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STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

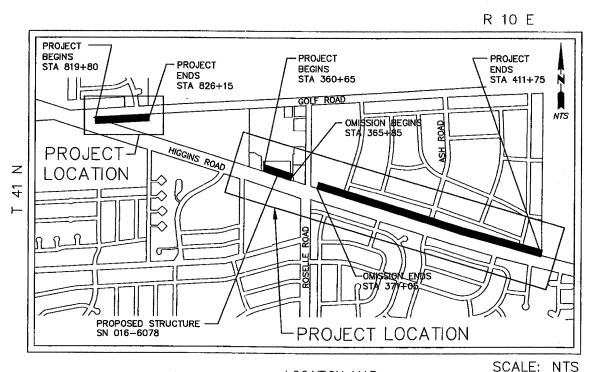
FAP ROUTE 341 IL RTE 72 (HIGGINS ROAD)

GOLF ROAD TO PLUM GROVE ROAD

PEDESTRIAN AND BICYCLE PROJECT

PROJECT NO. CMM-9003(243)SECTION NO. 08-00080-00-BT JOB NO. C-91-330-09 VILLAGE OF HOFFMAN ESTATES

COOK COUNTY



GROSS LENGTH = 5714 LIN. FT. (1.08 MILES) NET LENGTH = 4965 LIN. FT. (0.94 MILE)



UC. EXP. 11-30-11



GOLF ROAD

LOCATION OF SECTION INDICATED THUS: --BIKE PATH HIGGINS ROAD DESIGN SPEED: 20 MPH ADT = 33,200ADT = 42.800SPEED LIMIT: 45 MPH SPEED LIMIT: 45 MPH STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS APPROVED Avant 4, 2011 VILLAGE OF HOFFMAN ESTATES, DIRECTOR OF ENGINEERING PASSED

SECTION

08-00080-00-BT

COUNTY TOTAL SHEE NO.

COOK 86 1

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

Review AUGUST 5

Releasing for Bid

Based on Limited

CHRISTOPHE BUT

DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

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606001-04 CONCRETE CURB AND COMBINATION CONCRETE CURB & GUTTER

701006-03 OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE 701011-02 OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY

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701901-01 TRAFFIC CONTROL DEVICES 814001-02 CONCRETE HANDHOLES

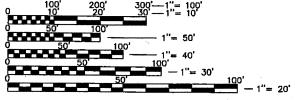
880006-01 TRAFFIC SIGNAL MOUNTING DETAILS 886001-01 DETECTOR LOOP INSTALLATIONS 886006-01 TYPICAL LAYOUTS FOR DETECTION LOOPS

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TC-13 TYPICAL PAVEMENT MARKINGS

TS-05 STANDARD TRAFFIC SIGNAL DESIGN DETAILS



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.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

Project Engineer: Nathan Roseberry, P.E. (847) 252-5800 Hoffman Estates, IL

CONTRACT NO.

63233

LOCATION MAP

GENERAL NOTES

- 1. ITEMS OF WORK LISTED IN THE SUMMARY OF QUANTITIES WHICH ARE NOT SPECIFICALLY INDICATED IN THE PLANS SHALL BE PERFORMED AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 2. THE VILLAGE SHALL NOT ASSUME ANY OF THE RESPONSIBILITIES OF THE CONTRACTOR'S SUPERINTENDENT OR OF SUBCONTRACTORS.
- 3. THE LOCATION OF PUBLIC AND PRIVATE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND THEIR ACCURACY IS NOT GUARANTEED. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES. THE CONTRACTOR SHALL REPORT ANY ENCOUNTERED DISCREPENCIES TO THE ENGINEER AT ONCE. THE CONTRACTOR SHALL TAKE DUE CARE IN ALL PHASES OF THE CONSTRUCTION TO PROTECT ANY UTILITIES WHICH MAY BE AFFECTED BY THE WORK. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. FOR UNDERGROUND UTILITY LOCATIONS, CALL 48 HOURS BEFORE DIGGING, (EXCLUDING SATURDAY, SUNDAY & HOLIDAYS) J.U.L.I.E. 1-800-692-0123 OR 811.
- 4. THE PROPOSED PROFILE WILL MATCH EXISTING ON ALL SHEETS UNLESS OTHERWISE NOTED.
- 5. THE VILLAGE OF HOFFMAN ESTATES WILL BE PROVIDING CONSTRUCTION LAYOUT AND STAKING OF THE PROPOSED SIDEWALKS & BIKE PATH. THE SIDEWALK & BIKE PATH LOCATIONS ARE ESSENTIALLY FOLLOWING AN ESTABLISHED FOOT PATH AND EXISTING TERRAIN. VARIATIONS IN THE PATH ARE SHOWN ON THE PLANS.
- 6. THE CONTRACTOR SHALL KEEP THE AREA OF CONSTRUCTION FREE OF DEBRIS AND OBJECTIONAL MATERIALS DURING CONSTRUCTION.
- 7. THE CONTRACTOR SHALL MAINTAIN ALL DRAINAGE FACILITIES DURING CONSTRUCTION AND SHALL REPAIR ANY DRAINAGE FACILITIES DAMAGED DURING CONSTRUCTION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND WILL NOT BE PAID FOR SEPARATELY.
- 8. MINIMUM SIDEWALK THICKNESS SHALL BE 5" AND THE MINIMUM BIKE PATH THICKNESS SHALL BE 2".
- 9. MAXIMUM LONGITUDINAL SLOPE SHALL NOT EXCEED 5%.
- 10. MAXIMUM TRANSVERSE SLOPE SHALL BE 1/4"/FT (2%).
- 11. ALL SIDEWALKS WITHIN THE PROJECT LIMITS AND ADJACENT TO THE CURB SHALL BE REMOVED AND REPLACED TO CONSTRUCT SIDEWALK RAMPS ACCESSIBLE TO THE DISABLED ACCORDING TO IDOT STANDARD 424001 - TYPE B.
- 12. A MINIMUM 4" AGGREGATE BASE COURSE, TYPE B. SHALL BE PROVIDED FOR THE SIDEWALK AND A MINIMUM 6" AGGREGATE BASE COURSE, TYPE B, SHALL BE PROVIDED FOR THE BIKE PATH
- 13. AGGREGATE BASE COURSE SHALL BE MECHANICALLY COMPACTED. ONLY 2x6 WOOD FORMS SHALL BE USED FOR FRAMING THE CONCRETE WORK OR APPROVED EQUAL.
- 14. THE CONTRACTOR SHALL PROTECT ALL SIDEWALKS AND CURB & GUTTER FROM DAMAGE AND VANDALISM.
- 15. SUPPLEMENTAL WATERING SHALL BE AT THE DIRECTION OF THE ENGINEER FOR SOD.
- 16. SODDING SHALL OCCUR BETWEEN THE SIDEWALK AND THE CURB, AS SHOWN ON THE PLANS, OR AT THE DIRECTION OF THE ENGINEER.

LEGEND

EXISTING EXISTING PROPOSED EXISTING PROPOSED SIDEWALK OR CURB & GUTTER ROW LINE ASPHALT BIKE PATH DITCH LINE REMOVAL OF \otimes SIDEWALK OR CURB TOP OF BANK REMOVAL AND REPLACEMENT OF CURB STREET LIGHT CABLE (0) (0) STORM MANHOLE STORM INLET R&R REMOVE AND RESET \Box 0 CATCH BASIN TELEPHONE OR ELECTRICAL PEDESTAL T or E \bigcirc SANITARY SEWER -()-UTILITY POLE - SINGLE UTILITY SIGN RESERVE -17--UTILITY POLE - MULTIPLE UTILITIES FLARED END SECTION ∇ • FIRE HYDRANT LIGHT POLE Ø >---STORM SEWER DETECTABLE WARNING SANITARY SEWER RIP RAP WATER MAIN SPLIT RAIL FENCE F&L NEW FRAME AND LID INLET AND PIPE PROTECTION ADJSTRUCTURES TO BE **ADJUSTED** STRUCTURES TO BE **RCN**

17. THE GENERAL CONTRACTOR IS REQUIRED TO HIRE AN ENVIRONMENTAL FIRM WITH AT LEAST DEPARTMENT TO REMEDIATE THE SOIL CONTAMINATION AND MONITOR FOR WORKER PROTECTION.

FIVE (5) DOCUMENTED LEAKING UNDERGROUND STORAGE TANK (LUST) CLEANUPS OR THAT IS PRE-QUALIFIED IN HAZARDOUS WASTE BY THE

FILE NAME =		DESIGNED —	REVISED —
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RECONSTRUCTED



						~~~~
Higgins	Road	Bicycle	and	Pedestriar	n Project	
	Gene	eral Not	es ar	nd Legend		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	08-00080-00-BT	Cook	86	2
		CONTRACT	NO. 6	3233
	ILLINOIS FED A	ID DOO ECT CHI	0003/243	`

LANDSCAPING LEGEND

OVERSTORY/ORNAMENTAL TREE

EVERGREEN TREE

RUSH

BUSH REMOVE

CLEARING AREA

SHRUB MASS

BUSHES/LANDSCAPING

REMOVE EXISTING TREE

REMOVE EXISTING EVERGREEN

PROPOSED

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X

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Н SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

AT&T UNDERGROUND TELEPHONE LINE

VERIZON UNDERGROUND FIBER OPTIC LINE

					CONSTRU	ICTION TYPE CODES  NEW BRIDGE: SN 016-6078
	CODE NO.	ITEM	UNIT	QUANTITY	0021	0008_
	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	550	550	
	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	214	214	
	20101000	TEMPORARY FENCE	FOOT	2700	2700	
	20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	23	23	
	20101350	TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	45	45	
	20200100	EARTH EXCAVATION	CU YD	2126	2126	
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	100	100	
	20400800	FURNISHED EXCAVATION	CU YD	773	773	
	20800150	TRENCH BACKFILL	CU YD	47	47	
*	21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	6553	6553	
	21400100	GRADING AND SHAPING DITCHES	FOOT	100	100	
*	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	77	77	
*	25000500	PHOSPHORUS FERTILIZER NÜTRIENT	POUND	77	77	
*	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	77	77	
*	25200110	SODDING, SALT TOLERANT	SQ YD	6553	6553	
*	25200200	SUPPLEMENTAL WATERING	UNIT	18	18	
	28000500	INLET AND PIPE PROTECTION	EACH	10	10	
	28000510	INLET FILTERS	EACH	3	3	
	28100107	STONE RIPRAP, CLASS A4	SQ YD	59	59	
	28200200	FILTER FABRIC	SQ YD	59	59	
	31101100	SUB BASE GRANULAR MATERIAL, TYPE B	CU YD	100	100	
	35101600	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	960	960	
	35101800	AGGREGATE BASE COURSE, TYPE B 6"	SQ YD	4107	4107	
	40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	616	616	
	40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	474	474	
	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	8640	8640	
	42400800	DETECTABLE WARNINGS	SQ FT	282	282	
	44000100	PAVEMENT REMOVAL	SQ YD	44	44	
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	375	375	
	44000600	SIDEWALK REMOVAL	SQ FT	700	700	
	542A1069	PIPE CULVERTS, CLASS A, TYPE 2 24"	FOOT	182	182	
	542A5491	PIPE CULVERTS, CLASS A, TYPE 1 EQUIVALENT ROUND—SIZE 36"	FOOT	48	48	
	54214731	PRECAST REINFORCED CONCRETE FLARED END SECTIONS — ELLIPTICAL, EQUIVALENT ROUND—SIZE 36"	EACH	2	2	
	54247130	GRATING FOR CONCRETE FLARED END SECTION 24"	EACH	4	4	
	54248160	GRATING FOR CONCRETE FLARED END SECTION EQUIVALENT ROUND—SIZE 36"	EACH	2	2	
	60107700	PIPE UNDERDRAINS 6"	FOOT	15	15	
	60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	, 1	*
	60255500	MANHOLES TO BE ADJUSTED	EACH	8	8	
	60257900	MANHOLES TO BE RECONSTRUCTED	EACH	1	1	
	60603900	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (ABUTTING EXISTING PAVEMENT)	FOOT	233	233	
	60605100	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (ABUTTING EXISTING PAVEMENT)	FOOT	180	180	
*	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	20	20	
	66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1	
	66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1	
	67100100	MOBILIZATION	L SUM	1	1	
	70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1	
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1	
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1	
	72000100	SIGN PANEL - TYPE 1	SQ FT	55	55	
	72900100	METAL POST - TYPE A	FOOT	161	161	
*	78001100	PAINT PAVEMENT MARKING — LETTERS AND SYMBOLS	SQ FT	2	2	
*	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1877	1877	
*		PAINT PAVEMENT MARKING - LINE 6"	FOOT	2750	2750	

* - SPECIALTY ITEM

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	DATE	REVISED —



VILLAGE OF HOFFMAN ESTATES 1900 Hossell Rood, Hoffman Estates, IL 60169 Phone Number: 847 252-5800

Higgins Road Bicycle and F	odoberian i rojobe								
Summary of Quantities									
SCALE: NONE SHEET NO. 1 OF 2 SHEETS	STA. TO STA.								

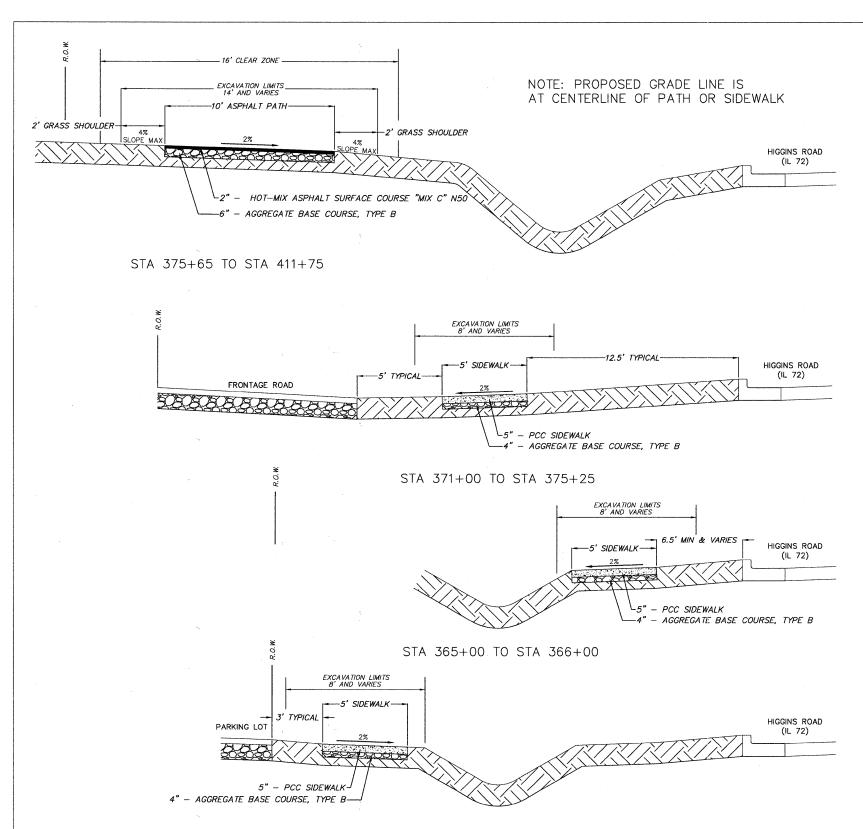
0005 110	1		011441777		NEW BRIDGE: SN 016-6078
CODE NO.	. ITEM	UNIT	QUANTITY	0021	0008
* 78001150	PAINT PAVEMENT MARKING - LINE 12"	FOOT	312	312	¥
* 78001180	PAINT PAVEMENT MARKING - LINE 24"	FOOT	505	505	
78300100	PAVEMENT MARKING REMOVAL	SQ FT	176	176	
* 81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	50	50	
* 81018600	CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	13	. 13	
* 81018700	CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	90	90	
* 81400100	HANDHOLE	EACH	1 .	√ii 1	
* 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2	2	
* 87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	4500	4500	
* 87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2529	2529	
* 87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	400	400	
* 87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	737	737	
* 87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	155	155	*
* 87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	2	2	
* 87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1	1	
* 87800100	CONCRETE FOUNDATION, TYPE A	FOOT	16	16	
* 87900200	DRILL EXISTING HANDHOLE	EACH	4	4	
* 88030050	SIGNAL HEAD, LED, 1—FACE, 3—SECTION, BRACKET MOUNTED	EACH	1	1	
* 88102710	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	2	2	
* 88102717	PEDESTRIAN SIGNAL HEAD, LED, 1—FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8	8	
* 88500100	INDUCTIVE LOOP DETECTOR	EACH	2	2	
* 88500105	INDUCTIVE LOOP DETECTOR (SPECIAL)	EACH	2	2	
* 88600100	DETECTOR LOOP, TYPE I	FOOT	175	175	
* 89502200	MODIFY EXISTING CONTROLLER	EACH	2	2	
	TREE, ACER PLATANOIDES CRIMSON KING, (CRIMSON KING NORWAY MAPLE), 2-1/2" CALIPER, BALLED AND				*
* A2000820	BURLAPPED	EACH	11	11	
* A2001420	TREE, ACER SACCHARINUM AUTUMN BLAZE (AUTUMN BLAZE SILVER MAPLE), 2-1/2" CALIPER, BALLED AND	EACH	10	10	
	BURLAPPED				
* A2007920	TREE, TILIA AMERICANA REDMOND (REDMOND AMERICAN LINDEN), 2—1/2" CALIPER, BALLED AND BURLAPPED	EACH	11	11	
L D0004666	TREE, CRATAEGUS CRUSGALLI INERMIS (THORN LESS COCKSPUR HAWTHORN), 6' HEIGHT, SHRUB FORM,	E A O. I.	10	10	
* B2001666	BALLED AND BURLAPPED	EACH	10	10	
* B2002666	TREE, MALUS ADAMS (ADAMS CRABAPPLE), 6' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED	EACH	14	14	
* B2004166	TREE, MALUS PRAIRIFIRE (PRAIRIFIRE CRABAPPLE), 6' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED	EACH	11	11	
* C2006236	SHRUB, RIBES ALPINUM (ALPINE CURRANT), 3' HEIGHT, BALLED AND BURLAPPED	EACH	420	420	
* C2011136	SHRUB, SYRINGA X PERSICA (PERSIAN LILAC), 3' HEIGHT, BALLED AND BURLAPPED	EACH	390	390	
* C2011836	SHRUB, VIBURNUM DENTATUM MORTON (NORTHERN BURGUNDY ARROWWOOD VIBURNUM), 3' HEIGHT, BALLED AND BURLAPPED	EACH	510	510	
* D2001972	EVERGREEN, PICEA GLAUCA DENSATA (BLACK HILLS SPRUCE), 6' HEIGHT, BALLED AND BURLAPPED	EACH	14	14	¥
* D2002272	EVERGREEN, PICEA PUNGENS GLAUCA (COLORADO BLUE SPRUCE), 6' HEIGHT, BALLED AND BURLAPPED	EACH	15	15	
* D2002272 * D2002772	EVERGREEN, PINUS NIGRA (AUSTRIAN PINE), 6' HEIGHT, BALLED AND BURLAPPED	EACH	14	14	
X0321962	CONNECTION OF EXISTING PIPE UNDERDRAIN	EACH	1	1	
X2010505	CLEARING, SPECIAL	L SUM	1	1	
X7240300	SIGN REMOVAL	EACH	1	1	
* X8140115	HANDHOLE TO BE ADJUSTED	EACH	4	4	
XX003437	REMOVE AND REINSTALL EXISTING PRECAST REINFORCED CONCRETE FLARED END SECTIONS	EACH	4	4	
* XX005437	PEDESTRIAN PUSH-BUTTON, LED	EACH	18	18	
XX007985	SPECIAL FRAME, CLOSED LID	EACH	4	4	
* XX007983	REMOVE EXISTING PEDESTRIAN PUSH BUTTON	EACH	5	5	
* XX008197 * XX008287	BOARDWALK STRUCTURE	SQ FT	550	J	550
Z0023204	SEDIMENT CONTROL, SILT FENCE	FOOT	1365	1365	,
* Z0033044	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	2	2	
Z0077900	WOOD POST AND RAIL FENCE	FOOT	215	215	
20077900	WOOD FOR AND MALE FENCE	1 001	210	210	

* - SPECIALTY ITEM

FILE NAME =	DESIGNED —	REVISED —
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CONSTRUCTION TYPE CODES



STA 360+65 TO STA 364+50

# HIGGINS ROAD PROPOSED TYPICAL SIDEWALK & BIKE PATH CROSS SECTION

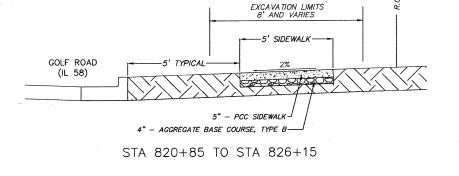
BEGIN IMPROVEMENTS STA 361+00

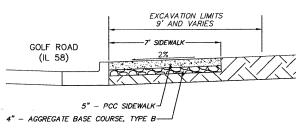
END IMPROVEMENTS STA 411+75





VILLAGE OF HOFFMAN ESTATES 1900 Hassell Road, Hoffman Estates, IL 60169 Phone Number: 847 252–5800





STA 819+80 TO STA 820+50

<u>GOLF ROAD PROPOSED</u>

TYPICAL SIDEWALK CROSS SECTION

BEGIN IMPROVEMENTS STA 819+80

END IMPROVEMENTS STA 826+15

NOTE: TOPSOIL MAY BE SAVED DURING EXCAVATION FOR PLACEMENT AS GRADE PREPARATION FOR SOD PLACEMENT. TOPSOIL SHALL BE PAID FOR AS TOPSOIL FURNISH AND PLACE, 6 INCH. MAXIMUM TOPSOIL AND SODDING LIMIT IS 1.5' FOR THE SIDEWALK AND 2' FOR THE BIKE PATH. HOWEVER, ALL DISTURBED AREAS OUTSIDE OF THE LIMITS MUST BE SODDED.

#### HOT-MIX ASPHALT MIXTURE REQUIREMENT

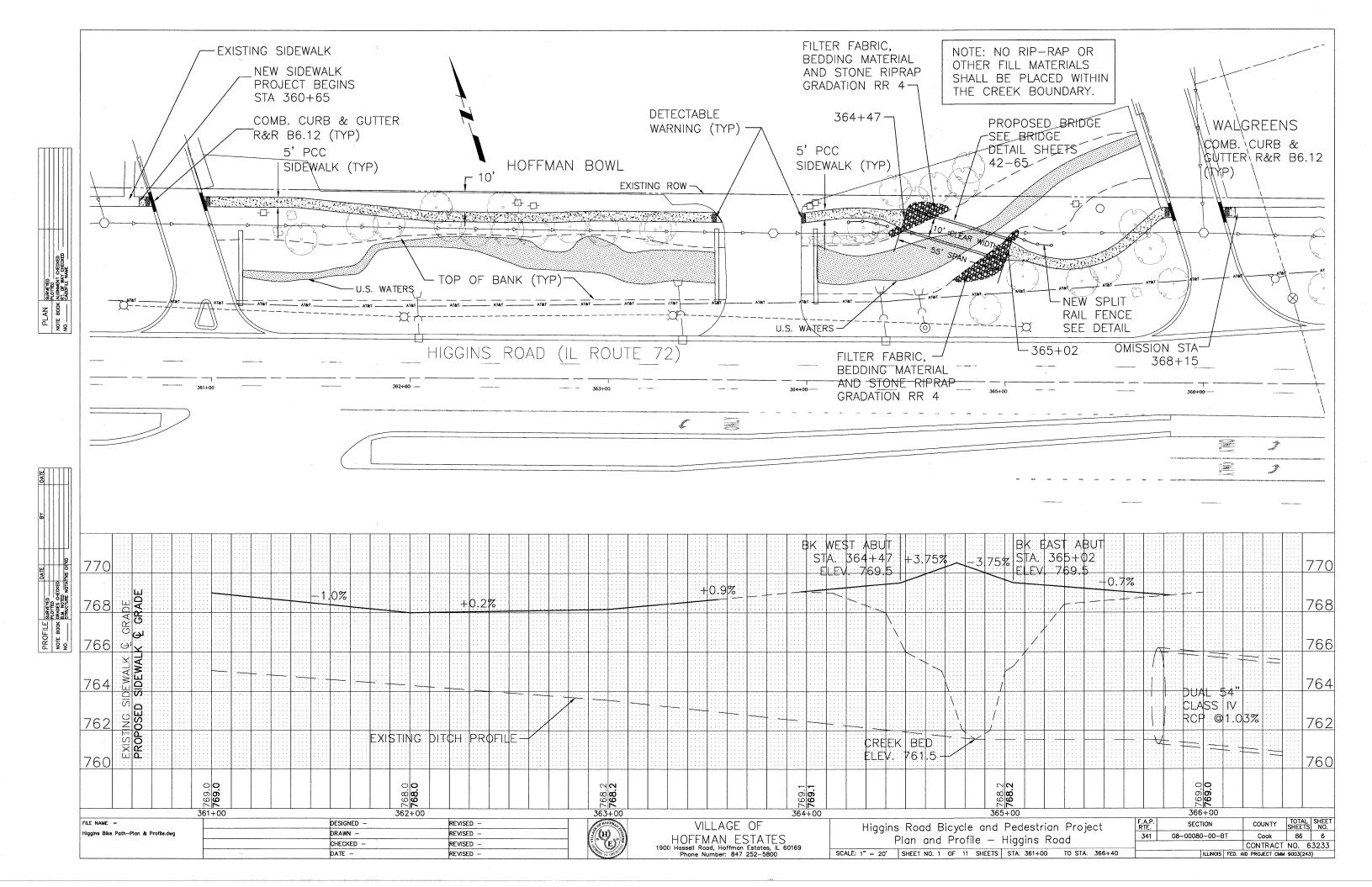
OPERATIONS	ITEM	VOIDS
BIKE PATH	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 (IL-9.5 mm) 2"	4% @ 50 GYR

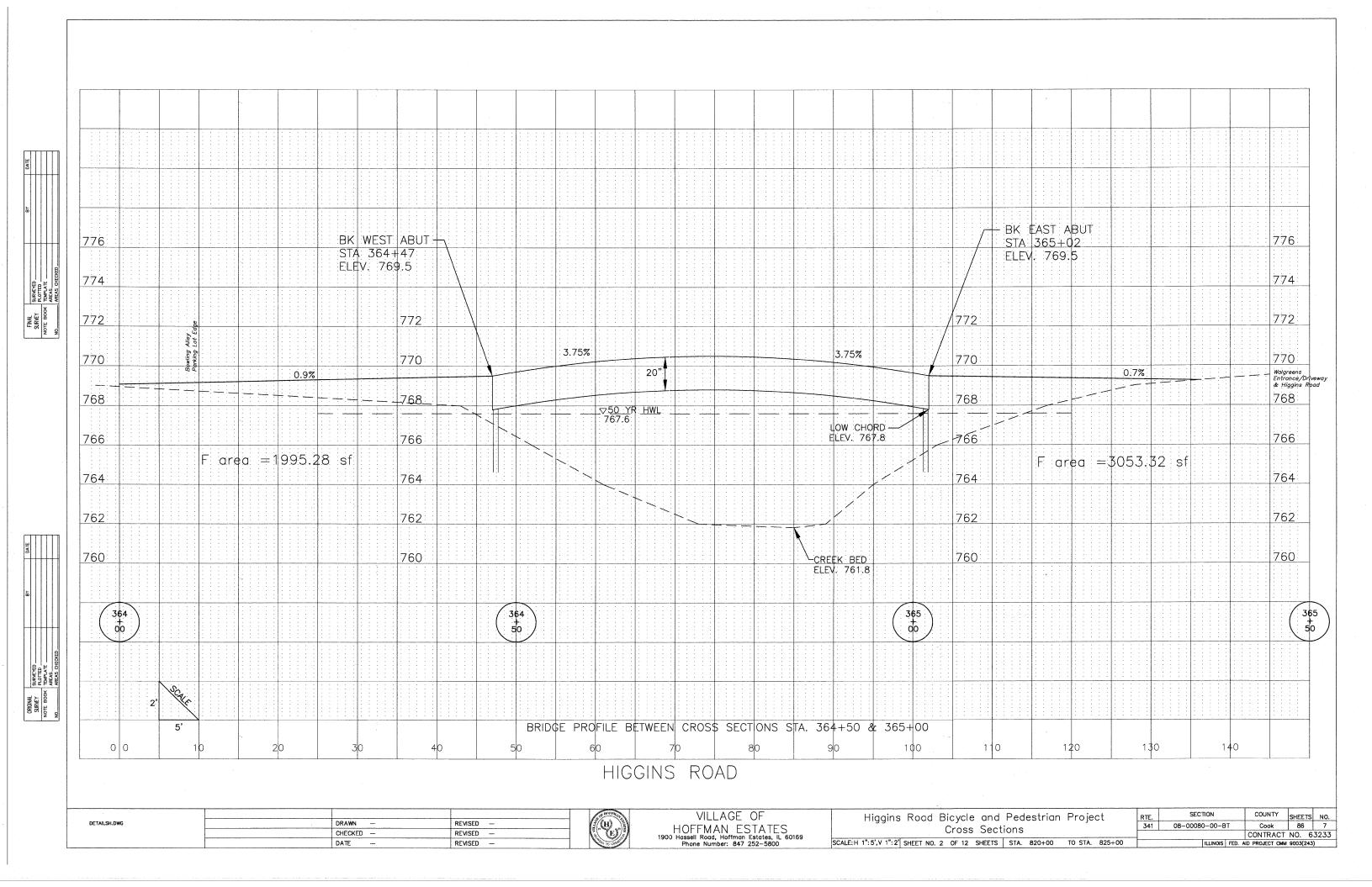
NOTE: THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LBS/SQ YD/IN.

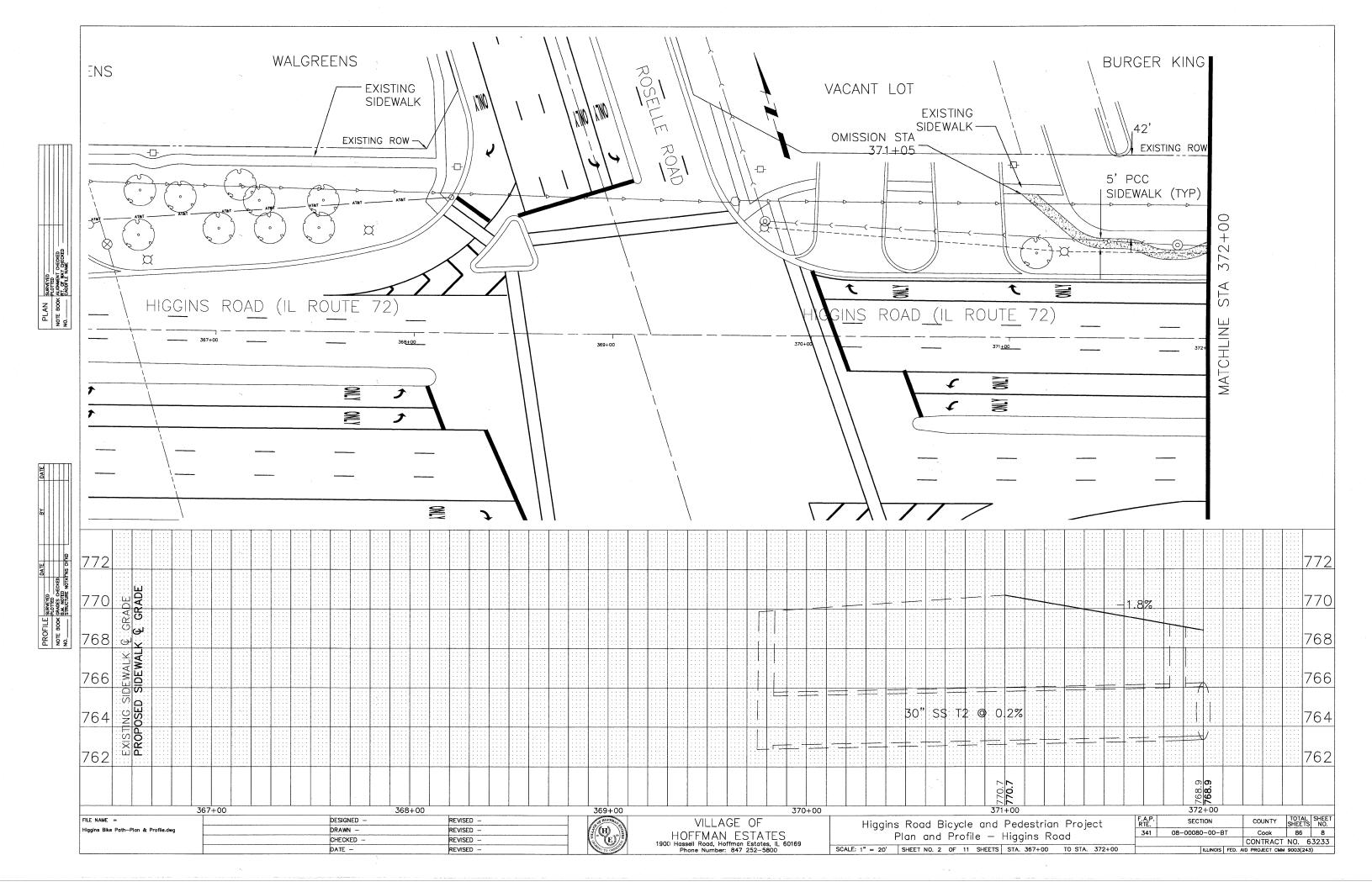
THE "AC TYPE" FOR NON POLYMERIZED HMA SHALL BE "PG 64-22" UNLESS MODIFIED

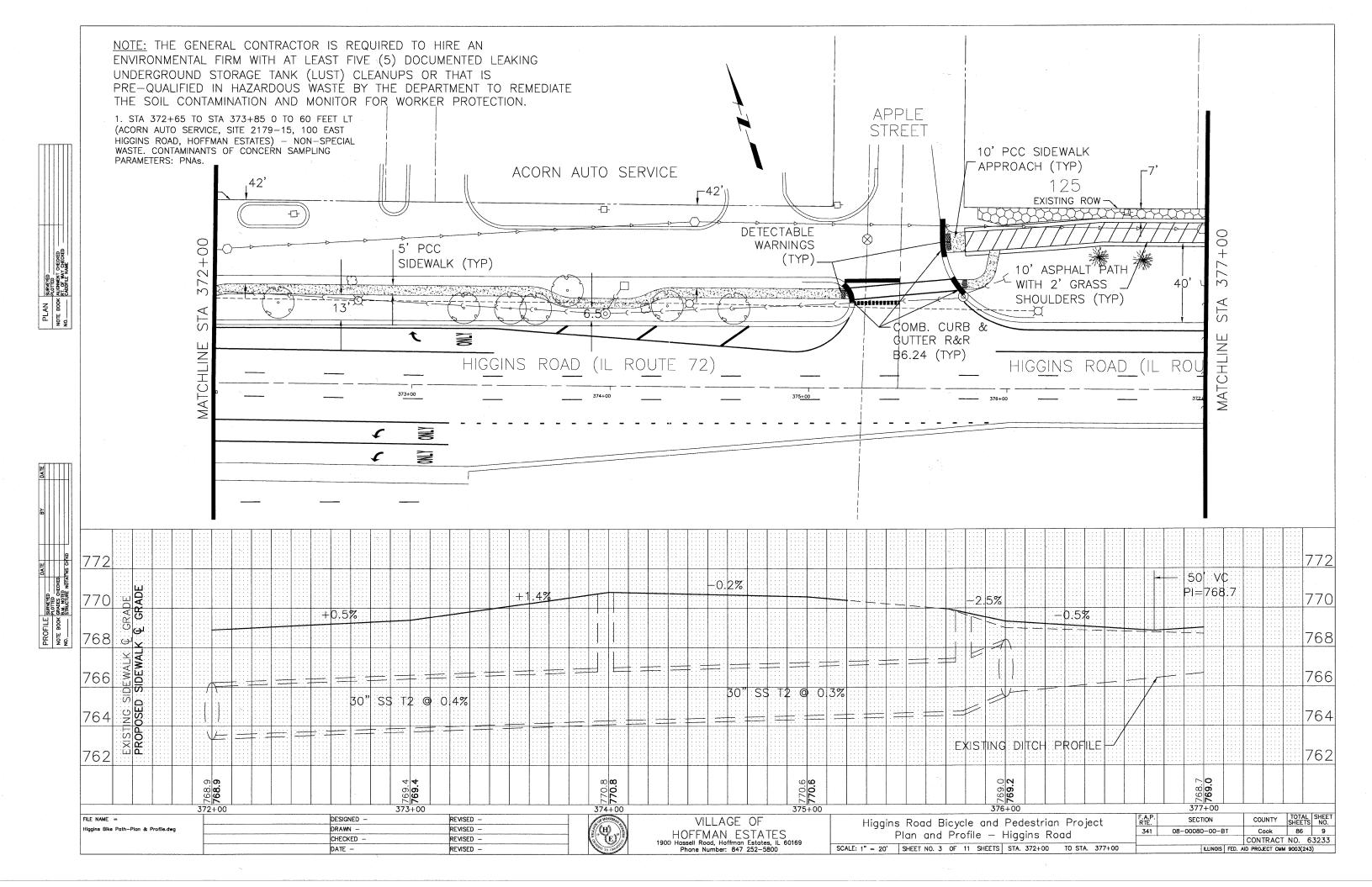
BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

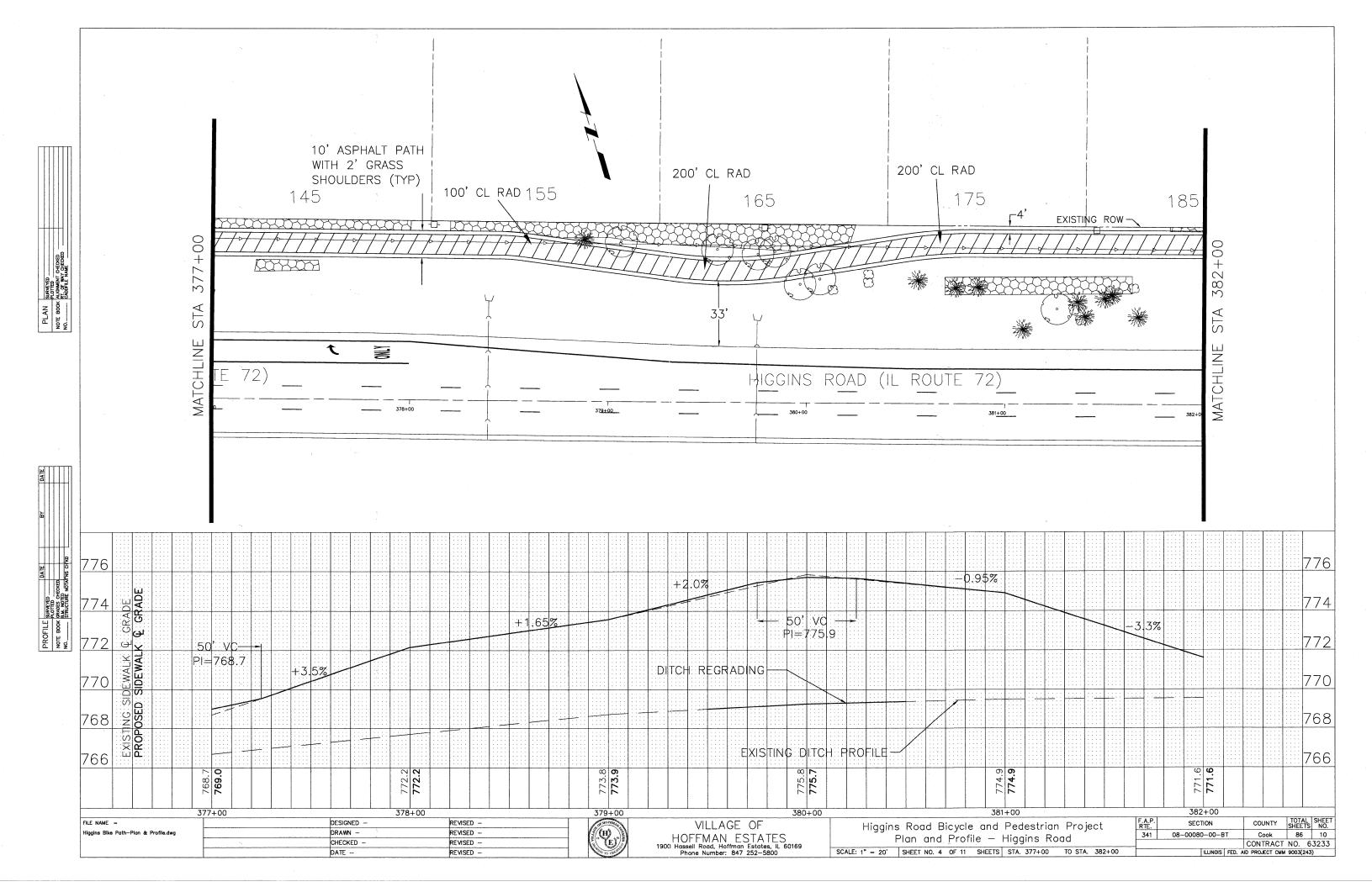
	Higgins	Roo	ad	Bic	·VC	le	and	Pede	strian	Pı	roject		F.A.P. RTE.	SEC.	TION		COUNTY	TOTAL SHEETS	SHEET NO.	
Higgins Road Bicycle and Pedestrian Project  Typical Sections							341	08-00080	0-00-E	Т	Cook	86	5							
	Typical Sections												CONTRACT	NO. E	3233					
CALE	: NONE	SHEET	NO.	1 0	F	1 5	SHEETS	STA.	÷	TO	STA.				ILLINOIS	FED. A	ID PROJECT CMM	9003(243	3)	

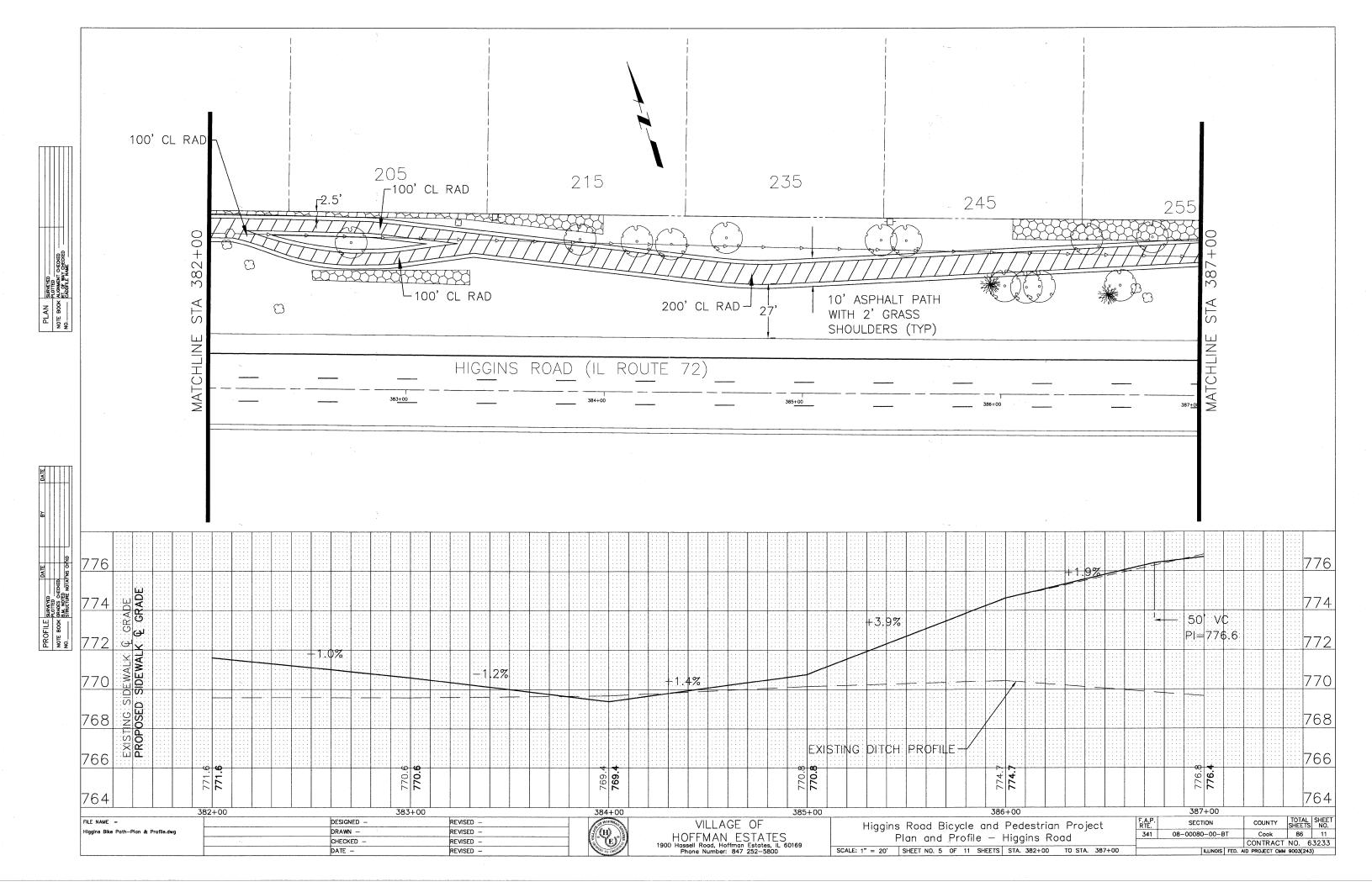


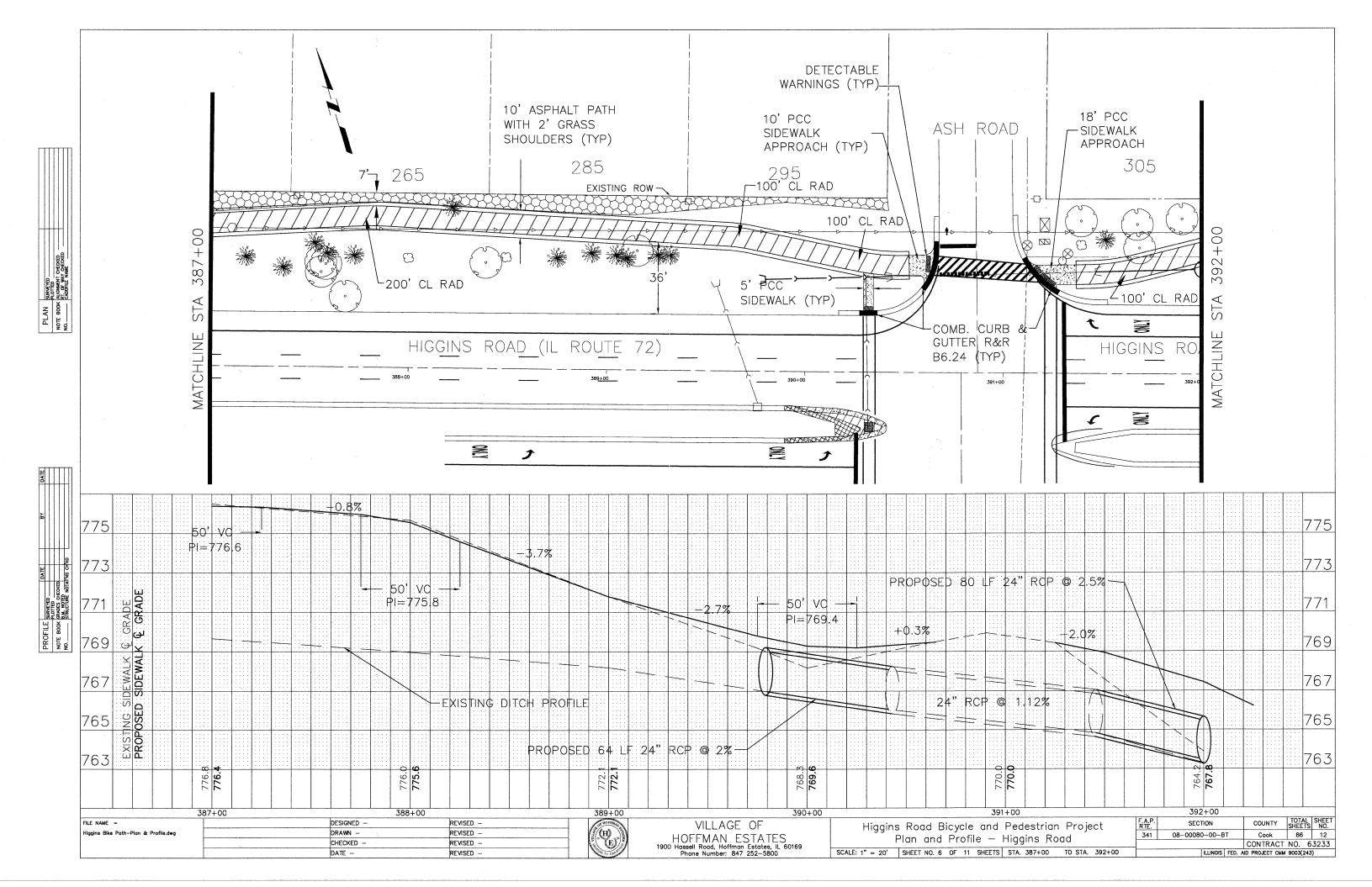


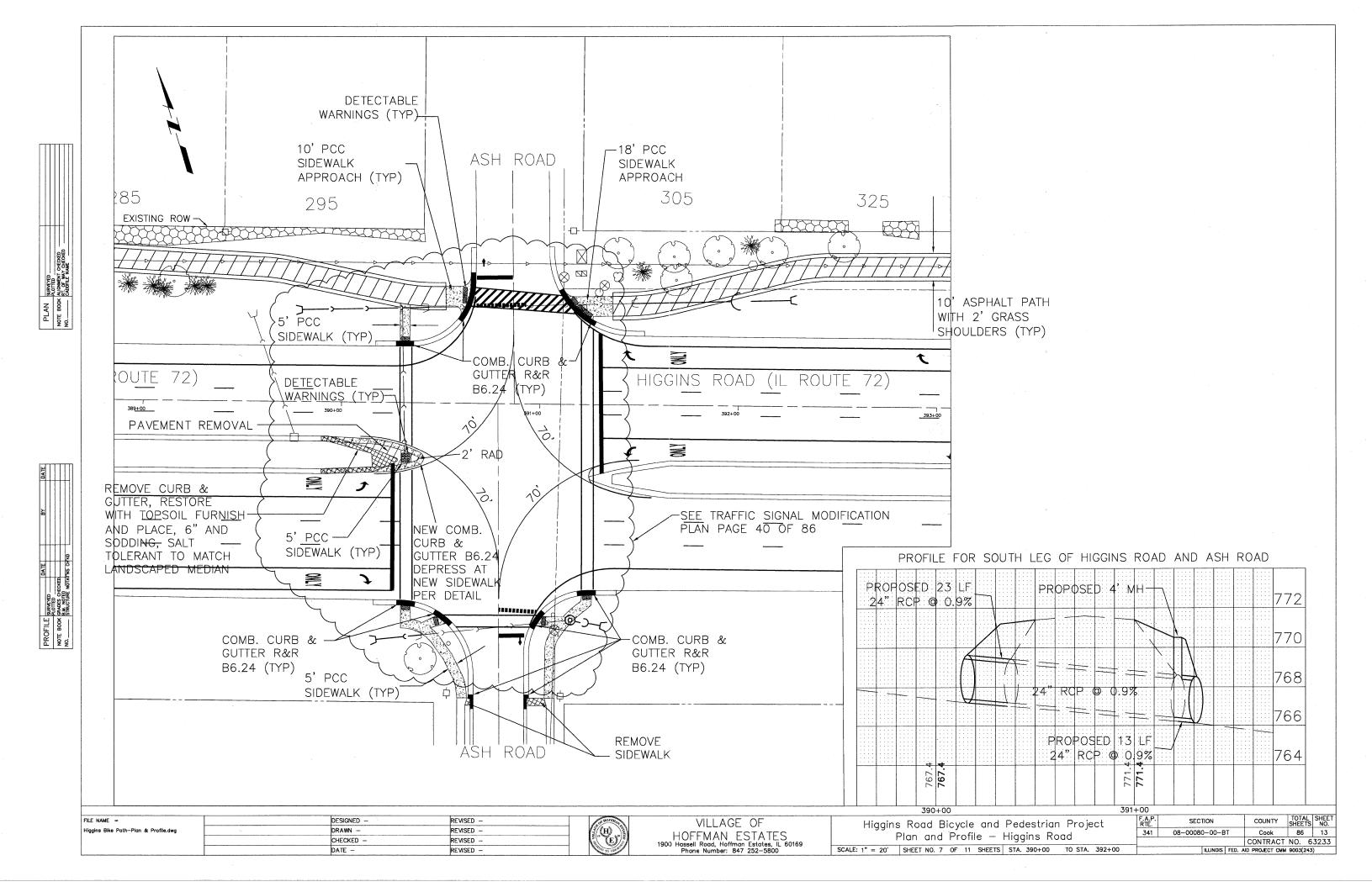


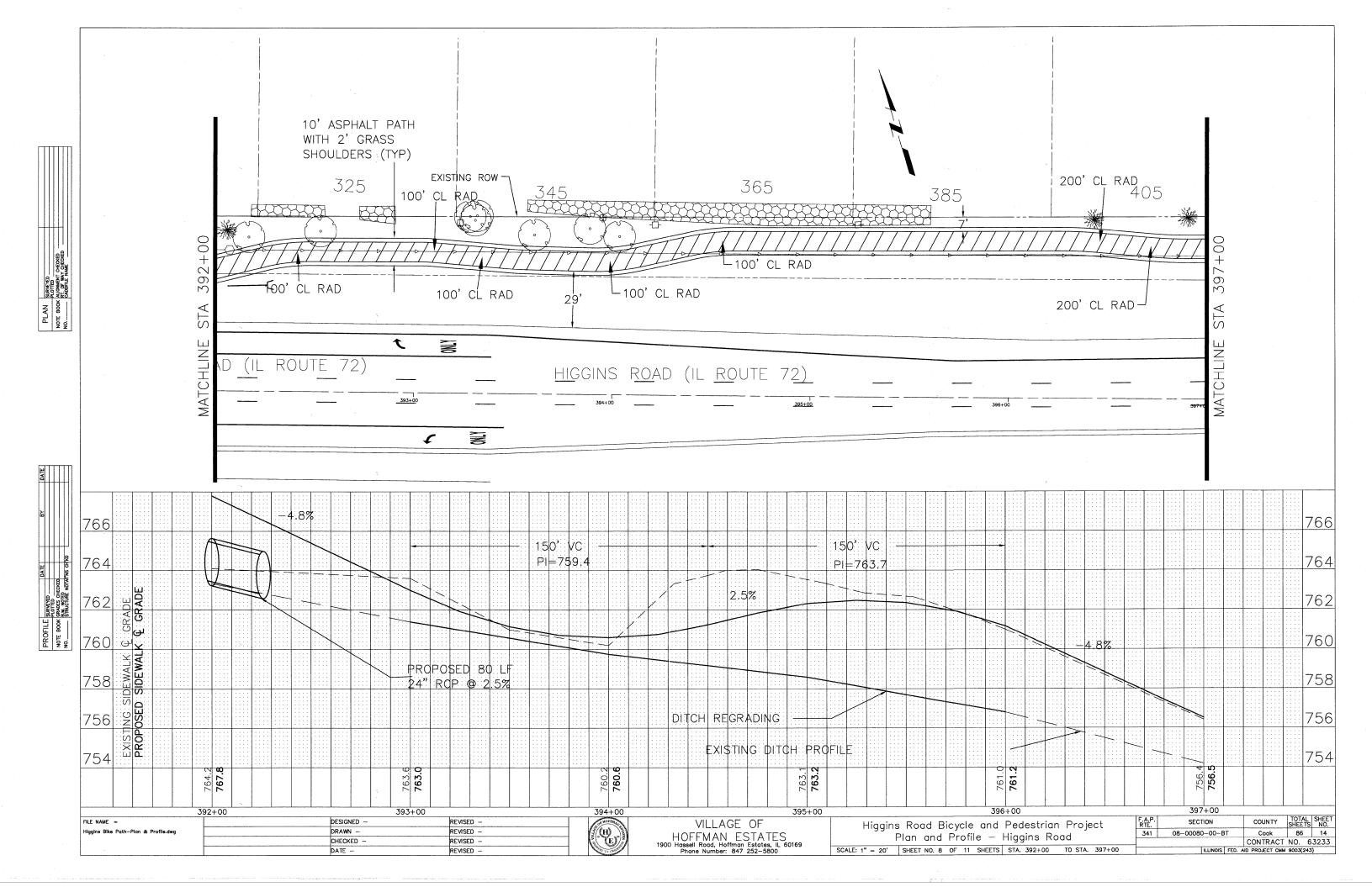


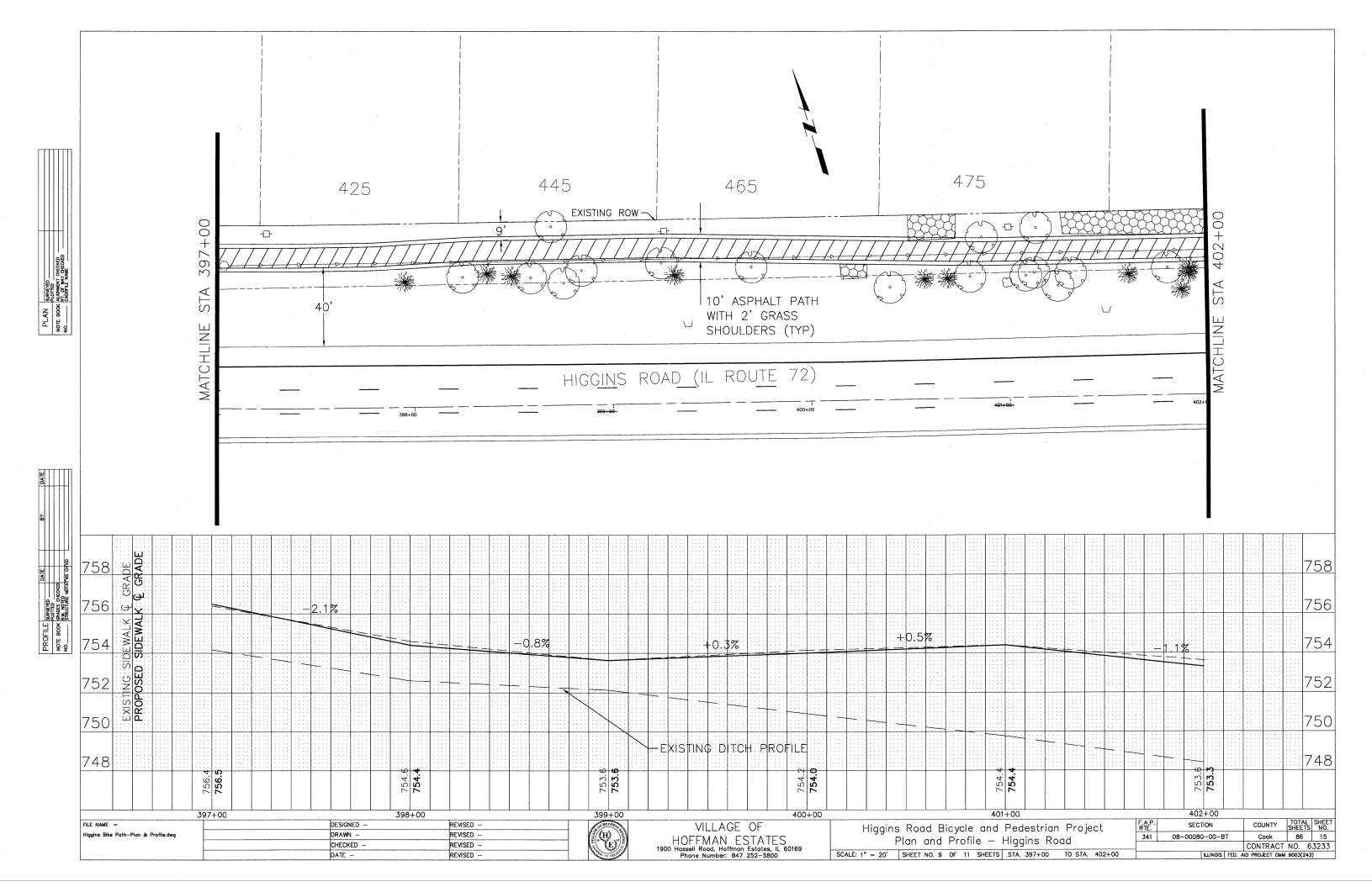


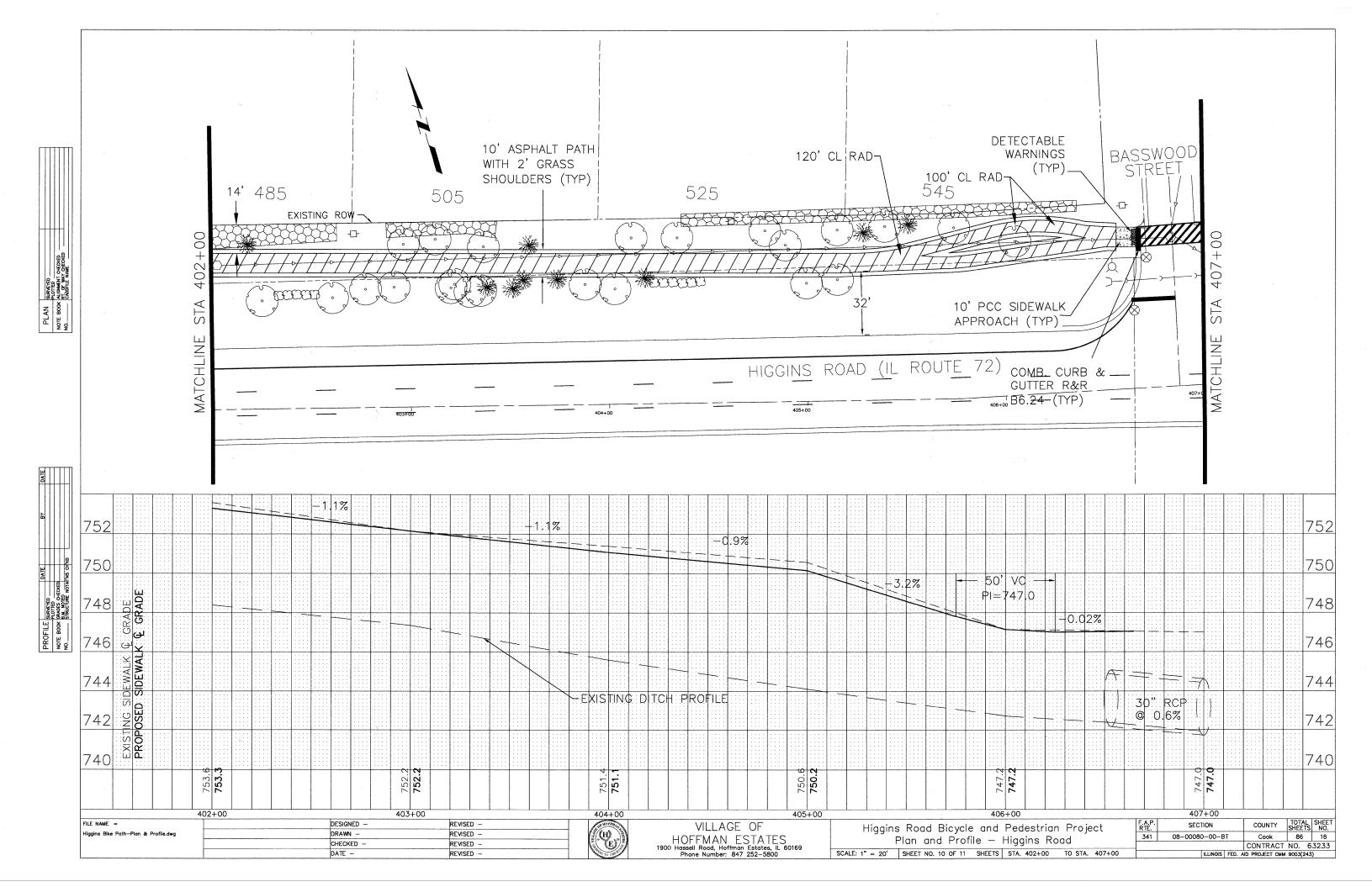


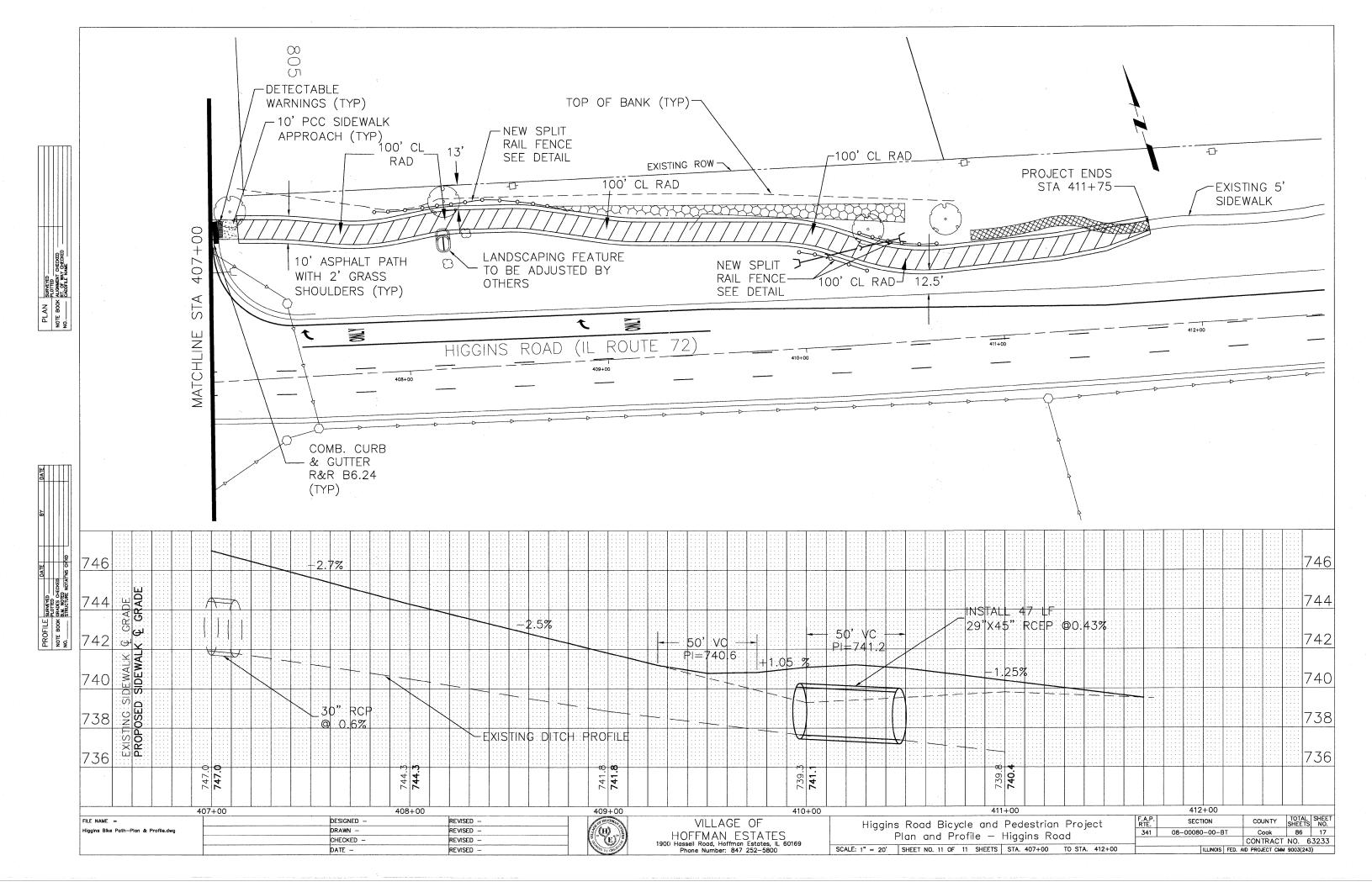


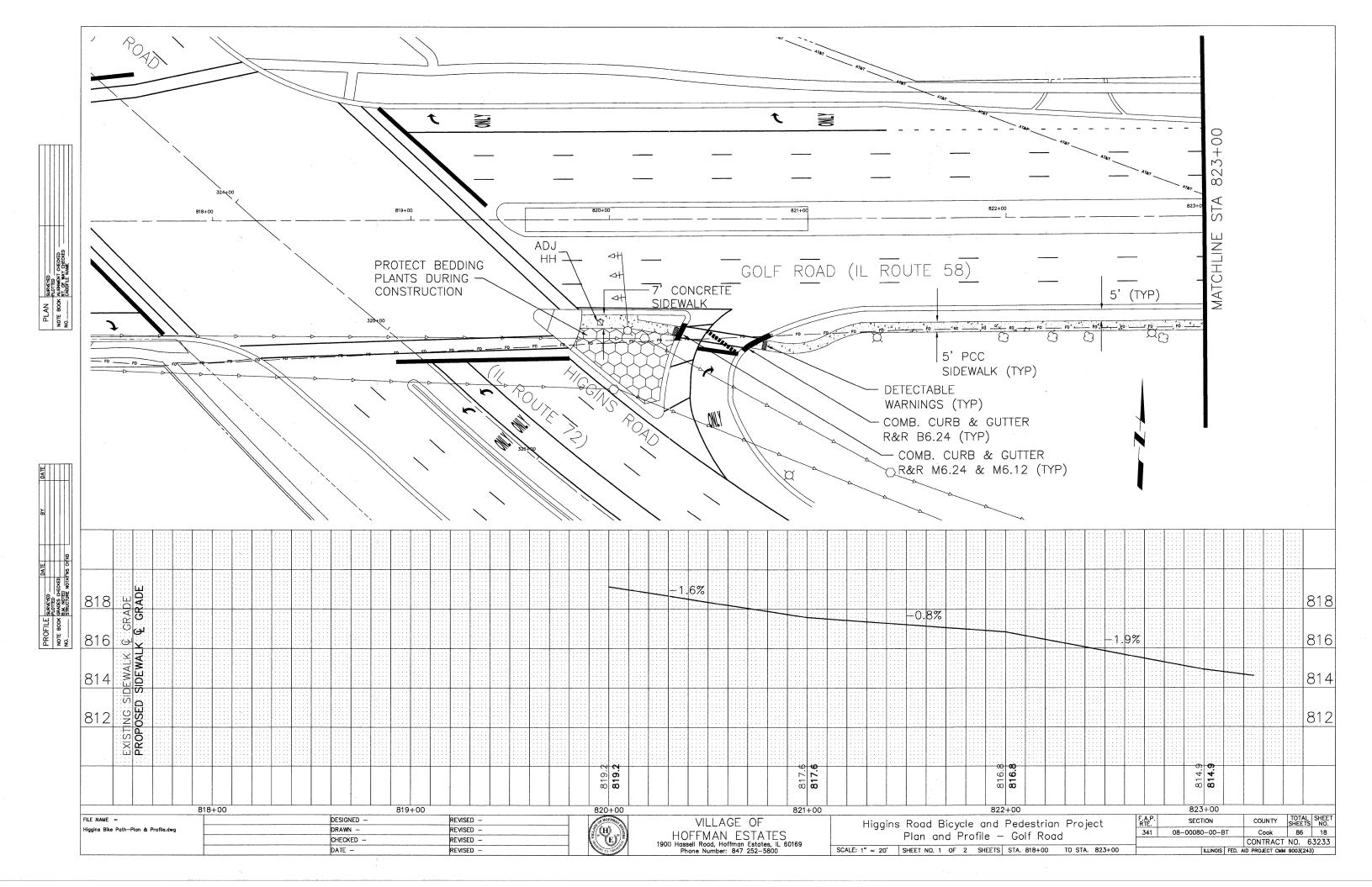


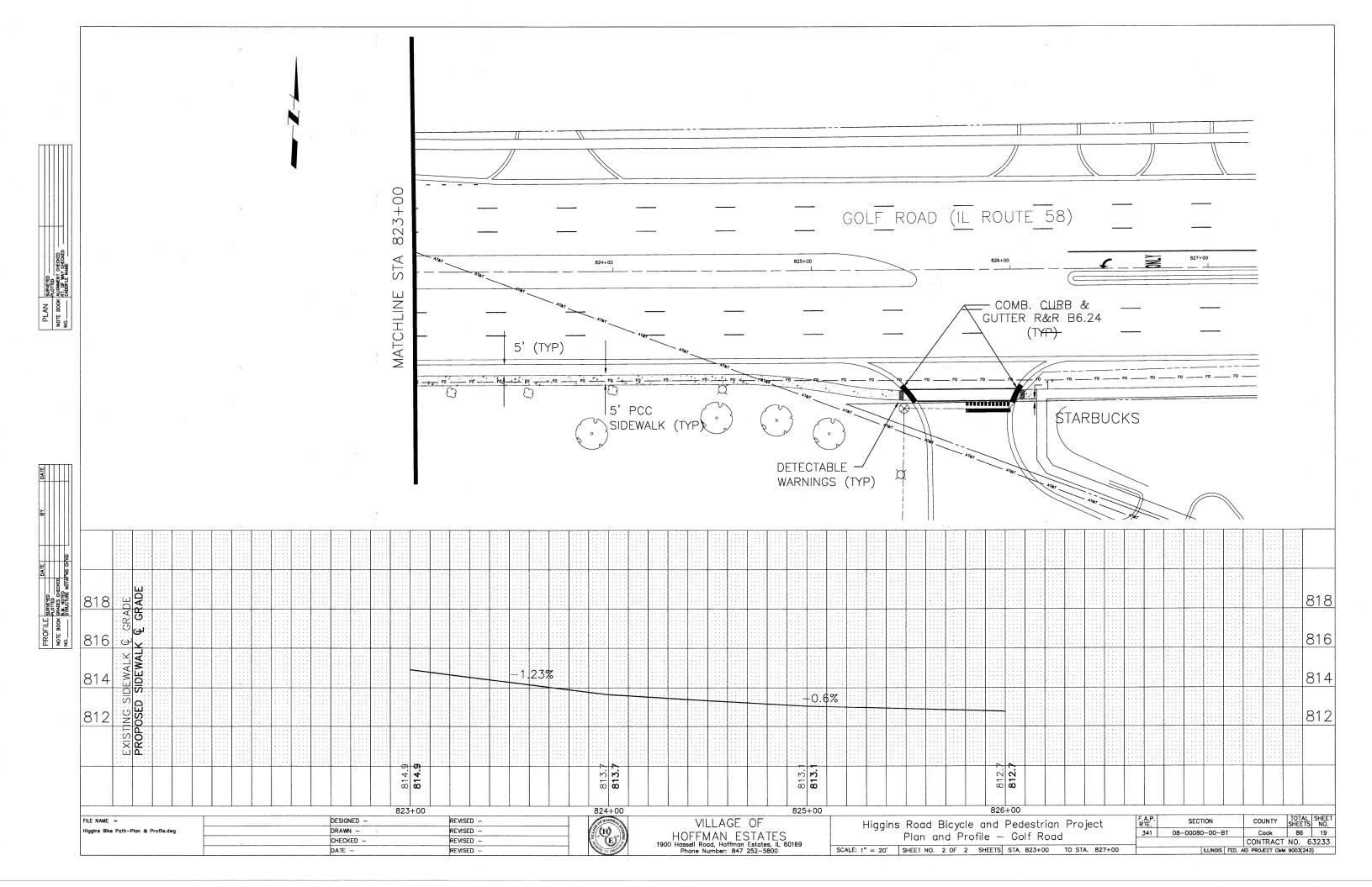












ACTIVITY IS TEMPORARILY OR PERMANENTLY CEASED IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.

WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 14 DAYS FROM WHEN ACTIVITIES CEASED, (EG, THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN 14 DAYS) THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE SEVENTH (7) DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY CEASED.

C. THE FOLLOWING PRACTICES ARE ACCEPTABLE STABILIZATION MEASURES:

OBSERVATION REPORTS SHOULD BE MAINTAINED ONSITE AS PART OF THE SWPPP.

SODDING

TEMPORARY SEEDING: MAY CONSIST OF SPRING OATS (100 LBS/ACRE) AND/OR WHEAT OR CEREAL RYE (150 LBS/ACRE).

PERMANENT SEEDING: IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLANS.

THE APPROPRIATE STABILIZATION MEASURE SHALL BE DETERMINED BASED ON SITE CONDITIONS AT THE TIME THE CONSTRUCTION ACTIVITY HAS CEASED, INCLUDING BUT NOT LIMITED TO WEATHER CONDITIONS

AND LENGTH OF TIME MEASURE MUST BE EFFECTIVE.

<u>DEWATERING OPERATIONS:</u> DURING DEWATERING/PUMPING OPERATIONS, ONLY UNCONTAMINATED WATER SHOULD BE ALLOWED TO DISCHARGE TO PROTECTED NATURAL AREAS, WATERS OF THE STATE, OR TO A STORM SEWER SYSTEM (IN ACCORDANCE WITH LOCAL PERMITS).

MAINTENANCE: THE FOLLOWING IS A DESCRIPTION OF PROCEDURES THAT SHOULD BE USED TO MAINTAIN, IN GOOD AND EFFECTIVE OPERATION CONDITIONS, VEGETATION, EROSION AND SEDIMENT CONTROL MEASURES AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THIS PLAN AND STANDARD SPECIFICATIONS. RIPRAP OUTLET PROTECTION: RIPRAP SHOULD BE INSPECTED FOR ANY SCOUR BENEATH THE RIPRAP OR FOR STONES THAT HAVE BEEN DISLODGED. SEDIMENT ACCUMULATION IN THE OUTFALL AREA SHOULD

BE REMOVED AS NEEDED.
SILT FILTER FENCE: SILT FENCES SHOULD BE INSPECTED REGULARLY FOR UNDERCUTTING WHERE THE FENCE MEETS THE GROUND, OVERTOPPING, AND TEARS ALONG THE LENGTH OF THE FENCE.

DEFICIENCIES SHOULD BE REPAIRED IMMEDIATELY. REMOVE ACCUMULATED SEDIMENTS FROM THE FENCE
BASE WHEN THE SEDIMENT REACHED ONE—HALF THE FENCE HEIGHT. DRING FINAL STABILIZATION,
PROPERLY DISPOSE OF ANY SEDIMENT THAT HAS ACCUMULATED ON THE SILT FENCE. INSTANCES WHEN
AREAS OF SILT FENCE CONTINUALLY FAIL, REPLACE SILT FENCE WITH ANOTHER BMP AS SEEN FIT. INSPECTIONS: THE OWNER SHALL DESIGNATE A QUALIFIED PERSONNEL TO BE RESPONSIBLE FOR SEDIMENT AND EROSION CONTROL OBSERVATION REPORTING. THIS QUALIFIED PERSONNEL SHALL MEET THE REQUIREMENTS NOTED IN THE ILR10 PERMIT CONDITIONS AND LOCAL CODES.

SITE OBSERVATIONS SHOULD OCCUR AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER, OR EQUIVALENT SNOWFALL. SITE

A. DISTURBED AREAS AND AREAS USED FOR THE STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE CHECKED FOR EVIDENCE OF, OR POTENTIAL FOR, POLLUTANTS
ENTERING THE DRAINAGE SYSTEM. THE EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY HAVE BEEN INSTALLED AND ARE OPERATING CORRECTLY. WHERE DISCHARGE POINTS ARE ACCESSIBLE, THEY SHOULD BE CHECKED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO THE RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHOULD BE CHECKED FOR OFF-SITE SEDIMENT TRACKING. ALL PUMPING OPERATIONS AND ALL OTHER POTENTIAL NON-STORM WATER DISCHARGES SHOULD BE OBSERVED

BASED ON THE RESULTS OF THE SITE OBSERVATION, THE DESCRIPTION OF POTENTIAL POLLUTANT SOURCES IDENTIFIED, AND TEH POLLUTION PREVENTION MEASURES DESCRIBED IN THIS PLAN SHALL BE REVISED AS APPROPRIATE, AS SOON AS PRACTICABLE AFTER OBSERVATION. THE MODIFICATIONS, IF ANY, SHALL PROVIDE FRO TIMELY IMPLEMENTATION OF ANY CHANGES TO THE PLAN WITHIN 7 CALENDAR DAYS FOLLOWING THE SITE OBSERVATION.

C. A REPORT SUMMARIZING THE SCOPE OF THE OBSERVATION, NAME(S) AND QUALIFICATIONS OF

PERSONNEL MAKING THE OBSERVATION, THE DATE(S) OF THE OBSERVATION, MAJOR
OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE STORM WATER POLLUTION
PREVENTION PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH PARAGRAPH B ABOVE SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE OF FINAL STABILIZATION OR PERMIT COVERAGE IS TERMINATED. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART VI.G (SIGNATORY REQUIREMENTS) OF THE ILR10 NPDES PERMIT.

THE OWNER SHALL NOTIFY THE APPROPRIATE AGENCY FIELD OPERATIONS SECTION OFFICE BY EMAIL AT EPA.SWNONCOMP@ILLINOIS.GOV, TELEPHONE, OR FAX WITHIN 24 HOURS OF ANY INCIDENCE OF NONCOMPLIANCE FOR ANY VIOLATION OF THE STORM WATER POLLUTION PREVENTION PLAN OBSERVED DURING A SITE OBSERVATION, OR FOR VIOLATIONS OF ANY CONDITION OF THE PERMIT. THE OWNER SHALL COMPLETE AND SUBMIT WITHIN 5 DAYS AN INCIDENCE OF NONCOMPLIANCE (ION) REPORT FOR ANY VIOLATION OF THE STORM WATER POLLUTION PREVENTION PLAN OBSERVED DURING AN INSPECTION CONDUCTED. SUBMISSION SHALL BE ON FORMS PROVIDED BY THE AGENCY AND INCLUDE SPECIFIC INFORMATION ON THE CAUSE OF NONCOMPLIANCE, ACTIONS WHICH WERE TAKEN TO PREVENT ANY FURTHER CAUSES OF NONCOMPLIANCE, AND A STATEMENT DETAILING ANY ENVIRONMENTAL IMPACT, WHICH MAY HAVE RESULTED FROM THE NONCOMPLIANCE

ALL REPORTS OF NONCOMPLIANCE SHALL BE SIGNED BY A RESPONSIBLE AUTHORITY AS DEFINED IN PART VI.G OF THE ILR10 NPDES PERMIT (SIGNATORY REQUIREMENTS).

F. ALL REPORTS OF NONCOMPLIANCE SHALL BE MAILED TO THE AGENCY AT THE FOLLOWING ADDRESS: ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

DIVISION OF WATER POLLUTION CONTROL COMPLIANCE ASSURANCE SECTION 1021 NORTH GRAND AVENUE EAST POST OFFICE BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276

SEDIMENT CONTROL NOTES: STREET CLEANING: ALL ADJACENT STREETS MUST BE KEPT CLEAR OF DEBRIS, INSPECTED DAILY, AND CLEANED WHEN NECESSARY. TEMPORARY SEDIMENT STORAGE BASIN: ADDRESS

-- 1/2" REBAR (TYP.) STRAW BALES AROUND DRAIN AREA (TYPICAL) DITCH CHECK DETAIL ALL DRAINAGE STRUCTURES MUST ALSO HAVE FABRIC BETWEEN FRAME AND GRATE 1/2" REBAR (2 PER BALE) TO BE DRIVEN A MINIMUM OF 2' INTO THE GROUND MUM 2"x2" WOOD OR STEEL POS WIRE FABRIC, MAXIMUM 6" OPENING SECURED TO POSTS NOTES:

1. STRAW BALES MUST BE MAINTAINED ON A REQULAR BASIS.

2. EROSION CONTROL TO BE INSTALLED PRIOR TO THE START OF CONSTRUCTION.

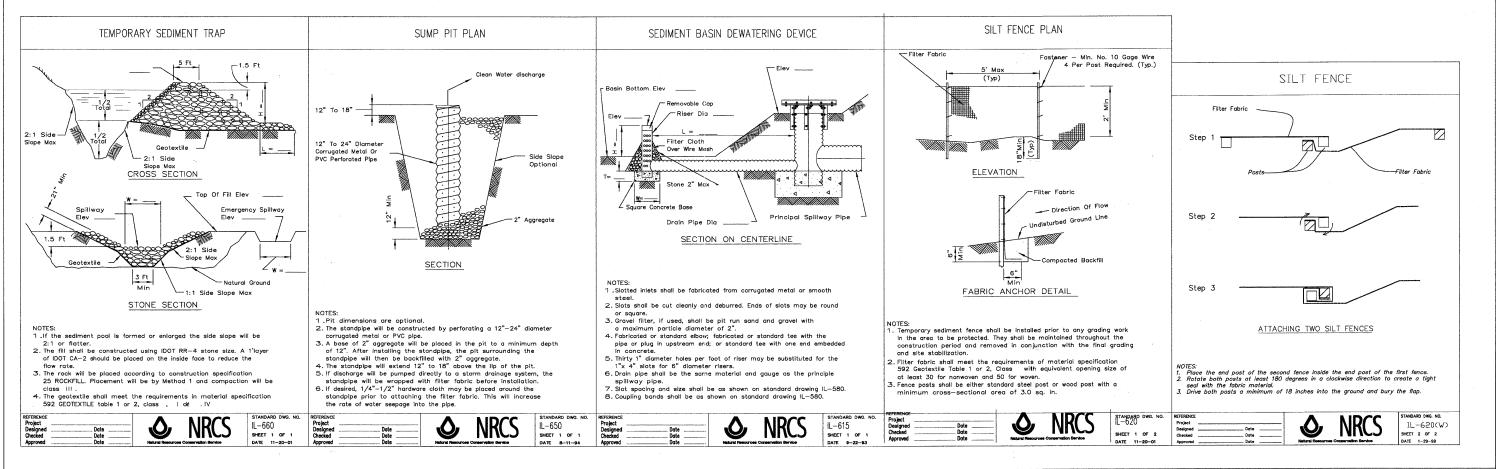
3. THE SILT FENCES SHALL BE MAINTAINED WEEKLY AND AFTER EACH RAINFALL FOR THE ENTIRE DURATION OF CONSTRUCTION.

4. ALL EROSION CONTROL MUST FOLLOW THE ILLINOIS URBAN MANUAL. EROSION CONTROL DETAIL HOR FILTER FABRIC AND WIRE FABRIC 6" DEEP BACKFILL AND COMPACT WITH EXCAVATED SOIL DRAFTER SLW

VILLAGE OF HOFFMAN ESTATES FILE NAME: SHEET NO.
TRANSPORTATION & ENGINEERING DIVISION EROSION.DWG 1 OF 1 SILT FENCE DETAIL

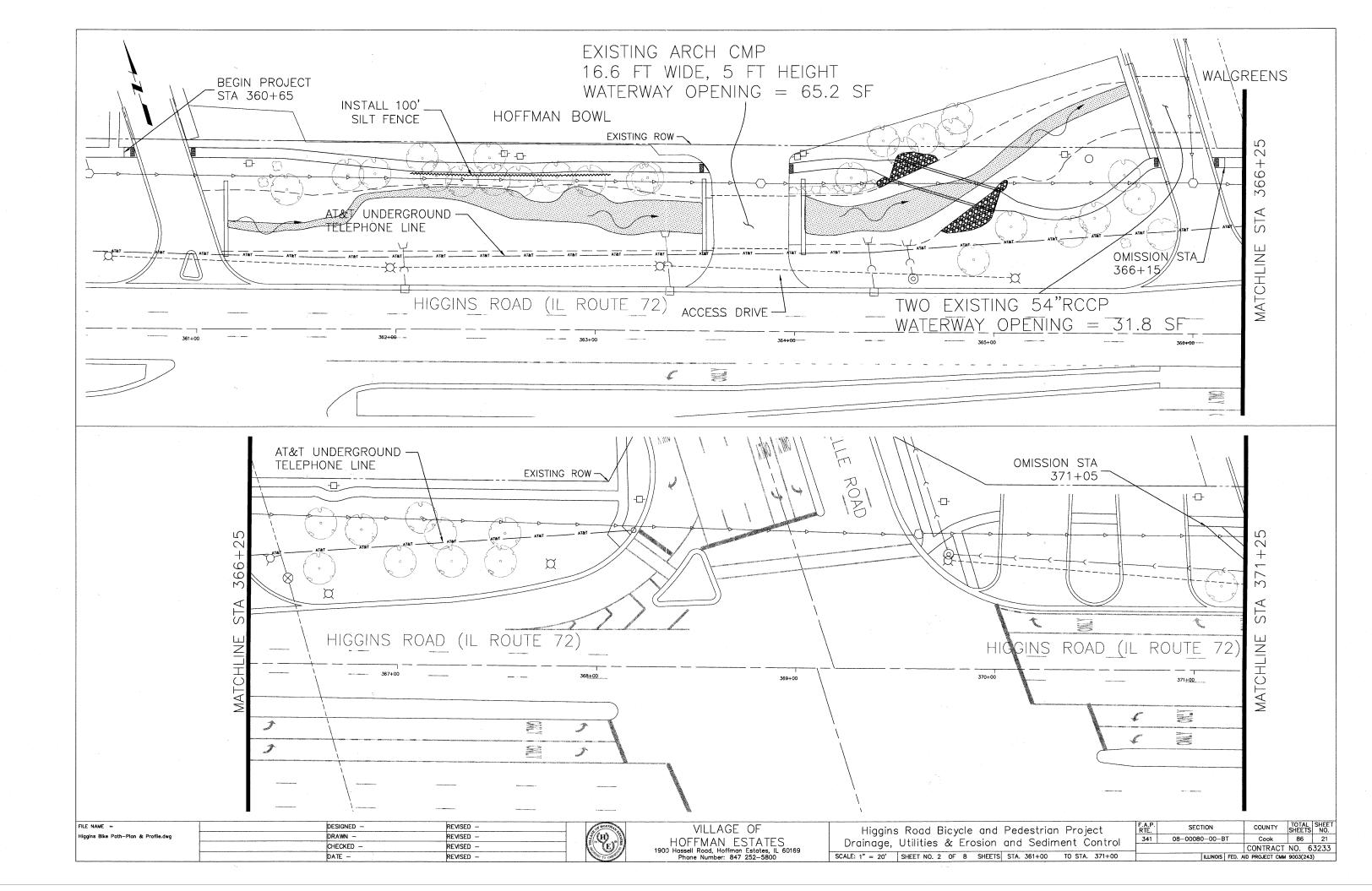


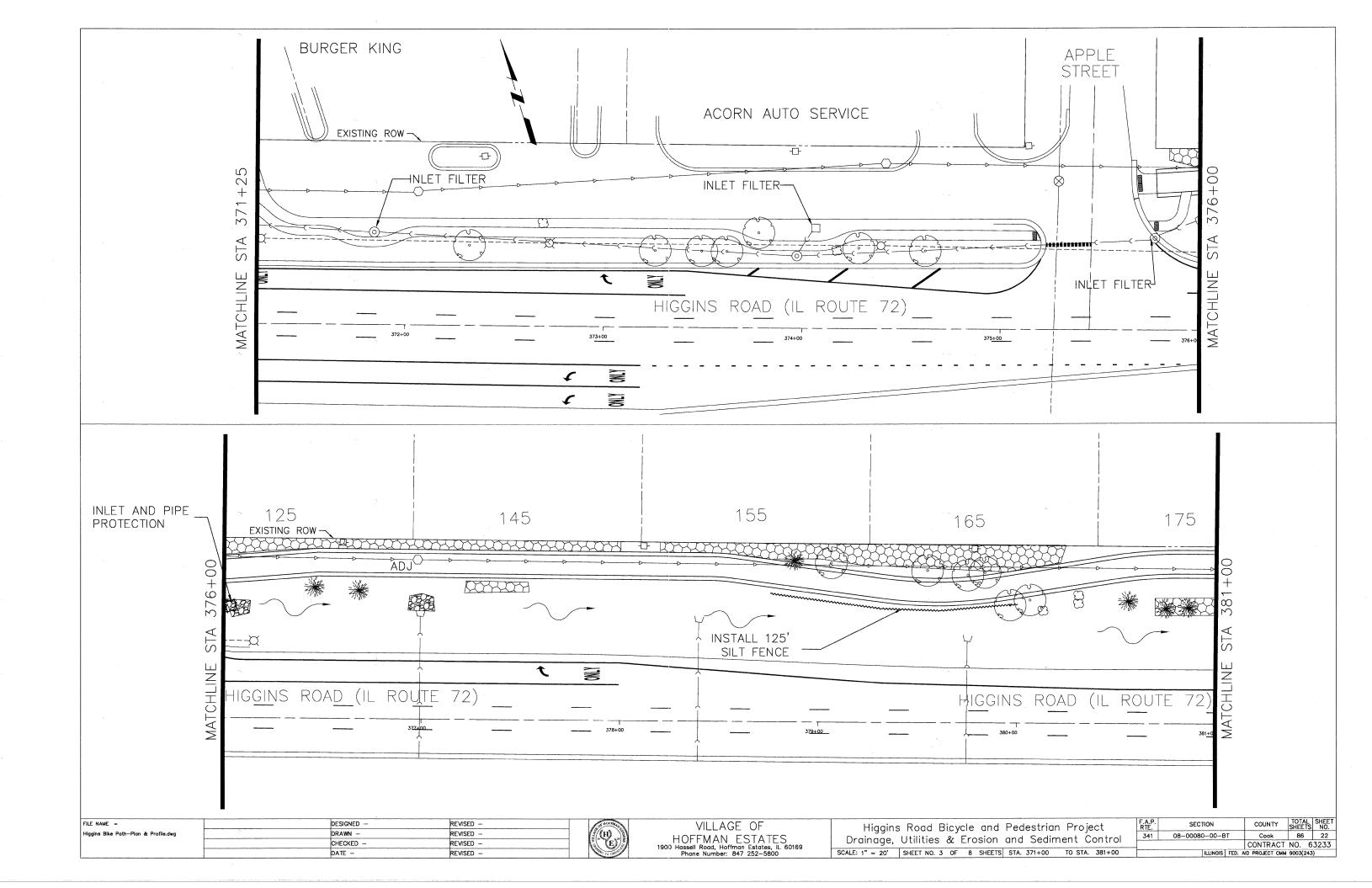
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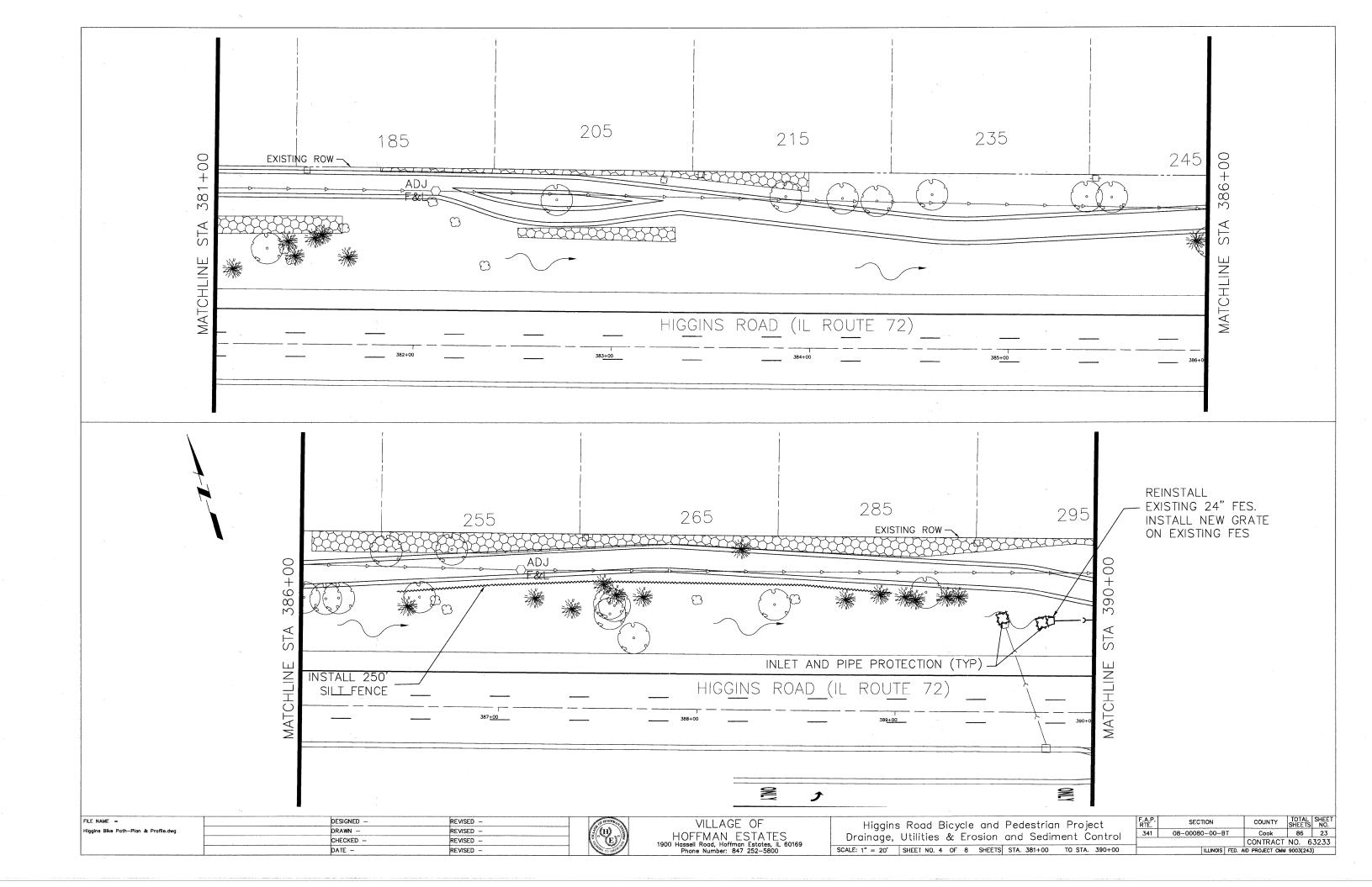


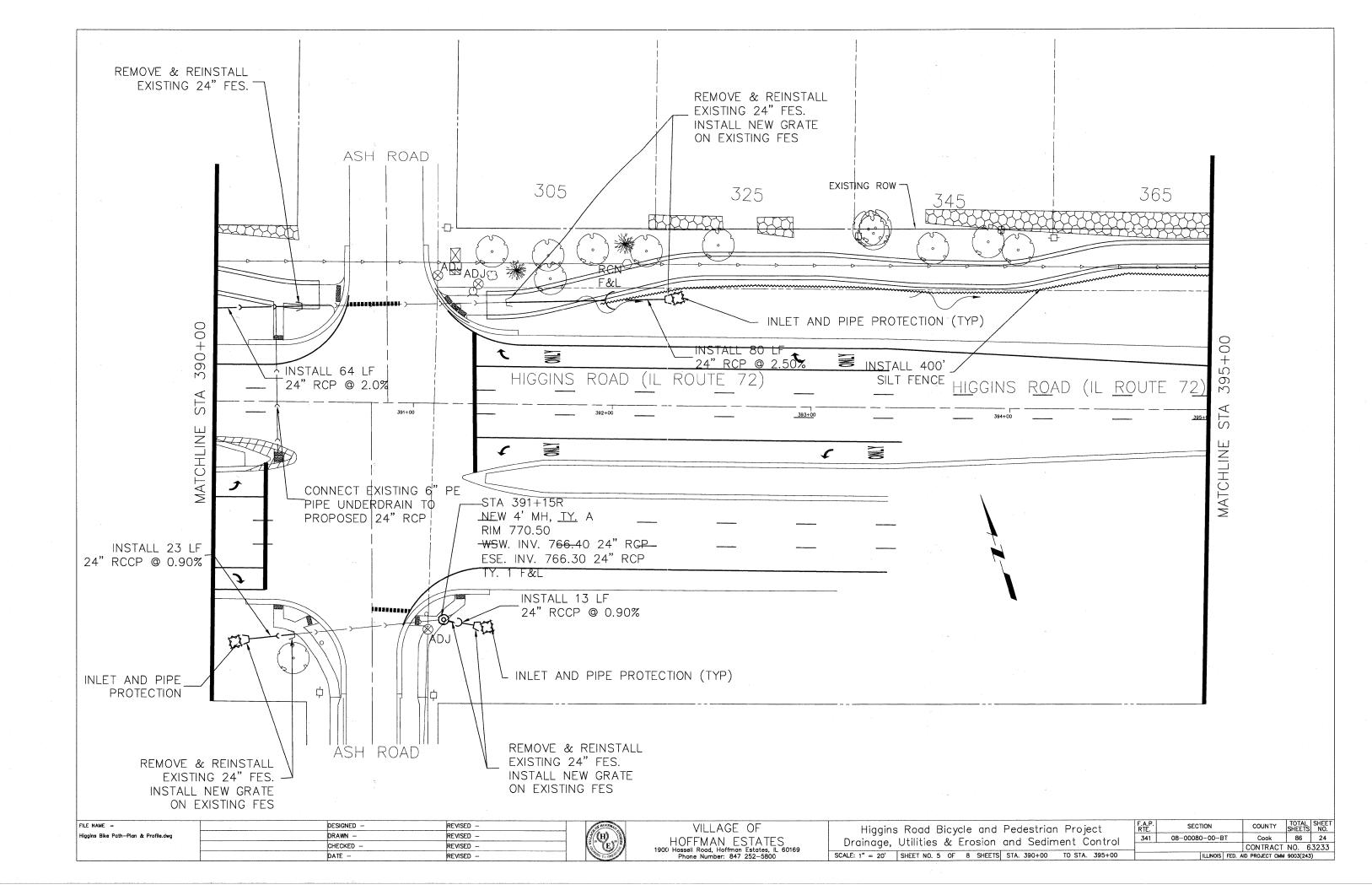


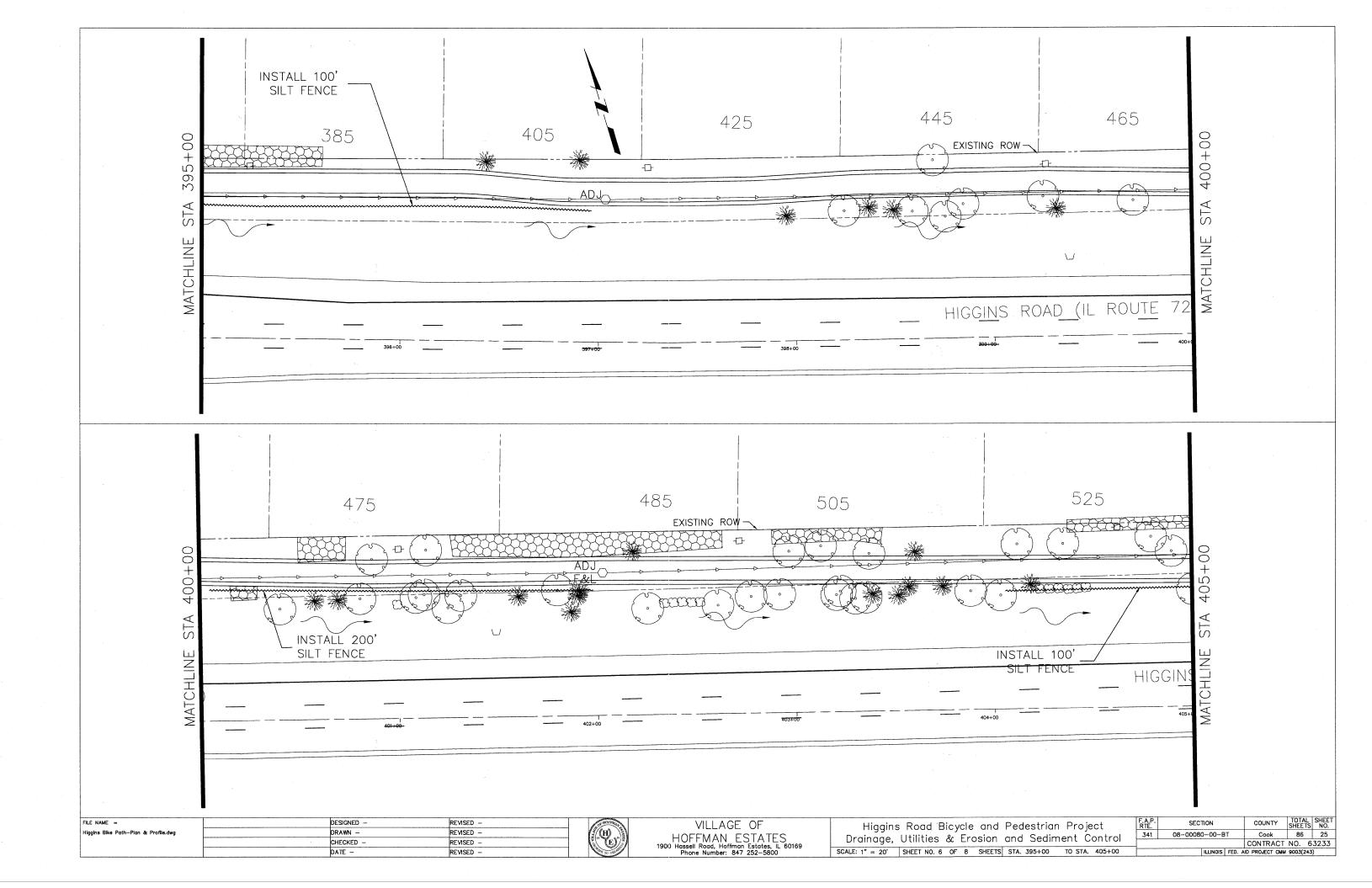
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ol	341	08-00080-00-BT	Cook	86	20
OI .			CONTRACT	NO. 6	3233
		ILLINOIS FED.	AID PROJECT CMM	9003(243	)

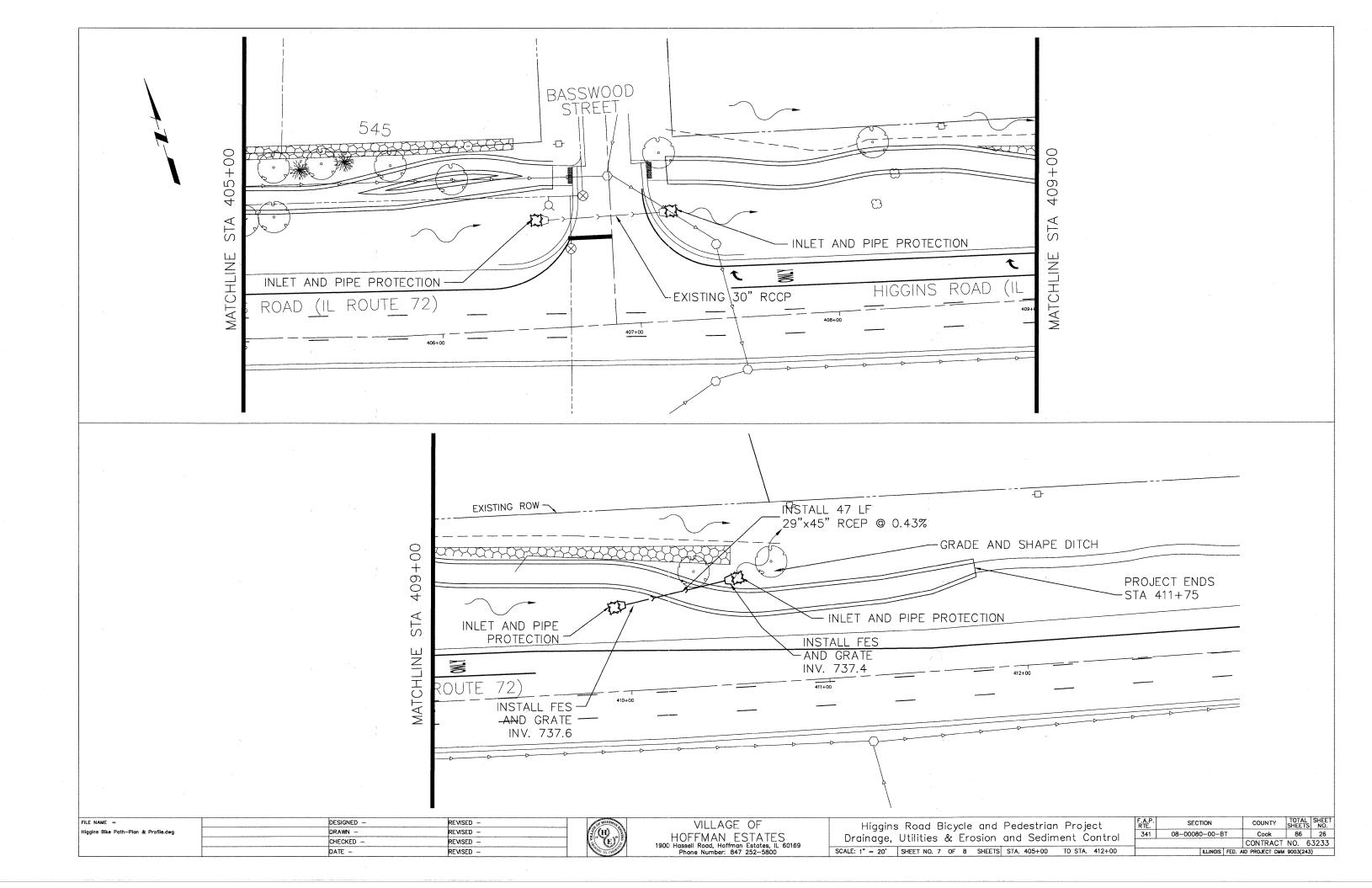


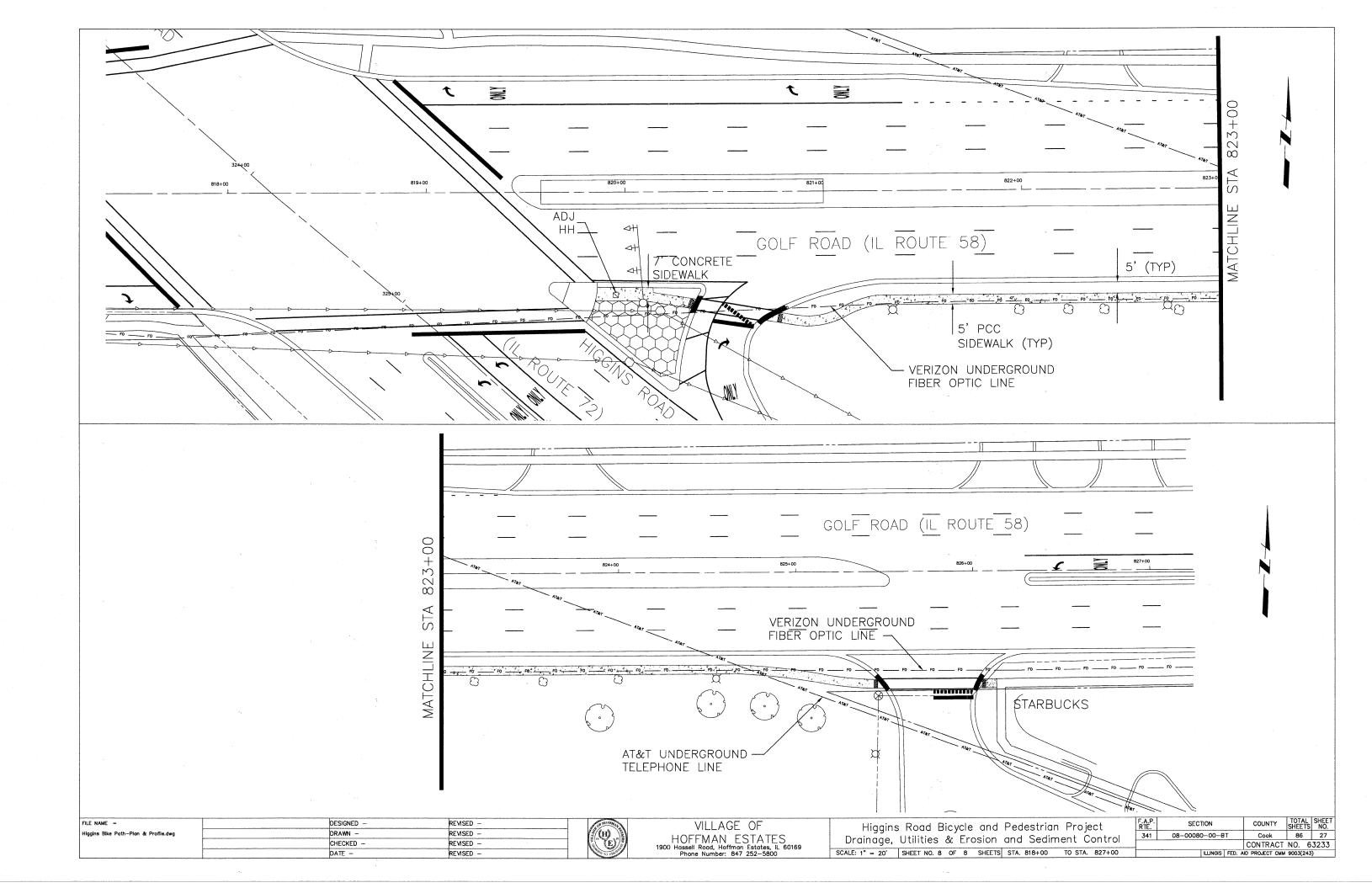


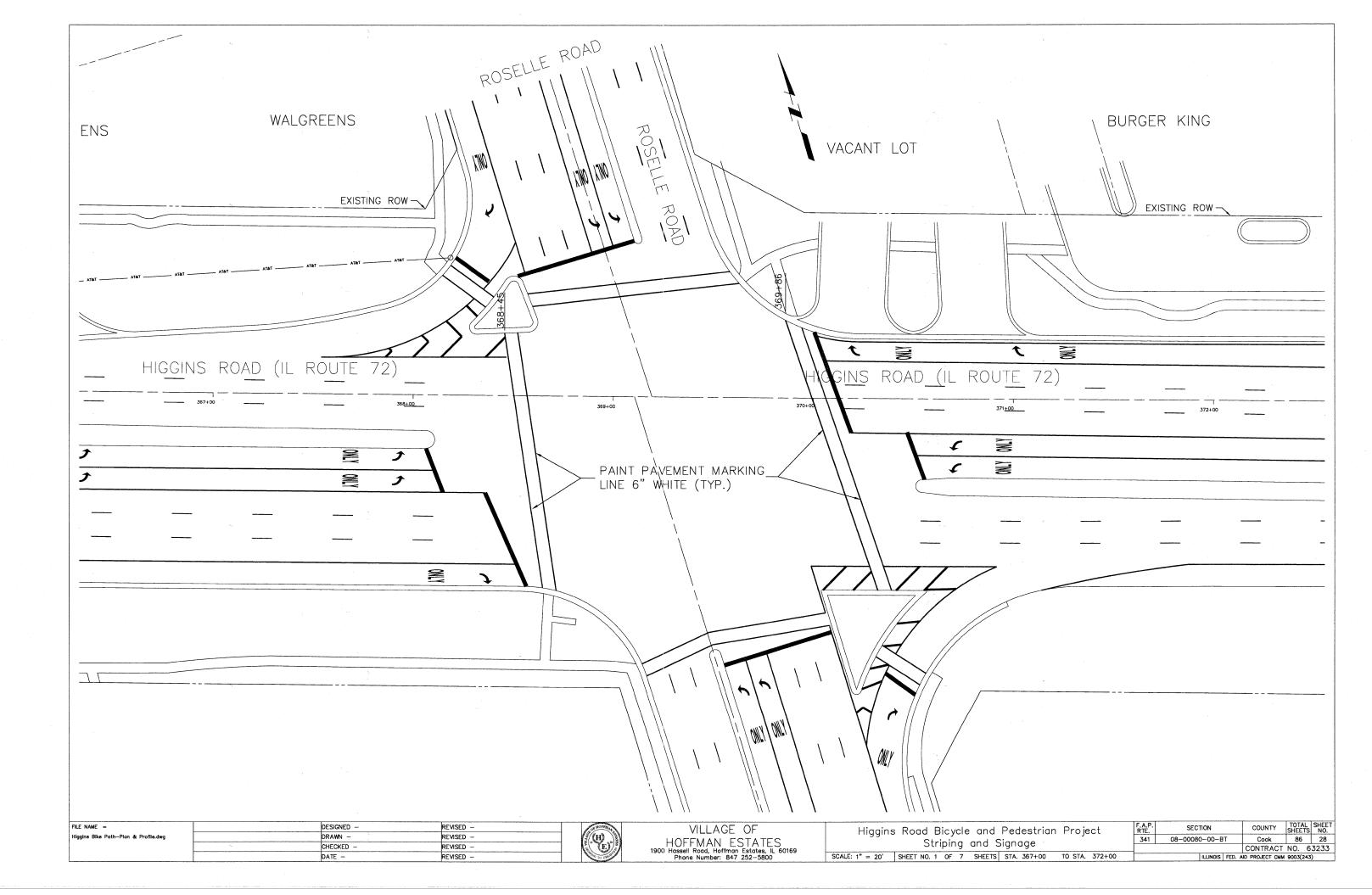


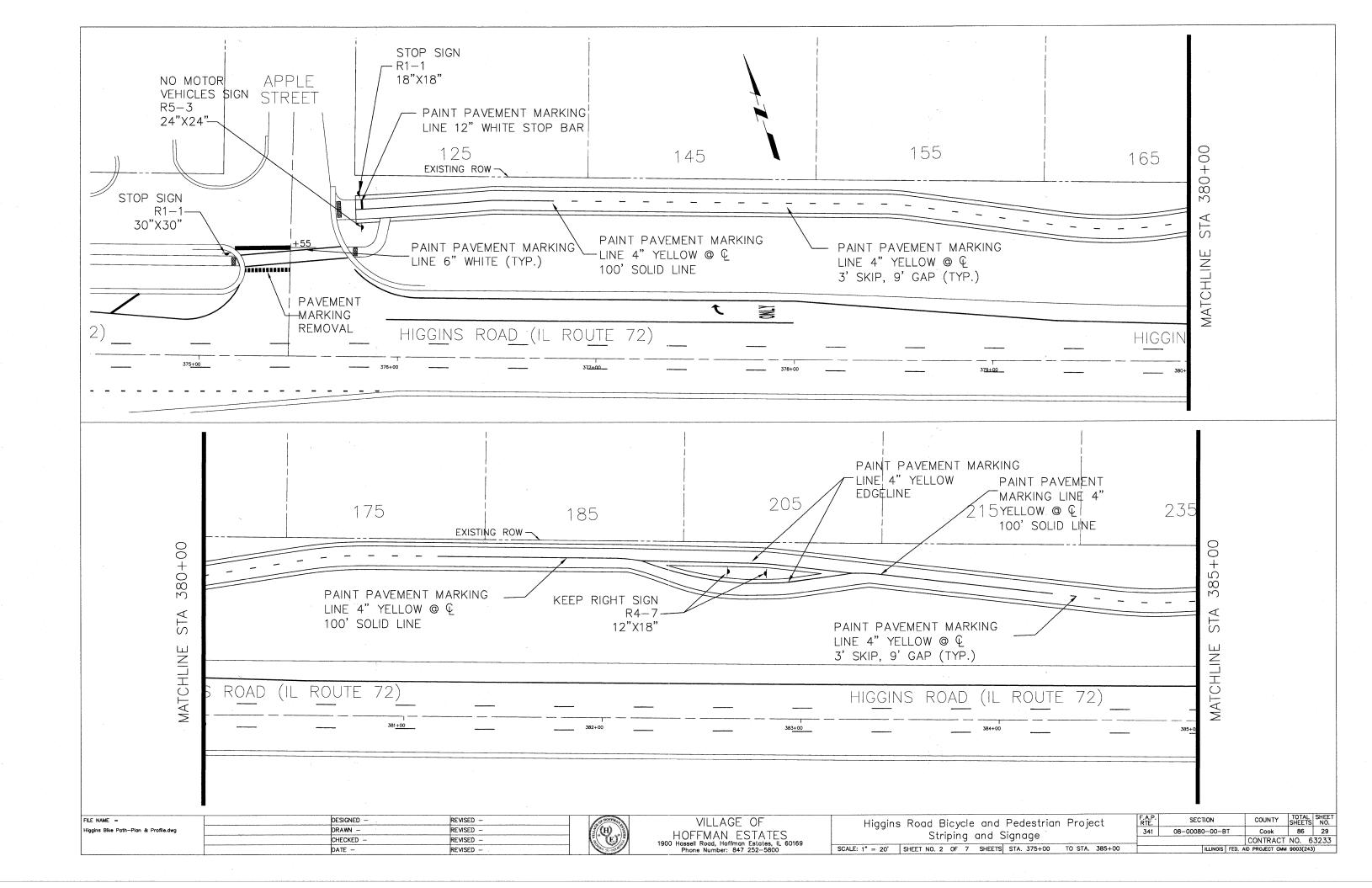


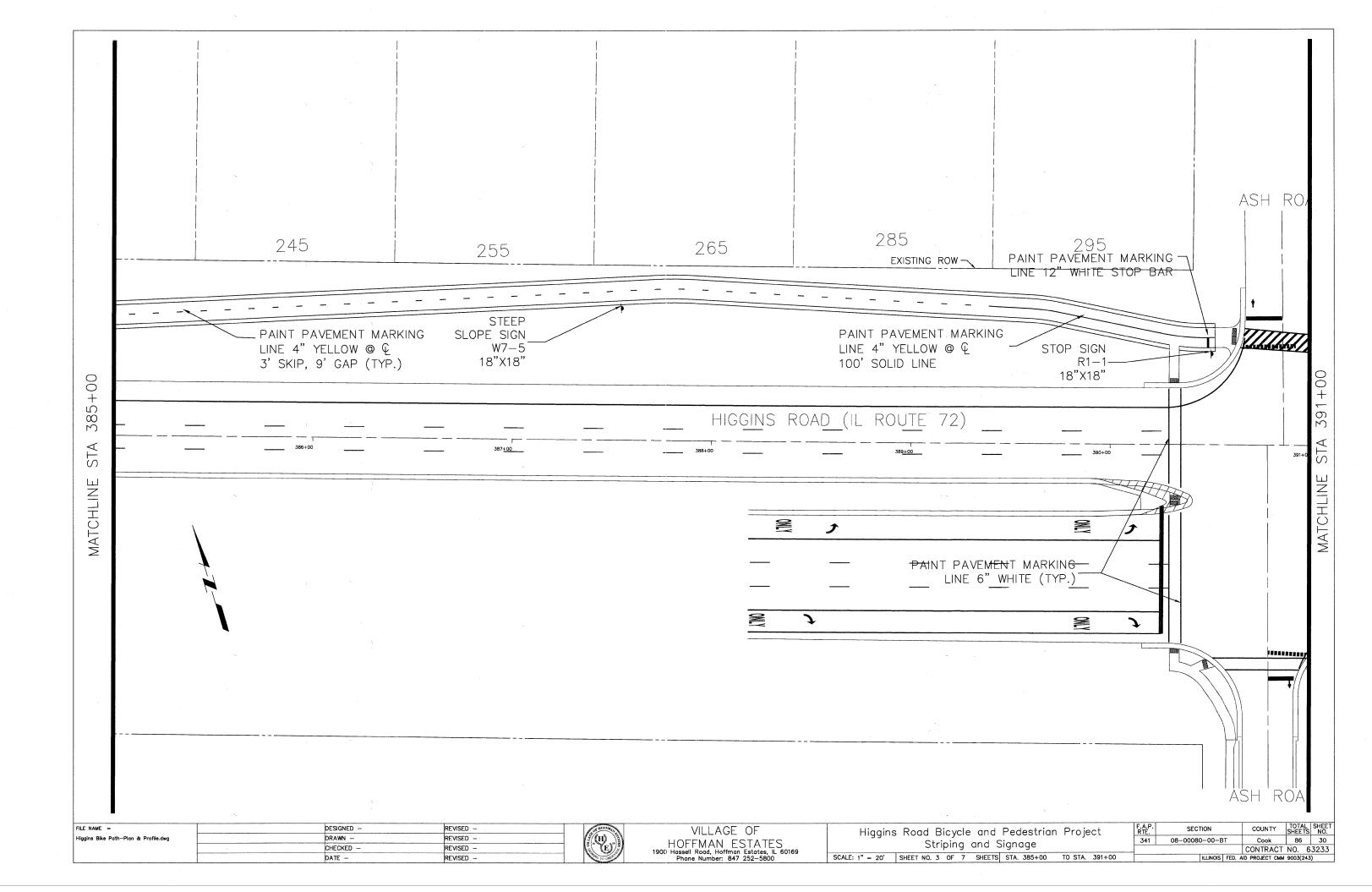


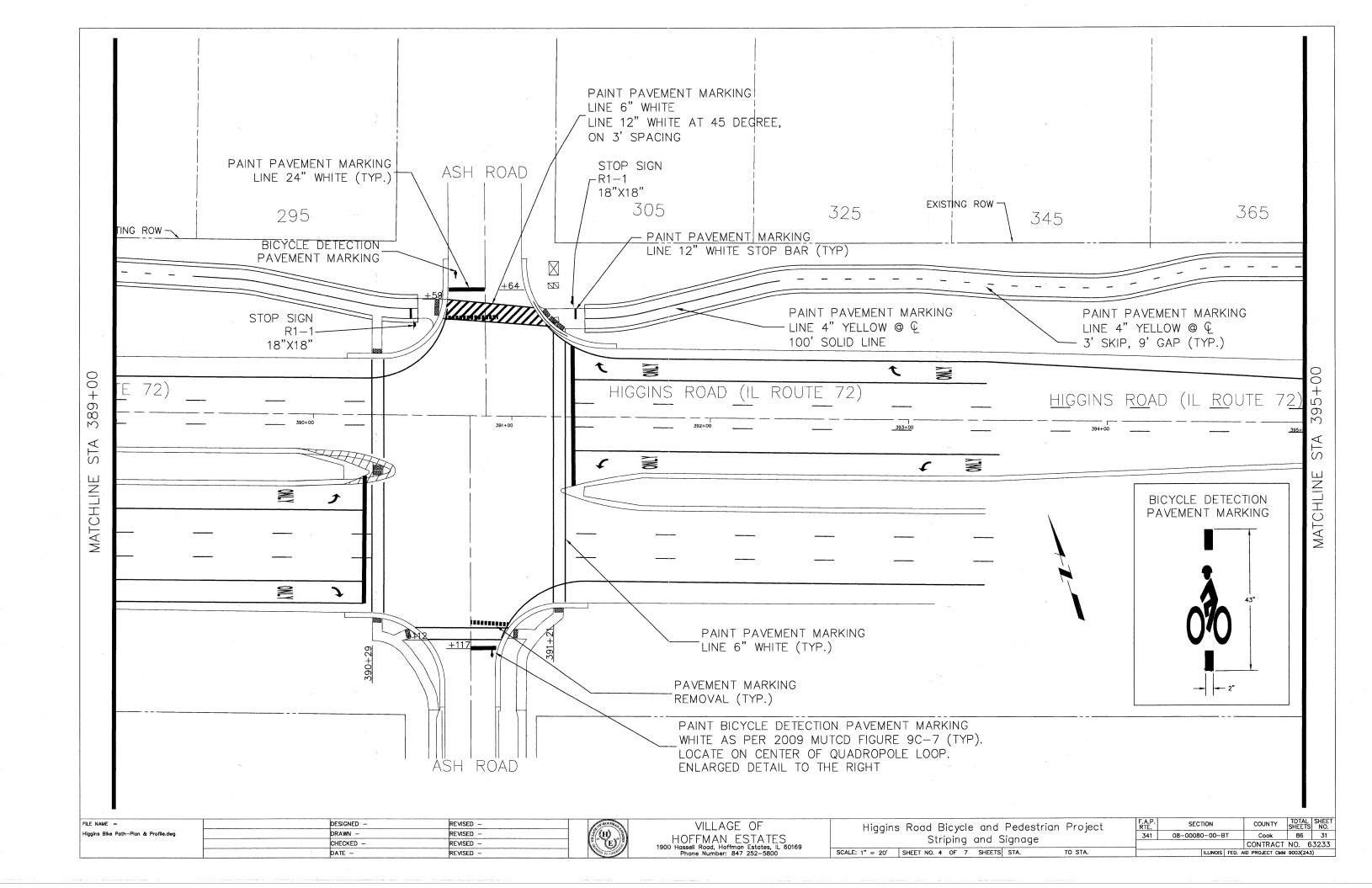


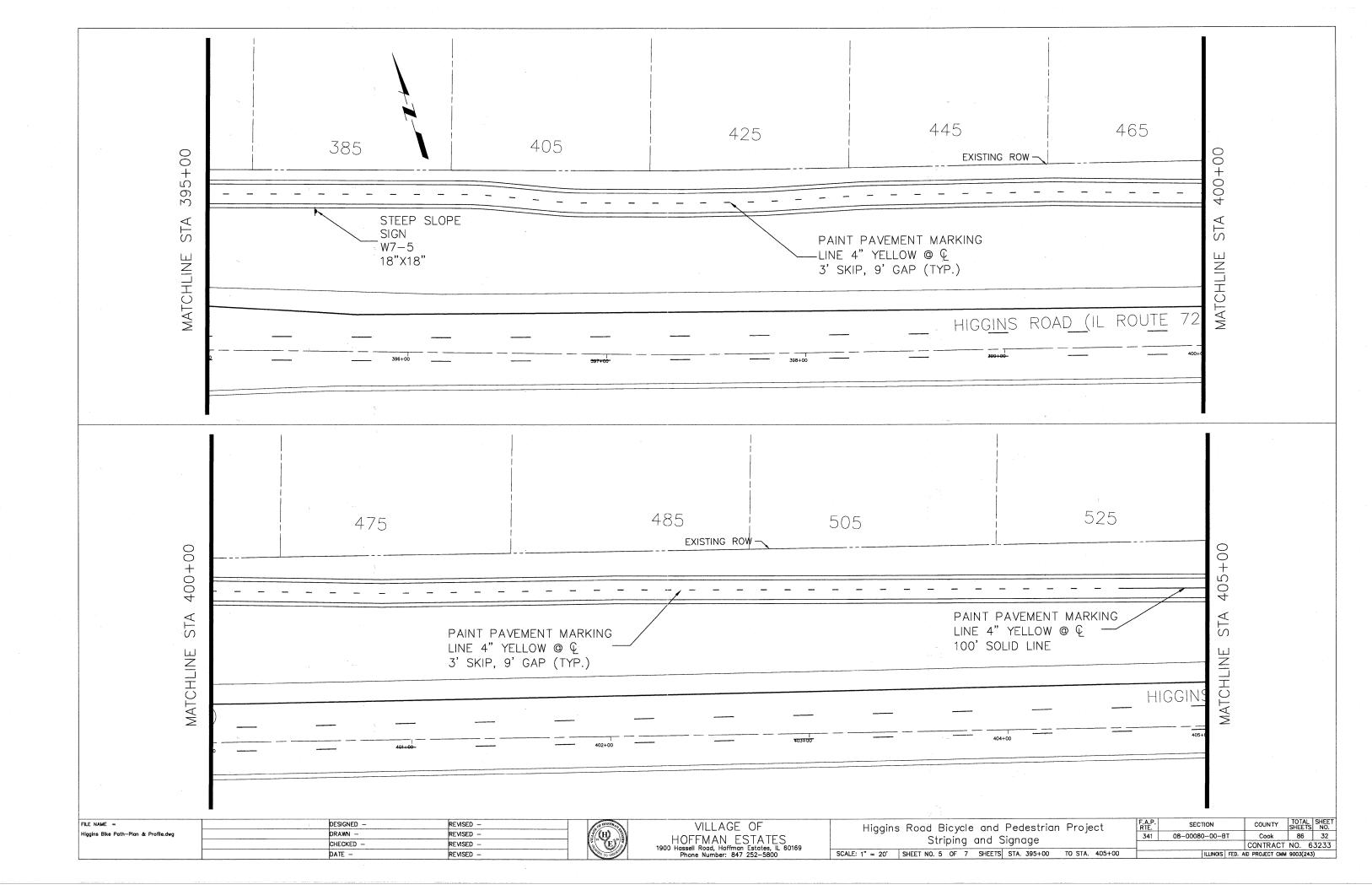


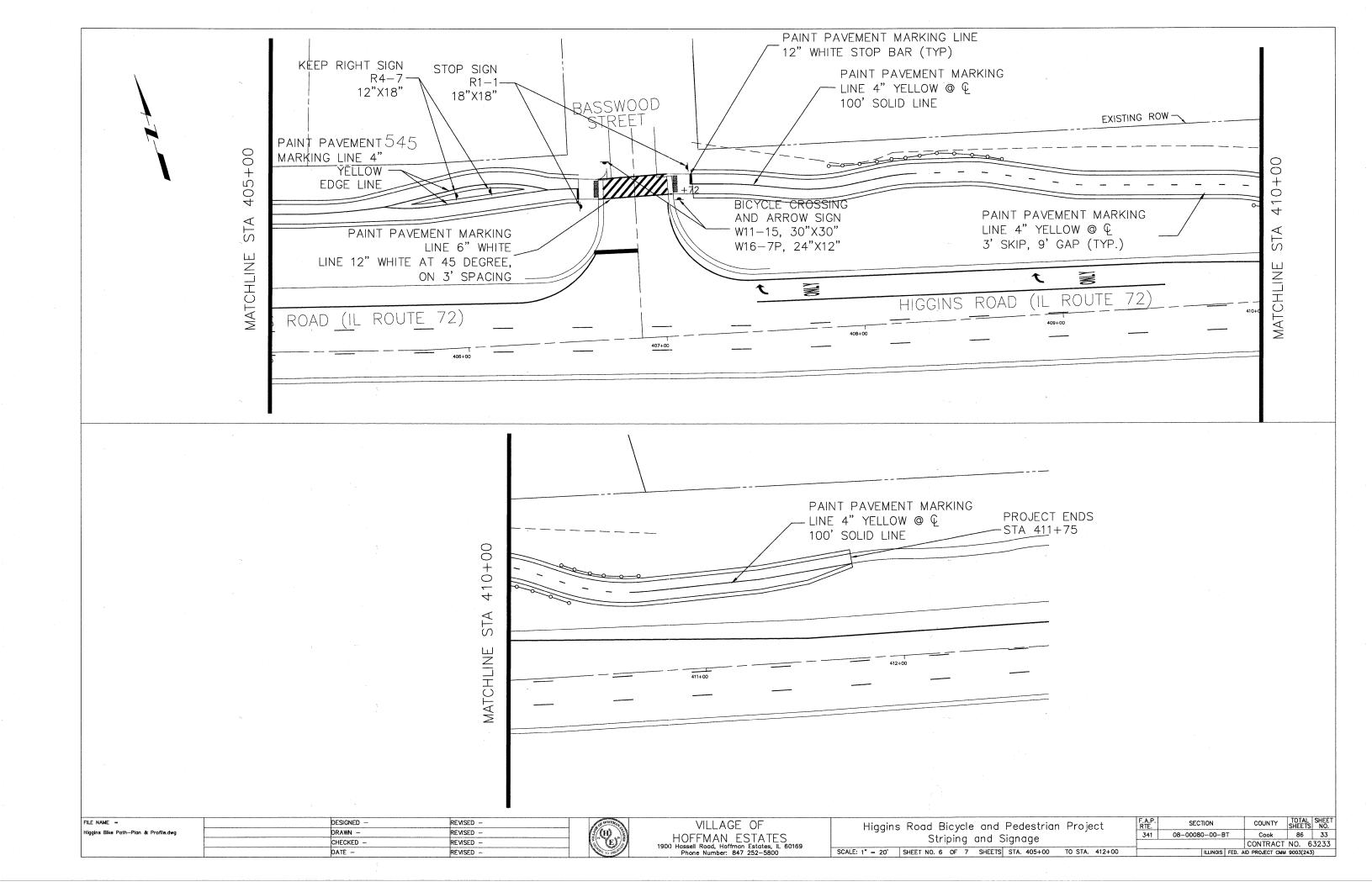


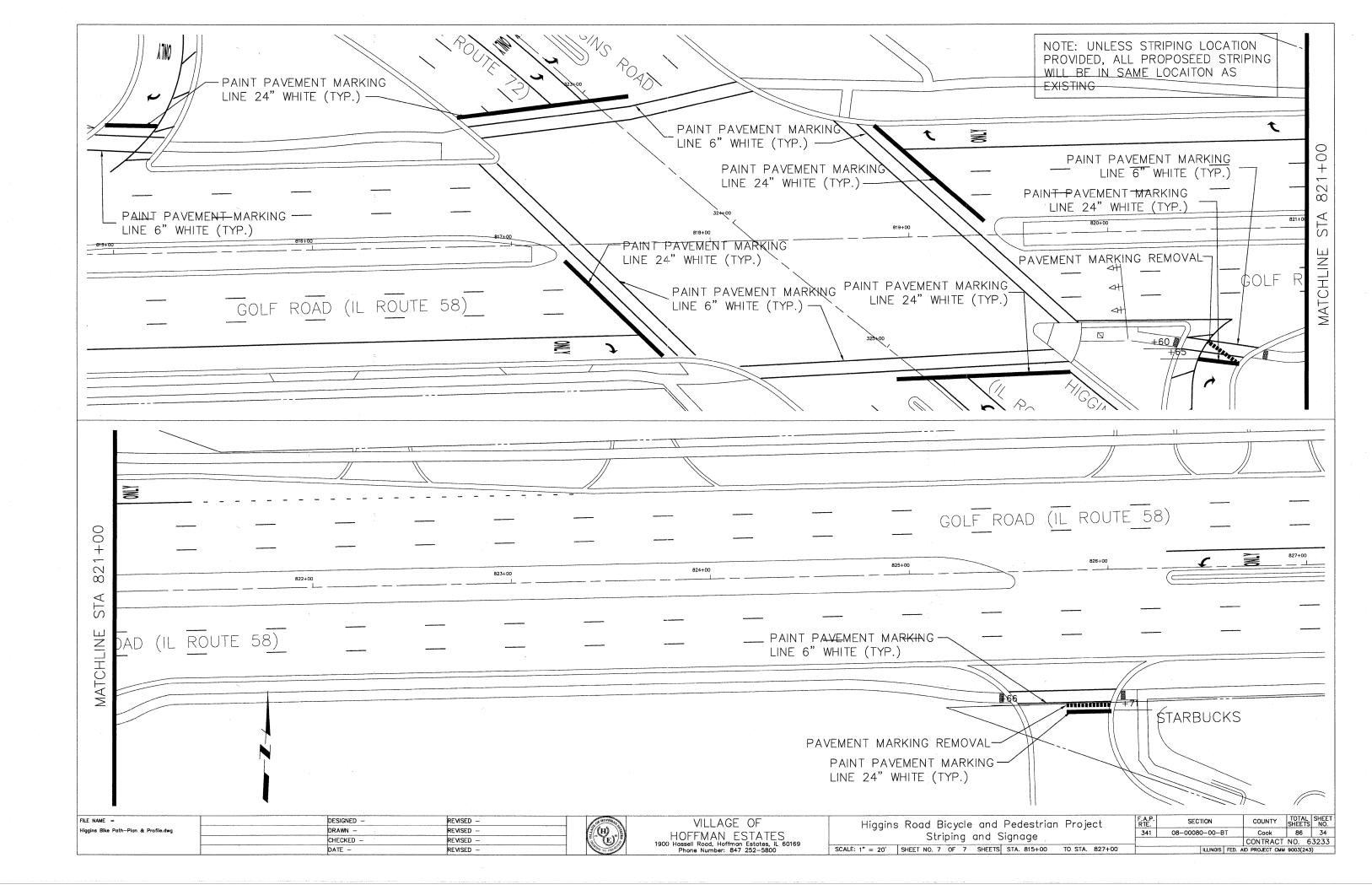


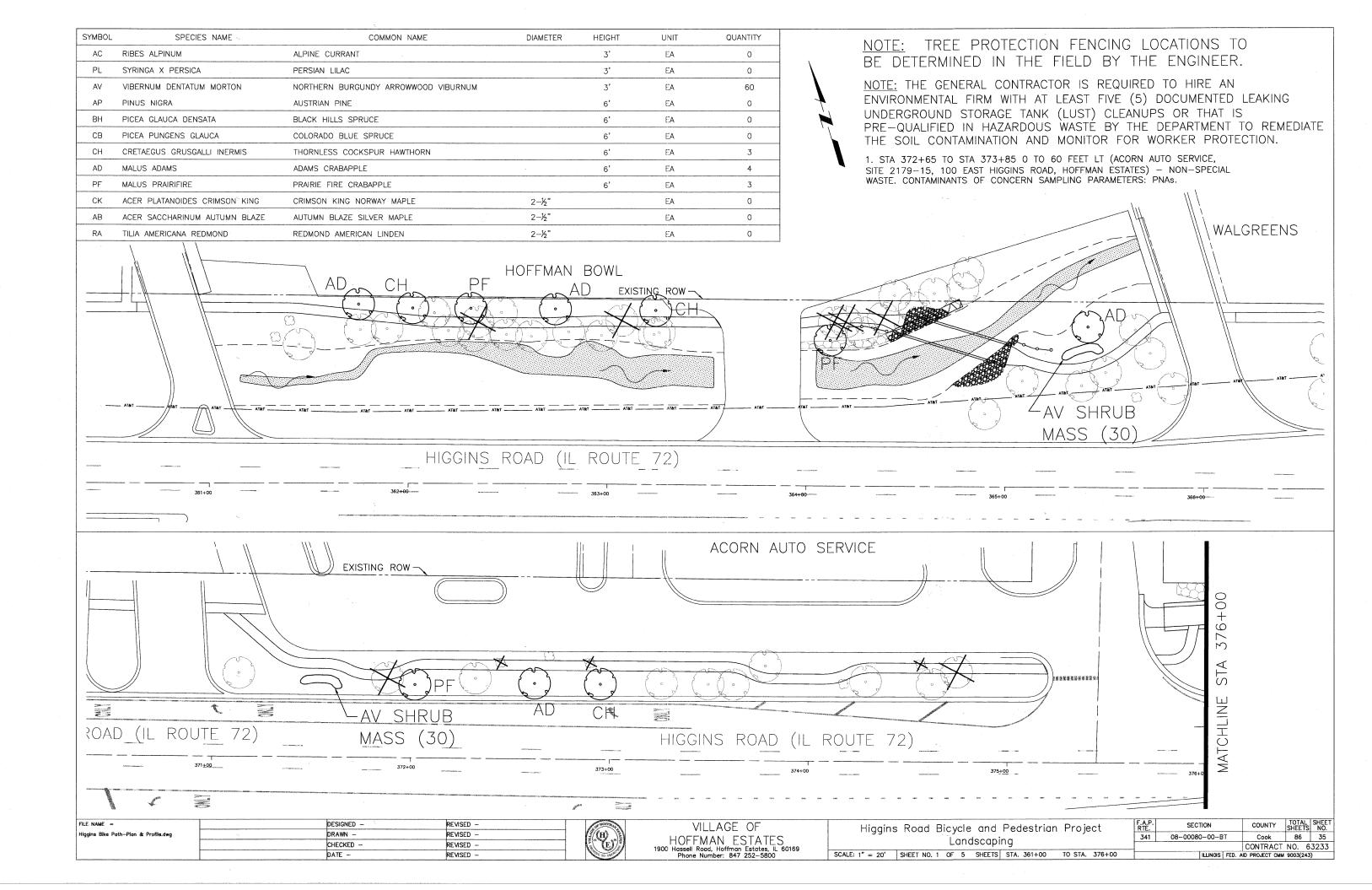


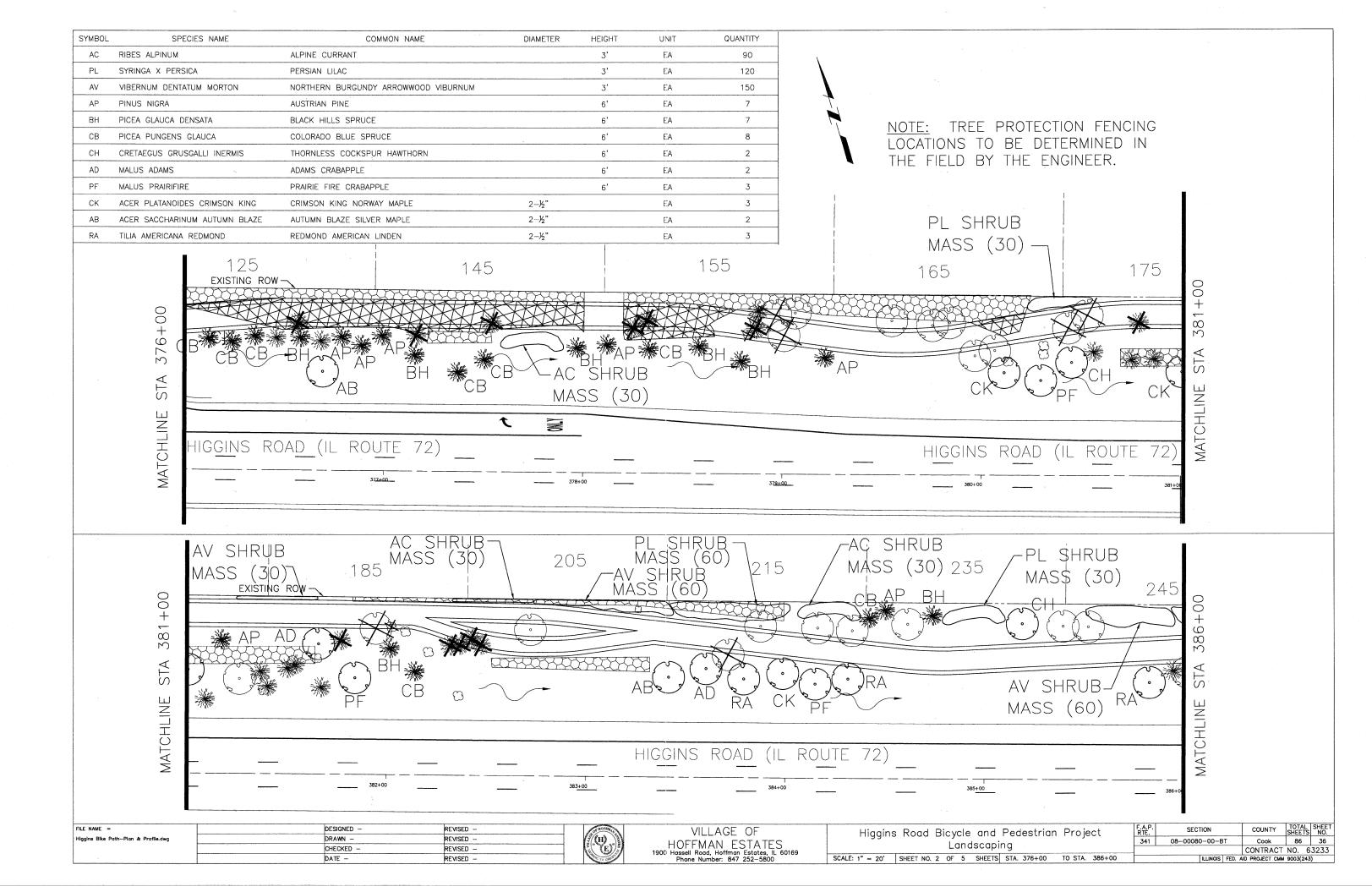


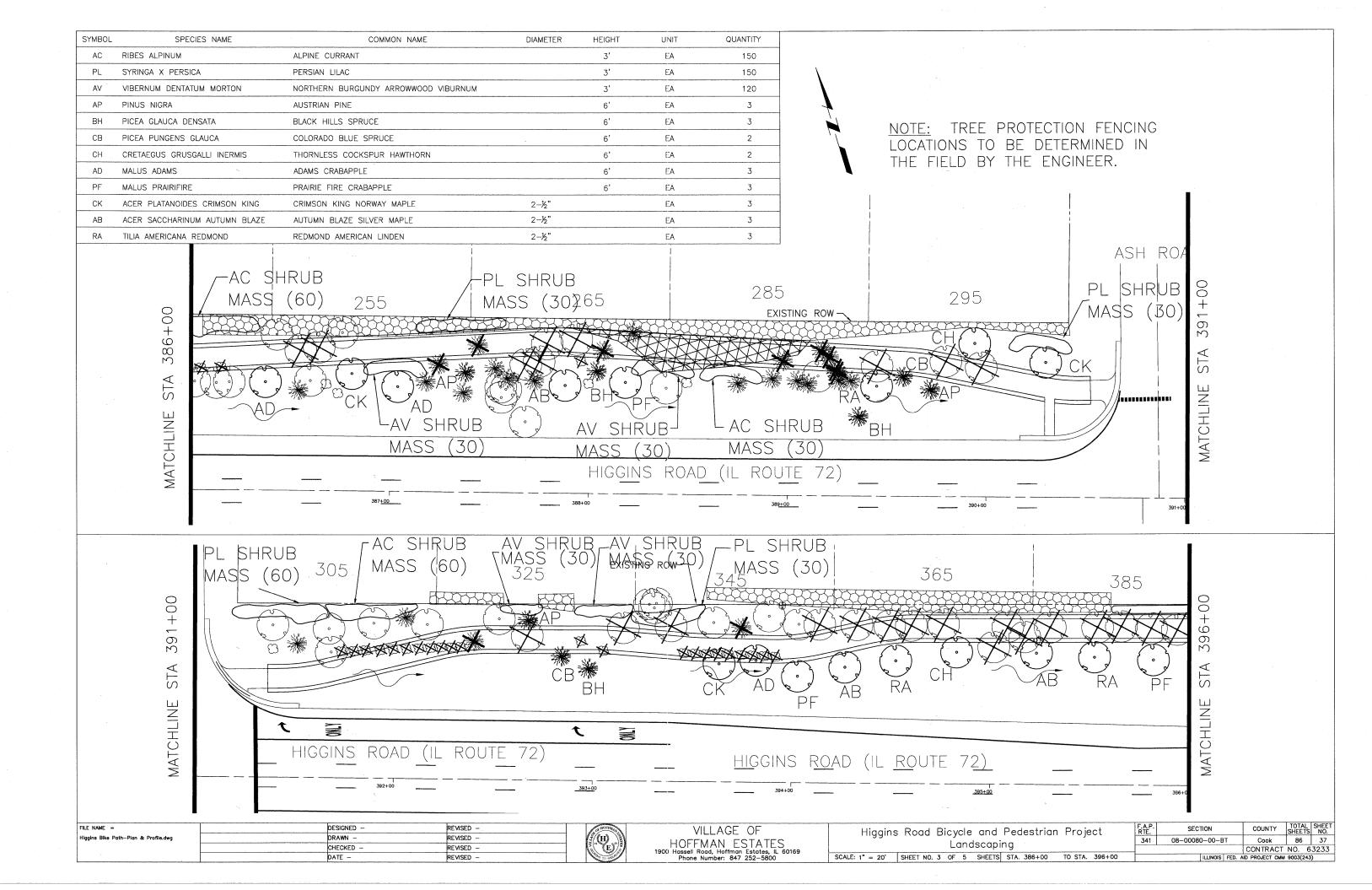


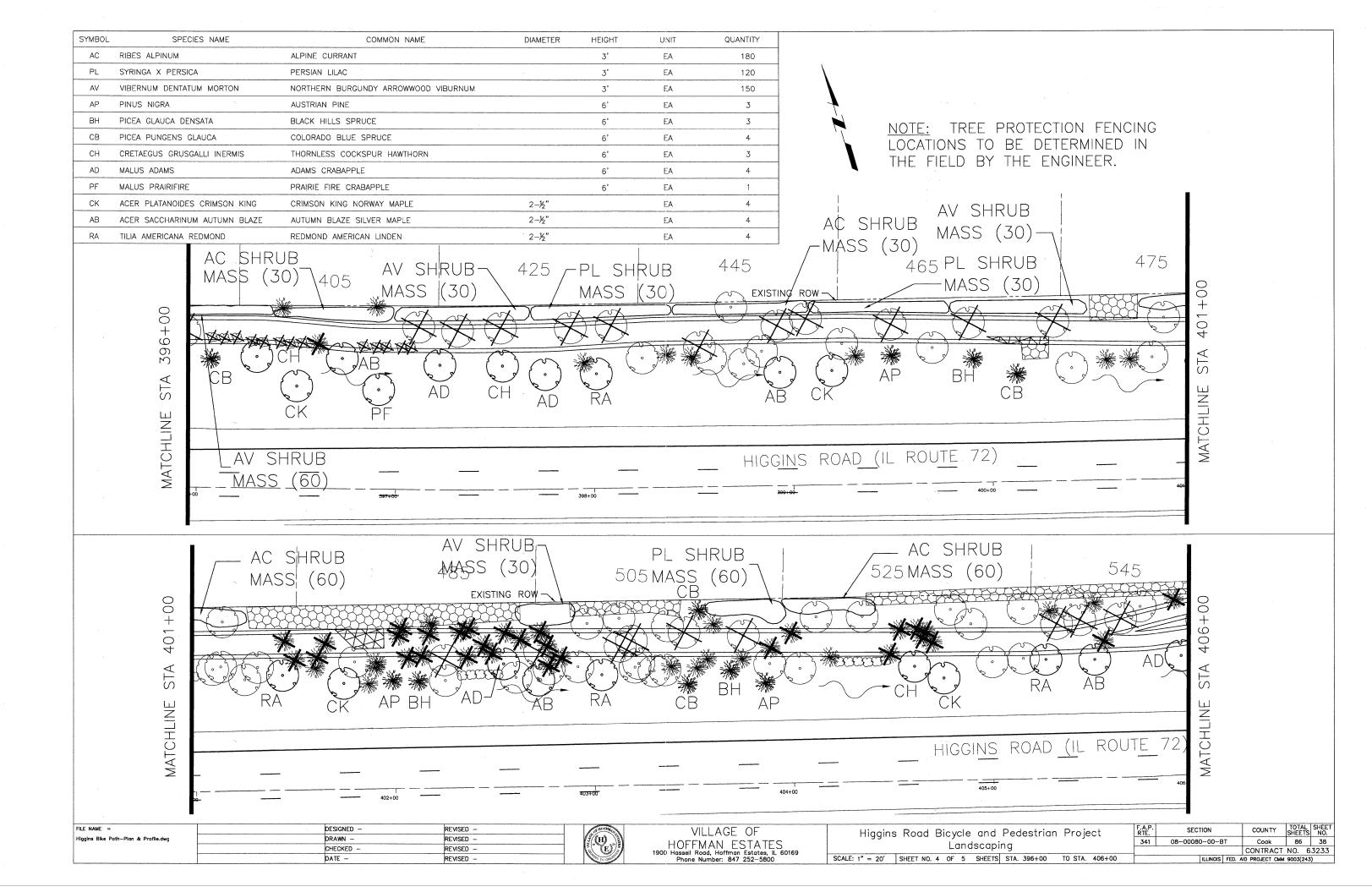


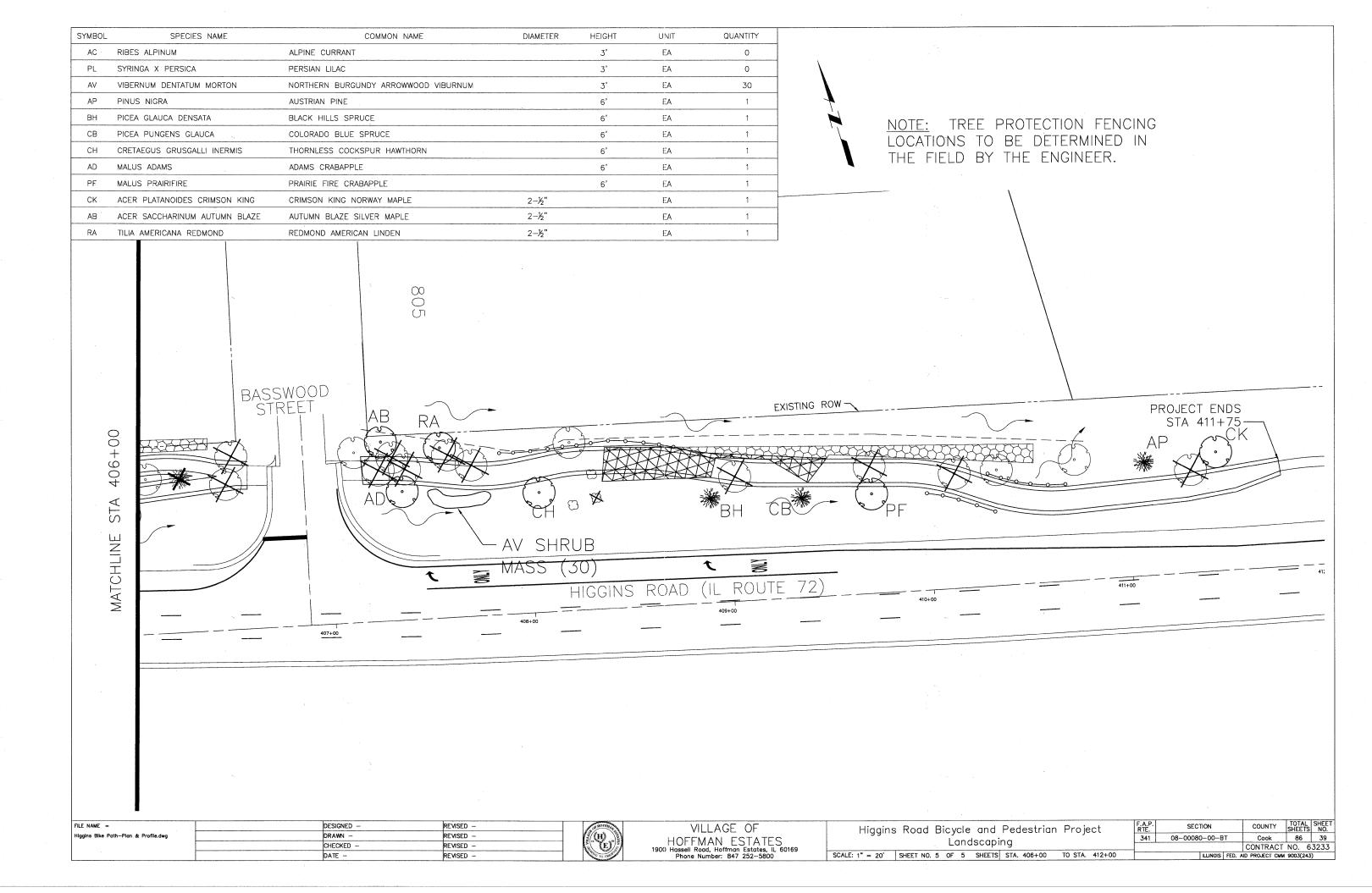


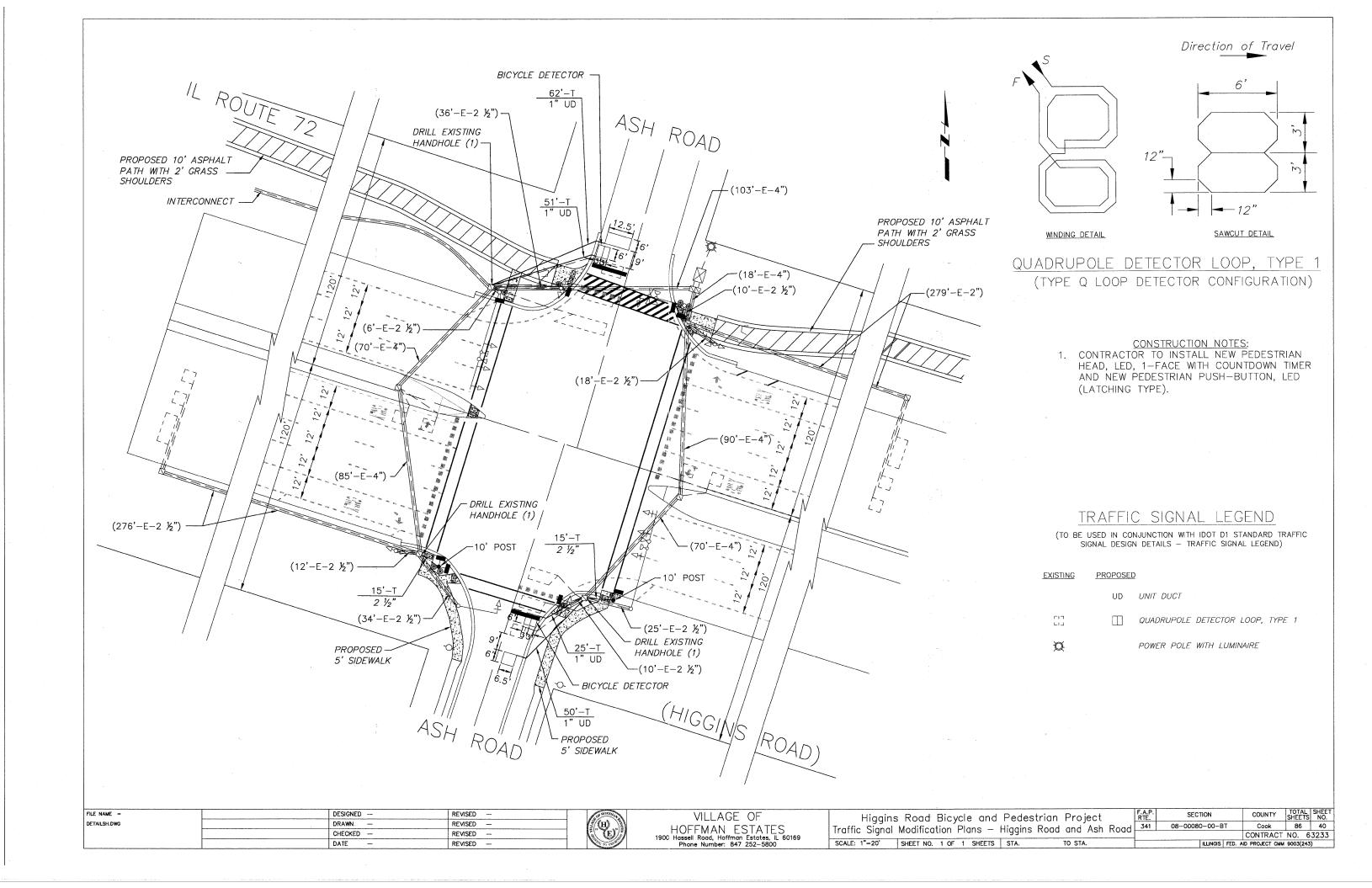


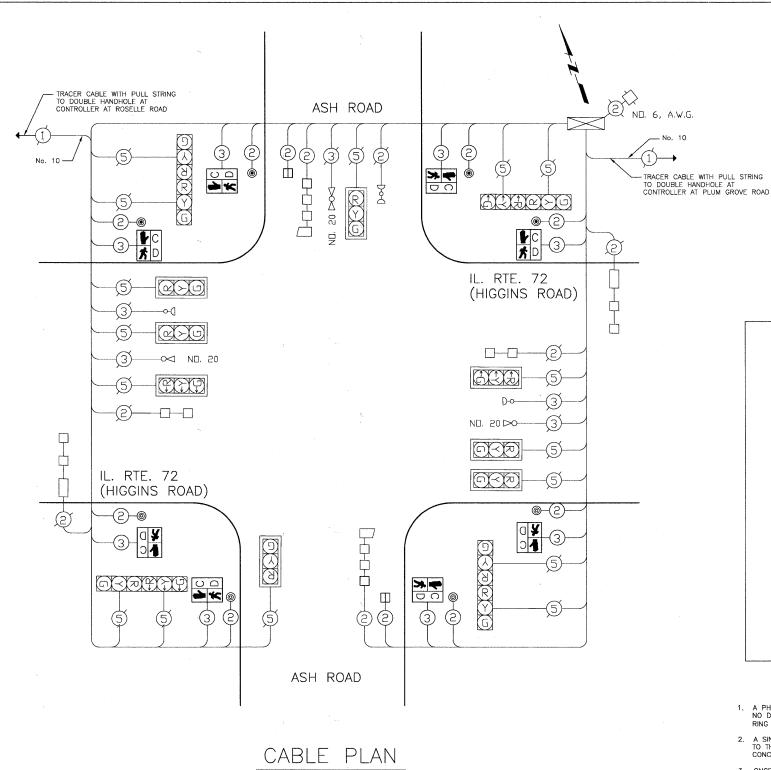












NOT TO SCALE

CONSTRUCTION NOTES: CONTRACTOR TO INSTALL NEW PEDESTRIAN
 HEAD, LED. 1—FACE WITH COUNTDOWN TIMER AND NEW PEDESTRIAN PUSH-BUTTON, LED

#### CABLE PLAN LEGEND

TRAFFIC SIGNAL DESIGN DETAILS - TRAFFIC SIGNAL LEGEND)

**EXISTING** PROPOSED

BICYCLE DETECTOR, QUADRUPOLE INDUCTION LOOP

(TO BE USED IN CONJUNCTION WITH IDOT D1 STANDARD

#### DUAL ENTRY PHASING NOTES (FOR ASH ROAD ONLY)

PHASES SHOWN ON THE CROSS STREET SHALL BE THE ONLY PHASES FOR WHICH STANDARD 857001 IS UTILIZED.

# 4. TERMINATION OF A PHASE SHALL BE WITH A YELLOW INDICATION FOLLOWED BY A RED INDICATION.

5. IN A FLASHING MODE, ALL VEHICULAR SIGNAL FACES SHALL FLASH RED AND ALL PEDESTRIAN SIGNAL FACES SHALL BE DARK.

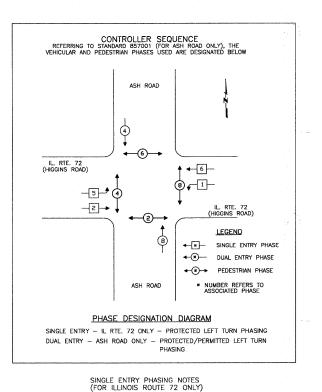
A PHASE IN ONE RING CAN BE SELECTED AND TIMED ALONE IF THERE IS NO DEMAND FOR SERVICE IN A NON-CONFLICTING PHASE ON THE PARALLEL RING ONLY ON THE ARTERIAL'S SIDE OF THE BARRIER.

A SINGLE PHASE SELECTED AS STATED ON NOTE 1 SHALL ONLY TERMINATE
TO THE CONFLICTING PHASE ON THE SAME SIDE OF THE BARRIER OR TO ANY
CONCURRENT PHASES ON THE OTHER SIDE OF THE BARRIER.

3. ONCE CONCURRENT TIMING OF BOTH RINGS OCCURS ON THE ARTERIAL'S SIDE OF THE BARRIER, THE ASSOCIATED CONCURRENT PHASES SHALL ONLY CLEAR TO OTHER CONCURRENT PHASES ON THE SAME SIDE OF THE BARRIER TO OR ANY CONCURRENT PHASES ON THE OTHER SIDE OF THE BARRIER.

## SCHEDULE OF QUANTITIES

PAY ITEM	<u>UNIT</u>	QUANTITY
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FT	50
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14, 2C	FT	1800
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14, 3C	FT	1854
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FT	737
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 10 FT	EACH	2
CONCRETE FOUNDATION, TYPE A	FT	12
DRILL EXISTING HANDHOLE	EACH	3
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	8
WITH COUNTDOWN TIMER		
INDUCTIVE LOOP DETECTOR	EACH	2
INDUCTIVE LOOP DETECTOR (SPECIAL)	EACH	2
DETECTOR LOOP, TYPE 1	FT	175
MODIFY EXISTING CONTROLLER	EACH	1
HANDHOLE TO BE ADJUSTED	EACH	4
PEDESTRIAN PUSH BUTTON, LED	EACH	8
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1



1. TERMINATION OF ALL PEDESTRIAN PHASES SHALL INCLUDE A FULL FLASHING "DON'T WALK" INTERVAL.

 $\stackrel{\cancel{\ }}{\Rightarrow}$ 

2. IF ALL RED CLEARANCE IS USED IN THE NORMAL SEQUENCE OF OPERATION, IT MUST BE DISPLAYED AFTER THE YELLOW CLEARANCE INTERVAL WHEN ENTERING OR LEAVING THE PREEMPTION SEQUENCE.

#### DUAL ENTRY NOTES:

 ONCE PREEMPTION HAS BEEN CALLED, TERMINATION OF A DUAL ENTRY PHASE(S) SHALL BE IDENTICAL TO THE NORMAL SEQUENCE OF OPERATION'S TERMINATION OF A PHASE(S) AS DESCRIBED IN STANDARD 857001.

EMERGENCY VEHICLE PREEMPTION SEQUENCE NOTES FOR DUAL ENTRY OPERATION — ASH ROAD LEGS FOR SINGLE ENTRY OPERATION — ILLINOIS ROUTE 72 LEGS

ASH ROAD

4-4-**√**4

(5)

ASH ROAD

PRIORITY LANES

(5)

IL. RTE. 72 (HIGGINS ROAD)

-(3)--(3)-

PROPOSED

MOVEMENT

2. CONTINUATION OR TERMINATION OF ALL RIGHT TURN OVERLAPS SHALL BE CONTINUATION OF TERMINATION OF ALL RIGHT TOWN OVERLAPS SHALL BE IDENTICAL TO THE NORMAL SEQUENCE OF OPERATION'S CONTINUATION OR TERMINATION OF RIGHT TURN OVERLAPS AS DESCRIBED IN THE CLEARANCE NOTES FOR RIGHT TURN OVERLAPS WITH THE FOLLOWING EXCEPTION: A RIGHT TURN OVERLAP SHALL BE TERMINATED IF THAT OVERLAP IS IN ITS PERMISSIVE OR PROTECTED PHASE IN THE NORMAL SEQUENCE OF OPERATION AND IT IS FOLLOWED BY ITS PROTECTED PHASE IN THE PREEMPTION SEQUENCE.

- ONCE PREEMPTION HAS BEEN CALLED, TERMINATION OF A SINGLE ENTRY
  PHASE(S) SHALL BE IDENTICAL TO THE NORMAL SEQUENCE OF OPERATIONS
  TERMINATION OF A PHASE(S) AS DESCRIBED IN THE SINGLE ENTRY PHASING

  OUTPIT

  TO THE STATE OF T
- A RIGHT TURN OVERLAP SHALL BE TERMINATED IF THAT OVERLAP IS IN ITS PERMISSIVE OR PROTECTED PHASE IN THE NORMAL SEQUENCE OF OPERATION AND IT IS FOLLOWED BY ITS PROTECTED PHASE IN THE PREEMPTION SEQUENCE.
- 3. CONTINUATION OR TERMINATION OF A RIGHT TURN OVERLAP DURING ITS PROTECTED PHASE WHEN TRANSFERRING FROM THE NORMAL SEQUENCE OF OPERATION TO THE PREEMPTION SEQUENCE SHALL BE IDENTICAL TO THE NORMAL SEQUENCE OF OPERATION'S CONTINUATION OR TERMINATION OF A RIGHT TURN OVERLAP DURING ITS <u>PROTECTED</u> PHASE AS DESCRIBED IN THE CLEARANCE NOTES FOR RIGHT TURN OVERLAPS.

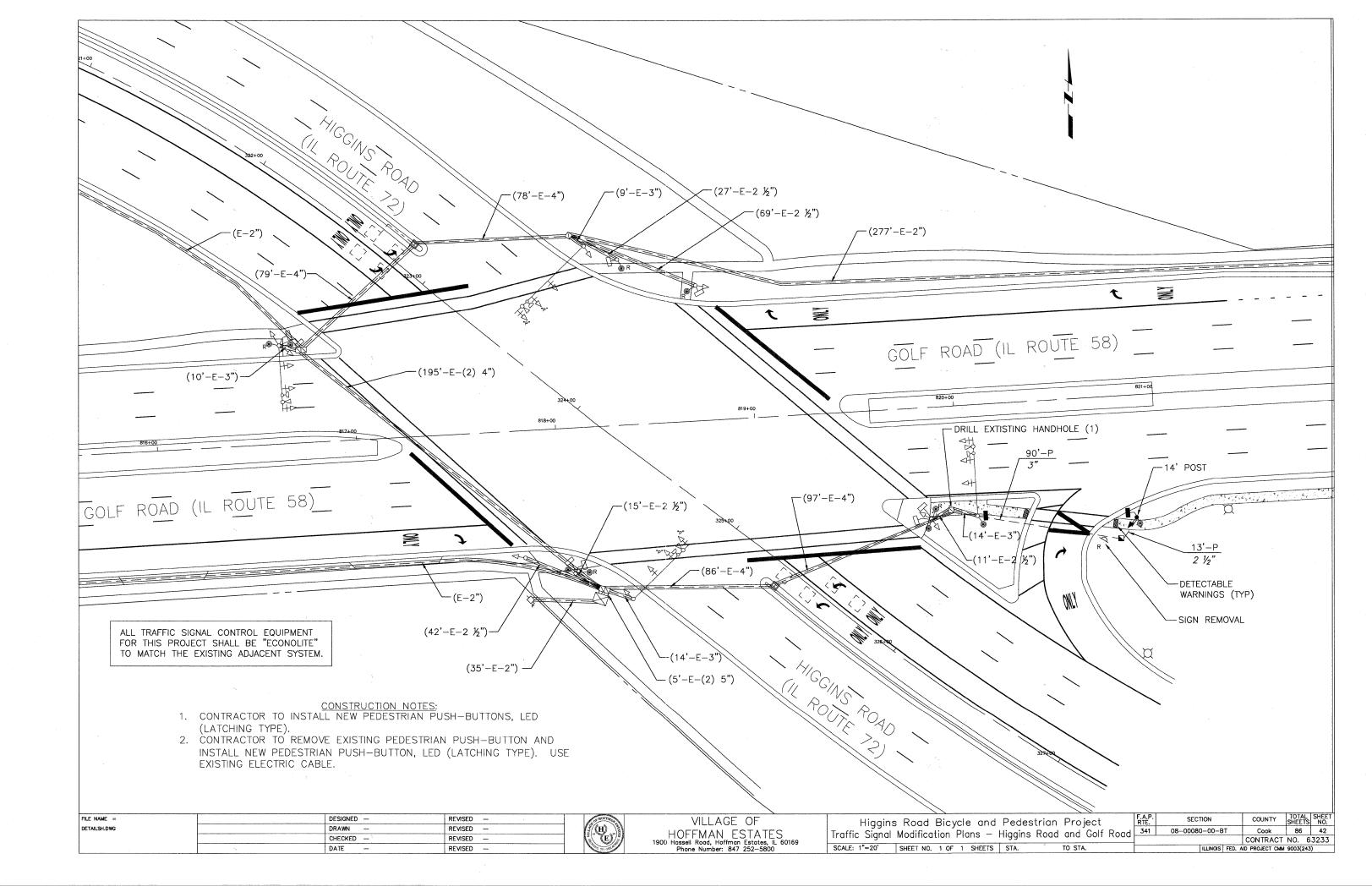
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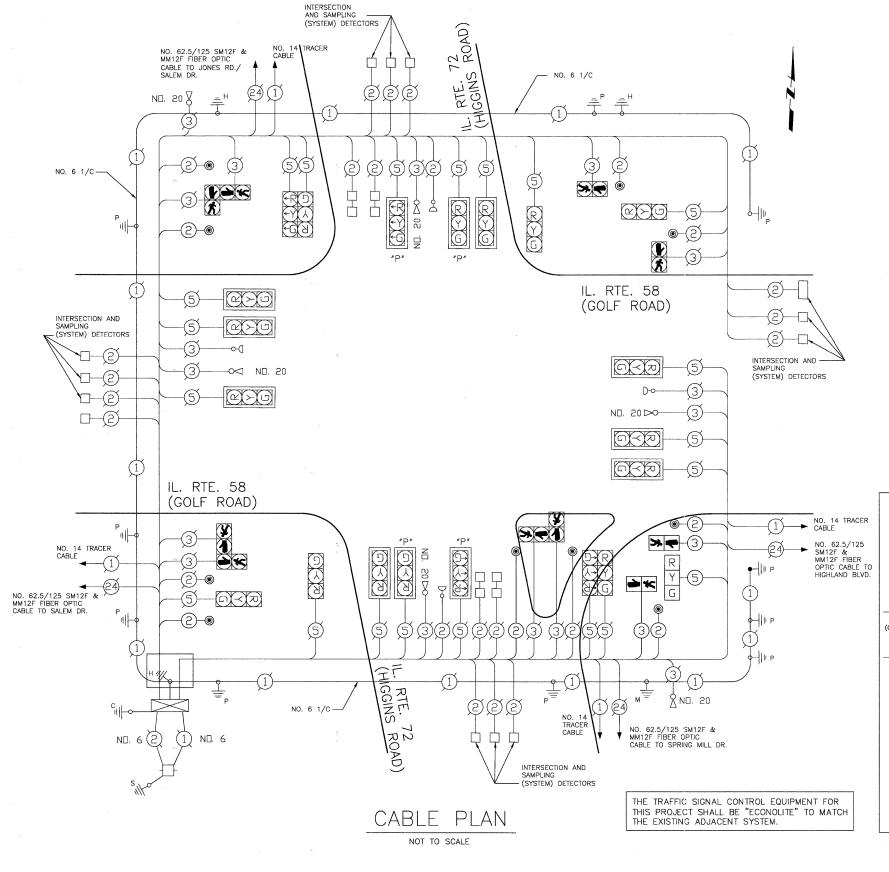


VILLAGE OF HOFFMAN ESTATES
1900 Hassell Road, Hoffman Estates, IL 60169 Phone Number: 847 252-5800

Higgins Road Bicycle and Pedestrian Project Cable and Sequence of Operations Plan - Higgins Road and Ash Roa SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

	F.A.P. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
ad	341	08-00080-00-E	BT.	Cook	86	41
uu				CONTRACT	NO. 6	3233
		ILLINOIS	FED. A	ID PROJECT CMM	9003(243	)





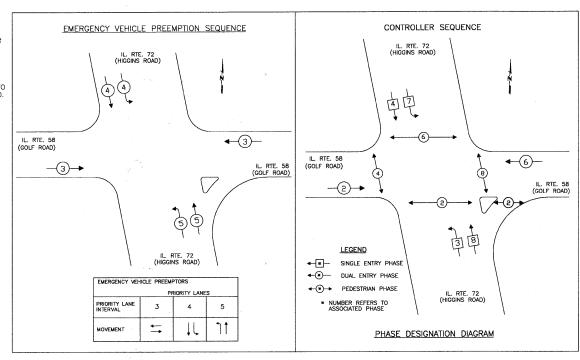
#### SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QUANTITY
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FT	13
CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FT	90
HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14, 2C	FT	2700
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14, 3C	FT	675
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14, 5C	FT	400
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING	FT	155
CONDUCTOR, NO. 6 1C		
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 14 FT	EACH	1
CONCRETE FOUNDATION, TYPE A	FT	4
DRILL EXISTING HANDHOLE	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	2
MODIFY EXISTING CONTROLLER	EACH	1
SIGN REMOVAL	EACH	1
PEDESTRIAN PUSH BUTTON, LED	EACH	10
REMOVE EXISTING PEDESTRIAN PUSH BUTTON	EACH	5
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1

- CONSTRUCTION NOTES:

  1. CONTRACTOR TO INSTALL NEW PEDESTRIAN PUSH—BUTTONS, LED
- (LATCHING TYPE).

  CONTRACTOR TO REMOVE EXISTING PEDESTRIAN PUSH-BUTTON AND INSTALL NEW PEDESTRIAN PUSH-BUTTON, LED (LATCHING TYPE). USE EXISTING ELECTRIC CABLE.



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	DATE -	REVISED -



VILLAGE OF HOFFMAN ESTATES
1900 Hassell Road, Hoffman Estates, IL 60169
Phone Number: 847 252-5800

	Higgins												Ŕ
Cable	and Sequ	ence	of	Оре	erat	tions	Plan	<ul><li>Higgi</li></ul>	ns Roa	d and	Golf	Road	-
SCALE:	NONE	SHEET	NO.	1	OF	1	SHEETS	STA.		TO STA.			

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	08-00080-00-BT	Cook	86	43
		CONTRACT	NO. 6	3233
	ILLINOIS FED	AID PROJECT CHM	9003/243	1

# HIGGINS BIKE PATH

# Hoffman Estates, IL TIMBER FREESPAN PEDESTRIAN BRIDGE

		DRAWIN	G IN	NDEX		
REVISIONS	DRAWING TITLE	SHEET NUMBER	R	EVISIONS	DRAWING TITLE	SHEET NUMBER
	GENERAL				SECTIONS	
	COVER/DRAWING INDEX	000			SECTION - STRINGER DIMENSIONS	301
	GENERAL NOTES	001			ENLARGED	
	PROJECT NOTES	002			ENLARGED PLAN - ABUTMENT	401
	BILL OF MATERIALS	003			ENLARGED ELEVATION - H5 ABUTMENT	402
:	BIDDERS PAGE	004			ENLARGED ABUTMENT SECTION @ WINGWALL	403
	WATER INFORMATION TABLE	005			DETAILS	
	PLANS				GLULAM BLOCKING DETAILS - PLAN	501
	PLAN - PILE LAYOUT	101			COUNTERSINK DETAILS	502
	PLAN - STRINGER LAYOUT	102			CURB DETAILS	503
	ELEVATIONS				GUIDERAIL & POST DETAILS	504
	ELEVATION - SOUTHEAST	201			ABUTMENT DETAILS	505
	ELEVATION - CURB	202			HARDWARE DETAILS	506
	ELEVATION - POSTS	203				-

I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THIS BRIDGE/BOX CULVERT DESIGN IS STRUCTURALLY ADEQUATE FOR THE DESIGN IS AN ECONOMICAL ONE FOR THE STYLE OF STRUCTURE AND COMPLIES WITH TROUISEMENTS OF THE CURRENT AASHTO STANDARD SPECIFICATIONS FOR PEDESTRIAN PRIPAGES.

LINOIS STRUCTURAL NO.

EXPIRES 11/30/2012



#### GENERAL NOTES:

- 1. OWNER IS TO PROVIDE AN ADEQUATE AND SECURE STAGING AREA FOR MATERIALS AND EQUIPMENT NEAR EACH BRIDGE SITE. THIS AREA MUST BE ACCESSIBLE AND CONSTANT UNTIL THE BRIDGE IS COMPLETE.
- 2. OWNER IS TO PROVIDE ADEQUATE ACCESS TO EACH WORK SITE FOR CONSTRUCTION MATERIALS AND EQUIPMENT PER THE BRIDGE BUILDER REQUIREMENTS. PROVISION OF ACCESS MAY INCLUDE REMOVAL OF VEGETATION, ROAD SHAPING, SCRAPING AND/OR APPLICATION OF GRAVEL TO SOLIDIFY ROAD SURFACE.
- 3. OWNER IS TO VERIFY THAT ALL REQUIRED PERMITS ARE IN PLACE PRIOR TO THE BRIDGE BUILDER MOBILIZATION, AND TO PROVIDE THE BRIDGE BUILDER WITH A COPY OF ANY PERMIT(S) PERTINENT TO THE WORK DESCRIBED IN THE PROPOSAL.
- 4. SITE PREPARATION AND COMPACTION FOR THE CONSTRUCTION OF ALL WORK MUST BE SUBSTANTIALLY COMPLETED ON THIS PROJECT PRIOR TO THE BRIDGE BUILDER MOBILIZATION TO ALLOW THE BRIDGE BUILDER IMMEDIATE COMMENCEMENT OF WORK UPON ARRIVAL AT JOBSITE. ALL SITE WORK PREPARATION, EXCAVATION AND CLEANING ARE TO BE PERFORMED BY OTHERS. ALL BACK FILLING AND FINISH GRADING BY OTHERS.
- 5. OWNER WILL CLEARLY MARK OR REMOVE ANY UTILITIES, SPRINKLER HEADS OR IRRIGATION LINES WITHIN 50' OF ALL AREAS WHERE CONSTRUCTION WILL OCCUR PRIOR TO THE BRIDGE BUILDER MOBILIZATION. THE BRIDGE BUILDER WILL NOT BE HELD LIABLE FOR DAMAGE TO ANY MARKED OR UNMARKED UTILITY OR IRRIGATION LINES IN THIS AREA.
- 6. OWNER IS RESPONSIBLE FOR HAVING THE CENTERLINES AND OFFSETS LOCATED AND STAKED AND PROVIDING APPROPRIATE BENCHMARKS AND ELEVATIONS PRIOR TO THE BRIDGE BUILDER MOBILIZATION. DURING CONSTRUCTION THE BRIDGE BUILDER MAY REQUIRE ADDITIONAL CONSTRUCTION STAKING, WHICH WILL BE THE RESPONSIBILITY OF THE OWNER.
- 7. THE BRIDGE BUILDER IS NOT RESPONSIBLE FOR ADEQUATE SITE DRAINAGE DURING CONSTRUCTION PHASE.
- 8. OWNER IS REQUIRED TO INSPECT AND SIGN OFF FOR EACH BRIDGE SITE BOTH BEFORE AND AFTER CONSTRUCTION TO PROVIDE QUALITY ASSURANCE WHILE THE BRIDGE BUILDER IS ONSITE PRIOR TO DEMOBILIZATION.
- 9. BRIDGE CONTRACTOR WILL PERFORM ALL WORK FROM DECK LEVEL WHERE APPLICABLE. ALL FOOT TRAFFIC WILL BE CONTAINED WITHIN SIX FEET FROM BRIDGE PATH.
- 10. BRIDGE CONTRACTOR WILL CLEAN UP EACH BRIDGE SITE DAILY, SCRAP TO BE PLACED IN DUMPSTER TO BE PROVIDED BY THE BRIDGE BUILDER OR OTHERWISE SPECIFIED IN THE CONTRACT.
- 11. OWNER IS RESPONSIBLE FOR POSTING LOAD LIMIT SIGNS AND/OR SPEED LIMIT SIGNS AT EACH END OF EACH BRIDGE.
- 12. COMPLIANCE WITH ALL BUILDING CODES REGARDING ADA COMPLIANCE WILL BE THE RESPONSIBILITY OF THE OWNER. CONTINUOUS ADA METAL GUIDE RAILS IF REQUIRED ARE TO BE INSTALLED BY OTHERS.
- 13. ALL UTILITY LINES, PIPES, CONDUIT OR OTHER LINES TO BE ATTACHED TO THE BRIDGE WILL BE INSTALLED BY OTHERS AFTER BRIDGE COMPLETION. ALL PIPE HANGER DESIGNS WILL BE BY OTHERS.
- 14. ALL THE BRIDGE BUILDER BRIDGES WILL NOT BE ABLE TO BE UTILIZED BY ANYONE OTHER THAN THE BRIDGE BUILDER PERSONNEL UNTIL THEY ARE INDIVIDUALLY SIGNED OFF BY A CERTIFIED REPRESENTATIVE OF THE OWNER.
- 15. IF THE INFORMATION OF THE 100-YEAR FLOOD ELEVATION FURNISHED BY CLIENT ENGINEER DOES NOT MEET THE BRIDGE BUILDER CRITERIA OF 12 INCHES ABOVE FLOOD PLAIN FOR THIS DESIGN, THE BRIDGE BUILDER RECOMMENDS THAT THE ELEVATION OF THE BOTTOM OF THE LOWEST BRIDGE STRINGER TO BE PLACED AT A MINIMUM OF 12 INCHES ABOVE THE 100-YEAR FLOOD ELEVATION.

THIS SHEET SIZE IS 22"X34" ANYTHING SMALLER IS A REDUCTION REVISIONS LICENSED: PROJECT DESCRIPTION HIGGINS BIKE PATH PROJECT TIMBER PEDESTRIAN BRIDGE DATE DESCRIPTION HOFFMAN ESTATES. IL DESIGNED LOADING GENERAL NOTES 85-PSF OR 5 TON GVW (L/360 DEFLECTION) APPROVED BY: DATE APPROVED: 5 of 4/6/11 D. MATTHEWS 001 209031

#### TIMBER BRIDGE PROJECT NOTES:

- 1. UNLESS OTHERWISE SPECIFIED, ALL SAWN LUMBER SHALL BE SOUTHERN YELLOW PINE AND GRADED UNDER THE SOUTHERN PINE INSPECTION BUREAU (SPIB) RULES.
- 2. UNLESS OTHERWISE SPECIFIED, ALL SAWN LUMBER SHALL BE GRADE NO. 2, S4S (SURFACED FOUR SIDES). PILE CAP TO BE ROUGH SAWN.
- 3. UNLESS OTHERWISE SPECIFIED, ALL SAWN LUMBER SHALL BE PRESSURE TREATED WITH <u>CCA</u> ON TIMBERS DENOTED BY THE BRIDGE BUILDER AND REFLECTED ON THE BILL OF MATERILAS OR WITH <u>ACQ</u>. RETENTION LEVELS SHALL BE DEFINED IN DESIGN PLANS. PRESSURE TREATMENT SHALL BE IN ACCORDANCE WITH THE AMERICAN WOOD PRESERVERS ASSOCIATION (AWPA) STANDARD P5-90 AND A2-88. ALL LUMBER AND TIMBERS SHALL BE PRESSURE IMPREGNATED UNDER AWPA STANDARDS C1-90, C14-90, AND C18-90 WHERE APPLICABLE.
- 4. ALL SAWCUTS, DRILLED HOLES OR OTHER PENETRATIONS (EXCEPT PILE SPLICES) SHALL BE TREATED WITH CCA SOLUTION PRIOR TO INSTALLING HARDWARE, BOLTS OR OTHER BRIDGE MEMBERS OR DEVICES.
- 5. UNLESS OTHERWISE SPECIFIED, TIMBER PILES SHALL BE SOUTHERN YELLOW PINE CONFORMING TO ASTM STANDARD D-25 (LATEST EDITION) FOR QUALITY. SPECIFICATION FOR SIZE SHALL BE 1 INCH TAPER IN 10 LINEAR FEET.
- 6. ALL PILING SHALL BE PRESSURE IMPREGNATED UNDER AWPA STANDARDS C1-90, C3-90, C14-90, AND C18-90 WHERE APPLICABLE.
- 7. HARDWARE THAT IS TO BE STAINLESS STEEL WILL BE SPECIFIED ON THE DRAWINGS.
- 8. WEAR-DECKING SHALL BE ATTACHED WITH 304 STAINLESS STEEL OR BETTER SCREWS RECESSED AT A MINIMUM OF ½ INCH BELOW DECK SURFACE.
- 9. ALL DECK SCREWS NOT BELOW MINIMUM DEPTH SHALL BE DRIVEN BELOW DECK SURFACE WITH AN APPROVED STEEL PUNCH.
- 10. HAND AUGURING AND JETTING ARE NOT APPROVED PILE INSTALLATION METHODS.
- 11. PILES ARE REQUIRED TO BE DRIVEN TO REFUSAL AS NOTED ON THE DRAWINGS PER CONTRACT. REFUSAL SHALL BE DEFINED AS AN INSERTION RATE OF 6 INCH PER MINUTE. IF THE SOIL CONDITIONS WARRANT ADDITIONAL DRIVING AT THE DIRECTION OF THE ENGINEER, THE PROJECT MANAGER AND/OR THE FOREMAN IN THE FIELD MAY CONTINUE TO APPLY LOAD ON THE PILE UNTIL THERE IS NOT ANY ADDITIONAL MOVEMENT. IN THE EVENT OF PREMATURE REFUSAL THE ENGINEER WILL BE CONSULTED.
- 12. UPON ENCOUNTERING DENSE SOIL OR OTHER SIMILAR SOIL CONDITIONS THAT PREVENT DRIVING PILING, THE AUGURING METHOD MAY BE UTILIZED TO ASSIST WITH PILE DRIVING EQUIPMENT.
- 13. PILING SHALL BE DRIVEN WITH NPK C8 UNLESS HARD SOIL OR ROCK IS ENCOUNTERED.
- 14. ABUTMENTS WILL HAVE MIRAFI 500X NEEDLE PUNCHED, WOVEN GEOTEXTILE, OR EQUAL.
- 15. ALL BOLT CONNECTIONS TO HAVE LOCK WASHERS.
- 16. WE ARE PROVIDING A WOOD DECK IN THIS PROJECT IN ACCORDANCE WITH THE SPECIFICATIONS AND/OR CONTRACT DOCUMENTS. BE AWARE THAT MOST PEDESTRIAN LIABILITY CLAIMS ARE DUE TO SLIP AND FALL CLAIMS, IT IS THE RESPONSIBILITY OF THE OWNER TO KEEP THE DECK FREE FROM SLIP OR TRIP HAZARDS DUE TO CUPPING, SPLITS, GAPS AND SMOOTH SURFACES.
- 17. THE STRUCTURAL CAPACITY WAS DESIGNED WITH THE FOLLOWING ITEMS TAKEN INTO CONSIDERATION: LOADING/CAPACITY OF COMPONENTS, WIND LOAD/UPLIFT AND STANDARD SOIL.

THIS SHEET SIZE IS 22"X34" ANYTHING SMALLER IS A REDUCTION ENGINEER: REVISIONS LICENSED: PROJECT DESCRIPTION HIGGINS BIKE PATH PROJECT TIMBER PEDESTRIAN BRIDGE DATE DESCRIPTION HOFFMAN ESTATES, IL DESIGNED LOADING **PROJECT** NOTES 85-PSF OR 5 TON GVW (L/360 DEFLECTION) APPROVED BY: DATE APPROVED 16 of 86 4/6/11 D. MATTHEWS 002 209031

#### BILL OF MATERIALS

LUMBER										
NAME	SIZE (in.)	GRADE	RETENTION	TREATMENT	FINISH	TIMBER TYPE				
ABUTMENT PILE	10" BUTT		.80	CCA		SYP				
WING WALL PILE	8"		.80	CCA		SYP				
PED GUIDERAIL POST	6x6	#1 DENSE	.40	CCA	S4S	SYP				
PED GUIDERAIL POST BLOCK	6x6x20	#2	.60	CCA	S4S	SYP				
BLOCKING	4x8	#2	.60	CCA	ROUGH SAWN	SYP				
TOP RAIL	4x10	#1 DENSE	.60	CCA	S4S	SYP				
CURB	6X6	#1 DENSE	.60	CCA	S4S	SYP				
CURB BLOCK	4X6X18	#1 DENSE	.60	CCA	S4S	SYP				
DECKING	2X8	#1 DENSE	.60	CCA	S4S	SYP				
KICKER	4X8	#1 DENSE	-60	CCA	S4S	SYP				
HORIZONTAL RAILS	2X4	#1 DENSE	.60	CCA	S4S	SYP				

IARDWARE									
NAME	SIZE (IN.)	SS	H.D.G.	NOTE					
SCREW	#12x4.5,#10x3	YES		^					
HEX BOLT (2DW,1LW,1N)	%"øx14",26"		YES						
HEX BOLT (2DW,1LW,1N)	¾"øx12,16,18,20		YES						
HEX BOLT (2DW,1LW,1N)	1"øx24"	1	YES						
TIMBER BOLT (2DW,1LW,1N)	%"øx8",12",14",24"		YES						
CARRIAGE BOLT (1DW,1LW,1N)	%"øx14"		YES						
LAG BOLT (1FW)	¾"øx8"		YES						
D-7273 ANGLE BRACKET	½"x4"x12"x6"		YES						
D-9573 ANGLE BRACKET	¾″х4″х4″х4″		YES						
POST CAP	6"x6"x6"								
STRAP	MTS16-Z,MSTA18-Z		YES	SIMPSON STRONG TIE					
NAILS	40D		YES	/					

GLULAM BEAM										
NAME	SIZE CAMBER			RETENTION	TREATMENT	FINISH	TIMBER MATERIAL			
GLULAM STRINGER	12.75"x20"x55'	1200	24F V4	.60	CCA OR TYPE C PENTA	INDUSTRIAL GRADE	SYP/ OR DOUGLAS FIR			

FINISHES									
TYPE	COLOR	DESCRIPTION	APPLIED						
SEALANT	N/A		l No						
EPOXY/AGGREGATE	N/A		NO						

NOTE: ALL ITEMS INCLUDED IN THE BILL OF MATERIALS TO THE RIGHT ARE INCLUDED WITH AND BEING PAID AS IDOT CODED ITEM XX008287, BOARDWALK STRUCTURE.

ENGINEER	EER:	LICENSED:		REVISIONS			PROJECT DESCRIPTION	HIGGINS BIKE PATH PROJECT			
			REV	DATE DESCRIPTION		TIMBER P	TIMBER PEDESTRIAN BRIDGE		HOFFMAN ESTATES, IL		
				DESIGNED LOADING		DESIGNED LOADING		BILL	OF		
	* ,					85-PSF OR 5 TON GVW (L/360 DEFLECTION)			MATER	RIALS	
						APPROVED BY:	DATE APPROVED:	CATE	DRAWN BY:	PROJECT NUMBER	sheet NUMBER: 47 of 86
								4/6/11	d. Matthews	209031	003

#### BIDDERS NOTES

- 1. BRIDGE TO BE BUILT BY A PROFESSIONAL BRIDGE CONTRACTOR, MEETING OR EXCEEDING BELOW SPECIFICATIONS. ALL FOOT TRAFFIC WILL BE CONTAINED WITHIN SIX FEET FROM BRIDGE PATH.
- 2. BRIDGE CONTRACTOR WILL PROVIDE A 3-YEAR STRUCTURAL WARRANTY. PROPOSED BRIDGE CONTRACTOR MUST PROVIDE A WRITTEN COPY, WITH MAINTENANCE REQUIREMENTS, WITH BID SUBMITTAL.
- 3. BRIDGE CONTRACTOR MUST HAVE BUILT A MINIMUM OF TWENTY (20) SIMILAR 85 PSF OR HIGHER CAPACITY TIMBER BRIDGES UTILIZING A SIMILAR CONSTRUCTION METHOD. PROPOSED BRIDGE CONTRACTOR MUST SUBMIT WRITTEN PROOF ATTESTING TO COMPLIANCE WITH THIS REQUIREMENT, WHICH MUST BE INCLUDED WITH BID PACKAGE.
- 4. BRIDGE CONTRACTOR MUST SUPPLY REFERENCES OF AT LEAST 10 CLIENTS FOR WHOM THE BRIDGE CONTRACTOR HAS BUILT SIMILAR 85 PSF OR HIGHER CAPACITY TIMBER BRIDGES UTILIZING A SIMILAR CONSTRUCTION METHOD. PROPOSED BRIDGE CONTRACTOR MUST SUPPLY THE NAMES AND CONTACT INFORMATION OF THE 10 REFERENCES (PREVIOUS CLIENTS) FOR WHOM THE COMPANY HAS BUILT SAID BRIDGES, WHICH MUST BE INCLUDED WITH BID PACKAGE.
- 5. BRIDGE COMPANY MUST HAVE BEEN IN BUSINESS FOR 10 YEARS OR MORE. PROPOSED BRIDGE CONTRACTOR MUST SUBMIT WRITTEN PROOF ATTESTING TO THIS LENGTH OF TIME, WHICH MUST BE INCLUDED WITH BID PACKAGE.
- 6. PROPOSED BRIDGE CONTRACTOR MUST PROVIDE A STATEMENT OF INSURANCE AND BONDING CAPABILITIES TO ATTEST AS TO THE FINANCIAL STRENGTH OF THE COMPANY. INCLUDE THE NAME AND LIMITS OF EACH CARRIER FOR THE FOLLOWING: CORPORATE INSURANCE, AUTO LIABILITY INSURANCE, BONDING/SURETY COMPANY. MUST BE INCLUDED WITH BID PACKAGE.
- 7. PROPOSED BRIDGE CONTRACTÓR MUST PROVIDE AN OVERVIEW OF THE BRIDGE CONSTRUCTION PROCESS, FROM DESIGN TO CONSTRUCTION, AND INCLUDE A REVIEW OF THE PROPOSED CONSTRUCTION METHOD FOR THIS PROJECT. MUST BE INCLUDED WITH BID PACKAGE.
- 8. BRIDGE CONTRACTOR WILL CLEAN UP EACH WORK SITE DAILY, PLACING SCRAPS IN A DUMPSTER TO BE FURNISHED AND REMOVED BY THE BRIDGE CONTRACTOR.

#### UV PROTECTANT SEALANT

BRIDGE CONTRACTOR SHALL APPLY A 3-STEP UV PROTECTANT SEALANT PACKAGE TO ALL VISIBLE SURFACES OF THE CURB, RAILS, POSTS, PEDESTRIAN DECK (IF APPLICABLE) AND OUTSIDE STRINGERS. THIS APPLICATION SHALL INCLUDE SUPPLY OF ALL MATERIALS AND LABOR — COMPLETE. THE THREE—STEP PROCESS MUST INCLUDE:

- STEP 1: PRESSURE WASHING AND PREP OF THE PARTS TO BE SEALED, INCLUDING
- STEP 2: APPLICATION OF 1 COAT OF PRIMER/BASE COAT
- STEP 3: APPLICATION OF TWO COATS OF THE FINISH COAT (SEALANT) IN OWNER'S CHOICE OF COLORS.

  1. APPLICATION MUST BE IN ACCORDANCE WITH ALL MANUFACTURER RECOMMENDATIONS, INCLUDING, BUT NOT LIMITED TO: i.BRIDGE CONTRACTOR MUST INSTALL MATERIALS IN ACCORDANCE WITH ALL SAFETY AND WEATHER CONDITIONS REQUIRED BY MANUFACTURER OR AS MODIFIED BY APPLICABLE RULES AND REGULATIONS OF LOCAL, STATE AND FEDERAL AUTHORITIES HAVING JURISDICTION. PRODUCT SHOULD NOT BE INSTALLED IF IT IS RAINING OR SNOWING OR IF SUCH CONDITIONS APPEAR TO BE IMMINENT. MINIMAL APPLICATION TEMPERATURE OF 50 DEGREES F REQUIRED, WITH SURFACE TEMPERATURE OF NO MORE THAN 90 DEGREES F. CONSULT MATERIAL SAFETY DATA SHEETS CREATED BY MANUFACTURER OF PRODUCT FOR COMPLETE HANDLING RECOMMENDATIONS.
  - ii. PRODUCT SHALL BE APPLIED TO HORIZONTAL SURFACES WITH A ROLLER OR PAINTER PAD; PRODUCT SHALL BE APPLIED TO VERTICAL SURFACES WITH A ROLLER OR PAINT PAD OR SPRAYER IF DESIRED. OVERSPRAY MUST BE ELIMINATED TO THE EXTENT POSSIBLE.
  - iii. BRIDGE CONTRACTOR MUST CONDITION THE SPECIFIED PRODUCT AS RECOMMENDED BY THE MANUFACTURER. iv. BRIDGE CONTRACT SHALL PREPARE SURFACE AS RECOMMENDED BY MANUFACTURER WHICH SHOULD INCLUDE THOROUGHLY PRESSURE WASHING THE SURFACES TO BE TREATED. NEW WOOD SURFACES HAVE A MILL GLAZE THAT PREVENTS MAXIMUM PENETRATION OF THE SEALANT; THEREFORE, EVEN NEWLY INSTALLED BRIDGES WILL REQUIRE THIS PREP STEP.
  - v. BRIDGE CONTRACTOR SHALL CLEAN UP WORK SITE DAILY AND UPON COMPLETION OF PROJECT, INCLUDING PROPER DISPOSAL OF ALL MATERIALS.
  - vi. BRIDGE CONTRACTOR SHALL PROPOSE A TRAFFIC MAINTENANCE PLAN WITH BID (IF NECESSARY). ANY COST FOR SUCH PLAN SHALL BE BORN BY THE BRIDGE CONTRACTOR.
- 3.MATERIALS MUST MEET THE FOLLOWING CRITERIA IN ORDER TO BE ACCEPTED FOR THIS PROJECT:
  - I.A PROFESSIONAL, PREMIUM QUALITY UV SEALANT MUST BE USED. SEALANTS PRIMARILY MARKETED AND/OR DESIGNED FOR HOMEOWNERS (SUCH AS THOMPSON'S WATER SEAL™, CABOT™, OR OLYMPIC™ PRODUCTS) WILL NOT BE ACCEPTED.
  - ii. SEALANT MUST BE PIGMENTED. CLEAR SEALANTS WILL NOT BE ACCEPTED FOR THIS PROJECT. WATER REPELLENTS ALONE WILL NOT BE ACCEPTED FOR THIS PROJECT.
  - iii. THE MULTI-STEP SEALANT SYSTEM MUST BE CLIMATE SPECIFIC AND RECOMMENDED FOR THE CLIMATE IN WHICH IT WILL BE APPLIED.
  - iv. MANUFACTURER MUST PROVIDE A WRITTEN WARRANTY AGAINST DEFECT OF MATERIALS FOR A MINIMUM OF SIX (6) MONTHS, BEGINNING WITH DATE OF SUBSTANTIAL COMPLETION OF THE PROJECT.
  - v. ACRYLIC WOOD FINISH (SEALANT) MUST MEET OR EXCEED THE FOLLOWING PERFORMANCE CRITERIA: 100% ACRYLIC

WEIGHT/GALLON 8.59LB / GALLON OR BETTER FLASH POINT GREATER THAN 200 DEGREES F

VOC: 240 G/L OR BETTER

VI. BASE COAT MUST MEET OR EXCEED THE FOLLOWING PERFORMANCE CRITERIA:

OIL/ACRYLIC BLEND

WEIGHT/GALLON 8.52LB / GALLON OR BETTER FLASH POINT GREATER THAN 200 DEGREES F

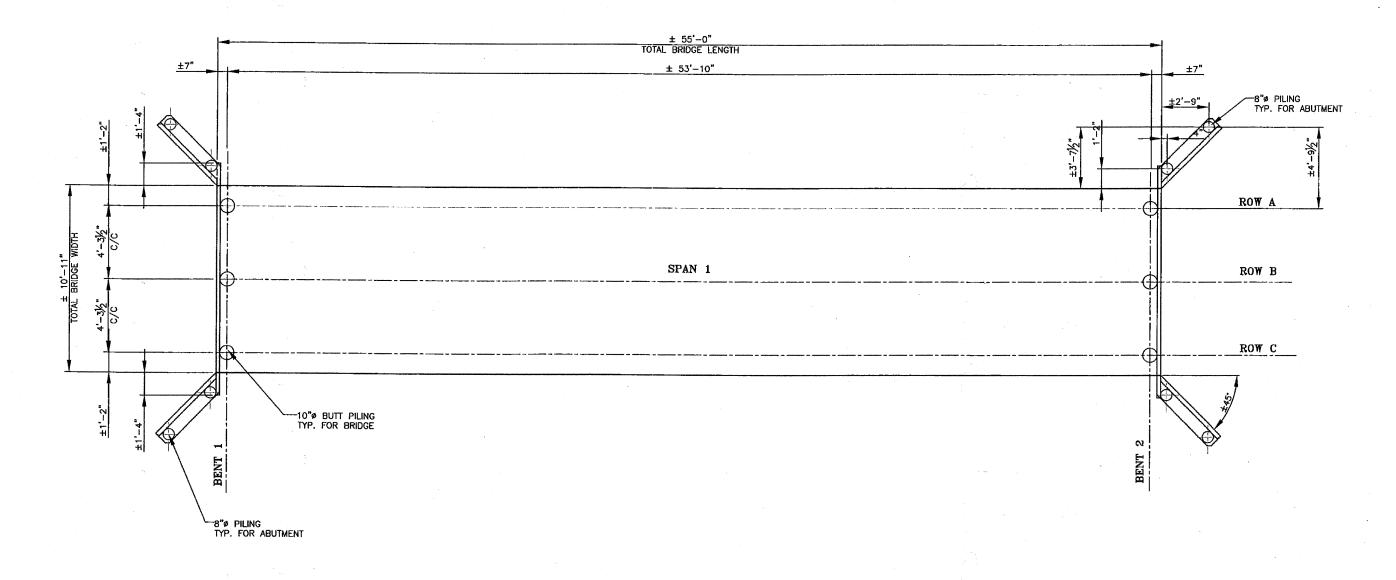
VOC: 200 G/L OR BETTER

THIS SHEET SIZE IS 22"X34" ANYTHING SMALLER IS A REDUCTION REVISIONS LICENSED: PROJECT DESCRIPTION HIGGINS BIKE PATH PROJECT TIMBER PEDESTRIAN BRIDGE REV DATE DESCRIPTION HOFFMAN ESTATES. IL DESIGNED LOADING **BIDDERS** PAGE 85-PSF OR 5 TON GVW (L/360 DEFLECTION) DRAWN 8Y: SHEET NUMBER APPROVED BY: DATE APPROVED: 18 of 86 4/6/11 D. MATTHEWS 004209031

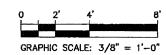
## WATER INFORMATION TABLE

					TON TABLE					
toute;	Higgins Road (IL-72)									
voute,	ringgino ricodo (IL-72)	ļ	S.N.	Unknown		Computed	LJS .	Date:	4/19/2011	
Section:	Sta 364+75	<u> </u>				<u> </u>	<u> </u>	<u> </u>		
Occion	Sia 304+75	T	5.N.	Unknown	<u> </u>	Checked		Date:	ļ	
	<del> </del>		<u> </u>				<del>                                     </del>		ļ	
	1			Salt Creek West Branch						
County:	Cook	,	Waterway:	Tributary A						
		1								
				Existing Low Grade Elevation =		NA				
Drainage Area										
rialiage Alea	0.80	Sq. Ml.		Proposed Low Grade Elevation =		769,50 ft Sta 365+02				
		ļ		<u> </u>			<u> </u>			
			Waterway	Opening (sq. ft.)*		Created	Head (ft.)	Headwa	er Elevation	
Flood	Frequency Year	Discharge (cfs)	Existing	Proposed	Natural H.W.E.	Existing	Proposed	Existing	Proposed	
	10	118	N/A	78,9	765.25	0.00	0.00	765.25	785.25	<del> </del>
Design	50	201	N/A	162,3	767.42	0,00	0.00	767.42	767.42	+
Base	100	250	N/A	364.2	770,39	0.00	0.01	770.39	770,40	<del> </del>
)vertopping	>100				170,55		0.07	170.09	710.40	
lax.	500							<del> </del>		
								<del> </del>		<del> </del>
		<u> </u>	<u> </u>				<del>                                     </del>			<del>- </del>
0 Year Velocity through Edsting Stru	ucture =			N/A		10 Year Velocity through Proposed Structure =	ĺ		1.50 fps	1
				\					<del>                                     </del>	†
		*Based on Natural HWE				<u> </u>				ļ
DATUM:		All elevations on NGVD29 Dat		<u> </u>		<u> </u>	<u> </u>			
, , , , , , , , , , , , , , , , , , ,		All elevations on NGVD29 Dai	<u>uni</u>			<del></del>	ı			
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VLL-TIME H.W.E, & DATE;		770.0 fl. (USGS HA-87, Octob	er 1954)							
										1
	,					Flevetions commuted from	:			
						Elevations computed from CBBEL HEC-RAS 04/11.				
COPE OF WORK:	1	Proposed bike path bridge.								
			_ · · · * v········			<del> </del>				<del></del>
		<del> </del>				<del> </del>			<del> </del>	-
		İ							<b> </b>	
* ·		EXISTING STRUCTURE				PROPOSED STRUCTURE				
		Туре:	N/A			Type:	Freespan Pedestrian Bridge			
			N/A			Length	12'11"			
			N/A				55'			
		Helght:	N/A				6.3'			1
ζ.		Skew:	N/A				430		·	1
		US Invert:	N/A				761.50		<u> </u>	
		DS Invert:	N/A				761,50		<u> </u>	1

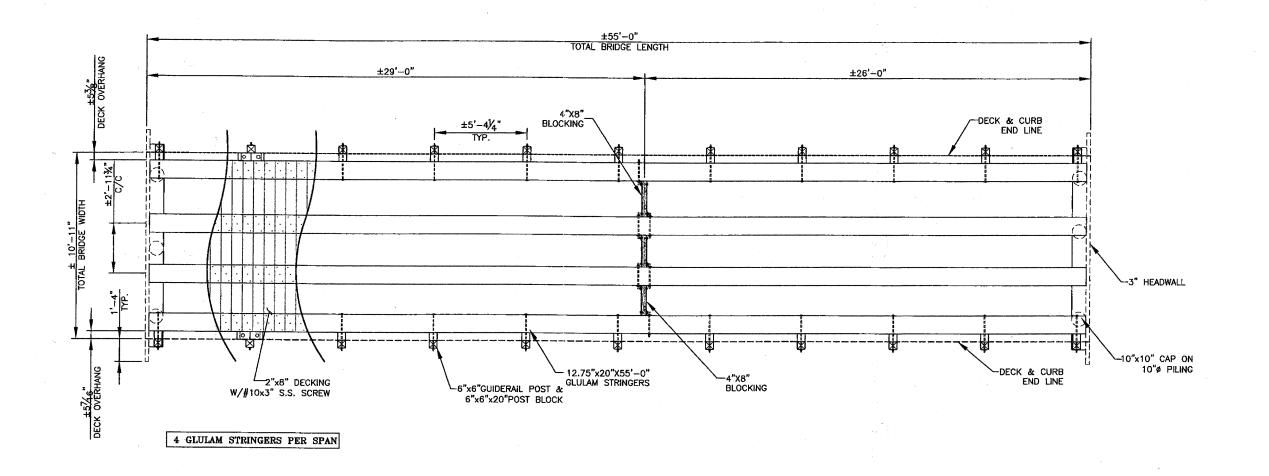
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	·		REV	DATE	DESCRIPTION	TIMBER PED	ESTRIAN BRIDGE	HOFFMAN EST	ATES, IL		
						DESK	ENED LOADING	WA	TER INF	ORMATIC	ON
						85-PSF OR 5 TON G	VW (L/360 DEFLECTION)		TAB	LE	,
						APPROVED BY:	DATE APPROVED:	DATE	DRAWN BY:	PROJECT NUMBER	SHEET NUMBER: 49 of 86
								4/6/11	d. Matthews	209031	005



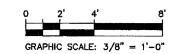
PLAN - PILE LAYOUT SCALE: 3/8"=1'-0"



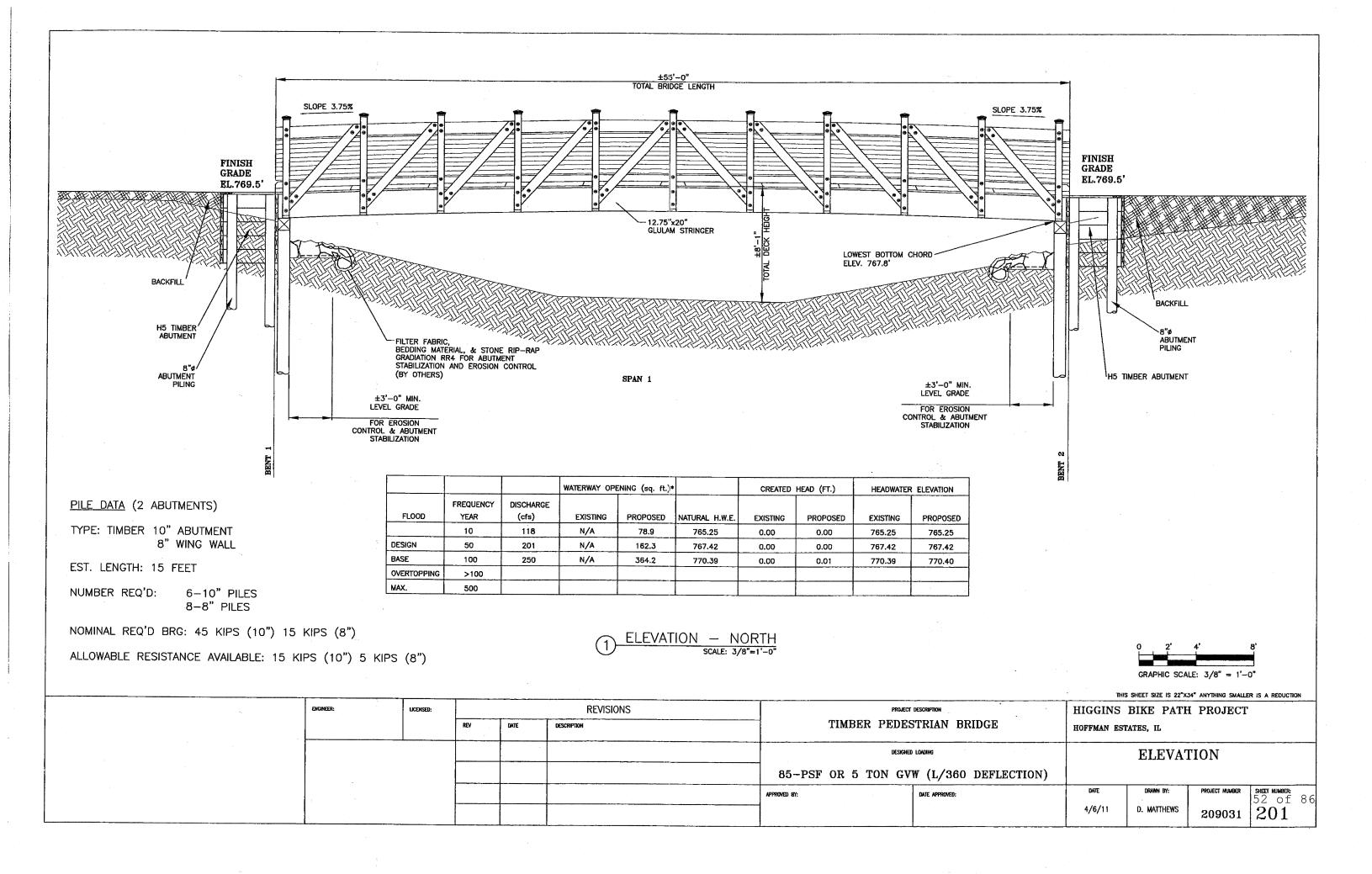
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			REV	REY DATE DESCRIPTION		TIMBI	ER PEDESTRIAN BRIDGE	HOFFMAN ES	TATES, IL		
				· · · · · · · · · · · · · · · · · · ·			DESIGNED LOADING		PLAN	***************************************	
	,		85-PSF OR 5 TON GVW (L/360 DEFLECTION)			PILE L	AYOUT				
						APPROVED BY:	DATE APPROVED:	DATE	DRAWN BY:	PROJECT NUMBER	SHEET NUMBER:
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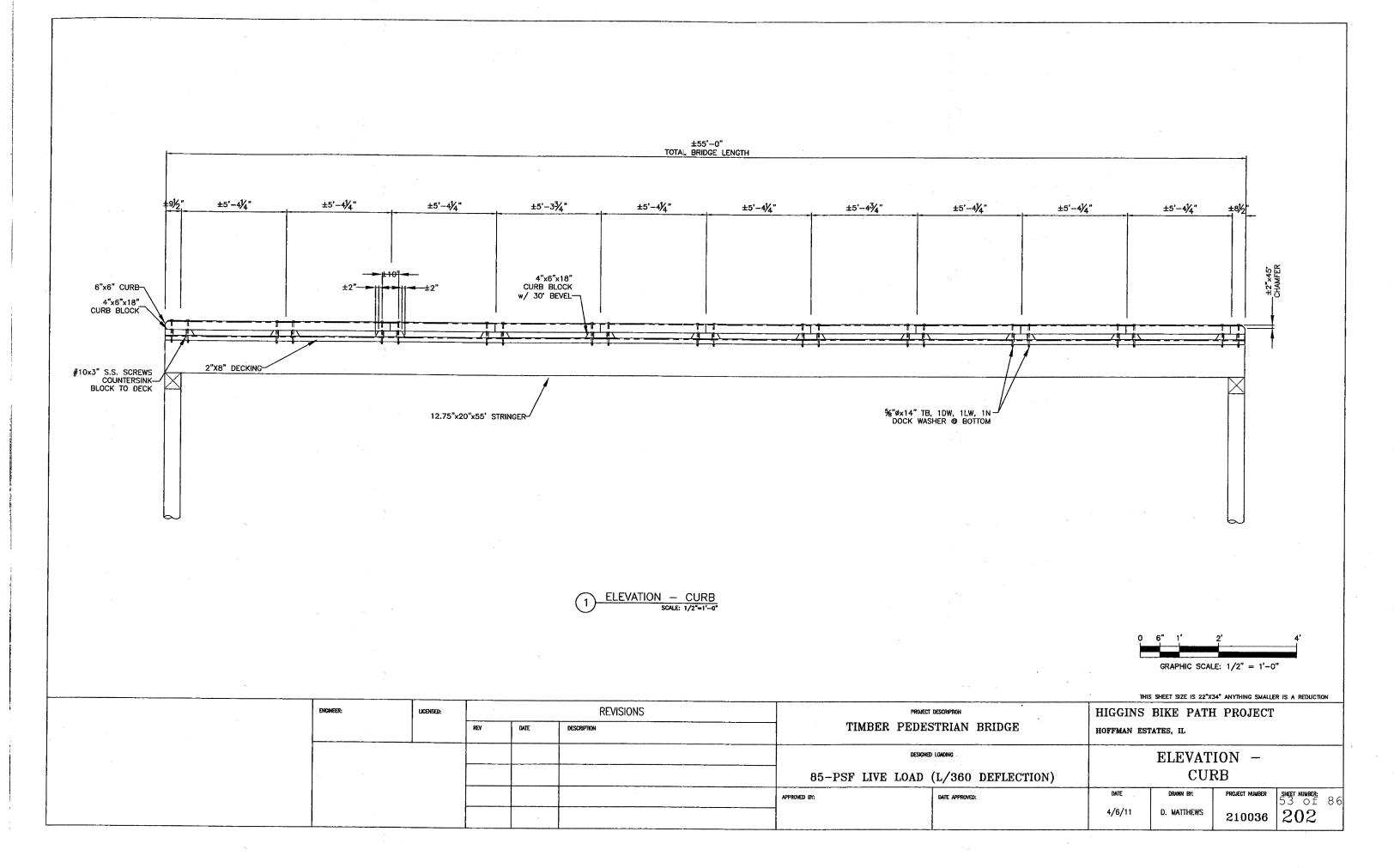


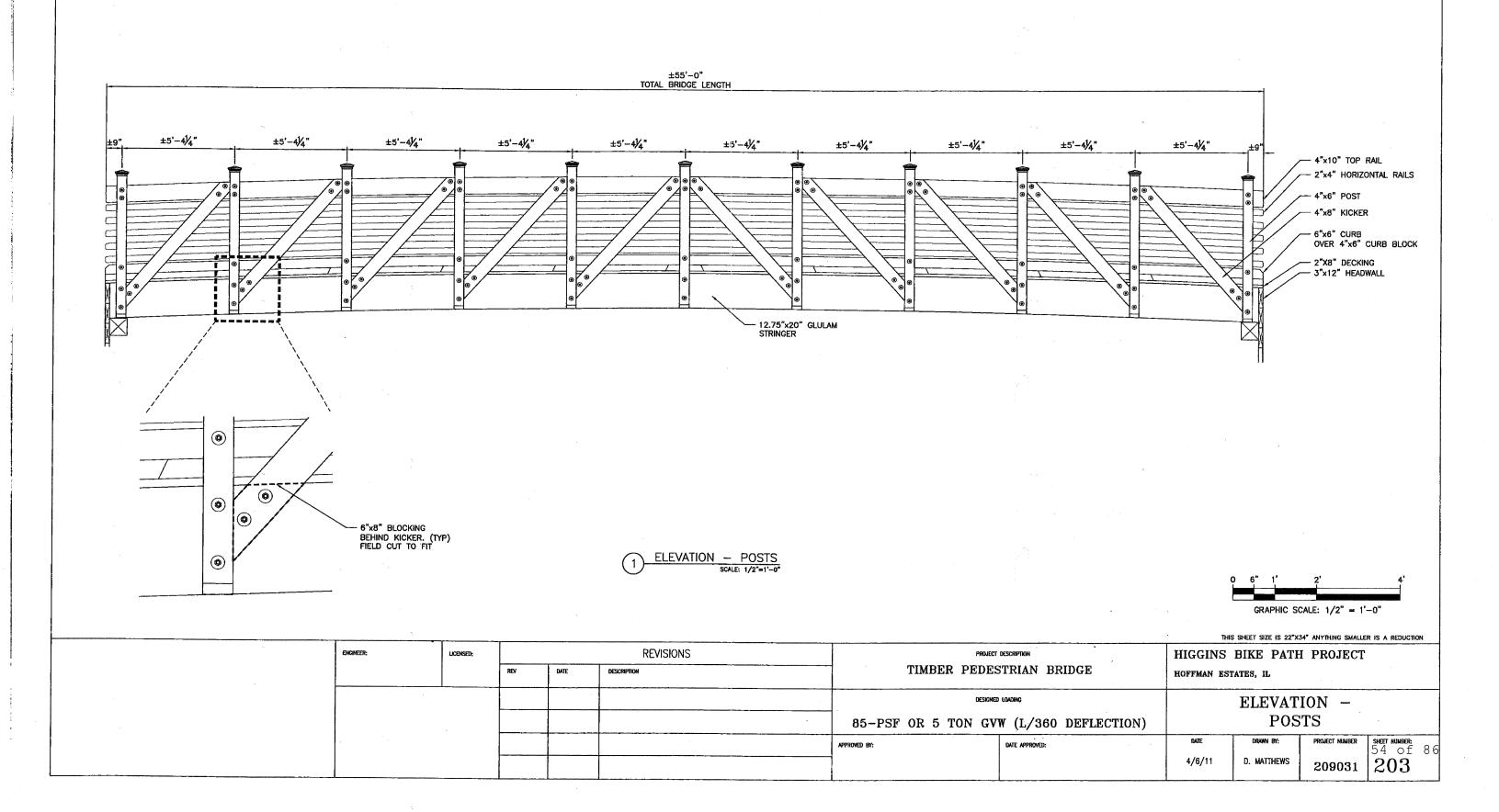
1 PLAN - STRINGER LAYOUT SCALE: 3/8"-1'-0"

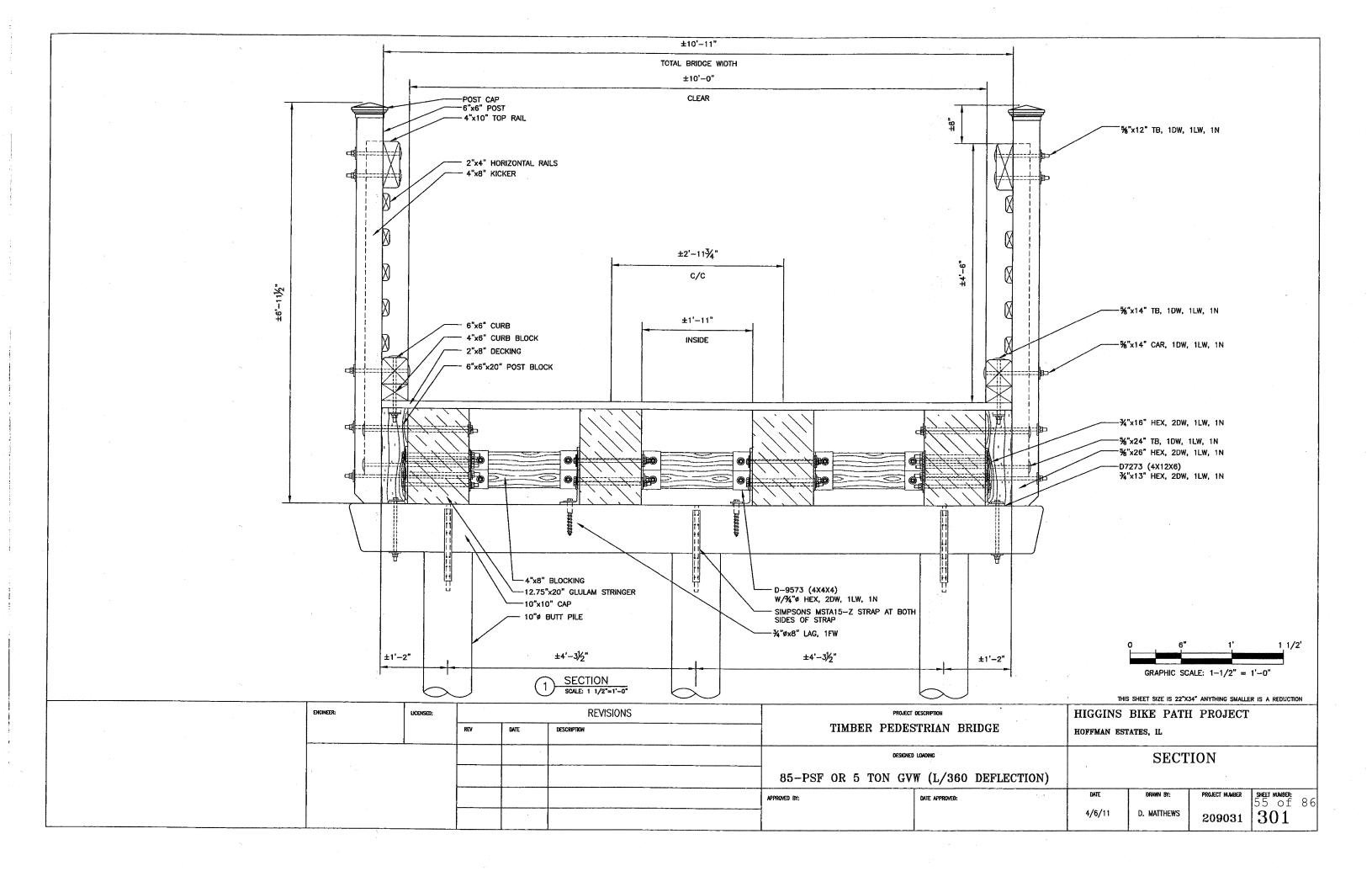


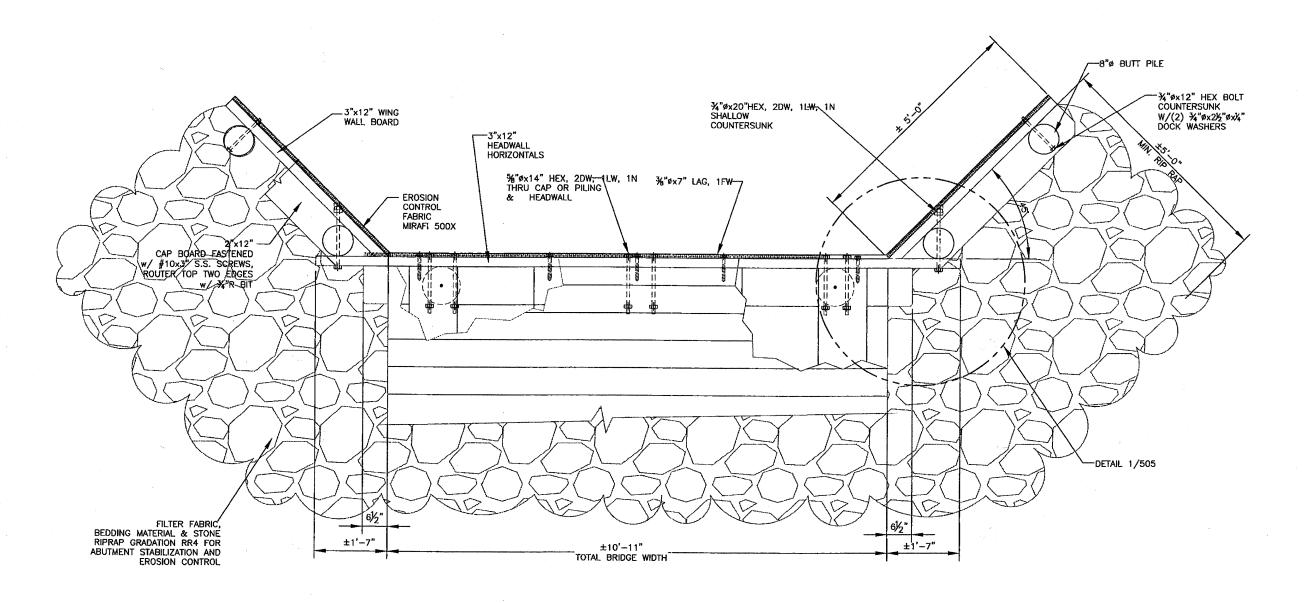
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		REV	CV DATE DESCRIPTION		TIMBER PEDE	STRIAN BRIDGE	HOFFMAN EST	FATES, IL		
					DESIGNE	D LOADING		PLAN	<b>V</b> –	
					85-PSF OR 5 TON GV	W (L/360 DEFLECTION)	S	TRINGER	LAYOUT	Г
					APPROVED BY:	DATE APPROVED:	DATE	DRAWN BY:	PROJECT NUMBER	SHEET NUMBER: 51 of 86
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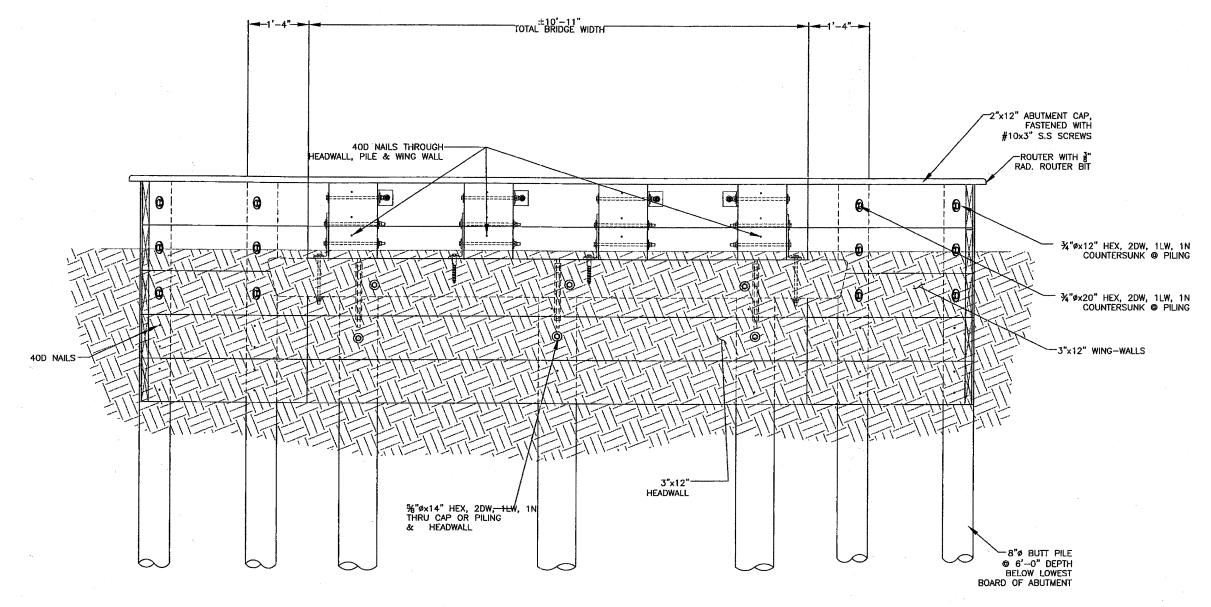




1) ENLARGE - ABUTMENT PLAN SCALE: 1°=1'-0°



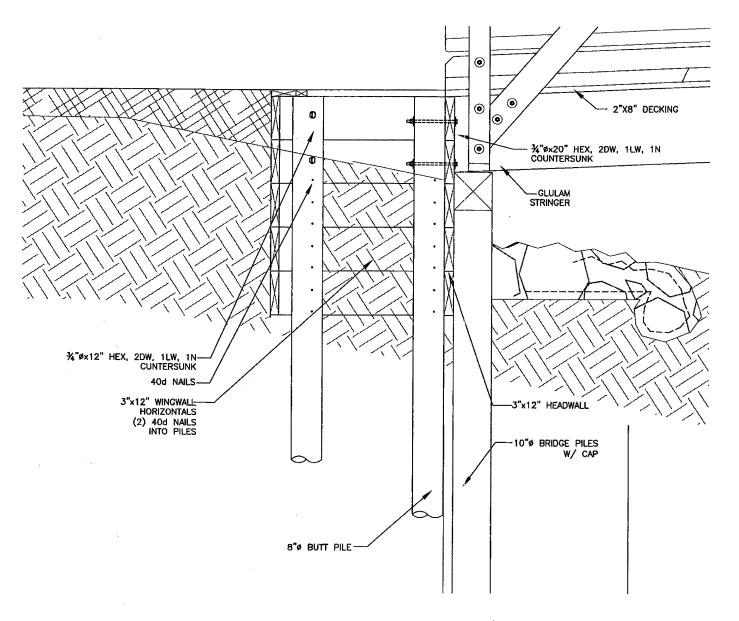
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	·		REV	DATE	DESCRIPTION	TIMBER PED	ESTRIAN BRIDGE	HOFFMAN ES	TATES, IL		
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						85-PSF OR 5 TON G	85-PSF OR 5 TON GVW (L/360 DEFLECTION)		ABUTMEN	NT PLAN	Ţ .
						APPROVED BY:	DATE APPROVED:	DATE	DRAWN BY:	PROJECT NUMBER	SHEET NUMBER: 56 of 86
								4/6/11	D. MATTHEWS	209031	401



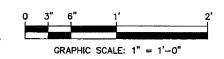
1 ENLARGE - ABUTMENT ELEVATION



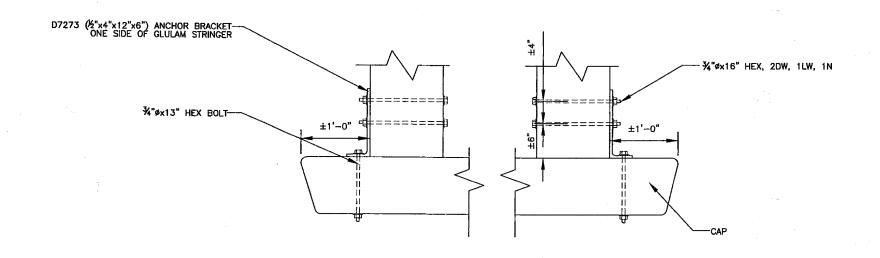
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		·				DESIGNED LOADING			ENLARG	GED-	· · · · · · · · · · · · · · · · · · ·
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	· · · · · · · · · · · · · · · · · · ·							4/6/11	d. Matthews	209031	402



ENLARGE - ABUTMENT SECTION @ WINGWALL SCALE: 1"=1'-0"



	ENGINEER:	1	UCENSED:			REVISIONS		CT DESCRIPTION	HIGGINS	BIKE PATH	PROJECT	*****
				REV	DATE	DESCRIPTION	TIMBER PEDE	STRIAN BRIDGE	HOFFMAN EST	CATES, IL		
							DESIGNED LOADING		ENLA	RGED -	ABUTM	ENT
							85-PSF OR 5 TON GVW (L/360 DEFLECTION)		SEC	TION @	WINGWA	LL
							APPROVED BY:	DATE APPROVED:	DATE	DRAWN BY:	PROJECT NUMBER	SHEET NUMBER: 58 of 86
	,	* •						·	4/6/11	D. MATTHEWS	209031	403



# DETAILS-- GLULAM MOUNTING SCALE: N.T.S.

	ENCINEER:	UCENSED:			REVISIONS		PROJECT DESCRIPTION	HIGGINS	BIKE PATH	I PROJECT	
i			REV	DATE	DESCRIPTION	TIMBE	R PEDESTRIAN BRIDGE	HOFFMAN EST	ATES, IL		
						DESIGNED LOADING		DETAI	L –		
						85-PSF OR 5	TON GVW (L/360 DEFLECTION)	GL	ULAM M	OUNTIN	G
						APPROVED BY:	DATE APPROVED:	DATE	DRAWN BY:	PROJECT NUMBER	SHEET NUMBER: 59 of 86
								4/6/11	D. MATTHEWS	209031	501

#10x3" S.S. SCREWS
THREE PER CONNECTION

14"X19"X55"-0"
GLULAM STRINGER

GLULAM DECKING

DECKING COUNTERSINK SCALE: N.T.S

SCREW HEAD TO BE_ ±½" BELOW THE SURFACE OF THE DECK

#10x3" S.S. SCREW-

DIGNACIDE LLODISCIDE:

REV DATE DESCRIPTION

APPROVED BY:

DETAILS —

DECKING AND COUNTERSINK

APPROVED:

DETAILS —

DECKING AND COUNTERSINK

APPROVED:

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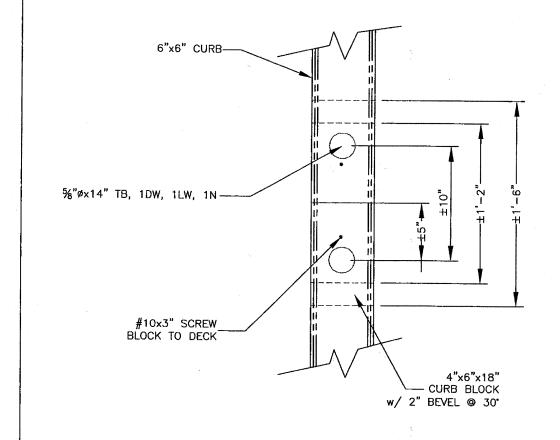
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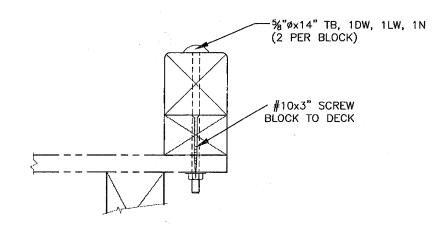
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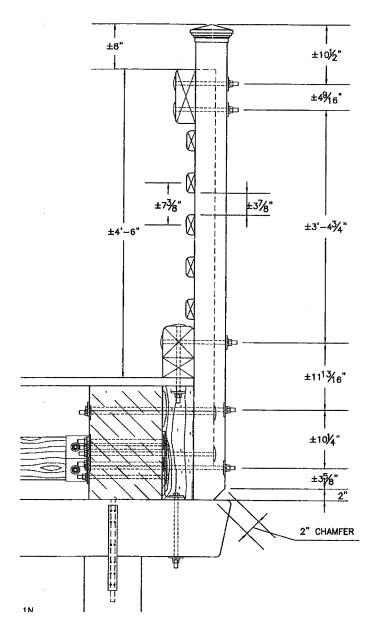
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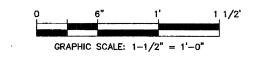


## **SECTION**

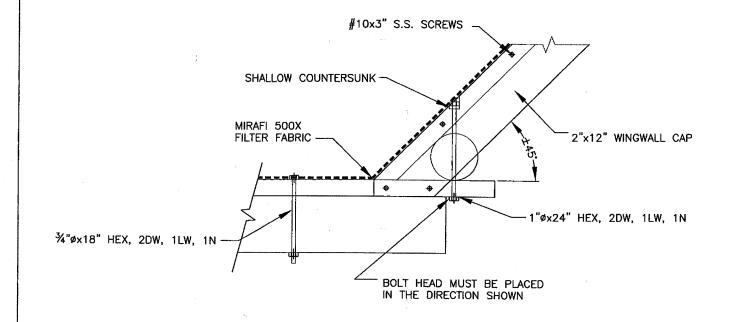
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İ				REV	EV DATE DESCRIPTION		TIMBER	PEDESTRIAN BRIDGE	HOFFMAN EST	PATES, IL		
								DESIGNED LOADING		DETA	IL –	
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	8	,					2	4/6/11	D. MATTHEWS	209031	503	

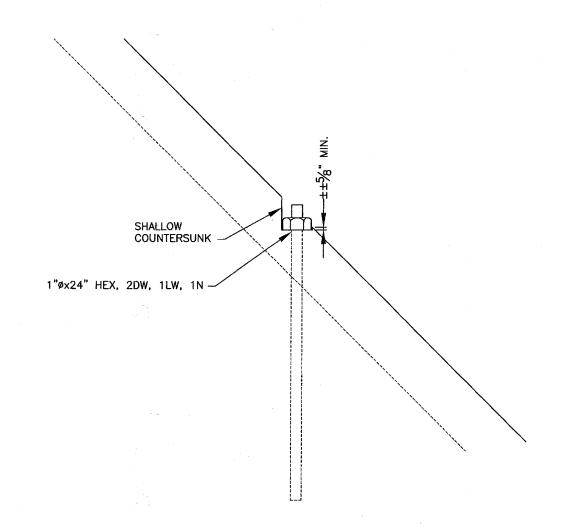


DETAIL - GUIDERAIL POST SCALE: 1 1/2"=1'-0"



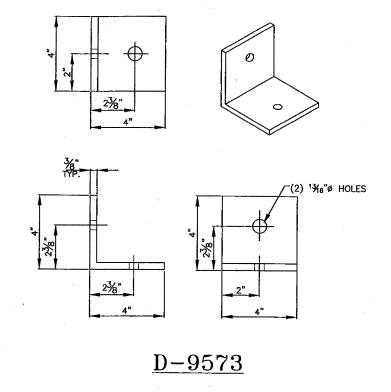
								· THI	S SHEET SIZE IS 22"X	34" ANYTHING SMALLE	R IS A REDUCTION
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			REV	DATE	DESCRIPTION	TIMBER PEDE	STRIAN BRIDGE	HOFFMAN ES	rates, IL		
			·			DESIGNE	ED LOADING		DETAI	L –	
	*** ***					85-PSF OR 5 TON GV	W (L/360 DEFLECTION)	(	GUIDERAI	IL POST	
						APPROVED BY:	DATE APPROVED:	DATE	DRAWN BY:	PROJECT NUMBER	sheet number: 62 of 86
								4/6/11	D. MATTHEWS	209031	504

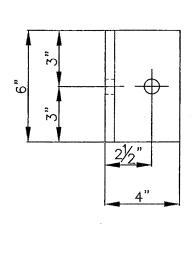


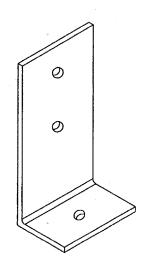


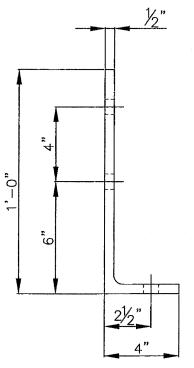
1 DETAILS - ABUTMENT SCALE: N.T.S.

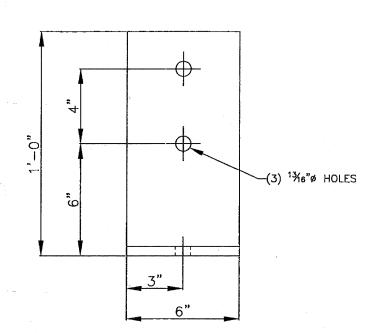
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`						DESIGN	NED LOADING		DETAI	LS -	
						85-PSF OR 5 TON G	VW (L/360 DEFLECTION)		ABUTM	MENT	
						APPROVED BY:	DATE APPROVED:	DATE	DRAWN BY:	PROJECT NUMBER	SHEET NUMBER: 63 of 86
							N. C.	4/6/11	D. MATTHEWS	209031	505











D - 7273

1 DETAILS - HARDWARE SCALE: N.T.S.

	8	ENGINEER:	LICENSED:			REVISIONS		DESCRIPTION	HIGGINS	BIKE PATH	PROJECT	i
				REV	DATE	DESCRIPTION	TIMBER PEDE	STRIAN BRIDGE	HOFFMAN EST	ATES, IL		
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L								4/6/11	d. Matthews	209031	506	

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VILLAGE OF
HOFFMAN ESTATES
1900 Hassell Road, Hoffman Estates, IL 60169
Phone Number: 847 252-5800

Higgins Road Bicycle and Pedestrian Project SCALE: NONE

SHEETS STA.

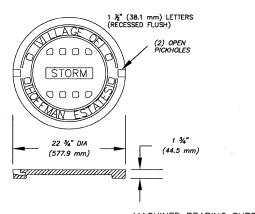
TO STA.

SHEET NO. OF

COUNTY TOTAL SHEET NO.

Cook 86 65

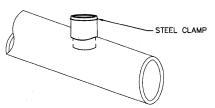
CONTRACT NO. 63233 F.A.P. RTE. SECTION 341 08-00080-00-BT ILLINOIS FED. AID PROJECT CMM 9003(243)



HEAVY DUTY
MAT'L ASTM A48 CL35

MACHINED BEARING SURFACE COVER WT: 125 LBS (56.7 kg)

#### STORM COVER DETAIL

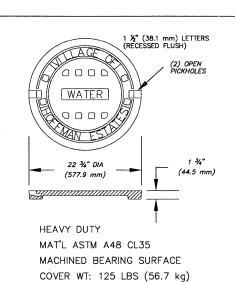


#### KOR-N-TEE CONNECTOR OR APPROVED EQUAL

#### NOTES:

- THE HOFFMAN ESTATES DEPARTMENT OF PUBLIC WORKS 847 490—6800 AND THE ENGINEERING DIVISION 847 252—5800 SHALL BE NOTIFIED BEFORE THE COMMENCEMENT OF WORK AND WHEN THE PIPE IS EXPOSED.
- 2. THE CONNECTION SHALL BE BACKFILLED COMPLETELY TO WITHIN SIX INCHES OF THE GROUND SURFACE WITH CA-6, CRUSHED STONE OR GRAVEL.
- 3. ONLY A PROFESSIONAL CONTRACTOR SHALL INSTALL THE CONNECTOR ACCORDING TO MANUFACTURERS REQUIREMENTS. THE PUBLIC WORKS DEPARTMENT IS NOT AVAILABLE TO ASSIST IN THE DIRECT CONNECTION TO THE STORM SEWER.
- KOR-N-TEE SEWER CONNECTORS, PART NO. 006-5 THRU 9, OR APPROVED EQUAL.
- 5. EXISTING PIPE SHALL BE CORED ONLY TO GAIN ACCESS.

#### <u>DIRECT CONNECTION TO</u> STORM SEWER DETAIL



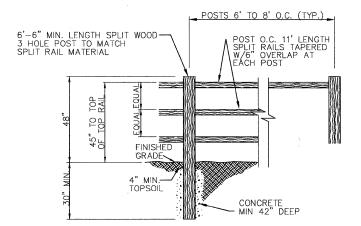
WATER COVER DETAIL

#### 1 1/2" (38.1 mm) 1 ½" (38.1 mm) LETTERS (RECESSED FLUSH) 0000 SANITARY (SEWER) 2 1/2" (63.5 mm) 0000 (26.6 mm) (38.1 mm) 22 3/4" DIA CONCEALED PICKHOLE DETAIL (44.5 mm) (577.9 mm) +.000' .180" -.*005** +.000 -.005" (6.1 mm) GROOVE DETAIL

HEAVY DUTY

MAT'L ASTM A48 CL35 MACHINED BEARING SURFACE COVER WT: 125 LBS (56.7kg) MANHOLE COVER WITH GROOVED GASKET SEAL & CONCEALED PICKHOLES TO REDUCE SURFACE WATER INFLOW.

### SANITARY COVER DETAIL



POST NOTES:

EACH POST SHALL BE SET IN CONCRETE MIN. 42" DEPTH

WOOD NOTES:

ALL WOOD SHALL BE CEDAR

GENERAL NOTE:

CONTRACTOR TO SUBMIT SHOP DRAWING OF PROPOSED MATERIAL AND SAMPLES OF TYPICAL POST AND RAIL FOR APPROVAL PRIOR TO INSTALLATION

#### 3-RAIL SPLIT RAIL FENCE DETAIL

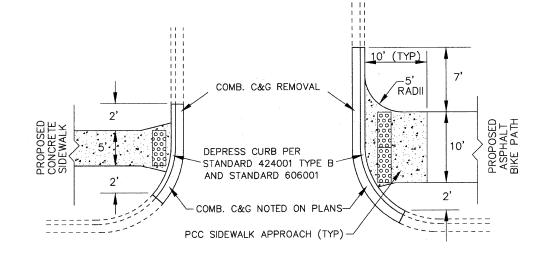
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		DATE —	REVISED —	



VILLAGE OF
HOFFMAN ESTATES
1900 Hassell Road, Hoffman Estates, IL 60169
Phone Number: 847 252-5800

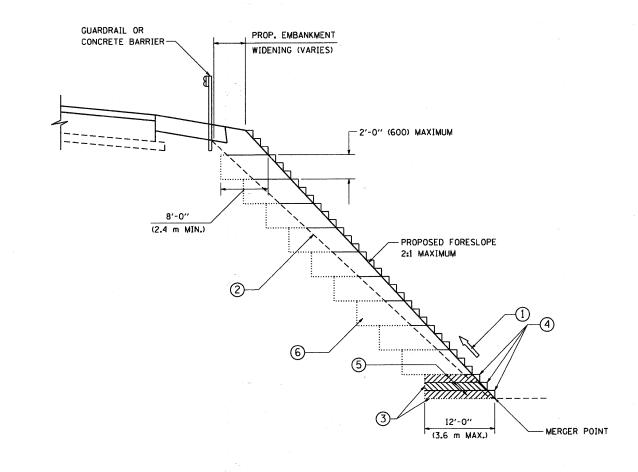
Higgins Road Bicycle and Pedestrian Project
Village Detail Sheet

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. TO STA.



PROPOSED DEPRESSED CURB & GUTTER EXIST. CURB & GUTTER NOT DEPRESSED

<u>TYPICAL PCC SIDEWALK</u> <u>APPROACH FOR BIKE PATH</u>



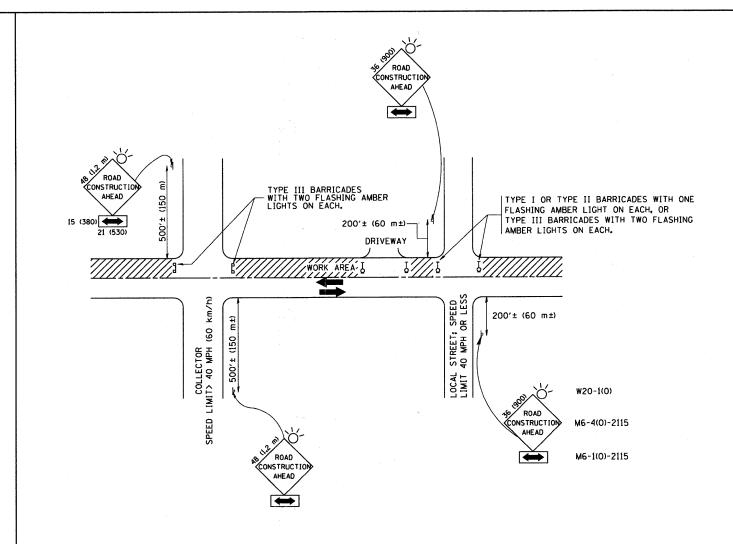
# TYPICAL BENCHING DETAIL FOR EMBANKMENT

#### NOTES:

- CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- 3) BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- 4 TRIM TO FINAL SLOPE.
- (5) EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

Г	FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -			BENCHING DETAIL	F.A. SECTION	COUNTY	TOTAL SHEET SHEETS NO.
	W:\diststd\22x34\bd5l.dgn		DRAWN - CADD	REVISED -	STATE OF ILLINOIS					86 67
		PLOT SCALE = 50.0000 '/ IN.	CHECKED - S.E.B.	REVISED -	DEPARTMENT OF TRANSPORTATION		FOR EMBANKMENT WIDENING	BD-51	CONTRACT	NO.
L		PLOT DATE = 1/4/2008	DATE - 06-16-04	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED. A	ID PROJECT	



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

#### NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900). WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

#### B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

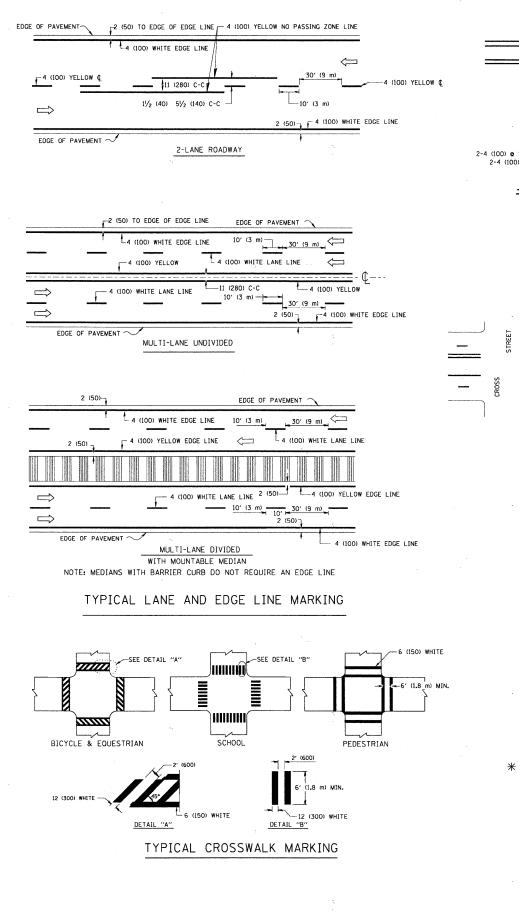
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

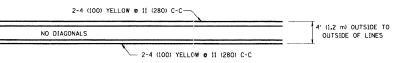
All dimensions are in millimeters (inches) unless otherwise shown.

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W:\diststd\22x34\tc10.dgn		DRAWN - :	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED -T. RAMMACHER 01-06-0

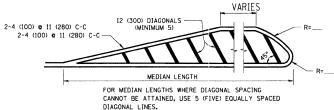
STATI	E OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

		TRAFFIC CONTROL AND PROTE	ECTION FOR	F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SH
Ì		SIDE ROADS, INTERSECTIONS, AN					86	
		SIDE RUADS, INTERSECTIONS, AN	D DNIVEWATS		TC-10	CONTRACT	NO.	
ı	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS ST.	A. TO STA.	FED. R	OAD DIST. NO. 1 ILLINOIS FED. AI	D PROJECT		



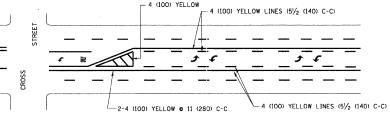


#### 4' (1.2 m) WIDE MEDIANS ONLY

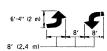


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

#### MEDIANS OVER 4' (1.2 m) WIDE

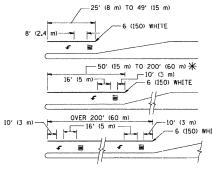


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR, ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

#### TYPICAL PAINTED MEDIAN MARKING

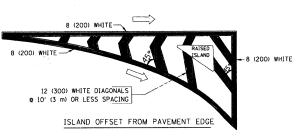


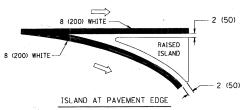
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SO. FT. (1.5 m² )  $\P$  AREA = 20.8 SQ. FT. (1.9 m²)

* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

#### TYPICAL TURN LANE MARKING





#### TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 © 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW: EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 & 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART 5EE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) & 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)! 150' (45 m) C-C (0VER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

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c:\pw_work\pwidot\drivakosgn\d0108315\to	3.dgn	DRAWN -		REVISED	-C. JUCIUS 09-09-09
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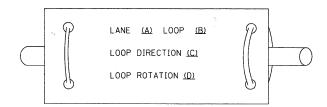
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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	DISTRICT OF	NE		F.A. SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
-	PICAL PAVEMENT	MADVINCE					86	69
	IFICAL PAVEIVICIVI	WANKINGS			TC-13	CONTRACT	NO.	
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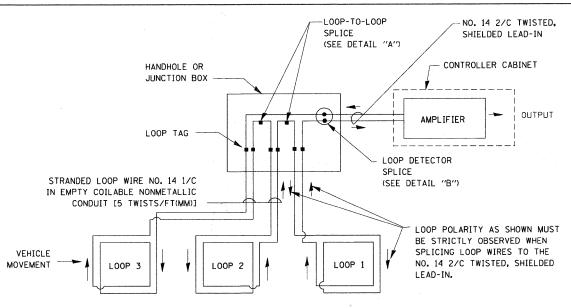
#### LOOP DETECTOR NOTES

- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- 2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- 3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- 4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- 6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- 7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

#### LOOP LEAD-IN CABLE TAG

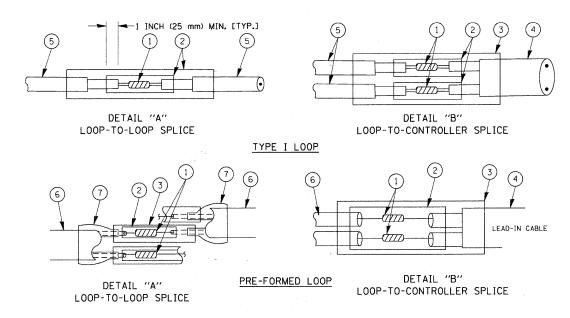


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



#### DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm), IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.



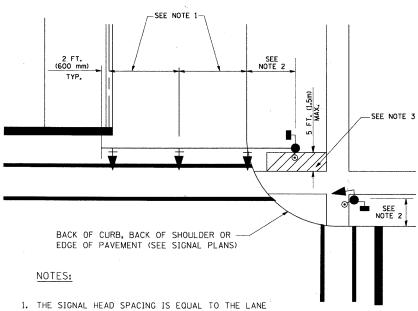
#### LOOP DETECTOR SPLICE

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.
- (4) NO. 14 2/C TWISTED, SHIELDED CABLE.
- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- (6) PRE-FORMED LOOP
- XL POLYOLEFIN 2 CONDUCTOR
- BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

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	PLOT DATE = 11/4/2009	DATE - 10-28-09	REVISED -		SCALE: NONE   SHEET NO. 1 OF 6 SHEETS   STA. TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS F	ED. AID PROJECT

#### TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.

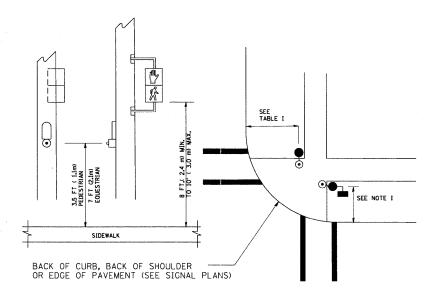


- WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

NOTES:

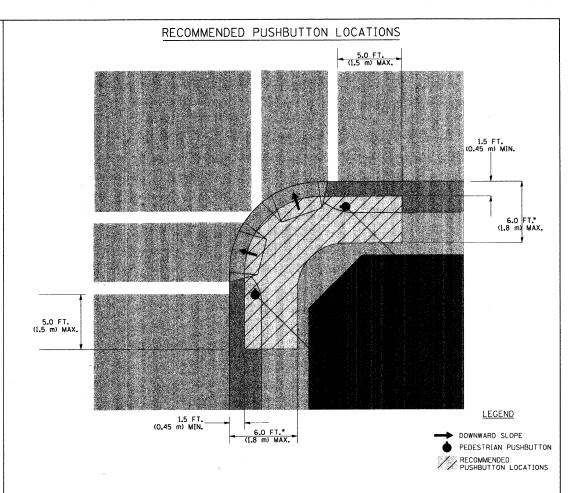
- PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
- 2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
- . THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT
- . THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
- . THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

## PEDESTRIAN SIGNAL POST PEDESTRIAN PUSH BUTTON POST



#### NOTES:

- 1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
- 3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."



- ▶ WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT ( 1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- ** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

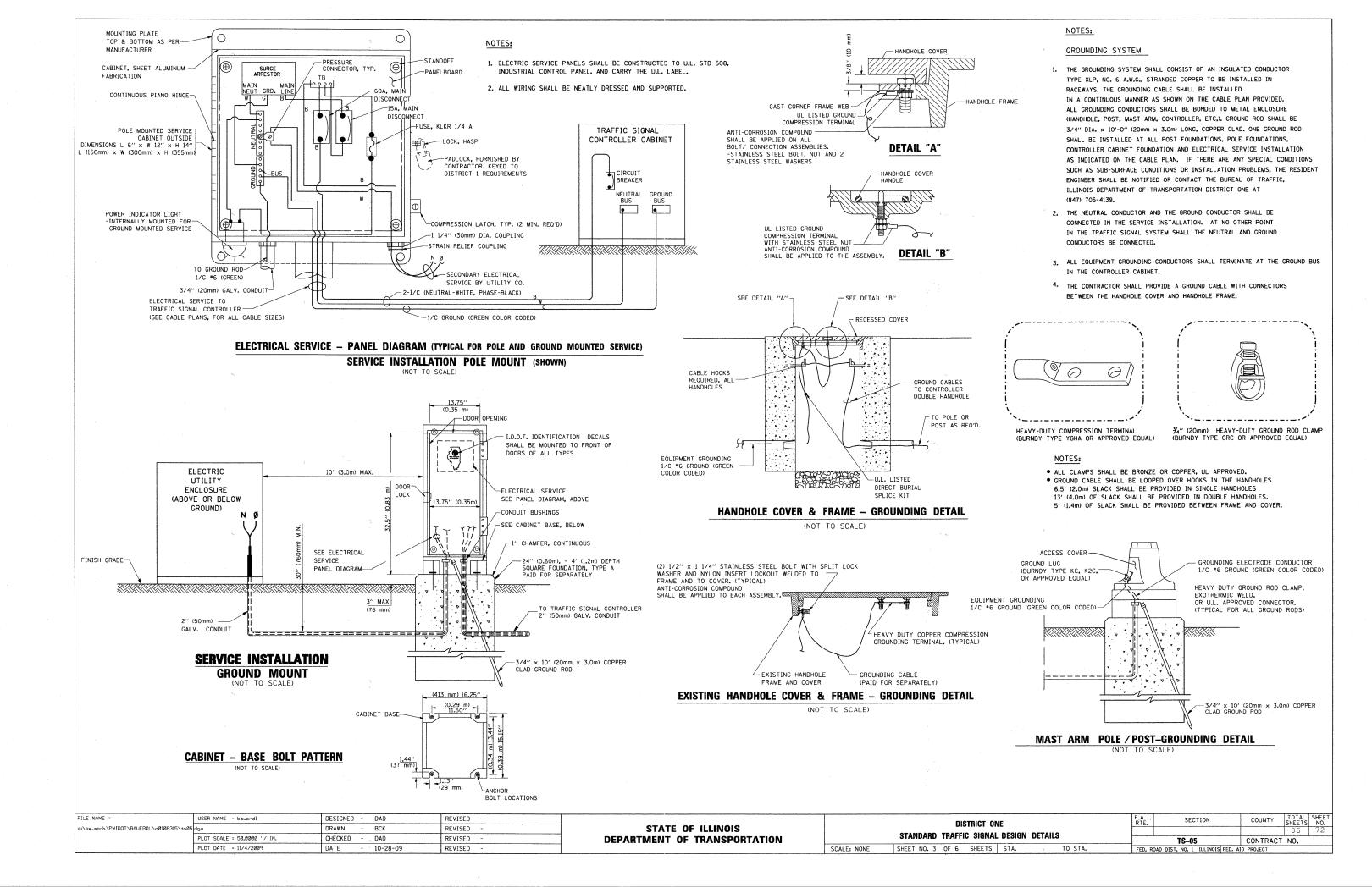
#### TRAFFIC SIGNAL EQUIPMENT OFFSET

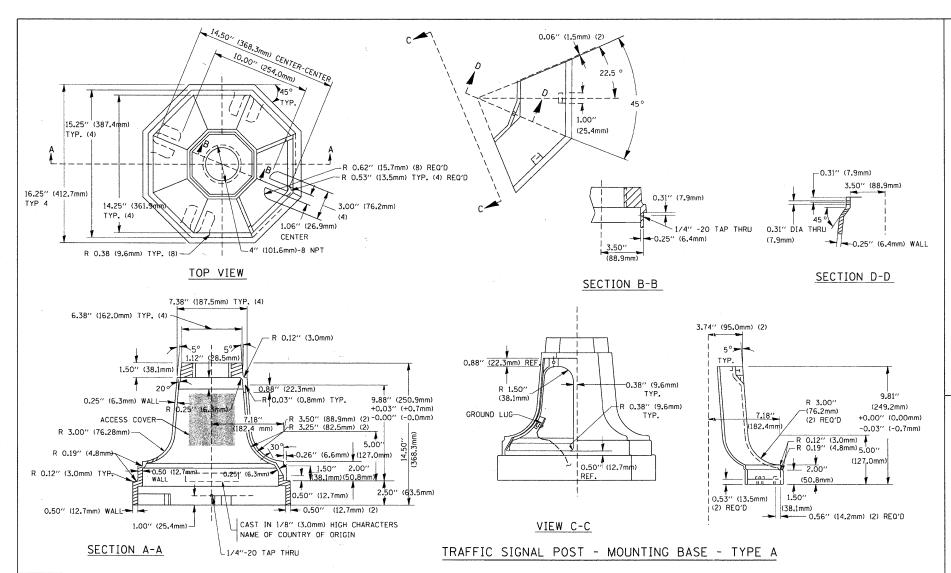
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

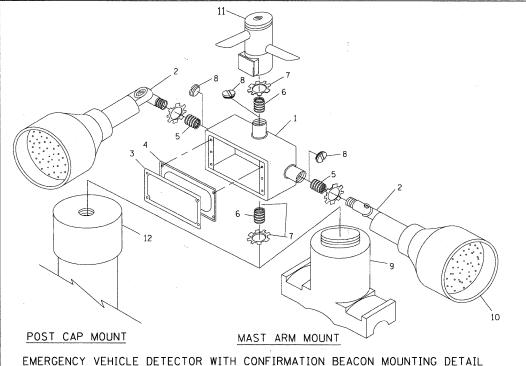
#### NOTES:

- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
- 3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
- 4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

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	PLOT DATE = 11/4/2009	DATE - 10-28-09	REVISED -		SCALE: NONE   SHEET NO. 2 OF 6 SHEETS   STA. TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS FE	ED. AID PROJECT







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ITEM	NO. IDENTIFICATION
1	OUTLET BOX- GALV, 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4"(19 mm) CLOSE NIPPLE
7	3/4"(19 mm) LOCKNUT
8	3/4"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

# NOTES:

- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- 2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
  ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
  ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- 3. WHEN POST MOUNTING IS SPECIFIED, ITEM *9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A ¾"(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.

#### R0.501 (12mm) 0.25 DRAIN -0.25" (6mm PORT 0.25"--0.23"(5mm) MATERIAL: - 0.31"(8mm) -0.20"(5mm) ASTM A36 STEEL - ASTM A-123 HOT DIPPED GALVANIZED WEIGHT HEIGHT 19"(483mm 7" (178mm) - 12" (300mm) 53 lbs (24kg) VARIES 9.5"(241mm)

68 lbs (31 kg)

81 lbs (37 kg) 126 lbs (57 kg)

# SHROUD

' (178mm) - 12" (300mm)

" (178mm) - 12" (300mm)

### NOTES:

VARIES

VARIES

VARIES

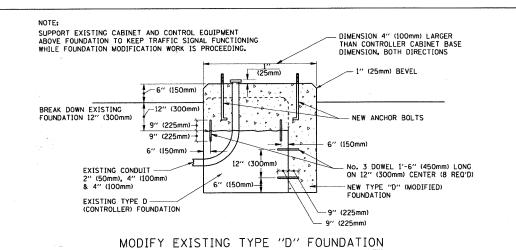
10.75"(273mm

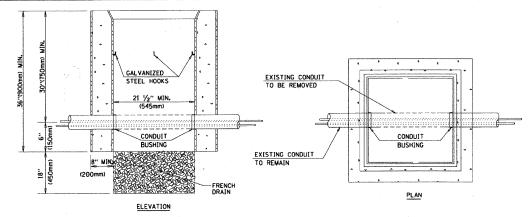
18.5"(470mm

- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD.
  THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
- 2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.

R2.95" (75mm)

3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.





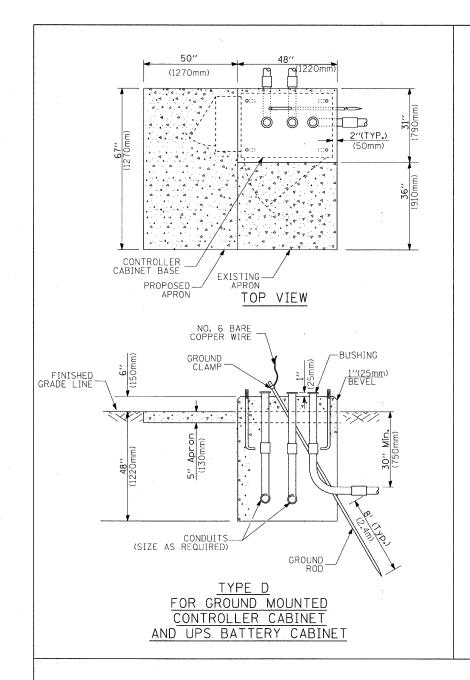
## NOTES:

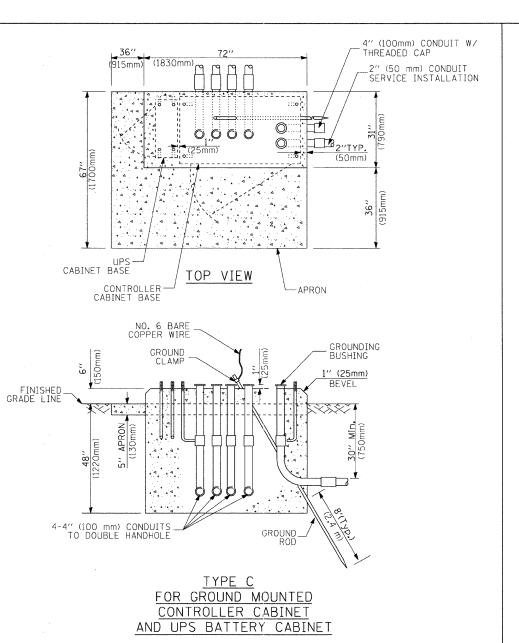
- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

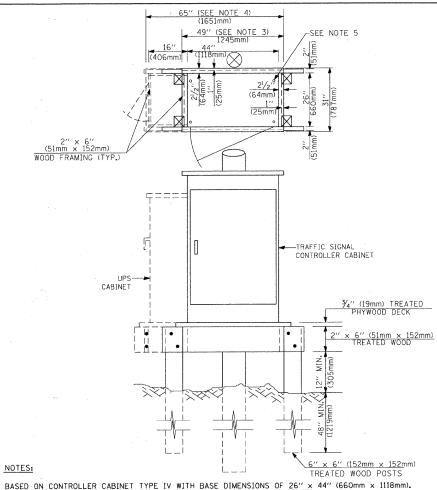
# HANDHOLE TO INTERCEPT EXISTING CONDUIT

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ļ		STANDARD TRAFFIC SIGNA	. DESIGN	DETAILS		TS-05	CONTRACT	NO.	
į	SCALE: NONE	SHEET NO. 4 OF 6 SHEETS	STA.	TO STA.	FED. R	OAD DIST. NO. 1   ILLINOIS FED. A	D PROJECT		

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION







- 1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF  $26'' \times 44''$  (660mm  $\times$  1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
- 2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
- 3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
- 4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
- 5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
- 6. FASTEN ALL-SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

# TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH .	FEET	METER
MAST ARM POLE ( MAST ARM MOUNTED SIGNAL HEAD)		
(L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

# VERTICAL CABLE LENGTH

FOUNDATION	DEPTH		
TYPE A - Signal Post	4'-0" (1.2m)		
TYPE C - CONTROLLER W/ UPS	4'-0'' (1.2m)		
TYPE D - CONTROLLER	4'-0'' (1.2m)		
SERVICE INSTALLATION, CROUND MOUNT, TYPE A - SQUARE	4'-0'' (1.2m)		

## DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Creater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0'' (4.0 m)	36'' (900mm)	30'' (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36'' (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0'' (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

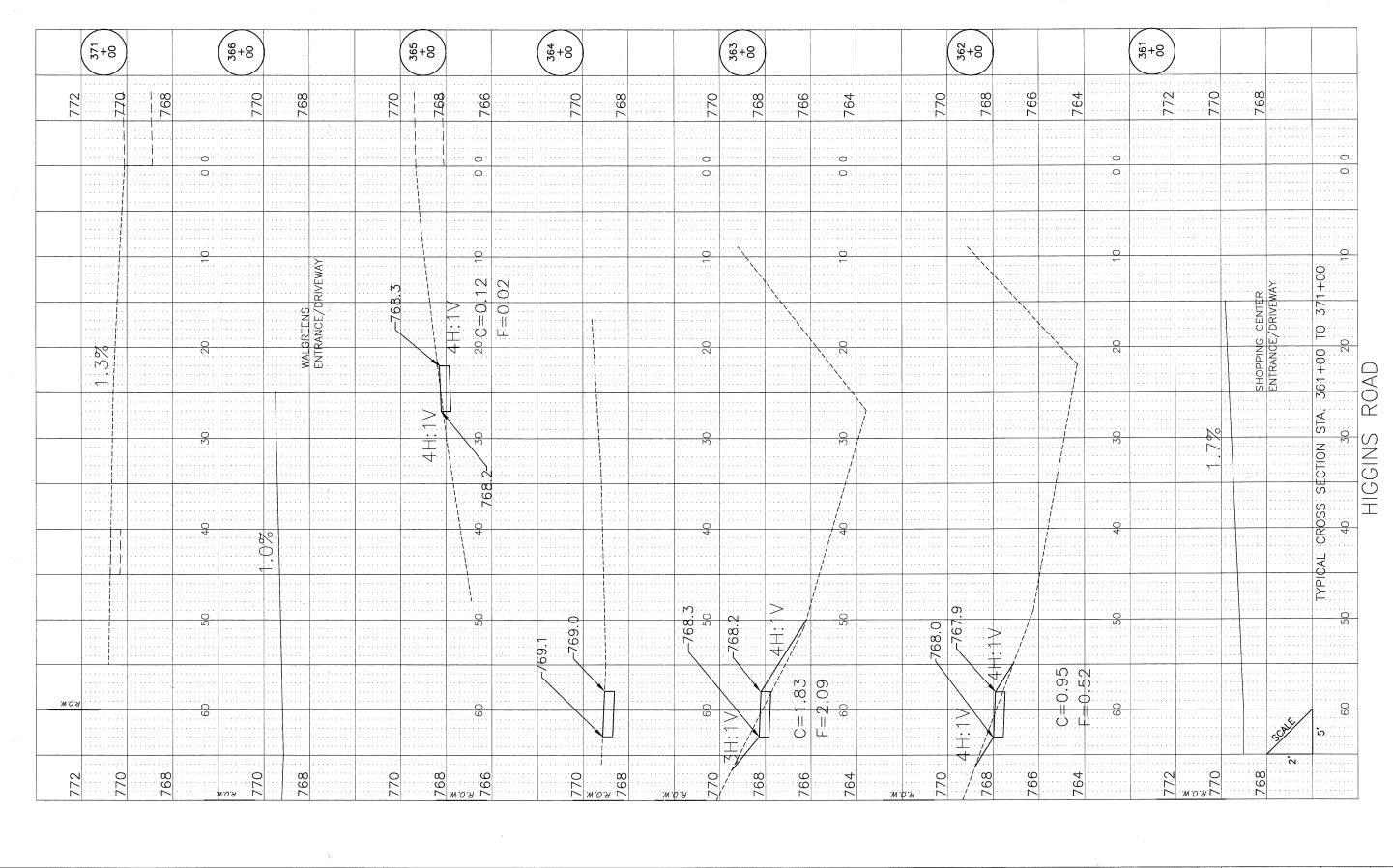
- These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along
  the length of the shaft, with an average Unconfined Compressive Strength (0u) > 1.0 tsf (100 kpo).
  This strength shall be verified by boring data prior to construction or with testing by the Engineer
  during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised
  design if other conditions are encountered.
- 2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
- 3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm diameter foundations.
- 4. For most arm assemblies with dual arms refer to state standard 878001.

# DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME =	USER NAME = bauerdl	DESIGNED - : DAG	REVISED -		DISTRICT ONE	F.A. · SECTION	COUNTY TOTAL SHEET
c:\pw_work\PWIDOT\BAUERDL\dØ	1108315\ts05 dgn	DRAWN - BCK	REVISED -	STATE OF ILLINOIS	OTANDARD TRAFFIC CIONAL DECICAL DETAILS		86 74
	PLOT SCALE = 50.0000 '/ IN.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION	STANDARD TRAFFIC SIGNAL DESIGN DETAILS	TS-05	CONTRACT NO.
	PLOT DATE = 11/4/2009	DATE - 10-28-09	REVISED -		SCALE: NONE SHEET NO. 5 OF 6 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED.	AlD PROJECT

# TRAFFIC SIGNAL LEGEND

	PLOT SCALE = 50.0000 '/ PLOT DATE > 11/4/2009	IN. (	CHECKED - DAD  DATE - 10-28-09	REVISED -	DEPARTMENT			SCALE: NO	STANDARD TRAFFIC SIGNAL DESIGN DETAILS  INE SHEET NO. 6 OF 6 SHEETS STA. TO STA.	TS-05 FED. ROAD DIST. NO. 1   ILLINOIS FE	CONTRACT NO.
FILE NAME = c:\pw_work\PWIDOT\BAUERDL\d0108315\ts05	USER NAME = bauerdl		DESIGNED - DAG/BCK DRAWN - BCK	REVISED -	STATE	OF ILLINOI	s		DISTRICT ONE	F.A. SECTION	COUNTY TOTAL SHE SHEETS NO
WIRELESS ACCESS POINT		R			GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)		(1)	(1)	CROSSBUCK	<b>★</b>	_
WIRELESS DETECTOR SENSOR		RW		W	ALL DETECTOR LOOP CABLE TO BE SHIELDED		)		CROSSING GATE	<del>202&gt;</del>	<b>X⊕X</b>
PAN, TILT, ZOOM CAMERA		R Pizh	PIZI	<u>P</u> IZ <b>I</b>	DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE,				FLASHING SIGNAL	$X \ominus X$	<b>X⊕X</b>
VIDEO DETECTION ZONE					RADIO REPEATER	RERR	ERR	RR	RAILROAD CANTILEVER MAST ARM	X <del>OX X</del> X	X <del>OX X</del>
VIDEO DETECTION CAMERA		R V	(V)	<b>V</b> ■	RADIO INTERCONNECT	##*O			RAILROAD CONTROL CABINET		
MICROWAVE VEHICLE SENSOR	8	R M 13	[M]		PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER		(C) (S) (D)	<b>₽</b> C <b>★</b> D	* · · · · · · · · · · · · · · · · · · ·	EXISTING	PROPOSED
PREFORMED DETECTOR LOOP			J-f	Р	12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID			*	RAILROAD S	SYMBOLS	
DETECTOR LOOP, TYPE I					INTERNATIONAL SYMBOL, OUTLINED			r <del>a</del> n		60	<b>G</b>
LLUMINATED SIGN 'NO RIGHT TURN''		R O			WALK/DON'T WALK SYMBOL  12" (300mm) PEDESTRIAN SIGNAL HEAD		W C		(SYSTEM) DETECTOR  PREFORMED SAMPLING (SYSTEM) DETECTOR	[PS]	PS
ILLUMINATED SIGN "NO LEFT TURN"		R		•	12" (300mm) PEDESTRIAN SIGNAL HEAD		DW W	Γ.	PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR PREFORMED INTERSECTION AND SAMPLING	ļ-īs	PIS
ACCESSIBLE PEDESTRIAN PUSH	HBUTTON, DETECTOR	R	@APS	(iii) APS			(* Y)	<b>◆</b> Y <b>◆</b> G	EXISTING PREFORMED INTERSECTION LOOP DETECTOR	ÎPP]	
PEDESTRIAN PUSHBUTTON DETE	ECTOR	R (6)	<b>©</b>	•	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD			G	EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	[P]	
PEDESTRIAN SIGNAL HEAD		R -	<del>,</del> []	-1			R	R	SAMPLING (SYSTEM) DETECTOR	S	S
LASHER INSTALLATION S DENOTES SOLAR POWER)		0-€>"F"	O- <b>(</b> >''F''	<b>●►</b> "F"			<b>◆ &gt;</b>	<b>4</b> Y <b>4</b> G	INTERSECTION & SAMPLING (SYSTEM) DETECTOR	[IS]	IS
IGNAL HEAD OPTICALLY PROG	GRAMMED	R 	- <b>∀</b> ″p″	<b>→</b> "P"	SIGNAL FACE		G	G	SIGNAL POST AND FOUNDATION TO BE REMOVED	RMF O	
SIGNAL HEAD WITH BACKPLATE		+DR	+->	+			R	R	AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED	<del></del>	
IGNAL HEAD CONSTRUCTION S NUMBERS INDICATE THE CONS		7/		- <b>-</b> 2	12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				STEEL COMBINATION MAST ARM ASSEMBLY	MF	
IGNAL HEAD		R -	-⊳	<u>→</u>	12 (JOURNAL SECTION		(R)	[ ]		RMF	
ETTER) 45 FOOT (13.7m) MINI UY WIRE	IMUM	⊗ > <u>P</u>	>	<b>&gt;</b>	ABANDON ITEM  12" (300mm) TRAFFIC SIGNAL SECTION	А	R	R	STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF	
EMPORARY WOOD POLE (CLAS)	SS 5 OR	^R ○	o ⊗	<b>▼</b> •	RELOCATE ITEM	RL			FOUNDATION TO BE REMOVED		
ASSEMBLY AND POLE WITH PT SIGNAL POST		PIZI	PIZH	PTZ	INTERSECTION ITEM REMOVE ITEM	R	I	ΙΡ	CONTROLLER CABINET AND	RCF	
ASSEMBLY AND POLE WITH LUM STEEL COMBINATION MAST ARM		R _O	<u> </u>	•	SYSTEM ITEM		S	S	GROUND ROD AT (C) CONTROLLER,  (H) HANDHOLE, (P) POST, (M) MAST ARM,  OR (S) SERVICE	C III	^c ∥⊢•
STEEL COMBINATION MAST ARM		R	0-10-	•	COMMON TRENCH COILABLE NONMETALLIC CONDUIT (EMPTY)			CT CNC	(NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)		
STEEL MAST ARM ASSEMBLY A ALUMINUM MAST ARM ASSEMBL		R	0		AND CABLE				FIBER OPTIC CABLE NO. 62.5/125,	$\prec$	
TELEPHONE CONNECTION P) POLE OR (G) GROUND MOUN	NT ,	R	P	P	IN TRENCH (T) OR PUSHED (P) TEMPORARY SPAN WIRE, TETHER WIRE,	R			FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F	— <u>24</u> F	—(24F)—
GERVICE INSTALLATION, P) POLE OR (G) GROUND MOUN	NT >	-D ^R	- <u></u> -	- <b></b>	JUNCTION BOX GALVANIZED STEEL CONDUIT	<b>(</b>			FIBER OPTIC CABLE NO. 62.5/125, MM12F	— <u>12</u> F—	
NINTERRUPTIBLE POWER SUPF	PLY	UPS	EUPS	UPS	DOUBLE HANDHOLE	* 🖂		N O	COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED	<u> </u>	6
ASTER MASTER CONTROLLER		R	EMMC	MMC	HEAVY DUTY HANDHOLE	KH	H	H	VENDOR CABLE FOR CAMERA	— <u>v</u>	— <u>v</u> —
ASTER CONTROLLER		[00]	EMC	MC	HANDHOLE					~	_
OMMUNICATIONS CABINET		C.C.	ECC	CC		R 🖂			COAXIAL CABLE	— <u>c</u>	<u> </u>
AILROAD CONTROL CABINET				<b> X</b>	EMERGENCY VEHICLE LIGHT DETECTOR  CONFIRMATION BEACON	Ro-O	o-€	<b>◄</b> <b>⊢</b>	NO. 14 1/C, UNLESS NOTED OTHERWISE		
ONTROLLER CABINET		R				R≪			ELECTRIC CABLE IN CONDUIT, TRACER,		



DETAILSH.DWG

FINAL SURVEYED—SURVEYED—NOTE BOOK PEAPLATE—AREAS—NO.

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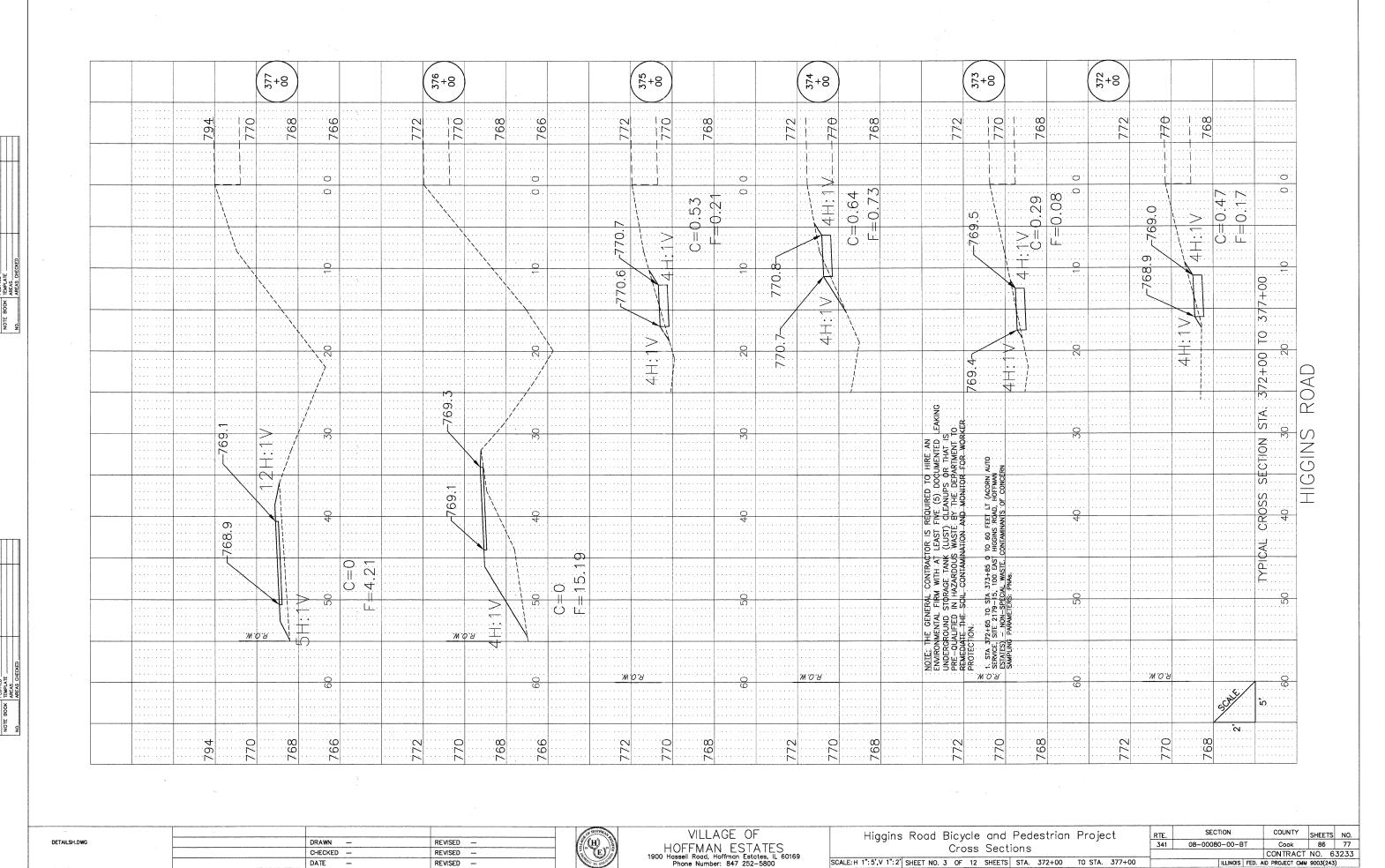
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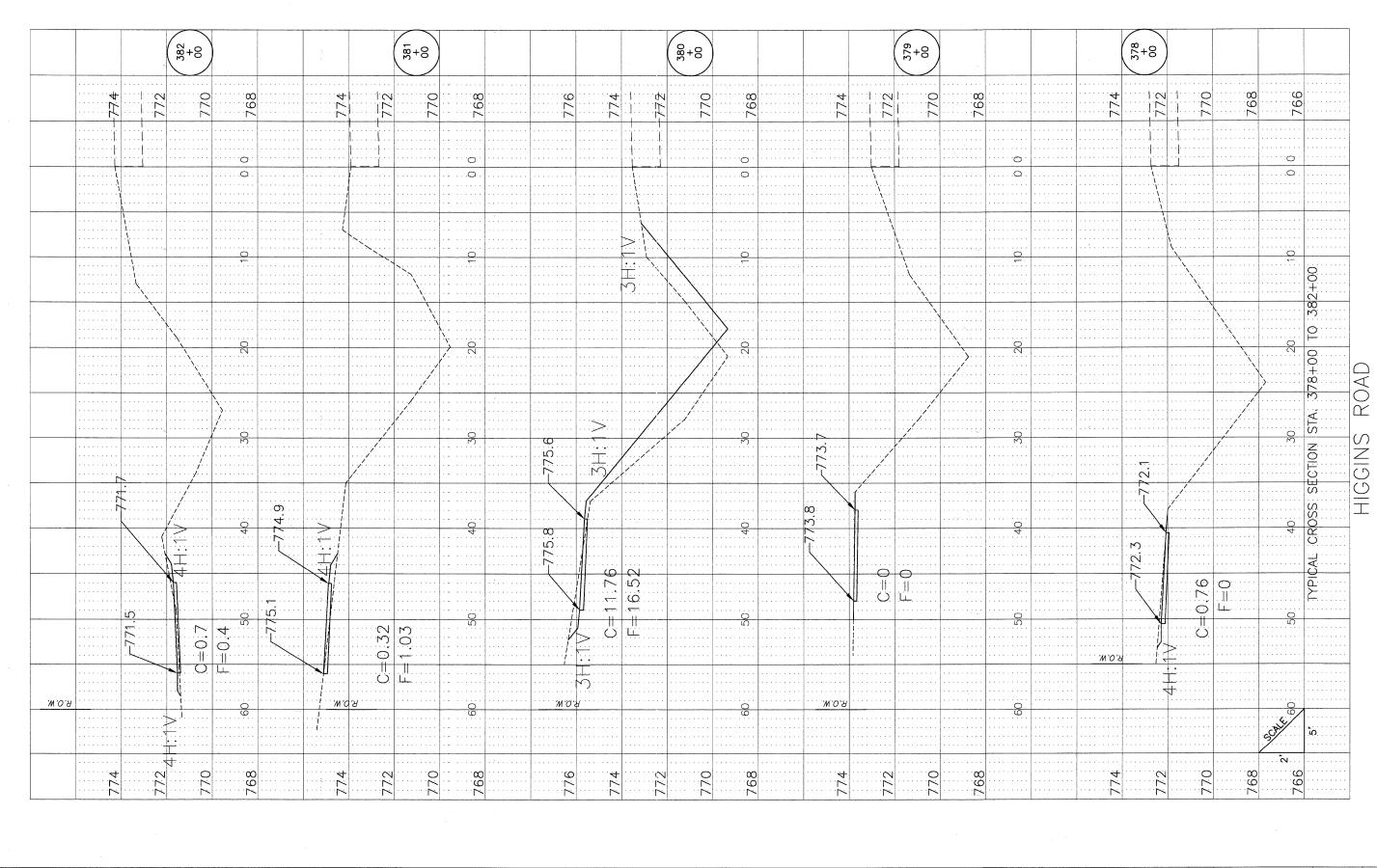


VILLAGE OF
HOFFMAN ESTATES
1900 Hassell Road, Hoffman Estates, IL 60169
Phone Number: 847 252-5800

Higgins Road Bicycle and Pedestrian Project
Cross Sections

SCALE: H 1": 5', V 1": 2' SHEET NO. 1 OF 12 SHEETS STA. 361+00 TO STA. 371+00





DETAILSH.DWG

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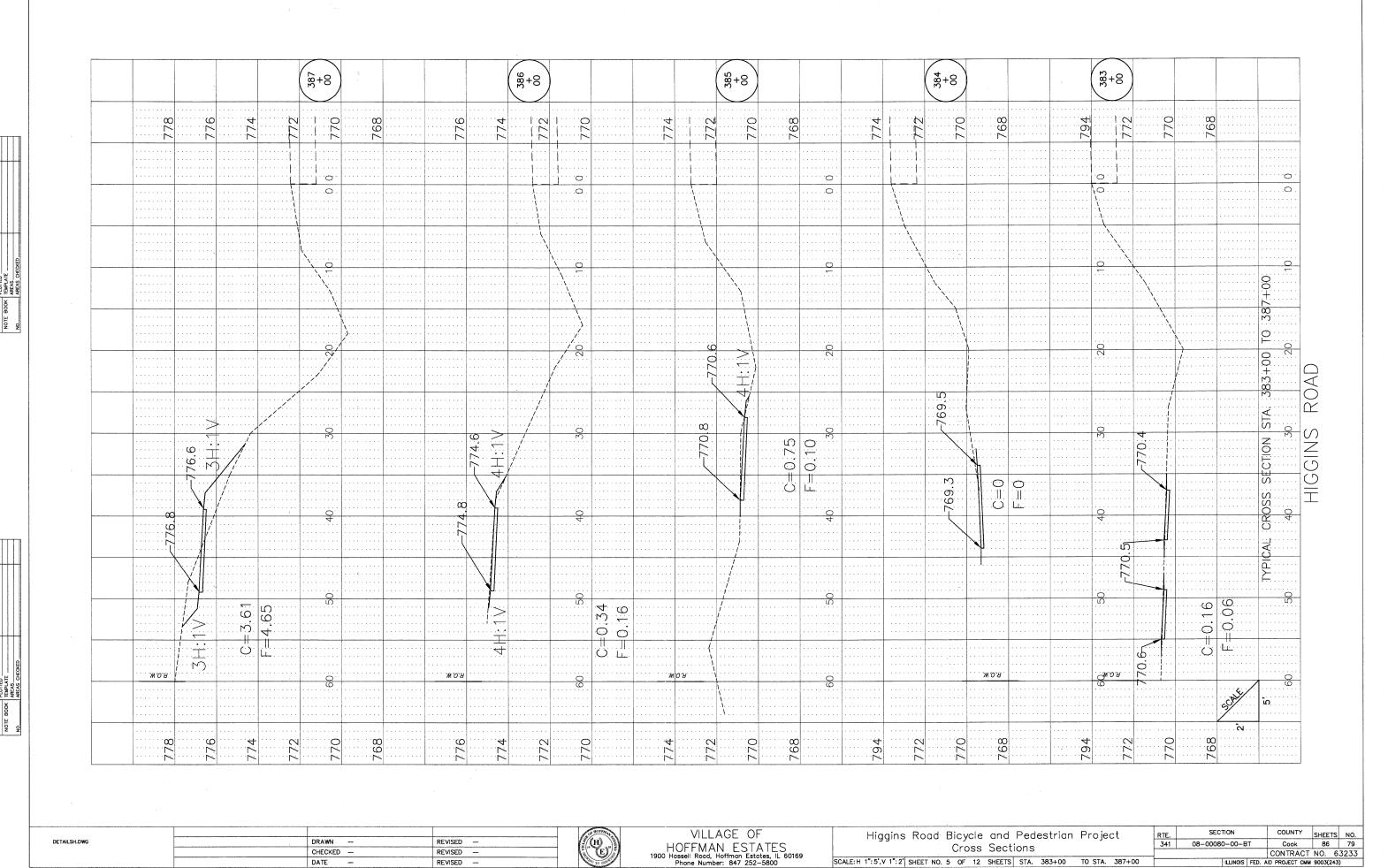


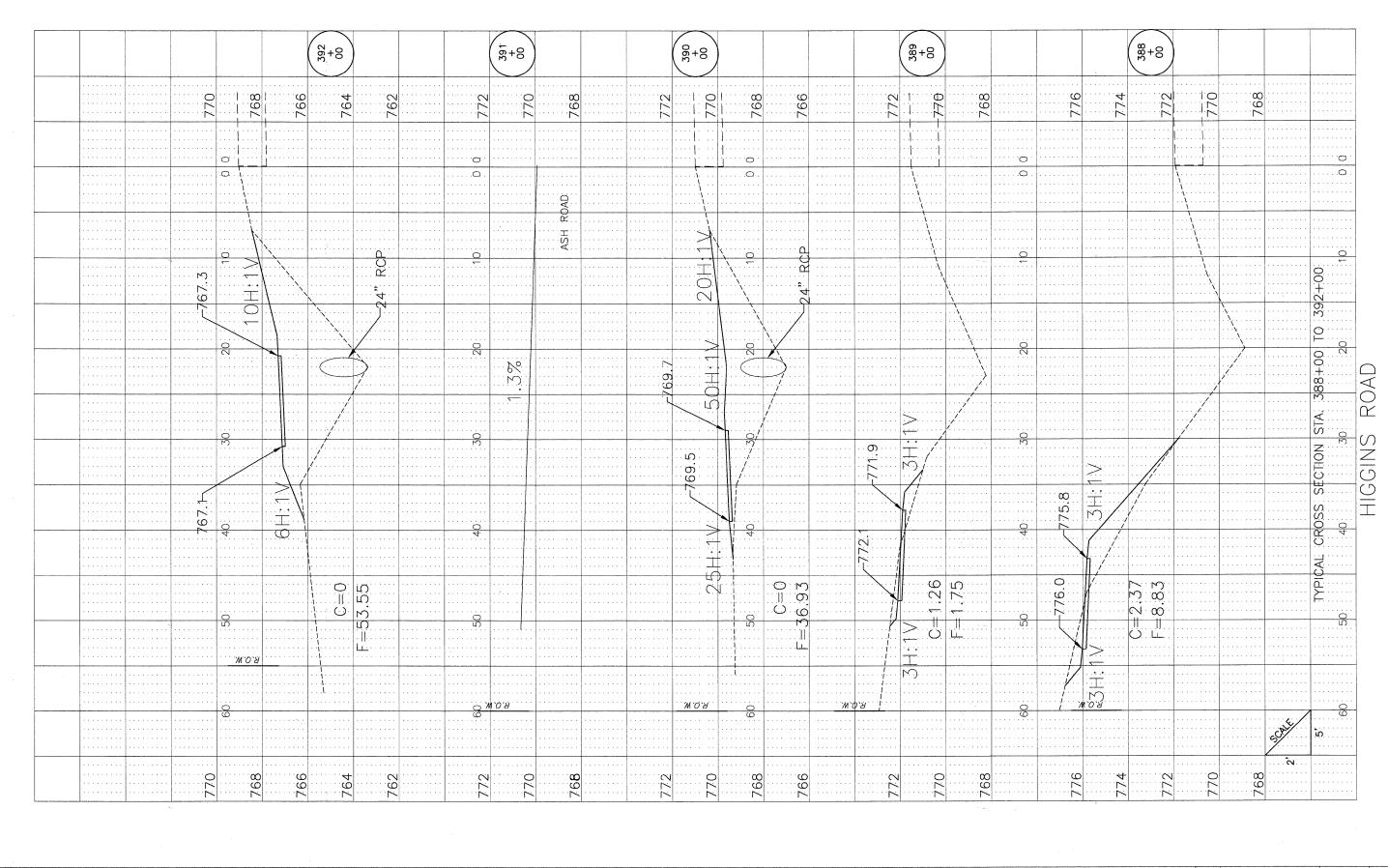
VILLAGE OF
HOFFMAN ESTATES
1900 Hossell Rood, Hoffman Estates, IL 60169
Phone Number: 847 252-5800

Higgins Road Bicycle and Pedestrian Project
Cross Sections

SCALE: H 1":5",V 1":2" SHEET NO. 4 OF 12 SHEETS STA. 378+00 TO STA. 382+00

RTE.	SECTION	COUNTY	SHEETS	NO.
341	08-00080-00-BT	Cook	86	78
		CONTRACT	NO. 6	3233
	ILLINOIS FED.	AID PROJECT CMM	9003(243	)





DETAILSH.DWG

| DRAWN -- | REVISED -- | | CHECKED -- | REVISED -- | | DATE -- | REVISED -- |



VILLAGE OF HOFFMAN ESTATES 1900 Hossell Road, Hoffman Estates, IL 60169 Phone Number: 847 252-5800 Higgins Road Bicycle and Pedestrian Project
Cross Sections
SCALE: H 1":5',V 1":2' SHEET NO. 6 OF 12 SHEETS STA. 388+00 TO STA. 392+00

