FOR INDEX OF SHEETS SEE SHEET NO. 2

**DESIGN DESIGNATION:** 

(0300) COLLECTOR (18) 0.0045 (FD-20)

# **STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PLANS FOR**

PROPOSED FEDERAL AID PROJECT **FAU 2712 BALMORAL AVENUE IMPROVEMENTS MANNHEIM ROAD (FAP 330) TO CANTERBURY STREET (FAU 2712) VILLAGE OF WESTCHESTER** 

**SECTION 05-00069-00-FP** RESURFACING AND RECONSTRUCTION

> **PROJECT M-8003** (875) **COOK COUNTY**

> > **C-91-** 038-08

**LOCATION MAP** 

**TOWNSHIP 39 NORTH, RANGE 12 EAST, SECTION 21** 

PROJECT ENDS **STATION 23+68** BALMORAL AVENUE

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

PROJECT BEGINS STATION 1+50 BALMORAL AVENUE PROJECT LOCATED IN THE VILLAGE OF WESTCHESTER **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.

CONTRACT NO. 83982



# TRAFFIC DATA

MAP SCALE: (1:400)

2030 ADT = 3.000POSTED SPEED LIMIT: 30 MPH DESIGN SPEED LIMIT: 30 MPH

ILLINOIS	DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS
APPROVED	OCTOBER 3 20 07
	VILLAGE OF WESTCHESTER PRESIDENT
PASSED	NOVEMBER 6 2007
	CHA CHRUSTOPHER HOLT
RELEASING FOR BID	DISTRICT/I ENGINEER OF LOCAL ROADS & STREETS
BASED ON LIMITED REVIEW	Nov. 7 20 07
	Dione o' Keefe to
	DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

FAU 2712

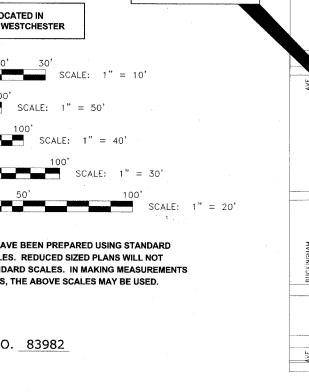
M-8003(655) 05-00069-00-F

(PRINTED BY AUTHORITY OF THE STATE OF ILLINOIS



**EDWIN HANCOCK ENGINEERING COMPANY** 9933 ROOSEVELT ROAD PHONE:(708)865-0300 WESTCHESTER, ILLINOIS 60154

E.H.E. NO. 838-06-16601



**PROVISO TOWNSHIP** - AREA OF IMPROVEMENT

CERMAK RD, (22nd ST.

GROSS AND NET LENGTH OF PROJECT = 2,218 FT. = 0.420 MI.

# **INDEX OF SHEETS**

# **BENCHMARKS**

# **LEGEND OF SYMBOLS**

ROUTE, NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.				
FAU 2712	**	СООК	36	2				
ILLINOIS PROJECT	ILLINOIS PROJECT M-8003(655)							
VILLAGE SECTION	VILLAGE SECTION 05-00069-00-FP							

SHEET NO.	DESCRIPTION
1	TITLE SHEET, LOCATION MAP
2	INDEX OF SHEETS, LEGEND, BENCHMARKS, I.D.O.T. STANDARD DRAWINGS
3	GENERAL NOTES
4	SUMMARY OF QUANTITIES
5	TYPICAL CROSS SECTIONS
<b>6-7</b>	ALIGNMENT AND TIES
8-9	MAINTENANCE OF TRAFFIC PLAN
10-15	PAVING PLAN AND PROFILE
16	ROADWAY DETAILS
17-22	DRAINAGE AND UTILITIES PLAN AND PROFILE
23-24	DRAINAGE AND UTILITIES DETAILS
25	EROSION CONTROL PLAN
26	SIGNING LEGEND AND NOTES
27	PAVEMENT MARKING AND SIGNING PLAN
28	ASPHALT AND LANDSCAPING PLAN
29	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
<b>30</b>	TRAFFIC CONTROL AND PROTECTION FOR SIDEROADS, INTERSECTIONS, AND DRIVEWAYS
31	BUTT JOINTS AND HMA TAPER DETAILS
32-36	STATION CROSS SECTIONS

ВМ-0	South-Southwest flange bolt on fire hydrant at 1955 Balmoral Avenue	633.44
BM-0	2. South-Southwest flange bolt on fire hydrant at 1933 Balmoral Avenue	633.44
BM-0	3. Northwest flange bolt on fire hydrant at Northwest corner of Bond Street	630.89
BM-0	4. Northwest flange bolt on fire hydrant at Northwest corner of Oxford Street	632.02
BM-0	5. Northwest flange bolt on fire hydrant at Northwest corner of Kent Street	631.76
BM-0	6. Southeast flange bolt on fire hydrant at Southwest corner of Wight Street	630.46

# I.D.O.T. STANDARD DRAWINGS

STANDARD NO.	TITLE OR DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-01	TEMPORARY EROSION CONTROL SYSTEMS
424001-05	CURB RAMPS FOR SIDEWALKS
602601-01	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
701501-0.↓	URBAN LANE CLOSURE, 2 L, 2 W, UNDIVIDED
<b>701701-0</b> -5	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-03	LANE CLOSURE, MULTILANE, 1 W OR 2 W CROSSWALK OR SIDEWALK CLOSURE
101901	TRAFFIC CONTROL DEVICES
720001	SIGN PANEL MOUNTING DETAILS
720006-01	SIGN PANEL ERECTION DETAILS
720011	METAL POSTS FOR SIGNS, MARKERS, AND DELINEATORS
729001	APPLICATIONS OF TYPES A AND B METAL POSTS (FOR SIGNS AND MARKERS)
780001-01	TYPICAL PAVEMENT MARKINGS

SYMBOL	DESCRIPTION
Ø	EXISTING POWER POLE
Δ	EXISTING GAS VALVE
-\$>0	EXISTING STREET LIGHT
. Ø	EXISTING WATER MAIN BUFFALO BOX
Q	EXISTING FIRE HYDRANT
	EXISTING WATER MAIN VALVE VAULT
©	EXISTING MANHOLE
	EXISTING INLET
0 .	EXISTING CATCH BASIN
$\odot$	EXISTING TREE
В	EXISTING BITUMINOUS CONCRETE AREA
C	EXISTING CONCRETE AREA
G	EXISTING GRASS AREA
S	EXISTING STONE OR GRAVEL AREA
	EXISTING STORM SEWER
	EXISTING SANITARY SEWER
	EXISTING ELECTRIC LINE
——— G ———	EXISTING GAS LINE
T	EXISTING TELEPHONE LINE
—— W ——	EXISTING WATER MAIN
	EXISTING CURB AND GUTTER
<u> </u>	EXISTING RIGHT OF WAY
Ø <sub>RM</sub>	EXISTING STRUCTURE TO BE REMOVED
∞ <sub>F</sub>	EXISTING STRUCTURE TO BE FILLED
	EXISTING CURB AND GUTTER TO BE REMOVED
B	EXISTING BITUMINOUS SURFACE TO BE REMOVED
B	EXISTING BITUMINOUS AREA TO BE REMOVED
//,c///	EXISTING CONCRETE AREA TO BE REMOVED
· · ·	PROPOSED SANITARY SEWER
	PROPOSED STORM SEWER
•	PROPOSED MANHOLE
	PROPOSED INLET
•	PROPOSED CATCH BASIN
<b>A</b>	STRUCTURE TO BE ADJUSTED
1C	TYPE 1 FRAME & CLOSED LID
1P	TYPE 1 FRAME & OPEN LID
RC	RECONSTRUCT EXISTING STRUCTURE
<u>.</u>	PROPOSED DIRECTION OF FLOW
-\$-	PROPOSED SUMMIT
A	PROPOSED HOT-MIX ASPHALT AREA
С	PROPOSED CONCRETE AREA
G	PROPOSED GRASS AREA
	PROPOSED COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.12

9933 Roosevelt Road Westchester, Illinois 60154-2780 Phone: 708/865-0300 Fax: 708/865-1212

BALMORAL AVENUE IMPROVEMENTS **VILLAGE OF WESTCHESTER, ILLINOIS**  INDEX OF SHEETS, LEGEND OF SYMBOLS, BENCHMARKS, & I.D.O.T. STANDARD DRAWINGS

	SCALE:	NONE
	DRAWN BY:	NAW/LEV/MK
	BOOK NO.:	1394/1427/LS
,	DATE:	10-3-07
	E.H.E. NO.:	838-06-16601

ROUTE NO.	SECTION	COUNTY	SHEETS	NO.
FAU 2712	**	СООК	36	3
ILLINOIS PROJECT	M-8003(	655)	***************************************	
VILLAGE SECTION	05-0006	9-00-FP		
CONTRACT NO. 839	82			

#### **ACCESS**

THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN ACCESS FOR EMERGENCY VEHICLES TO INGRESS AND EGRESS ONTO PRIVATE & COMMERCIAL PROPERTY DURING THE CONSTRUCTION PERIOD. ALSO DURING CONSTRUCTION, GARBAGE TRUCKS MUST BE PERMITTED ACCESS TO THE WORK ZONE IN ORDER TO PICK UP RESIDENTIAL AND COMMERCIAL GARBAGE FOR THOSE PROPERTIES FRONTING THE WORK ZONE.

#### **STANDARDS**

ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE THE LATEST STANDARD OF THE DEPARTMENT AS SHOWN ON THE INDEX OF SHEETS IN THE PLANS.

#### **UNDERGROUND UTILITIES**

THE LOCATIONS OF THE UNDERGROUND UTILITIES AS SHOWN ON THE PLANS HAVE BEEN OBTAINED BY FIELD SURVEYS AND SEARCHES OF AVAILABLE RECORDS. IT IS BELIEVED THAT THE DATA IS ESSENTIALLY CORRECT, BUT THE VILLAGE OF WESTCHESTER. THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND/OR OTHER OFFICES AND AGENCIES ASSOCIATED WITH THE DEVELOPMENT OF THESE PLANS DO NOT GUARANTEE THEIR ACCURACY OR COMPLETENESS. THE CONTRACTOR WILL BE REQUIRED TO VERIFY THE EXACT LOCATION OF EACH FACILITY WITH THE UTILITY COMPANY, AND SHALL TAKE DUE CARE IN ALL PHASES OF THE CONSTRUCTION TO PROTECT ANY SUCH FACILITIES WHICH MAY BE AFFECTED BY THE WORK ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE

ADJUSTMENTS REQUIRED BY UTILITY COMPANIES WILL BE PERFORMED BY THE COMPANY INVOLVED OR ITS CONTRACTOR.

COORDINATION OF ALL UTILITY WORK INVOLVED IN THE CONSTRUCTION AREA WILL BE DISCUSSED AT A PRE-CONSTRUCTION CONFERENCE.

THE CONTRACTOR SHALL USE EXTREME CAUTION IN THE REMOVAL OF ABANDONED EXISTING GAS LINES SINCE RESIDUAL MATERIALS CONTAINED THEREIN ARE HIGHLY EXPLOSIVE, FLAMMABLE, AND TOXIC. ONCE THE MAINS ARE ABANDONED BY THE OWNER. THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY DAMAGE AND/OR INJURY OCCURRING ON THE PROJECT DUE TO HIS OPERATIONS NEXT TO THE MAINS AND/OR THE METHOD OF REMOVAL OF THE ABANDONED MAINS. UNDER NO CIRCUMSTANCE SHALL THE UTILITY COMPANIES BE HELD LIABLE FOR ANY DAMAGE AND/OR INJURY ONCE THEIR MAINS HAVE BEEN RELOCATED AND THE EXISTING MAINS HAVE BEEN ABANDONED.

#### STORM SEWER

THE VERTICAL AND HORIZONTAL CLEARANCES BETWEEN WATER MAINS AND PROPOSED OR EXISTING STORM SEWERS SHALL CONFORM TO THE REQUIREMENTS OF THE I.E.P.A. AS STATED IN THEIR POLICY STATEMENTS. SECTION 31-1.02A THROUGH 31-1.02D.

#### **FRAMES AND GRATES**

THE TYPE OF FRAMES AND GRATES REQUIRED FOR ALL CATCH BASINS AND MANHOLES LISTED IN THE SUMMARY OF QUANTITIES MAY BE FOUND ON THE PLANS AT THEIR RESPECTIVE LOCATIONS. WHERE LIDS ARE CALLED FOR ON THE PLANS, THEY SHALL BE IN ACCORDANCE WITH ARTICLE 604.01 OF THE STANDARD SPECIFICATIONS AND THE TERM LID IS USED IN LIEU OF GRATE.

ON ALL IMPROVEMENTS, THE FRAMES AND LIDS OF EXISTING CATCH BASINS, INLETS, MANHOLES, AND VALVE VAULTS WHICH ARE TO BE ABANDONED DUE TO CONSTRUCTION OF THIS IMPROVEMENT ARE TO REMAIN THE PROPERTY OF THE VILLAGE OF BROOKFIELD AND BE SALVAGED. THE CONTRACTOR IS TO DELIVER FRAMES AND LIDS TO THE VILLAGE OF WESTCHESTER PUBLIC WORKS YARD LOCATED AT 10300 ROOSEVELT ROAD.

#### **MAINTENANCE OF SEWER FLOWS**

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO AS TO MAINTAIN AT ALL TIMES FLOWS THROUGH EXISTING STORM AND SANITARY SEWER SYSTEMS. HE SHALL ALSO PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT IF NECESSARY AND A TEMPORARY OUTLET AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER COLLECTED IN A SAFE MANNER WITHOUT DAMAGE OF ANY KIND TO ADJACENT PROPERTIES. THE ENDS OF EXISTING DRAINAGE LINES WHICH ARE NOT TO BE INCORPORATED INTO THE PROJECT ARE TO BE SEALED AS SPECIFIED IN THE SPECIAL PROVISIONS. THE COST OF ALL THE PREVIOUSLY MENTIONED WORK SHALL BE INCLUDED IN THE CONTRACT. ALL ACCUMULATION OF MATERIAL IN THE STRUCTURE DUE TO CONSTRUCTION OPERATIONS AS WELL AS MATERIAL EXISTING BEFORE CONSTRUCTION, SHALL BE REMOVED BY THE CONTRACTOR AT HIS EXPENSE.

#### **EXISTING STRUCTURE MODIFICATIONS**

ALL KNOWN EXISTING STRUCTURES IN THE PAVEMENT OR ADJACENT AREAS WHICH ARE INVOLVED IN THE CONSTRUCTION HAVE BEEN SHOWN ON THE PLANS AND NOTED AS TO BE REMOVED, FILLED, RECONSTRUCTED, OR ADJUSTED BY THE CONTRACTOR EXCEPT THOSE OF AMERITECH, COMED, AND THE NICOR GAS COMPANY, WHICH ARE TO BE ADJUSTED BY THE APPROPRIATE UTILITY FORCE. WHERE EXISTING STRUCTURES ARE TO REMOVED OR FILLED, OR THE EXISTING CASTING REPLACED, THE CASTINGS REMOVED FROM THE STRUCTURE BECOME THE PROPERTY OF THE VILLAGE OF WESTCHESTER.

#### SHEETING OR SHORING

IT SHOULD BE NOTED THAT ANY SHEETING OR SHORING REQUIRED FOR THE STORM SEWER INSTALLATION OR OTHER CONSTRUCTION ELEMENTS REQUIRING RELATIVELY DEEP EXCAVATIONS, SHALL BE INCLUDED IN THE PARTICULAR PAYMENT ITEM AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ANY SUPPLEMENTAL WORK ASSOCIATED WITH THE MAINTENANCE OF TRENCH SIDES OR OTHER EXCAVATED AREAS.

#### MAINTENANCE OF EXISTING DRAINAGE STRUCTURES

WHEN DURING THE CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF ANY GUTTERS OR DRAINAGE STRUCTURE SO THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS, ALL DRAINAGE FACILITIES SHALL BE CLEAN AND FREE OF ALL OBSTRUCTIONS. THE COST OF THIS WORK SHALL BE IINCLUDED IN THE CONTRACT.

# **SAW CUTTING**

THE CONTRACTOR SHALL SAW CUT ASPHALT PAVEMENT AND DRIVEWAY PAVEMENT AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER, TO SEPARATE THE EXISTING PAVEMENT TO BE REMOVED BY MEANS OF AN APPROVED CONCRETE SAW TO A DEPTH AS DIRECTED BY THE ENGINEER. SUITABLE GUIDELINES OR DEVICES SHALL BE USED TO ASSURE CUTTING A NEAT, STRAIGHT LINE AS SHOWN ON THE PLANS. CARE SHALL BE TAKEN BY THE CONTRACTOR SO AS NOT TO DAMAGE THE REMAINING PAVEMENT DIRECTLY ADJACENT TO THE PAVEMENT TO BE REMOVED. ANY DAMAGE TO THE EXISTING PAVEMENT RESULTING FROM PAVEMENT REMOVAL OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. THE PRICE OF SAW CUTTING, AS NOTED ABOVE, SHALL BE INCLUDED IN THE PARTICULAR PAY ITEMS.

#### TRAFFIC PROTECTION

CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT WHEN WORK COMMENCES, THE CONTRACTOR SHALL ASSUME THE MAINTENANCE OF ANY PAVEMENT, SHOULDERS, DRAINAGE FACILITIES, TRAFFIC CONTROL SIGNS, PAVEMENT MARKINGS, AND OTHER APPURTENANCES ON ROADWAYS WITHIN THE LIMITS OF THE CONTRACT WHICH ARE TO BE USED BY THE PUBLIC DURING CONSTRUCTION AND TO RETAIN THIS MAINTENANCE RESPONSIBILITY UNTIL THE VILLAGE ASSUMES THE MAINTENANCE. NEED FOR SNOW AND ICE CONTROL DURING THE CONSTRUCTION PERIOD SHALL BE ACCOMMODATED FOR BY OTHERS. ALL UNBALLASTED TYPE I & TYPE II BARRICADES SHALL HAVE TWO SANDBAGS ONE ACROSS EACH BOTTOM RAIL.

#### **EXISTING ROADWAY SIGNS**

ALL EXISTING ROADWAY SIGNS, MARKERS, ETC., LOCATED WITHIN THE ROADWAY RIGHT-OF-WAY WHICH ARE INVOLVED IN THIS CONSTRUCTION SHALL BE REMOVED AND DELIVERED TO THE VILLAGE PUBLIC WORKS YARD LOCATED AT 10300 ROOSEVELT ROAD. ALL WORK ASSOCIATED WITH THIS ITEM SHALL BE CONSIDERED INCLUDED IN THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.

#### **SOILS REPORT**

A SOILS REPORT HAS BEEN PREPARED CONTAINING CERTAIN INFORMATION RELATING TO GENERAL SOIL CONDITIONS TO BE ENCOUNTERED ALONG THE ROUTE OF THE WORK. THE CONTRACTOR WILL BE PERMITTED TO EXAMINE THIS INFORMATION AND DETERMINE ITS VALUE. ANY ADDITIONAL BORINGS DEEMED NECESSARY BY THE CONTRACTOR SHALL BE MADE AT HIS OWN EXPENSE

#### **PLUGGING EXISTING SEWERS AND DRAINS**

UNLESS OTHERWISE SPECIFIED, ABANDONED SEWERS AND DRAINS, AS DESIGNATED BY THE ENGINEER, SHALL BE PLUGGED WITH CLASS "SI" CONCRETE OR BRICK AND SUITABLE MORTAR TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE PAY ITEMS FOR REMOVING AND/OR FILLING THE VARIOUS TYPES OF STRUCTURES.



♦ Municipal Consultants

Westchester, Illinois 60154-2780 Phone: 708/865-0300

Fax: 708/865-1212

**BALMORAL AVENUE IMPROVEMENTS VILLAGE OF WESTCHESTER, ILLINOIS** 

**GENERAL NOTES** 

	SCALE: NONE
	DRAWN BY: NAW/LEV/M
	BOOK NO.: 1394/1427/LS
	DATE: 10-3-07
EVISION:	E.H.E. NO.: 838-06-1660

T	ROUTE NO.	SECTION:	COUNTY	TOTAL	SHEET NO.
	FAU 2712	**	соок	36	4
	LLINOIS PROJECT	M-8003(	655)		
1	VILLAGE SECTION	05-00069	9-00-FP		

CONTRACT	NO.	83982	_

	SUMMARY OF QUANTITIES				
			TOTAL	1000-2A 80% FEDERAL	Y.060
CODE	PAY ITEM	UNIT	QUANTITY	20% LOCAL	100% LOC/
20200100	EARTH EXCAVATION	CUYD	2,150	2,150	
	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS	CUYD	300	<del> </del>	
	POROUS GRANULAR EMBANKMENT, SUBGRADE	CUYD	300		
	TRENCH BACKFILL	CUYD	2.200		
	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQYD	6,600	.,	
	TOPSOIL FURNISH AND PLACE 4"	SQYD	3,700		
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	45	45	
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	45	45	
25000600	POTASSIUM PERTILIZER NUTRIENT	POUND	45	45	
25200100	SODDING	SQYD	3,700	3,700	
25200200	SUPPLEMENTAL WATERING	UNIT	100	100	
28000510	INLET FILTERS	EACH	13	13	
35300300	PORTLAND CEMENT CONCRETE BASE COURSE, 8"	SQYD	130	130	
40200800	AGGREGATE SURFACE COURSE, TY PE B	TON	1,000	1,000	
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GAL	1,300	1,300	
40600300	AGGREGATE (PRIME COAT)	TON	60	60	
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	100	100	
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	150	150	
40701821	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 7"	SQYD	6,600	6,600	
42101300	PROTECTIVE COAT	SQYD	2,045	2,045	
42300300	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH	SQYD	850	850	
42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQFT	3,100	3,100	
42400800	DETECTABLE WARNINGS	SQFT	300	300	
44000100	PAVEMENT REMOVAL	SQYD	6,600	6,600	
44000198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQYD	1,550	1,550	
44000200	DRIVEWAY PAVEMENT REMOVAL	SQYD	850	850	
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	3,950	3,950	
	SIDEWALK REMOVAL	SQFT	3,400	3,400	
44004400	PAVEMENT REMOVAL (SPECIAL)	SQYD	130	130	
55022000	STORM SEWERS, TYPE 2, REINFORCED CONCRETE CULVERT, STORM DRAIN,	FOOT	252	252	
	AND SEWER PIPE, CLASS III, 24"				
55022100	STORM SEWERS, TYPE 2, REINFORCED CONCRETE CULVERT, STORM DRAIN,	FOOT	142	142	
	AND SEWER PIPE, CLASS III, 27"	*			
55022200	STORM SEWERS, TYPE 2, REINFORCED CONCRETE CULVERT, STORM DRAIN,	FOOT	336	336	
	AND SEWER PIPE, CLASS III, 30"				
60213800	RESTRICTED DEPTH CATCH BASINS, 4' DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	7	7	<u>~</u>
60225400	RESTRICTED DEPTH MANHOLES, 5' DIAMETER, TY PE 1 FRAME, CLOSED LID	EACH	4	. 4	
60234200	INLETS, TYPEA, TYPE1 FRAME, OPEN LID	EACH	6	. 6	
60257900	MANHOLES TO BE RECONSTRUCTED	EACH	. 19	19	
60266100	VALVE VAULTS TO BE RECONSTRUCTED	EACH	5	5	
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	4	4	

* DENOTES SPECIALTY ITE	۷
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	SUMMARY OF QUANTITIES	<del>-</del>			
CODE	PAY ITEM	UNIT	TOTAL	1000-2A 80% FEDERAL 20% LOCAL	Y060
CODE	PAY IIEW	UNIT	IOIAL	20% LOCAL	100% LOCAL
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	3	3	
	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	24	24	
	REMOVING MANHOLES	EACH	1	1	
60500060	REMOVING INLETS	EACH	24	24	
60500205	FILLING CATCH BASINS	EACH	9	9	
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	3,950	3,950	
67000400	ENGINEER'S FIELD OFFICE - TYPE A	CALMO	5	5	
67100100	MOBILIZATION	L SUM	1	1	
70101800	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1	1	
70106800	CHANGEABLE MESSAGE SIGN	CAL-MO	1	1	, , , , , , , , , , , , , , , , , , , ,
72000100	SIGN PANEL - TYPE 1	SQFT	120	120	
72900100	METAL POST - TYPE A	FOOT	120	120	
72900200	METAL POST - TYPE B	FOOT	135	135	M
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS	SQFT	37	37	
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	1,700	1,700	
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	360	360	
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	90	90	······································
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	100	100	
X0323426	SEDIMENT CONTROL, DRAINAGE STRUCTURE INLET FILTER CLEANING	EACH	13	13	
×007206	SANITARY SEWER, PVC, 21"	FOOT	158		158
X0325207	TELEVISION INSPECTION OF SEWER	FOOT	2,650	2,650	······································
XX000541	EXPLORATORY EXCAVATION	CUY D	50	50	
XX001466	SANITARY SEWER, PVC, 12"	FOOT	119		119
XX001467	SANITARY SEWERS, PVC, 15"	FOOT	219		219
XX001672	STORM SEWERS, (POLYVINYL CHLORIDE) SDR 26, 12 INCH	FOOT	18	18	
XX003036	STORM SEWERS, PVC, SDR 26, 10 INCH	FOOT	350	350	
XX005634	12" X 6" PVC SEWER SERVICE CONNECTIONS	EACH	5	5	
XX005635	STORM SEWERS, PVC SDR 26, 15"	FOOT	75	75	
XX005636	PIPE UNDERDRAINS, PERFORATED POLYVINY L CHLORIDE PIPE, 6"	FOOT	78	78	
	15" X 6" PVC SEWER SERVICE CONNECTIONS	EACH	11	11	
XX006453	6" PVC SEWER SERVICE PIPE REPAIR ACROSS TRENCH	FOOT	50	50	
	AGGREGATE SUBGRADE 12"	SQYD	6,600	6,600	
Z0004900	BITUMINOUS MIXTURE FOR PATCHING POTHOLES (HOT MIX)	TON	20	20	
Z0076600		HOUR	500	500	
<b>X</b> (00720)	6" PVC SEWER SERVICE PIPE	FOOT	950	950	
Xxno72oZ=	21" X 6" SEWER SERVICE CONNECTIONS	EACH	6		6
×000203-	24" X 6" SEWER SERVICE CONNECTIONS	EACH	6		6
×х <b>о</b> 07204	27" X 6" SEWER SERVICE CONNECTIONS	EACH	4		4
XXOG1205	30" X 6" SEWER SERVICE CONNECTIONS	EACH	7		7

<sup>\*</sup> DENOTES SPECIALTY ITEM

**SUMMARY OF QUANTITIES** 

D 4080

9933 Roosevelt Road Westchester, Illinois 60154-2780 Phone: 708/865-0300 Fax: 708/865-1212

**BALMORAL AVENUE IMPROVEMENTS** VILLAGE OF WESTCHESTER, ILLINOIS 
 SCALE:
 NONE

 DRAWN BY:
 NAW/LEV/MK

 BOOK NO.:
 1394/1427/LS

 DATE:
 10-3-07

 E.H.E. NO.:
 838-06-16601

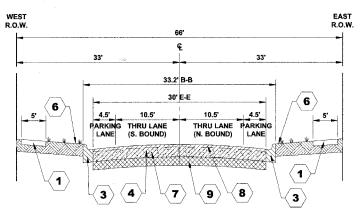
**EXISTING TYPICAL CROSS SECTION** 

BALMORAL AVENUE (STATION 1+50 TO STATION 5+20)

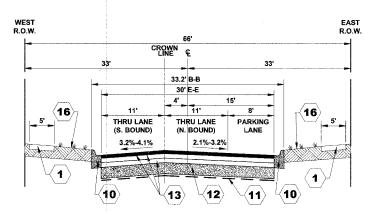
33.2' B-B 30' E-E THRU LANE THRU LANE PARKING (N. BOUND) LANE **(14)** 

PROPOSED TYPICAL CROSS SECTION

BALMORAL AVENUE (STATION 1+50 TO STATION 5+20)



**EXISTING TYPICAL CROSS SECTION** BALMORAL AVENUE (STATION 5+20 TO STATION 23+63)



PROPOSED TYPICAL CROSS SECTION BALMORAL AVENUE (STATION 5+20 TO STATION 23+63)

YEAR: 2030 PV = 3000 SU = 0 ROAD/STREET CLASSIFICATION: CLASS II PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE: P = 50 TRAFFIC FACTOR: ACTUAL TF = 0.0045 AC TYPE = PG 64-22 **SURFACE = 64-22** PG GRADE: BINDER = 64-22 SUBGRADE SUPPORT RATING:

STRUCTURAL DESIGN TRAFFIC:

1BR = 3.00 (STA. 5+20 TO 23+68)

WEST R.O.W.

FAU 2712 COOK 36 M-8003(655) 05-00069-00-FP CONTRACT NO. 83982

# TYPICAL CROSS SECTION LEGEND

#### EXISTING

PORTLAND CEMENT CONCRETE SIDEWALK, 5"

 $\langle$  2  $\rangle$ COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12

COMBINATION CONCRETE CURB & GUTTER REMOVAL

PORTLAND CEMENT CONCRETE BASE COURSE, 6" - 8"

HOT-MIX ASPHALT BINDER & SURFACE COURSE, 3" - 5"

PAVEMENT REMOVAL (10" - 12")

HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH (0" - 4")

#### **PROPOSED**

COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.12

GEOTECHNICAL FABRIC FOR GROUND STABILIZATION

**(12)** AGGREGATE SUBGRADE, 12"

HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 7"
- HOT-MIX ASPHALT SURFACE COURSE, MIX D, N50, 2"
- HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 5" (2 LIFTS) **(13**)

LEVELING BINDER (MACHINE METHOD), N50, 1"

HOT-MIX ASPHALT SURFACE COURSE, MIX D, N50, 121

SODDED PARKWAY WITH 4" TOPSOIL

HOT-MIX ASPHALT MIXTURE REQUIREMENTS				
ITEM	AC TYPE	PERCENT AIR VOIDS		
HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 7" HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50 (5")	PG 64-22/58-22 *	4% @ 50 GYR.		
HOT-MIX ASPHALT SURFACE COURSE, MIX D, N50 (2*) (IL-9.5mm)	PG 64-22	4% @ 50 GYR.		
LEVELING BINDER (MACHINE METHOD), N50	PG 64-22 *	4% @ 50 GYR.		
HOT-MIX ASPHALT SURFACE COURSE, MIX D, N50 (IL-9.5mm)	PG 64-22	4% @ 50 GYR.		
HOT-MIX ASPHALT MIXTURE FOR PATCHING POT HOLES (HOT MIX) (2") (BINDER IL-19mm)	PG 64-22 *	4% @ 50 GYR.		

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT MIXTURES IS 112 LBS/SQYD/IN

\* WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

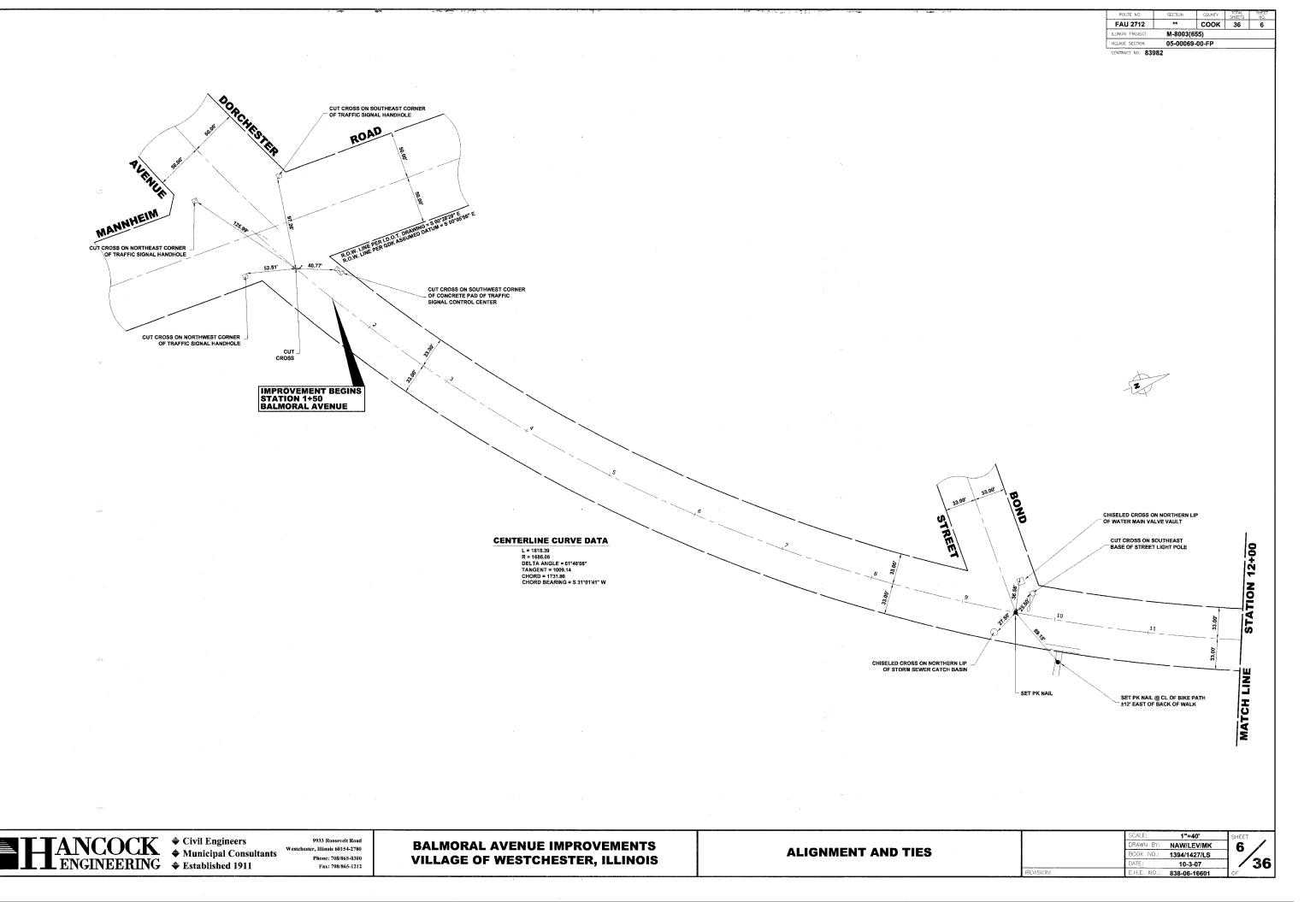
PAVEMENT CORE SUMMARY						
BORE	STATION	OFFSET	LEFT/RIGHT	BITUMINOUS	CONC. BASE	TOTAL
PC-1	6+15	8'	LEFT	4"	7"	11"
PC-2	8+73	5'	RIGHT	4"	7"	11"
PC-3	11+13	8'	LEFT	44"	7 <del>3</del> "	12"
PC-4	13+87	4'	RIGHT	3 <sup>3</sup> "	74"	11"
PC-5	17+04	8'	LEFT	33"	7"	10 <sup>3</sup> "
PC-6	20+52	6'	RIGHT	3"	73"	103"
PC-7	22+85	6'	LEFT	41"	61/2"	103"

ter, Illinois 60154-2780 Phone: 708/865-0300 Fax: 708/865-1212

**BALMORAL AVENUE IMPROVEMENTS VILLAGE OF WESTCHESTER, ILLINOIS** 

**TYPICAL CROSS SECTIONS** 

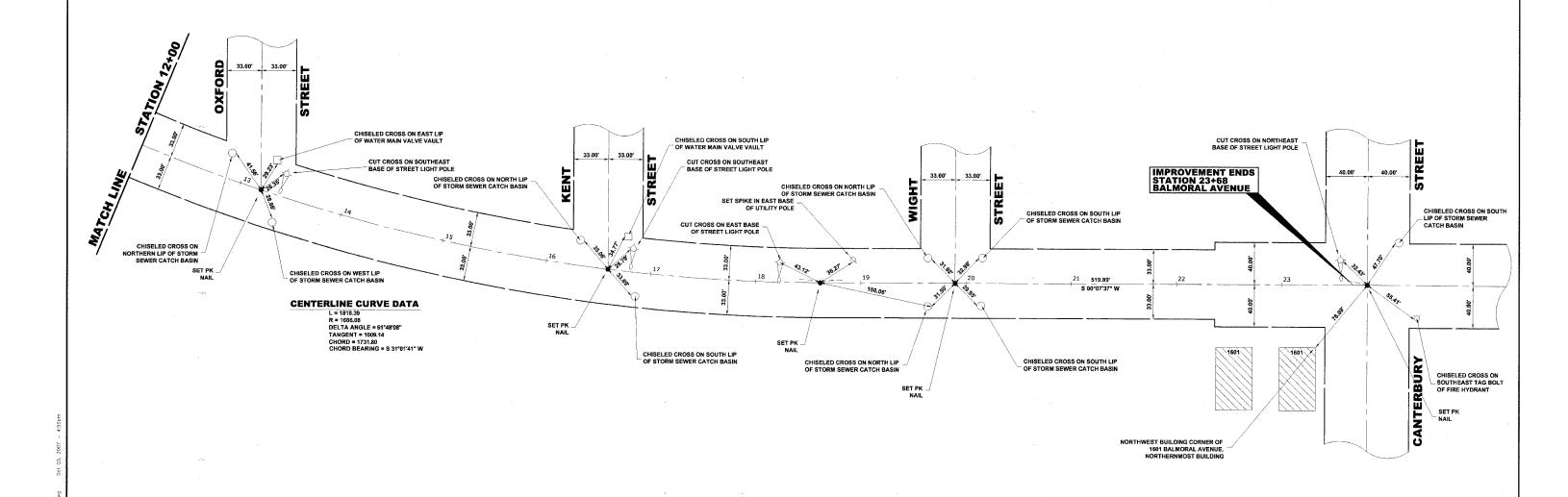
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	BOOK NO.:	1394/1427/LS	
	DATE:	10-3-07	
REVISION:	E.H.E. NO.:	838-06-16601	OF



FAU 2712 COOK 36 M-8003(655) 05-00069-00-FP

CONTRACT NO. 83982





ANCOCK

† Civil Engineers

† Municipal Consultants

† Established 1911

9933 Roosevelt Road Westchester, Illinois 60154-2780 Phone: 708/865-0300 Fax: 708/865-1212

**BALMORAL AVENUE IMPROVEMENTS VILLAGE OF WESTCHESTER, ILLINOIS** 

**ALIGNMENT AND TIES** 

SH	1"=40'	SCALE:	
7	NAW/LEV/MK	DRAWN BY:	
7.	1394/1427/LS	BOOK NO.;	
1	10-3-07	DATE:	
OF	838-06-16601	E.H.E. NO.:	EVISION:

COOK 36 8 FAU 2712 M-8003(655) 05-00069-00-FP CONTRACT NO. 83982

SYMBOL	DESCRIPTION	CODE & SIZE
RCLA	ROAD CLOSED AHEAD	W20-3 48"x48"
DA	DETOUR	W20-2 48"x48"
RC	ROAD CLOSED	R11-2 48"×30"
RC	ROAD CLOSED	R11-4 60"x30"
RC T T T	ROAD CLOSED TO THRU TRAFFIC	R11-4 60"x30"
N	NORTH	M3-1 24"X12"
S	SOUTH	M3-3 24"X12"
ВА .	BALMORAL AVE.	36"X12"
ED	END DETOUR	M4-8b 24"x18"

SYMBOL	DESCRIPTION	CODE & SIZE
Å D	DETOUR	M4 30"x24"
D	DETOUR	M4-9 30"x24"
D	DETOUR	M4-9 30"x24"
D	DETOUR	M4-9R 24"x30"
D	DETOUR	M4-9L 24"x30"
	DETOUR	M4-10R 48"X18"
D	DETOUR	M4-10L 48"X18"
		·

# NOTE:

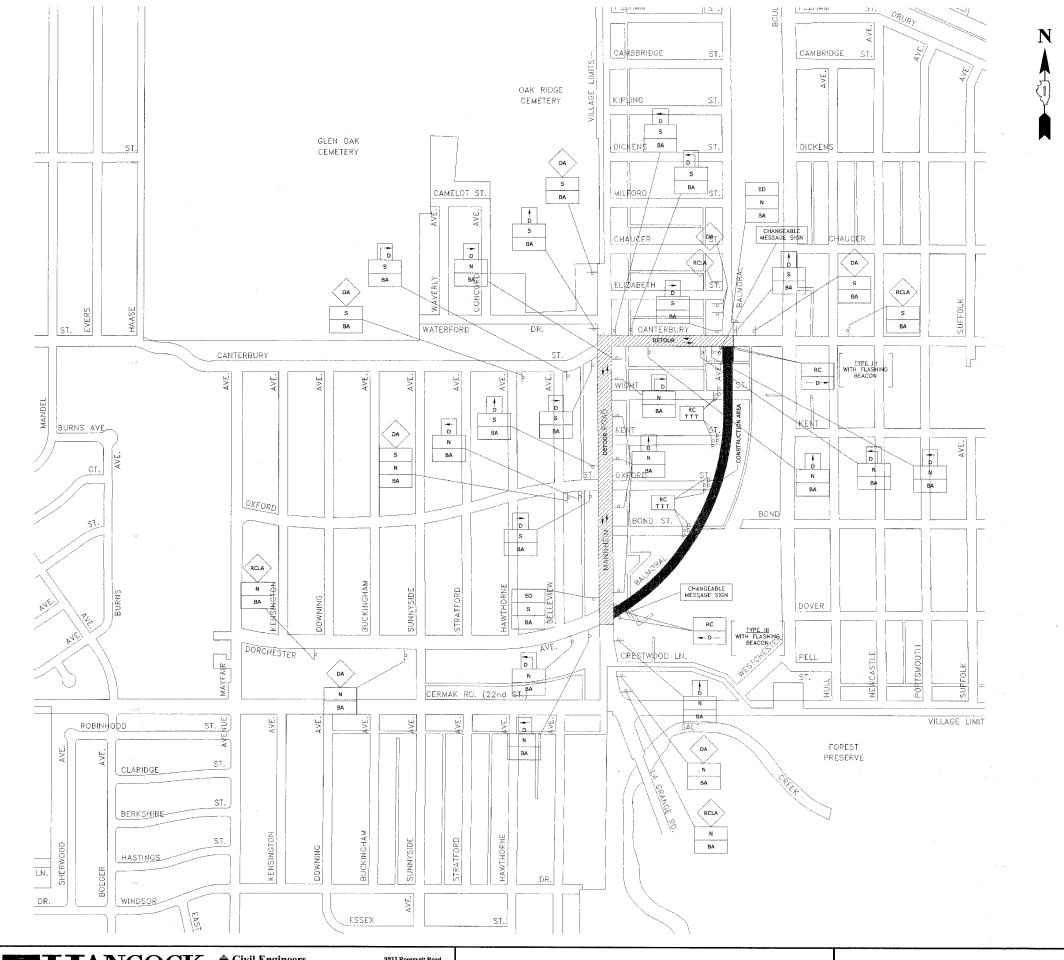
CONTRACTOR TO NOTIFY IDOT HEAD OF TRAFFIC MAINTENANCE (842)705-4470, SEVENTY-TWO HOURS IN ADVANCE OF SETTING UP DETOUR ROUTE.



Westchester, Illinois 60154-2780 Phone: 708/865-0300 Fax: 708/865-1212

**BALMORAL AVENUE IMPROVEMENTS VILLAGE OF WESTCHESTER, ILLINOIS**  **MAINTENANCE OF TRAFFIC** SIGNING LEGEND

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SION:	E.H.E. NO.:	838-06-16601	0



FAU 2712 COOK 36 9 M-8003(655) 05-00069-00-FP CONTRACT NO. 83982

- 1. ALL LOCAL DETOURS SHALL BE APPROVED BY THE VILLAGE AT LEAST 48 HOURS PRIOR TO INSTALLATION.
- 2. THE TWO (2) CHANGEABLE MESSAGE SIGNS ARE TO BE ON SITE AND FUNCTIONING FOR 2 WEEKS PRIOR TO BALMORAL AVENUE BEING CLOSED.

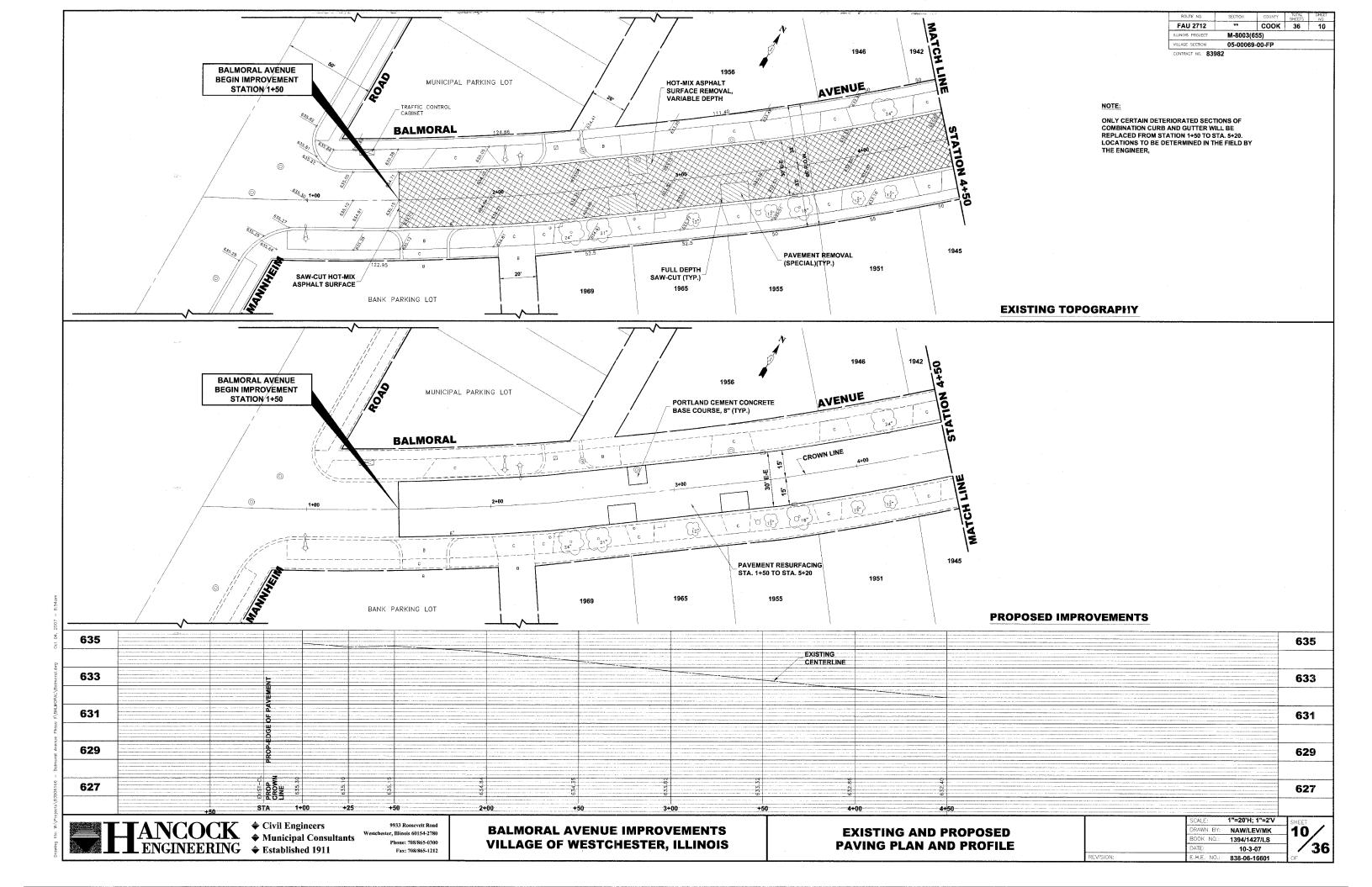
#### PROJECT STAGING AND LOCAL ACCESS

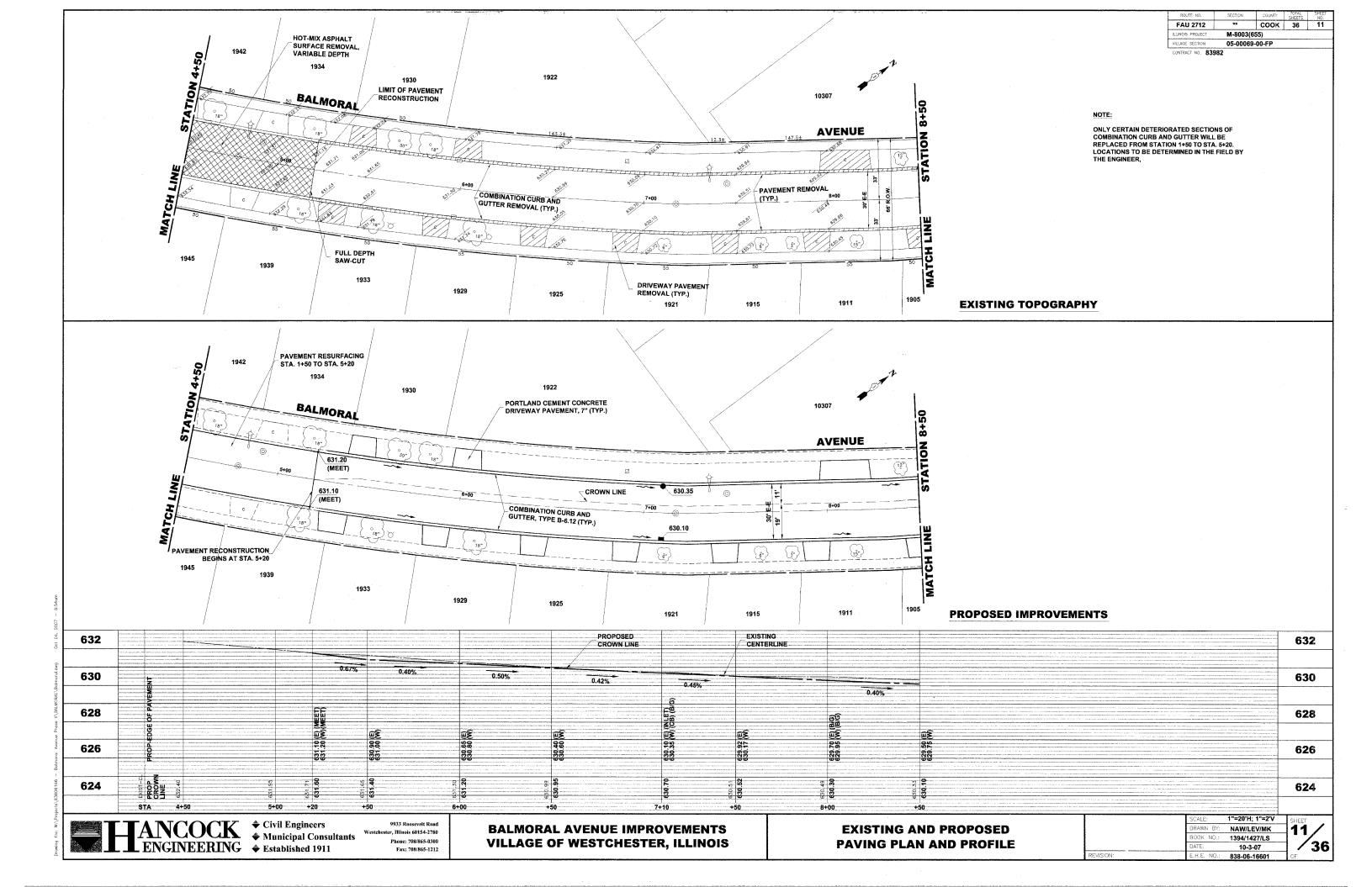
- DURING THE CONSTRUCTION OF THE PROJECT, BALMORAL AVENUE WILL BE CLOSED TO THROUGH TRAFFIC FROM MANNHEIM ROAD TO CANTERBURY STREET.
- LOCAL ACCESS WILL BE PROVIDED AT BOND STREET, OXFORD STREET, KENT STREET, AND WIGHT STREET.
- THE CONTRACTOR WILL MAINTAIN ACCESS TO THE INTERSECTIONS OF BOND STREET, OXFORD STREET, KENT STREET AND WIGHT STREET AT ALL TIMES INCLUDING DURING THE RECONSTRUCTION OF THE PAVEMENT SO THAT RESIDENTS WILL HAVE ACCESS TO THE HOUSES ON THE EAST SIDE OF BALMORAL AVENUE. THIS WILL BE PAID FOR UNDER AGGREGATE
- WHILE THE STORM SEWER, SANITARY SEWER, AND CONCRETE WORK IS BEING PERFORMED, ON-STREET PARKING WILL BE ALLOWED ON ONE SIDE OF THE STREET AND 2 THROUGH LANES TO PERMIT LOCAL ACCESS WILL BE MAINTAINED DURING NON-WORKING HOURS.
- DURING THE INSTALLATION OF THE STORM SEWER AND SANITARY SEWER, ALL TRENCHES SHALL BE SAW-CUT FULL-DEPTH TO ALLOW FOR
- DURING THE INSTALLATION OF THE CURB AND GUTTER, THE EXISTING PAVEMENT SHALL REMAIN IN PLACE. THE PAVEMENT SHALL BE SAW-CUT FULL-DEPTH 6" FROM THE EDGE OF PAVEMENT TO ALLOW FOR THE NEAT REMOVAL OF THE EXISTING CURB AND GUTTER.
- ALL REQUIRED SAW CUTTING WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE PERTINENT INDIVIDUAL PAY ITEMS IN THE
- THE TRENCHES FOR THE STORM SEWER LATERALS AND THE SANITARY SEWER REPAIRS WILL BE BACKFILLED TO THE TOP OF THE EXISTING PAVEMENT TO PROVIDE LOCAL ACCESS. THIS WILL BE PAID FOR UNDER AGGREGATE BASE COURSE, TYPE B ITEM.
- THE TRENCHES ALONG BALMORAL AVENUE FOR THE STORM AND SANITARY SEWER WILL BE BACKFILLED TO THE TOP OF THE EXISTING PAVEMENT TO PROVIDE ACCESS AT ALL DRIVEWAYS, INTERSECTIONS AND AS DIRECTED BY THE ENGINEER. THIS WILL BE PAID FOR UNDER AGGREGATE BASE COURSE, TYPE B ITEM
- THE EXCAVATION FOR THE PROPOSED PAVEMENT SHALL BEGIN AFTER THE PLACEMENT OF THE PROPOSED CONCRETE CURB AND GUTTER, DRIVEWAYS AND SIDEWALKS.

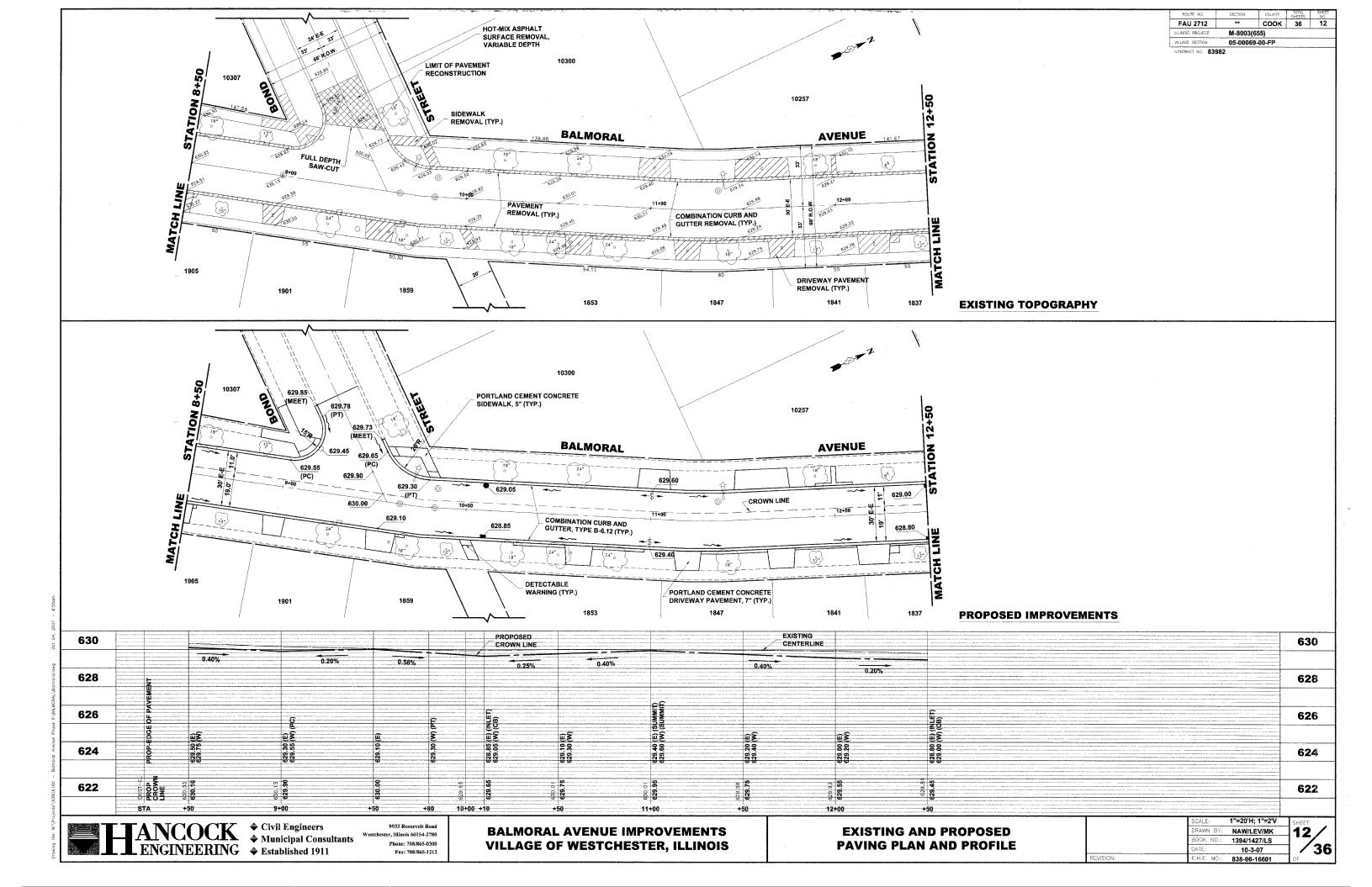
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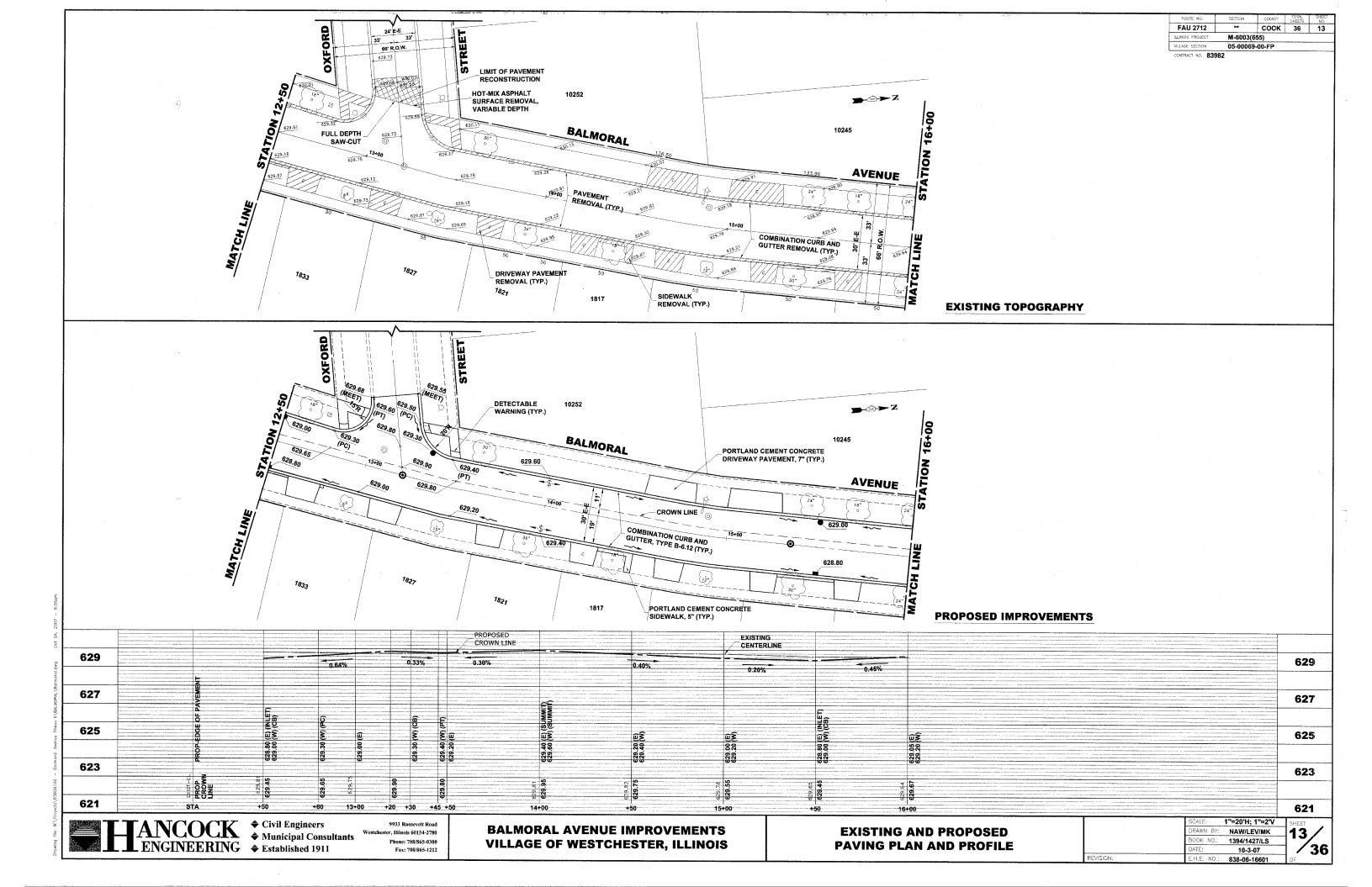
**BALMORAL AVENUE IMPROVEMENTS VILLAGE OF WESTCHESTER, ILLINOIS**  **DETOUR SIGNING FOR THROUGH TRAFFIC** WHEN BALMORAL AVENUE IS CLOSED

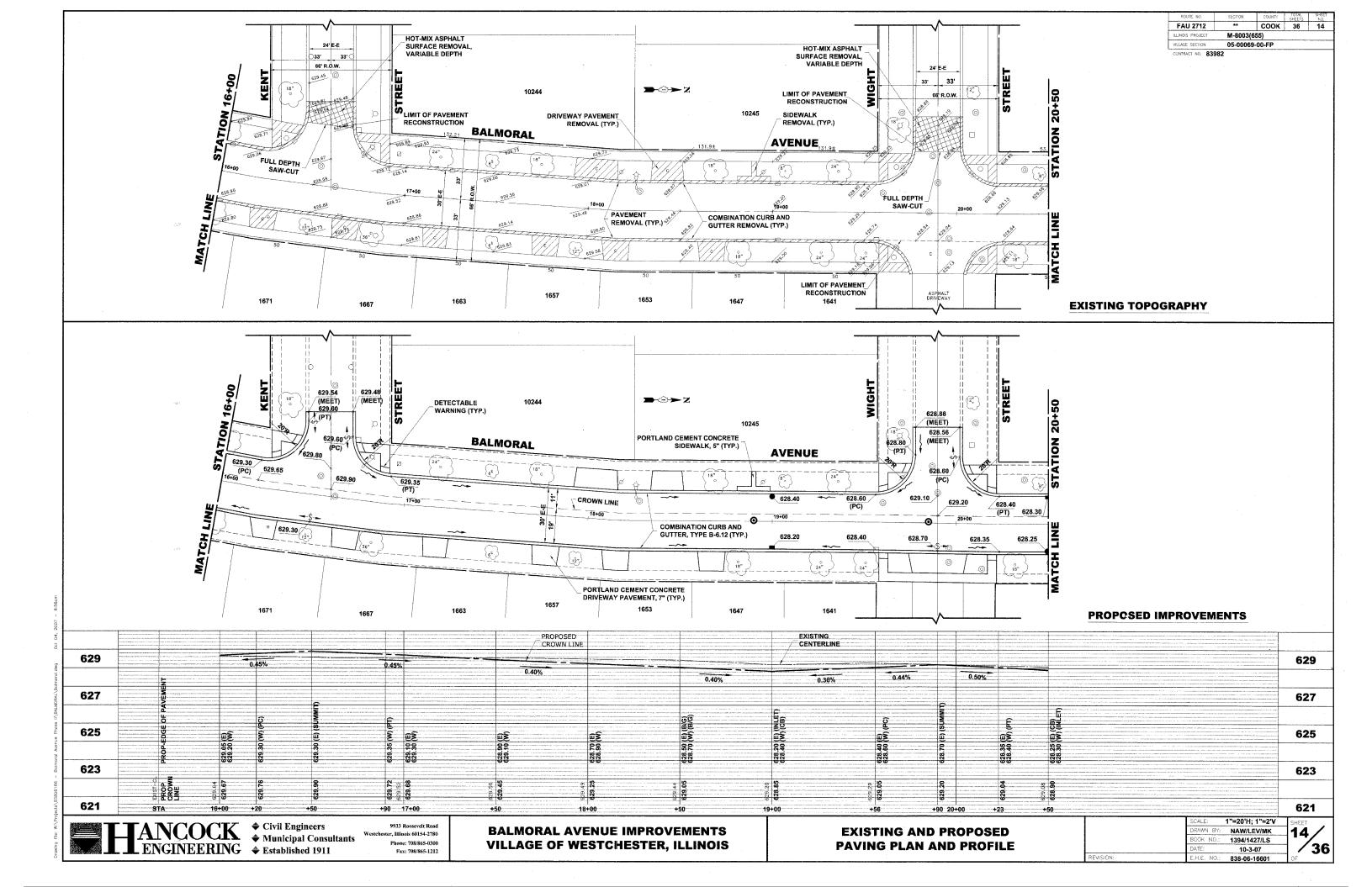
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	DATE:	10-3-07
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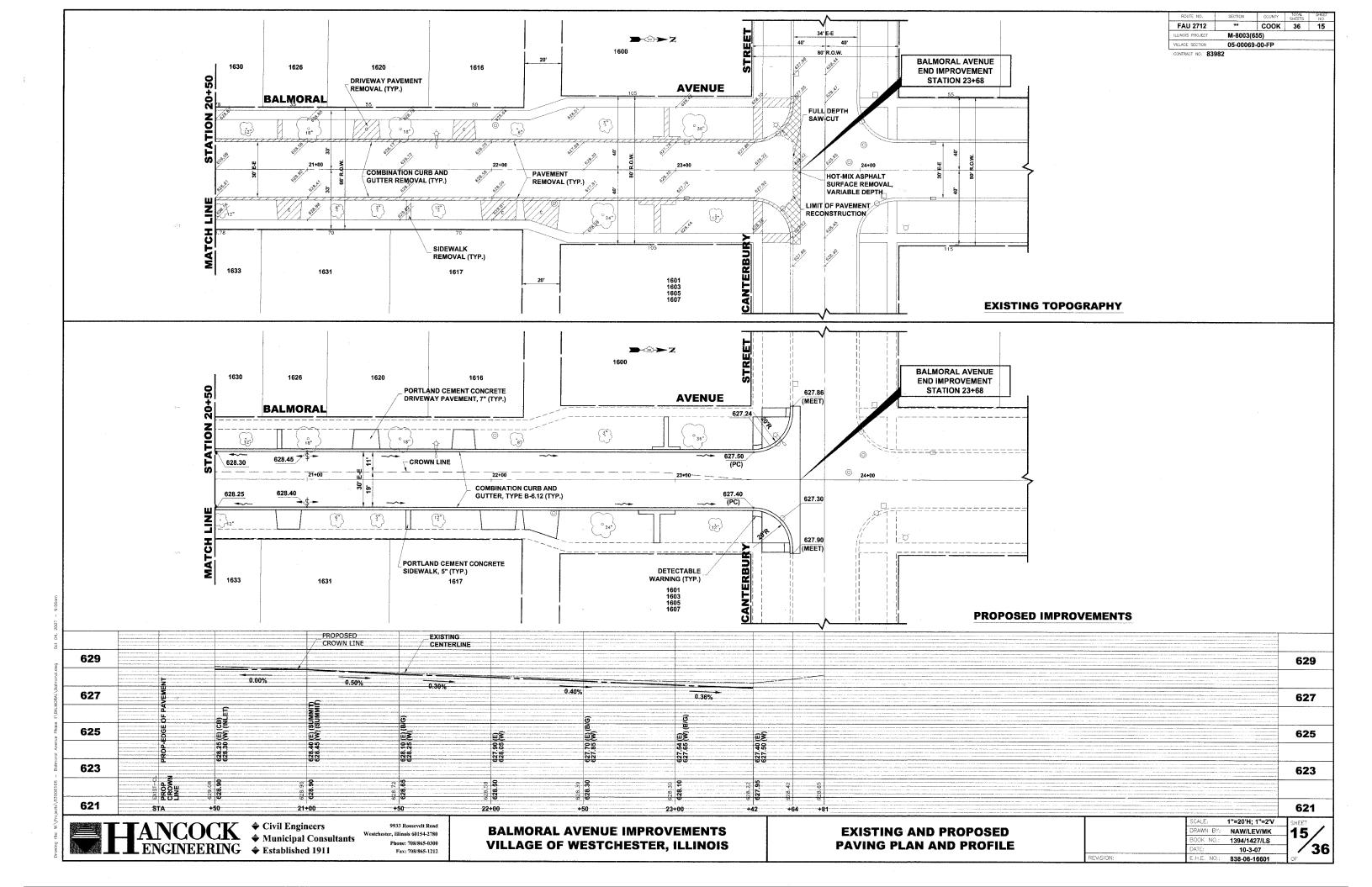




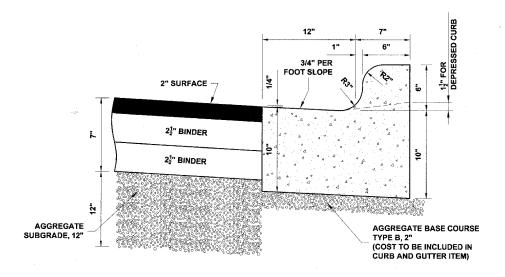




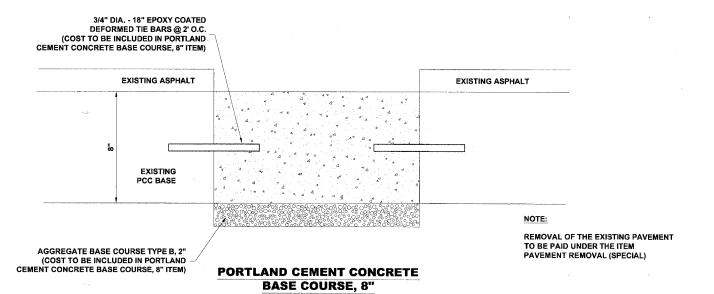




# **TYPICAL CURB AND GUTTER EXPANSION JOINT**



# **COMBINATION CONCRETE CURB & GUTTER TYPE B-6.12**



FAU 2712 соок ILLINOIS PROJECT M-8003(655) 05-00069-00-FP

#### **GENERAL NOTES**

DEPRESSED CURBS - THE TOP OF CURBS SHALL BE DEPRESSED WHERE THE CURB AND GUTTER IS CONSTRUCTED AT HANDICAP ACCESSIBLE SIDEWALK RAMPS AT ALLEY RETURNS AND STREET INTERSECTIONS, AND FOR PRIVATE DRIVES AND AS DIRECTED BY THE ENGINEER

DRAINAGE OPENINGS - AT ALL LOCATIONS WHERE CASTINGS ARE TO BE INCORPORATED IN THE CURB AND GUTTER, A 3/4" EXPANSION JOINT SHALL BE INSTALLED IN THE CURB AND GUTTER A DISTANCE OF 5 FT. FROM EACH SIDE OF THE CASTING. 2-NO. 4 RE-BARS, 9' IN LENGTH, SHALL BE INCORPORATED IN THE CONTINUOUS PORTION OF CONCRETE CURB BEHIND THE CASTING

SLIPFORM CONSTRUCTION - VERTICAL FACES MAY BE BATTERED AT THE RATE OF 3/4" PER FOOT OF HEIGHT TO AID IN SLIPFORM OPERATIONS

DEPRESSED CURB HEIGHT - THE HEIGHT OF THE DEPRESSED CURB SHALL BE 1-1/2" AT DRIVEWAYS. SEE IDOT STANDARD 424001-04 FOR HEIGHT AT SIDEWALK RAMP.

BITUMINOUS EXPANSION JOINTS - THREE QUARTER INCH (3/4") BITUMINOUS PREMOLDED INORGANIC FIBER EXPANSION JOINTS SHALL BE INSTALLED WHERE NEW SIDEWALK OR CURB AND GUTTER OR DRIVEWAY PAVEMENT ABUTS AN EXISTING CONCRETE WALK, DRIVE, OR CURB WHICH IS TO REMAIN IN PLACE, AND AT NOT LESS THAN NINETY FOOT (90') INTERVALS AT LOCATIONS WHERE CURB REPLACEMENT IS IN EXCESS OF NINETY FEET (90'); AT RADIUS POINTS, AT BOTH SIDES OF FRAMES AND GRATES WHICH FALL IN THE CURB; AND AS DIRECTED BY THE ENGINEER.

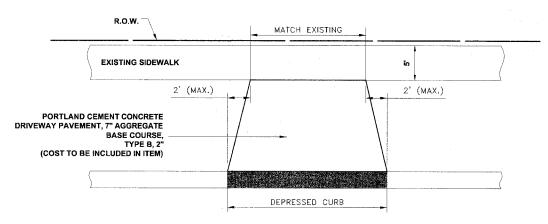
ALL EXPANSION JOINTS LOCATED IN THE CURB AND GUTTER SHALL HAVE TWO (2) THREE QUARTER INCH (3/4") DIAMETER, SMOOTH, ROUND, EPOXY COATED DOWEL BARS, EIGHTEEN INCHES (18") IN LENGTH, WITH GREASED PLASTIC END CAPS INSERTED TO ALLOW THE CURB AND GUTTER TO EXPAND AND CONTRACT LATERALLY. CONTRACTION JOINTS SHALL BE TOOLED INTO THE CURB AND GUTTER AT INTERVALS NOT TO EXCEED FIFTEEN FEET (15'). THESE CONTRACTION JOINTS SHALL BE SAW CUT TO A DEPTH OF TWO INCHES (2") WITHIN TWENTY-FOUR (24) HOURS OF CONCRETE PLACEMENT. THE COST OF THE ABOVE WORK SHALL BE INCLUDED INT THE RESPECTIVE ITEMS FOR CONCRETE INSTALLATION.

#### **CURB AND GUTTER REMOVAL**

THE COSTS FOR REMOVAL OF ANY ASPHALT OVERLAY THAT EXTENDS INTO THE GUTTER PORTION OF THE CURB AND GUTTER WILL BE INCLUDED IN THE PRICE FOR COMBINATION CURB AND GUTTER REMOVAL

#### **UNDERCUT AND POROUS GRANULAR EMBANKMENT (PGE)**

A QUANTITY OF POROUS GRANULAR EMBANKMENT, SUBGRADE (PGES), HAS BEEN PROVIDED FOR USE IF THE EXISTING SOILS ARE UNSUITABLE OR UNSTABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGES WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHALL BE TESTED WITH A STATIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.03 AND THE UNDERCUT GUIDELINES IN THE IDOT SUBGRADE STABILITY MANUAL. IF UNSUITABLE MATERIAL IS ENCOUNTERED, THE SOIL SHALL BE REMOVED AND REPLACED WITH PGES AS DETERMINED BY THE ENGINEER. IF UNSUITABLE MATERIAL IS NOT ENCOUNTERED, THEN THE QUANTITY OF PGES WILL REMAIN UNUSED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR. THE 3-INCH CAPPING AGGREGATE (CA-6 GRADATION) WILL NOT BE REQUIRED SINCE AGGREGATE BASE COURSE WILL BE PLACED ON TOP OF THE PGE.



**DRIVEWAY DETAIL** 



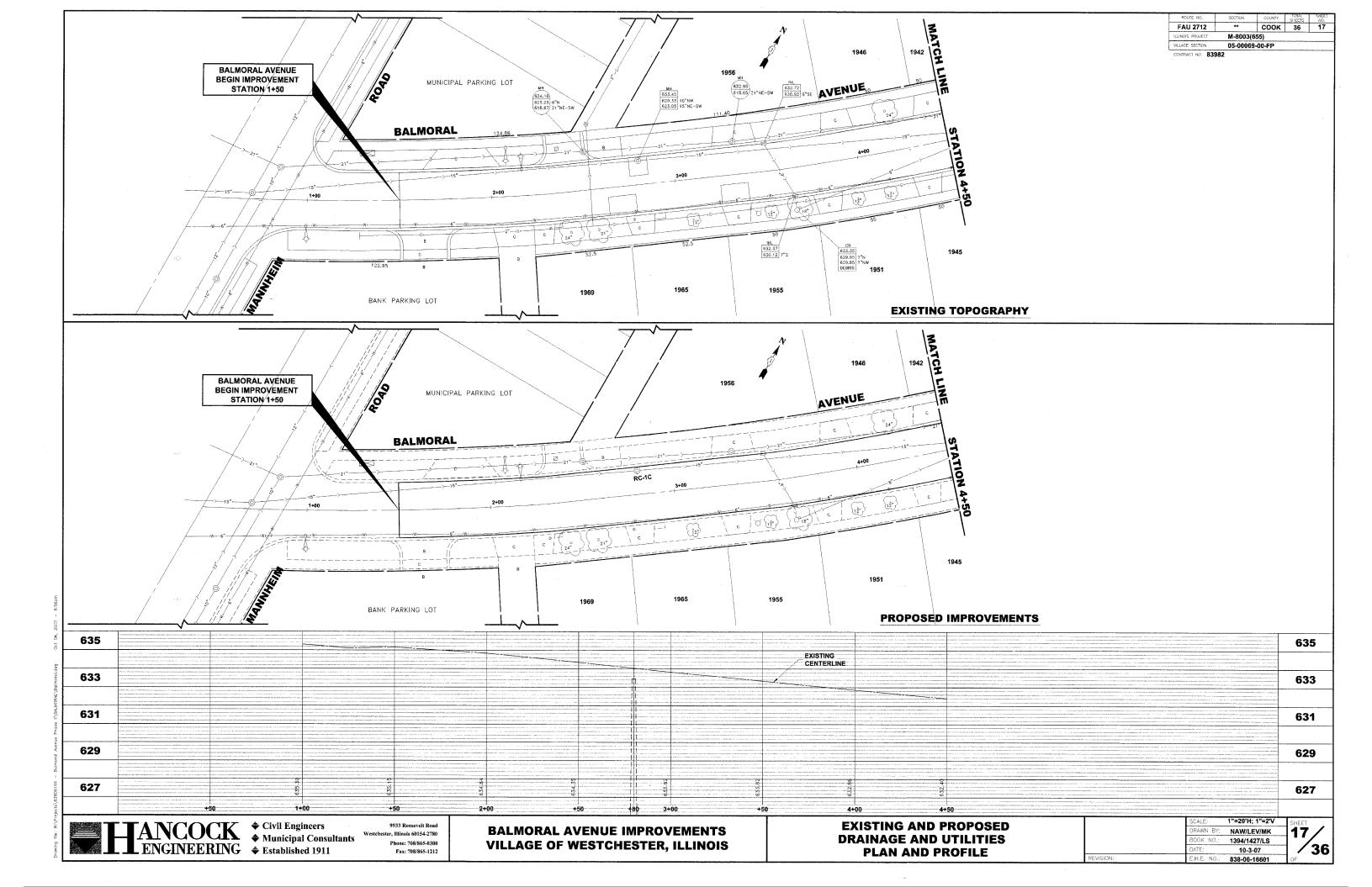
**♦** Civil Engineers

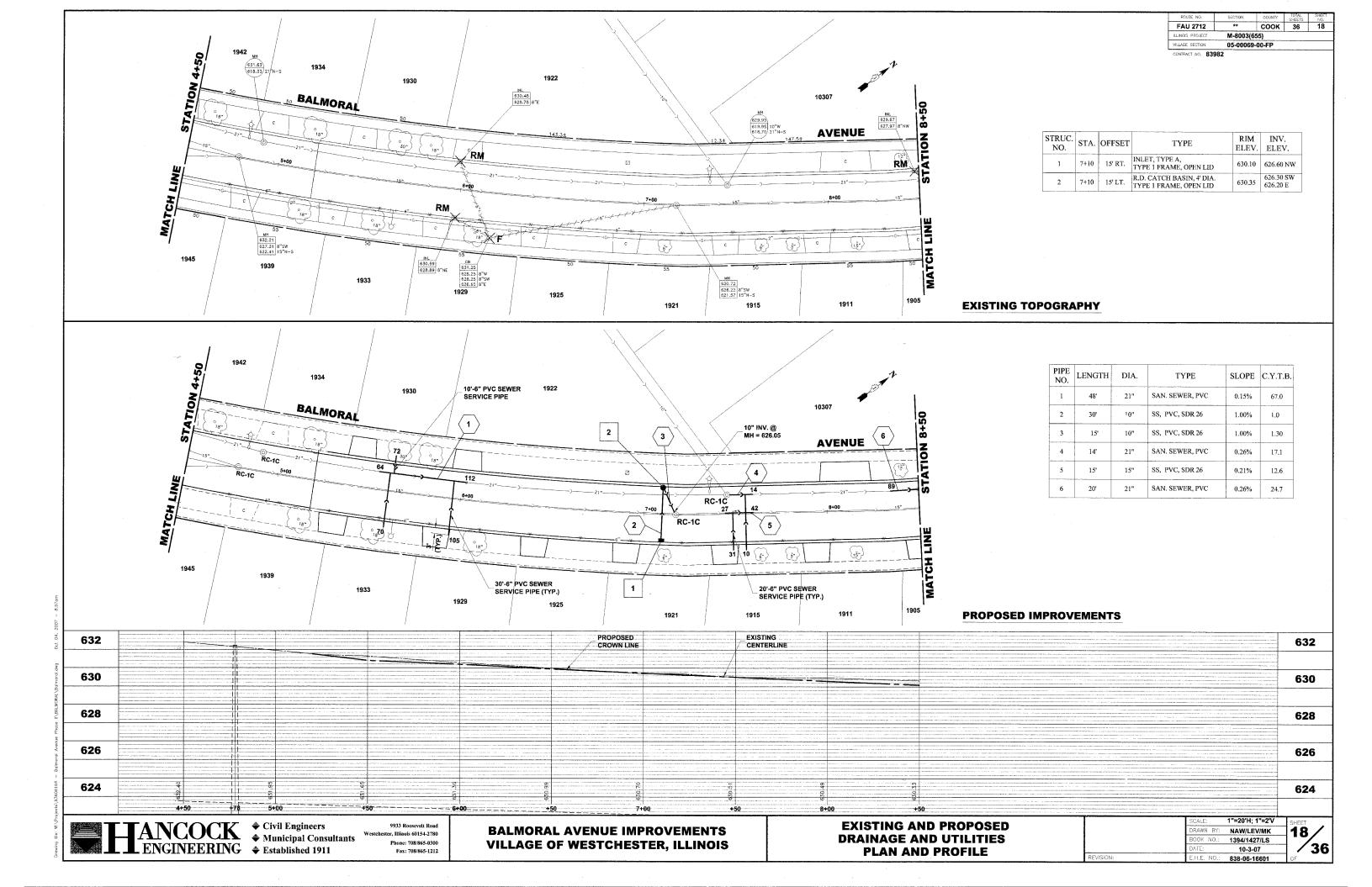
ter, Illinois 60154-2780 Phone: 708/865-0300 Fax: 708/865-1212

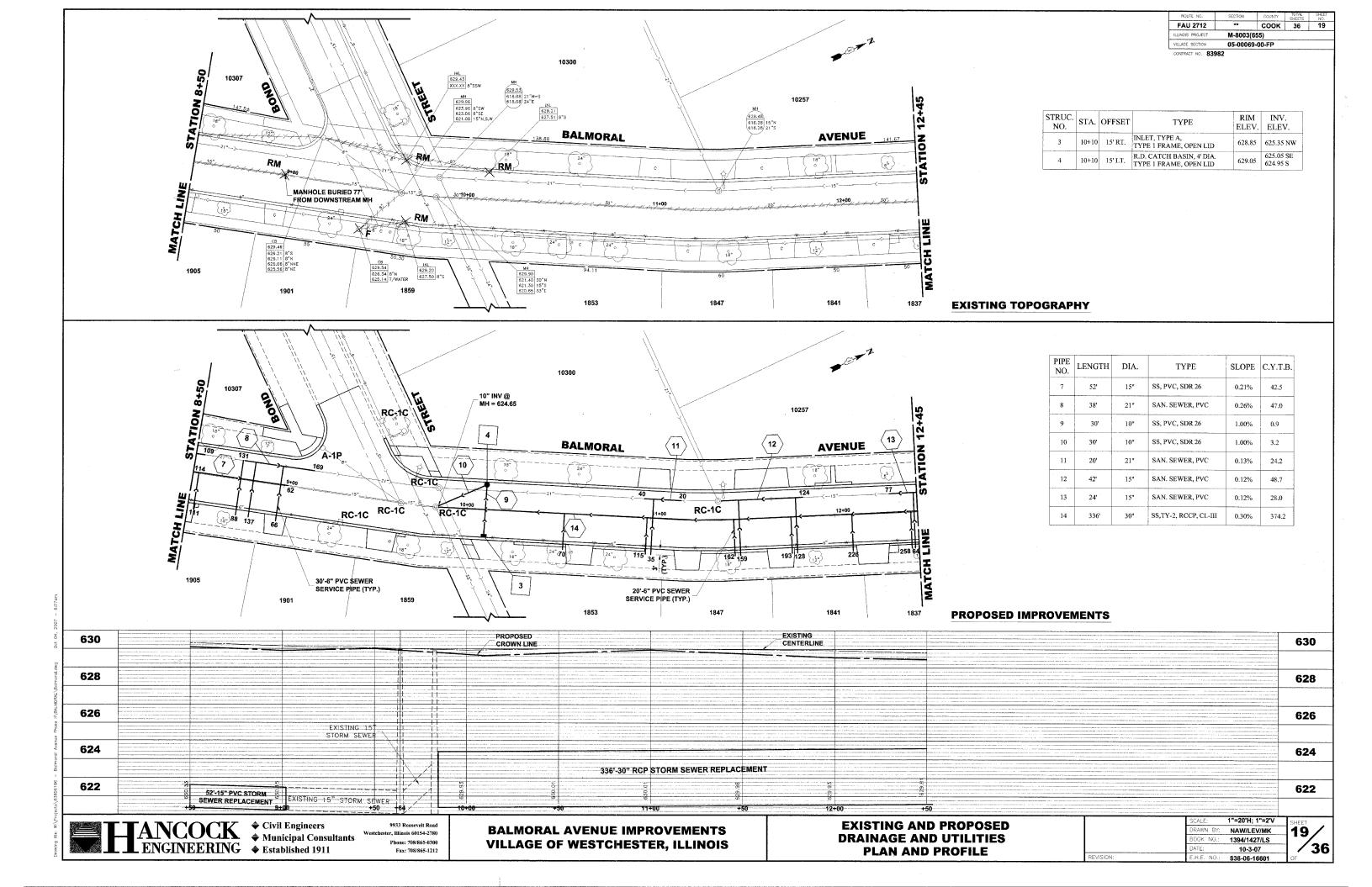
**BALMORAL AVENUE IMPROVEMENTS VILLAGE OF WESTCHESTER, ILLINOIS** 

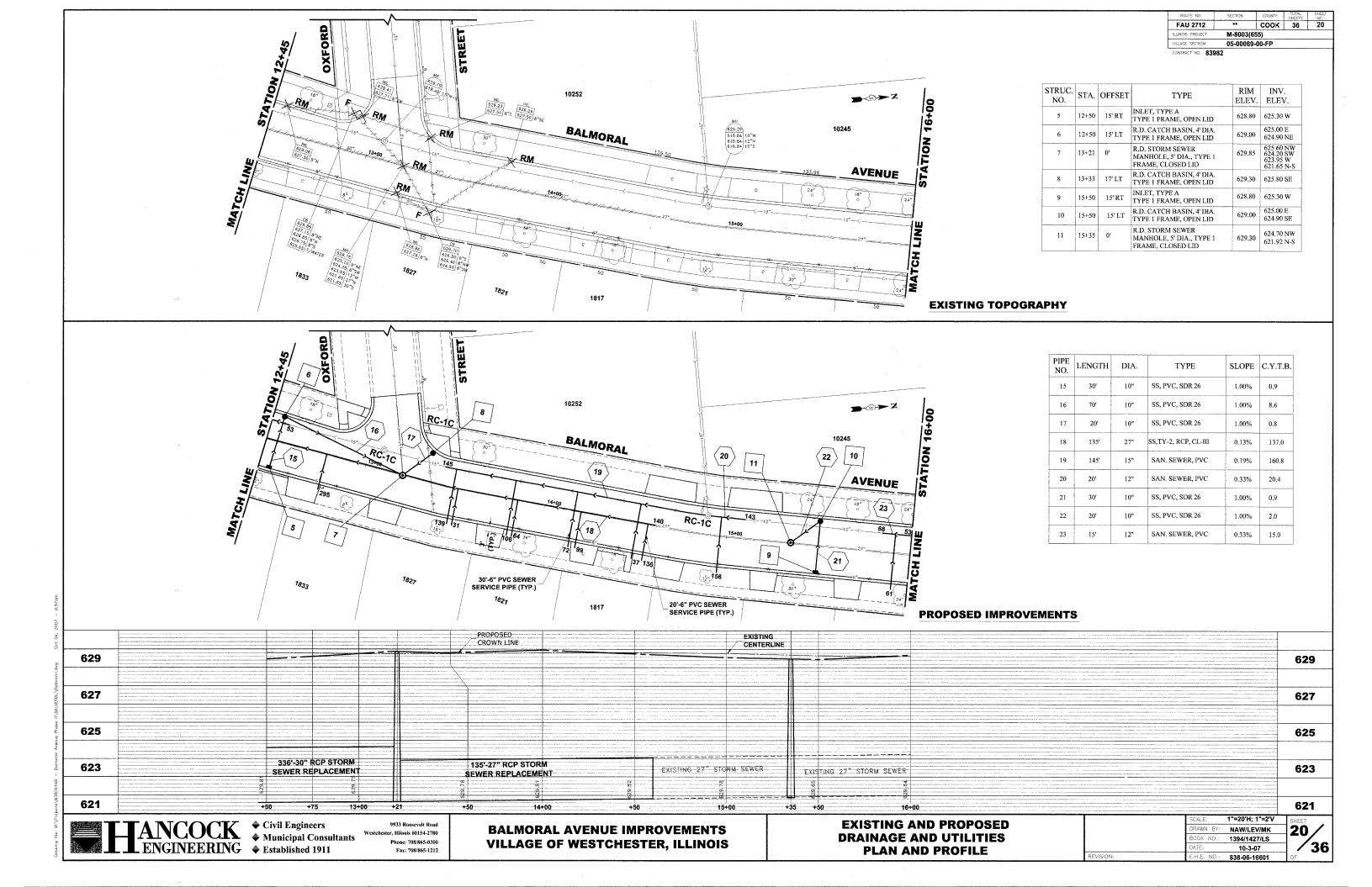
**ROADWAY DETAILS** 

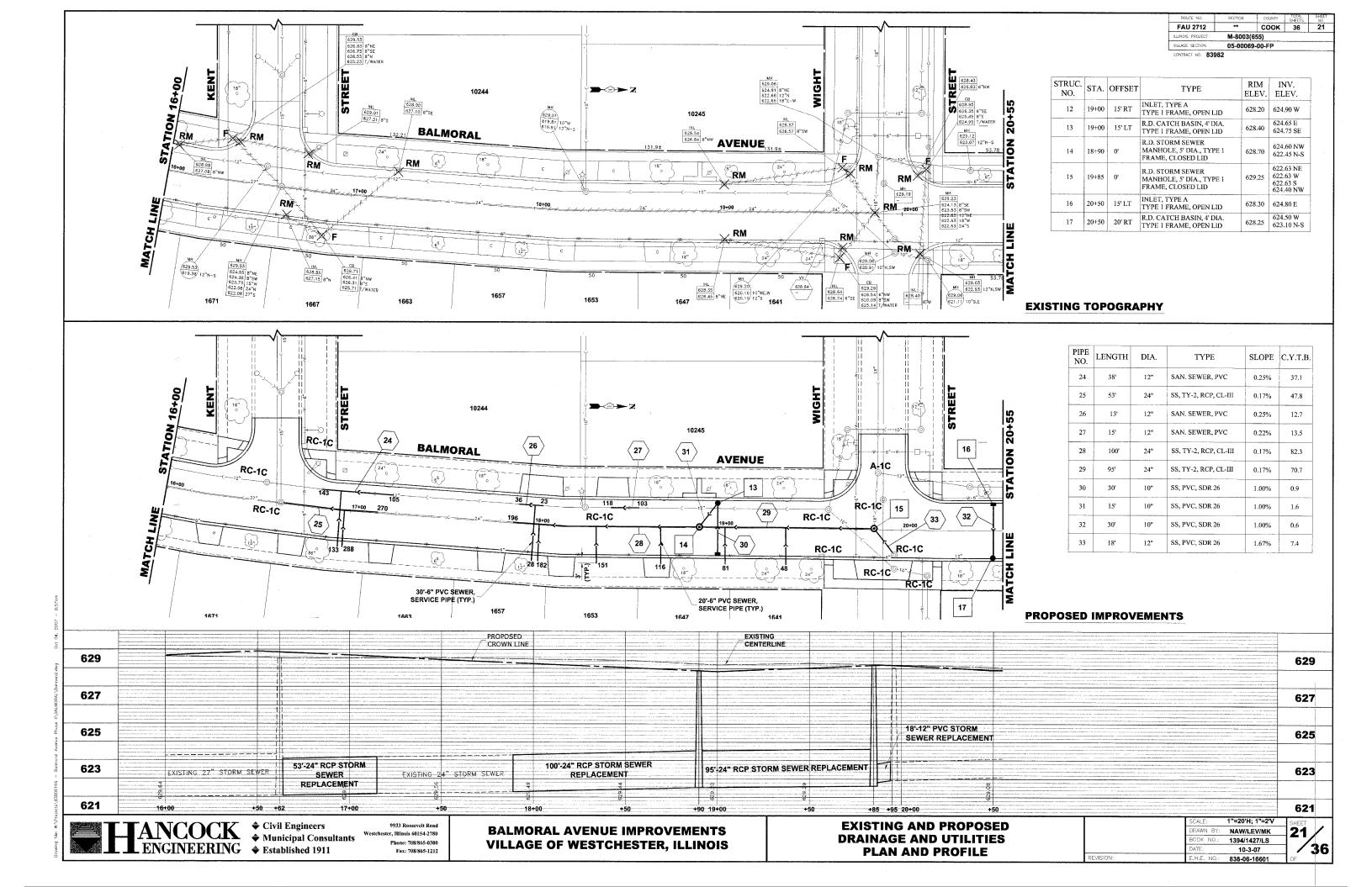
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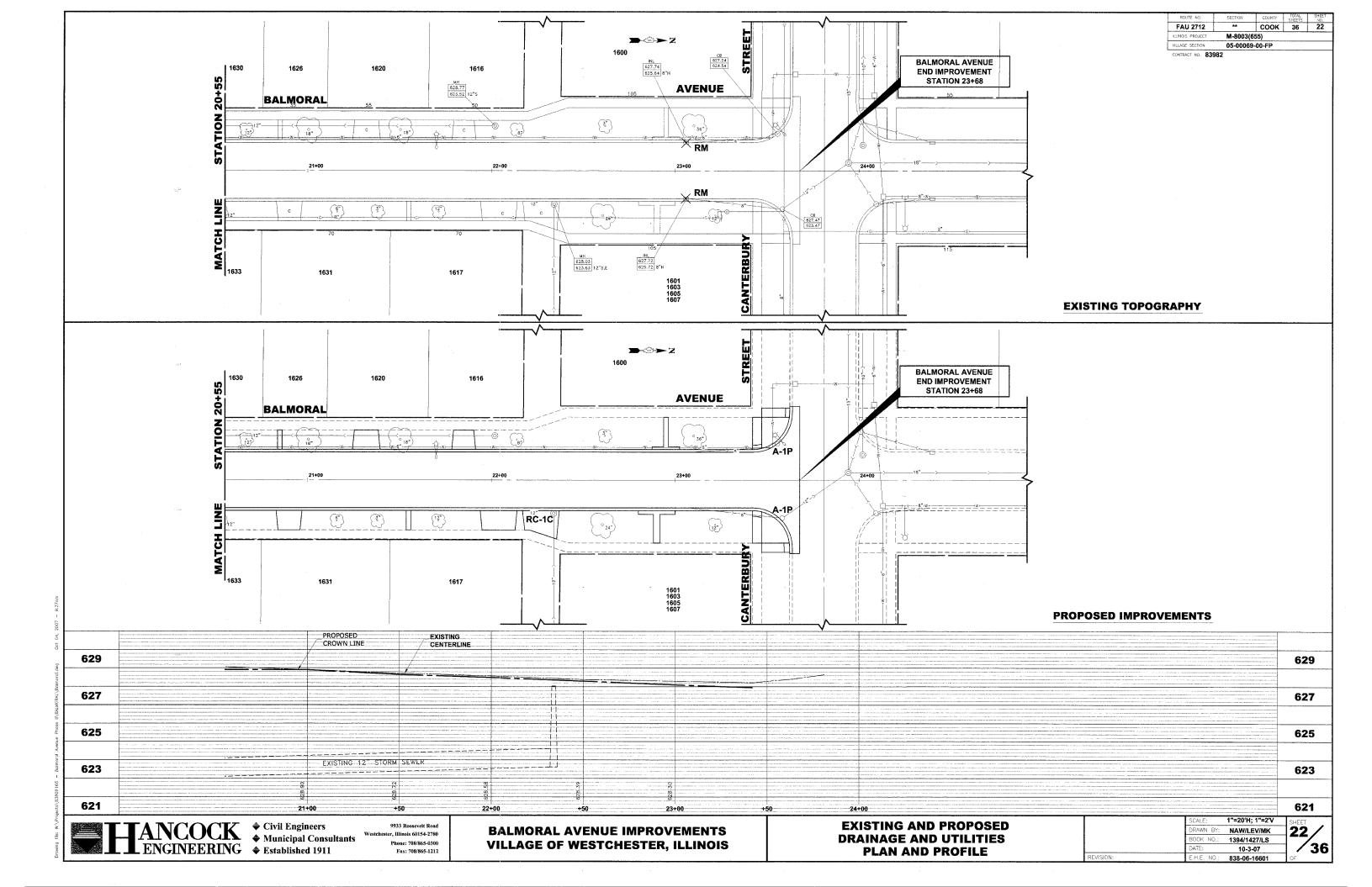






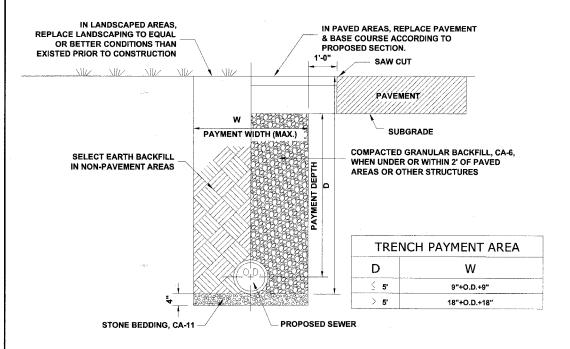






# **TYPICAL PVC SEWER TRENCH DETAIL**

PROPOSED SEWER



# M.W.R.D.G.C. GENERAL NOTES

- THE MWRDGC LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF WORK AT (708)
- **ELEVATION DATUM IS U.S.G.S**
- ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.
- ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE INTO THE STORM SEWER SYSTEM.
- ALL PVC STORM, COMBINED, AND SANITARY SEWER PIPE JOINTS SHALL CONFORM TO ASTM D-3139, AND THE PIPE SHALL CONFORM TO ASTM D-2241. ALL PVC SEWER PIPE SHALL BE SDR 26. ALL RCCP SEWER TO MEET ASTM C-76 AND JOINTS SHALL CONFORM TO ASTM C-443.
- ALL SANITARY SEWER CONSTRUCTION, AND ALSO STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS, REQUIRES STONE BEDDING 1/2" TO 1" IN SIZE, WITH A MINIMUM THICKNESS EQUAL TO 1/4 THE OUTSIDE DIAMETER OF THE SEWER PIPE. BUT NOT LESS THAN FOUR INCHES (4") NOR MORE THAN EIGHT INCHES (8").
  MATERIAL SHALL BE CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC PIPE.
- "BAND SEAL" OR SIMILAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPE OF DISSIMILAR MATERIALS.
- WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS
- 1) CIRCULAR SAW-CUT OF SEWER MAIN BY MECHANICAL CORING MACHINE, AND PROPER INSTALLATION OF HUB-WYE SADDLE OR HUB-TEE SADDLE, IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS
- 2) REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION. AFTER THE WYE OR TEE BRANCH IS INSERTED, CONCRETE SHALL BE PLACED OVER THE BROKEN AREA TO A MINIMUM THICKNESS OF 4" AND TO A DIMENSION OF 8" IN ALL DIRECTIONS
- 3) USING PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING. USE "BAND SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR THE INSTALLATION.
- WHEREVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATER MAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATER MAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/ COMBINED SEWERS AND WATER MAINS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATER MAIN LOCATED AT THE OPPOSITE SIDE ON BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED ABOVE CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS.
- ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED
  - ALL SANITARY MANHOLES (AND STORM MANHOLES IN COMBINED SEWER AREAS) SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE
- ALL ABANDONED SANITARY SEWERS SHALL BE PLUGGED AT BOTH ENDS WITH A MINIMUM OF TWO (2) FOOT LONG, NON-SHRINK CONCRETE/MORTAR PLUG
- ALL INLET AND OUTLET PIPES OF SANITARY SEWER MANHOLES AND OTHER UNDERGROUND STRUCTURES (IN COMBINED SEWER AREAS, ALSO INCLUDED ARE ALL COMBINED /STORM SEWER MANHOLES, CATCH BASINS, INLETS, AND UNDERGROUND DETENTION STORAGE STRUCTURES) SHALL BE JOINED WITH WATERTIGHT FLEXIBLE RUBBER CONNECTORS CONFORMING TO ASTM C-443 AND C-923 WITH STAINLESS STEEL BAND.

# **DRAINAGE AND UTILITIES NOTES**

THE LOCATIONS OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, SANITARY SEWERS, SEWER SERVICES, TELEPHONE LINES, COMMUNICATION LINES, ELECTRIC LINES, GAS MAINS, AND WATER SERVICES ARE APPROXIMATE AND THEIR SPECIFIC LOCATIONS ARE TO BE DETERMINED IN THE FIELD AT NO COMPENSATION TO THE CONTRACTOR

FAU 2712

TRACT NO. 83982

COOK 36

M-8003(655 05-00069-00-FI

COORDINATION OF ALL UTILITY WORK INVOLVED WITHIN THE CONSTRUCTION AREAS SHALL BE SUBJECT TO DISCUSSION AND CLARIFICATION AT A PRECONSTRUCTION MEETING

WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINAGE STRUCTURES OR SEWERS UNTIL PERMANENT CONNECTIONS TO SEWERS ARE BUILT AND IN SERVICE. THIS WORK SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

WHEN, DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIALS ARE DEPOSITED IN THE FLOW LINES OF GUTTERS OR DRAINAGE STRUCTURES SO THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, THE OBSTRUCTING MATERIALS SHALL BE REMOVED AT THE CLOSE OF EACH WORK DAY. AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES ARE TO BE FREE OF ALL DIRT, DEBRIS, AND OBSTRUCTING MATERIALS. THE WORK SPECIFIED ABOVE WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT.

ALL COSTS INVOLVED IN CONNECTING OF PROPOSED STORM SEWERS AND STORM STRUCTURES TO EXISTING STORM SEWERS OR PROPOSED STORM SEWERS SHALL BE CONSIDERED INCIDENTAL TO THE PROPOSED ITEMS

THE TYPE OF FRAMES AND GRATES REQUIRED FOR ALL CATCH BASINS AND MANHOLES LISTED IN THE SUMMARY OF QUANTITIES MAY BE FOUND ON THE PLANS AT THEIR RESPECTIVE LOCATIONS. WHERE LIDS ARE CALLED FOR ON THE PLANS, THEY SHALL BE IN ACCORDANCE WITH ARTICLE 604.01 OF THE STANDARD SPECIFICATIONS AND THE TERM LID IS USED IN LIEU OF GRATE.

ON ALL IMPROVEMENTS, THE FRAMES AND LIDS OF EXISTING CATCH BASINS, INLETS, MANHOLES, AND VALVE VAULTS WHICH ARE TO BE ABANDONED DUE TO CONSTRUCTION OF THIS IMPROVEMENT ARE TO REMAIN THE PROPERTY OF THE VILLAGE OF WESTCHESTER AND BE SALVAGED. THE CONTRACTOR IS TO DELIVER FRAMES AND LIDS TO THE VILLAGE OF WESTCHESTER PUBLIC WORKS YARD LOCATED AT 10300 ROOSEVELT ROAD.

ANY COSTS FOR SHEETING OR SHORING REQUIRED FOR THE STORM SEWER AND SANITARY SEWER INSTALLATION OR OTHER CONSTRUCTION ELEMENTS REQUIRING RELATIVELY DEEP EXCAVATIONS SHALL BE SHALL BE INCLUDED IN THE PRATICULAR PAYMENT ITEM AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ANY SUPPLEMENTAL WORK ASSOCIATED WITH THE MAINTENANCE OF TRENCH SIDES OR OTHER EXCAVATED

UNLESS OTHERWISE SPECIFIED, ABANDONED SEWERS AND DRAINS, AS DESIGNATED BY THE ENGINEER, SHALL BE PLUGGED WITH CLASS "SI" CONCRETE OR BRICK AND SUITABLE MORTAR TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE PAY ITEMS FOR REMOVING AND/OR FILLING THE VARIOUS TYPES OF STRUCTURES.

SEWER PIPE INSTALLED ON THIS PROJECT SHALL CONFORM TO THE FOLLOWING STANDARD:

#### **TYPE OF PIPE MATERIAL STANDARD** JOINT STANDARD

REINFORCED CONCRETE PIPE ASTM C-76 ASTM C-381 POLYVINYLCHLORIDE PIPE (6"-12") ASTM D-2241 **ASTM D-3139** POLYVINYLCHLORIDE PIPE (6".15" & 21") ASTM D-3034 **ASTM D-3212** 

FINAL ADJUSTMENT OF ALL STRUCTURES IN THE PAVEMENT, INCLUDING THOSE IN THE PROPOSED BASE COURSE, SHALL NOT BE COMPLETED UNTIL AFTER THE PLACEMENT OF THE HOT-MIX ASPHALT BINDER COURSE.

THE AREA WITHIN THE ROUNDOUT SHALL BE FILLED WITH CRUSHED STONE AND A MINIMUM OF 1-1/2" THICK BITUMINOUS MATERIAL APPROVED BY THE ENGINEER. COST IS TO BE INCLUDED IN THE RESPECTIVE PAY ITEM FOR THE NEW, ADJUSTED OR RECONSTRUCTED STRUCTURE.

A 3 FOOT PIECE OF PIPE UNDERDRAIN SHALL BE INSTALLED IN EACH DIRECTION PARALLEL TO THE CURB AND **GUTTER AT EACH DRAINAGE STRUCTURE** 

# TYPICAL RCCP SEWER TRENCH DETAIL

ENGINEERING \$ Established 1911

STONE BEDDING, CA-11

Municipal Consultants

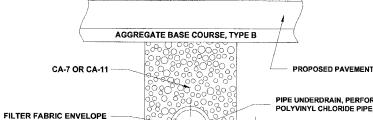
9933 Roosevelt Road Westchester, Illinois 60154-2780 Phone: 708/865-0300 Fax: 708/865-1212

**BALMORAL AVENUE IMPROVEMENTS VILLAGE OF WESTCHESTER, ILLINOIS** 

**DRAINAGE & UTILITY DETAILS** 

	SCALE:	NONE	SHEE
	DRAWN BY:	NAW/LEV/MK	21
	BOOK NO.:	1394/1427/LS	<b>-</b>
	DATE:	10-3-07	7 /
EVISION:	E.H.E. NO.:	838-06-16601	OF





SECTION

PIPE UNDERDRAIN, PERFORATED POLYVINYL CHLORIDE PIPE, 6"

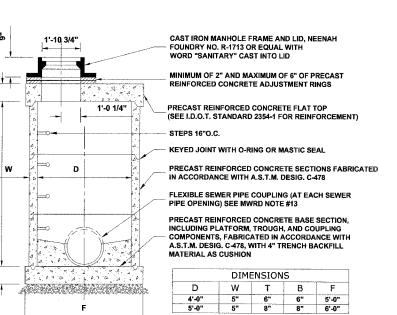
IN ADDITION TO THE REQUIREMENTS OF ARTICLE 601.01 OF THE STANDARD SPECIFICATIONS, THE PIPE UNDERDRAINS, PERFORATED PVC PIPE 6" SHALL INCLUDE THE COST FOR FURNISHING AND PLACING

THE REQUIRED BEDDING AND BACKFILL MATERIAL, FABRIC ENVELOPE, AND THE COST FOR MATERIALS.

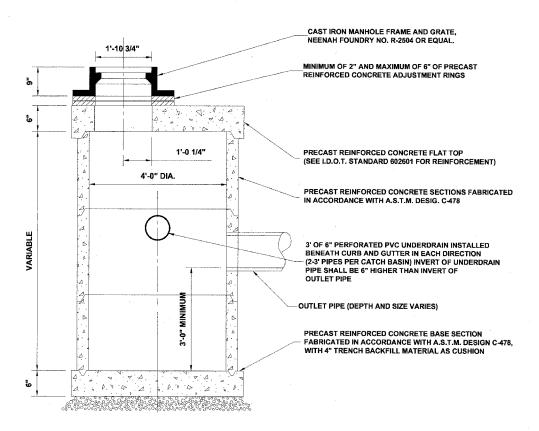
INVERT ELEVATION TO BE 6" HIGHER THAN INVERT P.C.C. GROUT

CONNECTION TO STRUCTURE

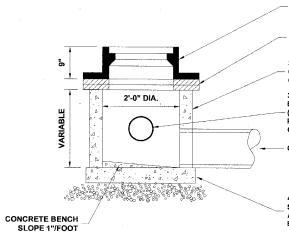
# PIPE UNDERDRAIN DETAIL



### **RESTRICTED DEPTH SANITARY MANHOLE**



**RESTRICTED DEPTH CATCH BASIN** 



**INLET, TYPE A** 

CAST IRON CATCH BASIN FRAME & GRATE, NEENAH FOUNDRY NO. R-2504 OR EQUAL. MINIMUM OF 2" AND MAXIMUM OF 6" PRECAST REINFORCED CONCRETE ADJUSTMENT RINGS 3" THICK PRECAST REINFORCED CONCRETE SECTION FABRICATED IN COMPLIANCE WITH A.S.T.M. DESIG. C-478 3' OF 6" PERFORATED PVC UNDERDRAIN INSTALLED BENEATH CURB AND GUTTER IN EACH DIRECTION (2-3' PIPES PER INLET) INVERT OF UNDERDRAIN PIPE SHALL BE 6" HIGHER THAN INVERT OF OUTLET PIPE (SIZE VARIES) 4" THICK PRECAST REINFORCED CONCRETE BASE SECTION FABRICATED IN COMPLIANCE WITH A.S.T.M. DESIG. C-478, WITH 4" OF TRENCH

**BACKFILL MATERIAL AS CUSHION** 

CAST IRON MANHOLE FRAME AND LID, NEENAH FOUNDRY NO. R-1713 OR EQUAL WITH WORD "STORM" CAST INTO LID 1'-10 3/4" MINIMUM OF 2" AND MAXIMUM OF 6" OF PRECAST 1'-0 1/4" 

PRECAST REINFORCED CONCRETE FLAT TOP (SEE I.D.O.T. STANDARD 2354-1 FOR REINFORCEMENT) STEPS 16"O.C. KEYED JOINT WITH 0-RING OR MASTIC SEAL PRECAST REINFORCED CONCRETE SECTIONS FABRICATED IN ACCORDANCE WITH A.S.T.M. DESIG. C-478 REMOVE TOP HALF OF PIPE THROUGH MANHOLE, POUR CONCRETE BENCH AROUND LOWER HALF AND SLOPE UPWARDS 3" TO SIDES PRECAST REINFORCED CONCRETE FLOOR FABRICATED IN ACCORDANCE WITH A.S.T.M. DESIG. C-478, WITH 4" TRENCH BACKFILL MATERIAL AS CUSHION

DIMENSIONS T D W В 5" 6" 6" 5'-0" 5" 8" 8" 6'-0" 4'-0"

#### **RESTRICTED DEPTH STORM MANHOLE**

ANCOCK CIVIL Engineers

Municipal Consultants 

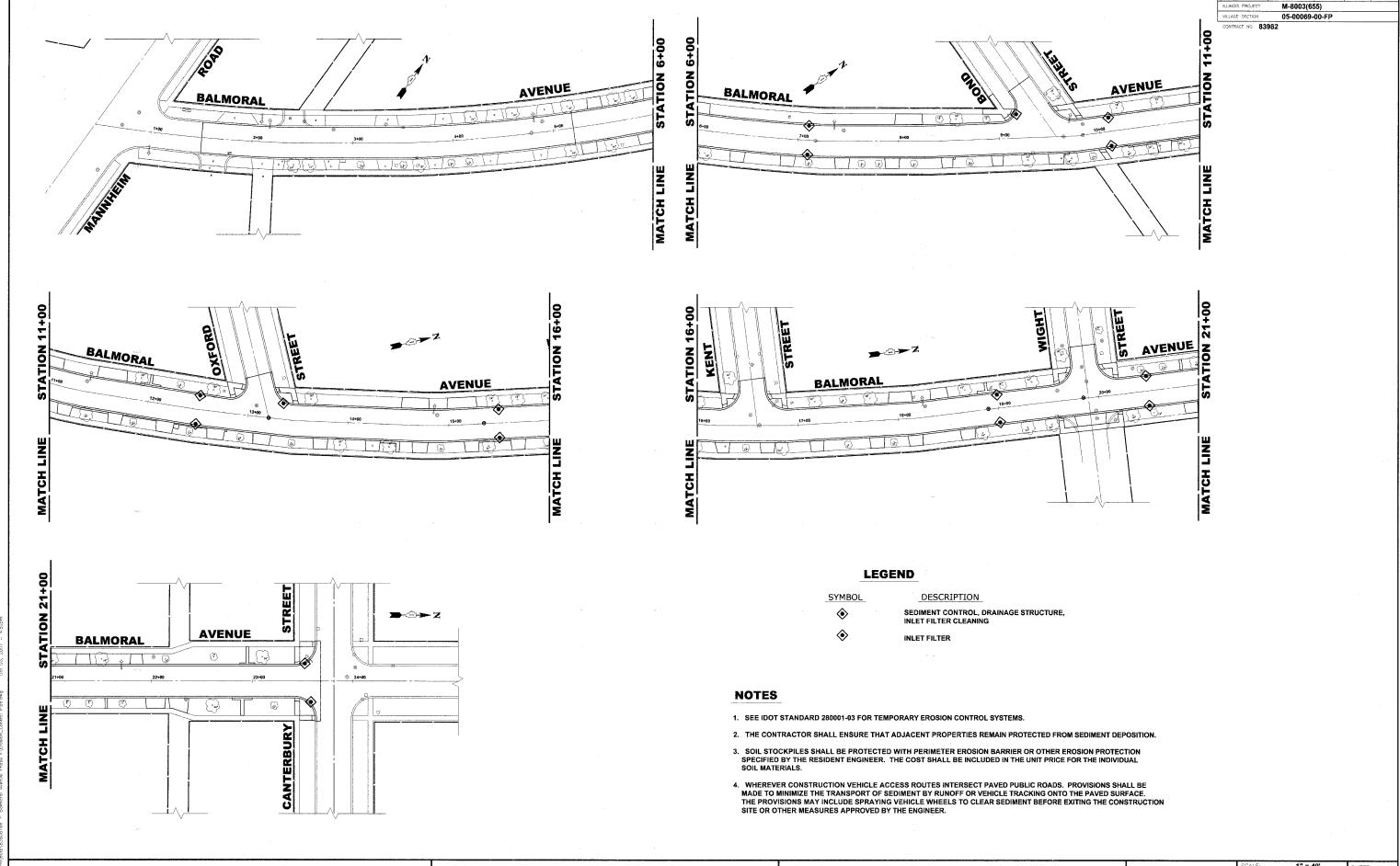
Fax: 708/865-1212

Westchester, Illinois 60154-2780 Phone: 708/865-0300

**BALMORAL AVENUE IMPROVEMENTS VILLAGE OF WESTCHESTER, ILLINOIS** 

**DRAINAGE & UTILITY DETAILS** 

	SCALE:	NONE
	DRAWN BY:	NAW/LEV/MK
	BOOK NO.:	1394/1427/LS
	DATE:	10-3-07
SION:	E.H.E. NO.:	838-06-16601



ANCOCK

† Civil Engineers

† Municipal Consultants

† Established 1911

9933 Roosevelt Road Vestchester, Illinois 60154-2780 Phone: 708/865-0300 Fax: 708/865-1212 BALMORAL AVENUE IMPROVEMENTS VILLAGE OF WESTCHESTER, ILLINOIS

**EROSION CONTROL PLAN** 

	SCALE:	1" = 40"	SH
	DRAWN BY:	NAW/LEV/MK	72
	BOOK NO .:	1394/1427/LS	_
	DATE:	10-3-07	
SiON:	E.H.E. NO.:	838-06-16601	OF

FAU 2712

COOK 36 25

SIGN	CODE & SIZE
SPEED LIMIT 25	R2-1 24"x30"
STOP	R1-1 30"x30"
ALL WAY	R1-4 18"x6"
NO PARKING	R8-3 24"x30"
The state of the s	W11-2 30"x30"
	SPEED LIMIT 25  STOP

# **LEGEND OF SYMBOLS**

SYMBOL

DESCRIPTION

PROPOSED TRAFFIC SIGN (TYPE A METAL POST)

PROPOSED TRAFFIC SIGN (TYPE B METAL POST)

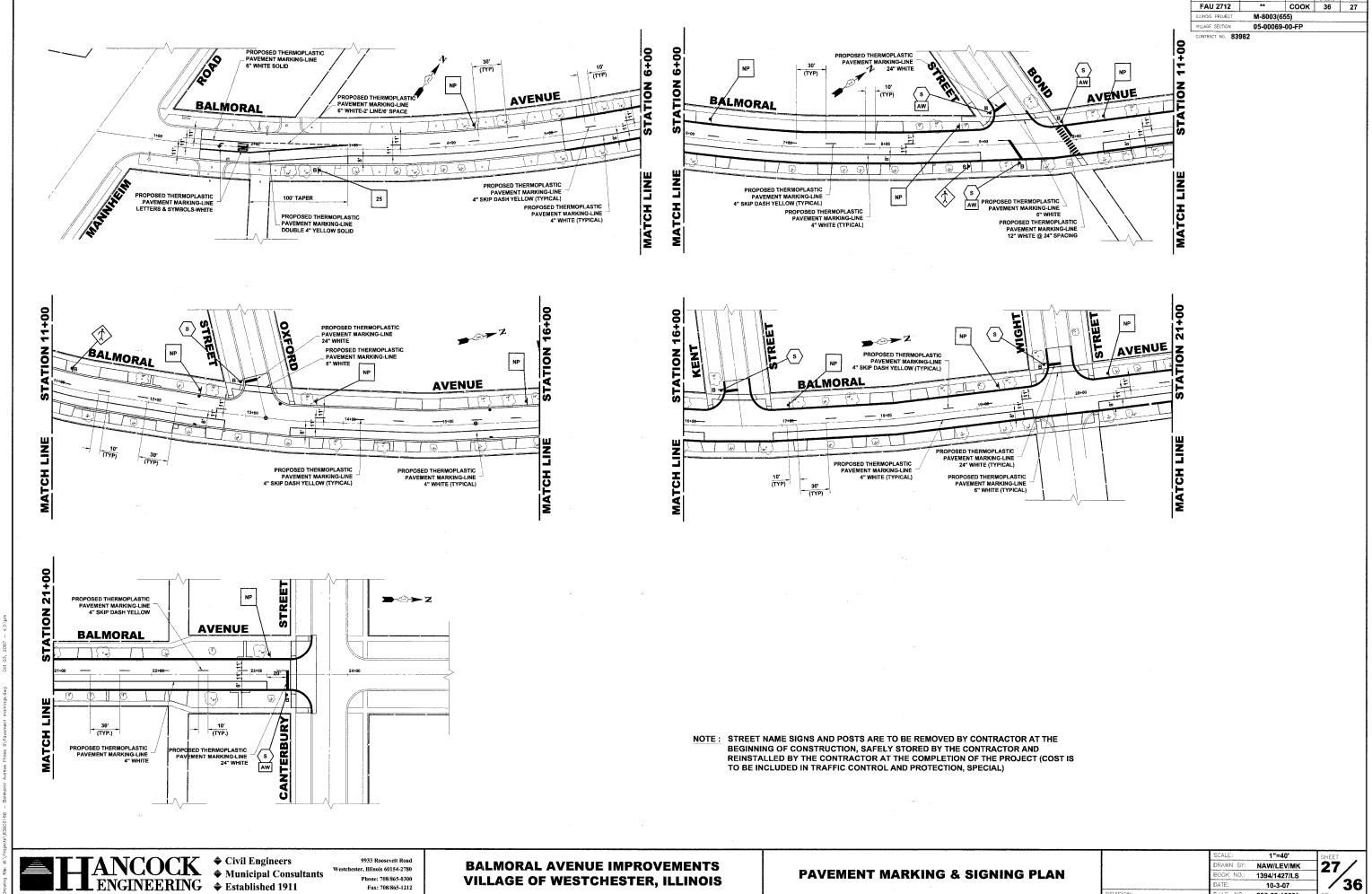


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**BALMORAL AVENUE IMPROVEMENTS VILLAGE OF WESTCHESTER, ILLINOIS** 

**SIGNING LEGEND & NOTES** 

	SCALE:	NONE	
	DRAWN BY:	NAW/LEV/MK	
	BOOK NO.:	1394/1427/LS	
	DATE:	10-3-07	
ION:	E.H.E. NO.:	838-06-16601	



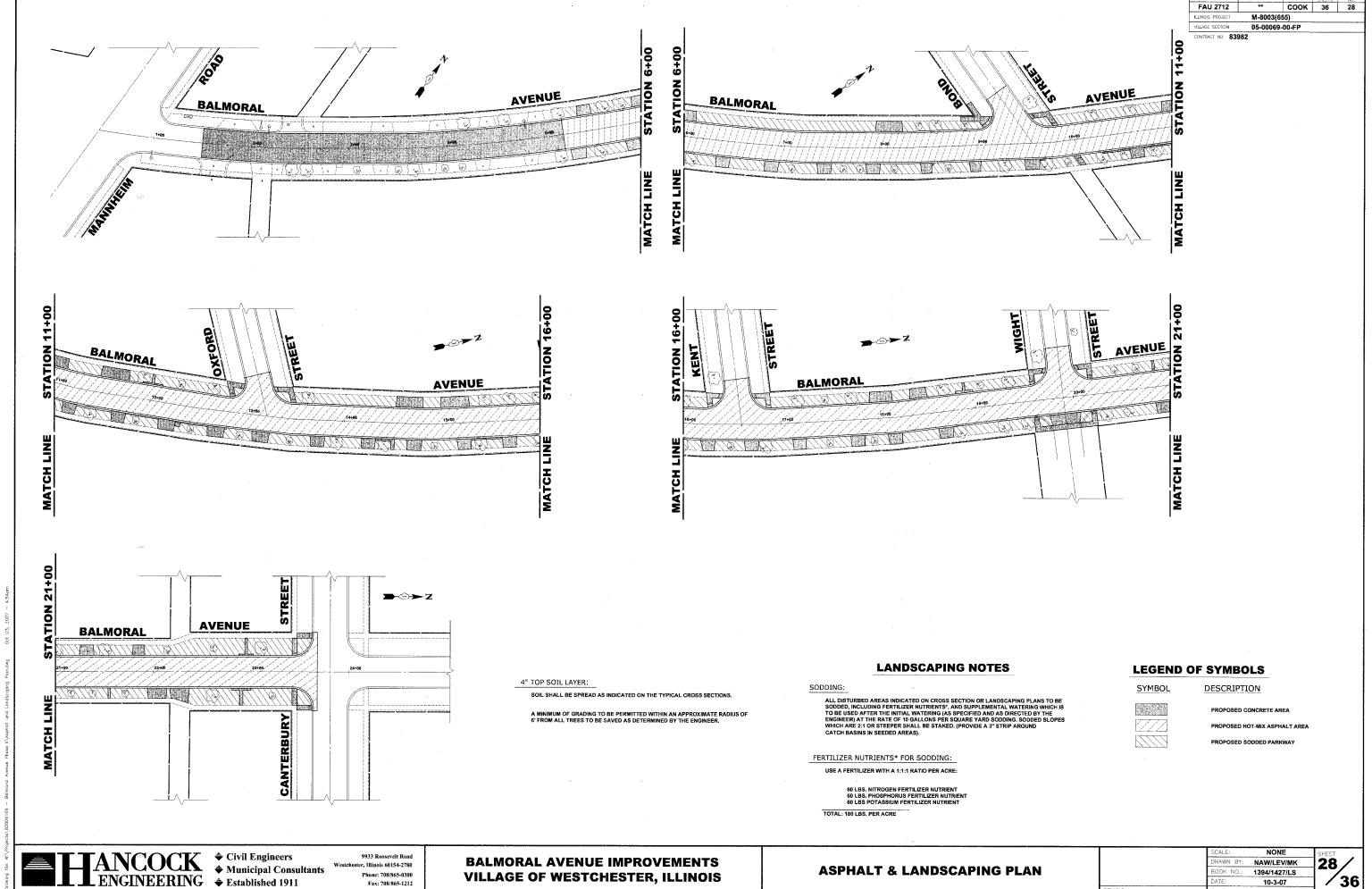
**VILLAGE OF WESTCHESTER, ILLINOIS** 

**PAVEMENT MARKING & SIGNING PLAN** 

1394/1427/LS

10-3-07 838-06-16601 **/36** 

Phone: 708/865-0300



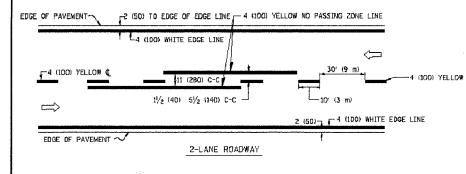
ENGINEERING Established 1911

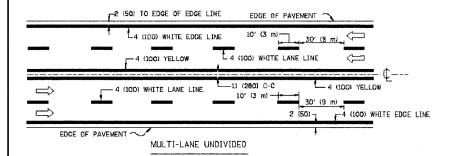
Fax: 708/865-1212

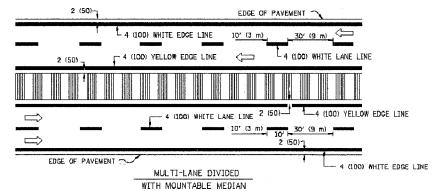
**VILLAGE OF WESTCHESTER, ILLINOIS** 

10-3-07 838-06-16601



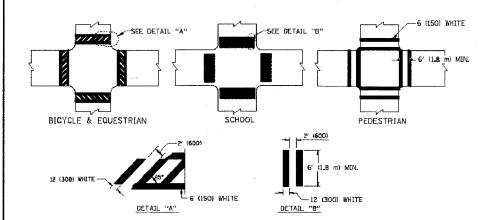




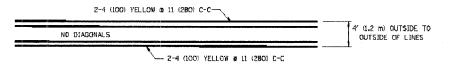


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

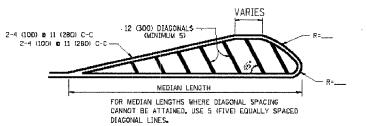
# TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

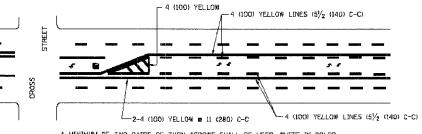


4' (1.2 m) WIDE MEDIANS ONLY

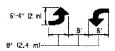


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

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

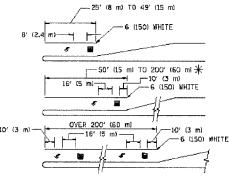


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

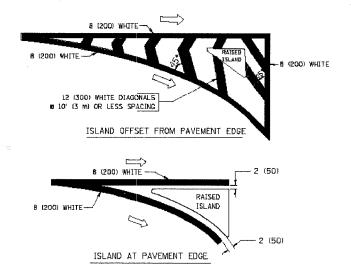
# TYPICAL PAINTED MEDIAN MARKING



\* TURN LANES IN EXCESS OF 400' 820 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

,	T		1	
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 UNDIVEDED PAVEMENT	2 2 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 <b>a</b> 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FRON 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' IL8 m) SPACE
EDGE LINES	4 (100)	20FID	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; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	6' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIACONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 6 6 (150) 12 (300) 6 46" 12 (300) 6 90"	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (EQD) APART 2' (EQD) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (L2 mi 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°	SOLID	YELLOW: TWO WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
	NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS		WHITE: ONE WAY TRAFFIC	SEE TYPICAL PAINTED MEDIAN MARKLING.
GORE MARKING AND CHANNELIZING LINES	B (200) WITH 12 (300) DIAGONALS B 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 (QVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 15 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"53.6 SD. FT. (0.33 m <sup>2</sup> ) EACH "X"-54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS	12 (300) s 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) T0 45MPH (70 km/h)) 150' (45 m) C-C (OVER 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.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION	
NAME	DATE	ILLINO13	DEFAITMENT OF TRANSPORTATION
EVERS	03-19-90		
T. RAMMACHER	10-27-94		DISTRICT ONE
ALEX HOUSEH	10-09-96		
ALEX HOUSEH	10~17~95	T,	YPICAL PAVEMENT
T. RAMMACHER	01-06-00		MARKINGS
			MARKINGS
		SCALE: NONE	DRAWN BY CADO
			CHECKED BY

FAU 2712 COOK 36 30 ILLINOIS PROJECT M-80003 (655) VILLAGE SECTION . 05-00069-00-FP CONTRACT NO. 83982 ROAD CONSTRUCTION AHEAD  $\rightarrow$ ROAD TYPE III BARRICADES WITH TWO FLASHING AMBER LIGHTS ON EACH. AHEAD TYPE I OR TYPE II BARRICADES WITH ONE FLASHING AMBER LIGHT ON EACH, OR 15 (380) TYPE III BARRICADES WITH TWO FLASHING 200'± (60 m±)-21 (530) AMBER LIGHTS ON EACH. DRIVEWAY , wórk área [ 200'± (60 m±) STREET, SPE 40 MPH OR I COLLECTOR LIMIT> 40 MPH ( LOCAL and A W20-1(0) ROAD SPEED CONSTRUCTION M6-4(0)-2115 AHEAD ROAU M6-1(0)-2115 AHEAD  $\rightarrow$ 

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:
- a) ONE ROAD CONSTRUCTION AMEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE
- 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:
- GI ONE ROAD CONSTRUCTION AHEAD SIGN 48  $\times$  48 (1.2 m  $\times$  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.
- 3. 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).

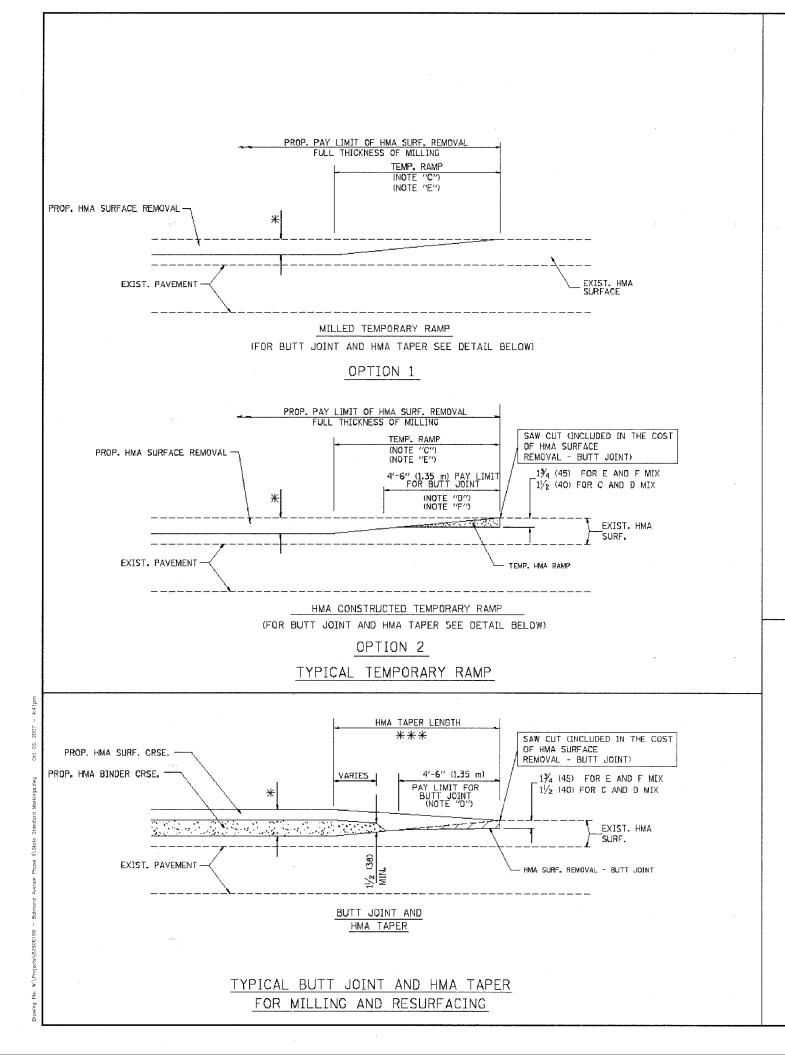
# B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

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.

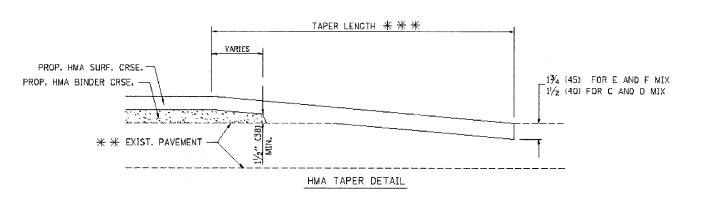
All dimensions are in millimeters (inches) unless otherwise shown.

REVISIONS		THE INDIC DEDARTHE	NT OF TRANSPORTATION
NAME	DATE	ILLINUIS DEPARTMEN	NI OF IKANSPORTATION
LHA	6/89	TRAFFIC CONTRO	L AND PROTECTION
T. RAMMACHER	09/08/94		
J. OBERLE	10/18/95	f	FOR
A. HOUSEH	03/06/96	CIDE DOADS IN	TEDSECTIONS AND
A. HOUSEH	10/15/96	SIDE KOADS, IN	ITERSECTIONS, AND
T. RAMMACHER	01/06/00	DRIV	VEWAYS
***************************************		SCALE: NONE	DRAWN BY
		JUNEAU TOTAL	DRAWN BT
			CHECKED BY
		TC	10 E.H.E. PROJECT NO. 838-06-1660



FAU 2712 COOK 36 31 ILLINGIS PROJECT M-80003 (655) VILLAGE SECTION 05-00069-00-FP CONTRACT NO. 83982

PROP. HMA OR PCC SURFACE REMOVAL - BUTT JOINT SAW CUT (INCLUDED IN THE COST EXIST. HMA OR PCC SURFACE 30'-0" (9.0 m) (NDTE "A") OF HMA OR P.C.C. SURFACE REMOVAL 15'-0" (4.5 m) (NOTE "B") (TMIOL TTUB ~ (NOTE "D") 13/4 (45) FOR E AND F MIX 1/2 (40) FOR C AND D MIX \* \* EXIST. PAVEMENT BUTT JOINT DETAIL



# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

\* \* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

#### NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP, RAMP AT A RATE OF 3'-Q" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS,
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- \*\*  $\times$  20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

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

# BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SOUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

BEWIETA	A IT	
REVISIO		
NAME	DATE	
M. DE YONG	6-13-90	
M. DE YONG	7-3-90	
M. DE YONG	3-27-92	
R. SHAH	09/09/94	
R. SHAH	10/25/94	
A. ABBAS	03/21/97	
M. GOMEZ	04/06/01	
R. BORO	01/01/07	SCAL
		SEAL

ILLINOIS DEPARTMENT OF TRANSPORTATION

**BUTT JOINT AND** HMA TAPER DETAILS

ALE: VERT. NONE

DRAWN BY

CHECKED BY

