


Michigan Engineers'
Resource Library

MERL 

 Center for
Technology & Training

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NICK KOSZYKOWSKI, PRINCIPAL PROGRAMMER/ANALYST

CENTER FOR TECHNOLOGY AND TRAINING

Michigan Tech

Civil & Environmental
Engineering

CENTER FOR TECHNOLOGY AND TRAINING

- SURFACE TRANSPORTATION
- TYPICALLY APPLIED RESEARCH
- LOCAL & STATE AGENCIES



STRENGTH AREAS:

IT – SOFTWARE

PAVEMENT MANAGEMENT / ASSET MANAGEMENT

TRAFFIC SAFETY ENGINEERING

BRIDGE ENGINEERING

BRIDGE LOAD RATING

CONSTRUCTION ENGINEERING

CENTER FOR TECHNOLOGY AND TRAINING

UNDER CIVIL AND
ENVIRONMENTAL ENGINEERING

20-22 FULL TIME STAFF

- ENGINEERS,
- COMPUTER PROGRAMMERS,
- TECHNICAL WRITERS,
- BUSINESS PROFESSIONALS

6-9 STUDENTS





MERL

Michigan Engineers' Resource Library

- STARTED IN 1997
- YEARLY CONTRACT WITH MDOT
 - CURRENT CONTRACT: \$110,000
- FREE TO MI LOCAL AGENCIES/CONSULTANTS
- ~1400 USERS



MERL

Michigan Engineers' Resource Library

- PROJECT ESTIMATOR
 - MDOT'S PAY ITEM LIST AND AVERAGE UNIT PRICES
- BID UTILITY
 - COLLECT AND ANALYZE BIDS
- LOCAL JOB MANAGER
 - MANAGE THE PROJECT IN THE FIELD, TRACKING ITEM USAGE AND PAYMENTS

LOCAL JOB MANAGER

- DAILY INSPECTIONS/POSTINGS
- PAY ESTIMATES
- CONTRACT MODIFICATIONS
- NO MATERIALS

Date	Total	Notes
10/17/2009	\$2,008.74	This posting is to balance our records with the contractor records t
10/16/2009	\$33,769.90	HMA patch placed in all disturbed sidewalk areas today. No ticket
10/15/2009	\$1,098.20	Installed sewer lateral at Santo Stefano Del Lago
10/14/2009	\$6,963.50	These items were placed at Santo Stefano Del Lago. In addition t
10/13/2009	\$8,138.43	Work was performed in front of Mr. Kozak's today. In addition to th

Posting Date: 10/13/2009 Field Book Number/Page: |

Notes:
 Work was performed in front of Mr. Kozak's today. In addition to these items, future pay estimates need to include Extra Service Length, Long-1 each, and Upsize Water Service 1" to 1.5", Long-1 each.

+ Add Item(s) X Remove Selected

Pay Item	Description	Qty	Units	Price	Total
1 2040013	Sidewalk, Rem	23.300	Syd	\$2.60	\$60.58
2 4027002	Forcemain, DI, 16 inch, Tr Det G	34.500	Ft	\$32.30	\$1,114.35
3 8250245	Water and Fire Suppression Service, 6 inch, Long	1.000	Ea	\$5,400.00	\$5,400.00
4 8257030	Additional Water Main Fittings, Not Shown on Plans	265.000	Lb	\$5.90	\$1,563.50

LOCAL JOB MANAGER

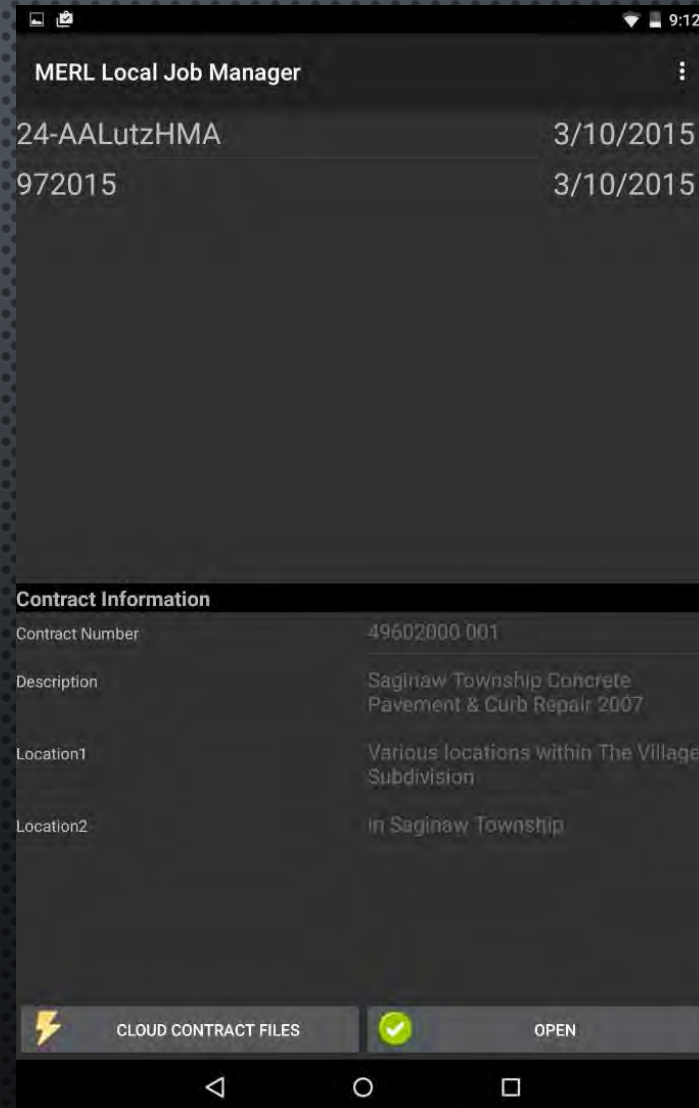
- ITEM SUMMARY
 - COMPLETELY PLACED, QTY REMAINING, UNPAID
- ITEM POSTING HISTORY

Postings Pay Estimates Contract Mods Item Summary						
Filter:						
Pay Item:		Description:				
<input type="text" value="Filter Pay Item"/>	<input type="text" value="Filter Description"/>	<input type="text" value="Completely Placed"/>				
Pay Item	Description	Units	Proj Qty	Placed	Paid	
2040005	Curb, Rem	Ft	105.00	105.00	0.00	
4027054	San Service Connection, PVC, 18 inch	Ea	1.00	1.00	0.00	
4027055	San Service Connection, PVC, 30 inch	Ea	1.00	1.00	0.00	
4027060	Sewer Flow Control, 24 inch	Ea	1.00	1.00	1.00	
8120102	Plastic Drum, High Intensity, Lighted, Fum	Ea	40.00	40.00	40.00	
8120103	Plastic Drum, High Intensity, Lighted, Oper	Ea	40.00	40.00	40.00	
8250057	Gate Valve and Box, 12 inch	Ea	2.00	2.00	0.00	
8257030	Additional Water Main Fittings, Not Shown on Plans	Lb	1,500.00	2,120.00	0.00	

Item Posting History			
Pay Item:		Description:	
<input type="text" value="8257030"/>	<input type="text" value="Additional Water Main Fittings, Not Shown on Plans"/>	Units:	
<input type="text" value="1500.00"/>	<input type="text" value="\$5.90"/>	<input type="text" value="Lb"/>	
Project Qty:		Unit Price:	
<input type="text" value="1500.00"/>		<input type="text" value="\$5.90"/>	
Posting Date	FB No./Page	Qty Placed	Total
10/02/2009		265.00	\$1,563.50
10/05/2009		265.00	\$1,563.50
10/06/2009		265.00	\$1,563.50
10/07/2009		265.00	\$1,563.50
10/08/2009		265.00	\$1,563.50
10/10/2009		265.00	\$1,563.50
10/13/2009		265.00	\$1,563.50
10/14/2009		265.00	\$1,563.50

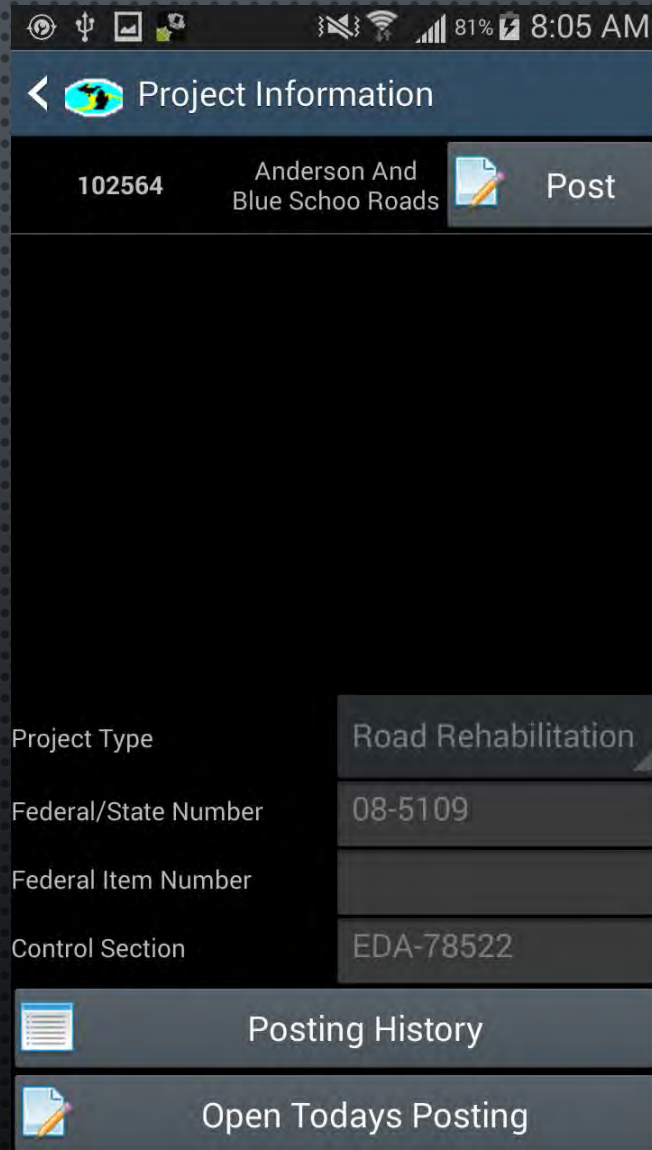
LOCAL JOB MANAGER MOBILE

- ANDROID APP
 - GOOGLE PLAY STORE
 - “MERL”
- IOS APP NEXT YEAR



LOCAL JOB MANAGER MOBILE

- PROJECT INFO
- POSTING HISTORY
- ADD POSTING



LOCAL JOB MANAGER MOBILE

← Daily Posting

Posting [edit]

Posting Date: 1/10/2015

Posting Total: 30000

Field Book Number/Page: 1

Notes: Light foundation construction began.

+ ADD ITEM(S)

⚡ SUBMIT POSTING

Pay Item Code	Qty	Units	Price	Total
Description				

← Add Items

🔍 3 inch

Pay Item Code	Units	Quantity Available
Description		
8190029	Ft	15
Conduit, DB, 1, 3 inch		
8190032	Ft	50
Conduit, DB, 2, 3 inch		
8190044	Ft	50
Conduit, Directional Bore, 3 inch		

Current Items

Pay Item Code	Quantity	Units	Price	Total
Description				
8190029	185	Ft	\$10.00	\$1,850.00
Conduit, DB, 1, 3 inch				

← Add Items

🔍 conduit

Pay Item Code	Units	Quantity Available
Description		
8190026	Ft	120
Conduit, DB, 1, 1 1/4 inch		
8190029	Ft	200
Conduit, DB, 1, 3 inch		

Edit Posting Item Quantity

Quantity: 185

Available: 200

Units: Ft

Description: Conduit, DB, 1, 3 inch

Supplemental Description

PayItemCode: 8190029

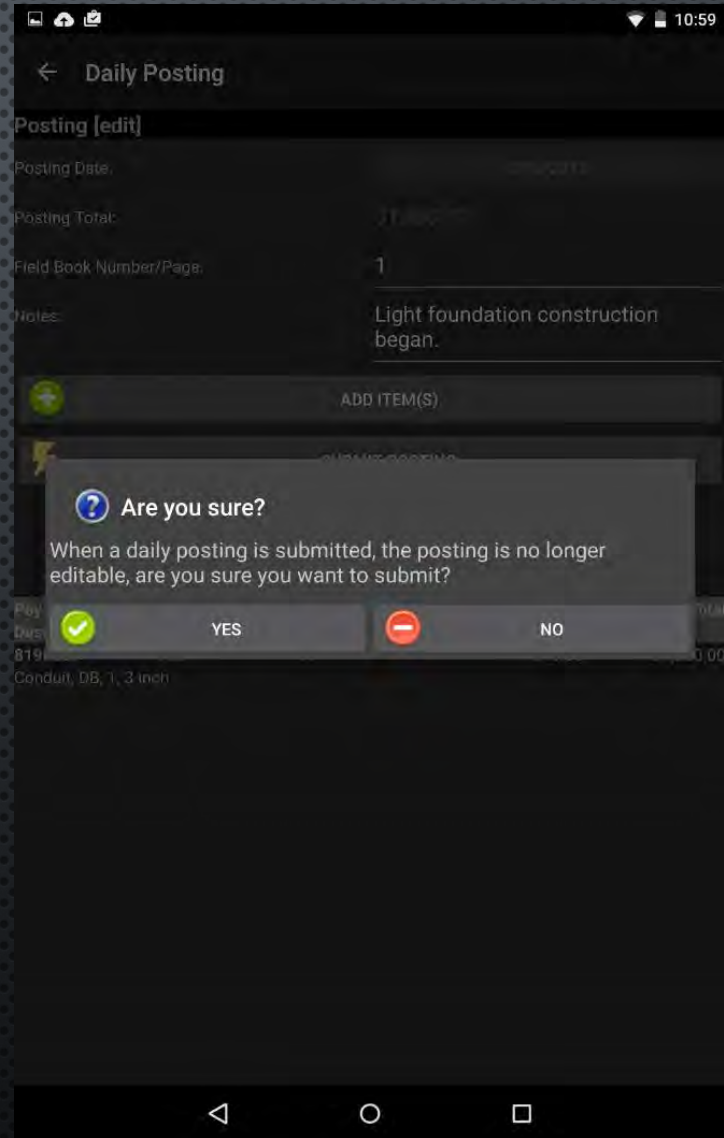
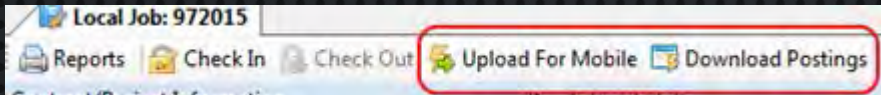
Placed: 0

Project Quantity: 200

✓ SAVE ✗ CANCEL

LOCAL JOB MANAGER MOBILE

- SUBMIT/UPLOAD POSTING
- DOWNLOAD TO MERL



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CONTACT INFO:

- MERL@MTU.EDU
- 906-487-2102

FREE TO DOWNLOAD:

- [HTTP://MERL.TRANS.MTU.EDU](http://MERL.TRANS.MTU.EDU)