

Chris Lowe

Subject: Factory OS - Optimising Housing Delivery with technology
Start: Fri 17/09/2021 16:00
End: Fri 17/09/2021 17:00
Recurrence: (none)
Meeting Status: Accepted
Organizer: [REDACTED]

Section 37
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Information

-----Original Appointment-----

From: [REDACTED]@citi.com>
Sent: Friday 10 September 2021 15:42
To: [REDACTED]@factoryos.com; [REDACTED] Barry O'Brien; John Coleman; Adrienne Vuotto
Subject: Factory OS - Optimising Housing Delivery with technology
When: Friday 17 September 2021 16:00-17:00 (UTC+00:00) Dublin, Edinburgh, Lisbon, London.
Where:

Join Zoom@Citi Meeting

Meeting URL: <https://citi.zoom.us/j/5300742226?pwd=Nm45aGh2dDVQSnA3Z2tSWjFnSWhVZz09>
Meeting ID: 530 074 2226
Password: 361349

Join by Telephone

Local dial in numbers - [click here](#).

Join by Citi Video Room

Host or join Zoom@Citi calls from Citi video meeting rooms. For instructions on how to host or join calls from Citi video meeting rooms [click here](#).

Meeting ID: 530 074 2226
Password: 361349
SIP: 5300742226@zoomcrc.com



Chris Lowe

From: John Coleman
Sent: Friday 17 September 2021 13:09
To: Phelim O' Neill; Noel Walsh
Subject: Factory OS

Lads

Have a look at the following video and let me know if you are interested / available to sit in on a video call with the Factory OS founder today at 4pm.

If so, I will send you the invite link.

<https://www.youtube.com/watch?v=Lp30WgcFIY>

John

John Coleman
CEO

Land Development Agency
2nd Floor, Ashford House
Tara Street
Dublin 2

Ph: +353 1 910 3400



Chris Lowe

Subject: FW: Factory OS - Optimising Housing Delivery with technology

Start: Fri 17/09/2021 16:00

End: Fri 17/09/2021 17:00

Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: [REDACTED]

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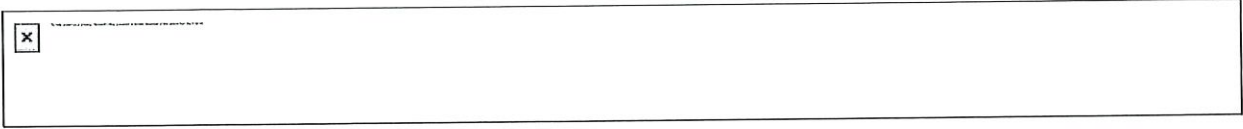
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Chris Lowe

From: Adrienne Vuotto
Sent: Friday 17 September 2021 14:14
To: Noel Walsh; John Coleman; Phelim O' Neill
Subject: RE: Factory OS

Hi Noel,

I just forwarded the link for the meeting at 4pm this afternoon.

Best regards
Adrienne

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From: Noel Walsh [REDACTED]@lda.ie>
Sent: Friday 17 September 2021 14:01
To: John Coleman [REDACTED]@lda.ie>; Phelim O' Neill [REDACTED]@lda.ie>
Subject: RE: Factory OS

Hi John,

That looks very interesting. I can sit in on it, please send on the link.

Regards,

Noel Walsh

2nd Floor, Ashford House, Tara St, Dublin 2
Tel +353 1 91034000 Mob + [REDACTED] Email [REDACTED]@lda.ie Web lda.ie



From: John Coleman <[REDACTED]@lda.ie>
Sent: Friday 17 September 2021 13:09
To: Phelim O' Neill [REDACTED]@lda.ie>; Noel Walsh <[REDACTED]@lda.ie>
Subject: Factory OS

Lads

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If so, I will send you the invite link.

<https://www.youtube.com/watch?v=Lp30WgcFIY>

John

John Coleman
CEO

Land Development Agency
2nd Floor, Ashford House
Tara Street
Dublin 2

Ph: +353 1 910 3400



Chris Lowe

From: John Coleman
Sent: Friday 17 September 2021 15:56
To: [REDACTED]; Adrienne Vuotto
Cc: Barry O'Brien; [REDACTED]; [REDACTED]; Phelim O' Neill; Noel Walsh
Subject: RE: Optimisation of Housing Delivery

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Hi [REDACTED]

Looking forward to our call with Factory OS, really appreciate you setting it up.

I hope you don't mind that I have forwarded the slot to two of my colleagues, Phelim (Head of Property) and Noel (Cost Manager) so they can sit in.

Thanks again.

John

From: [REDACTED] <[REDACTED]@citi.com>
Sent: Friday 10 September 2021 15:43
To: Adrienne Vuotto <[REDACTED]@lda.ie>
Cc: Barry O'Brien [REDACTED]@lda.ie>; [REDACTED]@citi.com>; [REDACTED]@citi.com>; John Coleman <[REDACTED]@lda.ie>
Subject: RE: Optimisation of Housing Delivery

Will do Adrienne. Many thanks for your help. Rgds [REDACTED]

From: [lda.ie] Adrienne Vuotto <[REDACTED]@lda.ie>
Sent: 10 September 2021 13:55
To: [REDACTED]
Cc: Barry O'Brien; [REDACTED]; [REDACTED]; John Coleman
Subject: RE: Optimisation of Housing Delivery

This Message is From an External Sender
This message came from outside of your organization.

Hi [REDACTED],

Yes that works for John's diary.

Would you mind sending dial in details to tie John's diary down.

Many thanks

Best regards
Adrienne

From: [REDACTED]@citi.com>
Sent: Friday 10 September 2021 11:57
To: Adrienne Vuotto [REDACTED]@lda.ie>

Cc: Barry O'Brien [redacted]@lda.ie>; [redacted]@citi.com>; [redacted]@citi.com>;
John Coleman [redacted]@lda.ie>
Subject: RE: Optimisation of Housing Delivery

Hi Adrienne,

Would 4pm on Fri Sept 17th work? [redacted] is on the US west coast, so it is 8am his local time.

Thanks [redacted]

From: [lda.ie] Adrienne Vuotto [redacted]@lda.ie>
Sent: 09 September 2021 09:27
To: [redacted]; John Coleman
Cc: Barry O'Brien; [redacted]; [redacted]
Subject: RE: Optimisation of Housing Delivery

This Message is From an External Sender
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Good morning [redacted],

Many thanks for your email.

Currently John's diary is free next Tuesday morning 14th September up to 2pm.

Friday 17th September in the afternoon is also free.

We can look at the following week should the above suggestions not work.

Many thanks

Adrienne Vuotto
Executive Assistant to John Coleman - CEO
Land Development Agency, Second Floor, Ashford House, 18-23 Tara Street, Dublin 2, D02 VX67
m +353 [redacted]
email: [redacted]@lda.ie



From: [redacted]@citi.com>
Sent: Thursday 9 September 2021 09:15
To: John Coleman [redacted]@lda.ie>
Cc: Barry O'Brien [redacted]@lda.ie>; [redacted]@citi.com>; [redacted]@citi.com>
Subject: RE: Optimisation of Housing Delivery

Hi John,

I haven't forgotten about this call. [redacted] has been travelling in the last while. Would sometime next week work for you?

Thanks █

From: [lda.ie] John Coleman █@lda.ie>
Sent: 26 August 2021 14:41
To: █
Cc: Barry O'Brien; █; █
Subject: RE: Optimisation of Housing Delivery

This Message is From an External Sender
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Hi Patrick

Apologies for the delay in my response. I did get some time away thanks, hope you did too.

A discussion with █ would be most welcome and thanks for facilitating it. Anytime after 4pm on Weds / Thurs / Fri next week works for us – I guess this would be 8am onwards for █, so hopefully that works with him.

Much appreciated.

Kind regards
John

From: █@citi.com>
Sent: Monday 23 August 2021 16:00
To: John Coleman █@lda.ie>
Cc: Barry O'Brien █@lda.ie>; █@citi.com>; █@citi.com>
Subject: FW: Optimisation of Housing Delivery

Hi John,

█.

Just following up on the below, would you and the team be available later this week or next week to have a chat with █ of Factor_OS? Factor_OS are on the West Coast of US, so it will be our late afternoon/evening if that worked.

Rgds █

From: [lda.ie] John Coleman <█@lda.ie>
Sent: 21 May 2021 18:08
To: █
Cc: █; █; █; Barry O'Brien
Subject: RE: Optimisation of Housing Delivery

Hi █

No problem and thank you for the discussion. I certainly did find █ reflections on the US situation really interesting and what struck me was how similar the issues are on both sides of the Atlantic.

The Factory_OS vid was also really interesting and I would welcome and appreciate a discussion with them if this is feasible.

Thanks again for all of your time today and I look forward to keeping the discussion going.

Kind regards
John

John Coleman
CEO

Land Development Agency
2nd Floor, Ashford House
Tara Street
Dublin 2

Ph: +353 1 910 3400



From: [REDACTED]@citi.com>
Sent: Friday 21 May 2021 17:24
To: John Coleman [REDACTED]@lda.ie>
Cc: [REDACTED]@citi.com>; [REDACTED]@citi.com>; [REDACTED]@citi.com>; Barry O'Brien <[REDACTED]@lda.ie>
Subject: Optimisation of Housing Delivery

Hi John,

Many thanks again for your time this afternoon and for your detailed overview of the objectives and purpose of the LDA. I hope you found [REDACTED] thoughts and experiences on how the US faces the challenges in the delivery of sufficient and efficient Affordable Housing. It would be great to keep this dialogue open over the coming months and quarters as things develop.

I attach a link to a CNBC piece on the company [REDACTED] referenced called Factor_OS. This piece gives a great overview of how the use of technology can deliver construction cost efficiencies, reduce the time to completion and thus minimise the disruption to business and communities in the adjacent area. (<https://factoryos.com/>). [REDACTED] is happy to arrange a follow-on call with the principals of the firm, if you think that might be of interest.

Have a good w/e. Chat soon.
Rgds [REDACTED]

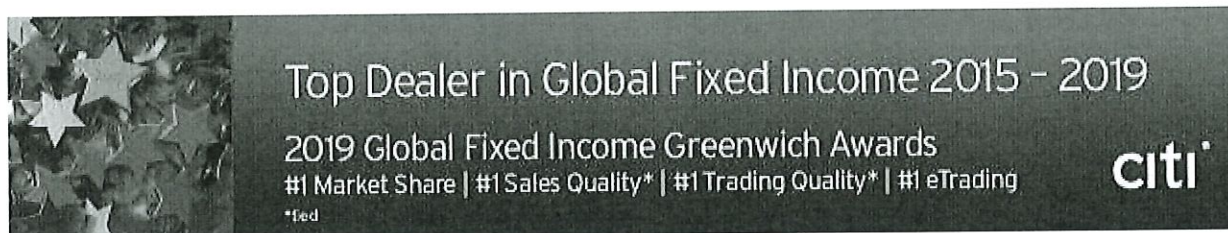
[REDACTED]

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1 North Wall Quay
Dublin 1
Tel: + [REDACTED]
[REDACTED]@citi.com



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Chris Lowe

From: John Coleman
Sent: Friday 1 October 2021 13:42
To: [REDACTED]; Phelim O' Neill; Barry O'Brien; Noel Walsh
Subject: RE: Modular Housing in US

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That info is very interesting and helpful [REDACTED] many thanks. I'll absorb it in more depth over the weekend.

Kind regards

John

From: [REDACTED] <[REDACTED]@citi.com>
Sent: Thursday 30 September 2021 08:48
To: John Coleman <[REDACTED]@lda.ie>; Phelim O' Neill [REDACTED]@lda.ie>; Barry O'Brien <[REDACTED]@lda.ie>; Noel Walsh <[REDACTED]@lda.ie>
Subject: Modular Housing in US

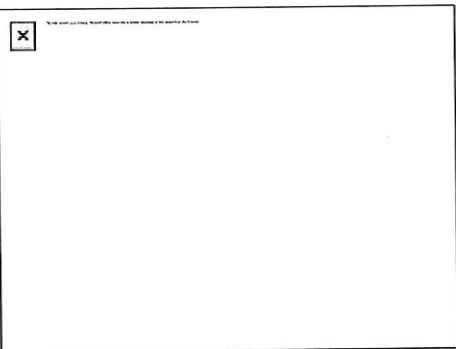
Hi guys,

As a follow-on from our recent call with [REDACTED] and [REDACTED], please see below some useful information on Modular Housing in US.

Turner Center for Housing Innovation have published a few different research projects on modular. The most recent is a landscape review for the County of Los Angeles:
<https://turnercenter.berkeley.edu/research-and-policy/off-site-construction-in-los-angeles-county/>

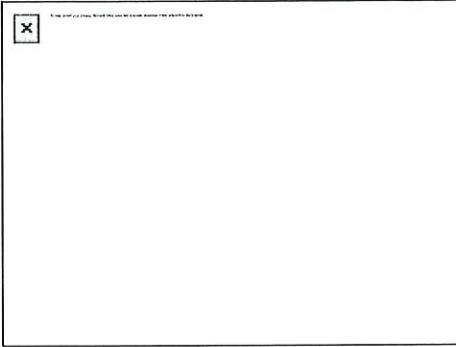
There is also the case study on the Tipping Point/Bryant street project that features a Factory_OS project (Citi financed) that is useful in understanding the intersection of modular and the broader finance system.

<https://turnercenter.berkeley.edu/research-and-policy/833-bryant-street-sf/>

	<p>Strategies to Lower Cost and Speed Housing Production: A Case Study of San Francisco's 833 Bryant Street Project - Turner Center Strategies to Lower Cost and Speed Housing Production: A Case Study of San Francisco's 833 Bryant Street Project. Nathaniel Decker. Published On February 9, 2021 turnercenter.berkeley.edu</p>
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And last is the actual Turner Center report of 2017:

<https://turnercenter.berkeley.edu/research-and-policy/offsite-construction/>



Building Affordability by Building Affordably: Exploring the Benefits, Barriers, and Breakthroughs Needed to Scale Off-Site Multifamily Construction - Terner Center
Authors: Carol Galante, Sara Draper-Zivetz, and Allie Stein
Release Date: March 2017 As home prices and rents continue to soar, we know that growing costs in the construction industry are a key part of the problem. Off-site manufacturing of homes, with the potential for significant cost and time savings in the production process, is a promising... Read more »
ternercenter.berkeley.edu

Rgds [REDACTED]

[REDACTED]

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Top Dealer in Global Fixed Income 2015 - 2019
2019 Global Fixed Income Greenwich Awards
#1 Market Share | #1 Sales Quality* | #1 Trading Quality* | #1 eTrading
*fed

Chris Lowe

From: Noel Walsh
Sent: Thursday 3 March 2022 09:49
To: Paul Greene; John White
Subject: Modular
Attachments: RE: Modular Housing in US

Lads,

We had a call last year with a company called Factory O_S, they are a relatively new organisation in the US manufacturing and building modular. A contact of John Coleman in Citi set it up. They talked us through set up costs / operation / delivery (I'll dig out notes and circulate, I don't have them to hand at the moment). See attached a follow up email from John's contact with some articles embedded. They offered further assistance if we were minded to explore.

Website:

<https://factoryos.com/>

Regards,

Noel Walsh

2nd Floor, Ashford House, Tara St, Dublin 2
Tel +353 1 91034000 Mob [REDACTED]

Email [REDACTED]@lda.ie Web lda.ie

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