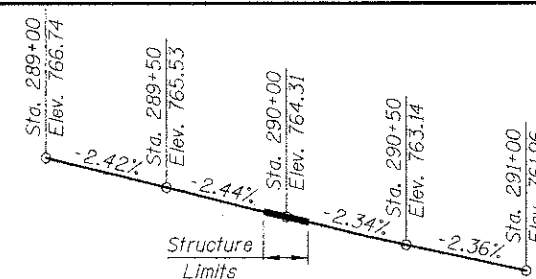
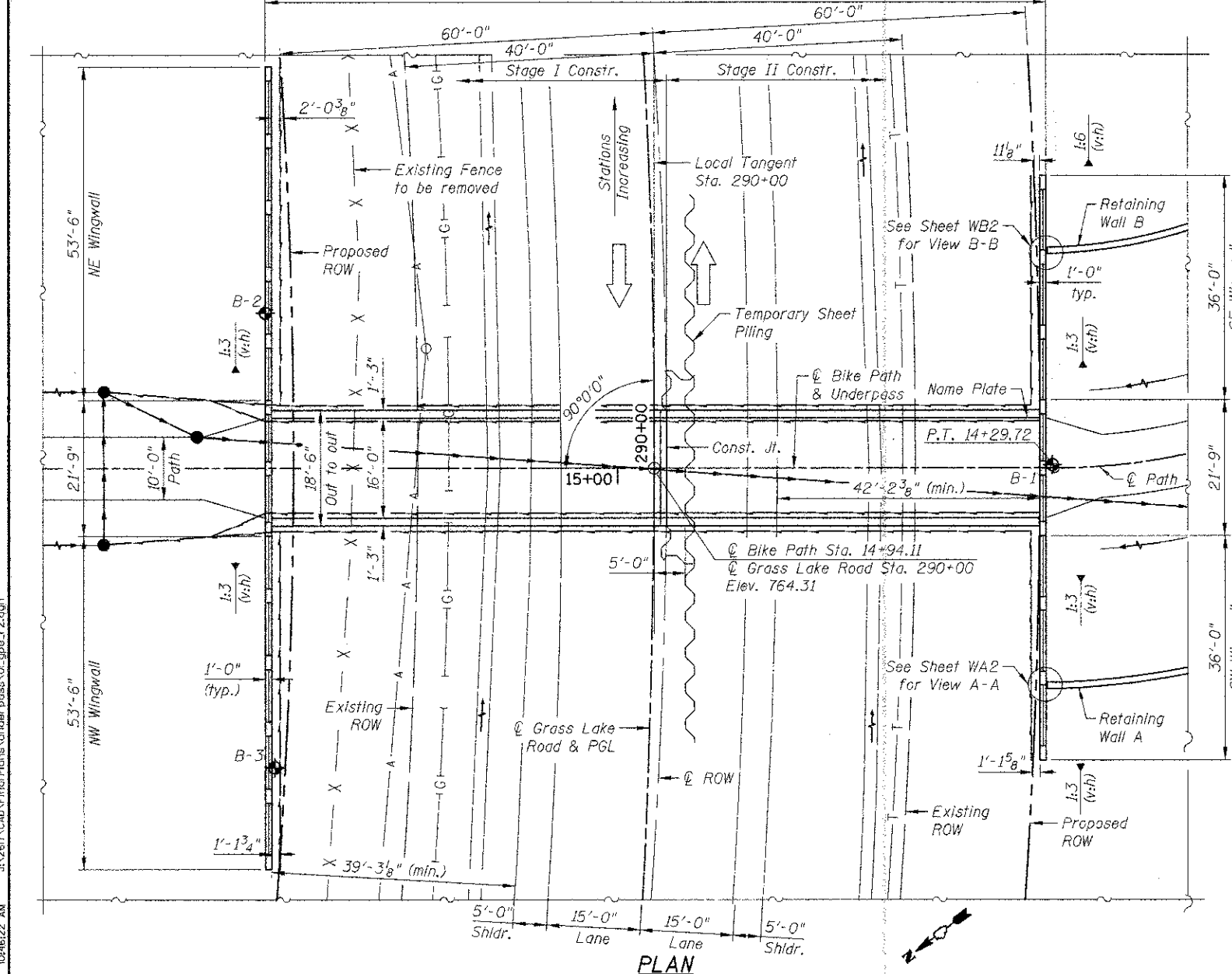
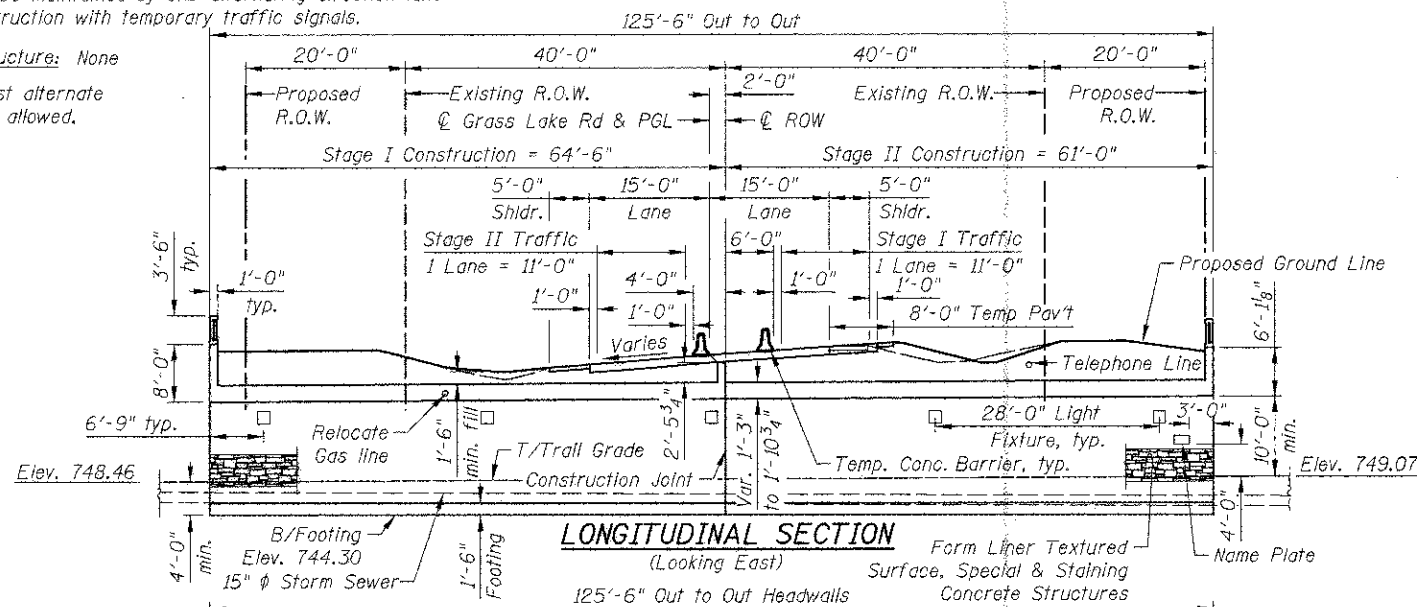


Benchmark: Control Point # 4, 5/8" iron rod with plastic cap set at Sta. 292+70.14 Offset 20.39' Rf. of @ ROW. Elevation 758.79.

Traffic will be maintained by one-alternating direction lane during construction with temporary traffic signals.

Existing Structure: None

Note: Precast alternate is not allowed.



EXISTING PROFILE GRADE OF
GRASS LAKE ROAD
(Along @ Grass Lake Road)

INDEX OF SHEETS

- S1 General Plan & Longitudinal Section
- S2 General Data
- S3 Underpass Plan & Elevation
- S4 Underpass Details
- S5 North Wingwalls
- S6 South Wingwalls
- S7 Wingwall Details
- S8 Architectural Details
- S9 Bar Splicer Assembly Details
- S10 Underpass Soil Boring Logs

CURVE DATA
GRASS LAKE ROAD
(@ of ROW)

$\Delta = 42^\circ 57' 58''$
 $D = 5^\circ 41' 52''$
 $T = 395.77'$
 $L = 754.10'$
 $E = 75.08'$
 $R = 1,005.60'$
 $S.E. = \text{Varies}$
 $P.C. = \text{Sta. } 289+02.02$
 $P.T. = \text{Sta. } 296+56.12$
 $P.I. = \text{Sta. } 292+97.79$

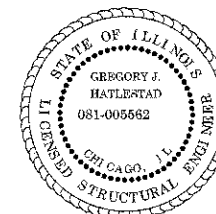
EXISTING GRASS LAKE ROAD ELEVATIONS

Station	Bottom of North Ditch	North EOP	@ Grass Lake Road	South EOP	Bottom of South Ditch
289+00	764.20	765.89	766.74	767.19	765.29
289+50	762.80	764.49	765.53	766.29	764.33
290+00	761.23	763.11	764.31	765.32	763.30
290+50	760.01	761.82	763.14	764.18	762.45
291+00	758.64	760.65	761.96	762.98	761.62

LEGEND

- Soil Boring
- Existing Aerial Lines
- Existing Fence
- Existing Underground Gasline
- Existing Underground Telephone
- Proposed Storm Sewer
- Power Pole
- Proposed Pipe Underdrain

CIVILTECH ENGINEERING, INC.
GREGORY J. HATLESTAD, S.E.



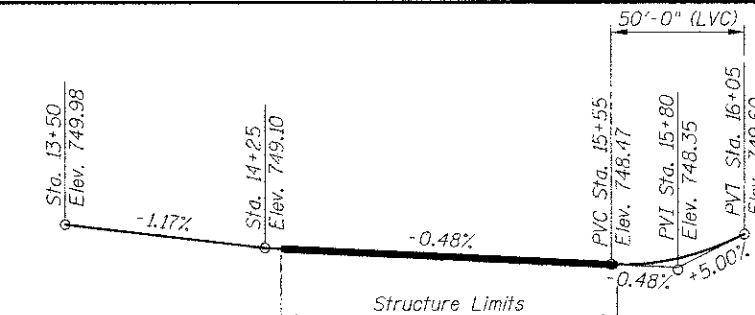
GREGORY J. HATLESTAD, S.E.
081-005562

EXP 11/30/2014

DATE 2/01/2013

I certify that to the best of knowledge, information and belief, this design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO LRFD Bridge Design Specifications for Highway Bridges.

PROPOSED PROFILE GRADE
BIKE PATH
(Along @ Bike Path)



CURVE DATA
BIKE PATH

$\Delta = 70^\circ 15' 13''$
 $D = 57^\circ 17' 45''$
 $T = 70.35'$
 $L = 122.61'$
 $E = 22.27'$
 $R = 100.00'$
 $P.C. = \text{Sta. } 13+07.10$
 $P.T. = \text{Sta. } 14+29.72$
 $P.I. = \text{Sta. } 13+77.45$

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge
Design Specifications, 6th ed.

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500 \text{ psi}$
 $f_y = 60,000 \text{ psi (Reinforcement)}$

LOADING HL-93

Allow 50 psf for Future Wearing Surface

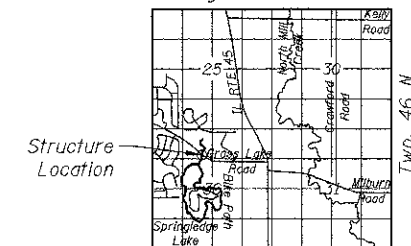
SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.075
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.123
Soil Site Class = D

GRASS LAKE ROAD
BUILT 201 BY
LINDENHURST PARK DISTRICT
SEC. 09-P0075-15-BT
F.A.U. 0174 STA. 290+00.00
LOADING HL-93 STR. NO. 049-3070

NAME PLATE

See Std. 515001
Range 10E - 3rd PM



LOCATION SKETCH

GENERAL PLAN & LONGITUDINAL SECTION

GRASS LAKE ROAD OVER BIKE PATH

F.A.U. ROUTE 0174

SEC. 09-P0075-15-BT

LAKE COUNTY

STA. 290+00

STRUCTURE NUMBER 049-3070

CIVILTECH
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DRAWN - K. BOCHNOWSKI
DESIGNED - M. LANGE
CHECKED - G. HATLESTAD
DATE - DECEMBER 17, 2012

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GRASS LAKE ROAD OVER BIKE PATH
STRUCTURE NO. 049-3070

SHEET NO. S1 OF S10 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0174	09-P0075-15-BT	LAKE	74	23
CONTRACT NO. 63778				

ILLINOIS FED. AID PROJECT