

Environmental Assessment

East Park Reservoir

Prepared for: East Park Leadership Conservation Center

Prepared by: CVM Construction Managers, Inc.

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Introduction

In accordance with the requirements of the City of Philadelphia Open Space Protection Ordinance, Section 15-104 of the Philadelphia Code, this memorandum presents an environmental and traffic analysis for the site of the proposed Outward Bound and Audubon Center on Reservoir Drive, Philadelphia, PA 19121, as shown on the attached location plan.

This memorandum specifically describes the features of the site and potential impacts of the change in use as required in Section 15-104 (1)(b) of the Ordinance.

A. Project Description

Outward Bound Philadelphia and National Audubon Society, Inc. have formed the East Park Leadership and Conservation Center, a Pennsylvania nonprofit support organization ("EPLACC") for the purpose of providing a center (the "Center") that will preserve a unique man-made lake as a bird and wildlife sanctuary and be the Philadelphia base of operations for nationally recognized Audubon and Outward Bound youth leadership and environmental education programs. This project will allow managed public access to the lake that aligns with education, recreation and conservation goals and will create an unparalleled resource to connect communities across the Philadelphia region with youth leadership development, nature and habitat conservation.

(1) Description of proposed Leased Acreage

- a. Almost 50 acres currently under control of PWD and fenced off from the public would become accessible to the public for recreational and educational purposes that are consistent with management of the site as a bird and wildlife sanctuary. This acreage includes 37.65 acres of lake and 12.35 acres of land around the perimeter of the lake that is currently fenced off under the jurisdiction of the Philadelphia Water Department and inaccessible to the public. Less than half an acre of this land would be used for a building, deck and observation platforms; and
- b. 4.47 acres of current open land would substantially continue to be used for permitted outdoor recreational uses. This piece of land consists of a small strip of land, contiguous to the land currently fenced around the reservoir and extending out to the logical boundary with Reservoir Drive. Because neither a sidewalk nor natural barrier exists between this land and Reservoir Drive, a modified protective fence may be installed on some parts of this acreage. The fence would not deny visual open space access, but would ensure safety for those enjoying the land. Public access to this area would continue, and the sight lines and space for foot and bicycle travel along Reservoir Drive would be maintained. A very small portion of this land (estimated at between .05 and .10 acre) might be affected by the building footprint. [See (3) below regarding Description of Building, Parking and Trails.]

(2) Description of Gateway Areas not included in proposed Leased Acreage

Audubon and Outward Bound will be among the public and private partners working in collaboration with the Department of Parks & Recreation to enhance two areas along Reservoir Drive toward 33rd street to create an inviting natural gateway to East Fairmount Park through landscaping, signage and walking paths. These areas, including 0.82 acres of Fairmount Park open land ("Gateway #2"), and (b) 1.35 acres of Fairmount Park open land ("Gateway # 1") will continue to be open to the public. [See (4) below regarding Description of Uses].

(3) Description of Building, Parking and Trails

a. Building: The current plan is to construct a two-story Center building, estimated to be a total of approximately 17,000 square feet, at the southern end of the lake. The footprint of the building is estimated to be approximately 8,500 square feet (approximately .25 acre). An additional .12 acre area immediately adjacent to the building will offer an outdoor deck and observation platform. Final plans, architectural drawings and building construction documents are not complete at this time. However, the vision is for the building footprint to be predominantly located within the area currently under PWD jurisdiction, i.e., not currently used as park lands. A slight portion of the building footprint (estimated at somewhere between .05 and .10 acre) may extend beyond the current fence line onto a small portion of park land. It is understood that should the building footprint extend onto this small strip of park land, the substitute land requirement of the ordinance may be triggered. This requirement is addressed by opening almost 50 acres of land currently under the jurisdiction of PWD to permitted outdoor recreational uses consistent with management of the site as a wildlife sanctuary and outdoor recreation facility. The vision for the building includes the possibility



- of an observation platform on the roof. Building plans will be subject to review and final approvals by P&R, the Commission, and other City agencies during the due diligence phase of the lease.
- b. Parking and Traffic: Plans for parking will be finalized along with plans for the building and subject to review by the City, and other authorities with jurisdiction. It is estimated that less than one acre will be used for parking. Parking surfaces will be pervious and landscaping will mitigate storm water runoff. A traffic study prepared by McMahon Transportation Engineers and Planners is attached. Additional traffic studies will be submitted during the due diligence period when plans are finalized.
- c. Trails: Plans for walking trails will be finalized along with plans for the building and subject to review by City agencies and the Department of Parks and Recreation. Please see Description of Uses below.

(4) Description of Uses

- a. (building) The building will serve as the base of operations for Outward Bound Philadelphia and Audubon to provide nationally recognized programs annually to thousands of participants, the vast majority of whom will be Philadelphia public school students. In addition, it is anticipated that the facility will attract more than 25,000 visitors on an annual basis, the majority of whom will come from Philadelphia. Program participants and the public will begin their encounter with nature through the building and continue their explorations on the lakeside and park side. Conceptual plans for use of space in the building include:
 - Viewing areas/exhibit room(s): Public areas for viewing birds and wildlife on the lake, including an observation platform adjacent to the building, and exhibits inspiring conservation and outdoor recreation activities.
 - Multi-purpose room: Space shared by Audubon and Outward Bound Philadelphia for programs, skillstraining seminars, week-end family programs, community programs, and events. This space will be offered for use by community groups from time to time in a manner consistent with the mission of the organizations, their programs, and management of the site as a wildlife sanctuary.
 - Classrooms: Space for program participants, professionals and volunteers; meeting space.
 - Open flexible office space for Audubon and Outward Bound staff members (and possibly workspace for a Philadelphia Department of Parks & Recreation employee).
 - · Storage and utility spaces.
 - Rentals. Corporate retreats, gatherings, and possibly weddings.
- b. (grounds) Conceptual plans for use of the grounds include:
 - Habitat management reducing invasive species and encouraging native species.
 - Walking trails and observation points/platforms; possible overnight sleepover sites for a small number of program participants.
 - · Challenge courses (including a ropes course) encouraging outdoor activity.
 - Special places and spaces (possibly a bird blind, an outdoor classroom, native habitat gardens, a climbing wall) that will encourage exploration, discovery, outdoor activity, fun and repeat visits.
 - Construction of a spillway at north end of the lake that will decommission the reservoir as a dam in compliance with DEP and PWD requirements.
 - Access points will be planned for the north end of the lake (for maintenance of the spillway).
 - Parking will be planned for the south end of the site near the building (see above).
- c. Gateway areas will remain under the jurisdiction of Parks & Recreation but subject to Parks & Recreation approved uses and improvements by EPLACC. It is anticipated that these areas will be landscaped to create an inviting public entrance to East Fairmount Park and the Strawberry Mansion community. Enhancements to these areas are in the early planning stages. Possibilities for Audubon and Outward Bound support for these improvements will be explored in collaboration with the Department of Parks & Recreation, the Fairmount Park Conservancy, and other organizations invested in East Fairmount Park and the Strawberry Mansion community.
- d. Access by program participants and the public.

The Center will be open for Outward Bound and Audubon business and program operations on a schedule that is coordinated by staff members from both organizations.



Depending on weather conditions and staff scheduling, the Center will have public viewing areas open and accessible several days during the week (including some weekend days), with special open-to-the-public hours (e.g. early morning hours for bird watching and late afternoon hours for enjoying sunsets) throughout the year as are yet to be determined. There will be no entrance fees to the public viewing areas.

Note: Because the site is within the Philadelphia Water Department's security perimeter and steep walls of the reservoir pose safety concerns, access to both the building and water must be tightly controlled. Safety and security concerns require that the public enter and exit the site through the Center building or managed public access ways. For conservation purposes, the Center cannot allow boating, fishing, or swimming in the lake by the general public, and fencing around the perimeter of the lake must remain in place, although more attractive options for security will be explored contingent upon funding.

The Center may offer carefully controlled water activities for program participants during periods when such activities will not disturb birds or wildlife. These activities, such as kayaking, canoeing and/or water testing, will be restricted to limited parts of the lake and be carefully supervised by trained Audubon and/or Outward Bound staff.

B. Existing Condition and Site Uses:

Most of the site for the project (50 acres) is currently under the jurisdiction of the Philadelphia Water Department (PWD) and is fenced from public access. Trees, shrubs and plants have gradually created vegetation along the interior slopes of the lake. PWD manages the perimeter of the lake to maintain access as part of its management of the entire East Park Reservoir.

C. Projected Impacts of the Project:

(1) Stormwater

Existing Condition

Given the nature of the berm and surrounding site, there are currently no active stormwater management strategies in place. Rainwater and snow melt run into the reservoir basins and into the adjacent stormwater infrastructure in the Park and stormwater inlets on Reservoir Drive and 33rd Street by way of sheet flow.

The existing berm structure around the entire perimeter of the East Park Reservoir is considered to be a dam by the Pennsylvania Department of Environmental Protection (DEP). Since 1996, PWD has actively maintained the west basin at a depth between 6 and 8 feet (water volume of approximately 300 acre-feet) with periodic drainage via a manually operated valve that discharges into the south basin. The west basin lake is "off-stream", meaning that it is only fed by direct precipitation and localized runoff, and does not serve as drainage for any waterways. As such, the basin is not subject to rapid rising of water levels in significant rain or melt events.

Projected Impact

The proposed construction of the EPLACC and modifications of the adjacent areas of the site will incorporate state of the art storm water management practices that will seek to meet or exceed local codes as defined by PWD and DEP. These strategies will minimize or eliminate runoff leaving the building and site during times of peak flow, and will increase the opportunity for storm water infiltration on site and the re-charging of ground water.

As a result of a cooperative arrangement between the project partners, PWD and DEP the berm will be de-commissioned as a dam by means of the construction of a passive drainage device, or 'spillway'. Located at the north east corner of the west basin lake, the spillway will maintain water level in the basin at a depth of 8' and will discharge via existing storm water infrastructure and natural drainage paths in the valley north of the basin. The spillway will also offer the critical ability to drain the basin quickly in the event of repairs, maintenance or seepage leaks.



(2) Water Pollution

Existing Condition

Due to the height of the berm and its relative elevation compared to surrounding streets, the site has maintained a pristine, if somewhat neglected condition, and as such is not subject to substantial infiltration of surface-borne pollutants, with the exception of those created by ongoing maintenance activities.

Projected Impact

The proposed project will incorporate the best storm water management practices and will meet or exceed state and local codes as defined by PWD and DEP. To offset the impact of this project, measures will be taken to ensure responsible management of runoff and water quality, such as bio-retention or other methods intended to reduce the level of pollutants entering the watershed.

(3) Canopy Preservation

Existing Condition

The Morris Arboretum's Urban Forestry Consultants were engaged to perform a tree inventory of the impacted areas of the site. It was found that there exists a mix of healthy mature trees, invasives, numerous smaller trees and saplings in the target areas in what appears to be a largely unmanaged urban woodland setting. Observed species include native and non-natives, mainly black cherry, white ash, black locust, red maple, ailanthus, and Norway maple.

Projected Impact

Site modifications and all construction activities will be undertaken with care and consideration for trees and vegetation determined to be of value. The goal of this intervention is will be to establish a harmonious landscape that is conducive to wildlife habitat preservation and the enjoyment of park visitors. As such, though some trees will have to be removed, the project partners will replace trees in compliance with the City of Philadelphia Tree Ordinance, and will seek to establish a diverse and healthy woodland focused on native and sustainable species appropriate for the setting and acceptable to the Department of Parks and Recreation.

(4) Natural Habitat

Existing Condition

Routine maintenance by PWD includes cutting grass, cutting trees, and removing vines and other vegetation that may obstruct PWD supervision of the area. Grass is cut inside and outside around the basin. This relatively low level of intervention over the years has allowed natural habitats to flourish, while it has also allowed invasive plant species to take hold in some areas.

Projected Impact

Site modifications and all construction activities will be undertaken with care and consideration for the existing natural habitats, and will be focused on improving them. Central to the educational and environment mission of the EPLACC is the creation, preservation and stewardship of a local, diverse and healthy landscape that will serve to provide habitat for birds, woodland creatures and aquatic wildlife.

(5) Noise

Existing Condition

Noise levels are generated by vehicular circulation and associated human activity in the surrounding park land. There is some minimal sound generated from the adjacent neighborhood and traffic on north 33rd Street, but this is minimized due to the distance and the relative elevation of the site. This noise is periodic, corresponding to times of occasional staged events.



Projected Impact

Noise levels generated by the proposed new Center will be minimal, as it is the intent for mechanical equipment to be contained within the new structure. Noise levels by program participants will be consistent with use for educational and recreation purposes while maintaining the site as a bird and wildlife sanctuary.

(6) Light

Existing Condition

There is no permanent lighting associated with the existing site. Ambient light spills over from street lights along Reservoir Drive with some minimal leakage from north 33rd Street and the adjacent neighborhood.

Projected Impact

The new Center will have exterior lighting appropriate for public safety during night time use of the facility. Light fixtures will be selected to be bird friendly, minimize glare, especially as may be visible from vehicular traffic along Reservoir Drive, and to comply with applicable dark-skies performance criteria.

(7) Traffic

Existing Condition

The site is located on Reservoir Drive, near the intersection of Oxford and north 33rd Streets, both major arterial roadways that offer convenient access to public transportation, on-street parking, as well as bike and pedestrian lanes. Reservoir Drive connects the site to the Fairmount Park roadway network and other major streets including Ridge Avenue and Kelly Drive, and is connected to a network of sidewalks and multi-use trails that provide good pedestrian access within the Park. This roadway also offers a paved shoulder which provides on-street parking during peak Park times.

Projected Impact

The project will not significantly alter the existing conditions in terms of the local roadway network, the type or volume of traffic generation, or the functionality of controlled intersections nearby. Parking and vehicle access for the site will be located within the project area, and will be designed in accordance with local codes and requirements and will be guided by best practices intended to minimize the impact to the natural setting.

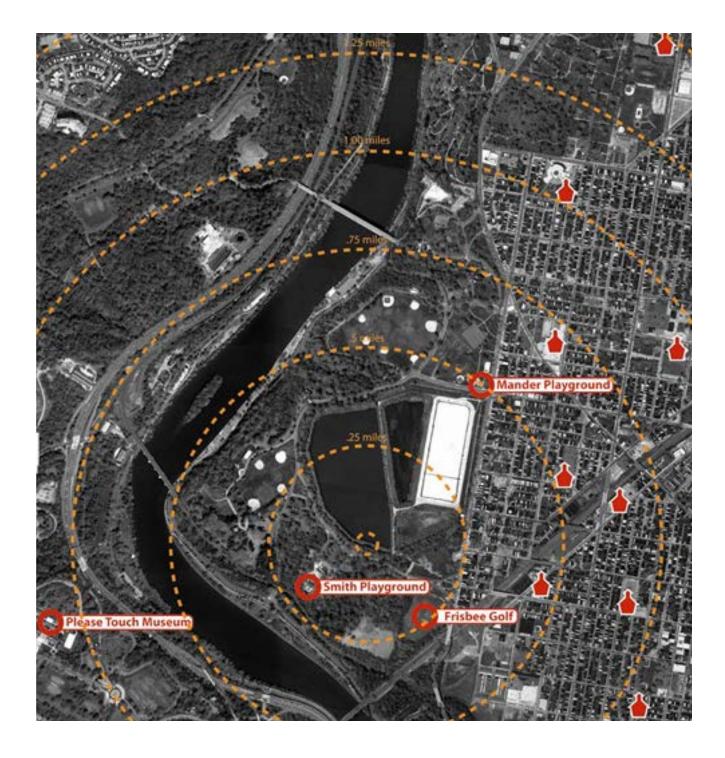
D. Conclusion:

The proposed lease of 4.37 acres of parkland for permitted outdoor recreational uses and of .10 acre for use as a building that provides access to 49.75 acres now under PWD jurisdiction is in the public interest.

This project will have a net positive impact on the environmental quality of the Park, because it will:

- invest Audubon and Outward Bound in the stewardship and maintenance of the site;
- preserve, maintain and enhance a unique woodland and aquatic landscape including natural habitats;
- result in a net gain of 49.75 acres for permitted outdoor recreational uses consistent with management of the site as a bird and wildlife sanctuary;
- allow managed access to these natural resources for the general public.





site context map





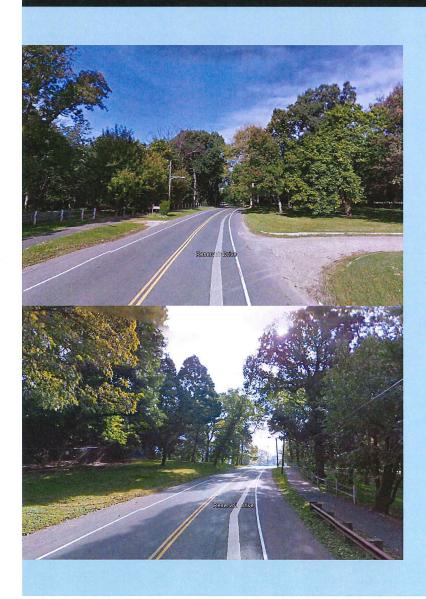
site acreage plan

INSIDE FENCE OUTSIDE FENCE WEST BASIN GATEWAY 1 12.35 4.47 37.65 1.35 **GATEWAY 2** 0.82 TOTAL: 56.64 EXISTING PWD FENCE LINE PROPOSED AREA TO BE LEASED GATEWAY 1 & 2 (NOT TO BE LEASED)



Transportation Narrative for Audubon/Outward Bound Facility in Fairmount Park

City of Philadelphia, Pennsylvania



Prepared for

CVM Construction

Prepared by



January 11, 2013

McMahon Project Number 812766.11



Transportation Setting

Existing Condition

The proposed Audubon/Outward Bound facility will be located along the north side of Reservoir Drive, just east of 33rd Street, within Fairmount Park in the City of Philadelphia (**Figure 1**). The existing roadways and intersections in the vicinity of the site, which comprise the study area roadway network, are described in this section.

The majority of visitors to the proposed facility will utilize 33rd Street (U.S. Route 13) as they approach the site. In the vicinity of the site, 33rd Street is classified by the Delaware Valley Regional Planning Commission (DVRPC) as an "Other Principal Arterial" and traverses in a north-south direction and provides sidewalks, on-street parallel parking, a dedicated bicycle lane, and one vehicular travel lane in each direction. Also, auxiliary left turn lanes are provided at key intersections, including at the 33rd Street intersection with Reservoir Drive/Oxford Street. The posted speed limit along 33rd Street is 25 miles per hour.

Oxford Street is classified as an "Urban Collector" by DVRPC and will provide a route to the east for some visitors of the site. Oxford Street generally provides one vehicular travel lane in each direction with on-street parallel parking and sidewalks. The posted speed limit along Oxford Street is 25 miles per hour.

Reservoir Drive is part of the roadway network within Fairmount Park that provides access through this portion of the Fairmount Park System. These roadways provide access to other City and State streets, such as 33rd Street, Kelly Drive, and Ridge Avenue. Reservoir Drive provides one vehicular travel lane in each direction, with a paved shoulder area that accommodates on-street parallel parking during peak Park times. A series of sidewalks and multi-use trails are provided within the park, and in the vicinity of the site, Reservoir Drive provides a multi-use trail on the south side of the roadway and along the north side of the roadway a path is provided near 33rd Street. The posted speed limit along Reservoir Drive is 25 miles per hour.

Bus transit service is also provided in the area of the site via several routes. A SEPTA bus stop is located at the adjacent 33rd Street/Oxford Street intersection.

Future Condition

The proposed Audubon/Outward Bound facility will not significantly alter the existing conditions in terms of the transportation network or traffic generation. Access and a loop driveway will be provided along the north side of the Reservoir Drive, similar to the existing driving range and frisbee course parking lot situated on the south side of Reservoir Drive opposite the site. Park and site visitors will continue to be permitted to parallel park along Reservoir Drive. A secondary driveway will serve the facility for deliveries and emergency access. In addition, the path/trail along the north side of Reservoir



Road will be improved to connect the site to 33rd Street. At this time, it is our understanding that the existing basketball courts will remain on the site, and will be served by the trail and area parking.

Traffic Volumes

Existing Condition

A manual turning movement traffic count was performed at the 33rd Street/Reservoir Drive/Oxford Street intersection on Thursday, December 13, 2012 during the weekday morning (7:00 AM to 9:00 AM) and weekday afternoon (4:00 PM to 6:00 PM) commuter peak periods. A traffic count was also conducted during the Saturday midday peak period (noon to 3:00 PM) on December 15, 2012. While these traffic counts may not reflect typical traffic volumes along Reservoir Drive, when utilization of the park facilities are more prevalent, the off-season traffic counts likely provide a reasonable account of commuter traffic (or base conditions) along 33rd Street, Oxford Street, and even Reservoir Drive. It is noted that a construction project was occurring along Ridge Avenue during the time of the traffic counts, with a closure of a nearby section of that roadway with a detour to 33rd Street, so the existing traffic volumes are likely higher than typical conditions.

The results of the traffic counts are tabulated by 15-minute intervals and included in **Attachment A**. The four highest consecutive 15-minute peak intervals during these traffic count periods constitute the peak hours that are the basis of this traffic analysis. The resultant peak hour traffic volumes are illustrated in **Figure 2** for the weekday morning commuter peak hour, the weekday afternoon commuter peak hour, and the Saturday midday peak hour.

Review of the intersection traffic count reveals that, in front of the site, the combined peak hour traffic volumes along Reservoir Road (in both directions) are minimal with 99 vehicles per hour, 107 vehicles per hour, and 127 vehicles per hour during the weekday morning peak hour, the weekday afternoon peak hour, and the Saturday midday peak hour, respectively. Average Daily Traffic (ADT) data provided by the City Streets Department indicates that 33rd Street carries approximately 20,000 (2010) vehicles per day (vpd), Oxford Street carries approximately 2,600 (1998) vpd, and Reservoir Drive carries approximately 700 (2003) vpd.

Future Condition

The proposed Audubon/Outward Bound facility will continue to take advantage of the natural and environmental resources and amenities that Fairmount Park offers, and will generate a minimal amount of new traffic associated with increased visitors, as well as staff. The proposed facilities have unique operational characteristics that are best evaluated when estimating future traffic generation, as opposed to other common uses where already published data (e.g., the Institute of Transportation Engineer's *Trip Generation* publication) provides the most reasonable method for estimating trip generation. Accordingly,



both the Audubon Society and Outward Bound organization provided the following preliminary information for estimating trip generation:

Audubon Society

Visitors

Peak Season (April to October): 8 to 10 vehicles per weekday, 25 to 30 vehicles per day on weekends, with possibly one weekend a month having an additional 5 to 10 vehicles for a special program. It is expected that the number of visitors would be reduced by half during the off-peak season.

Staff

Approximately 5 vehicles would be associated with staff or business visitors on a daily basis.

Buses

Approximately 2 buses would bring visitors to the site from an off-site facility approximately 60 days throughout the year.

Outward Bound

Visitors

At this time, it is anticipated that visitors will be bused to the site.

Staff

Approximately 8 vehicles would be associated with staff or business visitors on a daily basis. Also, there will be 8 fleet vehicles for the facility.

Buses

Approximately one (1) bus would bring visitors to and from the site.

These trips to and from the site, as noted above, will represent an approximate daily traffic volume for the site (approximately 34 weekday daily trips and 54 to 64 Saturday daily trips). In order to evaluate the impacts to peak hour traffic conditions, it was conservatively assumed that all future site traffic will be added during the weekday study peak hours and that all visitor traffic will be added during the Saturday midday peak hour (assuming staff will arrive/depart off peak). As such, the peak hour trip generation evaluated in this analysis is as follows:

	Weeko	lay AM Pe	ak Hour	Week	day PM Pe	eak Hour	Saturd	15 15 47 9 9 18	
	In	Out	Total	In	Out	Total	In	Out	Total
Audubon Society	17	0	17	0	17	17	15	15	47
Outward Bound ¹	9	8	17	8	9	17	9	9	18
Total Trips	26	8	34	8	26	34	24	24	48

^{1 –} Assumes that all eight fleet vehicles depart site during AM peak hour, arrive during PM peak hour, and make a round trip during the Saturday peak hour.



The site-generated traffic will approach and depart the site via different routes depending on factors such as the existing traffic patterns, location of major roadways, and the location of the development's site access. The distribution percentages for the anticipated directions of approach and departure are illustrated in **Figure 3**.

It is noted that the existing traffic volumes, which were counted in December, were conservatively increased 100 percent to account for the seasonal park traffic that may be higher during warmer weather months. The traffic volumes with development of the proposed facility are illustrated in **Figure 4**.

Traffic Operations

Existing Condition

The peak hour traffic volumes were analyzed to determine the existing operating conditions in accordance with standard techniques contained in the *Highway Capacity Manual* (2000). Based on the analysis, the adjacent 33rd Street/Reservoir Drive/Oxford Street intersection functions acceptably, or with a level of service (LOS) D or better during the study peak hours. Further, the analysis indicates that there are no adverse traffic congestion or vehicular queuing conditions that extend back from the intersection along Reservoir Drive past the site. Existing traffic operations are summarized in **Figure 5** for the study peak hours.

Future Condition

Upon completion of the proposed Audubon/Outward Bound facility, the analysis indicates that the 33rd Street/Reservoir Drive/Oxford Street intersection will continue to function acceptably during the study peak hours. Additionally, the proposed site driveway will also function acceptably during the peak hours. The continuation of on-street parking in front of the site will not have a significant impact on the traffic conditions along Reservoir Drive. This analysis assumes the conservative seasonal increase (100 percent increase) in Reservoir Drive traffic volumes. Future traffic operations are summarized in **Figure 6** for the study peak hours.

The existing and future traffic analysis worksheets are provided in **Attachment B**.

Sight Distance

The horizontal curvature and vertical grades of Reservoir Drive are moderate and should not create sight distance issues for the proposed site driveways. Vegetation should be limited to not restrict sight lines for vehicles exiting the proposed site driveways, and on-street parking should



be restricted in the vicinity of the proposed driveways in order to create sufficient sight lines for exiting traffic. Upon design of the site driveways, adequate sight distance must be provided in accordance with PennDOT criteria, PA Code Title 67, Chapter 441.8.h.2.iv.

Parking

Parking should be provided in accordance with the expected operational needs of both facilities in order to accommodate staff, visitors, and buses. As proposed, parking will be provided via a new parking lot and utilization of off-street parking. The anticipated on-street parking that will be used by the site is not anticipated to have an adverse impact on other park visitors.

Conclusion

Based on the operational information provided and the foregoing analyses, the proposed Audubon/Outward Bound facility will not have a significant transportation impact on the surrounding roadway network or within Fairmount Park. Visitors to the site will continue to take advantage of the natural and environmental resources offered by Fairmount Park, and therefore, the type of traffic generated by the site will not dramatically different from park traffic today.



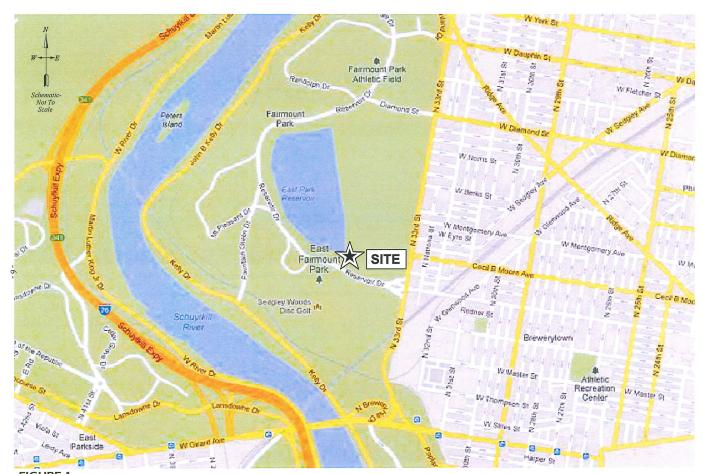


FIGURE 1
Site Location Map
AUDUBON/OUTWARD BOUND FACILITY IN FAIRMOUNT PARK
CITY OF PHILADELPHIA, PENNSYLVANIA





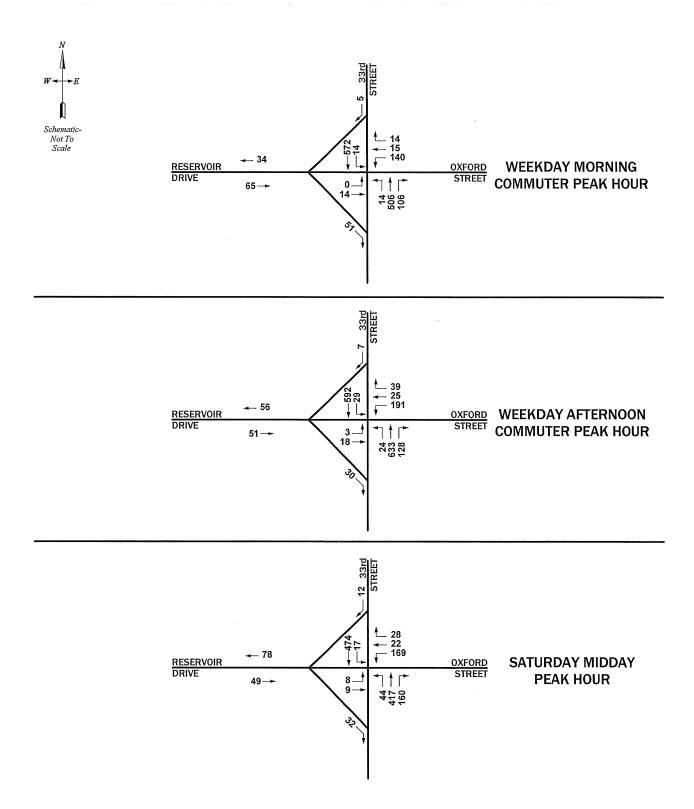
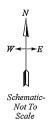


FIGURE 2 Existing Peak Hour Traffic Volumes AUDUBON/OUTWARD BOUND FACILITY IN FAIRMOUNT PARK CITY OF PHILADELPHIA, PENNSYLVANIA







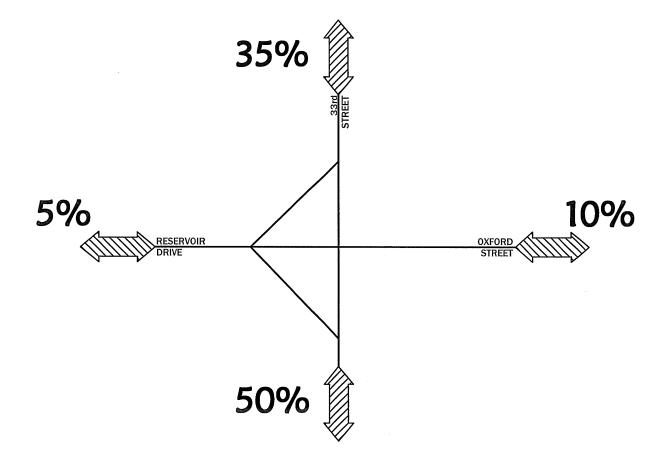


FIGURE 3 Directions of Approach & Departure AUDUBON/OUTWARD BOUND FACILITY IN FAIRMOUNT PARK CITY OF PHILADELPHIA, PENNSYLVANIA





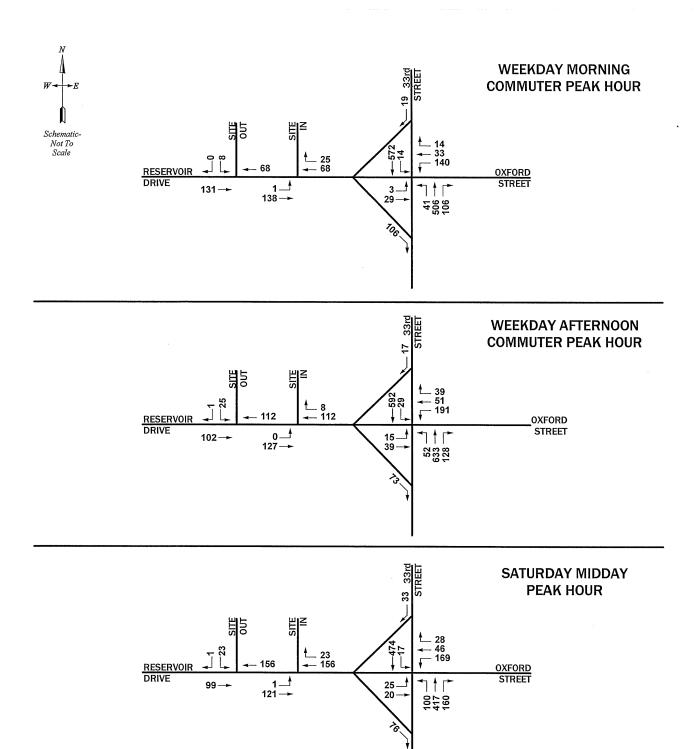


FIGURE 4

Peak Hour Traffic Volumes with Development AUDUBON/OUTWARD BOUND FACILITY IN FAIRMOUNT PARK

CITY OF PHILADELPHIA, PENNSYLVANIA





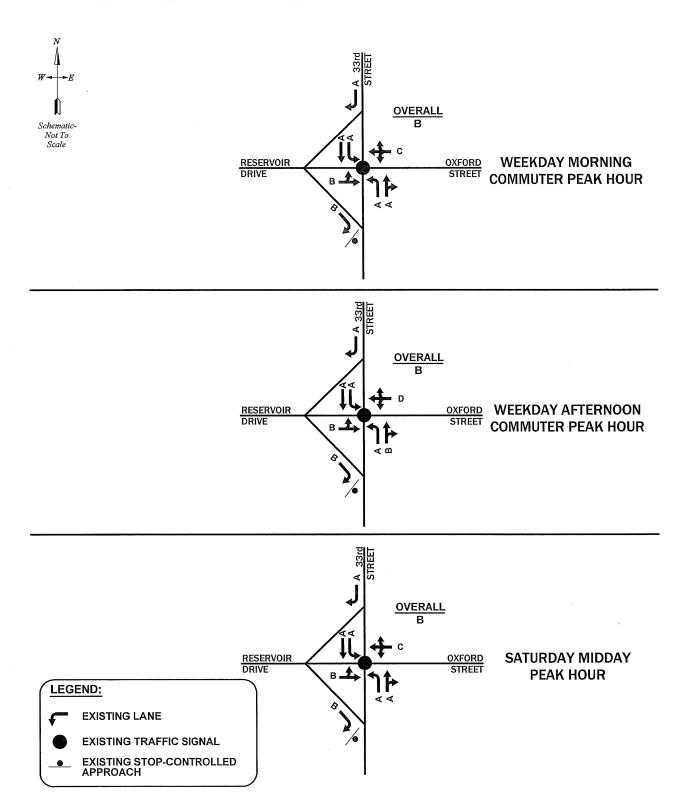


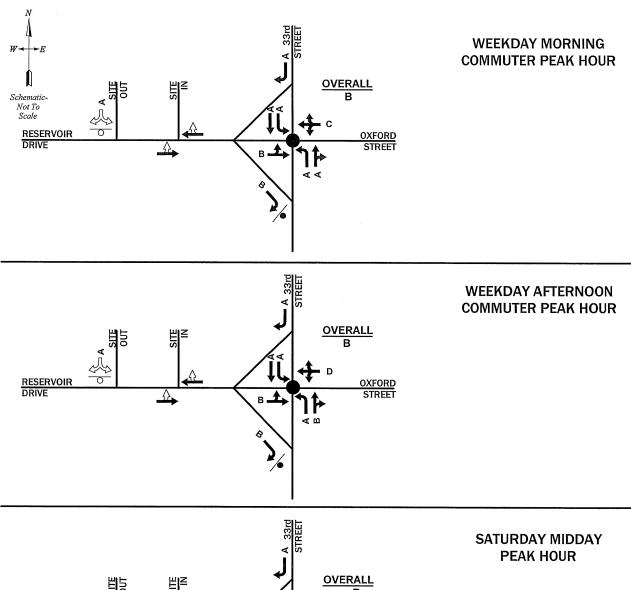
FIGURE 5

Existing Peak Hour Levels of Service AUDUBON/OUTWARD BOUND FACILITY IN FAIRMOUNT PARK

CITY OF PHILADELPHIA, PENNSYLVANIA







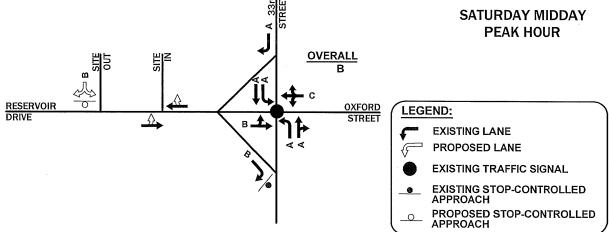


FIGURE 6 Future Peak Hour Levels of Service AUDUBON/OUTWARD BOUND FACILITY IN FAIRMOUNT PARK CITY OF PHILADELPHIA, PENNSYLVANIA





ATTACHMENT A



McMahon Associates, Inc. Transportation Engineers and Planners 425 Commerce Drive, Suite 200 iia Fort Washington, PA 19034

Municipality: City of Philadelphia

Location: 33rd Street & Reservior Dr / Oxford Street Counter/Countboard No.: BW

File Name: fairmount01w

Site Code : 00000111 Start Date : 12/13/2012

			Gro	ups Printe	d- Passen	ger Vehic	les - Heavy	Vehicles					
	33	rd Street		0:	xford St		0	xford St		Res	ervior Dr		
	Sou	thbound		We	stbound		No	rthbound		Ea	stbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00	2	92	0	18	5	1	0	92	18	1	3	2	234
07:15	6	111	1	31	3	3	2	102	38	1	3	3	304
07:30	2	150	1	41	7	3	4	128	31	0	3	6	376
07:45	4	159	1	36	4	5	4	134	27	0	4	14	392
Total	14	512	3	126	19	12	10	456	114	2	13	25	1306
08:00	5	116	1	33	2	3	2	131	22	0	2	12	329
08:15	3	147	2	30	2	3	4	113	26	0	5	19	354
08:30	6	135	1	26	4	3	4	123	30	0	4	15	351
08:45	3	149	1	34	2	5	3	110	33	0	2	5	347
Total	17	547	5	123	10	14	13	477	111	0	13	51	1381
16:00	10	142	2	32	8	8	7	146	27	1	. 3	4	390
16:15	4	140	4	33	6	5	5	137	32	2	2	10	380
16:30	5	148	1	48	8	9	6	158	32	0	2	3	420
16:45	10	156	1	49	6	8	5	152	34	1	6	9	437
Total	29	586	8	162	28	30	23	593	125	4	13	26	1627
17:00	4	131	1	41	4	5	4	162	35	2	6	11	406
17:15	10	157	4	53	7	17	9	161	27	0	4	7	456
17:30	5	152	2	38	6	8	4	130	20	2	2	7	376
17:45	8	152	1	33	22	7	7	116	28	I	2	7	364_
Total	27	592	8	165	19	37	24	569	110	5	14	32	1602
Grand Total	87	2237	24	576	76	93	70	2095	460	11	53	134	5916
Apprch %	3.7	95.3	1	77.3	10.2	12.5	2.7	79.8	17.5	5.6	26.8	67.7	
Total %	1.5	37.8	0.4	9.7	1.3	1.6	1.2	35.4	7.8	0.2	0.9	2.3	
Passenger Vehicles	86	2074	24	540	76	91	70	1925	428	11	53	134	5512
% Passenger Vehicles	98.9	92.7	100	93.8	100	97.8	100	91.9	93	100	100	100	93.2
Heavy Vehicles	1	163	0	36	0	2	0	170	32	0	0	0	404
% Heavy Vehicles	1.1	7.3	0	6.2	0	2.2	0	8.1	7	0	0	0	6.8



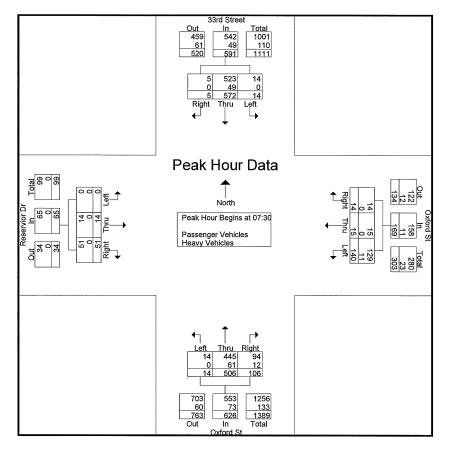
McMahon Associates, Inc. Transportation Engineers and Planners

425 Commerce Drive, Suite 200 Fort Washington, PA 19034

Municipality: City of Philadelphia Location: 33rd Street & Reservior Dr / Oxford Street Counter/Countboard No.: BW

File Name: fairmount01w Site Code : 00000111 Start Date : 12/13/2012

		33rd	Street			Oxfo	rd St			Oxfo	ord St			Reser	vior Dr		
		South	bound			Westl	bound			North	bound			Eastl	bound		
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analy	ysis Fron	n 07:00	to 11:45	- Peak 1 c	of 1										-		
Peak Hour for E	ntire Inte	ersection	n Begins a	at 07:30													
07:30	2	150	1	153	41	7	3	51	4	128	31	163	0	3	6	9	376
07:45	4	159	1	164	36	4	5	45	4	134	27	165	0	4	14	18	392
08:00	5	116	1	122	33	2	3	38	2	131	22	155	0	2	12	14	329
08:15	3	147	2	152	30	2	3	35	4	113	26	143	0	5	19	24	354
Total Volume	14	572	5	591	140	15	14	169	14	506	106	626	0	14	51	65	1451
% App. Total	2.4	96.8	0.8		82.8	8.9	8.3		2.2	80.8	16.9	******	0	21.5	78.5		
PHF	.700	.899	.625	.901	.854	.536	.700	.828	.875	.944	.855	.948	.000	.700	.671	.677	.925
Passenger Vehicles	14	523	5	542	129	15	14	.158	14	445	94	553	0	14	51	65	1318
% Passenger Vehicles	100	91.4	100	91.7	92.1	100	100	93.5	100	87.9	88.7	88.3	0	100	100	100	90.8
Heavy Vehicles	0	49	0	49	11	0	0	11	0	61	12	73	0	0	0	0	133
% Heavy Vehicles	0	8.6	0	8.3	7.9	0	0	6.5	0	12.1	11.3	11.7	0	0	0	0	9.2



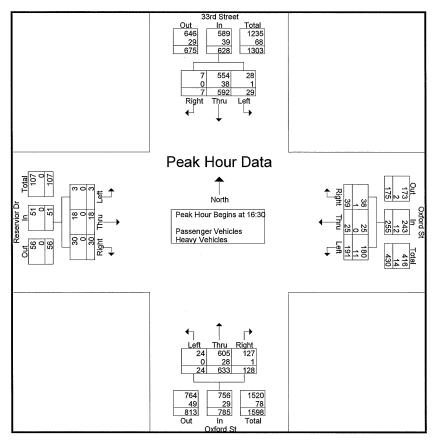


Transportation Engineers and Planners 425 Commerce Drive, Suite 200 iia Fort Washington, PA 19034

Municipality: City of Philadelphia Location: 33rd Street & Reservior Dr / Oxford Street Counter/Countboard No.: BW

File Name: fairmount01w Site Code : 00000111 Start Date : 12/13/2012

			Street bound				ord St bound				ord St bound				vior Dr bound		
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analy	ysis Fron	n 12:00	to 17:45 -	Peak 1 c	f 1												
Peak Hour for E	ntire Inte	rsection	Begins a	t 16:30													
16:30	5	148	1	154	48	8	9	65	6	158	32	196	0	2	3	5	420
16:45	10	156	1	167	49	6	8	63	5	152	34	191	1	6	9	16	437
17:00	4	131	1	136	41	4	5	50	4	162	35	201	2	6	11	19	406
17:15	10	157	4	171	53	7	17	77	9	161	27	197	0	4	7	11	456
Total Volume	29	592	7	628	191	25	39	255	24	633	128	785	3	18	30	51	1719
% App. Total	4.6	94.3	1.1		74.9	9.8	15.3		3.1	80.6	16.3		5.9	35.3	58.8		
PHF	.725	.943	.438	.918	.901	.781	.574	.828	.667	.977	.914	.976	.375	.750	.682	.671	.942
Passenger Vehicles	28	554	7	589	180	25	38	243	24	605	127	756	3	18	30	51	1639
% Passenger Vehicles	96.6	93.6	100	93.8	94.2	100	97.4	95.3	100	95.6	99.2	96.3	100	100	100	100	95.3
Heavy Vehicles	1	38	0	39	11	0	1	12	0	28	1	29	0	0	0	0	80
% Heavy Vehicles	3.4	6.4	0	6.2	5.8	0	2.6	4.7	0	4.4	0.8	3.7	0	0	0	0	4.7





Transportation Engineers and Planners 425 Commerce Drive, Suite 200 ia Fort Washington, PA 19034

Municipality: City of Philadelphia Location: 33rd Street & Reservior Dr / Oxford Street Counter/Countboard No.: BW

Total %

1.6

37.6

0.4

9.8

1.4

File Name: fairmount01w Site Code: 00000111 Start Date: 12/13/2012

Page No : 1

Groups Printed-Passenger Vehicles 33rd Street Oxford St Oxford St Reservior Dr Westbound Southbound Northbound Eastbound Right Right Int. Total Start Time Left Thru Left Thru Right Left Thru Right Thru 07:00 93 33 276 07:15 07:30 07:45 Total 08:00 08:15 2.4 08:30 115 14 104 51 08:45 Total 16:00 16:15 16:30 16:45 Total 17:00 17:15 2 17:30 17:45 Total **Grand Total** Apprch % 3.9 1.1 76.4 10.7 12.9 2.9 79.4 17.7 5.6 26.8

1.7

1.3

34.9

7.8

0.2

2.4



Transportation Engineers and Planners

Municipality: City of Philadelphia

Location: 33rd Street & Reservior Dr / Oxford Street Counter/Countboard No.: BW

Total %

40.3

8.9

0.5

42.1

425 Commerce Drive, Suite 200 Fort Washington, PA 19034

File Name: fairmount01w Site Code : 00000111 Start Date : 12/13/2012

Page No : 1

Groups Printed-Heavy Vehicles 33rd Street Oxford St Oxford St Reservior Dr Southbound Westbound Northbound Eastbound Start Time Thru Right Thru Right Thru Right Thru Right Int. Total 9 28 07:15 07:30 07:45 126 56 Total 08:00 08:15 08:30 08:45 Total 16:00 2 1 17 16:15 16:30 16:45 Total 55 114 17:00 17:15 17:30 17:45 Total Grand Total Apprch % 99.4 94.7 5.3 15.8 84.2



Transportation Engineers and Planners 425 Commerce Drive, Suite 200

Municipality: City of Philadelphia

Fort Washington, PA 19034

Location: 33rd Street & Reservior Dr / Oxford Street Counter/Countboard No.: BW

File Name: fairmount01w Site Code : 00000111 Start Date : 12/13/2012

Page No : 1

Groups Printed- Pedestrians

	Reservior Dr	Oxford St	Oxford St	33rd Street	
	Eastbound	Northbound	Westbound	Southbound	
Int. Total	N/S	E/W	N/S	E/W	Start Time
1	0	0	1	0	07:00
1	0	0	0	1	07:15
8	0	0	6	2	07:30
9	0	0	3	6	07:45
19	0	0	10	9	Total
1	1	0	0	0	08:00
4	0	. 0	3	1	08:15
2	0	0	2	0	08:30
3	0	0	2	1	08:45
10	1	0	7	2	Total
7	0	3	3	1	16:00
5	0	2	2	1	16:15
9	1	2	6	0	16:30
2	0	0	2	0	16:45
23	1	7	13	2	Total
2	1	0	1	0	17:00
6	1	0	5	0	17:15
4	0	0	4	0	17:30
12	2	0	10	0	Total
64	4	7	40	13	Grand Total
	100	100	100	100	Apprch %
	6.2	10.9	62.5	20.3	Total %



McMahon Associates, Inc. Transportation Engineers and Planners 425 Commerce Drive, Suite 200 hia Fort Washington, PA 19034

Municipality: City of Philadelphia Location: 33rd Street &

Reservior Drive / Oxford Street Counter/Countboard No.: BW

File Name: fairmount01s Site Code : 00000111

Start Date : 12/15/2012

			Gro	ups Printe	d- Passen	ger Vehic	cles - Heavy	Vehicles					
	331	rd Street			xford St			rd Street		Res	ervior Dr		
		thbound		W	estbound		No	rthbound		Ea	stbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
12:00	6	106	4	30	5	3	6	114	44	2	3	8	331
12:15	3	121	5	40	6	6	6	130	29	2	1	6	355
12:30	11	112	2	27	2	7	2	125	42	2	2	5	339
12:45	4	109	1	24	3	12	4	125	38	2	4	7	333
Total	24	448	12	121	16	28	18	494	153	8	10	26	1358
13:00	9	113	3	36	5	10	8	129	38	0	2	7	360
13:15	5	105	3	40	7	3	11	106	33	3	1	2	319
13:30	1	115	4	51	4	13	14	108	43	0	5	10	368
13:45	4	120	2	38	2	3	6	98	39	2	2	9	325
Total	19	453	12	165	18	29	39	441	153	5	10	28	1372
14:00	7	134	3	40	9	9	13	105	45	3	1	11	380
14:15	2	106	2	29	2	3	10	112	25	1	5	11	308
14:30	5	108	5	31	3	2	4	111	24	2	1	8	304
14:45	6	115	4	34	2	3	13	104	16	4	1	5	307
Total	20	463	14	134	16	17	40	432	110	10	8	35	1299
Grand Total	63	1364	38	420	50	74	97	1367	416	23	28	89	4029
Appreh %	4.3	93.1	2.6	77.2	9.2	13.6	5.2	72.7	22.1	16.4	20	63.6	4029
Total %	1.6	33.9	0.9	10.4	1.2	1.8	2.4	33.9	10.3	0.6	0.7	2.2	
Passenger Vehicles	63	1328	38	413	50	74	97	1323	409	23	28	89	3935
% Passenger Vehicles	100	97.4	100	98.3	100	100	100	96.8	98.3	100	100	100	97.7
Heavy Vehicles	0	36	0	7	0	0	0	44	7	0	0	0	94
% Heavy Vehicles	0	2.6	0	1.7	ō	0	0	3.2	1.7	ő	Ö	ő	2.3



Transportation Engineers and Planners 425 Commerce Drive, Suite 200

Municipality: City of Philadelphia

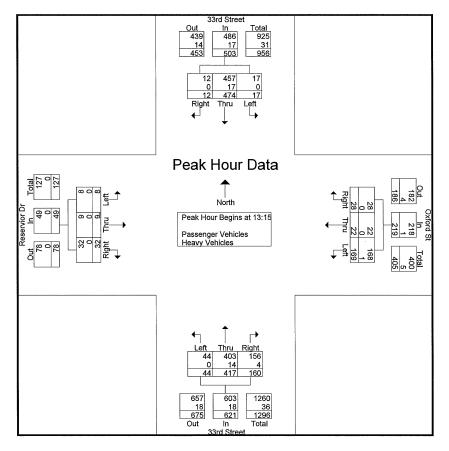
Location: 33rd Street &

Reservior Drive / Oxford Street Counter/Countboard No.: BW

Fort Washington, PA 19034

File Name: fairmount01s Site Code : 00000111 Start Date : 12/15/2012

			Street				ord St				Street		Reservior Dr Eastbound				
		South	bound			West	bound			North	bound			East	bound		
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analy	ysis Fron	n 12:00	to 14:45	- Peak 1 c	of 1												
Peak Hour for E	ntire Inte	ersection	Begins	at 13:15													
13:15	5	105	3	113	40	7	3	50	11	106	33	150	3	1	2	6	319
13:30	1	115	4	120	51	4	13	68	14	108	43	165	0	5	10	15	368
13:45	4	120	2	126	38	2	3	43	6	98	39	143	2	2	9	13	325
14:00	7	134	3	144	40	9	9	58	13	105	45	163	3	1	11	15	380
Total Volume	17	474	12	503	169	22	28	219	44	417	160	621	8	9	32	49	1392
% App. Total	3.4	94.2	2.4		77.2	10	12.8		7.1	67.1	25.8		16.3	18.4	65.3		
PHF	.607	.884	.750	.873	.828	.611	.538	.805	.786	.965	.889	.941	.667	.450	.727	.817	.916
Passenger Vehicles	17	457	12	486	168	22	28	218	44	403	156	603	8	9	32	49	1356
% Passenger Vehicles	100	96.4	100	96.6	99.4	100	100	99.5	100	96.6	97.5	97.1	100	100	100	100	97.4
Heavy Vehicles	0	17	0	17	1	0	0	1	0	14	4	18	0	0	0	0	36
% Heavy Vehicles	0	3.6	0	3.4	0.6	0	0	0.5	0	3.4	2.5	2.9	0	0	0	0	2.6





Municipality: City of Philadelphia

Location: 33rd Street &

Reservior Drive / Oxford Street Counter/Countboard No.: BW

McMahon Associates, Inc.
Transportation Engineers and Planners
425 Commerce Drive, Suite 200
iia Fort Washington, PA 19034

File Name: fairmount01s

Site Code : 00000111 Start Date : 12/15/2012

Page No : 1

Groups Printed-Passenger Vehicles

	33	rd Street		o	xford St		33	rd Street		Res	ervior Dr	.	
	Sou	thbound		W	estbound		No	rthbound		Ea	stbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
12:00	6	103	4	29	5	3	6	111	43	. 2	3	8	323
12:15	3	119	5	37	6	6	6	127	29	2	1	6	347
12:30	11	107	2	27	2	7	2	117	42	2	2	5	326
12:45	4	106	1	23	3	12	4	121	38	2	4	7	325
Total	24	435	12	116	16	28	18	476	152	8	10	26	1321
13:00	9	112	3	36	5	10	8	126	36	0	2	7	354
13:15	5	103	3	40	7	3	11	103	32	3	1	2	313
13:30	1	109	4	50	4	13	14	104	42	0	5	10	356
13:45	4	113	2	38	2	3	6	95	37	2	2	9	313
Total	19	437	12	164	18	29	39	428	147	5	10	28	1336
14:00	7	132	3	40	9	9	13	101	45	3	1	11	374
14:15	2	104	2	29	2	3	10	106	25	1	5	11	300
14:30	5	107	5	30	3	2	4	109	24	2	1	8	300
14:45	6	113	4	34	2	3	13	103	16	4	1	5	304
Total	20	456	14	133	16	17	40	419	110	10	8	35	1278
Grand Total	63	1328	38	413	50	74	97	1323	409	23	28	89	3935
Apprch %	4.4	92.9	2.7	76.9	9.3	13.8	5.3	72.3	22.4	16.4	20	63.6	
Total %	1.6	33.7	1	10.5	1.3	1.9	2.5	33.6	10.4	0.6	0.7	2.3	



Municipality: City of Philadelphia

Location: 33rd Street &

Reservior Drive / Oxford Street Counter/Countboard No.: BW

Transportation Engineers and Planners 425 Commerce Drive, Suite 200 iia Fort Washington, PA 19034

File Name: fairmount01s

Site Code : 00000111 Start Date : 12/15/2012

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Groups Printed-Heavy Vehicles

	331	rd Street		0	xford St		33	rd Street		Res	ervior Dr		
	Sou	thbound		W	estbound		No	rthbound		Ea	stbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int, Total
12:00	0	3	0	1	0	0	0	3	1	0	0	0	8
12:15	0	2	0	3	0	0	0	3	0	0	0	0	8
12:30	0	5	0	0	0	0	0	8	0	0	0	0	13
12:45	0	3	0	1	0	0	0	4	0	0	0	0	8_
Total	0	13	0	5	0	0	0	18	1	0	0	0	37
1						1			1				
13:00	0	1	0	0	0	0	0	3	2	0	0	0	6
13:15	0	2	0	0	0	0	0	3	1	0	0	0	6
13:30	0	6	0	1	0	0	0	4	1	0	0	0	12
13:45	0	7	0	00	0	0	0	3	2	0	0	0	12
Total	0	16	0	1	0	0	0	13	6	0	0	0	36
14:00	0	2	ا م	0	0	0.1	0	4	ا م	0	0	ا م	
	0	2	0	0	0	0	0	4	0	0	0	0	6
14:15	0	2	0	0	0	0	0	6	0	0	0	0	8
14:30	0	1	0	1	0	0	0	2	0	0	0	0	4
14:45	0	2_	0	0	0	0	0	1	0	0	0	0	3_
Total	0	7	0	1	0	0	0	13	0	0	0	0	21
Grand Total	0	36	0	7	0	0	0	44	7	0	0	0	94
Appreh %	0	100	ő	100	0	ő	Õ	86.3	13.7	ő	0	0	2.1
Total %	ŏ	38 3	ő	7.4	0	ő	Ô	46.8	7.4	ő	0	0	



McMahon Associates, Inc. Transportation Engineers and Planners 425 Commerce Drive, Suite 200 Fort Washington, PA 19034

Municipality: City of Philadelphia

Location: 33rd Street &

Reservior Drive / Oxford Street

Counter/Countboard No.: BW

File Name: fairmount01s

Site Code : 00000111 Start Date : 12/15/2012

Page No : 1

Groups Printed- Pedestrians

	33rd Street	Oxford St	33rd Street	Reservior Dr	
	Southbound	Westbound	Northbound	Eastbound	
Start Time	E/W	N/S	E/W	N/S	Int. Total
12:00	0	1	0	0	1
12:15	0	2	0	0	2
12:30	0	2	0	2/	4
12:45	0	2	0	1	3
Total	0	7	0	3	10
13:00	0	3	0	0	3
13:15	1 1	3	0	0	4
13:30	4	3	0	1	8
13:45	0	1	0	2	3
Total	5	10	0	3	18
14:00	0	3	2	1	6
14:15	1	2	0	1	4
14:30	5	3	2	0	10
14:45	0	3	0	2	5
Total	6	11	4	4	25
				,	
Grand Total	11	28	4	10	53
Apprch %	100	100	100	100	
Total %	20.8	52.8	7.5	18.9	



ATTACHMENT B



	_					_		_				
	_	-	•	•	-	_	1	T		-	¥	*
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBI
Lane Configurations		€1	7		4		ሻ	1→		*	↑	i
Volume (vph)	0	14	51	140	15	14	14	506	106	14	572	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	190
Lane Width (ft)	16	16	16	16	16	16	9	10	10	9	11	1
Grade (%)	***************************************	-1%			-1%			1%			-2%	
Storage Length (ft)	0		150	0		0=	100		0	100		15
Storage Lanes	0		1	0	MODERN CONTRACTOR	0	1	and a second	0	1		
Taper Length (ft)	75		50	75		75	60		75	65		- 5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
Ped Bike Factor					STOREST CASE				***		94.7et02592	
Frt		Singer Services	0.850	o davanto de la	0.989	number of the	STANDARDONA	0.974			DAMES AND	0.85
Flt Protected					0.960		0.950			0.950	20.25	
Satd. Flow (prot)	0	2122	1803	0	2014	0	1585	1685	0	1609	1819	154
FIt Permitted					0.752		0.353		wai:	0.326	PARTICIPATION OF THE PARTIES AND THE PARTIES A	500000
Satd. Flow (perm)	0	2122	1803	0	1578	0	589	1685	0	552	1819	154
Right Turn on Red	FED (MARKET SAME)	0.00000	Yes	FINANCE	1010	Yes	303	1000	Yes		1013	Ye
Satd. Flow (RTOR)	Considerate Considerate	Total Constant	57	of the second	7	100	SECOND SECOND	34	100		NOTE OF STREET	10
Link Speed (mph)	555625555555	25	31	ÇEGE)GESEVAS	25			34 25	Are district	FERNANDER	25	30000000
Link Distance (ft)		454			361		2000000	768	Description of the last of the		667	A900
Travel Time (s)		12.4		ernination	9.8	ning and a second	SHIPSTATE	20.9	SECULIAR SEC	CONCUENCY.	18.2	
Confl. Peds. (#/hr)		12.4			9.0			20.9	7,000		10.2	
		2 - 1 - 1 - 1 - 1			9724 TSSSSS	WESTERNAMEN		200700000000	19862281398	59/5353-9619.5	normal measure	UNICO NO.
Confl. Bikes (#/hr)	0.90	0.00	0.00	0.00	0.90	0.00	0.00	200	0.90	0.00	0.00	-
Peak Hour Factor		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.9
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	1009
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	24
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	ng Stronger
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%	CONTROL OF THE		0%			0%	
Adj. Flow (vph)	0	16	57	156	17	16	16	562	118	16	636	
Shared Lane Traffic (%)	1900F1478180-14					Service Ve	44					manuscript
Lane Group Flow (vph)	0	16	57	0	189	0	16	680	0	16	636	
Number of Detectors		2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Rigi
Leading Detector (ft)	20	100	20	20	100		20	100	-percent	20	100	2
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Turn Type	Perm		Perm	Perm	- US sold and		Perm		AND DESCRIPTION	Perm		Perr
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	agar or the Street
Switch Phase							KERNEL PRODUCTION					
Minimum Initial (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.
Minimum Split (s)	18.0	18.0	18.0	18.0	18.0		21.0	21.0		21.0	21.0	21.
Total Split (s)	18.0	18.0	18.0	18.0	18.0	0.0	42.0	42.0	0.0	42.0	42.0	42.
Total Split (%)	30.0%	30.0%		30.0%	30.0%	0.0%		70.0%	0.0%	70.0%	70.0%	
Maximum Green (s)	13.5	13.5	13.5	13.5	13.5	0.070	37.5	37.5	0.070	37.5	37.5	37.
Yellow Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	2
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	number typing	2.0	2.0	- TORON DESIGNATION OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TO THE P	2.0	2.0	2.
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2. 0.
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.0	4.5	4.5	4.0	4.5	4.5	4.

Lanes, Volumes, Timings I:\eng\812766\Traffic\Analysis\Existing\Weekday AM.syn

Lane Group EBL EBT EBR

Lead Lag Optimize?

Verlicie Estanson (s) 3.0 3.0 3.0

Minimum Gap (s) 3.0 3.0 3.0 3.0

Minimum Gap (s) 3.0 3.0 3.0 3.0

Time Before Reduce (s) 0.0 0.0 0.0

Time To Reduce (s) 0.0 0.0 0.0

Time To Reduce (s) 0.0 0.0 0.0

Time To Reduce (s) 0.0 0.0 0.0

Time Serior Reduce (s) 0.0 0.0 0.0

Time To Reduce (s) 0.0 0.0 0.0

Time Before Reduce (s) 0.0 0.0 0.0

Total Delay 18.7 7.3

Queue Length 50th (tt) 5.0 0.0

Queue Length 50th (tt) 15.0

Queue Length 50th (tt) 17.2

Tum Bay Length (tt) 150

Starvation Cap Reducth 0.0

Storage Cap Reducth 0.0

Storage Cap Reducth 0.0

Storage Cap Reducth 0.0

Storage Cap Reducth 0.0

Reduced W. Ratio 0.03

Intersection Summary EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Min Min Min Min Min 3.0 3.0 3.0 3.0 3.0 3.0 0.0 0.0 0.0 0.0 0.0 0.0 C-Max C-Max C-Max 0.04 0.15 0.63 0.04 0.60 0,04 0,53 0.01 4.6 8.8 0.0 0.0 4.6 8.8 2 111 8 216 688 4.7 7.8 0.0 0.0 4.7 7.8 2 103 8 188 587 2.8 0.0 2.8 0 3 100 390 1127 0 0 100 150 366 1205 1026 0 0 0 0 0 0 0 0 0 360 0 0 0 0 0 0.04 0.53 0.01 Intersection Summary
Area Type: Other Area type:
Orner
Cycle Length: 60
Actuated Orcle Length: 60
Offset: 0(1%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: OCO
Control Type: Actuated-Coordinated Splits and Phases: 3: Reservior Dr & 33rd Street

Lanes, Volumes, Timings I:\eng\812766\Traffic\Analysis\Existing\Weekday AM.syn

3: Reservior Dr & 33rd Street

McMahon Associates, Inc.

3: Reservior Dr & 33rd Street

3: Reservior Dr & 33rd Street Synchro 7

Audubon/Outward Bound Facility

Existing Weekday AM

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McMahon Associates, Inc. 3: Reservior Dr & 33rd Street

Audubon/Outward Bound Facility Existing Weekday AM

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	7		4		7	1>		*	↑	7
Volume (vph)	0	14	51	140	15	14	14	506	106	14	572	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	16	16	16	16	16	16	9	10	10	9.	11	11
Grade (%)		-1%			-1%			1%		W-3/00/11/00/2015	-2%	COMPONING STREET
Total Lost time (s)		4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.99		1.00	0.97		1.00	1.00	0.85
Flt Protected		1.00	1.00		0.96		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		2122	1803		2014		1585	1685		1609	1819	1546
Fit Permitted		1.00	1.00		0.75		0.35	1.00		0.33	1.00	1.00
Satd. Flow (perm)		2122	1803		1578		589			553	1819	1546
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	16	57	156	17	16	16	562	118	16	636	- 6
RTOR Reduction (vph)	0	0	46	0	6	0	0	12	0	0	0	2
Lane Group Flow (vph)	- 0	16	11	0	183	0	16	668	0	16	636	4
Turn Type	Perm		Perm	Perm			Perm			Perm		Perm
Protected Phases		4-			- 8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		11.3	11.3		11.3		39.7	39.7		39.7	39.7	39.7
Effective Green, g (s)		11.3	11.3		11.3		39.7	39.7		39.7	39.7	39.7
Actuated g/C Ratio		0.19	0.19		0.19		0.66	0.66		0.66	0.66	0.66
Clearance Time (s)		4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		400	340		297		390	1115		366	1204	1023
v/s Ratio Prot		0.01					CARRY OF STREET	c0.40			0.35	ENCARRACT.
v/s Ratio Perm			0.01		c0.12		0.03			0.03	30004400500000	0.00
v/c Ratio		0.04	0.03		0.62		0.04	0.60		0.04	0.53	0.00
Uniform Delay, d1		19.9	19.9		22.4		3.5	5.7		3.5	5.3	3.4
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.0	0.0		3.8		0.2	2.4		0.2	1.7	0.0
Delay (s)		20.0	19.9		26.2		3.7	8.1		3.8	6.9	3,4
Level of Service		В	В		С		A	Α		Α	Α	A
Approach Delay (s)		19.9			26.2		7.50	8.0		- 100 PER	6.8	
Approach LOS		В			С			Α			A	
Intersection Summary								200500				
HCM Average Control Delay			10.2	Н	CM Level	of Servic	9		В			
HCM Volume to Capacity ratio			0.60									
Actuated Cycle Length (s)			60.0	Sı	m of lost	time (s)			9.0		- Contract of the Contract of	
Intersection Capacity Utilization	1		56.6%			f Service		SAME SAME	В		Martin Sand	10000000000000000000000000000000000000
Analysis Period (min)			15					The second second			CONTRACTOR OF THE PARTY OF THE	aprecipitation(2)
Critical Lane Group						MOTOR NO.						

HCM Signalized Intersection Capacity Analysis I:\eng\812766\Traffic\Analysis\Existing\Weekday AM.syn

3: Reservior Dr & 33rd Street Synchro 7



3: Reservior Drive		Olicet								-	ing Week	
	•	-	•	1	-	•	4	Ť	/	-	Į.	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Lane Configurations		4	7		4		ሻ	1>		×	†	7
Volume (voh)	3	18	30	191	25	39	24	633	128	29	592	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	16	16	16	9	10	10	9	11	
Grade (%)		-1%			-1%		BRADING CO.	1%	- COLORDON		-2%	
Storage Length (ft)	0		150	0		0	100		0	100	-	150
Storage Lanes	0		1	0	CAMP COLOR DE SE	0	1	CONTRACTOR OF THE	0	1		1
Taper Length (ft)	75		50	75		75	60		75	65		50
Lane Util, Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					COLOR CONTRACTOR			CONTRACTOR OF				
Frt			0.850	340-040-050-040	0.979	Ph. D.C. Market Market Disc.	CARGO CONTON	0.975	LED COMMONTON	SALIK SINGHE-78		0.850
Fit Protected		0.994			0.964		0.950			0.950	Bara Chia	
Satd. Flow (prot)	0	2109	1803	0	2002	0	1585	1687	0	1609	1819	1546
Flt Permitted		0.966			0.765		0.327			0.214		
Satd. Flow (perm)	0	2050	1803	0	1589	0	545	1687	0	362	1819	1546
Right Turn on Red	CONTRACTOR	00.2007.0740.	Yes	erio Guardos	100000000000000000000000000000000000000	Yes		COMPANDA IN	Yes	100000		Yes
Satd. Flow (RTOR)	cannot beneficie	0,000,000,000,000	33	***********	14		a Submitted to	32			CONTRACTOR OF STREET	8
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		454			361			768			667	
Travel Time (s)		12.4			9.8	SCHOOL STATE	STATISTICS.	20.9	1000		18.2	
Confl. Peds. (#/hr)		100019070	CONTROL SALES CONTROL	to and or other trans							enilla.	
Confl. Bikes (#/hr)			5746/ABSS	2:09:000	7009F939	nerolesce)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	- 0	- 0	0	- 0	0-	- 0	0	0	0	(
Parking (#/hr)												2000
Mid-Block Traffic (%)	OBS CONTRACT	0%			0%			0%			0%	
Adj. Flow (vph)	3	20	33	212	28	43	27	703	142	32	658	8
Shared Lane Traffic (%)									NEW COOK	Contraction		
Lane Group Flow (vph)	0	23	33	0	283	0	27	845	0	32	658	8
Number of Detectors	e e	2	SEE	11	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	-514000000	20	100	20
Trailing Detector (ft)	0	0	0	0	0	ciercolination	0	0		0	0	0
Turn Type	Perm		Perm	Perm			Perm			Perm		Perm
Protected Phases	LOITI	4	in the Country	Sect Office	8		on contra	2	200000000000000000000000000000000000000	- Contract	6	- Louis
Permitted Phases	4		4	8	100 CO		2			6		6
Detector Phase	4	4	4	8	8	de-personal de-	2	2		6	6	6
Switch Phase												
Minimum Initial (s)	3.0	3.0	3.0	3.0	3.0	NAME OF TAXABLE	3.0	3.0		3.0	3.0	3.0
Minimum Split (s)	18.0	18.0	18.0	3.0 18.0	18.0	FF13FF	21.0	21.0	ALL STATES	21.0		21.0
Total Split (s)	18.0	18.0	18.0	18.0	18.0	0.0	42.0	42.0	0.0	42.0	42.0	42.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	30.0%		70.0%	70.0%		70.0%	70.0%	70.0%
	13.5	13.5	13.5		13.5	0.076	37.5	37.5	0.076		37.5	37.5
Maximum Green (s)	2.5	2.5	2.5	13.5	2.5		2.5	2.5		37.5 2.5	2.5	2.5
Yellow Time (s)	2.5	2.5	2.0	2.5	2.0		2.0	2.0		2.5	2.0	2.0
All-Red Time (s)	2.0 0.0	2.0 0.0	0.0	2.U 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s) Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.0	4.5	4.5	4.0	4.5	4.5	4 !

olumes, Timings	3: Reservior Drive & 33rd St
2766\Traffic\Analysis\Existing\Weekday PM.syn	Synch

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead/Lag	10-01100000	ni (Silikan)				and a						100000
Lead-Lag Optimize?	PERSONALIVATION				SCIA, STORES SERVICE	CONTRACTOR OF THE PROPERTY OF	EDUNACIO (SINONO	Line Problem (Control Control	************	ASSESSMENT OF THE PARTY OF THE	number particular de	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0		0.0			0.0	0.0		0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	SEAL ROLLING	0.0	0.0	0.0
Recall Mode	Min	Min	Min	Min	Min	COLUMN TO SERVICE STATE OF THE	C-Max				C-Max	
Walk Time (s)	ALL STREET	and Carrie	2000	Section of the sectio	2000	2011/04/04/05	O MICK	O Music	BESSEL CHECK	and an area	- Contract	- India
Flash Dont Walk (s)	9005050678		NAME OF TAXABLE PARTY.	guerrania	SCHOOL STATE	deres estados	1.0000000000000000000000000000000000000	00000000000				we man
Pedestrian Calls (#/hr)						100000000000000000000000000000000000000	200000000000000000000000000000000000000		-	200000000000000000000000000000000000000		Calaboration of the Control of the C
v/c Ratio		0.05	0.08		0.81		0.08	0.78		0.14	0.57	0.01
Control Delay	Section of Personal	18.7	8.2		41.4	AND STATE OF THE PARTY.	5.2	14.7	ACTUAL CONTRACTOR	6.4	8.9	2.7
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	NINOTENNICION IN	18.7	8.2		41.4		5.2	14.7		6.4	8.9	2.7
Queue Length 50th (ft)		7	0		91		3	184		4	119	- 0
Queue Length 95th (ft)		22	18		#202	ravalenint	11	#376	***********	15	199	4
Internal Link Dist (ft)					281			688		3769956	587	0000000
Turn Bay Length (ft)		01.4	150		401	matalenia eta bile	100	New York		100	001	150
Base Capacity (vph)		461	431		368		347	1085		230	1158	987
Starvation Cap Reductn	21502000000	0	0	UNIO PER NO DE	0	HONOLEY:	0	0		0	0	0
Spillback Cap Reductn		0	0		ů.		0	0	500000	0	- 0	Ŏ
Storage Cap Reductn		0	0		0	SIL HOUSE	0	0	State State State	0	0	0
Reduced v/c Ratio		0.05	0.08	20115M35	0.77		0.08	0.78		0.14	0.57	0.01
		0.00	0.00				0.00	949				
Intersection Summary												
	Other											
Cycle Length: 60								SANSARIA CONTRACTOR	narow.corror			vercenneenste
Actuated Cycle Length: 60	55 ± 88			0,000	TOWNS AND ST	CONTRACTOR OF THE PARTY OF THE					and the later	186-1000
Offset: 0 (0%), Referenced to	o phase 2:1	VBTL and	i 6:SBTL,	Start of 0	Green							
Natural Cycle: 60		1000000	100,000,000	4500000					1000			
Control Type: Actuated-Cool												
# 95th percentile volume e			eue may	be longer	•		642300000000 640000000000000000000000000000					
Queue shown is maximur	n after two	cycles.										
Splits and Phases: 3: Res	ervior Drive	e & 33rd :	Street									
△↑ a2								- A.	14			
42 s	000000000000000000000000000000000000000	(Augustina)	7637630				M 25550 M	18 s	7 4		SECTION SECTION	. 1888
.1		and the second				100000000000000000000000000000000000000		_	000000000000000000000000000000000000000		SCHOOL STATE	Description
								4	8			
♦ a6								18 s				

Lanes, Volumes, Timings I:\eng\812766\Traffic\Analysis\Existing\Weekday PM.syn



McMahon Associates, Inc. 3: Reservior Drive & 33rd Street

Audubon/Outward Bound Facility Existing Weekday PM

O. PRODELINO BLIVE G	0014	Juon										,
	۶	→	•	•	←	4	4	†	1	-	ļ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	7		4		٦	7+		ሻ	†	7
Volume (vph)	3	18	30	191	25	39	24	633	128	29	592	in the same of
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	16	16	16	16	16	16	9	10	10	9	- 11	11
Grade (%)		-1%			-1%			1%			-2%	
Total Lost time (s)	ADDING THE	4.5	4.5	TOTAL VIOLENCE	4.5		4.5	4.5		4.5	4.5	4.5
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected		0.99	1.00		0.96		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		2108	1803		2003		1585	1686		1609	1819	1546
Flt Permitted		0.97	1.00		0.77		0.33	1.00		0.21	1.00	1.00
Satd. Flow (perm)		2048	1803		1590		546	1686		362	1819	1546
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	3	20	33	212	28	43-	27	703	142	32	658	- 8
RTOR Reduction (vph)	0	0	26	0	11	0	0	12	0	0	0	3
Lane Group Flow (vph)	0	23	7	0	272	0	27	833	0	32	658	Transport.
Turn Type	Perm		Perm	Perm			Perm			Perm		Perm
Protected Phases		4			8	24 (5)64 (5		2			6	100
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		12.8	12.8		12.8		38.2	38.2		38.2	38.2	38.2
Effective Green, g (s)		12.8	12.8		12.8		38.2	38.2		38.2	38.2	38.2
Actuated g/C Ratio		0.21	0.21		0.21		0.64	0.64	40000	0.64	0.64	0.64
Clearance Time (s)		4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		437	385		339		348	1073		230	1158	984
v/s Ratio Prot						**************************************		c0.49			0.36	
v/s Ratio Perm	7900-0-1000	0.01	0.00		c0.17	9000 HERRISO	0.05	SACRET STREET, STREET,		0.09	CONTRACTOR OF THE PARTY OF THE	0.00
v/c Ratio		0.05	0.02		0.80		0.08	0.78		0.14	0.57	0.01
Uniform Delay, d1		18.8	18.6	ELOCAL COMPA	22.4	activities of	4.2	7.8		4.3	6.2	4.0
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.1	0.0		12.8		0.4	5.5		1.3	2.0	0.0
Delay (s)		18.8	18.7		35.2		4.6	13.4	Truncher Truncher	5.6	8.2	4.0
Level of Service		В	В		D		Α	В		A	A	A
Approach Delay (s)		18.7		HOAL SHEET	35:2			13.1			8.1	
Approach LOS		В	acour-ancesso	and the second	D	3842000000000	SASSACSAT VOICE	В	100104-003-011040	14234000348488	Α	
Intersection Summary			100									
HCM Average Control Delay			14.7	Н	CM Level	of Service	e		В			
HCM Volume to Capacity ratio			0.78									
Actuated Cycle Length (s)			60.0	S	um of lost	time (s)			9.0			-
Intersection Capacity Utilizatio	n		69.5%	IC	U Level o	f Service			C			
Analysis Period (min)			15									,
o Critical Lana Croup						SPECIENTS.					2022200000	

HCM Signalized Intersection Capacity Analysis I:\eng\812766\Traffic\Analysis\Existing\Weekday PM.syn



3: Reservior Drive	a Joiu .	Jueet								Lating	Saturday	miduu
	۶	-	•	•	—	•	4	†	~	-	↓	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	7		4		*	14		ች	†	7
Volume (vph)	8	9	32	169	22	28	44	417	160	17	474	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	16	16	16	9	10	10	9	11	11
Grade (%)		-1%			-1%			1%			-2%	
Storage Length (ft)	0		150	0		0	100	Stary Company or a	0	100	MAYON SOUTH	150
Storage Lanes	0		1	0		0	1		0	1	4400000	1
Taper Length (ft)	75		50	75	940131	75	60		75	65		50
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850	distribution of the	0.983			0.958	- Children States			0.850
Fit Protected		0.977	J.000		0.963		0.950	J.000		0.950		V.000
Satd. Flow (prot)	0	2073	1803	0	2008	0	1585	1657	0	1609	1819	1546
Fit Permitted		0.883	1003		0.762		0.417	1007	TERRETA	0.343	1013	1040
Satd. Flow (perm)	0	1873	1803	0	1589	0	696	1657	0	581	1819	1546
Right Turn on Red		1075	Yes		1000	Yes	000	1001	Yes	301	1013	Yes
Satd. Flow (RTOR)			36		11	108		62	100			13
Link Speed (mph)	empresentation out	25	30 20		25		CHICAGON	02 25	: Tanger and		25	
Link Distance (ft)		454			361	SE-2012	200000000000000000000000000000000000000	768			667	
		12.4	MALES AND ADDRESS OF THE PARTY		98		A COMPANS	20.9			18.2	
Travel Time (s)		12.4	SERVICE CONTRACTOR		9.0	SERVICE STORES		20.9			10.2	
Confl. Peds. (#/hr)					erenen.			FEFERENCE SEC.	EATPLOSE			337666
Confl. Bikes (#/hr)	0.90	0.00	0.90	0.00	0.90	0.90	0.90	0.00	0.90	0.90	0.90	0.00
Peak Hour Factor		0.90		0.90				0.90				0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100% 2%	100%	100%	100% 2%	100% 2%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2% 0	2% 0	2% 0	2% 0	2%	2% 0		2%
Bus Blockages (#/hr)	0	0	U	U	U	U	U	U	U	U.	0	0
Parking (#/hr)							2000000000	nem nuvere		amenton.		erponeno
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	9	10	36	188	24	31	49	463	178	19	527	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	19	36	0	243	0	49	641	0	19	527	13
Number of Detectors	1	2	1	. 1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	DHADON NO.	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		- 0	0	0
Turn Type	Perm		Perm	Perm			Perm			Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	4	8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Split (s)	18.0	18.0	18.0	18.0	18.0	en comment	21.0	21.0	reading line	21.0	21.0	21.0
Total Split (s)	18.0	18.0	18.0	18.0	18.0	0.0	42.0	42.0	0.0	42.0	42.0	42.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	30.0%	0.0%	70.0%	70.0%	0.0%	70.0%	70.0%	70.0%
Maximum Green (s)	13.5	13.5	13.5	13.5	13.5		37.5	37.5		37.5	37.5	37.5
Yellow Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	2.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	MORPOOR CONTRACTOR	2.0	2.0	NEW YORK WAS	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3: Reservior Drive & 33rd Street Synchro 7

Lanes, Volumes, Timings I:\eng\812766\Traffic\Analysis\Existing\Saturday Midday.syn

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead/Lag	LDL		LUI.					1101		ODE.	001	- CDI
Lead-Lag Optimize?	enerthan annean	10/20/20/20/20/20	raza nomenon con	01/8-040/-60020	CEMBELOW NO.	Oraquistania.	ACTION COMMON	SOUND AND SHADOW	(a) (y) (a) (a) (a) (a) (a) (a) (a) (a) (a) (a			
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	100 Marie 1	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	NAME OF THE OWNER.	0.0	0.0	umperen	0.0		0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	72040000	0.0	0.0		0.0	0.0	0.0
Recall Mode	Min	Min	Min		Min .		C-Max				C-Max	
Walk Time (s)	MILL	OHL	IVIII	TOTAL	mut		CHIVIDA	Chylax		UTIVIAX	U-Max	U-max
Flash Dont Walk (s)		Mary Compa				-			-	000000000	**********	
Pedestrian Calls (#/hr)		9710100000		THE PERSON		24000000000		Stratution of	gamanus pour	NOW THE PARTY OF		
v/c Ratio		0.05	0.09		0.73	assesses	0.11	0.59	DESIRE SERVICES	0.05	0.45	0.01
				ARLESS HAVE					Service		7.1	2.4
Control Delay	20244042344800	18.7	8.1 0.0	BY SERVICE AND ADDRESS OF THE PARTY OF THE P	35.6		5.3	8.4 0.0	province of	4.8		
Queue Delay		0.0		He Editor	0.0	X-01-0	0.0			0.0	0.0	0.0
Total Delay	APRILITATION OF THE	18.7	8.1		35.6		5.3	8.4		4.8	7.1	2.4
Queue Length 50th (ft)		5	0		77		. 6	105		2	85	0
Queue Length 95th (ft)		20	19		#165		17	189	PERFERENCES	9	142	5
Internal Link Dist (ft)		374	SOUTH BUTTO		281	an aparteries	College College	688			587	
Turn Bay Length (ft)			150	***********	enament or name	C20070P00070P0	100	smessor over notes		100	egennos con	150
Base Capacity (vph)		421	434	And State of the Lot	366	2000	450	1093	Maria Below	376	1176	1004
Starvation Cap Reductn		0	0		0		0	0		0	0	0
Spillback Cap Reductn		0			0		0		energe.	0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	0
Reduced v/c Ratio		0.05	0.08		0.66		0.11	0.59		0.05	0.45	0.01
Intersection Summary												
	Other											
Cycle Length: 60												
Actuated Cycle Length: 60					STOREST AND			SERVICE SERVICE				
Offset: 0 (0%), Referenced t	o phase 2:1	IBTL and	6:SBTL,	Start of C	Green							
Natural Cycle: 55												
Control Type: Actuated-Coo	rdinated											
# 95th percentile volume e		acity, qui	eue may l	e longer	and a least of the	mediant in the	a de la compansa de l	100000000		GN-70130-77		
Queue shown is maximu			accessors and	2000000000	ACERO-SVETSERS	10049504904	~~~	Selection of the	Personal Services	(2000/00/00/00/00/00/00/00/00/00/00/00/00	***************************************	
		-,										
	ervior Drive	& 33rd S	Street									
Splits and Phases: 3: Res								gh				
.a. A	011101 51111								×4			
Splits and Phases: 3: Res		75.00	A 5 11 5 1			N C.C.O.		18:	94			- 200
1 B2	9/4 SE	- Z-S						18:	50.(65			
↑ p2						Nerco		18:	s8			

Lanes, Volumes, Timings I:leng\812766\Traffic\Analysis\Existing\Saturday Midday.syn



McMahon Associa 3: Reservior Drive		Street					,	iaaboii	Journ	ard Bo Existing	Saturday	
	٠	→	7	1	+	Ą.	•	1	~	>	+	
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Lane Configurations		4	*		4		ሻ	4		ሻ	*	7
Volume (vph)	8	9	32	169	22	28	44	417	160	17	474	meet 1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	190
Lane Width	16	16	16	16	16	16	9	10	10	9	- 11	1
Grade (%)		-1%			-1%			1%			-2%	
Total Lost time (s)		4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.98		1.00	0.96		1.00	1.00	0.8
Flt Protected		0.98	1.00		0.96		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		2073	1803	Section 1	2007		1585	1658		1609	1819	1546
Flt Permitted		0.88	1.00		0.76		0.42	1.00		0.34	1.00	1.00
Satd. Flow (perm)		1873	1803	CACHEROLE.	1589	Common	695	1658	10000	581	1819	1546
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	9	10	36	188	24		49	463	178	19	527	nissioco (
RTOR Reduction (vph)	0	0	29	0	9	0	0	22	0	0	0	
Lane Group Flow (vph)	0	19	7	0	234	0	49	619	0	19	527	
Turn Type	Perm	economic you	Perm	Perm			Perm			Perm		Pern
Protected Phases		4			- 8			2			6	
Permitted Phases	4	MICVLO10	4	8			2			6	mary years	
Actuated Green, G (s)		12.2	12.2		12.2		38.8	38.8		38.8	38.8	38.8
Effective Green, g (s)	000000000000000000000000000000000000000	12.2	12.2	MONTH STATES	12.2	enongeneral annu-	38.8	38.8		38.8	38.8	38.8
Actuated g/C Ratio		0.20	0.20		0.20		0.65	0.65	4000000	0.65	0.65	0.65
Clearance Time (s)		4.5	4.5		4.5		4.5	4.5	rouncimmen	4.5	4.5	4.5
Vehicle Extension (s)		3.0	3.0	Control of the Control	3.0	1919/2294	3.0	3.0	**************************************	3.0	3.0	3.0
Lane Grp Cap (vph)	of control transport of the	381	367	Selizan version	323		449	1072		376	1176	1000
v/s Ratio Prot								c0.37			- 0.29	
v/s Ratio Perm	CONTRACTOR OF THE CONTRACTOR O	0.01	0.00		c0.15	Operation of	0.07			0.03		0.01
v/c Ratio		0.05	0.02	-0.00	0.73		0.11	0.58		0.05	0.45	0.01
Uniform Delay, d1		19.2	19.1		22.3	TOWN TOWN	4.0	6.0		3.9	5.3	3.8
Progression Factor		1.00	1.00	200 E 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.00		1.00	1.00	-	1.00	1.00	1.00
Incremental Delay, d2	Polish seed to be a sure	0.1	0.0 19.1	- SERVICE STREET	7.9	A STATE OF THE PARTY OF THE PAR	0.5	2.3	on our sales	0.3	1.2	0.0
Delay (s) Level of Service	harrio de	19.3 B		PARTICIPANT.	30.2		4.5	8.2		4.1	6.5	3.8
		19.2	В	CONTRACTOR OF THE PARTY OF THE	C 30.2	THE REAL PROPERTY.	A	A	-	A	A	A
Approach Delay (s)			M Cultery No.	<u> </u>		3300000		8.0			6.4	
Approach LOS		В			С			Α			Α	
ntersection Summary						26				9-M		
HCM Average Control Dela			11.3	Н	CM Level	of Servic	е		В			
ICM Volume to Capacity ra	atio		0.61									
Actuated Cycle Length (s)			60.0		um of lost				9.0			
ntersection Capacity Utiliza	ation		63.0%	IC	U Level c	f Service		and the same	В			
analysis Pariod (min)			15									

HCM Signalized Intersection Capacity Analysis I:\eng\812766\Traffic\Analysis\Existing\Saturday Midday.syn



McMahon Associates,	Inc.
2. December Dr. 9 22rd	Ctrool

Audubon/Outward Bound Facility Weekday AM with Development

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	7		4		ሻ	4		ሻ	†	7
Volume (vph)	3	29	106	140	33	14	41	506	106	14	572	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	16	16	16	9	10	10	9	41	30000011
Grade (%)	KLI OCEREZIETRE NIZO	-1%	NeO CONTRACTO		-1%	1220000_12000000	200110010000000	1%		DATE ENGINEERING .	-2%	20422000000
Storage Length (ft)	0		150	0		0	100		0	100		150
Storage Lanes	0		1	0	04044803468	0	1		0	1	CENTRAL	1
Taper Length (ft)	75		50	75		7.5	60		75	65		50
Lane Util, Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		PARCES.	15/8005460						200			
Frt	22009/2012/00/00	2000100020000	0.850	000000000000000000000000000000000000000	0.990		ALEQUORIORIDAD.	0.974	AMERICAN AND ADDRESS OF THE PARTY OF THE PAR	and and deep complete	Min emily work defining	0.850
Fit Protected		0.996			0.964		0.950			0.950		
Satd, Flow (prot)	0	2113	1803	0	2025	0	1585	1685	0	1609	1819	1546
Fit Permitted		0.971			0.758		0.351	1000		0.324		
Satd. Flow (perm)	0	2060	1803	0	1592	0	585	1685	0	549	1819	1546
Right Turn on Red			Yes		COLUMN TO	Yes	CHICAGORIA	1000	Yes	0-500 CH		Yes
Satd. Flow (RTOR)	364 SSS 1104 SSS 1104 S		118	1,444,000	6			34	100	La la companyone de la	olimon soldelder	21
Link Speed (mph)		25	005305500		25			25	COSSIN PERSON		25	332333
Link Distance (ft)		504	000000000000000000000000000000000000000	- Company	361			768	Para Para Para Para Para Para Para Para		667	22000
Travel Time (s)	-22500	13.7			9.8			20.9	AGENT CALCULATE	According to	18.2	erroperson
Confl. Peds. (#/hr)	- Section - Committee		WEIGHDHOTHE	Somethnesses	0.0		SPRESSORES	20.3			10.2	SUZINCE COLO
Confl. Bikes (#/hr)			CONTRACT	erconsen	managar sa a	Sales and Co			Selection of	Secretarion of		
Coriii. Bixes (#/iii) Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	276	276 0	276 0	270	276 0	276 0	276 0	276	276	276	276 0	270
Parking (#/hr)	U	Ų	U	U	U	U	0	U	U	U	0	- Common U
		0%		CONTROL OF THE PARTY OF THE PAR	00/	OWNERS OF	2545532	000			- OACH	Thinking Sacr
Mid-Block Traffic (%)	3	32	118	156	0% 37	16		0% 562	118	aliametronia 40	0%	
Adj. Flow (vph)		32	118	156	3/	16	46	562	118	16	636	21
Shared Lane Traffic (%)	A CONTRACTOR		440		000		***************************************	900	and the			
Lane Group Flow (vph)	0	35	118	0	209	0	46	680	0	16	636	21
Number of Detectors		2		1	2			_ 2		1.	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	100000000000000000000000000000000000000	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Turn Type	Perm		Perm	Perm			Perm			Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4	September 2	4	. 8			2			6		. 6
Detector Phase	4	4	4	8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Split (s)	18.0	18.0	18.0	18.0	18.0		21.0	21.0	- CONT. CO.	21.0	21.0	21.0
Total Split (s)	18.0	18.0	18.0	18.0	18.0	0.0	42.0	42.0	0.0	42.0	42.0	42.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	30.0%	0.0%	70.0%	70.0%	0.0%	70.0%	70.0%	70.0%
Maximum Green (s)	13.5	13.5	13.5	13.5	13.5		37.5	37.5		37.5	37.5	37.5
Yellow Time (s)	2.5	2.5	2.5	2.5	2.5	i de la composição de l	2.5	2.5		2.5	2.5	2.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	HENNING NO.	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Lanes, Volumes, Timings I:\eng\812766\Traffic\Analysis\Existing & Trip Gen\Weekday AM.syn

3: Reservior Dr & 33rd Street Synchro 7

McMahon Associates, Inc.

Audubon/Outward Bound Facility

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Recall Mode	Min	Min	Min	Min	Min		C-Max	C-Max		C-Max	C-Max	C-Max
Walk Time (s)												
Flash Dont Walk (s) Pedestrian Calls (#/hr)												Salaran Galaran
v/c Ratio		0.09	0.27		0.67		0.12	0.61		0.04	0.53	0.02
Control Delay		19.3	6.4		32.4	OHALBIST VALUE	5.4	9.0	A COMPANY OF A	4.8	8.0	2.2
Queue Delav		0.0	0.0	e monde	0.0	market P	0.0	0.0		0.0	0.0	0.0
Total Delay	OCCUPATION OF THE PARTY OF THE	19.3	6.4	William October 1972	32.4	a land of the same of the	5.4	9.0	20.000	4.8	8.0	2.2
Queue Length 50th (ft)	0.000 ZZ	10	0		67		6	117		2	108	- 0
Queue Length 95th (ft)	111111111111111111111111111111111111111	29	34		126		17	216		8	188	6
Internal Link Dist (ft)		424			281	NA 614		688			587	F-E-SS-
Turn Bay Length (ft)	200-00-00-00-00-00-00-00-00-00-00-00-00-	6207020000000	150		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		100			100		150
Base Capacity (vph)		464	497		363	00495-00	384	1118		360	1194	1022
Starvation Cap Reductn		0	0		0	************	0	0	HOLE-Willess HOL	0	0	0
Spillback Cap Reductn		0	0	Section Page 2	0.0		0	0		0	0	0
Storage Cap Reductn		0	0		0		0	0		0	0	0
Reduced v/c Ratio		0.08	0.24		0.58		0.12	0.61		0.04	0.53	0.02
Intersection Summary												
	Other	GENERAL PRODUCTION AND ADDRESS OF THE PARTY	per ut									
Cycle Length: 60					~							
Actuated Cycle Length: 60				SECTION SECTION								
Offset: 0 (0%), Referenced to	o phase 2:1	NBTL and	l 6:SBTL,	Start of C	Green							
Natural Cycle: 50												

Lanes, Volumes, Timings I:\eng\812766\Traffic\Analysis\Existing & Trip Gen\Weekday AM.syn



McMahon Associates, Inc	
3: Reservior Dr & 33rd Str	ee

Audubon/Outward Bound Facility Weekday AM with Development

	۶	-	•	•	←	4	4	†	~	>	ļ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	7		4		*5	1		*1	↑	7
Volume (vph)	3	29	106	140	33	14	41	506	106	14	572	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	16	16	16	16	16	16	9	10	10	9	11	11
Grade (%)		-1%			-1%			1%			-2%	
Total Lost time (s)		4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.99		1.00	0.97		1.00	1.00	0.85
Fit Protected		1.00	1.00		0.96		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		2113	1803		2024	10,000	1585	1685		1609	1819	1546
FIt Permitted		0.97	1.00		0.76		0.35	1.00		0.32	1.00	1.00
Satd. Flow (perm)		2059	1803		1592		585	1685		548	1819	1546
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	3	32	118	156	37	16	46	562	118	16	636	21
RTOR Reduction (vph)	0	0	95	0	5	0	0	12	0	0	0	7
Lane Group Flow (vph)	0	35	23	0	204	0	46	668	0	16	636	14
Turn Type	Perm		Perm	Perm			Perm			Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		11.6	11.6		11.6		39.4	39.4		39.4	39.4	39.4
Effective Green, g (s)		11.6	11.6		11.6		39.4	39.4		39.4	39.4	39.4
Actuated g/C Ratio		0.19	0.19		0.19		0.66	0.66		0.66	0.66	0.66
Clearance Time (s)		4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	01/1/07/01/0	3.0	3.0		3.0	icio di sta	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		398	349		308		384	1106		360	1194	1015
v/s Ratio Prot								c0.40			0.35	
v/s Ratio Perm		0.02	0.01		c0.13		0.08			0.03		0.01
v/c Ratio		0.09	0.07		0.66		0.12	0.60		0.04	0.53	0.01
Uniform Delay, d1		19.9	19.8		22.4		3.8	5.9		3.6	5.4	3.6
Progression Factor	refast-som	1.00	1.00		1.00		1:00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.1	0.1		5.3		0.6	2.5		0.2	1.7	0.0
Delay (s)		20.0	19.9		27.7		4.5	8.3		3.9	7.1	3.6
Level of Service		В	В		С		A	Α		Α	Α	A
Approach Delay (s)		19.9			27.7			8.1			7.0	and the same
Approach LOS		В			С			Α			Α	
Intersection Summary												
HCM Average Control Delay			11.0	H	CM Level	of Service	0		В			
HCM Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			60.0	Si	ım of lost	time (s)			9.0			
Intersection Capacity Utilizatio	n	(Stations	58.6%		U Level o		B-000-000-00		В			Description of
Analysis Period (min)			15									
c Critical Lane Group									New York		PERMIT	PAGE PAGE PAGE

McMahon Associates, Inc. 5: Reservior Dr & Site Access (In)

Audubon/Outward Bound Facility Weekday AM with Development

J. Reservior Dr & C	JILO MOO	C22 (II	·/				Treckday real trial Development
	٦	→	+	4	\	4	
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		4	4				
Volume (vph)	1	138	68	25	0	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	
Grade (%)		-1%	0%		0%		
Storage Length (ft)	0			0	0	0	
Storage Lanes	0			0	0	0	
Taper Length (ft)	75			75	75	75	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor							
Frt			0.964				
Flt Protected							
Satd. Flow (prot)	0	1872	1796	0	0	0	
FIt Permitted					and the second		
Satd. Flow (perm)	0	1872	1796	0	0	0	
Link Speed (mph)		25	25		25		
Link Distance (ft)		318	504		168		
Travel Time (s)	erior contra	8.7	13.7	100 100 100	4.6		
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Growth Factor	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	
Parking (#/hr)							
Mid-Block Traffic (%)		0%	0%		0%		
Adj. Flow (vph)	- 1	153	76	28	0	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	154	104	0	0	0	
Sign Control		Free	Free		Free		
Intersection Summary	1000	No.					
Area Type: Control Type: Unsignalized	Other						

Control Type: Unsignalized

HCM Signalized Intersection Capacity Analysis L'leng\812766\Traffic\Analysis\Existing & Trip Gen\Weekday AM.syn

3: Reservior Dr & 33rd Street Synchro 7

Lanes, Volumes, Timings I:\eng\812766\Traffic\Analysis\Existing & Trip Gen\Weekday AM.syn



McMahon Associates, Inc. 5: Reservior Dr & Site Access (In)

Intersection Sign configuration not allowed in HCM analysis.

Audubon/Outward Bound Facility Weekday AM with Development

McMahon Associates, Inc. 7: Reservior Dr & Site Access (Out)

Audubon/Outward Bound Facility Weekday AM with Development

Intersection Summary Area Type: Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis I:\eng\812766\Traffic\Analysis\Existing & Trip Gen\Weekday AM.syn

5: Reservior Dr & Site Access (In) Synchro 7

Lanes, Volumes, Timings I:\eng\&12766\Traffic\Analysis\Existing & Trip Gen\Weekday AM.syn



McMahon Associates, Inc. 7: Reservior Dr & Site Access (Out)

Audubon/Outward Bound Facility
Weekday AM with Development

1. INCOCIVIOI DI CEN	OILC ACC	C33 (C	utj				Troonady Tall Mar B
	٠	→	+	4	/	4	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		*	*		*/*		
Volume (veh/h)	0	131	68	0	8	0	
Sign Control	nonemente constitution	Free	Free	vrsterios.Z.bio	Stop	accessors Tuesdayer	WAR TO THE RESIDENCE OF THE PROPERTY OF THE PR
Grade		-1%	0%		0%		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	POPER PRODUCTION STATE OF THE PROPERTY OF THE
Hourly flow rate (vph)	0	146	76	0	9	0	The state of the s
Pedestrians	and the same of th			and the same			
Lane Width (ft)				1000000000	F1000000000	er harrist noness	
Walking Speed (ft/s)	20024-0000		200,020,070000	2,010,240,0120,21	NO POST OFFICE	900000000000000000000000000000000000000	
Percent Blockage	eri-contract and	000000000000					
Right turn flare (veh)	AND ADDRESS OF THE PARTY OF THE	ereconductored the	904949ETSAN	U49573668334636	NOCON SECTION CO.	attactive at the desired states of	
Median type		None	None				
Median storage veh)				************			2000 - Dall 2 2000 D. C 2000 A. 1000 D 2000 D 2000 A.
Upstream signal (ft)			822	07000000000			
pX, platoon unblocked	MACHINE MACHINE		C. C. C. C.	200000000000000000000000000000000000000	-		
vC, conflicting volume	76				221	76	
vC1, stage 1 conf vol			2000 L D2 100 L	and the second			
vC2, stage 2 conf vol		566666			3805076		
vCu, unblocked vol	76	0441990446			221	76	
tC, single (s)	41			-	6.4	6.2	
tC, 2 stage (s)	701				- CONT.		
tF (s)	22	V65 84			3.5	3.3	
p0 queue free %	100			erinotal con	99	100	
cM capacity (veh/h)	1524				767	986	
Direction, Lane #	EB 1	WB 1	SB 1			300	ACCUPATION OF THE CANADASSISSION
Volume Total	146	76	9				
Volume Lotal				olejaja ja			
Volume Right	0	0	9	NOTES PROVING	Salar Salar Salar		
volume Right cSH	1700	1700	767				
Volume to Capacity	0.09	0.04	0.01	Contractor State	***************************************		
Queue Length 95th (ft)	0.09	0.04	0.01	distribution.			
	0.0	0.0	9.7	Nation (Alliana			
Control Delay (s) Lane LOS	U.U	0.0			net Court of the		The state of the s
	0.0	0.0	9.7		ramer contracts		
Approach Delay (s)	0.0	0.0			akasi sa	The Mark Street	
Approach LOS			Α				
Intersection Summary		/			7.7		
Average Delay			0.4				
Intersection Capacity Utiliza	ation		16.9%	IC	U Level o	of Service	A
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis I:\eng\812766\Traffic\Analysis\Existing & Trip Gen\Weekday AM.syn



McMahon Associates, Inc.
2. December Dr. 9. 22rd Ctros

Audubon/Outward Bound Facility
Weekday PM with Development

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	7		4		ሻ	1		*	†	7
Volume (vph)	15	39	73	191	51	39	52	633	128	29	592	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	16	16	16	9	10	10	9	11	11
Grade (%)	A. None and the Control of the Contr	-1%			-1%	Maria Maria Com	0.0000000000000000000000000000000000000	1%	************	200000000000000000000000000000000000000	-2%	200000000
Storage Length (ft)	0		150	0		0	100		0	100	CARCULA	150
Storage Lanes	0	******	1	0		0	1	Laboration of the Control of the Con	0	1	Mark Commences	1
Taper Length (ft)	75		50	75		75	60		75	65		50
Lane Util, Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			ACCOUNTS:		9922990					
Frt	AND ADDRESS OF THE PARTY OF THE	distributed	0.850	ROBERT STATE	0.981	DECEMBER OF STREET	SERVICE STORK	0.975	HOSPINION SCHOOL	New York	CHRONICE	0.850
Fit Protected		0.986	0.000		0.967		0.950	0.010		0.950		0.000
Satd, Flow (prot)	0	2092	1803	0	2013	0	1585	1687	0	1609	1819	1546
Fit Permitted		0.902	1003		0.759	U	0.324	100/	U .	0.209	1019	1040
	0	1914	1803	0	1580	0	540	1687	0	354	1819	1546
Satd. Flow (perm)	U	1914		U	1080		540	1007		304	1819	
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	ONOM OF CHEST OF SAME		81		12	OLEZPHINOSONO	manaronno manan	32	CHARLEST MODILE	LINGS OF THE STREET	AND THE WORLD	19
Link Speed (mph)	Syntal College of	25	SOCIETY OF	March 1995	25	sales erest.		25	Alas Spirit		25	Acres de la constante de la co
Link Distance (ft)	NTTT BELLEVIA	504			361			768			667	
Travel Time (s)		13.7			9.8			20.9			18.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%		GET MINE	0%	and the second		0%			0%	
Adj. Flow (vph)	17	43	81	212	57	43	58	703	142	32	658	19
Shared Lane Traffic (%)									4000000			
Lane Group Flow (vph)	0	60	81	0	312	0	58	845	0	32	658	19
Number of Detectors		2			2		30	2		J2	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	- CONTRACT CONTRACT	Left	Thru	Right
Leading Detector (ft)	20	100	20	-20	100		20	100		20	100	20
	20	0	0	0	0	000124752-00002-000000000000000000000000000000	20	0	- constation in	- 20	0	
Trailing Detector (ft)									-10000000000000000000000000000000000000			0
Turn Type	Perm		Perm	Perm			Perm			Perm		Perm
Protected Phases		4			8	***************************************		2			6	
Permitted Phases	4	PERSONAL PROPERTY.	4	8			2			6		6
Detector Phase	4	4	4	8	8		2	2		6	6	6
Switch Phase	27.200				- CONTRACTOR (2)			Opposition of the	Children (1)			
Minimum Initial (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Split (s)	18.0	18.0	18.0	18.0	18.0		21.0	21.0		21.0	21.0	21.0
Total Split (s)	18.0	18.0	18.0	18.0	18.0	0.0	42.0	42.0	0.0	42.0	42.0	42.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	30.0%	0.0%	70.0%	70.0%	0.0%	70.0%	70.0%	70.0%
Maximum Green (s)	13.5	13.5	13.5	13.5	13.5		37.5	37.5		37.5	37.5	37.5
Yellow Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	2.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	and the second second	2.0	2.0	- SAMMAN (CONT.)	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.0	4.5	4.5	4.0	4.5	4.5	4.5
TOWN EVOL THING (O)	7.5	7.0	7.0	7.0	7,0	7.0	7.0	7,0	7.0	7.0	7.0	7.0

Lanes, Volumes, Timings I:leng)812766\Traffic\Analysis\Existing & Trip Gen\Weekday PM.syn 3: Reservior Dr & 33rd Street Synchro 7 McMahon Associates, Inc.

Audubon/Outward Bound Facility

3: Reservior Dr &	33rd Stre	eet					Weel	day PM w	rith Deve	lopmer		
	•	→	7	•	←	4	4	†	/	>	Ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SB
Lead/Lag										97.02		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0		0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0
Recall Mode	Min	Min	Min	Min	Min		C-Max	C-Max		C-Max	C-Max	C-Ma
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio		0.14	0.18		0.88		0.17	0.79		0.14	0.57	0.0
Control Delay		19.7	6.6		49.8		6.2	15.1		6.5	9.0	2.
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.
Total Delay		19.7	6.6		49.8		6.2	15.1		6.5	9.0	2
Queue Length 50th (ft)		18	0		105		8	184		4	119	
Queue Length 95th (ft)		43	28		#233		22	#376		15	199	
Internal Link Dist (ft)		424			281			688			587	
Turn Bay Length (ft)			150				100			100		15
Base Capacity (vph)		431	468		365		341	1075		223	1147	98
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		- 0	0	H2491900
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.14	0.17	000000	0.85		0.17	0.79		0.14	0.57	0.0
Intersection Summary												
Area Type:	Other											
Cycle Length: 60	COLUMN TO SERVICE SERV				etering temper				Management Committee		and an arrangement	reddereste
Actuated Cycle Length: 60					Sparie and	DU NOTATION DE LA	A STATE OF THE PARTY OF THE PAR		entricus fo	anne ita		
Offset: 0 (0%), Referenced		NBTL and	6:SBTL.	Start of C	Green	esseconomerca co	ONE OFFICE AND ADDRESS OF THE PARTY OF THE P	***************************************		CAMEDODO OF CO.	COMMUNICATION	0000000
Natural Cycle: 60			200000					100000				
Control Type: Actuated-Co	ordinated						- And the second of the	number of the second	194301.1141.00			
# 95th percentile volume		acity: qu	eue mav	be longer	e de me							
Queue shown is maximi					Customerological	massers del Audit de	on the control of the		-CHEANNET	aggarang and Challands		
Splits and Phases: 3: Re	servior Dr &	33rd Stre	oot									
	SCIVIOI DI &	Joid Ollt	301					A .				
P2								-	4			

Lanes, Volumes, Timings I:\eng\812766\Traffic\Analysis\Existing & Trip Gen\Weekday PM.syn



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Movement	EBL	EBT	EBR	₩BL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
	CDL		* EDIN	WOL		YVDI	indu T		NON	3DL	A	nac r
Lane Configurations	15	4 39	r 73	191	4 > 51	39	า 52	4	128	່ງ 29		
Volume (vph)	1900	1900	1900	1900	1900	1900	1900	633 1900	1900	1900	592 1900	17 1900
Ideal Flow (vphpi)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width	10	-1%	10	-10		10	9		10	9	-2%	- 1
Grade (%)		-1% 4.5	4.5	4-20-00	-1% 4.5	0.7500000		1% 4.5		4.5	-2% 4.5	4.5
Total Lost time (s) Lane Util, Factor	NAME OF THE OWNER, OWNE	1.00	1.00	SECTION AND A	1.00		4.5 1.00	1.00		1.00		1.00
								0.97	- CONTRACTOR OF THE PARTY OF TH		1.00	
Frt		1.00	0.85		0.98		1.00			1.00	1.00	0.85
Fit Protected	8000000	0.99	1.00		0.97 2014	married married	0.95	1.00	PRESENTED TO	0.95	1.00	1.00
Satd. Flow (prot)		2092		Substantion and the substa		2000000	1585	1686		1609	1819	1546
Flt Permitted		0.90	1.00	9550797444	0.76	25.000000000	0.32	1.00		0.21	1.00	1.00
Satd. Flow (perm)	EMBERANCE.	1915	1803	(CONTRACTOR OF THE CONTRACTOR	1581	(Prospersor	540	1686	0.540.000.000	354	1819	1546
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	17	43	81	212	57	43	58	703	142	32		19
RTOR Reduction (vph)	0	0	63	0	9	0	0	12	0	0	0	7
Lane Group Flow (vph)	0	60	18	0	303	-0	- 58	833	0-	32	658	12
Turn Type	Perm		Perm	Perm	-		Perm			Perm		Perm
Protected Phases		4			8		O CONTRACTOR	2			6	-
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		13.2	13.2		13.2		37.8	37.8		37.8	37.8	37.8
Effective Green, g (s)		13.2	13.2		13.2		37.8	37.8		37.8	37.8	37.8
Actuated g/C Ratio		0.22	0.22		0.22		0.63	0.63		0.63	0.63	0.63
Clearance Time (s)		4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		421	397		348		340	1062		223	1146	974
v/s Ratio Prot								c0.49			0.36	
v/s Ratio Perm		0.03	0.01		c0.19		0.11			0.09		0.01
v/c Ratio		0.14	0.04		0.87		0.17	0.78		0.14	0.57	0.01
Uniform Delay, d1		18.8	18.4		22.6		4.6	8.1		4.5	6.4	4.1
Progression Factor		1.00	1.00		1.00		1.00	1.00	7450 A.O.	1.00	1.00	1.00
Incremental Delay, d2		0.2	0.0		20.0		1.1	5.8		1.3	2.1	0.0
Delay (s)		19.0	18.5		42.5		5.7	13.9		5.9	8.5	4.2
Level of Service		В	В		D		Α	В		Α	Α	A
Approach Delay (s)		18.7			42.5			13.4			8.3	
Approach LOS		В			D			В			Α	
ntersection Summary												
HCM Average Control Delay			16.4	H	CM Level	of Service	9		В			
HCM Volume to Capacity ratio			0.81	outini toti								
Actuated Cycle Length (s)			60.0	Sı	ım of lost	time (s)			9.0			
ntersection Capacity Utilization	1		73.0%		U Level o				D			
Analysis Period (min)			15		.,							

5: Reservior Dr & Site Access (In) Weekday PM with Development **/** → ← < √ √ 0 127 112 8 0 0 1900 1900 1900 1900 1900 1900 12 12 12 12 12 12 12 -196 096 096 0 0 0 0 0 Intersection Summary
Area Type: Other
Control Type: Unsignalized

HCM Signalized Intersection Capacity Analysis Litengt812766\TraffictAnalysis\Existing & Trip Gen\Weekday PM.syn

3: Reservior Dr & 33rd Street Synchro 7

Lanes, Volumes, Timings I:\eng\812766\Traffic\Analysis\Existing & Trip Gen\Weekday PM.syn

McMahon Associates, Inc.

5: Reservior Dr & Site Access (In) Synchro 7

Audubon/Outward Bound Facility



McMahon Associates, Inc. 5: Reservior Dr & Site Access (In)

Intersection Sign configuration not allowed in HCM analysis.

Audubon/Outward Bound Facility Weekday PM with Development

McMahon Associates, Inc. 7: Reservior Dr & Site Access (Out)

Audubon/Outward Bound Facility Weekday PM with Development

	٠	-	+	•	>	4
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		*	*		*/	
Volume (vph)	0	102	112	0	25	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		-1%	0%		0%	Statistical manners
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	75		egalen i.	75	75	75
Lane Util, Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		ALLON ALCOHOLIS	000000000000000000000000000000000000000		0.995	3000 SERVICE - CAT
Fit Protected					0.954	
Satd. Flow (prot)	0	1872	1863	0	1768	0
Flt Permitted					0.954	
Satd. Flow (perm)	0	1872	1863	0	1768	0
Link Speed (mph)		25	25		25	
Link Distance (ft)	CALLED THE CHICAGO.	529	318		164	
Travel Time (s)		14.4	8.7		4.5	Contract Con-
Confl. Peds. (#/hr)		Consultation in				
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)	C00403900007000070000	halond/assur/soo.	IODAYA POSTO	100000000000000000000000000000000000000		
Mid-Block Traffic (%)		0%	0%	# W. 15	0%	
Adi, Flow (vph)	0	113	124	0	28	1
Shared Lane Traffic (%)		TOTAL ACT				
Lane Group Flow (vph)	0	113	124	0	29	0
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					

Area Type: Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis I:\eng\812766\Traffic\Analysis\Existing & Trip Gen\Weekday PM.syn

5: Reservior Dr & Site Access (In) Synchro 7

Lanes, Volumes, Timings I:\eng\812766\Traffic\Analysis\Existing & Trip Gen\Weekday PM.syn



Volume (vehrlh) 0 102 112 0 25 1 Sign Control Free Free Stop 0% Peak Hour Factor 0.9 0.9 0.90	7. INCOCIVIOI DI CA	OILE ALL	C33 (C	utj				rrookaay i w waa borolopiilol
Lane Configurations Volume (eith) 0		٦	→	+	4	>	4	
Volume (verhit) 0 102 112 0 25 1 Sign Control Free Free Stop 0%	Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Sign Control Free Free Stop Grade -194	Lane Configurations		*	^		74		
Grade 198	Volume (veh/h)	. 0	102	112	0	25	1	
Grade 11% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	Sign Control		Free	Free		Stop		
Houry Now rate (vph)	Grade		-1%	0%		0%		
Pedestrians Lame Width (11) Wakking Speed (11th) Wakking Speed (11th) Wakking Speed (11th) Wakking Speed (11th) Region Type Median storage verb) Me	Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Lane Width (1f) Walking Speed (fts) Percent Blockage Right turn flare veh) Median type	Hourly flow rate (vph)	0	113	124	- 0	28	1	
Wakking Speed (fits) Personal Blockage Right turn flarer (verh) Median storage verh Median storage Median	Pedestrians							
Percent Blockage (Right Lum flare yeth) Median type Median type More None Median storage wth) Upstream signal (ft) S22 X, platoon unblocked XC, conflicting volume XC, stage 1 cont vol XC2, stage 2 cont vol XC2, stage 3 cont vol XC3, stage (s) C, conflicting volume XC3, stage (s) C, conflicting volume XC4 XC5, stage (s) XC6, stage (s) XC7, stage	Lane Width (ft)						nictoneranical	
Right turn flare (veh) Median storage veh) Median storage veh) Median storage veh) Upstream sipanal (f) KV, platon unblocked CV, conflicting valume 124 238 124 CV. starge 20 ord vol CVC, starge 20 ord vol C	Walking Speed (ft/s)							
Median type None None Median type Who Median storage veh) Upstram signal (ft) 822 XD, plation unblocked KC, conficing volume 124 238 124 KC2, stage 2 conf vol KC2, stage 2 conf vol KC2, stage 2 conf vol KC2, stage 6 10 5 5 4 6 5 C. C, chingle (s) L 1 5 6 4 6 2 C. C, chingle (s) L 1 5 6 4 6 2 C. C, chingle (s) L 1 5 7 5 3 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Percent Blockage							
Median storage veh) Upstram signal (f) IV. platon unblooked X. platon unblooked XC. stage 2 cont vol CC2. stage 2 cont vol CC2. stage 2 cont vol CC2. stage 2 cont vol CC3. stage 2 cont vol CC4. unblooked vol CC4. unblooked vol CC, unblooked vol CC, 2 stage (a) CC, 2 stage (b) CC, 2 stage (c) CC, 2 sta	Right turn flare (veh)	ALTERNATION OF THE PARTY OF THE	LUCOS ACIDO TRAMA	and the second		304000000000000000000000000000000000000	MARKOTTO COMPLETE	
Median storage veh) Upstram signal (f) IV. platon unblooked X. platon unblooked XC. stage 2 cont vol CC2. stage 2 cont vol CC2. stage 2 cont vol CC2. stage 2 cont vol CC3. stage 2 cont vol CC4. unblooked vol CC4. unblooked vol CC, unblooked vol CC, 2 stage (a) CC, 2 stage (b) CC, 2 stage (c) CC, 2 sta	Median type		None	None				
Upstream signal (ft)					322202F 0000			
DX, platon unblocked				822	101000000000			
\(\text{C}, \text{ conficting volume } \ \ \text{ 124 } \ \ \text{ CX}, \text{ case a foor fool } \ \text{ CX}, \text{ case a foor fool } \ \text{ CX}, \text{ case a foor fool } \ \text{ CX}, \text{ case a foor fool } \ \text{ CX}, \text{ case a fool } \ \te		Standing separate separate	Certification	***************************************	water and a second	ACADO PARAMETER	-	
KC1, stage 1, cont vol KC2, stage 2, cont vol KC3, stage 2, cont vol KC4, s		124				238	124	
\(\text{XC}, \text{stage 2 conf vol} \) \(\text{XC}, \text{stage 2 conf vol} \) \(\text{XC}, \text{stage 16} \) \(\text{YC}, \text{2 stage 16} \) \(\text{YC},		0.000-00H.T.090		filotopic Continues				
VCU, unblocked vol 124 238 124 CC, 2 stage (s) 6.4 6.2 2.2 E (s) 2.2 3.5 3.3 D0 quase free % 100 95 100 Mc capacity (velvir)) 1462 750 926 Direction, Lane # EB 1 WB 1 SB 1 Volume Total 113 124 29 Volume Right 0 0 28 Volume Right 0 0 1 SSH 1700 1705 756 Volume Longhi Shift 0 0 3 Control Delay (s) 0.0 0.0 10.0 Lane LOS A Approach LOS A Approach LOS A Intersection Capacity Utilization 1.1 Intersection Capacity Utilization 1.5% ICU Level of Service A			######################################					
C, single (s)		124			A STREET CONTRACTOR	238	124	
C, 2 stags (s) F(s) 2.2 3.5 3.3 0 queue free % 100 95 100 Character free % 100 95 100		Δ1		1700000				
F (s) 2.2 3.5 3.3 0 0 0 0 queue free % 100 96 100 CM capacity (velvh) 1462 750 926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				***************************************	000000000000000000000000000000000000000		Inches Circumstance	
p0 queue free % 100 96 100 Mc capacity (velvh) 1462 750 926 Direction, Lane # EB 1 WB 1 SB 1 Volume Total 113 124 29 Volume Right 0 0 1 SSH 1700 1700 756 Volume Led p1 0 100 0 2 8 Volume Right 0 0 0 1 SSH 1700 1700 756 Volume Lo Capacity 0 0.07 0.07 0.04 Queue Length 95th (t) 0 0 3 Control Delay (s) 0.0 0.0 10.0 A Approach LOS A A Pagroach LOS A Intersection Capacity Utilization 15/9% ICU Level of Service A		2.2				3.5	3.3	
Micapachy (velvh) 1462 750 928 Diseption, Lane # EB 1 WB 1 SB 1 Volume Total 113 124 29 Volume Total 113 124 29 Volume Left 0 0 28 Volume Left 0 0 0 1 SB 1 Volume State 1 1700 1700 07 04 Volume State 1 1700 1700 07 004 Volume State 1 1700 1700 0 0 0 0 0 0 0 0 0 0 0 0 0 0		100	Economic Co.			96		
Direction, Lane #								
Volume Total 113 124 29 Volume Right 0 0 29 Volume Right 0 0 54 SSH 1700 1700 758 Volume Long Total Capacity 100 100 100 Volume Long Total Capacity 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	***************************************	ED 4	UAD 1	CD 1				
Volume Left 0 0 29 Volume Right 0 0 29 Volume Right 0 0 0 4 SSH 1700 1700 756 Volume to Capacity 0.07 0.07 0.07 Volume to Capacity 0.07 0.07 0.04 Volume to Capacity 0.07 0.07 0.04 Volume to Capacity 0.0 0 0 3 Volume to Capacity 0.0 0 0 100 Volume to Capacity Volume Vo					2448	Section 1		
Volume Right 0 0 1 SSH 1700 1700 758 Volume to Capseity 0.07 0.07 0.04 Doues Length S6th (ft) 0 0 3 Control Delay (g) 0.0 0.0 1.00 Lane LOS A A Approach LOS A A Intersection Summary Newraga Delay 1.1 Intersection Spacially Utilization 1.5% ICU Level of Service A					Secretary in		CF SHAPPINGS	
ISH 1700 1700 756 Volume to Capacity 0.07 0.07 0.04 Queue Length Sth (tt) 0 0 3 Control Delay (s) 0.0 0.0 10.0 Lane LOS A Approach Delay (s) 0.0 0.0 10.0 Approach LOS A Intersection Summary Versige Delay 1.1 Intersection Capacity Utilization 155% LOU Level of Service A					The second			
Volume to Capacity 0.07 0.07 0.04 Queue Length Sift (1) 0 0 3 Control Delay (5) 0.0 0.0 10.0 A Approach Delay (5) 0.0 0.0 10.0 A Approach LOS A A Represence of the Control of the Co					eticomod:			Control of Control Con
Ouere Length 95th (#) 0 3 Control Delay (s) 0.0 0.0 10.0 Lane LOS 0.0 0.0 10.0 Lyproach LOS A 4 Intersection Summary 1.1 Intersection Sepacity Utilization 1.5% LOU Level of Service A								
Centrol Delay (s) 0.0 0.0 10.0 Lane LOS A Approach Delay (s) 0.0 0.0 10.0 Approach LOS A Intersection Summary Verage Delay 1.1 Intersection Spacily Utilization 15.5% LCU Level of Service A							A STATE OF THE STA	
Lane LOS A Approach Delay (s) 0.0 0.0 10.0 Leproach LOS A Intersection Summary Vertage Delay 1.1 ICU Level of Service Vertage Delay 1.5 ICU Level of Service	Control Delay (s)						Processor Co.	
Approach Delay (s)		V.V.	0.0				Michelaustricisch	
Approach LOS A Intersection Summary 1.1 Intersection Capacity Utilization 15.9% ICU Level of Service A		0.0	0.0			2 TO SHOW		
Average Delay 1.1 Intersection Capacity Utilization 15.9% ICU Level of Service A	Approach LOS	0.0	0.0				or description	
Average Delay 1.1 Intersection Capacity Utilization 15.9% ICU Level of Service A	Intersection Summary							
ntersection Capacity Utilization 15.9% ICU Level of Service A	Average Delay			1.1				
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and an entire from		and the same						
					0.000			

HCM Unsignalized Intersection Capacity Analysis I:leng\812766\Traffic\Analysis\Existing & Trip Gen\Weekday PM.syn



McMahon Associates, Inc.	
3: Reservior Dr & 33rd Street	

Audubon/Outward Bound Facility Saturday Midday with Development

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Lane Group	EBL	EBT	EBR	WBL.	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	7		4		ሻ	1		*	†	7
Volume (vph)	25	20	76	169	46	28	100	417	160	17	474	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	16	16	16	9	10	10	9	11	11
Grade (%)		-1%			-1%			1%			-2%	SCIENCES CO.
Storage Length (ft)	0		150	0		0	100		0	100		150
Storage Lanes	0	Marie Con Color	1	0		0	1	Social Services	0	1	20040000000	1
Taper Length (ft)	75		50	75		75	60		75	65		50
Lane Util, Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor									1			SS 100 C S
Frt		The Association Co.	0.850	2012/05/2012/05	0.985		COLOR DISCOURSE	0.958		C. Carrier and Co. Co. Co.	ECHACIACINA NA	0.850
Fit Protected		0.973			0.966		0.950			0.950		
Satd. Flow (prot)	0	2064	1803	0	2019	0	1585	1657	0	1609	1819	1546
Flt Permitted	HURBERIE	0.814	SHACKWICH	errominent og	0.761	OHIO COLOR	0.414	9608266655	0550055	0.340		040
Satd. Flow (perm)	0	1727	1803	0	1590	0	691	1657	0	576	1819	1546
Right Turn on Red		1/2/	Yes		1000	Yes	001	1001	Yes	310	1013	Yes
Satd. Flow (RTOR)	Name and Address of the Owner, where the Owner, which is the Owne	-	84	Mirrodinos	10	100	nosativiscosis	62	100			37
Link Speed (mph)		25			25	THE REAL PROPERTY.		25			25	31
Link Distance (ft)	COMMISSION CONTRACTOR	504	NON-CONTRACTOR		361			768	300000000000000000000000000000000000000	29001441572	667	-
Travel Time (s)	- Mariton Alexandria	13.7			9.8			20.9		**********	18.2	
		13.7			9.6			20.9			15.2	AND RESIDENCE
Confl. Peds. (#/hr)		SANCOLOUS SANCO		Marine and	milericonam				Color State Colored			- Children
Confl. Bikes (#/hr)											and the second	desidentes
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	- 0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)										VC-007888047400		
Mid-Block Traffic (%)		0%	OF THE PARTY		0%			0%			0%	
Adj. Flow (vph)	28	22	84	188	51	31	111	463	178	19	527	37
Shared Lane Traffic (%)	(Orbitolication									Les Systems	Terror Communication	100000
Lane Group Flow (vph)	0	50	84	0	270	0	111	641	0	19	527	37
Number of Detectors	1	2	1	1	2		1	2		- 1	2	satura 1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Turn Type	Perm		Perm	Perm			Perm			Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	- 8			2		ALC: NO	6	260000	6
Detector Phase	4	4	4	8	8		2	2		6	6	6
Switch Phase	ories and the											
Minimum Initial (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Split (s)	18.0	18.0	18.0	18.0	18.0		21.0	21.0		21.0	21.0	21.0
Total Split (s)	18.0	18.0	18.0	18.0	18.0	0.0	42.0	42.0	0.0	42.0	42.0	42.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	30.0%	0.0%	70.0%	70.0%		70.0%		70.0%
Maximum Green (s)	13.5	13.5	13.5	13.5	13.5	0.070	37.5	37.5	0.070	37.5	37.5	37.5
Yellow Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	2.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	4.5	4.5	4.5		4.5	4.0	4.5	4.5	4.0	4.5	4.5	4.5
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.0	4.5	4.5	4.0	4.5	4.5	4.5

Lanes, Volumes, Timings I:\eng\&12766\Traffic\Analysis\Existing & Trip Gen\Weekday SAT.syn

3: Reservior Dr & 33rd Street Synchro 7

McMahon Associates, Inc. 3: Reservior Dr & 33rd Street

Audubon/Outward Bound Facility
Saturday Midday with Development

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Lead/Lag		GO MANA			Contractor of the Contractor o	ar (tear) and a few for		Control Control	AND STREET		and or section of the	Talke / E
Lead-Lag Optimize?					- Commence		200000000000000000000000000000000000000					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Recall Mode	Min	Min	Min	Min	Min	0000000	C-Max	C-Max		C-Max	C-Max	C-Max
Walk Time (s)												
Flash Dont Walk (s)					end end	A STATE OF THE STATE OF	Antherson	Secretary of the	Legisla Colore	Controller Service		
Pedestrian Calls (#/hr)												
v/c Ratio		0.14	0.19		0.79		0.25	0.59		0.05	0.45	0.04
Control Delay		19.8	6.6		39.9		6.8	8.7		4.9	7.3	1.8
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		19.8	6.6		39.9		6.8	8.7		4.9	7.3	1.8
Queue Length 50th (ft)		15	0		88		15	105		2	85	
Queue Length 95th (ft)		38	29		#192		37	189		9	142	8
Internal Link Dist (ft)		424			281			688			587	
Turn Bay Length (ft)			150				100			100		150
Base Capacity (vph)		389	471		366		442	1082		368	1163	1002
Starvation Cap Reductn		0	0		0		0	0		0	0	(
Spillback Cap Reductn		0	0		0		- 0	0		0	0	(
Storage Cap Reductn		0	0		0		0	0		0	0	(
Reduced v/c Ratio		0.13	0.18		0.74		0.25	0.59		0.05	0.45	0.04
Intersection Summary		(3) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1										
	Other											
Cycle Length: 60	Percentage and the second	oethy sytta atteon				000000000000000000000000000000000000000	ORDER WYTOCH		200200000000000000000000000000000000000	acres on Sanyage	un autoronio	memo convo
Actuated Cycle Length: 60	- Charles	er en en en en en	de como	erio 211. 2010	STATISTICS.	and the same	-0.00	200				
Offset: 0 (0%), Referenced to	phase 2:	VBTL and	6:SBTL,	Start of C	Green							*********
Natural Cycle: 55			and planting						10007000			
Control Type: Actuated-Coor		9807 19090697	www.marrior.nov			CONTRACTOR OF THE PARTY OF THE	ATRICUTE AND CO.	CONTRACTOR OF			NATIONAL PROPERTY.	
# 95th percentile volume ex Queue shown is maximum			eue may	be longer	A CONTRACTOR		Stant Strate					
Splits and Phases: 3: Resi	ervior Dr &	33rd Stre	et									

Lanes, Volumes, Timings I:\eng\812766\Traffic\Analysis\Existing & Trip Gen\Weekday SAT.syn



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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Lane Configurations		4	7		44		*	₽.		ች	†	7
Volume (vph)	25	20	76	169	46	28	100	417	160	17	474	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	190
Lane Width	16	16	16	16	16	16	9	10	10	9	11	1
Grade (%)		-1%			-1%			1%			-2%	
Total Lost time (s)		4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Ert		1.00	0.85		0.98		1.00	0.96		1.00	1.00	0.85
Fit Protected		0.97	1.00	r.m	0.97		0.95	1.00	A.S BA A.S B B B B B B B	0.95	1.00	1.00
Satd. Flow (prot)		2064	1803		2019		1585	1658		1609	1819	1546
Fit Permitted	OUCLE CONTROL OF THE	0.81	1.00	New Control Control	0.76	active Consocial	0.41	1.00		0.34	1.00	1.00
Satd. Flow (perm)		1726	1803		1590	2000	691	1658		575	1819	1546
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adi, Flow (vph)	28	22	84	188	51	31	111	463	178	19	527	37
RTOR Reduction (vph)	0	0	66	0	8	0	0	22	0	0	0	13
Lane Group Flow (vph)	0	50	18	0	262	0	111	619	0	19	527	24
Turn Type	Perm		Perm	Perm			Perm			Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4	nijako-iomotika	4	8	Contraction Contra	CONTRACTOR	2	in the same of the		6		6
Actuated Green, G (s)	estetis	12.6	12.6		12.6		38.4	38.4		38.4	38.4	38.4
Effective Green, g (s)	Managara A	12.6	12.6	H103H1111104CC	12.6		38.4	38.4	2007/02/04/02	38.4	38.4	38.4
Actuated g/C Ratio		0.21	0.21		0.21		0.64	0.64		0.64	0.64	0.64
Clearance Time (s)	or ex. Estabasello consolidad, securi	4.5	4.5	and discount of the	4.5		4.5	4.5	POLIFICATION SANDERS	4.5	4.5	4.5
Vehicle Extension (s)	SACTORION.	3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		362	379		334		442	1061		368	1164	989
//s Ratio Prot								c0.37	() / y . () (0.29	
//s Ratio Perm	PHARTS PANTALIFORDS	0.03	0.01	-0104-4404-0444-0	c0.16	rondenic seprendición	0.16	POR COLUMN TO SHIP	odybljatnik circy	0.03	SHIP THE PARTY OF	0.02
//c Ratio		0.14	0.05		0.78		0.25	0.58	W. C. S. W.	0.05	0.45	0.02
Jniform Delay, d1		19.3	18.9		22.4		4.6	6.2		4.0	5.5	3.9
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
ncremental Delay, d2	man de la libraria de	0.2	0.1		11.5		1.4	2.3	THE RESIDENCE OF THE PERSON NAMED IN	0.3	1.3	0.0
Delay (s)	CHARLEST THEIR	19.5	19.0		33.9		6.0	8.5		4.3	6.7	
evel of Service	copouncari relacione	В	В	and the second second	C		A	A	ACMERICAN CONTRACTOR	A	A	F
Approach Delay (s)		19.1			33.9			8.2	100000000000000000000000000000000000000	200	6.5	
Approach LOS		В	200	ATTOM/TOWN	C	accord to the		A		1004478094750	A	NOD STANSON

HCM Level of Service Sum of lost time (s) ICU Level of Service | Secretary | Secr

HCM Signalized Intersection Capacity Analysis L'leng\812766\Traffic\Analysis\Existing & Trip Gen\Weekday SAT.syn

12.4 0.63 60.0 66.4% 15

Intersection Summary

HCM Average Control Delay
HCM Volume to Capacity ratio
Actuated Cycle Length (s)
Intersection Capacity Utilization
Analysis Period (min)
c Critical Lane Group

3: Reservior Dr & 33rd Street Synchro 7

Lanes, Volumes, Timings I:\eng\812766\Traffic\Analysis\Existing & Trip Gen\Weekday SAT.syn

McMahon Associates, Inc.

5: Reservior Dr & Site Access (In) Synchro 7

Audubon/Outward Bound Facility



Intersection Sign configuration not allowed in HCM analysis.

	٠	-	-	•	-	4	
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		†	^		¥		
Volume (vph)	0	99	156	0	23	1	
ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	- 12	
Grade (%)		-1%	0%		0%		
Storage Length (ft)	0			0	0	0	
Storage Lanes	0			0	1	0	
Taper Length (ft)	75			75	75	75	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor							
Frt					0.995		
Fit Protected					0.954		Colonia Colonia
Satd. Flow (prot)	0	1872	1863	0	1768	0	
Flt Permitted					0.954		
Satd. Flow (perm)	0	1872	1863	0	1768	0	
Link Speed (mph)		25	25		25		
Link Distance (ft)		529	318		164		
Travel Time (s)		14.4	8.7		4.5		
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Growth Factor	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	
Parking (#/hr)							
Mid-Block Traffic (%)		0%	0%		0%		510.1
Adj. Flow (vph)	0	110	173	0	26	1	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	110	173	0	27	0	
Sign Control		Free	Free		Stop		
Intersection Summary							
	0.0	CONTRACTOR STATE	**************************************	THE RESERVE OF THE PERSON NAMED IN			AND THE RESERVE

Area Type: Other
Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis I:\eng\812766\Traffic\Analysis\Existing & Trip Gen\Weekday SAT.syn

5: Reservior Dr & Site Access (In) Synchro 7

Lanes, Volumes, Timings I:\eng\812766\Traffic\Analysis\Existing & Trip Gen\Weekday SAT.syn



McMahon Associates, Inc. 7: Reservior Dr & Site Access (Out)

Audubon/Outward Bound Facility Saturday Midday with Development

7: Reservior Dr & Sit	e Acc	ess (O	ut)			Saturday Midday With Develop	
	۶	→	←	4	/	4	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		^	*		¥		
Volume (veh/h)	0	99	156	- 0	23	1	
Sign Control		Free	Free		Stop		
Grade		-1%	0%		0%		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly flow rate (vph)	- 0	110	173	0	26	- 1	
Pedestrians							
ane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage		Acres 1					
Right turn flare (veh)							
Median type		None	None				
Median storage veh)							
Jpstream signal (ft)			822				
X. platoon unblocked							
C, conflicting volume	173				283	173	
C1, stage 1 conf vol							
C2, stage 2 conf vol		es de es	estra francis				
Cu, unblocked vol	173				283	173	
C, single (s)	4.1				6.4	6.2	
C, 2 stage (s)							
F (s)	2.2				3.5	3.3	
00 queue free %	100	action of the contract of the			96	100	
cM capacity (veh/h)	1403				707	870	
Direction, Lane #	EB1	WB 1	SB 1				
/olume Total	110	173	27		156853		
Volume Left	0	0	26				
/olume Right	Ō	. 0	100	1000000000			
:SH	1700	1700	712		n. v. e. c.	TACCOSTOLUS CATOL	15 / NESS CERES (15 / 10 - 10 - 10 / 10 / 10 / 10 / 10 / 10
Volume to Capacity	0.06	0.10	0.04				
Queue Length 95th (ft)	0	0	3				
Control Delay (s)	0.0	0.0	10.2		n in this course		
ane LOS			В				
Approach Delay (s)	0.0	0.0	10.2				
Approach LOS			В		man for the control of the control o		
Intersection Summary					(E50)(E50)		Note that the same of the same
Average Delay			0.9				
Intersection Capacity Utilizatio	n		18.2%	iC.	U Level o	of Service	A
Analysis Period (min)			15	and the same of the same of			
EDITOR SANDARDON		educiny Co.	10400125				

HCM Unsignalized Intersection Capacity Analysis
I:\eng\812766\Traffic\Analysis\Existing & Trip Gen\Weekday SAT.syn

