WATERMAIN NOTES:

WATERMAIN TO BE CL 54, DOUBLE CEMENT LINED DUCTILE IRON.

ALL FITTING VALVES AND HYDRANTS TO BE YCUA STANDARDS.

CONSTRUCTION TO BE UNDER YCUA INSPECTION.

YCUA TO BE NOTIFIED 48 HOURS IN ADVANCE OF ANY CONSTRUCTION.

WATERMAIN TO BE INSTALLED IN 20 FT. EASMENT TO YCUA.

WATERMAIN TO BE PRESSURE TESTED AND DISINFECTED IN ACCORDANCE WITH YCUA STANDARDS BEFORE BEING PLACE IN SERVICE.

HYDRANTS TO BE PROTECTED WITH 4" STEEL POSTS 8 FT. LONG, EXTENDING 4 FT. ABOVE GRADE, AT LEAST 4 POSTS TO BE USED AT EACH HYDRANT WITHIN PAVED AREAS.

SPECIAL NOTES:

HAZARDOUS MATERIALS THAT MAY BE USED WILL BE STORED, HANDLED AND DISPOSED OF IN ACCORDANCE WITH ACCEPTED ENVIRONMENTAL STANDARDS.

OUTDOOR LIGHTING:
LIGHTING TO BE WALL MOUNTED MCGRAW EDISON MODEL NOW 2 OR EQUAL. ALL LIGHTING TO BE DIRECTED ONTO YARD AREA. SHIELDS TO BE APPLIED AS NEEDED.

MAINTENANCE NOTE:
OWNER AGREES PAVED SURFACES, SIGNS, LIGHTING AND OTHER STRUCTURES AND SURFACES SHALL BE MAINTAINED IN A SAFE, ATTRACTIVE CONDITION AS ORIGINALLY DESIGNED AND CONSTRUCTED.

WETLAND NOTE:
NO REGULATED OR PROTECTED WETLANDS EXIST ON THE SITE.

LANDSCAPING

BERMS AS SHOWN TO BE 4:1 SLOPE

SURFACE TO BE WOOD CHIPS.

ROADSIDE AREA TO BE GRADED AND SEEDED TO EXTENT SHOWN.

DEVELOPED AREA TO BE MAINTAINED.

ROADWAY WILL NOT BE GRADED OR OTHERWISE IMPROVED.

LANDSCAPE MAINTENANCE AGREEMENT:
OWNER AGREES TO SEASONAL MAINTENANCE PROGRAM AND WILL REPLACE ALL DISEASED, DEAD, OR DAMAGED PLANTS, REPLENISH MULCH, CONTROL WEEDS, FERTILIZE AND PRUNE BEGINNING UPON COMPLETION OF CONSTRUCTION OF LANDSCAPING."

TREE SCHEDULE

KEY	NAME	QUANTITY	SIZE
A	PINUS NIGRA AUSTRIAN PINE	7	7'-8'
J	JUNIPERUS COMMUNIS JUNIPER	8	18"
B	TAXUS CUSPIDATA JAPANESE YEW	5	18"

ALL PROPOSED TREES TO BE BALLED AND BAGGED, AND INSTALLED IN ACCORDANCE WITH GOOD NURSERY PRACTICE.

BENCHMARK:
ARROW ON HYDRANT S.W. CORNER OF SITE
ELEV. 746.88 U.S.C.S. DATUM

OWNER-OPERATOR
R & L CARRIERS INC.
43 ENDRICK
YPSILANTI, MI. 48198
482 6822
ATTN: CHRIS RATHER

SITE DATA

AREA 15.27 ACRES
ZONING I-1 LIMITED INDUSTRIAL
PROPOSED USE: TRUCK TERMINAL
A PERMITTED USE

ALL UTILITIES ARE AVAILABLE
SOIL - SPINKS SANDY SOIL

SET BACKS

	MIN.	PROVIDED
FRONT	40 FT.	220 FT.
SIDE	20 FT. LEAST 40 FT. TOTAL	95 LEAST 500+ TOTAL
REAR	40 FT.	110 FT.

% OF COVERAGE LESS THAN 1% WITH BUILDINGS.

NOTES:
DISCHARGE OF THE NATURE OF THIS BUSINESS LARGE AREAS OF ASPHALT ARE REQUIRED FOR TRUCK MOVEMENT AND TRAILER STORAGE.

DESIGNATED MOVEMENT AND STORAGE AREAS WILL BE DETERMINED BY OPERATIONAL CONSIDERATIONS.

THIS FACILITY IS NOT OPEN TO THE PUBLIC.

PAVING:
EXISTING ASPHALT AND CONCRETE PAVED AREAS TO REMAIN NEW ASPHALT PAVING TO BE:
SUBBASE NATURAL SPINKS SOIL IN PLACE BASE 10" - 23A CRUSHED LIMESTONE C.I.P.
LEVELING COURSE - 3" MDOT SPEC. 4 - 1130L, 20AA BITT. AGG. PLACED IN 2 EQUAL COURSES.

WEARING COURSE: 1½" MDOT SPEC 4 #1100T - 20AA BIT AGG.

ANY SOFT SPOTS DEVELOPED DURING THE APPLICATION OF THE BASE COURSE OF THE LEVELING COURSE SHALL BE REMOVED AND CORRECTED PRIOR TO THE APPLICATION OF THE WEARING COURSE.

DRAINAGE: ALL PIPE SHALL BE C-76-IV
ALL CATCH BASINS TO BE YPSILANTI TOWNSHIP STANDARD "A".
FRAME AND COVER TO BE E.J.I.W. 1040

NO NEW SANITARY OR WATER SERVICES ARE TO BE INSTALLED.

LEGAL DESCRIPTION

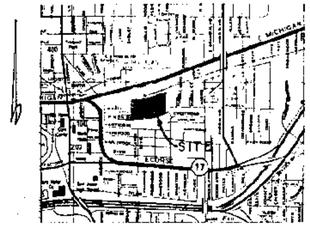
A PARCEL OF LAND IN SECTION 10, T3S., R7E., YPSILANTI TOWNSHIP WASHTENAW COUNTY, MICHIGAN, DESCRIBED AS:

COMMENCING AT THE CENTER OF SECTION 10; THENCE N. 87° 15' 30" W., 507.72 FT. ALONG THE EAST-WEST ¼ LINE; THENCE N. 3° 4' W., 331.02 FT. TO THE PLACE OF BEGINNING; THENCE N. 3° 4' W., 512.32 FT; THENCE EASTERLY 1200.0 FT ALONG THE ARC OF A CURVE RADIUS 4961.15 FT., A CHORD BEARING N. 79° 48' 40" E., 1197.08 FT. ALONG THE SOUTH R.O.W. LINE OF R.R.; THENCE S. 17° 17' 10" E., 504.86 FT.; THENCE S. 71° 53' W., 341.56 FT.; THENCE WESTERLY 985.3 FT. ALONG THE ARC OF A CURVE, RADIUS 2765.5 FT.; A CHORD BEARING S. 82° 8' W., 984.04 FT. TO THE PLACE OF BEGINNING.

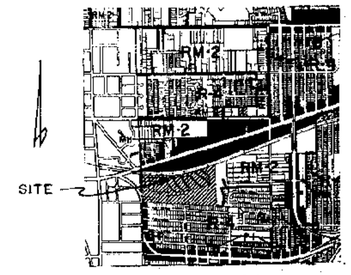
CONTAINING AN AREA OF 15.27 ACRES MORE OR LESS.

TOGETHER WITH AND INCLUDING AN EASEMENT FOR INGRESS AND EGRESS IN COMMON WITH GRANTOR AND OTHERS OVER A 60.0 FEET WIDE R.O.W. IN THE NORTH ½ OF SECTION 10, YPSILANTI TOWNSHIP, OVER THE FOLLOWING DESCRIBED PROPERTY:

COMMENCING AT THE CENTER OF SECTION 10, T3S., R7E., YPSILANTI TOWNSHIP WASHTENAW COUNTY, MICHIGAN; THENCE N. 87° 15' 30" W., 507.72 FT. ALONG THE EAST WEST ¼ LINE OF SAID SECTION; THENCE N. 3° 04' W., 293.14 FT., FOR A PLACE OF BEGINNING; THENCE WESTERLY 5.73 FT. ALONG THE ARC OF A CIRCULAR CURVE CONCAVE TO THE NORTH RADIUS 2825.0 FT., A CHORD BEARING N. 87° 32' 30" W., 5.73 FT.; THENCE N. 87° 37' W., 777.26 FT.; THENCE N. 1° 45' E., 60.15 FT. ALONG THE CENTERLINE OF ENDRICK ST.; THENCE S. 87° 37' E., 783.70 FT.; THENCE EASTERLY 989.30 FT. ALONG THE ARC OF A CIRCULAR CURVE CONCAVE TO THE NORTH, RADIUS 2765.0 FT., A CHORD BEARING S. 82° 08' E., 984.04 FT.; THENCE N. 71° 53' E., 484.76 FT.; THENCE EASTERLY 203.77 FT. ALONG THE ARC OF A CIRCULAR CURVE CONCAVE TO THE SOUTH, RADIUS 772.35 FT., A CHORD BEARING N. 80° 11' E. 222.98 FT.; THENCE N. 88° 29' E., 140.18 FT.; THENCE S. 2° 53' E. 60.03 FT. ALONG THE WEST LINE OF YPSI LITTLE FARMS, AS RECORDED IN LIBER 4 OF PLATS, PAGE 11, WASHTENAW COUNTY RECORDS; THENCE S. 88° 29' W., 142.82 FT; THENCE WESTERLY 206.36 FT. ALONG THE ARC OF A CIRCULAR CURVE CONCAVE TO THE SOUTH, RADIUS 712.35 FT., A CHORD BEARING S. 80° 11' W., 205.66 FT.; THENCE S. 71° 53' W., 484.76 FT.; THENCE WESTERLY 1005.04 FT. ALONG THE ARC OF A CIRCULAR CURVE CONCAVE TO THE NORTH, RADIUS 3105.0 FT., A CHORD BEARING S. 82° 04' 30" W., 999.76 FT., TO THE PLACE OF BEGINNING, BEING PART OF THE NORTH ½ OF SAID SECTION 10, YPSILANTI TOWNSHIP.

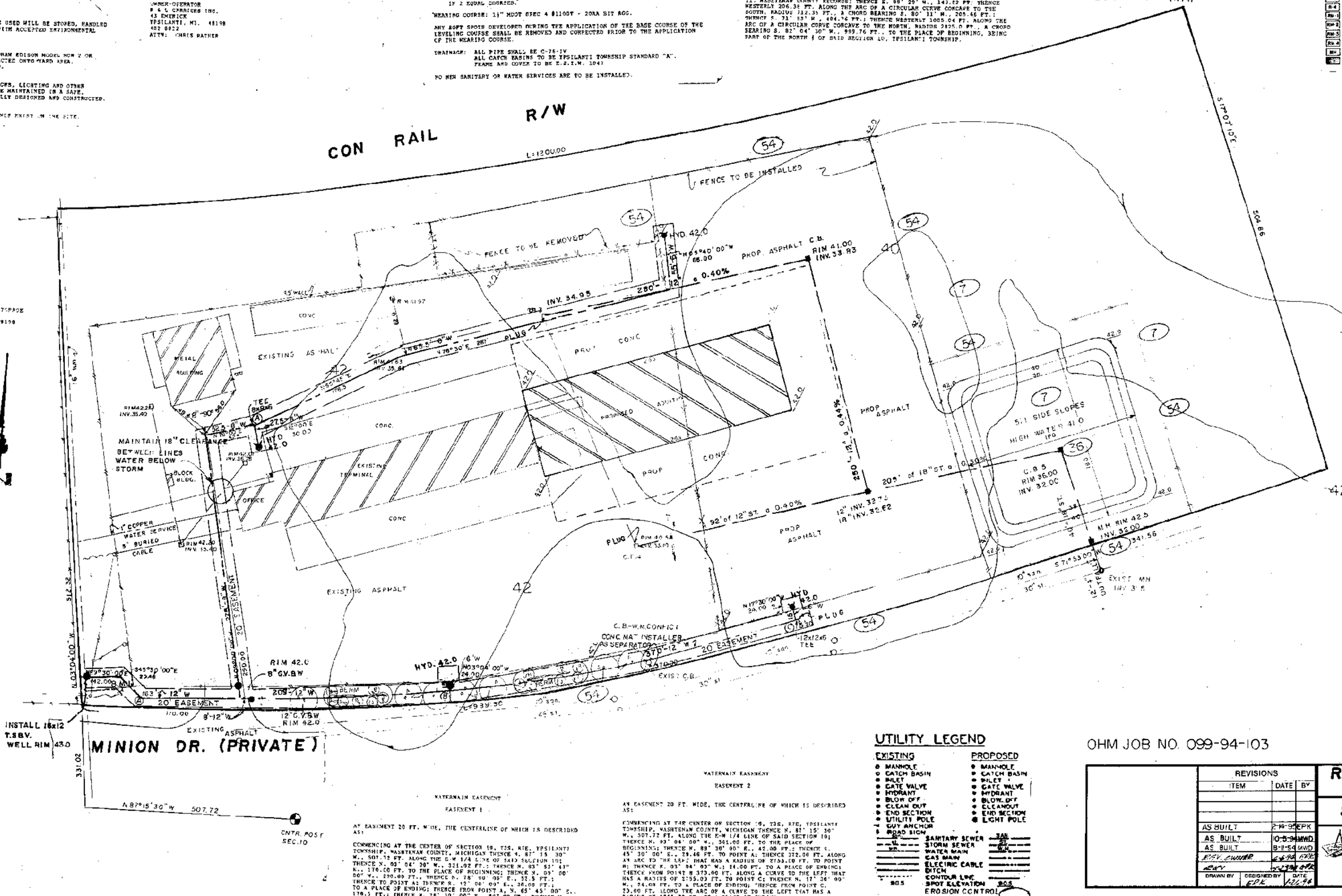


LOCATION MAP



R-1	R-1 ONE-FAMILY RESIDENTIAL (12,000 SQ.FT.)	B-1	B-1 LOCAL BUSINESS
R-2	R-2 ONE-FAMILY RESIDENTIAL (9,600 SQ.FT.)	B-2	B-2 COMMUNITY BUSINESS
R-3	R-3 ONE-FAMILY RESIDENTIAL (7,200 SQ.FT.)	B-3	B-3 GENERAL BUSINESS
R-4	R-4 ONE-FAMILY RESIDENTIAL (6,000 SQ.FT.)	F-1	F-1 FREEWAY SERVICE
RM-1	RM-1 MULTIPLE-FAMILY RESIDENTIAL	RO	RO RESEARCH OFFICE
RM-2	RM-2 MULTIPLE-FAMILY RESIDENTIAL	I-1	I-1 LIMITED INDUSTRIAL
RM-3	RM-3 MULTIPLE-FAMILY RESIDENTIAL	I-2	I-2 GENERAL INDUSTRIAL
RM-4	RM-4 MULTIPLE-FAMILY RESIDENTIAL	I-3	I-3 HEAVY INDUSTRIAL
MH	MH MOBILE HOME PARK	I-C	I-C INDUSTRIAL COMMERCIAL
OS-1	OS-1 OFFICE SERVICE	P-1	P-1 VEHICULAR PARKING

ZONING MAP



WATERMAIN EASEMENT

EASEMENT 1

AN EASEMENT 20 FT. WIDE, THE CENTERLINE OF WHICH IS DESCRIBED AS:

COMMENCING AT THE CENTER OF SECTION 10, T3S, R7E, YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN THENCE N. 87° 15' 30" W., 507.72 FT. ALONG THE E-W 1/4 LINE OF SAID SECTION 10; THENCE N. 03° 04' 00" W., 331.02 FT.; THENCE N. 03° 53' 47" W., 176.00 FT. TO THE PLACE OF BEGINNING; THENCE N. 09° 00' 00" W., 190.00 FT.; THENCE S. 78° 00' 05" E., 32.5 FT.; THENCE TO POINT A; THENCE S. 12° 06' 09" E., 36.08 FT.; TO A PLACE OF ENDING; THENCE FROM POINT A, N. 65° 45' 00" E., 178.5 FT.; THENCE N. 78° 30' 00" E., 287.00 FT.; THENCE N. 05° 40' 00" E., 66.00 FT. TO THE PLACE OF ENDING.

WATERMAIN EASEMENT

EASEMENT 2

AN EASEMENT 20 FT. WIDE, THE CENTERLINE OF WHICH IS DESCRIBED AS:

COMMENCING AT THE CENTER OF SECTION 10, T3S, R7E, YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN THENCE N. 87° 15' 30" W., 507.72 FT. ALONG THE E-W 1/4 LINE OF SAID SECTION 10; THENCE N. 03° 04' 00" W., 361.00 FT. TO THE PLACE OF BEGINNING; THENCE N. 89° 30' 00" E., 42.00 FT.; THENCE S. 45° 30' 00" E., 29.46 FT. TO POINT A; THENCE 372.06 FT. ALONG AN ARC TO THE LEFT THAT HAS A RADIUS OF 2755.03 FT. TO POINT B; THENCE N. 03° 04' 00" W., 14.00 FT. TO A PLACE OF ENDING; THENCE FROM POINT B 373.00 FT. ALONG A CURVE TO THE LEFT THAT HAS A RADIUS OF 2755.03 FT. TO POINT C; THENCE N. 17° 30' 00" W., 24.00 FT. TO A PLACE OF ENDING; THENCE FROM POINT C, 23.00 FT. ALONG THE ARC OF A CURVE TO THE LEFT THAT HAS A RADIUS OF 1735.30 FT. TO A PLACE OF ENDING.

UTILITY LEGEND

EXISTING	PROPOSED
MANHOLE	MANHOLE
CATCH BASIN	CATCH BASIN
INLET	INLET
GATE VALVE	GATE VALVE
HYDRANT	HYDRANT
BLOW OFF	BLOW OFF
CLEAN OUT	CLEANOUT
END SECTION	END SECTION
UTILITY POLE	LIGHT POLE
GUY ANCHOR	
ROAD SIGN	
SANITARY SEWER	SAN
STORM SEWER	ST
WATER MAIN	W
GAS MAIN	G
ELECTRIC CABLE	E
DITCH	
CONTOUR LINE	
SPOT ELEVATION	
EROSION CONTROL	

STORM WATER DETENTION

AREA
300 x 400 = 8.2 ACRES
C = .9
Qa = .2 CFS/ACRE
Qa = 1.65 CFS.
Qo = 1.65 = 0.22 CFS.
8.2x.9

T = -25 + √(625 + 16312.5 / 2.32) = -25 + 216.5 = 191.5 MIN.

Ya = 16300 (10.23) - 40(0.22)(191.5) / 216.5 = 14594.7

Yo = 14594.7 - 1485.2 = 12909.5 CU. FT./ACRE IMP.
Yt = 12909.5 x 8.2 x .9 = 95272 CU. FT.

D = 0.82 a/768

A = 1.65 / 0.82(64.4 x 33) + 0.104 SQ. FT.

d = √(.1 / .785) = 0.365 FT. = 4.38" USE 4" PIPE.

DETENTION POND

ELEV.	AREA
42	28900
37	16900
AVG.	22900
DEPTH	4 FT.
VOLUME	91600 CU. FT.
ORIFICE FLOW	8150 CU. FT.

TOTAL VOLUME 100,050 CU. FT.

OHM JOB NO. 099-94-103

REVISIONS ITEM	DATE	BY
AS BUILT	2-14-95	EPK
AS BUILT	10-5-94	MWD
AS BUILT	8-1-94	MWD
ESC. BOND	6-6-94	EPK
ENG.	5-24-94	EPK
DRAWN BY EPK	DESIGNED BY	DATE 12-1-93

R&L FREIGHT TERMINAL

SITE PLAN

SCALE HOR 1" = 50' VER 1" =

FIELD BOOK NO.

E.P. Rutkske & Associates, Inc.
1430 E. MICHIGAN AVE.
YPSILANTI, MI 48198-5806
CIVIL ENGINEERS & LAND SURVEYORS
(313) 481-1322

JOB NO. 93-328

SHEET NO.

BILL MARTIN TOWING & STORAGE
65 ENDRICK
YPSILANTI, MICHIGAN 48198

RUSSELL ANDERSON
204 HARRIS
YPSILANTI, MICHIGAN 48198