IDAHO

GEOGRAPHIC

COORDINATE

DATA BASE

(GCDB)

USERS'

GUIDE

Bureau of Land Management
Idaho State Office
Cadastral Survey Group - GCDB Team
1387 S. Vinnell Way
Boise, Idaho 83709
208-373-3993

June 2, 2000

GEOGRAPHIC COORDINATE DATA BASE USERS' GUIDE

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COST RECOVERY CHARGING RATES FOR GCDB DATA

The cost of GCDB data is made up of the following: an electronic record processing charge (Microcomputer (PC) or UNIX computer, depending on where the data resides or how much data is requested), an administrative charge, a media charge, and a mailing charge (if appropriate).

ELECTRONIC RECORD PROCESSING This charge is composed of the following charges:

MICROCOMPUTER (PC) or UNIX

$18.60 per hour for research time (personnel time required to process automated data compilation, manipulation, or searching) by a professional employee.
$ 8.40 per hour for research time (personnel time required to process automated data compilation, manipulation, or searching) by a clerical or Information Access Center employee. (Non-FOIA request)
$ 9.20 per hour for research time personnel time required to process automated data compilation, manipulation, or searching) by a clerical or Information Access Center employee. (FOIA request)

* Total time when under 15 minutes is $0, and time increments of 15 minutes will be used for charging.

ADMINISTRATIVE
The administrative charge is $8.00 per request.

MEDIA
The media charge is the cost of the media (diskette, 8mm tape) used to disseminate electronic information.

Diskette = $1.00
8mm tape = $15.00

MAILING
Postage costs will also be charged if we mail the data to you.

Refer to Information Memorandum No. 99-063.

If further questions arise call the State Office GCDB Staff - (208) 373-3993.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Idaho State Office
1387 S. Vinnell Way Boise, ID 83709-1657
Phone 208-373-3993, Fax 208-373-3904

GCDB DATA FILE ORDER
(Supplement to Copy Work Request, Form 1370-44)

Date Ordered: Date Needed: Date Filled:

Requested By: _____

If there are questions about this order, requestor may be reached at:

Address: _____

Telephone:

Data Requested: Check the data file(s) requested.

☐ LX or .LX FILE ☐ R or .RAW FILE ☐ DXF FILE ☐ SCR FILE

☐ LQT FILE ☐ .AN FILE

☐ OTHER DATA FILE/s: _____

Township/s Requested:

Media Selection: Provide the data files on the media selected below. NOTE: All data files are in ASCII text format.

☐ 3½" Diskette ☐ 8 mm Tape

Cost of This Product: (at current Bureau wide rates)

Administrative Fee		$ 8.00
Research: data compilation, manipulation, or searching. If under 1/4 hour - $0; charge in 1/4 hour increments.		
	Professional @ $18.60 X _____hours	$ _____
	NON-FOIA Clerical @ $8.40 X _____hours	$ _____
	FOIA Clerical @ $9.20 X _____hours	$ _____
Media:	3½" Diskette @ $1.00	$ _____
	8 mm Tape @ $15.00	$ _____
Postage		$ _____
TOTAL COST:		$ _____

NO WARRANTY IS MADE BY THE BUREAU OF LAND MANAGEMENT FOR THE USE OF THE DATA FOR PURPOSE NOT INTENDED BY BLM.

Notification to the Bureau of Land Management of any suspected or confirmed errors in the data files would be appreciated. Please call 373-3993.

ID 1370-1
(May 2000)

INTRODUCTION

The Idaho Geographic Coordinate Data Base (GCDB) contains geographic coordinates, and some associated attributes, for most of the Public Land Survey System (PLSS) in Idaho. Coordinates are available for all rectangular corners down to the 1/16 section corner level (some townships to the 1/256 section corner), and all special survey corners (meanders, mining claims, HES, etc) for those townships that are completely collected. It provides a spatial foundation for the BLM's Automated Land and Mineral Record System (ALMRS) and may be useful to anyone with a requirement to link their data to a spatial PLSS position on the earth's surface. These coordinates were calculated using the most recent federal survey information available from the PLSS records and using control points from various sources. In some cases, private survey information was also used. The GCDB coordinates represent an approximation of the location of PLSS corners on the earths surface based on the best available evidence input from the record with errors mathematically treated through an adjustment processes. The following two different software packages were used to compute the GCDB: PLSS Coordinate Computation System (PCCS) and GCDB Measurement Management (GMM). PCCS was used first, until May 1993. The file names for the two software packages are different but the contents are essentially the same. The two software packages, QLINK (PCCS) and GLINK (GMM), were used to "link" GCDB spatial data to Legal Land Description (LLD) alpha/numeric data.

The PCCS files have coordinates in Latitude/Longitude NAD 27, and Universal Transverse Mercator projection (UTMs - x,y in meters). GMM files have coordinates in all three formats.

The files you will be most interested in will be:

PCCS - L06N08E, U06N08E, T06N08E.SCR, LQT0060N0080E

GMM - T43N04W.LX, T43N04W.UTM, T43N04W.COR, T43N04W.DXF, T43N04W.AN

Descriptions of most of the files are included for your information . Some files are not listed because they are only used for reworking a township.

To successfully work with the GCDB, you need to know how the point identification system works, the difference between the meaning of reliability in PCCS versus GMM, and some information on control points. These topics are discussed on following pages.

The geographic coordinates and their associated products have NO LEGAL SIGNIFICANCE and should not be used for purposes other than which they were intended such as: restoration of lost corners, establishment of direction, trespass resolution, legal descriptions, etc. which require legal boundary surveys by qualified surveyors. They should also not be used for various other non-cadastral survey purposes like: fencing boundaries, construction, etc.. They could be used for record keeping, mapping, preliminary corner search and planning and other land management purposes.

The initial collection of the raw data for the geographic coordinates and attributes was not done with a requirement for 100% accuracy. In many cases, the only way to resolve conflicting survey records would be to perform an actual on-the-ground-survey. This was not feasible in the initial collection and so some kind of solution was arrived at in order to complete the collection. The GCDB is a dynamic data base which will be continually updated by design, at various times. This may cause problems for some users of GCDB data. Please let us know if you find any problems or can contribute better quality data, either survey plats or control. We need your help to improve the quality of our data. If you have questions, please feel free to give us a call.

TOWNSHIP NAMING CONVENTIONS

BLM has various township naming conventions. They are listed below.

SURVEY PLATS/NOTES	GMM	PCCS L FILE	ALMRS DED*
T. 22 N., R. 1 W.	T22NR01W	L22N01W	0220N0010W
T. 14 N., R. 4 E.	T14NR04E	L14N04E	0140N0040E
T. 11-1/2 S., R. 6 W.	H11SR06W	L11206W	0112S0060W
T. 12 N., R. 24-1/2 E.	T12NH24E	L12N242E	0120N0242E

* *Data Element Dictionary*

Idaho has used the same naming convention regardless of the computational software used, i.e., T22N01W, L22N01W.

RELIABILITY

Reliability, for data collected with either PCCS or GMM collection software, is represented by two adjoining fields (First field - 4 characters; Second field - 5 characters) in various files.

In GMM, the fields consists of the positional uncertainty of a GMM point in latitude and longitude respectively, expressed numerically as the coordinate error associated with the latitude or longitude at a 95% level of confidence. The coordinate error is derived from the least square analysis that is done during GMM's unconstrained least square adjustment process. Coordinate error does not reflect the difference between the GCDB coordinate and the field surveyed position. This is due to the fact that GCDB raw data is not actual field measurements but is record plat data and also that coordinates are influenced by other known control related to the National Geodetic Reference System in the adjustment process. Plat record data is raw field measurement data that has been reduced to horizontal ground distances and true mean bearing. In some cases this data is adjusted, and then rounded to nearest link or tenth of a link in distance and minute or tenth of minute in bearing.

In PCCS, the first field consists of the positional quality of a PCCS point, expressed numerically as an estimate of the most probable magnitude of error within the reduced survey measurement data and control station coordinates. This expression of the error's probable magnitude is based on closure of lines, so is thus route specific.

The second field consists of the positional uncertainty of a PCCS point, expressed numerically as an estimate of the largest likely magnitude of error within the reduced survey measurement data and control station coordinates. This expression of the error's largest magnitude is based on closure of lines, so is thus route specific.

If a numeric code of 999 is present in both fields, for PCCS data, it reflects that the coordinates were computed with protracted measurements from a protraction diagram.

POINT IDENTIFICATION SYSTEM

Point IDs are used to show where in a township a point is located and generally what kind of point it is (i.e. township exterior, interior, offset, meander, tract, special survey, mile post). It is a 6 digit number composed of 2 parts, XxxYyy, related to the x,y axis. In Xxx or Yyy, X or Y is the line number and xx or yy is the number of chains* from the section corner, going west to east and south to north. The diagrams on the next 2 pages show how the numbering scheme works.

Numbers greater than 700700 are reserved for the following special situations.

Xxx = 711 -799 Boundaries with Mileposts
800 -836 Meanders
837 -899 Tracts
900 -999 Mineral Surveys, Homestead Entries, etc.

Yyy Numbered sequentially along the survey in increments of 10. The prefix (Xxx) may be the same for all points in a similar survey.

In PCCS files, intersections of section lines and special survey lines will have two IDs, the "rectangular" ($\pm$4) and the segment identifier.

* *Chains are a unit of measure used by surveyors. A regular section is 80 chains square. One chain equals 66 feet. One hundred links equal one chain.*

GCDB POINT IDENTIFICATION SCHEME

NOVEMBER 4, 1993

MEANING OF THE PREFIX (GENERALLY)

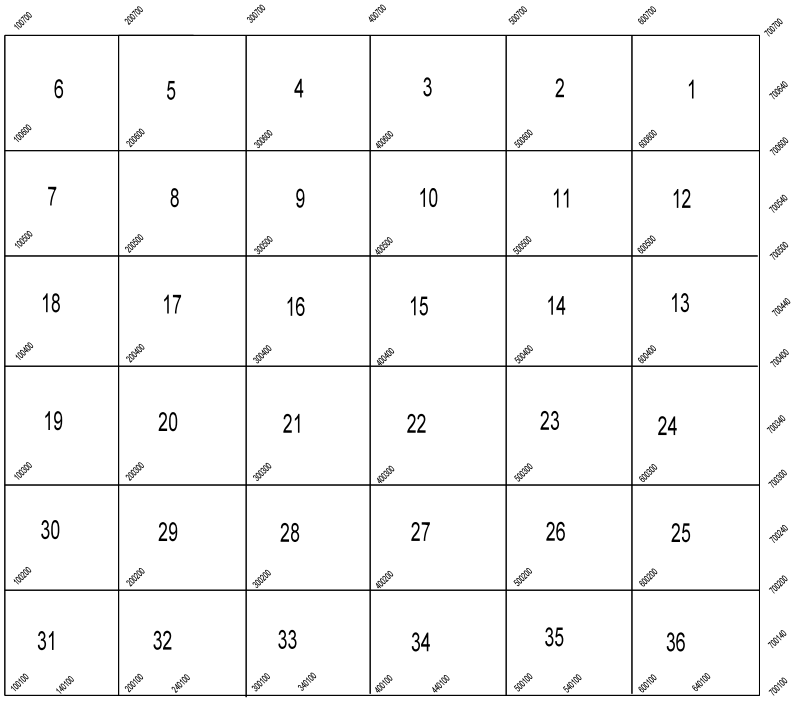
100 - 700 = RECTANGULAR SURVEY POINT

800 = MEANDERS

900 = MINERAL SURVEYS, HES, ETC.

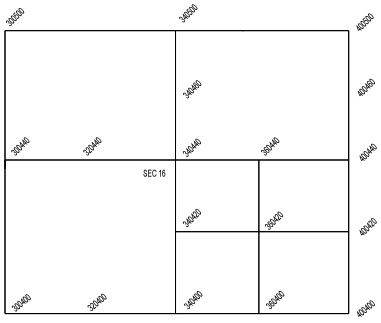
For explanation of more complicated point ID situations contact the

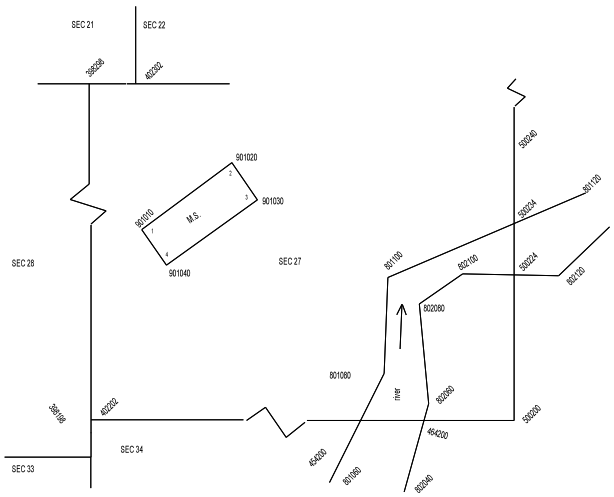
GCDB Section, Branch of Cadastral Surveys, Idaho State Office, BLM



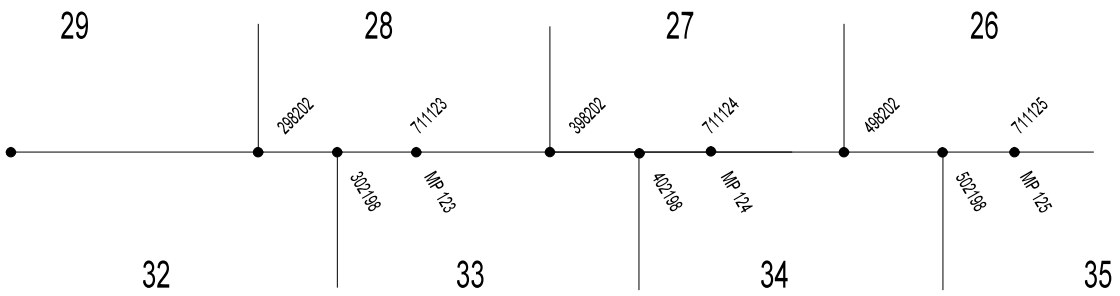
NO WARRANTY IS MADE BY THE BUREAU OF LAND MANAGEMENT

FOR USE OF THE DATA FOR PURPOSES NOT INTENDED BY BLM

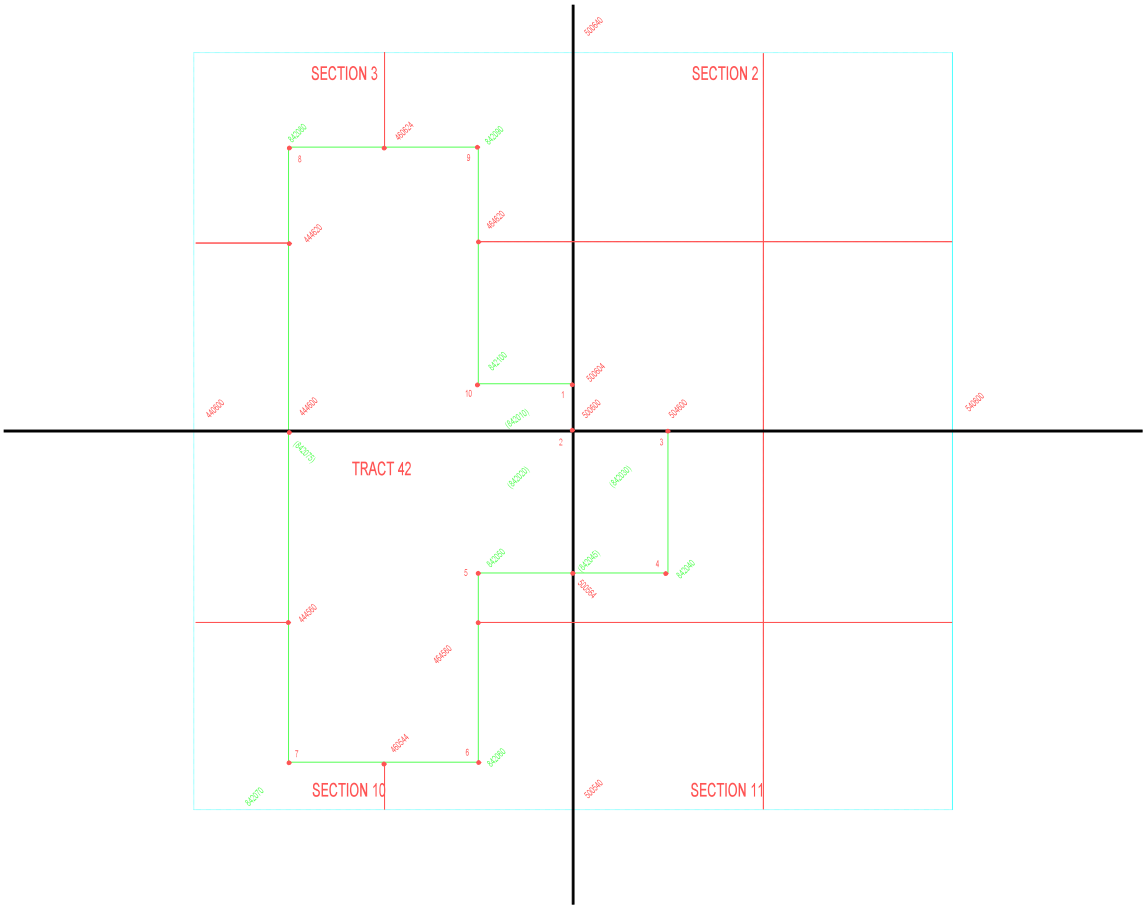




This sheet should accompany release of all GCDB data in ACCESS CATEGORY 2



Boundary or Milepost Survey



Special Survey Point Identifiers

CONTROL

Geographic control for GCDB is derived from a variety of sources, the various sources having a particular reliability. (e.g. Digitized points from USGS 7½ minute series topographic maps have a reliability of 40,40 (feet) whereas NGS first order points have reliabilities of 1,1 (foot).) The control points are handled differently by PCCS and GMM. In PCCS the control points are assigned a reliability and the values for latitude and longitude are held fixed during the computational process. In GMM, the control points are not held fixed, are treated as another measurement, assigned error estimates, and are allowed to adjust within established parameters based on the error estimates.

In GMM computed townships, the published values of some control established by NGS and USGS are assigned error estimates of .001 feet, which allows the value to be virtually held fixed to four decimal places in seconds of latitude or longitude. In PCCS computed townships, the values for control are exactly identical to the published values. **OBTAIN THE PUBLISHED VALUES FOR CONTROL from the appropriate source rather than using the apparent published value from the PCCS or GMM files**.

Many of the control points in GCDB are digitized values for PLSS corners shown as crosses (found corner) on USGS 7½ minute series topographical maps. These digitized points are assigned a reliability of 40,40 (feet) in PCCS or 40,40 to .001,.001 (feet) in GMM. PCCS will hold fixed the digitized values during the computation process. GMM will not hold fixed the digitized values, but will allow the digitized control to be adjusted.

Control is assigned an error estimate by the computing surveyor and it is allowed to adjust in GMM. Coordinates of transferred boundaries from previously computed townships are treated as control in both GMM and PCCS. On the next page is a list of the control reliabilities you'll find in the data files and their possible sources.

The control used for the computation process in GCDB is contained in a data base control table comprised of the following information on each control point.

Point ID #, Station Name, Latitude & Longitude in NAD 27,
Elevation in feet (not all points), NGS Order, which USGS Quad it's on, Source, Township, Range, Section, comments about what it is.

The survey plats used for the abstraction process in GCDB are contained in a data base plat table comprised of the following information from cadastral survey plats.

Township, Range, BLM District, BLM Resource Area, Forest,
Other (i.e. Indian Reservation, National Park, etc.),
Surveyors, Survey Year, Survey Type, Number of sections, Comments

Our **Township Report**, which is generated from various GCDB related data base tables, includes all the above mentioned data for a particular township. See the example on page 13.

KEY TO RELIABILITY OF CONTROL POINTS

RELIABILITY[1]	SOURCE[2]	DESCRIPTION
(1,1)	NGS	From National Geodetic Survey (NGS) tape, 1st order.
(3,3)	NGS	From NGS Tape, 2nd order.
(3,3)	NGS	From NGS Tape, 3nd order.
(3,3)	USGS	Supplemental Files, or source stated in comments
(3,3)	GPSF	Forest Service Global Positioning System (GPS)
(3,3)	USFS	Forest Service
(3,3)	G027	Canyon County GPS 1990 (027 is Data Element Dictionary (DED) code for C.Cnty)
(3,3)	G055	GPS done by Kootenai Co., City of CDA, Id. Trans Dpt.
(3,3)	GPSU	From USGS GPS Project
(3,3)	GPSB	BLM GPS
(3,3)	GPSM	GPS done by Mineral Surveyors
(3,3)	GPSP	Private GPS, D.Evans & Associates work for City of Coeur d' Alene 1988.
(10,10)	FSC	FS Plat conventional tie moving control to a section corner
(10,10)	BLMC	BLM Plat conventional tie moving control to a section corner
(13,13)	GPSB	BLM GPS done with PLGR - wage on
(16,16)	GPSB	BLM GPS done with PATHFINDER, good to 16 Feet
(16,16)	GPSF	FS GPS done with PATHFINDER, good to 16 Feet
(25,25)	BLMP	Owyhee Photo Project 1965
(25,25)	DOPU	USGS Doppler From USGS GPS Project
(25,25)	NGS	From NGS Tape
(25,25)	USGS	Supplemental files, USGS-GPS Project, or other
(25,25)	NEV	Carson City Hwy. Dept.- from NV-GCDB for State Bdy.
(25,25)	WHD	Wy Hwy. Dept.- from WY-GCDB for State Bdy.
(30,30)	GPSB	BLM GPS done w/ PLGR - wage off
(40,40)	MCI	Digitized points (found corners) off USGS 7-1/2' quads.

[1] (10,10) the estimated error in northing & easting, in feet, of the point.

[2] Source is a code found in the data base control table, not in the data files. If you need more information on a control point we can provide it.

TOWNSHIP REPORT

T0090S0150E GCDB REPORT Thu May 25 08:49:09 MDT 2000

PLATS:

YEAR| SID | SURVEYOR

1881 | 1,451|GEORGE H. PERRIN
COMMMENTS: SNAKE R THRU 9 SECS.

1914 | 1,452|SUPPLEMENTAL PLAT
COMMMENTS: SUPPLE PLAT OF SEC 12 SHOWING MS 2693, AND SUBDV ORIG LOT 5.

1915 | 1,453|JAMES SPOFFORD, WILLIAM E. ROBERTSON & CARL S. SWANHOLM
COMMMENTS: 2 SHEETS;DR OF SECS 2-12.;OMITTED LANDS ALONG SNAKE R.

1924 | 1,454|SUPPLEMENTAL PLAT
COMMMENTS: SUPPLE PLAT OF SECS 5 & 6.

1925 | 1,455|SUPPLEMENTAL PLAT
COMMMENTS: SUPPLE PLAT OF SEC 6.

1955 | 1,437|SUPPLEMENTAL PLAT
COMMMENTS: SUPPLE PLAT OF SECS 5 & 6.

1955 | 1,438|WALTER H. GOOD
COMMMENTS: SURVEY OF ISLANDS IN SNAKE R IN SECS 4,6, 9 & 10.

SPECIAL SURVEY PLATS:

SID	TYPE	NUM	SEC
7,677	M	2693,	011
7,677	M	2693,	012
7,677	M	2693,	012

CONTROL:

PID	LAT	LONG	STATION NAME	SORC	OR	DATUM
421144230003	423629.36800	1144119.49400	CEDAR	NGS	1	27
421144240002	423821.57900	1144134.39200	MAY	NGS	2	27
421144240005	424032.36900	1144341.39600	NIAGRA	NGS	2	27

MAPS:

Quad ID	Quad_Name	100K Map Name
42114-E7	Buhl	TWIN FALLS
42114-E6	Clover	TWIN FALLS
42114-F6	Niagara Springs	TWIN FALLS
42114-F7	Thousand Springs	TWIN FALLS

COMPARABLE FILES FOR PCCS AND GMM

PCCS	GMM
Bxxx	none
CAVLxxx	xxx.ALL (.AVL)
Cxxx	xxx.CON
Dxxx	none
Fxxx	none
LQTxxx	xxx.AN
LXxxx	xxx.LX
Pxxx	none
Qxxx	none
Rxxx	xxx.RAW
xxx.SCR	xxx.DXF
Uxxx	xxx.UTM
Xxxx	xxx.PGC
Zxxx	xxx.SID
none	xxx.COR
none	xxx.SD
none	xxx.ADD
none	xxx.DEF
none	xxx.INT
none	xxx.IRR
none	xxx.LSA
none	xxx.LXN
none	xxx.NOT

(PCCS) B06N08E

Boundary Information File.

TWP 06N RNG 08E PM Boise Idaho(ID) DATE 92/06/22

100100	06N	09E	700100	06N	08E
100117	06N	09E	700120	06N	08E
100120	06N	09E	700123	06N	08E
100137	06N	09E	700140	06N	08E
100140	06N	09E	700143	06N	08E
100157	06N	09E	700160	06N	08E
100160	06N	09E	700163	06N	08E
100197	06N	09E	700200	06N	08E
100200	06N	09E	700203	06N	08E
100217	06N	09E	700220	06N	08E
100220	06N	09E	700223	06N	08E
100237	06N	09E	700240	06N	08E
100240	06N	09E	700243	06N	08E
100257	06N	09E	700260	06N	08E
100260	06N	09E	700263	06N	08E
100297	06N	09E	700300	06N	08E
100300	06N	09E	700303	06N	08E
100317	06N	09E	700320	06N	08E
100320	06N	09E	700323	06N	08E
100337	06N	09E	700340	06N	08E
100340	06N	09E	700343	06N	08E
1		2	3		4

1 - Point ID in adjoining township
2 - Adjoining township
3 - Point ID in present township
4 - Present township

Description:
This file contains point identifier relationships on adjoining township exterior boundaries transferred into the present township as well as special survey point identifiers that were duplicated during the PCCS process.

(PCCS) CAVL06N08E

Geographic Coordinate File.

TWP 06N RNG 08E PM Boise Idaho(ID) DATE 92/06/19

ORIGIN	435100.0000	1153000.0000	5380.000	0	0	2000.0000	5000.0000
100200	434918.3700	1153358.0227	5380.000	40	40	1735.5255	4844.1446
100700	435335.6184	1153358.5970	5380.000	40	40	1735.2037	5238.9192
200500	435152.6724	1153245.9732	5380.000	40	40	1815.7139	5080.8826
200700	435334.8976	1153246.0170	5380.000	40	40	1815.7528	5237.7583
246100	434827.2443	1153206.9616	5380.000	40	40	1858.8955	4765.6119
400300	435009.7027	1153024.5362	5380.000	40	40	1972.7435	4922.8149
400700	435335.2041	1153022.9923	5380.000	40	40	1974.4830	5238.1783
500100	434826.8531	1152911.9646	5380.000	40	40	2053.3864	4764.9858
500200	434918.1754	1152912.4206	5380.000	40	40	2052.8670	4843.7444
500400	435101.9995	1152912.5241	5380.000	40	40	2052.7266	5003.0726
500700	435334.4353	1152912.7953	5380.000	40	40	2052.3883	5237.0017
537100	434827.0268	1152844.7650	5380.000	40	40	2083.6159	4765.2586
600100	434827.0858	1152801.8375	5380.000	40	40	2131.3253	4765.3646
600500	435152.3620	1152802.1554	5380.000	40	40	2130.8474	5080.3808
600600	435243.7527	1152801.7349	5380.000	40	40	2131.2829	5159.2455
700403	435103.3395	1152651.5117	5380.000	40	40	2209.3334	5005.1911
700700	435335.2279	1152651.6440	5380.000	40	40	2209.0389	5238.2800

1 2 3 4 5 6

1 - Point ID
2 - NAD 27 Latitude/Longitude. The decimal is located after the seconds.
3 - Project elevation in feet.
4 - Average Minimum Reliability in feet.
5 - Maximum Reliability in feet. (Control points have equal ave/max.)
6 - (X,Y) Cartesian tangent plane coordinates in chains unit. Origin is at Point ID 400400 or near the center of the township which is assigned a false departure of 2000 chs. and latitude of 5000 chs.

Description:
Contains all the available control for a township. Not all of the control will necessarily be used. The control resides in a data base control table..

(PCCS) C06N08E

Geographic Coordinate File.

TWP 06N RNG 08E PM Boise Idaho(ID) DATE 92/06/22

ORIGIN	435100.0000	1153000.0000	5380.000	0	0	2000.0000	5000.0000
100100	434827.0270	1153357.6985	5380.000	80	222	1735.8228	4765.3538
100120	434839.8629	1153357.7797	5380.000	250	568	1735.7483	4785.0517
100140	434852.6985	1153357.8606	5380.000	250	568	1735.6741	4804.7492
100160	434905.5343	1153357.9418	5380.000	250	568	1735.5996	4824.4470
100200	434918.3700	1153358.0227	5380.000	40	40	1735.5255	4844.1446
100220	434931.2325	1153358.0515	5380.000	250	568	1735.5092	4863.8833
100240	434944.0950	1153358.0801	5380.000	250	568	1735.4933	4883.6221
100260	434956.9575	1153358.1090	5380.000	250	568	1735.4769	4903.3608
100300	435009.8200	1153358.1376	5380.000	250	568	1735.4609	4923.0996
100320	435022.6825	1153358.1664	5380.000	250	568	1735.4447	4942.8384
100340	435035.5449	1153358.1950	5380.000	250	568	1735.4287	4962.5770
100360	435048.4074	1153358.2238	5380.000	250	568	1735.4125	4982.3158
100400	435101.2698	1153358.2524	5380.000	250	568	1735.3966	5002.0545
100420	435114.1322	1153358.2812	5380.000	250	568	1735.3804	5021.7932
100440	435126.9946	1153358.3099	5380.000	250	568	1735.3643	5041.5319
100460	435139.8570	1153358.3387	5380.000	250	568	1735.3481	5061.2706
100500	435152.7195	1153358.3673	5380.000	250	568	1735.3322	5081.0095
100520	435205.5818	1153358.3961	5380.000	250	568	1735.3160	5100.7480
100540	435218.4442	1153358.4247	5380.000	250	568	1735.3001	5120.4868
100560	435231.3066	1153358.4536	5380.000	250	568	1735.2838	5140.2255
100600	435244.1690	1153358.4822	5380.000	250	568	1735.2679	5159.9643
1		2	3	4	5	6	

1 - Point ID
2 - NAD 27 Latitude/Longitude. The decimal is located after the seconds.
3 - Project elevation in feet.
4 - Average Minimum Reliability in feet.
5 - Maximum Reliability in feet. (Control points have equal ave/max.)
6 - (X,Y) Cartesian tangent plane coordinates in chains unit. Origin is at Point ID 400400 which is assigned a false departure of 2000 chs. and latitude of 5000 chs.

Description:
Contains control points (digitized and published) that were used as part of the PCCS computational process, and any boundary points that were transferred in.

(PCCS) D06N08E

Organized Data Input File.

```
TWP 06N   RNG 08E   PM   Boise            Idaho(ID)   DATE 92/06/22

ORIGIN       43    51    000000         115  30    000000      538000 1000
100700          0     0              0        0      0              0      538000                            0
200700          0     0              0        0      0              0      538000                            0
120700          20300  2 89      57     000  0   0 0   1                                                    0
140700          20000  2 89      57     000  0   0 0   1                                                    0
200700          40000  2 89      57     000  0   0 0   1                                                    0
                                                                                                          111
          FROM 200700 TO 400700                              0 0
200700          0     0              0        0      0              0      538000                            0
400700          0     0              0        0      0              0      538000                            0
240700          40000  2 89      57     000  0   0 0   1                                                    0
300700          40000  2 89      57     000  0   0 0   1                                                    0
340700          40000  2 89      57     000  0   0 0   1                                                    0
400700          40000  2 89      57     000  0   0 0   1                                                    0
                                                                                                          111
          FROM 400700 TO 500700                                                                          0 0
400700          0     0              0        0      0              0      538000                            0
500700          0     0              0        0      0              0      538000                            0
440700          40000  2 89      57     000  0   0 0   1                                                    0
500700          40000  2 89      57     000  0   0 0   1                                                    0
|-------|       |------| ||----------------||------| |      |---------|     |--------|
    1              2     3        4              5    6                7                                 8

          FROM 500700 TO 700700
         |--------------------------------|
                          9
```

1 - Point ID
2 - Horizontal distance in chains. In example 40000 = 40 chains.
3 - Bearing Quadrant - 1=NE, 2=SE, 3=SW, 4=NW
4 - Bearing in degrees, minutes, seconds.
5 - Program codes
6 - 1 indicates the computation adjustment will be compass rule.
7 - Project elevation.
8 - File program codes that control lookup files within the program.
9 - Traverse name with beginning/ending stations.

Description:
This file contains the traverses between held control points and is one of two input files used in PCCS to generate coordinates.

(PCCS) F06N08E

Geographic Coordinate File.

TWP 06N RNG 08E PM Boise Idaho(ID) DATE 92/06/22

ORIGIN	435100.0000	1153000.0000	5380.000	0	0	2000.0000	5000.0000
700100	434827.1721	1152651.3742	5380.000	29	75	2209.6378	4765.5374
700120	434839.9486	1152651.4041	5380.000	29	68	2209.5922	4785.1441
700123	434840.1861	1152651.4046	5380.000	29	68	2209.5914	4785.5086
700140	434852.7251	1152651.4339	5380.000	29	68	2209.5467	4804.7508
700143	434853.2001	1152651.4350	5380.000	29	68	2209.5450	4805.4797
700160	434905.5894	1152651.4639	5380.000	29	68	2209.5008	4824.4922
700163	434906.2141	1152651.4654	5380.000	29	68	2209.4986	4825.4509
700200	434918.4537	1152651.4940	5380.000	29	68	2209.4549	4844.2336
700203	434919.2280	1152651.4952	5380.000	29	68	2209.4528	4845.4219
700220	434931.3505	1152651.5138	5380.000	29	68	2209.4204	4864.0250
700223	434932.2420	1152651.5151	5380.000	29	68	2209.4181	4865.3931
700240	434944.2474	1152651.5335	5380.000	29	68	2209.3860	4883.8165
700243	434945.2560	1152651.5351	5380.000	29	68	2209.3832	4885.3643
700260	434956.9815	1152651.5530	5380.000	29	68	2209.3519	4903.3581
700263	434958.2699	1152651.5550	5380.000	29	68	2209.3485	4905.3353
700300	435009.7157	1152651.5725	5380.000	29	68	2209.3179	4922.9000
700303	435011.2838	1152651.5705	5380.000	29	68	2209.3186	4925.3064
700320	435022.5474	1152651.5560	5380.000	29	68	2209.3238	4942.5915
700323	435024.2978	1152651.5538	5380.000	29	68	2209.3245	4945.2777
700340	435035.3791	1152651.5395	5380.000	29	68	2209.3296	4962.2830
1	2		3	4	5	6	

1 - Point ID
2 - NAD 27 Latitude/Longitude. The decimal is located after the seconds.
3 - Project elevation in feet.
4 - Average Minimum Reliability in feet.
5 - Maximum Reliability in feet. (Control points have equal ave/max.)
6 - (X,Y) Cartesian tangent plane coordinates in chains unit. Origin is at Point ID 400400 or a point near the center of the township which is assigned a false departure of 2000 chs. and latitude of 5000 chs.

Description:
Contains township boundary points that were previously computed and transferred into the present township.

(PCCS) LQT0060N0080E

Output file from the QLINK process.

SEC_001	A	T_L_1		39.950; M08T0060NR0080E		435328.8000	1152700.4600
SEC_001	B	T_L_2		39.850; M08T0060NR0080E		435328.7100	1152718.0900
SEC_001	C	T_A		40.000; M08T0060NR0080E		435315.9600	1152718.0500
SEC_001	D	T_A		40.000; M08T0060NR0080E		435316.0300	1152700.4500
SEC_001	E	T_L_3		39.750; M08T0060NR0080E		435328.6300	1152735.7100
SEC_001	F	T_L_4		39.650; M08T0060NR0080E		435328.5400	1152753.3500
SEC_001	G	T_A		40.000; M08T0060NR0080E		435315.8000	1152753.2400
SEC_001	H	T_A		40.000; M08T0060NR0080E		435315.8800	1152735.6500
SEC_001	I	T_A		40.000; M08T0060NR0080E		435303.0800	1152735.5700
SEC_001	J	T_A		40.000; M08T0060NR0080E		435303.0000	1152753.1300
SEC_001	K	T_A		40.000; M08T0060NR0080E		435250.2000	1152753.0300
SEC_001	L	T_A		40.000; M08T0060NR0080E		435250.2700	1152735.5000
SEC_001	M	T_A		40.000; M08T0060NR0080E		435303.2400	1152700.4400
SEC_001	N	T_A		40.000; M08T0060NR0080E		435303.1600	1152718.0100
SEC_001	O	T_A		40.000; M08T0060NR0080E		435250.3400	1152717.9700
SEC_001	P	T_A		40.000; M08T0060NR0080E		435250.4200	1152700.4400
SEC_002	A	T_L_1		39.630; M08T0060NR0080E		435328.4500	1152810.9900
SEC_002	B	T_L_2		39.700; M08T0060NR0080E		435328.3600	1152828.6400
SEC_002	C	T_A		40.000; M08T0060NR0080E		435315.6700	1152828.5600
SEC_002	D	T_A		40.000; M08T0060NR0080E		435315.7300	1152810.8700
SEC_002	E	T_L_3		39.760; M08T0060NR0080E		435328.2700	1152846.3000
SEC_002	F	T_L_4		39.830; M08T0060NR0080E		435328.1800	1152903.9500
SEC_002	G	T_A		40.000; M08T0060NR0080E		435315.5500	1152903.9200
SEC_002	H	T_A	N_P	40.000; M08T0060NR0080E		435315.6100	1152846.2400
SEC_002	I	T_A	N_P	40.000; M08T0060NR0080E		435302.9000	1152846.1700
SEC_002	J	T_A	N_P	40.000; M08T0060NR0080E		435302.8800	1152903.8800
1	2	3	4	5	6	7	8	9

1- Section Number
2- Nominal Location expressed as an alpha code.
3- Survey Type
4- Survey Number (lot # or MS #)
5- Survey Note
6- Acres
7- Meridian (expressed as a numeric code “08") and Tier & Range.
8- Latitude of area point.
9- Longitude of area point.

Description:
Contains the latitude and longitude of an area point for each polygon along with a portion of the legal land description label.

(PCCS) LX06N08E

Geographic Coordinate Line File.

TWP 06N RNG 08E PM Boise Idaho(ID) DATE 92/06/22

ORIGIN 435100.0000 1153000.0000 1.0 1.0000 620567.784856090.35

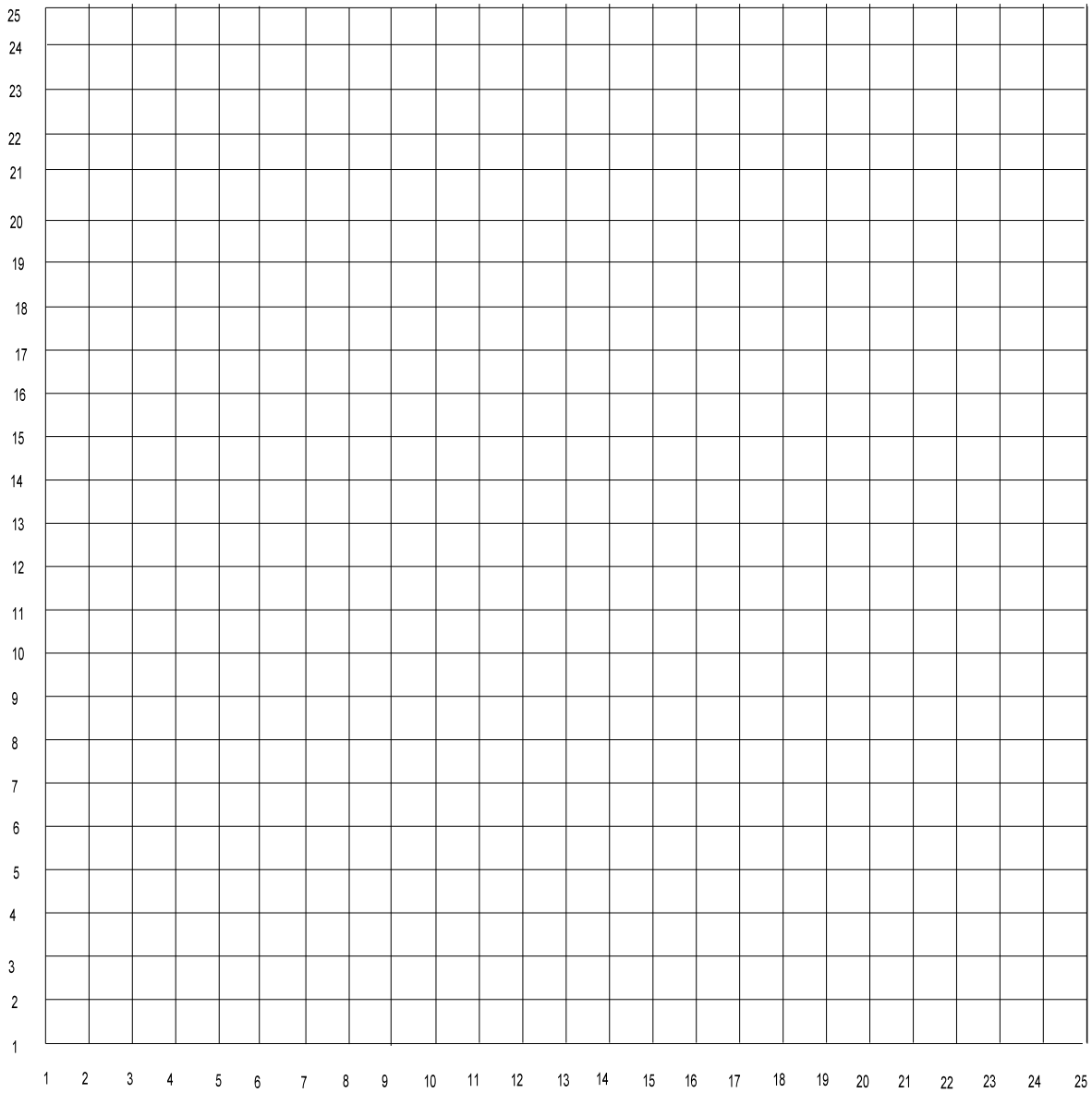
100100	434827.0270	1153357.6985	5380.00	80	222	1	0	2	615342.36	4851276.77
100120	434839.8629	1153357.7797	5380.00	250	568	1	0	3	615333.69	4851672.74
100140	434852.6985	1153357.8606	5380.00	250	568	1	0	3	615325.02	4852068.70
100160	434905.5343	1153357.9418	5380.00	250	568	1	0	3	615316.34	4852464.67
100200	434918.3700	1153358.0227	5380.00	40	40	1	0	3	615307.67	4852860.64
100220	434931.2325	1153358.0515	5380.00	250	568	1	0	3	615300.15	4853257.45
100240	434944.0950	1153358.0801	5380.00	250	568	1	0	3	615292.63	4853654.27
100260	434956.9575	1153358.1090	5380.00	250	568	1	0	3	615285.11	4854051.08
100300	435009.8200	1153358.1376	5380.00	250	568	1	0	3	615277.59	4854447.90
100320	435022.6825	1153358.1664	5380.00	250	568	1	0	3	615270.07	4854844.71
100340	435035.5449	1153358.1950	5380.00	250	568	1	0	3	615262.55	4855241.52
100360	435048.4074	1153358.2238	5380.00	250	568	1	0	3	615255.02	4855638.34
100400	435101.2698	1153358.2524	5380.00	250	568	1	0	3	615247.50	4856035.15
100420	435114.1322	1153358.2812	5380.00	250	568	1	0	3	615239.98	4856431.96
100440	435126.9946	1153358.3099	5380.00	250	568	1	0	3	615232.46	4856828.78
100460	435139.8570	1153358.3387	5380.00	250	568	1	0	3	615224.93	4857225.59
100500	435152.7195	1153358.3673	5380.00	250	568	1	0	3	615217.41	4857622.41
100520	435205.5818	1153358.3961	5380.00	250	568	1	0	3	615209.89	4858019.22
100540	435218.4442	1153358.4247	5380.00	250	568	1	0	3	615202.36	4858416.03
100560	435231.3066	1153358.4536	5380.00	250	568	1	0	3	615194.83	4858812.84
100600	435244.1690	1153358.4822	5380.00	250	568	1	0	3	615187.31	4859209.66
1 2	3		4	5	6	7	8	9		

1 - Point ID
2 - NAD 27 Latitude/Longitude. The decimal is located after the seconds.
3 - Project elevation in feet.
4 - Average Minimum Reliability in feet.
5 - Maximum Reliability in feet. (Control points have equal ave/max.)
6 - Line number code - see attached Lxx File Index diagram.
7 - Line type code - 0 = solid section line, 1 = dashed _20 prefix or suffix PID, 2 = dashed center line, 3= dashed _60 prefix or suffix PID
8 - Line draw code - 1 = skip, 2 = pen down, 3 = draw, 4 = pen up
9 - Universal Transverse Mercator (UTM) coordinates in meters. Cartesian format - x,y.

Description:
This is a graphics line file, usually used to produce graphic displays.

LXxx and .LX (GMM) FILE INDEX DIAGRAM

This is the sequence of line information as it shows up in the Lxx file for a simple township. It goes from South to North and then West to East. In more complicated townships collected with GMM software there may be exceptions to this sequence.



(PCCS) P06N08E

Geographic Coordinate File.

TWP 06N RNG 08E PM Boise Idaho(ID) DATE 92/06/22

ORIGIN 435100.0000 1153000.0000 5380.000 0 0 2000.0000 5000.0000

100100	434827.0270	1153357.6985	5380.000	80	222	1735.8228	4765.3538
100120	434839.8629	1153357.7797	5380.000	250	568	1735.7483	4785.0517
100140	434852.6985	1153357.8606	5380.000	250	568	1735.6741	4804.7492
100160	434905.5343	1153357.9418	5380.000	250	568	1735.5996	4824.4470
100200	434918.3700	1153358.0227	5380.000	40	40	1735.5255	4844.1446
100220	434931.2325	1153358.0515	5380.000	250	568	1735.5092	4863.8833
100240	434944.0950	1153358.0801	5380.000	250	568	1735.4933	4883.6221
100260	434956.9575	1153358.1090	5380.000	250	568	1735.4769	4903.3608
100300	435009.8200	1153358.1376	5380.000	250	568	1735.4609	4923.0996
100320	435022.6825	1153358.1664	5380.000	250	568	1735.4447	4942.8384
100340	435035.5449	1153358.1950	5380.000	250	568	1735.4287	4962.5770
100360	435048.4074	1153358.2238	5380.000	250	568	1735.4125	4982.3158
100400	435101.2698	1153358.2524	5380.000	250	568	1735.3966	5002.0545
100420	435114.1322	1153358.2812	5380.000	250	568	1735.3804	5021.7932
100440	435126.9946	1153358.3099	5380.000	250	568	1735.3643	5041.5319
100460	435139.8570	1153358.3387	5380.000	250	568	1735.3481	5061.2706
100500	435152.7195	1153358.3673	5380.000	250	568	1735.3322	5081.0095
100520	435205.5818	1153358.3961	5380.000	250	568	1735.3160	5100.7480
100540	435218.4442	1153358.4247	5380.000	250	568	1735.3001	5120.4868
100560	435231.3066	1153358.4536	5380.000	250	568	1735.2838	5140.2255
100600	435244.1690	1153358.4822	5380.000	250	568	1735.2679	5159.9643
1	2		3	4	5	6	

1 - Point ID
2 - NAD 27 Latitude/Longitude. The decimal is located after the seconds.
3 - Project elevation in feet.
4 - Average Minimum Reliability in feet.
5 - Maximum Reliability in feet. (Control points have equal ave/max.)
6 - (X,Y) Cartesian tangent plane coordinates in chains unit. Origin is at Point ID 400400 or a point near the center of the township which is assigned a false departure of 2000 chs. and latitude of 5000 chs.

Description:
Contains the above described values for section corners, quarter corners, and sixteenth corners. It is required for the PCCS section subdivision programs.

(PCCS) Q06N08E

Metadata File.

TWP 06N	RNG 08E	PM Boise	Idaho(ID) DATE 92/06/19
1 C	Geographic Latitude/Longitude		DED9021
1 W	West		DED9022
1 A	Deg-Min-Sec DDDmmss.ss (PCCS)		DED9046
1 A	Chains - ground		DED9049
1 A	Ntl Geodetic Vertical Datum 1929		DED9062
1 31	BLM - PCCS Program		DED9063
1 F	Feet		DED9064
1 A	NAD 27		DED9075
1 31	BLM - PCCS Program		DED9076
1 31	BLM - PCCS Program		DED9107
1 I	Astronomic (true) mean from North		DED9114
1 0060N	full (not a fractional) township		DED1695
1 0080E	full (not a fractional) range		DED1699
| |-----|	|----------|		|---------|
1 2	3		4

1 - Record number. One of an undetermined number of records to be collected by GCDB.
2 - Sub-identifier codes that identify the attribute definition description.
3 - Attribute definition description.
4 - Automated Lands & Mineral Records System (ALMRS) Data Element Dictionary number.

Description:
GCDB metadata file of attributes regarding collection parameters.

(PCCS) R06N08E

Raw Data File.

```
 TWP 06N   RNG 08E   PM   Boise            Idaho(ID)  DATE 92/06/22
999999
700100     700120    19.635    4          500.     3919
700120     700123     0.365    4          500.     3919
700123     700140    19.270    4          500.     3919
700140     700143     0.730    4          500.     3919
700143     700160    19.040    4          500.     3919
700160     700163     0.960    4          500.     3919
700163     700200    18.810    4          500.     3919
700200     700203     1.190    4          300.     3919
700203     700220    18.630    4          300.     3919
```

and then further down in the file....

```
620100     617100     7.465    4       900000.     3856
617100     600100    12.205    4       900000.     3856
600100     597100     7.800    3       895600.     3856
597100     560100    11.670    3       895600.     3856
560100     557100     8.335    3       895600.     3856
557100     540100    11.135    3       895600.     3856
540100     537100     8.870    4       900000.     3856
537100     520100    10.540    4       900000.     3856
520100     517100     9.440    4       900000.     3856
517100     500100     9.970    4       900000.     3856
|-----------------------|   |-------|    |     |----------|  |----|
            1                   2      3         4           5
```

1 - From and to station Point IDs.
2 - Horizontal distance in chains.
3 - Bearing quadrant (1=NE, 2=SE, 3=SW, 4=NW)
4 - Bearing in degrees, minutes, and seconds. The decimal is located after the seconds. The first example shows 5 minutes, the last shows 90 degrees.
5 - Source Identifier number (SID) Each data source, whether it is an official cadastral survey plat, state or local survey plat, deeds, etc., utilized in generating coordinates for the GCDB, will be assigned a unique SID number.

Description:
This is the raw data with which PCCS performs it computations. It is abstracted from the survey records.

(PCCS) T06N08E.SCR

Script File. For use in AutoCAD and other CAD or GIS software packages.

```
layer
new
twp,sect,int,annot,points
color
magenta
twp
color
blue
sect
color
green
int
```

and further down in the file.....

```
layer
set
sect

pline
0.61534236000E+06,0.48512767700E+07
0.61533369000E+06,0.48516727400E+07
0.61532502000E+06,0.48520687000E+07
0.61531634000E+06,0.48524646700E+07
0.61530767000E+06,0.48528606400E+07
0.61530015000E+06,0.48532574500E+07
0.61529263000E+06,0.48536542700E+07
0.61528511000E+06,0.48540510800E+07
0.61527759000E+06,0.48544479000E+07
0.61527007000E+06,0.48548447100E+07
0.61526255000E+06,0.48552415200E+07
0.61525502000E+06,0.48556383400E+07
0.61524750000E+06,0.48560351500E+07
```

Description:
This script file can be brought into many Computer Aided Drafting (CAD) and Geographic Information Systems (GIS) software packages to produce a drawing of the township.

(PCCS) U06N08E

Geographic Coordinate File.

TWP 06N RNG 08E PM Boise Idaho(ID) DATE 92/06/22
ORIGIN 435100.0000 1153000.0000 1.0 1.0000 620567.784856090.35

100100	434827.0270	1153357.6985	5380.00	80	222	615342.36	4851276.77
100120	434839.8629	1153357.7797	5380.00	250	568	615333.69	4851672.74
100140	434852.6985	1153357.8606	5380.00	250	568	615325.02	4852068.70
100160	434905.5343	1153357.9418	5380.00	250	568	615316.34	4852464.67
100200	434918.3700	1153358.0227	5380.00	40	40	615307.67	4852860.64
100220	434931.2325	1153358.0515	5380.00	250	568	615300.15	4853257.45
100240	434944.0950	1153358.0801	5380.00	250	568	615292.63	4853654.27
100260	434956.9575	1153358.1090	5380.00	250	568	615285.11	4854051.08
100300	435009.8200	1153358.1376	5380.00	250	568	615277.59	4854447.90
100320	435022.6825	1153358.1664	5380.00	250	568	615270.07	4854844.71
100340	435035.5449	1153358.1950	5380.00	250	568	615262.55	4855241.52
100360	435048.4074	1153358.2238	5380.00	250	568	615255.02	4855638.34
100400	435101.2698	1153358.2524	5380.00	250	568	615247.50	4856035.15
100420	435114.1322	1153358.2812	5380.00	250	568	615239.98	4856431.96
100440	435126.9946	1153358.3099	5380.00	250	568	615232.46	4856828.78
100460	435139.8570	1153358.3387	5380.00	250	568	615224.93	4857225.59
100500	435152.7195	1153358.3673	5380.00	250	568	615217.41	4857622.41
100520	435205.5818	1153358.3961	5380.00	250	568	615209.89	4858019.22
100540	435218.4442	1153358.4247	5380.00	250	568	615202.36	4858416.03
100560	435231.3066	1153358.4536	5380.00	250	568	615194.83	4858812.84
100600	435244.1690	1153358.4822	5380.00	250	568	615187.31	4859209.66
|-------|	|-------------------------------------	-------------------------------------|	|---------|	|--|	|--|	|------------|	|-------------|
1	2		3	4	5	6	7

1 - Point ID.
2 - NAD 27 Latitude/Longitude. The decimal is located after the seconds.
3 - Project elevation
4 - Average minimum reliability in feet.
5 - Maximum reliability in feet.
6 - Universal Transverse Mercator (UTM) coordinates in meters, x value.
7 - UTM coordinates in meters, y value.

Description:
This file contains Latitude and Longitude, and UTM coordinates for all the points in the township.

(PCCS) X06N08E

Geographic Coordinate File.

```
 TWP 06N   RNG 08E   PM   Boise            Idaho(ID)   DATE 92/06/22
 ORIGIN   435100.0000 1153000.0000 5380.000   0    0  2000.0000 5000.0000
100100    434827.0270     1153357.6985     5380.000      80   222   1735.8228    4765.3538
100120    434839.8629     1153357.7797     5380.000     250   568   1735.7483    4785.0517
100140    434852.6985     1153357.8606     5380.000     250   568   1735.6741    4804.7492
100160    434905.5343     1153357.9418     5380.000     250   568   1735.5996    4824.4470
100200    434918.3700     1153358.0227     5380.000      40    40   1735.5255    4844.1446
100220    434931.2325     1153358.0515     5380.000     250   568   1735.5092    4863.8833
100240    434944.0950     1153358.0801     5380.000     250   568   1735.4933    4883.6221
100260    434956.9575     1153358.1090     5380.000     250   568   1735.4769    4903.3608
100300    435009.8200     1153358.1376     5380.000     250   568   1735.4609    4923.0996
100320    435022.6825     1153358.1664     5380.000     250   568   1735.4447    4942.8384
100340    435035.5449     1153358.1950     5380.000     250   568   1735.4287    4962.5770
100360    435048.4074     1153358.2238     5380.000     250   568   1735.4125    4982.3158
100400    435101.2698     1153358.2524     5380.000     250   568   1735.3966    5002.0545
100420    435114.1322     1153358.2812     5380.000     250   568   1735.3804    5021.7932
100440    435126.9946     1153358.3099     5380.000     250   568   1735.3643    5041.5319
100460    435139.8570     1153358.3387     5380.000     250   568   1735.3481    5061.2706
100500    435152.7195     1153358.3673     5380.000     250   568   1735.3322    5081.0095
100520    435205.5818     1153358.3961     5380.000     250   568   1735.3160    5100.7480
100540    435218.4442     1153358.4247     5380.000     250   568   1735.3001    5120.4868
100560    435231.3066     1153358.4536     5380.000     250   568   1735.2838    5140.2255
100600    435244.1690     1153358.4822     5380.000     250   568   1735.2679    5159.9643
|--------|  |-------------------------  ----------|  |-----------|  |-|   |-|   |----------------------------|
    1                       2                             3          4     5                  6
```

1 - Point ID
2 - NAD 27 Latitude/Longitude. The decimal is located after the seconds.
3 - Project elevation in feet.
4 - Average Minimum Reliability in feet.
5 - Maximum Reliability in feet. (Control points have equal ave/max.)
6 - (X,Y) Cartesian tangent plane coordinates in chains unit. Origin is at Point ID 400400 or a point near the center of the township which is assigned a false departure of 2000 chs. and latitude of 5000 chs.

Description:
Contains the above described values for every PCCS point in the township, including sixteenths and special surveys.

(PCCS) Z06N08E

Metadata file.

```
  TWP 06N   RNG 08E   PM   Boise           Idaho(ID)   DATE 92/06/22
3919                BLM  18-JUL-1924    01    KURTZWEIL,G,M
3873                BLM  19-JAN-1897    01    KENDALL,L,B
3856                BLM  03-APR-1930    01    KURTZWEIL,G,M
|----|              |---|  |----------------|    |    |---------------------|
   1                  2           3          4              5
```

1 - <u>Source Identifier number (SID)</u> Each data source, whether it is an official cadastral survey plat, state or local survey plat, deeds, etc., utilized in generating coordinates for the GCDB, will be assigned a unique SID number. If needed this information is available from the GCDB staff.

2 - <u>Source Document Agency</u> A code identifying the source of the survey document by agency. It is part of the Data Element Dictionary. See Table A on the next page.

3 - <u>Date</u> The latest signature acceptance date on the plat when it was signed by a Surveyor General, Cadastral Survey Branch Chief, or any other acting official or registered Professional Land Surveyor.

4 - <u>Survey Procedure</u> A Data Element Dictionary code number for the type of survey procedure used. See Table B on the next page.

5 - <u>Surveyor Name</u> The name of the primary surveyor who conducted the field survey.

Description:
GCDB metadata file of attributes regarding the survey plats used in the abstraction process.

TABLE A

Please enter the number for the Source Document Agency:
for the reference code 3507
DED9125

<1>-Atomic Energy Commission(AEC)
<2>-US Army Map Srvc(now DMA)
<3>-Bureau of Land Management(BLM)
<4>-Bureau of Reclamation(BOR)
<5>-Civil Aeronautics Board(CAB)
<6>-Coast & Geodetic Srvy(CGS)
<7>-Defense Mapping Agency(DMA)
<8>-Fed Aviation Admin(FAA)
<9>-Ntnl Aeronautics & Space Ad(NASA)
<10>-Ntnl Bureau of Standards(NBS)
<11>-Ntnl Geodetic Survey(NGS)
<12>-Ntnl Park Service(NPS)
<13>-US Forest Service(USFS)
<14>-US Geological Survey(USGS)
<15>-USGS Eastern Mapping Cntr(USGS-E)
<16>-Wisconsin Dept of Trans(WIDT)
<17>-Dane County Wisconsin(WI-025)
<18>-Local Survyr,Ind/Firm(LOCSUR)
<19>-Univ of Wisconsin-Madison(UWI)
<20>-Mark Hurd Aerial Srvy,INC(MHAS)
<21>-Other

TABLE B

Please enter the number corresponding to the Survey Procedure desired:
for the reference code 3507
DED9127

<1>-Original Survey(01)
<2>-Dependent Resurvey(02)
<3>-Independent Resurvey(03)
<4>-Retracement Survey(04)
<5>-Amer Land Title Ass Srvy(05)
<6>-California Tract Survey(06)
<7>-International Boundary Srvy(07)
<8>-Not Surveyed-Digitized(08)
<9>-Not Surveyed-Protracted(09)
<10>-Not Surveyed-Scaled(10)
<11>-Reacquired Lands Survey(11)
<12>-Omitted Lands Survey(12)
<13>-Remeasurement Survey(13)
<14>-Restoration Survey(14)
<15>-Location Survey(15)
<16>-Other-SrvyProcedNotDescribed(16)
<17>-Supplemental Plat(17)
<18>-Field Survey Travers(18)
<19>-Field Survey Triang(19)
<20>-Field Survey Trilat(20)
<21>-GPS,FGCC Rel Pos Stndrd(21)
<22>-GPS,Rel Position Netwrk(22)
<23>-GPS,Rel Position Rad(23)
<24>-GPS,Point Position(34)
<25>-GPS,Procedure unkwn(35)
<26>-Unknown-Srvy Procdr Unkwn(99)

(GMM) T03S39E.ALL (.AVL)

Geographic Coordinate File.

TWP 03S RNG 39E PM Boise Idaho(ID) DATE 92/12/03

ORIGIN	430900.0000	1115300.0000	6107.000	0	0	2000.0000	5000.0000
200200	430720.0594	1115528.6589	6107.000	40	40	1832.8984	4846.6863
200300	430812.2517	1115528.9244	6107.000	40	40	1832.6395	4926.7734
200400	430905.1101	1115528.6197	6107.000	40	40	1833.0219	5007.8824
200600	431048.6303	1115528.8205	6107.000	40	40	1832.8747	5166.7310
300100	430627.8638	1115417.9871	6107.000	40	40	1912.3171	4766.5647
303700	431143.4701	1115402.1275	6107.000	40	40	1930.2482	5250.8472
400100	430627.7656	1115306.5040	6107.000	40	40	1992.6874	4766.4027
400300	430812.2042	1115305.4477	6107.000	40	40	1993.8779	4926.6592
400500	430956.4033	1115307.4236	6107.000	40	40	1991.6613	5086.5491
603700	431143.6213	1115029.2979	6107.000	40	40	2169.1961	5251.1143
700100	430627.3197	1114933.6059	6107.000	40	40	2232.0547	4765.7979
700397	430901.0974	1114933.1767	6107.000	40	40	2232.3755	5001.7636
700400	430903.9452	1114933.1773	6107.000	40	40	2232.3719	5006.1334
1	2		3	4		5	

1 - Point ID
2 - NAD 27 Latitude/Longitude. The decimal is located after the seconds.
3 - Project elevation in feet.
4 - Error estimates in feet, northing, easting.
5 - (X,Y) Cartesian tangent plane coordinates in chains unit. Origin is assigned a false departure of 2000 chs. and latitude of 5000 chs.

Description:
This is a backup control file. It contains all the control available in the township but does not include transferred boundaries. This control is not all necessarily used.

(GMM) T41N03W.AN

Output file from the GLINK process.

Sec_001	C	T_A			40.000; M08T0410NR0030W	465550.5287	1163925.6469
Sec_001	D	T_A			40.000; M08T0410NR0030W	465550.9091	1163906.5898
Sec_001	G	T_A			40.000; M08T0410NR0030W	465549.6453	1164003.7751
Sec_001	H	T_A			40.000; M08T0410NR0030W	465550.1475	1163944.7008
Sec_001	I	T_A			40.000; M08T0410NR0030W	465536.9385	1163944.6585
Sec_001	J	T_A			40.000; M08T0410NR0030W	465536.4790	1164003.6930
Sec_001	K	T_A			40.000; M08T0410NR0030W	465523.3513	1164003.6364
Sec_001	L	T_A			40.000; M08T0410NR0030W	465523.8332	1163944.6165
Sec_001	M	T_A			40.000; M08T0410NR0030W	465537.8554	1163906.5816
Sec_001	N	T_A			40.000; M08T0410NR0030W	465537.3971	1163925.6209
Sec_001	O	T_A			40.000; M08T0410NR0030W	465524.3151	1163925.5951
Sec_001	P	T_A			40.000; M08T0410NR0030W	465524.7965	1163906.5736
Sec_001	A	T_L	1		40.170; M08T0410NR0030W	465604.0547	1163906.5990
Sec_001	B	T_L	2		40.520; M08T0410NR0030W	465603.8649	1163925.6740
Sec_001	E	T_L	3		40.870; M08T0410NR0030W	465603.5115	1163944.7688
Sec_001	F	T_L	4		41.220; M08T0410NR0030W	465603.1550	1164003.9121
Sec_002	C	T_A			40.000; M08T0410NR0030W	465549.3390	1164041.5865
Sec_002	D	T_A			40.000; M08T0410NR0030W	465549.3737	1164022.7459
Sec_002	G	T_A			40.000; M08T0410NR0030W	465549.0873	1164119.3982
Sec_002	H	T_A			40.000; M08T0410NR0030W	465549.2203	1164100.4793
Sec_002	I	T_A		N_P	40.000; M08T0410NR0030W	465536.1688	1164100.2773
Sec_002	J	T_A			40.000; M08T0410NR0030W	465536.0077	1164119.2171
Sec_002	K	T_A		N_P	40.000; M08T0410NR0030W	465522.9280	1164119.0327
Sec_002	L	T_A			40.000; M08T0410NR0030W	465523.2419	1164100.0772
Sec_002	M	T_A		N_P	40.000; M08T0410NR0030W	465536.2141	1164022.5918
Sec_002	N	T_A			40.000; M08T0410NR0030W	465536.2128	1164041.3863
Sec_002	O	T_A			40.000; M08T0410NR0030W	465523.3166	1164041.2148
1	2	3	4	5	6	7	8	9

1- Section Number
2- Nominal Location expressed as an alpha code.
3- Survey Type
4- Survey Number (lot # or MS #)
5- Survey Note
6- Acres
7- Meridian (expressed as a numeric code) and Tier & Range.
8- Latitude of area point.
9- Longitude of area point.

Description:
Contains the latitude and longitude of an area point for each polygon along with a portion of the legal land description label.

(GMM) T03S39E.CON

Geographic Coordinate File.

TWP 03S RNG 39E PM Boise Idaho(ID) DATE 92/12/03

ORIGIN 430900.0000 1115300.0000 6107.000 0 0 2000.0000 5000.0000

200200	430720.0594	1115528.6589	6107.000	40	40	106.9358	100.4781
200300	430812.2517	1115528.9244	6107.000	40	40	106.9291	101.4788
200400	430905.1101	1115528.6197	6107.000	40	40	106.9305	102.4924
200600	431048.6303	1115528.8205	6107.000	40	40	106.9219	104.4773
300100	430627.8638	1115417.9871	6107.000	40	40	107.9315	99.4803
303700	431143.4701	1115402.1275	6107.000	40	40	108.1351	105.5325
400100	430627.7656	1115306.5040	6107.000	40	40	108.9358	99.4816
400300	430812.2042	1115305.4477	6107.000	40	40	108.9439	101.4842
400500	430956.4033	1115307.4236	6107.000	40	40	108.9095	103.4821
603700	431143.6213	1115029.2979	6107.000	40	40	111.1209	105.5459
700100	430627.3197	1114933.6059	6107.000	40	40	111.9269	99.4842
700397	430901.0974	1114933.1767	6107.000	40	40	111.9210	102.4328
700400	430903.9452	1114933.1773	6107.000	40	40	111.9207	102.4874
100100	430628.1434	1115635.2902	6107.000	40	40	106.0025	99.4801
100120	430641.1687	1115635.2493	6107.000	40	40	106.0024	99.7298
100140	430654.1940	1115635.2084	6107.000	40	40	106.0023	99.9796
100160	430707.2193	1115635.1674	6107.000	40	40	106.0022	100.2293
100200	430720.2445	1115635.1265	6107.000	40	40	106.0022	100.4791
100220	430733.2698	1115635.0856	6107.000	40	40	106.0021	100.7288
100240	430746.2951	1115635.0447	6107.000	40	40	106.0020	100.9786
100260	430759.3203	1115635.0038	6107.000	40	40	106.0019	101.2283
100300	430812.3455	1115634.9628	6107.000	40	40	106.0018	101.4780
1	2		3	4		5	

1 - Point ID
2 - NAD 27 Latitude/Longitude. The decimal is located after the seconds.
3 - Project elevation in feet.
4 - Error estimates in feet.
5 - These are meaningless values.

Description:
This file contains all the control used in the township.

(GMM) T03S39E.COR

Coordinate File.

700100	591049.213	525308.649
700117	591045.071	526366.036
700120	591044.015	526628.308
700137	591039.872	527686.025
700140	591038.816	527947.966
700157	591034.672	529006.014
700160	591033.618	529267.625
700197	591029.472	530326.002
700200	591028.419	530587.284
700217	591024.305	531644.744
700220	591023.251	531906.656
700237	591019.140	532963.456
700240	591018.083	533226.028
700257	591013.974	534282.168
700260	591012.914	534545.400
700297	591008.807	535600.881
700300	591007.745	535864.772
700317	591003.899	536918.270
700320	591002.846	537183.772
700337	590999.005	538235.621
700340	590997.946	538502.772
1	2	

1 - Point ID.
2 - State Plane Coordinates (x,y) easting & northing in feet and NAD 27.

Description:
These are the State Plane coordinates for the township. GMM does all its computations in SPCs and then converts them into UTMs and Lat/Long.

(GMM) T03S39E.DXF

Drawing Interchange File (DXF). For use in AutoCAD and other CAD or GIS software packages.

```
  0
SECTION
  2
HEADER
  9
$ACADVER
  1
AC1004
  9
$INSBASE
 10
0.0
```

and then to the end of the file.....

```
  1
N90- 0W
 50
    0.13
  0
ENDSEC
  0
EOF
```

Description:
This drawing interchange file can be brought into many Computer Aided Drafting (CAD) and Geographic Information Systems (GIS) software packages to produce a drawing of the township.

(GMM) T03S39E.LX

Geographic Coordinate Line File.

TWP 03S RNG 39E PM Boise Idaho(ID) DATE 92/12/03

ORIGIN 430900.0000 1115300.0000 428174.124777635.76

100100	430628.1434	1115635.2902	6107.00	0	0	1	0	2	423258.67	4773004.40
100120	430641.1687	1115635.2493	6107.00	0	0	1	0	3	423264.11	4773406.18
100140	430654.1940	1115635.2084	6107.00	0	0	1	0	3	423269.56	4773807.97
100160	430707.2193	1115635.1674	6107.00	0	0	1	0	3	423275.01	4774209.75
100200	430720.2445	1115635.1265	6107.00	0	0	1	0	3	423280.45	4774611.54
100220	430733.2698	1115635.0856	6107.00	0	0	1	0	3	423285.90	4775013.32
100240	430746.2951	1115635.0447	6107.00	0	0	1	0	3	423291.34	4775415.11
100260	430759.3203	1115635.0038	6107.00	0	0	1	0	3	423296.79	4775816.89
100300	430812.3455	1115634.9628	6107.00	0	0	1	0	3	423302.24	4776218.67
100320	430825.3708	1115634.9219	6107.00	0	0	1	0	3	423307.68	4776620.46
100340	430838.3960	1115634.8810	6107.00	0	0	1	0	3	423313.13	4777022.24
100354	430845.2212	1115634.8595	6107.00	0	0	1	0	3	423315.98	4777232.78
100356	430846.7647	1115634.8547	6107.00	0	0	1	0	3	423316.63	4777280.39
100360	430851.4212	1115634.8401	6107.00	0	0	1	0	3	423318.58	4777424.03
100400	430904.4464	1115634.7991	6107.00	0	0	1	0	3	423324.02	4777825.81
100420	430917.4716	1115634.7582	6107.00	0	0	1	0	3	423329.47	4778227.60
100440	430930.4968	1115634.7173	6107.00	0	0	1	0	3	423334.92	4778629.38
100460	430943.5219	1115634.6764	6107.00	0	0	1	0	3	423340.37	4779031.16
100500	430956.5471	1115634.6355	6107.00	0	0	1	0	3	423345.81	4779432.95
1	2		3	4		5	6	7	8	

1 - Point ID
2 - NAD 27 Latitude/Longitude. The decimal is located after the seconds.
3 - Project elevation in feet.
4 - Reliability in latitude/longitude respectively rounded to the nearest foot. Some control are given values of 0,0 as are boundaries which are transferred in from an adjoining township since they are held fixed for edge matching purposes. To get the true reliability for control points look in the .ALL (.AVL) file. To get true reliability for the transferred boundaries look in that adjacent township's files.
5 - Line number code - see Index diagram on page 13.
6 - Line type code - 0 = solid section line, 1 = dashed _20 prefix or suffix PID, 2 = dashed centerline, 3 = dashed _60 prefix or suffix PID.
7 - Line draw code - 1 = skip, 2 = pen down, 3 = draw, 4 = pen up
8 - Universal Transverse Mercator (UTM) coordinates in meters. Cartesian format - x,y.

Description:
This is a graphics line file, usually used to produce graphic displays.

(GMM) T03S39E.PGC

Geographic Coordinate File.

TWP 03S RNG 39E PM Boise Idaho(ID) DATE 92/12/03

ORIGIN	430900.0000	1115300.0000	6107.000	0	0	2000.0000	5000.0000
700100	430627.6337	1114932.5922	6107.000	22	22	2233.1941	4766.2805
700117	430638.0782	1114932.5901	6107.000	22	21	2233.1855	4782.3070
700120	430640.6688	1114932.5900	6107.000	22	21	2233.1829	4786.2822
700137	430651.1165	1114932.5878	6107.000	21	21	2233.1743	4802.3137
700140	430653.7038	1114932.5877	6107.000	21	21	2233.1717	4806.2839
700157	430704.1548	1114932.5856	6107.000	21	21	2233.1631	4822.3204
700160	430706.7389	1114932.5854	6107.000	21	21	2233.1605	4826.2856
700197	430717.1931	1114932.5833	6107.000	20	20	2233.1519	4842.3271
700200	430719.7739	1114932.5831	6107.000	20	20	2233.1493	4846.2872
700217	430730.2191	1114932.5806	6107.000	20	20	2233.1411	4862.3149
700220	430732.8061	1114932.5805	6107.000	20	20	2233.1386	4866.2846
700237	430743.2447	1114932.5779	6107.000	20	20	2233.1304	4882.3022
700240	430745.8383	1114932.5778	6107.000	20	20	2233.1279	4886.2819
700257	430756.2704	1114932.5752	6107.000	20	20	2233.1197	4902.2895
700260	430758.8705	1114932.5751	6107.000	20	20	2233.1171	4906.2793
700297	430809.2961	1114932.5726	6107.000	19	19	2233.1090	4922.2769
700300	430811.9027	1114932.5724	6107.000	19	19	2233.1064	4926.2766
700317	430822.3086	1114932.5665	6107.000	19	19	2233.1021	4942.2442
700320	430824.9311	1114932.5661	6107.000	19	19	2233.0997	4946.2683
1	2		3	4		5	

1 - Point ID
2 - NAD 27 Latitude/Longitude. The decimal is located after the seconds.
3 - Project elevation in feet.
4 - Reliability in latitude/longitude respectively rounded to the nearest foot. Some control are given values of 0,0 as are boundaries which are transferred in from an adjoining township since they are held fixed for edge matching purposes. To get the true reliability for control points look in the .ALL (.AVL) file. To get true reliability for the transferred boundaries look in that adjacent township's files
5 - (X,Y) Cartesian tangent plane coordinates in chains unit. Origin is assigned a false departure of 2000 chs. and latitude of 5000 chs. These values may not be included with some townships.

Description:
This is a geographic coordinate file used by GMM programs.

(GMM) T03S39E.RAW

Raw Data File.

```
TWP 03S   RNG 39E   PM   Boise            Idaho(ID)   DATE 92/12/03

999999
700100      700117      16.025   4           0.0   938
700117      700120       3.975   4           0.0   938
700120      700137      16.030   4           0.0   938
700137      700140       3.970   4           0.0   938
700140      700157      16.035   4           0.0   938
```

and a little further down...

```
200500      200540      40.000   4         400.0   960
200540      200600      40.000   4         400.0   960
200600      200640      40.000   4         400.0   960
200640      200660      20.000   4         400.0   960
200660      200700      25.150   4         400.0   960
100100      100120      20.000   4           0.0   960/SD1
100120      100140      20.000   4           0.0   960/SD1
100140      100160      20.000   4           0.0   960/SD1
```

and a little further down.....

```
200600      140600      40.000   4      895800.0   960
140600      120600      20.000   4      895800.0   960
120600      100600      13.770   4      895800.0   960
700700      663700       3.330   4      900000.0   960
|-----------------------|     |-------|   |   |-----------|    |------|
            1                     2       3         4             5
```

1 - From and to Point IDs.
2 - Distance, in chains, between the points.
3 - Bearing quadrant (1=NE, 2=SE, 3=SW, 4=NW)
4 - Bearing in degrees, minutes, and seconds. The decimal point is located after the seconds.
5 - Source Identifier number (SID). Each data source, whether it is an official cadastral survey plat, state or local survey plat, deeds, etc., utilized in generating coordinates for the GCDB, will be assigned a unique SID number. The /SD1 shows that error estimates were changed within this SID to make GMM adjustment parameters compute properly.

Description:
This is the raw data with which GMM performs it computations. It is abstracted from the survey records.

(GMM) T03S39E.SD

Error Estimate File.

```
700100              40.000  40.000      0
700397              40.000  40.000      0
700400              40.000  40.000      0
100100               0.001  0.001       0
100120               0.001  0.001       0
|--------|       |----------------------|    |
    1                     2                 3

700100          700117                      0.840   0
700117          700120                      0.284   0
700120          700137                      0.841   0
700137          700140                      0.283   0
|----------------------------|            |-------|   |
             4                                5      6

0            0            0                 4.00   1
700100          700117                     150.00   0
700117          700120                     150.00   0
700120          700137                     150.00   0
700137          700140                     150.00   0
|------------------------------|          |-------|   |
             7                                8      9
```

1 - Point ID.
2 - The amount control points are allowed to move, in feet, during an adjustment. These values are error ellipses. 40,40 is digitized control. .001,.001 is control which is being held fixed.
3 - Program code.
4 - From and to Point IDs.
5 - Distance error estimate for that line segment, in feet.
6 - Program code.
7 - From and to Point IDs.
8 - Bearing error estimate for that line segment, in seconds.
9 - Program code.

Description:
This file reflects the error estimates for all the measurements in a township. It is used during the adjustment process.

(GMM) T03S39E.SID

Metadata File.

```
S938          0.100    700.0    150.0    40.000    40.000
C BLM 10-OCT-1916 01 BARDSLEY,H,G
S960          0.100    700.0    150.0    40.000    40.000
C BLM 20-OCT-1911 01 BATES,T,W
S960/SD1      0.100   1400.0    240.0    40.000    40.000
C WEST BNDY JUNK SID#
```

S938 -	Source Identifier number (SID) Each data source, whether it is an official cadastral survey plat, state or local survey plat, deeds, etc., utilized in generating coordinates for the GCDB, will be assigned a unique SID number. If needed this information is available from the GCDB staff.
0.100 -	Constant error estimate.
700.0 -	Distance error estimate in PPM (parts per million).
150.0 -	Error estimate in seconds.
40.000 -	These 2 fields are not used. The numbers are irrelevant.
C -	Comment line.
BLM -	Source Document Agency A code identifying the source of the survey document by agency. It is part of the Data Element Dictionary. See Table A on page 30.
10-OCT-1916 -	Date The latest signature acceptance date on the plat when it was signed by a Surveyor General, Cadastral Survey Branch Chief, or any other acting official or registered Professional Land Surveyor.
01 -	Survey Procedure A Data Element Dictionary code number for the type of survey procedure used. See Table B on page 30.
Bardsley,H,G -	Surveyor Name The name of the primary surveyor who conducted the field survey.
S960/SD1 -	Special error estimates for a particular part of the survey plat with SID # 960, in this case the west boundary. (These are called "junk SIDs.")

Description:
GCDB metadata file of attributes regarding the survey plats used in the abstraction process.

(GMM) T03S39E.UTM

Geographic Coordinate File.

```
 TWP 03S   RNG 39E   PM   Boise              Idaho(ID)   DATE 92/12/03
 ORIGIN    430900.0000 1115300.0000  6107.00   0    0  428174.124777635.76
700100     430627.6337     1114932.5922     6107.00    22    22   432812.50     4772887.89
700117     430638.0782     1114932.5901     6107.00    22    21   432815.73     4773210.07
700120     430640.6688     1114932.5900     6107.00    22    21   432816.51     4773289.98
700137     430651.1165     1114932.5878     6107.00    21    21   432819.74     4773612.26
700140     430653.7038     1114932.5877     6107.00    21    21   432820.53     4773692.08
700157     430704.1548     1114932.5856     6107.00    21    21   432823.75     4774014.46
700160     430706.7389     1114932.5854     6107.00    21    21   432824.54     4774094.17
700197     430717.1931     1114932.5833     6107.00    20    20   432827.76     4774416.65
700200     430719.7739     1114932.5831     6107.00    20    20   432828.55     4774496.27
```

and further down in the file.....

```
100640     431114.6980     1115634.3899     6107.00     0     0   423378.51     4781843.65
100660     431127.7231     1115634.3490     6107.00     0     0   423383.96     4782245.44
100700     431144.1412     1115634.2974     6107.00     0     0   423390.83     4782751.89
640100     430627.6855     1115008.1917     6107.00    23    23   432007.88     4772897.46
540100     430627.7967     1115119.3741     6107.00    23    23   430399.02     4772917.11
440100     430627.9004     1115230.5835     6107.00    22    22   428789.55     4772936.92
340100     430627.9789     1115341.8584     6107.00    20    20   427178.59     4772956.35
240100     430628.0397     1115453.1879     6107.00    18    18   425566.39     4772975.63
140100     430628.1010     1115604.5570     6107.00     7     7   423953.30     4772995.31
120100     430628.1248     1115622.3762     6107.00     4     5   423550.55     4773000.55
|--------|  |----------------------------------|  |---------|  |--------|  |------------|  |-------------|
    1                        2                        3            4             5                6
```

1 - Point ID
2 - NAD 27 Latitude/Longitude. The decimal is located after the seconds.
3 - Project elevation in feet.
4 - Reliability in latitude/longitude respectively rounded to the nearest foot. Some control are given values of 0,0 as are boundaries which are transferred in from an adjoining township since they are held fixed for edge matching purposes. To get the true reliability for control points look in the .ALL (.AVL) file. To get true reliability for the transferred boundaries look in that adjacent township's files
5 - Universal Transverse Mercator (UTM) coordinates in meters, x value.
6 - UTMs in meters, y value.

Description:
This file contains UTM coordinates for all the points in the township.

(GMM) T43N04W.ADD

Subdivision-of-Section File.

```
2 620560 600560 640560   .00000  1    .000    .000
2              0 620600       2   .01000  1    .000    .000
2 950100 120500 120520   .00000  1    .000    .000
0          0 900010 900020   .00000  2    .000    .000
2 950101 120500 124500   .00000  2    .000    .000
0          0 900030 900040   .00000  2    .000    .000
2 950102 140460 140500   .00000  1    .000    .000
0          0 711115 900060   .00000  2    .000    .000
2 950103 140460 160460   .00000  1    .000    .000
0          0 711115 900060   .00000  2    .000    .000
2 950104 140440 160440   .00000  1    .000    .000
0          0 900080 711120   .00000  2    .000    .000
```

The 1st field describes the type of action. 1 = traverse/proportion, 2 = intersection, 3 = add a line. Intersections require 2 lines of data.

The 2nd field is the point being generated. Value is 0 if not applicable.

The 3rd field is the known point starting the procedure. Intersections have two such points.

The 4th field is either the endpoint ID defining the bearing from the base point or the quadrant of a user-entered bearing. Not applicable = 0.

The 5th field is the bearing value of a user-entered bearing. Not applicable value is 0.

The 6th field is a digit describing whether the computation is based on a geodetic line (1) or plane line (2).

The 7th field is the record distance to the new corner.

The 8th field, if nonzero, is the record distance to the endpoint, in which case the record distances will be used as a proportion to apply to the adjusted overall distance.

Description:
This file contains the logic for extra calculations to compute points or for instructions to draw lines. Most of these computed points reflect subdivision-of-section, but they may reflect non-subdivision-of-section computations.

(GMM) T43N04W.DEF

Default File.

Y	not applicable to GMM
18 IDAHO WEST MERCATOR	state plane zone
1	NAD27=1 NAD83=2
2	(Survey ft=2 meters=1 Int. ft=3)
3193.000	default elevation
N	read elevations from .LEV file
Y	read error estimates from .SD
.100 1000.0	default for distance error estimate
4.0	default for angle error estimate
120.0	default for bearing error estimate
40.000	default for control N error estimate
40.000	default for control E error estimate
Y	(mean geodetic brgs=Y, grid brgs=N)
.000	(Distance residual printout limit)
.0	(Angle residual printout limit)
.0	(Azimuth residual printout limit)
N	error ellipses computed
N	readjust w/ robusted error estimates
N	(print adjusted grid brgs/dists)
Y	(update .COR file)
T43N04W	Project name
BOISE	Meridian
IDAHO	State designation
11	UTM zone number
	not applicable to GMM
1	not applicable to GMM

Description:
This file contains default parameters for the computational process.

(GMM) T43N04W.INT

Intersection File.

```
INTERSECTION 120500 120520 STRAIGHT   WITH 900010 900020 MEAN
CREATES 950100
INTERSECTION 120500 124500 MEAN       WITH 900030 900040 MEAN
CREATES 950101
INTERSECTION 140460 140500 STRAIGHT   WITH 711115 900060 MEAN
CREATES 950102
INTERSECTION 140460 160460 STRAIGHT   WITH 711115 900060 MEAN
CREATES 950103
INTERSECTION 140440 160440 STRAIGHT   WITH 900080 711120 MEAN
CREATES 950104
```

This portion of the file lists the point identifiers involved in the intersection computation, including the point identifier for the intersection point. It also lists the type (geodetic/mean or planar/straight) of the lines involved in the intersection computation.

and further down in the file.....

```
100100 100120 120120 120100 100100
100100 120100 123100 140100 143100 160100 163100 200100 203100 220100 223100 240100
100140 100120 120120 120140 100140
100140 100160 120160 120140 100140
100200 100160 120160 120200 100200
100200 100220 120220 120200 100200
100240 100220 120220 120240 100240
100240 100260 120260 120240 100240
100300 100260 120260 120300 100300
```

This portion of the file is a chain file that lists the point identifiers that define each polygon.

Description:
This file contains polygon information for the linking process.

(GMM) T43N04W.IRR

Subdivision-of-Section File.

```
140640
       0     0
       0     0     0
       0
       0
       0
120640     9.970    29.970
140660    21.590    41.590
       0      .000      .000
       0
       0
999999
```

Description:
This file contains the logic for calculations to compute points for non-standard sections. A standard section is considered to be a section where there is no lotting against interior lines, no segregation of special surveys, no offset lines (interior or exterior), not shortened nor elongated. In essence, all subdivision-of-section corners are computed at midpoint or intersection with no corners of minimum control controlling those computations.

(GMM) T43N04W.LSA

Adjustment File.

```
600400          240411.617    1968426.666   0
600600          240616.482    1978992.502   0
603700          241391.831    1984375.939   1
  and further down in the file.....
636600            711200          1587.300   0
711200            711205          2659.800   0
711205            700664          1333.200   1
  and further down in the file.....
0           0           0           0  0   .00 1
  and further down in the file.....
636600            711200        31 25   .00  0
711200            711205        31 53   .00  0
711205            700664        32 23   .00  1
  and further down in the file.....
100663          214898.925     1983502.344   0
711115          216466.645     1973062.474   0
900050          216172.188     1973418.891   1
```

The first segment is a list of known control imported from .CON.
The second segment is the distances
The third segment is the angles.
The fourth segment is the azimuths.
The fifth segment is the approximate coordinates that GENER computed for points that are not control.
Each line is ended with a 0 or 1. The 1 signifies the end of the segment.

Description:
This file contains the control, line measurements, and approximate coordinates to compute points in the adjustment process.

(GMM) T43N04W.LXN

Line File.

```
T43N04W          BOISE          IDAHO
 ORIGIN    470342.0000 1165002.0000              512614.545211811.77
   41
10010010012010014010016010020010022010024010026010030010032010032310034010034 3
   26
12010012012012014012016012020012022012024012026012030012032012034012036012040 0
   26
14010014012014014014016014020014022014024014026014030014032014034014036014040 0
   26
   and further down in the file.....
   50
70010070011770012070012370014070014370016070016370020070020370022070022370024 0
999999
   48
10010012010012310014010014310016010016310020010020310022010022310024010024310 0
   25
10012012012014012016012020012022012024012026012030012032012034012036012040012 0
   25
10014012014014014016014020014022014024014026014030014032014034014036014040014 0
    and further down in the file.....
   26
10066012066014066016066020066022066024066026066030066032066034066036066040066 0
   48
10070012070012370014070014370016070016370020070020370022070022370024070024370 0
999999
   67
10051690001095010090002090003095010190004090005071111595010295010390006090007 0
   35
43426071116044026644630095011795011671116595011850034671117095011951440095012 0
999999
```

Description:
This graphic file provides line connectivity and contains the beginning, intermediate, and ending point identifiers in a continuous chain for each line. The south/north lines come first, followed by the east/west lines, and finishing with special survey lines. There is a 999999 code that separates each group of lines.

(GMM) T43N04W.NOT

Do-Not-Draw Line File.

```
      0
      2
500300 514314
514314 905010
```

The first line describes how many “NOT points” will follow.

The next segment is the listing of NOT points. NOT points are non-boundary points whose lines must be removed for post-subdivision display. The points will be removed from the COR file. This feature will become obsolete, so all lines touching this kind of point should be entered into the “lines” segment.

The number after the “NOT” points describes how many “NOT lines” will follow.

The last segment is the listing of lines to be removed for post-subdivision display. These must be entered in the same order as they exist in the .RAW file. Points (950xxx) generated through automatic intersections in APROP can be entered in this file, however subsequent changes in the base files may result in a different numbering scheme for 950xxx points.

Description:
This file provides the logic for which points and lines to eliminate from the line type files, .LXN and .LX.