11-17-2017 LETTING ITEM 056

FOR INDEX OF SHEETS, HIGHWAY STANDARDS AND GENERAL NOTES, SEE SHEET NO. 2

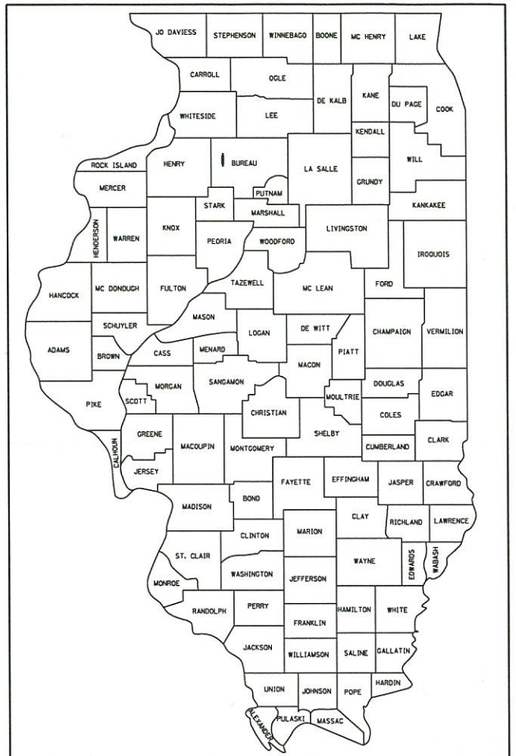
M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	01
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID PROJECT MAJOR BRIDGE PROGRAM

M.S. 6050A (MAIN STREET) OVER WALNUT DITCH
STRUCTURE REPLACEMENT
VILLAGE OF WALNUT
SECTION 13–00019–00–BR
PROJECT NO. 4BCY(445)
BUREAU COUNTY

C–93–053–17



LOCATION OF SECTION INDICATED THUS: –

TRAFFIC DATA:

FUNCTIONAL CLASSIFICATION: URBAN LOCAL STREET
NEW CONSTRUCTION/RECONSTRUCTION GUIDELINES
2018 ADT = 1030
2048 ADT = 1870
% TRUCKS = 4%
DESIGN SPEED: 30 M.P.H.
POSTED SPEED: 30 M.P.H.

UTILITY CONTACT INFORMATION:

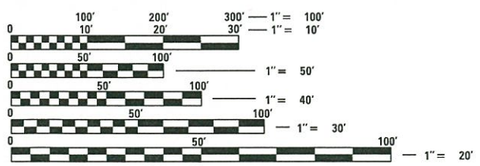
VILLAGE OF WALNUT
ATTN: MR. CARL MINKS
114 JACKSON STREET
WALNUT, ILLINOIS 61376
PHONE: (815) 878-0077

NICOR GAS
ATTN: MR. BRUCE KOPPANG
1844 FERRY ROAD
NAPERVILLE, ILLINOIS 60563
PHONE: (888) 642-6748
ENGINEERING #N10365

FRONTIER COMMUNICATION (NORTH)
ATTN: MR. DAVID DAY
124 EAST LINCOLN WAY
MORRISON, ILLINOIS 61270
PHONE: (815) 772-2078
JULIE #A2662944

COM ED
ATTN: MR. ADAM SADKOWSKI
ONE LINCOLN CENTRE
OAKBROOK TERRACE, ILLINOIS 60181
PHONE: (815) 263-3123
COMED REF# H18001DIX

MEDIACOM
ATTN: MR. MITCH HANCOCK
4507 49TH AVE
MOLINE, ILLINOIS 61265
PHONE: (309) 743-4735



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1–800–892–0123
OR 811

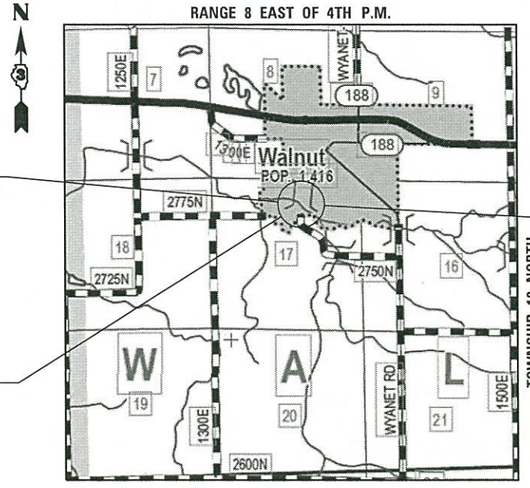
PROJECT ENGINEER – PLP
PROJECT MANAGER – BKC

CONTRACT NO. 87680

BRIDGE LOCATION

PROJECT BEGINS STA. 17+50 MAIN STREET

PROJECT ENDS STA. 22+70 MAIN STREET



LOCATION MAP
NOT TO SCALE

PROPOSED STRUCTURE
S.N. 006-8100 A THREE SPAN (28'-11":36'-2":28'-11") CONCRETE DECK ON COMPOSITE STEEL BEAMS ON INTEGRAL SPILL-THRU ABUTMENTS AND SOLID WALL ENCASED BENT PIERS AT STA. 20+00. 30° SKEW LEFT AHEAD.
EXISTING STRUCTURE
S.N. 006-4319 A TWO SPAN (2 @ 32'-0") CONCRETE DECK ON STEEL BEAM STRINGERS ON CONCRETE PILE CAPS WITH CLOSED TIMBER ABUTMENTS AT STA. 20+00. 30° SKEW LEFT AHEAD.

GROSS LENGTH = 520 FT. = (0.10 MILE)
NET LENGTH = 520 FT. = (0.10 MILE)

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED Aug. 25, 2017 2017
VILLAGE OF WALNUT

PASSED 9/5/17 2017
DISTRICT 3 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW 9/5/17 2017
REGION 2 ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

LICENSED PROFESSIONAL ENGINEER
LUKE G. NELSON
062-065230
STATE OF ILLINOIS

DATE: 8-25-17
EXPIRES 11/30/17

WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

FILE = S:\PROJECTS\2015\1160015_Walnut\DESIGN\STRUCTY\2D_Drawings\1160015_Cover Sheet.dgn

INDEX OF SHEETS

STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420406	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB
515001-03	NAME PLATE FOR BRIDGES
601001-05	PIPE UNDERDRAINS
602301-04	INLET, TYPE A
602406-07	MANHOLE, TYPE A 6' DIAMETER
604051-04	FRAME & GRATE, TYPE 11
606001-06	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
630001-11	STEEL PLATE BEAM GUARDRAIL
630301-07	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-15	TRAFFIC BARRIER TERMINAL, TYPE 6
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 m) AWAY
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701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701901-06	TRAFFIC CONTROL DEVICES
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720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
725001-01	OBJECT AND TERMINAL MARKERS
728001-01	TELESCOPING STEEL SIGN SUPPORT
729001-01	APPLICATIONS OF TYPE A & B METAL POSTS (FOR SIGNS & MARKERS)
780001-05	TYPICAL PAVEMENT MARKINGS
782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
B.L.R. 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
B.L.R. 22-7	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS (TWO-LANE TWO WAY RURAL TRAFFIC) (ROAD CLOSED TO THRU TRAFFIC)
	DISTRICT 3 DETAILS
561-1	FIRE HYDRANT INSTALLATION
561-3	VALVE BOX INSTALLATION
606-4	REINFORCEMENT FOR CURB & GUTTER

GENERAL NOTES

EXISTING STRUCTURES (INCLUDING FOUNDATIONS, WALLS, CISTERNS, WELLS, OR OTHER UNDERGROUND STRUCTURES) WITHIN THE RIGHT OF WAY SHALL BE REMOVED IN ACCORDANCE WITH ARTICLE 501.04 AND 501.05 OF THE STANDARD SPECIFICATIONS, WITHOUT ADDITIONAL COMPENSATION, UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIAL PROVISIONS.

EXISTING STREET SIGNS AND TRAFFIC SIGNS THAT ARE WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED AND RESET BY THE CONTRACTOR IN ACCORDANCE WITH ARTICLE 107.25.

WHERE THE PROPOSED CONSTRUCTION MEETS AN EXISTING BITUMINOUS OR CONCRETE SURFACE, OR WHERE SAWING IS STATED ON THE PLANS, THE EXISTING SURFACE SHALL BE SAWED IN A NEAT, STRAIGHT LINE. COST OF SAWING IS TO BE INCLUDED IN THE UNIT BID PRICES OF THE ITEM BEING REMOVED.

NO OVERHAUL HAS BEEN COMPUTED AND NONE SHALL BE PAID FOR FROM ANY SOURCE.

BITUMINOUS MATERIALS (PRIME COAT) SHALL BE RC-70 OR SS-1 ON BITUMINOUS AND MC-30 OR P.E.P. ON AGGREGATE AND SHALL BE APPLIED AT THE RATE OF 0.025-0.25 POUNDS PER SQUARE FOOT, OR AS DIRECTED BY THE ENGINEER.

THE FINAL TOP FOUR INCHES OF SOIL IN ANY RIGHT-OF-WAY AREA DISTURBED BY THE CONTRACTOR MUST BE A COHESIVE SOIL CAPABLE OF SUPPORTING VEGETATION.

A PROOF ROLL OF THE SUBGRADE IS REQUIRED PRIOR TO PLACING THE AGGREGATE SUB-BASE AND MUST BE OBSERVED BY A CERTIFIED TESTING COMPANY. NOTIFY THE ENGINEER PRIOR TO DOING THE PROOF ROLL.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS, MONUMENTS, AND RIGHT OF WAY PINS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR, OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

THE LOCATION AND ELEVATION OF THE UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE NOT TO BE TAKEN AS EXACT. THE CONTRACTOR SHALL USE SPECIAL CARE WHEN CONDUCTING CONSTRUCTION OPERATIONS NEAR THEM TO PREVENT DAMAGE.

ALL CONSTRUCTION MATERIALS WITHIN THE VILLAGE ROW MUST BE IDOT CERTIFIED. DOCUMENTATION OF MATERIAL CERTIFICATION SHALL BE SUBMITTED PRIOR TO ENGINEER APPROVAL. ALL CONSTRUCTION MATERIAL NEEDING INSPECTION SHALL BE DONE ACCORDING TO THE LATEST IDOT PROJECT AND PROCEDURES GUIDE.

THE CONTRACTOR SHALL PROVIDE THE ENGINEER THE FOLLOWING:

1. A LIST OF MATERIALS USED.
2. COPIES OF ALL IDOT MATERIAL CERTIFICATION ASSOCIATED WITH EACH MATERIAL USED.
3. A SIGNED COPY OF ALL MATERIAL TESTING COMPANY RESULTS ON A WEEKLY BASIS. WEEKLY FIELD REPORTS SHALL BE PROVIDED ON THE APPROPRIATE IDOT FORM.
4. A CERTIFICATION LETTER THAT CERTIFIES COMPLIANCE WITH THE PLANS AND SPECIFICATIONS.

COMMITMENTS

NO TREES GREATER THAN 3'' DIAMETER AT BREAST HEIGHT SHALL BE CLEARED FROM APRIL 1 THROUGH OCTOBER 1.

THE CONTRACTOR SHALL MAINTAIN CONTINUOUS ACCESS TO ALL ENTRANCES WITHIN THE PROJECT LIMITS DURING CONSTRUCTION.

WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED	BRH	REVISED	-
CHECKED	LGN	REVISED	-
DRAWN	BRH	REVISED	-
CHECKED	LGN	REVISED	-

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

INDEX, STANDARDS, GENERAL NOTES, & COMMITMENTS
STRUCTURE NO. 006-8100
SHEET NO. 1 OF 1 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	02
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

FILE = S:\PROJECTS\2015\1160015.Walnut\DESIGN\STRUCT\20.Drawings\1160015_Index & Standards.dgn

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0004	0011
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	22	22	
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	23	23	
20300100	CHANNEL EXCAVATION	CU YD	667		667
20400800	FURNISHED EXCAVATION	CU YD	292	292	
20800150	TRENCH BACKFILL	CU YD	2	2	
25100630	EROSION CONTROL BLANKET	SQ YD	3,209	3,209	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	663	663	
28000305	TEMPORARY DITCH CHECKS	FOOT	84	84	
28000400	PERIMETER EROSION BARRIER	FOOT	1,403	1,403	
28000500	INLET AND PIPE PROTECTION	EACH	1	1	
•30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	1,253	1,253	
31101000	SUBBASE GRANULAR MATERIAL, TYPE B	TON	47	47	
35101400	AGGREGATE BASE COURSE, TYPE B	TON	179	179	
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	3,129	3,129	
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	275	275	
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	210	210	
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	140	140	
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	8	8	
42000070	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB	SQ YD	62	62	
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	58	58	
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	5	5	
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	280	280	
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	200	200	
•50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
50102400	CONCRETE REMOVAL	CU YD	2.4	2.4	
50200100	STRUCTURE EXCAVATION	CU YD	268		268
•50300100	FLOOR DRAINS	EACH	6		6
•50300225	CONCRETE STRUCTURES	CU YD	173.2		173.2
50300255	CONCRETE SUPERSTRUCTURE	CU YD	124.6		124.6
50300260	BRIDGE DECK GROOVING	SQ YD	487		487
50300280	CONCRETE ENCASEMENT	CU YD	6.5		6.5
50300300	PROTECTIVE COAT	SQ YD	628		628
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	90.8		90.8
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	LSUM	1		1
50500505	STUD SHEAR CONNECTORS	EACH	760		760
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	90,490		90,490

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0004	0011
51200957	FURNISHING METAL SHELL PILES 12" X 0.250"	FOOT	690		690
51202305	DRIVING PILES	FOOT	690		690
51203200	TEST PILE METAL SHELLS	EACH	4		4
51500100	NAME PLATES	EACH	1		1
52100505	ANCHOR BOLTS, 5/8"	EACH	20		20
52100520	ANCHOR BOLTS, 1"	EACH	20		20
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	9	9	
△ 56400800	FIRE HYDRANT AND VALVE TO BE MOVED	EACH	1	1	
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	45		45
60223800	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1	
60236800	INLETS, TYPE A, TYPE 11 FRAME AND GRATE	EACH	1	1	
60257900	MANHOLES TO BE RECONSTRUCTED	EACH	5	5	
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	385	385	
△ 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	25	25	
△ 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2	2	
△ 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2	2	
67100100	MOBILIZATION	LSUM	1	1	
△ 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	2	2	
△ 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	435	435	
△ 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	352	352	
△ 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	6	6	
•Z0013798	CONSTRUCTION LAYOUT	LSUM	1		
•Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	156		156
•Z0051400	REMOVING AND RESETTING POSTS	EACH	7	7	
•X2020410	EARTH EXCAVATION (SPECIAL)	CU YD	230	230	
•X2500900	SEEDING, CLASS 1 (SPECIAL)	ACRE	0.57	0.57	
•X2501100	SEEDING, CLASS 3 (SPECIAL)	ACRE	0.10	0.10	
•X2810210	STONE RIPRAP, CLASS A5 (SPECIAL)	TON	1,215		1,215
•X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	106		106
•X6340205	GUARD POSTS REMOVAL	EACH	12	12	
•X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1	1	

•SEE SPECIAL PROVISIONS

△ SPECIALTY ITEMS

WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T. 815-284-3361 DESIGN FIRM #184-000918

DESIGNED - TBS	REVISED -	VILLAGE OF WALNUT MAIN STREET OVER WALNUT DITCH STATION 20+00	SUMMARY OF QUANTITIES STRUCTURE NO. 006-8100 SHEET NO. 1 OF 1 SHEETS
CHECKED - LGN	REVISED -		
DRAWN - TBS	REVISED -		
CHECKED - LGN	REVISED -		

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	03
	WHA* 1160015	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

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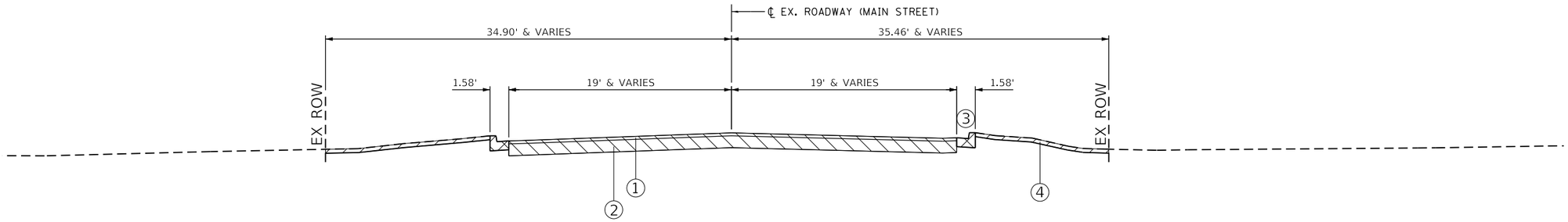


EXISTING TYPICAL SECTION

(MAIN STREET LOOKING NORTH)
STATION 20+34 TO 22+70

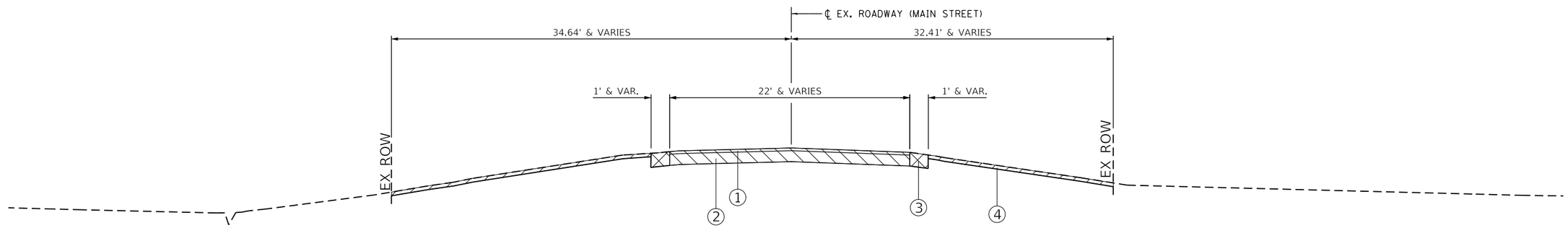
① EXISTING BITUMIOUS SURFACE 3"
(REMOVAL INCLUDED IN EARTH EXCAVATION (SPECIAL))

② EXISTING AGGREGATE BASE
(REMOVAL INCLUDED IN EARTH EXCAVATION (SPECIAL))

③ EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
(COMBINATION CURB AND GUTTER REMOVAL)

④ STRIP 4" TOPSOIL
(REMOVAL INCLUDED IN EARTH EXCAVATION (SPECIAL))

EXISTING BRIDGE STATION 19+66 TO 20+34



EXISTING TYPICAL SECTION

(MAIN STREET LOOKING NORTH)
STATION 17+50 TO 19+66

① EXISTING SEAL COAT
(REMOVAL INCLUDED IN EARTH EXCAVATION (SPECIAL))

② EXISTING AGGREGATE BASE
(REMOVAL INCLUDED IN EARTH EXCAVATION (SPECIAL))

③ AGGREGATE SHOULDER
(REMOVAL INCLUDED IN EARTH EXCAVATION (SPECIAL))

④ STRIP 4" TOPSOIL
(REMOVAL INCLUDED IN EARTH EXCAVATION (SPECIAL))

WILLETT HOFMANN & ASSOCIATES INC
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809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - BRH	REVISED -	
CHECKED - LGN	REVISED -	
DRAWN - BRH	REVISED -	
CHECKED - LGN	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

TYPICAL SECTIONS
STRUCTURE NO. 006-8100
SHEET NO. 1 OF 3 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	04
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

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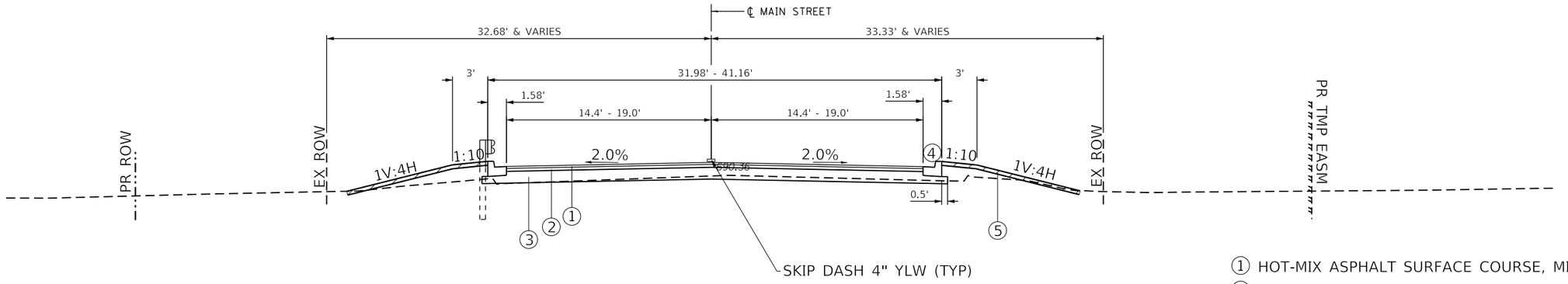


PROPOSED TYPICAL SECTION

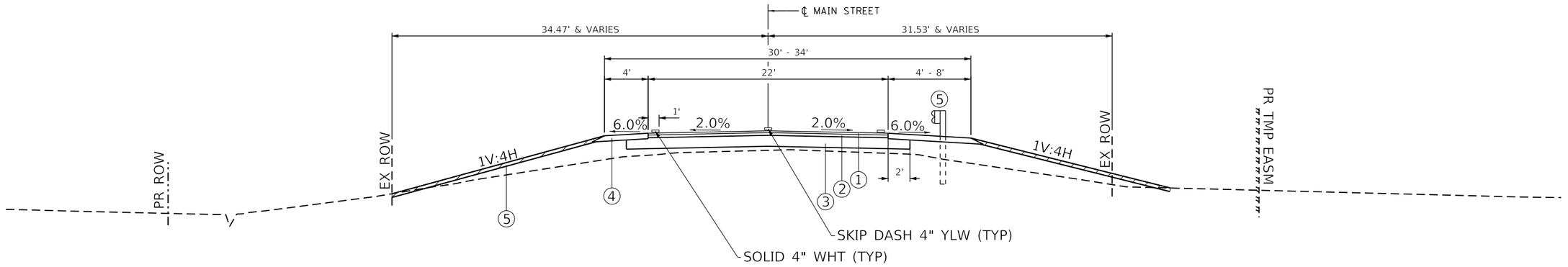
(MAIN STREET LOOKING NORTH)
STATION 20+87.77 TO 22+70

① HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50-2"
② HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50-3"
③ AGGREGATE SUBGRADE IMPROVEMENT 12"
④ COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.12
LOCATED FROM RT. STA. 20+69.43 TO STA. 22+70
LT. STA. 20+86.08 TO STA. 22+70
⑤ RESPREAD 4" EXISTING STRIPPED TOPSOIL
(REMOVAL INCLUDED IN EARTH EXCAVATION (SPECIAL))

BRIDGE OMMISSION STA. 19+22.23 TO 20+77.77

PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB
STA. 19+12.23 TO 19+22.23
STA. 20+77.77 TO 20+87.77

⑤ GUARDRIAL SHALL BE INSTALLED BASED ON FINAL ELEVATION OF PAVEMENT
GUARDRAIL LOCATED FROM:
RT. STA. 18+21.43 TO STA. 19+31.07
LT. STA. 20+68.93 TO STA. 21+78.50



PROPOSED TYPICAL SECTION

(MAIN STREET LOOKING NORTH)
STATION 17+50 TO 19+12.23

① HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50-2"
② HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50-3"
③ AGGREGATE SUBGRADE IMPROVEMENT 12"
④ AGGREGATE SHOULDERS, TYPE B, 6"
⑤ RESPREAD 4" EXISTING STRIPPED TOPSOIL
(REMOVAL INCLUDED IN EARTH EXCAVATION (SPECIAL))

WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - BRH	REVISED -	
CHECKED - LGN	REVISED -	
DRAWN - BRH	REVISED -	
CHECKED - LGN	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

TYPICAL SECTIONS
STRUCTURE NO. 006-8100
SHEET NO. 2 OF 3 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	05
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

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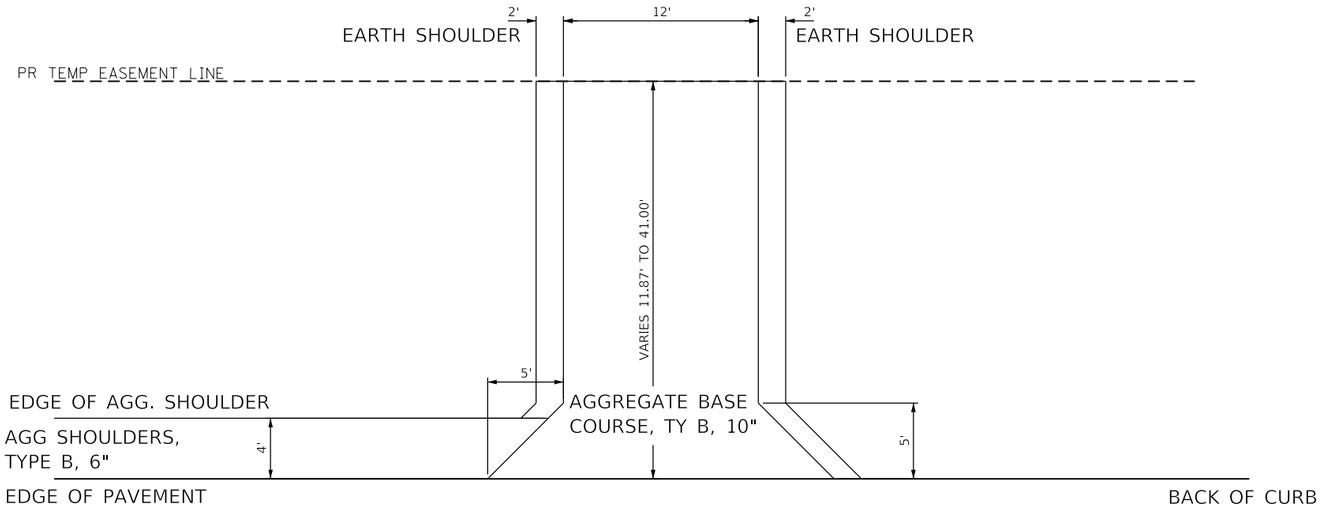


PRIVATE ENTRANCE DETAIL

LT. STA. 18+63, LT. STA. 22+07

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS @ NDES
MAIN STREET PAVEMENT	
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50-2"	4%@50 GYR.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50-3"	4%@50 GYR.
COMMERCIAL ENTRANCE RT. STA. 21+19	
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50-2"	4%@50 GYR.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50-3"	4%@50 GYR.
PAVEMENT CONNECTOR	
PAVT CONNECTOR (HMA) FOR BRIDGE APPR SLAB MIX "C", N50	4%@50 GYR.
PRIVATE ENTRANCE LT. STA. 18+63 & 22+07	
INCIDENTAL HOT-MIX ASPHALT SURFACING 2"	4%@50 GYR.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ. YD./IN.

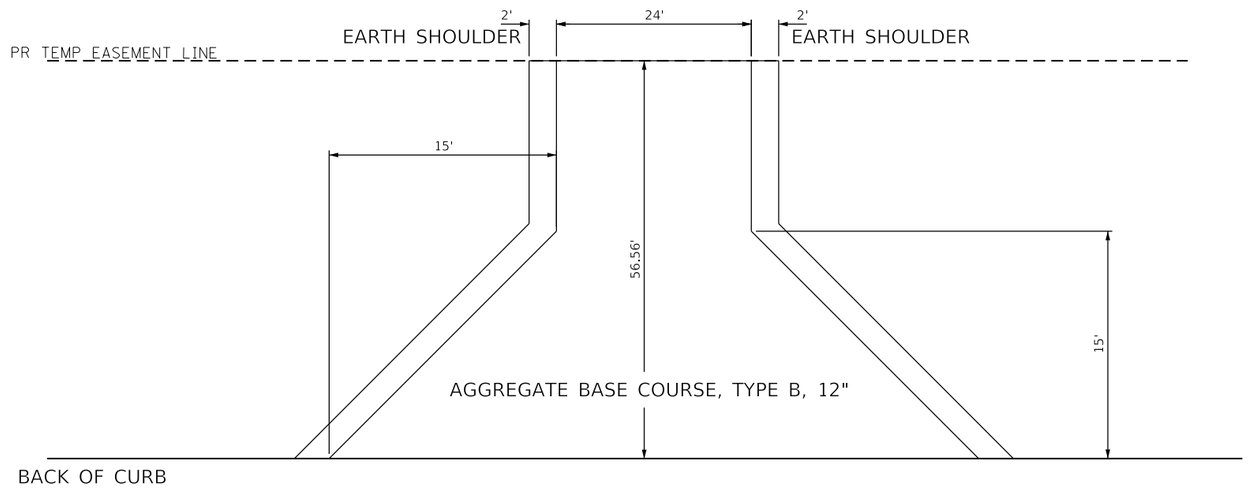
BINDER, SURFACE AND INCIDENTAL - BINDER GRADE PG64-22

BINDER (IL19.0), SURFACE AND INCIDENTAL (IL 9.5) - MIXTURE COMPOSITION

BINDER, SURFACE AND INCIDENTAL - QUALITY MANAGEMENT PROGRAM (QCQA)

BINDER, SURFACE (LR 1030) AND INCIDENTAL (SATISFACTION OF THE ENGINEER) - DENSITY TEST METHOD

BINDER, SURFACE AND INCIDENTAL - SUBLOT SIZE (N/A)



COMMERCIAL ENTRANCE DETAIL

RT. STA. 21+19

WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - BRH	REVISED -	
CHECKED - LGN	REVISED -	
DRAWN - BRH	REVISED -	
CHECKED - LGN	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

TYPICAL SECTIONS
STRUCTURE NO. 006-8100
SHEET NO. 3 OF 3 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	06
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

FILE = S:\PROJECTS\2015\1160D15_Walnut\DESIGN\STRUCTS\2D_Drawings\1160D15_Typical Section.dgn

SCHEDULE OF QUANTITIES

EARTHWORK SCHEDULE

	A	B	C	D	E	F
LOCATION	EARTH EXCAVATION (SPECIAL) X2020410• (CY)	CHANNEL EXCAVATION 20300100 (CY)	(0.5 X B) CHANNEL EXCAVATION REDUCED 50%	(0.75 X (A+C)) EXCAVATION ADJUSTED FOR SHRINKAGE 25%	EMBANKMENT	(E-D) FURNISHED EXCAVATION 20400800 (CY)
MAIN STREET STA. 17+50 TO STA. 22+70	230			173	716	543
WALNUT DITCH STA. 9+00 TO STA. 11+57		667	334	251	0	-251
TOTALS	230	667				292

TREE REMOVAL (OVER 15 UNITS DIAMETER)

STATION	CU. YD.	REMARKS
MAIN STREET		
30' RT 20+85	22	
PROJECT TOTAL	22	
20100210		

REM. AND DISPOSAL OF UNSUITABLE MATERIAL

STATION	UNIT	REMARKS
MAIN STREET		
ENTIRE PROJECT	47	
PROJECT TOTAL	47	
20201200		

TRENCH BACKFILL

STATION	UNIT	REMARKS
MAIN STREET		
LT 21+86	2	12''
PROJECT TOTAL	2	
20800150		

EROSION CONTROL BLANKET

STATION	SQ. YD.	REMARKS
		SEE EROSION CONTROL PLAN
MAIN STREET		
RT 17+50 - 19+40	719	
LT 17+50 - 18+57	272	
LT 18+69 - 20+04	529	
RT 19+95 - 21+07	497	
LT 20+58 - 22+01	277	
RT 21+31 - 22+70	353	
LT 22+13 - 22+39	34	
LT 22+43 - 22+70	35	
WALNUT DITCH		
RT 19+17 - 20+17	311	
LT 19+88 - 20+75	182	
PROJECT TOTAL	3,209	
25100630		

TEMPORARY EROSION CONTROL SEEDING

STATION	POUND	REMARKS
		SEE EROSION CONTROL PLAN
MAIN STREET		
RT & LT 17+50 - 22+70	561	10 APPLICATIONS @ 100 LBS / ACRE
WALNUT DITCH		
RT & LT 19+17 - 20+75	102	10 APPLICATIONS @ 100 LBS / ACRE
PROJECT TOTAL	663	
28000250		

TEMPORARY DITCH CHECKS

STATION	FOOT	REMARKS
		SEE EROSION CONTROL PLAN
MAIN STREET		
RT 19+25	21	
LT 19+75	21	
RT 20+25	21	
LT 20+75	21	
PROJECT TOTAL	84	
28000305		

PERIMETER EROSION BARRIER

STATION	FOOT	REMARKS
		SEE EROSION CONTROL PLAN
MAIN STREET		
RT 17+50 - 22+70	463	
LT 17+50 - 22+70	551	
WALNUT DITCH		
19+35- 20+42	196	
19+52 - 20+57	193	
PROJECT TOTAL	1,403	
28000400		

INLET AND PIPE PROTECTION

STATION	EACH	REMARKS
		SEE EROSION CONTROL PLAN
MAIN STREET		
LT 21+86	1	
PROJECT TOTAL	1	
28000500		

AGGREGATE SUBGRADE IMPROVEMENT 12''

STATION	SQ YD	REMARKS
		SEE SPECIAL PROVISIONS
MAIN STREET		
17+50 - 19+12.23	464	12''
20+87.77 - 22+70	789	12''
PROJECT TOTAL	1,253	
30300112•		

SUBBASE GRANULAR MATERIAL, TYPE B

STATION	TON	REMARKS
MAIN STREET		
ENTIRE PROJECT	47	
PROJECT TOTAL	47	
31101000		

AGGREGATE BASE COURSE, TYPE B

STATION	TON	REMARKS
ENTRANCES		
PEL 18+63	38	10''
CER 21+19	129	12''
PEL 22+07	12	10''
PROJECT TOTAL	179	
35101400		

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VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

SCHEDULE OF QUANTITIES
STRUCTURE NO. 006-8100
SHEET NO. 1 OF 3 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	07
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

FILE = S:\PROJECTS\2015\1160D15_Walnut\DESIGN\STRUCTURE\2D_Drawings\1160D15_Schedule of Quantities.dgn

SCHEDULE OF QUANTITIES

BITUMINOUS MATERIALS (PRIME COAT)

STATION	POUND	REMARKS
MAIN STREET		
17+50 - 19+12.23	884	MAINLINE 0.25 LB/SF 1 APP ON AGG
19+12.23 - 19+22.23	55	PVT CONNECTOR 0.25 LB/SF 1 APP ON AGG
20+77.77 - 20+87.77	84	PVT CONNECTOR 0.25 LB/SF 1 APP ON AGG
20+87.77 - 22+70	1,587	MAINLINE 0.25 LB/SF 1 APP ON AGG
ENTRANCES		
PEL 18+63	129	ENTRANCE 0.25 LB/SF 1 APP ON AGG
CER 21+19	42	ENTRANCE 0.25 LB/SF 1 APP ON AGG
PER 22+07	348	ENTRANCE 0.25 LB/SF 1 APP ON AGG
PROJECT TOTAL	3,129	

40600275

BITUMINOUS MATERIALS (TACK COAT)

STATION	POUND	REMARKS
MAIN STREET		
17+50 - 19+12.23	88	MAINLINE 0.025 LB/SF 1 APP ON BIT
19+12.23 - 19+22.23	11	PVT CONNECTOR 0.025 LB/SF 2 APP ON BIT
20+77.77 - 20+87.77	17	PVT CONNECTOR 0.025 LB/SF 2 APP ON BIT
20+87.77 - 22+70	159	MAINLINE 0.025 LB/SF 1 APP ON BIT
PROJECT TOTAL	275	

40600290

HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50

STATION	TON	REMARKS
MAIN STREET		
17+50 - 19+12.23	66	3"
20+87.77 - 22+70	118	3"
ENTRANCE		
CER 21+19	26	3"
PROJECT TOTAL	210	

40603080

HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50

STATION	TON	REMARKS
MAIN STREET		
17+50 - 19+12.23	44	2"
20+87.77 - 22+70	79	2"
ENTRANCE		
CER 21+19	17	2"
PROJECT TOTAL	140	

40603310

INCIDENTAL HOT-MIX ASPHALT SURFACING

STATION	TON	REMARKS
ENTRANCES		
PEL 18+63	6	2"
PER 22+07	2	2"
PROJECT TOTAL	8	

40800050

PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB

STATION	SQ YD	REMARKS
		SEE STD. 420406
MAIN STREET		
19+12.23 - 19+22.23	24	
20+77.77 - 20+87.77	38	
PROJECT TOTAL	62	

42000070

PORTLAND CEMENT CONCRETE SIDEWALK 5"

STATION	SQ FT	REMARKS
MAIN STREET		
RT 20+49	16	FRISBEE GOLF PAD 4' X 4'
LT 22+41	42	SIDEWALK 4'
PROJECT TOTAL	58	

42400200

DRIVEWAY PAVEMENT REMOVAL

STATION	SQ YD	REMARKS
ENTRANCE		
PER 22+07	5	6"
PROJECT TOTAL	5	

44000200

COMBINATION CURB AND GUTTER REMOVAL REMOVAL

STATION	FOOT	REMARKS
MAIN STREET		
LT 21+22 - 22+70	148	EXISTING B-6.12
RT 21+39 - 22+70	132	EXISTING B-6.12
PROJECT TOTAL	280	

44000500

AGGREGATE SHOULDERS, TYPE B 6"

STATION	SQ YD	REMARKS
MAIN STREET		
RT 17+50 - 19+42	129	6"
LT 17+50 - 18+56	45	6"
LT 18+70 - 19+31	26	6"
PROJECT TOTAL	200	

48101500

CONCRETE REMOVAL

STATION	CU YD	REMARKS
MAIN STREET		
LT 20+33 - 20+48	2.2	8" THICK
RT 20+49	0.2	4" THICK (FRISBEE GOLF PAD)
PROJECT TOTAL	2.4	

50102400

STORM SEWERS, TYPE A, TYPE 1, 12"

STATION	FOOT	REMARKS
MAIN STREET		
LT 21+86	9	AT 1 % SLOPE
PROJECT TOTAL	9	

550A0050

FIRE HYDRANT AND VALVE TO BE MOVED

STATION	EACH	REMARKS
MAIN STREET		
RT 21+60	1	MOVE TO 1:10 SLOPE AREA
PROJECT TOTAL	1	

56400100

MANHOLES, TYPE A, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID

STATION	EACH	REMARKS
		SEE STD. 602406
MAIN STREET		
LT 21+86	1	
PROJECT TOTAL	1	

60223800

INLETS, TYPE A, TYPE 11 FRAME AND GRATE

STATION	EACH	REMARKS
		SEE STD. 602301 & 604051
MAIN STREET		
LT 21+86	1	
PROJECT TOTAL	1	

60236800

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DRAWN	TBS	REVISED	-
CHECKED	LGN	REVISED	-

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

SCHEDULE OF QUANTITIES
STRUCTURE NO. 006-8100
SHEET NO. 2 OF 3 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	08
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

FILE = S:\PROJECTS\2015\1160D15_Walnut\DESIGN\STRUCTURE\2D_Drawings\1160D15_Schedule of Quantities.dgn

SCHEDULE OF QUANTITIES

MANHOLES TO BE RECONSTRUCTED

STATION	EACH	REMARKS
MAIN STREET		
LT 20+71	1	SANITARY
LT 20+83	1	STORM
LT 21+19	1	STORM
LT 21+32	1	STORM
RT 21+46	1	SANITARY
PROJECT TOTAL	5	
60257900		

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12

STATION	FOOT	REMARKS
		SEE PLAN DETAIL 606-4 & STD. 606001
MAIN STREET		
RT 20+69 - 22+70	201	
LT 20+86 - 22+70	184	
PROJECT TOTAL	385	
60603800		

STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS

STATION	FOOT	REMARKS
		SEE STD. 630001
MAIN STREET		
RT 18+72.92 - 18+85.42	12.5	
LT 21+14.57 - 21+27.06	12.5	
PROJECT TOTAL	25	
63000001		

TRAFFIC BARRIER TERMINAL, TYPE 6

STATION	EACH	REMARKS
		SEE STD. 631031
MAIN STREET		
RT 18+85.42 - 19+31.07	1	
LT 20+68.93 - 21+14.57	1	
PROJECT TOTAL	2	
63100085		

TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT

STATION	EACH	REMARKS
		SEE STD. 630301
MAIN STREET		
RT 18+21.43 - 18+72.92	1	
LT 21+27.06 - 21+78.50	1	
PROJECT TOTAL	2	
63100167		

TERMINAL MARKER - DIRECT APPLIED

STATION	EACH	REMARKS
		SEE STD. 725001
MAIN STREET		
RT 18+21.43	1	
LT 21+78.50	1	
PROJECT TOTAL	2	
72501000		

THERMOPLASTIC PAVEMENT MARKING - LINE 4"

STATION	FOOT	REMARKS
		SEE STD. 780001
MAIN STREET		ON BITUMINOUS SURFACE
17+50 - 19+22	40	SKIP DASH CENTERLINE YELLOW
RT 17+50 - 19+16	166	SOLID WHITE EDGE LINE
LT 17+50 - 19+28	179	SOLID WHITE EDGE LINE
20+78 - 22+70	50	SKIP DASH CENTERLINE YELLOW
PROJECT TOTAL	435	
78000200		

POLYUREA PAVEMENT MARKING, TYPE 1 - LINE 4"

STATION	FOOT	REMARKS
		SEE STD. 780001
MAIN STREET		ON CONCRETE PAVEMENT
RT 19+16 - 20+72	156	SOLID WHITE EDGE LINE
19+22 - 20+78	40	SKIP DASH CENTERLINE YELLOW
LT 19+28 - 20+84	156	SOLID WHITE EDGE LINE
PROJECT TOTAL	352	
78008210		

GUARDRAIL REFLECTORS, TYPE A

STATION	EACH	REMARKS
		SEE STD. 782006
MAIN STREET		
RT 18+21.43 - 20+54.07	3	80' CENTERS
LT 19+45.93 - 21+78.50	3	80' CENTERS
PROJECT TOTAL	6	
78200005		

SEEDING, CLASS 1 (SPECIAL)

STATION	ACRE	REMARKS
		SEE SPECIAL PROVISIONS
MAIN STREET		
RT 17+50 - 22+70	0.24	
LT 17+50 - 22+70	0.33	
PROJECT TOTAL	0.57	
X2500900*		

SEEDING, CLASS 3 (SPECIAL)

STATION	ACRE	REMARKS
		SEE SPECIAL PROVISIONS
WALNUT DITCH		
RT 19+17 - 20+17	0.06	
LT 19+88 - 20+75	0.04	
PROJECT TOTAL	0.10	
X2501100*		

GUARD POST REMOVAL

STATION	EACH	REMARKS
		SEE SPECIAL PROVISIONS
MAIN STREET		
RT STA 19+40	1	
RT STA 19+47	1	
RT STA 19+53	1	
RT STA 19+57	1	
RT STA 19+63	1	
RT STA 19+69	1	
RT STA 20+28	1	
RT STA 20+33	1	
RT STA 20+37	1	
RT STA 20+42	1	
RT STA 20+48	1	
RT STA 20+53	1	
PROJECT TOTAL	12	
X6340205*		

REMOVING AND RESETTING POSTS

STATION	EACH	REMARKS
		SEE SPECIAL PROVISIONS
MAIN STREET		
RT 21+36 - 21+41	7	
PROJECT TOTAL	7	
Z0051400*		

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VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

SCHEDULE OF QUANTITIES
STRUCTURE NO. 006-8100
SHEET NO. 3 OF 3 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	09
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

FILE = S:\PROJECTS\2015\1160D15_Walnut\DESIGN\STRUCTURE\Drawings\1160D15_Schedule of Quantities.dgn

PROP CURVE 100
PI STA 17+04.99
Δ = 97° 30' 43" (LT)
D = 60° 18' 41"
R = 95.00'
T = 108.35'
L = 161.68'
E = 49.10'
e = -----
T.R. = -----
S.E. RUN = -----
PC STA 15+96.64
PT STA 17+58.32

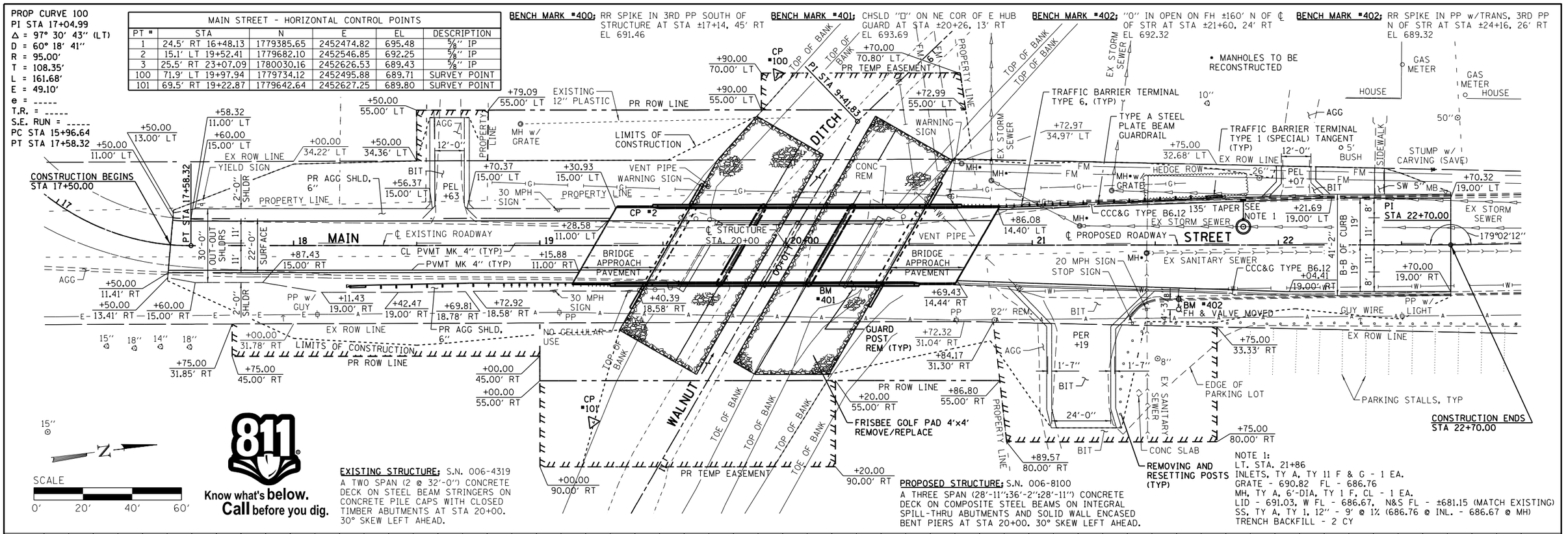
MAIN STREET - HORIZONTAL CONTROL POINTS					
PT #	STA	N	E	EL	DESCRIPTION
1	24.5' RT 16+48.13	1779385.65	2452474.82	695.48	⅝" IP
2	15.1' LT 19+52.41	1779682.10	2452546.85	692.25	⅝" IP
3	25.5' RT 23+07.09	1780030.16	2452626.53	689.43	⅝" IP
100	71.9' LT 19+97.94	1779734.12	2452495.88	689.71	SURVEY POINT
101	69.5' RT 19+22.87	1779642.64	2452627.25	689.80	SURVEY POINT

BENCH MARK #400: RR SPIKE IN 3RD PP SOUTH OF STRUCTURE AT STA ±17+14, 45' RT EL 691.46

BENCH MARK #401: CHSLD "□" ON NE COR OF E HUB GUARD AT STA ±20+26, 13' RT EL 693.69

BENCH MARK #402: "O" IN OPEN ON FH ±160' N OF ℄ OF STR AT STA ±21+60, 24' RT EL 692.32

BENCH MARK #402: RR SPIKE IN PP w/TRANS, 3RD PP N OF STR AT STA ±24+16, 26' RT EL 689.32



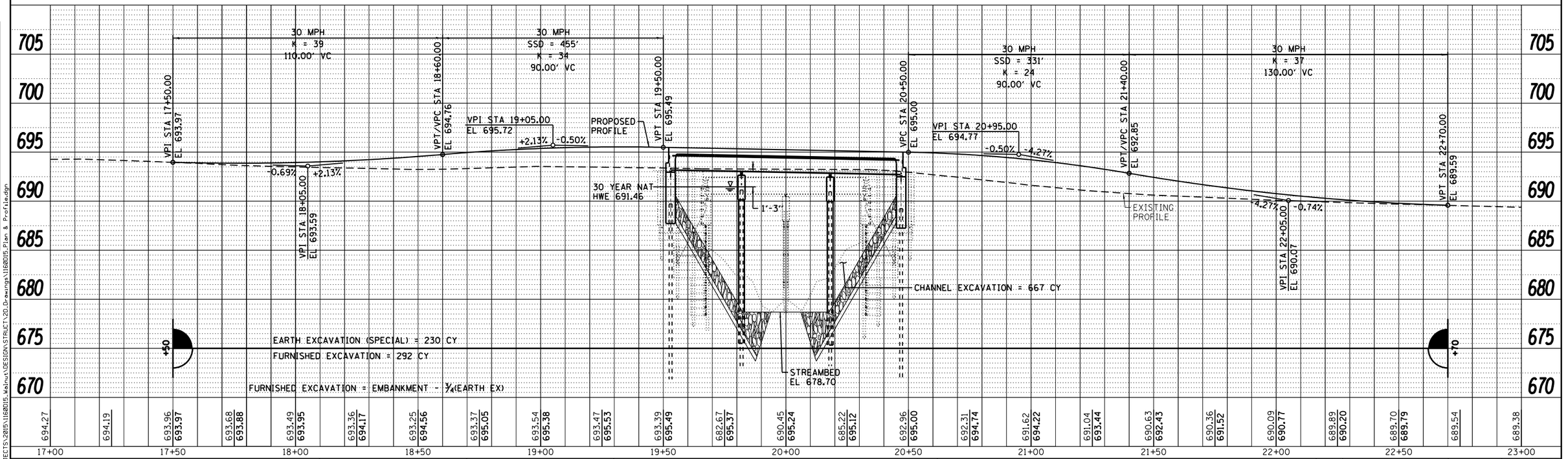
EXISTING STRUCTURE: S.N. 006-4319
A TWO SPAN (2 @ 32'-0") CONCRETE DECK ON STEEL BEAM STRINGERS ON CONCRETE PILE CAPS WITH CLOSED TIMBER ABUTMENTS AT STA 20+00. 30° SKEW LEFT AHEAD.

PROPOSED STRUCTURE: S.N. 006-8100
A THREE SPAN (28'-11";36'-2";28'-11") CONCRETE DECK ON COMPOSITE STEEL BEAMS ON INTEGRAL SPILL-THRU ABUTMENTS AND SOLID WALL ENCASED BENT PIERS AT STA 20+00. 30° SKEW LEFT AHEAD.

NOTE 1:
LT. STA. 21+86
INLETS, TY A, TY 11 F & G - 1 EA.
GRATE - 690.82 FL - 686.76
MH, TY A, 6'-DIA, TY 1 F, CL - 1 EA.
LID - 691.03, W FL - 686.67, N&S FL - ±681.15 (MATCH EXISTING)
SS, TY A, TY 1, 12" - 9' @ 1% (686.76 @ INL. - 686.67 @ MH)
TRENCH BACKFILL - 2 CY

SCALE 0' 20' 40' 60'

Know what's **below.** **Call** before you dig.



DESIGNED - LGN	REVISED -	VILLAGE OF WALNUT MAIN STREET OVER WALNUT DITCH STATION 20+00	PLAN & PROFILE
CHECKED - PLP	REVISED -		SCALE: 1" = 20'-0" SHEET NO. 1 OF 1 SHEETS STA. 17+00.00 TO STA. 23+00.00
DRAWN - RDA	REVISED -		
CHECKED - PLP	REVISED -		

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6050A	13-00019-00-BR	BUREAU	45	10
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, RT. OF WAY CHECKED, CADD FILE NAME; NOTE BOOK, NO.; DATE, BY
PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, B.M. NOTED, STRUCTURE NOTATNS CHKD; NOTE BOOK, NO.; DATE, BY

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N

SCALE: 1"=20'

0' 20' 40' 60'

EX R.O.W. LINE

PR R.O.W. LINE

PR TEMP. EASEMENT

+50.00 55.00' LT

+50.00 34.36' LT

+79.09 55.00' LT

+90.00 70.00' LT

+90.00 55.00' LT

+90.00 70.00' LT

+90.00 55.00' LT

P.E.L. +63

P.E.L. +07

2'-0" SHLDR

30'-0" OUT TO OUT SHLDRS

11' 11'

22'-0" SURFACE

(MAIN STREET)

℄ PROPOSED ROADWAY

℄ EX ROADWAY

CONSTRUCTION BEGINS STA. 17+50.00

CONSTRUCTION ENDS STA. 22+70.00

SIDEWALK

B-B OF CURB 49'

41'-2"

8' 11' 11' 8'

+75.00 31.85' RT

+75.00 45.00' RT

+00.00 45.00' RT

+00.00 55.00' RT

+00.00 90.00' RT

+20.00 55.00' RT

+20.00 90.00' RT

+84.17 31.30' RT

+86.80 55.00' RT

+89.57 80.00' RT

+75.00 33.33' RT

+75.00 80.00' RT

C.E.R. +19

20+00

10+00

WALNUT DITCH

NOTE
TEMPORARY EROSION CONTROL SEEDING
AT ALL SEEDING LOCATIONS

LEGEND

- SEEDING, CLASS 1 (SPECIAL) & EROSION CONTROL BLANKET
- SEEDING, CLASS 3 (SPECIAL) & EROSION CONTROL BLANKET
- STONE RIPRAP, CLASS A5 & FILTER FABRIC
- TEMPORARY DITCH CHECKS
- RUNOFF FLOW DIRECTION
- PERIMETER EROSION BARRIER
- INLET & PIPE PROTECTION

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DRAWN - BRH	REVISED -	
CHECKED - LGN	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

EROSION CONTROL SHEET
STRUCTURE NO. 006-8100
SHEET NO. 1 OF 2 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	11
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

STORM WATER POLLUTION PREVENTION PLAN

THE FOLLOWING PLAN IS ESTABLISHED AND INCORPORATED IN THE PROJECT TO DIRECT THE CONTRACTOR IN THE PLACEMENT OF TEMPORARY EROSION CONTROL SYSTEMS AND TO PROVIDE A STORM SEWER WATER POLLUTION PREVENTION PLAN FOR COMPLIANCE UNDER NPDES.

THE PURPOSE OF THIS PLAN IS TO MINIMIZE EROSION WITHIN THE CONSTRUCTION SITE AND TO LIMIT SEDIMENTS FROM LEAVING THE CONSTRUCTION SITE BY UTILIZING PROPER TEMPORARY EROSION CONTROL SYSTEMS AND PROVIDING GROUND COVER WITHIN A REASONABLE AMOUNT OF TIME.

CERTAIN EROSION CONTROL FACILITIES SHALL BE INSTALLED BY THE CONTRACTOR AT THE BEGINNING OF CONSTRUCTION. OTHER ITEMS SHALL BE INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER ON A CASE BY CASE SITUATION DEPENDING ON THE CONTRACTOR'S SEQUENCE OF ACTIVITIES, TIME OF YEAR, AND EXPECTED WEATHER CONDITIONS.

THE CONTRACTOR SHALL INSTALL PERMANENT EROSION CONTROL SYSTEMS AND SEEDING WITHIN A TIME FRAME SPECIFIED HEREIN AND AS DIRECTED BY THE ENGINEER, THEREFORE MINIMIZING THE AMOUNT OF AREA SUSCEPTIBLE TO EROSION AND REDUCING THE AMOUNT OF TEMPORARY SEEDING. THE ENGINEER WILL DETERMINE IF ANY TEMPORARY EROSION CONTROL SYSTEMS SHOWN IN THE PLAN CAN BE DELETED AND IF ANY ADDITIONAL TEMPORARY EROSION CONTROL SYSTEMS, WHICH ARE NOT INCLUDED IN THIS PLAN, SHALL BE ADDED. THE CONTRACTOR SHALL PERFORM ALL WORK AS DIRECTED BY THE ENGINEER AND AS SHOWN IN STANDARD 280001 OF THE PLANS.

SECTION 280, TEMPORARY EROSION CONTROL, OF THE STANDARD SPECIFICATIONS ADDITIONALLY SUPPLEMENTS THIS PLAN.

SITE DESCRIPTION
DESCRIPTION OF CONSTRUCTION ACTIVITY;

1. THE PROJECT CONSISTS OF A BRIDGE REPLACEMENT ON SOUTH MAIN STREET (M.S. 6050A) OVER THE WALNUT DITCH & APPROACH ROADWAY WORK THERETO.

2. CONSTRUCTION INCLUDES PAVEMENT REMOVAL, EARTH EXCAVATION, CHANNEL EXCAVATION, VARIOUS PAVEMENT ITEMS, BRIDGE & CULVERT ITEMS AND OTHER MISCELLANEOUS ITEMS OF CONSTRUCTION.

DESCRIPTION OF INTENDED SEQUENCE FOR MAJOR CONSTRUCTION ACTIVITIES WHICH WILL DISTURB SOILS FOR MAJOR PORTIONS OF THE CONSTRUCTION SITE;

1. INSTALL PERIMETER EROSION BARRIER AS DIRECTED BY THE ENGINEER.
2. STRUCTURE REMOVAL AND CHANNEL EXCAVATION.
3. BRIDGE CONSTRUCTION.
4. EARTH EXCAVATION AND PLACEMENT OF TEMPORARY DITCH CHECKS.
5. AGGREGATE BASE, BITUMINOUS SURFACE AND RELATED APPURTENANCES.
6. PLACEMENT OF PERMANENT EROSION CONTROL INCLUDING SEEDING, AND EROSION CONTROL BLANKET.

AREA OF CONSTRUCTION SITE;

THE TOTAL AREA OF THE CONSTRUCTION SITE IS ESTIMATED TO BE 1.22 ACRES OF WHICH 0.67 ACRES WILL BE DISTURBED BY EXCAVATION, GRADING, AND OTHER ACTIVITIES.

OTHER REPORTS, STUDIES AND PLANS WHICH AID IN THE DEVELOPMENT OF THE STORM WATER POLLUTION PREVENTION PLAN AS REFERENCED DOCUMENTS;

1. INFORMATION OF THE SOILS AND TERRAIN WITHIN THE SITE WAS OBTAINED FROM SOIL BORINGS THAT WERE UTILIZED FOR THE DEVELOPMENT OF THE PROPOSED TEMPORARY EROSION CONTROL SYSTEMS.

2. PROJECT PLAN DOCUMENTS, SPECIFICATIONS AND SPECIAL PROVISIONS, AND PLAN DRAWINGS INDICATING DRAINAGE PATTERNS AND APPROXIMATE SLOPES ANTICIPATED AFTER GRADING ACTIVITIES WERE UTILIZED FOR THE PROPOSED PLACEMENT OF THE TEMPORARY EROSION CONTROL SYSTEMS.

DRAINAGE TRIBUTARIES AND SENSITIVE AREAS RECEIVING RUNOFF FROM THIS CONSTRUCTION SITE;

THE WALNUT DITCH.

CONTROLS - EROSION CONTROLS AND SEDIMENT CONTROL
DESCRIPTION OF STABILIZATION PRACTICES AT THE BEGINNING OF CONSTRUCTION,

1. THE DRAWINGS, SPECIFICATIONS AND SPECIAL PROVISIONS WILL ENSURE THAT EXISTING VEGETATION IS PRESERVED WHERE ATTAINABLE AND DISTURBED PORTIONS OF THE SITE WILL BE STABILIZED. STABILIZATION PRACTICES INCLUDE: TEMPORARY SEEDING, PERMANENT SEEDING, PERIMETER EROSION BARRIER, AND OTHER APPROPRIATE MEASURES AS DIRECTED BY THE ENGINEER. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

   (A) AREAS OF EXISTING VEGETATION (WOOD AND GRASSLANDS) OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE IDENTIFIED BY THE ENGINEER FOR PRESERVING AND SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES.

   (B) DEAD, DISEASED, OR UNSUITABLE VEGETATION WITHIN THE SITE SHALL BE REMOVED AS DIRECTED BY THE ENGINEER, ALONG WITH REQUIRED TREE REMOVAL.

   (C) AS SOON AS REASONABLE ACCESS IS AVAILABLE TO ALL LOCATIONS WHERE WATER DRAINS AWAY FROM THE PROJECT, TEMPORARY DITCH CHECKS AND PERIMETER EROSION BARRIER SHALL BE INSTALLED AS CALLED OUT IN THIS PLAN AND DIRECTED BY THE ENGINEER.

   (D) BARE AND SPARSELY VEGETATED GROUND IN HIGHLY ERODIBLE AREAS AS DETERMINED BY THE ENGINEER SHALL BE TEMPORARILY SEEDED AT THE BEGINNING OF CONSTRUCTION WHERE NO CONSTRUCTION ACTIVITIES ARE EXPECTED WITHIN 7 DAYS.

   (E) AT LOCATIONS WHERE A SIGNIFICANT AMOUNT OF WATER DRAINS INTO THE CONSTRUCTION ZONE FROM OUTSIDE AREAS (ADJACENT LANDOWNERS), TEMPORARY DITCH CHECKS WILL BE UTILIZED TO LOCALLY DIVERT WATER, REDUCE FLOW RATES, AND COLLECT OUTSIDE SILTATION INSIDE THE RIGHT-OF-WAY LINE.

2. ESTABLISHMENT OF THESE TEMPORARY EROSION CONTROL MEASURES WILL HAVE ADDITIONAL BENEFITS TO THE PROJECT. DESIRABLE GRASS SEED WILL BECOME ESTABLISHED IN THESE AREAS AND WILL SPREAD SEEDS ONTO THE CONSTRUCTION SITE UNTIL PERMANENT SEEDING/MOWING AND OVER SEEDING CAN BE COMPLETED.

DESCRIPTION OF STABILIZATION PRACTICES DURING CONSTRUCTION;

1. DURING CONSTRUCTION, AREAS OUTSIDE THE CONSTRUCTION LIMITS AS OUTLINED PREVIOUSLY HEREIN SHALL BE PROTECTED. THE CONTRACTOR SHALL NOT USE THIS AREA FOR STAGING (EXCEPT AS DESCRIBED ON THE PLANS AND DIRECTED BY THE ENGINEER), PARKING OF VEHICLES OR CONSTRUCTION EQUIPMENT, STORAGE OF MATERIALS, OR OTHER CONSTRUCTION RELATED ACTIVITIES.

   (A) WITHIN THE CONSTRUCTION LIMITS, AREAS WHICH MAY BE SUSCEPTIBLE TO EROSION AS DETERMINED BY THE ENGINEER SHALL REMAIN UNDISTURBED UNTIL FULL SCALE CONSTRUCTION IS UNDERWAY TO PREVENT UNNECESSARY SOIL EROSION.

   (B) EARTH STOCKPILES SHALL BE TEMPORARILY SEEDED IF THEY ARE TO REMAIN UNUSED FOR MORE THAN 14 DAYS.

   (C) AS CONSTRUCTION PROCEEDS, THE CONTRACTOR SHALL INSTITUTE THE FOLLOWING AS DIRECTED BY THE ENGINEER:

      I. PLACE TEMPORARY EROSION CONTROL FACILITIES AT LOCATIONS SHOWN ON THE PLANS.

      II. TEMPORARILY SEED ERODIBLE BARE EARTH ON A WEEKLY BASIS TO MINIMIZE THE AMOUNT OF ERODIBLE SURFACE AREA WITHIN THE CONTRACT LIMITS.

   (D) EXCAVATED AREAS AND EMBANKMENT SHALL BE PERMANENTLY SEEDED IMMEDIATELY AFTER FINAL GRADING. IF NOT, THEY SHALL BE TEMPORARILY SEEDED IF NO CONSTRUCTION ACTIVITY IN THE AREA IS PLANNED FOR 7 DAYS.

   (E) CONSTRUCTION EQUIPMENT SHALL BE STORED AND FUELED ONLY AT DESIGNATED LOCATIONS. ALL NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OR OTHER POLLUTANT IN ACCORDANCE WITH EPA WATER QUALITY REGULATIONS. LEAKING EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE.

   (F) THE RESIDENT ENGINEER SHALL INSPECT THE PROJECT DAILY DURING CONSTRUCTION ACTIVITIES. INSPECTION SHALL ALSO BE DONE WEEKLY AND AFTER RAINS OF 1/2 INCH OR GREATER OR EQUIVALENT SNOWFALL DURING THE WINTER SHUTDOWN PERIOD. THE PROJECT SHALL ADDITIONALLY BE INSPECTED BY THE CONSTRUCTION FIELD ENGINEER ON A BI-WEEKLY BASIS TO DETERMINE THAT EROSION CONTROL EFFORTS ARE IN PLACE AND EFFECTIVE AND IF OTHER EROSION CONTROL WORK IS NECESSARY.

   (G) SEDIMENT COLLECTED DURING CONSTRUCTION OF THE VARIOUS TEMPORARY EROSION CONTROL SYSTEMS SHALL BE DISPOSED OF ON THE SITE ON A REGULAR BASIS AS DIRECTED BY THE ENGINEER. THE COST OF THIS MAINTENANCE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR VARIOUS TEMPORARY EROSION CONTROL PAY ITEMS.

   (H) THE TEMPORARY EROSION CONTROL SYSTEMS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AFTER USE IS NO LONGER NEEDED OR NO LONGER FUNCTIONING. THE COST OF THIS REMOVAL SHALL BE INCLUDED IN THE UNIT BID PRICE FOR VARIOUS TEMPORARY EROSION CONTROL PAY ITEMS.

DESCRIPTION OF STRUCTURAL PRACTICES AFTER FINAL GRADING

1. TEMPORARY EROSION CONTROL SYSTEMS SHALL BE LEFT IN PLACE WITH PROPER MAINTENANCE UNTIL PERMANENT EROSION CONTROL IS IN PLACE AND WORKING PROPERLY AND ALL PROPOSED TURF AREAS SEEDED AND ESTABLISHED.

2. ONCE PERMANENT EROSION CONTROL SYSTEMS AS PROPOSED IN THE PLANS ARE FUNCTIONAL AND ESTABLISHED, TEMPORARY ITEMS SHALL BE REMOVED, CLEANED UP, AND DISTURBED TURF RESEEDED.

MAINTENANCE AFTER CONSTRUCTION

1. CONSTRUCTION IS COMPLETE AFTER ACCEPTANCE BY THE ENGINEER'S FINAL INSPECTION. MAINTENANCE UP TO THIS DATE WILL BE BY THE CONTRACTOR.

MISCELLANEOUS

ALL EROSION CONTROL PRODUCTS FURNISHED SHALL BE SPECIFICALLY RECOMMENDED BY THE MANUFACTURER FOR THE USE SPECIFIED IN THE EROSION CONTROL PLAN. PRIOR TO THE APPROVAL AND USE OF THE PRODUCT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A NOTARIZED CERTIFICATION BY THE PRODUCER STATING THE INTENDED USE OF THE PRODUCT AND THAT THE PHYSICAL PROPERTIES REQUIRED FOR THIS APPLICATION ARE MET OR EXCEEDED. THE CONTRACTOR SHALL PROVIDE MANUFACTURER INSTALLATION PROCEDURES TO FACILITATE THE ENGINEER IN CONSTRUCTION INSPECTION.

EROSION CONTROL NOTES

TEMPORARY EROSION CONTROL SEEDING SHALL BE APPLIED AT A RATE OF 100 LBS. /ACRES.

EROSION CONTROL BLANKET SHALL BE INSTALLED TO ALL DISTURBED AREAS WITH SLOPES EQUAL TO OR GREATER THAN 1V:5H AND IN CRITICAL AREAS (I.E. DETENTION BASIN PERIMETERS, STREAMBANKS, BERMS, ETC.) IMMEDIATELY UPON FINAL GRADING.

ALL ADJACENT STREETS MUST BE KEPT CLEAR OF DEBRIS, INSPECTED DAILY AND CLEANED WHEN NECESSARY.

ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE REFERENCED FROM THE ILLINOIS URBAN MANUAL.

TEMPORARY DITCH CHECKS SHALL COMPLY WITH SECTION 280 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STANDARD 280001 LOCATED IN THE PROPOSAL.

EROSION CONTROL BLANKET SHALL BE PLACED IN DITCHES AS SHOWN ON THIS EROSION CONTROL PLAN SHEET AND IN ACCORDANCE WITH SECTION 251 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

THE USE OF GREEN DYE IN THE EROSION CONTROL BLANKET IS NOT ACCEPTABLE.

THE USE OF ASPHALT AS A BINDER IS NOT ACCEPTABLE.

ALL ITEMS SHALL BE CONSTRUCTED AS SHOWN ON STANDARD 280001 AND AS DIRECTED BY THE ENGINEER. MAINTENANCE AND CLEANING OF THE EROSION CONTROL ITEMS SHALL BE INCLUDED IN THE RESPECTIVE EROSION CONTROL PAY ITEM.

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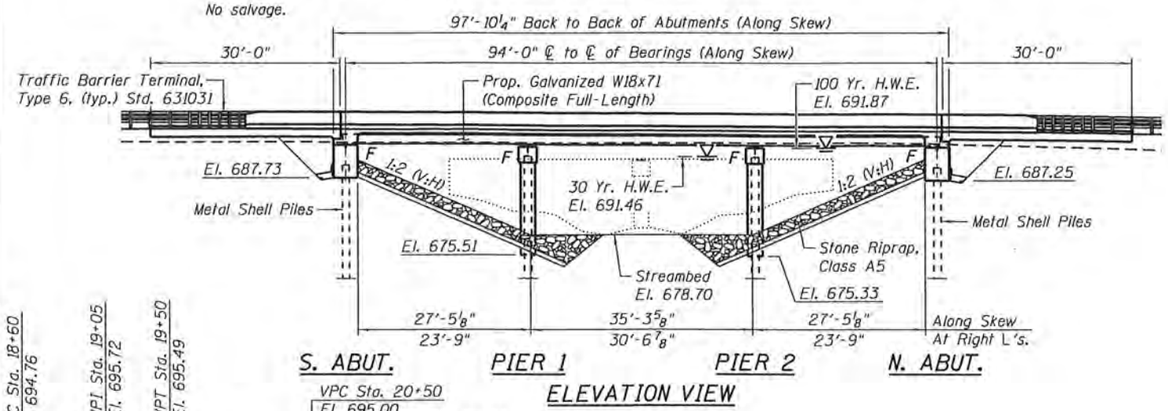
WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - BRH	REVISED -	VILLAGE OF WALNUT MAIN STREET OVER WALNUT DITCH STATION 20+00	EROSION CONTROL SHEET STRUCTURE NO. 006-8100 SHEET NO. 2 OF 2 SHEETS
CHECKED - LGN	REVISED -		
DRAWN - BRH	REVISED -		
CHECKED - LGN	REVISED -		

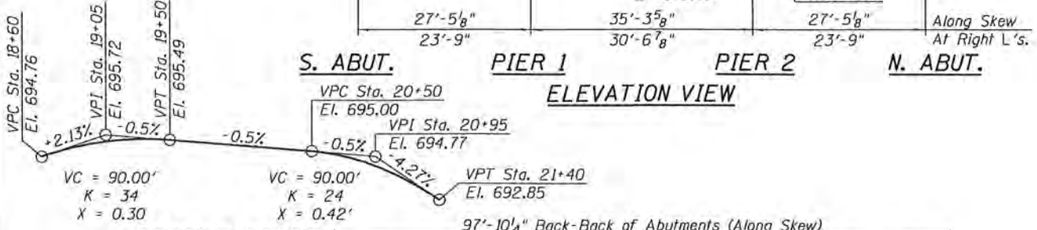
M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	12
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

EXISTING STRUCTURE: S.N. 006-4319 built in 1953 under Walnut Twp. at Sta. 1+50.00 as a two span (2 @ 32'-0") skewed 30° Lt. Ahead reinforced concrete deck bridge on steel 21WF beams on concrete pile caps. The structure is supported on creosoted timber piles with closed timber abutments. 68'-7½" back-to-back of abutments and 26'-0" out to out of deck. The existing structure is to be removed and replaced.

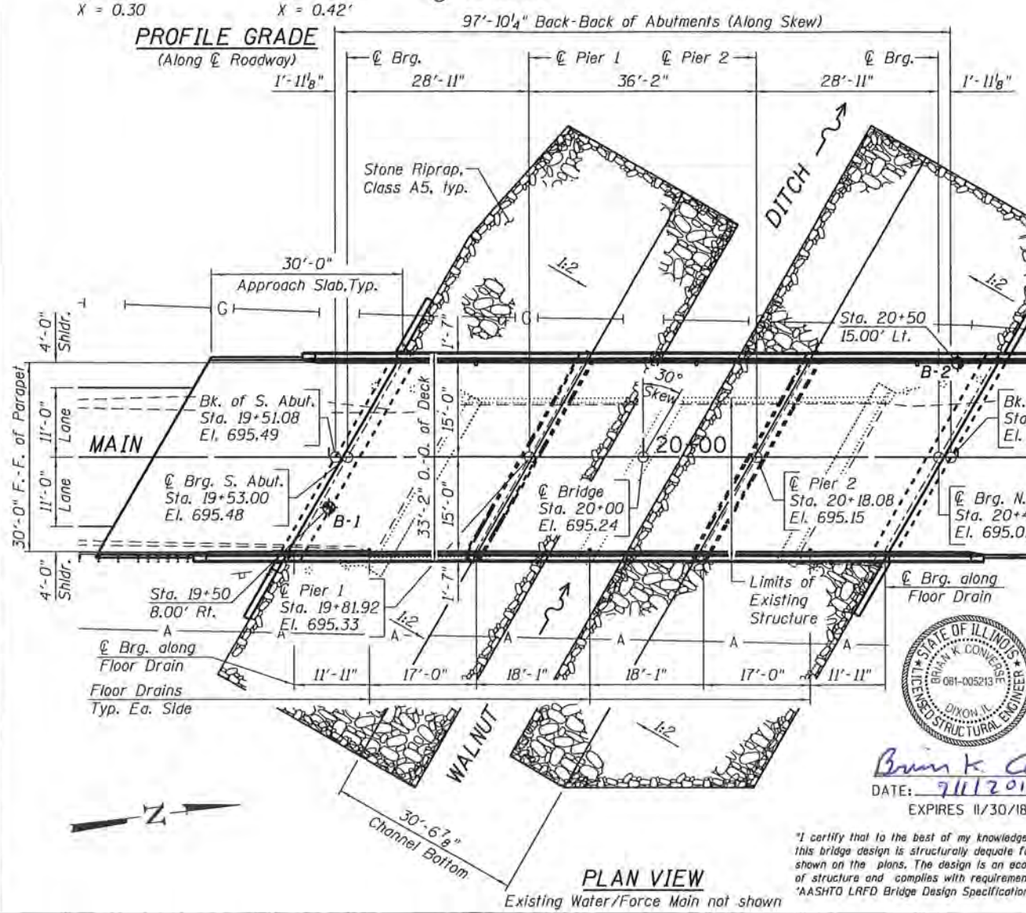
No salvage.



ELEVATION VIEW



PROFILE GRADE
(Along ℄ Roadway)



PLAN VIEW
Existing Water/Force Main not shown

STATE OF ILLINOIS — BRIAN K. CONNER — 081-005213 — LICENSED STRUCTURAL ENGINEER — DIXON, IL

Brian K. Conner
DATE: 7/12/2017
EXPIRES 11/30/18

"I certify that to the best of my knowledge, information and belief, this bridge design is structurally dequate 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"."

BENCH MARK: Chiseled "□" in Northeast Corner Hubguard, Elev. 693.69

INDEX OF SHEETS

GENERAL NOTES:

Fasteners shall be ASTM A325 Type 3, mechanically galvanized bolts. Bolts ⅞" ϕ, holes ¹⁵⁄₁₆" ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 45,600 lbs.

All structural steel shall be AASHTO M 270 Grade 50.

** All structural steel shall be galvanized per ASTM A123/A123M-13 and AASHTO M111. See Special Provisions for Hot-Dip Galvanizing for Structural Steel.

Painting of galvanized structural steel is **NOT** specified for this project.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of ⅛" (0.01'). Adjustment shall be made either by grinding the surface or by shimming the bearings.

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

WALNUT DITCH
BUILT 2018 BY
VILLAGE OF WALNUT
SEC. 13-00019-00-BR
M.S. RTE. 6050A STA. 20+00
STR. NO. 006-8100 LOADING HL93

NAME PLATE
See Std. 515001

DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2016 Interims

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
f'c = 4,000 psi (Superstructure Concrete)
fy = 50,000 psi (Structural Steel)
fy = 60,000 psi (Reinforcement)

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.092
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.15
Soil Site Class = D

TOTAL BILL OF MATERIAL

	ITEM	UNIT	SUPER	SUB	TOTAL
	Channel Excavation	Cu. Yd.	———	667	667
*	Removal of Existing Structures	Each	———	———	1
	Structure Excavation	Cu. Yd.	———	268	268
*	Floor Drains	Each	6	———	6
*	Concrete Structures	Cu. Yd.	———	173.2	173.2
	Concrete Superstructure	Cu. Yd.	124.6	———	124.6
	Bridge Deck Grooving	Sq. Yd.	487	———	487
	Concrete Encasement	Cu. Yd.	———	6.5	6.5
	Protective Coat	Sq. Yd.	628	———	628
	Concrete Superstructure (Approach Slab)	Cu. Yd.	90.8	———	90.8
**	Furnishing and Erecting Structural Steel	L. Sum	1	———	1
	Stud Shear Connectors	Each	760	———	760
	Reinforcement Bars, Epoxy Coated	Pound	65,510	24,980	90,490
	Furnishing Metal Shell Piles 12"x0.250"	Foot	———	690	690
	Driving Piles	Foot	———	690	690
	Test Pile - Metal Shells	Each	———	4	4
	Name Plates	Each	1	———	1
	Anchor Bolts, ⅝"	Each	20	———	20
	Anchor Bolts, 1"	Each	20	———	20
	Geocomposite Wall Drain	Sq. Yd.	———	45	45
*	Pipe Underdrains for Structures 4"	Foot	———	156	156
*	Stone Riprap, Class A5 (Special)	Ton	———	1,215	1,215
*	Granular Backfill for Structures	Cu. Yd.	———	106	106

*See Special Provisions

WATERWAY INFORMATION

Drain. Area = 14.5 sq. mi. Low Grade El. 680.90 @ Sta. 23+42.23

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Overtopping (EX)	20	1,792	442.2	633.3	691.08	1.27	0.48	692.35	691.58
Overtopping (PR)	20	1,792	442.2	633.3	691.08	1.27	0.48	692.35	691.58
Design	30	4,400	442.2	661.9	691.46	1.73	0.22	693.19	691.69
Base	100	6,229	442.2	734.0	692.46	0.48	0.12	692.94	692.58
Scour Check	200	7,450	442.2	766.6	693.00	0.46	0.12	693.47	693.11
Max. Calc.	500	9,300	442.2	768.2	693.69	0.30	0.30	694.00	693.99

BRIDGE DESIGN SCOUR ELEVATION TABLE

Event / Limit State	Design Scour Elevations (ft.) S. Abut.	Pier #1	Pier #2	N. Abut.	Item 113
0100	-	677.46	677.38	-	B
0200	-	677.46	677.38	-	
Design	687.73	676.20	676.20	687.76	
Check	687.73	676.20	676.20	687.76	

Range 8 E, 4th P.M.

LOCATION SKETCH

GENERAL PLAN AND ELEVATION
MAIN STREET OVER WALNUT DITCH
SEC. 13-00019-00-BR
VILLAGE OF WALNUT
STATION 20+00
STRUCTURE NO. 006-8100

WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0357
T: 815-284-3381 DESIGN FIRM: #184-000915

DESIGNED	PLP	REVISED -
CHECKED	BKC	REVISED -
DRAWN	RDA	REVISED -
CHECKED	BKC	REVISED -

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 006-8100
STRUCTURAL SHEET NO. 1 OF 21 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	13
	WHA* 1160015	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

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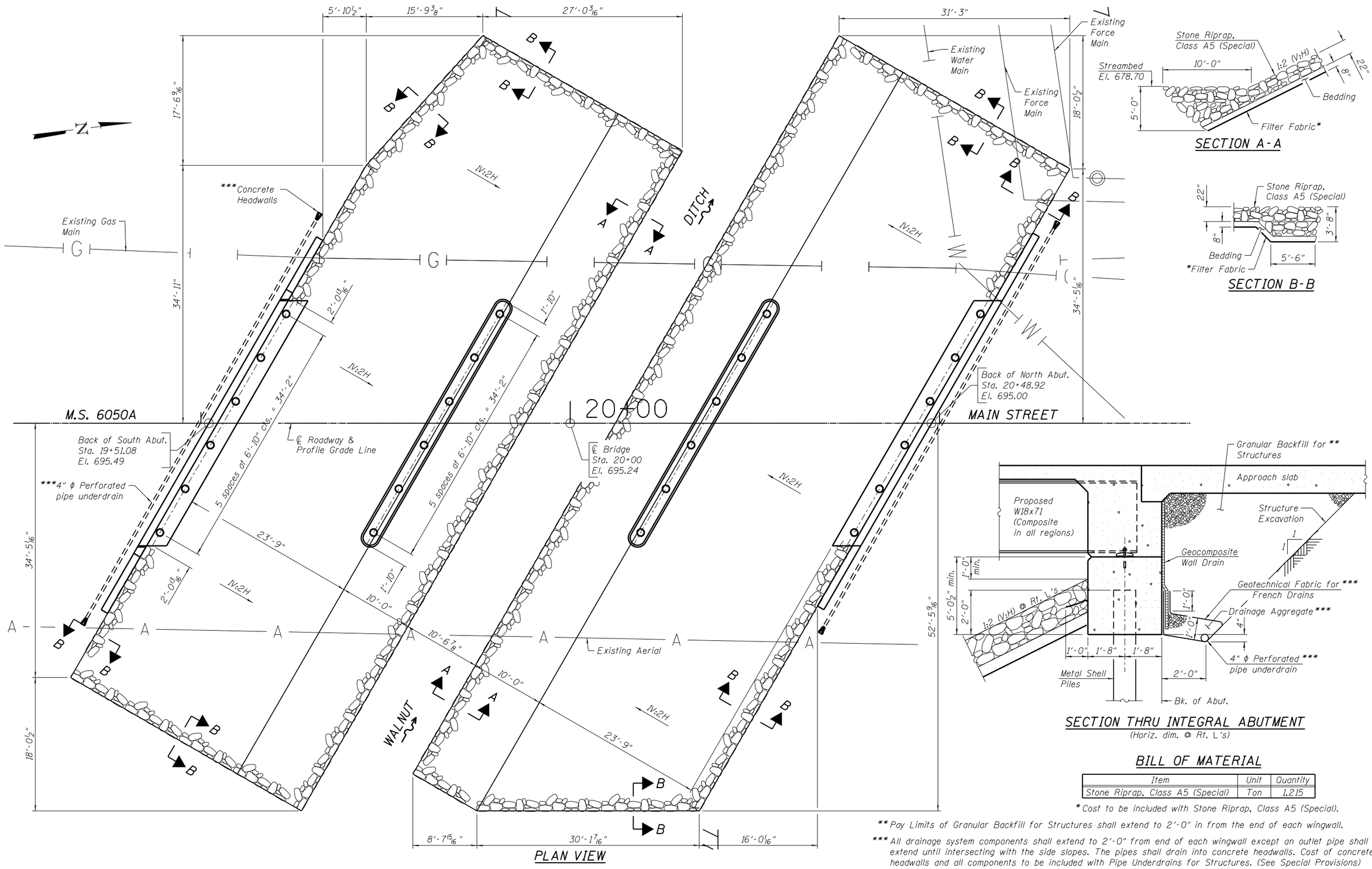

BILL OF MATERIAL

Item	Unit	Quantity
Stone Riprap, Class A5 (Special)	Ton	1,215

*Cost to be included with Stone Riprap, Class A5 (Special).

**Pay Limits of Granular Backfill for Structures shall extend to 2'-0" in from the end of each wingwall.

***All drainage system components shall extend to 2'-0" from end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. Cost of concrete headwalls and all components to be included with Pipe Underdrains for Structures. (See Special Provisions)

WILLETT HOFMANN & ASSOCIATES, INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - PLP	REVISED -	
CHECKED - BKC	REVISED -	
DRAWN - RDA	REVISED -	
CHECKED - BKC	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

RIPRAP AND PILE LAYOUT
STRUCTURE NO. 006-8100
STRUCTURAL SHEET NO. 2 OF 21 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	14
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

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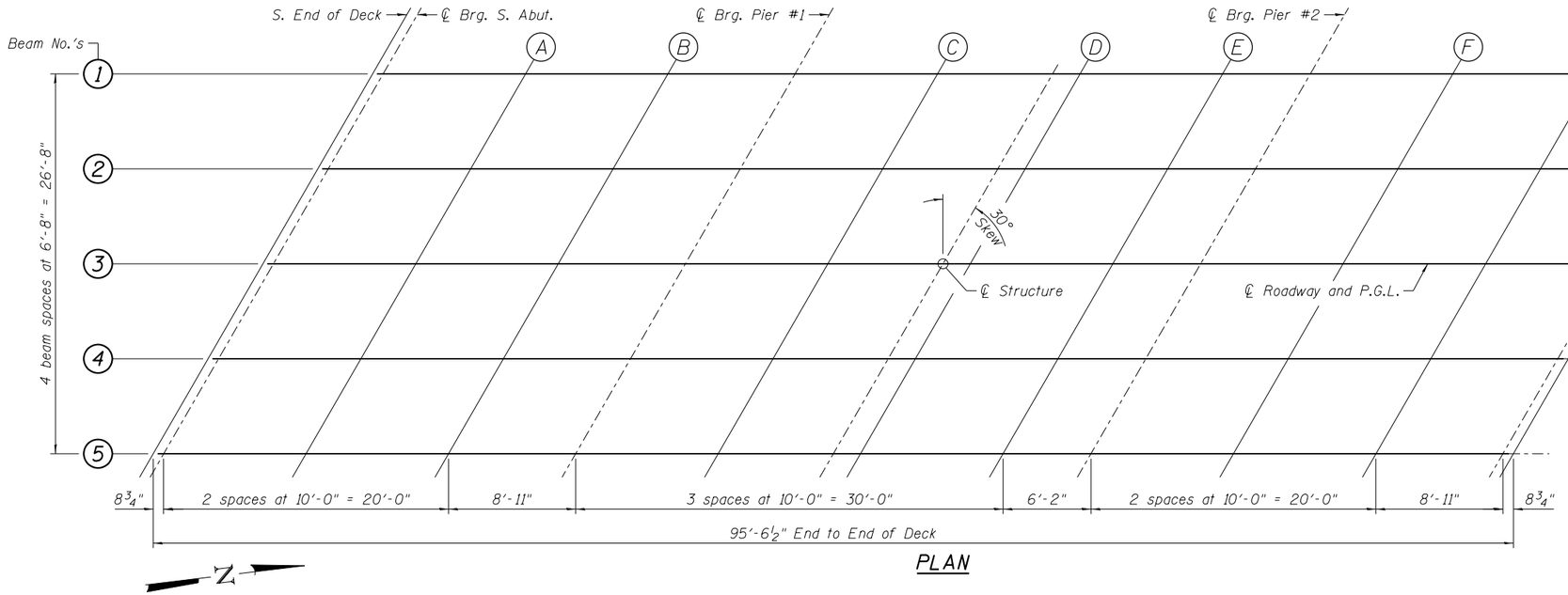
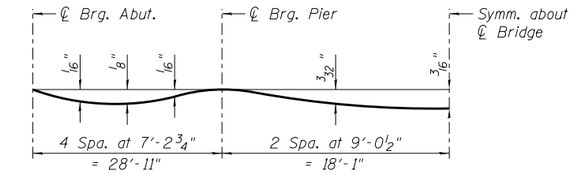


PLAN



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

NOTE:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.

BEAM 1

Location	Station	Offset Lt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Deck	19+59.93	13.33	695.24	695.24
℄ Brg. S. Abut.	19+60.70	13.33	695.23	695.23
A	19+70.70	13.33	695.18	695.19
B	19+80.70	13.33	695.13	695.13
℄ Brg. Pier #1	19+89.61	13.33	695.08	695.08
C	19+99.61	13.33	695.03	695.04
D	20+09.61	13.33	694.98	695.00
E	20+19.61	13.33	694.93	694.94
℄ Brg. Pier #2	20+25.78	13.33	694.90	694.90
F	20+35.78	13.33	694.85	694.86
G	20+45.78	13.33	694.80	694.81
℄ Brg. N. Abut.	20+54.70	13.33	694.75	694.75
N. End of Deck	20+55.47	13.33	694.73	694.73

BEAM 2

Location	Station	Offset Lt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Deck	19+56.08	6.67	695.37	695.37
℄ Brg. S. Abut.	19+56.85	6.67	695.36	695.36
A	19+66.85	6.67	695.31	695.32
B	19+76.85	6.67	695.26	695.27
℄ Brg. Pier #1	19+85.77	6.67	695.22	695.22
C	19+95.77	6.67	695.17	695.18
D	20+05.77	6.67	695.12	695.13
E	20+15.77	6.67	695.07	695.07
℄ Brg. Pier #2	20+21.93	6.67	695.04	695.04
F	20+31.93	6.67	694.99	694.99
G	20+41.93	6.67	694.94	694.94
℄ Brg. N. Abut.	20+50.85	6.67	694.89	694.89
N. End of Deck	20+51.62	6.67	694.88	694.88

BEAM 3, CENTERLINE OF ROADWAY AND P.G.L.

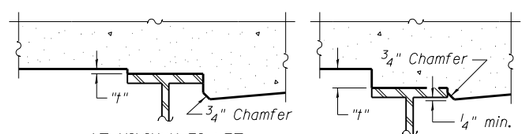
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Deck	19+52.23	0.00	695.49	695.49
℄ Brg. S. Abut.	19+53.00	0.00	695.48	695.48
A	19+63.00	0.00	695.43	695.45
B	19+73.00	0.00	695.39	695.39
℄ Brg. Pier #1	19+81.92	0.00	695.34	695.34
C	19+91.92	0.00	695.29	695.30
D	20+01.92	0.00	695.24	695.25
E	20+11.92	0.00	695.19	695.20
℄ Brg. Pier #2	20+18.08	0.00	695.16	695.16
F	20+28.08	0.00	695.11	695.12
G	20+38.08	0.00	695.06	695.07
℄ Brg. N. Abut.	20+47.00	0.00	695.02	695.02
N. End of Deck	20+47.77	0.00	695.01	695.01

BEAM 4

Location	Station	Offset Rt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Deck	19+48.38	6.67	695.40	695.40
℄ Brg. S. Abut.	19+49.15	6.67	695.39	695.39
A	19+59.15	6.67	695.35	695.36
B	19+69.15	6.67	695.30	695.31
℄ Brg. Pier #1	19+78.07	6.67	695.26	695.26
C	19+88.07	6.67	695.21	695.21
D	19+98.07	6.67	695.16	695.17
E	20+08.07	6.67	695.11	695.11
℄ Brg. Pier #2	20+14.23	6.67	695.07	695.07
F	20+24.23	6.67	695.02	695.03
G	20+34.23	6.67	694.97	694.98
℄ Brg. N. Abut.	20+43.15	6.67	694.93	694.93
N. End of Deck	20+43.92	6.67	694.92	694.92

BEAM 5

Location	Station	Offset Rt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Deck	19+44.53	13.33	695.30	695.30
℄ Brg. S. Abut.	19+45.30	13.33	695.29	695.29
A	19+55.30	13.33	695.25	695.26
B	19+65.30	13.33	695.20	695.21
℄ Brg. Pier #1	19+74.22	13.33	695.16	695.16
C	19+84.22	13.33	695.11	695.12
D	19+94.22	13.33	695.06	695.07
E	20+04.22	13.33	695.01	695.01
℄ Brg. Pier #2	20+10.39	13.33	694.98	694.98
F	20+20.39	13.33	694.93	694.94
G	20+30.39	13.33	694.88	694.89
℄ Brg. N. Abut.	20+39.30	13.33	694.83	694.83
N. End of Deck	20+40.07	13.33	694.82	694.82



AT MINIMUM FILLET

AT MAXIMUM FILLET

To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

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T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - PLP	REVISED -	
CHECKED - BKC	REVISED -	
DRAWN - RDA	REVISED -	
CHECKED - BKC	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 006-8100
STRUCTURAL SHEET NO. 3 OF 21 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	15
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

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WEST EDGE OF SHOULDER

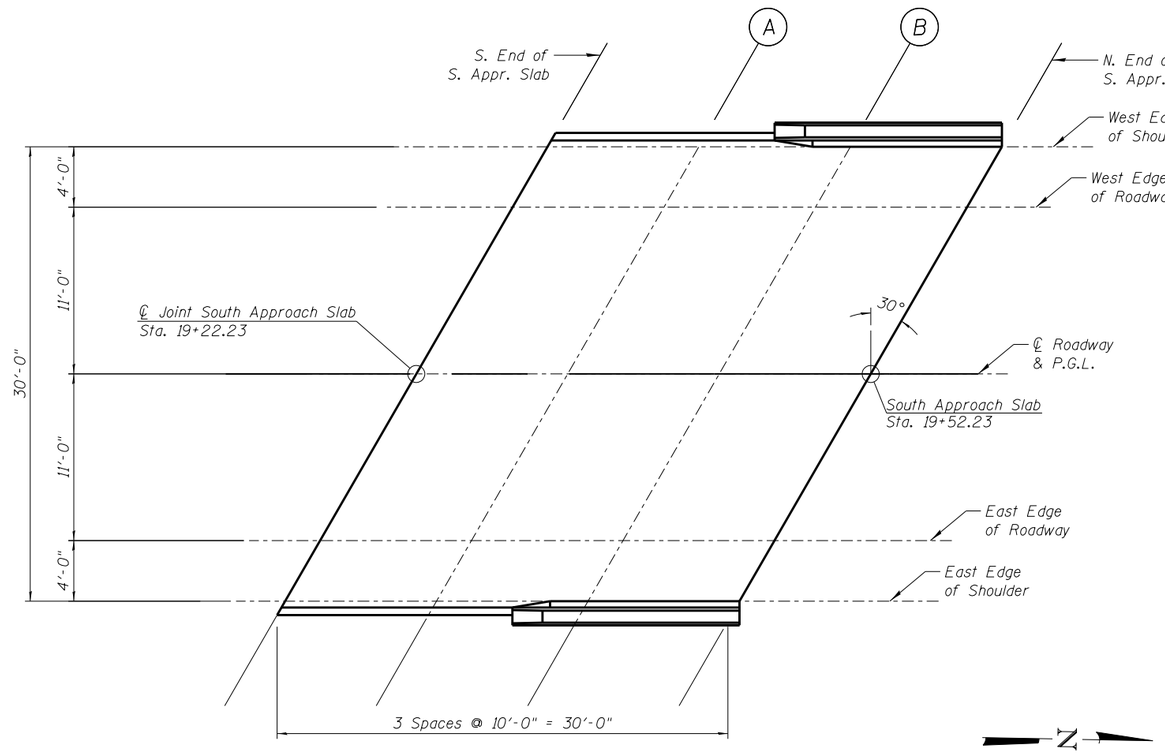
Location	Station	Offset Lt.	Theoretical Grade Elevations
S. End of S. Appr	19+30.89	15.00′	695.28
A	19+40.89	15.00′	695.27
B	19+50.89	15.00′	695.24
N. End of S. Appr	19+60.89	15.00′	695.19

WEST EDGE OF ROADWAY

Location	Station	Offset Lt.	Theoretical Grade Elevations
S. End of S. Appr	19+28.58	11.00′	695.38
A	19+38.58	11.00′	695.38
B	19+48.58	11.00′	695.34
N. End of S. Appr	19+58.58	11.00′	695.29

℄ ROADWAY & P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
S. End of S. Appr	19+22.23	0.00′	695.52
A	19+32.23	0.00′	695.54
B	19+42.23	0.00′	695.53
N. End of S. Appr	19+52.23	0.00′	695.48



PLAN

EAST EDGE OF ROADWAY

Location	Station	Offset Rt.	Theoretical Grade Elevations
S. End of S. Appr	19+15.88	11.00′	695.34
A	19+25.88	11.00′	695.37
B	19+35.88	11.00′	695.38
N. End of S. Appr	19+45.88	11.00′	695.36

EAST EDGE OF SHOULDER

Location	Station	Offset Rt.	Theoretical Grade Elevations
S. End of S. Appr	19+13.57	15.00′	695.23
A	19+23.57	15.00′	695.27
B	19+33.57	15.00′	695.28
N. End of S. Appr	19+43.57	15.00′	695.27

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CHECKED - BKC	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

TOP OF SOUTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 006-8100
STRUCTURAL SHEET NO. 4 OF 21 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	16
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

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WEST EDGE OF SHOULDER

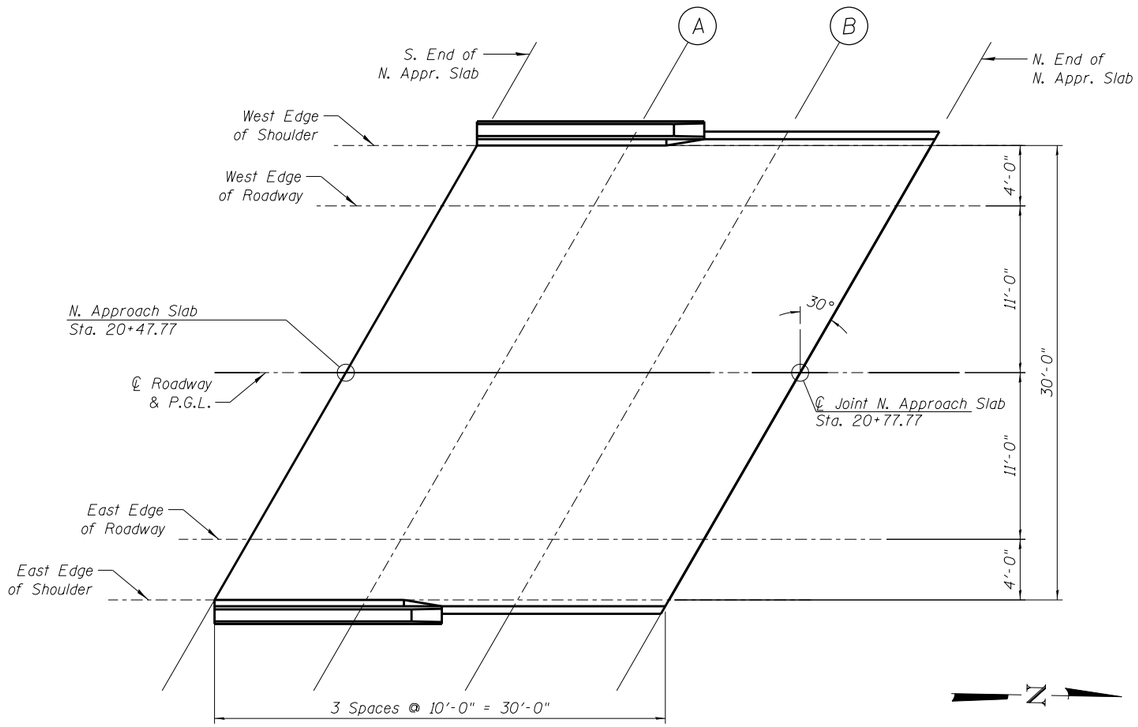
Location	Station	Offset Lt.	Theoretical Grade Elevations
S. End of N. Appr	20+56.43	15.00′	694.70
A	20+66.43	15.00′	694.60
B	20+76.43	15.00′	694.46
N. End of N. Appr	20+86.43	15.00′	694.28

WEST EDGE OF ROADWAY

Location	Station	Offset Lt.	Theoretical Grade Elevations
S. End of N. Appr	20+54.12	11.00′	694.81
A	20+64.12	11.00′	694.73
B	20+74.12	11.00′	694.60
N. End of N. Appr	20+84.12	11.00′	694.42

℄ ROADWAY & P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
S. End of N. Appr	20+47.77	0.00′	695.00
A	20+57.77	0.00′	694.94
B	20+67.77	0.00′	694.84
N. End of N. Appr	20+77.77	0.00′	694.70



PLAN

EAST EDGE OF ROADWAY

Location	Station	Offset Rt.	Theoretical Grade Elevations
S. End of N. Appr	20+41.42	11.00′	694.88
A	20+51.42	11.00′	694.83
B	20+61.42	11.00′	694.75
N. End of N. Appr	20+71.42	11.00′	694.63

EAST EDGE OF SHOULDER

Location	Station	Offset Rt.	Theoretical Grade Elevations
S. End of N. Appr	20+39.11	15.00′	694.79
A	20+49.11	15.00′	694.74
B	20+59.11	15.00′	694.68
N. End of N. Appr	20+69.11	15.00′	694.57

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CHECKED - BKC	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

TOP OF NORTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 006-8100
STRUCTURAL SHEET NO. 5 OF 21 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	17
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

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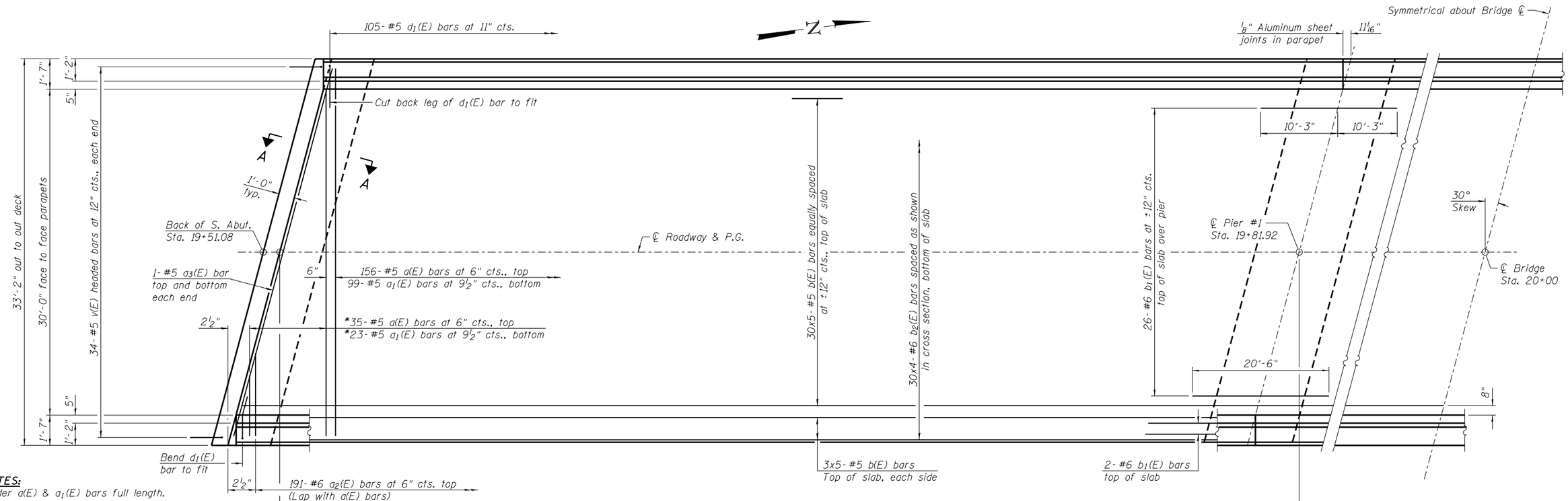


NOTES:

*Order a(E) & a_1(E) bars full length.

Cut to fit skew and use remainder of bars in opposite end.

See Structural Sheet 7 of 21 for parapet reinforcement.

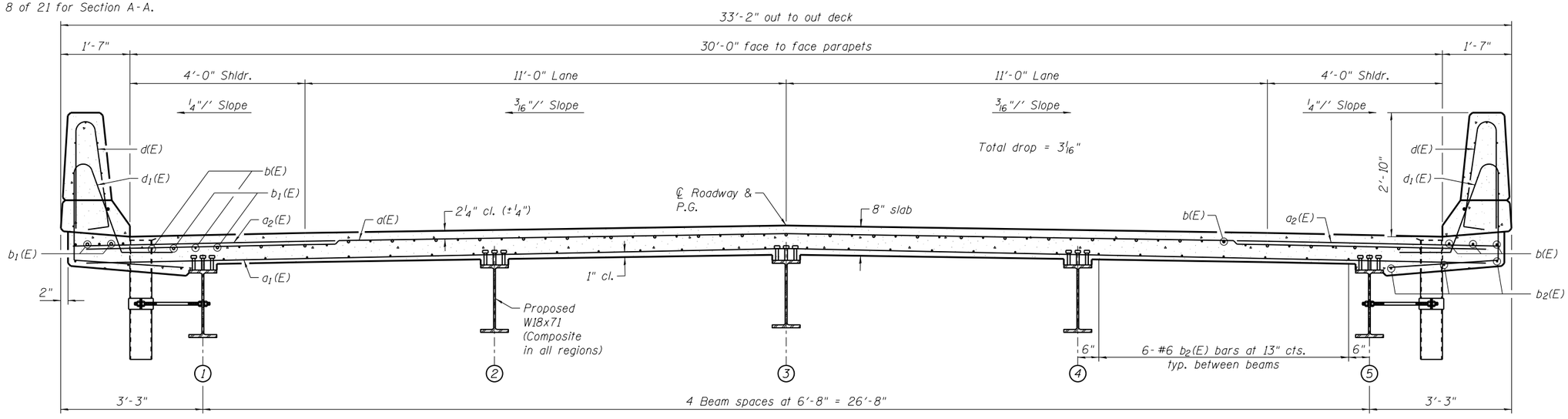
See Structural Sheet 8 of 21 for Section A-A.

PARTIAL PLAN

MINIMUM BAR LAP

#5 bar = 3'-6"

#6 bar = 4'-10"



NEAR PIER **NEAR MIDSPAN**

CROSS SECTION

(Looking North)

NOTES:

See Structural Sheet 7 of 21 for superstructure details and Bill of Material.

Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

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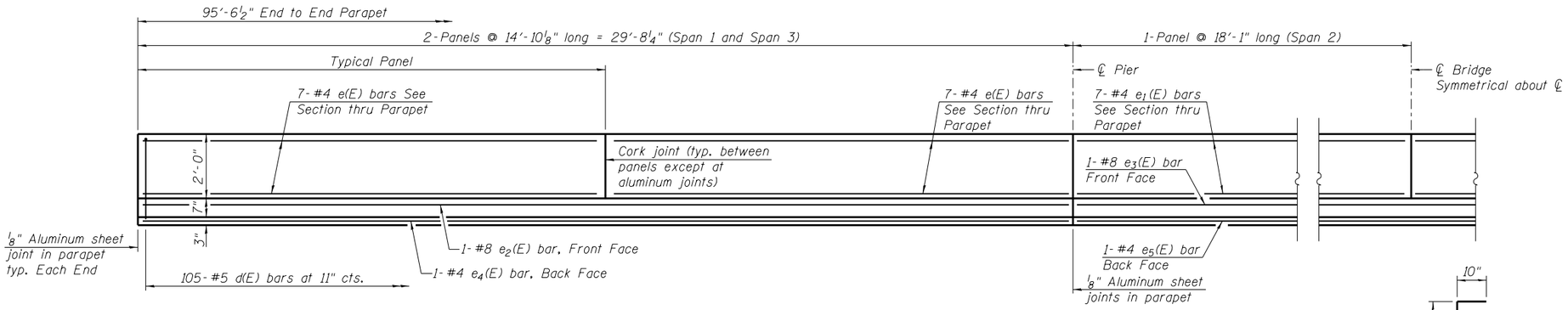
DRAWN - RDA	REVISED -	
CHECKED - BKC	REVISED -	

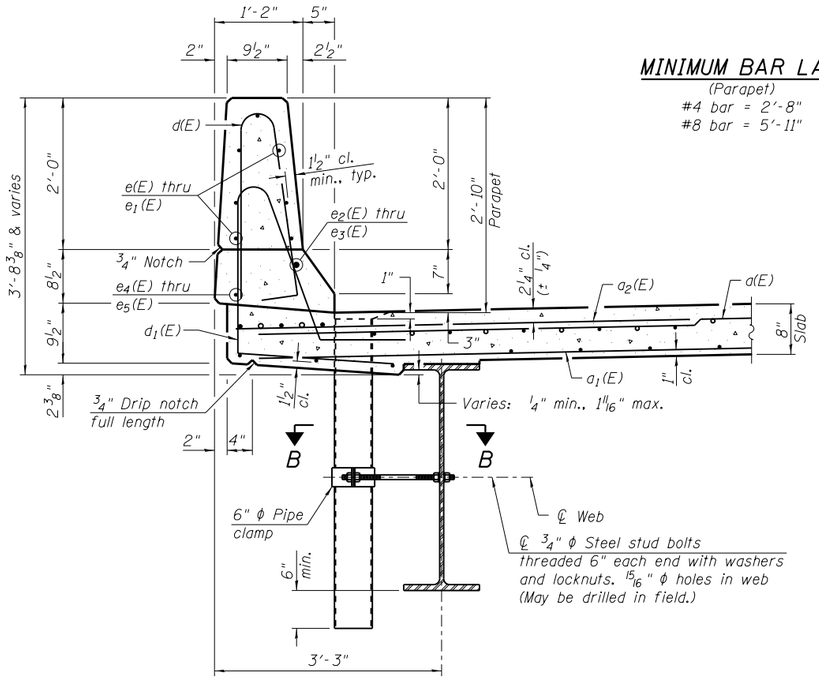
VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

SUPERSTRUCTURE
STRUCTURE NO. 006-8100
STRUCTURAL SHEET NO. 6 OF 21 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	18
	WHA* 1160015	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			



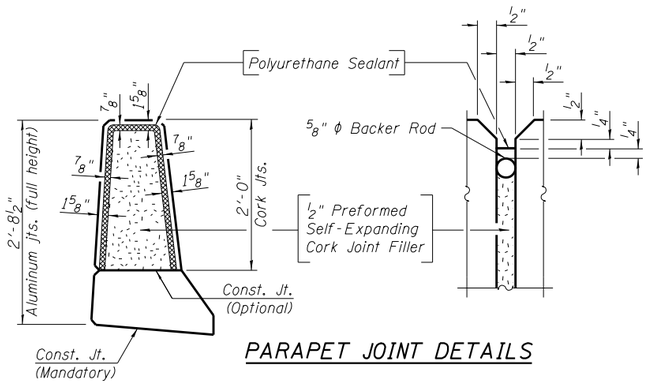
INSIDE ELEVATION OF PARAPET



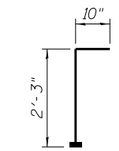
SECTION THRU PARAPET

MINIMUM BAR LAP

(Parapet)
#4 bar = 2'-8"
#8 bar = 5'-11"

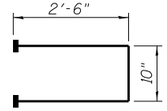


PARAPET JOINT DETAILS



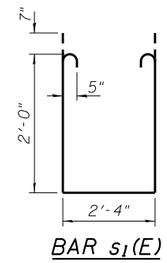
BAR v(E)

(Headed)

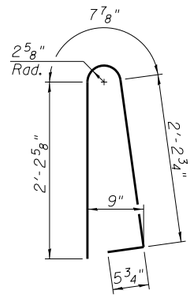


BAR s(E)

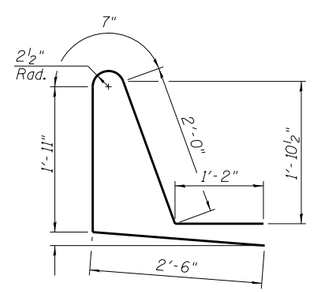
(Headed)



BAR s1(E)



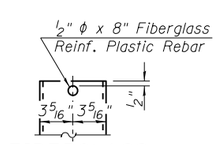
BAR d(E)



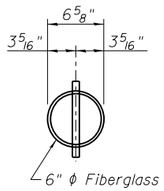
BAR d1(E)

SUPERSTRUCTURE BILL OF MATERIAL

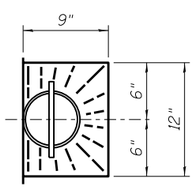
Bar	No.	Size	Length	Shape
d(E)	191	#5	32'-6"	
a_1(E)	122	#5	32'-6"	
a_2(E)	382	#6	6'-6"	
a_3(E)	4	#5	38'-0"	
b(E)	180	#5	21'-10"	
b_1(E)	60	#6	20'-6"	
b_2(E)	120	#6	27'-5"	
d(E)	210	#5	5'-7"	
d_1(E)	210	#5	8'-2"	
e(E)	56	#4	14'-6"	
e_1(E)	28	#4	17'-10"	
e_2(E)	4	#8	28'-5"	
e_3(E)	2	#8	35'-11"	
e_4(E)	4	#4	28'-5"	
e_5(E)	2	#4	35'-11"	
m(E)	6	#6	38'-0"	
m_1(E)	16	#6	7'-1"	
m_2(E)	8	#6	3'-6"	
m_3(E)	20	#5	4'-0"	
s(E)	64	#5	5'-10"	
s_1(E)	64	#5	7'-6"	
v(E)	68	#5	3'-1"	
Floor Drains			Each	6
Concrete Superstructure			Cu. Yd.	117.9
Bridge Deck Grooving			Sq. Yd.	297
Protective Coat			Sq. Yd.	398
Reinforcement Bars, Epoxy Coated			Pound	31,640



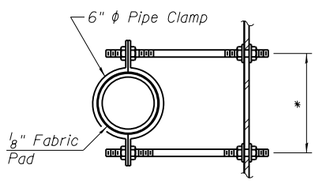
FIBERGLASS PIPE



TOP PLAN



TOP PLAN



SECTION A-A

*Dimension as required by Pipe Clamp

NOTES:

All exposed edges shall have 3/4" chamfer, except as noted.

Slip forming of parapets will not be allowed.

Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.

See Special Provisions for painting exterior surfaces of the Floor Drains.

Drains shall **NOT** be aluminum tube.

Galvanize clamping device, bolts, washers and nuts according to AASHTO M232. Cost of clamping device and inserts is included with Floor Drains.

The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.

The Polyurethane Sealant shall be non-staining gray one component non-sag elastomeric gun grade meeting the requirements of ASTM C-920, Type S, Grade NS, Class 25. Use T with a 5/8" backer rod.

The 1/2" Preformed Self-Expanding Cork Joint Filler shall be according to Article 1051.07 of the Std. Spec. Cost included with Concrete Superstructure.

Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.

Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.

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DESIGNED - PLP	REVISED -	
CHECKED - BKC	REVISED -	
DRAWN - RDA	REVISED -	
CHECKED - BKC	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 006-8100
STRUCTURAL SHEET NO. 7 OF 21 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	19
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

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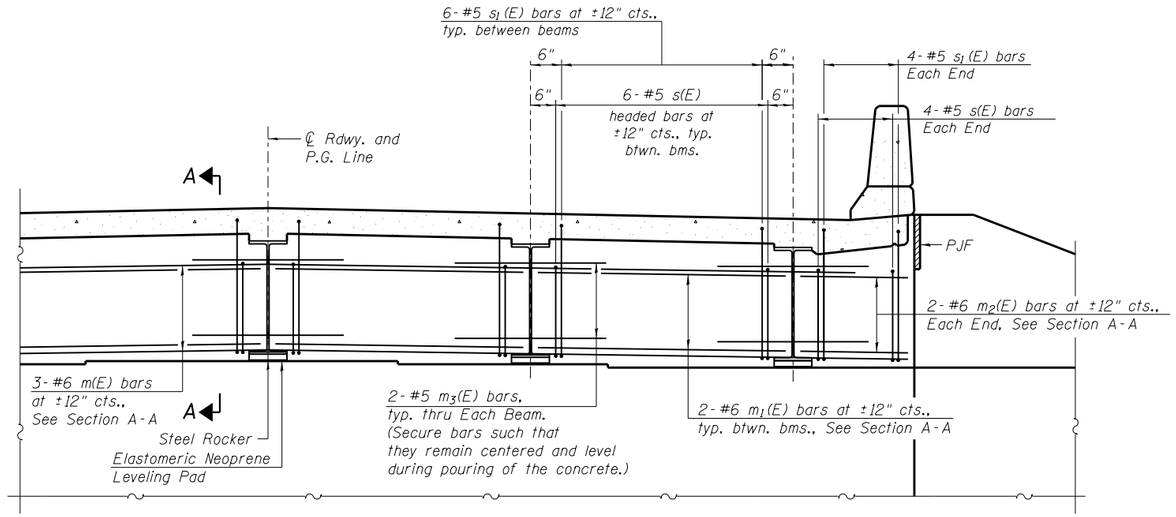
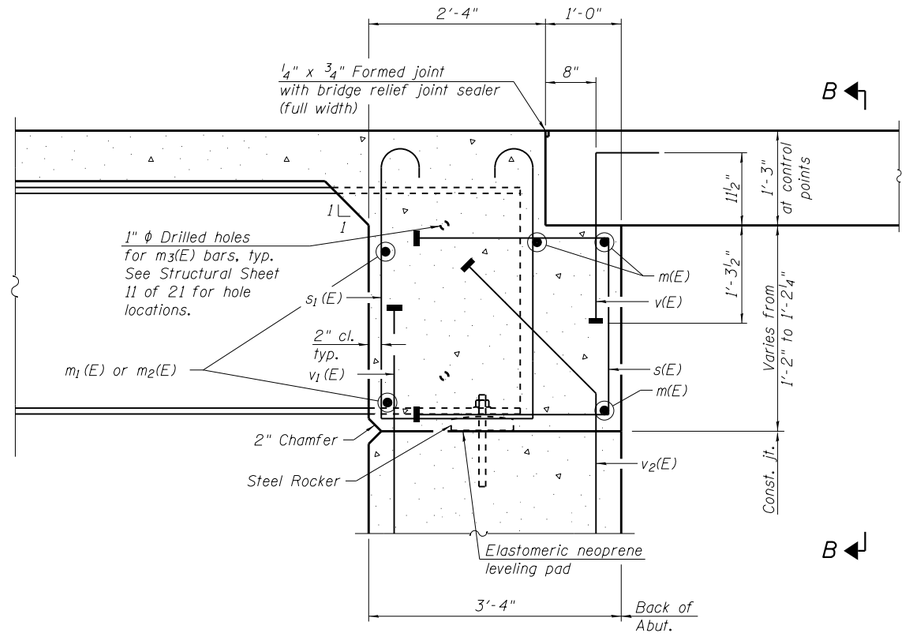
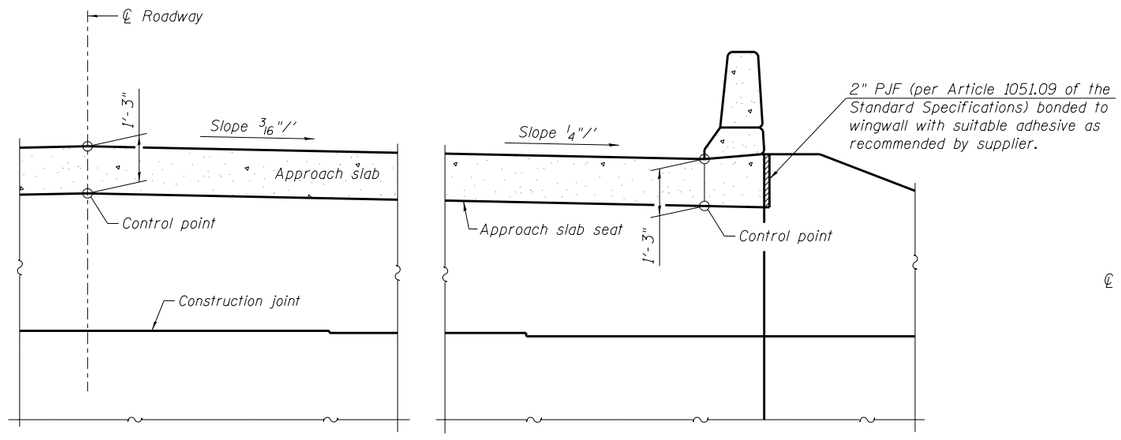


DIAPHRAGM AT ABUTMENT

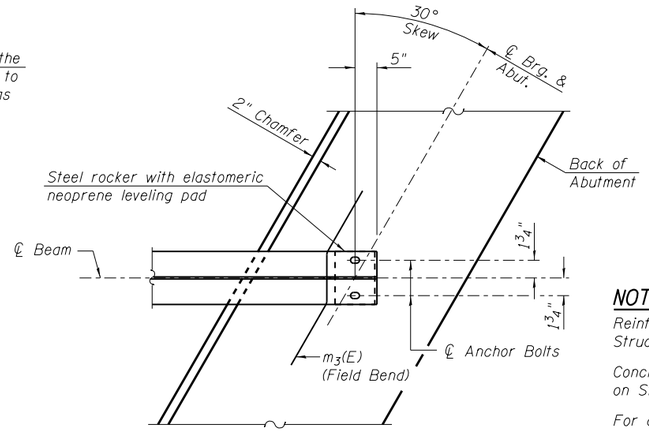


SECTION A-A

(at Rt. L's)



SECTION B-B



PLAN AT ABUTMENT

(Showing bottom flange of beam)

NOTES:

Reinforcement bars in diaphragm are billed with superstructure on Structural Sheet 7 of 21.

Concrete in diaphragm is included with Concrete Superstructure on Structural Sheet 7 of 21.

For details of bars s(E), s_1(E) and v(E) see Structural Sheet 7 of 21.

The s(E) and s_1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

The approach slab seat shall have a constant slope determined from the control points shown.

For bearing details see Structural Sheet 13 of 21.

For details of bars v_1(E) and v_2(E) see Structural Sheet 14 of 21.

Beams shall be braced for stability during erection and remain braced until deck is poured and cured.

WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - PLP	REVISED -	
CHECKED - BKC	REVISED -	
DRAWN - RDA	REVISED -	
CHECKED - BKC	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

DIAPHRAGM DETAILS
STRUCTURE NO. 006-8100
STRUCTURAL SHEET NO. 8 OF 21 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	20
	WHA= 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

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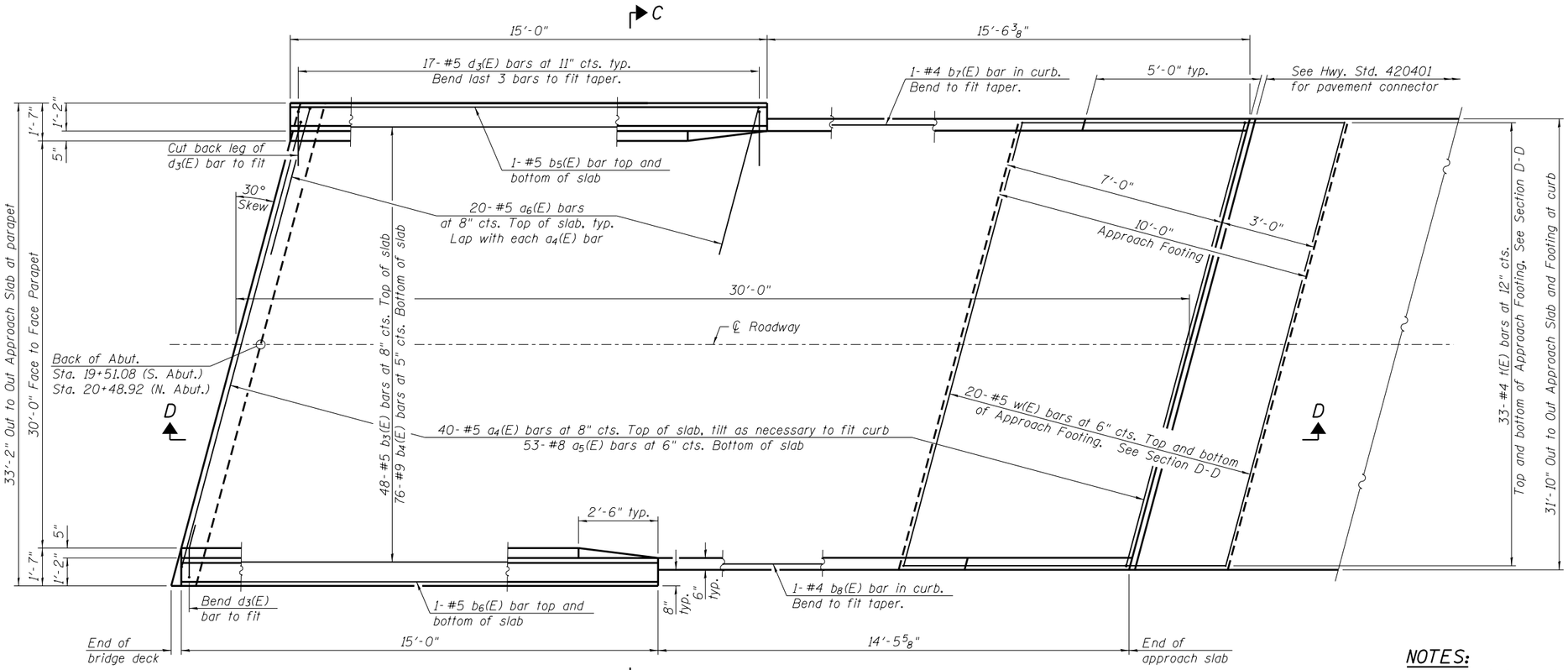
NORTH APPROACH

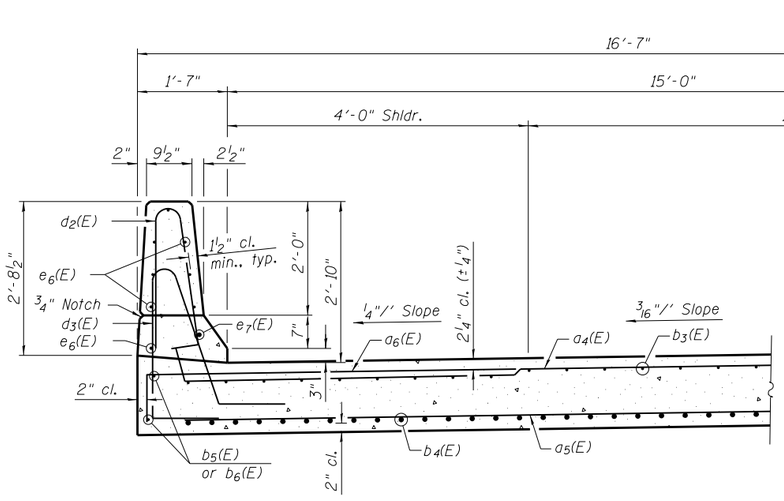
SOUTH APPROACH



PLAN

NOTES:

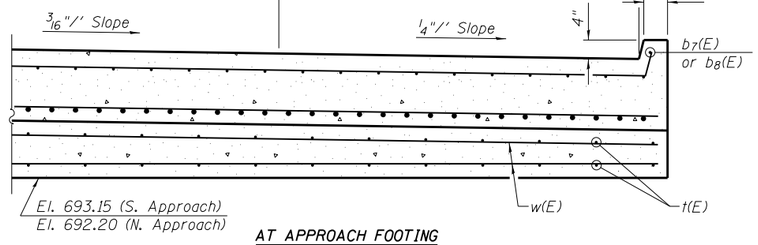
For Section D-D, see Structural Sheet 10 of 21.



NEAR ABUTMENT

SECTION C-C

(Looking North)



AT APPROACH FOOTING

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VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 006-8100

STRUCTURAL SHEET NO. 9 OF 21 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	21
	WHA# 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

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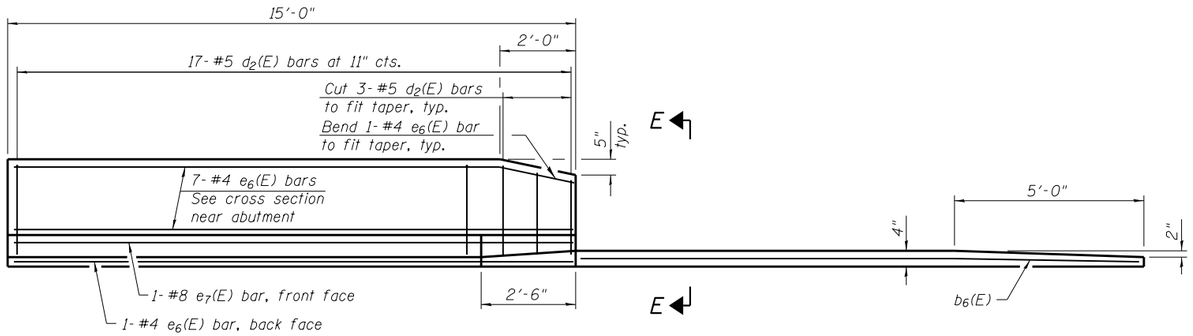
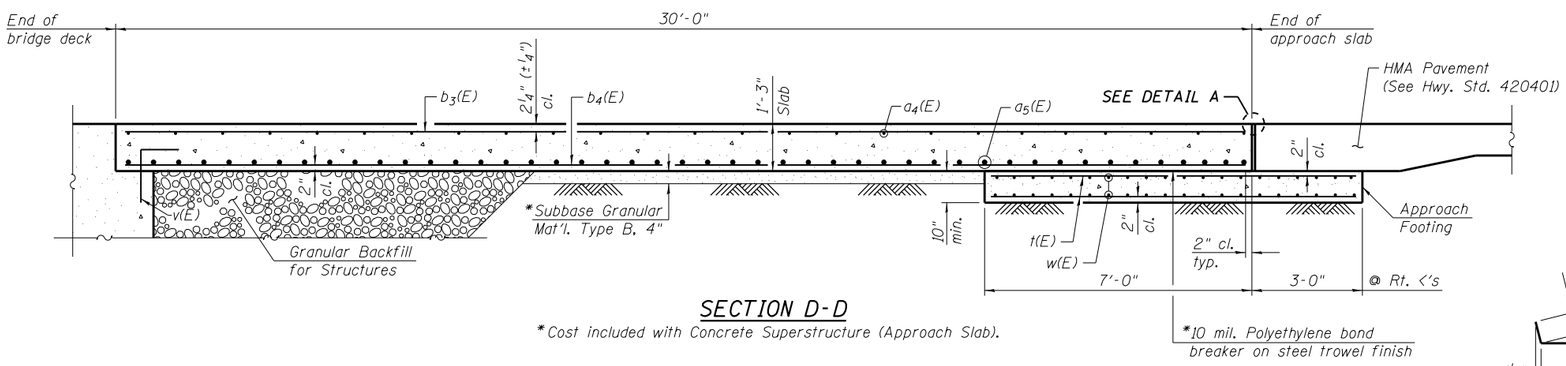


INSIDE ELEVATION OF PARAPET AND CURB



SECTION D-D

*Cost included with Concrete Superstructure (Approach Slab).

NOTES:

Parapet concrete shall be paid for as Concrete Superstructure.

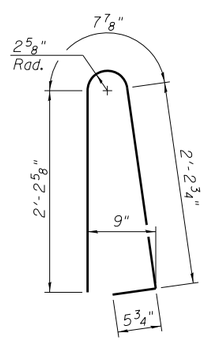
Approach slab shall be paid for as Concrete Superstructure (Approach Slab).

Approach footing concrete shall be paid for as Concrete Structures.

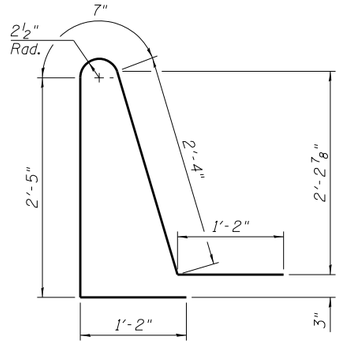
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.

Cost of excavation for approach footing included with Concrete Structures.

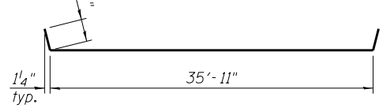
For Granular Backfill for Structures and drainage treatment details, see Structural Sheet 2 of 21.



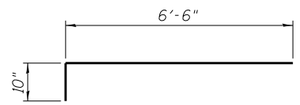
BAR d_2(E)



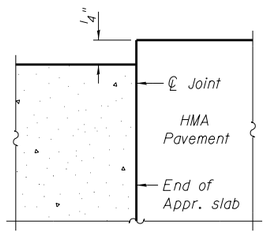
BAR d_3(E)



BAR a_4(E)

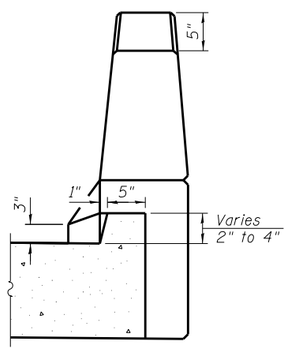


BAR a_6(E)



FLEXIBLE PAVEMENT DETAIL A

(@ Rt. <'s)



VIEW E-E

TWO APPROACHES BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_4(E)	80	#5	36'-10"	
a_5(E)	106	#8	36'-5"	
a_6(E)	80	#5	7'-4"	
b_3(E)	96	#5	29'-8"	
b_4(E)	152	#9	29'-8"	
b_5(E)	4	#5	14'-8"	
b_6(E)	4	#5	14'-8"	
b_7(E)	2	#4	15'-3"	
b_8(E)	2	#4	14'-2"	
d_2(E)	68	#5	5'-7"	
d_3(E)	68	#5	7'-8"	
e_6(E)	32	#4	14'-8"	
e_7(E)	4	#8	14'-8"	
t(E)	132	#4	11'-3"	
w(E)	80	#5	36'-5"	
Concrete Structures			Cu. Yd.	21.8
Concrete Superstructure			Cu. Yd.	6.7
Bridge Deck Grooving			Sq. Yd.	190
Protective Coat			Sq. Yd.	230
Concrete Superstructure (Approach Slab)			Cu. Yd.	90.8
Reinforcement Bars, Epoxy Coated			Pound	37,900

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CHECKED - BKC	REVISED -	
DRAWN - RDA	REVISED -	
CHECKED - BKC	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 006-8100
STRUCTURAL SHEET NO. 10 OF 21 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	22
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 48CY(445)			

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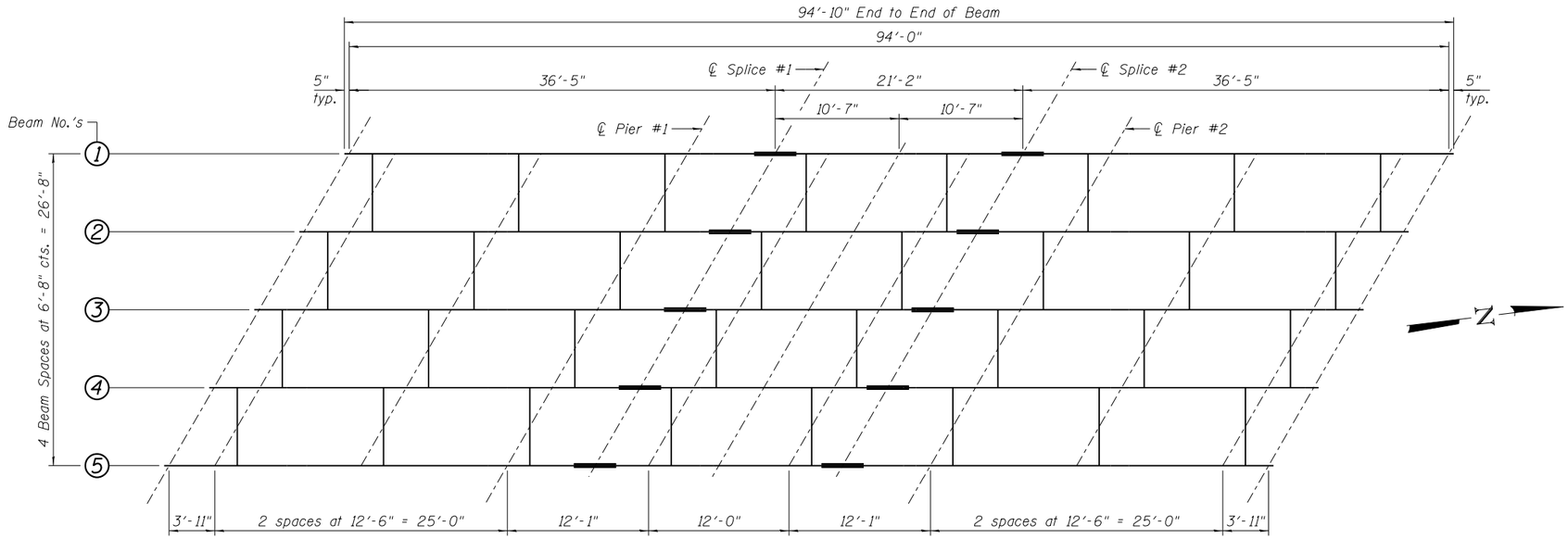
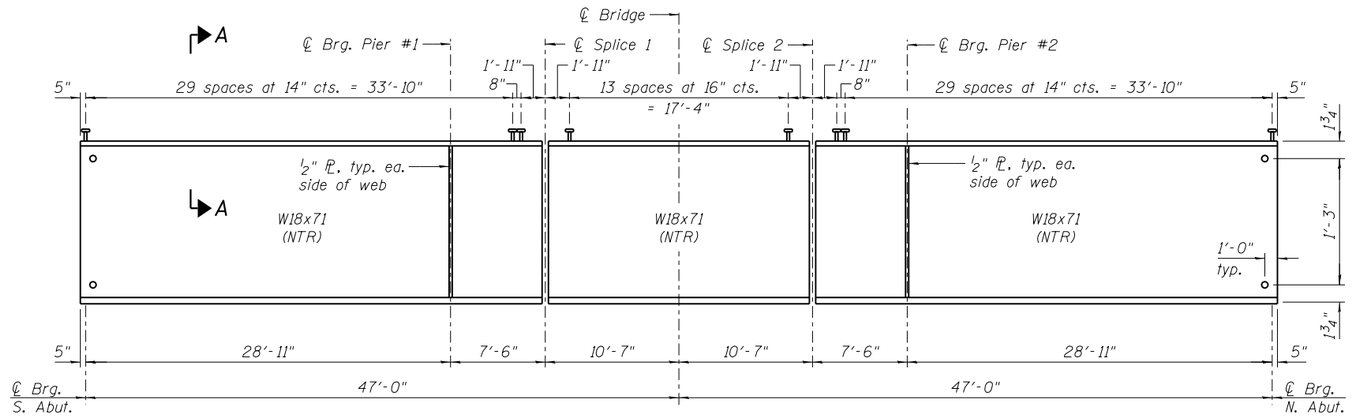
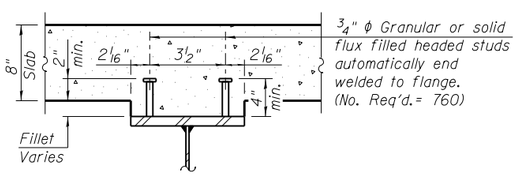


FRAMING PLAN



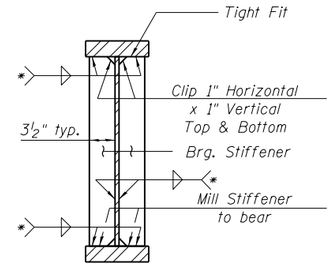
GIRDER ELEVATION

"CVN" denotes Charpy-V-Notch impact energy requirements, zone 2.



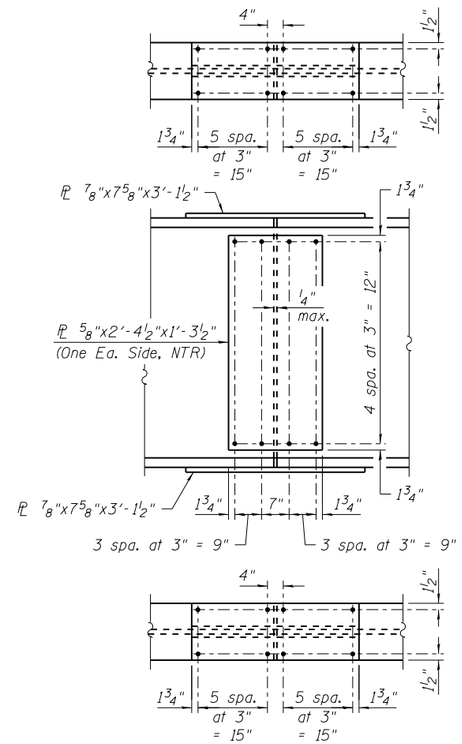
SECTION A-A

TOP OF BEAM ELEVATIONS (FOR FABRICATION ONLY)						
Beam Number	South Abutment	Pier #1	Splice #1	Splice #2	Pier #2	North Abutment
1	694.50	694.32	694.27	694.16	694.13	694.02
2	694.63	694.45	694.41	694.30	694.27	694.16
3	694.76	694.58	694.53	694.42	694.40	694.29
4	694.67	694.49	694.44	694.34	694.31	694.20
5	694.57	694.39	694.35	694.24	694.21	694.10



SECTION AT PIER

*Terminate 1/4" (±1/8") from the end of ℄ intersects.



FIELD SPLICE DETAIL

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CHECKED - BKC	REVISED -	
DRAWN - RDA	REVISED -	
CHECKED - BKC	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

STRUCTURAL STEEL DETAILS
STRUCTURE NO. 006-8100
STRUCTURAL SHEET NO. 11 OF 21 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	23
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

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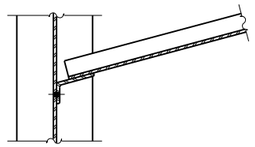
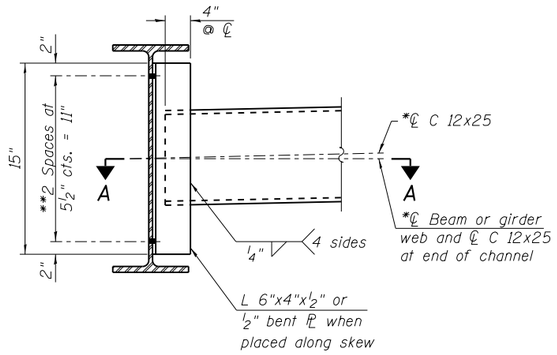


SECTION A-A



INTERIOR DIAPHRAGM

NOTE:
Two hardened washers required for each set of oversized holes.

* Alternate C 12X30 channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.

The alternate, if utilized, shall be provided at no additional cost to the Department.

** ¾" ϕ HS bolts, 15/16" ϕ holes

INTERIOR GIRDER MOMENT TABLE				
		0.4 Sp. 1 or 0.6 Sp. 3	Pier	0.5 Sp. 2
I_s	(in^4)	1,170	1,170	1,170
$I_c(n)$	(in^4)	4,707	———	4,707
$I_c(3n)$	(in^4)	3,515	———	3,515
$I_c(cr)$	(in^4)	———	2,049	———
S_s	(in^3)	127	127	127
$S_c(n)$	(in^3)	233	———	233
$S_c(3n)$	(in^3)	207	———	207
$S_c(cr)$	(in^3)	———	162	———
DC1	(k/')	0.791	0.791	0.791
M_{DC1}	('k)	43.4	80.8	42.2
DC2	(k/')	0.180	0.180	0.180
M_{DC2}	('k)	10.4	19.3	10.1
DW	(k/')	0.333	0.333	0.333
M_{DW}	('k)	19.2	35.8	18.7
LLDF		0.690	0.683	0.676
M_{L+IM}	('k)	239	216	253
M_u (Strength I)	('k)	514	556	536
$\phi_f M_n$	('k)	1,281	———	1,281
f_s DC1	(ksi)	4.10	7.63	3.99
f_s DC2	(ksi)	0.60	1.43	0.59
f_s DW	(ksi)	1.12	2.65	1.08
f_s (L+IM)	(ksi)	12.27	15.94	13.03
f_s (Service II)	(ksi)	21.77	32.43	22.56
$0.95R_hF_{yf}$	(ksi)	47.5	47.5	47.50
f_s (Total)(Strength I)	(ksi)	———	43.2	———
$\phi_f F_n$	(ksi)	*	**	*
V_f	(k)	31.6	34.6	32.3

INTERIOR GIRDER REACTION TABLE			
		Abut.	Pier
LLDF		0.800	0.800
OCF		———	———
R_{DC1}	(k)	37.95	27.28
R_{DC2}	(k)	1.93	6.53
R_{DW}	(k)	3.58	12.09
R_{L}	(k)	51.8	61.1
R_{Im}	(k)	12.4	12.9
R_{Total}	(k)	107.7	119.9

* NA - Section is compact per AASHTO 6.10.6.2.2

** Section qualifies for AASHTO A6 per A6.1 ;
A moment-based check per AASHTO A6.1.1-1 is sufficent

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in^4 and in^3).

$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (in^4 and in^3).

$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in^4 and in^3).

$I_c(cr)$, $S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in^4 and in^3).

DC1: Un-factored non-composite dead load (kips/ft.).

M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

LLDF: Interior girder live load distribution factor (Lanes/Beam)

M_{L+IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).
$1.25\ (M_{DC1} + M_{DC2}) + 1.5\ M_{DW} + 1.75\ M_{L+IM}$

$\phi_f M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft).

f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
M_{DC1} / S_{nc}

f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
$M_{DC2} / S_c(3n)$ or $M_{DC2} / S_c(cr)$ as applicable.

f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
$M_{DW} / S_c(3n)$ or $M_{DW} / S_c(cr)$ as applicable.

f_s (L+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).
$M_{L+IM} / S_c(n)$ or $M_{DW} / S_c(cr)$ as applicable.

f_s (Service II): Sum of stresses as computed below (ksi).
$f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3\ f_s(L+IM)$

$0.95R_hF_yf$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
$1.25\ (f_{sDC1} + f_{sDC2}) + 1.5\ f_{sDW} + 1.75\ f_s(L+IM)$

$\phi_f F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

V_f: Maximum factored shear range in span computed according to Article 6.10.10.

BILL OF MATERIAL

Item	Unit	Quantity
Stud Shear Connectors	Each	760
Furnishing & Erecting Structural Steel	L. Sum	1

NOTES:

All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

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VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

STRUCTURAL STEEL DETAILS
STRUCTURE NO. 006-8100
STRUCTURAL SHEET NO. 12 OF 21 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	24
	WHA* 1160015	CONTRACT NO. 87680		
	ILLINOIS	FED. AID PROJECT 4BCY(445)		

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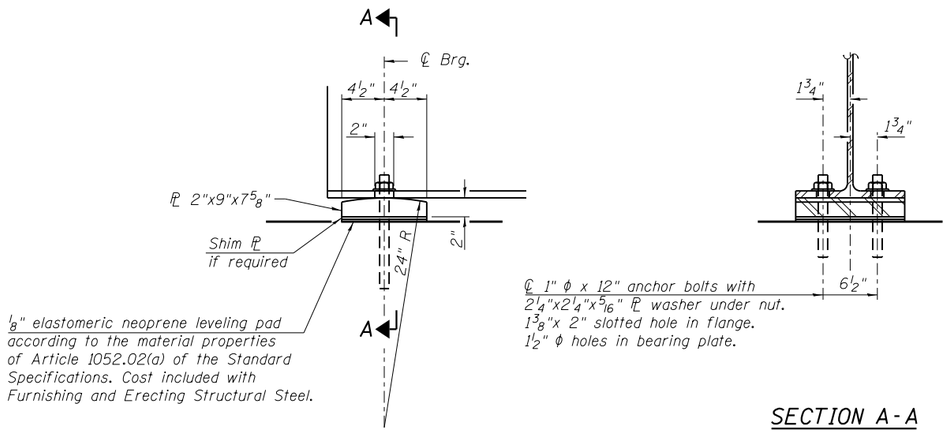
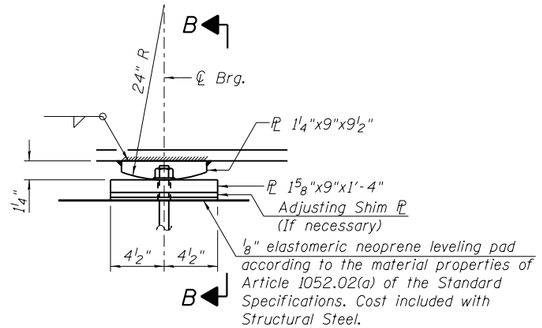


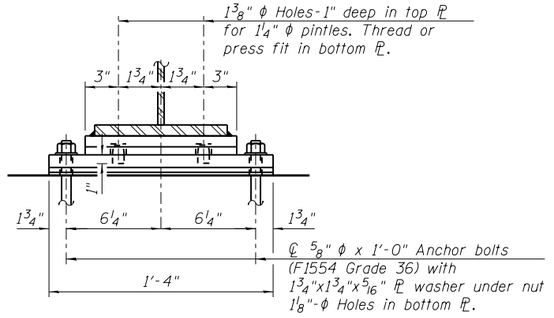
SECTION A-A

ELEVATION AT ABUTMENT

FIXED BEARING - ABUTMENTS

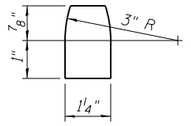


ELEVATION AT PIER



SECTION B-B

FIXED BEARING - PIERS



PINTLE

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts ⅝"	Each	20
Anchor Bolts 1"	Each	20

NOTES:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Beams shall be braced for stability during erection and remain braced until deck is poured and cured.

Anchor bolts at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.

WILLETT HOFMANN & ASSOCIATES INC
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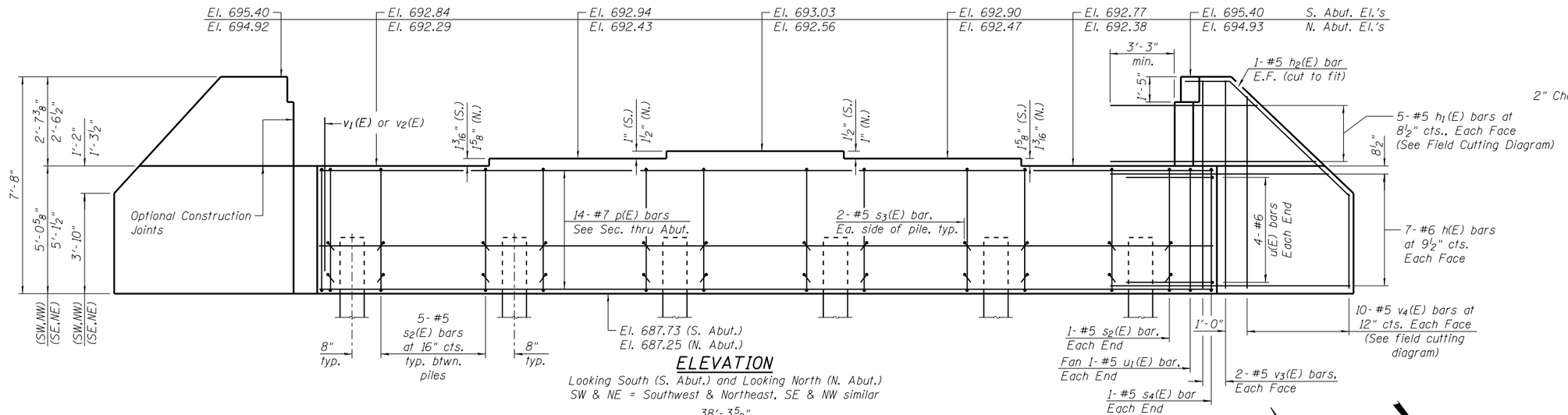
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - PLP	REVISED -	
CHECKED - BKC	REVISED -	
DRAWN - RDA	REVISED -	
CHECKED - BKC	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

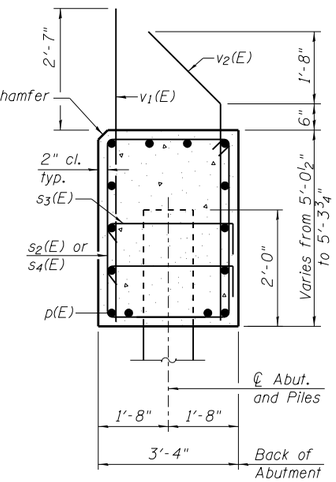
BEARING DETAILS
STRUCTURE NO. 006-8100
STRUCTURAL SHEET NO. 13 OF 21 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	25
	WHA# 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			



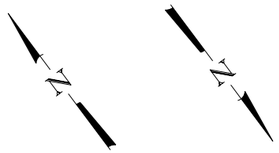
ELEVATION

Looking South (S. Abut.) and Looking North (N. Abut.)
SW & NE = Southwest & Northeast, SE & NW similar

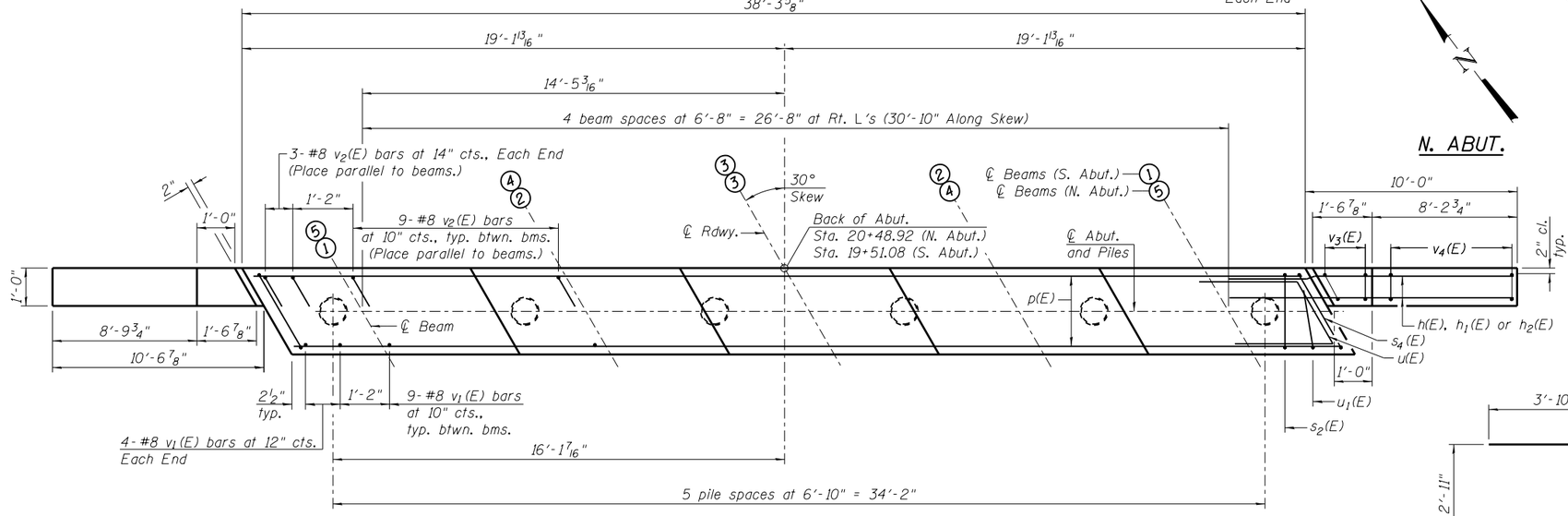


SEC. THRU ABUT.

Dimensions at right angles to abutment.



N. ABUT. S. ABUT.



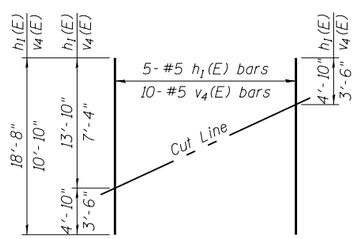
PLAN

TWO ABUTMENTS BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	56	#6	14'-5"	
h1(E)	20	#5	18'-8"	
h2(E)	8	#5	10'-10"	
p(E)	28	#7	37'-11"	
s2(E)	54	#5	16'-5"	
s3(E)	48	#5	4'-0"	
s4(E)	4	#5	17'-5"	
u(E)	16	#6	11'-0"	
u1(E)	4	#5	11'-1"	
v1(E)	88	#8	5'-11"	
v2(E)	84	#8	6'-2"	
v3(E)	16	#5	7'-4"	
v4(E)	40	#5	10'-10"	
Structure Excavation		Cu. Yd.	209.4	
Concrete Structures		Cu. Yd.	58.2	
Reinforcement Bars, Epoxy Coated		Pound	8,720	
Furnishing Metal Shell Piles 12"x0.250"		Foot	305	
Driving Piles		Foot	305	
Test Pile Metal Shells		Each	2	
Geocomposite Wall Drain		Sq. Yd.	45	
Pipe Underdrain for Structures 4"		Foot	156	
Granular Backfill for Structures		Cu. Yd.	106	

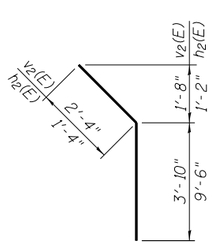
PILE DATA

Type: 12" ϕ Metal Shell with 0.250" thick walls
Nominal Required Bearing: 190 k (N. Abut.) and 190 k (S. Abut.)
Factored Resistance Available: 105 k (N. Abut.) and 105 k (S. Abut.)
Est. Length: 30'-6" (N. Abut.) and 30'-6" (S. Abut.)
No. Production Piles: 5 (N. Abut.) and 5 (S. Abut.)
No. Test Piles: 1 (N. Abut.) and 1 (S. Abut.)

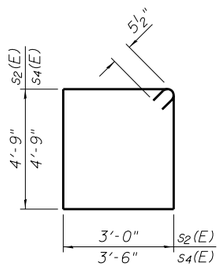


FIELD CUTTING DIAGRAM

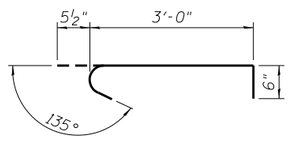
Order h1(E) and v4(E) full length. Cut as shown and use remainder of bars in opposite face.



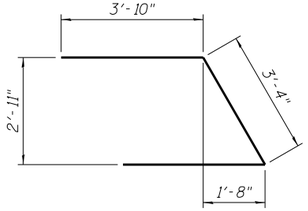
BAR v2(E) & h2(E)



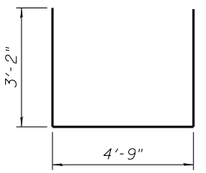
BAR s2(E) & s4(E)



BAR s3(E)



BAR u(E)



BAR u1(E)

NOTES:

For details of piles, see Structural Sheet 16 of 21.

Pour steps monolithically with cap.

For drainage details, see Structural Sheet 2 of 21.

WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

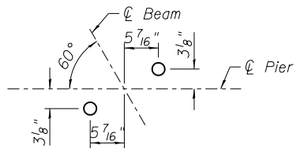
DESIGNED - PLP	REVISED -	
CHECKED - BKC	REVISED -	
DRAWN - RDA	REVISED -	
CHECKED - BKC	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

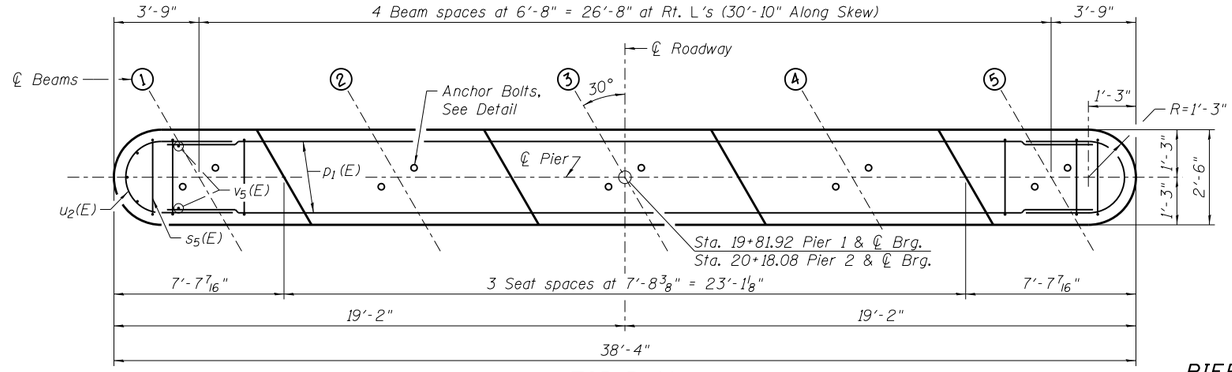
ABUTMENT DETAILS
STRUCTURE NO. 006-8100
STRUCTURAL SHEET NO. 14 OF 21 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	26
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

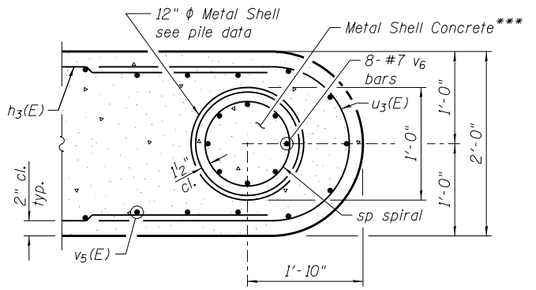
FILE = S:\PROJECTS\2015\1160D15.Walnut\DESIGN\STRUCT\20.Drawings\1160D15 Abutment Details.dgn



ANCHOR BOLT LAYOUT
(Typical)

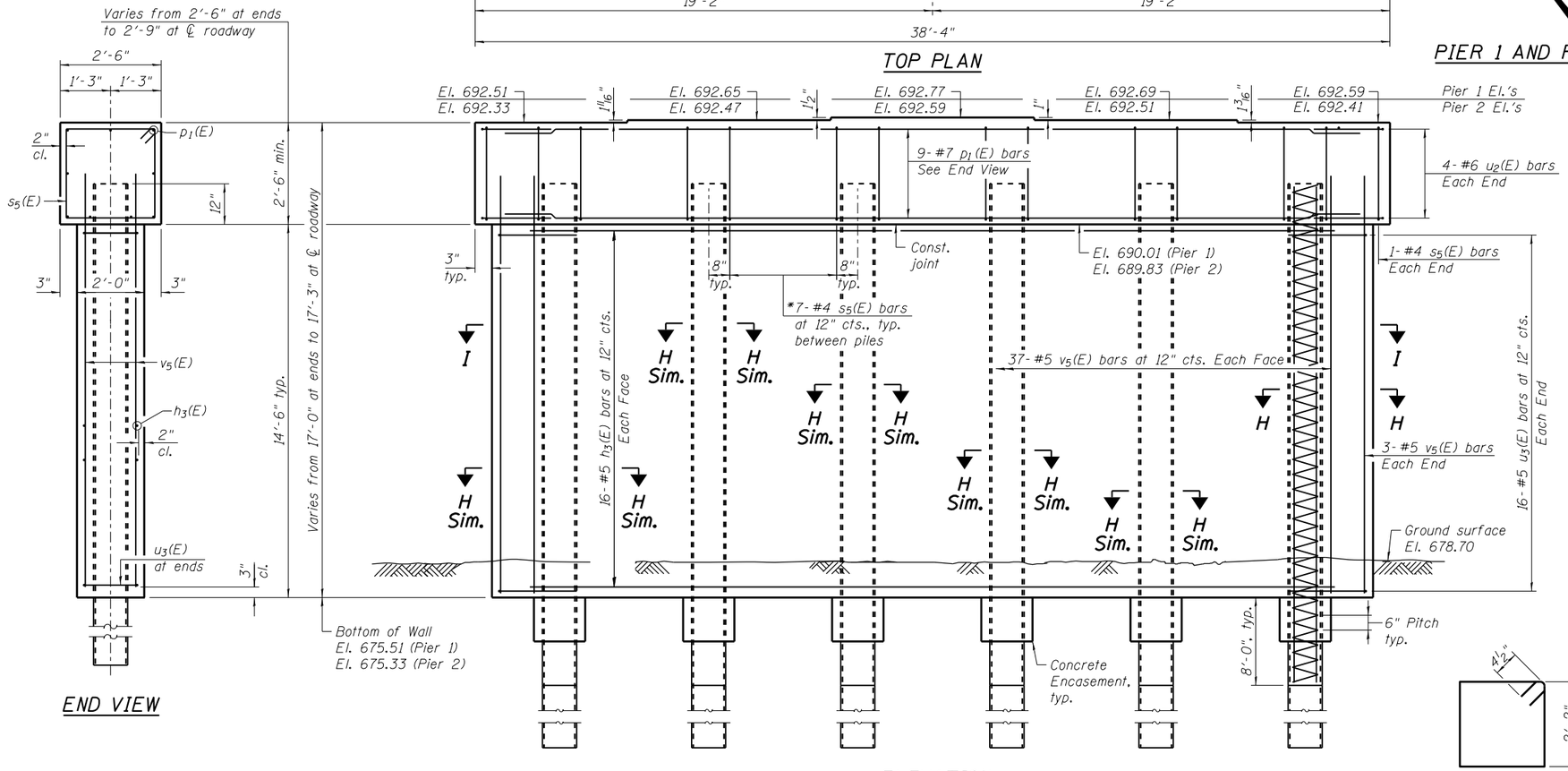


TOP PLAN



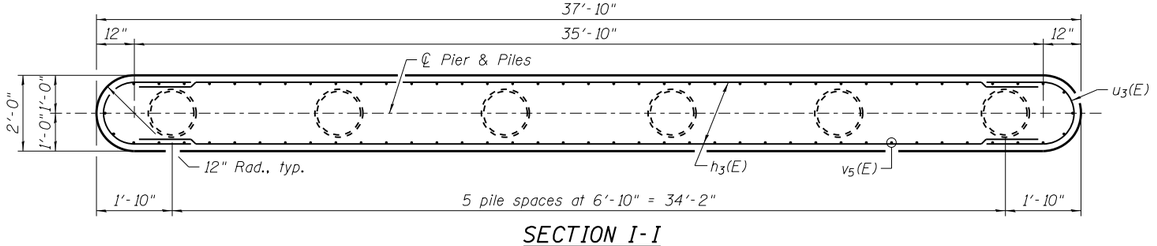
SECTION H-H
(Metal Shell Concrete, sp spiral, and v_6 bars typ. Each Pile)

PIER 1 AND PIER 2

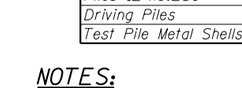


END VIEW

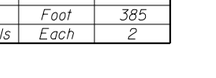
ELEVATION
(Looking North)



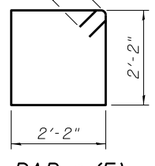
SECTION I-I
(Spirals not shown for clarity)



BARS $u_2(E)$



BARS $u_3(E)$



BAR $s_5(E)$

PILE DATA

Type: 12" ϕ Metal Shell with 0.250" thick walls
Nominal Required Bearing: 294k (Pier 1) and 294k (Pier 2)
Factored Resistance Available: 162k (Pier 1) and 162k (Pier 2)
Est. Length: 54'-0" (Pier 1) and 54'-0" (Pier 2)
No. Production Piles: 5 (Pier 1) and 5 (Pier 2)
No. Test Piles: 1 (Pier 1) and 1 (Pier 2)

TWO PIERS BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	$h_3(E)$	64	#5	35'-10"	——
	$p_1(E)$	18	#7	35'-10"	——
	$s_5(E)$	74	#4	9'-5"	□
	$u_2(E)$	16	#6	9'-3"	⊃
	$u_3(E)$	64	#5	7'-5"	⊃
**	sp	12	#4	23'-6"	∿∿
	$v_5(E)$	160	#5	15'-6"	——
	v_6	96	#7	23'-6"	——
	Structure Excavation		Cu. Yd.	58.6	
	Concrete Structures		Cu. Yd.	93.2	
	Concrete Encasement		Cu. Yd.	6.5	
	Reinforcement Bars, Epoxy Coated		Pound	12,230	
	Furnishing Metal Shell Piles 12"x0.250"		Foot	385	
	Driving Piles		Foot	385	
	Test Pile Metal Shells		Each	2	

NOTES:

Pour steps monolithically with cap.

Reinforcement bars designated (E) shall be epoxy coated.

All exposed edges shall have standard 3/4" chamfers. Except as noted.

* Space cap reinforcement to miss anchor bolts.

** Length is height of spiral.

*** Cost for Metal Shell Concrete included with Furnishing Metal Shell Piles 12"x0.250".

See Structural Sheet 16 of 21 for details of Concrete Encasement at Piers.

FILE = S:\PROJECTS\2015\1160115_Walnut\DESIGN\STRUCT\20_Drawings\1160115_Pier Details.dgn

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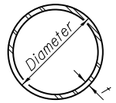
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - PLP	REVISED -	
CHECKED - BKC	REVISED -	
DRAWN - RDA	REVISED -	
CHECKED - BKC	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

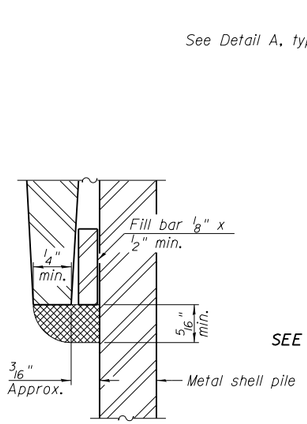
PIER DETAILS
STRUCTURE NO. 006-8100
STRUCTURAL SHEET NO. 15 OF 21 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	27
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

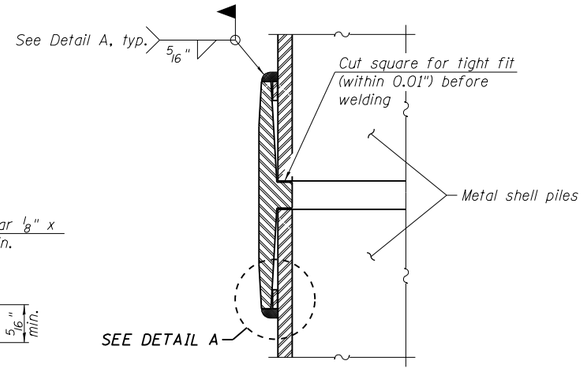


METAL SHELL PILE TABLE

Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume ($yd.^3$/ft.)
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361
PP16	0.312"	52.32	0.0478
PP16	0.375"	62.64	0.0470



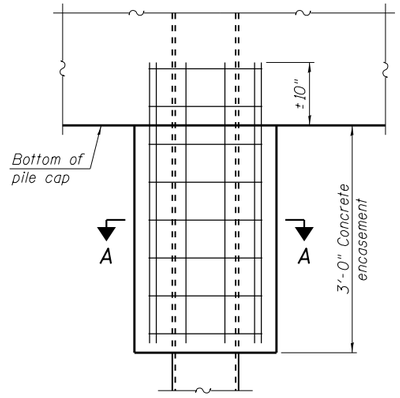
DETAIL A



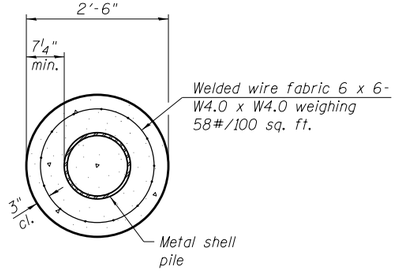
NOTE:
The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them.

Pile segments shall be driven to solid contact with splicer before welding.

WELDED COMMERCIAL SPLICE

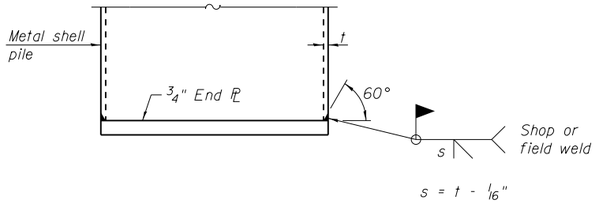


ELEVATION

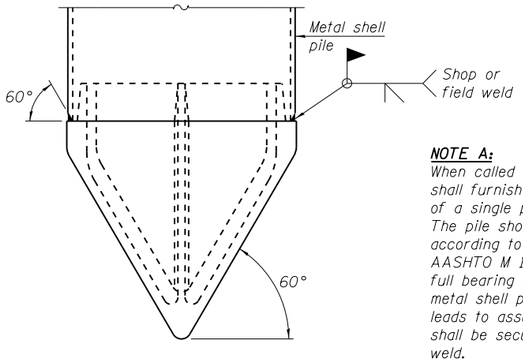


SECTION A-A

INDIVIDUAL PILE CONCRETE ENCASEMENT AT PIERS

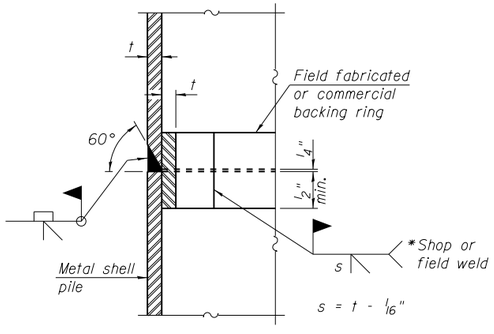


END PL ATTACHMENT



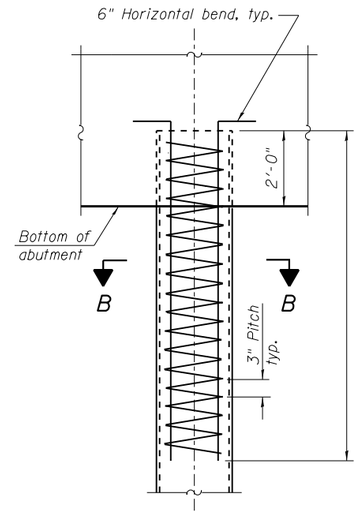
NOTE A:
When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 90-60 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld.

PILE SHOE ATTACHMENT
(See Note A)

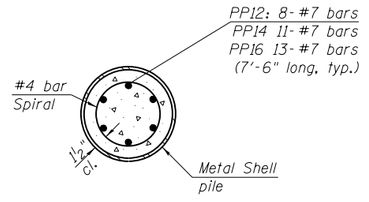


COMPLETE PENETRATION WELD SPLICE

*Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



ELEVATION



SECTION B-B

REINFORCEMENT AT ABUTMENTS

NOTE:
The metal shell piles shall be according to Article 1006.05 of the Standard Specifications.

WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

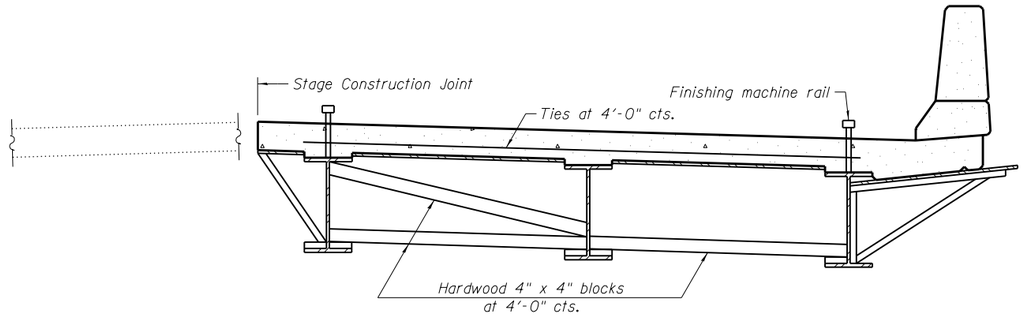
DESIGNED - PLP	REVISED -	
CHECKED - BKC	REVISED -	
DRAWN - RDA	REVISED -	
CHECKED - BKC	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

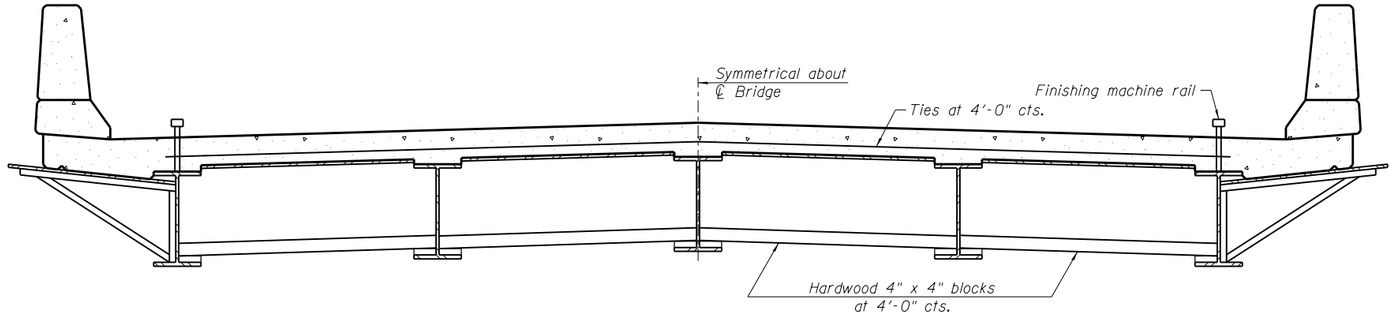
METAL SHELL PILE DETAILS
STRUCTURE NO. 006-8100
STRUCTURAL SHEET NO. 16 OF 21 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	28
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

FILE = S:\PROJECTS\2015\1160D15_Walnut\DESIGN\STRUCT\2D_Drawings\1160D15_Metal Shell Pile Details.dgn



FORM BRACES FOR
STAGE CONSTRUCTION



FORM BRACES FOR
STANDARD CONSTRUCTION

NOTES:

When cantilever forming brackets are used, the work shall be done according to Article 503.06(b) of the Standard Specifications, except as modified below and in the details shown on this sheet.

The finishing machine rails shall be placed on the top flange of the exterior beams.

The beams or girders, supporting cantilever forming brackets, shall be tied together at 4'-0" intervals.

For Standard construction, or Stage Construction the Hardwood bracing materials shall be placed as shown between webs of beams in each bay.

FILE = S:\PROJECTS\2015\1160D15.Walnut\DESIGN\STRUCTURE\2D-Drawings\1160D15_Cantilever Forming Brackets.dgn

WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - PLP	REVISED -	
CHECKED - BKC	REVISED -	
DRAWN - RDA	REVISED -	
CHECKED - BKC	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

CANTILEVER FORMING BRACKETS FOR SUPERSTRUCTURES WITH W27 BEAMS AND SMALLER
STRUCTURE NO. 006-8100

STRUCTURAL SHEET NO. 17 OF 21 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	29
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 1 of 4

Client: Willet Hofmann & Associates, Inc.
Project Name: Village Of Walnut Section 13-00019-00-BR
Project Site: Bureau County, IL.

Boring No. B-1
Surface Elev. ***693.40***
Auger Depth 76' Rotary Depth NA
Start Date 10/10/15 Finish Date 10/10/15

Location: 8' Right of Station 19+50

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) ELEV. 693.40	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
692.40			1								
691.40	Stiff Brown Sandy Loam (Fill)		2								
690.40			3	1	SS	1.7	11	S	15		
689.40			4								
688.40			5	2	SS	1.2	6	B	21		
687.40	Stiff Black Silty Clay		6								
686.40			7								
685.40			8	3	SS	1.4	6	B	23		
684.40			9								
683.40	Stiff Brown Silty Clay		10	4	SS	1.4	7	B	20		
682.40			11								
681.40			12								
680.40			13	5	SS	---	12	---	---		
679.40			14								
678.40			15	6	SS	---	15	---	---		
677.40	Medium Brown Fine Sand To Coarse Gravel		16								
676.40			17								
675.40			18	7	SS	---	17	---	---		
674.40			19								
673.40			20	8	SS	---	13	---	---		

Groundwater Data: Static water level at time of our subsurface investigation - Elevation 680.5
Comments:

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 2 of 4

Client: Willet Hofmann & Associates, Inc.
Project Name: Village Of Walnut Section 13-00019-00-BR
Project Site: Bureau County, IL.

Boring No. B-1
Surface Elev. ***693.40***
Auger Depth 76' Rotary Depth NA
Start Date 10/10/15 Finish Date 10/10/15

Location: 8' Right of Station 19+50

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) ELEV. 672.40	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
671.40			22								
670.40			23	9	SS	---	19	---	---		
669.40			24								
668.40	Medium Brown Fine Sand To Coarse Gravel (Cobble From 20 - 30' Depth)		25								
667.40			26	10	SS	---	26	---	---		
666.40			27								
665.40			28	11	SS	---	16	---	---		
664.40			29								
663.40			30								
662.40			31	12	SS	2.4	14	B	16		
661.40			32								
660.40			33	13	SS	3.1	15	S	13		
659.40			34								
658.40	Very Stiff Brownish Gray Silty Clay Till		35								
657.40			36	14	SS	3.5	18	S	14		
656.40			37								
655.40			38								
654.40			39								
653.40			40								
652.40			41	15	SS	3.7	24	S	12		

Groundwater Data: Static water level at time of our subsurface investigation - Elevation 680.5
Comments:

WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - PLP	REVISED -	
CHECKED - BKC	REVISED -	
DRAWN - RDA	REVISED -	
CHECKED - BKC	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

BORING LOGS
STRUCTURE NO. 006-8100
STRUCTURAL SHEET NO. 18 OF 21 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	30
	WHA* 1160015	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

FILE = S:\PROJECTS\2015\1160015.Walnut\DESIGN\STRUCTURE\20.Drawings\1160015.Boring Logs.dgn

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 3 of 4

Client: Willet Hofmann & Associates, Inc.
Project Name: Village Of Walnut Section 13-00019-00-BR
Project Site: Bureau County, IL.

Boring No. B-1
Surface Elev. ***693.40***
Auger Depth 76' Rotary Depth NA
Start Date 10/10/15 Finish Date 10/10/15

Location: 8' Right of Station 19+50

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
651.40											
650.40			43								
649.40			44								
648.40			45								
				16	SS	2.3	14	B	17		
647.40			46								
646.40			47								
645.40			48								
644.40			49								
643.40			50								
				17	SS	2.6	15	B	16		
642.40			51								
641.40			52								
640.40	Very Stiff Gray Silty Clay Till		53								
639.40			54								
638.40			55								
				18	SS	2.3	15	B	17		
637.40			56								
636.40			57								
635.40			58								
634.40			59								
633.40			60								
				19	SS	2.1	13	B	17		
632.40			61								
631.40			62								

Groundwater Data: Static water level at time of our subsurface investigation - Elevation 680.5
Comments:

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

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Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 4 of 4

Client: Willet Hofmann & Associates, Inc.
Project Name: Village Of Walnut Section 13-00019-00-BR
Project Site: Bureau County, IL.

Boring No. B-1
Surface Elev. ***693.40***
Auger Depth 76' Rotary Depth NA
Start Date 10/10/15 Finish Date 10/10/15

Location: 8' Right of Station 19+50

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
630.40											
629.40			64								
628.40			65								
				20	SS	2.2	13	B	16		
627.40			66								
626.40			67								
625.40			68								
624.40	Very Stiff Gray To Brownish Gray Silty Clay Till		69								
623.40			70								
				21	SS	2.8	17	S	13		
622.40			71								
621.40			72								
620.40			73								
619.40			74								
618.40			75								
				22	SS	2.5	16	S	13		
617.40	Boring Terminated		76								
616.40			77								
615.40			78								
614.40			79								
613.40			80								
612.40			81								
611.40			82								
610.40			83								

Groundwater Data: Static water level at time of our subsurface investigation - Elevation 680.5
Comments:

WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - PLP	REVISED -	
CHECKED - BKC	REVISED -	
DRAWN - RDA	REVISED -	
CHECKED - BKC	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

BORING LOGS
STRUCTURE NO. 006-8100
STRUCTURAL SHEET NO. 19 OF 21 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	31
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

FILE = S:\PROJECTS\2015\1160D15_Walnut\DESIGN\STRUCT\20_Drawings\1160D15_Boring Logs.dgn

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 1 of 4

Client: Willet Hofmann & Associates, Inc.
Project Name: Village Of Walnut Section 13-00019-00-BR
Project Site: Bureau County, IL.

Boring No. B-2
Surface Elev. ***692.90***
Auger Depth 76' Rotary Depth NA
Start Date 10/10/15 Finish Date 10/10/15

Location: 15' Left of Station 20+50

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) ELEV. 692.90	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
691.90	Stiff Black Silty Clay		1								
690.90			2								
689.90			3	1	SS	1.0	5	B	21		
688.90			4								
687.90			5	2	SS	1.3	6	B	18		
686.90			6								
685.90	Stiff Brown Silty Clay		7								
684.90			8	3	SS	1.2	6	B	18		
683.90			9								
682.90			10	4	SS	1.2	6	B	19		
681.90			11								
680.90			12								
679.90			13	5	SS	---	16	---	---		
678.90			14								
677.90			15								
676.90	Medium Brown Fine Sand To Coarse Gravel		16	6	SS	---	22	---	---		
675.90			17								
674.90			18	7	SS	---	20	---	---		
673.90			19								
672.90			20	8	SS	---	26	---	---		

Groundwater Data: Static water level at time of our subsurface investigation - Elevation 680.5
Comments:

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 2 of 4

Client: Willet Hofmann & Associates, Inc.
Project Name: Village Of Walnut Section 13-00019-00-BR
Project Site: Bureau County, IL.

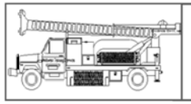
Boring No. B-2
Surface Elev. ***692.90***
Auger Depth 76' Rotary Depth NA
Start Date 10/10/15 Finish Date 10/10/15

Location: 15' Left of Station 20+50

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) ELEV. 671.90	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
670.90			22								
669.90			23	9	SS	---	17	---	---		
668.90			24								
667.90			25								
666.90			26	10	SS	---	18	---	---		
665.90			27								
664.90	Medium Brown Fine Sand To Coarse Gravel With Cobbles		28	11	SS	---	25	---	---		
663.90			29								
662.90			30								
661.90			31	12	SS	---	14	---	---		
660.90			32								
659.90			33	13	SS	---	21	---	---		
658.90			34								
657.90			35								
656.90			36	14	SS	---	37	---	---		
655.90			37								
654.90	Dense Brown Coarse Gravel With Cobbles		38								
653.90			39								
652.90			40								
651.90			41	15	SS	---	42	---	---		

Groundwater Data: Static water level at time of our subsurface investigation - Elevation 680.5
Comments:



Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 3 of 4

Client: Willet Hofmann & Associates, Inc.
Project Name: Village Of Walnut Section 13-00019-00-BR
Project Site: Bureau County, IL.

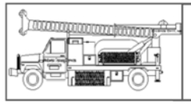
Boring No. B-2
Surface Elev. ***692.90***
Auger Depth 76' Rotary Depth NA
Start Date 10/10/15 Finish Date 10/10/15

Location: 15' Left of Station 20+50

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
650.90											
649.90			43								
648.90			44								
647.90	Dense Brown Coarse Gravel With Cobbles		45								
646.90			46	16	SS	---	36	---	---		
645.90			47								
644.90			48								
643.90			49								
642.90			50								
641.90			51	17	SS	2.5	14	B	18		
640.90			52								
639.90			53								
638.90	Very Stiff Gray Silty Clay Till		54								
637.90			55								
636.90			56	18	SS	2.2	12	B	18		
635.90			57								
634.90			58								
633.90			59								
632.90			60								
631.90			61	19	SS	2.7	15	B	16		
630.90			62								

Groundwater Data: Static water level at time of our subsurface investigation - Elevation 680.5
Comments:



Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 4 of 4

Client: Willet Hofmann & Associates, Inc.
Project Name: Village Of Walnut Section 13-00019-00-BR
Project Site: Bureau County, IL.

Boring No. B-2
Surface Elev. ***692.90***
Auger Depth 76' Rotary Depth NA
Start Date 10/10/15 Finish Date 10/10/15

Location: 15' Left of Station 20+50

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
629.90											
628.90			64								
627.90	Very Stiff Gray Silty Clay Till		65								
626.90			66	20	SS	2.4	15	B	15		
625.90			67								
624.90			68								
623.90			69								
622.90			70								
621.90	Very Stiff Brownish Gray Till With Sand Seams		71	21	SS	2.4	21	S	14		
620.90			72								
619.90			73								
618.90			74								
617.90			75								
616.90	Boring Terminated		76	22	SS	3.0	19	S	12		
615.90			77								
614.90			78								
613.90			79								
612.90			80								
611.90			81								
610.90			82								
609.90			83								

Groundwater Data: Static water level at time of our subsurface investigation - Elevation 680.5
Comments:

FILE = S:\PROJECTS\2015\160015_Walnut\DESIGN\STRUCT\20.Drawings\160015_Boring Logs.dgn

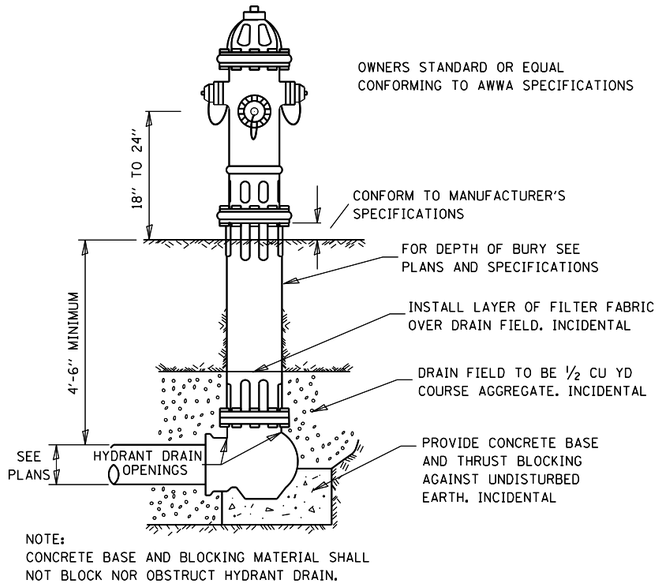
WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - PLP	REVISED -	
CHECKED - BKC	REVISED -	
DRAWN - RDA	REVISED -	
CHECKED - BKC	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

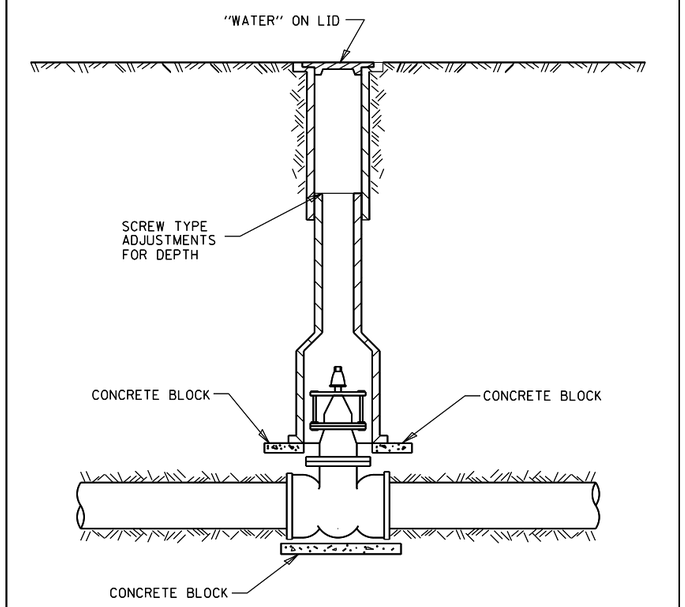
BORING LOGS
STRUCTURE NO. 006-8100
STRUCTURAL SHEET NO. 21 OF 21 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	33
	WHA* 1160015	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

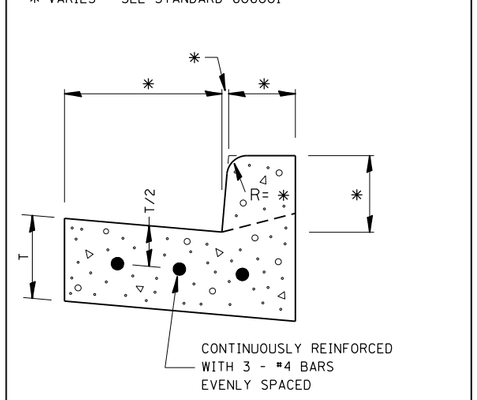


NOTE:
CONCRETE BASE AND BLOCKING MATERIAL SHALL
NOT BLOCK NOR OBSTRUCT HYDRANT DRAIN.

TYPICAL HYDRANT INSTALLATION



TYPICAL VALVE BOX INSTALLATION



REINFORCEMENT SHALL NOT BE PAID FOR
SEPARATELY BUT WILL BE INCLUDED IN THE
CONTRACT UNIT PRICE FOR CC&G.

REINFORCEMENT DETAIL FOR COMBINATION CONCRETE CURB AND GUTTER

FILE = S:\PROJECTS\2015\160015.Walnut\DESIGN\STRUCT\20.Drawings\160015_District 3 Details.dgn

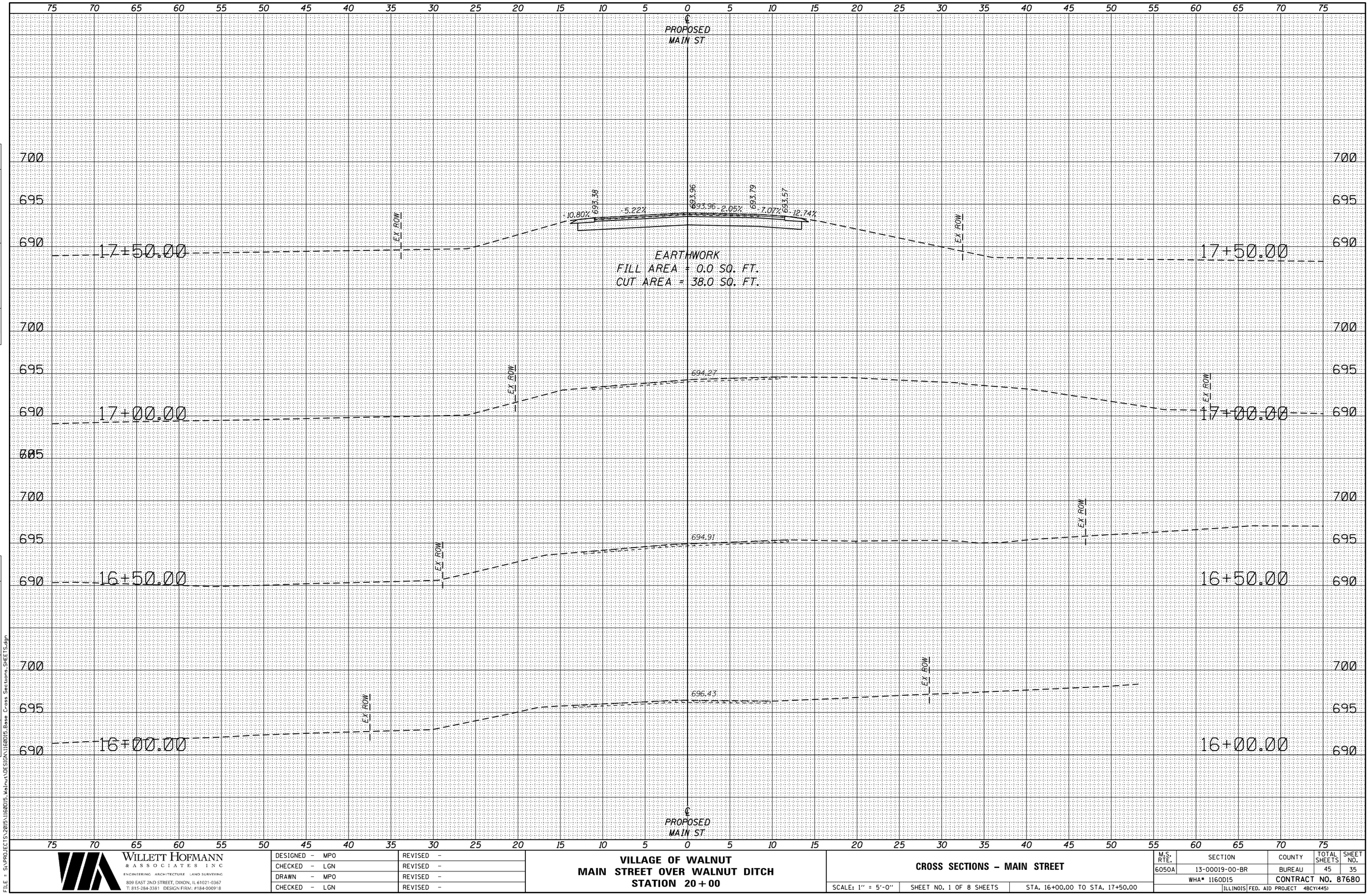
WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000718

DESIGNED - BRH	REVISED -	
CHECKED - LGN	REVISED -	
DRAWN - BRH	REVISED -	
CHECKED - LGN	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

DISTRICT 3 DETAILS
STRUCTURE NO. 006-8100
SHEET NO. 1 OF 1 SHEETS

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	34
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			



FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

FILE = S:\PROJECTS\2015\1160015_Walnut\DESIGN\1160D15_Base Cross Sections_SHEETS.dgn

WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

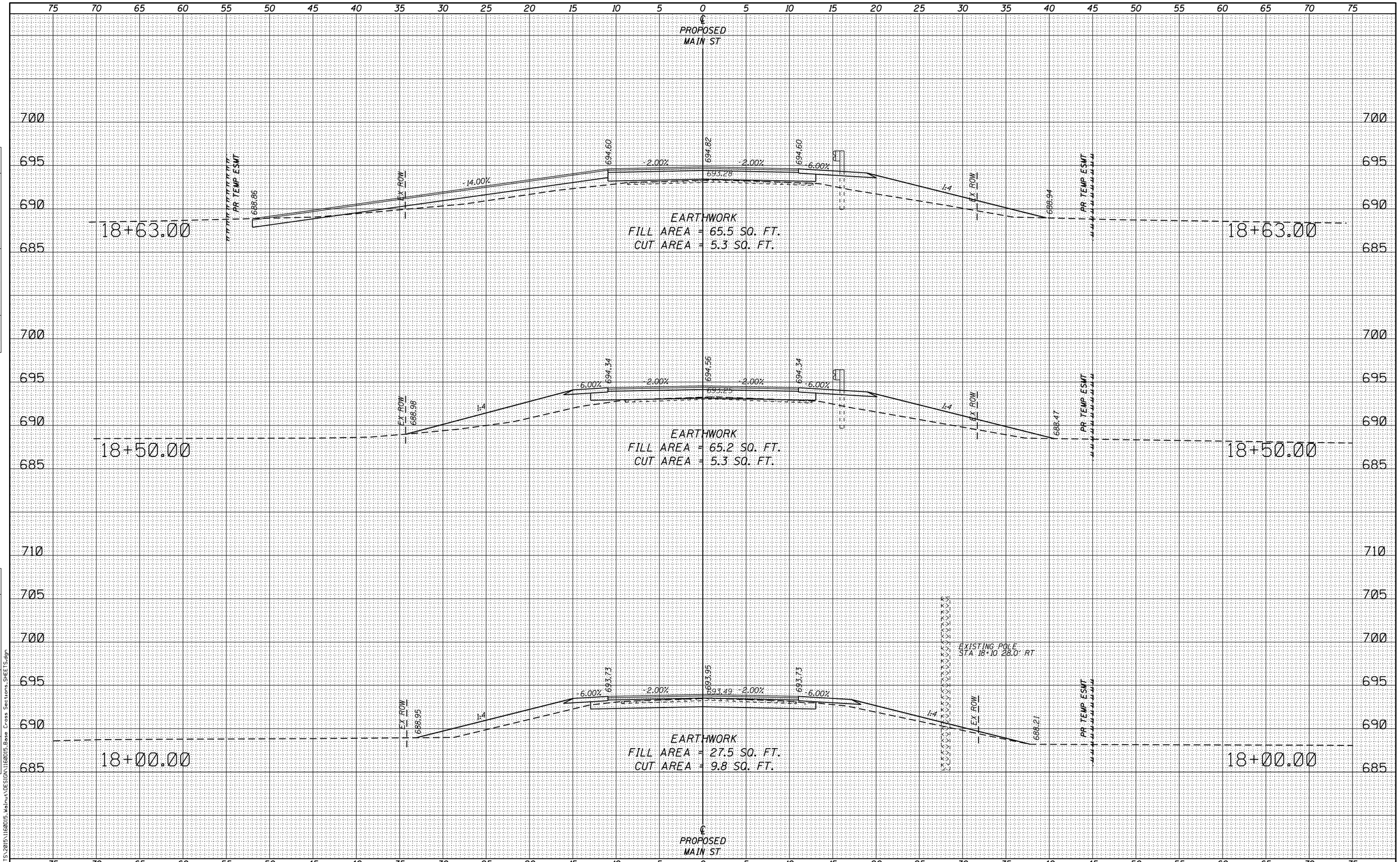
DESIGNED - MPO	REVISED -	
CHECKED - LGN	REVISED -	
DRAWN - MPO	REVISED -	
CHECKED - LGN	REVISED -	

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

CROSS SECTIONS – MAIN STREET

SCALE: 1" = 5'-0" | SHEET NO. 1 OF 8 SHEETS | STA. 16+00.00 TO STA. 17+50.00

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	35
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			



FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
NO.	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
NO.	AREAS CHECKED	

FILE = S:\PROJECTS\2015\1160015_Walnut\DESIGN\1160D15_Base Cross Sections_SHEETS.dgn

WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

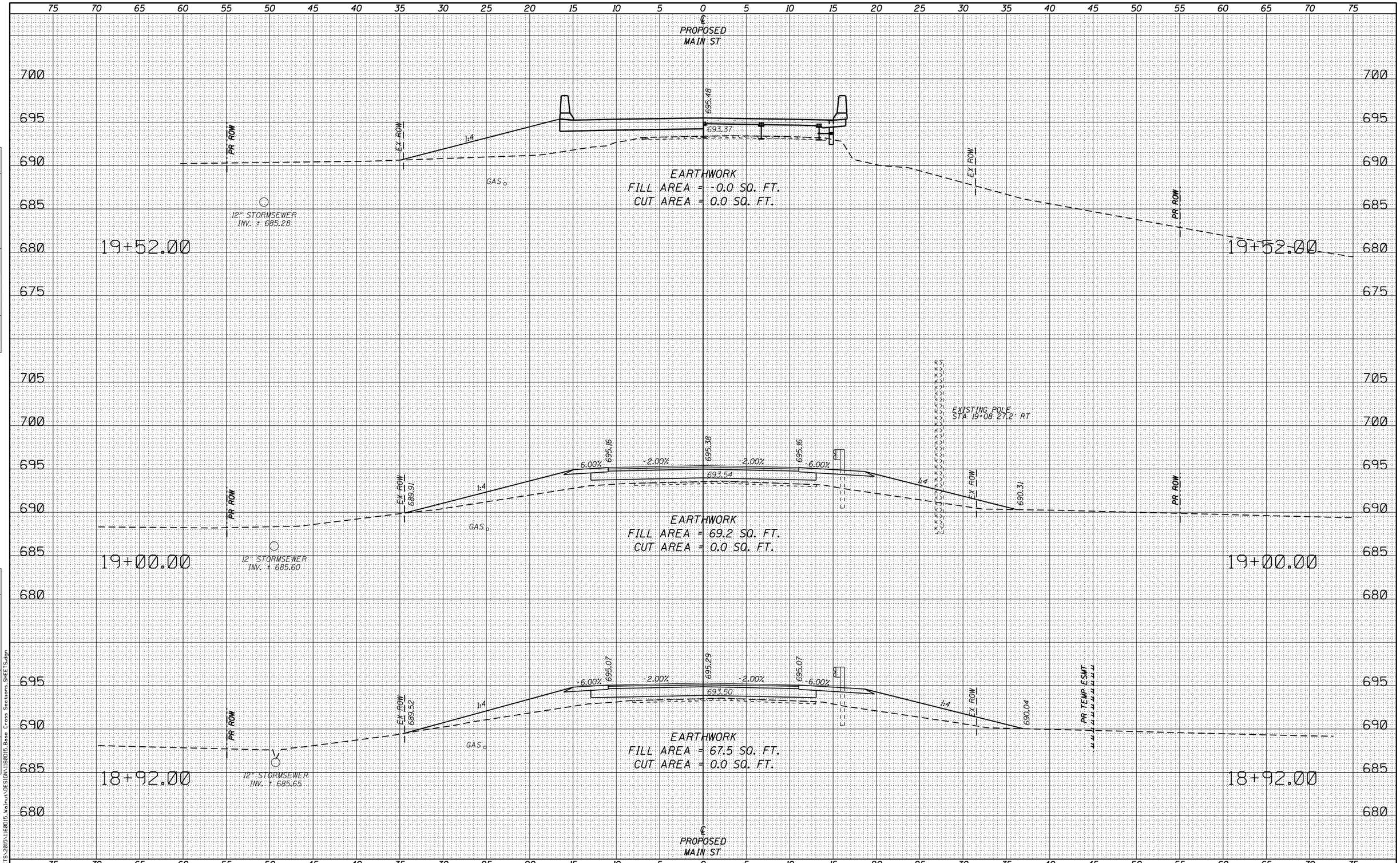
DESIGNED - MPO		REVISED -
CHECKED - LGN		REVISED -
DRAWN - MPO		REVISED -
CHECKED - LGN		REVISED -

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

CROSS SECTIONS – MAIN STREET

SCALE: 1" = 5'-0" | SHEET NO. 2 OF 8 SHEETS | STA. 18+00.00 TO STA. 18+63.00

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	36
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			



FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

FILE = S:\PROJECTS\2015\1160015.Walnut\DESIGN\1160015.Base Cross Sections_SHEETS.dgn

WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

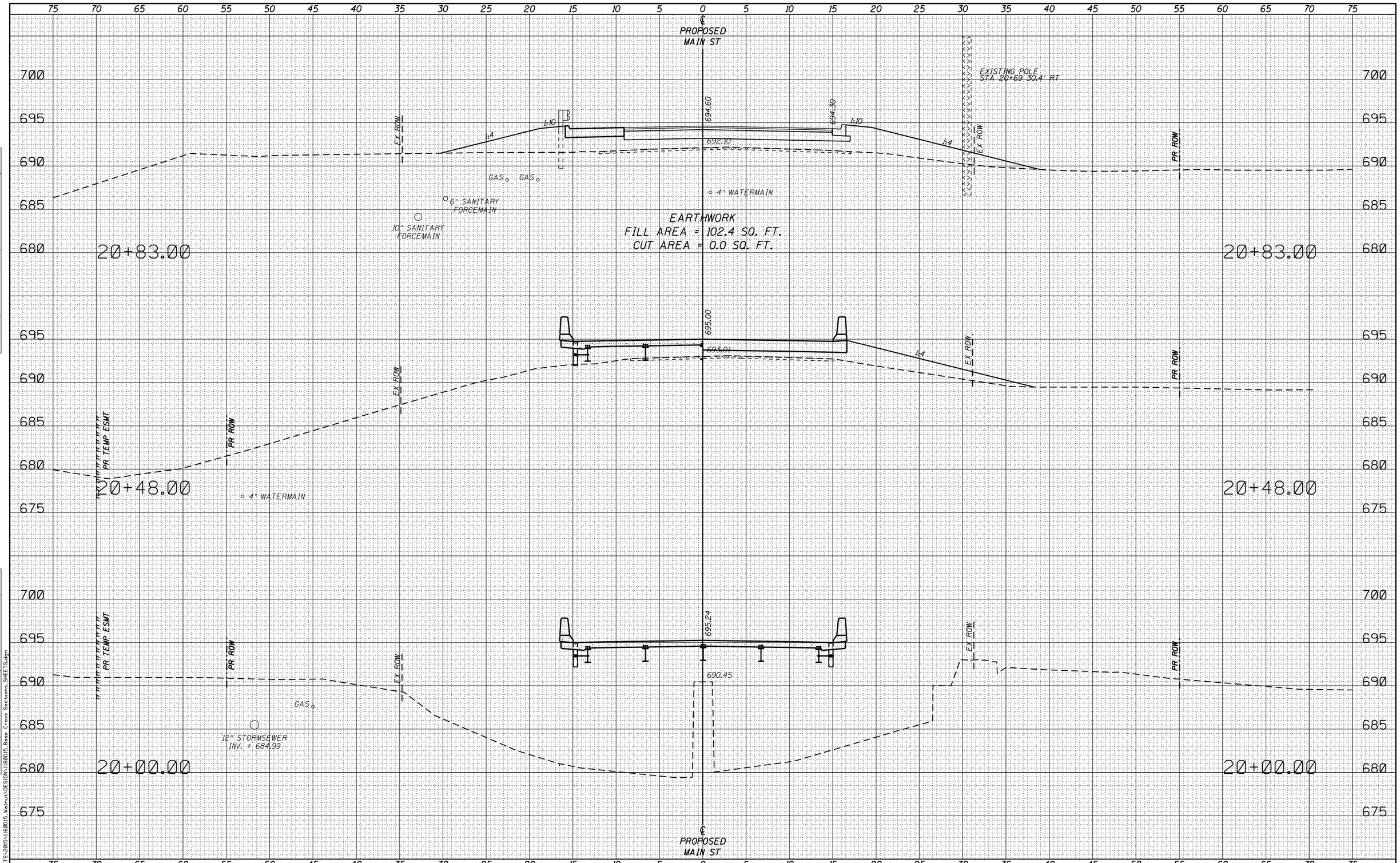
DESIGNED	MPO	REVISED -
CHECKED	LGN	REVISED -
DRAWN	MPO	REVISED -
CHECKED	LGN	REVISED -

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

CROSS SECTIONS – MAIN STREET

SCALE: 1" = 5'-0" | SHEET NO. 3 OF 8 SHEETS | STA. 18+92.00 TO STA. 19+52.00

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	37
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			



WILLETT HOFMANN & ASSOCIATES INC ENGINEERING ARCHITECTURE LAND SURVEYING 809 EAST 2ND STREET, DIXON, IL 61021-0367 T: 815-284-3381 DESIGN FIRM: #184-000918	DESIGNED - MPO CHECKED - LGN DRAWN - MPO CHECKED - LGN	REVISED - REVISED - REVISED - REVISED -	**VILLAGE OF WALNUT** **MAIN STREET OVER WALNUT DITCH** **STATION 20+00**

CROSS SECTIONS – MAIN STREET

SCALE: 1" = 5'-0" | SHEET NO. 4 OF 8 SHEETS | STA. 20+00.00 TO STA. 20+83.00

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	38
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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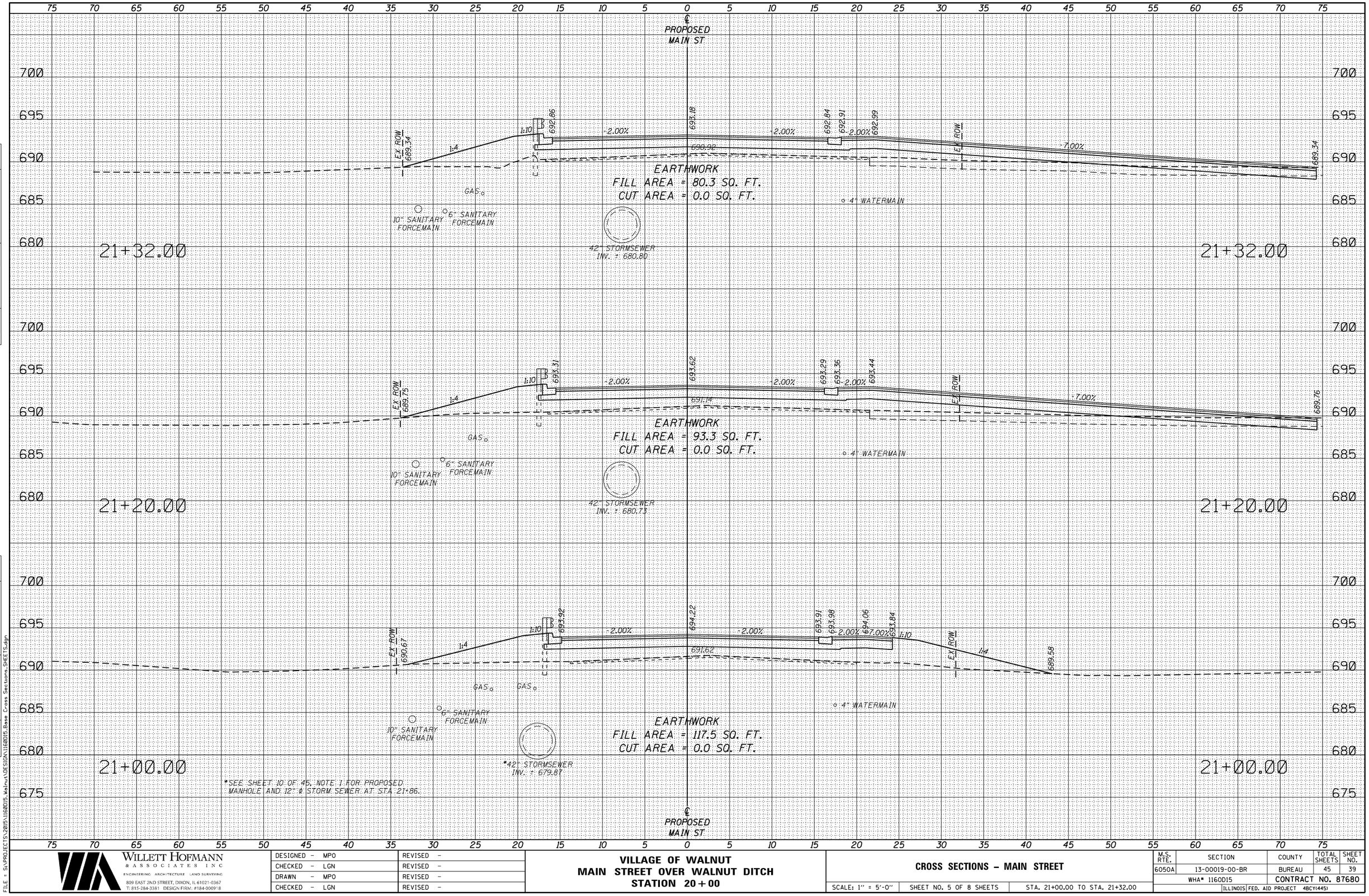


FINAL SURVEY

NO.	BY	DATE
NOTE BOOK		
AREAS CHECKED		
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		

ORIGINAL SURVEY

NO.	BY	DATE
NOTE BOOK		
AREAS CHECKED		
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		

FILE = S:\PROJECTS\2015\1160015.Walnut\DESIGN\1160015.Base Cross Sections_SHEETS.dgn

WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

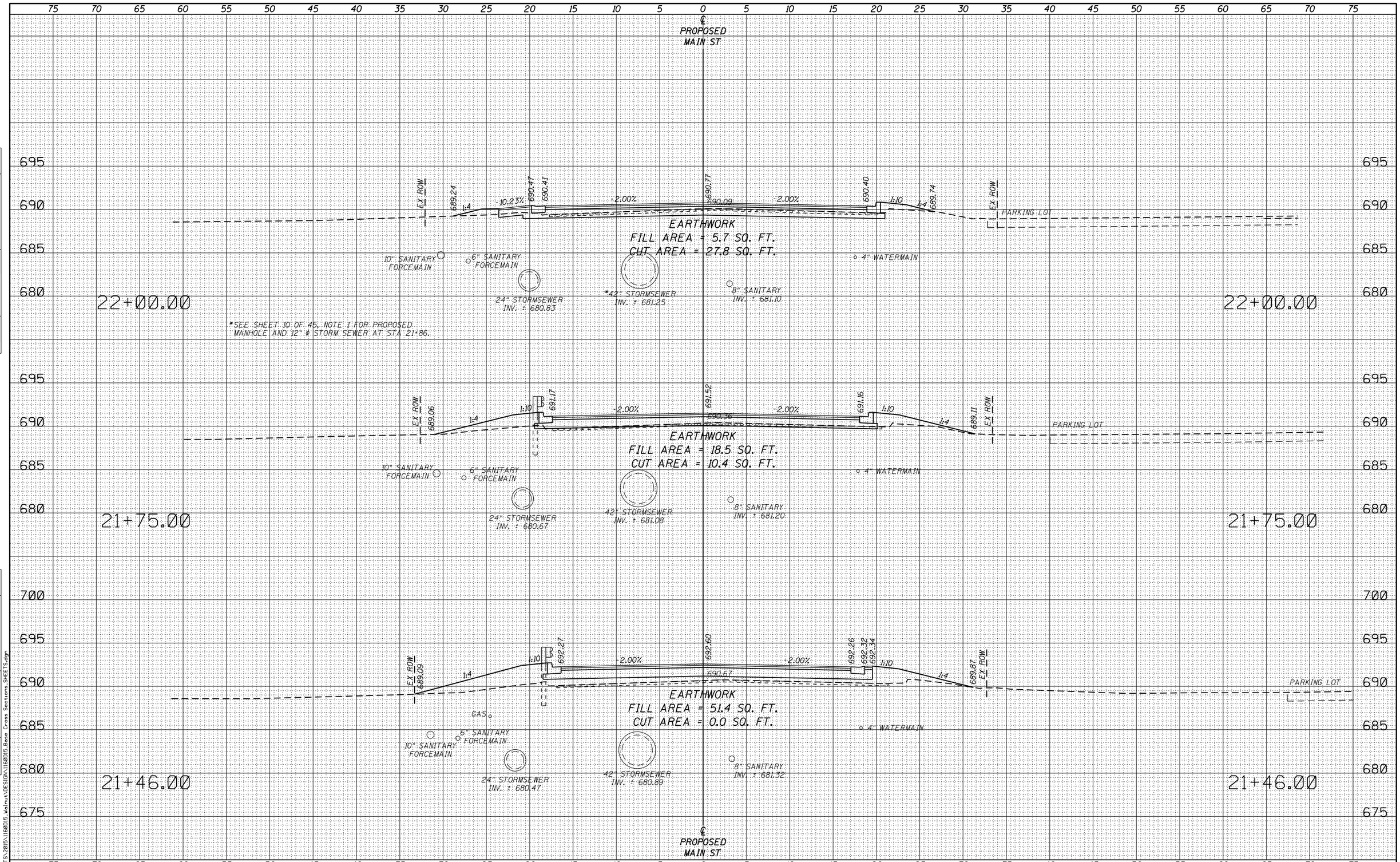
DESIGNED	- MPO	REVISED	-
CHECKED	- LGN	REVISED	-
DRAWN	- MPO	REVISED	-
CHECKED	- LGN	REVISED	-

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

CROSS SECTIONS – MAIN STREET

SCALE: 1" = 5'-0" | SHEET NO. 5 OF 8 SHEETS | STA. 21+00.00 TO STA. 21+32.00

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	39
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			



FINAL SURVEY	NOTE BOOK		NO.
	SURVEYED	BY	
	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		
		DATE	

ORIGINAL SURVEY	NOTE BOOK		NO.
	SURVEYED	BY	
	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		
		DATE	

FILE = S:\PROJECTS\2015\1160015.Walnut\DESIGN\1160D15_Base Cross Sections_SHEET.dgn

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ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

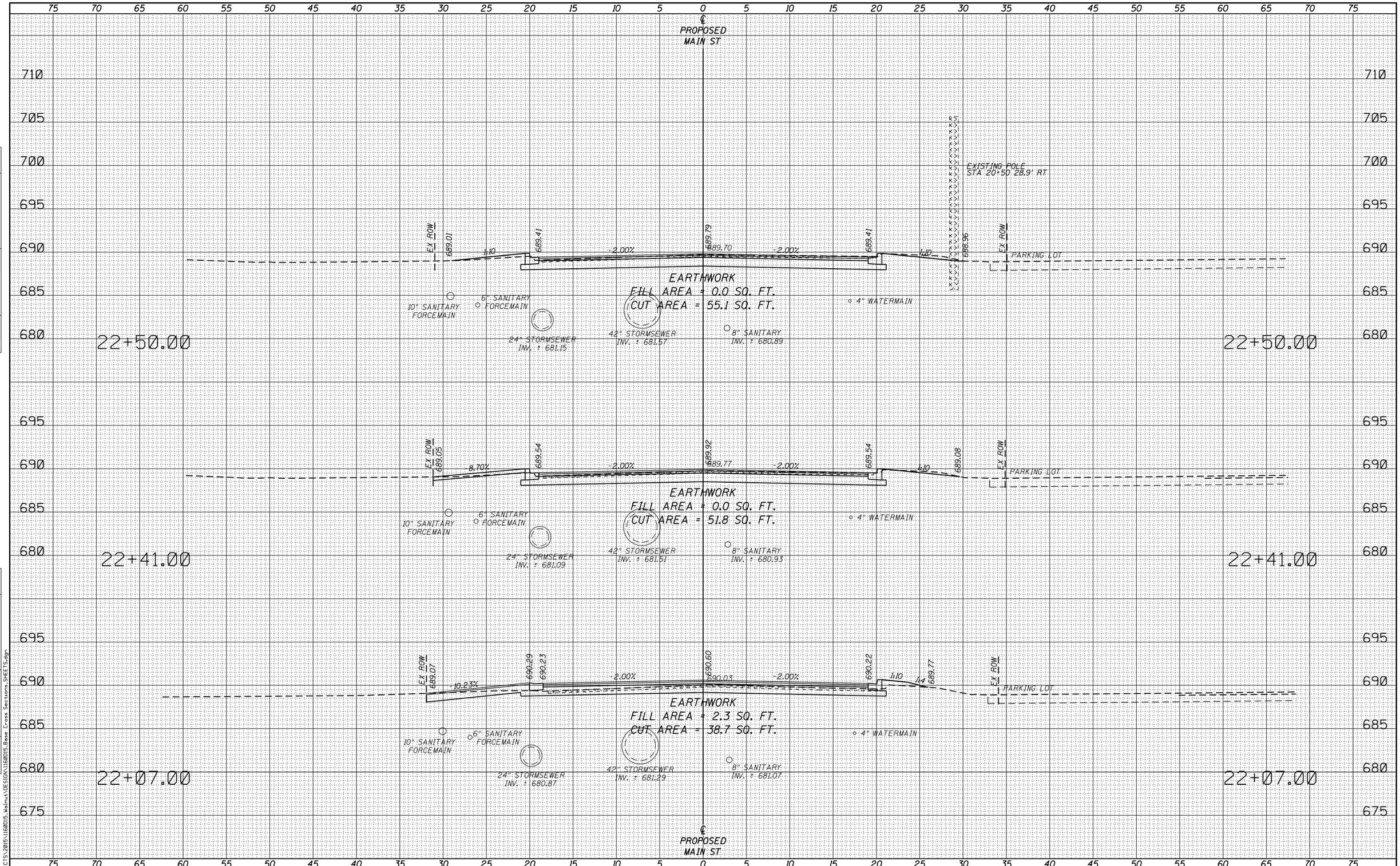
DESIGNED - MPO		REVISED -
CHECKED - LGN		REVISED -
DRAWN - MPO		REVISED -
CHECKED - LGN		REVISED -

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

CROSS SECTIONS – MAIN STREET

SCALE: 1" = 5'-0" | SHEET NO. 6 OF 8 SHEETS | STA. 21+46.00 TO STA. 22+00.00

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	40
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			



FINAL SURVEY
NOTE BOOK
NO.

BY	DATE
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	

ORIGINAL SURVEY
NOTE BOOK
NO.

BY	DATE
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	

FILE = S:\PROJECTS\2015\1160015.Walnut\DESIGN\1160015.Base Cross Sections_SHEETS.dgn

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ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
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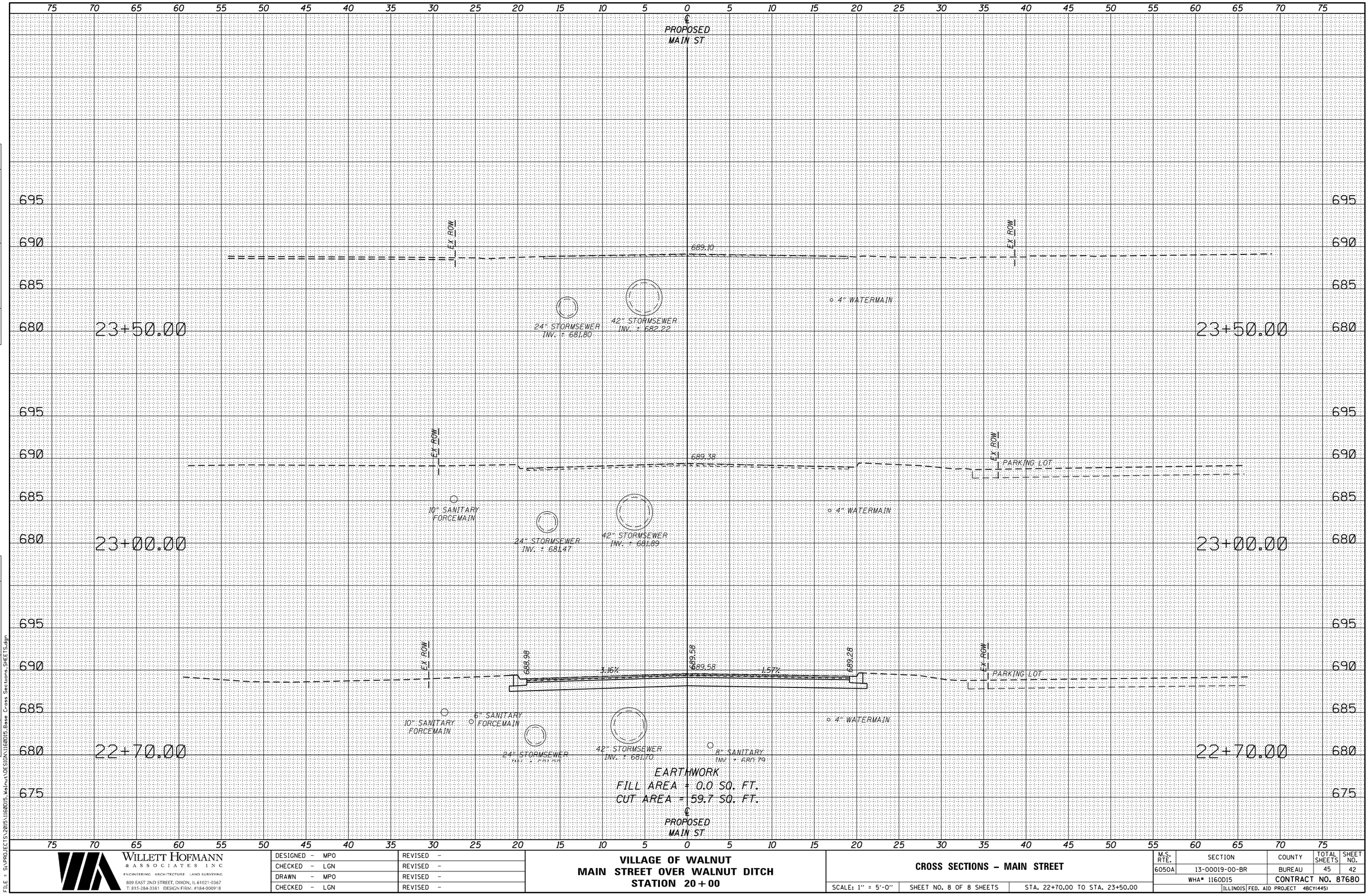
DESIGNED	MPO	REVISED	-
CHECKED	LGN	REVISED	-
DRAWN	MPO	REVISED	-
CHECKED	LGN	REVISED	-

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

CROSS SECTIONS – MAIN STREET

SCALE: 1" = 5'-0" | SHEET NO. 7 OF 8 SHEETS | STA. 22+07.00 TO STA. 22+50.00

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	41
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			



FINAL SURVEY	BY	DATE
NOTE BOOK	SURVEYED	
NO.	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
NOTE BOOK	SURVEYED	
NO.	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	

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WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
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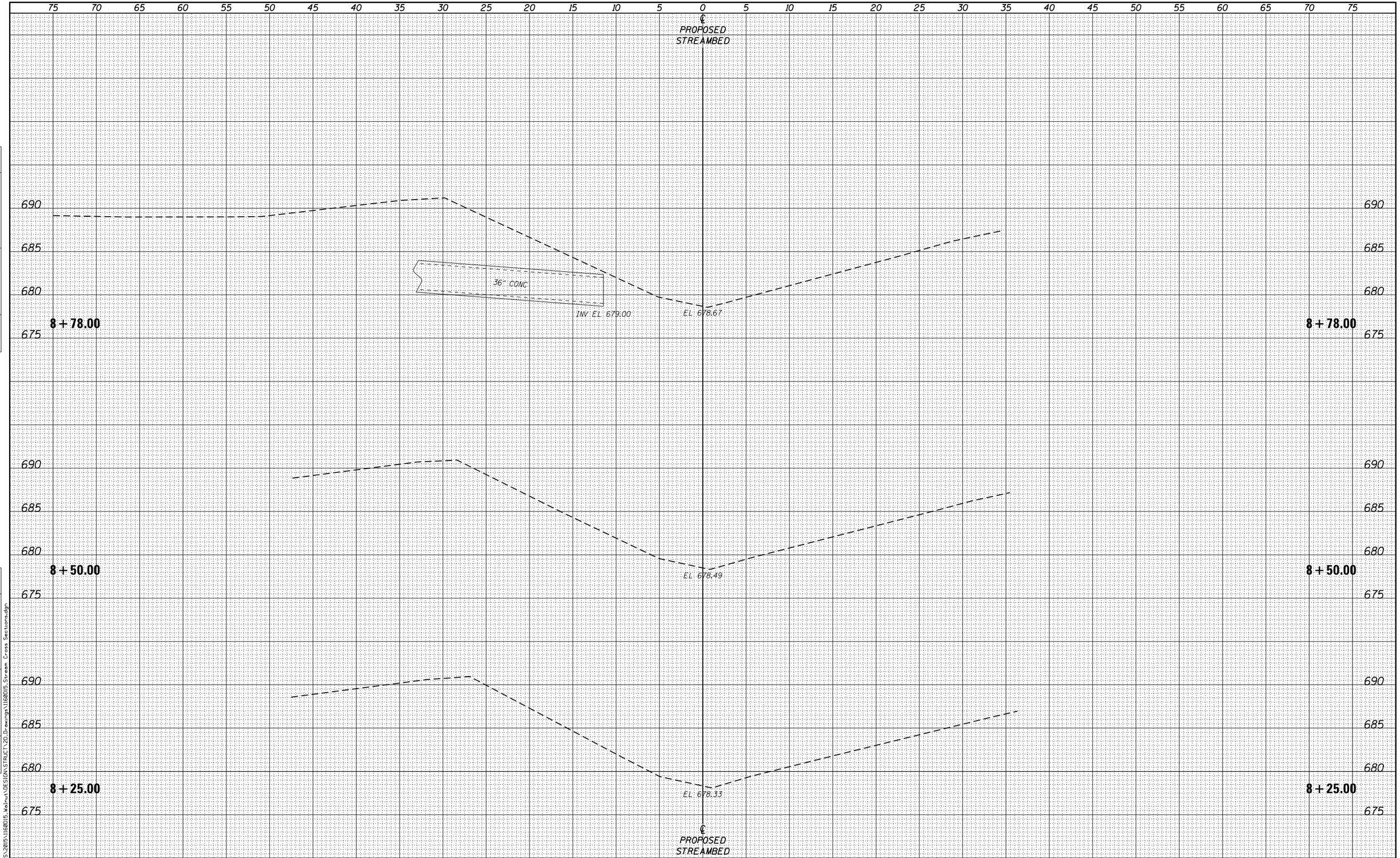
DESIGNED	MPO	REVISED	-
CHECKED	LGN	REVISED	-
DRAWN	MPO	REVISED	-
CHECKED	LGN	REVISED	-

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20+00

CROSS SECTIONS – MAIN STREET

SCALE: 1" = 5'-0" | SHEET NO. 8 OF 8 SHEETS | STA. 22+70.00 TO STA. 23+50.00

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	42
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			



FINAL SURVEY	NOTE BOOK	NO.
	SURVEYED	
	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
	SURVEYED	
	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	

BY	DATE

FILE = S:\PROJECTS\2015\1160015.Walnut\DESIGN\STRUCT\2D_Drawings\1160015_Stream Cross Sections.dgn

WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

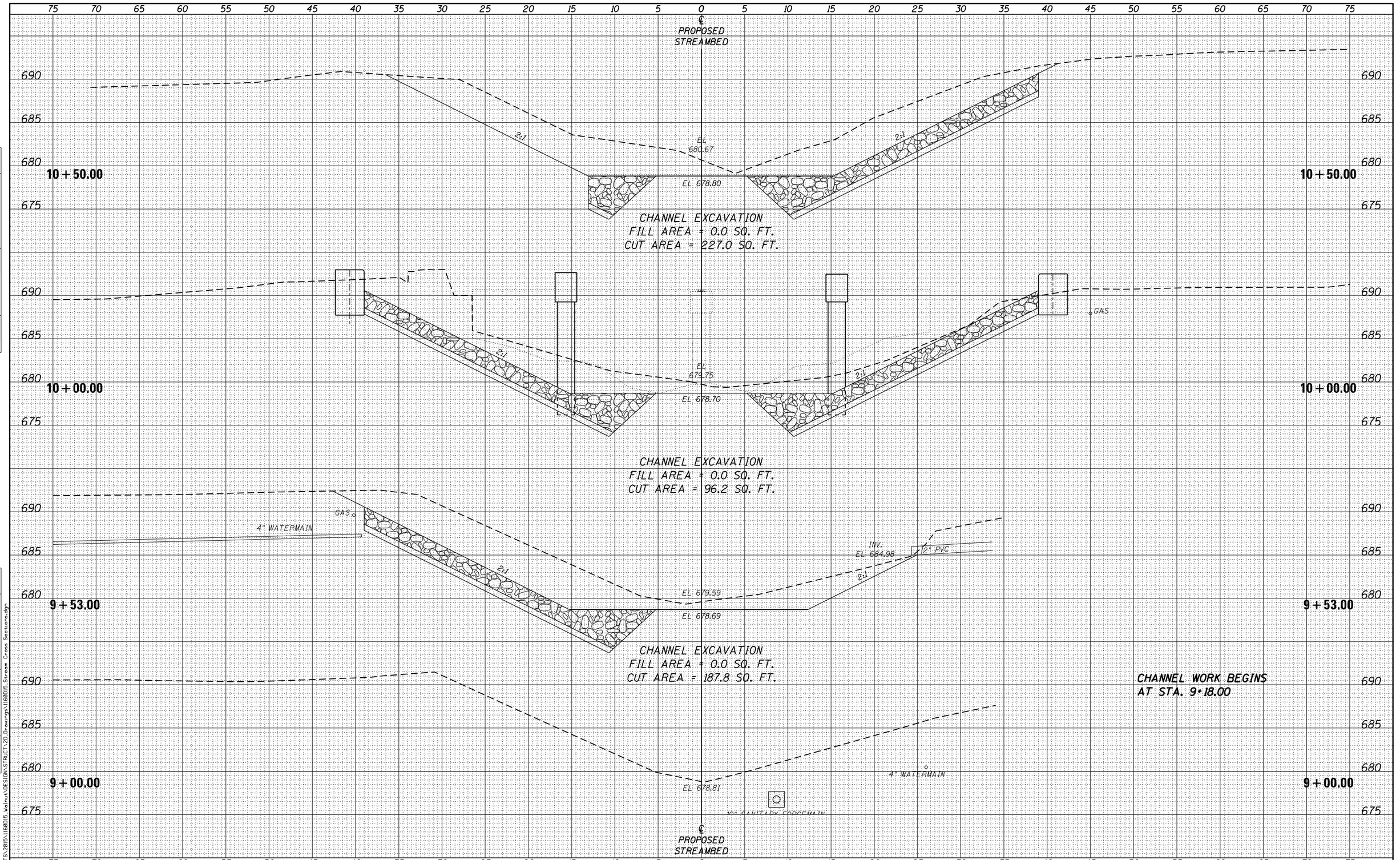
DESIGNED	- MPO	REVISED	-
CHECKED	- LGN	REVISED	-
DRAWN	- MPO	REVISED	-
CHECKED	- LGN	REVISED	-

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20 + 00

CROSS SECTIONS – WALNUT DITCH

SCALE: 1" = 5'-0" | SHEET NO. 1 OF 3 SHEETS | STA. 8+25.00 TO STA. 8+78.00

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	43
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			



FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
NO.	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
NO.	AREAS CHECKED	

FILE = S:\PROJECTS\2015\1160D15_Walnut\DESIGN\STRUCTURE\2D_Drawings\1160D15_Stream Cross Sections.dgn

WILLETT HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

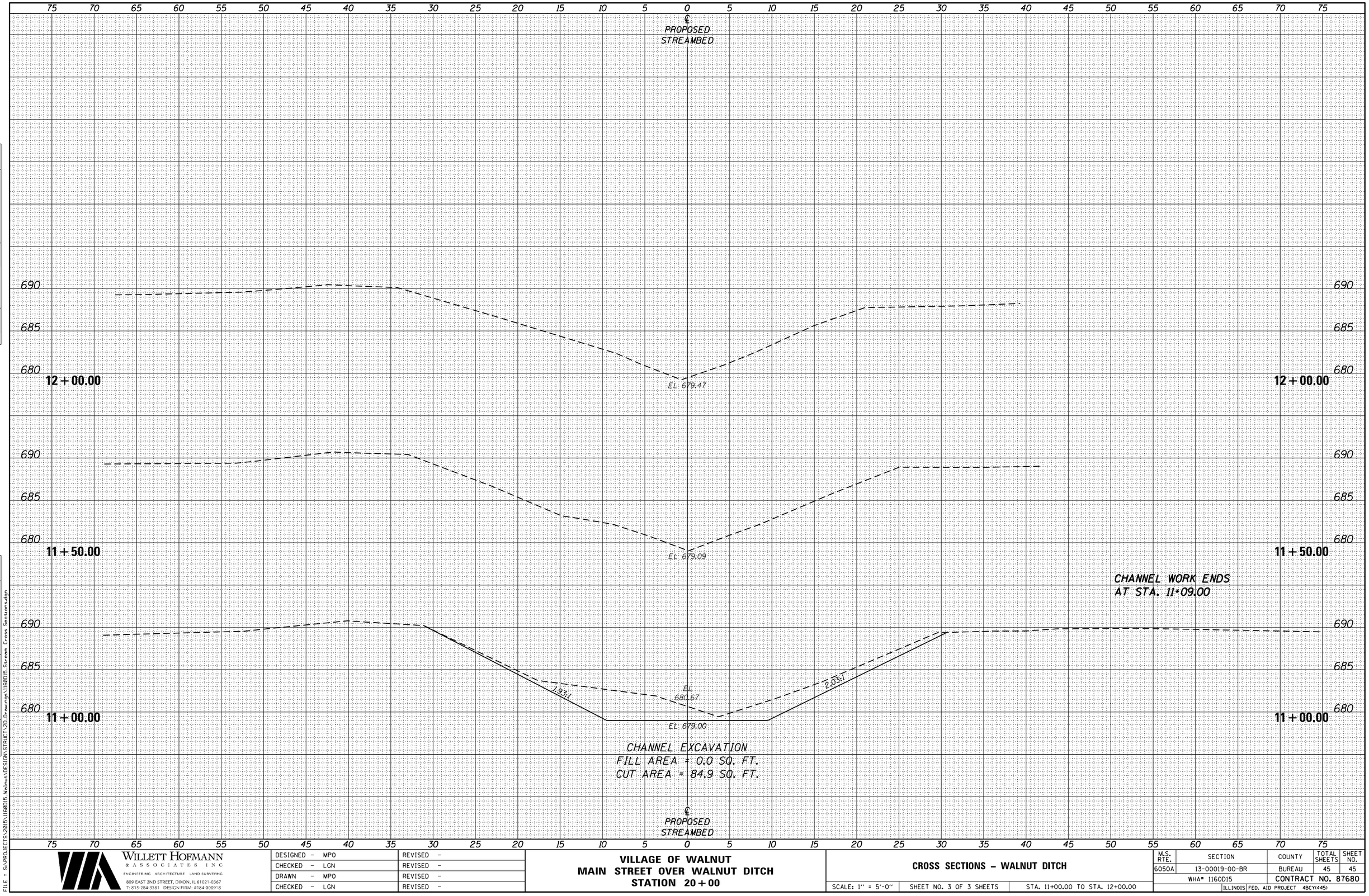
DESIGNED	- MPO	REVISED	-
CHECKED	- LGN	REVISED	-
DRAWN	- MPO	REVISED	-
CHECKED	- LGN	REVISED	-

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20 + 00

CROSS SECTIONS – WALNUT DITCH

SCALE: 1" = 5'-0" | SHEET NO. 2 OF 3 SHEETS | STA. 9+00.00 TO STA. 10+50.00

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	44
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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CHECKED	- LGN	REVISED	-

VILLAGE OF WALNUT
MAIN STREET OVER WALNUT DITCH
STATION 20 + 00

CROSS SECTIONS – WALNUT DITCH

SCALE: 1" = 5'-0" | SHEET NO. 3 OF 3 SHEETS | STA. 11+00.00 TO STA. 12+00.00

M.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6050A	13-00019-00-BR	BUREAU	45	45
	WHA* 1160D15	CONTRACT NO. 87680		
	ILLINOIS FED. AID PROJECT 4BCY(445)			