

File: 20-2

THE CORPORATION OF THE DISTRICT OF BURNABY

TRAFFIC SAFETY COMMITTEE

HIS WORSHIP, THE MAYOR
AND MEMBERS OF COUNCIL

Madam/Gentlemen:

REPORT OF THE TRAFFIC SAFETY COMMITTEE

1. Request for Stop Signs at the Intersection of East Broadway and Duthie Avenue

Recommendations:

- (a) "THAT stop signs be installed on Broadway and Duthie Avenue.
- (b) THAT a "stop ahead" warning sign be permanently installed for eastbound Broadway.
- (c) THAT Mr. R.W. Scheer, #1 - 7353 Montecito Drive, Burnaby, B.C., V5A 1R3 be sent a copy of this report."

R E P O R T

A letter dated 1982 November 23 was received from Mr. R.W. Scheer, #1 - 7353 Montecito Drive, Burnaby, B.C., V5A 1R3 requesting the installation of stop signs at the intersection of East Broadway and Duthie Avenue.

This matter was referred to the Director Engineering who reported as follows:

"The captioned intersection is a three-leg intersection with a stop sign on Duthie Avenue, the stem of the 'T'. In response to the request for additional stop signs at this intersection we checked our accident records and measured vehicle volumes approaching the intersection. The number of reported traffic accidents considered correctable by the installation of stop signs on Broadway are as follows:

1982	-	4
1981	-	6
1980	-	1
1979	-	1
1978	-	1
1978	-	1

The dramatic increase from a one per year average, from 1978 to 1980 inclusive, to a five per year average in the past two years may be attributable in part to the increased development in the vicinity, particularly the Forest Grove and Aubrey-Glen areas. Also the use of Broadway and Duthie as commuter bypass routes may be increasing.

:- AGENDA 1983 FEBRUARY 21

:- COPY-MANAGER

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The approach volumes on the individual legs of the intersection as recorded on 83 01 13 were as follows:

Duthie Avenue - southbound	- 3647
Broadway - eastbound	- 4275
- westbound	- 3646

The warrants for a 'multiway' stop are that there be five or more reported accidents in a twelve month period of a kind susceptible to correction by a multiway stop and that the volumes approaching the intersection be approximately equal from each direction.

From the above data the subject intersection meets the statistical warrant for a multiway stop. We checked with the Planning Department regarding the future plans for the intersection of Duthie and Broadway in conjunction with the proposed Bainbridge-Broadway-Phillips connector. While the installation of stop signs on Broadway would not be consistent with the future plans for Broadway it is felt that the changes are far enough in the future and will be of such variance with the existing street pattern that to install stop signs now would not be detrimental to the future street pattern.

The one factor which may present a problem is the limited sight distance of the intersection for eastbound traffic. This problem could be resolved with the strategic installation of a 'stop ahead' warning sign. In view of the warrant for a multiway stop and the absence of factors which may preclude its safe and effective operation we are recommending that stop signs be installed on Broadway at Duthie and that a stop ahead sign for eastbound traffic be permanently installed in advance of the stop sign. (NOTE: Temporary stop ahead signs are normally installed for new stop sign installations.)

STAFF RECOMMENDATIONS TO THE TRAFFIC SAFETY COMMITTEE:

- (i) THAT stop signs be installed on Broadway and Duthie Avenue.
- (ii) THAT a 'stop ahead' warning sign be permanently installed for eastbound Broadway.
- (iii) THAT Mr. Robert Scheer of 1 - 7353 Montecito Drive be sent a copy of this report."

- 2. Request for Four-Way Stop - Intersection of Gilley Avenue and Imperial Street

Recommendations:

- (a) "THAT the request for a four way stop at Imperial Street and Gilley Avenue be denied.
- (b) THAT Mrs. Phyllis le Noble, 6560 Colborne Avenue, Burnaby, B.C., V5E 2N6 be sent a copy of this report."

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R E P O R T

A letter dated 1982 November 24 was received from Mrs. Phyllis le Noble, 6560 Colborne Avenue, Burnaby, B.C., V5E 2N6 requesting the installation of a four way stop at the intersection of Gilley Avenue and Imperial Street.

This matter was referred to the Director Engineering who reported as follows:

"The warrant for the installation of four way stop controls at an intersection is a two part warrant. The accident portion of the warrant requires that there be at least five reported accidents of a type correctable by four way stop installation within a twelve month period. In 1982 there were eight reported accidents, seven of which were right angle collisions, while similar figures for 1981 and 1980 were three and two, and eight and four respectively. Of these 19 accidents ten occurred on either a Saturday or Sunday and only two of the 19 occurred during what would be considered the peak periods.

The second portion of the four way stop warrant requires that the volume of traffic on both streets be approximately equal. From automatic traffic counts taken on the west and north legs of the intersection the volume on Imperial Street is more than seven times greater than the volume on Gilley Avenue. A comparison with three existing four way stops and one previous four way stop shows that similar control at the subject location would be unusual, if not unworkable.

<u>Major Street</u>	<u>Pk. Hr. Vol.</u>	<u>Minor Street</u>	<u>Pk. Hr. Vol.</u>
Moscrop Street	502	Smith Avenue	570
Royal Oak Avenue	1,102	Moscrop Street	1,092
Gilmore Avenue	636	Douglas Road	662
Curtis-Parker Streets	1,251	Holdom Avenue	681
Imperial Street	950	Gilley Avenue	161

The example above, Curtis-Parker-Holdom, was subsequently signaled due to its meeting the necessary warrants. Prior to signalization, this location with its imbalance in traffic volumes (only 2:1 in this case) was the source of numerous complaints, including excessive delays, vehicles crossing two abreast during peak periods, extra hazards to pedestrians crossing due to driver impatience as a result of long line-ups, and speeding on the existing side of the intersection.

In addition to the possible detrimental effects of a four way stop with a volume imbalance a four way stop at Imperial and Gilley may serve to increase the through traffic volume on Gilley Avenue. The neighbourhood north of Imperial Street, particularly the residents of Bryant Street, has previously made representation to the Committee protesting the volumes of commuter traffic within the neighbourhood.

As the result of a previous request in 1979 to the Committee, the property on the northeast corner was acquired by the Municipality, a truncation removed from the property and the fence relocated to improve the sight distance for southbound traffic. In the three and one half years prior to the fence relocation there were six right angle collisions involving this corner and the same number of accidents in the three and one half years since.

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This fact, combined with the only two right angle collisions in seven years involving the southwest corner which currently has the only vision obstruction seems to support the theory that restricted vision clearance sometimes results in safer driving habits, i.e. driving with due care and attention.

In summary the warrants for a four way stop are not met at the intersection of Imperial Street and Gilley Avenue. Nor would a four way stop be desirable in that it would probably result in increased traffic volume within the residential neighbourhood north of Imperial.

STAFF RECOMMENDATIONS TO THE TRAFFIC SAFETY COMMITTEE:

- (i) THAT the request for a four waystop at Imperial Street and Gilley Avenue be denied.
- (ii) THAT Mrs. le Noble, 6560 Colborne Avenue, be sent a copy of this report."
- 3. Request for "No Stopping" signs - South Side 4800 Block Irmin Street

Recommendations:

- (a) "THAT the request for a 'No Stopping' regulation on Irmin Street adjacent the Nelson Avenue School be denied.
- (b) THAT Mr. J.R. MacWilliam, Principal, Nelson Avenue School, 4850 Irmin Street, Burnaby, B.C., V5J 1V2 be sent a copy of this report."

R E P O R T

A letter dated 1983 January 24 was received from Mr. J.R. MacWilliam, Principal, Nelson Avenue School, 4850 Irmin Street, Burnaby, B.C., V5J 1V2 requesting the installation of "No Stopping" signs on the south side of the 4800 block Irmin Street.

This matter was referred to the Director Engineering who reported as follows:

"The captioned request is one that we receive from time to time and one that we have always denied. The reasons for denying these requests are:

- (i) If such a regulation was to be of any use it would have to be rigidly enforced.
- (ii) To be rigidly enforced would be to charge a parent even if they just stopped for a second to pick up their child.
- (iii) To overcome the enforcement they would, as some were observed doing already, double park on the opposite side of the road to pick up their child.

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- (iv) We have to the best of our knowledge recorded very few accidents, if any, that could be attributed to parents stopping adjacent the school to pick up children. We may however create an accident potential environment if we do post and enforce a 'No Stopping' regulation which will be caused by some parents who will try and dash in and pick up their children more or less on the run.

In summary we are of the opinion that the posting of a 'No Stopping' regulation is unwarranted.

STAFF RECOMMENDATIONS TO THE TRAFFIC SAFETY COMMITTEE:

- (i) THAT the request for a 'No Stopping' regulation on Irmin Street adjacent the Nelson Avenue School be denied.
- (ii) THAT the Principal of the Nelson Avenue School, Mr. J.R. MacWilliam, be sent a copy of this report."

4. Parking Restrictions - 4300 Block Imperial Street

Recommendations:

- (a) "THAT the existing peak hour 'No Parking' zone be reduced to 30 metres in length.
- (b) THAT C. & M. Carinha, c/o K One Hour Cleaners, 4384 Imperial Street, Burnaby, B.C., V5J 1A9, and the petitioners, be sent a copy of this report."

R E P O R T

A petition and letter dated 1983 January 14 was received from C. & M. Carinha, c/o K One Hour Cleaners, 4384 Imperial Street, Burnaby, B.C., V5J 1A9 requesting removal of parking restrictions on the 4300 Block Imperial Street.

This matter was referred to the Director Engineering who reported as follows:

"The Municipality recently installed as a traffic management project, timing devices in the traffic signal controllers along Imperial Street to regulate the progression of traffic travelling on this primary arterial street between Boundary Road and Kingsway. In order to insure that left turning vehicles at the signalized intersections did not impede the progression of traffic it was necessary to ban parking on the approach legs of these intersections.

Turning movement counts taken at the subject intersection indicated a high enough volume of left turners eastbound Imperial to northbound Sussex Avenue to justify a parking ban of about 30 metres. This distance would eliminate three legal parking spaces against the curb.

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The parking ban has however been posted from Sussex Avenue west to the driveway into the commercial area parking lot, a distance of about 45 metres. To the west of the driveway is a bus zone. To repost the parking ban to reflect the presently required 30 metre zone would allow for the parking of two vehicles between the aforementioned driveway and the 'No Parking' zone. We say the presently required 30 metre zone bearing in mind that possible changes in the traffic patterns of this intersection related to the development of the A.L.R.T. and property north of Imperial may soon require extended parking restrictions on Imperial to reflect its Primary Arterial function as set down in the Conceptual Transportation Plan. In the meantime it would be possible to shorten the existing zone to 30 metres.

STAFF RECOMMENDATIONS TO THE TRAFFIC SAFETY COMMITTEE:

- (i) THAT the existing peak hour 'No Parking' zone be reduced to 30 metres in length.
 - (ii) THAT the petitioners be sent a copy of this report."
5. Fell - Winch Intersection
- Recommendations:
- (a) "THAT the Chief Building Inspector investigate and initiate action to ensure the property owners on the southeast and southwest corners of Winch/Fell comply, as they stated, with the vision clearance requirements of the Zoning Bylaw.
 - (b) THAT no additional traffic control devices be installed.
 - (c) THAT Mrs. Phyllis Olson, 1591 Holdom Avenue, Burnaby, B.C., V5B 3V7 be sent a copy of this report."

R E P O R T

A letter dated 1983 January 26 was received from Mrs. Phyllis Olson, 1591 Holdom Avenue, Burnaby, B.C., V5B 3V7 requesting the foliage at the intersection of Fell Avenue and Winch Street be trimmed back as it causes a hazardous vision clearance problem at that intersection.

This matter was referred to the Director Engineering who reported as follows:

"We draw your attention to a report this Department made to the Committee on 1982 June 15 regarding this intersection. There have been three accidents recorded at this intersection since our 1982 June 09 report. These accidents are briefly described as follows:

- (i) 1982 September 03 - Two car collision involving vehicles eastbound on Winch Street and southbound on Fell Avenue.
- (ii) Single vehicle accident southbound on Fell Avenue, out of control.

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- (iii) Car/Motorcycle collision - Car southbound on Fell Avenue and motorcycle westbound on Winch Street. This latter accident was fatal to the cyclist.

None of these three accidents involved the southwest or southeast corners of this intersection.

The fatal accident that Mrs. Olson refers to in her letter dated 1983 January 26 involved the northeast corner of the intersection where the sight distance is considered to be more than adequate. The contributing factors to the fatal accident were:

- (i) Unlicensed, underaged driver,
- (ii) Unlicensed, improperly equipped, i.e. no lights, vehicle,
- (iii) Darkness (artificial light only),
- (iv) Excessive speed, and
- (v) Failure, by motorcyclist, a yield to the right.

None of these factors involved limited visibility due to vision obstructions.

Since the fatal accident this Department reinvestigated the intersection at Winch and Fell and found that the view is still partially obstructed on the southwest corner by numerous trees that are behind the property lines on the southwest corner lot. We had contacted the property owner regarding trimming the trees and bushes at the time of the 1982 June 15 report to the Traffic Safety Committee, and they acknowledged the request by trimming some of the offending bushes and trees. As these trees are not creating a serious view obstruction this Department has not initiated enforcement of the Burnaby Zoning Bylaw section on Vision Clearance at Intersections.

A member of this Department has again contacted the owners of both corner lots on the southwest and southeast corners of this intersection in hopes that the owners would comply with our request to trim the trees and bushes within the corner vision clearance area defined by the Zoning Bylaw. The property owners on both the southwest and southeast corners have agreed to trim the branches on the trees in the immediate vicinity of the intersection in hopes of improving the sight distance although one resident objected to having to compensate for the bad driving habits of most drivers. Any further action would have to be initiated by the Chief Building Inspector as they are charged with responsibility of enforcing the Burnaby Zoning Bylaw.

As this intersection does not meet the Committee's adopted warrant for stop sign installations this Department is recommending against any installation of stop signs. Yield signs are not deemed effective as can be seen from the attached accident records for the intersection of Fell and Winch and of Fell and Kitchener.

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The latter intersection is currently controlled by yield signs and has recorded 14 right angle collisions as compared to 16 right angle collisions at Fell and Winch. If you don't include the fatal accident due to its unusual circumstances then the comparison would be 14 at a controlled intersection versus 15 at an uncontrolled intersection, in the same eight year period.

One of the recommendations of this Department following our last submission to the Traffic Safety Committee on 1982 June 15 was to install an intersection ahead advance warning sign south of Winch on Fell facing northbound traffic. This was completed on 82 July 23. While it is too early to tell if the installation of this sign has significantly affected the accident rate, none of the subsequent accidents involved northbound vehicles.

STAFF RECOMMENDATIONS TO THE TRAFFIC SAFETY COMMITTEE:

- (i) THAT the Chief Building Inspector investigate and initiate action to ensure the property owners on the southeast and southwest corners of Winch/Fell comply, as they stated, with the vision clearance requirements of the Zoning Bylaw.
- (ii) THAT no additional traffic control devices be installed.
- (iii) THAT Mrs. Olson be sent a copy of this report."

6. Traffic Management - Council Meeting 1983 February 07

Recommendation:

- (a) "THAT roundabouts be placed, on a temporary basis, at the intersections of Pender Street and Gamma Avenue and Pender Street and Alpha Avenue."

R E P O R T

A memorandum dated 1983 February 10 was received from the Municipal Clerk who reported as follows:

"This is to advise that Council, at the regular Council meeting held on 1983 February 07 entertained two delegations; Mr. F.F. Still, 4637 Pender Street, and Mr. R.A. Sward, 3666 Oxford Street, with both delegations expressing major concerns with traffic problems in their areas.

Arising out of Council's consideration of their presentations and the many other delegations that have appeared before Council expressing concerns regarding traffic within the municipality, the following motion was adopted:

'THAT staff be instructed to design a small traffic circle and that the design then be referred to the Traffic Safety Committee, along with the matter of the feasibility of constructing and monitoring such traffic circles, on an experimental basis, at specific intersections with the location(s) to be selected by the Traffic Safety Committee. And further that the recommendations of the Traffic Safety Committee be brought forward to Council for the Council member's consideration prior to any implementation.'

In compliance with Council's direction, I am requesting that the Traffic Supervisor design a small traffic circle, which forms part of this report and is attached as Appendix I, for the consideration of the Traffic Safety Committee."

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In support of this request, Mr. F.F. Still, 4637 Pender Street, appeared as a delegation at the Traffic Safety Committee meeting held on 1983 February 15.

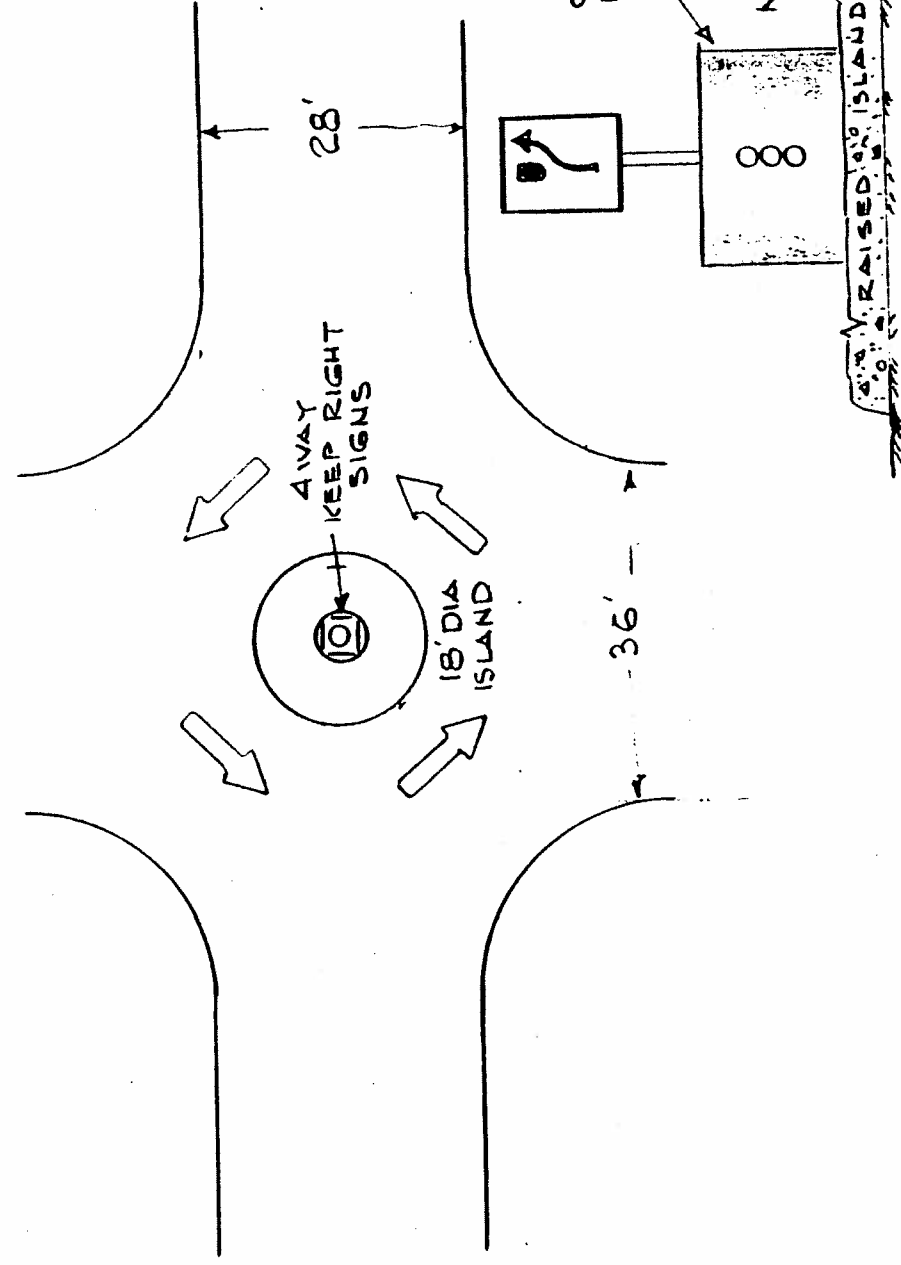
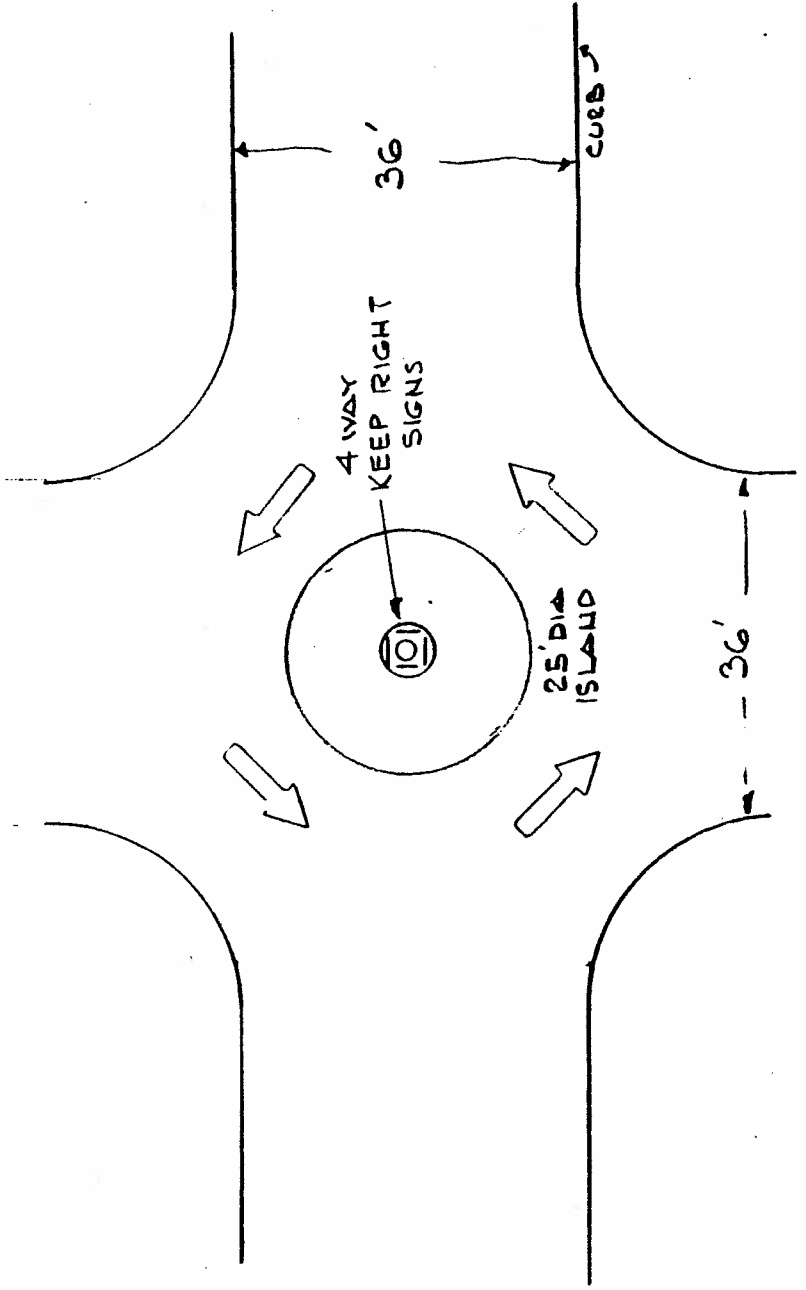
Respectfully submitted,

Alderman A.H. Emmott,
Chairman

Alderman G.H.F. McLean,
Member

Alderman E. Nikolai,
Member

MP/sw



RAISED ISLAND TURNAROUND TRAFFIC CONTROL.

1. CURB OF ISLAND TO BE PAINTED YELLOW
2. KEEP RIGHT SIGN TO FACE EACH APPROACH
3. 3 LENS REFLECTOR ON ISLAND TO FACE EACH APPROACH
4. PAVEMENT ARROWS AS INDICATED.

APPENDIX I

NO.	DATE	REVISION
CORPORATION OF THE DISTRICT OF BURNABY ENGINEERING DEPARTMENT		
DESIGNED BY		DIVISION
DRAWN BY		SCALE 1" = 20'
CHECKED BY		DATE
APPRVD BY		DRWG NO. L.

TYPICAL ISLAND
TURNAROUND.