



# cleregolfhub

Record, plan, share and review data captured across your course anytime, anywhere...

- GPS enabled for on-course access via IOS and Android
- Track incidents across your course and identify trends
- Record photographic evidence for future recall
- Create and assign tasks to better manage projects
- Know the precise areas of all key features across your course
- Study the course with sub 10cm accuracy from home or office

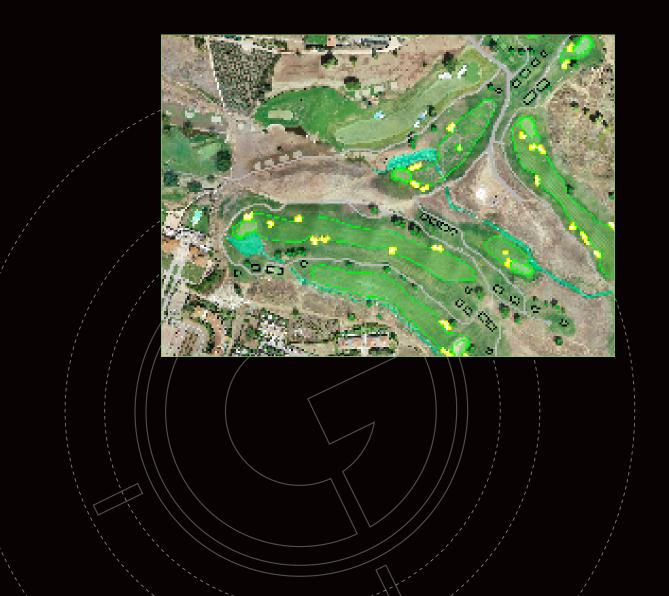
## Manage your greatest asset geospatially

Clere Golf travel the world capturing invaluble golf course data in order to produce the best and most accuarte course guides, green books and 3D models in golf.

By combining state-of-the-art Drone, 3D Laser Scanning and GPS technology we can deliver this data to you in a software product we call the 'golfHUB'.

golfHUB is underpinned by a present-day sub 10cm accurate aerial image of your course accesible anytime, anywhere on desktop and mobile via IOS and Android.

It is the only product available that allows you to record, plan, share and review everything course related quickly and effectively.





Our drones capture thousands of individual images, once knitted together these images create a highly accurate 'photo mosaic' which can be analyssed in great detail.

From this photo mosiac our team carefully outline every feature on your course and assign 'real-world' co-ordinates. By doing this each feature has a physical location in the world that can be navigated to by a GPS enabled device rather like a sat-nav would.

This process offers other significant benefits such as knowing the precise area of all features and the course topography, all incredibly useful when planning future works.



Perhaps the most important capability you now have is storing records supported by a wealth of data including photographs geospatially (against a map as opposed to a folder structure on your computer.....)



## Course Manager - 'Above & Below' Plans

Often historical pipework and below ground plans are hard to find and difficult to access. Through our course manager everything can be stored geo-spataially against a present-day aerial image for easy access anytime, anywhere:

- Irrigation systems can be GPS mapped or uploaded from 'as-built' plans and stored in 'layers' for the users to tailor their view
- All information can be viewed on your GPS enabled mobile device allowing users to easily locate any component while on-course (just like a satellite navigation system)
- Think of the HUB as a blank canvas on to which a host of data can be placed from pipework, gas and electricity, sub air systems, property boundaries....
- Excavate in confidence knowing the precise location of any services below ground by knowing your location and that of any pipework



## Course Manager - Sprinkler Sytems

As new sprinkler systems are installed or existing systems updated or extended, it's vital to maintain an up-to-date record of what has been installed where. Through the HUB you can record the precise location of each sprinkler with ease and accompany each 'geo-record' with notes that can be stored, shared and reviewed:

- Maintain an up-to-date record of all sprinkler heads including it's GPS location, manufacturer and head type
- Use your GPS enabled device to locate hard to find sprinkler heads when on the course
- Know the precise distance from every sprinkler to the front/middle/back of every green. Ideal when ordering and installing distance tags
- With A4 and A3 'long hole view' print capabilities you can take hard hole layouts on-course for manual checks or use your GPS device when carrying out routine maintenance



## Course Manager - Feature Analysis at your fingertips

Integral to the HUB is an incredibly accurate present-day aerial image captured of your course during our on-site survey. Upon processing this image our skilfull inhouse team carefully outline each and every feature on all holes allowing you to:

- Select any feature such as a tee, green fairway or bunker and know it's exact surface area
- Move through the course in a 'hole-by-hole view' and see the summary of feature areas for that hole
- Ensure 'seeds and feeds' are purchased efficiently by basing your orders on precise measurements
- Apply application rates of chemicals with confidence in the knowledge that concentration levels are optimised



## Course Manager - Remote Measuring & Planning

With sub 10cm accuracy across your entire course at your finger tips from any web enabled desktop or mobile device you can measure distance and area from home or office as precisely as you could on the course.

- Accurately plan new tee or bunker construction by creating the features inside the HUB before measuring hole lengths, and driving distances to / from them.
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## Course Manager - Geo Records

The golfHUB really comes into it's own with the ability to create geo-records (a record that is stored against a specific location), these records can be viewed against the map and navigated to using your GPS enabled device as you would with a satellite navigation system so that you can:

- Capture photographic evidence of incidents such as 'pest' or 'disease' while oncourse
- Create categories against which your geo-records can be assigned allowing filtered records to be visualised against your map
- Quickly build a visual representation of activity across the course such as tree felling, pollarding, path repairs, vandalism, flooding (whatever you wish)!
- Streamline course walks by creating records relating to work to be actioned with accompanying notes while on-course



## Course Manager - Task Management

Not only can geo-records be created, shared and reviewed but each can also generate a task and assigned to members of your team:

- Use your mobile device to photograph parts of the course that require attention, add notes and assign a member of staff for action
- Create 'projects' such as Winter Program or Bunker Renovations against which tasks can be attributed and progress monitored
- Stage virtual course walks away from the course using the hole-by-hole view and intuitive filters inorder to navigate through each hole reviewing 'work in progress' or 'outstanding jobs'
- A great way to instantly record issues spotted while on-course with photographic evidence!



## Course Manager - Event & Structural Planning

Staging events requires extensive planning with temporary structures carefully positioned, amenities strategically located and service points conveniently spread across the facility. Storing this information geo-spatially makes perfect sense and enables you to plan remotely then navigate to the precise locations when on-course:

- Record the physical location of a temporary structure by walking its perimeter with your GPS device, once saved it can be located in subsequent years
- Plan precisely where you want spectator ropes to be located from your desktop then head out on the course and 'walk the line'
- As structures are drawn the HUB will display the exact size / area so that you know the structure you are creating is to spec



## Course Manager - Health & Safety

Not only can geo-records be created, shared and reviewed but each can also generate a task and assigned to members of your team:

- Overlay course topography to better understand the severity of slopes and identify areas of exclusion for certain machinery
- Display 'driving cones' in order to identify areas of risk for spectators
- Attach risk assessment documentation to physical locations or temporary structures for fast and effective recall



## Course Manager - Additional Media

Staging events requires extensive planning with temporary structures carefully positioned, amenities strategically located and service points conveniently spread across the facility. Storing this information geo-spatially makes perfect sense and enables you to plan remotely then navigate to the precise locations when on-course:

- Immerse yourself with a fully intercative virtual walk through your course. Great for website and social media
- Used by event staging teams to 'drag and drop' pre-built structures on to the course for review pre-build
- As structures are drawn the HUB will display the exact size / area so that you know the structure you are creating is to spec



## Course Manager - The Dashboard

Supporting the 'course view' of all geo-records created is the 'dashboard' where all records can be filtered, sorted and exported to CSV for offline investigation.

- 3 distinct dropdown views neatly separate 'my tasks' and 'my geo-records' from ' all geo-records' created across your facility for fast and effective review
- Hyperlinks will take you directly from any line item to the precise location of the geo-record within the map view
- Intelligent one-click filtering enables users to drill down into record categories with ease
- Review on the go by accessing the 'dashboard' through your mobile device



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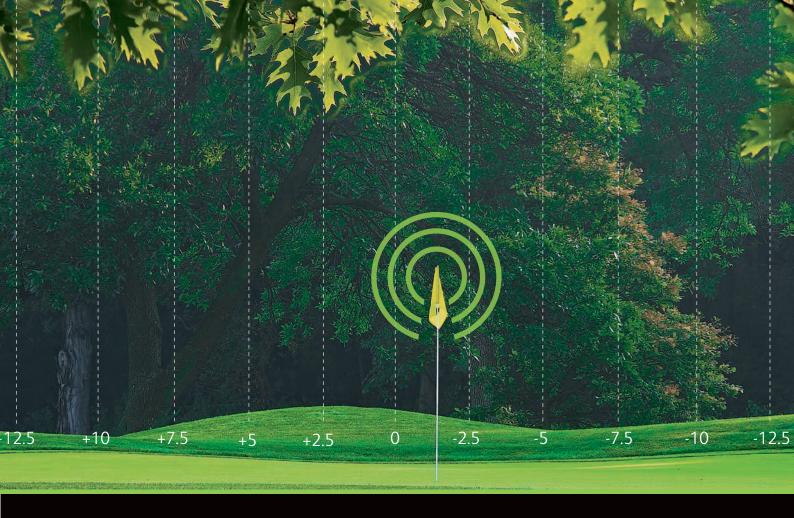
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# **clere**PinZone<sup>™</sup>

Create professional grade pin sheets on desktop and mobile with speed and precision.

- Build a database of historical pin locations
- IOS and Android App for pin location delivery
- A variety of printed formats available

- Enhance your member and visitor experience
- Intuitive GUI ensures fast user adoption
- GPS functionality enables pins to be set 'on-course'

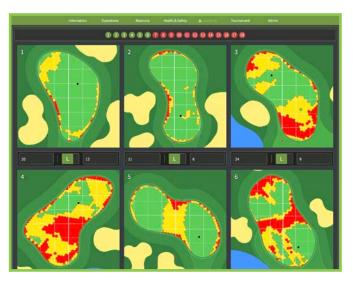


## Data Input

Entering pin locations couldn't be simper using desktop or mobile, in the office or on-course.

- Precise measurements from left or right can be entered or users can simply 'point and click'
- Use your mobile device while on-course with GPS enabled to set pin locations
- Traffic Light system (top of page) offers instant feedback for pins which have been set





## Slope Data (optional)

Setting pins remotely can often be a challenge if slopes are not known. By scanning green surfaces this slope data can be displayed ensuring pin placement remains 'legal'

- Heat Map View: Dispalys areas of 0-3%, 3-5%, 5-7% and 7 plus %
- Arrow View: Displays major green slopes of 5% and 7 plus





## Proactive Green Management

By recording pin locations you are able to use in-built filters to display the location of historical pins:

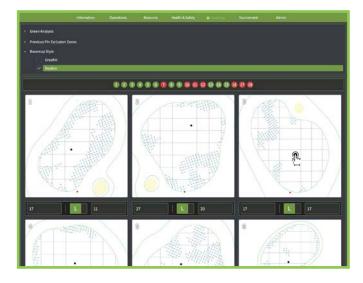
- Allow parts of the green to recover sufficiently
- Reduce foot traffic in certain areas
- Choose the time parameter and size of exclusion zone around a past pin (1 yards to 5 yards)



## Tailor your View

The intuitive GUI enables users to tailor the display to their own preferences.

- Choose from a 1 or 5yd grid display or both!
- Contours can be displayed if preferred to slope arrows



## Preparing for print

Printed pin sheets are generated by our system screen capturing each green as displayed on your desktop.

By tailoring the display on your desktop you are also designing your pin sheets!

Using a keyline view will save ink and enable users to mark notes too.



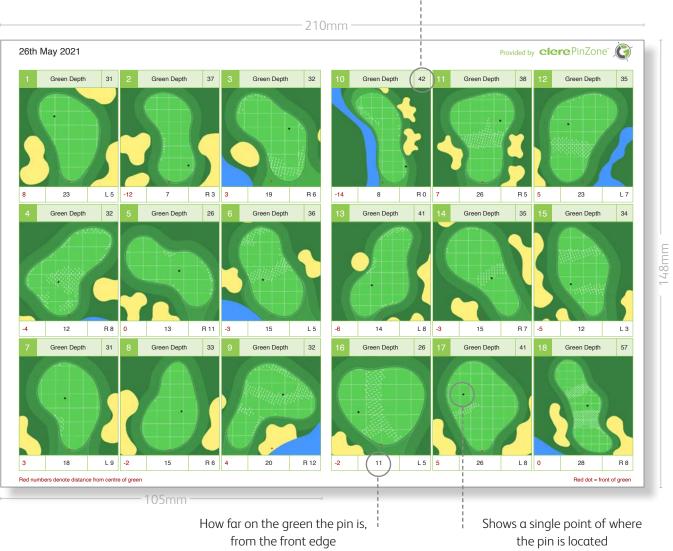
### The Dashboard

Where all future and past pin sheets are stored for fast recall.

- Categorise Pin Sheets for future analysis
- Plan pin sheets in advance of events to save time on the day
- Pin locations used regularly can besaved as a 'favourite'
- Accessible on IOS and Android



## Green depth for golfers reference



26th N	May 2021																							
HOLE	FRONT	SIDE	GREEN DEPTH	HOLE	FRONT	SIDE	GREEN DEPTH	HOLE	FRONT	SIDE	GREEN DEPTH	HOLE	FRONT	SIDE	GREEN DEPTH	ŀ	HOLE	FRONT	SIDE	GREEN DEPTH	HOLE	FRONT	SIDE	GREE DEP1
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2	27	L11	37	11	10	L10	38	2	27	L11	37	11	10	L10	38	1	2	27	L11	37	11	10	L10	38
3	20	L16	32	12	28	L8	35	3	20	L16	32	12	28	L8	35	1	3	20	L16	32	12	28	L8	35
4	27	L10	32	13	10	L8	41	4	27	L10	32	13	10	L8	41	1	4	27	L10	32	13	10	L8	4
5	14	L8	26	14	11	L8	35	5	14	L8	26	14	11	L8	35		5	14	L8	26	14	11	L8	3
6	11	L11	36	15	29	L5	34	6	-11	L11	36	15	29	L5	34		6	11	L11	36	15	29	L5	3-
7	22	L7	31	16	12	L21	26	7	22	L7	31	16	12	L21	26		7	22	L7	31	16	12	L21	2
8	13	L8	33	17	28	L17	41	8	13	L8	33	17	28	L17	41		8	13	L8	33	17	28	L17	4
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REFERENCE	PINZONE TYPE
PZ-SLOPE	PinZone Slope



## A variety of printed formats to choose from:

The intuitive GUI enables users to tailor the display to their own preferences.

- A4, 2 x A5 sheets per A4 (see above) or 4 x A6 sheets per A4
- Graphical or tabular layout (see left)
- Full colour of key-line display
- Pre-perforated and pre-printed (club/resort branded sheets available)



## The Clere Player App

Available on both IOS and Android, pin locations can be provided to your members and visitors through our Free of Charge players App.

- Accompanied by a photograph of your choice, players can search for your course and opt to set it as their home venue for fast recall.
- Upgrades available for further personalisation and even your own fully branded App

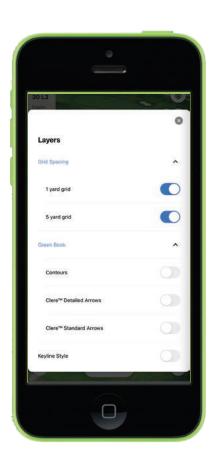






### The Pins

- Pin locations displayed against an aerial map / photograph
- Optional drone survey available
- Scroll from hole to hole, alter the perspective for a truly immersive experience



## Display preferences

The user has total control over how information is delivered.

- Choose from a 1 yard or 5 yard grid
- Full colour aerial maps or keyline view
- Contours can be overlaid
- InApp purchases enabling Green Book data to be downloaded





## The Green Book

Generated from 3D laser scans of your greens; the same technology used to produce Green Books used across all major golf tours, green surface data can be downloaded and displayed.

- Read greens with speed and precision
- Putt with confidence knowing the ideal line
- Begin to understand the impact of slope severity on your putt