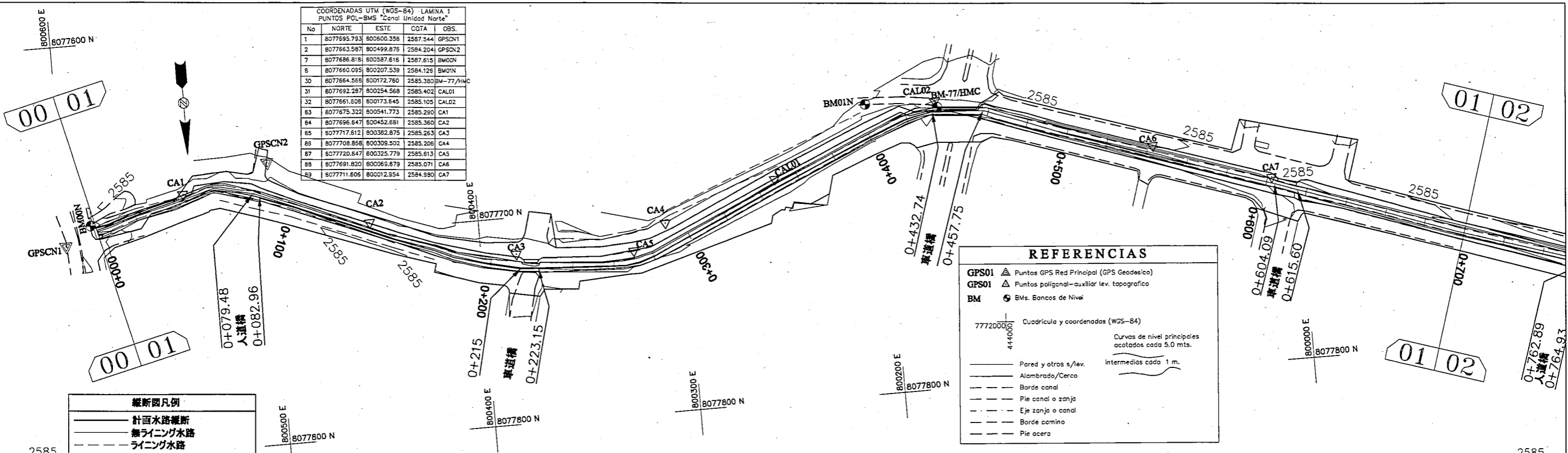


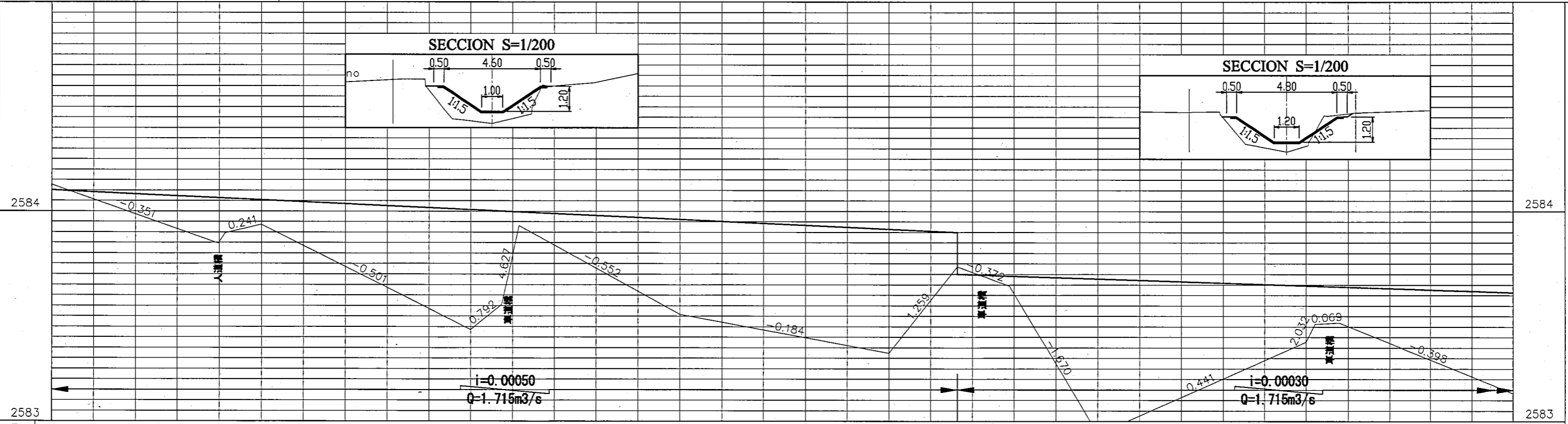
COORDENADAS UTM (WGS-84) LAMINA 1  
PUNTOS POL.-BMS "Canal Unidad Norte"

No	NORTE	ESTE	COTA	OBS.
1	8077695.793	800600.358	2587.544	GPSCN1
2	8077663.587	800499.876	2584.204	GPSCN2
7	8077686.818	800587.616	2587.615	BM00N
8	8077660.085	800207.539	2584.128	BM01N
30	8077664.568	800172.760	2585.380	BM-77/HMC
31	8077692.287	800254.568	2585.402	CAL01
32	8077661.608	800173.645	2585.105	CAL02
63	8077675.322	800541.773	2585.280	CA1
84	8077696.647	800452.681	2585.360	CA2
65	8077717.612	800382.875	2585.263	CA3
66	8077708.858	800309.502	2585.206	CA4
67	8077720.647	800325.779	2585.613	CA5
68	8077691.820	800069.679	2585.071	CA6
69	8077711.606	800012.954	2584.980	CA7



縦断面凡例

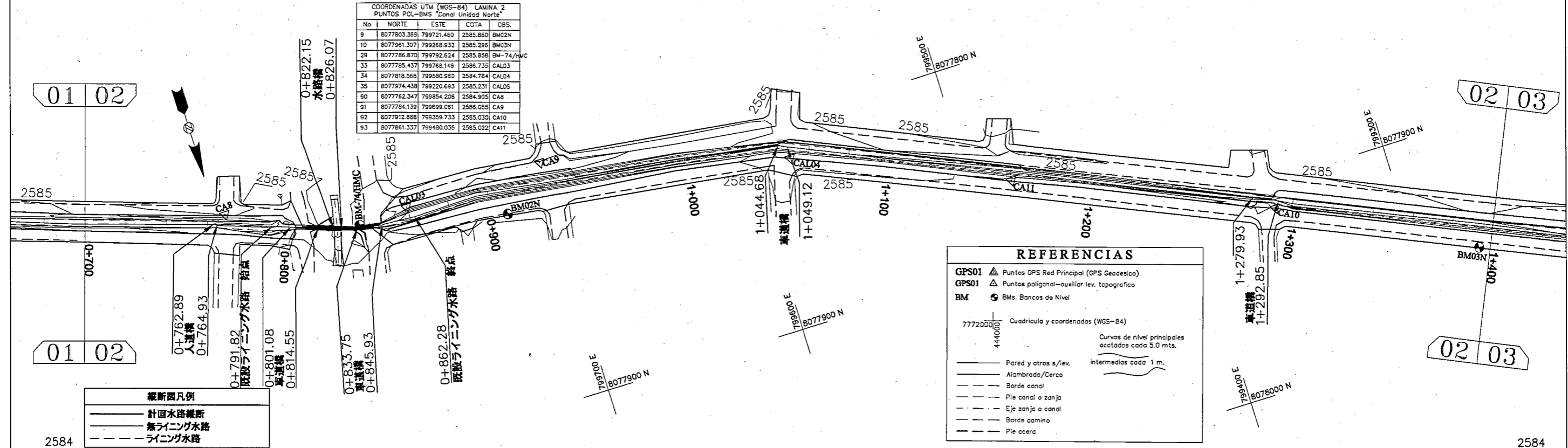
- 計画水路縦断
- 無ライニング水路
- ライニング水路



勾配	計画高	地盤高	追加距離
	2584.100	2584.126	0+000
	2584.063	2583.847	0+079.48
	2584.062	2583.896	0+082.96
	2584.054	2583.937	0+100
	2584.008	2583.436	0+200
	2584.001	2583.555	0+215.00
	2583.997	2583.932	0+223.15
	2583.962	2583.508	0+300
	2583.916	2583.324	0+400
	2583.900	2583.736	0+432.74
	2583.692	2583.643	0+457.75
	2583.678	2582.938	0+500
	2583.646	2583.379	0+600
	2583.645	2583.462	0+604.09
	2583.641	2583.470	0+615.60
	2583.614	2583.134	0+700

COORDENADAS UTM (WGS-84) LAMINA 2  
PUNTOS POL-BMS "Canal Unidod Norte"

No	NORTE	ESTE	COTA	OBS.
9	8077803.369	799721.460	2585.860	BM02N
10	8077961.307	799268.932	2585.298	BM03N
29	8077786.870	799792.624	2585.858	BM-74/14C
33	8077785.437	799768.148	2586.735	CALD3
34	8077818.566	799580.560	2584.784	CALD4
35	8077974.439	799220.693	2585.231	CALD5
90	8077762.347	799854.208	2584.905	CA8
91	8077784.139	799899.081	2586.055	CA9
92	8077912.868	799359.733	2585.030	CA10
93	8077861.337	799480.035	2585.022	CA11



**REFERENCIAS**

GPS01 ▲ Puntos GPS Red Principal (GPS Geodesico)  
 GPS01 △ Puntos poligonal-auxiliar lev. topografico  
 BM ● BMs. Bancos de Nivel

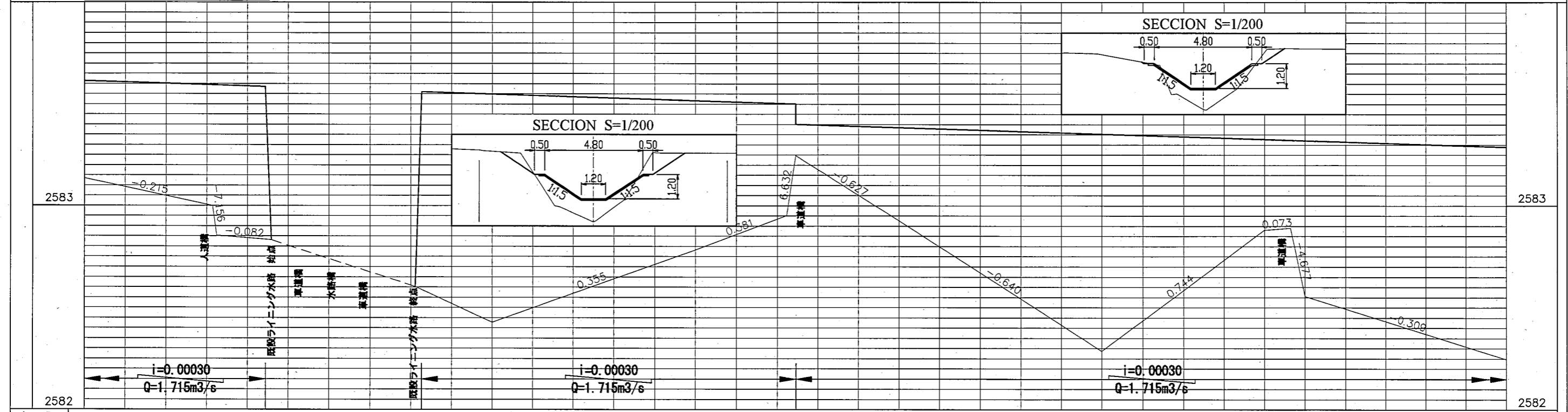
77720000  
4410000  
Cuadrícula y coordenadas (WGS-84)

Curvas de nivel principales  
acotadas cada 5.0 mts.  
intermedias cada 1 m.

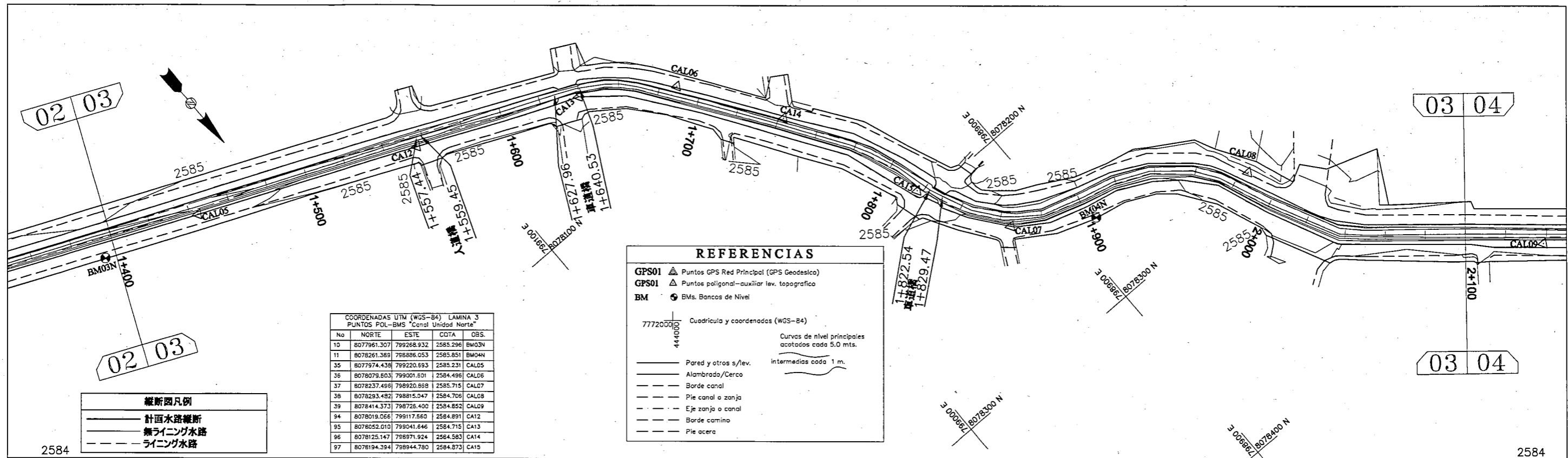
— Pared y otros s/lev.  
 — Alameda/Cerco  
 — Borde canal  
 - - - Pie canal o zanja  
 - - - Eje zanja o canal  
 - - - Borde camino  
 - - - Pie acera

**縦断面凡例**

— 計画水路縦断  
 - - - 無ライニング水路  
 - - - ライニング水路



勾配	計画高	基準高	追加距離
	2583.614	2583.134	0+700
	2583.584	2582.889	0+762.89
	2583.584	2582.853	0+764.93
	2583.584	2582.831	0+791.82
	2583.584	2582.804	0+800
	2583.584	2582.801	0+801.08
	2583.584	2582.757	0+814.55
	2583.584	2582.732	0+826.07
	2583.584	2582.695	0+833.75
	2583.584	2582.655	0+845.92
	2583.584	2582.602	0+862.28
	2583.584	2582.427	0+865.28
	2583.584	2582.782	1+000
	2583.584	2582.952	1+044.68
	2583.584	2583.266	1+049.12
	2583.584	2583.700	1+100
	2583.584	2582.927	1+200
	2583.584	2582.287	1+200
	2583.584	2582.881	1+279.93
	2583.584	2582.890	1+292.85
	2583.584	2582.556	1+300
	2583.584	2582.247	1+400

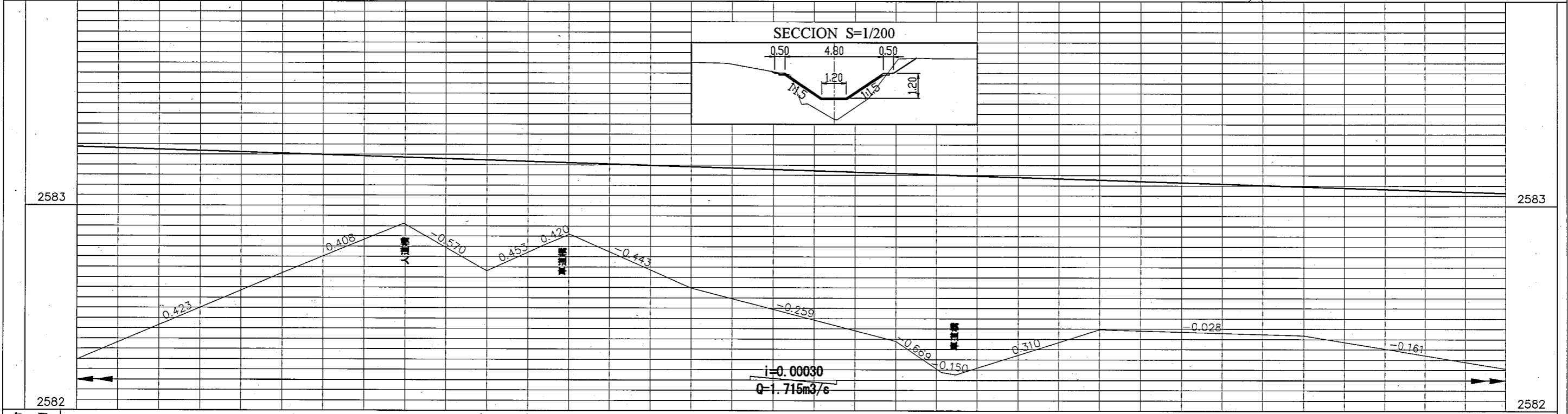
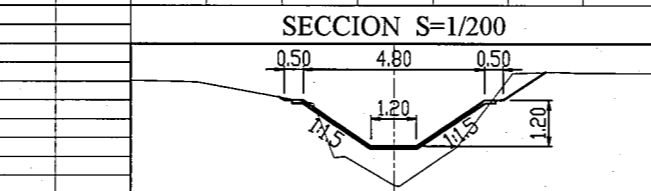


COORDENADAS UTM (WGS-84) LAMINA 3  
PUNTOS POL-BMS "Canal Unidad Norte"

No	NORTE	ESTE	COTA	OBS.
10	8077961.307	799268.932	2585.296	BM03N
11	8078261.388	798686.053	2585.851	BM04N
35	8077974.438	799220.693	2585.231	CAL05
36	8078079.603	799001.601	2584.496	CAL06
37	8078237.496	798920.668	2585.715	CAL07
38	8078293.482	798815.047	2584.706	CAL08
39	8078414.373	798725.400	2584.852	CAL09
94	8078019.066	799117.560	2584.891	CA12
95	8078052.010	799041.646	2584.715	CA13
96	8078125.147	798971.924	2584.583	CA14
97	8078194.394	798944.780	2584.873	CA15

縦断面凡例

- 計画水路縦断
- 無ライング水路
- ライング水路



勾配	計画高	地盤高	追加距離
	2583.288	2582.247	1+400
	2583.256	2582.670	1+500
	2583.237	2582.913	1+559.45
	2583.224	2582.681	1+600
	2583.215	2582.808	1+627.96
	2583.211	2582.861	1+640.53
	2583.192	2582.597	1+700
	2583.160	2582.339	1+800
	2583.153	2582.188	1+822.53
	2583.150	2582.178	1+829.47
	2583.128	2582.396	1+900
	2583.096	2582.368	2+000
	2583.064	2582.207	2+100

COORDENADAS UTM (WGS-84) LAMINA 4  
PUNTOS POL-BMS "Canal Unidad Norte"

No	NORTE	ESTE	COTA	OBS.
12	8078576.224	798528.467	2584.720	BM5N
39	8078414.373	798726.400	2584.852	CAL09
40	8078584.474	798513.546	2584.713	CAL10
98	8078457.715	798676.450	2584.580	CA18
99	8078528.273	798595.680	2584.860	CA17
100	8078500.058	798467.782	2584.708	CA16
101	8078636.643	798390.941	2584.464	CA19
102	8078667.872	798321.903	2584.754	CA20
103	8078720.576	798207.621	2584.701	CA21

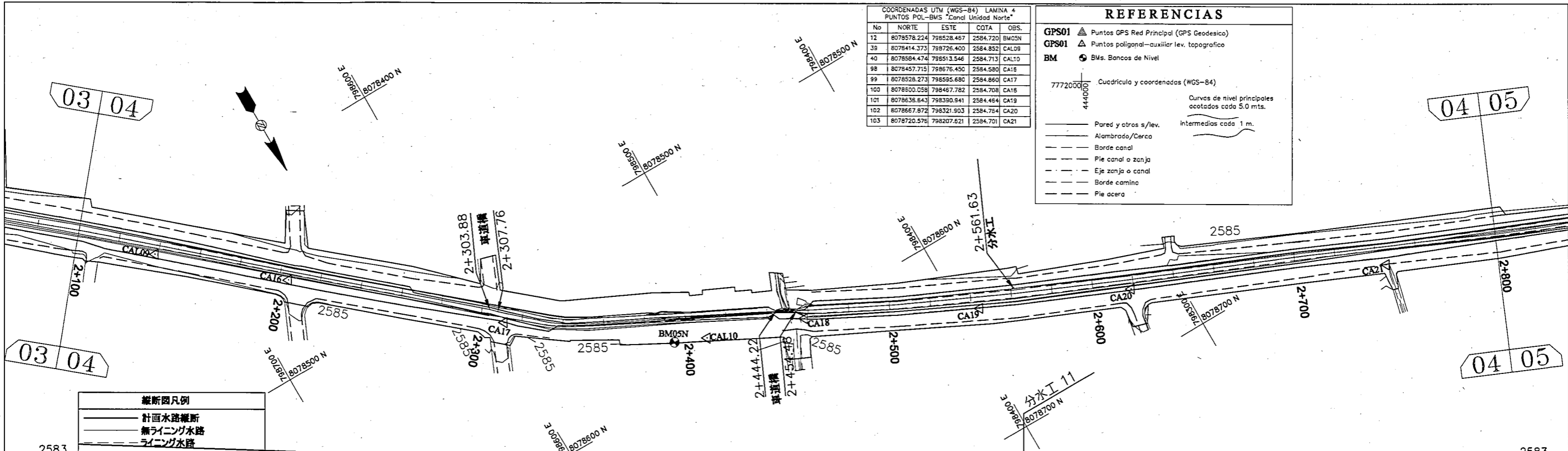
**REFERENCIAS**

GPS01 ▲ Puntos GPS Red Principal (GPS Geodesico)  
GPS01 ▲ Puntos poligonal-auxiliar lev. topografico  
BM ● BMs. Bancos de Nivel

77720000  
444000  
Cusdricula y coordenadas (WGS-84)

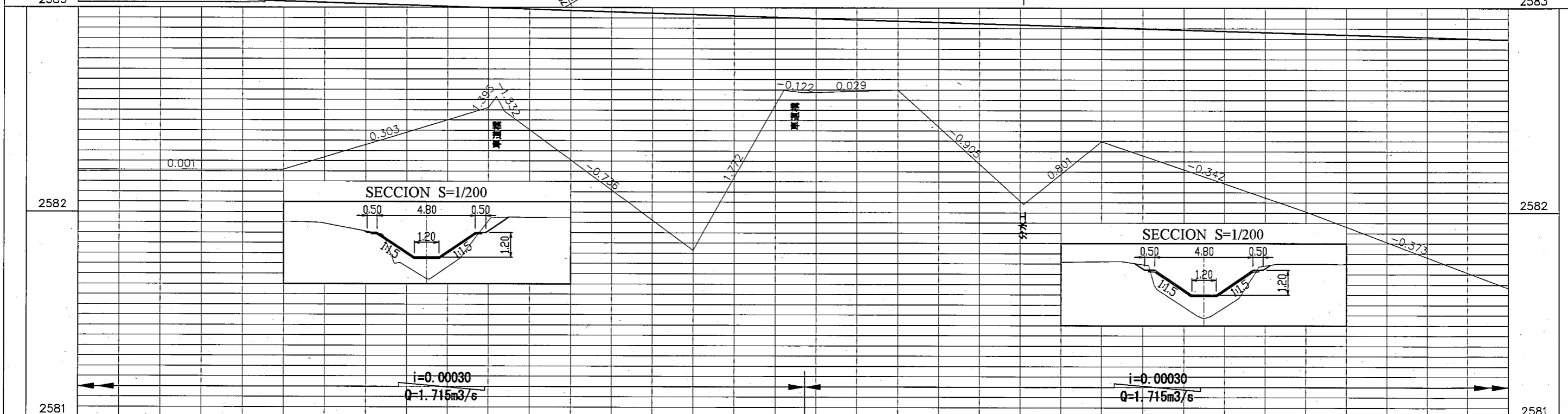
Curvas de nivel principales  
ocotados cada 5.0 mts.  
intermedias cada 1 m.

— Pared y otros s/lev.  
— Alambrado/Cerca  
— Borde canal  
— Pie canal o zanja  
— Eje zanja o canal  
— Borde camino  
— Pie acera

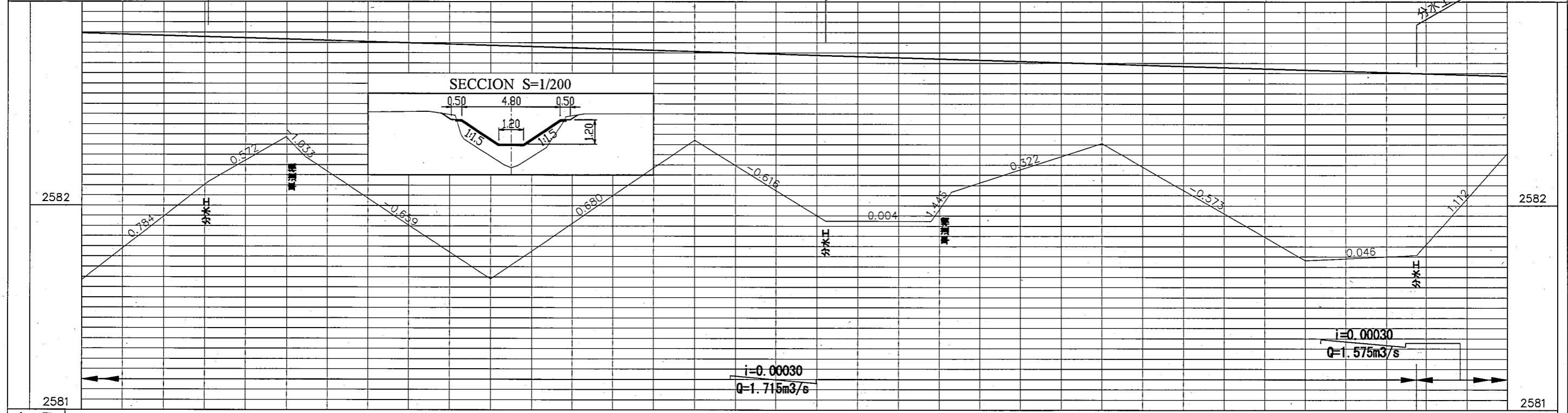
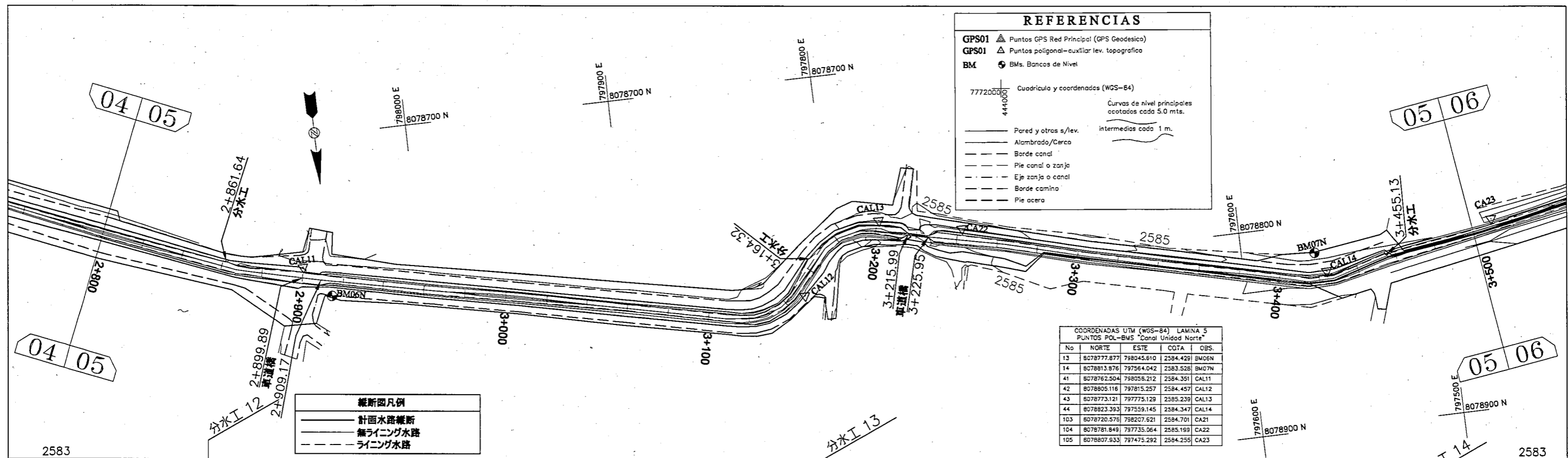


**縦断面凡例**

— 計画水路縦断  
— 無ライニング水路  
— ライニング水路



勾配	計画高	地盤高	追加距離
	2583.064	2582.207	2+100
	2583.032	2582.208	2+200
	2583.000 2582.998 2582.996 2582.994	2582.511 2582.509 2582.505 2582.494	2+300 2+303.88 2+307.76
	2582.968	2581.815	2+400
	2582.954 2582.950	2582.599 2582.586	2+444.22 2+454.48
	2582.936	2582.599	2+500
	2582.918	2582.042	2+561.63
	2582.906	2582.349	2+600
	2582.876	2582.007	2+700
	2582.846	2581.634	2+800



勾配	計画高	地盤高	追加距離
	2582.846	2581.634	2+800
	2582.828	2582.117	2+861.64
	2582.816	2582.336	2+900
	2582.814	2582.240	2+909.17
	2582.786	2581.641	3+000
	2582.756	2582.321	3+100
	2582.737	2581.925	3+164.32
	2582.726	2581.924	3+200
	2582.722	2581.923	3+215.99
	2582.719	2582.067	3+225.95
	2582.696	2582.306	3+300
	2582.666	2581.732	3+400
	2582.650	2581.758	3+455.13
	2582.636	2582.257	3+500

No	NORTE	ESTE	CGTA	CBS.
3	8078880.930	797068.978	2584.431	GPS03N
4	8078852.994	796982.325	2585.007	GPS04N
15	8078866.692	797051.948	2584.228	BM08N
27	8078883.218	797058.676	2584.512	BM10ANT
45	8078785.349	797322.513	2584.696	CAL15
46	8078795.816	797260.497	2587.200	CAL16
47	8078894.826	797120.056	2584.286	CAL17
58	8078879.234	797061.248	2584.667	CNO1J
59	8078846.745	796854.850	2584.316	CNO2J
60	8078825.615	796755.335	2584.091	CNO3J
105	8078807.933	797475.292	2584.255	CA23
106	8078759.177	797385.926	2584.577	CA24
119	8078846.021	796899.197	2584.131	NO1J

**REFERENCIAS**

GPS01 Puntos GPS Red Principal (GPS Geodesico)  
 GPS01 Puntos poligonal-auxiliar lev. topografico  
 BM B.Ms. Bancos de Nivel

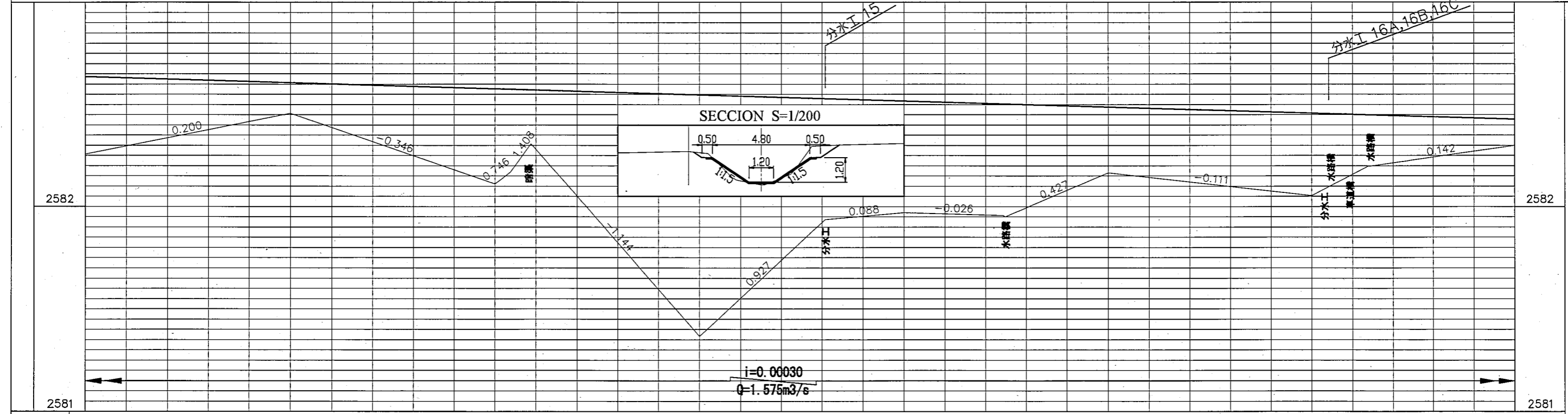
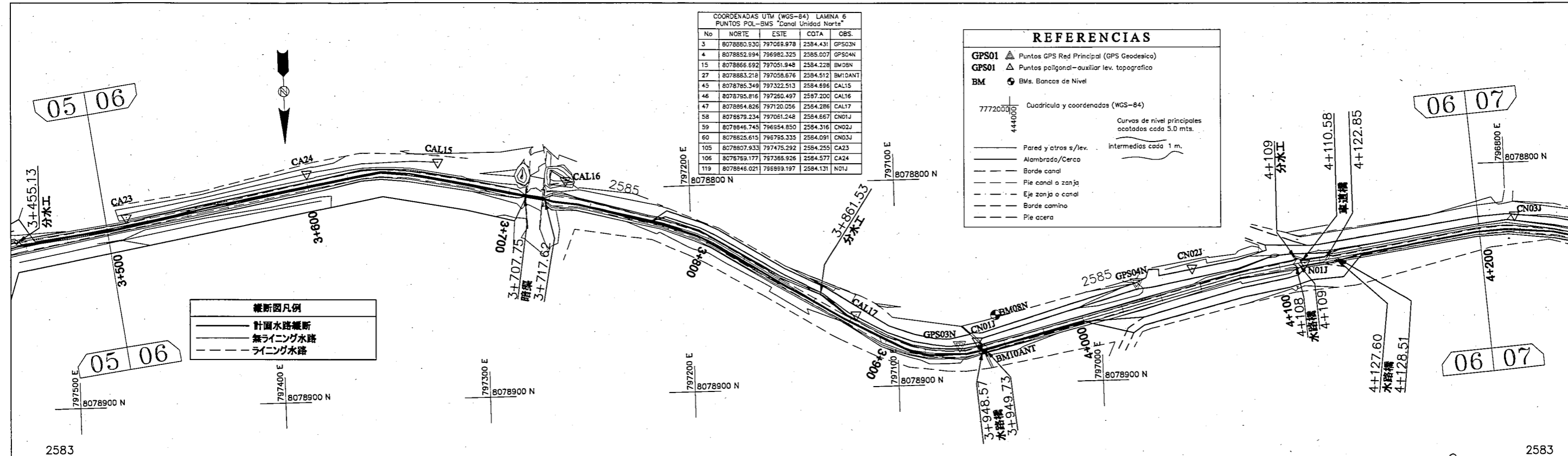
77720000  
444000  
Cuadrícula y coordenadas (WGS-84)

Curvas de nivel principales acotadas cada 5.0 mts.  
Intermedias cada 1 m.

— Pared y otros s/lev.  
 — Alambrado/Cerca  
 - - - Borde canal  
 - - - Pie canal o zanja  
 - - - Eje zanja o canal  
 - - - Borde camino  
 - - - Pie acera

**縦断面凡例**

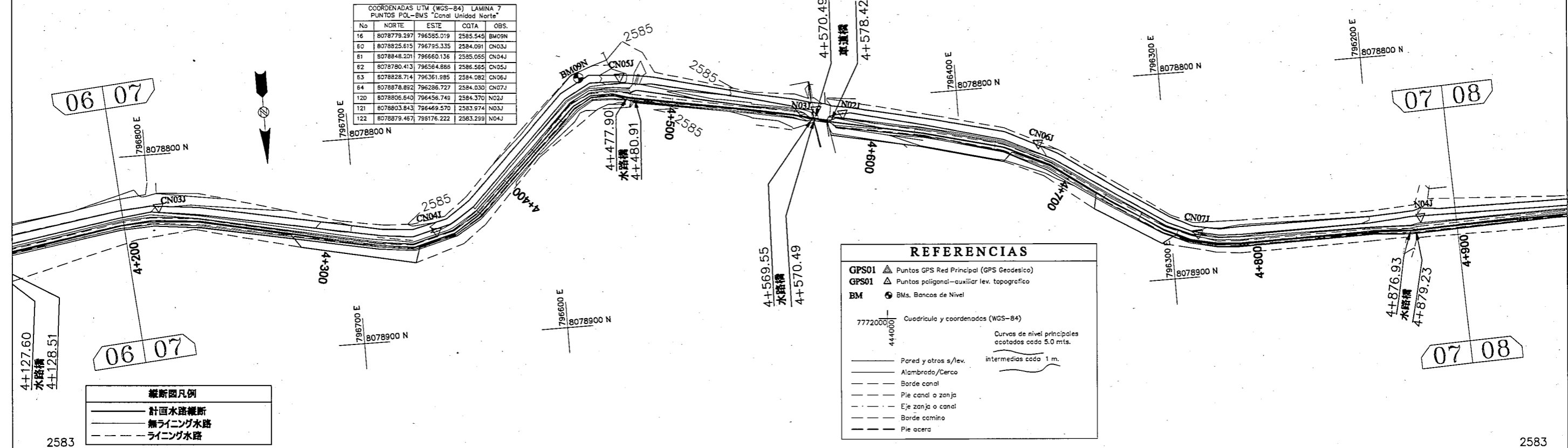
— 計画水路縦断面  
 - - - 無ライニング水路  
 - - - ライニング水路



勾配	計画高	地盤高	追加距離
	2582.636	2582.257	3+500
	2582.606	2582.457	3+600
	2582.576	2582.111	3+700
	2582.574	2582.169	3+707.75
	2582.571	2582.308	3+717.62
	2582.546	2581.366	3+800
	2582.528	2581.936	3+861.53
	2582.516	2581.970	3+900
	2582.502	2581.957	3+948.57
	2582.501	2581.950	3+949.73
	2582.486	2582.165	4+000
	2582.456	2582.054	4+100
	2582.453	2582.198	4+128.51
	2582.431	2582.299	4+200

COORDENADAS UTM (WGS-84) LAMINA 7  
PUNTOS POL-BMS "Canal Unidad Norte"

No	NORTE	ESTE	CGTA	OBS.
16	8078779.297	796585.019	2585.545	BM09N
60	8078825.615	796795.335	2584.091	CN03J
61	8078848.201	796660.136	2585.055	CN04J
62	8078780.413	796564.866	2586.565	CN05J
63	8078828.714	796361.985	2584.082	CN06J
64	8078878.892	796286.727	2584.030	CN07J
120	8078806.640	796456.749	2584.370	N02J
121	8078803.843	796469.570	2583.974	N03J
122	8078879.457	796176.222	2583.299	N04J



縦断面凡例

- 計画水路縦断
- 無ライン水路
- ライン水路

**REFERENCIAS**

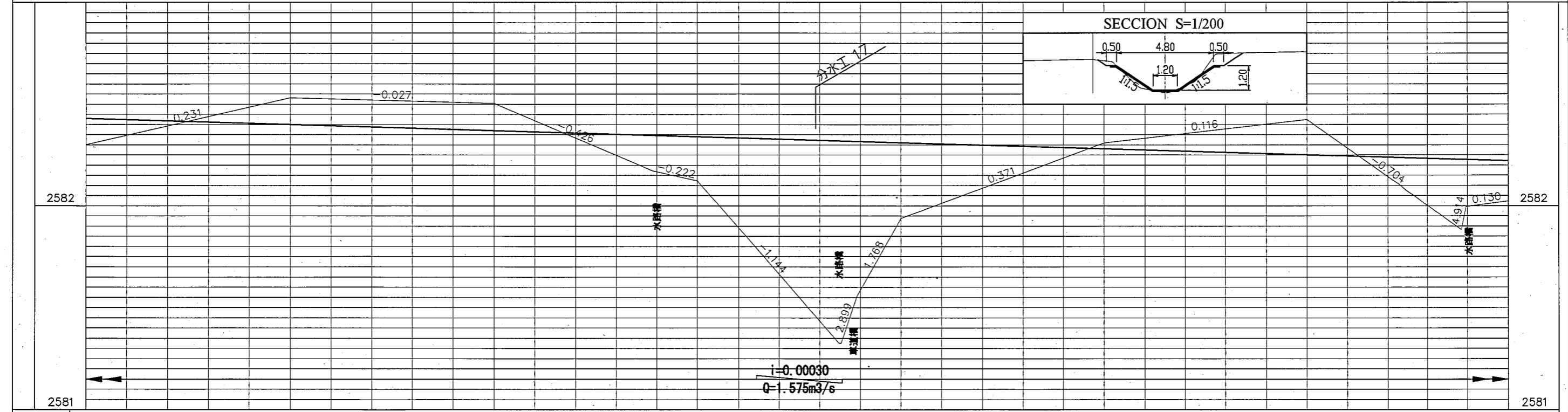
GPS01 ▲ Puntos GPS Red Principal (GPS Geodesico)  
 GPS01 ▲ Puntos poligonal-auxiliar lev. topografico  
 BM ● BMs. Bancos de Nivel

77720000  
440000

Cuadrícula y coordenadas (WGS-84)

Curvas de nivel principales  
cotados cada 5.0 mts.  
intermedias cada 1 m.

- Pared y otros s/lev.
- Alambrado/Cerco
- Borde canal
- Pie canal o zanja
- Eje zanja o canal
- Borde camino
- Pie acera

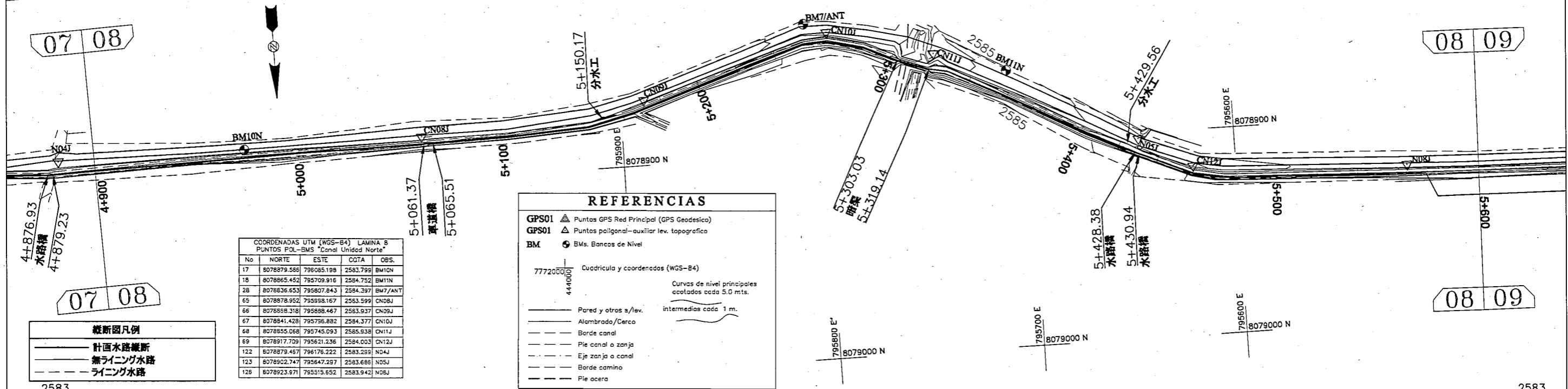


勾配	計画高	地盤高	追加距離
	2582.431	2582.299	4+200
	2582.401	2582.530	4+300
	2582.371	2582.503	4+400
	2582.348	2582.171	4+477.90
	2582.341	2582.122	4+500
	2582.321	2581.376	4+569.55
	2582.320	2581.326	4+570.49
	2582.318	2581.356	4+578.42
	2582.311	2581.937	4+600
	2582.281	2582.309	4+700
	2582.251	2582.424	4+800
	2582.228	2581.883	4+876.93
	2582.228	2581.996	4+879.23
	2582.221	2582.023	4+900

078800 N

07 08

08 09



COORDENADAS UTM (WGS-84) LAMINA 8  
PUNTOS POL-BMS "Canal Unidad Norte"

No	NORTE	ESTE	COTA	OBS.
17	8078879.586	796085.198	2583.799	BM10N
18	8078865.452	795709.916	2584.752	BM11N
28	8078836.653	795807.843	2584.397	BM7/ANT
65	8078878.952	795998.167	2583.599	CN08J
66	8078858.318	795888.467	2583.937	CN09J
67	8078841.428	795796.882	2584.377	CN10J
68	8078855.068	795745.093	2585.938	CN11J
69	8078917.709	795621.236	2584.003	CN12J
122	8078879.487	796176.222	2583.289	ND4J
123	8078902.747	795647.297	2583.686	N05J
126	8078923.971	795515.652	2583.942	N06J

**REFERENCIAS**

GPS01 ▲ Puntos GPS Red Principal (GPS Geodesico)  
GPS01 ▲ Puntos poligonal-auxiliar lev. topografico  
BM ● Bms. Bancos de Nivel

77720000 Cuadrícula y coordenadas (WGS-84)  
4440000

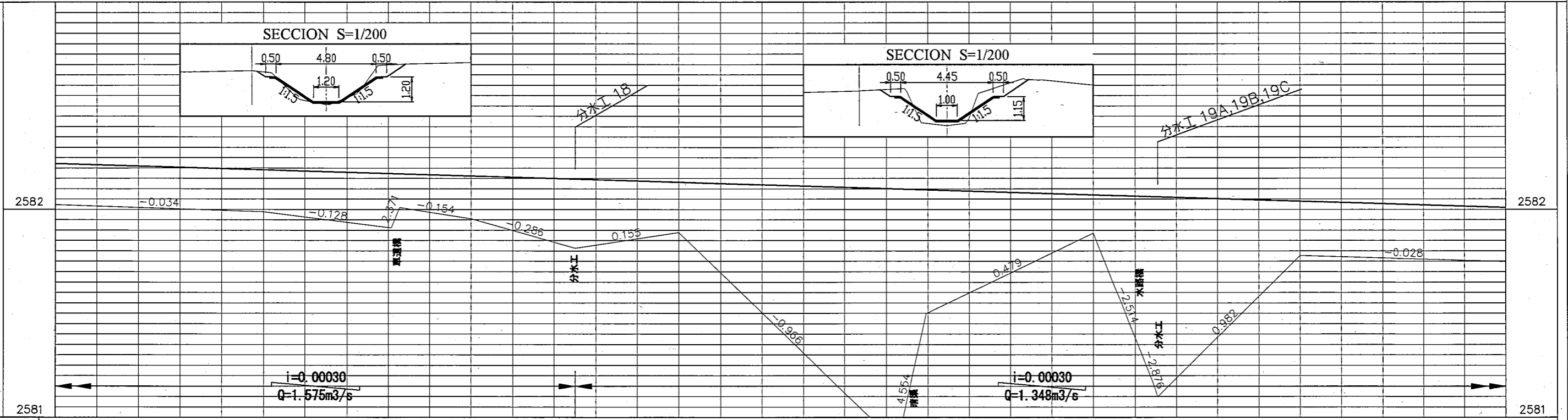
Curvas de nivel principales acotados cada 5.0 mts.  
intermedias cada 1 m.

— Pared y otros s/lev.  
— Alambrado/Cerco  
— Borde canal  
— Pie canal o zanja  
— Eje zanja o canal  
— Borde camino  
— Pie acera

**断面図凡例**

— 計画水路縦断  
— 無ライング水路  
— ライング水路

2583

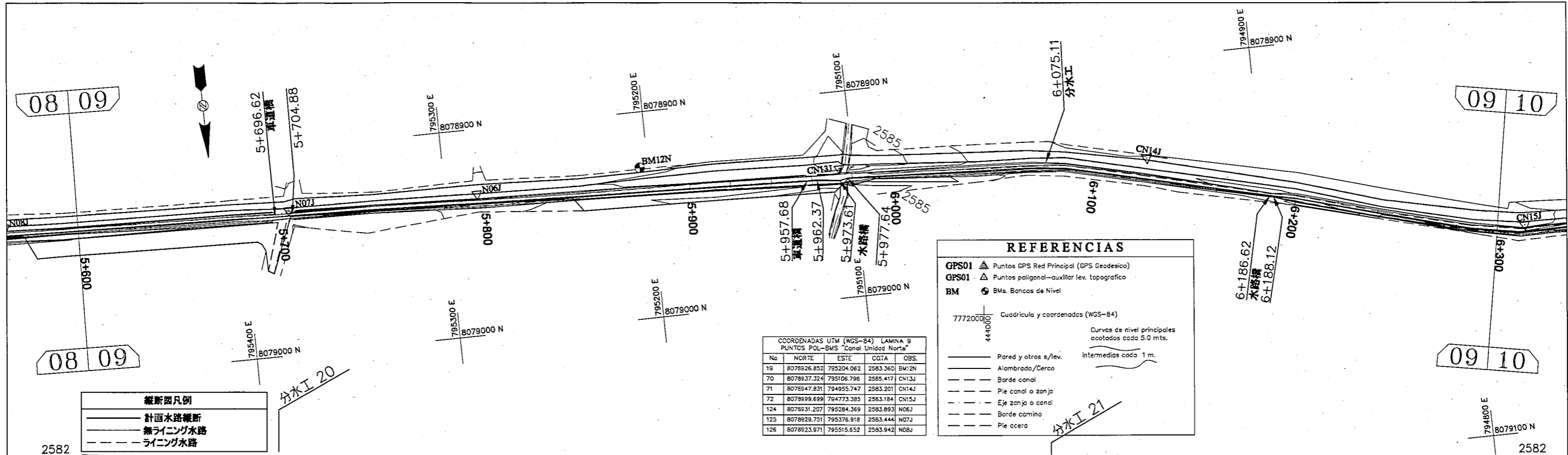


2581

勾配	計画高	地盤高	追加距離
	2582.221	2582.023	4+900
	2582.191	2581.989	5+000
	2582.172	2581.911	5+061.37
	2582.161	2582.009	5+065.51
	2582.146	2581.956	5+100
	2582.131	2581.813	5+150.17
	2582.101	2581.890	5+200
	2582.096	2580.924	5+300
	2582.071	2580.765	5+303.03
	2582.063	2581.499	5+319.14
	2582.042	2581.886	5+400
	2582.012	2581.173	5+428.38
	2582.012	2581.099	5+430.94
	2582.042	2581.777	5+500
	2582.012	2581.749	5+600

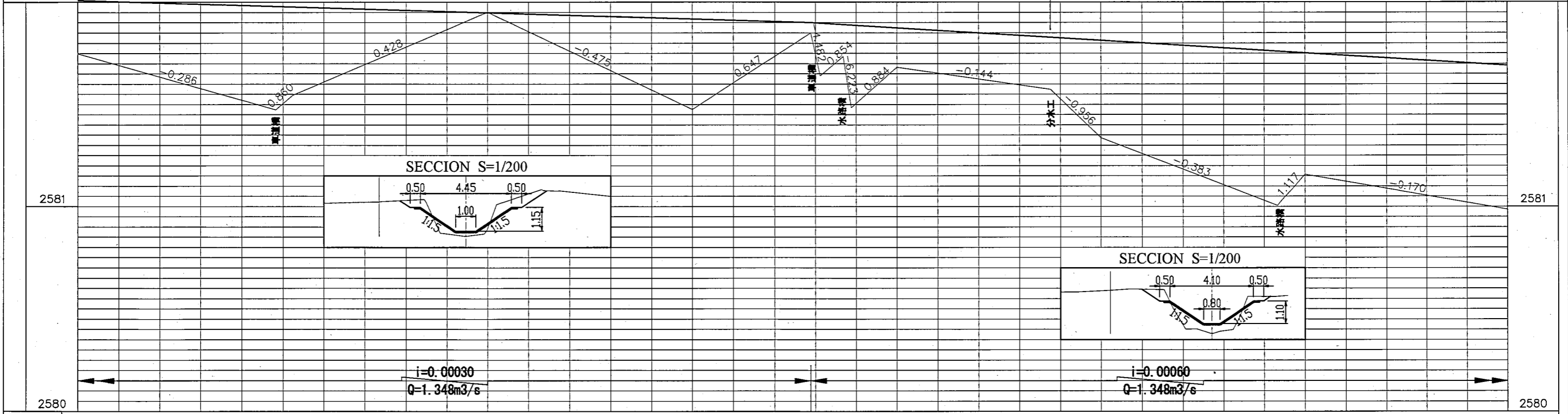
<p>REPÚBLICA DE BOLIVIA ASOCIACION DE REGANTES COCHABAMBA - BOLIVIA</p>	<p>TAIYO CONSULTANTS CO., LTD.</p>	<p>ボリビア国コチャバンバ県 灌漑施設改修計画</p>	<p>北幹線水路</p>	<p>承認</p>	<p>点検</p>	<p>LIC. OSCAR DE LA CRUZ R. ING. CRISTOBAL ESPINOZA C.</p>	<p>作図</p>	<p>北幹線水路 平面縦断図</p>	
								<p>縮尺 H= 1/2000 V= 1/20</p>	<p>図面番号 2 (8/14)</p>



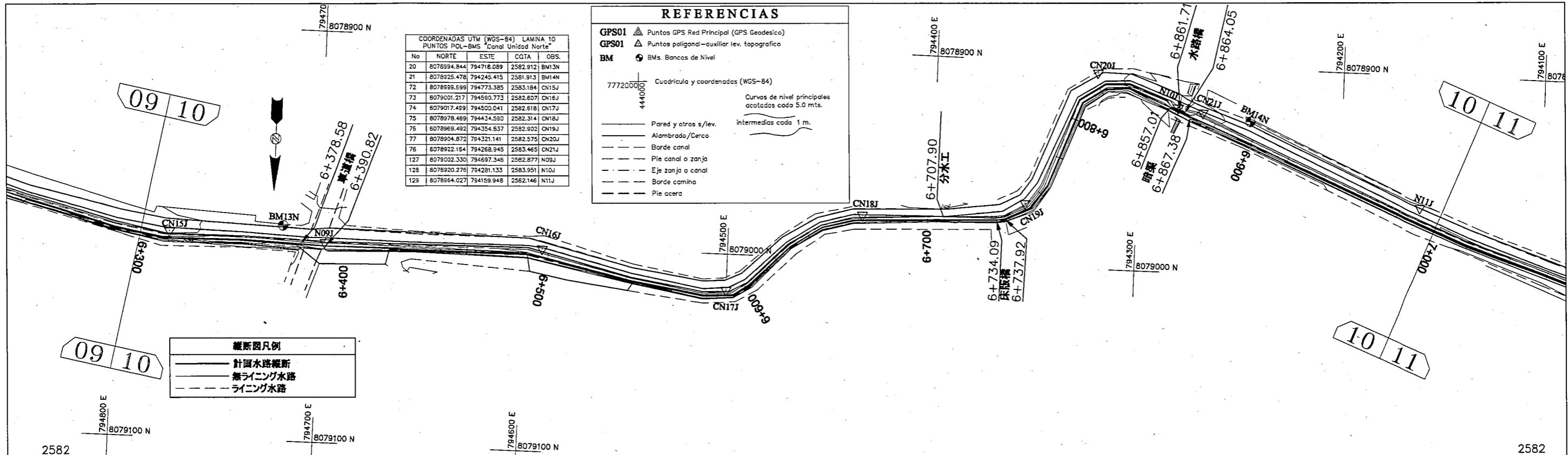


**縦断面凡例**

- 計画水路縦断
- - - 無ラインング水路
- - - ラインング水路



勾配	計画高	地盤高	追加距離
	2582.012	2581.749	5+600
	2581.983 2581.982 2581.982 2581.980	2581.473 2581.502 2581.544 2581.544	5+696.62 5+700 5+704.88 5+704.88
	2581.952	2581.951	5+800
	2581.922	2581.476	5+900
	2581.900 2581.897 2581.890 2581.888	2581.849 2581.639 2581.735 2581.484	5+957.68 5+962.37 5+973.61 5+977.64
	2581.874	2581.662	6+000
	2581.828	2581.574	6+075.11
	2581.813	2581.336	6+100
	2581.760 2581.759	2581.004 2581.024	6+186.62 6+188.12
	2581.752	2581.157	6+200
	2581.691 2581.491	2580.986	6+300



**REFERENCIAS**

GPS01 ▲ Puntos GPS Red Principal (GPS Geodesico)  
 GPS01 ▲ Puntos poligonal-auxiliar lev. topografico  
 BM ● BMs. Bancos de Nivel

7772000  
444000

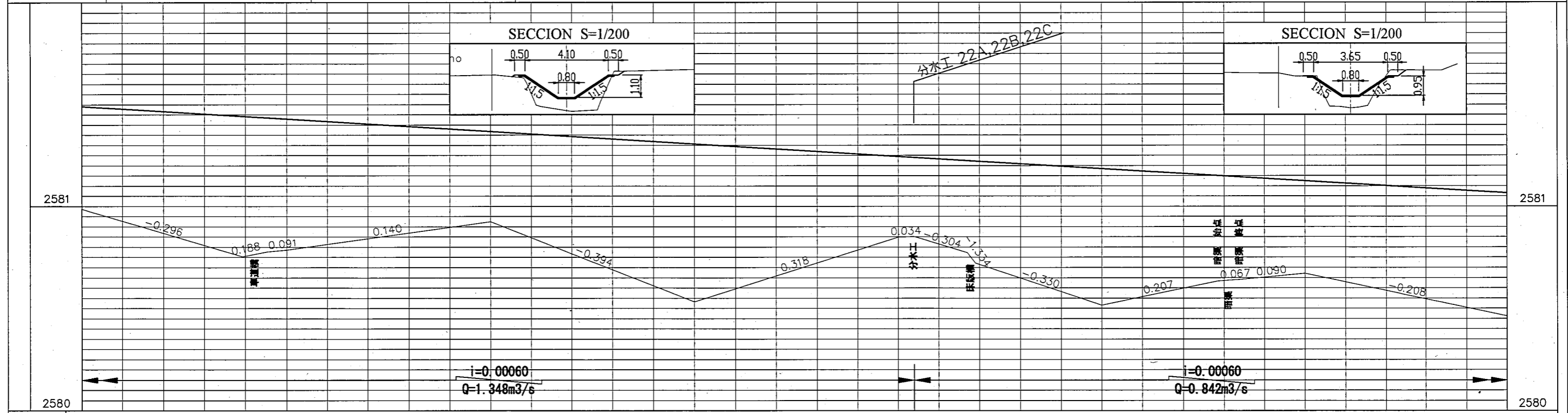
Cuadrícula y coordenadas (WGS-84)  
Curvas de nivel principales acotadas cada 5.0 mts.  
intermedias cada 1 m.

— Pared y otros s/lev.  
 — Alambrada/Cerco  
 - - - Borde canal  
 - - - Pie canal o zanja  
 - - - Eje zanja o canal  
 - - - Borde camino  
 - - - Pie acera

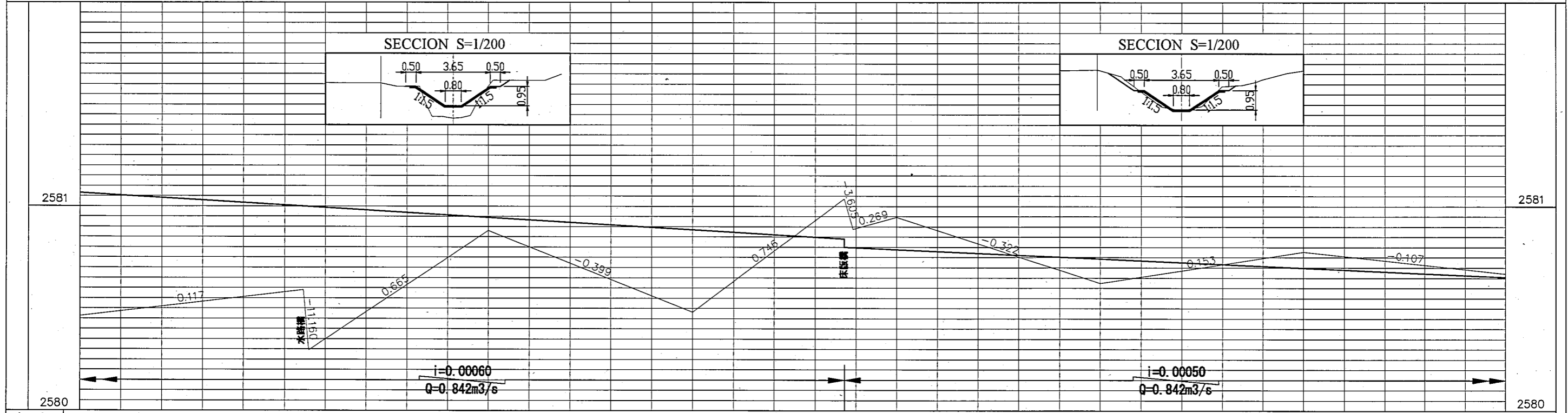
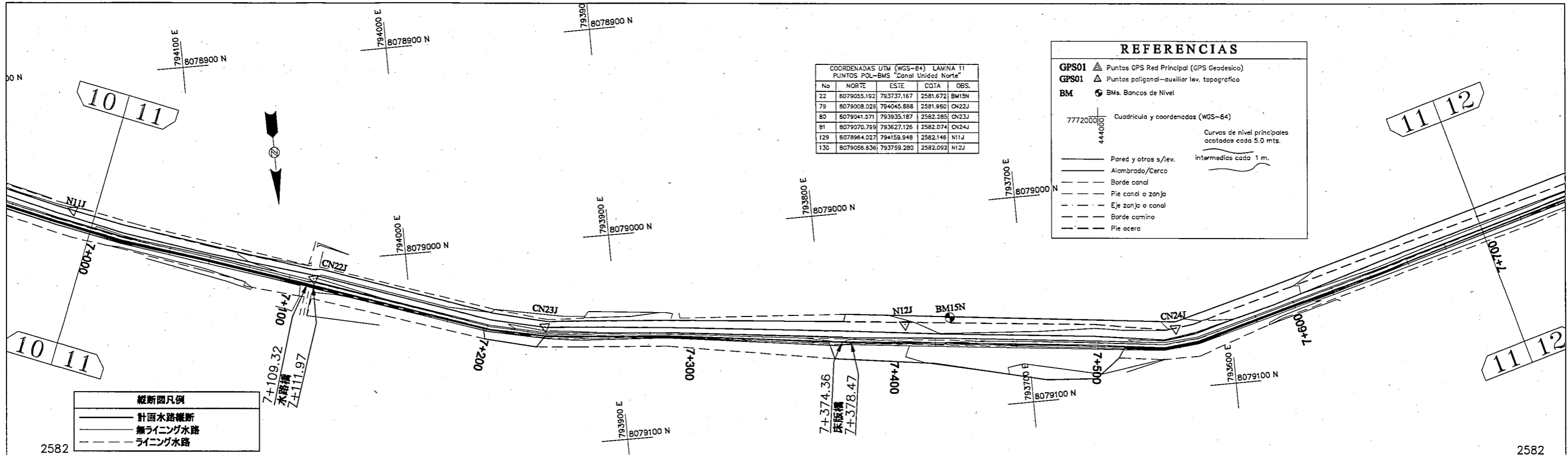
No	NORTE	ESTE	CGTA	OBS.
20	8078994.844	794718.089	2582.812	BM13N
21	8078925.478	794245.415	2581.913	BM14N
72	8078999.699	794773.385	2583.184	CN15J
73	8079001.217	794590.773	2582.607	CN16J
74	8079017.499	794500.041	2582.618	CN17J
75	8078978.469	794434.590	2582.314	CN18J
76	8078969.492	794354.637	2582.602	CN19J
77	8078904.872	794321.141	2582.575	CN20J
78	8078922.184	794268.945	2583.465	CN21J
127	8079002.330	794697.346	2582.677	N09J
128	8078920.276	794281.133	2583.951	N10J
129	8078964.027	794159.948	2582.146	N11J

**断面図凡例**

— 計画水路縦断  
 - - - 無ライニング水路  
 - - - ライニング水路

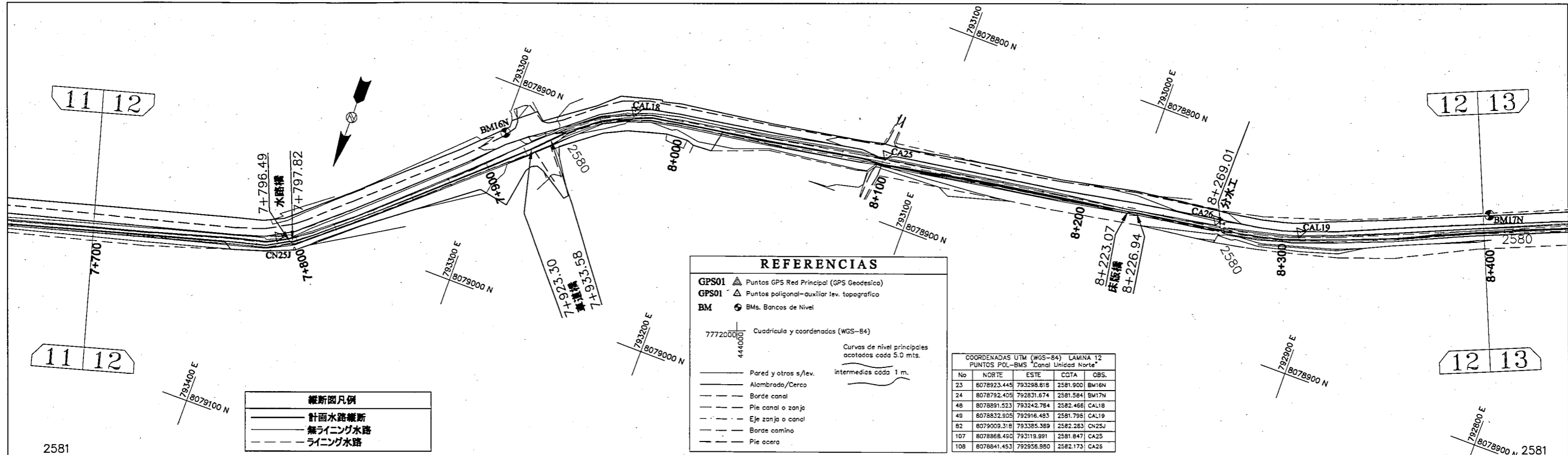


勾配	2581		2580	
計画高	2581.691 2581.491	2581.443 2581.436 2581.430	2581.369	2581.308
地盤高	2580.986	2580.754 2580.777 2580.785	2580.925	2580.531
追加距離	6+300	6+378.58 6+390.82 6+400	6+500	6+600
		6+700 6+707.90 6+734.09 6+737.92		6+800 6+857.01 6+861.71 6+867.38
				6+900
				7+000



勾配	計画高	基準高	追加距離
	7+000 2581.064	2580.463	7+000
	7+100 2581.003	2580.579	7+100
	7+109.32 2580.997	2580.590	7+109.32
	7+111.96 2580.996	2580.295	7+111.96
	7+200 2580.942	2580.881	7+200
	7+300 2580.881	2580.481	7+300
	7+374.36 2580.840	2581.036	7+374.36
	7+378.47 2580.800	2580.888	7+378.47
	7+400 2580.788	2580.946	7+400
	7+500 2580.743	2580.624	7+500
	7+600 2580.698	2580.777	7+600
	7+700 2580.653	2580.670	7+700

REPÚBLICA DE BOLIVIA ASOCIACION DE REGANTES COCHABAMBA - BOLIVIA	TAIYO CONSULTANTS CO., LTD.	ポリビア国コチャバンバ県 灌漑施設改修計画	北幹線水路	LIC. OSCAR DE LA CRUZ R. ING. CRISTOBAL ESPINOZA C.	北幹線水路 平面縦断面図	
					承認	点検



**REFERENCIAS**

GPS01 ▲ Puntos GPS Red Principal (GPS Geodesico)  
 GPS01 △ Puntos poligonal-auxiliar lev. topografico  
 BM ● Bms. Bancos de Nivel

77720000  
444000

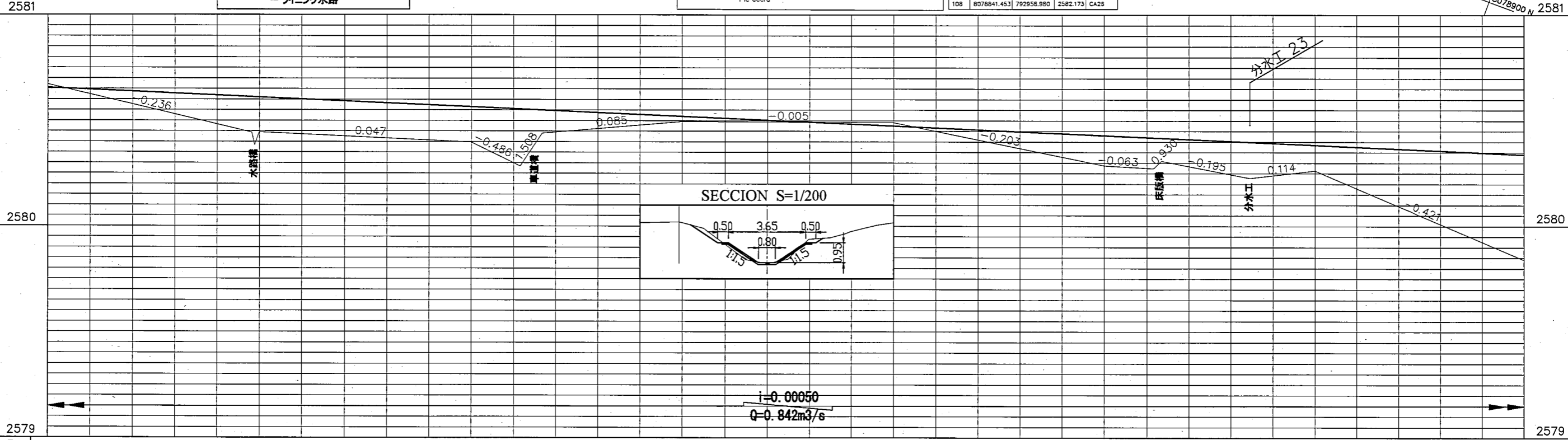
Cuadrícula y coordenadas (WGS-84)  
Curvas de nivel principales acotadas cada 5.0 mts. intermedias cada 1 m.

— Pared y otros s/lev.  
 --- Alombrado/Cerco  
 - - - Pie canal o zanja  
 - - - Eje zanja o canal  
 - - - Borde camino  
 - - - Pie acera

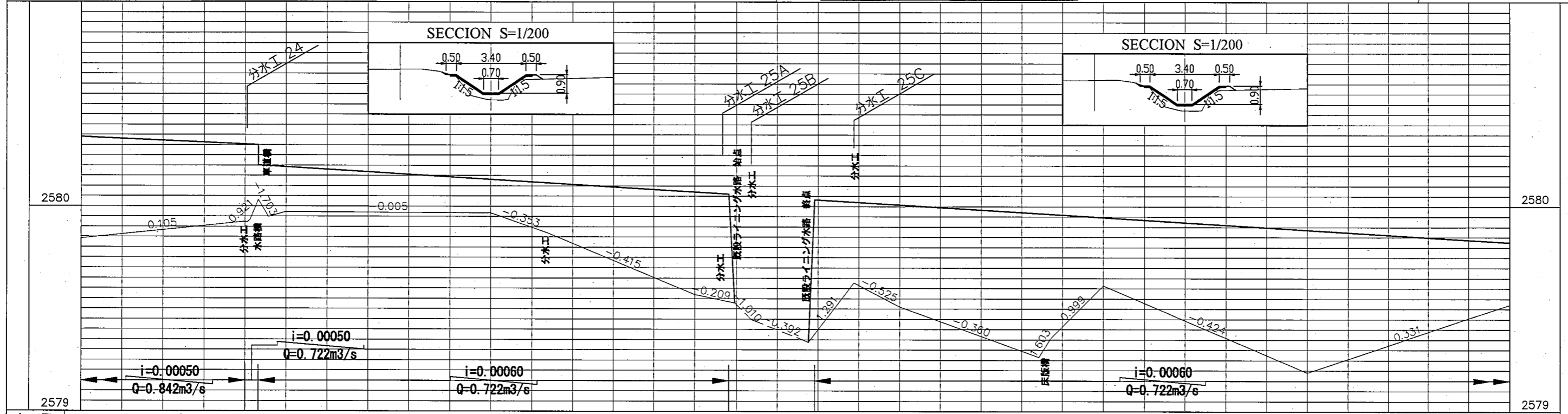
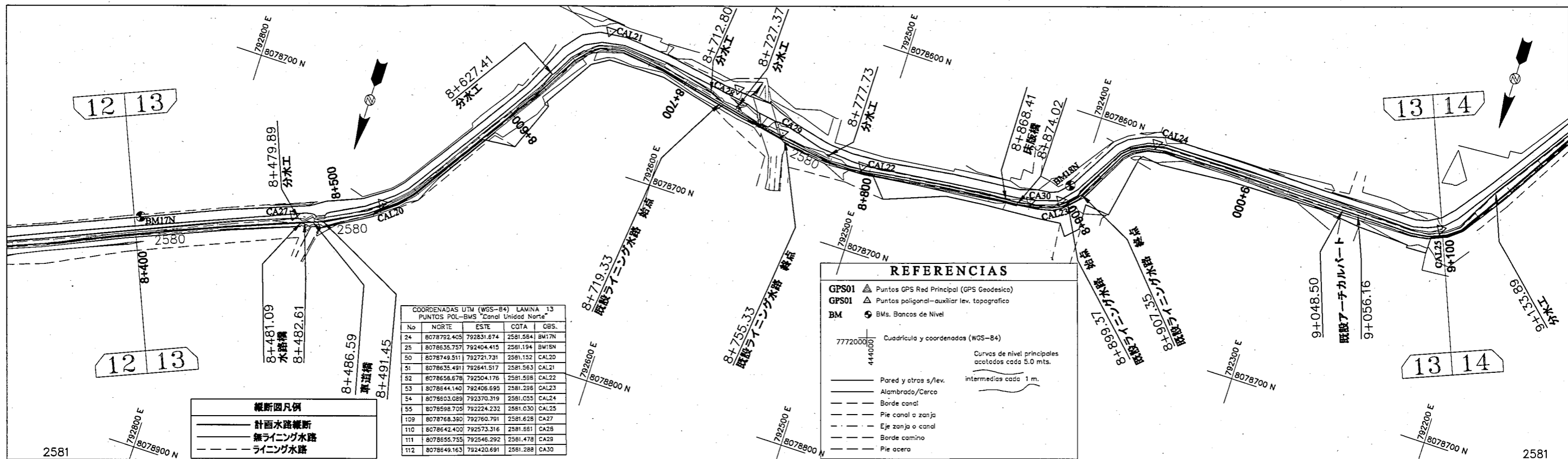
No	NORTE	ESTE	COTA	OBS.
23	6078923.445	793298.618	2581.900	BM16N
24	6078792.409	792831.674	2581.584	BM17N
48	6078891.523	793242.784	2582.466	CAL18
49	6078832.905	792916.483	2581.798	CAL19
82	6079009.318	793385.389	2582.283	CN25J
107	6078868.450	793119.991	2581.847	CA25
108	6078841.453	792956.980	2582.173	CA26

**縦断面凡例**

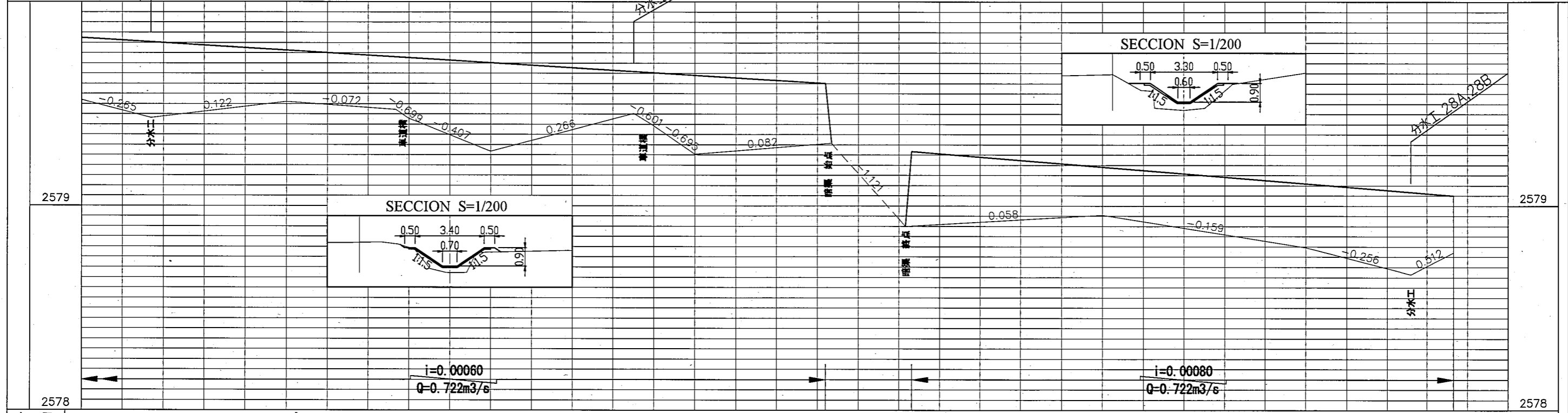
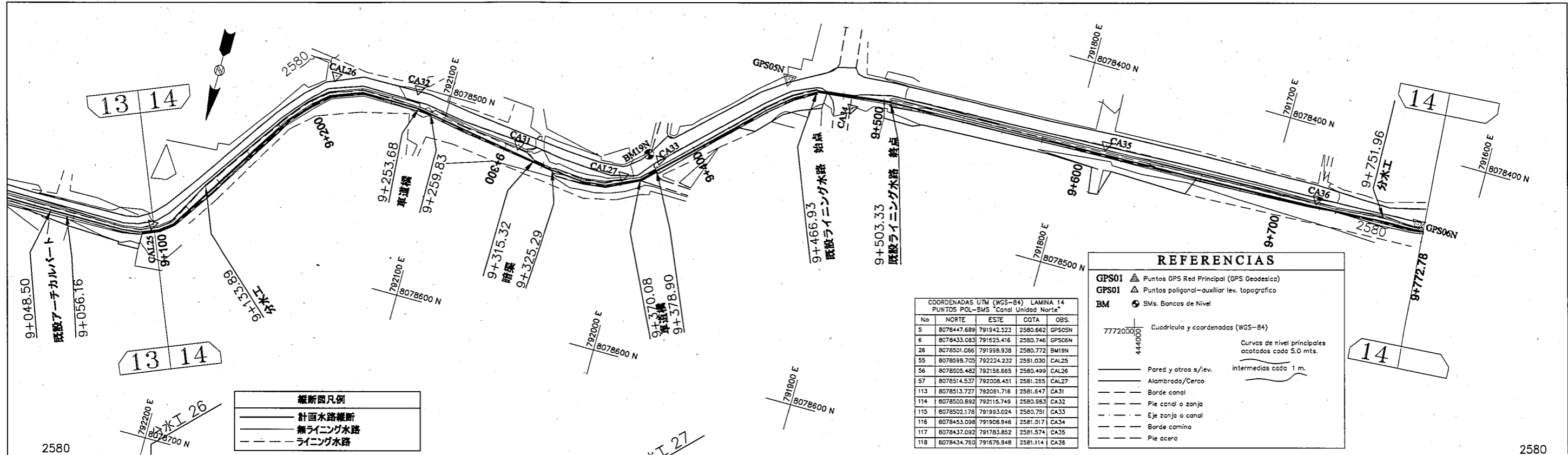
— 計画水路縦断  
 - - - 無ライニング水路  
 - - - ライニング水路



勾配	計画高	地盤高	追加距離
	2580.653	2580.670	7+700
	2580.610 2580.600 2580.588 2580.568	2580.442 2580.363 2580.444	7+796.49 7+797.82 7+800
	2580.563	2580.397	7+900
	2580.553 2580.548	2580.284 2580.439	7+923.30 7+933.58
	2580.518	2580.495	8+000
	2580.473	2580.491	8+100
	2580.428	2580.287	8+200
	2580.418 2580.416	2580.273 2580.309	8+223.07 8+226.94
	2580.397	2580.227	8+269.01
	2580.383	2580.262	8+300
	2580.338	2579.841	8+400



勾配	計画高	地盤高	追加距離
	2580.338	2579.841	8+400
	2580.303	2579.926	8+479.89
	2580.302	2579.921	8+481.09
	2580.301	2579.935	8+482.61
	2580.300	2580.031	8+486.59
	2580.299	2579.948	8+491.45
	2580.192	2579.973	8+500
	2580.131	2579.968	8+600
	2580.114	2579.871	8+627.41
	2580.070	2579.569	8+700
	2580.059	2579.529	8+716.33
	2580.059	2579.529	8+719.33
	2580.034	2579.448	8+727.37
	2580.034	2579.338	8+755.33
	2580.030	2579.627	8+758.33
	2580.017	2579.627	8+777.73
	2579.975	2579.613	8+800
	2579.971	2579.264	8+868.41
	2579.956	2579.354	8+874.02
	2579.895	2579.613	8+900
	2579.834	2579.190	9+000
	2579.834	2579.521	9+100



勾配	計画高	地盤高	追加距離
	2579.834	2579.521	9+100
	2579.813	2579.431	9+133.89
	2579.773	2579.511	9+200
	2579.740	2579.473	9+253.68
	2579.736	2579.430	9+259.83
	2579.712	2579.267	9+300
	2579.669	2579.453	9+370.08
	2579.663	2579.400	9+378.90
	2579.651	2579.253	9+400
	2579.602	2579.308	9+463.93
	2579.268	2578.937	9+500
		2578.900	9+503.33
			9+506.33
	2579.191	2578.956	9+600
	2579.109	2578.797	9+700
	2579.066	2578.664	9+751.96
	2579.050	2578.771	9+773

COORDENADAS UTM (WGS-84)  
PUNTOS POL-BMS "CANAL CENTRAL1"

No	NORTE	ESTE	COTA	OBS.
1	8069321.508	803311.141	2516.177	CR01J
2	8069402.666	803184.472	2516.126	CR02J
3	8069214.745	803414.921	2517.704	CR03J
4	8069518.717	803146.596	2515.723	CR04J
5	8089690.008	803102.982	2518.465	CR05J
6	8089576.440	802912.686	2513.641	CR06J
8	8069691.091	802828.256	2512.208	CR08J
23	8069343.225	803290.003	2516.483	GPSC1
24	8069432.008	803178.894	2515.950	GPSC2
29	8069321.103	803306.924	2516.053	BMCI
30	8069346.078	803308.314	2516.866	BMQM
31	8069661.508	803072.765	2514.970	BM1M
38	8069520.307	803148.759	2516.100	BM17ANT

**REFERENCIAS**

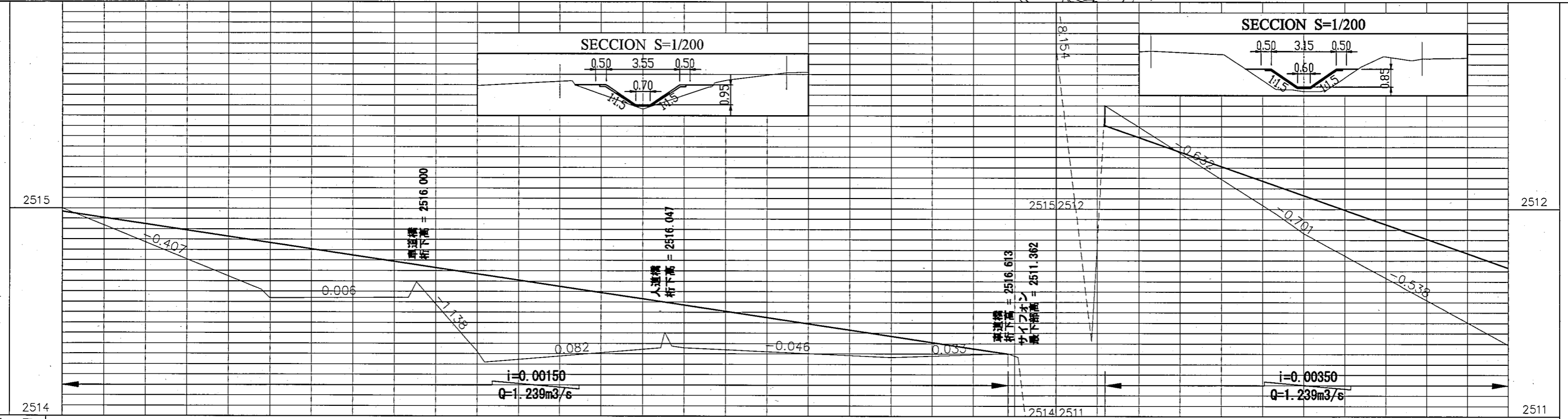
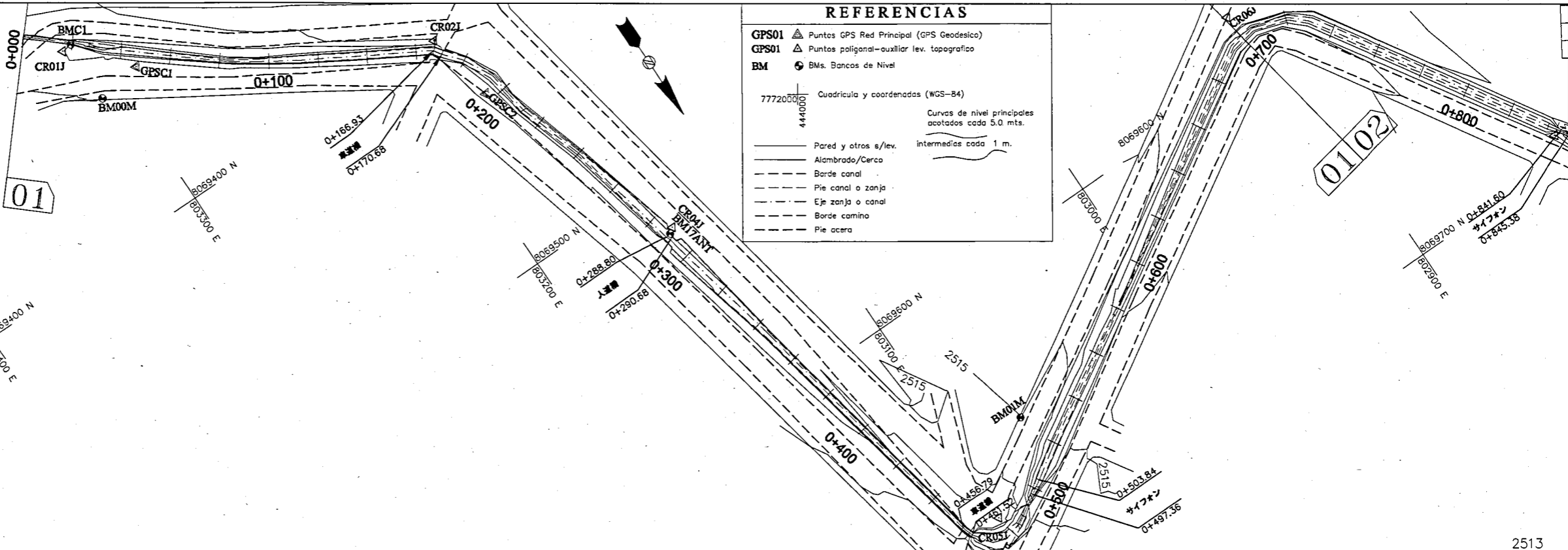
GPS01 Puntos GPS Red Principal (GPS Geodésico)  
GPS01 Puntos poligonal-auxiliar lev. topográfico  
BM BMs. Bancos de Nivel

7772000 444000 Cuadrícula y coordenadas (WGS-84)  
Curvas de nivel principales acotadas cada 5.0 mts. intermedias cada 1 m.

— Pared y otros s/lev.  
— Alameda/Cerco  
- - - Borde canal  
- - - Pie canal o zanja  
- - - Eje zanja o canal  
- - - Borde camino  
- - - Pie acera

**縦断図凡例**

— 計画水路縦断  
- - - 無ライング水路  
- - - ライング水路



勾配	計画高	地盤高	追加距離
	2514.985	2514.999	0+000
	2514.841	2514.609	0+095.84
	2514.835	2514.568	0+100
	2514.735	2514.572	0+166.93
	2514.729	2514.646	0+170.68
	2514.685	2514.312	0+200
	2514.680	2514.259	0+203.63
	2514.552	2514.329	0+288.80
	2514.549	2514.403	0+290.68
	2514.535	2514.329	0+300
	2514.385	2514.283	0+400
	2514.300	2514.301	0+456.79
	2514.300	2514.285	0+461.52
	2512.403	2511.362	0+497.36
	2512.066	2511.825	0+500
	2512.112	2512.500	0+503.84
	2512.066	2511.975	0+586.87
	2512.066	2511.883	0+600
	2511.716	2511.345	0+700

**REPÚBLICA DE BOLIVIA**  
 ASOCIACION DE REGANTES  
 COCHABAMBA - BOLIVIA

**TAIYO CONSULTANTS CO., LTD.**

**ボリビア国コチャバンバ県**  
**灌漑施設改修計画**

**中央幹線水路**  
**(MATRIZ 1)**

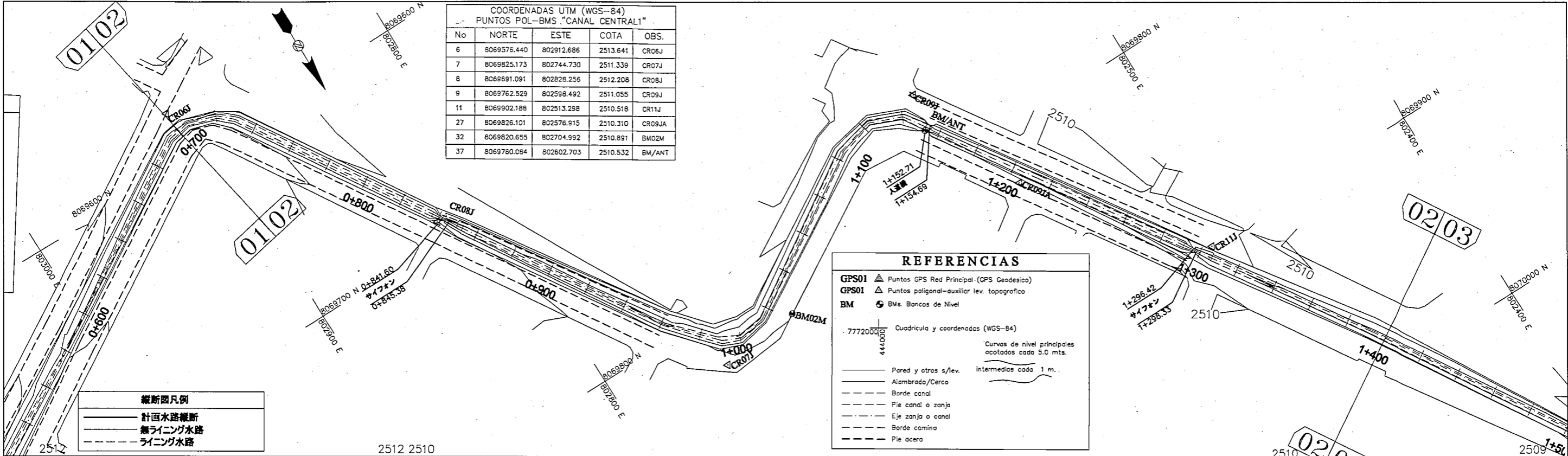
LIC. OSCAR DE LA CRUZ R. **中央幹線水路 (MATRIZ1) 平面縦断図**  
 ING. CRISTOBAL ESPINOZA C.

縮尺 H= 1/2000  
 V= 1/20  
 日付 2005年12月  
 図面番号 3 (1/5)

承認 点検 作図

COORDENADAS UTM (WGS-84)  
PUNTOS POL-BMS "CANAL CENTRAL1"

No	NORTE	ESTE	COTA	OBS.
6	8069576.440	802912.686	2513.641	CR06J
7	8069825.173	802744.730	2511.339	CR07J
8	8069891.091	802828.256	2512.208	CR08J
9	8069762.529	802598.492	2511.055	CR09J
11	8069902.188	802513.298	2510.518	CR11J
27	8069826.101	802576.915	2510.310	CR09JA
32	8069820.655	802704.992	2510.891	BM02M
37	8069780.084	802602.703	2510.532	BM/ANT



縦断面凡例

- 計画水路縦断
- 無ライニング水路
- ライニング水路

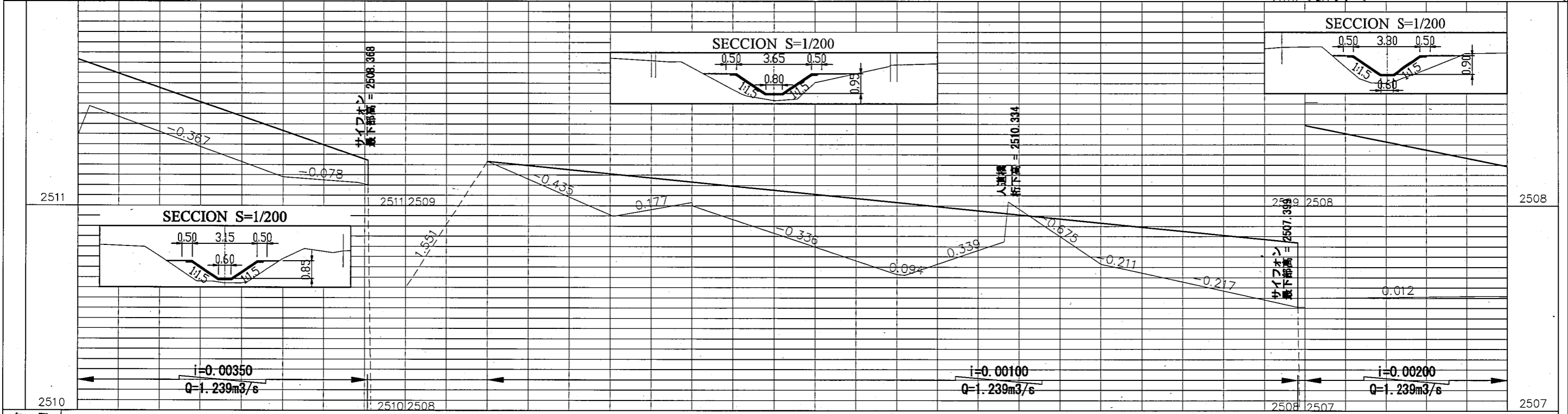
**REFERENCIAS**

- GPS01 ▲ Puntos GPS Red Principal (GPS Geodesico)
- GPS01 △ Puntos poligonal-auxiliar lev. topografico
- BM ● BMs. Bancos de Nivel

77720000 Cuadrícula y coordenadas (WGS-84)  
4440000

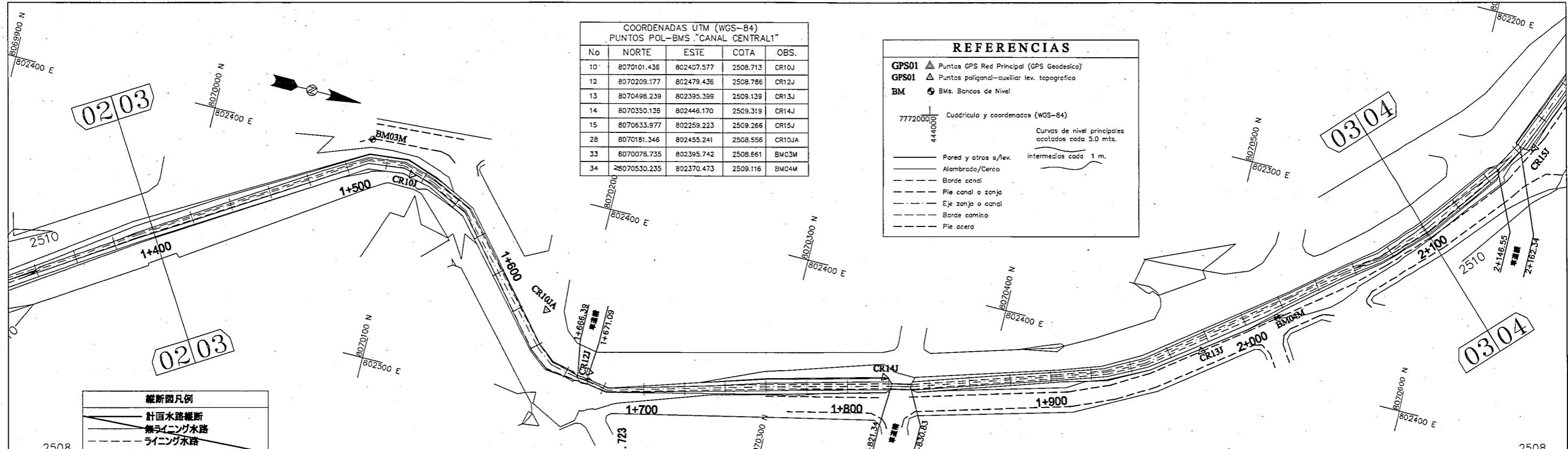
Curvas de nivel principales acotados cada 5.0 mts.  
intermedias cada 1 m.

- Pared y otros s/lev.
- Alambrado/Cerco
- Borde canal
- Pie canal o zanja
- Eje zanja o canal
- Borde camino
- Pie acero



勾配	計画高	地盤高	追加距離
	2511.716 2511.697	2511.345 2511.487	0+700 0+705.63
	2511.366	2511.140	0+800
	2511.220	2511.102 2508.369	0+841.60 0+845.38
	2509.216	2509.216	0+900
	2509.155	2508.948	0+961.50
	2509.116 2509.116	2509.016 2508.999	1+000 1+000.33
	2509.016 2509.012	2508.664 2508.660	1+100 1+103.97
	2508.963 2508.961	2508.825 2509.020	1+152.71 1+154.69
	2508.916 2508.903	2508.714 2508.687	1+200 1+212.85
	2508.820 2508.393	2508.506 2507.399 2507.549	1+296.42 1+298.33 1+300
	2508.209 2508.193	2507.560 2507.558	1+391.82 1+400





COORDENADAS UTM (WGS-84)  
PUNTOS POL-BMS "CANAL CENTRAL1"

No	NORTE	ESTE	COTA	OBS.
10	8070101.438	802407.577	2508.713	CR10J
12	8070209.177	802479.436	2508.786	CR12J
13	8070498.239	802395.399	2509.139	CR13J
14	8070350.138	802446.170	2509.319	CR14J
15	8070633.977	802259.223	2509.266	CR15J
28	8070181.346	802455.241	2508.556	CR10JA
33	8070075.735	802395.742	2508.661	BM03M
34	8070530.235	802370.473	2509.116	BM04M

**REFERENCIAS**

GPS01 ▲ Puntos GPS Red Principal (GPS Geodesico)  
 GPS01 ▲ Puntos poligonal-auxiliar lev. topografico  
 BM ● BMs. Bancos de Nivel

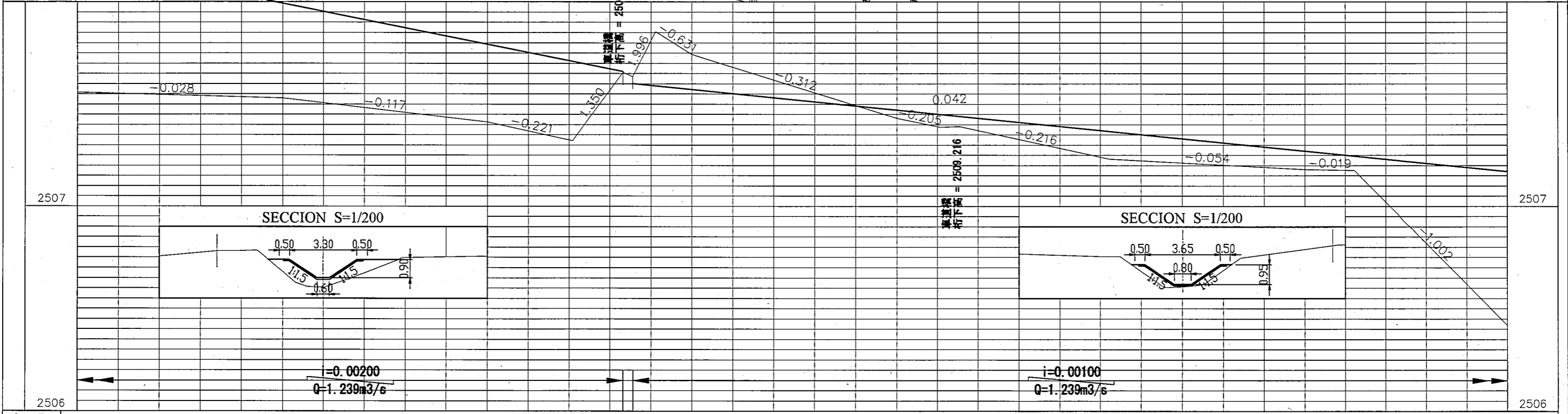
7772000 E  
4440000 N  
Cuadrícula y coordenadas (WGS-84)

Curvas de nivel principales  
acotadas cada 3.0 mts.  
intermedias cada 1 m.

- Pared y otros s/lev.
- Alambrado/Cerca
- - - Borde canal
- - - Pie canal o zanja
- - - Eje zanja o canal
- - - Borde camino
- - - Pie acera

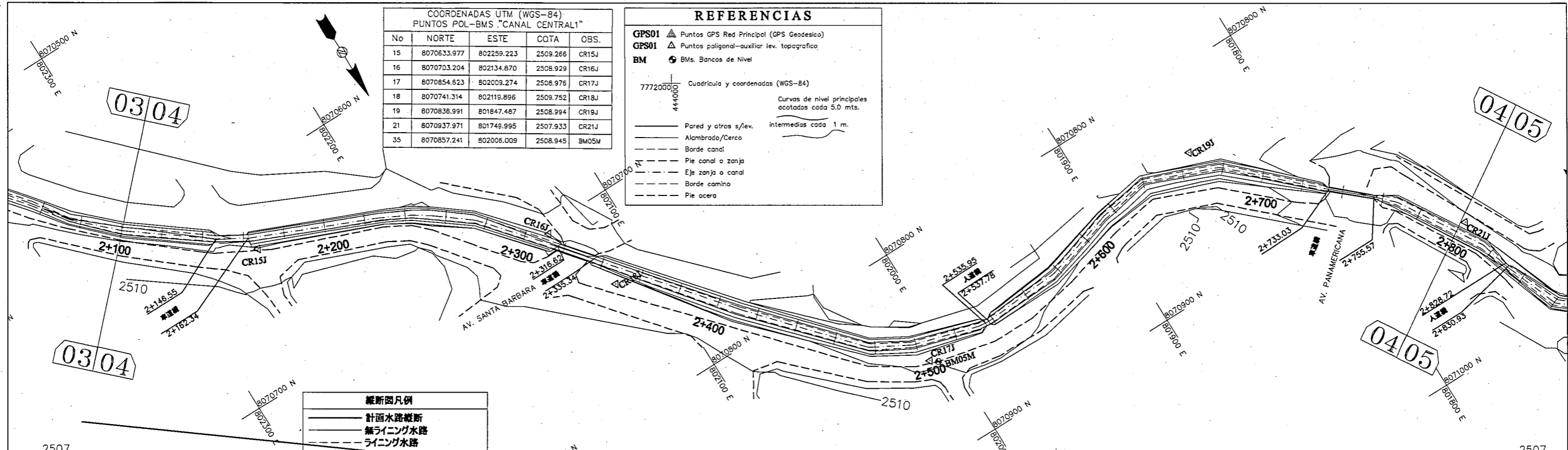
**縦断面凡例**

- 計画水路縦断
- - - 無ライング水路
- - - ライング水路



勾配	計画高	地盤高	追加距離
	2508.193	2507.558	1+400
	2507.993	2507.530	1+500
	2507.793	2507.413	1+600
	2507.710	2507.321	1+641.73
	2507.660	2507.654	1+666.39
	2507.600	2507.634	1+671.09
	2507.589	2507.855	1+682.16
	2507.571	2507.742	1+700
	2507.471	2507.431	1+800
	2507.450	2507.387	1+821.34
	2507.440	2507.391	1+830.83
	2507.371	2507.241	1+900
	2507.367	2507.232	1+904.37
	2507.271	2507.181	2+000
	2507.247	2507.176	2+024.53
	2507.171	2506.419	2+100

REPÚBLICA DE BOLIVIA ASOCIACION DE REGANTES COCHABAMBA - BOLIVIA	TAIYO CONSULTANTS CO., LTD.	ボリビア国コチャバンバ県 灌漑施設改修計画	中央幹線水路 (MATRIZ 1)	承認	点検	作図	LIC. OSCAR DE LA CRUZ R. ING. CRISTOBAL ESPINOZA C.	中央幹線水路 (MATRIZ1) 平面縦断面図 縮尺 H= 1/2000 V= 1/20 日付 2005年12月	図面番号 3 (3/5)
				承認	点検	作図	LIC. OSCAR DE LA CRUZ R. ING. CRISTOBAL ESPINOZA C.	中央幹線水路 (MATRIZ1) 平面縦断面図 縮尺 H= 1/2000 V= 1/20 日付 2005年12月	図面番号 3 (3/5)



COORDENADAS UTM (WGS-84)  
PUNTOS POL-BMS "CANAL CENTRAL1"

No	NORTE	ESTE	CGTA	OBS.
15	8070633.977	802259.223	2509.266	CR15J
16	8070703.204	802134.870	2508.929	CR16J
17	8070854.623	802009.274	2508.976	CR17J
18	8070741.314	802118.896	2509.752	CR18J
19	8070836.991	801847.487	2508.994	CR19J
21	8070937.971	801748.995	2507.933	CR21J
35	8070857.241	802006.009	2508.945	BM05M

REFERENCIAS

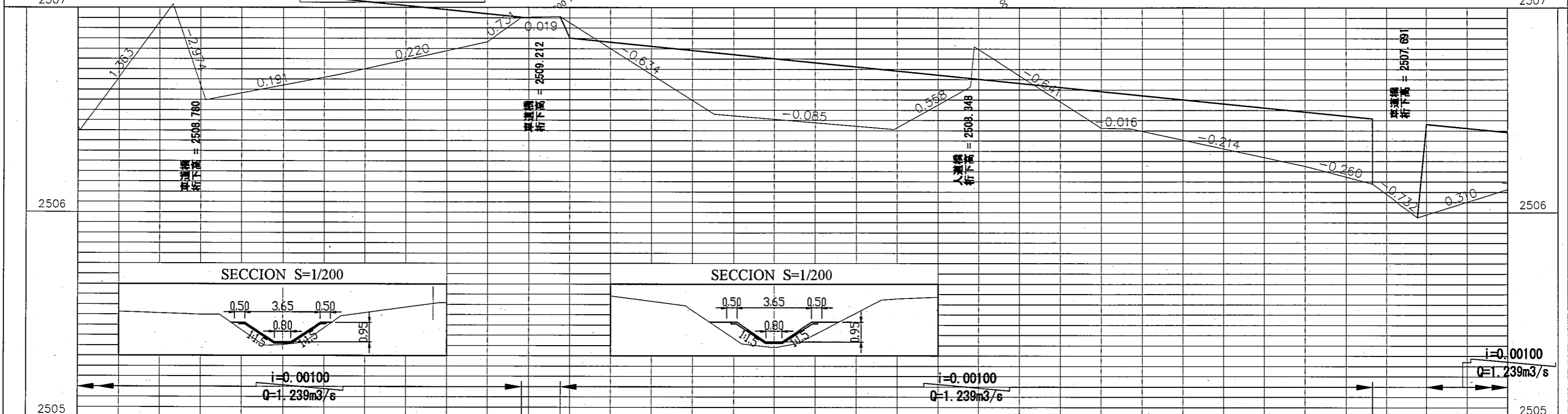
GPS01 ▲ Puntos GPS Red Principal (GPS Geodesico)  
GPS01 ▲ Puntos poligonal-auxiliar lev. topografico  
BM ● BMs. Bancos de Nivel

7772000  
44000  
Cuadrícula y coordenadas (WGS-84)  
Curvas de nivel principales acotadas cada 5.0 mts.  
intermedias cada 1 m.

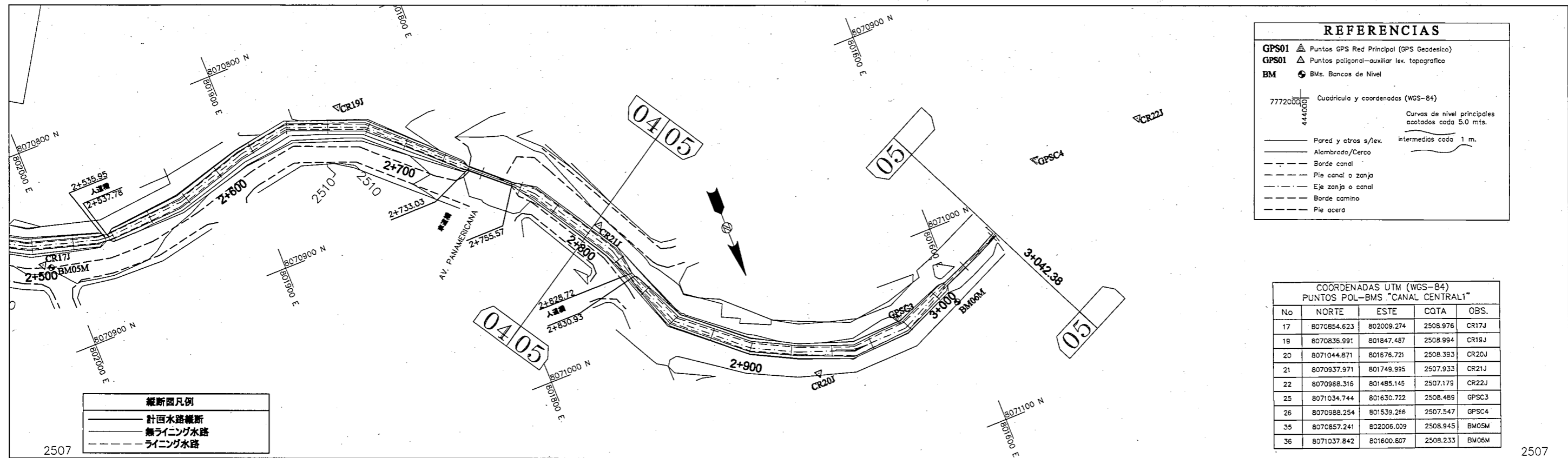
— Pared y otras s/lev.  
— Alambrado/Cerco  
- - - Borde canal  
- - - Pie canal o zanja  
- - - Eje zanja o canal  
- - - Borde camino  
- - - Pie acera

縦断面凡例

— 計画水路縦断  
— 無ライング水路  
- - - ライング水路



勾配	許面高	地盤高	追加距離
	2507.171	2506.419	2+100
	2507.170	2506.399	2+101.17
	2507.125	2507.017	2+146.56
	2507.109	2506.548	2+162.34
	2507.071	2506.620	2+200
	2507.043	2506.673	2+227.74
	2506.971	2506.832	2+300
	2506.953	2506.953	2+316.62
	2506.857	2506.957	2+335.34
	2506.792	2506.547	2+400
	2506.782	2506.481	2+410.42
	2506.694	2506.406	2+498.52
	2506.692	2506.414	2+500
	2506.656	2506.614	2+535.95
	2506.655	2506.811	2+537.78
	2506.592	2506.412	2+600
	2506.578	2506.410	2+614.46
	2506.492	2506.227	2+700
	2506.459	2506.141	2+733.03
	2506.436	2505.976	2+755.57
	2506.392	2506.114	2+800



**REFERENCIAS**

GPS01 Puntos GPS Red Principal (GPS Geodesico)  
 GPS01 Puntos poligonal-auxiliar lev. topografico  
 BM BMs. Bancos de Nivel

77720000 4440000 Cuadrícula y coordenadas (WGS-84)  
 Curvas de nivel principales acotadas cada 5.0 mts.  
 intermedias cada 1 m.

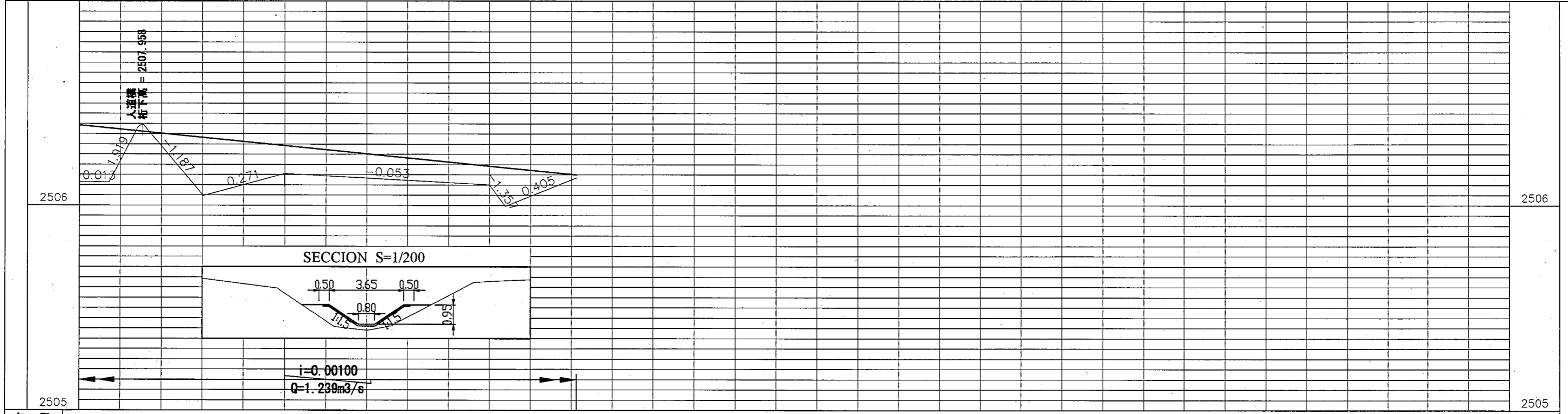
Pared y otros s/lev.  
 Alambrada/Cerco  
 Borde canal  
 Pie canal o zanja  
 Eje zanja o canal  
 Borde camino  
 Pie acera

COORDENADAS UTM (WGS-84)  
PUNTOS POL-BMS "CANAL CENTRAL1"

No	NORTE	ESTE	COTA	OBS.
17	8070854.623	802009.274	2508.976	CR17J
19	8070836.991	801847.487	2508.994	CR19J
20	8071044.871	801676.721	2508.393	CR20J
21	8070937.971	801749.995	2507.933	CR21J
22	8070988.316	801485.145	2507.178	CR22J
25	8071034.744	801630.722	2508.489	GPSC3
26	8070988.254	801539.266	2507.547	GPSC4
35	8070857.241	802006.009	2508.945	BM05M
36	8071037.842	801600.607	2508.233	BM06M

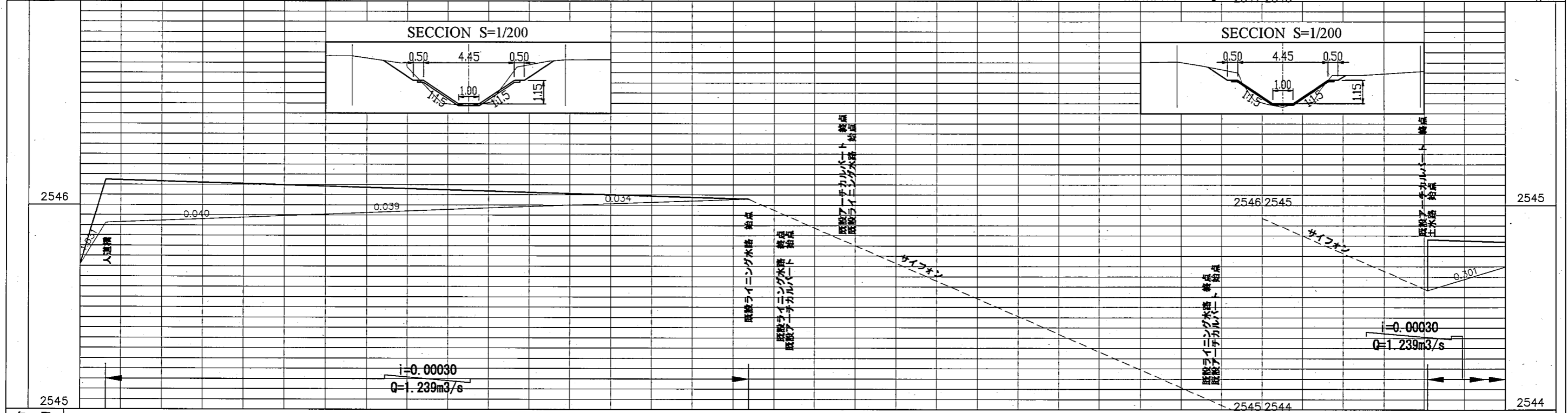
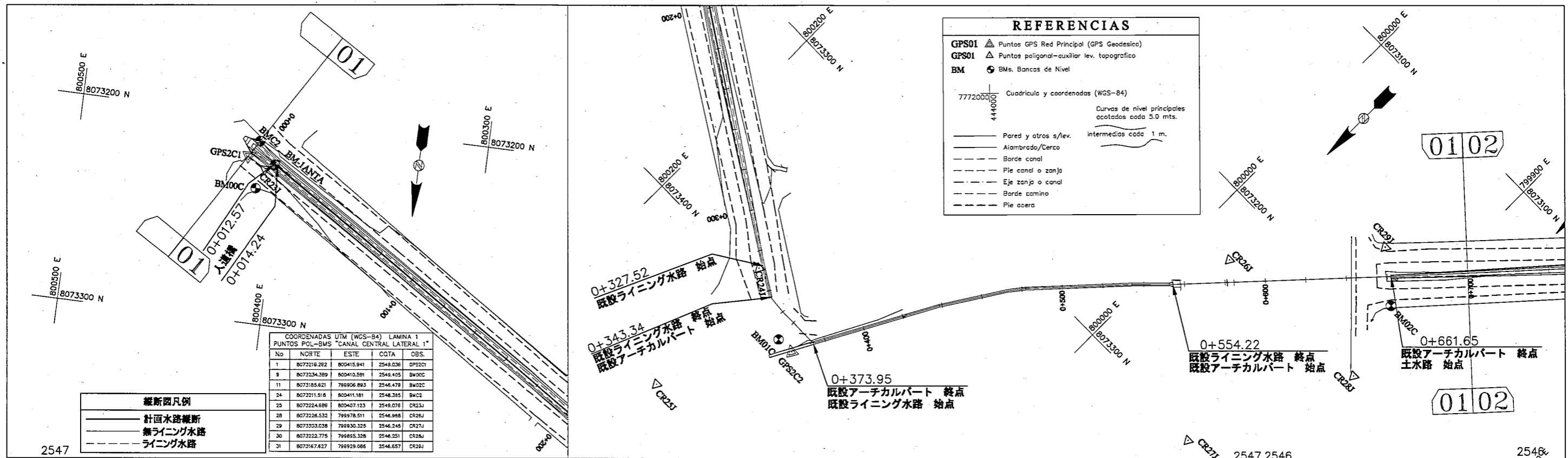
**縦断面凡例**

計画水路縦断  
 無ライニング水路  
 ライニング水路

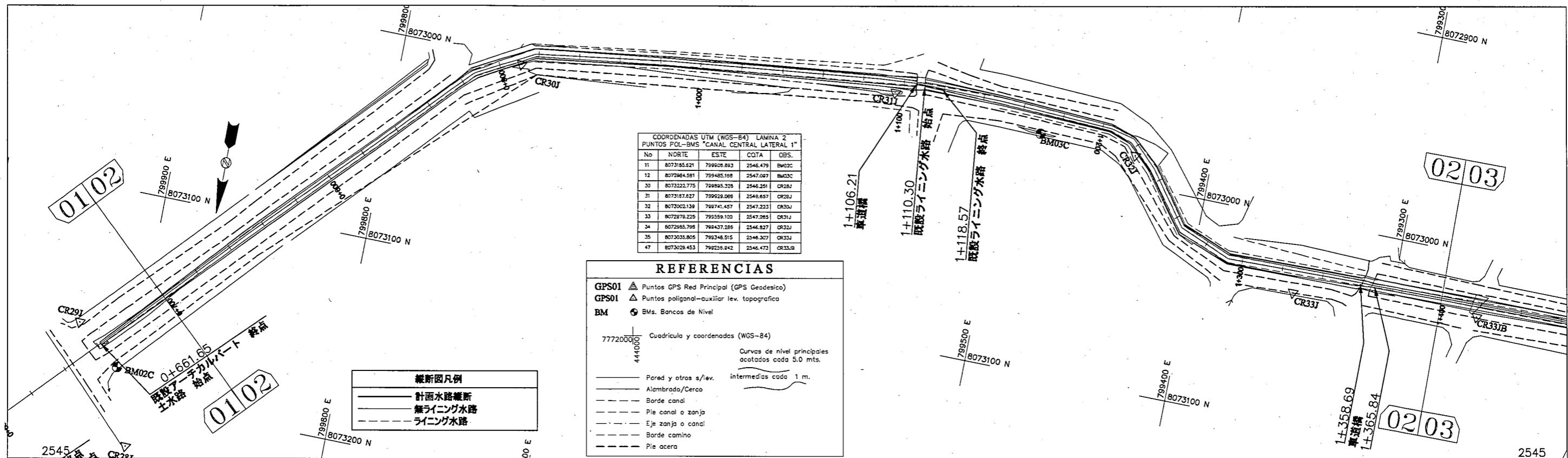


勾配	計画高	地盤高	追加距離
	2506.392	2506.114	2+800
	2506.377	2506.112	2+814.60
	2506.363	2506.383	2+828.72
	2506.361	2506.398	2+830.93
		2506.047	
	2506.292	2506.154	2+900
	2506.192	2506.101	3+000
	2506.184	2505.995	3+007.81
	2506.150	2506.135	3+042

REPÚBLICA DE BOLIVIA ASOCIACION DE REGANTES COCHABAMBA - BOLIVIA	TAIYO CONSULTANTS CO., LTD.	ポリビア国コチャバンバ県 灌漑施設改修計画	中央幹線水路 (MATRIZ 1)	承認	点検	作図	LIC. OSCAR DE LA CRUZ R. ING. CRISTOBAL ESPINOZA C.	中央幹線水路 (MATRIZ1) 平面縦断面図 縮尺 H= 1/2000 V= 1/20 日付: 2005年12月	図面番号 3 (5/5)



勾配	計画高		地盤高		追加距離	
	2545.707	2545.707	2545.707	2545.707	0+000	0+000
	2546.124	2546.124	2545.913	2545.913	0+012.57	0+012.57
	2546.124	2546.124	2545.913	2545.913	0+014.24	0+014.24
	2546.098	2546.098	2545.947	2545.947	0+100	0+100
	2546.068	2546.068	2545.986	2545.986	0+200	0+200
	2546.038	2546.038	2546.020	2546.020	0+300	0+300
	2546.030	2546.030	2546.029	2546.029	0+327.52	0+327.52
	2546.030	2546.030	2545.924	2545.924	0+343.34	0+343.34
	2546.030	2546.030	2546.981	2546.981	0+373.95	0+373.95
	2546.446	2546.446	2546.446	2546.446	0+400	0+400
	2545.320	2545.320	2545.320	2545.320	0+500	0+500
	2545.369	2545.369	2545.369	2545.369	0+554.22	0+554.22
	2546.837	2546.837	2546.837	2546.837	0+600	0+600
	2544.831	2544.831	2544.583	2544.583	0+661.65	0+661.65
	2544.819	2544.819	2544.699	2544.699	0+700	0+700



COORDENADAS UTM (WGS-84) LAMINA 2  
PUNTOS POL-BMS "CANAL CENTRAL LATERAL 1"

No	NORTE	ESTE	COTA	OBS.
11	8073185.621	799608.863	2546.479	BM02C
12	8072964.581	799485.168	2547.097	BM03C
30	8073222.775	799845.328	2546.251	CR28J
31	8073187.627	799618.068	2546.657	CR28J
32	8073002.139	798741.457	2547.233	CR30J
33	8072879.225	799559.120	2547.285	CR31J
34	8072855.798	798437.286	2546.827	CR32J
35	8073035.805	799348.515	2546.307	CR33J
47	8073029.453	799255.842	2546.473	CR33J

**REFERENCIAS**

GPS01 ▲ Puntos GPS Red Principal (GPS Geodesico)  
 GPS01 ▲ Puntos poligonal-auxiliar lev. topografica  
 BM ● BMs. Bancos de Nivel

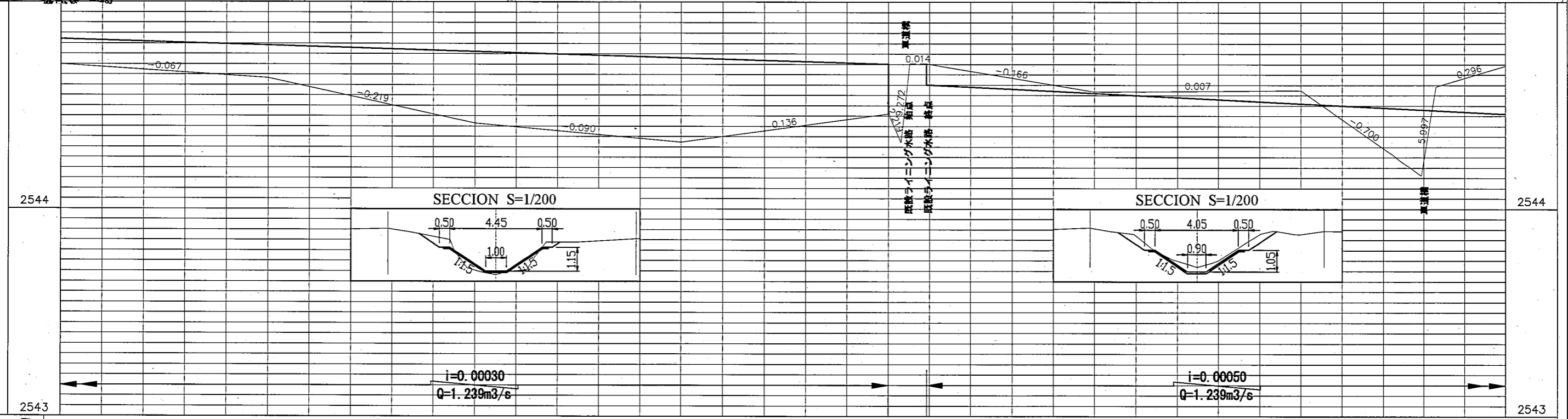
77720000 444000 Cuadrícula y coordenadas (WGS-84)

Curvas de nivel principales  
ocotadas cada 5.0 mts.  
intermedias cada 1 m.

— Pared y otros s/lev.  
 — Alameda/Cerco  
 - - - Borde canal  
 - - - Pie canal o zanja  
 - - - Eje zanja o canal  
 - - - Borde camino  
 - - - Pie acera

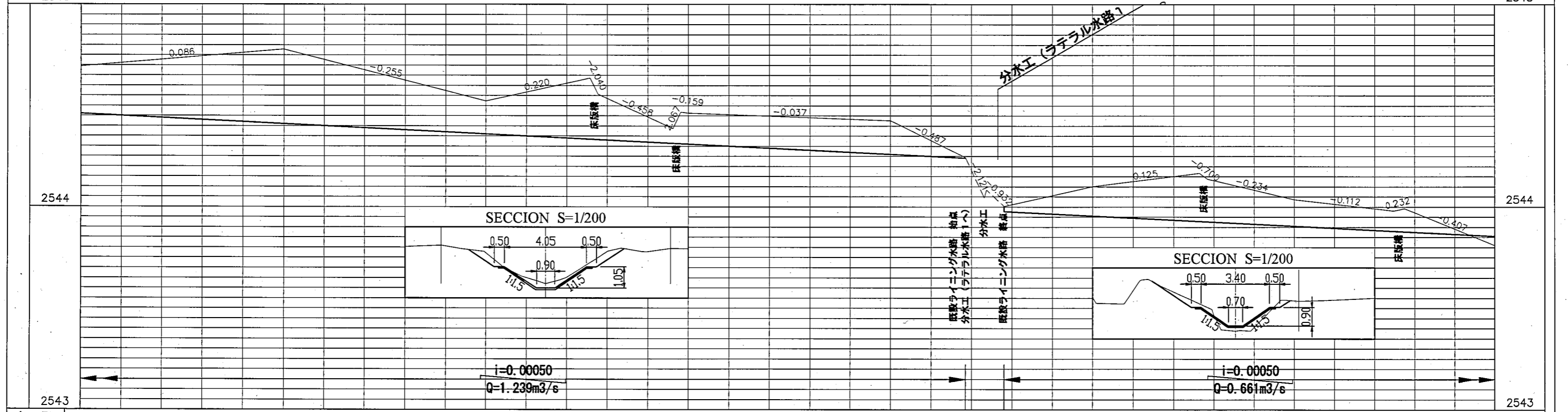
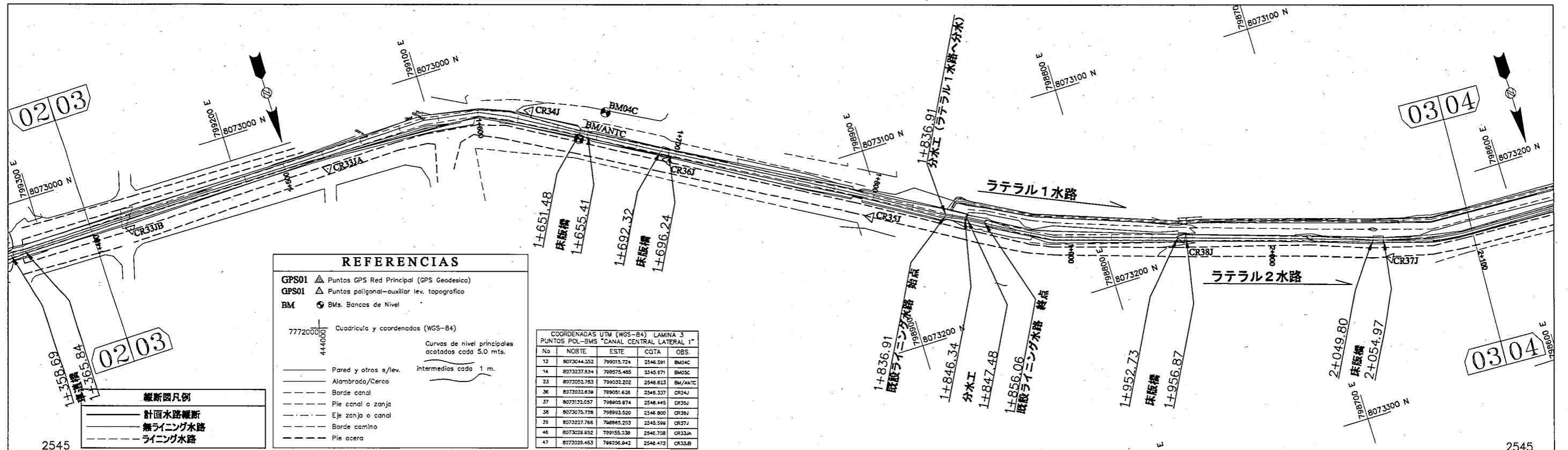
**縦断面凡例**

— 計画水路縦断面  
 - - - 無ライニング水路  
 - - - ライニング水路

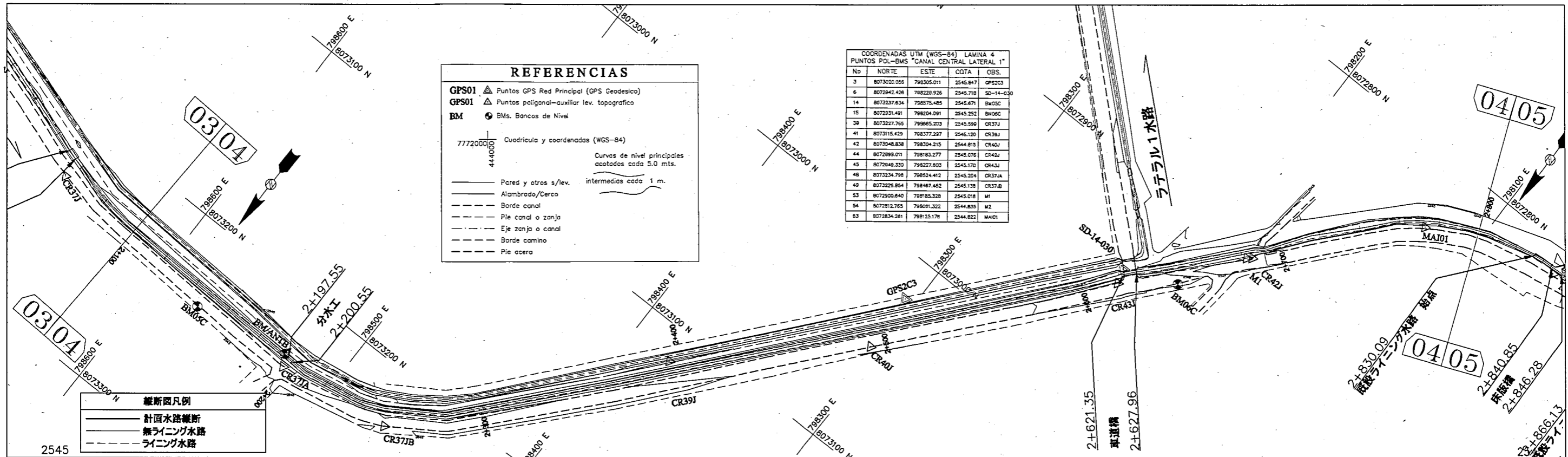


勾配	計画高		地盤高		追加距離	
	0+700	2544.819	2544.699	0+700	2544.819	
	0+800	2544.790	2544.632	0+800	2544.790	
	0+900	2544.760	2544.413	0+900	2544.760	
	1+000	2544.730	2544.323	1+000	2544.730	
	1+100	2544.700	2544.459	1+100	2544.700	
	1+106.21	2544.761	2544.761	1+106.21	2544.761	
	1+110.30	2544.600	2544.702	1+110.30	2544.600	
	1+118.57	2544.600	2544.702	1+118.57	2544.600	
	1+200	2544.559	2544.566	1+200	2544.559	
	1+300	2544.509	2544.573	1+300	2544.509	
	1+358.69	2544.480	2544.162	1+358.69	2544.480	
	1+365.84	2544.476	2544.591	1+365.84	2544.476	
	1+400	2544.459	2544.692	1+400	2544.459	

REPÚBLICA DE BOLIVIA ASOCIACION DE REGANTES COCHABAMBA - BOLIVIA	TAIYO CONSULTANTS CO., LTD.	ボリビア国コチャバンバ県 灌漑施設改修計画	中央幹線水路 (MATRI Z2+ラテラル2)	LIC. OSCAR DE LA CRUZ R. ING. CRISTOBAL ESPINOZA C.	中央幹線水路 (MATRI Z2及びラテラル 2) 平面縦断面図	
					承認	点検



勾配	計画高	地盤高	追加距離
	2544.459	2544.692	1+400
	2544.409	2544.778	1+500
	2544.359	2544.523	1+600
	2544.334	2544.636	1+651.48
	2544.313	2544.468	1+655.41
	2544.309	2544.462	1+692.32
			1+696.24
	2544.259	2544.425	1+800
	2544.241	2544.245	1+836.91
	2544.211	2544.045	1+846.34
	2543.977	2544.083	1+847.48
		2544.003	1+856.06
	2543.955	2544.101	1+900
	2543.929	2544.186	1+952.73
	2543.905	2544.037	2+000
	2543.880	2543.981	2+049.80
	2543.878	2543.993	2+054.97
	2543.855	2543.810	2+100



**REFERENCIAS**

GPS01 ▲ Puntos GPS Red Principal (GPS Geodesico)  
 GPS01 ▲ Puntos poligonal-auxiliar lev. topografica  
 BM ● B.Ms. Bancos de Nivel

7772000 444000 Cuadrícula y coordenadas (WGS-84)  
 Curvas de nivel principales acotadas cada 5.0 mts. Intermedias cada 1 m.

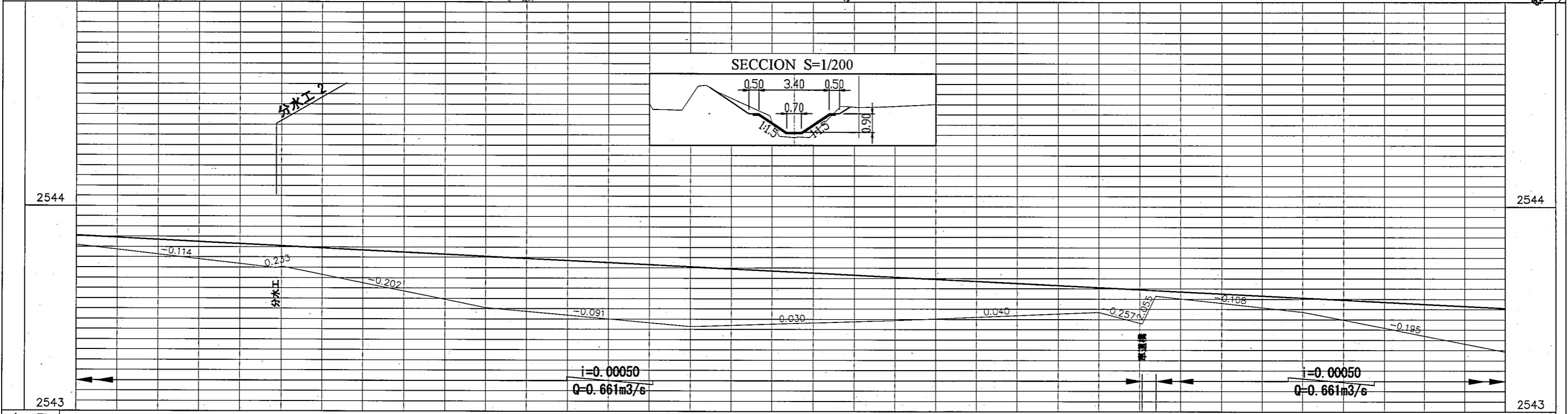
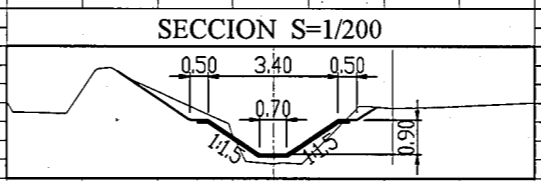
— Pared y otros s/lev.  
 — Alambreda/Cerco  
 - - - Borde canal  
 - - - Pte canal o zanja  
 - - - Eje zanja o canal  
 - - - Borde camino  
 - - - Pie acera

COORDENADAS UTM (WGS-84) LAMINA 4  
 PUNTOS POL-BMS "CANAL CENTRAL LATERAL 1"

No	NORTE	ESTE	CGTA	OBS.
3	8073020.056	798305.011	2545.847	GPS203
6	8072842.426	798228.926	2545.718	SD-14-C10
14	8073237.634	798575.485	2545.671	BW05C
15	8072931.491	798204.091	2545.252	BW06C
39	8073227.766	799665.203	2545.599	CR37J
41	8073115.429	798577.297	2546.120	CR39J
42	8073048.838	798504.215	2546.815	CR40J
44	8072899.011	798583.277	2545.076	CR42J
45	8072948.330	798227.803	2545.170	CR43J
48	8073234.798	798524.412	2545.204	CR37JA
49	8073226.854	798487.452	2545.138	CR37JB
53	8072900.640	798585.328	2545.018	M1
54	8072812.785	798091.322	2544.835	M2
83	8072834.261	798125.176	2544.822	MAJ01

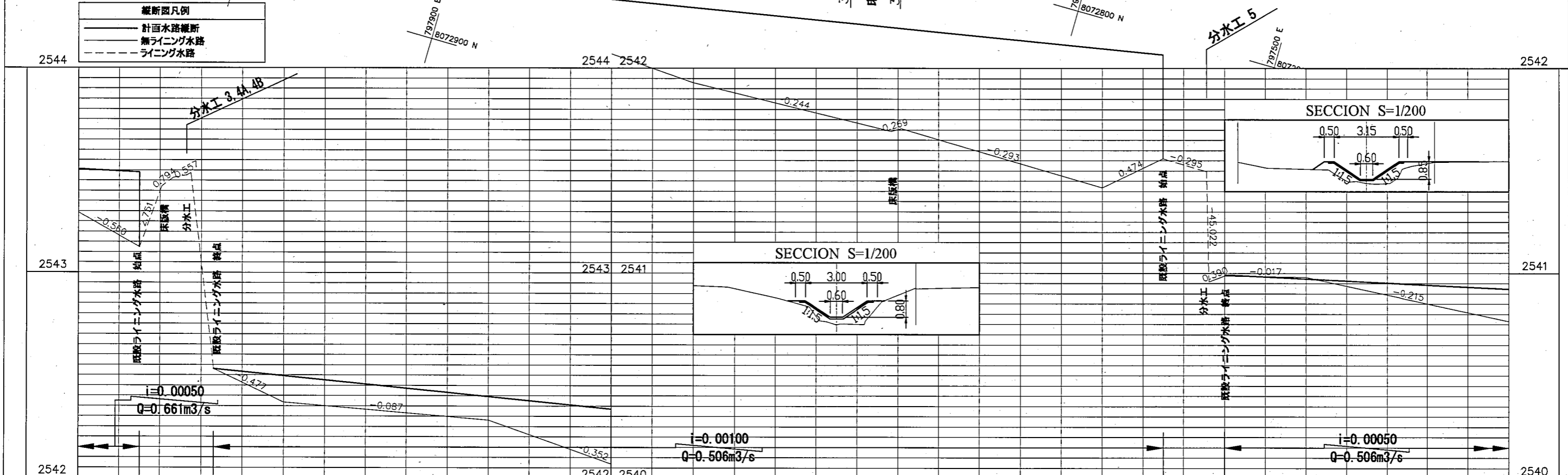
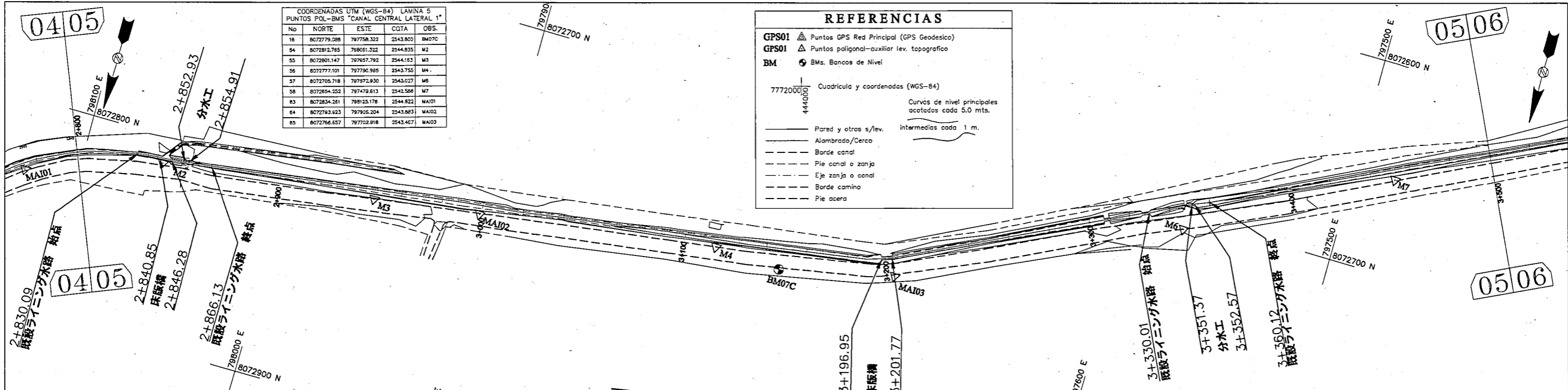
**縦断面凡例**

— 計画水路縦断  
 - - - 無ライニング水路  
 - - - ライニング水路



勾配	計画高	地盤高	追加距離
	2543.855	2543.810	2+100
	2543.806 2543.805 2543.805	2543.698 2543.704 2543.705	2+197.55 2+200 2+200.55
	2543.755	2543.504	2+300
	2543.705	2543.414	2+400
	2543.655	2543.444	2+500
	2543.605	2543.484	2+600
	2543.594 2543.591	2543.429 2543.565	2+621.35 2+627.96
	2543.555	2543.487	2+700
	2543.505	2543.293	2+800

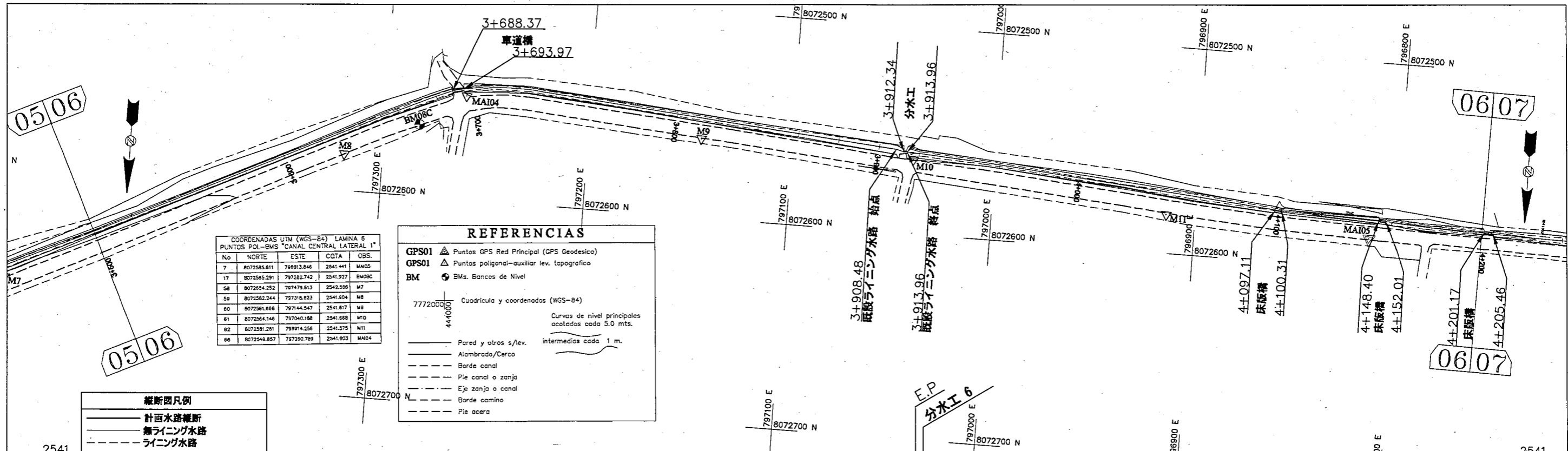
REPÚBLICA DE BOLIVIA ASOCIACION DE REGANTES COCHABAMBA - BOLIVIA	TAIYO CONSULTANTS CO., LTD.	ボリビア国コチャバンバ県 灌漑施設改修計画	中央幹線水路 (MATRI22+ラテラル2)	LIC. OSCAR DE LA CRUZ R. ING. CRISTOBAL ESPINOZA C.	中央幹線水路 (MATRI22及びラテラル2) 平面縦断面図	
					承認	点検



勾配	計画高	地盤高	追加距離
	2543.505	2543.293	2+800
	2543.490	2543.124	2+830.09
		2543.420	2+840.85
		2543.463	2+846.28
		2543.475	2+852.93
		2543.486	2+854.90
	2542.530	2542.530	2+866.12
	2542.496	2542.368	2+900
	2542.396	2542.281	3+000
	2542.296	2541.929	3+100
	2542.199	2541.893	3+196.95
	2542.194	2541.701	3+200
		2541.706	3+201.77
	2542.096	2541.418	3+300
	2542.067	2541.560	3+330.01
		2541.497	3+351.37
		2540.959	3+352.57
		2540.988	3+360.12
	2540.973	2540.981	3+400
	2540.923	2540.766	3+500

	REPÚBLICA DE BOLIVIA ASOCIACION DE REGANTES COCHABAMBA - BOLIVIA	TAIYO CONSULTANTS CO., LTD. ボリビア国コチャバンパ県 灌漑施設改修計画	中央幹線水路 (MATRIZ2+アテラル2)	承認	点検	作図	LIC. OSCAR DE LA CRUZ R. ING. CRISTOBAL ESPINOZA C.	中央幹線水路 (MATRIZ2及アテラル2) 平面縦断面図
							縮尺 H= 1/2000 V= 1/20 日付 2005年12月	図面番号 4 (5/7)





COORDENADAS UTM (WGS-84) LAMINA 6  
PUNTOS POL-BMS "CANAL CENTRAL LATERAL 1"

No	NORTE	ESTE	COTA	OBS.
7	8072585.811	798813.846	2541.441	MA05
17	8072585.291	797282.742	2541.927	BM08C
58	8072554.252	797479.813	2542.568	M7
59	8072582.244	797315.823	2541.904	M8
60	8072561.866	797444.547	2541.817	M9
61	8072564.146	797040.188	2541.668	M10
62	8072581.281	798914.258	2541.575	M11
66	8072548.857	797280.789	2541.803	MA04

**REFERENCIAS**

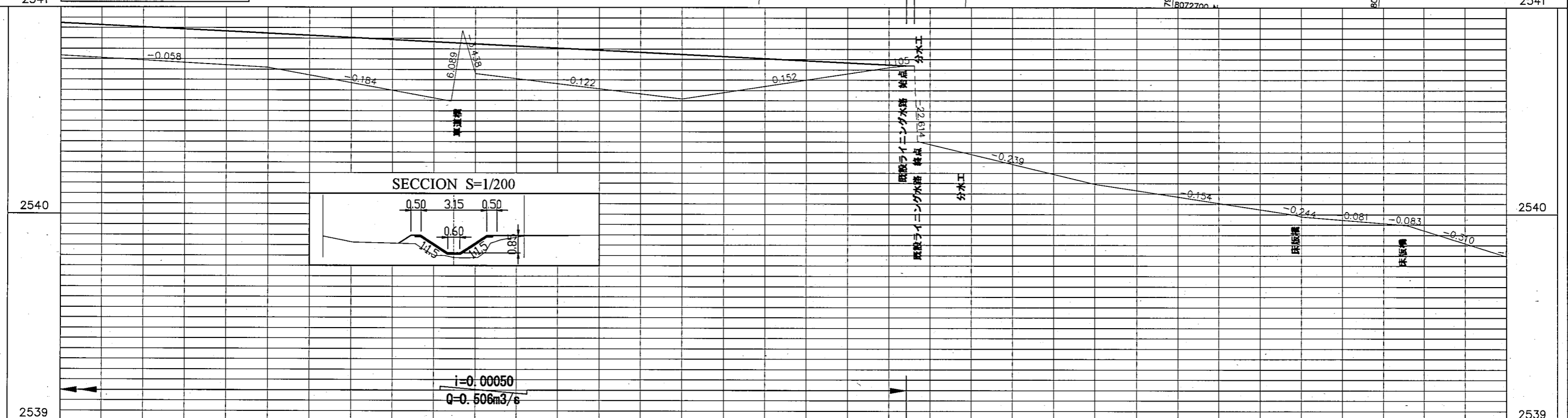
GPS01 ▲ Puntos GPS Red Principal (GPS Geodesico)  
 GPS01 ▲ Puntos poligonal-auxiliar lev. topografico  
 BM ● Bms. Bancos de Nivel

77720000 4410000  
 Cuadrícula y coordenadas (WGS-84)  
 Curvas de nivel principales acotados cada 5.0 mts.  
 intermedias cada 1 m.

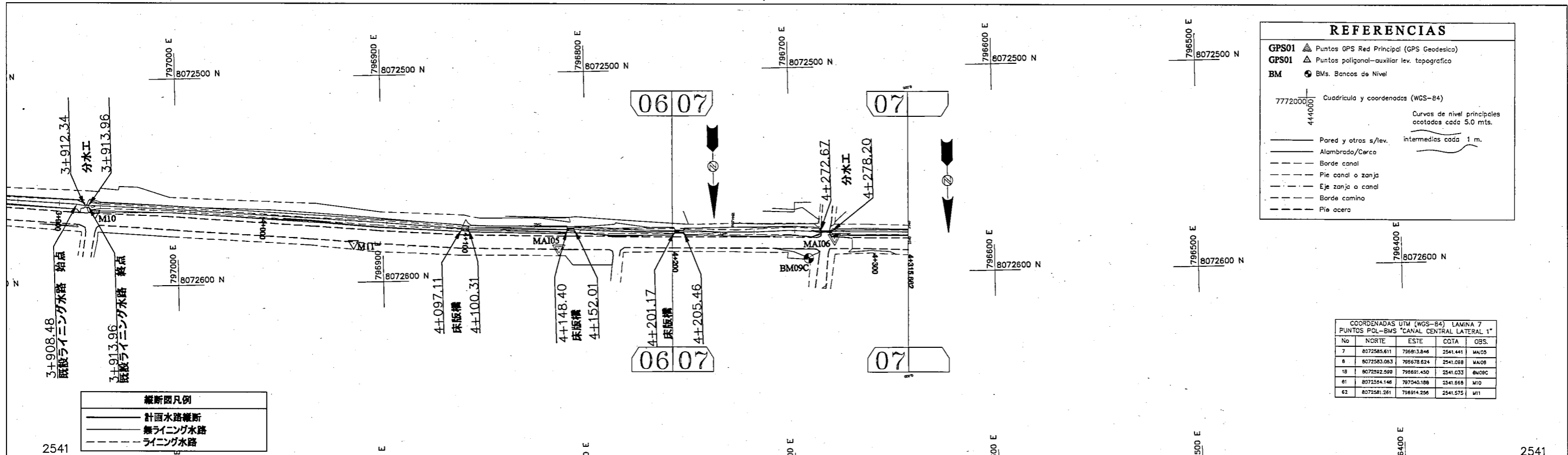
— Pared y otros s/lev.  
 — Alambrado/Cerco  
 - - - Borde canal  
 - - - Pie canal o zanja  
 - - - Eje zanja o canal  
 - - - Borde camino  
 - - - Pie acera

**縦断面凡例**

— 計画水路縦断  
 - - - 無ライング水路  
 - - - ライング水路



勾配	計画高	地盤高	追加距離
	2540.923	2540.766	3+500
	2540.873	2540.709	3+600
	2540.829	2540.546	3+688.37
	2540.826	2540.887	3+693.97
	2540.823	2540.680	3+700
	2540.773	2540.558	3+800
	2540.723	2540.710	3+900
	2540.719	2540.719	3+908.48
		2540.719	3+912.34
		2540.352	3+913.96
		2540.146	4+000
		2539.997	4+097.11
		2539.990	4+100.31
		2539.989	4+100.31
		2538.959	4+148.40
		2538.959	4+152.01
		2539.798	4+200



**REFERENCIAS**

GPS01 ▲ Puntos GPS Red Principal (GPS Geodesica)  
 GPS01 ▲ Puntos poligonal-auxiliar lev. topografico  
 BM ● BMs. Bancos de Nivel

7772000  
444000

Cuadrícula y coordenadas (WGS-84)  
 Curvas de nivel principales  
 acotadas cada 5.0 mts.  
 Intermedias cada 1 m.

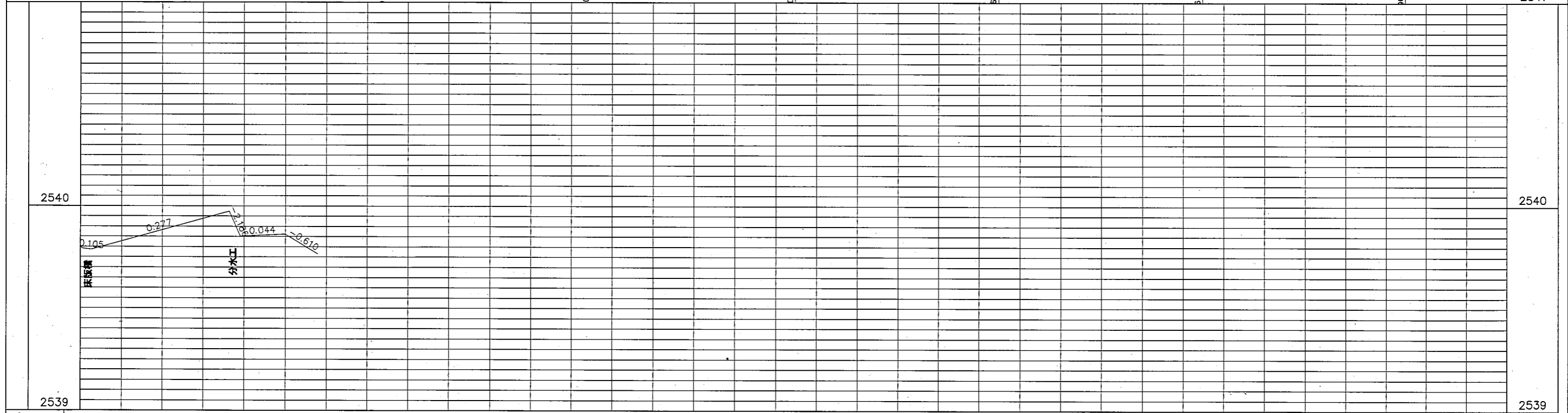
— Pared y otras s/lev.  
 — Alambrado/Cerca  
 - - - Borde canal  
 - - - Pie canal o zanja  
 - - - Eje zanja o canal  
 - - - Borde camino  
 - - - Pie acera

COORDENADAS UTM (WGS-84) LAMINA 7  
 PUNTOS POL-BMS "CANAL CENTRAL LATERAL 1"

No	NORTE	ESTE	CGTA	OBS.
7	8072585.611	796913.846	2541.441	MA105
8	8072583.083	796678.624	2541.088	MA108
18	8072592.598	796691.450	2541.033	BM09C
81	8072554.146	797040.188	2541.668	M10
82	8072581.281	796914.256	2541.575	M11

**縦断面凡例**

— 計画水路縦断  
 - - - 無ライング水路  
 - - - ライング水路



勾配	計画高	基礎高	追加距離
0.105	2539.798	2539.798	4+200
0.277	2539.797	2539.787	4+201.17
0.044	2539.973	2539.852	4+205.45
-0.610	2539.862	2539.862	4+272.67
	2539.766	2539.766	4+278.20
			4+300
			4+316