

Orion Township

Preliminary Project Feasibility

- Sheriff Substation
- Fire Station
- DPW

January 2008

plante moran CRESA
REAL ESTATE CONSULTANTS

ORION TOWNSHIP PRELIMINARY PROJECT FEASIBILITY REPORT

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C.

conceptual site plan

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Approval to prepare a conceptual site engineering plan based on French



MANAGEMENT SUMMARY

A. Project Objective

Orion Township is located approximately 45 minutes north of the City of Detroit. This outer ring suburban community has experienced and is forecasted to have significant growth. In an effort to continue to provide services to its residents, the Township is undertaking the design and construction of three new facilities: Sheriff substation, Fire Station and DPW building.

The purpose of this project is to:

- Determine the approximate size of the facilities
- Prepare a rough project schedule
- Determine approximate project cost
- Review / comment on existing township site information

B. Project Approach

To achieve the intended objective the following approach was undertaken:

1. Project Initiation

An initial meeting was conducted with key Township staff and government officials to outline the final project deliverable.

2. Data Review

Based on previous reports and requested data, the Township provided Plante Moran CRESA (PMC) with information regarding the space and operational needs of the affected departments. The data reviewed included the following:

- Staffing projections
- Previously completed feasibility reports
- Audited financial statements
- Department budgets
- Utility Maps
- Non complaint survey by OHM
- Preliminary soil report by S-H

3. Space and Site Plan Confirmation

From the information provided, a space and site plan analysis was performed to confirm the preliminary required space and site size for the project.

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4. Project Costs and Financing

From the space program, and township provided site information, preliminary project costs were developed. The financing concepts for the project were developed based on the review of the audited financial statements.

5. Development of Site Plan and Building Massing

Working with French Associates, a preliminary site plan was developed for the site. The purpose of this was to allow the Township and its residents to be able to have a visual representation of the proposed facility(ies).

C. Project Findings

Project Component	Project Finding	Section
Proposed Facility Size	Fire Headquarters 18,200 sq ft Sheriff Substation 11,400 sq ft DPW Building 17,700 sq ft TOTAL 47,300 sq ft	3
Site Layout	Fire Headquarters 2.0 to 2.5 acres Sheriff Substation 1.2 to 1.5 acres DPW Building 2.0 to 2.5 acres TOTAL 5.2 to 6.5 acres	4
Site Due Diligence	Title - Township/Water and Sewer owns the property, will land lease to police and fire Zoning — Suburban Farm (SF) Special Land Use is required for Public Safety Project Floodplain — Not in floodplain per OHM survey dated 08/21/95. Wetlands - Boundaries shown on OHM survey. PMC recommends mapped wetland boundary survey be completed to MDEQ specs. Soil Borings — Conducted on 7-17-07 indicated that the purpose was exploratory and random. OHM recommends retention pond. High groundwater throughout site is indicated. Preliminary recommendation of formed footings. It will be necessary to consider groundwater conditions. PMC recommends additional borings based on actual building locations. Easements — Need to have a title search completed and an ALTA survey. Topography - A Topographic Survey was completed by OHM 8-21-95, it will be necessary to update this survey.	4

Project Component	Project Finding	Section
	Utilities – Per Township records, the following utilities are located in proximity of the site. Based on final site layout and requirements, it may be necessary to extend or modify the utilities: Water: 16 inch main on west side of Joslyn Road Sewer 12 inch sanitary sewer on site Storm: No storm sewer available; retention basin and discharge to wetland, need to review with MDEQ Power: Available Gas: 8 inch high pressure line on the west side of Joslyn Road	
	Trees: Township woodland ordinance will require a tree survey. It should be noted that the results of the additional site due diligence may impact final project costs. Therefore; it is recommended that the Township complete site due diligence prior to final project approval.	•
Project Costs	Fire Headquarters \$3,600,000 - \$3,700,000 / \$2,200 = 205 Sheriff Substation \$2,800,000 - \$2,900,000 / \$1,400 = 255 DPW Building \$2,900,000 - \$3,000,000 \$1,000 = 175 TOTAL \$9,300,000 - \$9,600,000 Project costs are preliminary and may vary significantly based on the	5
Financing Alternatives	PMC recommended additional site due diligence. The Township is in a very strong financial position. Based on our review of audited financial statements we would suggest the following.	6
	Paid through Water and Sewer Funds no debt Fire Station Financed through remaining Fire Capital Improvement balance of \$1,009,385 and debt financing through the Water and Sewer Fund of approximately \$2,700,000, resulting in an approximately an average annual debt service payment of \$216,000 per year. This assumes a 20 year payment period and 5.0% interest rate.	
v	Sheriff Substation Financed through use of Police Protection Fund, \$856,580 and debt financing through Water and Sewer of approximately \$2,044,000. This results in an approximate annual average payment of \$164,000. This assumes a 20 year payment period and 5.0% interest rate.	

Project Component		Project Finding	Section
Schedule	Project Design and Permi Additional Site Due Dilige Survey Topographic/Wetla Soil Borings Site Layout Conceptual Engine Revised Costs Special Land Use MDEQ Review and	nce: ands eering Approval	8
	Move Coordination	2 – 3 months	
	Project Closeout	1 – 2 months	
	Total Time Required	23 – 29 months	
	A more detailed project s	chedule is included in Section 8.	
12	next five months. 2. Completion of addition of addition of addition of a condition of addition of a condition		
Next Steps Costs	PMC Site Due Diligence - Topographic - Boundary	\$17,500 \$14,244	
	- Tree - Wetland		= -
	Soil Borings	\$10,000	
	Conceptual Engineering	\$ 5,000	



COMMUNITY PROFILE

A. Introduction

Orion Township is a Charter Township located within Oakland County. The Township had a 2000 Census population of 30,748 and surrounds the Village of Lake Orion. While the Village is a politically independent, it shares Fire Services with the Township.

The total Township consists of 36.0 square miles of which 33.3 square miles are land with the remaining portion of the Township consisting of inland lakes.

The table below provides key demographic data for the Township according to the 2000 Census (Statistics provided by SEMCOG):

		<u> </u>	Herves	G BMG 00
Demographic Factor	Value	10	1200	2045
Population	30,748	32,921	35,951 -	37,032
Households	11,409	12 519	13,33	
Average Household Size	2.71	27	28	2.5
Median Home Value	\$200,00	00 202	apo	
Median Household Income	\$73,755	5 80	1843	

B. Current Services

The Township currently provides Police, Fire and DPW services to its residents. Below is a brief description of each service :

Police Services

The Township's Police Services are provided by contracting with the Oakland County Sheriff's Department. The Township currently contracts 30 deputies to provide 24 hour coverage through a dedicate millage of 2.0 mils.

Fire Services

The Township currently provides fire services to the Township and the Village through a mixture of six full time staff members and 65 Paid On Call (POC) staff. The Township funds its portion of fire services through a dedicate millage of 1.0 mils.

DPW

The Township provides DPW services to the residents of the Township with a total staff of 13 individuals. The Department has over 3,200 water customers and 5,200 sewer customers. The system consists of approximately 63 miles of water mains, 100 miles of sanitary sewer mains, 900 fire hydrants, 16 sanitary sewer lift stations. The annual budget is \$7.6 million.

C. Community Growth

Moving forward, the Township is forecasted to continue to expand and grow. Between 1990 and 2000 the Township's population grew nearly 50%. With this increase in population the total number of structures increased 50% from 7,654 to 11,517 structures. By 2030, it is forecasted that the population will grow another 26% to approximately 41,000 residents.

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FIRE HEADQUARTERS SPACE PROGRAM

ORION TOWNSHIP - FIRE HEADQUARTERS PRELIMINARY SPACE PROGRAM October 2007

	Spac	е Туре		
Department /	Solid	Open	Unit	Total
Function	Walls	Area	Sq. Ft.	Sq. Ft.
Fire Department Administration				
Lobby	0	1	80	80
Chief	1	0	225	225
Assistant Chief/Fire Marshall	1	0	150	150
Fire Marshall Staff	0	2	80	160
Training Officer	1	0	150	150
EMS Coordinator	0	1	80	80
Secretary	0	1	80	80
Conference Room (8 person)	1	0	240	240
Copy/Fax/Storage	1	0	100	100
Plan Storage / Files	1	0	150	150
Toilet Room	2	0	60	120
SUBTOTAL				1,535
Circulation (40%)				614
Total Fire Department Administration	8	4		2,149
Apparatus Storage				
Drive Thru Bays	0	4	1,500	6,000
Storage/Medical Supplies/Equipment	1	0	350	350
SUBTOTAL				6,350
Circulation (40%)				2,540
Total High-bay	1	4		8,890
Fire Station Support Areas	1		€	
DE Con Room	1	0	100	100
Laundry	1	0	150	150
Drying Room	1	0	200	200
Mechanics Room/Tool Crib	1	0	150	150
Hose Storage / Rack Room	1	0	200	200
Gear Storage (Turn-out)	1	0	400	400
Training Center	1		1,000	1,000
SCBA / Air Compressor	1	0	150	150
SUBTOTAL		2		1,900
Circulation (40%)			=	760
Total Fire Station Support Areas	5	0		2,660
Fire Fighter Quarters	.2	11 g	2 6	
Day Room	1 ×	0	400	400
Kitchen / Dining	1	0	200	200
Male Locker Room	. 1 *	0	500	500
Women Locker Room	1	0	200	200
Laundry (Reg)	_1	0 -	150	150
Bunk Rooms (4 person)	0	4	70	280
Physical Training Storage Room	1 1	0	150 150	150 150
SUBTOTAL			-	_
Circulation (40%)	-	-		2,030
· · · · · · · · · · · · · · · · · · ·	 			812
Total Fire Fighter Quarters	7	- 4		2,842

ORION TOWNSHIP - FIRE HEADQUARTERS PRELIMINARY SPACE PROGRAM October 2007

A STATE OF THE STA	Space	е Туре		
Department / Function	Solid Walls	Open Area	Unit Sq. Ft.	Total Sq. Ft.
Core				
Mechanical Room	1	0	300	300
Electrical Room	1	0	150	150
Janitor Closet	2	0	60	120
SUBTOTAL		l 		570
Circulation (35%)			_	200
Total Core Area	2	0		770
TOTAL LOW-BAY	22	8		8,421
Sub-Total				17,311
Construction Factor (5%)				866
GRAND TOTAL				18,176

SHERIFF SUBSTATION SPACE PROGRAM

ORION TOWNSHIP - SHERIFF'S DEPT. PRELIMINARY SPACE PROGRAM 1/21/2008

		Space	е Туре	Unit	Total
Department / Function	Staff	Solid Walls	Open Area	Square Feet	Square Feet
Public Area					_
Vestibule & Lobby	1	1	0	200	200
Front Desk	1	1	0	96	96
Report Writing Area		1	0	80	80
Public Restrooms (Uni-sex)		1	0	60	60
SUBTOTAL					436
Circulation (50%)					218
Total Public Area	1	4	•		654
Administrative					
Lieutenants Office	1	1	о	225	225
File Storage	1	0	1	36	36
Coat Closet (7 LF)	1	1	l о	14	14
Conference Room (capacity for 12)		1	0	360	360
Copy/Fax/Storage		1	0	50	50
SUBTOTAL					685
Circulation (50%)					343
Total Administrative	1	4	1		1,028
Investigation (Detective Bureau)					
Detective Lieutenant (Supervisor)	1	1	0	120	120
Detectives	2	0	3	80	240
Soft Interview Room		1	0	100	100
Interview Equipment Room		1	0	80	80
SUBTOTAL	 				540
Circulation (50%)		_	=	_	270
Total Investigation (Detective Bureau)	3	3	3		810
Patrol	_	-			
Shift Sergeants	1	1 3	0	120	360
Patrol Investigators	2		3	80	240
School Liasons	2		3	80	240
Equipment Storage		1	0	100	100
Report Writing	-		4	36	144
Storage	-	. 1		100	100
Briefing/Training	15	1	0	450	450
Armory	4	1 1	0	120	120
Canteen Area			1	80	80
SUBTOTAL	-		>1		1,754
Circulation (50%)	0 *	-			877
Total Patrol	20	7	- 11	18 g	2,631

ORION TOWNSHIP - SHERIFF'S DEPT. PRELIMINARY SPACE PROGRAM 1/21/2008

		Space	Space Type		Total
Department / Function	Staff	Solid Walls	Open Area	Square Feet	Square Feet
Holding Area			_	100	
Processing Area		1 1	0	100	100
Prisoner Interview Room Male Holding Area		1 1	0	80	80
Female Holding Area		1	0	80 80	80
Juvenile Holding Area		1 1	0	80	80 80
Janitor Closet		1		25	25
SUBTOTAL		 	0	25	
	-	-	ļ <u>.</u>		445
Circulation (50%)		 			223
Total Holding Area		6	0		668
Staff Common Areas					
Secure Vestibule and Entry		1	0	150	150
Work Area		1	0	100	100
Computer Room		1	0	80	80
Supply Storage		1	0	150	150
Staff Lounge		0	1	200	200
Mail Box Area			1	40	40
Men's Locker (35 FT and 10 Reserves)		1	0	1600	1,600
Women's Locker (5 FT and 3 Reserve)		1	0	300	300
Janitors Closets		1	0	60	60
SUBTOTAL				ļ	2,680
Circulation (50%)	=	ļ			1,340
Total Staff Area		7	2	-	4,020
Records Bureau		·			
Records Clerks	1 1	0	1	80	80
Records Counter (see Front Desk)		1	0	0	-
Records Storage		0	1	150	150
Records Archives		1	0	0	-
SUBTOTAL	-				230
Circulation					115
Total Records	1	2	2		345
Microllaneous Spaces					
Miscellaneous Spaces		1 ,		250	700
Sally Port Police Bikes		2	0	350	700
Flares and Flammable Storage	_	1 1	0	80	80 50
SUBTOTAL			 	50	
Circulation (35% Gross-Up Factor)	<u> </u>	<u> </u>	<u> </u>		830
	-				415
Total Misc. Spaces		4	0		1,245
Total	26		<u> </u>		11,400

DPW BUILDING SPACE PROGRAM

ORION TOWNSHIP - DPW FACILITY PRELIMINARY SPACE PROGRAM 10/23/07

	Employee	Offic	е Туре		
	Count	Solid	Systems	Unit	Total S.F.
Department / Function		Walls	Furniture	Sq. Ft.	
Public Areas/Billng					
Vestibule/Counter Window	2	1	0	100	100
Lobby		1	0	80	80
Restroom		2	0	60	120
SUBTOTAL					300
Circulation (30%)	-				90
Total Public Areas	2	4	0		390
Administration	.*				
DPW Director	- 1	1	0	225	225
Assistant Director	1	1	0	150	150
Secretary/Billing	3	0	3	80	240
Hotelling Workstation		0	2	64	128
Conference Room (8-10 person)		1	0	240	240
Kitchen / Coffee Station		1	0	150	150
Office Storage / Work Area		1	0	80	80
Computer/Copy Room		1	0	64	64
File Room		1	0	150	150
Blueprint Room		1	0	200	200
SUBTOTAL					1,627
Circulation (30%)					488
Total Administration	5	8	5		2,115
DPS Staff					
Crew Supervisor	1	1	0	80	80
Water and Sewer Crew	9	- 0	0	0	0
Men's Locker/Restroom (10)		1	0	350	350
Women's Locker Restroom (5)		1	0	150	150
Lunch Room/Training Room		1	0	400	400
SUBTOTAL					980
Circulation (20%)			<u> </u>		196
Total Staff	10	4	0		1,176
Building Common					
Mechanical Room		1.	-	200	200
Electrical Room		, 1,		150	150
Janitor Closet		1	-	50	50
SUBTOTAL					400
Circulation (30%)					120
Total Building Common	0	3	0		520
TOTAL OFFICE (LOWBAY)	17	19	5		4,201

ORION TOWNSHIP - DPW FACILITY PRELIMINARY SPACE PROGRAM 10/23/07

	Employee	Offic	е Туре	VA. 69	
	Count	Solid	Systems	Unit	Total S.F.
Department / Function		Walls	Furniture	Sq. Ft.	
Mechanics Area					
Mechanic's Bench Area		1	-	80	80
Parts & Tool Room		1	-	.80	80
Lamp / Battery Storage		1	-	50	50
Paint, Fuel & Waste Oil Storage	:	1	-	80	80
SUBTOTAL					290
Circulation (20%)					58
Total Staff	0	1	0		348
Vehicle Repair Area					
Truck Hoist		1	-	300	300
Auto Hoist		1	-	200	200
Tire Changing Area		1	-	50	50
Tire Storage		1	-	100	100
Air Compressor/Generator		1	-	50	50
Welding Room/Drill & Arbor Press		1	-	50	50
Ventilation Equipment		1	-	50	50
SUBTOTAL		-	-		800
Circulation (20%)					160
Total Vehicle Repair Area	0	0	0		960
Current Vehicle Storage Needs					
Large Vehicle Equipment Storage		1	-	5500	5,500
Small Equipment Storage		1	-	500	500
Supplies / Parts Storage		1	-	100	100
Staging Area		. 1	· -	100	100
SUBTOTAL					6,200
Circulation (50%)					3,100
Current Total Vehicle Storage Nee	ds				9,300
Shop Area					
Workbench		1	-	64	64
Pesticide Storage		1	-	80	80
Table Saw and Bench		. 1	-	80	.80
Water Parts Storage		1	-	80	80
Meter Room		1	-	240	240
SUBTOTAL					544
Circulation (20%)					109
Total Shop Area		5	0		653
TOTAL EMPLOYEES	17				
TOTAL SHOP (HIGHBAY)		<u> </u>	<u> </u>		11,261
					,

ORION TOWNSHIP - DPW FACILITY PRELIMINARY SPACE PROGRAM 10/23/07

Department / Function	Employee	Employee Office Type			
	Count	Solid Walls	Systems Furniture	Unit Sq. Ft.	Total S.F.
SUBTOTAL (OFFICE & SHOP)					15,462
Construction Factor (5%)					773
HIGH BAY AND LOW BAY TOTA	L				16,235
Mezzanine Storage Area Misc. Storage		1	-	1,500	1,500
TOTAL Mezzanine Area		1	0		1,500

GRAND TOTAL 17,735

ORION TOWNSHIP PROJECT FEASIBILITY REPORT

PRELIMINARY SPACE PROGRAM ASSUMPTIONS

The Preliminary Space Programs were developed through the collection of data, applying industry standards and professional expertise. The following steps were performed in the collection of data:

- P&MC conducted site visits of the existing facilities. Personal interviews with OT were conducted during and after the site visits to obtain clarification from the survey results.
- 2) P&MC reviewed plans and toured other facilities similar in nature as it relates to general industry standards for office type spaces relating to association(s) facilities.
- 3) P&MC prepared space programs for each of the services. These programs has been reviewed and approved by Administration and staff to ensure that facility needs is properly accounted for. The space program is intended to meet the functional space needs of the functions with relatively level staff numbers over the next twenty (20) years.
- 4) The space program considers a twenty (20) year outlook. Considering space beyond twenty (20) years is difficult due to the possibility and reasonable expectations of staff changes within the OT organization, technology changes, and equipment changes and policy changes.

P&MC used the following space assumptions:

- The preliminary space program scenarios assume the Municipal Service facilities will be constructed under the following scenario on existing sites owned by OT.
- 2) Parking for staff, visitors, and fleet vehicles is assumed to be accommodated on the existing site and is included in the overall site program.
- 3) Circulation factor for general office areas are approximately 35% and are based on general industry standards. Other areas will vary according to the specific use and will be based on general industry standards.
- 4) A construction factor of 5% was used for construction materials (i.e. exterior CMU wall thickness).
- 5) The following denotes the approximate area of new construction at each facility. Deviations from this scope may have impact on space requirements and cost.

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FIRE HEADQUARTERS SITE PROGRAM



ORION TOWNSHIP - FIRE HEADQUARTERS PRELIMINARY SITE PROGRAM OCTOBER 2007

Site	Parking			
Area	_	Multi.	Square Feet	Totals
Fire Headquarters Parking				
			٠	
Fire Headquarters			18,176	
Parking - Employees	10	350	3,500	
Parking - Visitors	5	350	1,750	
Parking - Volunteers	25	350	8,750	
Sub-Total				32,176
Allowance for Landscaping, Setbacks, Circulation (60%)			19,306
Total Fire Headquarter Building & Growth	_			51,482
Parking - Exterior Apparatus Layout		2		
Engine Truck	1	350		
Tanker Truck	2	350		
Heavy Rescue Truck	1	200		
4x4 Rescue Truck	1	200		
Brush Truck	1	300		
Utility Truck	0	200		
Parade Vehicle	0	200		
Mini Pumper	0	200		
Ladder Truck	1	500	500	
	~			
Sub-Total				2,250
Circulation (100%)				2,250
Total Net Site Area		f-		4,500 55,982
Retention Area				34,848
Total Site Area Required				90,830
Total Acres				2.09

SHERIFF SUBSTATION SITE PROGRAM

ORION TOWNSHIP - SHERIFF PRELIMINARY SITE PROGRAM NOVEMBER 2007

Site	Parking			
Area	Quantity	Mult.	Square Feet	Totals
Sheriff's Office				
Building Size			11,400	
Employee Parking	30	350	10,500	
Visitor Parking	5	350	1,750	
Sub-Total				23,650
Police Car Parking	20	350	7,000	
Sub-Total	E H			7,000
Total Net Site Area				30,650
Allowance for Landscaping, Setb	acks, Circulation, Etc.	70%		21,455
Total Site Area Required				52,105
Total Acres				1.20

DPW SITE PROGRAM

ORION TOWNSHIP DPW FACILITY PRELIMINARY SITE PROGRAM NOVEMBER 2007

Site Area	Parking	Multi	Square Feet	Totals
DPW Building	Quartity	wara.	Oquare 1 eet	Iotais
DPW / Building Dept. Facility Parking - Employees Parking - Visitors Equipment Parking Reserve Area for Additional Parking	16 4 10 5	350 350 350 350	17,227 5,600 1,400 3,500 1,750	ă.
Sub-Total				29,477
Allowance for Landscaping, Setbacks, Circulation (60%	6)			17,686
Total DPW Building & Growth				47,163
Site Storage and Auxiliary Buildings				
Barricades, Signs and Barrels Storage (Enclosed) Water and Sewer Pipe Storage (Covered) Sand & Aggregate Cells (Covered) Concrete & Paving Waste Area Excavation Spoils Topsoil Storage Drying Bed (Covered) Waste Dumpsters (Trash & Roll off) Misc. Storage Above Ground Fuel Storage (1000 gal. Ea)	1 1 1 1 1 1 1 1 2	500 1,000 2,000 1,000 1,000 250 500 1,000 300	1,000 2,000 1,000 1,000 1,000 250 500 1,000	
Sub-Total	,		~	8,850
Circulation (100%)				8,850
Total Site Storage and Auxiliary Building Total Net Site Area			•	17,700
Retention Area				64,863 25,000
Total Site Area Required				89,863
Total Acres				2.06

SITE CONSIDERATIONS

A. Site Location

The Township (Water and Sewer Department) has purchased property north on Joslyn Road just south of Clarkston Road. This property consists of a total of approximately 11 acres. An OHM survey dated 08/21/95 indicated that approximately 45% may be regulated wetlands.

B. Site Requirements

Based on the proposed facility sizes approximately a total of 5 to 6.5 acres are required for the development of the three facilities. The table below identifies the total acreage required for each facility.

Facility	Acreage Required
Fire	2.0 to 2.5
Police	1.2 to 1.5
DPW	2.0 to 2.5
TOTAL	5.2 to 6.5

C. Site Due Diligence

An essential component in determining project costs is a complete understanding of site features and restrictions. Limited information has been obtained for the site, and therefore, a complete understanding of site restrictions is unavailable at this time.

Due Diligence Item	Outcome
Title	Township, (Water and Sewer) owns the property. Ability to land lease the property to police and fire.
Zoning	Suburban Farms (SF) uses are permitted under Section 5.03 Special Land Uses, a special land use permit will be required
Floodplain	Not in the floodplain, according to Township's consulting engineer
Wetlands	There are wetland areas on the site based on 8-21-95 survey completed by OHM. An updated Wetland Boundary survey should be obtained. Discussions with MDEQ and OHM regarding the storm water system are required.
Soil Borings	Were conducted on 7/17/07 indicated that the purpose was to provide general information and not foundation analysis. Formed footings are recommended for the buildings. It will be necessary to obtain additional borings and to perform some site engineering because of the high water table. Additional borings are recommended based on new surveys and site layout.
Easements	Need to have a title search completed and a ALTA survey completed

C. Site Due Diligence (Continued)

Due Diligence Item	Outcome
Topography	A Topographic survey was completed by OHM 8-21-95; it will be necessary to obtain a survey that complies with the township zoning ordinance.
Utilities	The Township indicates the following utilities are located in proximity of the site. Based on final site layout and requirements, it may be necessary to extend or modify the utilities:
- Water	16 inch main on west side of Joslyn
- Sewer	12 inch sanitary sewer
- Storm	No storm sewer exists, retention basin with discharge to wetland
- Power	Power is available
- Gas	8 inch high pressure line on west side of Joslyn.
Trees	Woodland ordinance

It should be noted that the results of additional site due diligence will impact project costs. Therefore; it is recommended that the Township complete additional site due diligence prior to project approval.

FIRE HEADQUARTERS PROJECT COSTS

ORION TOWNSHIP FIRE HEADQUARTERS PRELIMINARY PROJECT COST SUMMARY

Cost Data = Detroit CBSA 2Q2007

Specification Factor = Geographic Factor = Cost Escalation Factor = 1.00 1.00 1.06

CONCEPTUAL

Fire Headquarters

lino		Area	No. of	Total		Effective	As % of
Line No.	Program Area	Required (in Sq. Ft.)	Room(s) Required	Area (in Sq. Ft.)	Unit Cost (\$)	Program Area Cost (\$)	Total Cost
	Fire Department Administration	(111 34.1 (.)	Required	(111 34: 1 1.)	Cost (\$)	C03E (\$)	Cost
2	Chief	225	1	225	\$130.00	\$31,005	0.85%
3	Assistant Chief/Fire Marshall	150	1	150	\$130.00	\$20,670	0.57%
4	Fire Marshall Staff	80	2	160	\$130.00	\$22,048	0.61%
5	Training Officer	150	1	150	\$130.00	\$20,670	0.57%
6	EMS Coordinator	80	1	80	\$120.00	\$10,176	0.28%
7	Secretary	80	2	160	\$120.00	\$20,352	0.56%
8	Conference Room (8 person)	240	1	240	\$145.00	\$36,888	1.02%
9	Copy/Fax/Storage	100	1	100	\$105.00	\$11,130	0.31%
10	Plan Storage / Files	150	1	150	\$105.00	\$16,695	0.46%
	Lobby	80	1	80	\$105.00	\$8,904	0.25%
11	Toilet Room	60	2	120	\$165.00	\$20,988	0.58%
12	Training Room / EOC (incl. storage and auxilla	1,000	1	1,000	\$145.00	\$153,700	4.23%
12							
13	Apparatus Areas						
14	Drive Through Bays	1,500	4	6,000	\$110.00	\$699,600	19.26%
15	Storage	200	1	200	\$105.00	\$22,260	0.61%
16							
17	Fire Station Support Areas						
18	DE Con Room	100	1	100	\$110.00	\$11,660	0.32%
19	Laundry	150	1	150	\$165.00	\$26,235	0.72%
20	Drying Room	200	1	200	\$110.00	\$23,320	0.64%
21	Mechanics Room/Tool Crib	150	1	150	\$105.00	\$16,695	0.46%
22	Hose Storage / Rack Room	200	1	200	\$105.00	\$22,260	0.61%
23	Gear Storage (Turn-out)	400	<i>[</i> 1	400	\$105.00	\$44,520	1.23%
24	SCBA / Air Compressor	150	i 1	150	\$105.00	\$16,695	0.46%
25	23 114 and 1 mm-n of						
26	Fire Fighter Quarters						
27	Day Room	400	1	400	\$130.00	\$55,120	1.52%
28	Kitchen / Dining	200	1	200	\$165.00	\$34,980	0.96%
29	Male Locker Room	500	1	500	\$165.00	\$87,450	2.41%
30	Women Locker Room	150	1	150	\$165.00	\$26,235	0.72%
31	Laundry (Reg)	150	1	150	\$110.00	\$17,490	0.48%
32	Bunk Rooms (4 person)	280	1	280	\$110.00	\$32,648	0.90%
22	Physical Training	150	1	150	\$130.00	\$20,670	0.57%
33	Storage Room	150	1	150	\$105.00	\$16,695	0.46%
34	Core						
35 35	Core Mechanical Rooms	200		200	4405.00		
36	Electrical Rooms	300 150	1	300	\$105.00	\$33,390	0.92%
37	Janitor Closet	60	1 2	150 120	\$105.00	\$16,695	0.46%
1		00			\$165.00	\$20,988	0.58%
	Program Area Sub-Total: Circulation & Overhead Area:	420/	of Construction	12,715	4110.00	1,618,832	44.57%
40	Building Sub-total Total:	43%	of Construction	5,400	\$110.00	\$594,000	16.36%
41	Site Development & Improvement:	(Allowanco)	2 20000	18,115	\$122.15	\$2,212,832	60.93%
	Site Utilities:	(Allowance) (Allowance)	2 acres			\$300,000	8.26%
43	Site Development & Utilities Total:	(Allowalice)				\$150,000	4.13%
44	Builder Fee / Reimbursable:	6 50%	Of Building & Cit	a Budaat		\$450,000 \$173,100	12.39%
		0.30%	Of Building & Sit	c Suuget	\$156.55	\$173,100 \$2,835,932	4.77% 78.09%
	Building Project Contingency:	10.00%	of Building & Site	- Budget	4130.33	\$2,835,932 \$283,600	78.09% 7.81%
	Furnishing and Equipment Cost:		of Building & Site	•		\$283,000 \$124,900	3.44%
	Fire Apparatus & Equipment Cost:		of Building & Site	-		\$125,000	3.44%
	Professional Fees:		of Building & Site			\$262,300	7.22%
	Site Acquisition:	-		\$ -	per acre	4502,300	1.2270
	Bond Issuance Costs:		of Program Budg	-	por 0010		
51	Dona Issaanice Costs.						

SHERIFF SUBSTATION PROJECT COSTS

ORION TOWNSHIP - SHERIFF'S SUBSTATION PRELIMINARY PROJECT COST SUMMARY

Cost Data = Detroit CBSA 3Q2006

Specification Factor = 1.00 Geographic Factor = 1.00

Cost Escalation Factor = 1.04

CONCEPTUAL

Fire Headquarters

		Area	No. of	Total		Effective	As % of
Line		Required	Room(s)	Area		Program Area	Total
No.	Program Area	(in Sq. Ft.)	Required	(in Sq. Ft.)	Cost (\$)	Cost (\$)	Cost
1	Public Area Vestibule	50	1	50	#13E 00	#7 020	0.240/
2	Vestibule	100	1		\$135.00	\$7,020	0.24%
3	Lobby	25	1	100	\$135.00	\$14,040	0.48%
4	Front Counter		1	25	\$120.00	\$3,120	0.11%
5	Public Restrooms	100	1 1	100	\$165.00	\$17,160	0.59%
6 7	A desiminaturative		1				
8	Administrative Fire Chief	150	1	150	#130.00	#10 720	0.640
9	Fire Marshal	64	1	150	\$120.00	\$18,720	0.64%
			1	64	\$120.00	\$7,987 \$7,654	0.27%
10	Training Officer (Captain's Office)	64 64	1	64	\$115.00	\$7,654 \$7,654	0.26%
11	Inspectors		1	64	\$115.00	\$7,654	0.26%
12	Lieutenant	64		64	\$115.00	\$7,654	0.26%
13	Copy/Fax/work Area	64	1	64	\$110.00	\$7,322	0.25%
14	General Storage	100	1	100	\$95.00	\$9,880	0.34%
15	Records	100	4	400	\$95.00	\$39,520	1.36%
16	Janitor Closet	60	1	60	\$95.00	\$5,928	0.20%
17	College Parks Aven						
18	Suppression Duty Area	150		450	*****	104.000	0.700/
19	Vestibule and Lobby	150	1	150	\$135.00	\$21,060	0.72%
20	Men's Locker (25) & showers	500	1	500	\$195.00	\$101,400	3.49%
21	Women's Locker (5) & Showers	200	1	200	\$195.00	\$40,560	1.40%
22	Janitor Closet	60	4	240	\$95.00	\$23,712	0.82%
23	Bunk Rooms (4)	280	1	280	\$115.00	\$33,488	1.15%
24	Laundry (Rag)	100	1	100	\$145.00	\$15,080	0.52%
25	Kitchen / Day Room	200	1	200	\$135.00	\$28,080	0.97%
26	Amenda Para Orientia						
27	Apparatus Bay-Support	200	_	200			
28	Turn-Out Gear room (30)	300	1	300	\$140.00	\$43,680	1.50%
29	EMS/EMT Supplies and Storage	150	1	150	\$95.00	\$14,820	0.51%
30	Decon Area and Shower	150	1	150	\$145.00	\$22,620	0.78%
31	SCBA Cascade Room	150	1	150	\$125.00	\$19,500	0.67%
32	Hose Drying and Storage	200	1	200	\$95.00	\$19,760	0.68%
33	Wash Area/Laundry	150	1	150	\$125.00	\$19,500	0.67%
34	General Supplies / Storage	150	1	150	\$95.00	\$14,820	0.51%
35	Air Compressor Room	100	1	100	\$95.00	\$9,880	0.34%
36	Drive-thru Bays	1,530	3 [4,590	\$95.00	\$453,492	15.60%
37	Program Area Sub-Total:			8,915		1,035,112	35.61%
38	Circulation & Overhead Area:	40% (of Building	3,600	\$105.00	\$378,000	13.00%
39	Building Sub-total Total:	•		11,264	\$125.45	\$1,413,112	48.61%
40	Site Development & Improvement:		Allowance)			\$450,000	15.48%
	Site Utilities:	(,	Allowance)			\$150,000	5.16%
	Site Development & Utilities Total:					\$624,000	21.47%
43		6.00% C	of Building & Sit	te Budget	v2	\$122,200	4.20%
44	Building & Site Cost Total:		en 44		\$191.70	\$2,159,312	74.28%
45	Building Project Contingency:		f Building & Sit	-		\$215,900	7.43%
46	Furnishing and Equipment Cost:		f Building & Sit	-		\$91,100	3.13%
47	• • • • • • • • • • • • • • • • • • • •		f Building & Sit	-		\$139,500	4.80%
48	Professional Fees:		f Building & Sit	-		\$191,200	6.58%
49	Site Acquisition:		cres @	\$ -	per acre	1	
50	Bond Issuance Costs:	3.93% 0	f Program Budg	get		\$109,980	3.78%
51	PROJECT GRAND TOTAL:				\$258.08	\$2,906,992	100.00%



DPW BUILDING PROJECT COSTS

ORION TOWNSHIP - DPW FACILITY PRELIMINARY PROJECT COST SUMMARY

Cost Data = 2nd QTR 2006 (DETROIT)

Specification Factor = Geographic Factor =

1.00

Cost Escalation Factor = 1.07 (2nd QTR 2007)

CONCEPTUAL

		Cost Escalation Factor = 1.07		2.0, (2	(na Q1R 2007)	CONCEPTUAL	
		Area	No. of	Total	Base	Effective	As % of
Line No.	Program Area	Required (in Sq. Ft.)	Room(s) Required	Area (in Sq. Ft.)	Unit Cost (\$)	Program Area Cost (\$)	Total Cost
1				()	3333 (47)	3333 (4)	
2	Public Areas						
3	Vestibule/Counter Window	100	1	100	\$110.00	\$11,770	0.40%
4 5	Lobby	80 54	1 2	80	\$110.00	\$9,416	0.32%
6	Restroom	24	2	108	\$90.00	\$10,400	0.35%
7	Administration						
8	DPW Director	225	1	225	\$110.00	\$26,483	0.90%
9	Assistant Director	150	1	150	\$110.00	\$17,655	0.60%
10	Secretary/Building	80	3	240	\$90.00	\$23,112	0.78%
11	Hotelling Workstation	128	1	128	\$90.00	\$12,326	0.42%
12	Conference Room (10 person)	240	1	240	\$110.00	\$28,248	0.96%
13 14	Kitchen / Coffee Station Office Storage / Work Area	150 80	1	150 80	\$120.00	\$19,260 \$7,704	0.65% 0.26%
15	Computer/Copy Room	64	1	64	\$90.00 \$100.00	\$7,704 \$6,848	0.23%
16	File Room	150	1	150	\$100.00	\$16,050	0.54%
17	Blueprint Room	200	1	200	\$100.00	\$21,400	0.72%
18	·						
19	DPS Staff						
20	Men's Locker/Restroom (10)	350	1	350	\$165.00	\$61,793	2.09%
21	Women's Locker Restroom (5)	150	1	150	\$165.00	\$26,483	0.90%
22	Lunch Room/Training Room	400	1	400	\$120.00	\$51,360	1.74%
23	Building Common						
25	Building Common Mechanical/Electrical Room	200	1	200	\$90.00	#10.250	0.65%
26	Janitor Closet	150	1	150	\$90.00	\$19,260 \$14,445	0.65%
27	Janitor Closet	150	•	130	\$30.00	\$17,775	0.45%
	Mechanics Area						
29	Mechanic's Area		1		\$90.00		
30	Parts & Tool Room	80	1	80	\$90.00	\$7,704	0.26%
31	Battery/Lamp Storage	80	1	80	\$90.00	\$7,704	0.26%
32	Paint, Fuel & Waste Oil Storage	50	1	50	\$90.00	\$4,815	0.16%
33							
	Vehicle Repair Area		_				
35	Truck Hoist	300 200	1	300	\$110.00	\$35,310	1.20%
36 37	Auto Hoist Tire Changing Area	50	1	200 50	\$110.00 \$90.00	\$23,540 \$4,815	0.80% 0.16%
38	Tire Storage	100	1	100	\$90.00	\$9,630	0.33%
39	Air Compressor/Generator	50	1	50	\$90.00	\$4,815	0.16%
40	Welding Room/Drill & Arbor Press	50	1	50	\$100.00	\$5,350	0.18%
41	Ventilation Equipment	50	1	50	\$90.00	\$4,815	0.16%
42							
43							
44	Large Vehicle Equipment Storage	5,500	1	5,500	\$90.00	\$529,650	17.93%
45	Small Equipment Storage	500	1	500	\$90.00	\$48,150	1.63%
46 47	Supplies / Parts Storage	100 100	1	100	\$90.00	\$9,630	0.33%
48	Staging Area	100	1	100	\$90.00	\$9,630	0.33%
	Shop Area						
50	Workbench	64	1	64	\$90.00	\$6,163	0.21%
51	Pesticide Storage	80	1	80	\$90.00	\$7,704	0.26%
52	Table Saw and Bench	80	1	80	\$90.00	\$7,704	0.26%
53	Water Parts Storage	80	1	80	\$90.00	\$7,704	0.26%
55							
	Mezzanine Storage Area	1,500	1	1,500	\$90.00	\$144,450	4.89%
57			· · · · · · · · · · · · · · · · · · ·	10.170	1100		
	Building Sub-Total: Circulation & Overhead Area:	AFW	of Addition	12,179	\$103.73	1,263,296	42.77%
59		4370	or Addition	5,500	\$95.00	\$559,075	18.93%
60	Building Total:	26	A	17,679	\$103.08	\$1,822,371	61.69%
62	Site Development & Improvement (Allowance): Site Utilities (Allowance):	2.6	Acres at per acre	e cost or	\$125,000	\$328,750 \$15,000	11.139 0.519
	Site Development & Utilities Total:					\$15,000 \$367,813	12.459
64					\$132.53	\$2,343,000	79.32%
	Building Project Contingency:	7.50%	Of Building & Site	e Budget	4-4-100	\$176,000	5.969
	Construction Management Fee and Costs:		Of Building & Site			\$139,000	4.719
	Professional Fees and Costs:		Of Building & Site	-		\$226,000	7.659
68	BUILDING GRAND TOTAL:			-	\$163.13	\$2,884,000	97.63%
	Loose Furnishing and Equipment Cost:	2.00%	Of Building & Situ	e Budget	,	\$47,000	1.599
	Technology Equipment		Of Building & Site			\$23,000	0.789
	Building Permits & Inspection Fees:		Of Building & Site	_			
72	Site Acquisition:		Acres at per acre	e cost of			
72	PROJECT GRAND TOTAL:				\$167.09	\$2,954,000	100.00%

ORION TOWNSHIP PRELIMINARY PROJECT FEASIBILITY REPORT

PROJECT COSTS ASSUMPTIONS

P&MC prepared the Preliminary Project Costs which were developed through the collection of data, applying general industry standards and professional expertise. P&MC prepared a preliminary schematic costs analysis relating to constructing a new addition to accommodate the space requirements for each department.

P&MC used the following assumptions for the preliminary schematic costs:

- 1) The building square footage for constructing an addition and renovating the existing facility is based on the Preliminary Space Evaluation conducted by P&MC
- 2) Building development costs for new construction of this type of facility on a OT owned site are based on approximate square foot costs for similar projects. This analysis is for the construction of either a single story or two story facility with no basement and no unusual soil or environmental conditions. This price does include land development costs and assumes that utilities are available at the property line.
- 3) The approximate costs are based on a project delivery system managed by a qualified independent professional firm, which utilizes a fixed costs RFP process, which will include competitive bidding for major project components.
- 4) The approximate costs indicated in each of the Preliminary Project Costs are a rough order magnitude of costs in current values. These costs should not be used for finalized budget figures. Actual costs may vary and are dependant on the final site layout, site restrictions and actual facility size, and types of construction used.
- The following denotes the approximate area of new construction at each facility. The remaining square footage at each facility is to be renovated. Deviations from this scope may have impact on space requirements and cost.

Fire Headquarters Site:

18,200 square feet

Sheriff Site:

11,400 square feet

DPW Building:

17,700 square feet



FINANCIAL ANALYSIS

A. Project Costs

Based on the costs outlining within this report, the total preliminary project costs for the design, construction and development of the public safety complex and DPW facility will total approximately \$9,300,000 – to \$9,600,000. The reader of this report should realize that this value is only an estimate and the true project costs could be slightly greater or less than this projection. The table below identifies the project costs for each component of the project.

Project Component	Costs	
Fire Station	\$3,600,000 - \$3,700,000	·
Sheriff Substation	\$2,800,000 - \$2,900,000	
DPW Building	\$2,900,000 - \$3,000,000	
Total Project Costs	\$9,300,000 - \$9,600,000	

B. Project Funds

The table below shows the funds potentially available for the project:

Funding Source	Amount
Fire Capital Fund	\$ 1,010,000 (1)
Police Capital Fund	\$ 856,000 (2)
General Fund	\$ 5,575,300
Water and Sewer Fund	\$30,833,000
Total	\$38,274,300

- (1) The Fire Capital Improvement Fund has a balance of approximately \$2,700,000. It would appear that \$1,700,000 of this balance has been allocated to other projects. Based on the needs of the community, the Township may wish to reallocate additional dollars to this project.
- (2) The Sheriff's Department has approximately \$1,175,000. Based on the needs of the community, the Township may wish to reallocate additional dollars to this project.

C. Operational Surplus

In addition to the dollars identified above, the Township currently has operational surpluses for the General Fund operations, Fire and Sheriff's Departments. Based on discussions with the Township's auditors and review of financial statements, the table below identifies the annual surplus for fiscal year 2006.

Department	Annual Surplus
General Fund Operations	\$577,000
Fire Operations	\$600,000
Sheriff Operations	\$293,000
TOTAL	\$1,470,000

D. Project Financing and Approach

The objective of the Township in funding this effort is to minimize the need to obtain outside financing for the project. The Township has been very cautious in the management of its operations, resulting in the Township having funds available to address the construction of these facilities. We have reviewed the Township's audited financial statements, and the following dollars and approach has been identified as possible funding sources.

Phase I - Project Funding and Financing

Project Component	Cost/Amount	Payment
DPW Project	\$3,000,000	DPW is able to pay its portion from Water and Sewer Funds, no financing required.
Fire Department Project	\$3,700,000	
Fire Capital Improvement Fund	\$1,009,885	
Amount to Finance	\$2,690,615	Payment to Water and Sewer of approximately \$216,000 per year based on 20 years at 5.0% (1)
Sheriff's Department Project	\$2,900,000	
Police Capital Fund	\$856,583	
Amount to Finance	\$2,043,417	Payment to Water and Sewer of approximately \$164,000 per year based on 20 years at 5.0%. (1)

Financial

In evaluation of the above financing scenario, PMC developed models to examine revenues and expenditures associated with the Sheriff's and Fire Department, a copy of these models is included in Appendix A. Based on these models it would appear that the Sheriff's Department has approximately \$300,000 of revenue in excess of expenditures each year. These monies could be used to meet debt service payments. Additionally, from a review of Fire Services, it would appear that the Fire Department has approximately \$300,000 of revenue in excess of expenditures. These monies could be used to meet debt service obligations.

(1) The Township should be aware that the rate and term of financing may vary based on the final project cost and funding capability of the Departments. The Township currently receives 4.25% to 5.10% on it investments.

Millage

The Sheriff and Fire Departments both have dedicated millages that expire in 2009. The Township should continue to ensure that the millage levels in the Township will be able to cover operational and debt service. If the millage issue fails, the Township will not be able to pay for basic Fire and Police services.

In addition to the dedicated millages, the Township has other resources to pay for the project debt service. The table below identifies alternatives.

Concern	Funding Source or Possibility
Debt Service	Estimated at \$380,000 per year
General Fund	\$300,000 to \$500,000 surplus per year
General Fund Millage	Ability to raise millage 0.10 mils would generate a minimum of \$180,000 per year

Operations

Moving into the new facilities, the departments can expect operating costs of approximately \$3.00 to \$4.00 per square foot. This operational cost includes utilities, maintenance and insurance. This equates to the following operational considerations for each department.

Department	Operating Range	Current Costs
Fire	\$54,000 to \$72,800	Would be additional not replacing a facility
Sheriff	\$34,200 to \$45,600	\$57,960
DPW	\$53,100 to \$70,800	\$48,000

Phase II & III

Based on the Facilities Master Plan prepared by Straub, Pettitt and Yaste, the project cost for Phase II is estimated at \$927,000 and the cost associated with Phase III is \$6,525,000. The total of these two phases are \$7,452,000. Based on an expected project start of 2010 (3 years) the anticipated cost for these projects is approximately \$8,100,000 based on an annual inflation rate of 3.0%.

Assuming the Township was to finance the entire project at 5.0% for 20 years by borrowing the money from Water and Sewer, the average annual bond cost would be approximately \$650,000. However, based on the Township's ability to use General Fund Balance the Township could significantly reduce this payment amount.

Assuming that revenues keep pace with expenditures and that the Township earns a 4.0% rate of return on investments, the Township could possibly have a fund balance between \$6,800,000 to \$7,200,000 in three years. Again assuming that Township General Fund expenditures would increase at a rate of 5%, total expenditures would be approximately \$6,000,000. Assuming a fund balance of 25%, the Township would need to have a balance of approximately \$1,500,000. The result is the potential ability to use up to \$5,700,000 for project Phases II and III. Use of these dollars would reduce debt service payments to approximately \$250,000 per year.

CONCEPTUAL SITE PLAN AND BUILDING PROFILE

The following section was prepared by French Associates and includes a conceptual site land the building profile.



Orion Teup.





resentation

Sheriffs
Oakland Co.





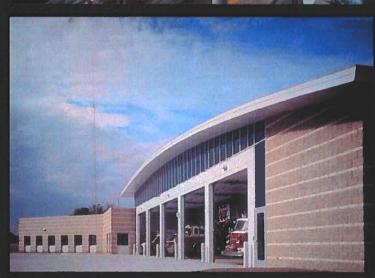




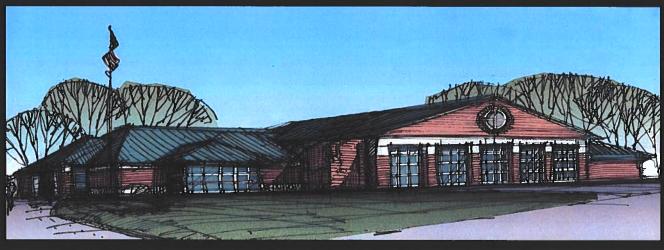


resentation

Fire Station







Orion Twp.





resentation

DPW





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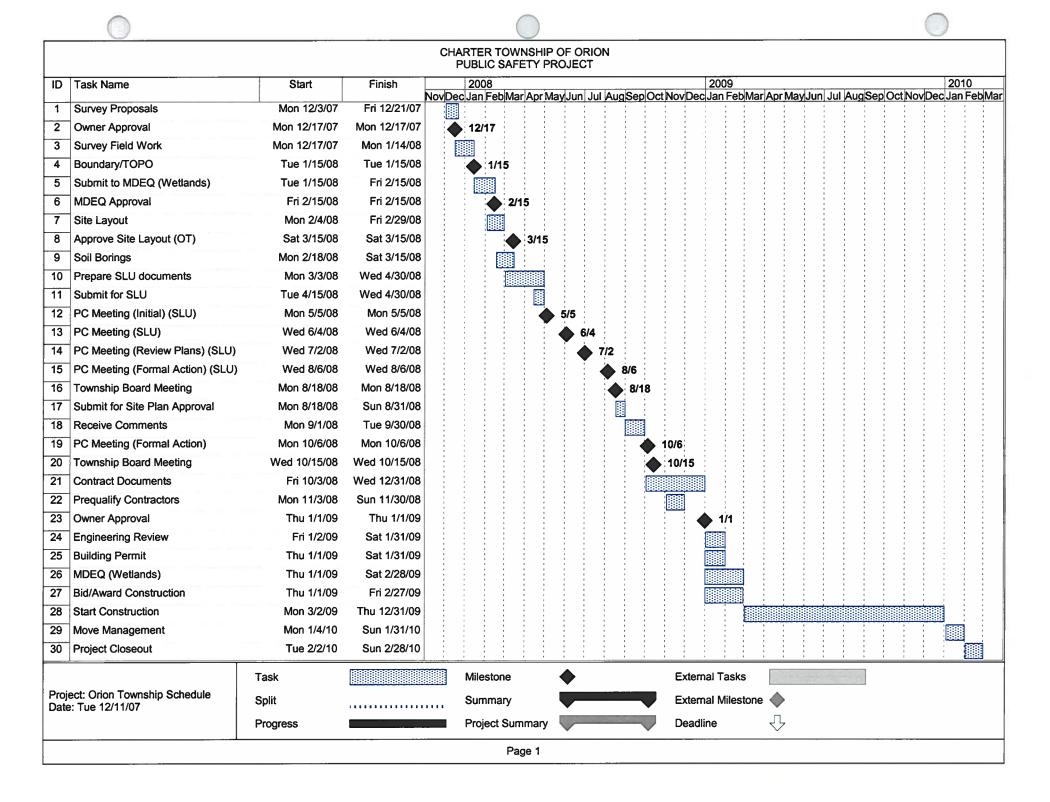


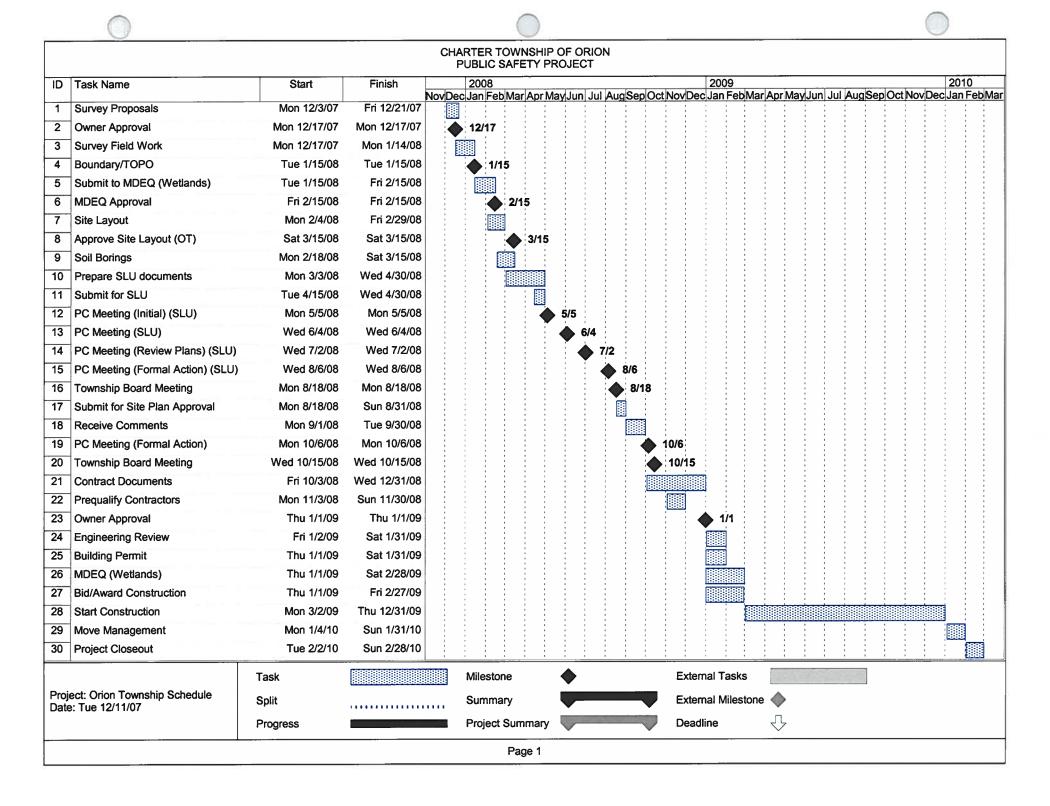
PROJECT SCHEDULE

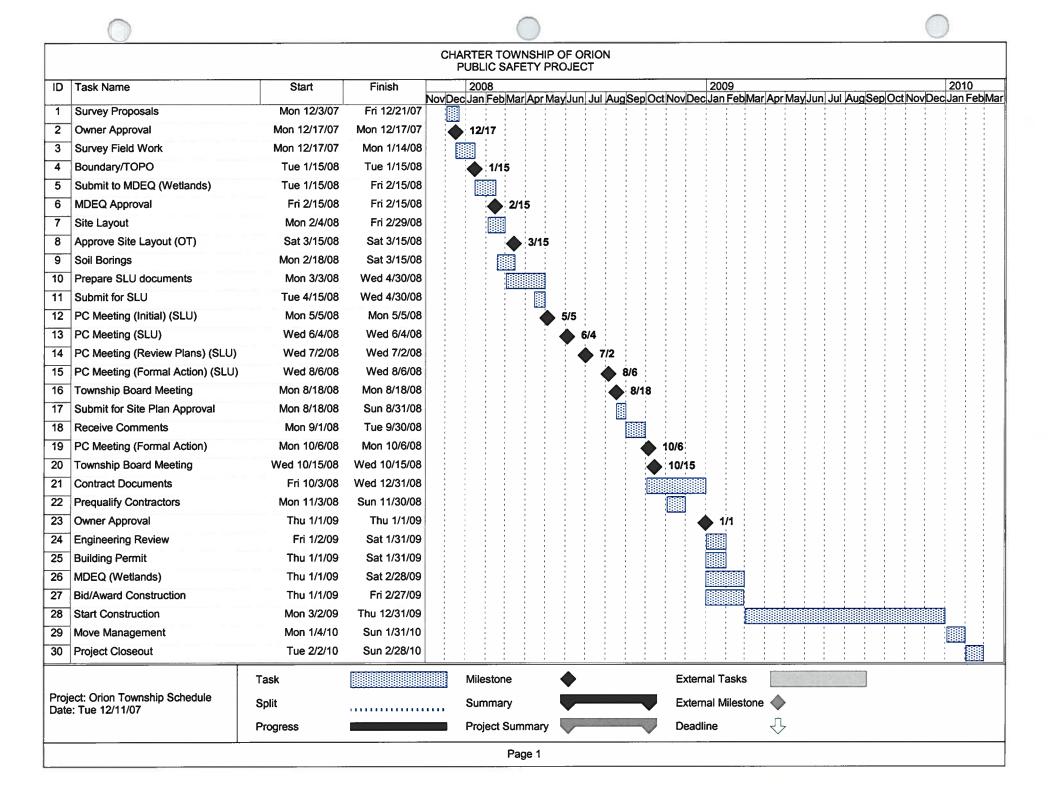
In this section is the proposed project schedule for this project. Based on the proposed schedule the general timeline to complete major project tasks is included in the table below:

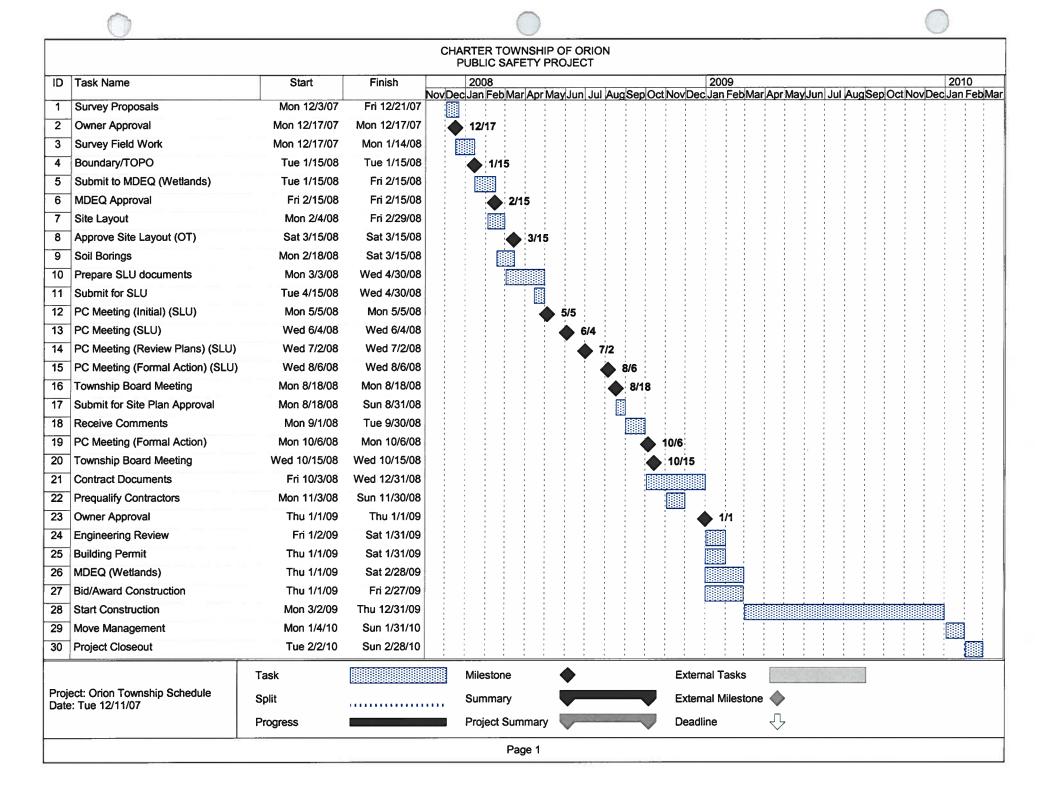
Task	Time to Complete	
Project Design and Permitting Additional Site Due Diligence: Survey Topographic/Wetlands Soil Borings Site Layout Conceptual Engineering Revised Costs Special Land Use Approval MDEQ Review and Approval	6 – 8 months	
GC Bidding and Construction	14 – 16 months	
Move Coordination	2 – 3 months	
Project Closeout	1 – 2 months	
TOTAL TIME REQUIRED	23 – 29 months	

CHARTER TOWNSHIP OF ORION PUBLIC SAFETY PROJECT 2008 2009 2010 ID Task Name Start Finish Dec Jan Feb Mar Apr May Jun Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep 1 Survey Proposals Mon 12/3/07 Fri 12/21/07 2 Owner Approval Sat 3/1/08 Sat 3/1/08 3 Survey Field Work Sat 3/1/08 Tue 4/1/08 4 Boundary/TOPO Tue 4/1/08 Tue 4/1/08 5 Submit to MDEQ (Wetlands) Tue 4/1/08 Thu 5/1/08 6 MDEQ Approval Thu 5/1/08 Thu 5/1/08 7 Site Layout Thu 5/1/08 Sun 6/1/08 8 Approve Site Layout (OT) Sun 6/1/08 Sun 6/1/08 Thu 5/1/08 Sun 6/1/08 9 Soil Borings Mon 6/2/08 Sun 6/15/08 10 Project Review Sun 6/15/08 Sun 6/15/08 11 Owner Approval 6/15 Fri 8/1/08 Prepare SLU documents Sun 6/15/08 Submit for SLU Fri 8/1/08 13 Tue 7/15/08 14 PC Meeting (Initial) (SLU) Wed 8/6/08 Wed 8/6/08 15 PC Meeting (SLU) Wed 9/3/08 Wed 9/3/08 16 PC Meeting (Review Plans) (SLU) Wed 10/1/08 Wed 10/1/08 11/5 17 PC Meeting (Formal Action) (SLU) Wed 11/5/08 Wed 11/5/08 18 **Township Board Meeting** Mon 11/17/08 Mon 11/17/08 Mon 11/17/08 Sun 11/30/08 19 Submit for Site Plan Approval 20 **Receive Comments** Mon 12/1/08 Tue 12/30/08 21 PC Meeting (Formal Action) Fri 1/9/09 Fri 1/9/09 22 Mon 1/19/09 Mon 1/19/09 Township Board Meeting Thu 3/19/09 23 **Contract Documents** Mon 1/19/09 Thu 1/1/09 Sun 2/1/09 24 **Prequalify Contractors** 25 Thu 3/19/09 Thu 3/19/09 Owner Approval Sun 4/19/09 26 **Engineering Review** Thu 3/19/09 27 **Building Permit** Thu 3/19/09 Sun 4/19/09 28 MDEQ (Wetlands) Thu 3/19/09 Tue 5/19/09 **Bid/Award Construction** Thu 3/19/09 Fri 5/1/09 Fri 5/15/09 Thu 4/15/10 30 **Start Construction** 31 Move Management Fri 4/16/10 Sat 5/15/10 32 Project Closeout Mon 5/17/10 Fri 7/30/10 Task Milestone External Tasks Project: Orion Township Schedule External Milestone Split Summary Date: Mon 1/21/08 Deadline **Project Summary** Progress plante moran cresa Page 1









NEXT STEPS

To move forward with this effort, the Township will want to complete the following:

- 1. Retain PMC for fee of \$3,500 per month to manage project for next five months.
- 2. Completion of additional site due diligence:
 - Boundary Survey
 - Topographic Survey
 - Wetland Boundary Survey
 - Tree Survey
- 3. Completion of a conceptual engineering plan based on French Associates conceptual site plan and additional due diligence.
- 4. Present revised project cost and schedule based on conceptual engineering plan and additional site due diligence.

NEXT STEPS COSTS

PMC	\$17,500
Site Due Diligence - Topographic - Boundary - Tree - Wetland	\$14,244
Soil Borings	\$10,000
Conceptual Engineering	\$ 5,000
TOTAL	\$46,744



FIRE DEPARTMENT'S OPERATIONAL MODEL

ORION TOWNSHIP FIRE OPERATIONAL COSTS

	2007	2008	2009	2010	2011	2012	2013
Taxable Value	\$1,819,182,420	\$1,837,374,244	\$1,855,747,987	\$1,892,862,946	\$1,930,720,205	\$1,969,334,609	\$2,008,721,302
REVENUE							
Property Taxes	\$1,803,901	\$1,821,940	\$1,840,160	\$1,876,963	\$1,914,502	\$1,952,792	\$1,991,848
State Sources	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500
Interest	\$40,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Other	\$4,500	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
TOTAL REVENUE	\$1,849,901	\$1,844,440	\$1,862,660	\$1,899,463	\$1,937,002	\$1,975,292	\$2,014,348
EXPENDITURES							
Salary and Employee Benefits	\$1,009,000	\$1,039,270	\$1,070,448	\$1,102,562	\$1,135,638	\$1,169,708	\$1,204,799
Supplies	\$40,000	\$41,200	\$42,436	\$43,709	\$45,020	\$46,371	\$47,762
Utilities	\$43,000	\$97,000	\$99,910	\$102,907	\$105,995	\$109,174	\$112,450
Repair and Maintenance	\$75,000	\$77,250	\$79,568	\$81,955	\$84,413	\$86,946	\$89,554
Insurance	\$100,000	\$103,000	\$106,090	\$109,273	\$112,551	\$115,927	\$119,405
Capital Outlay	\$20,000	\$20,600	\$21,218	\$21,855	\$22,510	\$23,185	\$23,881
Other Public Safety Expenditures	\$70,000	\$72,100	\$74,263	\$76,491	\$78,786	\$81,149	\$83,584
TOTAL EXPENDITURES	\$1,357,000	\$1,450,420	\$1,493,933	\$1,538,751	\$1,584,913	\$1,632,460	\$1,681,434
Revenues in excess of Expenditures	\$492,901	\$394,020	\$368,727	\$360,712	\$352,089	\$342,832	\$332,914

ORION TOWNSHIP FIRE OPERATIONAL COSTS

2014	2015	2016	2017	2018
\$2,048,895,728	\$2,089,873,642	\$2,131,671,115	\$2,174,304,537	\$2,217,790,628
\$2,031,685	\$2,072,319	\$2,113,765	\$2,156,040	\$2,199,161
\$1,500	\$1,500	\$1,500	\$1,500	\$1,500
\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
\$2,054,185	\$2,094,819	\$2,136,265	\$2,178,540	\$2,221,661
\$1,240,943	\$1,278,171	\$1,316,516	\$1,356,012	\$1,396,692
\$49,195	\$50,671	\$52,191	\$53,757	\$55,369
\$115,823	\$119,298	\$122,877	\$126,563	\$130,360
\$92,241	\$95,008	\$97,858	\$100,794	\$103,818
\$122,987	\$126,677	\$130,477	\$134,392	\$138,423
\$24,597	\$25,335	\$26,095	\$26,878	\$27,685
\$86,091	\$88,674	\$91,334	\$94,074	\$96,896
\$1,731,877	\$1,783,834	\$1,837,349	\$1,892,469	\$1,949,243
\$322,308	\$310,985	\$298,916	\$286,071	\$272,418

FIRE DEPARTMENT MODEL ASSUMPTIONS

Revenue

- 1. Taxable value provided by Township increased at 1% for two years and 2% after that.
- 2. Property tax millage held constant in model.
- 3. State revenue sources held constant at \$1,500.
- 4. Interest income assumed at \$20,000.
- 5. Other income assumed at \$1,000.

Expenditures

- 1. Salary and benefits based on budget information and audited financial statements. Increased at 3% per year.
- 2. Supplies increased at 3% per year.
- 3. Utilities increased for new facility estimated at \$3.00 per square foot for new facility, and increase at 3% per year.
- 4. Repair and maintenance increased at 3% per year.
- 5. Insurance increased at 3% per year.
- 6. Capital outlay increased at 3% per year.
- 7. Other expenditures increased at 3% per year.

SHERIFF'S DEPARTMENT OPERATIONAL MODEL

ORION TOWNSHIP SHERIFF OPERATIONAL COSTS

Revenues in excess of Expenditures	TOTAL EXPENDITURES	EXPENDITURES Salary and Employee Benefits Supplies Utilities Repair and Maintenance Capital Outlay Other	TOTAL REVENUE	Taxable Value REVENUE Property Taxes Liquor License Liaison Officer Interest Earned Penalty Fees Cost Recovery Fees Miscellaneous Income
\$283,552	\$3,551,860	\$3,430,260 \$62,000 \$4,100 \$2,500 \$0 \$53,000	\$3,835,412	\$1,819,182,420 \$1,819,182,420 \$3,427,412 \$10,000 \$110,000 \$155,000 \$40,000 \$3,000
\$387,929	\$3,668,452	\$3,516,017 \$63,860 \$36,000 \$2,575 \$0 \$50,000	\$4,056,381	\$1,837,374,244 \$1,837,374,244 \$3,643,881 \$5,000 \$114,000 \$160,000 \$460,000 \$40,000 \$3,500
\$328,384	\$3,759,425	\$3,603,917 \$65,776 \$37,080 \$2,652 \$0 \$50,000	\$4,087,809	\$1,855,747,987 \$1,855,747,987 \$3,680,319 \$5,000 \$117,990 \$75,000 \$164,800 \$41,200 \$3,500
\$319,037	\$3,852,688	\$3,694,015 \$67,749 \$38,192 \$2,732 \$0 \$50,000	\$4,171,725	\$1,892,862,946 \$3,753,926 \$5,000 \$122,120 \$75,000 \$169,744 \$42,436 \$3,500
\$309,145	\$3,948,299	\$3,786,365 \$69,782 \$39,338 \$2,814 \$0,000	\$4,257,444	\$1,930,720,205 \$1,930,720,205 \$3,829,004 \$5,000 \$126,394 \$75,000 \$174,836 \$43,709 \$3,500
\$298,688	\$4,046,316	\$3,881,024 \$71,875 \$40,518 \$2,898 \$0,000	\$4,345,004	\$1,969,334,609 \$1,969,334,609 \$3,905,584 \$5,000 \$130,818 \$75,000 \$180,081 \$45,020 \$3,500
\$287,647	\$4,146,800	\$3,978,050 \$74,031 \$41,734 \$2,985 \$0,000	\$4,434,447	\$2,008,721,302 \$3,983,696 \$5,000 \$135,396 \$75,000 \$185,484 \$46,371 \$3,500

ORION TOWNSHIP SHERIFF OPERATIONAL COSTS

\$222,951	\$237,228	\$250,814	\$263,731	\$276,002
\$4,688,462	\$4,574,677	\$4,463,686	\$4,355,421	\$4,249,814
\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
\$0	\$0	\$0	\$0	\$ 0
\$3,461	\$3,360	\$3,262	\$3,167	\$3,075
\$48,381	\$46,972	\$45,604	\$44,275	\$42,986
\$85,822	\$83,323	\$80,896	\$78,540	\$76,252
\$4,500,798	\$4,391,023	\$4,283,925	\$4,179,439	\$4,077,501
\$4,911,414	\$4,811,906	\$4,714,500	\$4,619,152	\$4,525,816
\$3,500	\$3,500	\$3,500	\$3,500	\$3,500
\$53,757	\$52,191	\$50,671	\$49,195	\$47,762
\$215,027	\$208,764	\$202,683	\$196,780	\$191,048
\$75,000	\$75,000	\$75,000	\$75,000	\$75,000
\$160,808	\$155,370	\$150,116	\$145,040	\$140,135
\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
\$4,398,322	\$4,312,081	\$4,227,530	\$4,144,637	\$4,063,370
\$2,217,790,628	\$2,174,304,537	\$2,131,671,115	\$2,089,873,642	\$2,048,895,728
2018	2017	2016	2015	2014

SHERIFF'S DEPARTMENT MODEL ASSUMPTIONS

Revenue

- 1. Taxable value provided by Township.
- 2. Taxable value is projected to increase at 1% for two years and 2% after that.
- 3. Property tax millage held constant.
- 4. Liaison officer increased at 3.5% per year.
- 5. Interest earned based on estimate by Township and assumed at \$75,000 per year.
- 6. Penalty fees increased at 3% per year.
- 7. Cost recovery fees increased at 3% per year.
- 8. Miscellaneous income held constant at \$3,500.
- 9. Model baseline table for Township department budgets and audited financial statements.

Expenditures

- 1. Baseline year based on department budgets and audited financial statements.
- 2. Salary and benefits based on department budgets and increased at 2.5% per year.

PUBLIC HEARING - RESPONSES

A public hearing was conducted on November 5, 2007. At this hearing, several questions were asked by the public. These questions were recorded and are shown on the following pages, along with the response.

PUBLIC SAFETY COMPLEX Questions

1. Why not on the ballot?

The purpose of the meeting was to continue to inform the public on the plans for the proposed facility, not to ask for additional funding millage, since the Township has the money available for the project, they are able to take action on the project without asking for a millage or bond.

2. From where were was money borrowed to do previous Township Hall renovations and additions and was it paid back?

It wasn't necessary to borrow funds for these projects.

3. Did the Township go out for bids for [engineering services]?

No, for CRESA. Yes, for Architect/Engineering Services.

4. The cost per square foot – why so high?

The cost per square foot includes complete project costs and includes not only construction costs but furniture, technology, professional fees, site development and all other necessary project costs. In other words, this cost is all inclusive and is the true cost of the project. Industry practice is to only provide the construction cost per square foot which does not provide the true picture of actual project costs.

5. Why can't Building Department facilitate the project?

The Building Department has experienced staff reduction. Additionally, Building Department staff is at capacity handling continued residential and commercial development in the community.

6. Why is the Township paying for furniture for the OCSD Substation?

The building and all its contents are an asset of the Township not the Sheriff's Department. If the Township were to ever start its own Police Department, the building and the furnishings would belong to the Township.

7. How much money does Orion have in the "special" fund(s)?

The Township has the following funds available to pay for or borrow from for the construction of the facilities.

Water / Sewer Fund	\$3,000,000
Fire Capital Fund	\$1,750,000
Police Capital Fund	\$1,800,000
General Fund (Fund Balance)	\$5,800,000
Capital Improvement Fund	\$1,200,000

8. If there are overruns, where will the money come from?

The Township has adequate funds to cover cost overruns. However, with CRESA's assistance, architectural and construction contracts are being developed to limit the liability of the Township for potential overruns. In other words the burden of overage will be placed on the architect and general contractor.

9. Does the \$9 million cost include the renovation of Township Hall?

The \$9,000,000 cost does not include the renovation of Township Hall.

10. What is the cost to renovate Township Hall?

From a previously completed study, the cost to renovate Township Hall is approximately \$6,000,000. The renovation is not part of this phase.

11. If we are saving \$1.3 million, using CRESA, what is their cost for that service?

CRESA fees are \$7,500 per month. The anticipated cost \$180,000 to \$225,000 for the total project. The savings of \$1,300,000 are after we have paid CRESA's fees (their services will provide the Township with a 500% + plus rate of return).

12. When will citizens get answers to their questions?

The answers to the above questions are the response to citizen questions from the November 5, 2007 Public Hearing.

13. Has the Township run a Lease versus Buy model?

The Township is in a better position to build a facility or facilities than to lease. The reason is the cost of capital to a private developer. Since the Township can borrow money for less than a private developer, the Township will spend less to build a facility than to lease. Additionally, if the Township were to lease it would be necessary to pay a portion of the developer's taxes, utilities and insurance. Finally, it would be necessary to pay the developer a reasonable profit, currently 6 to 8%.

14. Since the Township is a tax exempt entity, should it buy the materials itself for the new facilities?

The Township is a tax exempt entity. However, there are a few challenges against this practice.

- 1. The Township may have to pay a use or other fee, it will be necessary to consult with the Township's attorney
- 2. It would be a challenge for the contractor building the facility
- 3. The Township may not receive the best pricing. Contractors often receive better pricing since they are buying materials for several projects that allow them to receive volume discounts.

15. What will happen to the rent that the DPW currently pays the Township?

The DPW will no longer pay the Township rent. The current rental amount is approximately \$45,000 per year. This amount equates to less than 1.0% of the Township's General Fund Budget.

16. The Fire Department already has plans to update other stations. What will happen to those plans?

The Fire master plan identifies the need to construct a new central station in addition to renovation of other stations. The construction of a new central station will improve the response time of the Department and improve service to residents.

17. Will there be a need for additional taxes to maintain the facilities?

Operational costs have been considered as part of the project costs. Based on current staffing and operational levels additional funds to operate the new facilities will not be required.

18. The economy in Michigan is not very good, why build the facilities now?

The Township has been very deliberate about setting aside money for these projects and currently has enough money to pay for the projects. Second, because of the current economic conditions, contractors need the work. Since pricing is a result of supply and demand the Township will receive better pricing now since there is more supply than demand for construction.

Finally, the dollars spent on construction, furniture, equipment, professional fees, etc., will recycle through the local and state economy, thereby having a larger impact than just on the construction of these needed facilities.

SAMPLE RESOLUTIONS

The following are sample resolutions that the Township could use to move forward with this project.

A. Preliminary Program

The Township Board moves to file and receive the project program provided by PMC regarding the development and construction of a new Fire Station, Sheriff Substation, and DPW building.

Additionally, the Township Board moves to extend PMC's contract for five months at a cost of \$3,500 per month to manage and coordinate the additional site due diligence and conceptual site engineering plan. At the completion of this process contract amount will return to standard \$7,500 per month plus expenses, capped at \$1,000 per month.

Finally, at the end of this period, and in accordance with the project schedule outlined in the plan, PMC will update the Board with project costs and schedule. The Board will then make a final go or no go decision.

B. Approval of Additional Site Due Diligence

The Township Board moves to approve additional site due diligence to continue refining the site considerations for the proposed project. Additional due diligence will consist of Boundary/Topographic Survey, Wetland Boundary Survey, tree survey, and additional soil borings.

C. Approval to Prepare a Conceptual Site Engineering Plan Based on Conceptual Site Plan Layout Prepared by French Associates

The Township Board moves to approve the hiring of a civil engineering firm to prepare a conceptual site engineering plan based on the accepted preliminary program and additional site due diligence information.

