CPQ Configuration and Work Process

Global Projects Unit

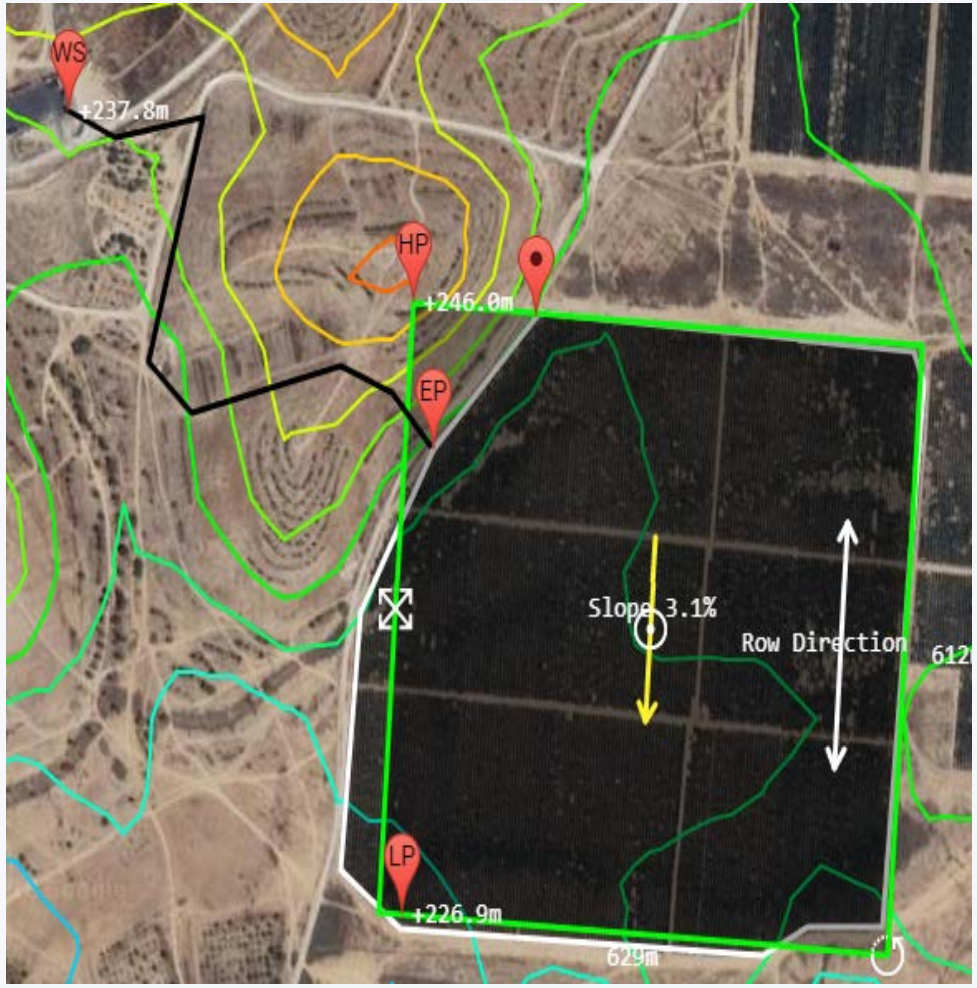
Agenda slide

- General Data
  - General Data Input
- Configuration
  - Infield
  - Submain
  - Mainline
  - Head Control
  - Filtration
- Maps After Configuration
  - Final Maps Module
- Pricing and Output Document
  - Pricing
  - Output Document

General Data

General Data Input

- In the General data input stage, the field's data is transformed into a format on which SPRINT can design the irrigation system by:
  - Shape of field transformation into a 'rectangle'
  - Adjustment of the rectangle to best fit actual field (rotate, move and adjust dimensions)
  - Determining several key locations
  - Supply line route
  - Contour line calculation
  - Maximum slope calculation
  - Row direction



CPQ Configuration Type and Customer Data

MAIN GROUP

General Data

A01.1) Sales Organization
OpenField_SOrg
2011

* A01) Type of CPQ data entry ...
CPQtype
'Full GE' - Area data entry + area division

Customer Data

A02) Project site Country:
InputCountry
USA

A03) Project / farm name:
InputfarmName
Crazy Horse

A04) State:
InputState
Texas

A05) Farm Location:
InputFarmLocation
Lubbock

A05.1) Customer Gross Area (...
Inputnetareamanual_US
17.000

Crop and Operation Data Configuration

Crop Data

* **A06) Crop Group:**
InputCropGroup
Row Crops

* **A07) Crop Name:**
InputCropName
Cotton

* **a10) Total Block FV (%)**
TotalBlockFV
12

a10.1) Total Block EU (%)
TotalBlockEU
92.800

a11) Crop Factor:
CropFactor
1.000

* **A09) Climate:**
InputClimate
Hot

* **A10) Row / bed Spacing (Inch)**
InputrowbedSpacingInch
36.000

A11) Plant Spacing (Inch)
InputPlantSpacing_US

a12) Max Water Requirement (...
MaxWaterRequirementInch
0.350

A12) Manual - Max. Water Req...
InputMaxWaterRequirementInch
0.350

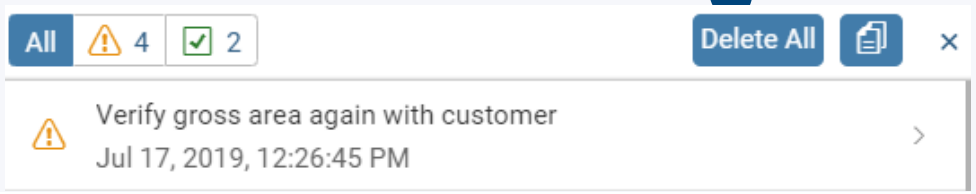
Operational Data

* **A14) Max Allowed Irrigation T...**
InputMaxIrrigationTime
22

* **A15) Max Allowed Irrigation D...**
InputMaxIrrigationDays
7

* **A16) Shifts Blocks Scattered ...**
InputShiftsBlock
Scattered

Area and Operational Data Configuration



Area Data

a13) Gross Area (Ac)
Inputnetarea_US
101.900

a14) Area Length at row ...
InputAreaParallel_US
1,053.000

a15) Area width perpendi...
InputAreaPerpendicular_US
4,216.000

*** A13) Gross-net area ga...**
InputGrossNetArea
3%

a16) Geometry/ layout of ...
InputGeoArea
Irregular

a17) Slope-row direction ...
InputSlopeX
0.300

a18) Slope- perpendicula...
InputSlopeY
0.800

*** a19) Field slope unifor...**
InputSlopeuniform
No

a20) WS to EP supply line...
InputWaterSourceDistance_US
1,921.000

a21) Altitude of Ground L...
InputAltitudeWaterSource_US
1,851.300

a22) Altitude of highest p...
InputAltitudeHighestPoint_US
1,888.000

a23) Altitude of lowest p...
InputAltitudeLowestPoint_US
1,852.700

*** a24) Altitude of supply l...**
InputAltitudeDeliveryLine
1,864.400

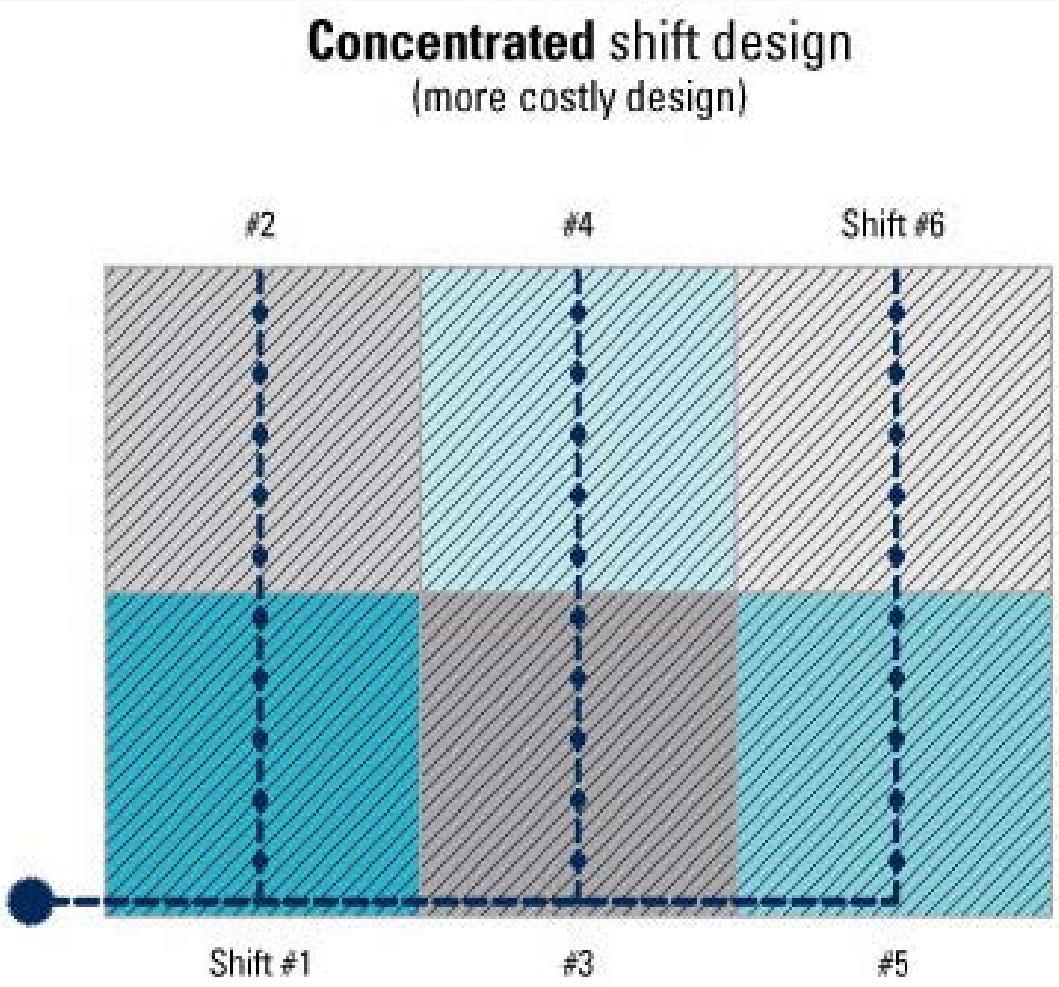
Operational Data

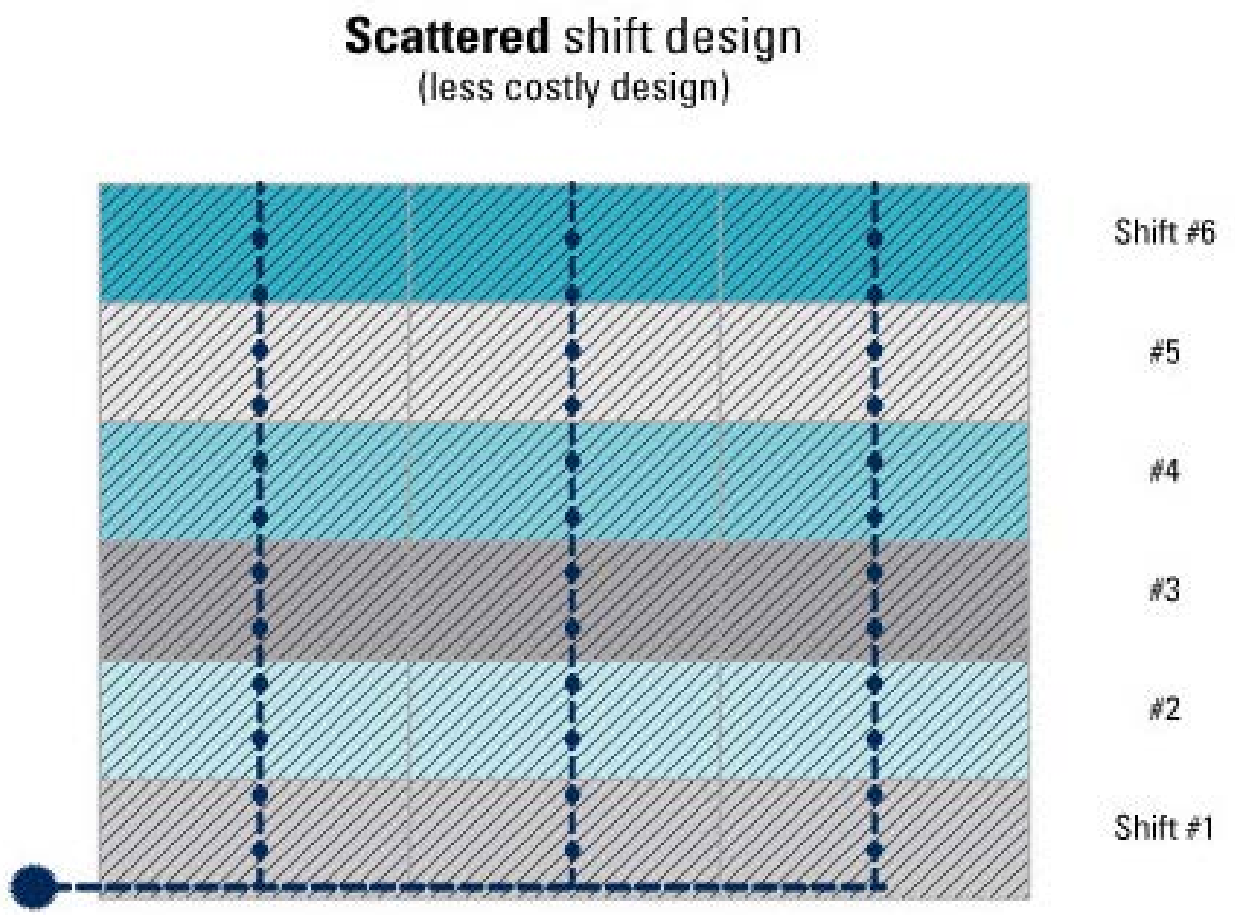
*** A14) Max Allowed Irrigation T...**
InputMaxIrrigationTime
22

*** A15) Max Allowed Irrigation D...**
InputMaxIrrigationDays
7

*** A16) Shifts Blocks Scattered ...**
InputShiftsBlock
Scattered

A16 Scattered or Concentrated Shift Design

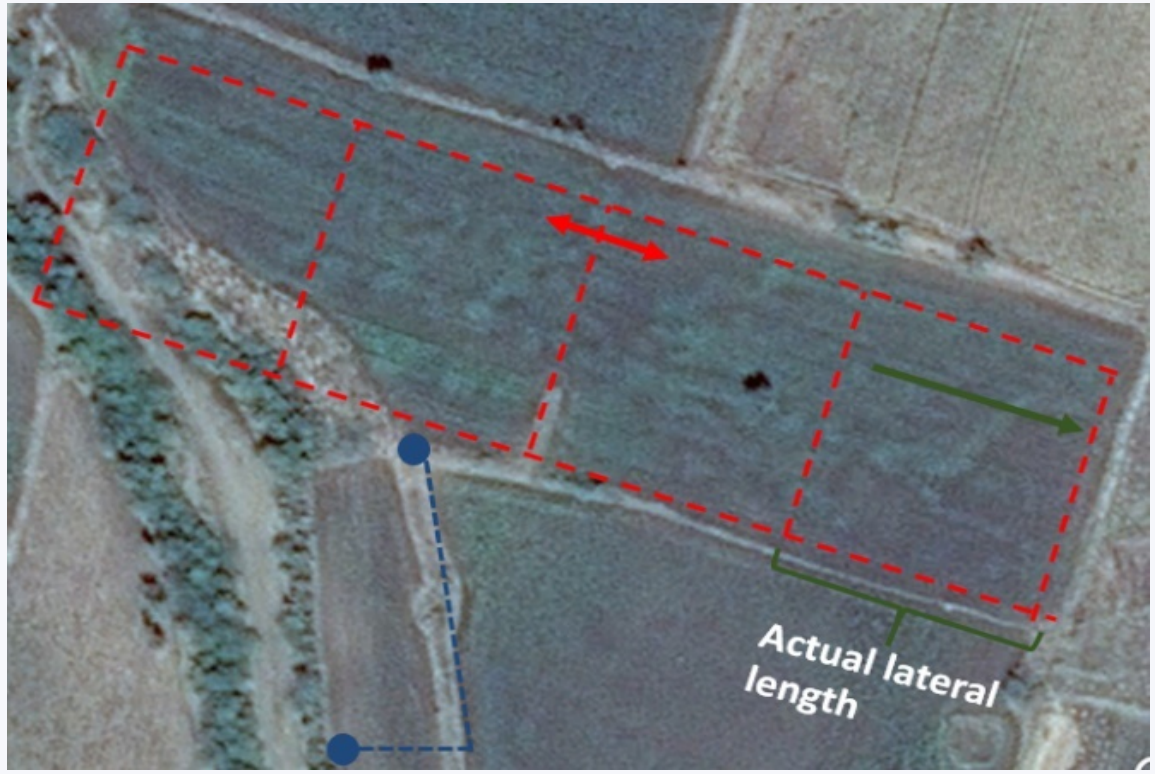




Configuration

Infield

- In this section, the area is divided into ‘cells’ perpendicularly to the row direction
- The division is determined by the calculation of the actual lateral length
- Each ‘cell’ is irrigated by one Hydrant line
- The lateral and ‘cell’ length is based on:
  - Emitter selection
  - Submain and hydrant line location selection
  - EU / FV (flow variation) for NPC emitters (10% - 15% total block FV)
  - Allowed Head loss for PC emitters
  - Slope
  - Total length of the ‘rectangle’

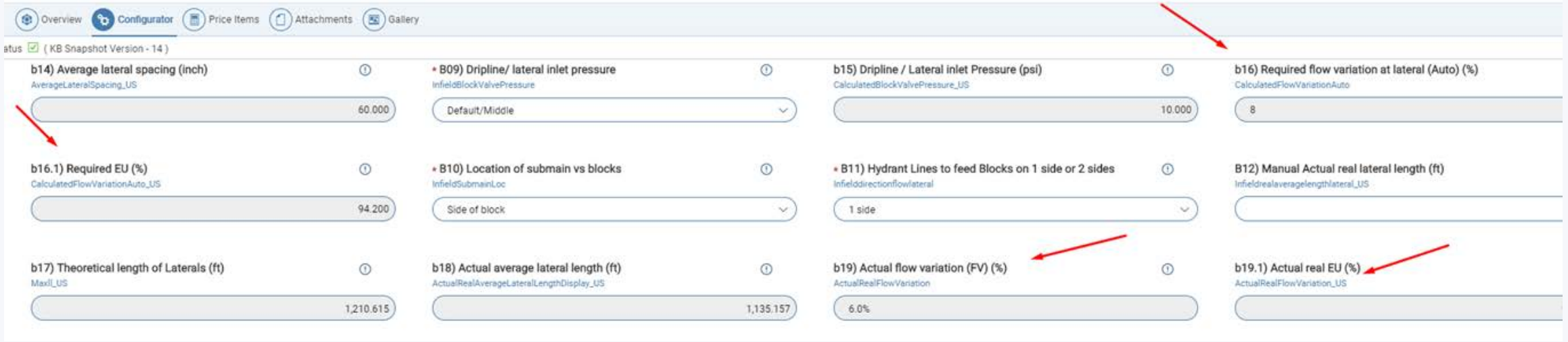


Infield Configuration - Input

INFIELD

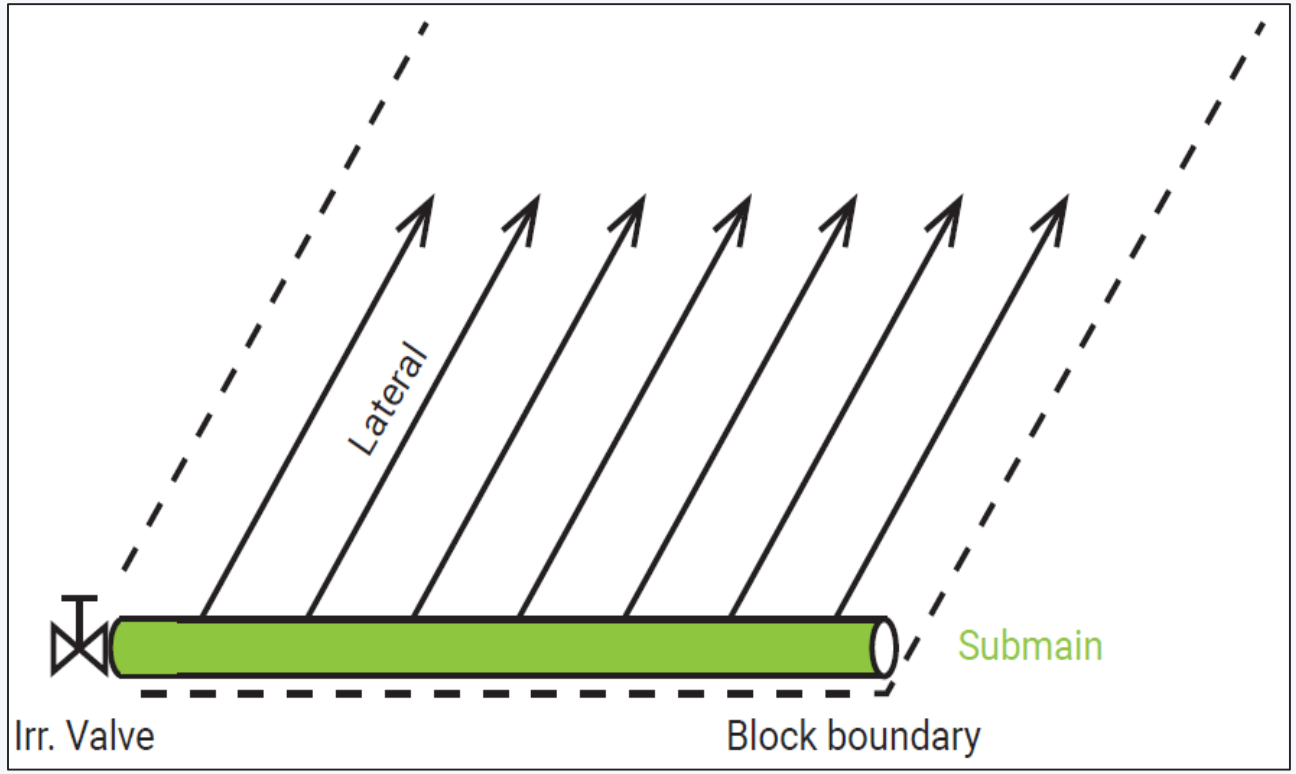
* B01) Emitter Type InfieldLateralType Integral DripperLine	* B02) Emitter PC / NPC InfieldLateralDescription Non Pressure Compensated	* B03) Emitter/Lateral Na... InfieldEmitterClassification TYPHOON PLUS	* B04) Lateral Diameter &... InfieldLateralClass_US TPF87513
* B05) Emitter Nominal Fl... InfieldEmitterNominalFlowRate_US 0.16	* B06) Emitter spacing (in... InfieldEmitterSpacing_US 24	B07) Manual Emitter spa... InfieldEmitterSpacingManual_US	* B08) Number of Lateral ... InfieldnumberofLateralperBedRow 1.000
b14) Average lateral spac... AverageLateralSpacing_US 35.984	* B09) Dripline/ lateral inl... InfieldBlockValvePressure Manual	* B09.1) Dripline/ Lateral ... InfieldBlockValvePressureManual... 12.000	b15) Dripline / Lateral inl... CalculatedBlockValvePressure_US 12.000
b16.1) Required EU (%) CalculatedFlowVariationAuto_US 94.200	* B10) Location of subma... InfieldSubmainLoc Side of block	* B11) Hydrant Lines to fe... Infielddirectionflowlateral 1 side	B12) Manual Actual real l... Infieldrealaveragelengthlateral_US

Infield Configuration – Input with FV (next ver.)

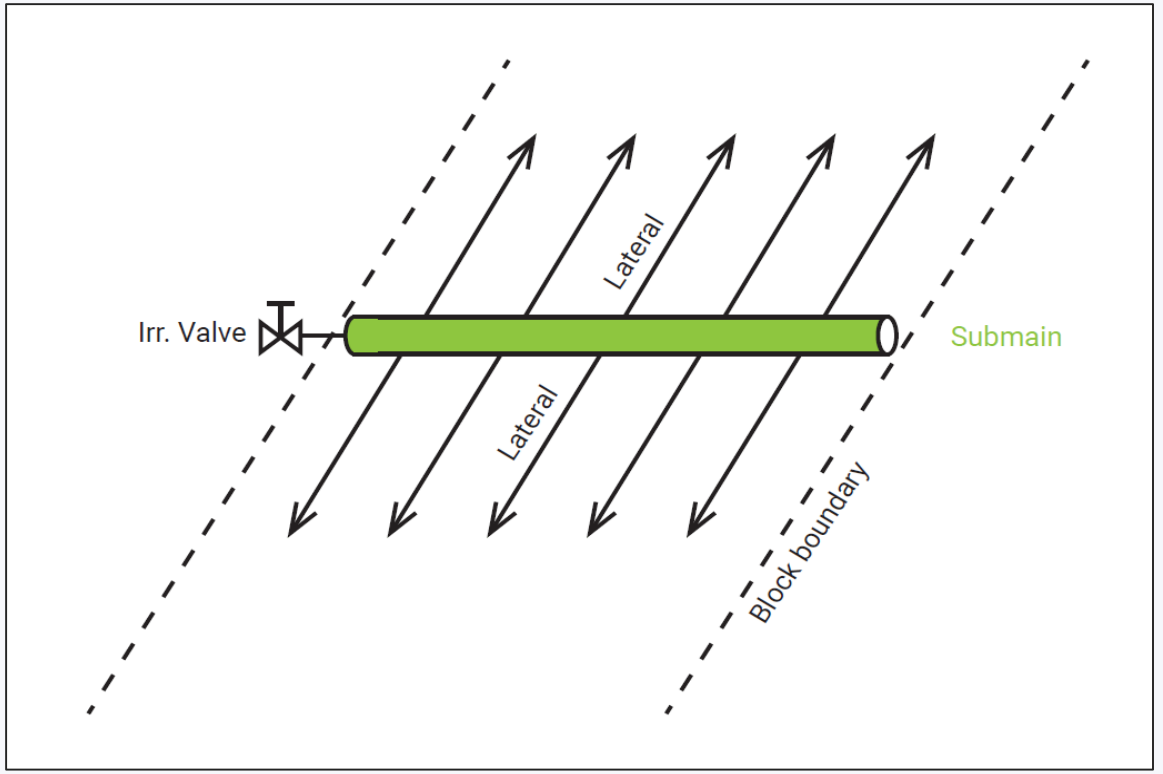


B10: Location of Submain vs. Block

Side of Block (when valve at side of block):

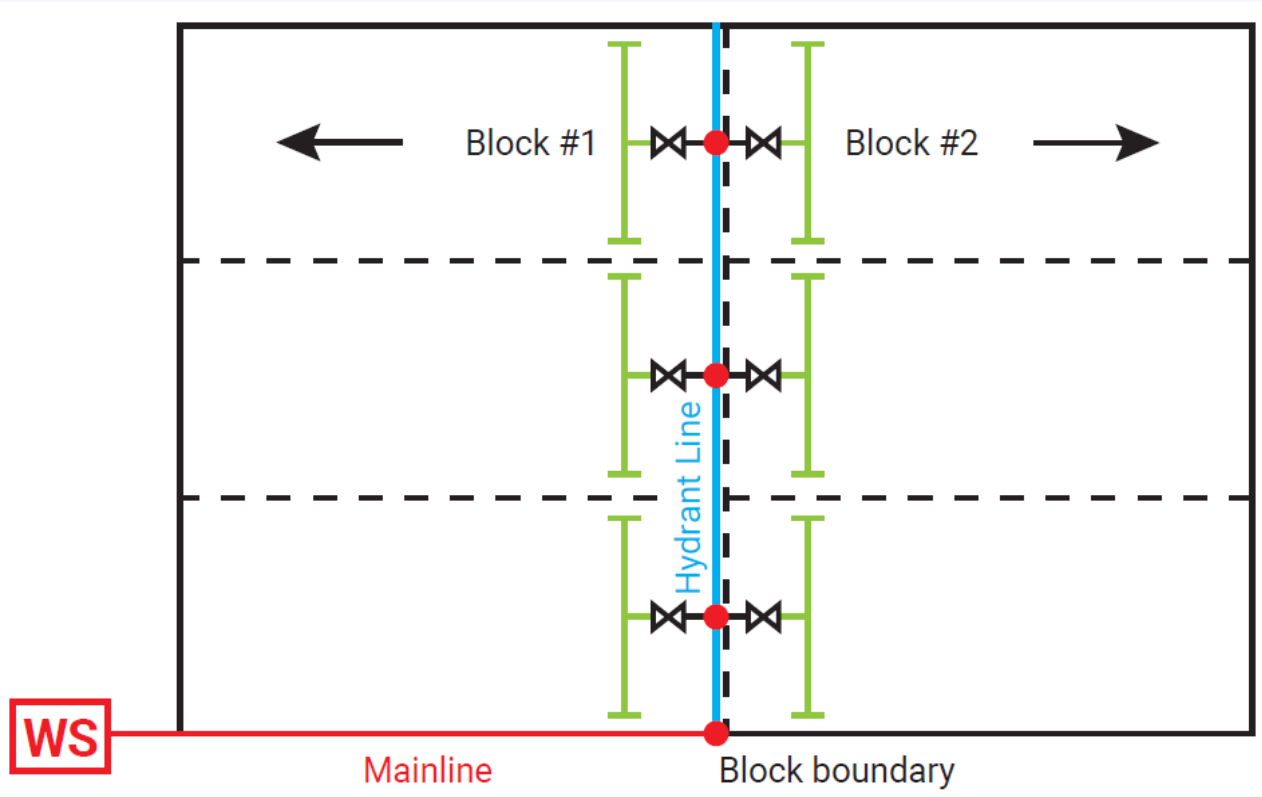


Middle of Block (when valve at side of block):

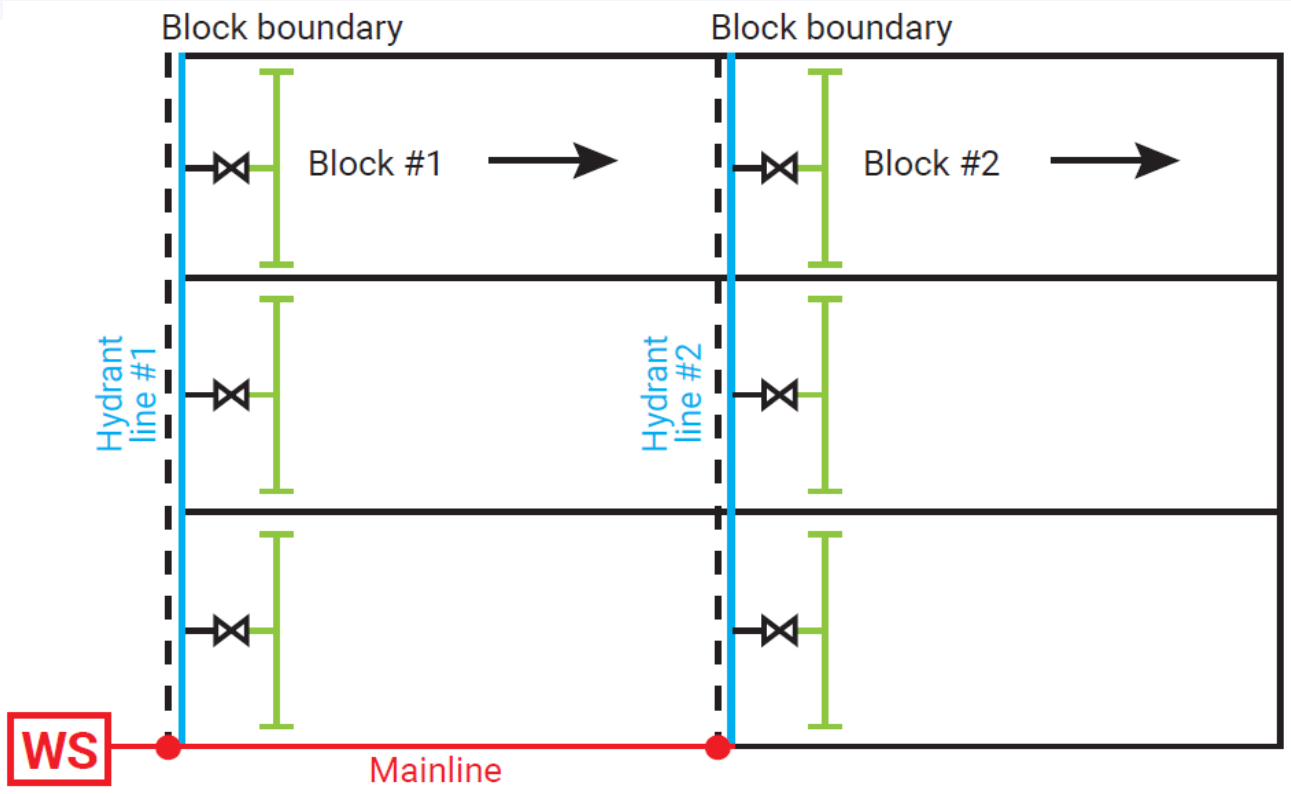


B11: Hydrant Lines Feeding 1 or 2 Sides

Hydrant line feeding 2 sides



Hydrant line feeding 1 side

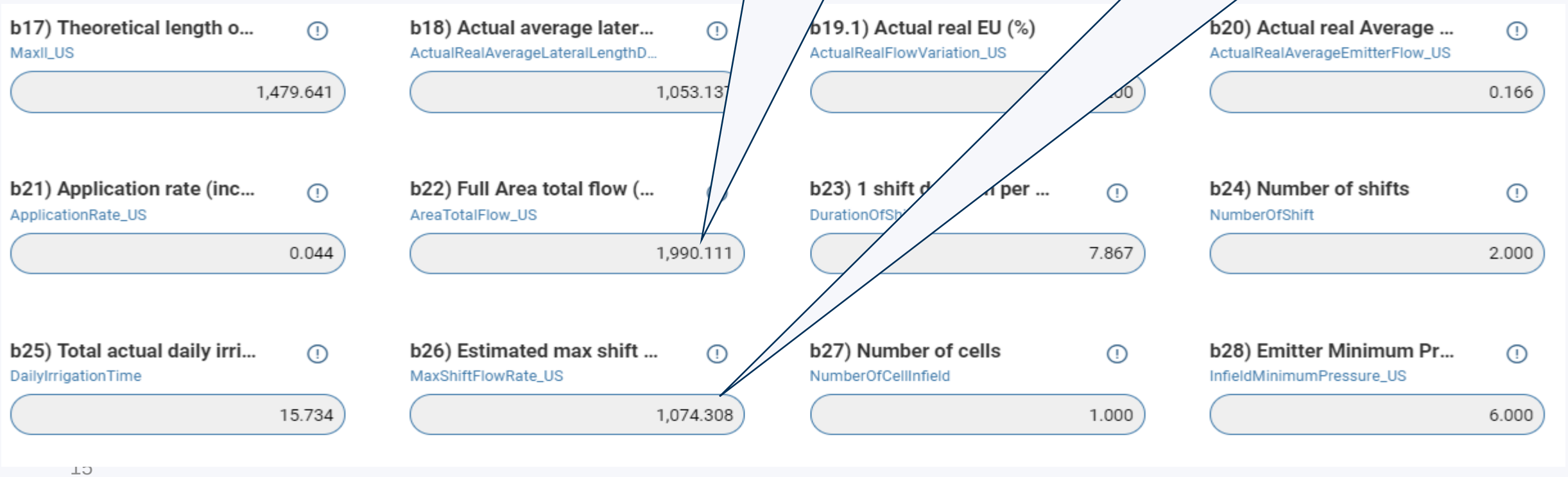


Infield - Output

- In addition, other parameters being calculated including:
  - Irrigation rate (mm/h)
  - Max flow rate per shift (M^3/h)
  - Number of shifts
  - Duration of shifts and irrigation per day

Net flow as if the area is irrigated in 1 shift

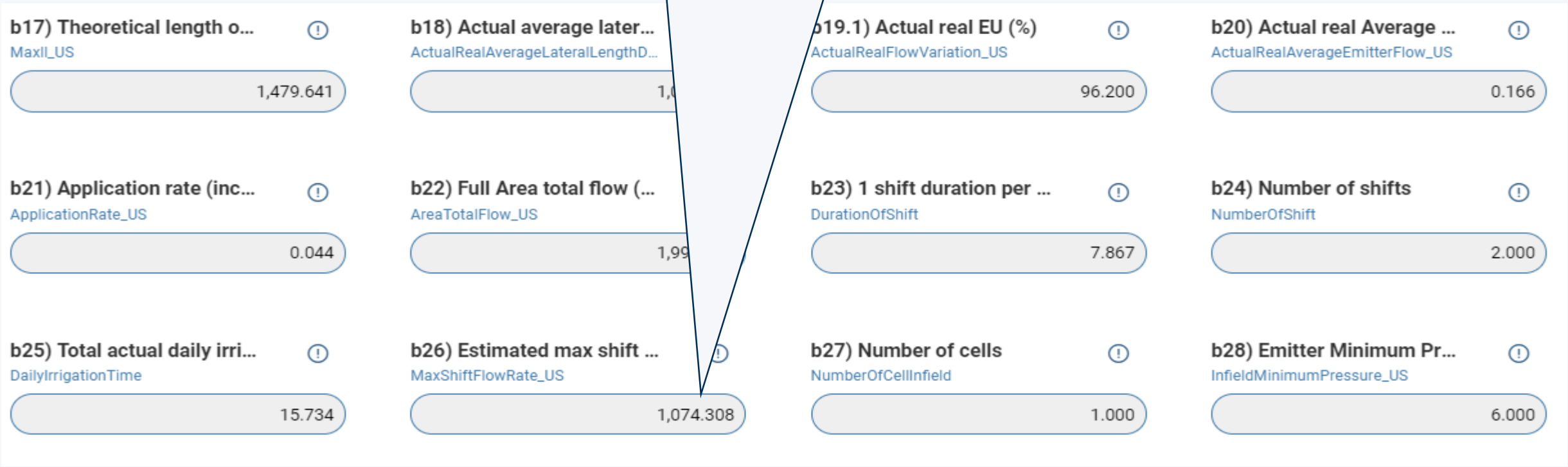
Gross flow of biggest shift =
(b22 / b24) * 1.08
(8% margin for unequal shifts program)



Infield - Output

If area flow should be adjusted to fit existing limitations (well flow etc.) or user wish, there are few options for this:

1. Adjust Max. water requirement @ ‘crop data’ - A12
2. Adjust irr. Hr per day @ ‘operational Data’ - A14
3. For NPC - Adjust Inlet pressure to dripline @ ‘Infield’ – B09 & B09.1
4. For PC - Adjust emitter flow or spacing @ ‘Infield’ – B05 & B06

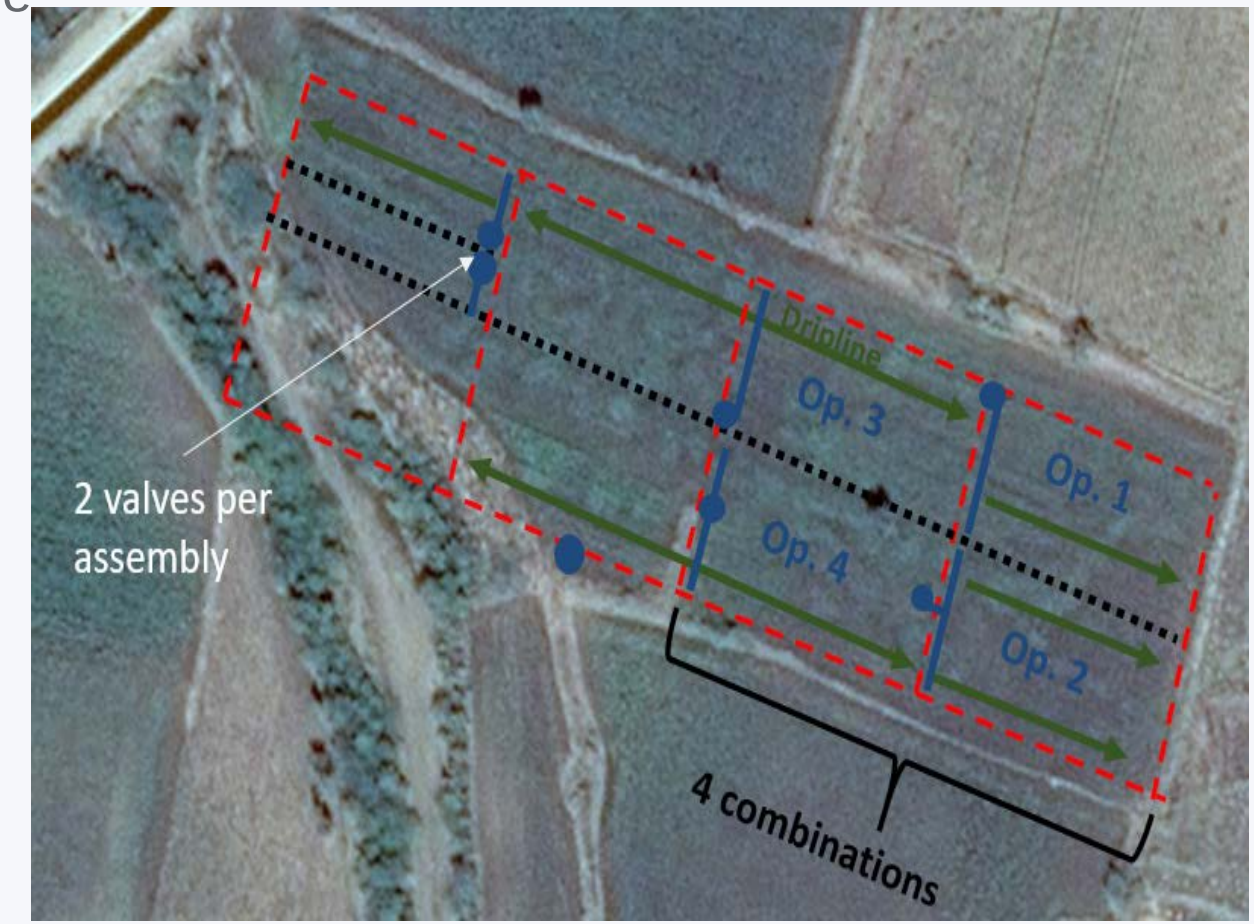


Infield Configuration – Output

b29) Emitter Maximum Pr... InfieldMaximumPressure_US 22.000	**b30) Max. required hl at l...** HI_US 2.029	**b32) Dripline CoilLength (...** InfieldInlineCoilLength_US 3,600.000	**b33) Total length of later...** TotalLengthOfLateral_US 1,478,984.640
b34) Total No. of lateral's ... TotalNumberOfLateralOutlets 1,430.000	**b35) No. dripline coils or ...** QuantityEmitter 411.000	**b36) No. of sprinklers sta...** QuantityMisc 411.000	**b37) Spr./Online No. of c...** QuantityInfieldPipeClass
b38) No. of PE coils for o... QuantityInfieldPeTube 5.000	**b39) No. of start connect...** QuantityInfieldStartConnector 1,510.000	**b40) No. of lateral adapte...** QuantityInfieldAdaptor 1,510.000	**b41) No. of Barb Conn.** QuantityInfieldBarbConn 611.000

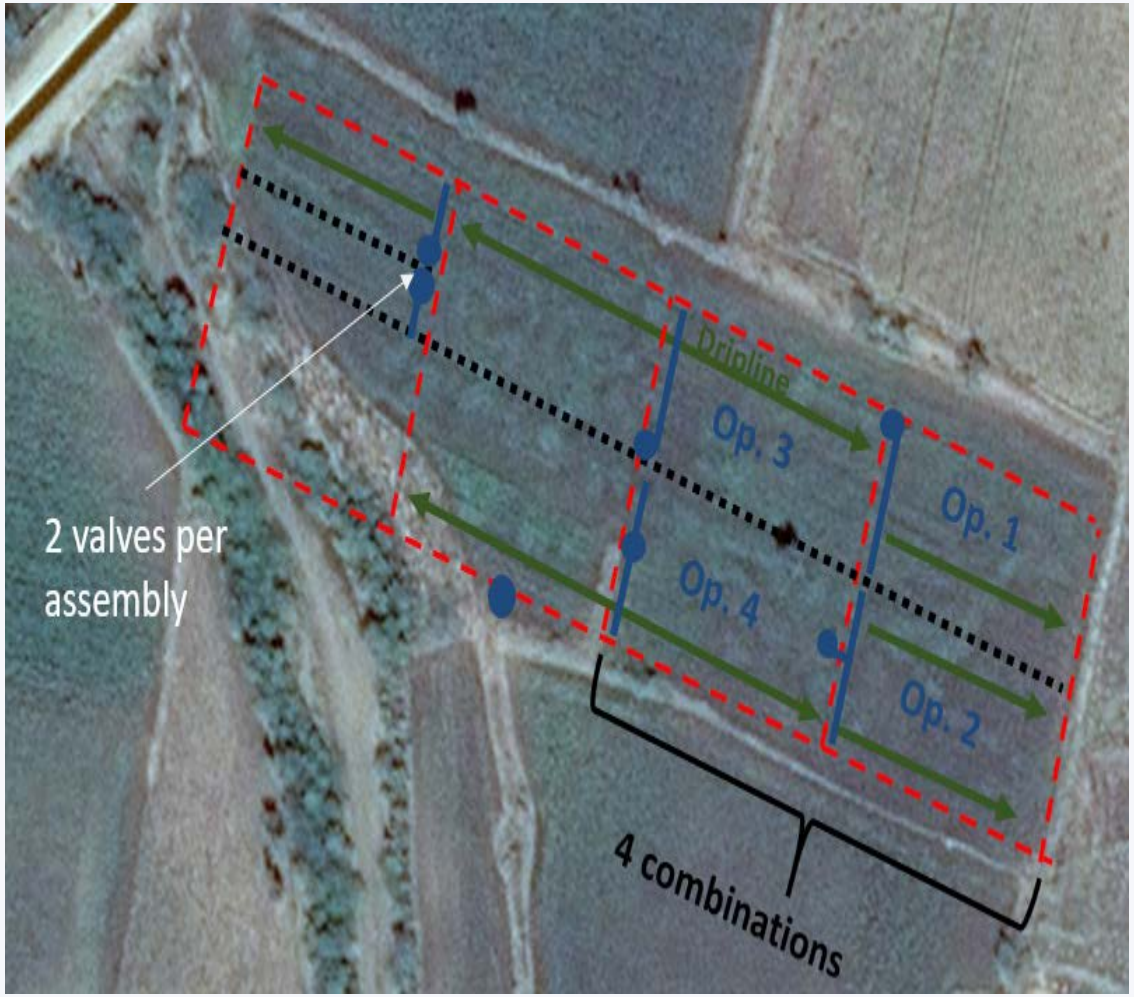
Submain and Irrigation Valves

- In this section, the area is divided parallel to the row direction, creating the irrigation blocks
- Each block is controlled by a single valve
- The division is determined by the flow limit for the selected valve
- The number of valves (blocks) in the field is determined by:
  - Number of shifts (calculated in infield WBS)
  - Number of cells (calculated in infield WBS)
  - Shift scheme design (scattered or concentrated)
  - Additional parameters



Submain and Irrigation Valves

- Valves assembly method is selected – **‘spread’** or **‘cluster’** (for US only).
- For **'clusters'** method - locations & number per Cell is selected
- For **‘spread’** method - valve location along the submain and the number of valves per assembly are selected
- Hydraulic calculations are done to determine submain diameters (up to 3 diameters)
- For 'clusters' method calculations are done to determine length & HL for delivery lines to Submains (US only, for future use in other markets)
- This is determined by:
  - Submain flow & length
  - Submain pipe material selection
  - EU / Flow variation (for NPC emitters)
  - Allowed Head loss (for PC emitters)



Irrigation Valve Configuration

InfieldHeadWorks

* C01) Method of Block/V... Headworksmethods C02) Required diameter of block	* C02) Required diameter... HeadworksRequireddiameter 3"	* C03)Type of valves HeadworksType Electric + P.R.	* C04) Type of valves seri... HeadworksTypeMaterial DOROT-PVC-GLUE-96
c10) Theoretical average ... Headworksflow_US	c10) Theoretical average ... Headworksflow 48	c11) Number of valves pe... ActualNumberOfValvesPerShift 5.000	C05) Manual number of v... SubmainvalvesperShiftmanual
c12) Actual ave. flow rate... ActualAverageFlowAtBiggestShift...	c12) Actual ave. flow rate... ActualAverageFlowAtBiggestShift 48.800	c13) Size of avarege bloc... SizeOfAverageBlock 4.000	c13) Size of avarege bloc... SizeOfAverageBlock_US
c14) Number of valves\bl... NumberOfValvesPerProject 10.000	* C06)Valves distribution ... ValvesDistributionMethod Spread	* C07) Location of valves ... Headworkslocationvalvesblocks side of block	* C08) Number of valves ... SubmainnoValveAssembly Valve_Assembly2

Irrigation Valve Configuration

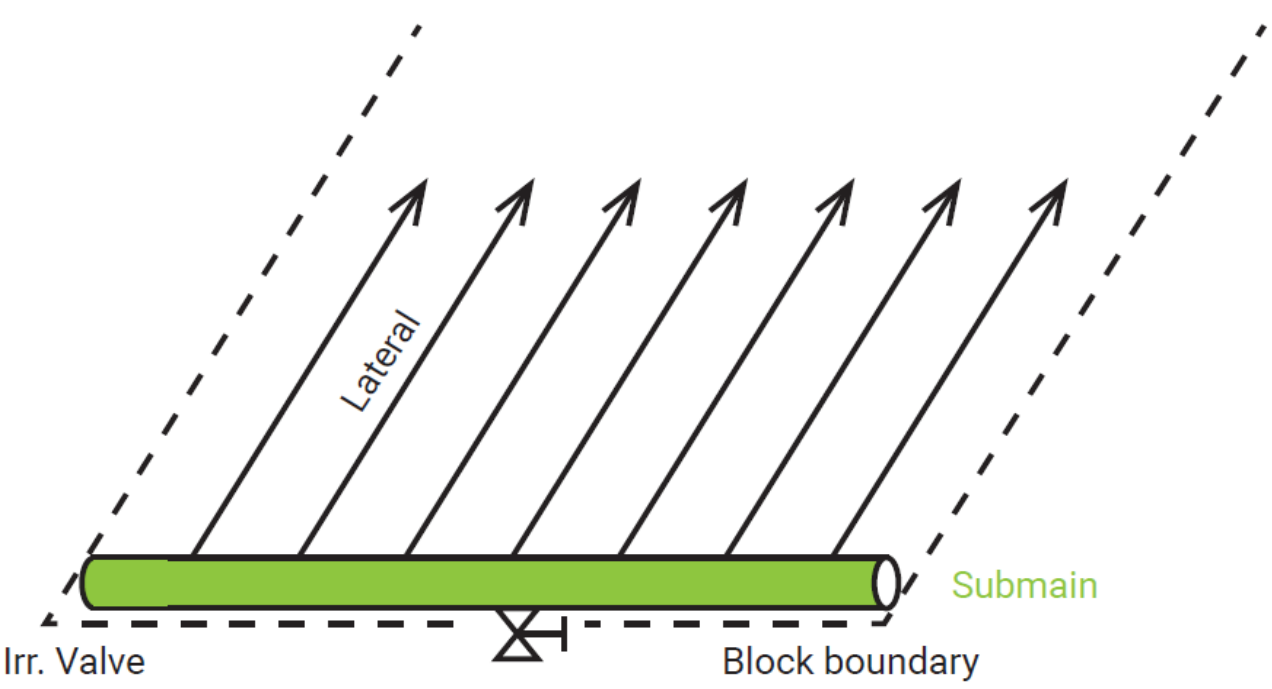
Optional C06 = Cluster:

c14) Number of valves\bl...	* C06)Valves distribution ...	* C06.1)Valves clusters l...	* C06.2)Number of cluste...
NumberOfValvesPerProject	ValvesDistributionMethod	ValvesClusterslocation	NumberofclustersperCell
10.000	Cluster	Both corners and center of cells	2

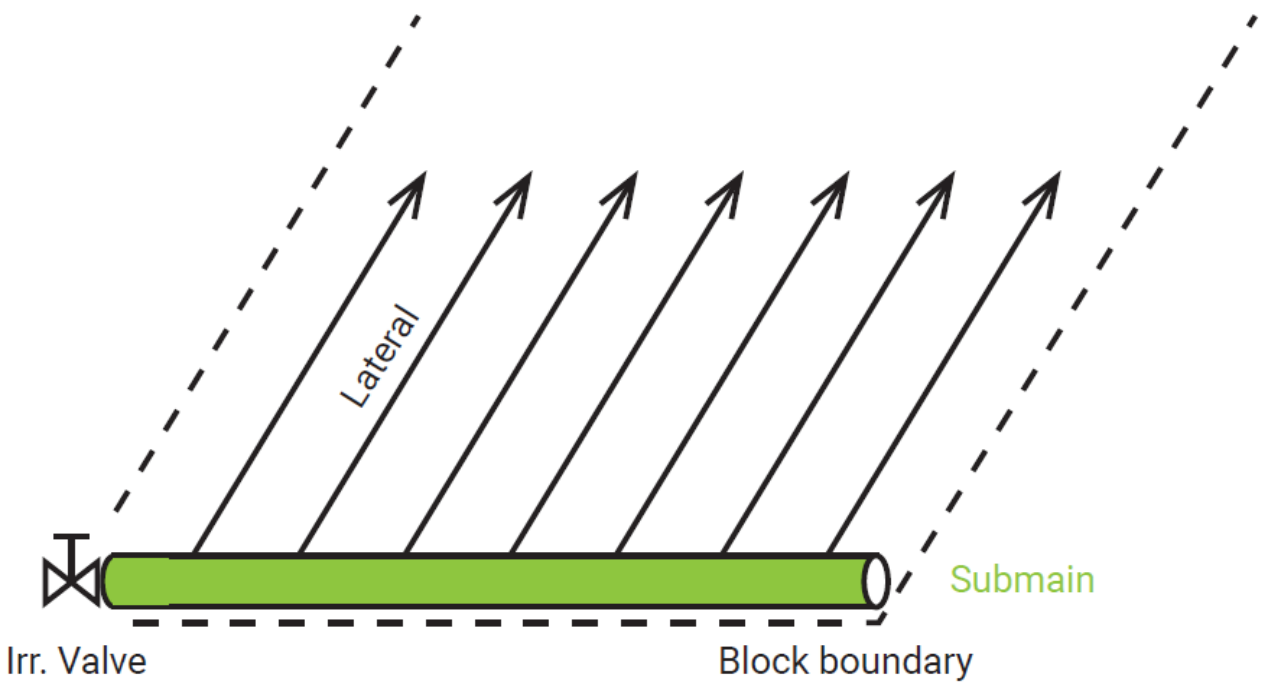
c15) Number of valves pe...	c16) Number of extra val...	* C07) Location of valves ...
Numberofvalvesperclusterside	Numberoffreevalve	Headworkslocationvalvesblocks
3.000	1.000	side of block

C07: Location of Valves vs. Block

Middle of Block (for submain at side of block)

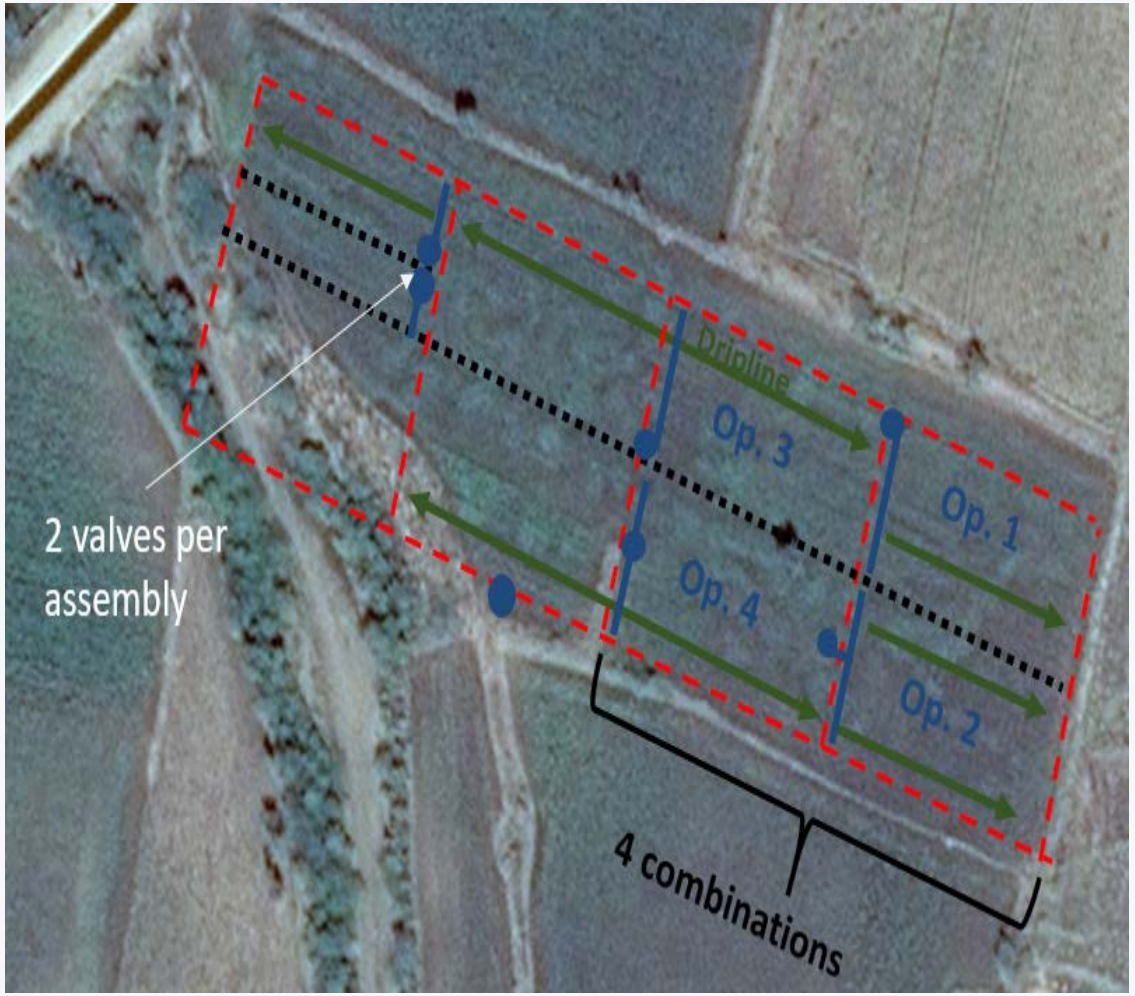


Side of Block (for submain at side of block)



Submain and Irrigation Valves

- For **‘spread’** method - valve location along the submain and the number of valves in each assembly are selected
- Hydraulic calculations are done as indicated previously and based on same parameters
- Selecting a drip irrigation system with flushing manifolds allows to configure the number and diameter of the flushing manifolds (for US only one FM & one diameter is automatically calc.)

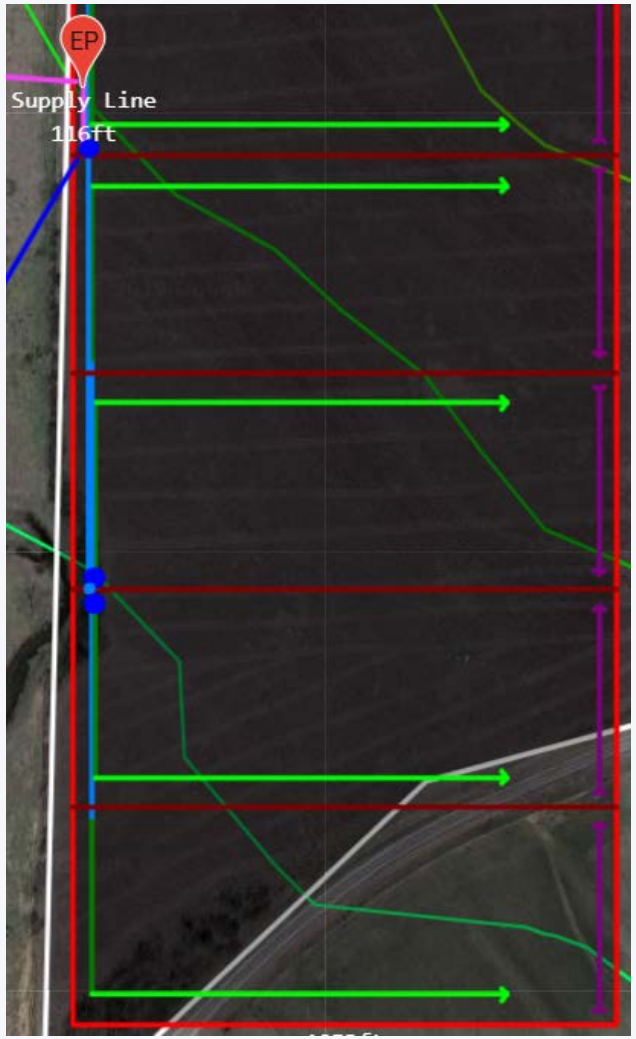


Submain Pipes Configuration

Submain

D00) Location of submain... SubmainlocationsubmainblocksSubmainlocationsubmainblocks side of block	* D01) Type of Submains SubmainType P.V.C glue type	* D02) Type of drip system: SubmainTypeDripsystem subsurface drip WITH flushing sy	d10) Submain flow per val... SubmainQ_US 215.000
d11) Submain length per ... AverageLengthOfSubmainPerBloc... 475.750	d13) Submain & 'Submain... SubmainDmm1_US 4.000	d14) Actual Submain HL (... SubmainFV_US 0.000	d15) Actual Submain EU (... SubmainFvNpc_US 95.700
d15) Actual Submain FV (... SubmainFvNpc 4.000	D03) Manual method of s... Submaininsertmanually No	D03.1) manual submain d... Submaindiameter1	D03.2) Manual submain d... Submaindiameter2

Submain and Flushing Layout on Gmap



Flushing System Configuration

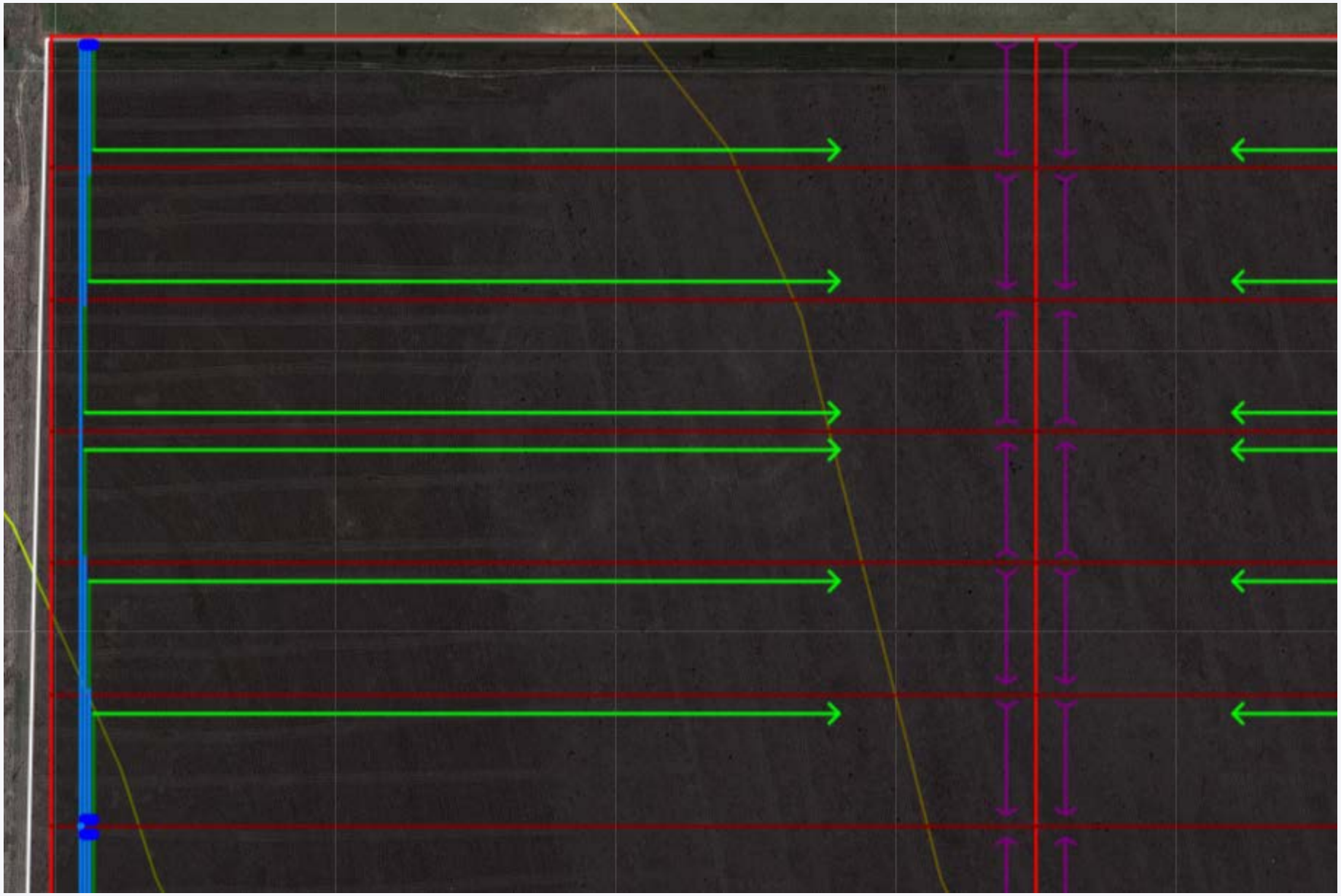
Manifold Flushing Cluster

* Flushing Valves Distribut...	* Flushing Valves Clusters...	* Flushing clusters per Cell	Total extra flushing valves...
FlushingValvesDistributionMethod	FlushingValvesClusterslocation	FlushingNumberofclustersperCell	FlushingNumberoffreevalve
Cluster	Center of cells	3	2.000

Flushing valves per cluste...
FlushingNumberofvalvespercluste...
3.000

D03.3) Manual submain d...	d17) Length of FM per blo...	d19) FM & FD diameter (I...	d20) Number of end lines ...
Submaindiameter3	TotalLengthOfFlushingManifold_US	FlushingManifoldDiameter_US	NumberOfEndLinesPerBlock
			144.000

Submain & SD + Flushing System layout sample



Flushing System Configuration

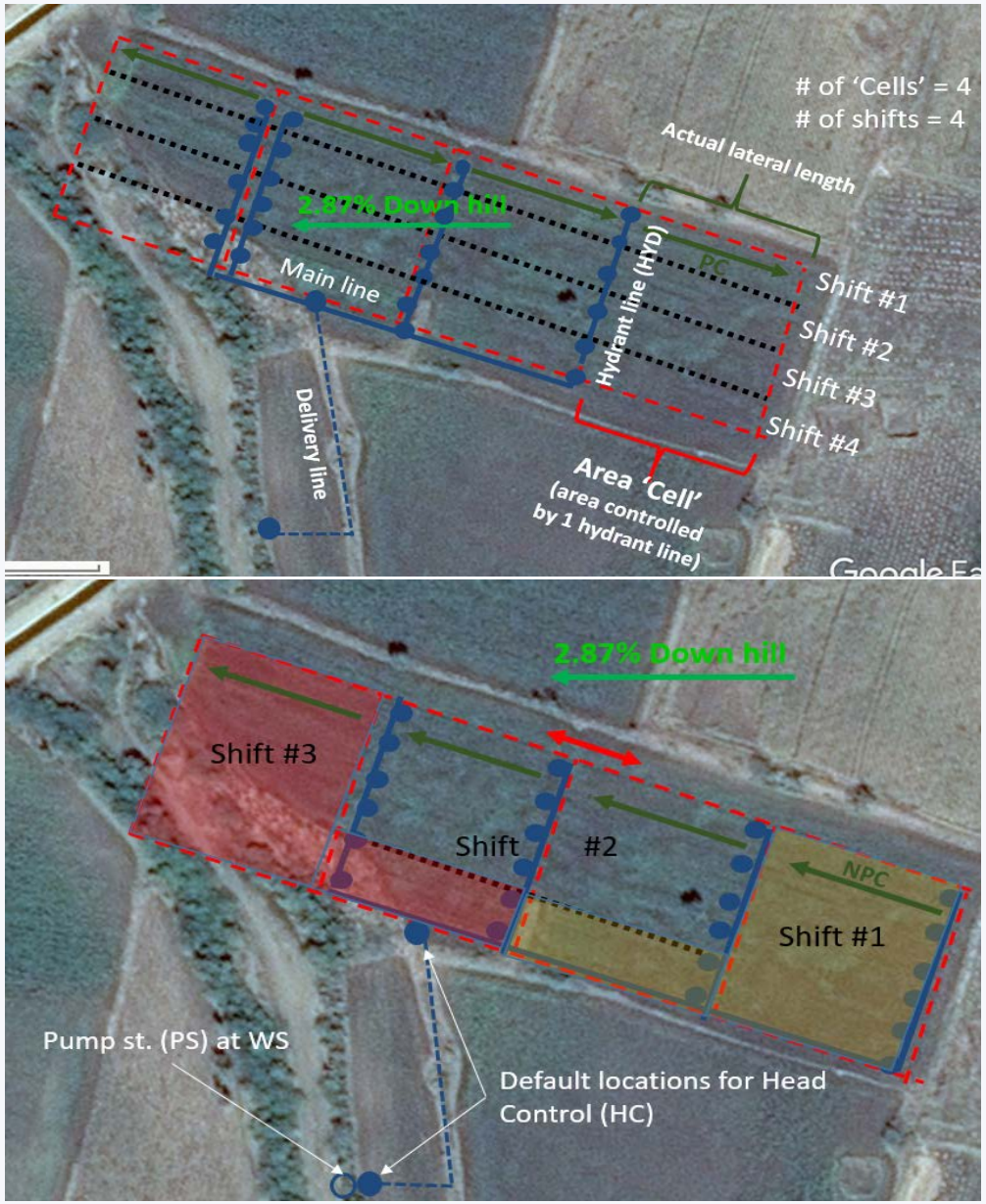
d21) Number of end lines ...	d22) Size of flushing valve...	d23) Size of vacuum valve...	d24) Number of flushing/...
TotalEndLine	SizeOfFlushingValve	SizeOfVacuumValve	TotalNumberOfFlushingValvesPer...
1,430.000	4.000	4.000	20.000

d05) Number of laterals p...	* D05) Flushing assignme...	d06) Number of laterals o...	d07) Number of flushing ...
NoLateralPerSideOfBlock	Submainflushingmanifold	NoLateralManifold	NoAutoFlushingManifold
141.000	Auto	72.000	2.000

d22) Number of flushing/...	Submain pipes selection ...
NumberOfFlushingValvesPerBlock	SubmainAutoManualSelection
2.000	Auto Calculation

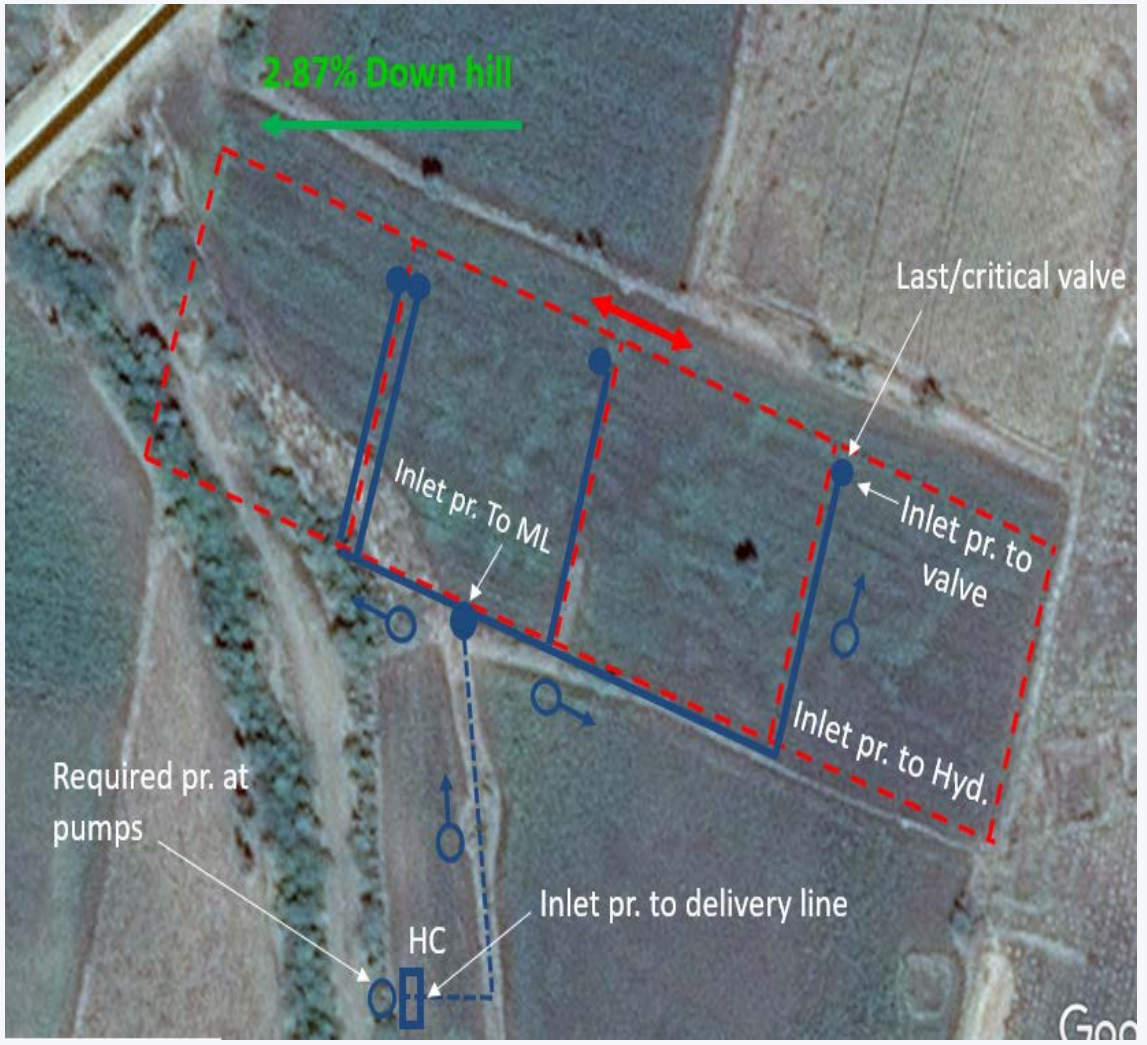
Mainline

- In this section, the mainline pipe network is designed
- This pipe network is divided into 3 segments:
  - 1. Supply/delivery pipe (LO) – From WS to EP
  - 2. Mainline (ML) – parallel to row direction
  - 3. Hydrant line (Hyd) – perpendicular to row direction, feeding all valves assemblies / clusters
- The system differentiates between 2 scenarios:
  - WS is inside the field
  - WS is outside the field
- Pipe material and Min. pipe Class (E01, E02) are selected; if SPRINT determines that a higher class is needed then it will design accordingly



Mainline

- User can select to have isolation valves @ E03 (1 valve per each Hydrant line / Cell)
- For specific conditions, selection of Hydrant line location is available to allow flexibility of layout (field E04)
- The calculation starts from the critical valve backwards until the water source adding the head losses and topographic gain / loss along the route (up to 2 m/s Max. Velocity)
- Max. hydraulic gradient for initial calculations is based on DP between driplines inlet pressure and ('pipe class') * 0.95
- The inlet pressure to the delivery line (e07.0) will be used in the following WBS's



Mainline – Input

Mainline

* E01) Type of main line: MainLineType	PVC
* E02) Min. Class of main line MainLineClass_US	100
E03) Hydrant lines to have isolation valves MainLineisolationvalves	No
* E04) Hydrant Line Location MainLineHydrantLineLocation	Topography
e07.0) Main line inlet pressure (psi) MainLineInletPressure_US	42.780

Mainline – Output

Main Line Calculation

e07.1) Number of blocks per project MainLineNumberBlock	10.000
e07.4) Block length parallel to laterals (ft) MainLineBlockLength_US	1,053.201
e07.6) Block width perpendicular to lateral... MainLineBlockWidth_US	421.625
e07.9) Block Ave. flow rate (gpm) MainlineAvgFlowRate_US	199.016
e08.8) mainLine Booster required? MainLineBooster	NO
e10.4) real number of blocks in 1 cell MainLineE30	10.000
e12.3) Required Mainline Hyd. Gradyent (D... MainLineJreq	0.047

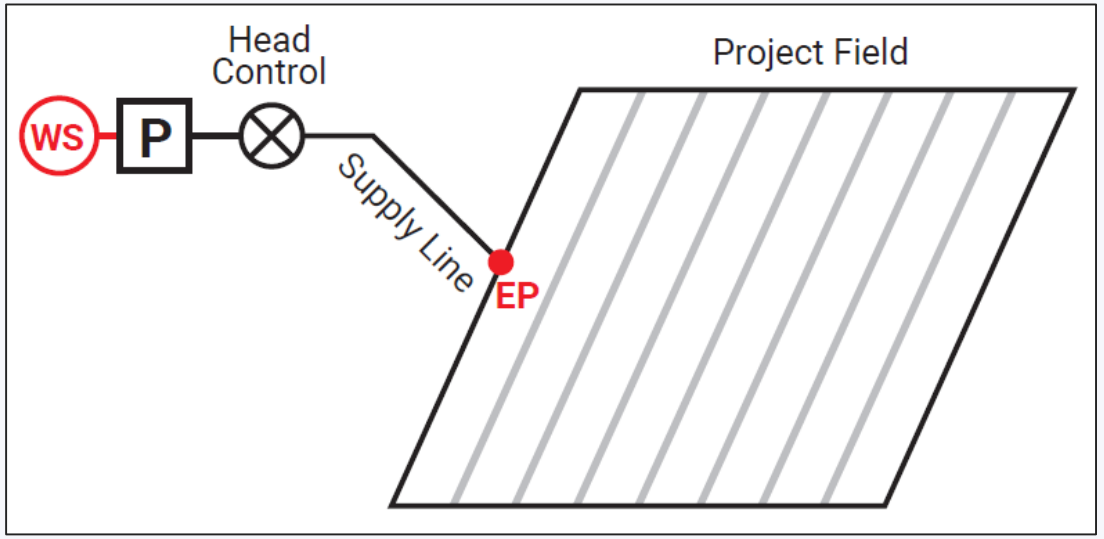
e13.7) ML Secondary Filter Hl (m) MISecondaryFilterHl	
e13.8) Submain HL (psi) MISubmainHl_US	6.035
e14) Valve assembly HL (psi) MIValveHl_US	5.000
e09.6) Virtual Lateral Length: MainLineE19_US	1,053.201
Highest Valve HighestValve	
Total length of cable needed TotalLengthofCable	
Distance of EP to furthest valve DistanceEPtofurthestvalve	
Lowest Valve LowestValve	

Data for further configuration

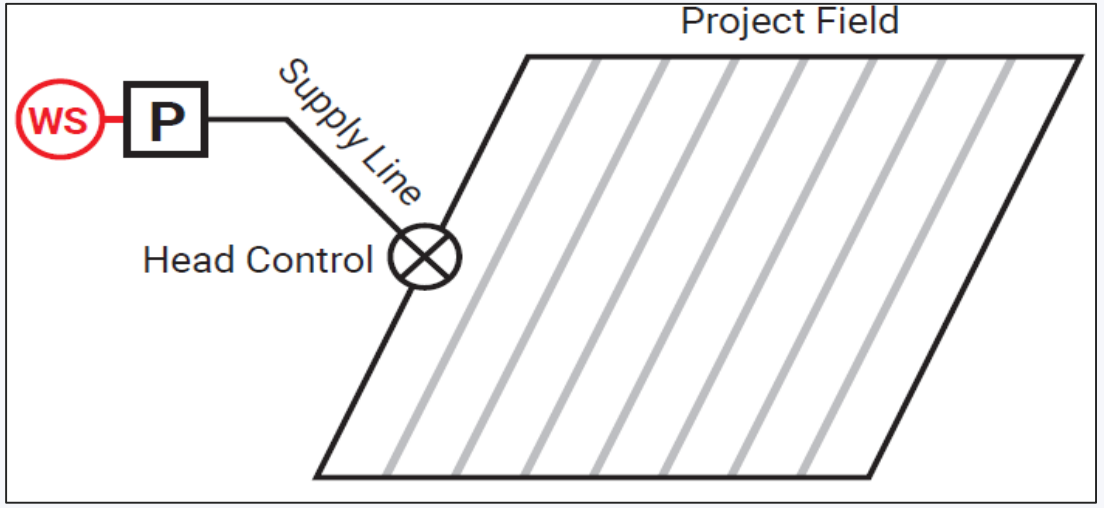
Head Control

- The head control can be located adjacent to the pump station or away from it
- If a booster is required due to high inlet pressure to Mainline (H_{in}>80 M), it will be located by default on the downstream side of Head Control (can be moved in detailed design).
- Head control includes manifolds (only PVC for US), water meter, air valves etc. in one SDBOM
- Head control includes main valve as per user selection
- Primary filtration and fertigation is located at HC and for the US Secondary filtration as well.

HC adjacent



HC away



Head Control Configuration

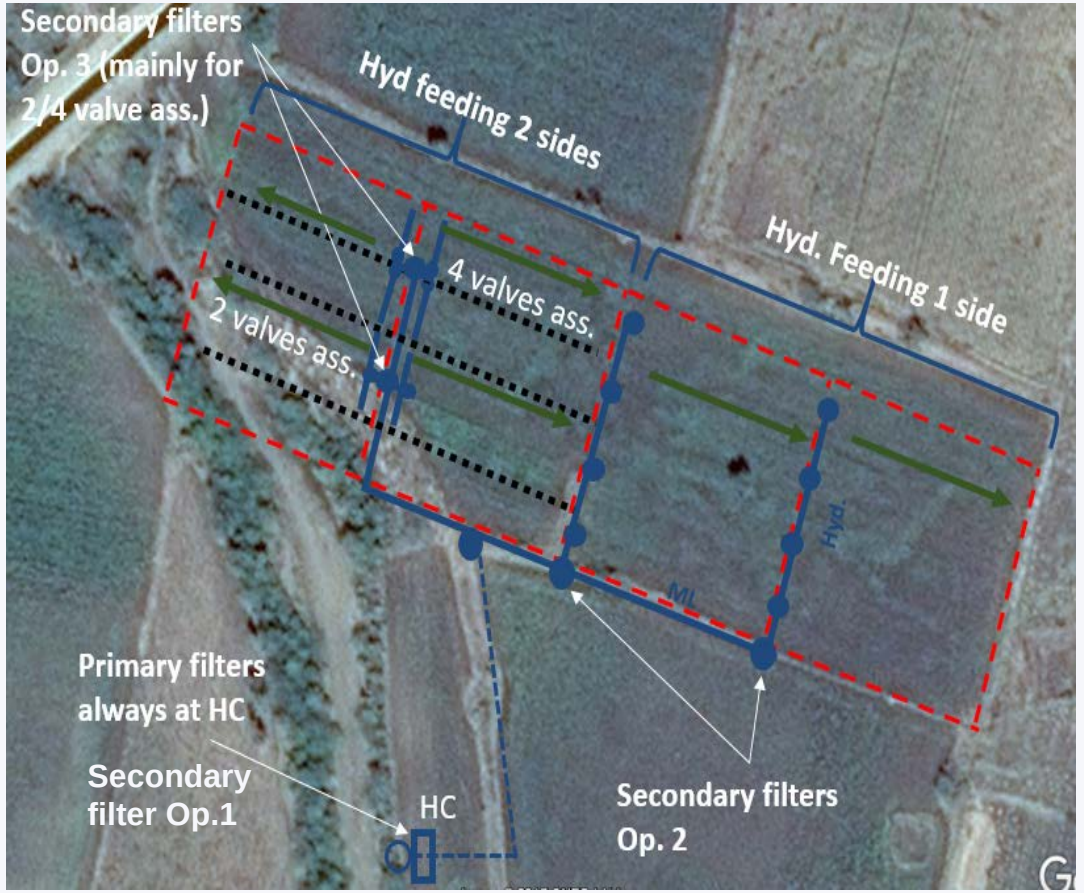
HEADCONTROL

* G01) HeadControl Location vs Watersou... HCLocation	Adjacent to pump station
* G02) Head Control type: HCType	Regular Head Control mounted on site
* G04) Regular HC Diameter Config. Method HCDiameter	Automatic
* G06) Type of main valve: HCMainValve	Electric +P.R./P.S. pilot
* G07) Type HC manifolds HCManifold	PVC class 10 manifolds
g08) Head Control Diameter (Inch) HeadControlDiameter	hc_manual_8inch

Filtration

- There are 2 filtration levels: Primary and Secondary
- There are 2 water quality levels: ‘poor’ and ‘moderate’
- There are 3 types of filters: ‘Auto’, 'Semi auto' and ‘manual'.

  All types can be selected for both Primary & Secondary
- Primary filters include either Hydro cyclone, or media filter (Sand Storm), or discs filter (Arkal), or screen filter (not for US).
- Secondary filters include either media filter - Sand Storm (for US only), or discs filter (Arkal), or screen filter (ScreenGuard).
- Automatic selection of the filters is based on flow limit values which appears in the database for each level of water quality
- Secondary filters can be located in 3 different configurations:
  - At HC, right after the primary filter (this is the only option for US)
  - Beginning of each hydrant line
  - At valve clusters / assemblies



Filtration Configuration - Input

* I01) Type of primary filtration required: FTrequired	MEDIA / GRAVEL FILTERS
* I02) Manufacturer of primary filtration r... FTmanufactured	SANDSTORM
I03) Type of water source: FTTypeWatersource	Lake / reservoir
* I04) Method of Primary filtration selecti... FTprimaryselection	Automatic selection method
* I05) Water quality for primary filtration d... FTwaterquality	Moderate
I06) Backflush control system: FTBackflush	Filters backflushed by dedicated Filtration sys
* I09) Type of Secondary (backup) filters ... FTbackupfilterrequired	Secondary Gravel Filter
* I10) Location of backup filters: FTlocationbackupfilter	At down stream end of head control
* I11) Method of Secondary filtration sele... FTsecondaryfilterselection	Auto select
* I12) Manufacturer of secondary filtratio... FTsecondaymanufactured	SANDSTORM
I14) Model of secondary filters/filter batt... FTsecdescriptionauto	
i16) Primary Filtration Flow Rate (gpm) FilterMaxShiftFlowRate_US	990.675
i17) Secondary Filtration Flow Rate AutoFiltrationFlow_US	

Fertigation

FERTIGATION

* 103) Type of Fertilizer...
Fertigationtype
103.1 - Guided selection mo

* 103a) Type of Fertilize...
Fertigationsystem
103.5 - Multiple channel sys

* 103b) Type of Fertiliz...
Fertigationsystemelectric
103.6 - Electricity available &

* 103c) Allowed head lo...
Fertigationallowedheadloss

* 103d) Level of Fertiliz...
Fertigationfertilizerautomation

* 103e) Solid Fertilizer ...
Fertigationmixing
None

* 103.2.8) Guided Mode...
Fertigationfertikit3Gguided

* If Mainline Inlet Press...
MainInletPressureabovebelow
Above 60

Mainline Inlet Pressure ...
FertigationMaininletpressure

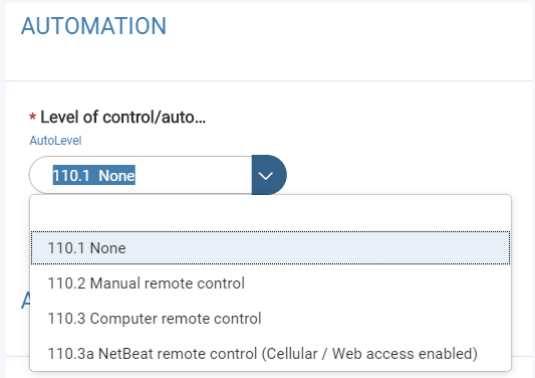
Pumping

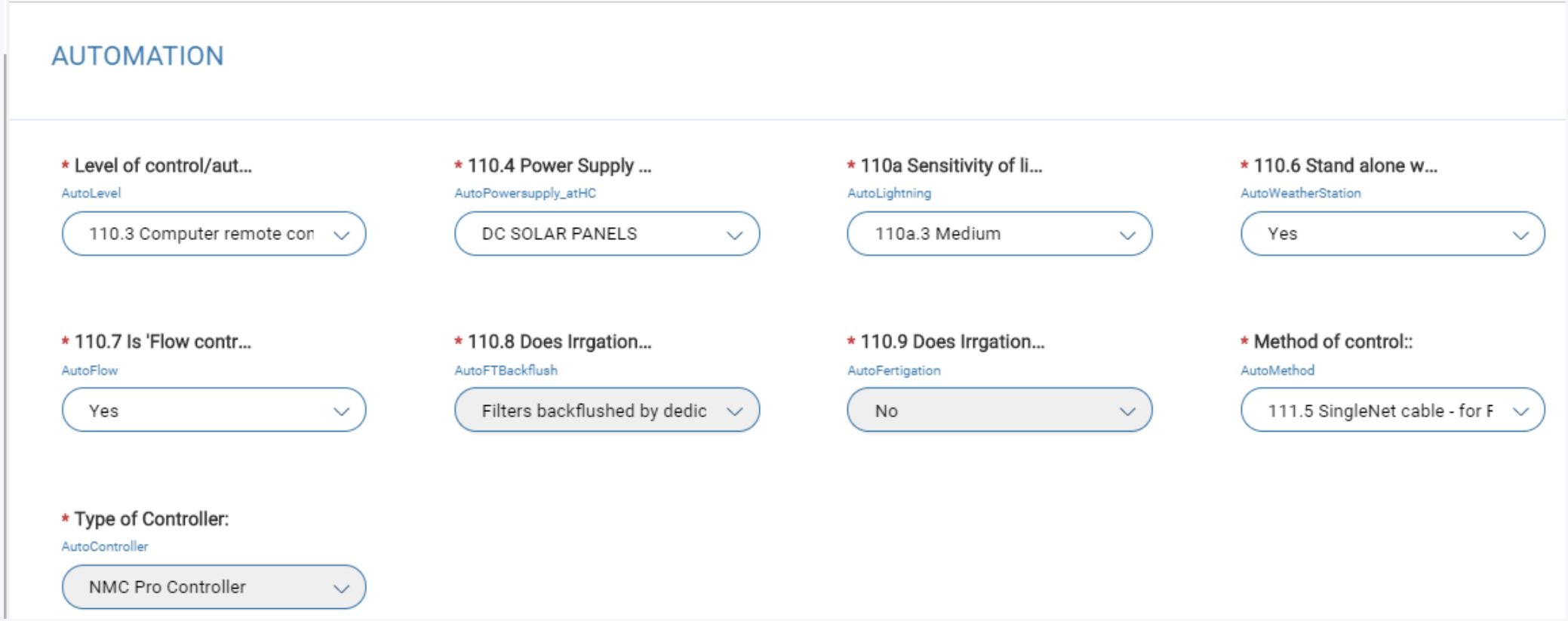
* J01) Pumping statio...	* J02) Number of pu...	* J02.1) Backup pum...	* J03.1) Include pump...
PSPumpRequired	PSIdenticalPump	PSbackupPump	PSpumpswitchincluded
yes	2.000	Required	yes

* J03) Type of pumps:	* J04) Pump inlet con...	* J06) Type of deliver...	* J07) Type of downst...
PStypepumps	PSpumpinletcondition	PSdeliverysetmanifolds	PStypepumpsvalve
 Submersible - 2900 RPM	Gravity Feed	PVC class 10	Manual Butterfly valve

* J08) Type of NRV:	J9) Flow (per unit) at ...	J10) Est. pump head ...	J11) Est. power requir...
PSNRV	PsPumpFlow	PsEstimatedHead	PsEstimatedPower
plastic (Regev) - up to 10"	65.000	76.000	22.000

Automation


AUTOMATION
* Level of control/auto...
AutoLevel
110.1 None
110.1 None
110.2 Manual remote control
110.3 Computer remote control
110.3a NetBeat remote control (Cellular / Web access enabled)


AUTOMATION
* Level of control/aut...
AutoLevel
110.3 Computer remote con
* 110.4 Power Supply ...
AutoPowersupply_atHC
DC SOLAR PANELS
* 110a Sensitivity of li...
AutoLightning
110a.3 Medium
* 110.6 Stand alone w...
AutoWeatherStation
Yes
* 110.7 Is 'Flow contr...
AutoFlow
Yes
* 110.8 Does Irrgation...
AutoFTBackflush
Filters backflushed by dedic
* 110.9 Does Irrgation...
AutoFertigation
No
* Method of control::
AutoMethod
111.5 SingleNet cable - for F
* Type of Controller:
AutoController
NMC Pro Controller

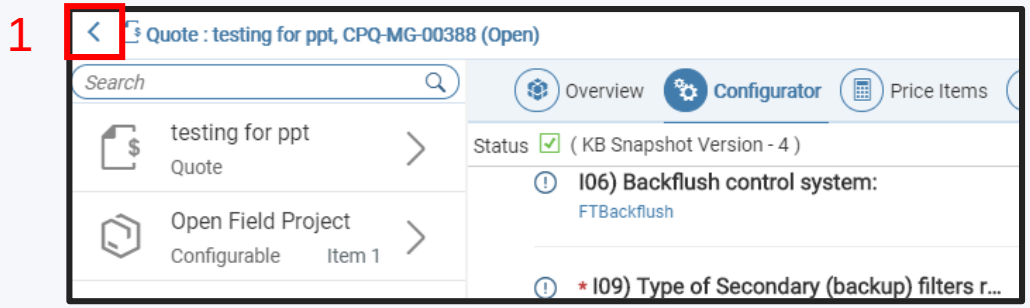
Maps After Configuration

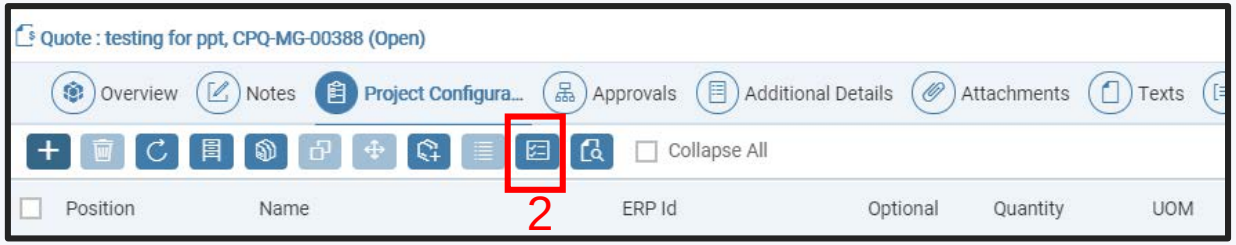
Maps Module After Configuration

To run the Mainline script do the following:

1. Click on arrow to exit the configuration screen to the BOM
2. Click on Organize lineitems with script
3. Click Next
4. Review the results and click Accept in order to receive the correct Submain and Mainline Bill of Materials and hydraulic calculations

If this process is not done at the end of any change to one or more fields of the configuration, the hydraulic calculations and BOM will be incorrect!



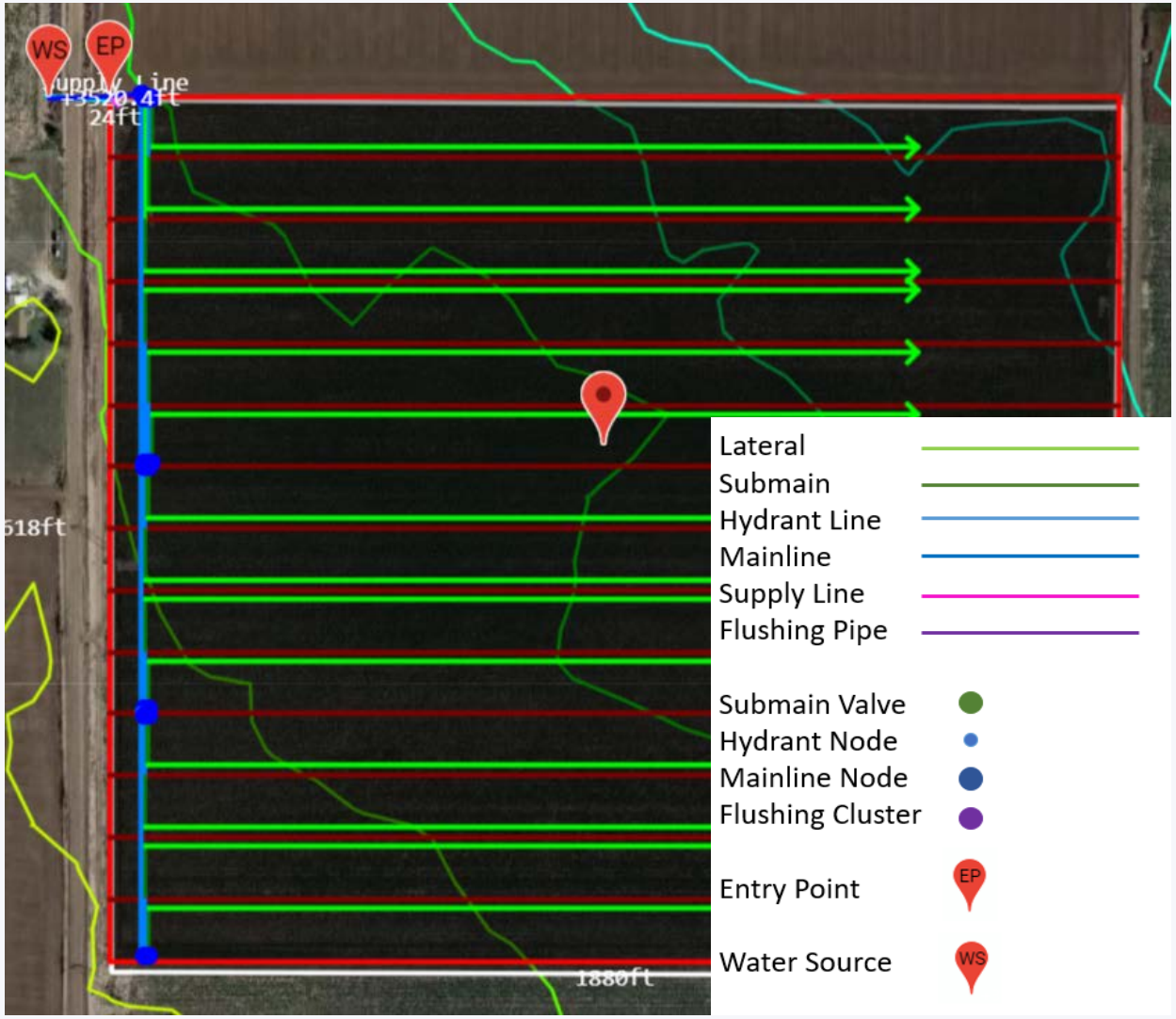


Maps Module After Configuration (2)

- To open the maps module go to the Mainline menu in the project configuration and click on Launch Google Map

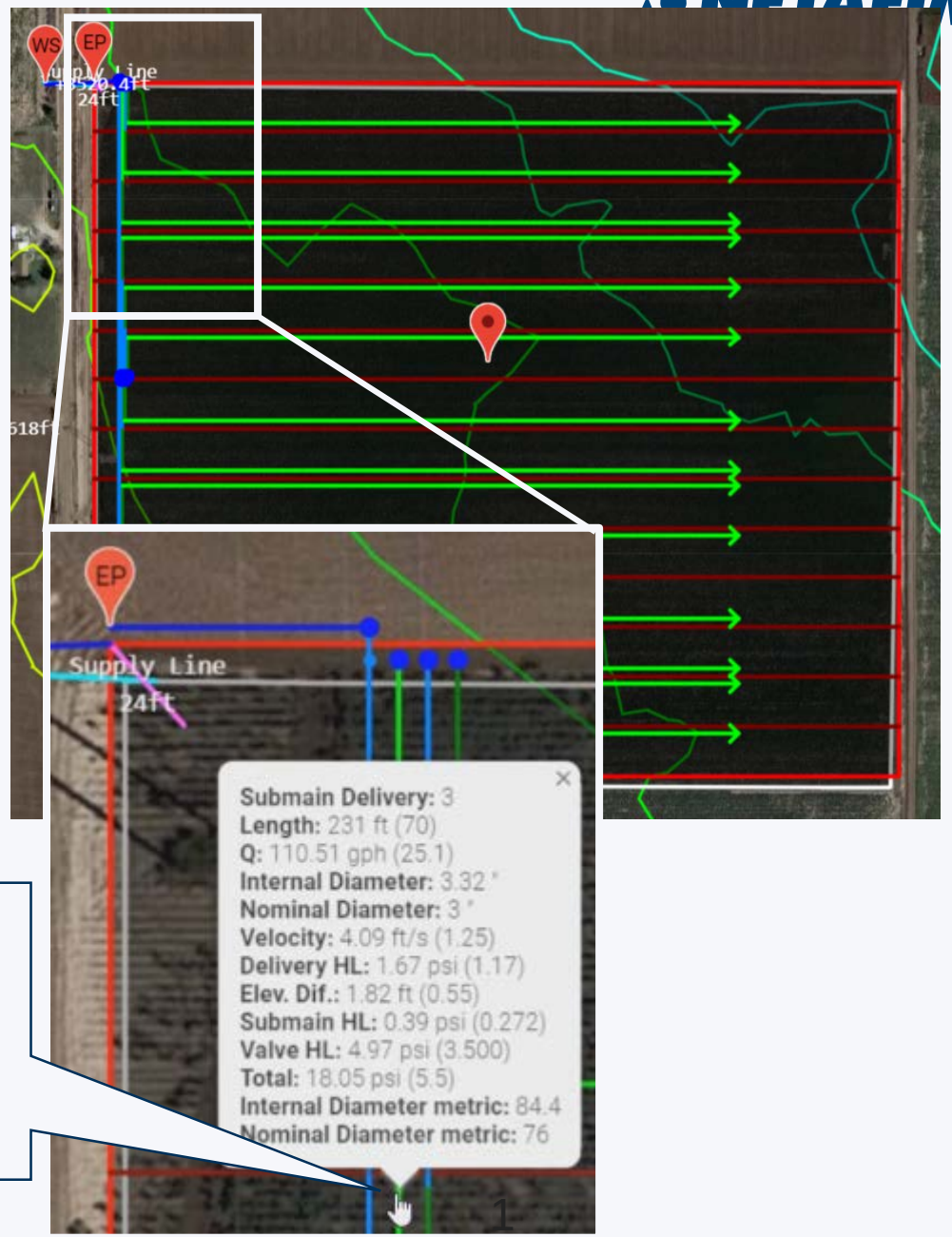
Maps Module After Configuration (3)

- After completing the configuration, the system updates the map accordingly with the following elements:
  - Mainline isolation valves
  - Secondary filters location
  - Head control
  - Pumping station



Maps Module After Configuration (4)

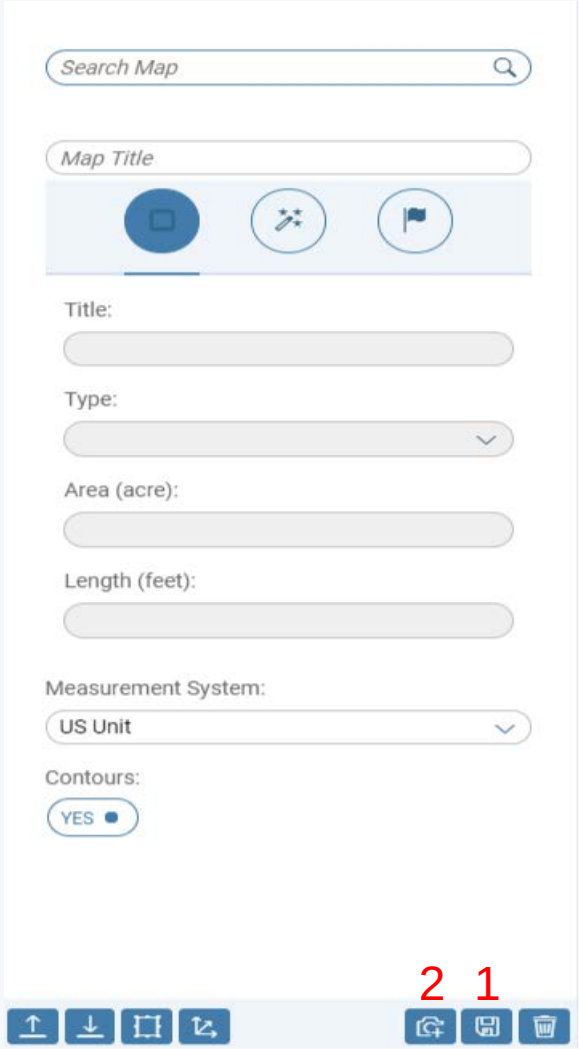
- The user should zoom in on the map to verify valves & piping specifications (supply line, mainline, hydrant lines, valve clusters, submain, and flushing) in order to verify that the configuration layout reflects his wish
- By pressing on any piping section in map, in depth data on pressure, velocity etc. can be seen



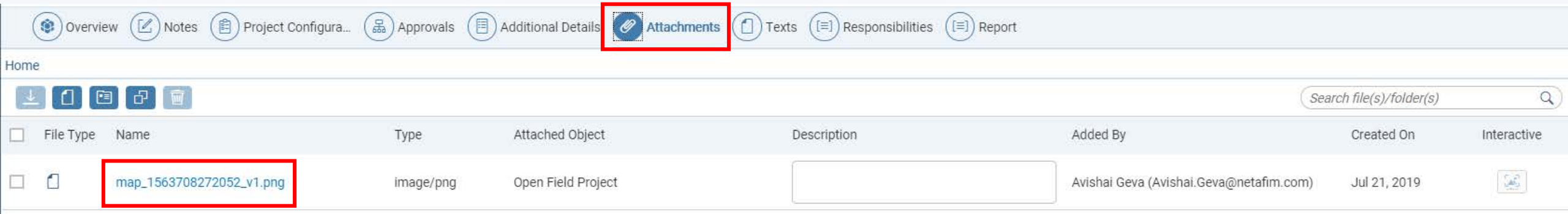
1. Zoom In
2. Locate the mouse on the requested pipe
3. Once the hand icon appears click in order to see the pipe spec bubble

Saving the Map's Screenshot

- After completing the process on the Gmap, click Save (1)
- After that, click on Take Screenshot (2) and click Submit on the screen that pops up.
- This will attach an image of the map to the end of the output document



- To view the map's image, click on the Attachments tab and download it



BOM Calculations and Creation

Flushing Delivery Piping Calculations

☐	»	1.3.4	Flushing Delivery Pipes	FLUSHING_DELIVERY_PIPES	NO	1.000
☐		1.3.4.1	PVC PIPE IPS 160PSI RD26 GLUE 2 20FT	000000077340006401	NO	882.000
☐		1.4	Infield Headworks	[91]	NO	1.000

Head Control

- 1.6.3 is the main valve
- 1.6.4 is the head control assembly (start with 99000-XXXXX) that includes all head control components as decided by the BU
- User will be able to see the assembly only after pricing is done
- SDBOM example

Position	Name	ERP Id	Optional	Quantity	UOM
1	Open Field Project	INPUT	NO	1.000	EA
1.1	Infield	[1]	NO	1.000	
1.2	Submain	[2]	NO	1.000	
1.3	Manifold and Flushing System	[91]	NO	1.000	
1.4	Infield Headworks	[91]	NO	1.000	
1.5	MainLine_US	[3]	NO	1.000	
1.6	HeadControl	[4]	NO	1.000	
1.6.1	AccessoryHeadControl	[99999999002]	NO	7.000	P1
1.6.3	DOROT 4 PS PVC SLIP N.O GRN SI	000000071610022483	NO	1.000	EA
1.6.4	SDB H.C PRE-FAB. COMP W/O M.\	000000099000026000	NO	1.000	EA

Position	Name	ERP Id	Optional	Quantity	UOM
1.6.4	SDB H.C PRE-FAB. COMP W/O M.'	000000099000026000	NO	1.000	EA
1.6.4.1	PVC NIPPLE PLAINXGROOVE SCH	000000077350017880	YES	1.000	EA
1.6.4.2	PVC RED.BUSHING SCH40 GLUE ‹	000000077350005400	NO	1.000	EA
1.6.4.3	PVC RED.BUSHING SCH40 GLUE :	000000077350005100	NO	1.000	EA
1.6.4.4	VIC COUPLER 2	000000070040002900	NO	1.000	EA
1.6.4.5	PVC NIPPLE PLAINXGROOVE SCH	000000077350017880	NO	1.000	EA
1.6.4.6	PVC T SCH40 GLUE 2	000000077350008070	NO	1.000	EA
1.6.4.7	PVC ELBOW 90DEG. SCH40 GLUE	000000077350002400	NO	2.000	EA
1.6.4.8	VIC COUPLER 2	000000070040002900	NO	1.000	EA
1.6.4.9	VIC COUPLER 4	000000070040003100	NO	2.000	EA
1.6.4.10	PVC FLANGE SCH80 GLUE 6	000000077350013910	NO	2.000	EA
1.6.4.11	5&6 ST ZINC PLATED FLANGE HA	000000076500010641	NO	2.000	EA

Filtration

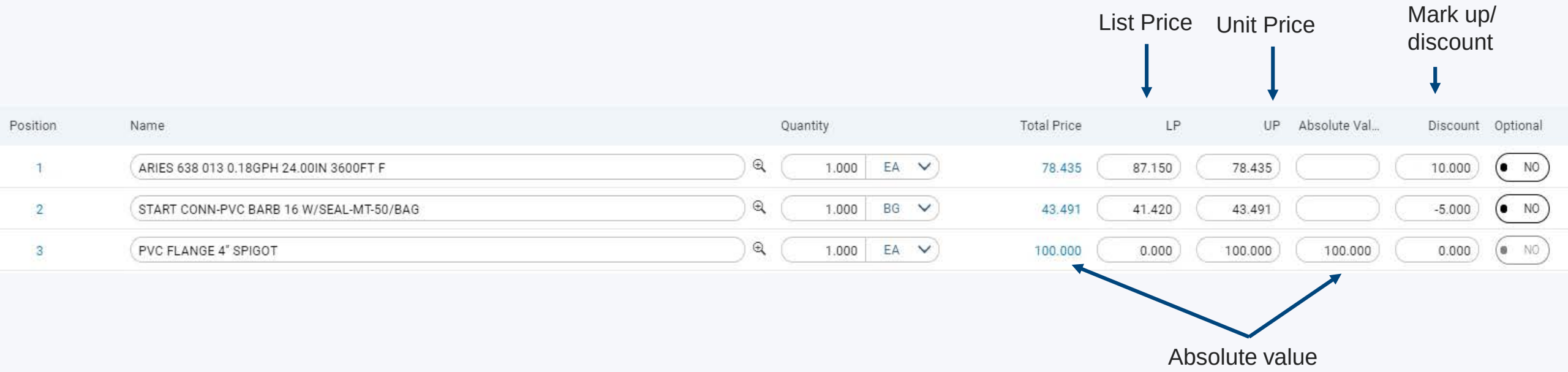
- The BOM includes both primary and secondary filtration
- Primary filtration can include additional products (in this case 1.8.1 Sedimentation Tank)
- Primary Filtration Flow Rate (m^3/h or gpm) is based on Max shift flow rate (calculated in Infield b26)
- The system provides the filter that fits requirements
- The location of the secondary filter determines the flow rate (I10 location of backup filter). The system will provide that filter that fits these requirements

Position	Name	ERP Id	Optional	Quantity	UOM
1.2	Submain	[2]	NO	1.000	
1.3	Manifold and Flushing System	[91]	NO	1.000	
1.4	Infield Headworks	[91]	NO	1.000	
1.5	MainLine_US	[3]	NO	1.000	
1.6	HeadControl	[4]	NO	1.000	
1.7	Fertigation	[5]	NO	1.000	
1.8	Filtration_US	[6]	NO	1.000	
1.8.1	SEDIMENTATION TANK 2.5 GAL G	000000072001007200	NO	2.000	EA
1.8.2	SM MEDIA FILTER SYS 24X3 DC S	000000071950001430	NO	1.000	EA
1.8.3	SCREEN FILTER 4" GR 120 MESH	000000072001010500	NO	1.000	EA
1.8.4	HCYCLN 8"*3" GR W/3" GR BOTTC	000000072001002900	NO	2.000	EA
1.8.5	Accessory Filtration	[99999999001]	NO	7.000	P1

Pricing and Output Document

Pricing Functionality

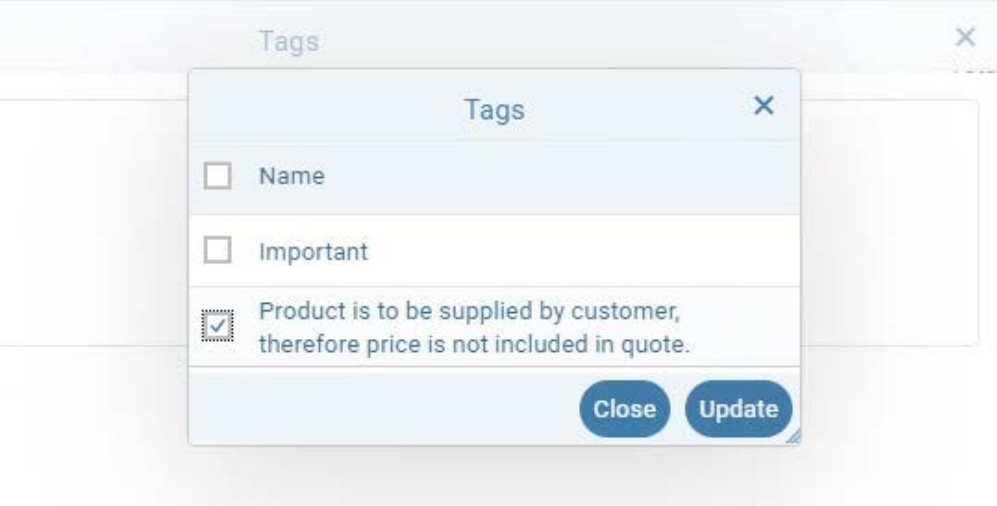
- List Price is based on dealer prices in Netafim's SAP and are updated based the discount agreement with each dealer
- Users can add mark up, discounts on product, WBS and entire project level
- Users can use the absolute value to override the list price or to use it whenever a price is missing
- User will be able to see the assembly only after pricing is done



Position	Name	Quantity		Total Price	LP	UP	Absolute Val...	Discount	Optional
1	ARIES 638 013 0.18GPH 24.00IN 3600FT F	1.000	EA	78.435	87.150	78.435		10.000	NO
2	START CONN-PVC BARB 16 W/SEAL-MT-50/BAG	1.000	BG	43.491	41.420	43.491		-5.000	NO
3	PVC FLANGE 4" SPIGOT	1.000	EA	100.000	0.000	100.000	100.000	0.000	NO

Pricing Functionality (2)

- When a product is not supplied by Netafim or the dealer this can be modified from the tags
- Other costs such as shipping, supervision and unexpected costs can also be added



Position	Name	Product Name	Optional
1	Other Costs	OTHERCOSTS	NO
1.1	Unexpected	Unexpected	NO
1.2	Transportation	Transportation	NO
1.2.1	Air Transportation	AirTransportation	NO
1.2.2	Sea Freight	Sea Freight	NO
1.2.3	Land Transportation	LandTransportation	NO
1.3	Supervision	Supervision	NO
1.4	Project Management	ProjectManagement	NO
1.4.1	Commissionning	Commissionning	NO
1.4.2	Project Management Sub	ProjectManagementS...	NO
1.5	Installation	Installation	NO
1.6	Legal Expenses	LegalExpenses	NO
1.7	Financial Expenses	FinancialExpenses	NO
1.8	Detailed Design and BOM	DetailedDesignBOM	NO
1.9	After Sales Managment	AfterSalesManagment	NO

Output Document

- The output document can be generated from the configuration screen

For more information on how to generate the output document click here

PROPOSAL FOR

Diversity_D

Project No. EG-US18 - v2

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Sweet Corn

Prepared by: Netafim LTD

28. April 2019

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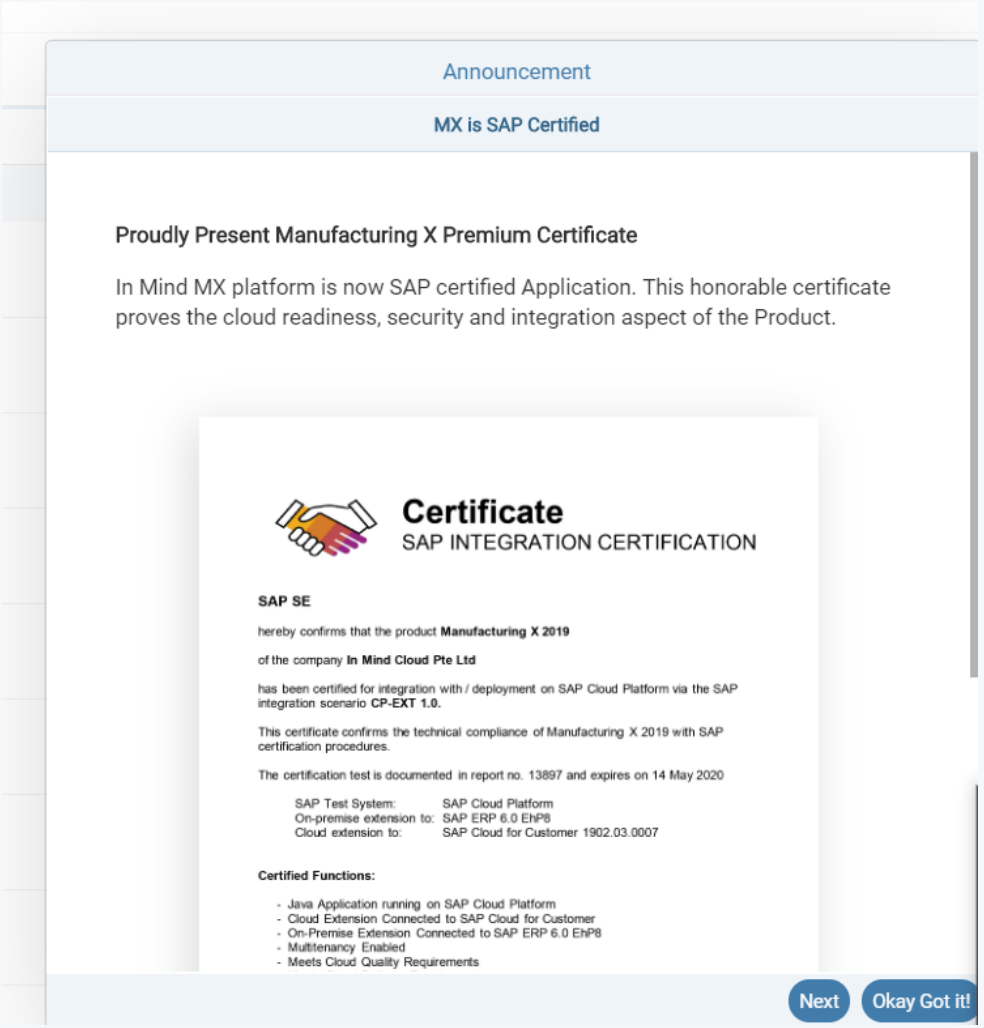
Important to Know?

- Don’t touch the Esc Button
- On the Area data tab verify that your map data are correct
- Don’t use the **Delete** option in “Open Field Project” **WBS**
- Don’t forget to look over the Alerts messages menu
- When the Open Field line item showing without WBS’s list
  - Don’t save
  - Log out
  - Open new incognito tab
  - Start again
- Save after each WBS’s
- If the pricing didn’t work
  - Look for the alert message bar
  - Find the problematic SKU’s (maybe more than 1)
  - Use the “Option” button end eliminate this item
- Review over your BOM at the end of the process
- Report to the support on any bug ,don’t forgot to mention CPQ id

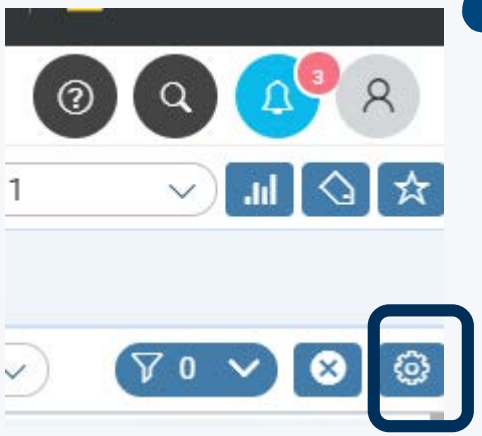
Important to Know?

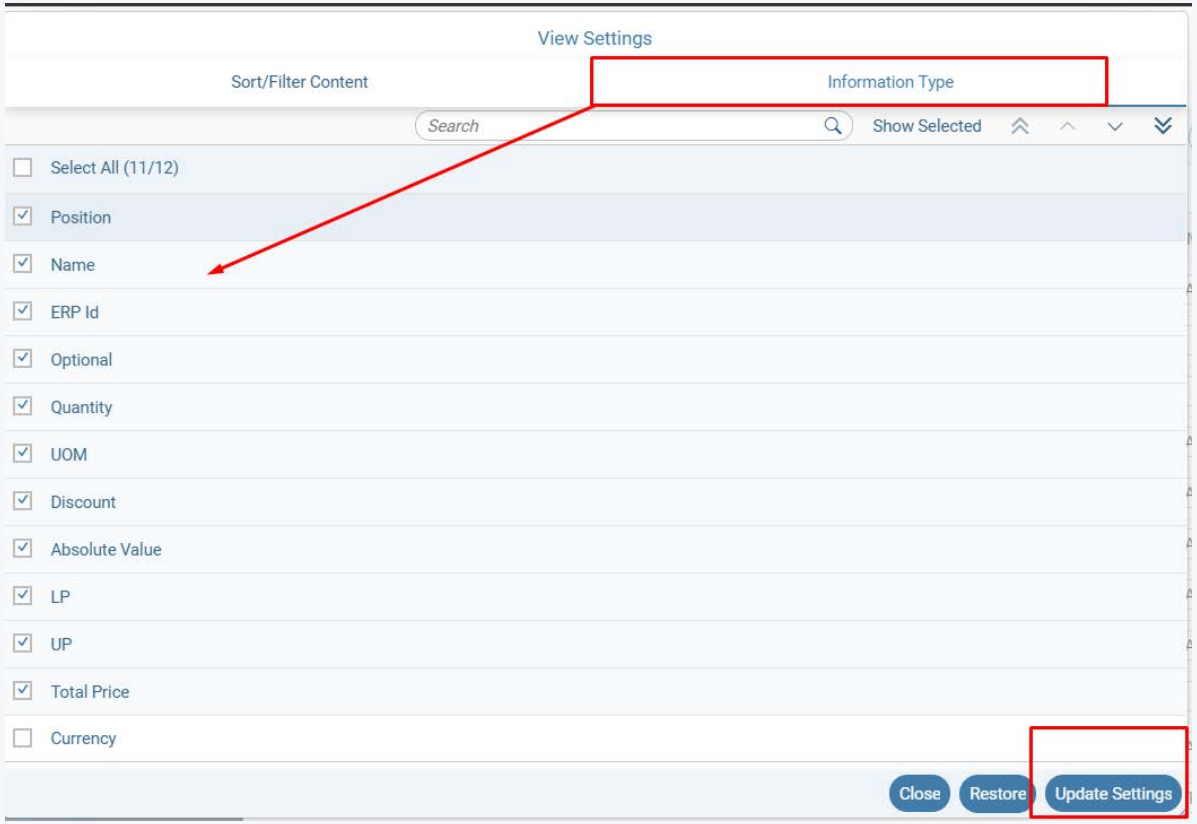
- When Open the system used -new incognito tab
- The following sign will appear



Important to Know?

- Press the “Setting” the configuration screen
- Choose what do you want to see on the screen
- Press Update Setting





Important to Know?

- Press the “X” button
- “Click here to clear browser cash”