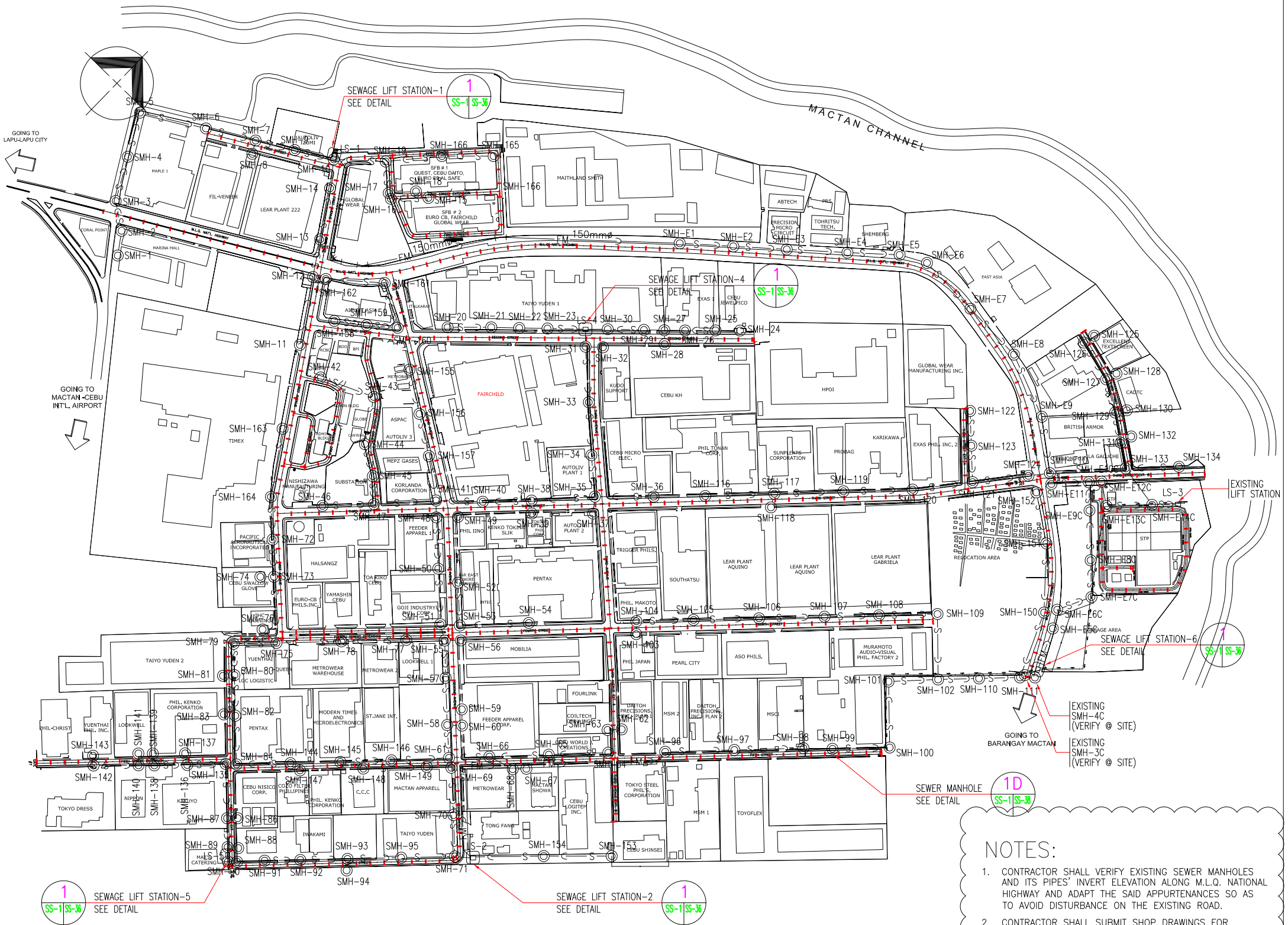

NOTES:

1. CONTRACTOR SHALL VERIFY EXISTING SEWER MANHOLES AND ITS PIPES' INVERT ELEVATION ALONG M.L.Q. NATIONAL HIGHWAY AND ADAPT THE SAID APPURTENANCES SO AS TO AVOID DISTURBANCE ON THE EXISTING ROAD.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR INTERCONNECTIONS TO EXISTING SEWER MANHOLE.

GENERAL NOTES:

1. IT IS NOT INTENDED THAT THE DRAWINGS SHALL SHOW EVERY PIPE FITTING, VALVE AND APPURTENANCE, ALL SUCH ITEM WHETHER SPECIFICALLY MENTIONED OR NOT, OR INDICATED ON THE DRAWINGS SHALL BE FURNISHED AND INSTALLED IF NECESSARY TO COMPLETE THE SYSTEM TO THE SATISFACTION OF THE OWNER.
2. ALL DIMENSIONS ARE IN MILLIMETERS AND ELEVATIONS IN METERS, UNLESS OTHERWISE INDICATED.
3. INDICATED METRIC EQUIVALENT USED IN THESE PLANS FOR PIPE SIZES ARE AS FOLLOWS:

   4" = 100mm 6" = 150mm 8" = 200mm 10" = 250mm 12" = 300mm
   14" = 350mm 16" = 400mm 18" = 450mm
4. SEWER LINE SHALL BE PROVIDED WITH MINIMUM COVER OF 1200mm. SEWER PIPES UNDER ROADS WITH LESS THAN 1200mm COVER SHALL HAVE CONCRETE ENCASEMENT.
5. ALL LENGTH OF PIPES ARE MEASURED FROM CENTER TO CENTER OF MANHOLES & BASED ON THE HORIZONTAL PROJECTED DISTANCE.
6. THE TOP ELEVATION OF SEWER MANHOLES REPRESENTS THE TOP OF THE MANHOLE COVER AND SHOULD BE FLUSHED WITH THE FINISHED GRADE.
7. THE TOP ELEVATION OF SEWER MANHOLES ARE INDICATIVE AND BASED ON THE ROAD CENTERLINE ELEVATIONS AND SHALL BE ADJUSTED ACCORDINGLY ON SITE.
8. THE INVERT ELEVATION OF SEWER PIPES ARE INDICATIVE AND BASED ON THE MANHOLE CENTERLINE ELEVATIONS AND SHALL BE ADJUSTED ACCORDINGLY ON SITE.
9. ALL SERVICE CONNECTIONS TO PRECAST MANHOLE SHALL BE CORE DRILLED. CHIPPING SHALL NOT BE ALLOWED.
10. THE DRAWING SHALL BE READ IN CONJUNCTION WITH ALL DRAWINGS PREFIXED "SS" AND REFERENCE SHALL BE MADE TO CIVIL DRAWINGS.
11. THE CONTRACTOR SHALL CHECK THE SEWER PROFILE DRAWINGS IN COORDINATION WITH OTHER UTILITIES.
12. ALL PIPES SIZES INDICATED ON THE PLANS WERE SIZED ACCORDING TO THEIR INSIDE DIAMETER.

MATERIALS' SPECIFICATION:

1. SEWER LINES – SEWER PIPES SHALL BE POLYETHYLENE PIPE (PE 80) SDR 33 PER ASTM D3034. SIMILAR TO HYDROVAR, MOLDEX, ATLANTA PE PIPES OR APPROVED EQUAL.
2. SEWER FORCE MAIN – SHALL BE POLYETHYLENE PIPE (PE 80) SDR 13.60. SIMILAR TO HYDROVAR, MOLDEX, ATLANTA PE PIPES OR APPROVED EQUAL.
3. SEWER SERVICE CONNECTIONS – SERVICE PIPES 150mmø AND SMALLER SHALL BE POLYETHYLENE PIPE (PE 80) SDR 33. SIMILAR TO HYDROVAR, MOLDEX, ATLANTA PE PIPES OR APPROVED EQUAL.
4. SEWER MANHOLES – MANHOLES SHALL BE TRAFFIC TYPE SIMILAR TO JAMAN MODEL JMC 146 CONFORMING TO ASTM C 478 OR APPROVED EQUAL.

LEGEND, SYMBOLS AND ABBREVIATIONS:

—S→	EXISTING SEWERLINE	PE	POLYETHYLENE
SMH	EXISTING SEWER MANHOLE	PVC	POLYVINYL CHLORIDE
—S→	SEWERLINE	REINF. CONC.	REINFORCED CONCRETE
SMH	SEWER MANHOLE	TYP	TYPICAL
		MAX.	MAXIMUM
		MIN.	MINIMUM
	SERVICE CONNECTION	O.C.	ON CENTER
—FM→	FORCE MAIN	NOS.	NUMBERS
TE	TOP ELEVATION	DIA./D	DIAMETER
IIE	INLET INVERT ELEVATION	O.D.	OUTSIDE DIAMETER
OIE	OUTLET INVERT ELEVATION	EL	ELEVATION
STP	SEWAGE TREATMENT PLANT	SQ	SQUARE
S	SLOPE	BOT.	BOTTOM
ø	DIAMETER	E.W.	EACH WAY
L	LENGTH	B.C.	BOLT CENTER
LS	LIFT STATION	CYL.	CYLINDER
mm	MILLIMETER	INTER.	INTERIOR
m	METER	CPLG.	COUPLING
HOR.	HORIZONTAL	CAP.	CAPACITY
VERT.	VERTICAL	CU.M.	CUBIC METER
SHT.	SHEET		
CON'T.	CONTINUATION		
THK.	THICK		
C.I.	CAST IRON		
GALV.	GALVANIZED		

GRAPHIC SCALE:

25000 50000 0 50000 150000

SCALE 1:2500

1 SS-1 SS-1 EXTERIOR SEWER SYSTEM GENERAL LAYOUT

SCALE 1:2500

OWNER/CLIENT:			PROJECT CONSULTANT:			PROJECT TITLE:	REVISION		SHEET CONTENTS:	SHEET TITLE
MACTAN ECONOMIC ZONE AUTHORITY			TCGI ENGINEERS 9th Floor, Feliza Building, 108 V.A. Rufino Street, Legaspi Village, Makati City, 1229 Philippines * Tel.Nos. 8178311 to 16	CHOLLY F. FERROLINO PROJECT MANAGER REG. NO. 0023329 / PTR NO. 971049 / DATE: 01-04-11 PLACE: VALENZUELA CITY / TIN: 109-384-556	EUGENIA M. LUZTRE DRAINAGE ENGINEER REG. NO. 52204 / PTR NO. 971062 / DATE: 01-04-11 PLACE: VALENZUELA CITY / TIN: 112-058-517	*THE MEZ MASTER DRAINAGE SYSTEM PROJECT PHASE 1.B (SEWERAGE SYSTEM)* LOCATION: MACTAN EXPORT ZONE, LAPU-LAPU CITY, CEBU	NO. / DESCRIPTION / DATE		EXTERIOR SEWER SYSTEM GENERAL LAYOUT SCALE: 1:2500m.	SS–1
CHECKED BY:	RECOMMENDED BY:	APPROVED BY:								
LOUIE EVANS E. ESOTO DIVISION CHIEF II, EMD	ISAGANI B. PULVERA DEPARTMENT MANAGER, OPERATIONS	BGEN CHARITO B. PLAZA, MNSA PHD. DIRECTOR GERAL AND ZONE ADMINISTRATOR FOR MEZ AND VISMIN SEZ'S								