



CITY of NOVI CITY COUNCIL

Agenda Item E
October 12, 2009

SUBJECT: Approval of Traffic Control Order 09-05 for the installation of a yield sign for eastbound Jacob Drive to yield at Danyas Way; and Traffic Control Order 09-06 for the installation of a stop sign for westbound Jacob Drive to stop at Taft Road.

SUBMITTING DEPARTMENT: Department of Public Services, Engineering Division *BTC*

CITY MANAGER APPROVAL: *PWA for CJP*

BACKGROUND INFORMATION:

The homeowners' association for Taft Knolls has assumed control of the subdivision and is working with the City to facilitate acceptance of the streets. As part of this process, the traffic control signs installed by the developer within the subdivision were reviewed against the approved final site plan for compliance with the traffic review. Typically, the developer would be responsible for installation of missing or incorrect signs. Since the developer is no longer involved and the homeowners' association is working towards compliance with the punch lists, the incorrect or missing signs were installed by the city using the traffic control sign financial guarantee collected from the developer at site plan approval.

The traffic control signs for the subdivision were reviewed by the traffic consultant as part of the site plan approval process. The attached traffic control orders are required for the enforcement of the two regulatory signs within the development: 1) eastbound Jacob to yield at Danyas Way; and 2) westbound Jacob to stop at Taft Road. A location map and a copy of the approved final site plan are enclosed for reference.

RECOMMENDED ACTION: Approval of Traffic Control Order 09-05 for the installation of a yield sign for eastbound Jacob Drive to yield at Danyas Way; and Traffic Control Order 09-06 for the installation of a stop sign for westbound Jacob Drive to stop at Taft Road.

	1	2	Y	N
Mayor Landry				
Mayor Pro Tem Gatt				
Council Member Burke				
Council Member Crawford				

	1	2	Y	N
Council Member Margolis				
Council Member Mutch				
Council Member Staudt				

Taft Knolls

Location Map



Map Author: Brian Coburn
Date: 10/1/09
Project: Taft Knolls
Version #: 1.0

Map Legend

 Taft Knolls

MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

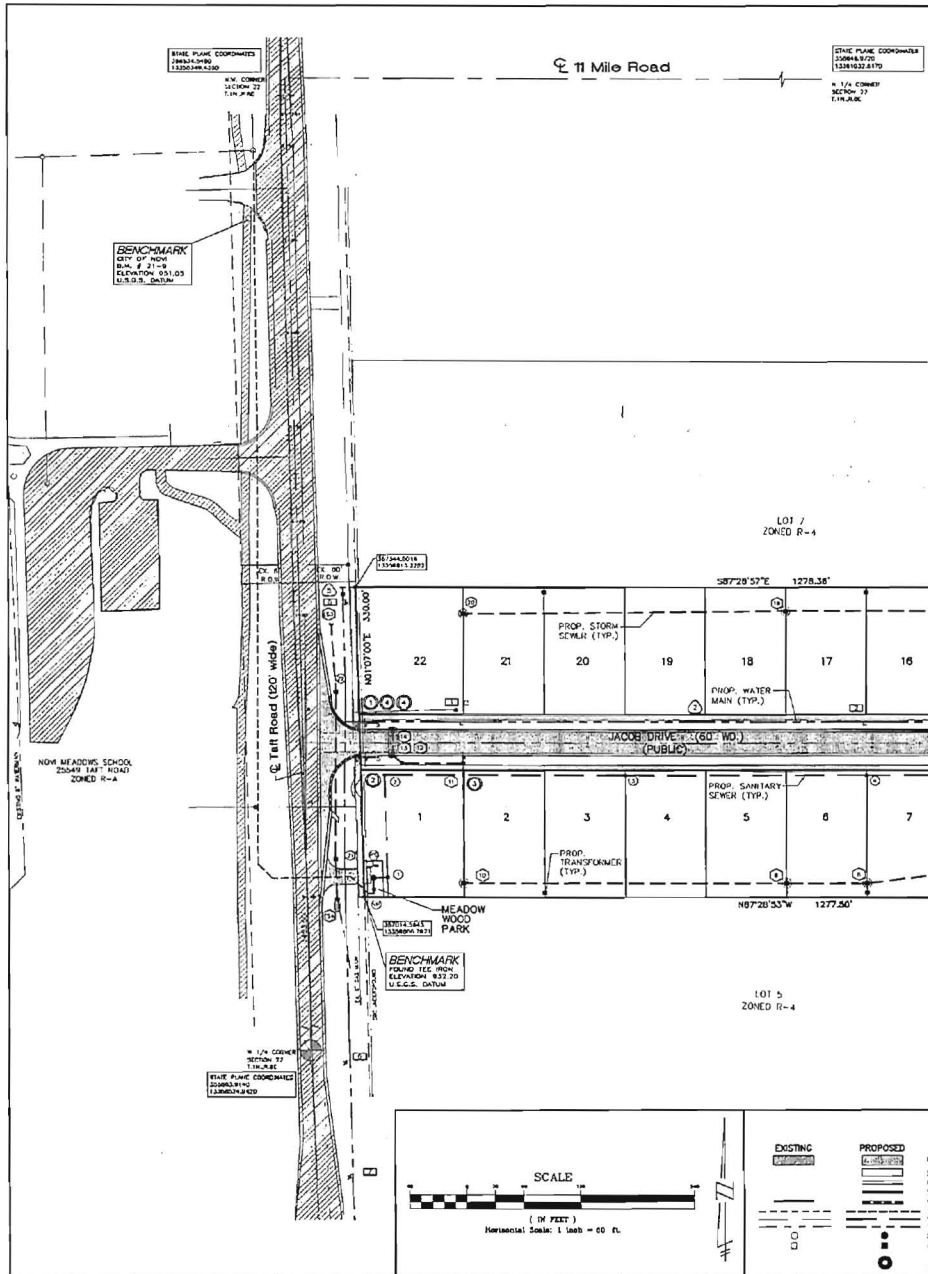


City of Novi
Department Division
Department Name
45175 W Ten Mile Rd
Novi, MI 48375
cityofnovi.org

0 60 120 240 360 480
Feet



1 inch = 317 feet



SYMBOL LEGEND		SIGN LEGEND			
○	SANITARY SEWER	STOP	NO OUTLET	SPEED LIMIT 25	STREET NAME
⊙	STORM SEWER	R1-1	W4-2	R2-1 (25)	R1-2
□	HYDRANT	①	②	③	④
⊕	GATE VALVE & WELL ON T.S. & W.				

SANITARY SEWER BASIS OF DESIGN

Sanitary Flow to the Pump Station:
 Total Number of Connections Under: 22
 Total Population: 22 Units x 3.2 People/Unit = 71 People
 Average Flow: 71 People x 100 GPCD = 0.011 CFS
 Peaking Factor: 1.8 (1991 LRPD) = 54 (1991 LRPD) = 4.24
 Peak Flow = Peaking Factor x Average Flow = 4.24 x 0.011 CFS = 0.047 CFS
 Capacity of an 8-inch Pipe at 0.40% slope = 0.71 CFS
 Therefore, the pipe capacity is sufficient.

Efficient Flow to the Pump Station:
 The Area of the lot to the north is 13.74 acres. 13.74 acres @ 3.0 units per acre = 41.22 Units
 The area necessary to the south of the lot at the same density is 10 single family houses due to the large wetland complex.
 Total off-site ultimate units = 41 + 10 = 51 Units
 Total ultimate number of units tributary to the Pump Station = 22 + 31 = 53 Units
 Total Population: 53 Units x 3.2 People/Unit = 170 People
 Average Flow: 170 People x 100 GPCD = 0.021 CFS
 Peaking Factor: 1.8 (1991 LRPD) = 54 (1991 LRPD) = 4.12
 Peak Flow = Peaking Factor x Average Flow = 4.12 x 0.021 CFS = 0.087 CFS
 Capacity of an 8-inch Pipe at 0.40% slope = 0.71 CFS
 Therefore, the pipe capacity is sufficient.

Sanitary Sewer Service Area Map
 See sheet 14 for the Sanitary Sewer Service Area Map.
 See sheet 11 for the Sanitary Sewer Pump Station Basis of Design.

SIGN LEGEND		
SYMBOL	DESCRIPTION	QUANTITY
①	R1-1 30" "STOP" SIGN	1
②	W4-2 "NO OUTLET" SIGN	1
③	R2-1 (25) "25 MPH SPEED LIMIT" SIGN	1
④	D3-1 STREET NAME	4
⑤	R1-2 18" END OF ROAD MARKER	2
⑥	R1-2 30" "YIELD" SIGN	1

BENCHMARKS

- FOUND THE IRON #1 SOUTHWEST CORNER OF PROPERTY. ELEVATION = 830.39 (U.S.C.S. DATUM)
- FOUND IRON #418 #1 NORTHEAST CORNER OF PROPERTY. ELEVATION = 832.20 (U.S.C.S. DATUM)
- CITY BENCHMARK NO. 21-B CHASED CROSS NORTH NEW AGRICULTURE MARKER, 12' WEST OF CENTERLINE OF TAFT ROAD, 34' SOUTH OF NORTH ENTRANCE TO NEW MEADOWS SCHOOL. SOUTH OF ELEVATION WILE ROAD. ELEVATION = 831.00 (U.S.C.S. DATUM)

STORM STRUCTURE SCHEDULE

NO.	TYPE	DIA.	FRAME & COVER
1	GAS & OIL SEPARATOR	4"	E K LUMI 1040 TYPE B COVER
2	MANHOLE	4"	LUMI 1040 TYPE B COVER
3	CATCH BASIN	4"	EJIM 1040 TYPE M1 GRATE
4	CATCH BASIN	4"	EJIM 1040 TYPE M1 GRATE
5	CATCH BASIN	4"	EJIM 1040 TYPE M1 GRATE
6	CATCH BASIN	4"	EJIM 1040 TYPE M1 GRATE
7	CATCH BASIN	4"	EJIM 1040 TYPE M1 GRATE
8	CATCH BASIN	4"	EJIM 1040 TYPE M1 GRATE
9	CATCH BASIN	4"	EJIM 1040 TYPE M1 GRATE
10	CATCH BASIN	4"	EJIM 1040 TYPE M1 GRATE
11	MANHOLE	4"	LUMI 1040 TYPE B COVER
12	CATCH BASIN	4"	EJIM 1040 TYPE M1 GRATE
13	MANHOLE	4"	LUMI 1040 TYPE B COVER
14	INLET	4"	EJIM 1040 TYPE M1 GRATE
15	MANHOLE	4"	LUMI 1040 TYPE B COVER
16	CATCH BASIN	4"	EJIM 1040 TYPE M1 GRATE
17	CATCH BASIN	4"	EJIM 1040 TYPE M1 GRATE
18	CATCH BASIN	4"	EJIM 1040 TYPE M1 GRATE
19	CATCH BASIN	4"	EJIM 1040 TYPE M1 GRATE
20	CATCH BASIN	4"	EJIM 1040 TYPE M1 GRATE
21	CATCH BASIN	4"	EJIM 1040 TYPE M1 GRATE
22	CATCH BASIN	4"	EJIM 1040 TYPE M1 GRATE
CS1	CSB SLEIGH		EJIM 1040 TYPE M1 GRATE
CS2	CSB SLEIGH		EJIM 1040 TYPE M1 GRATE
CS3	CSB SLEIGH		EJIM 1040 TYPE M1 GRATE
CS4	CSB SLEIGH		EJIM 1040 TYPE M1 GRATE

ESTIMATED QUANTITIES

WATER MAIN

ITEM	QUANTITY
1. 8" WATER MAIN D. S. ELSA	1170.00 L.F. @ 1.00
2. 10" WATER MAIN D. S. ELSA	1170.00 L.F. @ 1.00
3. INVERTAL VALVE & BOX	2 EA. @ 1.00
4. 8" GATE VALVE & WELL	2 EA. @ 1.00
5. 10" GATE VALVE & WELL	1 EA. @ 1.00

SANITARY SEWER

ITEM	QUANTITY
1. 8" PVC 1040 SAN. SEWER	1170.00 L.F. @ 1.00
2. 8" DIA. FORCE MAIN D. S. CL. 51	1170.00 L.F. @ 1.00
3. 8" DIA. FORCE MAIN D. S. CL. 51	1170.00 L.F. @ 1.00
4. 4" HDPE LEAD PIPE-TION 63.0	1170.00 L.F. @ 1.00
5. 8" DIA. MANHOLE	1 EA. @ 1.00
6. 2" SANITARY PUMP STATION	1 EA. @ 1.00
7. STRUCTURAL IRON W/ 4" S.I. PIPE	42 L.F. @ 1.00
8. 4" DIA. VEHICLE PIT	1 EA. @ 1.00

STORM SEWER

ITEM	QUANTITY
1. 8" PVC 1040 STORM SEWER	4400.00 L.F. @ 1.00
2. 8" C-76-4 STORM SEWER	4400.00 L.F. @ 1.00
3. 10" C-76-4 STORM SEWER	1170.00 L.F. @ 1.00
4. 10" C-76-4 STORM SEWER	1170.00 L.F. @ 1.00
5. 4" PVC 1040 40 TEMP LEAD	205.00 L.F. @ 1.00
6. 8" DIA. INLET	8 EA. @ 1.00
7. 8" DIA. MANHOLE	8 EA. @ 1.00
8. 4" DIA. CATCH BASIN	16 EA. @ 1.00
9. GAS & OIL SEPARATOR	1 EA. @ 1.00
10. 10" CSB SECTION	1 EA. @ 1.00
11. 10" CSB SECTION	1 EA. @ 1.00
12. SEWER BASIN STAIN PIPE	1 EA. @ 1.00

ROAD PAVING

ITEM	QUANTITY
1. 4" ASPHALT ON OF AGGREGATE	2,200 S.F. @ 1.00
2. 10" DEPTH STRENGTH ACTUAL	248 S.F. @ 1.00
3. CONC. CURB & GUTTER - 30"	5,370 L.F. @ 1.00
4. 4" CONC. SIDEWALK	1,400 L.F. @ 1.00
5. 4" CONC. SIDEWALK	80 L.F. @ 1.00
6. 6" 21-44 ACCESS BRICK	50 S.F. @ 1.00

LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED
PAVEMENT (ASPHALT)	PAVEMENT (ASPHALT)	END SECTION	END SECTION
SIDE WALK (CONCRETE)	SIDE WALK (CONCRETE)	DATE VALVE	DATE VALVE
MANHOLE COVER	MANHOLE COVER	HYDRANT	HYDRANT
STRAIGHT FACE CURB (PRECAST CONCRETE)	STRAIGHT FACE CURB (PRECAST CONCRETE)	WETLANDS	WETLANDS
STORM SEWER	STORM SEWER	METLANDS BUFFER	METLANDS BUFFER
SANITARY SEWER	SANITARY SEWER	CONTIGS	CONTIGS
WATER MAIN	WATER MAIN	SPOT ELEVATION	SPOT ELEVATION
CATCH BASIN	CATCH BASIN	SURFACE DRAINAGE	SURFACE DRAINAGE
STAIN PIPE	STAIN PIPE	SILT FENCE	SILT FENCE

REVISIONS

NO.	DATE	DESCRIPTION
1	01-21-04	REVISED PER CITY REVIEW
2	01-21-04	REVISED PER CITY REVIEW
3	01-21-04	REVISED PER CITY REVIEW

UTILITY WARNING
 UNDESIGNED UTILITY LOCATIONS ARE SHOWN ON THIS PLAN. ANY UNDESIGNED UTILITY LOCATIONS SHOULD BE IDENTIFIED AND RECORDED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ANY UTILITY LOCATIONS NOT SHOWN ON THIS PLAN.

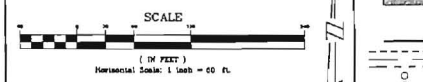
TAFT KNOLLS
 SECTION 22
 CITY OF NOV, OAKLAND COUNTY, MICHIGAN

COMPOSITE UTILITY & TRAFFIC PLAN

SEIBER, KEAST & ASSOCIATES, INC.
 CIVIL ENGINEERS

40390 GRAND RIVER AVENUE • SUITE 110 • NOV, MI 48375-2123
 248.473.7880

DATE: 01-21-04
 DRAWN BY: J.A. JOHNSON
 CHECKED BY: J.A. JOHNSON
 JOB NUMBER: 03-024



CITY OF NOVI
TRAFFIC CONTROL ORDER

_____ SPEED

DATE OF ORDER: SEPTEMBER 23, 2009

_____ PARKING

CONTROL NUMBER: 09-05

X OTHER

PURSUANT TO CHAPTER NO. 33 OF THE CODE OF ORDINANCES OF THE CITY OF NOVI, MICHIGAN, SAME BEING THE UNIFORM TRAFFIC CODE FOR CITIES, TOWNSHIPS, AND VILLAGES OF MICHIGAN, AND IN THE INTEREST OF PUBLIC SAFETY AND CONVENIENCE, THE FOLLOWING TRAFFIC CONTROL ORDER IS HEREBY ISSUED BY BRIAN COBURN, SENIOR CIVIL ENGINEER, DULY AUTHORIZED AS TRAFFIC ENGINEER, BY SEC. 33.141 OF THE AFORESAID CHAPTER.

ISSUANCE OF THIS TRAFFIC CONTROL ORDER WAS PRECEDED BY STUDY AND INVESTIGATION OF TRAFFIC CONDITIONS ON THE FOLLOWING PUBLIC ROAD OR ROADS IN THE CITY OF NOVI, MICHIGAN.

JACOB DRIVE

AND AFTER SAID INVESTIGATION, IT IS HEREBY ORDERED AND DIRECTED THAT THE DEPARTMENT OF PUBLIC WORKS ERECT AND MAINTAIN THE YIELD SIGN (S) IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS REQUIRED BY SEC. 33.217 OF THE AFORESAID CHAPTER, SAID SIGNS TO GIVE NOTICE OF THE FOLLOWING DETERMINATION:

EAST BOUND JACOB TO YIELD AT DANYAS WAY



TRAFFIC ENGINEER – Brian Coburn

DATED: 10/1/09

APPROVED BY CITY COUNCIL

TRAFFIC CONTROL ORDER NUMBER 09-05 HAVING BEEN PRESENTED TO THE COUNCIL OF THE CITY OF NOVI, MICHIGAN FOR STUDY AND APPROVAL, IS HEREBY APPROVED AND IT IS HEREBY ORDERED AND DIRECTED THAT THIS ORDER BE FILED IN THE OFFICE OF THE CITY CLERK AND A COPY THEREOF IN THE OFFICE OF THE CHIEF OF POLICE OF SAID CITY.

IT IS FURTHER ORDERED AND DIRECTED THAT THIS ORDER SHALL BECOME EFFECTIVE UPON BEING FILED WITH THE CLERK AND UPON ERECTION OF ADEQUATE SIGNS GIVING NOTICE OF THE EXISTENCE OF AFORESAID,

ADOPTED AT THE REGULAR MEETING
OF COUNCIL ON _____.

BY: _____
MAYOR – David Landry

CITY CLERK – Maryanne Cornelius

CITY OF NOVI
TRAFFIC CONTROL ORDER

____ SPEED

DATE OF ORDER: SEPTEMBER 23, 2009

____ PARKING

CONTROL NUMBER: 09-06

X OTHER


PURSUANT TO CHAPTER NO. 33 OF THE CODE OF ORDINANCES OF THE CITY OF NOVI, MICHIGAN, SAME BEING THE UNIFORM TRAFFIC CODE FOR CITIES, TOWNSHIPS, AND VILLAGES OF MICHIGAN, AND IN THE INTEREST OF PUBLIC SAFETY AND CONVENIENCE, THE FOLLOWING TRAFFIC CONTROL ORDER IS HEREBY ISSUED BY BRIAN COBURN, SENIOR CIVIL ENGINEER, DULY AUTHORIZED AS TRAFFIC ENGINEER, BY SEC. 33.141 OF THE AFORESAID CHAPTER.

ISSUANCE OF THIS TRAFFIC CONTROL ORDER WAS PRECEDED BY STUDY AND INVESTIGATION OF TRAFFIC CONDITIONS ON THE FOLLOWING PUBLIC ROAD OR ROADS IN THE CITY OF NOVI, MICHIGAN.

JACOB DRIVE

AND AFTER SAID INVESTIGATION, IT IS HEREBY ORDERED AND DIRECTED THAT THE DEPARTMENT OF PUBLIC WORKS ERECT AND MAINTAIN THE STOP SIGN (S) IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS REQUIRED BY SEC. 33.217 OF THE AFORESAID CHAPTER, SAID SIGNS TO GIVE NOTICE OF THE FOLLOWING DETERMINATION:

WEST BOUND JACOB TO STOP AT TAFT



TRAFFIC ENGINEER – Brian Coburn

DATED: 10/1/09

APPROVED BY CITY COUNCIL

TRAFFIC CONTROL ORDER NUMBER 09-06 HAVING BEEN PRESENTED TO THE COUNCIL OF THE CITY OF NOVI, MICHIGAN FOR STUDY AND APPROVAL, IS HEREBY APPROVED AND IT IS HEREBY ORDERED AND DIRECTED THAT THIS ORDER BE FILED IN THE OFFICE OF THE CITY CLERK AND A COPY THEREOF IN THE OFFICE OF THE CHIEF OF POLICE OF SAID CITY.

IT IS FURTHER ORDERED AND DIRECTED THAT THIS ORDER SHALL BECOME EFFECTIVE UPON BEING FILED WITH THE CLERK AND UPON ERECTION OF ADEQUATE SIGNS GIVING NOTICE OF THE EXISTENCE OF AFORESAID,

ADOPTED AT THE REGULAR MEETING
OF COUNCIL ON _____.

BY: _____
MAYOR – David Landry

CITY CLERK – Maryanne Cornelius