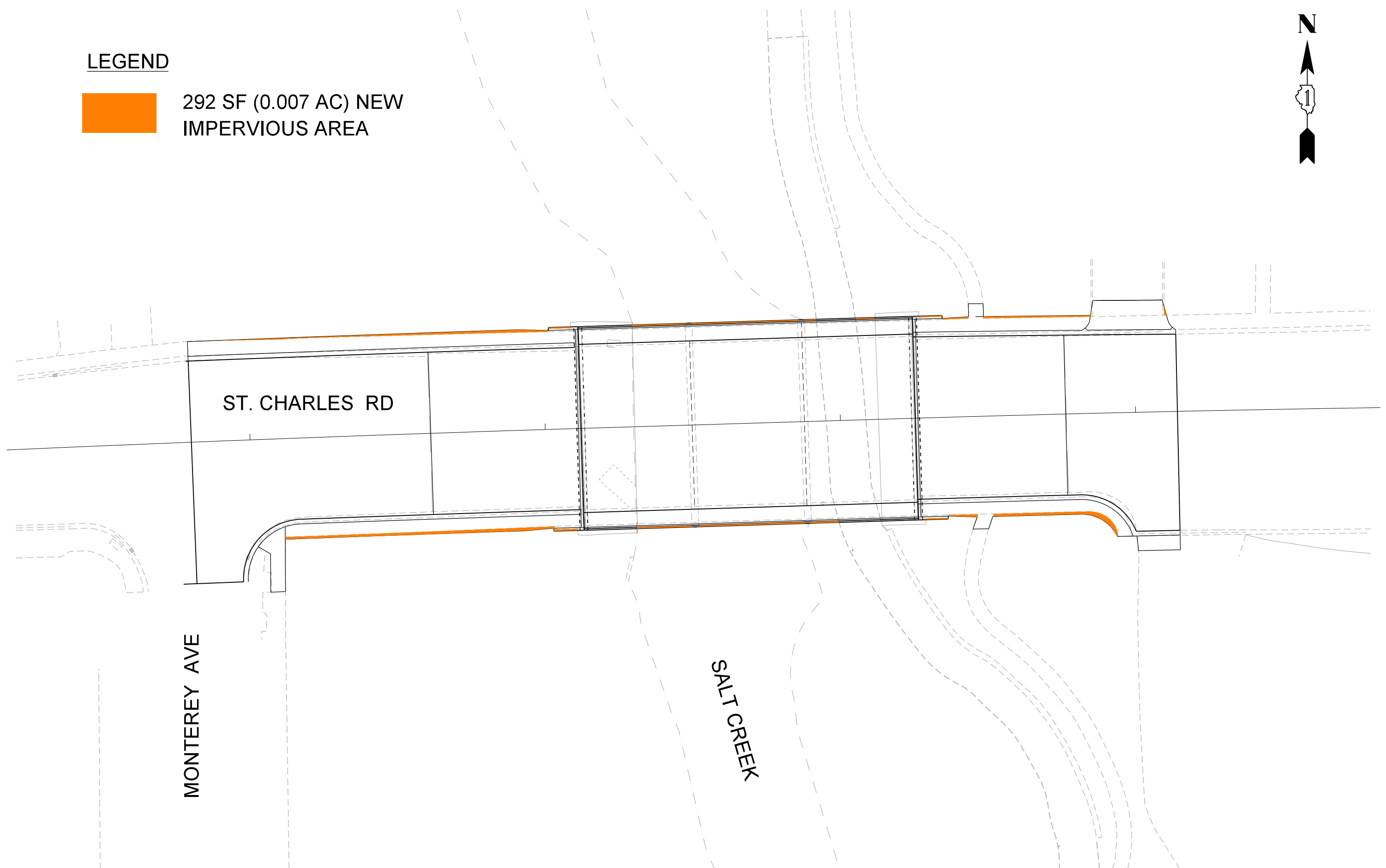
SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. 84+50.00 TO STA. 90+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	15-00094-00-BR	DUPAGE	1	1
PROJECT: BRM-4003(508); JOB: P-91-313-15				
EXHIBIT E-3.0 ILLINOIS FED. AID PROJECT				

LEGEND



292 SF (0.007 AC) NEW IMPERVIOUS AREA



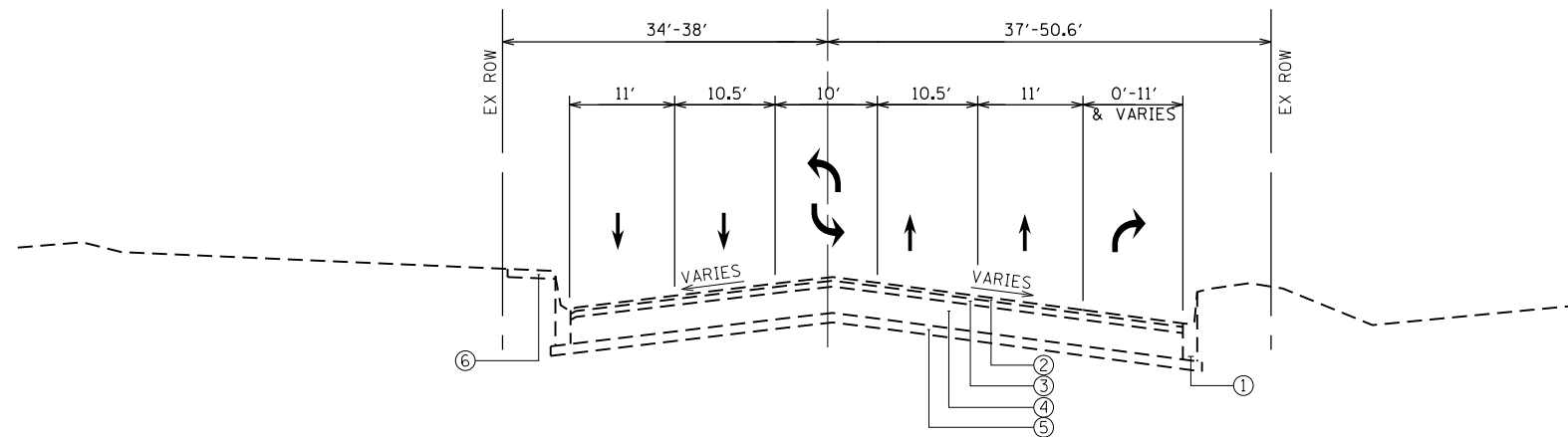
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	PLOT DATE = 8/16/2016	DATE - 08-19-16	REVISED -

**ST. CHARLES ROAD BRIDGE
OVER SALT CREEK**

**EXHIBIT 14
NEW IMPERVIOUS AREA EXHIBIT**

SCALE: 1" = 30' SHEET 1 OF 1 SHEETS STA. 85+80 TO STA. 89+80

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397		DUPAGE	1	1
CONTRACT NO.				
ILLINOIS LOCAL ROADS PROJECT				

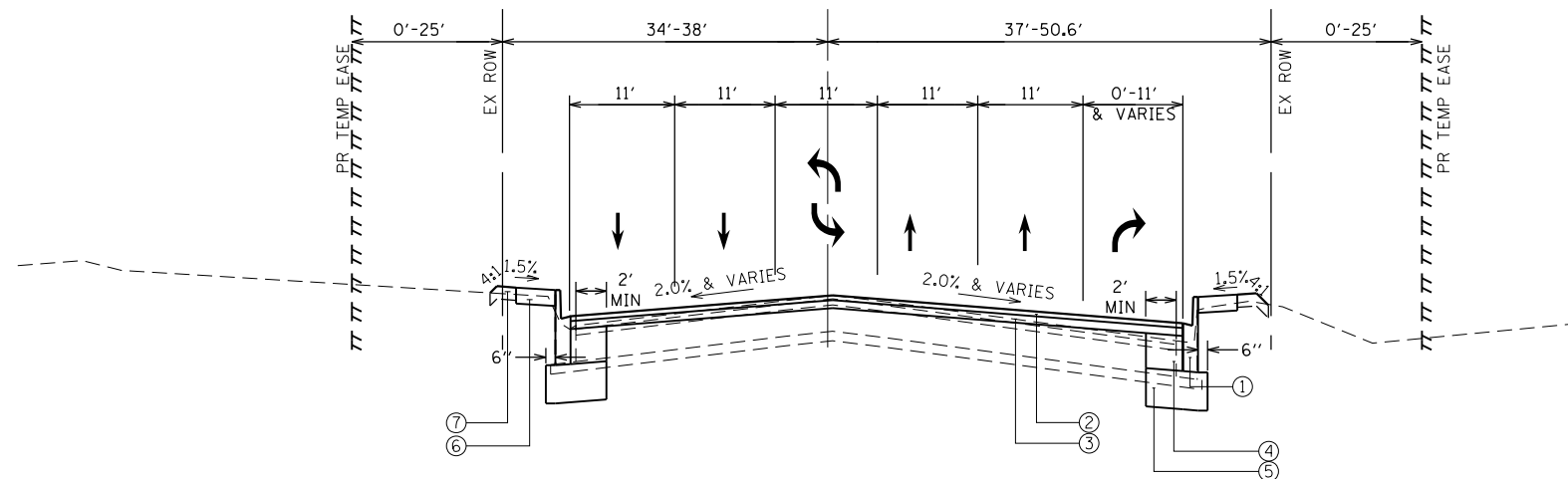


EXISTING LEGEND

- ① EXISTING B-9.12 CURB & GUTTER
- ② EXISTING HMA SURFACE COURSE, 1.5"
- ③ EXISTING HMA BINDER COURSE, 2.5"
- ④ EXISTING HMA BASE COURSE, 11"
- ⑤ EXISTING SUB-BASE GRANULAR MATL, TY A, 4" MIN
- ⑥ EXISTING PCC SIDEWALK, 4"

EXISTING TYPICAL SECTION

STA 85+78.04 TO STA 86+58.88
 BRIDGE OMISSION: STA 86+58.88 TO 88+74.17
 STA 88+74.17 TO STA 89+12.12



PROPOSED LEGEND

- ① PROPOSED B-9.12 CURB & GUTTER
- ② PROPOSED HMA SURFACE COURSE MIX D, N70, 1.5"
- ③ PROPOSED HMA BINDER COURSE, IL-19.0, N70, 2.5"
- ④ PROPOSED HMA BASE COURSE, 11"
- ⑤ PROPOSED AGGREGATE SUBGRADE, 12"
- ⑥ PROPOSED PCC SIDEWALK, 5"
- ⑦ PROPOSED TOPSOIL, 4"

PROPOSED TYPICAL SECTION

STA 85+78.04 TO STA 86+58.88
 BRIDGE OMISSION: STA 86+58.88 TO 88+74.17
 STA 88+74.17 TO STA 89+12.12

EXHIBIT 15

<p>V3 Companies 7325 Janes Avenue Woodridge, IL 60517 630.724.9200 phone 630.724.9202 fax www.v3co.com</p>	USER NAME = vsjkes	DESIGNED - EIH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ST. CHARLES ROAD TYPICAL SECTIONS		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40.0000' / in.	DRAWN - EIH	REVISED -				15-00094-00-BR	DUPAGE	1	1	
	PLOT DATE = 8/18/2016	CHECKED - GJS	REVISED -				PROJECT: BRM-4003508; JOB: P-91-313-15				
		DATE - 05/12/16	REVISED -				EXHIBIT E-2.0	ILLINOIS FED. AID PROJECT			
							SCALE: N.T.S.	SHEET 1 OF 1 SHEETS	STA. 85+78.04 TO STA. 89+12.12		

**IDOT LDS Technical Memorandum
St. Charles Road Bridge over Salt Creek**

Appendix B: Calculations

- Existing CN Calculation
- Proposed CN Calculation
- Soil Classifications
- Inlet Spacing Calculations

Worksheet 2: Runoff Curve Number

Project: St. Charles Road over Salt Creek
 Location: Villa Park (DuPage Co), IL

By: VAS Date: 12/8/2015
 Checked: SRU Date: 9/1/2016

Location Existing Conditions
Subbasin Outlet to Salt Creek

Runoff Curve Number (CN)

Soil Name and hydrologic group (appendix A)	Cover description (cover type, treatment, and hydrologic condition; percent impervious; unconnected/connected impervious area ratio)	CN ^{1/}			Area <input checked="" type="checkbox"/> acres <input type="checkbox"/> mi ² <input type="checkbox"/> %	Product of CN x area
		Table 2-2	Fig. 2-3	Fig. 2-4		
	Pavement	98			5.07	496.9
C	Grass	74			0.83	61.4
D	Grass	80			0.65	52.0
Totals =					6.55	610.3

1/ Use only one CN source per line.

$$CN \text{ (weighted)} = \frac{\text{total product}}{\text{total area}} = \frac{610.28}{6.55} = 93.2;$$

Use CN =

AREA = Acres
 0.0102 Sq. Mi.

Worksheet 2: Runoff Curve Number

Project: St. Charles Road over Salt Creek
 Location: Villa Park (DuPage Co), IL

By: VAS Date: 8/16/2016
 Checked: SRU Date: 9/1/2016

Location Proposed Conditions
Subbasin Outlet to Salt Creek

Runoff Curve Number (CN)

Soil Name and hydrologic group (appendix A)	Cover description (cover type, treatment, and hydrologic condition; percent impervious; unconnected/connected impervious area ratio)	CN ^{1/}			Area <input checked="" type="checkbox"/> acres <input type="checkbox"/> mi ² <input type="checkbox"/> %	Product of CN x area
		Table 2-2	Fig. 2-3	Fig. 2-4		
	Pavement	98			5.08	497.8
C	Grass	74			0.82	60.7
D	Grass	80			0.65	52.0
Totals =					6.55	610.5

1/ Use only one CN source per line.

$$CN \text{ (weighted)} = \frac{\text{total product}}{\text{total area}} = \frac{610.52}{6.55} = 93.2;$$

Use CN =

AREA = Acres
 0.0102 Sq. Mi.

DuPage County, Illinois

805B—Orthents, clayey, undulating

Map Unit Setting

National map unit symbol: 64wv

Elevation: 510 to 980 feet

Mean annual precipitation: 28 to 40 inches

Mean annual air temperature: 45 to 54 degrees F

Frost-free period: 140 to 190 days

Farmland classification: Not prime farmland

Map Unit Composition

Orthents, clayey, undulating, and similar soils: 91 percent

Minor components: 9 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Orthents, Clayey, Undulating

Setting

Landform: Ground moraines, lake plains

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Earthy fill

Typical profile

H1 - 0 to 7 inches: silty clay

H2 - 7 to 60 inches: silty clay

Properties and qualities

Slope: 1 to 6 percent

Depth to restrictive feature: 4 to 10 inches to densic material

Natural drainage class: Moderately well drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat):

Moderately low (0.02 to 0.06 in/hr)

Depth to water table: About 24 to 42 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 25 percent

Available water storage in profile: Very low (about 0.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4s

Hydrologic Soil Group: D

Minor Components

Ashkum

Percent of map unit: 3 percent
Landform: End moraines, ground moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Concave

Urban land

Percent of map unit: 3 percent
Down-slope shape: Linear
Across-slope shape: Linear

Bryce

Percent of map unit: 2 percent
Landform: Ground moraines, glacial lakes (relict)
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Concave

Aquents, clayey

Percent of map unit: 1 percent
Landform: Lake plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear

Data Source Information

Soil Survey Area: DuPage County, Illinois
Survey Area Data: Version 11, Sep 25, 2015

DuPage County, Illinois

854B—Markham-Ashkum-Beecher complex, 1 to 6 percent slopes

Map Unit Setting

National map unit symbol: 64wy
Elevation: 510 to 930 feet
Mean annual precipitation: 28 to 40 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 140 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

Markham and similar soils: 40 percent
Ashkum and similar soils: 30 percent
Beecher and similar soils: 25 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Markham

Setting

Landform: End moraines, ground moraines
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Thin mantle of loess or other silty material and in the underlying till

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 21 inches: silty clay loam
H3 - 21 to 32 inches: silty clay loam
H4 - 32 to 60 inches: silty clay loam

Properties and qualities

Slope: 1 to 6 percent
Depth to restrictive feature: 20 to 55 inches to densic material
Natural drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat):
Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 30 percent
Available water storage in profile: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C

Description of Ashkum

Setting

Landform: End moraines, ground moraines

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Concave

Parent material: Colluvium and in the underlying till

Typical profile

H1 - 0 to 12 inches: silty clay loam

H2 - 12 to 29 inches: silty clay

H3 - 29 to 54 inches: silty clay loam

H4 - 54 to 60 inches: silty clay loam

Properties and qualities

Slope: 1 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Poorly drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high (0.20 to 0.60 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: None

Frequency of ponding: Frequent

Calcium carbonate, maximum in profile: 25 percent

Available water storage in profile: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: C/D

Description of Beecher

Setting

Landform: End moraines, ground moraines

Landform position (two-dimensional): Backslope, footslope

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Thin mantle of loess or other silty material and in the underlying till

Typical profile

H1 - 0 to 7 inches: silt loam

H2 - 7 to 24 inches: silty clay loam

H3 - 24 to 36 inches: silty clay loam

H4 - 36 to 60 inches: silty clay loam

Properties and qualities

Slope: 2 to 4 percent

Depth to restrictive feature: 24 to 45 inches to densic material

Natural drainage class: Somewhat poorly drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat):

Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 6 to 24 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 35 percent

Available water storage in profile: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C/D

Minor Components

Orthents, clayey

Percent of map unit: 5 percent

Landform: Ground moraines, lake plains

Landform position (two-dimensional): Summit, backslope

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Convex

Data Source Information

Soil Survey Area: DuPage County, Illinois

Survey Area Data: Version 11, Sep 25, 2015

DuPage County, Illinois

3107A—Sawmill silty clay loam, 0 to 2 percent slopes, frequently flooded

Map Unit Setting

National map unit symbol: 64tz

Elevation: 440 to 930 feet

Mean annual precipitation: 28 to 40 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 180 days

Farmland classification: Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season

Map Unit Composition

Sawmill and similar soils: 95 percent

Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sawmill

Setting

Landform: Flood plains

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium

Typical profile

H1 - 0 to 29 inches: silty clay loam

H2 - 29 to 48 inches: silty clay loam

H3 - 48 to 60 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Poorly drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: Frequent

Frequency of ponding: Frequent

Calcium carbonate, maximum in profile: 20 percent

Available water storage in profile: High (about 11.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: B/D

Minor Components

Millington

Percent of map unit: 5 percent

Landform: Flood plains

Down-slope shape: Linear

Across-slope shape: Linear

Data Source Information

Soil Survey Area: DuPage County, Illinois

Survey Area Data: Version 11, Sep 25, 2015

NORTH SIDE INLET SPACING CALCULATIONS:

Allowable Inlet Spacing within bridge deck, west of bridge, north side

Roadway Station	Longitudinal Roadway Slope (Percent)	Transverse Roadway Slope (Percent)	Transverse Gutter Slope (Percent)	Nominal Gutter Width (ft)	Maximum Spread of Water on Pavement (ft)	Depth of Flow at Edge of Pavement d(p)	Flow on Pavement Q(p)	Flow in Gutter Extension Q(x)	Depth of Flow in Gutter d(g)	Flow in Gutter and Extension Q(g+x)	Flow in Gutter Q(g)	Maximum Allowable Flow Q(T)	Intercepted Flow Q(I)	Bypass Flow Q(BY)	10 Year Rainfall Intensity (In/Hr)	Runoff Coefficient (C)	Width of Tributary Area (Ft)	Max Distance to First Inlet Q(T) = CIA	Distance to Successive Inlets Q(I) = CIA
87+67 (HP) to 85+33 (LP)	0.78%	2.00%	6.00%	1.0	3.00	0.060	0.1050	0.0350	0.1200	0.2221	0.1872	0.2921	0.1872	0.1050	6.48	0.90	34.5	63	41

DIST TO EDGE OF BRDGE DECK = 58' OK

Allowable Inlet Spacing along roadway, west of bridge, north side

Roadway Station	Longitudinal Roadway Slope (Percent)	Transverse Roadway Slope (Percent)	Transverse Gutter Slope (Percent)	Nominal Gutter Width (ft)	Maximum Spread of Water on Pavement (ft)	Depth of Flow at Edge of Pavement d(p)	Flow on Pavement Q(p)	Flow in Gutter Extension Q(x)	Depth of Flow in Gutter d(g)	Flow in Gutter and Extension Q(g+x)	Flow in Gutter Q(g)	Maximum Allowable Flow Q(T)	Intercepted Flow Q(I)	Bypass Flow Q(BY)	10 Year Rainfall Intensity (In/Hr)	Runoff Coefficient (C)	Width of Tributary Area (Ft)	Max Distance to First Inlet Q(T) = CIA	Distance to Successive Inlets Q(I) = CIA
87+67 (HP) to 85+33 (LP)	0.78%	2.00%	6.00%	1.0	5.50	0.110	0.5284	0.1761	0.1700	0.5623	0.3862	0.9146	0.3862	0.5284	6.48	0.90	36.0	190	80

DIST TO 1ST EXISTING INLET = 234'

ADDITIONAL INLET REQUIRED

Allowable Inlet Spacing within bridge deck, east of bridge, north side

Roadway Station	Longitudinal Roadway Slope (Percent)	Transverse Roadway Slope (Percent)	Transverse Gutter Slope (Percent)	Nominal Gutter Width (ft)	Maximum Spread of Water on Pavement (ft)	Depth of Flow at Edge of Pavement d(p)	Flow on Pavement Q(p)	Flow in Gutter Extension Q(x)	Depth of Flow in Gutter d(g)	Flow in Gutter and Extension Q(g+x)	Flow in Gutter Q(g)	Maximum Allowable Flow Q(T)	Intercepted Flow Q(I)	Bypass Flow Q(BY)	10 Year Rainfall Intensity (In/Hr)	Runoff Coefficient (C)	Width of Tributary Area (Ft)	Max Distance to First Inlet Q(T) = CIA	Distance to Successive Inlets Q(I) = CIA
87+67 (HP) to 90+00	2.14%	2.00%	6.00%	1.0	3.00	0.060	0.1738	0.0579	0.1200	0.3679	0.3100	0.4838	0.3100	0.1738	6.48	0.90	34.5	105	67

DIST TO EDGE OF BRDGE DECK = 58' OK

Allowable Inlet Spacing along roadway, east of bridge, north side

Roadway Station	Longitudinal Roadway Slope (Percent)	Transverse Roadway Slope (Percent)	Transverse Gutter Slope (Percent)	Nominal Gutter Width (ft)	Maximum Spread of Water on Pavement (ft)	Depth of Flow at Edge of Pavement d(p)	Flow on Pavement Q(p)	Flow in Gutter Extension Q(x)	Depth of Flow in Gutter d(g)	Flow in Gutter and Extension Q(g+x)	Flow in Gutter Q(g)	Maximum Allowable Flow Q(T)	Intercepted Flow Q(I)	Bypass Flow Q(BY)	10 Year Rainfall Intensity (In/Hr)	Runoff Coefficient (C)	Width of Tributary Area (Ft)	Max Distance to First Inlet Q(T) = CIA	Distance to Successive Inlets Q(I) = CIA
87+67 (HP) to 90+00	2.14%	2.00%	6.00%	1.0	5.50	0.110	0.8753	0.2918	0.1700	0.9315	0.6397	1.5150	0.6397	0.8753	6.48	0.90	36.0	314	133

DIST TO 1ST EXISTING INLET = 232' OK

d(p) = DEPTH OF FLOW AT THE EDGE OF THE PAVEMENT.

Q(p) = FLOW ON THE PAVEMENT OUTSIDE OF THE INLET GRATE.

d(g) = DEPTH OF FLOW AT THE GUTTER.

Q(x) = FLOW ON THE GUTTER EXTENSION.

Q(g) = Q(g+x) - Q(x)

Q(T) = Q(g) + Q(p)

Q(BY) = Q(T) - Q(g) ALL FLOW OVER THE GRATE IS ASSUMED TO GO IN THE GRATE.

ALL DEPTHS AND DISTANCES ARE IN FEET.

ALL FLOWS ARE IN CUBIC FEET PER SECOND.

SOUTH SIDE INLET SPACING CALCULATIONS:

Allowable Inlet Spacing within bridge deck, west of bridge, south side

Roadway Station	Longitudinal Roadway Slope (Percent)	Transverse Roadway Slope (Percent)	Transverse Gutter Slope (Percent)	Nominal Gutter Width (ft)	Maximum Spread of Water on Pavement (ft)	Depth of Flow at Edge of Pavement d(p)	Flow on Pavement Q(p)	Flow in Gutter Extension Q(x)	Depth of Flow in Gutter d(g)	Flow in Gutter and Extension Q(g+x)	Flow in Gutter Q(g)	Maximum Allowable Flow Q(T)	Intercepted Flow Q(I)	Bypass Flow Q(BY)	10 Year Rainfall Intensity (In/Hr)	Runoff Coefficient (C)	Width of Tributary Area (Ft)	Max Distance to First Inlet Q(T) = CIA	Distance to Successive Inlets Q(I) = CIA
87+67 (HP) to 85+33 (LP)	0.78%	2.00%	6.00%	1.0	3.00	0.060	0.1050	0.0350	0.1200	0.2221	0.1872	0.2921	0.1872	0.1050	6.48	0.90	34.5	63	41

DIST TO EDGE OF BRDGE DECK = 58' OK

Allowable Inlet Spacing along roadway, west of bridge, south side

Roadway Station	Longitudinal Roadway Slope (Percent)	Transverse Roadway Slope (Percent)	Transverse Gutter Slope (Percent)	Nominal Gutter Width (ft)	Maximum Spread of Water on Pavement (ft)	Depth of Flow at Edge of Pavement d(p)	Flow on Pavement Q(p)	Flow in Gutter Extension Q(x)	Depth of Flow in Gutter d(g)	Flow in Gutter and Extension Q(g+x)	Flow in Gutter Q(g)	Maximum Allowable Flow Q(T)	Intercepted Flow Q(I)	Bypass Flow Q(BY)	10 Year Rainfall Intensity (In/Hr)	Runoff Coefficient (C)	Width of Tributary Area (Ft)	Max Distance to First Inlet Q(T) = CIA	Distance to Successive Inlets Q(I) = CIA
87+67 (HP) to 85+33 (LP)	0.78%	2.00%	6.00%	1.0	5.50	0.110	0.5284	0.1761	0.1700	0.5623	0.3862	0.9146	0.3862	0.5284	6.48	0.90	37.0	185	78

DIST TO 1ST EXISTING INLET = 171' OK

Allowable Inlet Spacing within bridge deck, east of bridge, south side

Roadway Station	Longitudinal Roadway Slope (Percent)	Transverse Roadway Slope (Percent)	Transverse Gutter Slope (Percent)	Nominal Gutter Width (ft)	Maximum Spread of Water on Pavement (ft)	Depth of Flow at Edge of Pavement d(p)	Flow on Pavement Q(p)	Flow in Gutter Extension Q(x)	Depth of Flow in Gutter d(g)	Flow in Gutter and Extension Q(g+x)	Flow in Gutter Q(g)	Maximum Allowable Flow Q(T)	Intercepted Flow Q(I)	Bypass Flow Q(BY)	10 Year Rainfall Intensity (In/Hr)	Runoff Coefficient (C)	Width of Tributary Area (Ft)	Max Distance to First Inlet Q(T) = CIA	Distance to Successive Inlets Q(I) = CIA
87+67 (HP) to 90+00	2.14%	2.00%	6.00%	1.0	3.00	0.060	0.1738	0.0579	0.1200	0.3679	0.3100	0.4838	0.3100	0.1738	6.48	0.90	34.5	105	67

DIST TO EDGE OF BRDGE DECK = 58' OK

Allowable Inlet Spacing along roadway, east of bridge, south side

Roadway Station	Longitudinal Roadway Slope (Percent)	Transverse Roadway Slope (Percent)	Transverse Gutter Slope (Percent)	Nominal Gutter Width (ft)	Maximum Spread of Water on Pavement (ft)	Depth of Flow at Edge of Pavement d(p)	Flow on Pavement Q(p)	Flow in Gutter Extension Q(x)	Depth of Flow in Gutter d(g)	Flow in Gutter and Extension Q(g+x)	Flow in Gutter Q(g)	Maximum Allowable Flow Q(T)	Intercepted Flow Q(I)	Bypass Flow Q(BY)	10 Year Rainfall Intensity (In/Hr)	Runoff Coefficient (C)	Width of Tributary Area (Ft)	Max Distance to First Inlet Q(T) = CIA	Distance to Successive Inlets Q(I) = CIA
87+67 (HP) to 90+00	2.14%	2.00%	6.00%	1.0	5.50	0.110	0.8753	0.2918	0.1700	0.9315	0.6397	1.5150	0.6397	0.8753	6.48	0.90	49.0	231	98

DIST TO 1ST EXISTING INLET = 231 OK

d(p) = DEPTH OF FLOW AT THE EDGE OF THE PAVEMENT.

Q(p) = FLOW ON THE PAVEMENT OUTSIDE OF THE INLET GRATE.

d(g) = DEPTH OF FLOW AT THE GUTTER.

Q(x) = FLOW ON THE GUTTER EXTENSION.

Q(g) = Q(g+x) - Q(x)

Q(T) = Q(g) + Q(p)

Q(BY) = Q(T) - Q(g) ALL FLOW OVER THE GRATE IS ASSUMED TO GO IN THE GRATE.

ALL DEPTHS AND DISTANCES ARE IN FEET.

ALL FLOWS ARE IN CUBIC FEET PER SECOND.

IDOT LDS Technical Memorandum
St. Charles Road Bridge over Salt Creek

Appendix C: Supporting Documents

- St. Charles Road Bridge over Salt Creek WIT
- IDOT Engineering Plans Project M-5003(27) St. Charles Road – FAU Rte. 1397, Dated 3-22-1979 (Partial Plan Set)



Illinois Department of Transportation

Bridge Waterway Information Table

Route: FAU 1397 (St. Charles Road)
 Waterway: Lower Salt Creek
 Section: 15-00094-00-BR
 County: DuPage

Existing SN: 022-6950
 Proposed SN: 022-6950
 Prepared by: VAS
 Checked by: SRU

Date: 8/19/16
 Date: 9/1/16

Flood Event	Freq. Yr.	Discharge ft ³ /s	Waterway Opening - ft ²		Natural H.W.E. - ft	Head - ft		Headwater Elevation - ft	
			Existing	Proposed		Existing	Proposed	Existing	Proposed
Design	10	1484	738.36	738.36	665.41	0.12	0.12	665.53	665.53
Base	50	1852	822.27	822.27	666.30	0.13	0.13	666.43	666.43
Scour Design Check	100	1994	851.14	851.14	666.60	0.14	0.14	666.74	666.74
Overtop Existing	200	2071	888.12	888.12	666.76	0.14	0.14	666.90	666.90
Overtop Proposed	--	--	--	--	--	--	--	--	--
Max. Calc.	500	2303	908.77	908.77	667.19	0.16	0.16	667.35	667.35

Drainage Area = 92.13 square miles
 Existing Overtopping Elev. = 671.45 at Sta. 88+36
 Proposed Overtopping Elev. = 671.32 at Sta. 88+36

Datum:

All-Time H.W.E. & Date: 666.26 NAVD (Sept. 2008) ft
 Surveyed Normal Water Level: 658.3 ft

10-Year Velocity through Existing Structure = 1 ft/s
 10-Year Velocity through Proposed Structure = 1.6 ft/s
 2-Yr. Flow Rate = 994 ft³/s

EXISTING STRUCTURE

Type: Precast prestress concrete deck beam bridge
 Length/Width: 113' -1" span / 68' width
 # Spans/Cells: 3
 Low Chord: 669.27
 Skew: 90 (relative to road)
 Clearance: 2.97' (low chord - Nat. 50-yr HWE)
 Bridge Flow Line: 652.89 (u/s) 652.89 (d/s)
 Low E.O.P.: 671.45
 Freeboard: 5.02' (low eop - Ex 50-yr headwater)
 Culvert Inverts: N/A (u/s) N/A (d/s)

PROPOSED STRUCTURE

Type: Precast prestress concrete deck beam bridge
 Length Of Span: 113' -1" span / 69' width
 # Spans: 3
 Low Chord: 669.27
 Skew: 90 (relative to road)
 Clearance: 2.97' (low chord - Nat. 50-yr HWE)
 Bridge Flow Line: 652.89 (u/s) 652.89 (d/s)
 Low E.O.P.: 671.32
 Freeboard: 4.89' (low eop - Pr 50-yr headwater)

NOTE: Proposed Structure Details Are Preliminary; Subject To Refinement In TSL Stage.

00104

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Phase I

ROUTE	SECTION	COUNTY	TOTAL MILES
1397	1397-1398	DuPAGE	1.05
TOTAL PROJECT			1.05

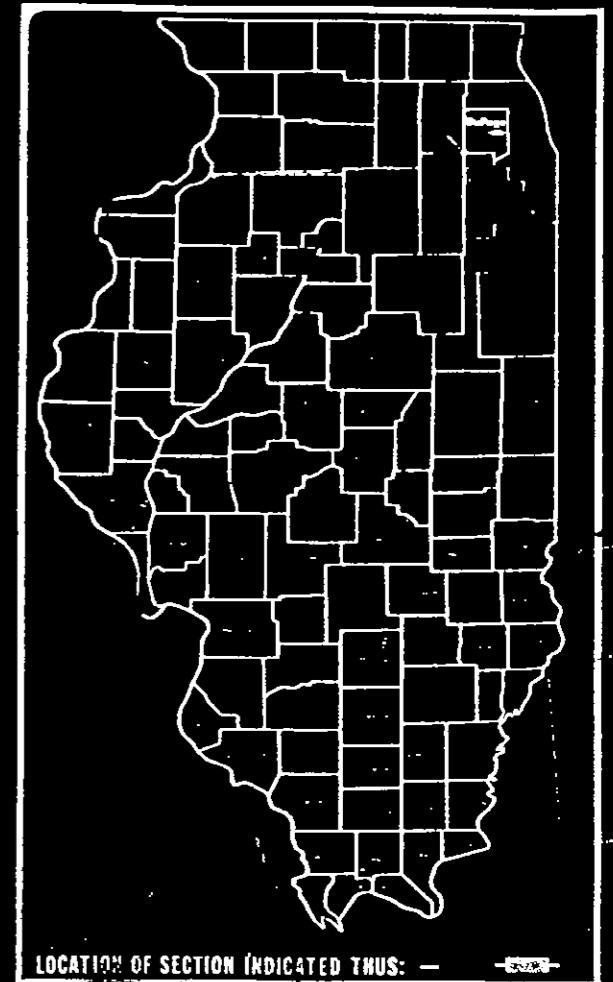
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

SEE SHEET 2 FOR INDEX OF SHEETS & STATE STANDARDS

SCALES	
PLAN	1 INCH = 60 FEET
PROFILE HORIZ.	1 INCH = 30 FEET
PROFILE VERT.	1 INCH = 5 FEET
CROSS-SECTIONS	
HORIZ.	1 INCH = 5 FEET
VERT.	1 INCH = 5 FEET

STATE OF ILLINOIS SECTION 1975-136-W & RS, BY
VILLAGE OF VILLA PARK SECTION 76-00045-00-RP
CITY OF ELMHURST SECTION 76-00113-00-RP

Du PAGE COUNTY, ILLINOIS
PROJECT M-5003(27)
ROADWAY IMPROVEMENTS



ST. CHARLES ROAD - FAU RTE. 1397 - NET LENGTH 3,732.00 FEET OR 0.707 MILES OR 1.137 KILOMETER
VILLA AVENUE - FAU RTE. 2652 - NET LENGTH 1,106.00 FEET OR 0.209 MILE OR 0.337 KILOMETER
NET LENGTH OF PROJECT = 4,838.00 FEET OR 0.916 MILE OR 1.474 KILOMETER
TOWNSHIP 39 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN
JOB NO. C-91-262-75

*DRAWER
70*



LIMIT OF IMPROVEMENTS
STA. 14+50.00

PROJECT M-5003 (27)
ENDS STA. 97+90.00

LIMIT OF IMPROVEMENTS
Sta. 2+32.00

DESIGN DESIGNATION

ST. CHARLES ROAD - 2244 (93) TS-2 1.18 (B-15)
VILLA AVENUE - 971 (93) TS-3 0.51 (B-15)



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED: *3-22-75*
[Signature]
LOCAL AGENCY REPRESENTATIVE

PASSED: *MARCH 28 1975*
[Signature]
DISTRICT ENGINEER OF LOCAL ROADS AND STREETS

APPROVED: *MARCH 28 1975*
[Signature]
DISTRICT ENGINEER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

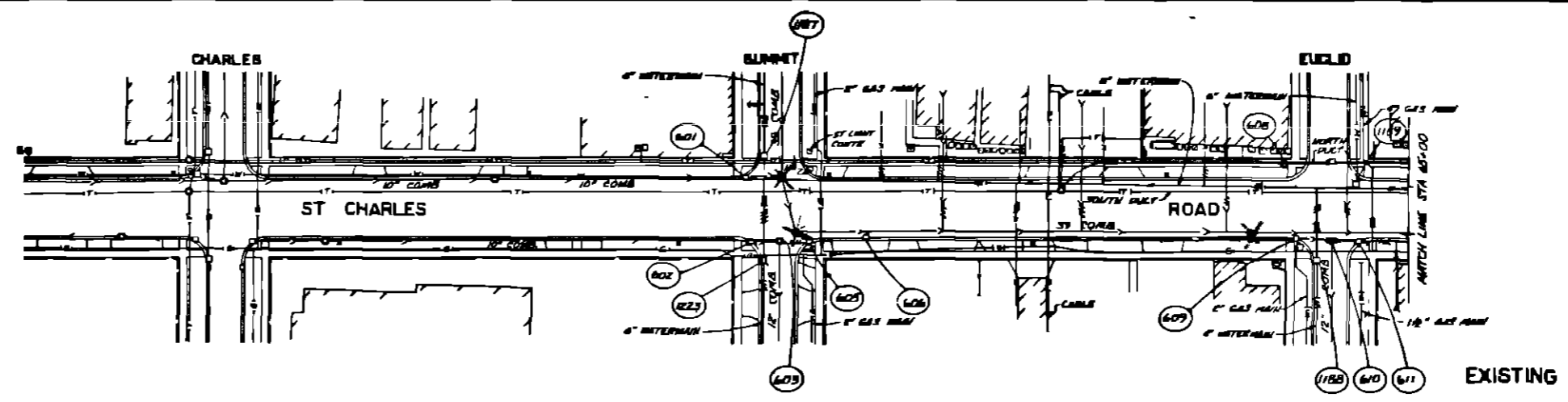
APPROVED _____ DATE _____

DIVISION ADMINISTRATOR

00104-1

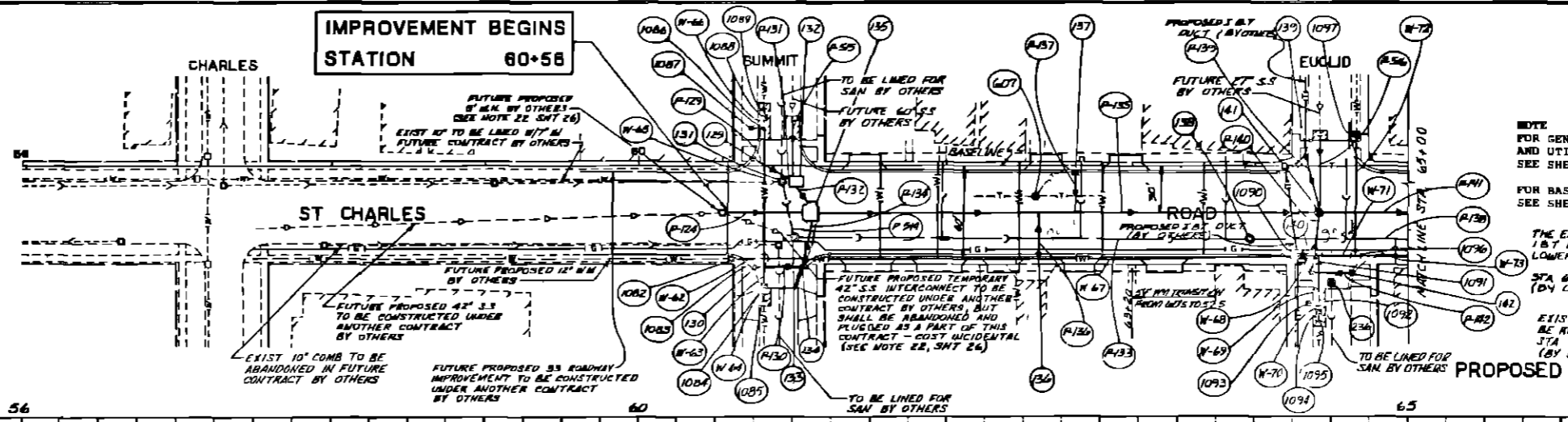
00104

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1/18/78	136	DuPAGE	105	27
1/23/77	133			
STA. 56+00		TO STA. 65+00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT # 8-800(77)		



PLAN
 DRAWN BY
 CHECKED BY
 DATE
 SCALE
 1\"/>

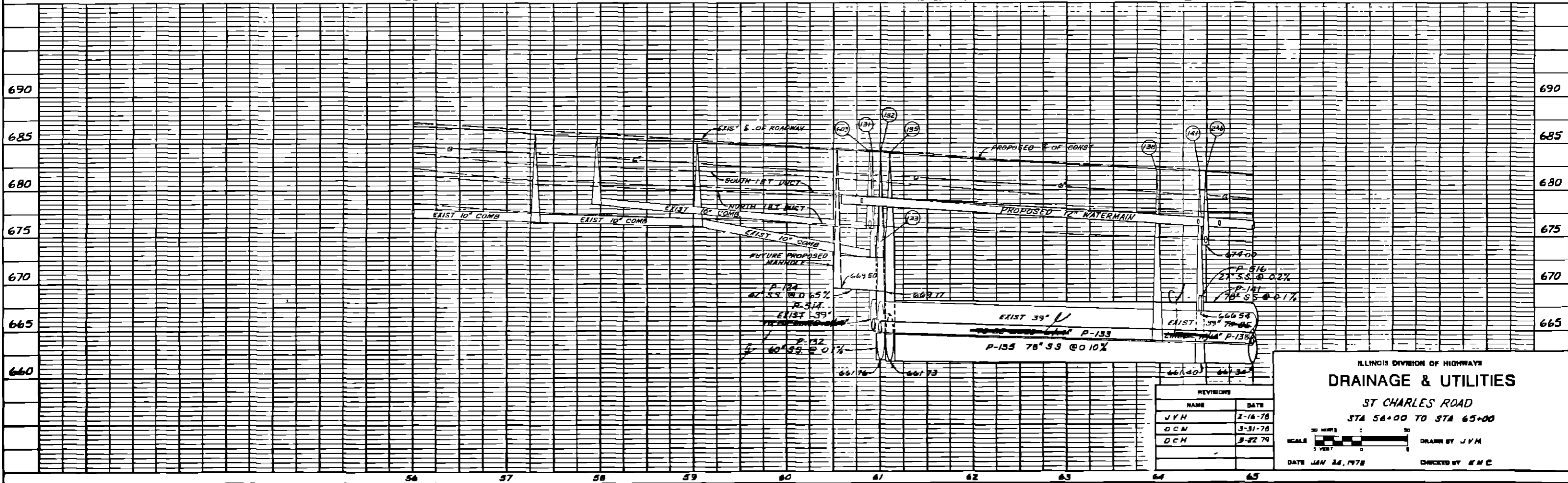
IMPROVEMENT BEGINS
 STATION 60+58



NOTE
 FOR GENERAL DRAINAGE
 AND UTILITY NOTES
 SEE SHEET NO 26
 FOR BASELINE INFO
 SEE SHEETS 14 & 15
 THE EXISTING SOUTH
 18\"/>

BENCHMARK 117
 N.W. BOLT IN NEW CONCRETE SIGN
 BASE
 STA 61+19 + 75'R. EL. 684.48

PROFILE
 DRAWN BY
 CHECKED BY
 DATE
 SCALE
 1\"/>



REVISION	NAME	DATE
1	JYH	1-18-78
2	OCM	3-31-78
3	DCH	3-22-79

ILLINOIS DIVISION OF HIGHWAYS
DRAINAGE & UTILITIES
 ST CHARLES ROAD
 STA 56+00 TO STA 65+00

SCALE: 1\"/>

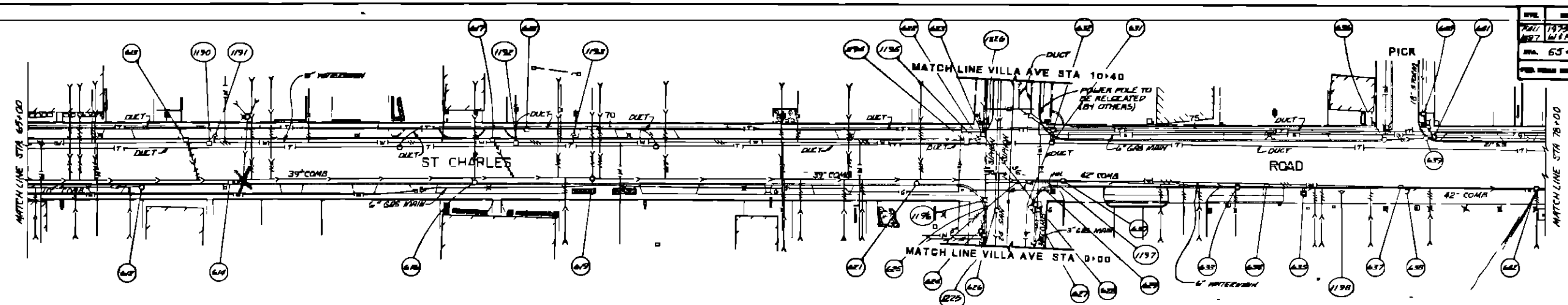
DATE JAN 24, 1978
 DRAWN BY JYH
 CHECKED BY KMC

00104-25

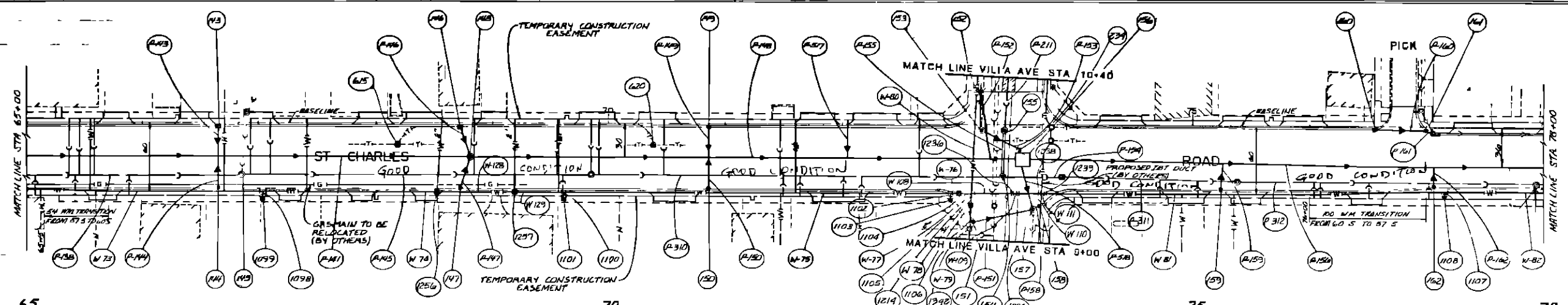
00104

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1/16/78	1738-1740	DUPAGE	105	28
NO.	65+00	TO STA.	78+00	
DESIGNED BY	ILLINOIS	FIELD AND PROJECT	NO. 0003 (2)	

PLAN
 MARKED
 PLOTTED
 CHECKED
 DATE 1-16-78



EXISTING

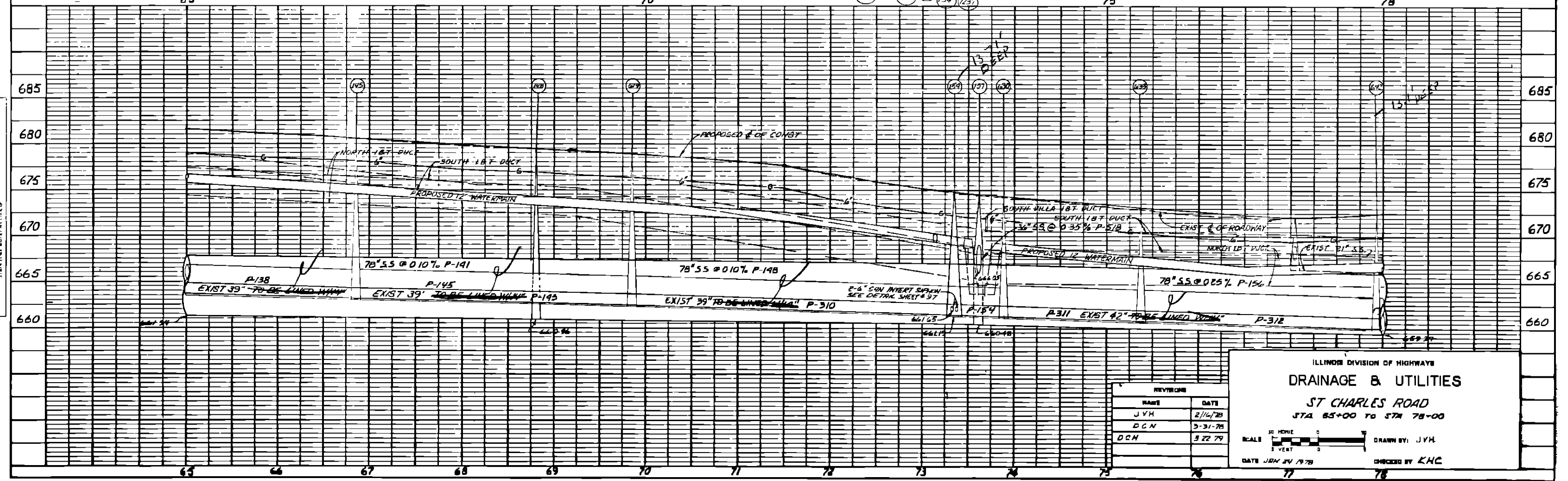


PROPOSED

NOTE
 FOR GENERAL DRAINAGE
 AND UTILITY NOTES
 SEE SHEET NO 26
 FOR BASELINE INFO
 SEE SHEETS 14 & 15
 THE EXISTING SOUTH
 18" DUCT SHALL
 BE LOWERED
 STA 75+00 TO 78+25
 (BY OTHERS)

BENCHMARK #18
 X-CUT IN CONCRETE SIGN BASE
 (ELMH RST FEDERAL)
 STA 59+10 ±10' L EL 674

PROFILE
 MARKED
 PLOTTED
 CHECKED
 DATE 1-16-78



REVISION	DATE
J.V.H.	2/16/78
D.C.N.	3-31-78
D.C.H.	5-22-79

ILLINOIS DIVISION OF HIGHWAYS
DRAINAGE & UTILITIES
 ST CHARLES ROAD
 STA 65+00 TO STA 78+00

SCALE: 1" = 10' HORIZ, 1" = 5' VERT

DATE: JAN 24 1978

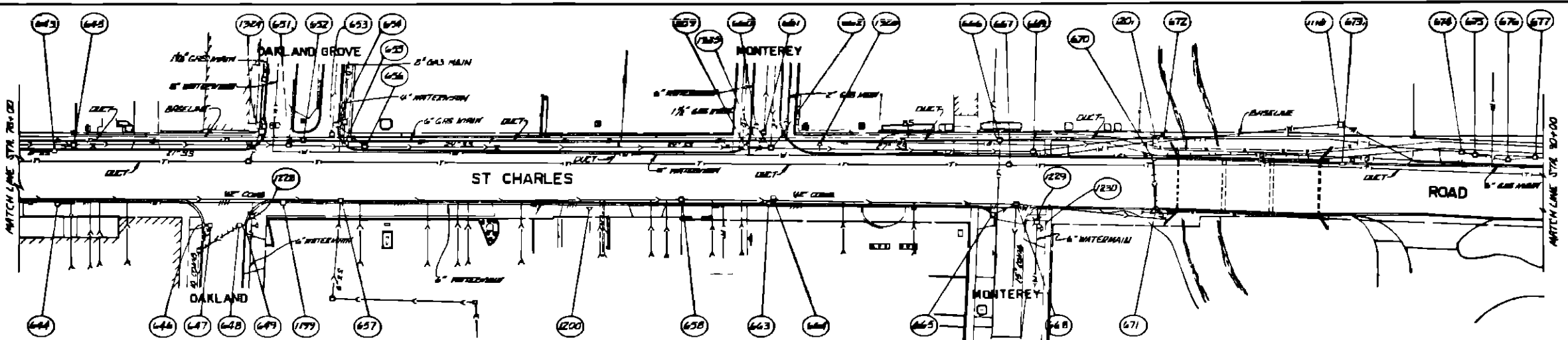
DRAWN BY: J.V.H.
 CHECKED BY: K.H.C.

PLATE 1 PLAN PROFILE FOR
 ST CHARLES ROAD STA 65+00 TO 78+00

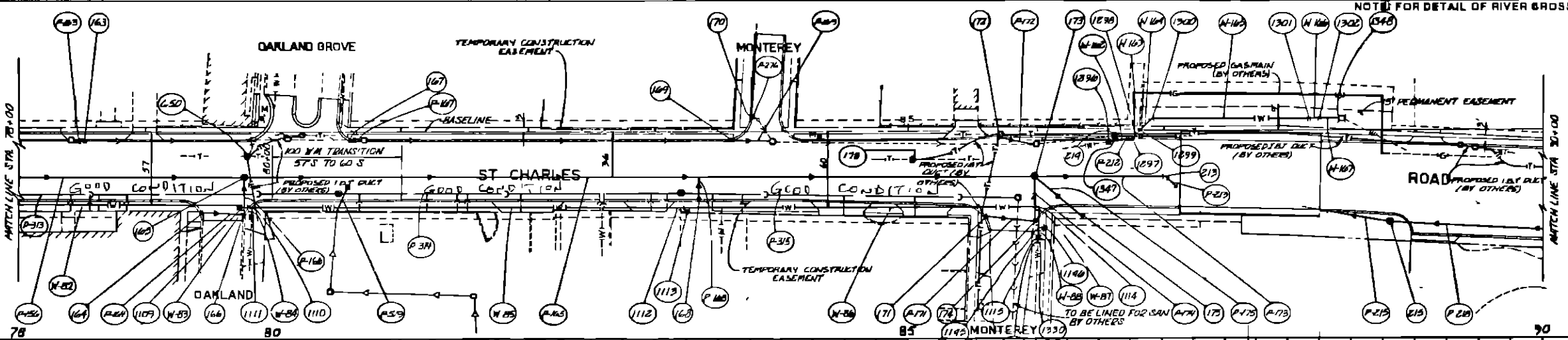
00104-26

00104

DATE	1978-1979	DESIGNER	JCH	NO.	29
PROJECT	78-00	DATE	90-00		



EXISTING



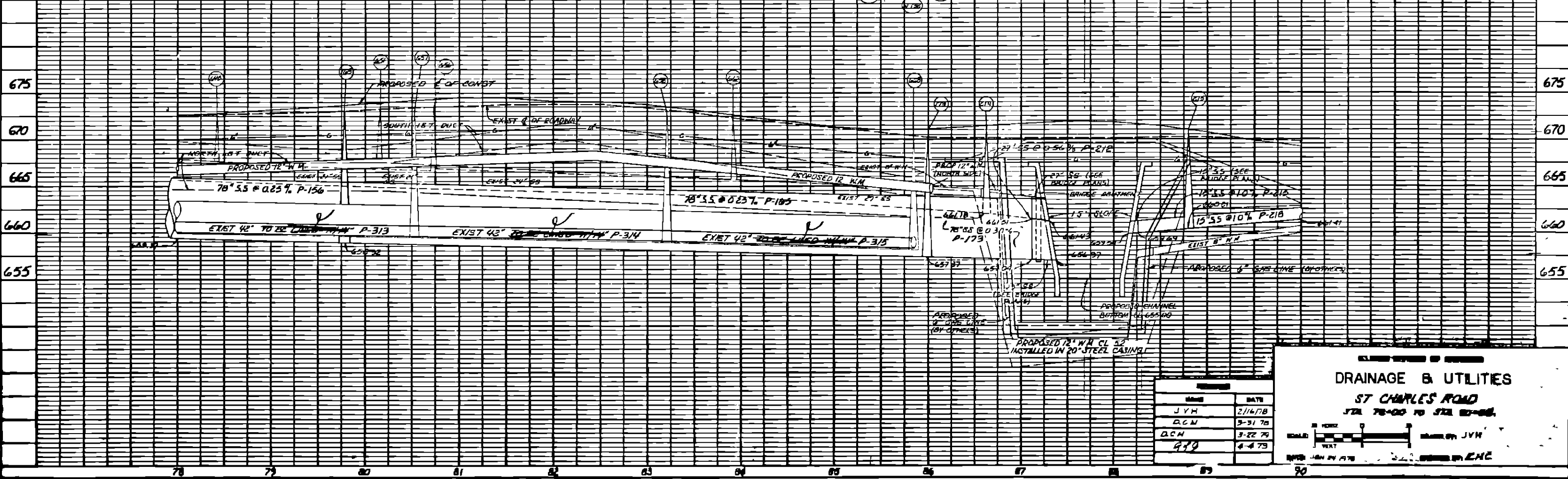
PROPOSED

NOTE: FOR DETAIL OF RIVER CROSSING SEE SHEET #101
 WATER FOR GENERAL DRAINAGE AND UTILITY NOTES SEE SHEET NO. 472
 FOR BASELINE INFO. SEE SHEETS #118
 THE EXISTING SOUTH L.S.T. DUCT SHALL BE LOWERED STA 81+25 TO 82+75 (BY OTHERS)

PLAN
 DATE
 DRAWN BY
 CHECKED BY
 APPROVED BY

BENCHMARK #22
 X-CUT IN N.W. CORNER OF
 CONCRETE PLANTER FOR (FLOWER
 CITY) SIGN
 STA. 80+85 +74 R EL. 675.85

PROFILE
 DATE
 DRAWN BY
 CHECKED BY
 APPROVED BY



NAME	DATE
JYH	2/16/78
DCN	3-31-78
DCN	3-22-79
JCH	4-4-79

CLAIMED RIGHTS OF OTHERS

DRAINAGE & UTILITIES

ST CHARLES ROAD

STA 78+00 TO STA 82+00

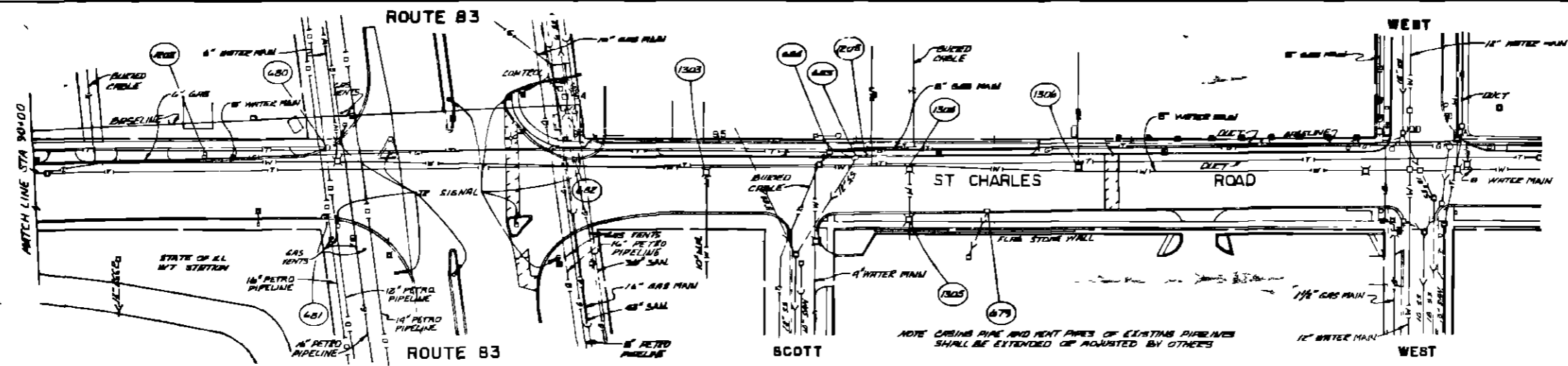
DESIGNED BY JYH
 DRAWN BY JCH

00104-27

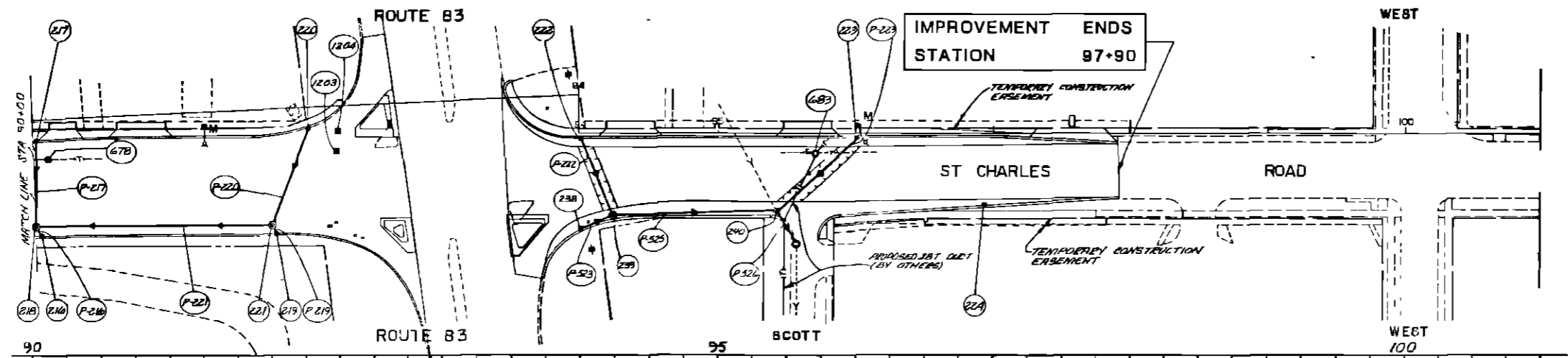
PLAN
 DRAWN BY: J.V.H.
 CHECKED BY: J.V.H.
 DATE: 3/21/78

PROFILE
 DRAWN BY: J.V.H.
 CHECKED BY: J.V.H.
 DATE: 3/21/78

DATE	REVISION	BY	NO.
1978 12 15		D. PAGE	105
1977 11 15			30
SHEET NO. 90+00		TOTAL SHEETS 101+00	
PROJECT NO. 1-5003(8)			



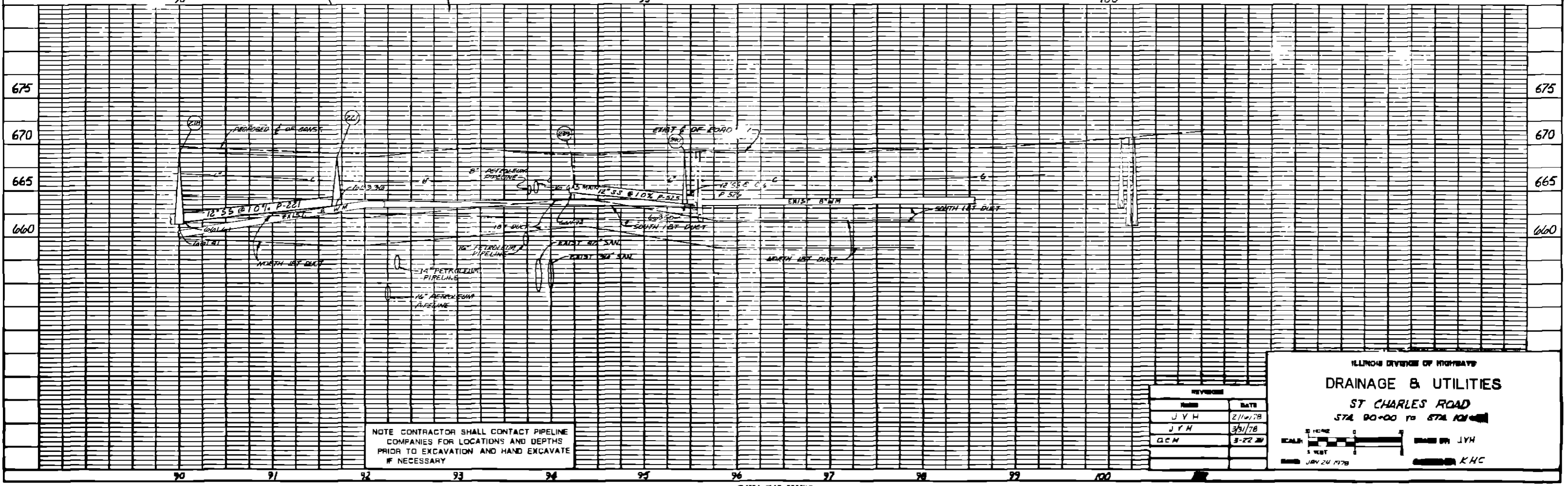
EXISTING



PROPOSED

NOTE
 FOR GENERAL DRAINAGE
 AND UTILITY NOTES
 SEE SHEET NO 26
 FOR BASELINE INFO
 SEE SHEETS 14 & 15

BENCHMARK #25
 TOP OF S.W. CORNER OF CONCRETE
 FPD FOR TRAFFIC CONTROL BOX
 STA 93+60 ±10'L
 EL. 669.53



NOTE CONTRACTOR SHALL CONTACT PIPELINE COMPANIES FOR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION AND HAND EXCAVATE IF NECESSARY

REVISION	DATE
JYH	2/11/78
JYH	3/21/78
CCM	3-22-78

ILLINOIS DIVISION OF HIGHWAYS
DRAINAGE & UTILITIES
ST CHARLES ROAD
 STA 90+00 TO STA 101+00

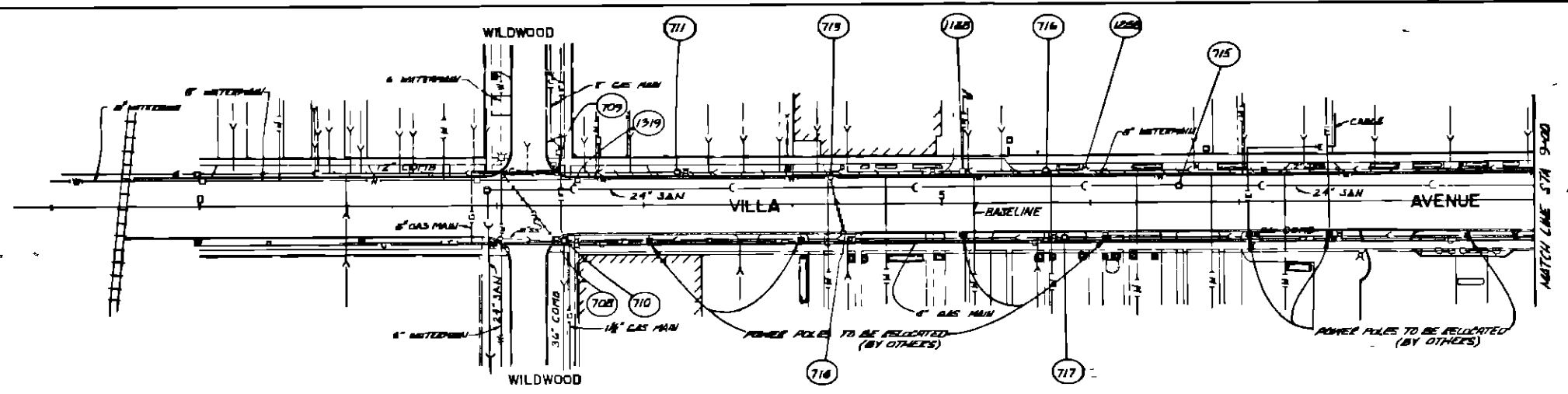
SCALE: 1" = 10' HORIZ. 1" = 5' VERT.
 DRAWN BY: JYH
 DATE: JUN 24 1978
 CHECKED BY: KHC

PLATE PLAN PROFILE P&A
 STANDARD FORM NO. 107
 11-700-1

00704-28

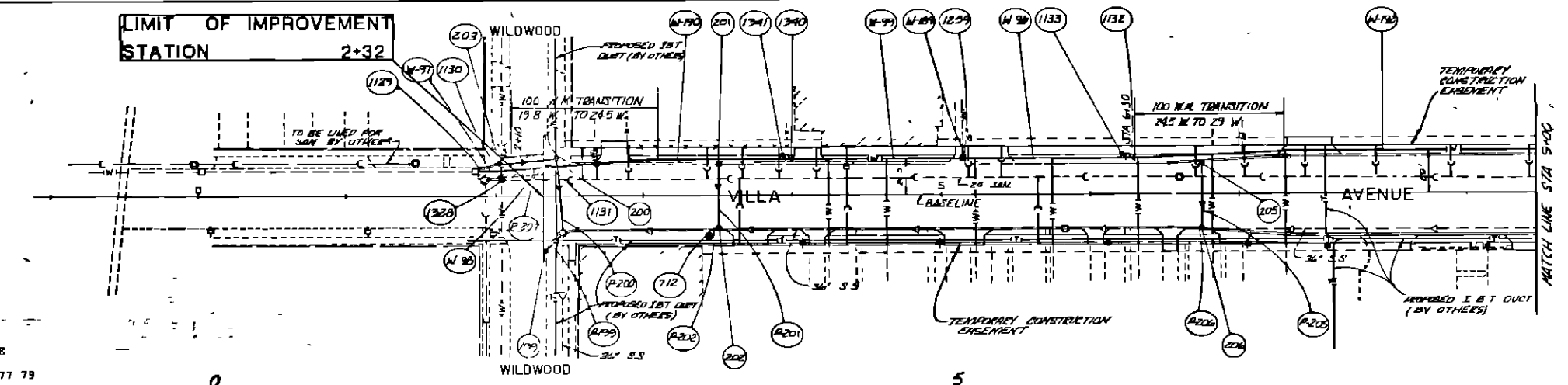
00104

DIST.	DISTRICT	SUBJECT	TOTAL SHEETS	SHEET NO.
180	1801-1802	DUPAGE	105	31
SHEET NO. 0+00		TOTAL STA. 9+00		
SHEET NO. 0+00		SHEET NO. 0+00		



EXISTING

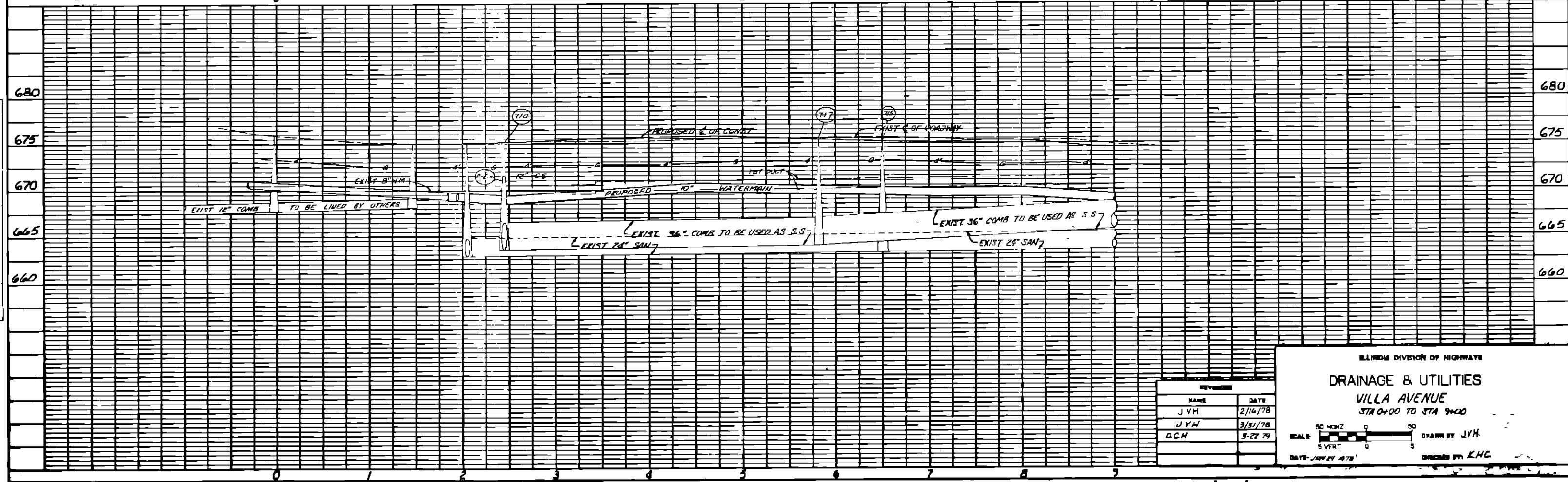
PLAN
 SURVEYED BY
 PLANNED BY
 CHECKED BY
 DATE



PROPOSED

BENCHMARK #20
 I-CUT IN TOP OF CONCRETE
 CYLINDER BUMPER ON W SIDE
 OF VILLA AVE
 STA. 5+00 ±34 L. EL. 677.79

NOTE
 FOR GENERAL DRAINAGE
 AND UTILITY NOTES
 SEE SHEET NO. 26
 FOR BASELINE INFO.
 SEE SHEETS 14 & 15



PROFILE
 SURVEYED BY
 PLANNED BY
 CHECKED BY
 DATE

REVISION	NAME	DATE
1	JYH	2/16/78
2	JYH	3/31/78
3	DCH	5-27-79

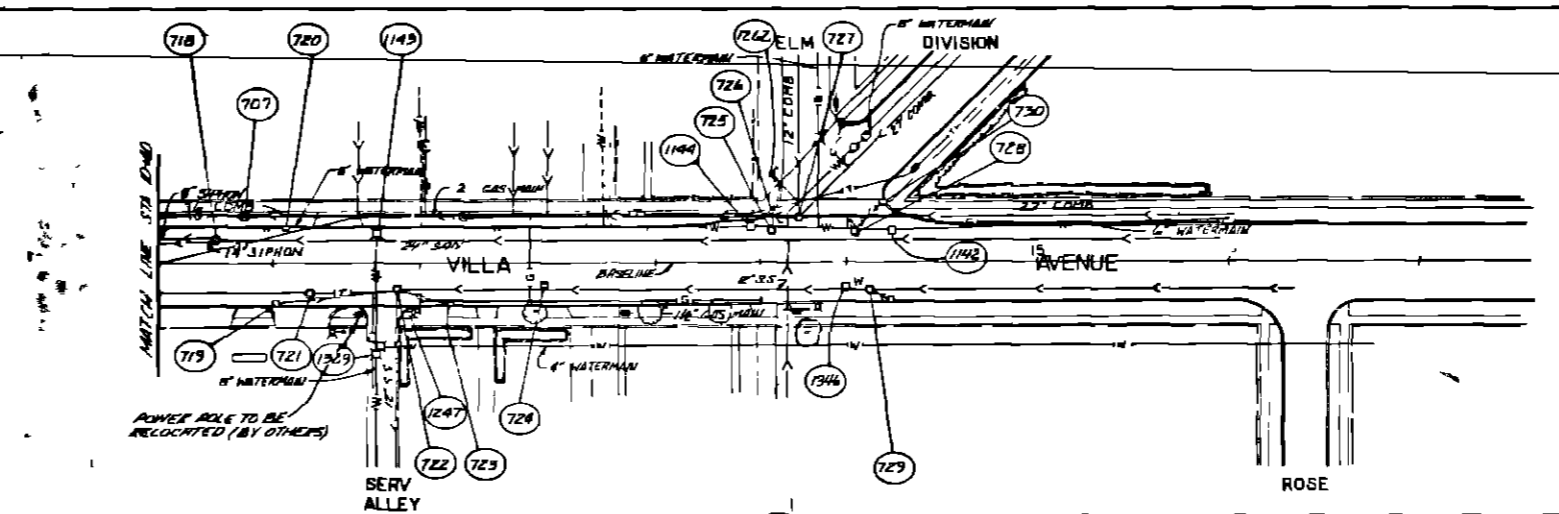
ILLINOIS DIVISION OF HIGHWAYS
DRAINAGE & UTILITIES
VILLA AVENUE
 STA 0+00 TO STA 9+00

SCALE: 30 HORIZ. 1" = 30'
 5 VERT. 1" = 5'
 DATE: JAN 24 1978
 DRAWN BY: JYH
 CHECKED BY: KHC

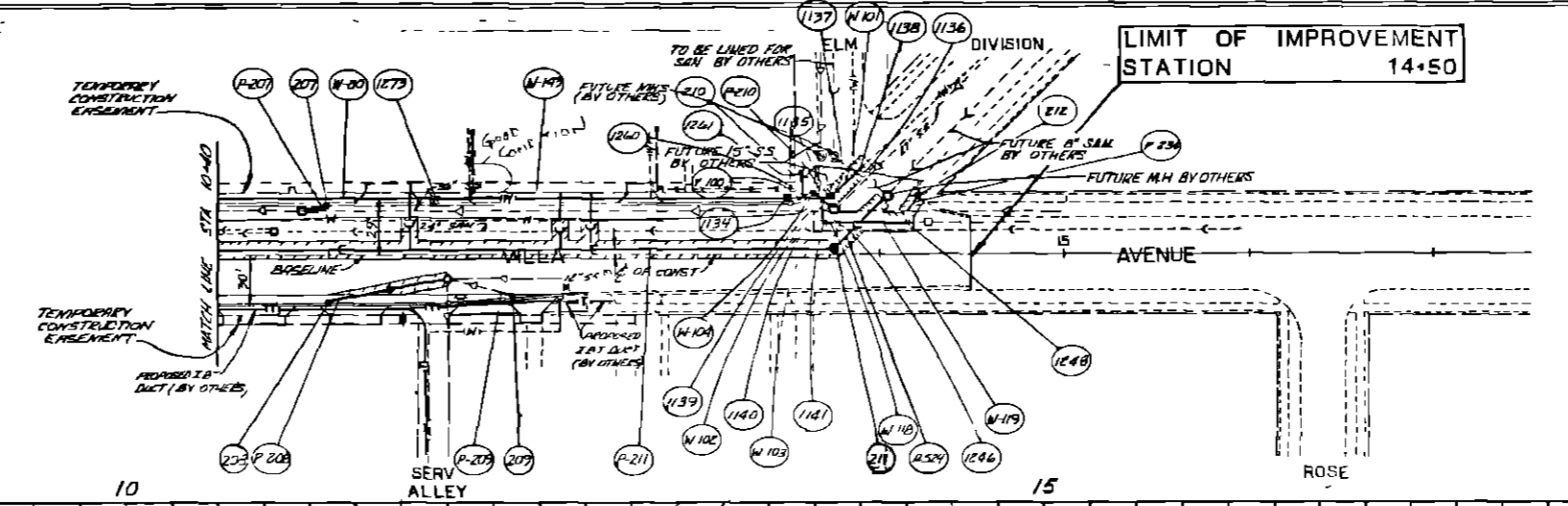
00104-29

00104

SYL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
RAU	10-40	DUPAGE	105	32
DATE	10-80	TO FILE	11-80	
FILE NAME	FILE NO.	PROJECT	ILLINOIS DIVISION OF HIGHWAYS	



EXISTING

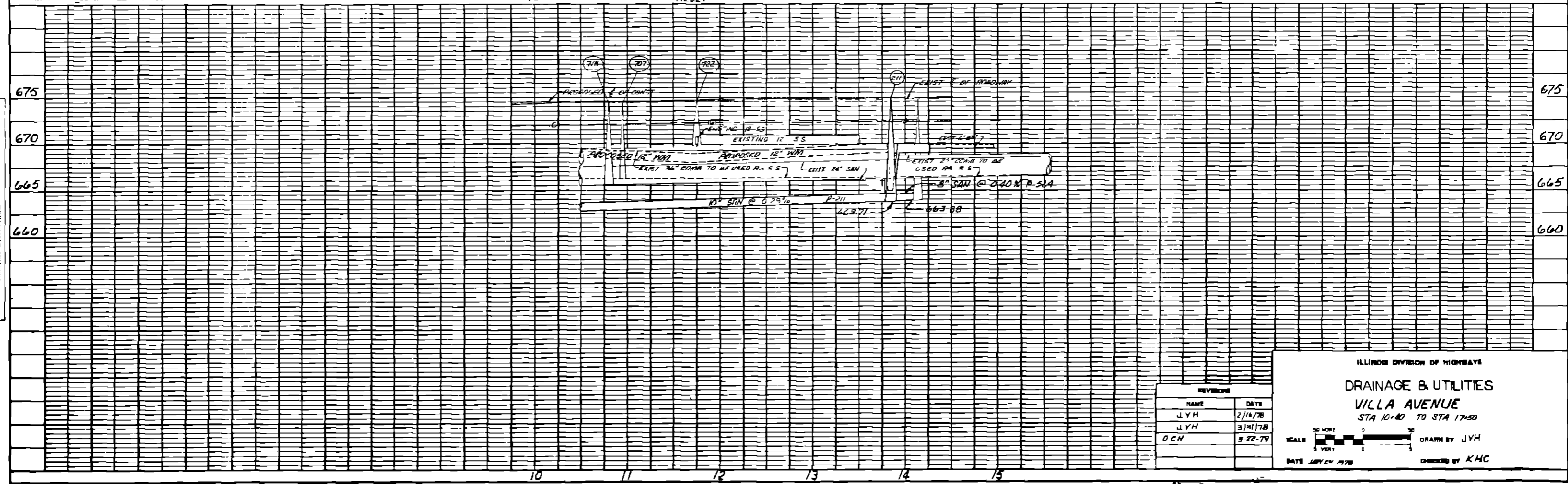


PROPOSED

NOTE
FOR GENERAL DRAINAGE
AND UTILITY NOTES
SEE SHEET NO 26

FOR BASELINE INFO
SEE SHEETS 14 & 15

BENCHMARK #19
N W CORNER OF CONCRETE BASE
FOR FLAG POLE
STA 72+77 +92'R EL. 676.14



REVISION	NAME	DATE
1	JVH	2/16/78
2	JVH	3/11/78
3	DCH	5-22-79

ILLINOIS DIVISION OF HIGHWAYS
DRAINAGE & UTILITIES
VILLA AVENUE
STA 10+00 TO STA 17+50

SCALE: 1" = 10' HORIZ, 1" = 5' VERT

DATE: JAN 24 1978

DRAWN BY: JVH
CHECKED BY: KHC

PLAN
DATE: 1-8-79
DRAWN BY: J.V.H.
CHECKED BY: R.L.G.SCALE: 1" = 40'

PROFILE
DATE: 5-22-79
DRAWN BY: J.V.H.
CHECKED BY: D.C.H.
SCALE: 1" = 5' VERT

00104-30

00104

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
107	SP-138	DU PAGE	105	33
STA.		TO STA.		
FED ROAD DIST NO.		ILLINOIS	FED AID PROJECT # 5003(27)	

STR NO	LOCATION			ACTION	TYPE			ELEVATION		REMARKS
	STATION	OFFSET LINE	OFFSET		STRUCTURE	DIA	FRAME & GRATE	ELEV	LOCATION	
129	60 + 75	ST CHAR	4 5' N	CONSTRUCT	C B TYP C	2'	T-11	683 48	EDGE	SPECIAL
130	60 + 76	ST CHAR	69' S	CONSTRUCT	INLET, TYP A	2'	T-11	683 50	EDGE	
131	60 + 93	ST CHAR	9 0' S	REHAB	M H TYP A	4'	T-1(SPEC)WTL	683 60	RIM	
132	61 + 00	ST CHAR	9' S	CONSTRUCT	M H (SPEC)	*	T-1(SPEC)CL	683 56	RIM	*JUNCTION CHAMBER 1, SEE DETAIL SHEET 196
133	61 + 01	ST CHAR	46 0' S	REHAB	M H TYP A	4'	T-1(SPEC)WTL	683 66	RIM	
134	61 + 06	ST CHAR	66' S	CONSTRUCT	C B TYP C	2'	T-11	683 45	EDGE	
135	61 + 10	ST CHAR	30' S	CONSTRUCT	M H (SPEC)	*	T-1(SPEC)CL	683 94	RIM	*JUNCTION CHAMBER 2, SEE DETAIL SHEET 195
136	62 + 60	ST CHAR	57 3' S	CONSTRUCT	C B TYP C	2'	T-11	682 44	EDGE	
137	62 + 83	ST CHAR	2 7' S	CONSTRUCT	INLET TYP A	2'	T-11	682 28	EDGE	
138	63 + 97	ST CHAR	47 0' S	REHAB	M H TYP A	4'	T-1(SPEC)WTL	681 86	RIM	
139	64 + 33	ST CHAR	5' N	CONSTRUCT	C B TYP C	2'	T-11	681 35	EDGE	SPECIAL
140	64 + 37	ST CHAR	69' S	CONSTRUCT	C B TYP C	2'	T-11	681 10	EDGE	
141	64 + 43	ST CHAR	30' S	CONSTRUCT	M H TYP TEE	4'	T-1(SPEC)CL	681 96	RIM	
142	64 + 62	ST CHAR	69' S	CONSTRUCT	INLET, TYP A	2'	T-11	681 30	EDGE	
143	66 + 67	ST CHAR	2 7' S	CONSTRUCT	INLET, TYP A	2'	T-11	680 19	EDGE	
144	66 + 67	ST CHAR	57 3' S	CONSTRUCT	C B TYP C	2'	T-11	680 19	EDGE	
145	66 + 86	ST CHAR	45 5' S	REHAB	M H TYP A	4'	T-1(SPEC)WTL	680 36	PIM	
146	68 + 72	ST CHAR	2 7' S	CONSTRUCT	INLET TYP A	2'	T-11	679 03	EDGE	
147	68 + 72	ST CHAR	57 3' S	CONSTRUCT	C B TYP C	2'	T-11	679 03	EDGE	
148	68 + 82	ST CHAR	30' S	CONSTRUCT	M H TYP TEE	4'	T-1(SPEC)CL	679 53	RIM	
149	70 + 85	ST CHAR	2 7' S	CONSTRUCT	C B TYP C	2'	T-11	677 81	EDGE	SPECIAL
150	70 + 85	ST CHAR	57 3' S	CONSTRUCT	C B TYP C	2'	T-11	677 81	EDGE	
151	9 + 13	VILLA	27 3' W	CONSTRUCT	C B TYP C	2'	T-11	673 85	EDGE	
152	10 + 27	VILLA	27 3' W	CONSTRUCT	C B TYP C	2'	T-11	673 95	EDGE	SPECIAL
153	73 + 19	ST CHAR	5' S	CONSTRUCT	M H TYP A	5'	T-1(SPEC)CL	674 40	RIM	
154	73 + 37	ST CHAR	45' S	CONSTRUCT	SAN M H	5'	T-1(SPEC)WTL	674 43	RIM	*SPECIAL SANITARY M H #1, SEE DETAIL SHEET 197
155	73 + 39	ST CHAR	5' S	CONSTRUCT	SAN M H	5'	T-1(SPEC)WTL	674 25	PIM	
156	73 + 55	ST CHAR	30' S	CONSTRUCT	M H (SPEC)	*	T-1(SPEC)CL	674 60	RIM	*JUNCTION CHAMBER #1 SEE DETAIL SHEET 194
157	73 + 63	ST CHAR	72 5' S	CONSTRUCT	M H TYP A	5'	T-1(SPEC)CL	673 79	RIM	
158	73 + 71	ST CHAR	70' S	CONSTRUCT	C B TYP C	2'	T-11	673 75	EDGE	
159	75 + 25	ST CHAR	57 3' S	CONSTRUCT	C B TYP C	2'	T-11	672 88	EDGE	
160	76 + 55	ST CHAR	2 7' S	CONSTRUCT	INLET, TYP A	2'	T-11	671 65	EDGE	
161	77 + 00	ST CHAR	4' S	CONSTRUCT	C B TYP C	2'	T-11	671 55	EDGE	
162	77 + 05	ST CHAR	51 5' S	CONSTRUCT	C B TYP C	2'	T-11	671 65	EDGE	
163	78 + 52	ST CHAR	7 5' S	CONSTRUCT	C B TYP C	2'	T-11	672 42	EDGE	
164	79 + 45	ST CHAR	63' S	CONSTRUCT	INLET, TYP A	2'	T-11	672 50	EDGE	
165	79 + 77	ST CHAR	36' S	CONSTRUCT	M H TYP TEE	4'	T-1(SPEC)CL	673 97	RIM	
166	79 + 77	ST CHAR	65' S	CONSTRUCT	C B TYP C	2'	T-11	672 50	EDGE	
167	80 + 63	ST CHAR	6' S	CONSTRUCT	C B TYP C	2'	T-11	673 70	EDGE	SPECIAL

STR NO	LOCATION			ACTION	TYPE			ELEVATION		REMARKS
	STATION	CENTER LINE	OFFSET		STRUCTURE	DIA	FRAME & GRATE	ELEV	LOCATION	
168	83 + 33	ST CHAR	54 8' S	CONSTRUCT	C B TYP C	2'	T-11	672 78	EDGE	
169	83 + 60	ST CHAR	7 5' S	CONSTRUCT	C B TYP C	2'	T-11	672 54	EDGE	
170	83 + 75	ST CHAR	6 5' N	CONSTRUCT	INLET, TYP A	2'	T-11	672 88	EDGE	
171	85 + 61	ST CHAR	67' S	CONSTRUCT	INLET, TYP A	2'	T-11	670 25	EDGE	
172	85 + 70	ST CHAR	5' S	CONSTRUCT	C B TYP C	2'	T-11	670 50	EDGE	
173	85 + 96	ST CHAR	36' S	CONSTRUCT	M H TYP TEE	4'	T-1(SPEC)CL	670 93	RIM	
174	85 + 99	ST CHAR	70 5' S	CONSTRUCT	C B TYP C	2'	T-11	670 25	EDGE	
175	86 + 35	ST CHAR	67' S	CONSTRUCT	C B TYP C	2'	T-1 WITH CL	670 30	RIM	
178	85 + 01	ST CHAR	22 5' S	CONSTRUCT	I B T M H	6"x12"	BY OTHERS	671 22	RIM	TO BE CONSTRUCTED BY OTHERS
199	2 + 34	VILLA	37' E	CONSTRUCT	C B TYP C	2'	T-11	673 95	EDGE	
200	2 + 41	VILLA	25' W	CONSTRUCT	C B TYP C	2'	T-11	674 60	EDGE	
201	3 + 52	VILLA	22 8' W	CONSTRUCT	INLET TYP A	2'	T-11	675 08	EDGE	
202	3 + 52	VILLA	22 8' E	CONSTRUCT	C B TYP C	2'	T-11	675 08	EDGE	
203	2 + 01	VILLA	21 5' W	CONSTRUCT	INLET, TYP A	2'	T-11	674 20	EDGE	
205	6 + 75	VILLA	3 6' W	CONSTRUCT	INLET, TYP A	2'	T-11	674 70	EDGE	
206	6 + 75	VILLA	3 6' E	CONSTRUCT	C B TYP C	2'	T-11	674 70	EDGE	
207	11 + 00	VILLA	7 3' W	CONSTRUCT	C B TYP C	2'	T-11	673 90	EDGE	
208	11 + 00	VILLA	7 3' E	CONSTRUCT	C B TYP C	2'	DEPRESSED (SPEC)	673 67	EDGE	
209	12 + 00	VILLA	4 3' E	CONSTRUCT	C B TYP C	2'	DEPRESSED (SPEC)	674 02	EDGE	
210	13 + 64	VILLA	33' W	CONSTRUCT	C B TYP C	2'	T-11	674 00	EDGE	
211	13 + 75	VILLA	3' W	CONSTRUCT	SAN M H	4'	T-1(SPEC)WTL	674 85	RIM	
212	14 + 20	VILLA	33' W	CONSTRUCT	C B TYP C	2'	T-11	673 82	EDGE	
213	87 + 03	ST CHAR	36' S	CONSTRUCT	PIPE ELBOW	78"				INCIDENTAL TO COST OF STORM SEWER
214	86 + 62	ST CHAR	4' S	CONSTRUCT	M H TYP A	5'	T-1(SPEC)CL	671 25	RIM	
215	88 + 80	ST CHAR	75' S	CONSTRUCT	M H TYP A	4'	T-1(SPEC)CL	670 10	RIM	
216	90 + 02	ST CHAR	15' S	CONSTRUCT	C B TYP C	2'	T-11	668 59	EDGE	
217	90 + 02	ST CHAR	85' S	CONSTRUCT	C B TYP C	2'	T-11	668 30	EDGE	
218	90 + 00	ST CHAR	77' S	CONSTRUCT	M H TYP A	4'	T-1(SPEC)CL	668 43	RIM	
219	91 + 72	ST CHAR	92' S	CONSTRUCT	C B TYP C	2'	T-11	667 69	EDGE	
220	92 + 00	ST CHAR	16' S	CONSTRUCT	C B TYP C	2'	T-11	667 82	EDGE	
221	91 + 70	ST CHAR	86' S	CONSTRUCT	M H TYP A	4'	T-1(SPEC)CL	667 83	RIM	
222	94 + 00	ST CHAR	3' S	CONSTRUCT	C B TYP C	2'	T-11	668 30	EDGE	
223	96 + 00	ST CHAR	3' S	CONSTRUCT	C B TYP C	2'	T-11	668 44	EDGE	
224	96 + 90	ST CHAR	55' S	CONSTRUCT	C B TYP C	2'	T-11	668 63	EDGE	
234	73 + 52	ST CHAR	21' S	CONSTRUCT	PIPE ELBOW	36"				INCIDENTAL TO COST OF STORM SEWER
236	64 + 50	ST CHAR	75' S	CONSTRUCT	SAN M H	4'	T-1(SPEC)WTL	681 70	RIM	
238	94 + 00	ST CHAR	72' S	CONSTRUCT	C B TYP C	2'	T-11	668 40	EDGE	
239	94 + 23	ST CHAR	60' S	CONSTRUCT	M H TYP A	4'	T-1(SPEC)CL	668 54	RIM	
240	95 + 45	ST CHAR	60' S	CONSTRUCT	M H TYP A	4'	T-1(SPEC)CL	668 85	RIM	

REVISIONS	
NAME	DATE

ILLINOIS DIVISION OF HIGHWAYS

STORM & SANITARY SEWER TABLES

PROPOSED STRUCTURES

SCALE *NONE* DRAWN BY *939*

DATE *3-22-79* CHECKED BY *KHC*

00104-31

00104

WTL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FAU	773-26-1	DUPAGE	105	34
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT. N-5008(27)		

STR NO	LOCATION			ACTION	TYPE			PROPOSED ELEVATION		REMARKS
	STATION	CENTER LINE	OFFSET		STRUCTURE	DIA	FRAME & GRATE	ELEV	LOCATION	
601	60 + 60.5	ST CHAS	9.5' S	ABANDON	EXIST	C B				
602	60 + 72	ST CHAS	52.4' S	ABANDON	EXIST	C B				
603	60 + 90.5	ST CHAS	51.1' S	ADJUST	EXIST	M H	683.48	RIM	PROVIDE NEW T-1 (SPEC) WTL*	
605	61 + 09.5	ST CHAS	51.3' S	ABANDON	EXIST	C B				
606	61 + 46	ST CHAS	48.5' S	ABANDON	EXIST	C B				
607	62 + 74	ST CHAS	18' S	RECONST	I B T M H		682.64	RIM	TO BE RECONSTRUCTED BY OTHERS	
608	64 + 19	ST CHAS	0.5' S	ADJUST	I B T M H		682.26	RIM	TO BE ADJUSTED BY OTHERS	
609	64 + 27	ST CHAS	49.9' S	ABANDON	EXIST	C B				
610	64 + 50	ST CHAS	50.4' S	ABANDON	EXIST	M H				
611	64 + 68	ST CHAS	51.1' S	ABANDON	EXIST	C B				
612	65 + 93	ST CHAS	51.4' S	ABANDON	EXIST	M H				
613	66 + 36.5	ST CHAS	10.5' S	ABANDON	EXIST	C B				
614	66 + 75.5	ST CHAS	49.1' S	ABANDON	EXIST	C B				
615	68 + 19	ST CHAS	18' S	RECONST	I B T M H		679.63	RIM	TO BE RECONSTRUCTED BY OTHERS	
616	68 + 84	ST CHAS	48.8' S	ABANDON	EXIST	C B				
617	68 + 99	ST CHAS	9.8' S	ABANDON	EXIST	C B				
618	69 + 29	ST CHAS	2.5' S	ADJUST	I B T M H		679.65	RIM	TO BE ADJUSTED BY OTHERS	
619	69 + 85.5	ST CHAS	44.4' S	ADJUST	EXIST	M H	678.64	RIM	PROVIDE NEW T-1 (SPEC) WTL*	
620	70 + 40	ST CHAS	17' S	RECONST	I B T M H		678.35	RIM	TO BE RECONSTRUCTED BY OTHERS	
621	72 + 62.5	ST CHAS	48.9' S	ABANDON	EXIST	C B				
622	73 + 15.5	ST CHAS	3.5' S	ABANDON	EXIST	C B				
623	73 + 19	ST CHAS	5.5' S	ABANDON	EXIST	M H				
624	9 + 15.5	VILLA	22.5' W	ABANDON	EXIST	M H				
625	73 + 22	ST CHAS	68' S	ABANDON	EXIST	C B				
626	73 + 31.5	ST CHAS	70.5' S	ADJUST	EXIST	M H	674.08	RIM	PROVIDE NEW T-1 (SPEC) WTL*	
627	73 + 61	ST CHAS	67' S	ABANDON	EXIST	C B				
628	73 + 63.5	ST CHAS	64' S	ABANDON	EXIST	M H				
629	73 + 74	ST CHAS	50' S	ABANDON	EXIST	INLET				
630	73 + 87.5	ST CHAS	45.5' S	ADJUST	EXIST	M H	674.12	RIM	PROVIDE NEW T-1 (SPEC) WTL*	
631	73 + 77	ST CHAS	12.9' S	ADJUST	I B T M H		674.00	RIM	TO BE ADJUSTED BY OTHERS	
632	73 + 78	ST CHAS	2.3' S	ADJUST	I B T M H		673.75	RIM	TO BE ADJUSTED BY OTHERS	
633	75 + 37.5	ST CHAS	50.5' S	ADJUST	EXIST	M H	672.86	RIM	PROVIDE NEW T-1 (SPEC) WTL*	
634	75 + 62	ST CHAS	50.5' S	ABANDON	EXIST	C B				
635	75 + 94	ST CHAS	55.5' S	ABANDON	EXIST	M H				
636	76 + 62	ST CHAS	8.5' S	ABANDON	EXIST	C B				
637	76 + 77	ST CHAS	50.5' S	ABANDON	EXIST	INLET				
638	76 + 81	ST CHAS	52' S	ABANDON	EXIST	C B				
639	76 + 97.5	ST CHAS	6.5' S	ABANDON	EXIST	C B				
640	76 + 96	ST CHAS	11' N	ADJUST	EXIST	M H	672.30	RIM		
641	77 + 05	ST CHAS	7' S	ADJUST	EXIST	M H	671.57	RIM		
642	77 + 93	ST CHAS	50.5' S	ADJUST	EXIST	M H	672.07	RIM	PROVIDE NEW T-1 (SPEC) WTL*	
643	78 + 28	ST CHAS	10.5' S	ABANDON	EXIST	C B				
644	78 + 30	ST CHAS	52.5' S	ABANDON	EXIST	M H				
645	78 + 43	ST CHAS	7' S	ADJUST	EXIST	M H	672.31	RIM		
646	79 + 44.5	ST CHAS	69.4' S	ABANDON	EXIST	INLET				
647	79 + 50	ST CHAS	70' S	ABANDON	EXIST	C B				
648	79 + 73.5	ST CHAS	70' S	ABANDON	EXIST	C B				
649	79 + 77.5	ST CHAS	70' S	ABANDON	EXIST	INLET				
650	79 + 80	ST CHAS	19.5' S	RECONST	I B T M H		673.50	RIM	TO BE RECONSTRUCTED BY OTHERS	
651	80 + 11.5	ST CHAS	7' S	ADJUST	EXIST	M H	673.40	RIM		
652	80 + 23	ST CHAS	2.7' S	ADJUST	I B T M H		673.74	RIM	TO BE ADJUSTED BY OTHERS	
653	80 + 47.5	ST CHAS	2.5' N	ADJUST	EXIST	M H	673.75	RIM		
654	80 + 50.5	ST CHAS	10' N	ADJUST	EXIST	C B	673.75	EDGE		
655	80 + 55.5	ST CHAS	6.5' S	ABANDON	EXIST	INLET				
656	80 + 72	ST CHAS	7.7' S	ADJUST	EXIST	M H	673.82	RIM		
657	80 + 53	ST CHAS	50.5' S	ADJUST	EXIST	M H	673.76	RIM		
658	83 + 21	ST CHAS	49.5' S	ADJUST	EXIST	M H	673.02	RIM	PROVIDE NEW T-1 (SPEC) WTL*	
659	83 + 70	ST CHAS	7.7' S	ABANDON	EXIST	C B				
660	83 + 79	ST CHAS	9' N	ADJUST	EXIST	C B	673.12	RIM		
661	83 + 85.5	ST CHAS	3.5' N	ADJUST	EXIST	M H	672.85	RIM		

STR NO	LOCATION			ACTION	TYPE			PROPOSED ELEVATION		REMARKS	
	STATION	CENTER LINE	OFFSET		STRUCTURE	DIA	FRAME & GRATE	ELEV	LOCATION		
662	83 + 32	ST CHAS	3' S	ADJUST	EXIST	M H			672.19	RIM	
663	83 + 30.5	ST CHAS	53.5' S	ABANDON	EXIST	INLET					
664	83 + 32.5	ST CHAS	49' S	ABANDON	EXIST	C B					
665	83 + 67.5	ST CHAS	61.5' S	ABANDON	EXIST	INLET					
666	85 + 73	ST CHAS	3' S	ADJUST	I B T M H				671.22	RIM	TO BE ADJUSTED BY OTHERS
667	85 + 80	ST CHAS	22.5' S	ADJUST	I B T M H				670.82	RIM	TO BE ADJUSTED BY OTHERS
668	85 + 85	ST CHAS	53.5' S	ADJUST	EXIST	M H			670.60	RIM	PROVIDE NEW T-1 (SPEC) WTL*
669	85 + 99	ST CHAS	12' S	ADJUST	EXIST	M H			670.69	RIM	
670	86 + 95	ST CHAS	18' S	ABANDON	EXIST	INLET					
671	86 + 96	ST CHAS	57.5' S	ABANDON	EXIST	INLET					
672	87 + 03	ST CHAS	1.5' N	REMOVE	EXIST	HEADWALL					INCIDENTAL TO SPECIAL EXCAVATION
673	88 + 42	ST CHAS	20.5' S	ABANDON	EXIST	INLET					
674	89 + 37	ST CHAS	11.5' S	ADJUST	I B T M H				669.90	RIM	TO BE ADJUSTED BY OTHERS
675	89 + 47.5	ST CHAS	12' S	ADJUST	I B T M H				669.25	RIM	TO BE ADJUSTED BY OTHERS
676	89 + 72	ST CHAS	18' S	ADJUST	I B T M H				668.98	RIM	TO BE ADJUSTED BY OTHERS
677	89 + 94.5	ST CHAS	15' S	ADJUST	I B T M H				668.62	RIM	TO BE ADJUSTED BY OTHERS
678	90 + 08.5	ST CHAS	31' S	RECONST	I B T M H				668.88	RIM	TO BE RECONSTRUCTED BY OTHERS
679	96 + 94	ST CHAS	49.5' S	ABANDON	EXIST	INLET					
680	92 + 16.5	ST CHAS	N B/C	ABANDON	EXIST	C B					
681	92 + 15	ST CHAS	74.5' S	ABANDON	EXIST	C B					
682	93 + 94.5	ST CHAS	10.1' S	ABANDON	EXIST	INLET					
683	95 + 72.5	ST CHAS	15' S	RECONST	I B T M H				668.85	RIM	TO BE RECONSTRUCTED BY OTHERS
684	95 + 79	ST CHAS	6.3' S	ADJUST	I B T M H				668.55	RIM	TO BE ADJUSTED BY OTHERS
685	95 + 97.5	ST CHAS	9.6' S	ABANDON	EXIST	INLET					
707	10 + 87	VILLA	24' W	ADJUST	FRAME & LID				674.00	RIM	
708	2 + 40.5	VILLA	21' E	ABANDON	EXIST	INLET					
709	2 + 39.5	VILLA	22' W	ABANDON	EXIST	INLET					
710	2 + 46	VILLA	24' E	ADJUST	EXIST	M H			674.67	RIM	
711	3 + 25.5	VILLA	22' W	ABANDON	EXIST	M H					
712	3 + 45	VILLA	24.5' E	RECONST	I B T M H				675.52	RIM	TO BE RECONSTRUCTED BY OTHERS
713	4 + 27	VILLA	20.8' W	ABANDON	EXIST	C B					
714	4 + 34	VILLA	20.5' E	ABANDON	EXIST	INLET					
715	6 + 62.5	VILLA	10.0' W	ADJUST	EXIST	M H			674.97	RIM	PROVIDE NEW T-1 (SPEC) WTL*
716	5 + 70	VILLA	22.5' W	ABANDON	EXIST	M H					
717	5 + 82	VILLA	24.5' E	ADJUST	EXIST	M H			675.43	RIM	
718	10 + 70	VILLA	13' W	ADJUST	FRAME & LID				674.37	RIM	PROVIDE NEW T-1 (SPEC) WTL*
719	11 + 01	VILLA	20' E	ABANDON	EXIST	INLET					
720	11 + 06	VILLA	19.6' W	ABANDON	EXIST	INLET					
721	11 + 20	VILLA	15.5' E	ADJUST	FRAME & LID				674.08	RIM	
722	11 + 65	VILLA	10.5' E	ADJUST	FRAME & LID				674.44	RIM	
723	11 + 92	VILLA	20.5' E	ABANDON	EXIST	INLET					
724	12 + 41	VILLA	11' E	ADJUST	FRAME & LID				674.53	RIM	
725	13 + 60	VILLA	16.5' W	ABANDON	EXIST	C B					
726	13 + 60.5	VILLA	26' W	ABANDON	EXIST	INLET					
727	13 + 75.5	VILLA	23.5' W	ADJUST	FRAME & LID				674.70	RIM	
728	14 + 04	VILLA	16' W	ABANDON	EXIST	C B					
729	14 + 13	VILLA	13' E	ADJUST	FRAME & LID				674.71	RIM	
730	14 + 20.5	VILLA	33' W	ABANDON	EXIST	INLET					

*TO BE PAID FOR SEPARATELY

REVISIONS	
NAME	DATE

ILLINOIS DIVISION OF HIGHWAYS
STORM & SANITARY SEWER TABLES
EXISTING STRUCTURES

SCALE NONE
 DATE 3-22-79
 DRAWN BY: *RRP*
 CHECKED BY: *KNE*

00104-32

00104

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PAU 1973-196-1997	W.F.E.S. BY	DUPAGE	105	35
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT M-3003(27)		

PIPE NO	LOCATION		PAY LENGTH (FEET)	GRADE %	ELEVATION		DIA	TYPE	TRENCH BACKFILL (C Y)	REMARKS
	FROM	TO			FROM	TO				
P-124	FUT M H	115	50	0.65	669.50	669.17	42"	S S TYPE 3	143	
P-129		129	21	1.00	680.48	680.23	12"	S S TYPE 1	3	
P-130		130	28	1.00	680.75	680.45	12"	S S TYPE 1	4	
P-131		131	4	1.00	665.04	666.00	42"	S S TYPE 3	16	
P-132		132	23	0.10	661.76	661.73	60"	S S TYP 4	68	
P-133		133	236	0.32	664.68	663.74	14"	LINER		EXIST 39"
P-134		134	27	1.00	679.87	679.57	12"	S S TYPE 1	4	
P-135		135	328	0.10	661.73	661.40	78"	S S TYPE 3	1928	
P-136		136	25	1.00	678.86	678.60	12"	S S TYPE 1	4	BREAK-IN CONNECTION
P-137		137	26	1.00	679.53	679.26	12"	S S TYPE 1	8	BREAK-IN CONNECTION
P-138		138	289	0.24	663.74	663.05	14"	LINER		EXIST 39"
P-139		139	34	0.00	678.20	675.24	12"	S S TYPE 1	5	
P-140		140	36	1.00	677.52	677.13	12"	S S TYPE 1	5	
P-141		141	433	0.10	661.40	660.96	78"	S S TYPE 3	2190	
P-142		142	23	1.00	678.55	678.30	12"	S S TYPE 1	4	
P-143		143	26	15.00	677.44	673.39	12"	S S TYPE 1	4	BREAK-IN CONNECTION
P-144		144	26	1.00	676.61	676.34	12"	S S TYPE 1	4	BREAK-IN CONNECTION
P-145		145	299	0.23	663.05	662.16	14"	LINER		EXIST 39"
P-146		146	26	1.00	676.28	675.99	12"	S S TYPE 1	4	
P-147		147	26	1.00	675.45	675.18	12"	S S TYPE 1	4	
P-148		148	468	0.10	660.96	660.48	78"	S S TYPE 3	1762	
P-149		149	26	11.50	673.50	670.40	12"	S S TYPE 1	4	BREAK-IN CONNECTION
P-150		150	26	1.00	674.23	673.96	12"	S S TYPE 1	4	BREAK-IN CONNECTION
P-151		151	50	1.00	670.27	669.74	12"	S S TYPE 1	7	
P-152		152	17	1.00	670.95	670.75	12"	S S TYPE 1	3	
P-153		153	38	0.35	665.69	665.55	36"	S S TYPE 2	5	
P-154		154	50	0.22	661.19	661.08	14"	LINER		EXIST 39"
P-155		155			662.65	661.65	6"	D I CL 2		INVERT SIPHON *SEE DETAIL SHEET 197
P-156		156	618	0.25	660.48	659.92	70"	S S TYPE 2	1676	
P-158		158	2	1.00	670.17	670.12	12"	S S TYPE 1	3	
P-159		159	21	1.00	669.30	669.08	12"	S S TYPE 1	3	BREAK-IN CONNECTION
P-160		160	43	1.00	668.90	668.45	12"	S S TYPE 1	6	
P-161		161	3	1.00	667.97	667.91	12"	S S TYPE 1	1	
P-162		162	15	1.00	668.07	667.91	12"	S S TYPE 1	2	BREAK-IN CONNECTION
P-163		163	7	1.00	668.84	668.74	12"	S S TYPE 1	2	
P-164		164	30	1.00	669.75	669.42	12"	S S TYPE 1	4	
P-165		165	615	0.25	658.92	657.37	78"	S S TYPE 2	1618	
P-166		166	26	1.00	668.92	668.63	12"	S S TYPE 1	4	
P-167		167	7	1.00	670.70	670.60	12"	S S TYPE 1	2	
P-168		168	15	1.00	669.20	669.04	12"	S S TYPE 1	2	BREAK-IN CONNECTION
P-169		169	28	1.00	668.96	668.65	12"	S S TYPE 1	4	
P-171		171	34	1.00	667.50	667.13	12"	S S TYPE 1	5	
P-172		172	26	1.00	666.92	666.63	12"	S S TYPE 1	4	
P-173		173	90	0.30	657.37	657.06	78"	S S TYPE 2	271	
P-174		174	32	1.00	666.67	666.32	12"	S S TYPE 1	5	

PIPE NO	LOCATION		PAY LENGTH (FEET)	GRADE %	ELEVATION		DIA	TYPE	TRENCH BACKFILL (C Y)	REMARKS
	FROM	TO			FROM	TO				
P-175		175	47	1.00	666.72	666.22	12"	S S TYPE 1	7	
P-199		199	14	1.00	670.37	670.20	12"	S S TYPE 1	3	
P-200		200	47	1.00	671.02	670.52	12"	S S TYPE 1	7	
P-201		201	46	1.00	672.08	671.62	12"	S S TYPE 1	6	
P-202		202	6	1.00	671.49	671.42	12"	S S TYPE 1	1	BREAK-IN CONNECTION
P-204		204	38	1.00	671.60	671.20	12"	S S TYPE 1	5	
P-205		205	45	1.00	671.70	671.12	12"	S S TYPE 1	6	
P-206		206	6	1.00	671.10	671.03	12"	S S TYPE 1	1	BREAK-IN CONNECTION
P-207		207	10	1.00	670.32	670.21	12"	S S TYPE 1	2	
P-208		208	63	1.00	670.92	670.26	12"	S S TYPE 1	8	
P-209		209	7	1.00	670.99	670.89	12"	S S TYPE 1	2	EXIST 12"
P-210		210	12	1.00	670.42	670.27	12"	S S TYPE 1	2	
P-211		211	376	0.28	663.71	662.65	10"	SAN	493	
P-212		212	45	0.56	661.78	661.51	27"	S S TYPE 2	72	*OUTFALL STRUCTURE SPECIAL 27"
P-213		213	8	0.30	657.06	657.03	78"	S S TYPE 2	21	*OUTFALL STRUCTURE SPECIAL 78"
P-215		215	50	1.00	660.21	659.69	15"	S S TYPE 2	78	*OUTFALL STRUCTURE, SPECIAL 15"
P-216		216	6	1.00	665.00	664.91	12"	S S TYPE 1	1	
P-217		217	60	1.00	664.72	664.09	12"	S S TYPE 1	8	
P-218		218	116	1.00	661.41	660.21	15"	S S TYPE 2	180	
P-219		219	4	1.00	664.11	664.04	12"	S S TYPE 1	1	
P-220		220	72	1.00	664.24	663.43	12"	S S TYPE 1	10	
P-221		221	172	1.00	663.36	661.61	12"	S S TYPE 2	139	
P-222		222	55	1.00	665.30	664.77	12"	S S TYPE 1	7	
P-223		223	75	1.00	665.44	664.69	12"	S S TYPE 1	10	
P-234		212	8	1.00	670.24	EXIST	12"	S S TYPE 1	1	BREAK-IN CONNECTION
P-276		170	3	1.00	670.13	670.07	12"	S S TYPE 1	1	
P-310		619	351	0.32	662.32	661.19	14"	LINER		EXIST 3-
P-311		630	150	0.28	661.08	660.66	14"	LINER		EXIST- 4.
P-312		633	255	0.28	660.66	659.95	14"	LINER		EXIST- 42"
P-313		642	258	0.18	659.95	659.49	14"	LINER		EXIST 42"
P-314		657	268	0.22	659.49	658.91	14"	LINER		EXIST 42"
P-315		658	264	0.30	658.91	658.12	14"	LINER		EXIST- 42"
P-514		131	35	0.51	664.86	664.68	14"	LINER		EXIST- 39"
P-515		FUTURE	34	0.10	661.80	661.76	60"	S S TYPE 4	194	
P-516		FUTURE	48	0.20	666.64	666.54	27"	S S TYPE 3	130	
P-517		EXIST	33	1.00			12"	S S TYPE 1	5	BREAK-IN CONNECTION
P-518		156	35	0.35	666.05	665.91	16"	S S TYPE 2	42	
P-519		EXIST	30	1.00			12"	S S TYPE 1	4	BREAK-IN CONNECTION
P-523		218	23	1.00	665.40	665.14	12"	S S TYPE 1	3	
P-524		FUT M H	40	0.40	663.88	663.71	8"	SAN	53	
P-525		239	118	1.00	664.72	663.50	12"	S S TYPE 1	29	
P-526		240	23	1.00	663.50	663.24	12"	S S TYPE 2	9	

*TO BE PAID FOR SEPARATELY

REVISIONS	
NAME	DATE

ILLINOIS DIVISION OF HIGHWAYS
STORM AND SANITARY SEWER TABLES
PIPE

SCALE NONE DRAWN BY *gag*
DATE 3-22-79 CHECKED BY *KHC*

00104-33

00104

DATE	SECTION	QUANTITY	TOTAL QUANTITY	SHEET NO.
PAU 1975-1980	W.F.S., B.Y.	DUPAGE	105	50
BYA		TO RTA		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT #1-5003(27)	

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
NAME PLATE	EACH	1
CHANNEL EXCAVATION	CU YDS	1500
POROUS GRANULAR EMBANKMENT, SPECIAL	CU YDS	375
STRUCTURE EXCAVATION	CU YDS	570
COFFERDAM EXCAVATION	CU YDS	450
COFFERDAMS	EACH	2

DESIGN DATA

DESIGN SPECIFICATIONS FOR HIGHWAY BRIDGES, A.A.S.H.T.O. 1973 AND INTERIMS 1974, 1975, 1976 & 1977

DESIGN LOAD HS20

DESIGN STRESSES

CAST IN PLACE CONCRETE

$f_c = 1400 \text{ psi}$
 $f_s = 56.2 \text{ ksi}$
 $n = 8.5$

PRESTRESSED CONCRETE BEAMS

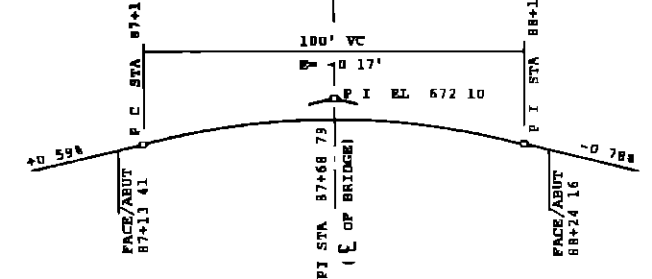
$f'_c = 5000 \text{ psi}$
 $f'_s = \text{SEE INDIVIDUAL BEAM DETAILS}$

REINFORCING STEEL, DEFORMED

$f_y = 20,000 \text{ psi}$

PRESTRESSING STEEL - 1/2" STRANDS

$f'_s = 270,000 \text{ psi}$ EXTRA HIGH STRENGTH
 (INITIAL FORCE PER STRAND IS TO BE 28,900 LBS)
 $f_{si} = 189,000 \text{ psi}$



PROFILE GRADE & E OF CONSTRUCTION (TOP OF CLASS I SURFACE)

STATION 87+88.78
 BUILT 1978 BY
 STATE OF ILLINOIS
 SA RT SA-7 SEC. 0-1.15D
 F.A. PROJ. M-5003(27)
 LOADING HS 20
 STR. NO. 022-6950

NAME PLATE
 (SEE STD 2113)

NOTE
 STRUCTURE NUMBER (STR. NO.)
 TO BE SUPPLIED BY DISTRICT
 LOCATE NAME PLATE AT THE
 NORTHEAST WINGWALL (#1)

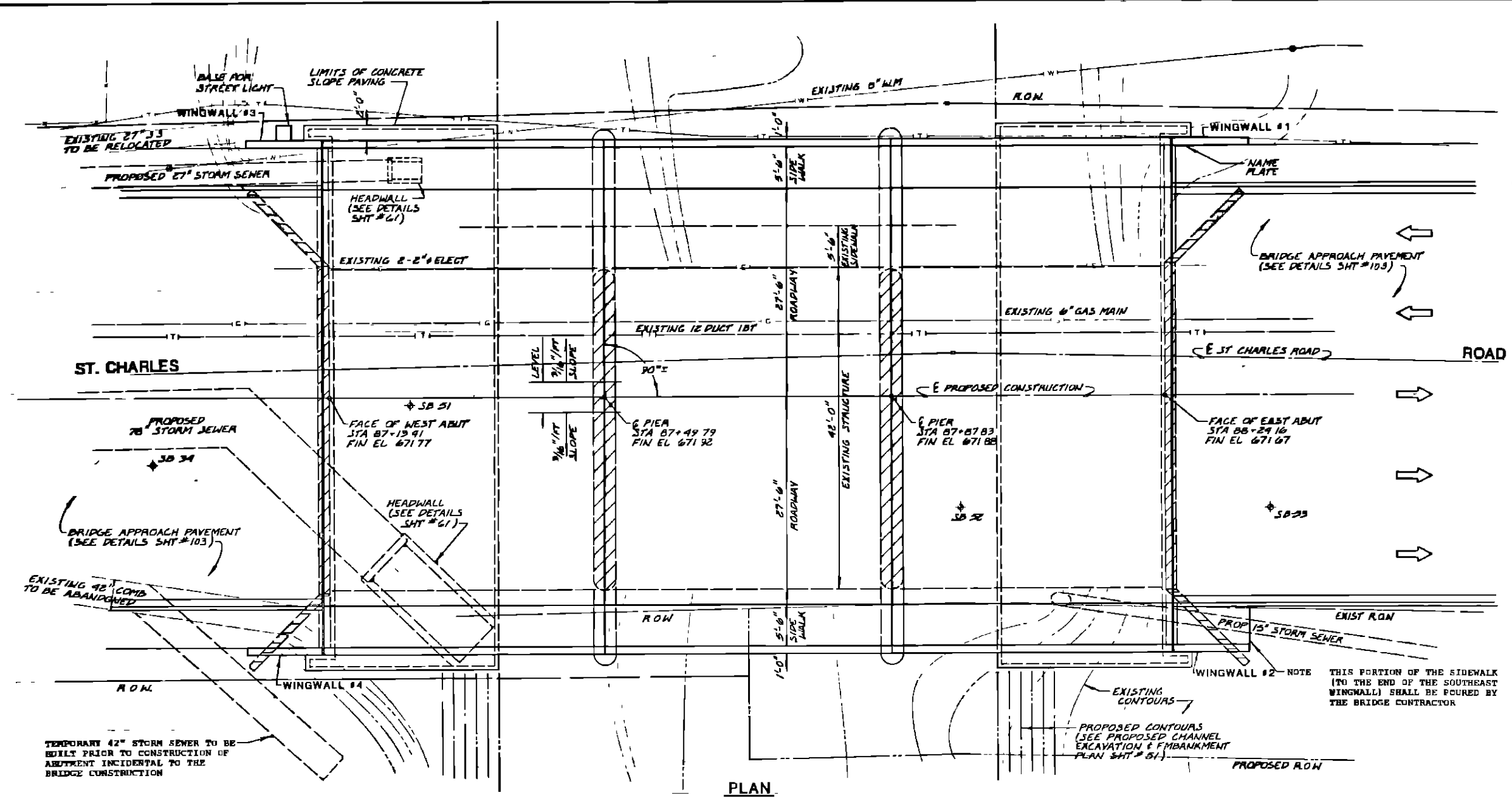
*THE CONTRACTOR SHALL BE PAID FOR CONSTRUCTION OF ONE COFFERDAM AT EACH PIER. THE COFFERDAM MAY BE CONTINUOUS FROM ONE END OF THE PIER TO THE OTHER OR IT MAY BE CONSTRUCTED ONLY AROUND THE NEW CONSTRUCTION AT THE ENDS.

ILLINOIS DIVISION OF HIGHWAYS

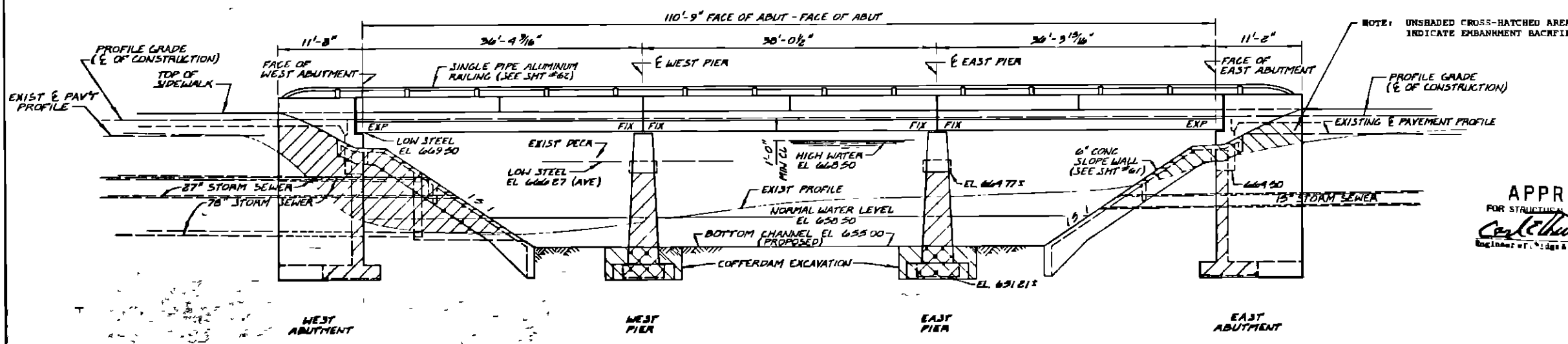
GENERAL BRIDGE PLAN

ST CHARLES ROAD BRIDGE - SALT CREEK

SCALE: 1" = 20'-0"
 DRAWN BY: DCN
 CHECKED BY: EM
 DATE: 12-13-77



PLAN



ELEVATION

CROSS-HATCHED AND SHADED AREAS INDICATE EXISTING SUB-STRUCTURE

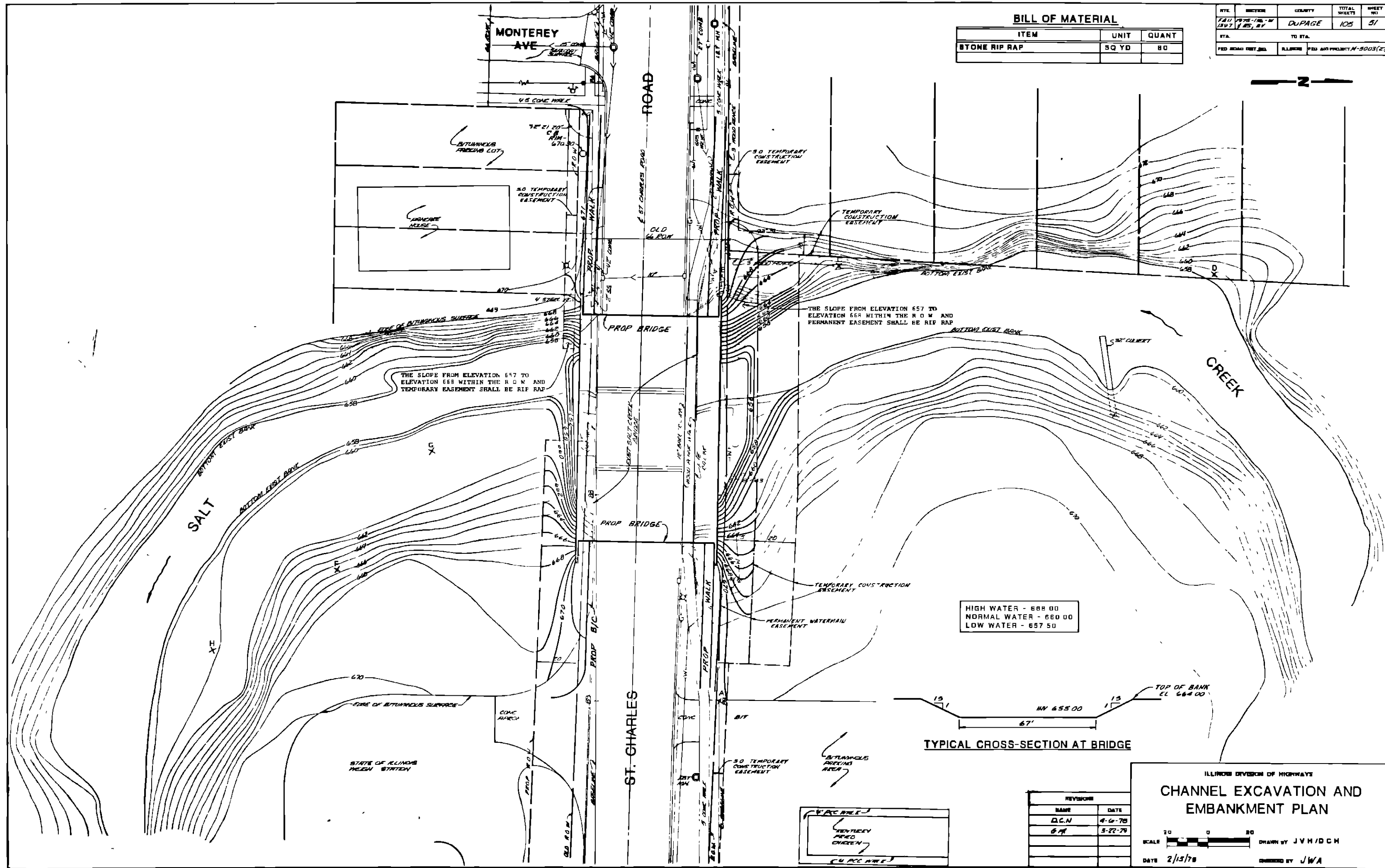
APPROVED
 FOR STRUCTURAL USE ONLY
Carl E. Thompson
 Engineer of Bridges & Traffic



REVISIONS	
NAME	DATE
DCN	2/14/78
EM	3-22-79

00104-48

00104



00104-49

00104

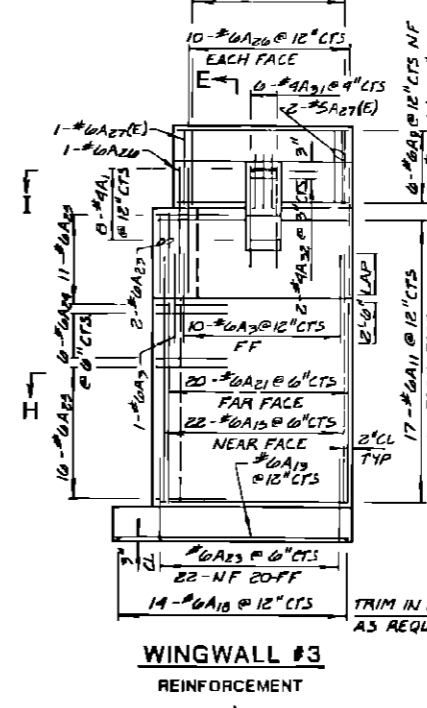
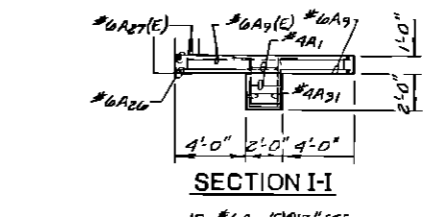
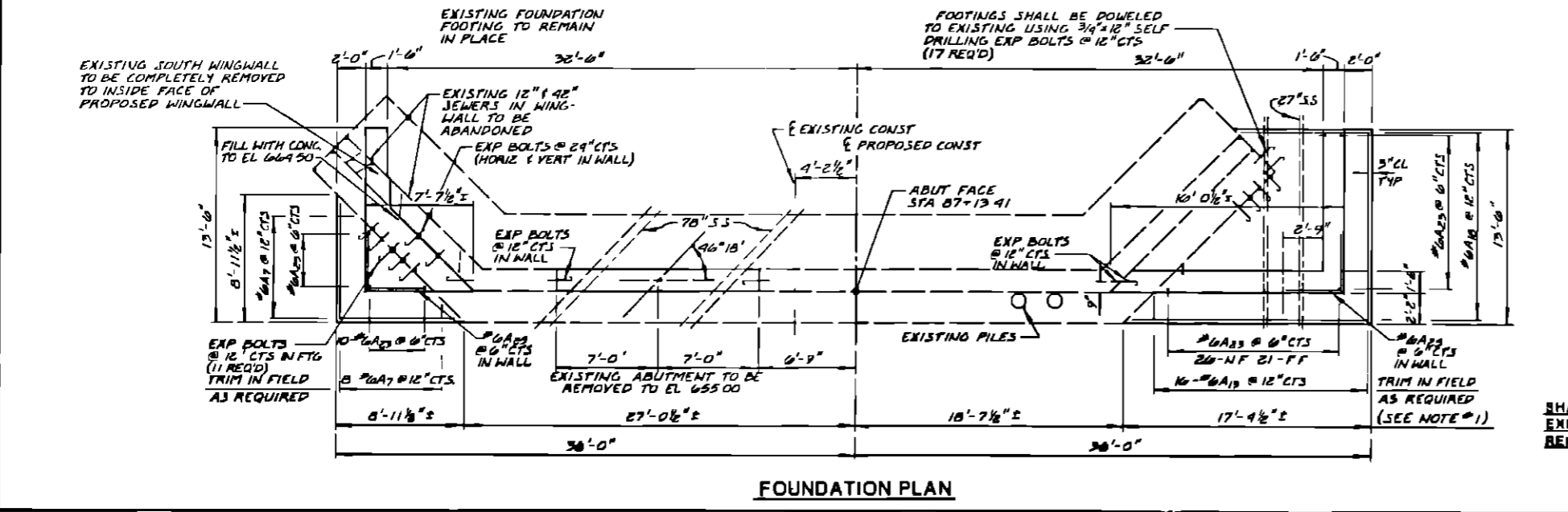
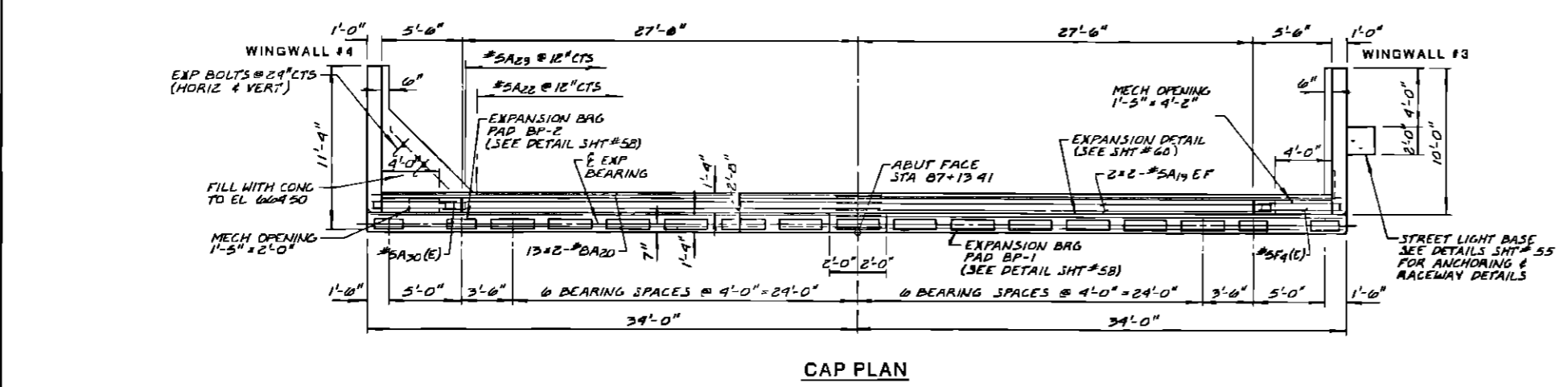
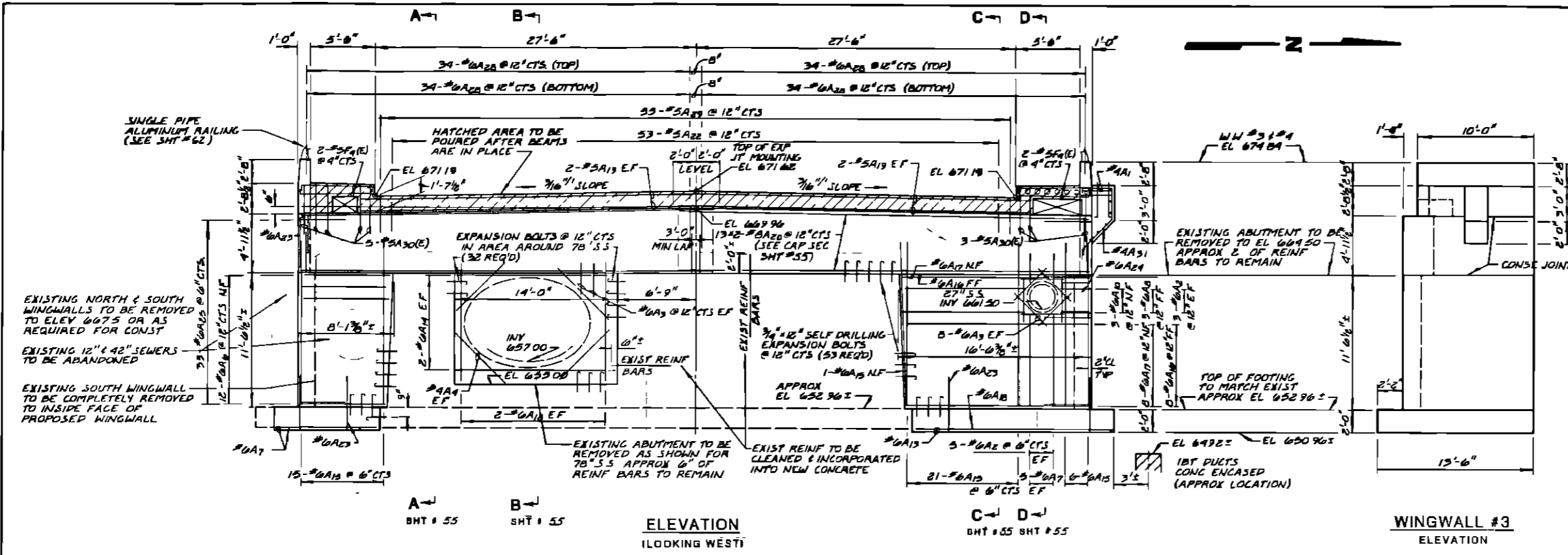
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PAU 1578-152-1597	W 483.01	DUPAGE	105	53
STA		TO STA.		
FED ROAD DIST NO.		ILLINOIS	FED AID PROJECT # 3-003 (2)	

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED SEE SPECIAL PROVISIONS

BILL OF MATERIAL

BAR	NO	SIZE	LENGTH	SHAPE
A1	8	#4	1'-0"	
A2	16	#6	2'-0"	
A3	40	#6	5'-0"	
A4	8	#4	6'-0"	
A5(E)	12	#6	9'-0"	
A6	12	#6	7'-4"	
A7	26	#6	8'-3"	
A8	3	#6	9'-0"	
A9	12	#6	9'-0"	
A10	3	#6	10'-0"	
A11	68	#6	11'-0"	
A12	4	#6	12'-0"	
A13	16	#6	13'-0"	
A14	4	#6	13'-0"	
A15	114	#6	14'-0"	
A16	9	#6	14'-0"	
A17	9	#6	15'-0"	
A18	14	#6	16'-3"	
A19	8	#5	30'-0"	
A20	26	#5	35'-0"	
A21	40	#6	12'-3"	
A22	53	#5	5'-0"	
A23	112	#6	5'-0"	
A24	6	#6	6'-0"	
A25	60	#6	8'-0"	
A26	44	#6	7'-5"	
A27(E)	26	#6	10'-0"	
A28	136	#6	8'-10"	
A29	55	#5	6'-8"	
A30(E)	6	#5	8'-8"	
A31	6	#4	10'-10"	
A32	2	#4	9'-4"	
F4(E)	8	#5	7'-2"	SEE SHT #56

3/4" X 12" SELF DRILLING EXPAN BOLTS	137
CLASS X CONCRETE	CU YDS 82
REINFORCEMENT BARS	POUNDS 14,284
REINF BARS (EPOXY COATED)	POUNDS 888



NOTES

- CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS OF EXISTING BRIDGE. IF ANY SIGNIFICANT VARIATIONS ARE FOUND THE ENGINEER SHOULD BE NOTIFIED.
- ALL BARS SHALL HAVE 2" OF COVER EXCEPT IN THE FOOTINGS WHERE 3" OF COVER SHALL BE MAINTAINED.

SHADED AREAS INDICATE EXISTING TO BE REMOVED

ILLINOIS DIVISION OF HIGHWAYS

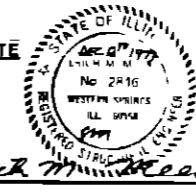
WEST ABUTMENT PLANS

ST CHARLES ROAD BRIDGE - SALT CREEK

DRAWN BY D.C.M.

CHECKED BY E.M.

DATE: 12-13-77

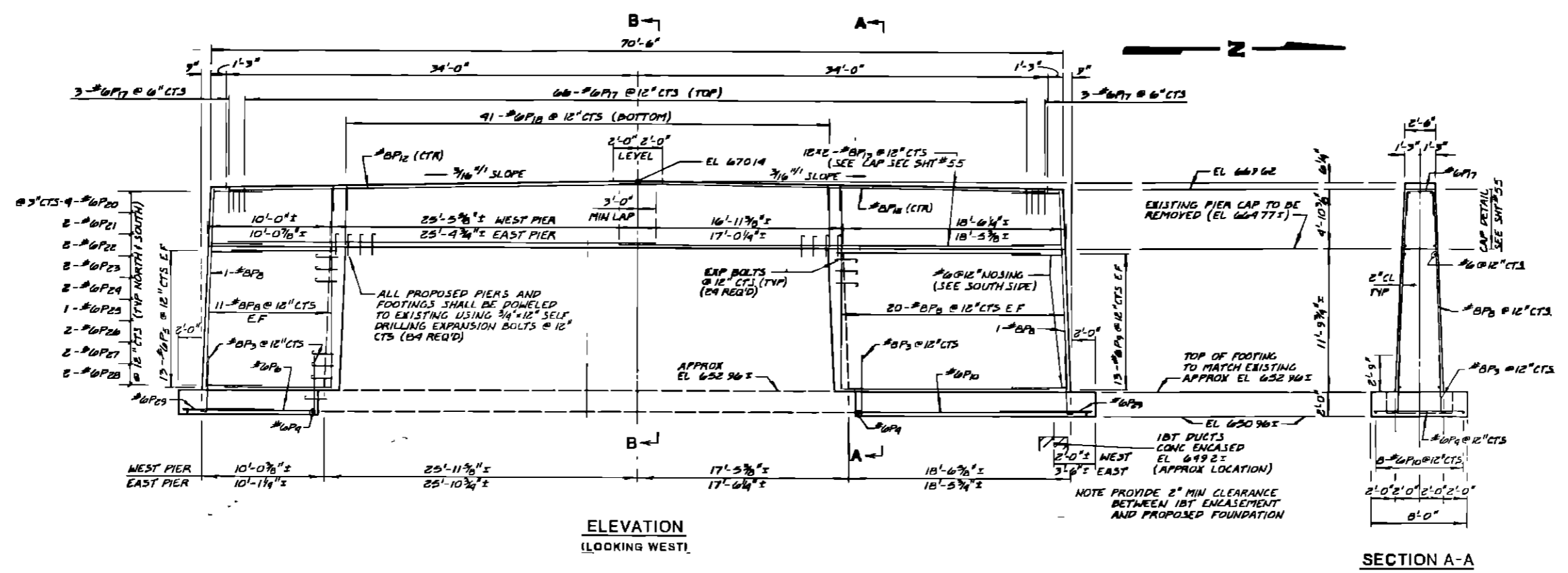


REVISIONS	
NAME	DATE
DCN	8-17-78
GM	8-22-79

00104-51

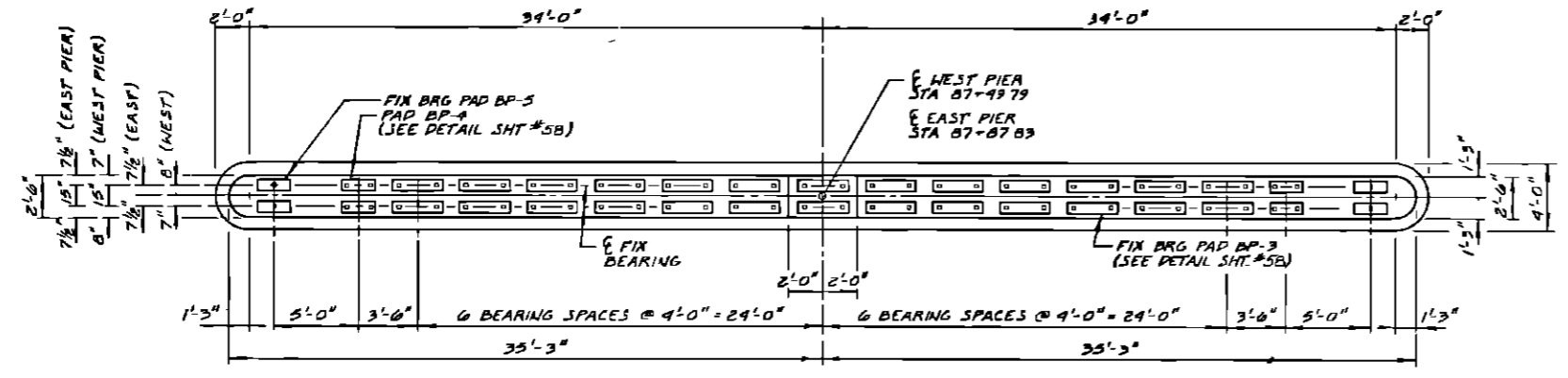
00104

SYL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
PAU 1975-1980	W/FAS, BV	DUPAGE	105	54
STA.	TO STA.			
FED ROAD DIST NO	ILLINOIS	FED AID PROJECT #	2003(27)	

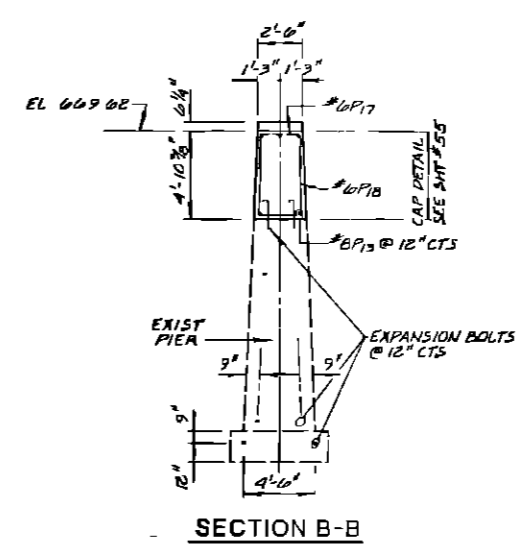


ELEVATION
(LOOKING WEST)

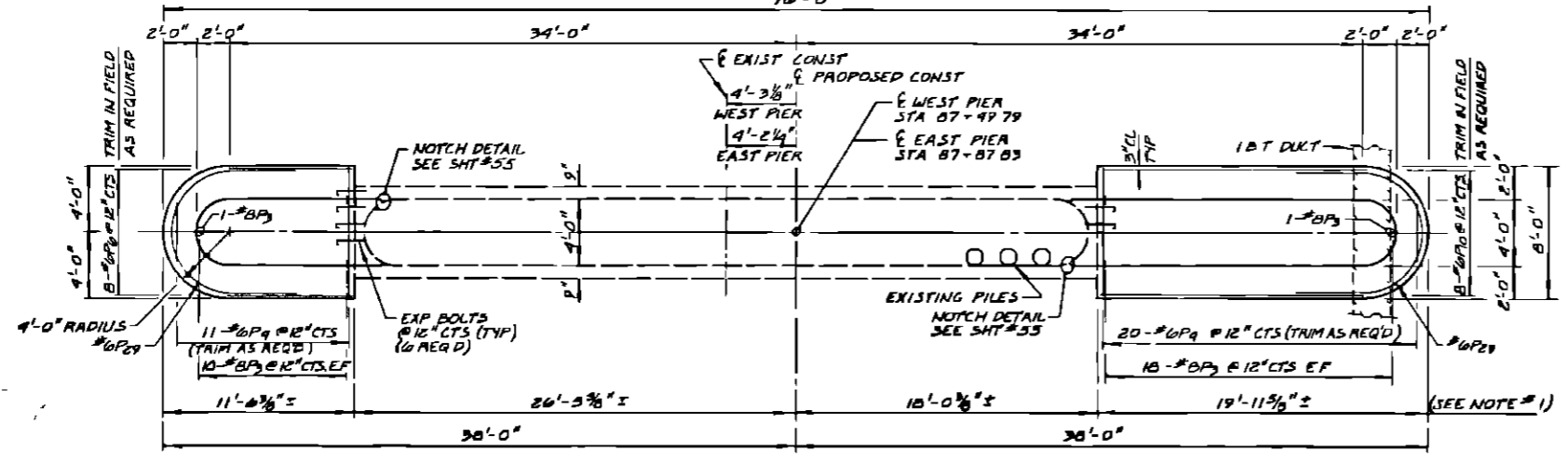
SECTION A-A



CAP PLAN



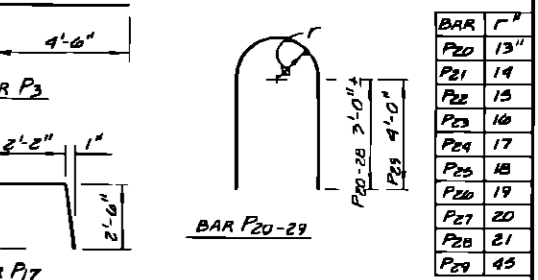
SECTION B-B



FOUNDATION PLAN

EAST AND WEST PIERS
BILL OF MATERIAL

BAR	NO	SIZE	LENGTH	SHAPE
P3	116	#8	5'-0"	—
P4	62	#6	7'-6"	—
P5	32	#6	8'-0"	—
P6	16	#6	11'-0"	—
P8	154	#8	16'-9"	—
P9	22	#6	17'-0"	—
P10	16	#6	19'-6"	—
P12	4	#8	30'-8"	—
P13	48	#8	35'-6"	—
P17	144	#6	7'-2"	—
P18	62	#6	11'-8"	—
P20	16	#6	9'-4"	—
P21	8	#6	9'-6"	—
P22	8	#6	10'-0"	—
P23	8	#6	10'-2"	—
P24	8	#6	10'-4"	—
P25	4	#6	10'-9"	—
P26	8	#6	11'-0"	—
P27	8	#6	11'-3"	—
P28	8	#6	11'-6"	—
P29	4	#6	19'-9"	—
3/4" X 12" SELF DRILLING EXPAN. BOLTS				288
CLASS X CONCRETE				CU YDS 186
REINFORCEMENT BARS				POUNDS 18 803



NOTES

- CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS OF EXISTING BRIDGE. IF ANY SIGNIFICANT VARIATIONS ARE FOUND THE ENGINEER SHOULD BE NOTIFIED.
- ALL BARS SHALL HAVE 2" OF COVER EXCEPT IN THE FOOTINGS WHERE 3" OF COVER SHALL BE MAINTAINED.



REVISIONS	
NAME	DATE
DLN	8-16-78
DLN	8-6-78
GA	3-22-79

ILLINOIS DIVISION OF HIGHWAYS

EAST & WEST PIER PLANS

ST CHARLES ROAD BRIDGE - SALT CREEK

DATE 12-13-77

DRAWN BY: D.C.N.
CHECKED BY: E.M.

00104-52

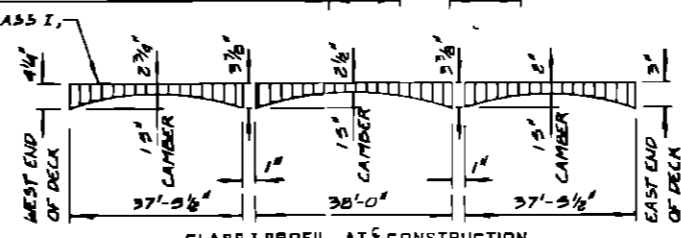
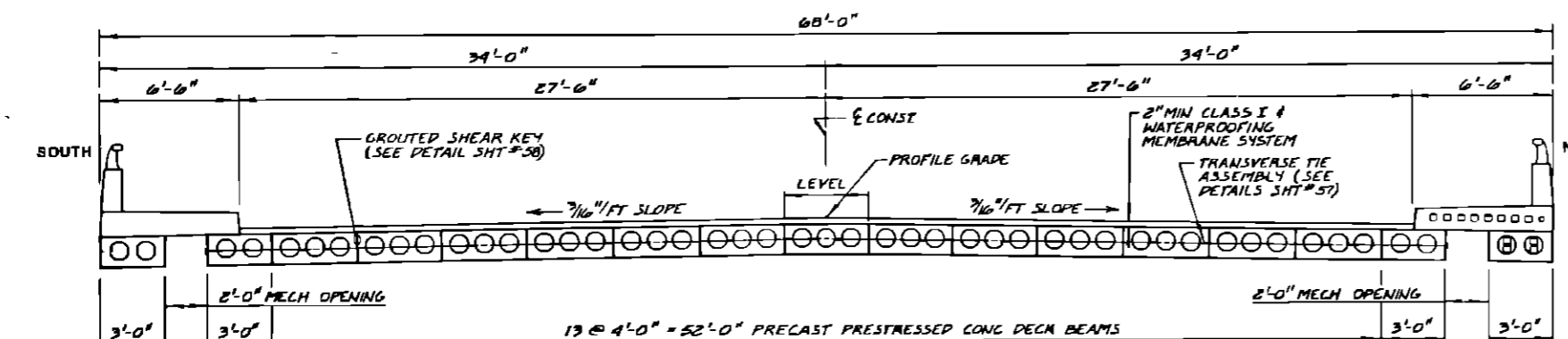
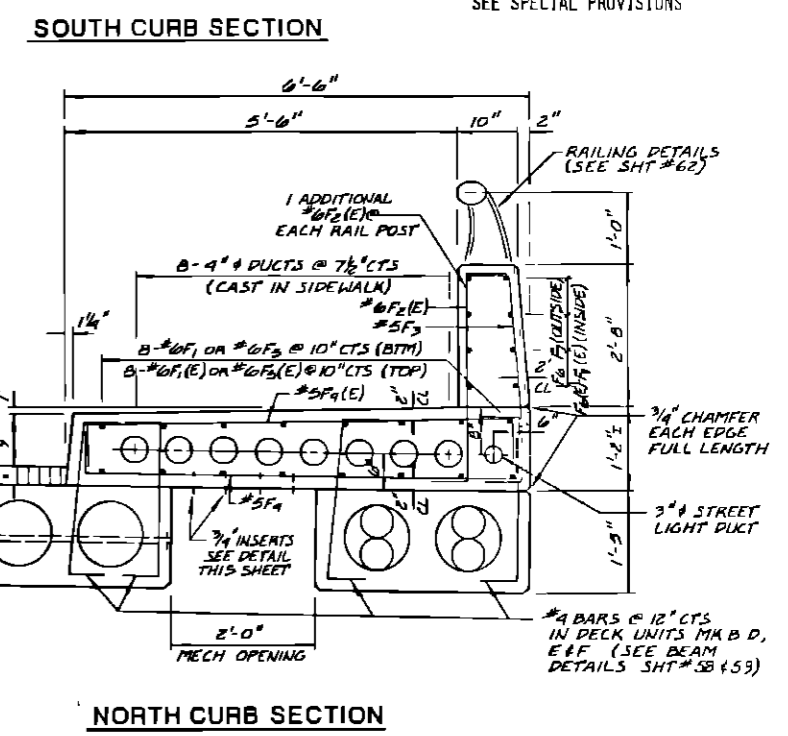
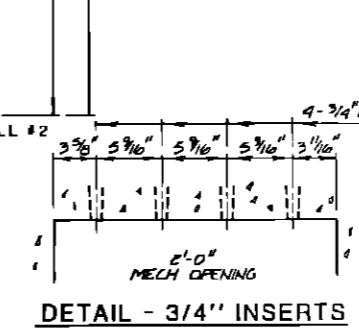
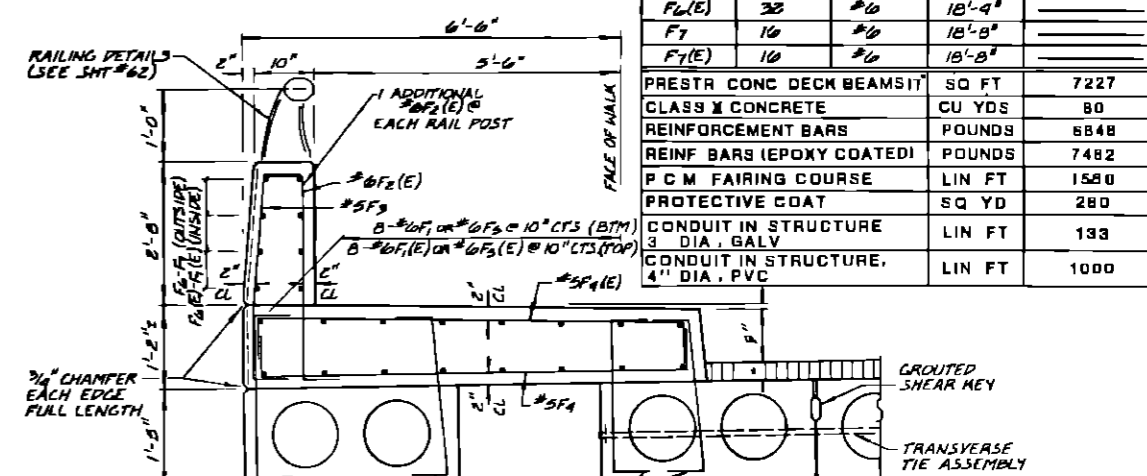
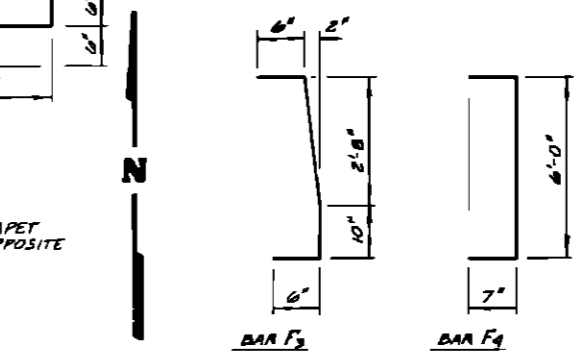
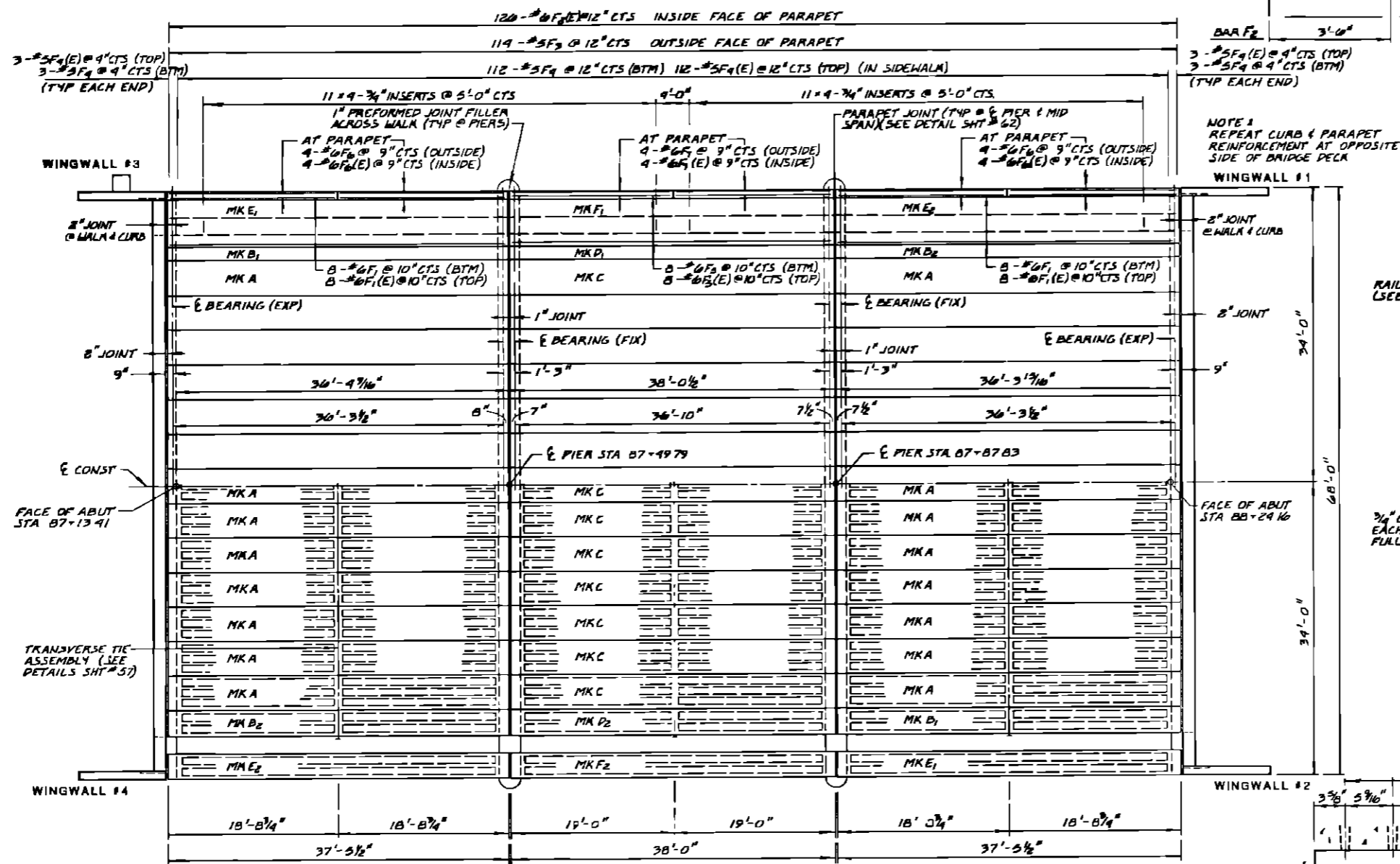
00104

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FDL 1928-196	117 AS 271	DUPAGE	105	54
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT #1-3003 (27)		

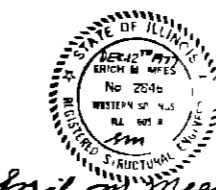
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
F1	32	#6	37'-0"	
F2(E)	252	#6	4'-0"	
F3	228	#5	4'-0"	
F4	236	#5	7'-2"	
F7(E)	32	#6	37'-0"	
F4(E)	236	#5	7'-2"	
F5	10	#6	37'-8"	
F5(E)	10	#6	37'-8"	
F6	32	#6	15'-4"	
F6(E)	32	#6	15'-4"	
F7	10	#6	15'-8"	
F7(E)	10	#6	15'-8"	

PRESTR. CONC. DECK BEAMS	SQ. FT.	QTY.
CLASS I CONCRETE	CU YDS.	80
REINFORCEMENT BARS	POUNDS	6848
REINF. BARS (EPOXY COATED)	POUNDS	7482
P.C.M. FAIRING COURSE	LIN. FT.	1580
PROTECTIVE COAT	SQ. YD.	280
CONDUIT IN STRUCTURE	LIN. FT.	133
CONDUIT IN STRUCTURE	LIN. FT.	1000



NOTE
 DECK TO HAVE CLASS I BITUMINOUS CONC. WEARING SURFACE INCLUDING THICKNESS OF WATERPROOFING MEMBRANE SYSTEM FOR PROPER THICKNESS (1") SEE PLAN OR SURFACE GRADES SHT #60 (THICKNESS VARIES 2" TO 4 1/4")



REVISION	NAME	DATE
1	D.C.N.	2-19-78
2	D.C.N.	4-6-78
3	G.H.	3-22-79

ILLINOIS DIVISION OF HIGHWAYS
DECK FRAMING PLAN & DETAILS
 ST CHARLES ROAD BRIDGE - SALT CREEK
 DRAWN BY D.C.N.
 CHECKED BY E.M.
 DATE 12-13-77

00104-54

IDOT LDS Technical Memorandum
St. Charles Road Bridge over Salt Creek

Appendix D: Correspondence

- Item 1: Conference Memorandum Kick-Off Meeting dated 11-6-2015
- Item 2: FHWA Meeting Summary dated 3-15-2016



CONFERENCE MEMORANDUM

DATE OF MEMO: 11/6/15

DATE OF MEETING: 11/4/15

LOCATION OF MEETING: IDOT District 1, Bureau of Local Roads

ATTENDEES: Alex Househ, (Illinois Department of Transportation)
Suleyman Tulgar, IDOT
Vydas Juskelis, Village of Villa Park (VP)
Jeremie Lukowicz, VP
George Schober, V3 Companies (V3)
Elora Hsu, V3

TO: Attendees

FROM: Elora Hsu

CC: Marilyn Solomon, IDOT, Greg Wolterstorff (V3), Scott Brejcha (V3), Lynn Smith (V3), Bill Vegrzyn (V3), Kent Johnson (City of Elmhurst), Jim Rodgers (Elmhurst Park District), File 15228

RE: St. Charles Road Bridge (FAU 1397) over Salt Creek

The kick-off meeting for the subject project was held on 11/4/15 at 1:30 PM to discuss the project status and anticipated schedule. The following is a summary of the key issues discussed at the meeting:

Item	Action
The project scope consists of preliminary engineering to determine the rehabilitation of the St. Charles Rd. bridge V3 anticipates that the super structure will need to be replaced, but it has not yet been determined if the substructure will need to be replaced.	INFO
Introductions and project contacts were stated. V3 will issue a list of contact information to the team.	INFO/V3
It is anticipated that this project will be classified as a Categorical Exclusion (CE) II.	INFO
V3 noted that the wetlands adjacent to the bridge are not DuPage County jurisdiction, but are Army Corp (ACOE) jurisdiction so impacts less than 0.1 acres will not have to be mitigated. IDOT stated that they will require that all impacts be mitigated regardless of jurisdiction.	INFO
IDOT suggested that the Bridge Condition Report (BCR) to be completed prior to first FHWA meeting.	INFO
IDOT noted that only an abbreviated BCR is necessary for a full bridge replacement. A full BCR is required for replacement of the superstructure. V3 will coordinate with the Bridge office to determine if an abbreviated BCR will be appropriate.	INFO
V3 summarized the following project status: a) Topo Survey – currently underway; IDOT requested Bat Survey to include under the bridge as well as in the tress as part of the tree survey. b) Environmental Survey Request – currently working on the form c) PESA (local) – should be completed by middle of November d) Wetland Delineation – delineation is complete. V3 anticipates less than 0.1 acre to be impacted, but IDOT still requires mitigation for wetland	a) INFO/V3 b) INFO c) INFO d) INFO/V3

<p>e) Hydraulic Report – Starts once survey is completed f) Bridge Condition Report – Concurrent to hydraulic report findings</p>	<p>e) INFO f) INFO</p>
<p>V3 will target a February 2016 FHWA meeting.</p>	<p>INFO</p>
<p>V3 anticipates design approval by the end of 2016.</p>	<p>INFO</p>
<p>ESR form and submittal questions were answered – a) Contract # – Label “TBD” b) Local Contact person – Villa Park (Jeremie Lukowicz) c) Special Waste – V3 is conducting the PESA within the St. Charles Road project limits with the exception of the area located within the IL 83 right-of-way. d) IDOT will provide V3 with the Local Roads ESR submittal checklist.</p>	<p>a) V3 b) V3 c) INFO/V3 d) IDOT</p>
<p>Local PESA: For area outside of the IL 83 right-of-way, V3 is conducting the PESA.</p>	<p>INFO</p>
<p>Special Waste Request (continued) State PESA: A portion of the ESR limits is within a state route (IL 83). To be conservative, IDOT suggests maintaining the limits shown in the exhibit in case re-profiling of St. Charles Road is necessary. Since the ESR limits contains portion of a state route, V3 will need to fill out the “Special Waste Screening Request” (pg 2) of the ESR so that IDOT can perform the PESA. If it is determined that re-profiling is not necessary, V3 can cancel the request without affecting the project schedule.</p>	<p>INFO/V3</p>
<p>V3 will verify if any properties within the ESR limits are classified as Section 4(f).</p>	<p>V3</p>
<p>V3 will need to coordinate the Traffic Maintenance Plan with Bureau of Traffic for their review and approval since the construction staging will impact IL 83. This could impact the schedule as their review will take up to 8 weeks.</p>	<p>INFO/V3</p>
<p>Since the bridge is anticipated to be constructed in stages and traffic will be maintained during construction, IDOT suggested that V3 coordinate the TMP with the Bridge Office for their review and approval prior to completion of BCR.</p>	<p>INFO/V3</p>
<p>V3 should research the property ownership and maintenance agreements related to the property around the Salt Creek and the adjacent bike path and sidewalk. Impacts may require a 4(f) report be prepared. V3 will coordinate with the Elmhurst Park District, the DuPage County Forest Preserve and the City of Elmhurst. The need for a 4(f) or 6(f) report should be discussed with the FHWA at the initial meeting planned for February 2016.</p>	<p>V3</p>

This constitutes the writer’s understanding of the items discussed and agreements reached at the aforementioned meeting. Any corrections and/or additions, to this memorandum should be sent to the writer within ten (10) business days of receipt of this memorandum.

ATTENDANCE ROSTER


BUREAU OF LOCAL ROADS AND STREETS

PROJECT: Project Kickoff meeting - St. Charles Rd Bridge Phase I

DATE: 11/04/15

TIME: 01:30 PM

LOCATION: Schaumburg / District One ROOM: Conference Room A

	NAME (Please Print)	REPRESENTING	PHONE NUMBER
1	Marilyn Solomon	IDOT - D1 - BLRS	(847) 705-4407 Marilyn.Solomon@illinois.gov
2	Alex Househ	IDOT - D1 - BLRS	(847) 705-4410 Alex.Househ@illinois.gov
3	Suleyman Tulgar 	IDOT - D1 - BLRS (HDR, Inc.)	(847) 705-4205 Suleyman.tulgar@illinois.gov
4	ELORA Hsu	V3	(630) 729-6323
5	George Schober	V3	(630) 291-0064
6	Jeremie Lukowicz	Village Park	(630) 834-8505
7	VIDAS JUSKEVICIS	VILLA PARK	(630) 834-8505
8			()
9			()
10			()
11			()
12			()
13			()
14			()

STP PROJECT MILESTONE SCHEDULE

Municipality: Villa Park
 Project: St Charles Road Bridge of Salt Creek - Phase I
 Scope of Work: Preliminary Engineering for Bridge Replacement
 TIP #: 08-14-0034
 TIP Years (Ph II / Const): TBD/TBD
 Section #: 15-00094-00-BR
 Current Constr & E3 Cost (date: 2/13/15): \$4,340,000
 Fund Type(s): STP-BR

Contact Information

Municipality Jeremy Lukowicz: jlukowicz@invillapark.com; (630) 834-8505
 Council/Liaison Mike Albin: MAlbin@dmmc-cog.org; (630) 571-0480 ; 226
 Consultant George Schober: gschober@v3co.com; 630-291-0064
 IDOT Marilin Solomon: marilin.solomon@illinois.gov; (847) 705-440

Date Prepared: _____ Date Revised: _____

	Projected Dates			Notes
	Initial Est.	Kick-Off	Revised/Actual	
1. Project Scoping				
2. IDOT Phase I Kick-off Meeting		11/4/2015	11/4/2015	
3. 1st State/Federal Coordination Meeting		2/10/2016		
4. Categorical Exclusion Concurrence		2/10/2016		
5. Design Variance Concurrence		6/8/2016		
6. Submit Draft Phase I Report (PDR) to IDOT (a)		7/15/2016		
7. Public Hearing/Meeting (or N/A)		10/15/2016		No public meeting is anticipated ot be required, but will present the project at Village Board meeting
8. Right-of-Way Kick-off Meeting (or N/A)		N/A		No right of way acquisition is anticipated
9. Submit Final Phase I Report (PDR) to IDOT (b)		9/15/2016		
10. Submit Phase II Engr. Agreeem't to IDOT (or N/A)		10/15/2016		
11. Phase I Design Approval		11/15/2016		
12. ROW Aquisition Initiation (or N/A) (c)		N/A		No right of way acquisition is anticipated
13. Phase II Engr. Agreement Approval (or N/A)		1/15/2017		
14. Submit Pre-Final Plans and Estimates (d)		6/15/2017		
15. Submit Phase III Engr. Agreement to IDOT		6/15/2017		
16. Submit Final Plans, Specs & Estimates (PS&E) (e)		9/15/2017		
17. ROW Acquisition Complete		N/A		
18. Construction Letting		12/15/2017		

Notes:
 See IDOT Local Roads' **Mechanics of Project Management**
 "Federal Aid Project Initiation to Completion" Flow Chart for
 sequence of events and estimated review times.

- (a) 3 to 6 month review required per complexity and submittal quality
- (b) 1 to 3 month review
- (c) Minimum 9 to 18 months required from plats to acquisition
- (d) 85% minimum; 1 to 4 month review
- (e) 7 to 10 days before Springfield BLR due date

AGENDA ITEM #3
March 15, 2016

St. Charles Road Bridge (FAU 1397)
Over Salt Creek
Section No.: 15-00094-00-BR
Job No. : P-91-313-15
Project Number: BRM-4003(508)
Structure No: 022-6950
County: DuPage

This is the first presentation of this project. The purpose of this meeting is to present the general scope of the project and the current status of the design.

A. Location

The project is located within the Village of Villa Park and City of Elmhurst in DuPage County.

B. Traffic Volume

St. Charles Road is a Minor Arterial under Villa Park's jurisdiction.

The existing traffic volumes within the project limits are 23,200 vpd for St. Charles Road. St. Charles Road is a non-designated truck route.

C. Crash Experience

The project limits are from Monterey Avenue to 100' East of the Salt Creek bridge on St. Charles Road. A crash analysis was performed for the years 2013 through 2015 within the project limits and a total number of 6 crashes occurred. All of the crashes occurred at the intersections of Monterey Avenue and St. Charles Road. No crashes occurred on the bridge.

The most common crash type was Sideswipe (Same Direction) with 3 crashes (50%), followed by 2 Rear End crashes (33%), and 1 Sideswiped (Opposite Direction) (16%). Most of the crashes occurred west of the bridge during the daytime (66%) and under dry pavement conditions. The high percentage of sideswipe crashes may be attributed to the narrow lane widths.

D. Existing Conditions

St. Charles Road has two lanes in each direction with sidewalks on both sides of the road.

The pavement approaches widen to 53 feet and consist of 10.5" outside lanes, 11' inside lanes and a 10 foot wide left turn lane.

The bridge width is 55 feet. The structure is a simple three span, 17" deep PPC deck beam bridge with asphalt overlay and poured concrete sidewalks and parapets.

The asphalt wearing surface varies from 2" to 4 1/4" over a waterproofing membrane system.

There is a 2' utility gap between the two outer deck beams on the north and south side of the bridge. There are 9 ducts running through the 2' gap on the north side of the bridge.

The substructure is rated a 7. The abutments are cantilevered walls and the piers are solid walls both in good condition with minor spalls and cracks.

There is an existing 78" storm sewer that passes through the west abutment and outlets at the southwest end of the west slopewall.

There is some evidence of scour at the bridge. Some of the more significant scour issues appear to be due to the 78" diameter storm sewer outfall. Unless the bridge is realigned or storm sewer outfall is relocated, these scour issues will continue regardless if substructure is replaced. While evidence of some scour was found, the bridge is in generally good condition. The NBIS scour rating for the bridge is an 8.

E. Design Criteria

Design criteria will be based on 3R Policy. Posted speed limit on St. Charles Road is 30 mph, with a design speed of 35 mph.

F. Proposed Improvements

The proposed scope of the project is to replace the superstructure of the Salt Creek Bridge, including approach and substructure rehabilitation. The Superstructure will be replaced with 17" deep PPC Deck beams and a 5" concrete wearing surface and results in raising the profile by approximately 3 inches.

The new Superstructure will be widened 6" to the North and the South to provide five 11 foot lanes. The sidewalk and the parapet will cantilever 6" off of the deck beams.

The 2' gaps between the outside beams for utilities will be removed. Any utilities to be maintained will be verified and relocated in conduits placed along the parapet wall.

The abutments and piers will be repaired with Structural Repair of Concrete ($\leq 5"$) and Epoxy Crack Sealing.

The top 5.5' of the 10' long wingwalls will be removed and replaced at all 4 corners to accommodate the 6" superstructure widening.

The approaches will be widened 1' to the North and South and resurfaced with asphalt.

Scour countermeasures will be implemented at the piers and all of the debris will be removed from the west pier.

This work will be completed using stage construction.

G. Status of Environmental Coordination

We have received cultural clearances. We are awaiting biological, wetland, and special waste clearances.

Wetland Delineation is complete; we anticipate less than 0.1 acres to be impacted.

Local PESA report has been completed and submitted to Local Roads for review.

H. Status of Agency Coordination

We anticipate meeting with the local agencies shortly after this meeting to receive their feedback on the proposed improvements.

Regarding Stage Construction: We anticipate the Salt Creek Greenway bikepath to be temporarily closed during construction and will coordinate with the appropriate agencies accordingly.

The trail was funded by IDOT Congestion Mitigation Air Quality Program (CMAQ), IDNR's bike path program, and the DuPage Mayors and Managers Transportation Control Measures Program. Will this require 4(f) or 6(f) reports to be prepared?

It is our understanding that the Forest Preserve District of DuPage County entered an Intergovernmental Agreement with the EPD to lease certain properties along Salt Creek to the Park District.

I. Anticipated Design Exceptions

None anticipated

Project Schedule Design Approval is scheduled for November 2016