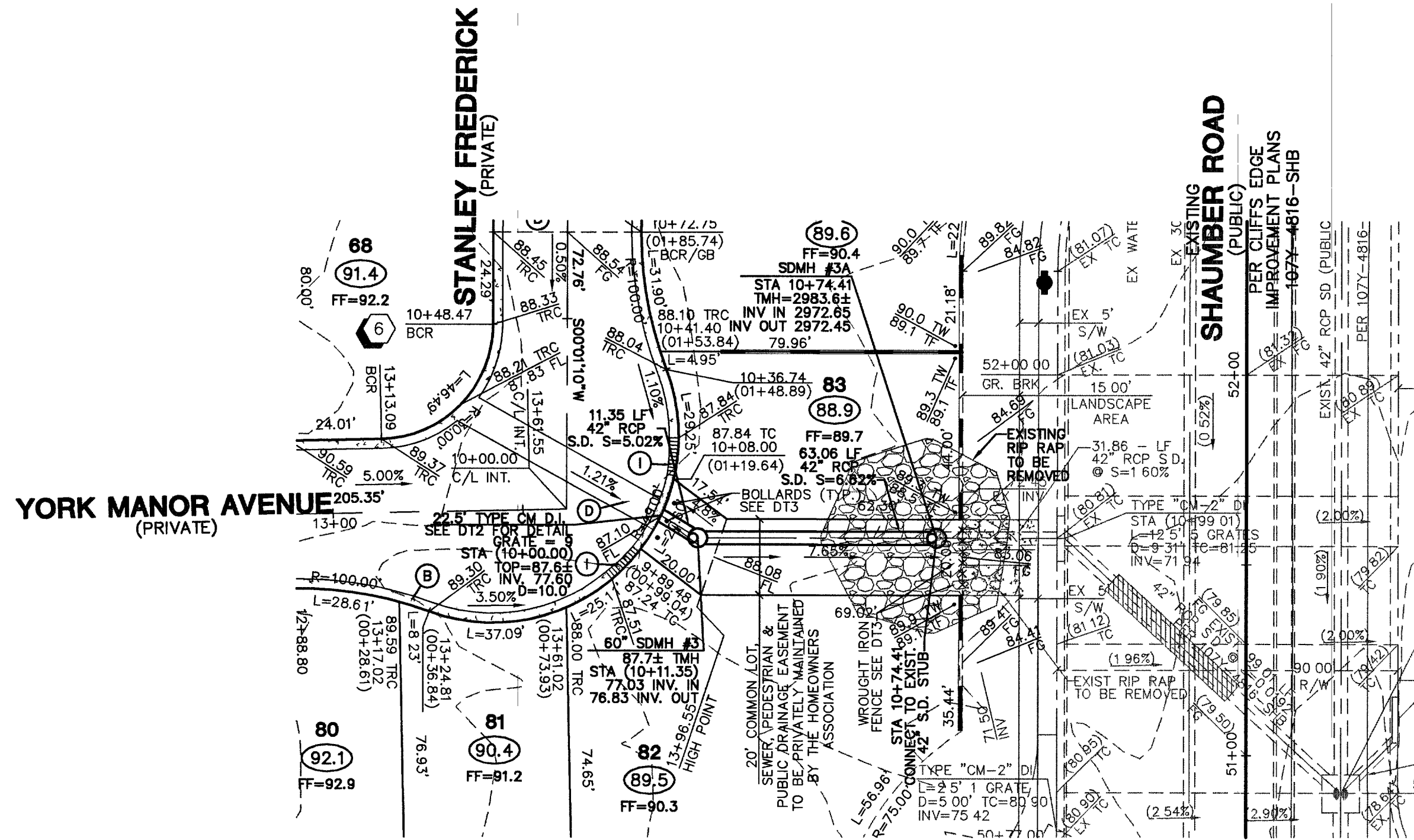
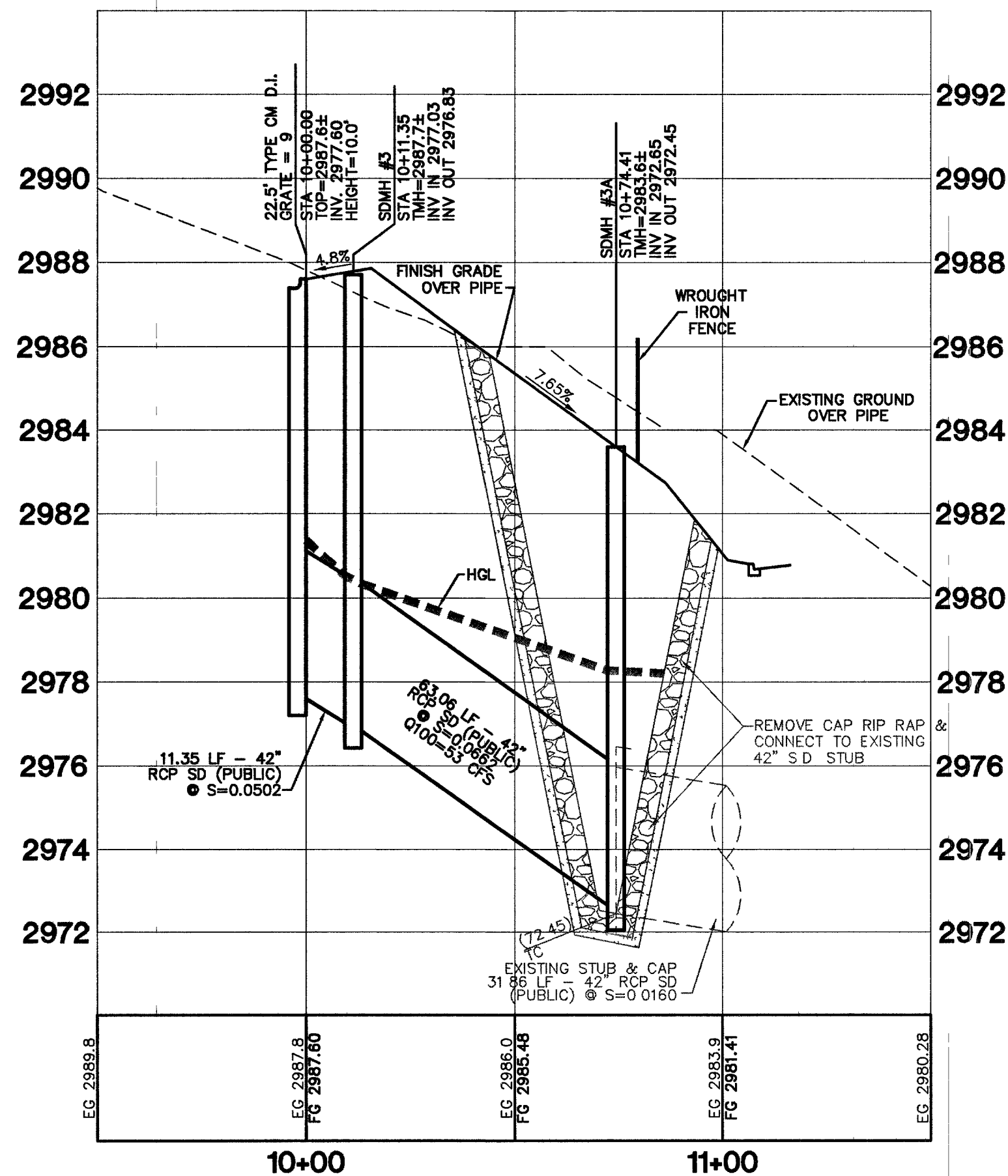




SOUTH EAST STORM DRAIN LATERAL



ABBREVIATIONS

FC	FINISH GRADE
FL	FLOW LINE
TC	TOP OF CURB
TRC	TOP OF ROLL CURB
EAC	EDGE OF ASPHALT PAVEMENT
FUT.	FUTURE
EXIST.	EXISTING (EX.)
VG	VALLEY GUTTER
NG	NATURAL GROUND
H.P.	HIGH POINT
L.P.	LOW POINT
C/L	CENTER LINE
C/C	CROWN
BC	BACK OF CURB
BCR	BEGIN CURB RETURN
TF	TOP OF FOOTING
GB	GRADE BREAK
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
PRC	POINT OF REVERSE CURVATURE
PCC	POINT OF COMPOUND CURVATURE
BVC	BEGIN VERTICAL CURVE
MVC	MID-POINT OF VERTICAL CURVE
EVC	END VERTICAL CURVE
PRVC	POINT OF REVERSE VERTICAL CURVE
VPI	VERTICAL POINT OF INTERSECTION
TRW	TOP OF PLANTER WALL
TRW	TOP OF RETAINMENT WALL
TOP	TOP OF CHANNEL/SCARP
TOE	TOE OF CHANNEL/SCARP
TOB	TOP OF BOX
PP	POWER POLE
TRANS.	TRANSITION
RET.	RETAINMENT
INT.	INTERSECTION
D.G.	DESIGN GRADE
TSW	TOP OF SIDEWALK
FF	FINISH FLOOR
GFF	GARAGE FINISH FLOOR
BFE	BASE FLOOR ELEVATION
R/W	RIGHT-OF-WAY
S/W	SIDEWALK

FLOOD CONTROL QUANTITIES

1. COURSE SOLID GROUTED STEM WALL	388 L.F.
2. COURSE SOLID GROUTED FLOOD WALL	693 L.F.
3. COURSE SOLID GROUTED FLOOD WALL	1,160 L.F.
DRAINAGE EASEMENT	1,674 SQ. FT.

CONTRACTOR NOTE:

CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITIES AND NOTIFY THE DESIGN ENGINEER IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

CONSTRUCTION NOTES

- CONSTRUCT 24" "L" TYPE CURB & GUTTER PER STD. DWG. NO. 218
- CONSTRUCT 30" "ROLL" TYPE CURB & GUTTER PER STD. DWG. NO. 217A
- CONSTRUCT "A" TYPE ISLAND CURB PER STD. DWG. NO. 219
- CONSTRUCT CONCRETE CROSS GUTTER PER STD. DWG. NO. 228
- CONSTRUCT 5' CONCRETE SIDEWALK PER STD. DWG. NO. 234
- CONSTRUCT WHEEL CHAIR RAMP PER STD. DWG. NO. 235 CASE 1
- CONSTRUCT 2' WIDE UNDER SIDEWALK DRAIN PER STD. DWG. NO. 236
- CONSTRUCT DEPRESSED CURB SECTION PER DETAIL ON SHEET DT2
- CONSTRUCT 10" "L" TO "ROLL" CURB TRANSITION PER DETAIL ON SHEET DT2.

GRAPHIC SCALE



PROFILE SCALES:

HORIZ. = 1" = 30'
VERT. = 1" = 3'

PROJECT BENCHMARK

DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
CITY OF LAS VEGAS BENCHMARK: BLV99:13SES
NAVD88 ELEVATION: 869.606 METERS (2853.03 FEET)
RIVET AND PLATE IN CONCRETE CYLINDER NW CORNER OF HUALAPAI AND ELKHORN
NOTE: WHEN THE SURVEYING FOR THIS PROJECT BEGAN, THE ABOVE REFERENCED BENCHMARK BLV99:13SES WAS NOT PUBLISHED. THE BASIS FOR THE DATUM FOR THIS PROJECT IS SHOWN ON RECORD OF SURVEY FILE 124 PAGE 94, CLARK COUNTY BENCHMARK 1000-086, WHICH AT THE TIME OF THE ORIGINAL SURVEY (PRIOR TO THE CURRENT 2003 COUNTY BENCHMARK PUBLISHING) HAD AN ELEVATION OF 2584.61 FEET. TO CONVERT THE CURRENT CITY OF LAS VEGAS BENCHMARK BLV99:13SES TO MATCH THE ORIGINAL PROJECT DATUM, 0.34' NEEDS TO BE ADDED TO THE ELEVATION OF 2853.03 FEET.

BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS PROJECT IS NORTH 00°08'18" EAST BEING THE EAST LINE OF THE NORTHWEST QUARTER (NE 1/4) OF THE SECTION 24, TOWNSHIP 19 SOUTH, RANGE 99 EAST, M.D.M., CLARK COUNTY, NEVADA, AS SHOWN ON A RECORD OF SURVEY ON FILE IN THE CLARK COUNTY, NEVADA, RECORDER'S OFFICE IN FILE 123 AT PAGE 32.

NOTE:

ALL DRAINAGE EASEMENTS MUST BE COMMON LOTS & PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED BY H.O.A.

NOTES:

- ALL PRIVATE STREETS AND PRIVATE DRIVES ARE P.U.E., CLV PUBLIC SEWER EASEMENTS, & PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED.
- SEE SHEET DT1 FOR SECTIONS AND DETAILS.

HC RAMP DATA

NO.	"A"	"B"	CASE
1	8	8	1

CUT = 98,909 C.Y.
FILL = 118,700 C.Y.
(ADJUSTED)

"I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE AT CITY OF LAS VEGAS, NEVADA FOR THIS PROJECT." DS3685
CHRISTOPHER R. GRUBBS
P.E. NO. 13956
DATE 10/19/05

LEGEND

EX. CONTOUR(5' INTERVAL)	SCARP AREA	CONC. BLOCK WALL
EX. CONTOUR(1' INTERVAL)	LOT NUMBER	EXIST. CONC. BLOCK WALL
PROPOSED PAD GRADE	SIGHT VISIBILITY ZONES	EXIST. DIRT ROAD
FUT./EXIST. PAD GRADE	PROJECT BOUNDARY LINE	EXIST. AC
SLOPE AND FLOW DIRECTION	SETBACK LINE	CONSTRUCTION PHASE LINE
EDGE OF EXIST. A.C.	R/W OR P/L	OR UNIT BOUNDARY LINE
SAW CUT & MATCH A.C.	EXIST. IMPROVEMENTS	
SIDEWALK RAMP	FUTURE IMPROVEMENTS	
PAD SWALE SLOPES	CENTER LINE	
	RETAINING WALL	

Avoid overhead power the contact it's costly
Call before you Overhead
1-702-227-2929

Avoid cutting underground utility lines it's costly
Call before you Dig
1-800-227-2600

AVOID HITTING UNDERGROUND TRAFFIC SIGNAL SYSTEMS AND STREET LIGHT SYSTEM CONDUITS
IT'S COSTLY CALL BEFORE YOU DO UNDERGROUND
Call before you Underground
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS AND
1-702-229-6611
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

CITY OF LAS VEGAS GRADING NOTES

- IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER/ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUB GRADE, FINISH GRADE AND SLOPES SHOWN.
- CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ALL EXCAVATION. ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
- THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
- THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED PERMIT.
- CONTRACTOR SHALL GRADE TO THE LINES AND ELEVATIONS SHOWN ON THE PLANS WITHIN THE FOLLOWING HORIZONTAL AND VERTICAL TOLERANCES AND DEGREES OF COMPACTION, IN THE AREAS INDICATED:
A. PAVEMENT AREA SUB GRADE 0.1" +0.0' TO -0.1' SEE SOILS REPORT
B. ENGINEERED FILL 0.5" +0.1' TO -0.1' SEE SOILS REPORT
COMPACTION TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE.
- ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
- THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACK FILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER.
- THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
- IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE OWNER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

KIMBALL HILL
8 SUNSET WAY, SUITE 101
HENDERSON, NEVADA 89014
(702)436-4592

STORM DRAIN PLAN & PROFILE
SOUTH EAST LATERAL
WINDMERE @ PROVIDENCE
POD 211 - UNIT 1

DRAWN BY:	BLW/TP	10/05
DESIGNED BY:	BLW	10/05
CHECKED BY:	CRG	10/05
PROJECT NO:	5400	SCALE: 1"=30' HORIZ. 1"=3' VERT.
SHEET SD1 52 OF 52 SHEETS DRAWING NO. 10744888-1		

PROFESSIONAL ENGINEER STATE OF NEVADA
CHRISTOPHER R. GRUBBS
No. 13956
EXPIRES 06-30-07
10/19/05