(27) 2/18/2008
JRF

Adjust traverse on east Side Lyon Richardson to Marina Q: 2007/07-07-036.../ TSC/0736-Topo.east/Reports/ Network Adjustment-Topo EAST.htm

Export to file, ACAD

10770 - 13112 (topo points)

Q: 2007/07-07-036.../TSC/ 0736-Topo EAST/Export/ 0736-021708.txt

07-07-036 (c)
ARUP/Doyle

(27)

update control file

edit #225 elev to 11.98'
see book 1 p56

edit coord @ 232
see book 2 p74

see last export p3

Export to file, ACAD
300 - 306 tie's to MACTECH

13113 - 13329

Q: 2007/07-07-036.../TSC/ 0736-Topo EAST/EXPORT/ 0736-021808.TXT

(28) 2/19/2008 site 9

JF/JP

New TSC2 file 0736-topo-2.dc

Code list for TSC2

Az: 230°23'45"

π @ 50 BS-126

BHH = 5.06/1.543m HS = 5.82/1.775m

HI = 5.572'

ΔH = 0.001 ΔV = -0.003

PT	Rod	Desc		
13330	5.6	320_L_2 BSW		Conc poc
13336	"	"	EC ∡	
13338	7.0	"	LoPt	BSW
13342	"	320_L_2 FSW @ WCR		
13343	"	BSW @ TBC	0.0	BC
13344	"	"	"	EC
13348	5.2	320_L2		BC
13351	6.5	325-L	TFC@BC	0.0
13358	5.5	325-L	TFC@CR	0.0
13361	6.0	324 L	EP	0.0
13366	6.0	324 L	FL	0.0
13367	6.0	323 L	LIP BEG	0.0
13377	6.0	324 L	FL@WCR	0.0
13378	6.0	324 L	FL@WCR	0.0
13379	6.0	324 L	FL@CR	0.0

ARUP/Doyle

07-07-036 (c)

(28)

<New CT codes>

TFC

FL

Fence 208-215

EP/AC edge 236 L

EC 235 L

Lip 323 L

FL 324 L

BSW/FSW 320 L _2 = Conc _1 = AC

AC ep 350 L

AC misc/GB 352

(29) CONTINUED FROM site 9

PT	ROD	DESC. TO SC
13380	6.0	324-L EP @ CONCAVE
13382	4.91	324-L FL @ EC
13383	6.0	324-L FL @ WCR
13384	6.0	323-L LIP ℄ (AP)
13387	8.5	323-L LIP END
13388	6.0	323-L LIP BEG
13389	6.0	323-L LIP ℄ (AP)
13391	6.0	320-L BSW
13392	6.0	320-L BSW BC
13396	6.0	320-1 EC / EP BEG AC PATH
13397	6.0	320-1 "
13401	6.0	320-2 BSW @ PATH
13402	6.0	320-2 BSW @ PATH
13407	6.0	325-L TFC @ CR
13408	6.0	325-L TFC @ WCR
13409	6.0	325-L TFC @ WCR
13410	6.0	325-L TFC @ CR
13412	6.0	325-L TFC BC 0.0
13415	6.0	325-L TFC ℄ @ WCR
13421	6.0	325-L TFC ℄ @ WCR
13422	6.0	325-L TFC ℄ @ WCR
13425	6.0	553-P WV
13430	6.0	360-4 EDGE PLANTER
13433	6.0	420-4H PALM
13438	6.0	610-3P DI

CONT. FROM TSO PG (28) (29)

PT	ROD	DESC.
13439	7.0	325-L TFC/POC
134[illegible]	7.0	610-3P DI
134[illegible]	7.0	352-L MISC. AC
13502	7.0	532-3P VAULT COR.
13505	7.0	523-P MH SIGNAL
13507	7.0	535 2 WM
13525	7.0	521 P MHSD?
13526	7.0	520 P MHSS?
13527	7.0	520 P MHSS?
13528	7.0	523 P MH SIGNAL
13529	7.0	535 1 PBSL
13530	7.0	500 P PSL
13539	7.0	505 CALL BOX
13541	5.0	535 10 PB IRRIG.
13553	5.0	530 3P COR BFPD
13554	5.0	" " ENCLOSURE
13555	5.0	530 3P " "

BS CK HΔ .003
V 1.003

(30) 2/20/2008 VF/JP

Az: 230°23'45"

T CSO BS - 12L

BNH = 4.767'/1.453m HS - 5.518'/1.682m

HI = ΔH = -0.003 ΔV = 0.011

PT #	Rod	Desc	
76	5.518/1.682m		set MAGNW
13356	7.0	M-12*	0.5' GROUND AC
13357	7.0	520 P	MHSS
13358	6.5	320 L	BSW
13359	6.5	320 L	BSW @ AC PATH
13360	6.5	320 L	FSW @ AC PATH
13361	5.0	320 L	FSW
13362	7.0	420 10	13" CAMPHER
13363	4.91	420 10	15" MISC.
NEW HI - BTM NOTCH = 1.457m / 4.78 FT			
✓76	5.518	ΔH .003	ΔV .010
	HI =		
13364	6.8	535 1	PB ELEC
13366	6.8	520 P	MHSS OLD #960 *
13367	4.91	555	VALVE C.O.?
13368	4.91	500 10	PSL
13369		283	TOE CONC. WALL
13583	5.35	283	RW TOE
CLOSE TO 13569 *			
13584		283	TOE CW
13600		283	RW TOE CONC

CLOSE TO 13584 *

Topo site 12

ARUP / Doyle

07-07-036 (2)

(30)

TSC2 0736-topo2.dc filt cont 7

(Download 13330-13555*)

Q: 2007/07-07-036.../TSC/

0736-TOPO EAST/EXPORT/

*0736-021908.txt

(**Download 13356-)

**0736-022008.txt

CA-76 HS = 5.518'/1.682m

Set MAGNW near north EC @ the extension Girard ST aprox 20' past bollards

PT #	ROD	DESC
13601	6.4	328 EDGE DW
13617	8.5	324L AC/EP
13618	8.5	380 1 EP/BSW
~~13619~~	4.91	MAGNF WLS 105
HA ~~305~~ 307	ZA	SD
156°32'04"	92°36'01"	381.452'
~~13620~~	4.91	CNF T3R CA1
HA ~~306~~ 308	ZA	SD
66°27'21"	89°16'15"	526.747'

PT	Rod	Desc
13621	10.0	275 L RW TOE
13625	9.0	517 4 4" WL ELBOW *
13626	12.0	(CONNECT TO RET WALL) *
13641	12.0	517 4 4" WL ELBOW (BLOB)
		611 DI

(31)

2/20/2008 JF/JP.

Rain/showers

Az: 222°37'44"

BS - 126

HS = 5.513/1.681m

ΔH = 0.014

ΔV = 0.037

π @ 76

BMH = 5.03/1.534m

HI =

PT	Rod	Desc	code
13642	6.0	MHSS	520 P
13643	"	"	"
13644	"	"	"
13646	"	FH	
13648	"	edge walk/WCR GB	
13673	7.0	curb end @ AC daylight	
13696	"	TFC DWY/WCR	
13688	5.0	TFC @ AC path	
13703	5.0	FL AC @ DWY	

ARUP Doyle
07-07-036 (c)

(31)

site 12

BS ZA - 38°20'44"
SD - 929.334'

site @ 50 HS = 5.53'/1.700

10048 (A 76-126-50)

HA - 354°35'56"
ZA - 87°59'57"
SD - 551.429'

FS-44 HS = 9.50

10049 (A 76-50-44) see P 32

HA - 180°25'59"
VA - 90°59'22"
SD - 389.182

(32) 2/21/2008

JF / KK

< RAIN / Showers >

Az: 217° 13' 41"

T @ 76 BS - 50

BNH = 5.107 / 1.556m FS - 5.85 / 1.782m

HI = 5.615'

ΔH = 0.003' BS (ZA - 87° 58' 40"

ΔV = 0.014' (SD - 551.440'

PT	Rod	Desc
309	4.91	CNF "WLS 109"
~~13709~~		

New T BNH = 4.75 / 1.447 ΔH = 0.005'

HI = 5.256' ΔV = 0.017'

PT	Rod	Desc	code
13704	5.0	EP st	328 1
✓44	9.50	CHK 44	
10049	9.50	A 76-50-44	
13706	5.0	DIR	610-3P
13709	5.0	MHSS	520 P
13710	" "	" "	" "
13712	" "	E SW@ EP	328 1
13713	" "	E SW @ EP	328 1
13735	8.7	BCOR NE	205 L
13736	6.0	Stair wall cor	205 L

ARUP | Doyle

07-07-036 (c)

(32)

New job file TSC2

0736-topo-3.dc / .job

site 12 cont

309 (HS = 4.91)

END CN IN BSW aprox 20' south of SWLK JCT, east of Vets Bldg

1030 (*see Tredwell / Rollo 02-05-037)

HA - 59° 03' 43"

ZA - 90° 54' 01"

SD - 262.286'

FS 44 HS = 9.50)

10049 (A 76-50-44)

HA - 180° 25' 59"

ZA - 90° 59' 22"

SD - 389.182

(33) JF/JP (π cont from 32)

Pt	ROD	Des	Code
13738	7.0	PBI	535 10
13739	" "	DIR	610-3P
13742	" "	PSL	540 P
13743		EC ∡.	328-2
13763	6.0	Stairwall cor (0.7 ft Steel)	205-L
13774	"	Ballard	900 2
	" "	WV	553 P
13784	" "	MHU	521 P
13789	4.91	PBI	535 10
13797	8.5	CABE	531 1
13821	8.5	MHSS	520 P
13822	" "	DIR	610-3P
13823	" "	" "	
13824	" "	"	"
13828	" "	MHSS (Under curb)	520 P
* 13872	7.0	0.5 ft grout in ac	M-13
13876	" "	Mon well	900 1
13882	" "	outside edge	328 2
13883	" "	of 1ft wide	" "
13884	" "	concrete	" "

ARUP/Doyle
07-07-036(c) (33)

site 12

Export 309, 13704-13884

Q:2007/07-07-036 .../TSC/
0736-TOPO-EAST/EXPORT/
0736-022108.TXT

(10 pts New—)

New Geotech Areas

① 34-19 6-R1 Lincoln N/Storey
34-19 6-R2

② A2 R2, A2 R3, A2-R6 Ruck/Storey
A2-R8 (P2)

③ RW 8 R2 -~~(P2)~~ ✓ Lincoln e/138 CH

④ 07-CPT-16 ✓ Girard/Gorgas
07-CPT-17 * NF

⑤ MPT NB-R6 * Halleck/Poyle?

* Not found
need ARUP markup

(34) 2/22/2008
JF / KA

Az: 37°39'31"

T @ 76 BS - 44
BHHt 7.59 / 1.398m HS = 1.00 / .303
HI = 5.095' 5.856 / 1.785
6.856 / 2.088
ΔH = 0.004
ΔV = 0.003
BS (ZA - 91°21'22"
SD - 389.236'

Pt	Rad	Desc
13885	6.5	07-CPT-16
310	4.91	MAGNWF - MACTEC CA.20
✓309	"	check 309 ΔH = ΔV =
13886	" "	275L (RW Toe)
13891	6.0	" " (Toe Stair)
13893	" "	276 L (RW TOP DAYLIGHT)
13895	7.0	360 L (TOP STAIR)
13898	" "	903 (GB)
13907	6.0	500 10" (PSL)
13908	" "	384 L (EDGE GRAVEL ROAD)
13916	" "	520 P (MHSS)
13917	" "	360 L (BSW END)
13920	" "	275 L (RW TOE X.@ BSW)
13921	" "	470 L (GND)
13926	" "	610-3P (DIR)
13942	6.2	275 0.0 (RW END DAYLIGHT)

ARUP / Doyle
07-07-036 (c)
(34)

(site 12 finish)
Note Adjacent to site 13
(see MACTech topo)
see p 33 for Geote

276L = RW top
360L = ec cone misc

310 FND MAGNW "CA.20"
in parking Lot east of
Archealogical Bldg 230
(HS = 4.91)
HA - 320°44'35"
ZA - 91°39'48"
SD - 364.228'

(35) 2/22/2008

Az: 303°55'51"

π @ 138 BS @ 134

BHH= 4.867/1.493m HS = 4.91

HI = 5.375' ΔH = 0.003

ΔV = 0.003

PT	Rod.	Desc
13943	6.0	34-195B-R10

Az: 138°21'34"

π @ 117 BS - 55

BHH=4.995/1.523m HS - 4.91

HI = ΔH = 0.002

ΔV = 0.008

PT	Rod	Desc	Note*
~~13943~~	~~6.0~~	~~Rw 8 - R2 PZ~~	0.5 PZ

ARUP | Doyle
07-07-036 (B)
Geotech As built

(35)

*see 10756 book 2 p77 boring only

PZ not found !!!

(36) 2/22/2008
JE / KK

Az: 23°47'10"

T @ 133 BS @ 132
BNH = 4.825' / 1.471m HS = 5.385' / 1.642m
HI = 5.335' ΔH = 0.003
ΔV = 0.015

PI	Rod	Desc	Note
13944	6.0	34-196-R1	0.3' GRT IN AC
13945	8.5	AZ-R3	0.5' GROUT IN SOIL
13946	"	AZ-R6	0.5' "
13947	4.91	AZ-R2	0.4" PZ

Az: 203°47'10"

T @ 132 BS - 133
BNH = 4.865' / 1.483m HS = 5.35' / 1.631m
HI = 5.375' ΔH = 0
ΔV = 0.01

PI	Rod	Desc	Note
13948	6.0	34-196-R2	0.3' GRT IN AC
13949	"	AZ-R8 (?)	0.4' PZ

ARUP / Doyle
07-07-036(B)
(36)
— Geotech As built

see shots book 2 p 66
AZ-R1, AZ-R9, AZ-R8 no PZ

~~34-196-R2~~
~~34-196-R1~~
~~AZ-R8 (PZ)~~ NOT built?
~~AZ-R6~~
~~AZ-R2 (PZ)~~
~~AZ-R3~~

Export 310, 13885-13949
Q: 2007/07-07-036... / TSC /
0736-topo-east (Export)
0736-022208.txt

AZ-R8
Note; Aprox 100' North of origonal position

(37)

2/25/2008

VF / DH.

Az: 207° 23' 33"

π @ 304

BS @ 231

BNH = 5.05 / 1.540m

HS = 5.85 / 1.781m

HI = 5.562'

ΔH = 0.014

ΔV = 6.015

PT	Rod	code	desc.
13950	7.0	325	TFC o/L WCR
13958	"	"	TFC Lo Pt
13959	"	324	PI FE FL
13960	"	"	"
13963	"	325	TFC WCR
13966	"	324	FE WCR
13977	"	320_1	BSW AC
13982	"	360	Back conc walk
13983	"	"	Frt " "
		325	TBC
14004	"	380_1	Lip
14023	"	611	DI & FL
14030	"	325	TFC CR
14031	"	"	" WCR
14048	"	Wall	⚠ (283)
14050	"	610	DI
14061	"	610	" (old # 3225)

ARUP / Doyle

07-07-036 (c)

(37)

(site 10/11 west toward site 7)

New TSC2 .ik

0736-Topo4.dc

Pts 13950-

PT	Rod	Code	desc
14062	7.0	325	TFC WCR
14063	"	"	LP TFC AC curb
14075	"	"	TFC CR End conc curb
14080	"	"	TFC @ col foot
14083	1	610	old 3337
14084	"	611	—
14091	"	380_1	end lip
14115	"	500_6	JP @ UG
14120	"	522	MH E
14121	"	514	MH SD
14122	"	611	DI & FL
14136	"	325	TFC @ col
14141	"	352	AC

2/25/2009
VF / DH

Az: 52° 13' 45"

T @ 231 BS - 123
BNH = 5.23' / 1.609m HS = 5.41' / 1.650m
HI = 5.789' ΔH = 0.008
ΔV = 0.008

PT	Rod	code	Desc
14142	7.0	380_1	Lip
14148	"	325	TFC/WCR
14162	"	324	FE @ WCR
14167	"	380_1	Lip end
14170	"	"	" beg
14180	"	205	BCOR NE
77	5.54' / 1.688m	SET MAGNS	
78	4.91	"	

ARUP / Doyle
07-07-036(c)

site 10/11 west toward site 7
Doyle west / Halleck

BS
ZA - 90° 02' 13"
SD - 179.196'

77 HS = 5.54 / 1.688m
SET MAGNS 2' SW of JP
aprox 45' north of Bent
column 42 (North)

HA - 206° 51' 06"
ZA - 90° 21' 07"
SD - 308.244'

78 (HS = 4.91)
SET MAGNS 13' south / FH
and 45' NE / Bldg 204 (NE COR)

HA - 152° 09' 47"
ZA - 89° 59' 25"
SD - 197.033'

(39) 2/26/2009
JF / DH

77-Refix +/- Az: 79°04'51"

T @ 77 BS @ 231
BMH = 5.11 / 1.558m HS = 5.27 / 1.604m
HI = 5.621
ΔH = 0.005
ΔV = 0.013
BS (ZA -
SD -

Az: 204°42'27"

T @ 77 BS - 121
BMH = 5.11 / 1.558m HS - 5.34 / 1.628m
HI = 5.621
ΔH = 0.003
ΔV = 0.006

PT	Rod	✓ Δ's	
✓233	4.91	ΔH = 0.02	ΔV = 0.015
✓231	5.262	ΔH = 0.02	ΔV = 0.01
✓121	5.34		
✓232	4.91	ΔH < 0.006	ΔV = 0.01
14181	11.0	514	MHSD
14182	12.0	610	DIR @ FL

ARUP / Doyle
07-07-036 (c)
(39)

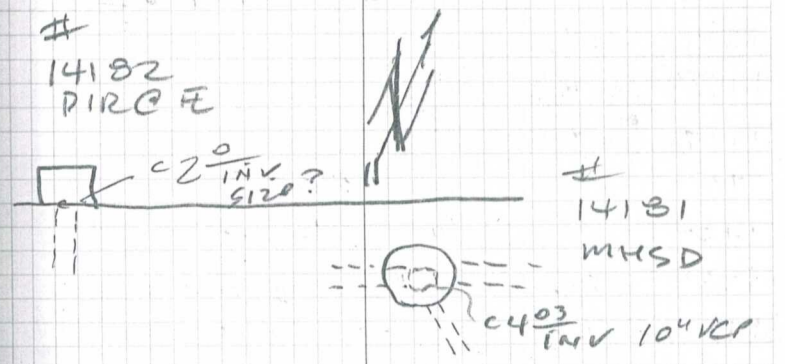
Doyle West / Halleck

Next temp # 10050
Next topo # 14181
Next CP # 79

Site @ 121 (HS = 5.34' 1.628m)

3 Pt Resection CH77 N - 2120861.937 E - 5996583.370 el - 10.114

PT	HA	ZA	SD
121	0°00'02"	84°04'17"	307.342'
233	38°15'44"	89°38'59"	377.531'
231	234°22'16"	89°45'49"	308.244'



2/26/2008
JF / DH

cont 7 — Az: 204° 42' 27"
π @ 77 — BS – 121
BNH = 5.11 — FS – 5.34'
HI = 5.621'

PT	Rod	code	desc
14203	10.0	530_1	elect pad XFMR
14212	7.0	360	conc ramp
14232	7.0	514	mHSD
14239	"	520	mHSS
14241	"	500_6	JP/PSL
	"	325	TFC @ co 1
14263	"	TFC	end (325)
14271	"	610	DI & FL
14278	"	325	TFC @ DWY
14284	"	901	Locate GAS
14303	8.7	350	edge PAD GAS
14307	7.0	530_10	GAS enclosure
14310	"	211-8	8' CLF corner
14313	"	"	Gatepost
14315	"	211-8	Gatepost new endpost
14328	4.91	18" Tree 40_10_13	(OAK?) (TAG 2751)

Download pts
Export (13950 – 14366, 77-79)
Q:2007/07-07-036 ARUP Doyle/TSC/0736-topo-cast/EXPORT/0736-022608.txt

(41)

2/26/2008
JF / DH

AZ: 232°00'57"

π @ 232 BS – 121
BHH = 5.01'/1.528m HS – 4.748/1.446m
HI = 5.524' ΔH = 0.012
ΔV = 0.018

PT	Rod	Code	Desc
√231	5.265'		
14329	7.0	360	toe ramp
14350	"	555	coss
14351	7.0	325	TFC DWY
14357	7.0	610	CTR 2.5'x2.5'
14359	"	611	cor DI
14366	"	MPTSB-R2-P2	
'79	4.91	SET MAGNW	

BS / ZA – 85°20'45"
SD – 361.473'

ARUP / Doyle
07-07-036 (C)

(41)

* CPT PT

79 SET MAGN+WASH
aprox 53' SE of Bent column
48 and 28.3' NW
of Toe STAIRS (@ west side
Natural Gas Pumps
aprox 500' west / Halleck
~ 150' west / Bldg 204

HA – 13°54'05"
ZA – 89°52'22"
SD – 298.416'

(42) 2/27/08

09"
05"

Adjusted Az: 37° 39' 14"

T @ 79 BS - 123

BNH= 5.25'/1.601m HS= 5.79/1.764m

HI = 5.762' ΔH = 0.02 = 0.002

ΔV = 0.01 = 0.001

PT	Rod	code	desc
✓231	4.91	—	ΔH = 0.003 ΔV = 0.007
✓79	"	—	ΔV = 0.04 ΔH = 0.02

After Resection 1/2

PT	Rod	code	desc
✓BS	5.787	—	ΔH = 0.007 ΔV = 0.004
✓79	4.91	—	ΔH = 0.005 ΔV = 0.01
✓231	"	—	ΔH = 0.033 ΔV = 0.004
✓BS	5.787	—	ΔH = 0.002 ΔV = 0.001
✓79	4.91	—	ΔH = 0.007 ΔV = -0.004
✓231	5.39	—	ΔH = 0.013 ΔV = 0.002

PT	Rod	Code	Desc
14367	7.0	205	BCOR SW
14368	" "	284	TFRW
14380	" "	205	RW TOE/BCOR
14381	" "	660	WEST EDGE CONC DRAIN 1A.WX 0.7 D

ARUT / Doyle
07-07-036 (c)

(42)

Residual
ΔN = 0.002
ΔE = 0.002
Δel = 0.004
@ cor = 0°00'01"

Resect 79

PT	HI/HS	HA	ZA	SD
123	5.787	0°00'00"	90°05'53"	365.223'
79	4.91	223°15'35"	90°02'04"	353.902'

79
N - 2120740. ~~874~~ .838
E - 5996879. ~~659~~ .660
el - 12. ~~645~~ .650

(See also book 2 p 74)

Resect 2

PT	HS	HA	ZA	SD
123	5.787	359°59'57"	90°05'53"	365.216'
79	4.91	223°15'25"	90°02'05"	353.902'
231	4.393/1.643m	346°45'18"	90°22'31"	197.037'

(43) 2/27/08 JF / KC

Az 37° 38' 09"

Cont π @ 7'8 BS - 12.3

HI = 5.762' NS - 5.787

PT	Rod	Code	desc
14387	7.0	530	Elec. Cabs. (6)
14390	" "	660	Same as #14381
14393	8.5	310	NW COR 6"x8" WD POST
14394	7.0	500 6	JP SVC + SL
14398	" "	350/290	AC/TOE DECK COR
14403	6.0	660	Same as # [illegible] END
14404	" "	610	DIR (3)
14411	" "	283 1.7	RW TOE @ COL
14414	6.0	MPTHB-12b	0.5 SB IN AC
14415	6.0	283 6.8	RW Toe
14417	6.0	350	AC / Toe stairs
14419	6.0	310	NW cor 4"x4" STAIR pier post
14422	"	900	=1.0 drain manwell
14425	8.7	521	MHSD
14426	7.0	610	DIR (center) 1.5x1.5
14427	" "	" "	"
14433	" "	352	LSD AC @ USA SD
14439	"	352 LE	CL 4' HV TRENCH
14459	"	521	MHSD

ARUP Doyle
07-07-036 (c)

(43)

Topo / west / Halleck

cont>

PT	Rod	Code	desc
14460	7.0	521	MHSD
14461	"	320 2	COR CONC STAIR
14468	"	320 2	SW@BSW/WCR
14485	"	500 10	PSL
14490	"	325	TFC WCR
14494	"	521	MHSD
14495	"	616	D1 CL FL
14512	"	610	" "

* CPT Pt

14518	7.0	532 10	VLT SD
14556	"	605 10	TOP BRICK DITCH
14572	"	606 10	FL BRICK DITCH
14580	"	652 10	VCPN 8"
14581	"	652 10	VCPO 10"
14582	"	652 10	" "
14583	"	652 10	VCPN 10"
14584	7.0	532 10	VLT SD

(44) 2/27/08 JF/KK

cont Az: 37°38'09"
π @ 79 BS @ 123
BNH= 5.25' HS - 5.797'
HI= 5.762'

Pt	Rod	Code	Desc
14598	8.7	266	stop sign
14603	7.0	420-11-30	30" Acacia (tag 1748)
14611	"	360	toe ramp
14617	4	275-3.7	Brick Ret wall
14630	"	548	E meter

Az: 12°05'32"
π @ 303 BS - 123
BNH= 5.045/1.538m HS - 5.797'
HI= 5.557' ΔH= 0.003 ΔV= 0.025'

PT	Rod	Code	Desc
14631	6.0	283	RW toe/EP
14643	7.0	652-10	10" VCPM
14659	8.7	652-10	10" VCPO
14674	8.7	470	06/6B

ARUP / Doyle
07-07-036 (c)
(44)

~~cont 7~~ Az: 12°05'32"
~~π=303~~ BS - 123
HI= HS - 5.797

Export 14367 - 14674
Q: 2007/07-07-036.../TSC/
0736-TOPO EAST/EXPORT/
0736-022708.txt

(45) 2/28/2008 JF / KK

clear 50° 5 Am

To 70° 11:30 Am

Az: 80°53'~~32"~~ 34"

T @ 79 BS @ 78

BMH = 5.222 / 1.5925 HS = 5.615 / 1.712m

HI = 5.735' ΔH = ∅

ΔV = 0.007

PT	Rod	Desc	
✓233	4.91	*Adjusted	ΔH = ΔV =
✓231	"	ΔH = 0.007	ΔV = ∅
✓232	"	ΔH = 0.02	ΔV = ∅

Resect 79 * Retie 233

HI = 5.735 BS Ref 222

* BS Ref 78

PT / HS	HA	ZA	SD
222 / 5.5[illegible] / 1.6[illegible]	0°00'01"	90°14'11"	597.212'
232 / 4.91	138°01'39"	90°24'11"	298.422'
78 / 5.617	159°47'37"	90°07'25"	353.909'
*233 / 4.91	190°37'31"	90°16'17"	208.210'

New 79

Tied BS 78

N - 2120684.~~871~~ 858

E - 5996530.~~223~~ 229

el - 13.293 13.29

ARUP / Doyle (c)

07-07-036

(45)

<Note HS 123 = 5.81 / 1.772m>

<elev check 233; 79> (* see book 1 p 9)

PT	BS	HI	FS	elev	desc
TP161				*13.83	CN
① 233 top	(1.611) 5.284 5	19.115	(1.826) 5.991'	13.124'	NTF
② 79	(1.298) ~~5.261'~~ 4.259	17 ~~18~~ ~~17~~.383	(1.248) 4.098' 6	13 ~~14~~.287 ~~13~~.287	MAGNW
233 ③	(1.198') 3.93'	~~18~~ 17 ~~17~~.217	(1.248m) 4.096	13 ~~14~~.121 ~~13~~.123	NTF
TP151 ④	(1.775) 5.824 3	13.944 ~~19~~.110	(1.561) 5.119 .12	13.824	

-0.006

Record 13.156

233 13.126 / 13.125

79 13.29

Note Adjust 233 in control file to 13.126 (Also need to change 62 + 63 proportionally from 117 to 233)

~~(see book 2 p 78)~~

~~N - 2120690.386~~ 233

~~E - 5996322.102~~

(46) 2/28/2008 JF / KK

cont 7 Az: 80°53'34"
↑ @ 79 BS - 79'
HI = 5.735' HS = 5.617'

PT	Rod	Code	Desc
14675	9.0	205	BCOR SW
14676	"	310	4"x4" Steel Stair Beam
14680	"	360	EC TOE STAIRS
14691	12.5	515	3" Gas Line Elbow
14702	15.0	360	CONC PAD ELEC/GAS CONTR
14723	13.0	211 8	8' CLF ENCL. NAT. GAS
14730	"	360	EC PAD GAS BLDG
14752	9.0	500 10	PSL
14754	12.0	205	BCOR GAS CCAN (2)
14760	9.0	530	NAT. GAS PUMP
14766	"	531	FUEL CARD PED.
14792	7.0	215	2" HAND RAIL
14797	"	360	EC TOE/TOP STAIRS
14836	"	520	MHSS
14840	8.0	520	MHSS
14841	"	520	MHSS
14842	"	520	MHSS
14843	7.0	521	MHSD
14844	"	610	DIR NE COR
14849	"	611	DIR CL 2.5'x2.5'

ARVP / Doyle
07-07-036 ES

(47)

PT	ROD	CODE	DESC
14855	12.4	517 6	6" FM WL ELBOW
14867	9.0	211 6	6' CLF PUMP STA. ENC.
14878	12.0	684	PUMP HOUSE COR
14883	"	611	DIR 1.2'x1.2'
14884	"	532	WV
14888	11.0	517 6	6" WL Blowout Riser

Export 62, 63, 233, 78, 79 Edits
14675 - 14888
Q: 2007 / 07-07-036... / TSC /
0736 - Topo EAST / EXPORT /
0736-022808.TXT

(47)

2/29/2008
JF / KK

Az: 124°42'27"
BS - 77
HS = 5.52/1.683m

T @ 121
BHH = 5.12/1.560m
HI = 5.631'
ΔH = 0
ΔV = 0.017

PT	Rod	Code	Desc
14889	7.0	325	TFC ⊄
14910	"	60	DIR CL FL
14928	"	325	TFC WCR.
14970	"	535 2	PBL
14971	"	500 10	PSL
14989	5.5	652 10 3	3" PVC ⊙
14990	"	611 0.7	1.5' x 1.5' DI C
15009	"	518 1	3" EXP. CONDUIT
15017	7.0	470	GND.

3" PVC

ARUP / Doyle
07-07-036(C)

(47)

New TSCZ file
0736-Topo5.dc/.job

PTS 14889 -
(Avail CP # 80-)

Need 0227.txt (copy)
Re-calc 77 see p 39
Re-import see p 40
(3950-14366 77-75)
0736-topo4

New coordinate @ 77
77

N - 2120861.943
E - 5996658.379
el - 10.107

ΔN = 0.004
ΔE = 0.002
Δ el = 0°00'02"

(43)

2/29/08
JF/KK

Az: 62°53'15"

T @ 233 35 - 77

BMH = 5.01/1.526m HS = 5.52/1.683m

HI = 5.516' ΔH = 0.007

ΔV = 0.005

Pt	Rod	Code	Desc
✓63		check 63	ΔH = ✓ ΔV = ✓
✓79	4.91	" 79	ΔH = 0.005 ΔV = 0.01
15018	8.5	530 10	PAD UNKWN TANK
15029	7.0	284	TBRW @ DYLT
15042	"	652 4 12	12" CMP @ RW TOE
15043	"	652 4 12	12" CMP ELBOW
15052	"	283	RW TOE @ END
15065	"	387	TOP

ARUP/Doyle
07-07-036 (c)

(48)

Export 14839 - 15065

Q: 2007/07-07-036.../TSC/
0736 - TOPO EAST/EXPORT/
0736 - 022908.TXT

(49) 3/2/2009

JF / KK.

+/- Az: 286°09'07"

T @ 233 BS - 222

BNH = 5.085'/1.550m HS - 5.59/1.703m

HI = 5.595' ΔH = 0.027

ΔV = 0.047

Az: 317°31'20"

T @ 233 BS - 120

HI = 5.595' HS = 5.34/1.628m

ΔH = 0.006

ΔV = 0.015

PT	Rod	Code	Desc
✓ 27	4.91	X=> ΔH = 0.003	ΔV = 0.014
√222	5.587'	X=0.0004	ΔH = 0.036 ΔV = 0.046
√78	5.242'	X = 0.0002	ΔH = 0.02 ΔV = 0.009
√71	4.91	X=0.0002	ΔH = 0.01 ΔV = 0.007
100 51 63	2.7	A 233-120-63	(tie to 63)
222	5.587	Cut x - CH 222	
330	4.91	MAG NS - CH V 130	
79	4.91	Retie MAG NW CH 79	

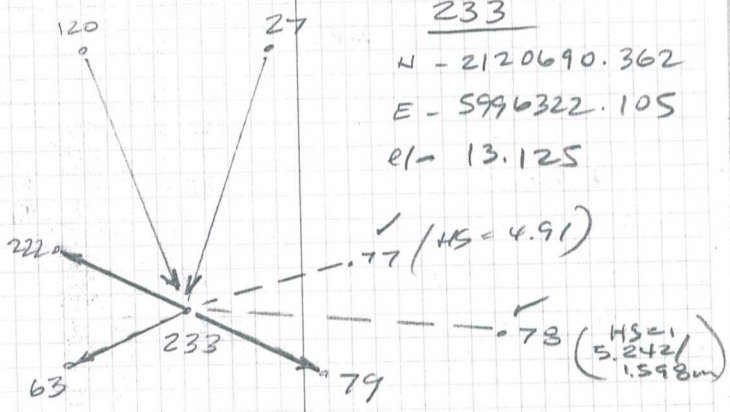
ARUP / Doyle

07-07-036(c)

(49)

** Area subject to movement

233 Retie 222 79 63 330



233

N - 2120690.362

E - 5996322.105

el - 13.125

PT	HS	HA	ZA	SD
120	5.341	0°00'00	90°02'15"	1103.900'
✓77	4.91	105°26'42"	90°33'46"	377.551'
✓78	5.243	127°18'01"	90°05'08"	559.858'
✓79	4.91	133°59'34"	90°08'39"	208.215'
(100 51 63)	2.7'	284°01'13"	85°47'37"	327.435'
222	5.587'	328°39'00"	90°19'32"	393.444'
330	4.91	29°26'25"	91°12'53"	198.350'

3/2/2008
JF / KK

cont 7
T @ 233
HI = 5.595'

Az: 317°31'20"
BS = 120
HS = 5.341'

PT	Rod	Code	Desc
15066	4.91	211-8	FE SCLF
15081	7.0	526	MH
15082	"	" "	MH
15088	"	611	DI CL FL
15123	"	325	TFC CR curve to SE
15130	"	520	MHSS To Pump Sta.
15139	"	283	RW TOE
15141	"	284	TFRW BEG
15145	"	500 10	ABANDONED POLE
15151	"	284 N	FACE 1.2' Rock RW
15162	"	284	BEG RW
15172	"	610	NE COR DI
15218	6.5	325	TFC BC
15225	"	521	MHSD
15227	"	521	MH
15228	"	521	MH
15234	"	323	lip

ARVP / Doyle
07-07-036(c)

New values
79, 233, 62, 63, 222

Export 330, 15066 - 15234

Q:/2007/07-07-036../TSC/
0736-TOPO EAST / EXPORT /
0736-030308.txt

(51) 3/4/8 JF / KK

cool clear 50° AM

70° PM

Az: 332°27'12"

T @ 222 BS - 120

BNH = 5.220/1.591m HS = 5.225/1.593m

HI = 5.73' ΔH = 0.001 ZA - 89°55'01"

ΔV = 0.03 SD - 794.806'

(3) Held elev 9.747

115 CNS CH V 115 NE / SPORTS BASEMENT

(HS = 4.91)

HA - 343°57°02"

ZA - 90°29'03"

SD - 249.002'

PT	Rod	Code	Desc
✓79	5.7	/	Check ΔH=0.01 ΔV=0
15235	7.0	323	Lip POC
15238	4.91	325	TFC PRC
15249	"	420 10 20	20" PRIVET TAG-2755
15252	"	360	ELEC. PAD COR
15255	"	533 1	2.6'×2' Elec. VLT
15270	6.0	284	END ROCK WALL DYLT
15277	4.91	324	FL BEG CURB
15279	"	325	TBC 0.0 BEG
15295	7.0	652 10 6	6" PVCO
15331	4.91	500 10	PSL

ARUP | Doyle

07-07-036 (c) (52)

(1) Site @ 233 (HS = 534/1.628m)

10052 (A 222-120-233)

HA - 133°42'04" check OK

ZA - 89°45'08"

SD - 393.442'

(2) Site @ 234 (HS = 5.352'/1.632m)

10053 (A 222-120-234)

HA - 241°08'20"

ZA - 89°51'08"

SD - 283.865'

New coordinate 234

N - 2120563.368

E - 5995787.142

el - 12.143

(52) 3/4/08 JF/KK

cont>

T @ 222 Az: 332°27'12"

HI = 5.73' BS - 120

HS - 5.225

PT	Rod	Code	Desc
15376	7.00	601 2	NE Begin conc Vditch
15385	"	601 2	NE side ditch @ box inlet
15427	"	652 7 12	12" CPPO
15437	"	521	MHSD
15453	6.0	902	5" wood bollards
15472	6.0	386	toe slope

T @ (10052) 234 +/- Az: 259°47'24"

BMH = 0.01/1.527m BS - 141

HI = 5.519' HD = 4.91" (Δ 2.46)

ΔH = 0.023

ΔV = 0.022

PT	Rod	Code	Desc
10054	6.72	A 234-140-222	
15743	14.0	205	BCOR
15475	"	211_8	8' FE CLF (enclosure electric)
15499	6.0	601_2	N edge conc ditch

BS (ZA - 85°46'36"
SD - 802.532'

ARVP / Doyle
07-07-036 (E) (52)

* PP / Doyle
check sty col Ret walls (BC 62-63) (BC 64-65) (BC 66-67) (BC 68-69)
(V ditch @ BC 65) - drain to North
(circular Retrofit columns 62-71)

Note check
should be overlap - previous surveys

Sitt @ 222 HS = 6.72'/2.048m

10054 (A 234-140-222)

HA - 133°47'58"
ZA - 89°59'05"
SD - 283.874'

Export 115, 15235-15499

Q: 2007/07-07-036 .../TSC/0736 - TOPO EAST / EXPORT/0736_030408.TXT

(53) 3/5/08
VF/KK

Az: 259° 47' 26"
BS - 140
FS - 5.243'/1.599m
ΔH = 0.005
ΔV = 0.015

* @ 234
BNH = 5.15/1.569
HI = 5.657'

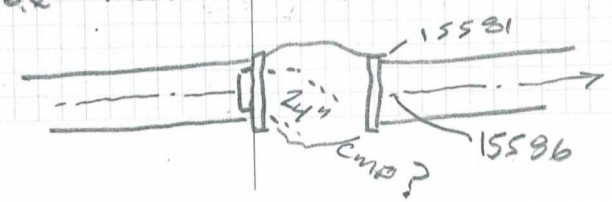
PT	Rod	Code	Desc
✓77	4.91	?	check ΔH = 0.03 ΔV = 0.0002 ~~ΔV=0~~
✓222	"	?	check ΔH = 0.01 ΔV = 0.00.06 ~~ΔV=0~~
✓141	"	?	check X = 0.0001 ΔH = 0.014 ΔV = 0.002
15500	13.00	531_10	AC FHM
15508	13.00	360	cor conc pad/Elect
15519	6.0	360	COT conc pad/Gas
15524	"	515 5	4" Gas Line
15526	"	515 2	2" Gas Line
15555	7.6	420 16 20	TR EUC 20"
15562	5.5	518 1	E CONDUIT X 5
15563	"	522	MHE
15581	6.5	640	TFHDWL
15585	"	652_4_24	24" cmpo
15586	"	641 - 602	FL - toe Hdwall
*15587	"	0.5' soil boring	"M-11"

Note
delete
M-11

ARUP | Doyle
07-07-036 (C)
(53)

CDT PT * 15587 "M-11"

* into SD structure / buried
east side flows away
J Box NOT Found



3/5/2008 JF / KK

Az: 240°01'21"
BS – 62
HS – 4.71/1.436m

π @ 63
BNH = 5.08/1.~~549~~ 1.551
HI = ~~5.592~~ 5.597', ΔH = 0.009, ΔV = 0.023
BS ZA – 87°55'43"
SD – 370.555'

FS 233 (HS = 2.70)
10055 (A 63 – 62 – 233)
HA – 181°31'14"
ZA – 95°13'16"
SD – 327.969'

Az: 61°32'41"
BS – 233
HS = 2.70

π @ 63
HI = ~~5.592~~ 5.597'
ΔH = –0.006
ΔV = 0.030
BS ZA – 95°13'15"
SD – 327.978'

PT	Rod	Code	Desc
✓233	2.70	—	∡ = 0.0007 ΔH = 0.01 ΔV = 0.02
✓80	5.377	—	∡ = 0.0003 ΔH = 0.004 ΔV = ~~0~~
✓62	4.711	—	∡ = ~~0~~ ΔH = ~~0~~ ΔV = 0.01
~~15589~~			

ARVP / Doyle
07-07-036(C)

Survey Lincoln @ Bldg 106

FS 80 (HS = 5.38/1.639m)
Set MAGN+WASH "80" on SW
25.5' west of SW Cor Bldg 210
3' 5' south of TC/WCR C/R
@ Lincoln Ave entrance (rear)
to the BANK.
HA – 246°02'01"
ZA – 89°17'13"
SD – 304.909'

FS 80 (HS = 5.38/1.639m)
10056 (A 63 – 233 – 80)
HA – 64°30'44"
ZA – 89°17'13"
SD – 304.910'

FS 62 (HS = 4.711)
10057 (A 63 – 233 – 62)
HA – 178°28'42"
ZA – 87°55'40"
SD – 370.556'

(55) 3/5/09 JF / KK

Az = 126°03'22"
BS - 80
HS = 5.377'

π @ 63
HI = 5.597
ΔH = 0
ΔV = 0

BS (ZA - 89°17'11"
SD - 304.91'

PT	Rod	Code	Desc
15588	6.0	540	PSL
15594	"	652 10 4	4" PVC IN
15597	"	521	MHSD
15598	"	610	DIR COR
15627	"	610	DIR COR
15630	"	205	n/y cor b'd's DL
15631	"	611 1.3	CL DI C 13 8" VCP
15699	4.91	360	TOP/TOE Stair
15695	5.0	215 3	2" RAIL
15715	"	387	TOP SLOPE

ARUP / DOYLE
07-07-036 (c) (55)

FS 81 (HS = 4.91)
SET MAGNET + WASH "81" @ BSW
North side Lincoln @ the
WEST ext of Taylor Rd
HA - 121°47'35" 23' East'ly
ZA - 88°14'52" of electrolier
SD - 214.849' (PSL)

FS 62 (HS = 4.711)
10058 (A 63-80-62)
HA - 113°57'58"
ZA - 87°55'40"
SD - 370.556'

EXPORT 80-81, 15500-15715

Q: 2007 / 07-07-036 ... / TSC /
0736 - TOPO EAST / EXPORT /
0736-030508.TXT

3/6/08
VF /KK

Az: 126°03'23"
BS – 90
HS – 5.39/1.644m

π @ 63
BNH = 5.125/1.563m
HI = 5.638' ΔH = 0.005
ΔV = 0.002

PT	Rod	Code	Desc
✓ 81	5.403/1.647m	— check Δ 0°0'0005"	ΔH = 0.005 ΔV = 0.009
✓ 62	4.91	— check Δ 0°00'02"	ΔH = 0.01 ΔV = 0
15716	6.0	387	GB / Top
15718	"	555	ROOF DRAIN CO
15731	7.0	284	RW TOP END
15749	5.5	241 15	SOUTH FACE GUARD RAIL
15761	"	535 10	PBSL
15781	.377	521	MHSD.
15788	8.7	470	GB.

Az: 306°03'23"
BS – 63
HS – 5.47/1.667m

π @ 90
BNH = 5.045/1.538m
HI = 5.555' ΔH = 0.007 ΔV = 0.011

PT	Rod	Code	Desc
✓ 81	5.403	– Δ = 0°00'02"	ΔH = 0.01 ΔV = 0.01
15789	7.0	553	WV
15797	"	611	DIR
15910	"	521	MHSD
15912	0.0	207	OH Bldg 106

ARUP / Doyle
07-07-036 (C)

PT	Rod	Code	Desc
15919	8.5	205	SE COR Bldg @ 06

(57) 3/7/2009 J.F. / T.N.

Az: 67°50'59"

π @ 81 BS – 63

BNH = 5.020/1.530m HS – 5.245/1.598m

HI = 5.529' ΔH = 0.001

ΔV = 0.01

PT	Rod	Code	Desc
15920	7.0	205	SW'ly cor Bldg 106
15932	7.0	241_2	S FACE Guard
15950	"	611_2.4	c 2 4 12" cmp "w"
15951	"	521	MHSD
15962	"	520	MHSS
15965	"	310	1'x1' stair column cor
15966	"	350	AC toe stair cor
15982	"	360	toe stair
15992	"	360	top stairs to BASEMEN
16024	5.0	610	DIR cor SW
16027	7.5	611	DI ℄ ℄
16050	5.0	611	2.2
16063	"	362_LEA	electric
16064	"	TFC	WCR – west edge
16085	0.0	207	Bldg OH
16086	"	"	"

HRVP / DOXIC
07-07-036(c)

(57)

Finish Design Survey
At Lincoln / Taylor

– C 1 5/2 3" VCP out N 25° E
– C 2 2 10" CMP

USA HV MHE to MHE