

塑造智慧变革

2018年海克斯康新产品新技术发布暨用户大会

HxGN Local Beijing 2018

2018年9月10日-12日 北京·国家会议中心

MULTIVISTA VISUAL DOCUMENTATION FOR CONSTRUCTION & FACILITIES MANAGEMENT

Multivista 可视化建筑文档 管理系统

马慧，RS技术工程师

2018.09.12

目录

1. Multivista基本思想
2. Multivista系统构成
3. Multivista项目经验
4. Multivista功能
5. Multivista服务分类
 - a) 进度和无规则拍摄
 - b) 关键节点的精准拍摄
 - c) 实景拍摄和实时摄像
6. Multivista Plus

Content

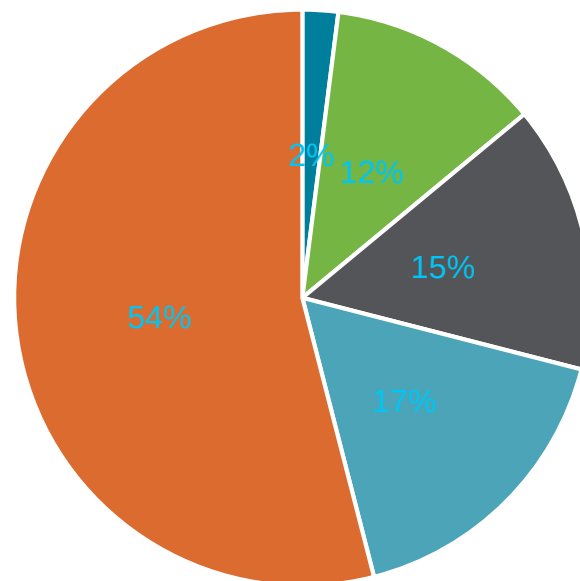
1. Simple Concept
2. Components of Multivista
3. Proven Experience
4. Reduce Project Risks
5. Multivista Service
 - a) Progressions and Slideshows
 - b) Critical Milestones
 - c) Live-Motion & Real-Time
6. Multivista Plus

Multivista基本思想

Born from Necessity

建筑缺陷分析

Responsibility for Construction Defects



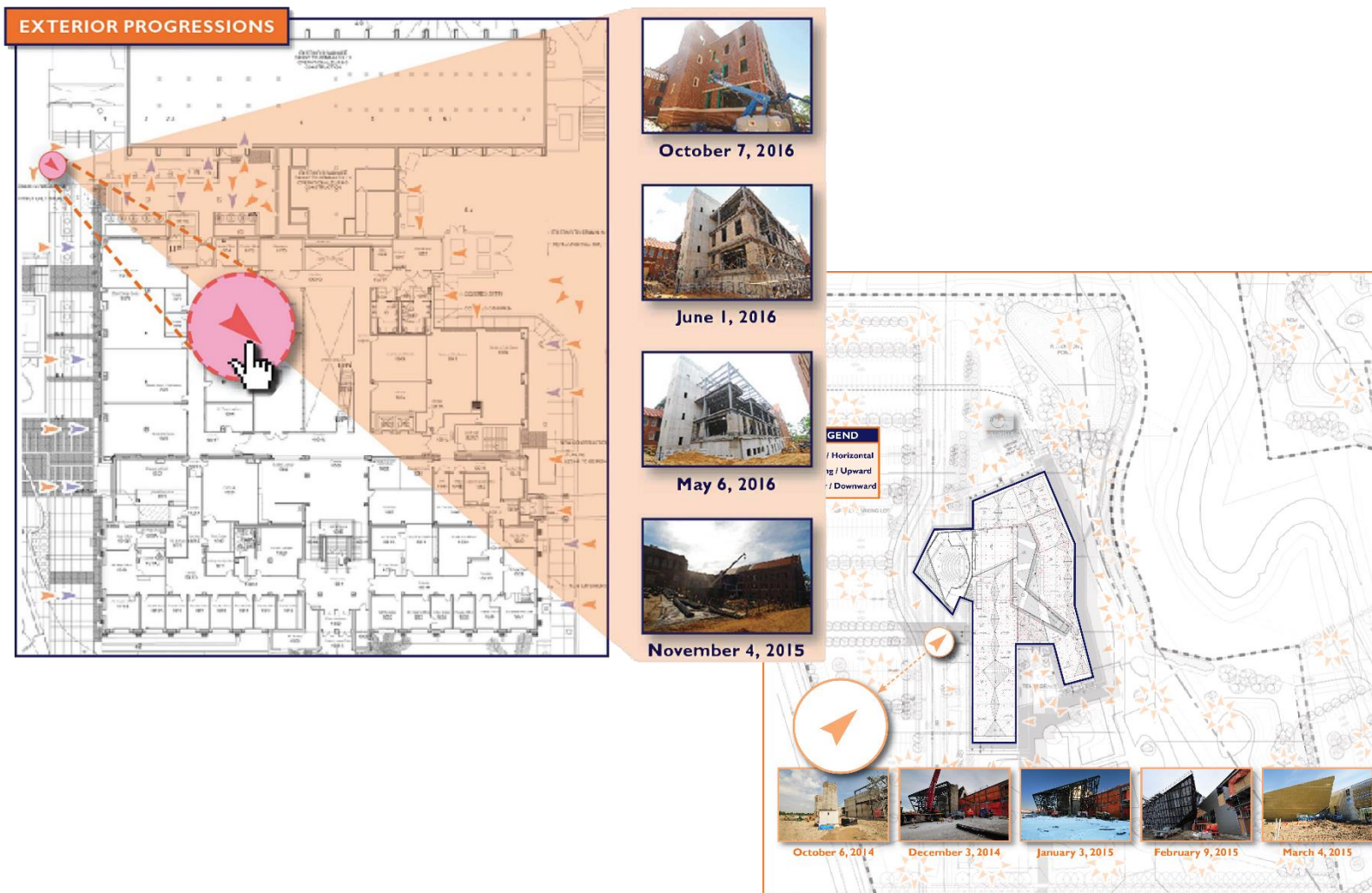
■ 灾害 ■ 材质 ■ 维护 ■ 设计 ■ 建造
Disaster Materials Maintenance Design Construction

- 美国内华达州大学一项有关建筑调查

- University of Nevada, Las Vegas Construction Defect Study Findings

Multivista基本思想

Simple Concept



- 将文档关联在相应位置

- Picture Over Plans

Multivista系统组成

Components of Multivista

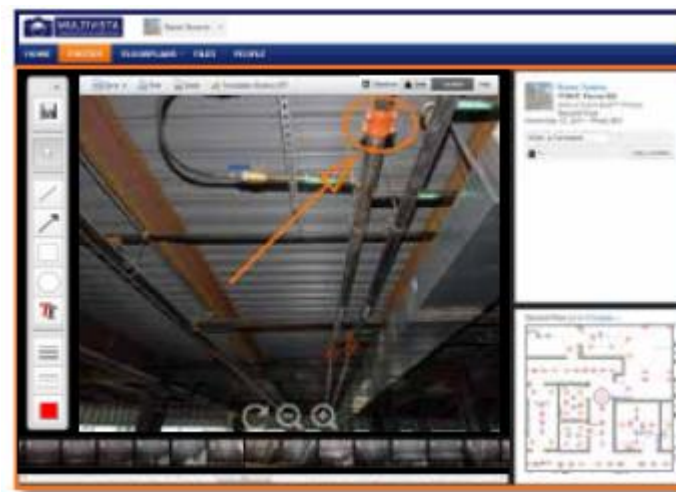


云平台

- 帮助发现问题
- 确认现场情况
- 已经有了15年经验
- 与BIM融合
- 数据安全

The Platform

- Identify Issues
- Verify Conditions
- Over a Decade of experience
- Integrations with BIM
- Backup and Security



Multivista系统组成

Components of Multivista



Multivista APP

- 随时沟通查看
- 沟通和交流
- 可以查看实时摄像

Multivista APP

- Share photos with the entire project team or specific people
- Inspect high-resolution details
- View your hi-res, live streaming webcams



Multivista系统组成

Components of Multivista

当地专家和技术人员

- 为全球用户提供建筑文档管理工作
- 也提供关于各项服务的培训

Local Expertise & Superior Service

- We operate locally alongside client teams in all our locations across North America, the UK, and Panama
- We train client-in person, on site

Multivista项目经验

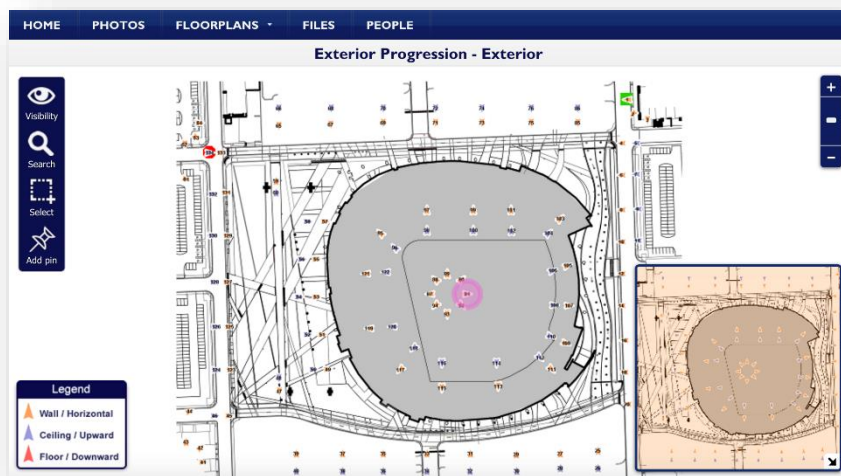
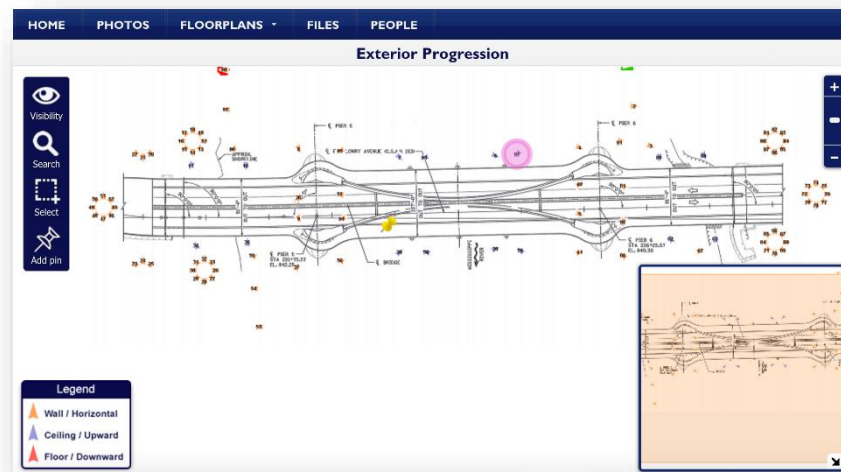
Proven Experience

遍及建筑各个领域

- 医院
- 学校
- 政府
- 公寓
- 商业住房

Suited For Every Construction Sector

- Hospitals
- Schools
- Government
- Apartments
- Custom Home



Multivista项目经验

Proven Experience



承接的15900项目获奖

- 近2亿平方米

Over 15900 Projects Awarded

- Over 2.1 billion square feet

Multivista功能

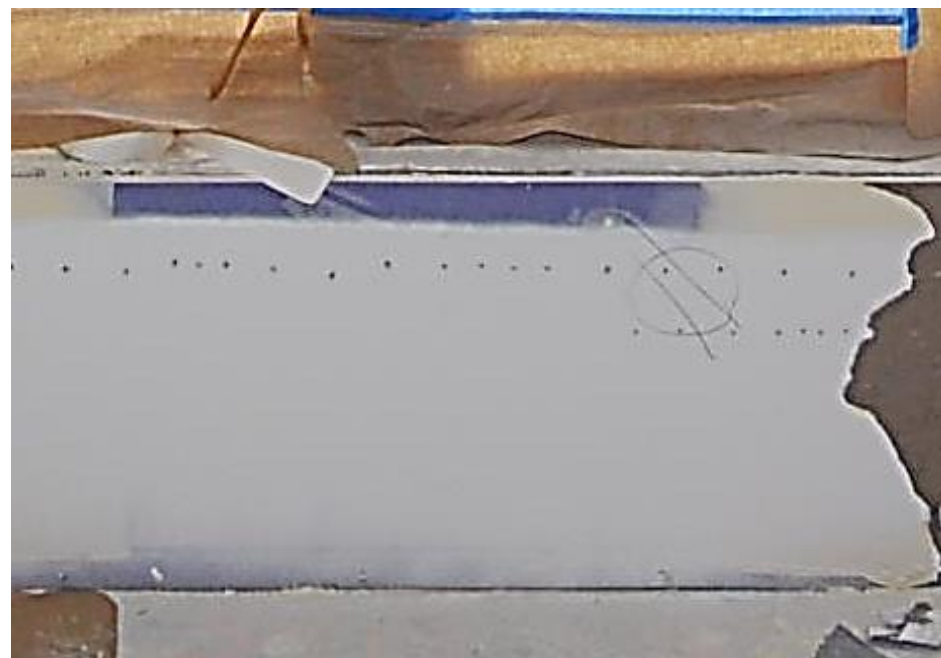
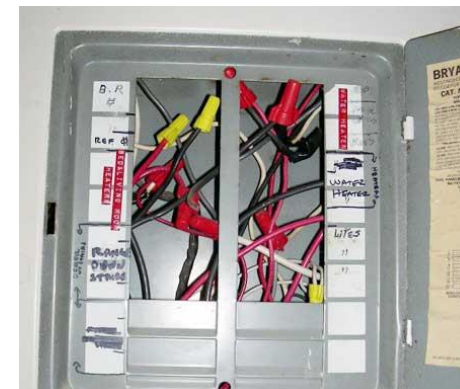
Reduce Project Risks

确保建筑过程符合规范

- 查看封装的不当的结构
- 预判工程量

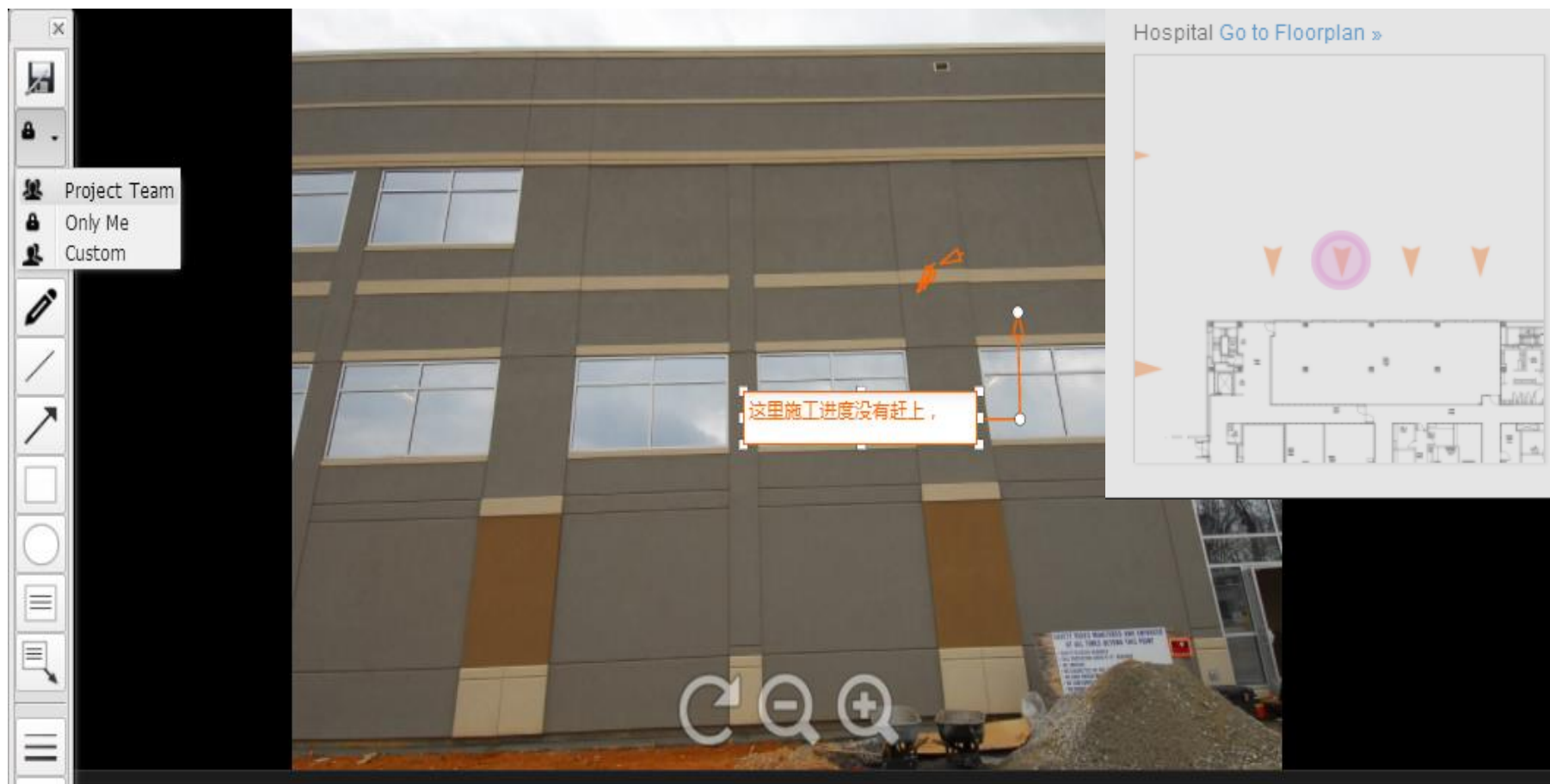
Compliance

- View improper, concealed construction
- Determine construction compliance



Multivista功能

Reduce Project Risks



建筑进度安排和交流

- 向内及时有效沟通
- 向业主客观反馈现场情况

Scheduling

- Share progress photos with our group
- Communicate construction related questions and issues

Multivista功能

Reduce Project Risks

减少返工和破坏

- 减少不必要的返工
- 减少无谓的破坏。

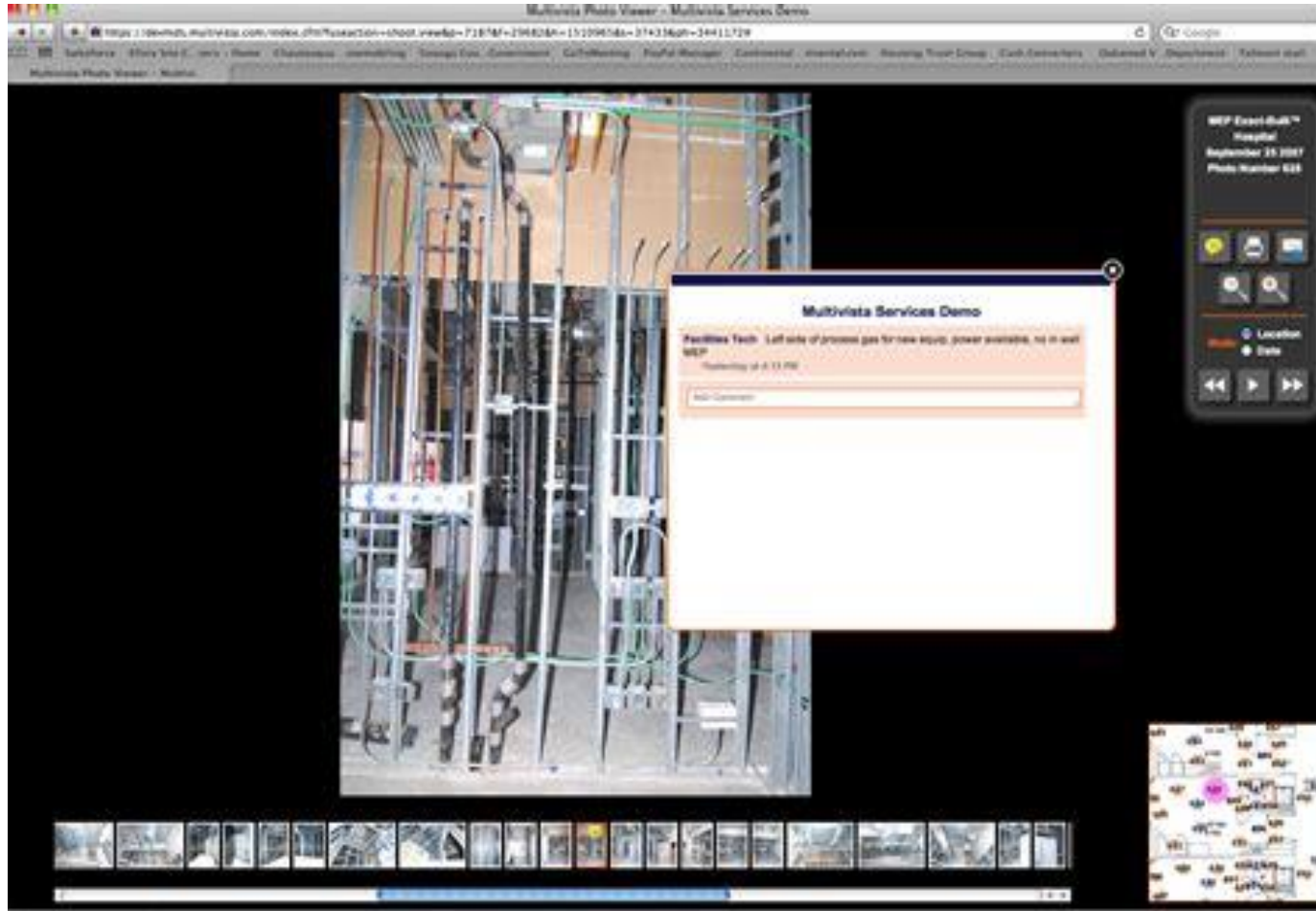
Rework

- Look inside every wall without having to perform any unnecessary destructive verification



Multivista功能

Reduce Project Risks



解决争议

- Multivista在解决争议方面
- 有利的第三方工具

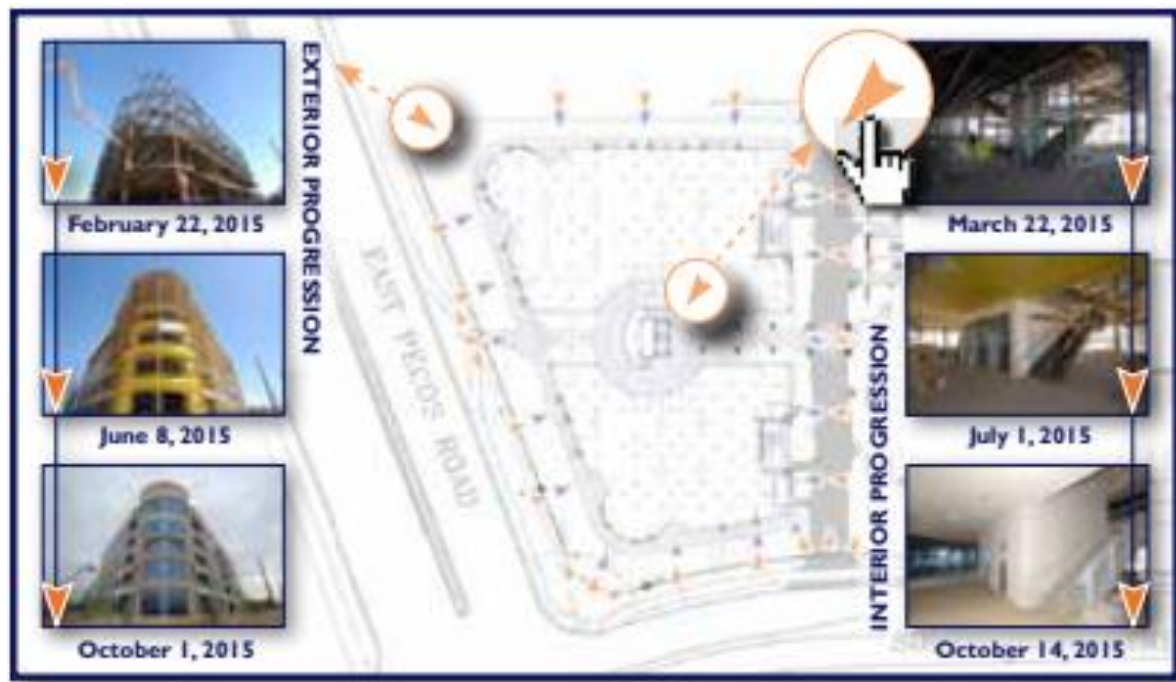
Dispute Resolution

- Dispute by taking the guess work out of the status of the project or different aspect of the work on a given day

Multivista服务分类

进度和无规则拍摄

- 进度拍摄.
 - 建筑内部和外部的施工进度
- 无规则拍摄
 - 记录建筑周边意外情况
 - 物料进场等



Multivista Service



Progressions and Slideshows

- Progressions
 - Document all work on your project from beginning to end
- Slideshows
 - Miscellaneous occurrences
 - E.g., Materials stored on-site

Multivista服务分类

关键节点的精准拍摄

- 场地精确拍摄
 - 拍摄开工之前道路、公共设施等
- MEP精确拍摄
 - 拍摄封装在地板、天花板及墙体的水电暖管道
- 浇注前精确拍摄
 - 在预制板浇筑之前拍摄封装在里面的钢筋结构、管道



Multivista Service



Critical Milestone

- Site-Survey Exact-Built
 - Capture the pre-existing conditions such as streets
- MEP Exact-Built
 - Capture the mechanical, electrical, plumbing in every wall and ceiling
- Pre-Slab Exact-Built
 - Structural components that will be covered up once a slab is poured

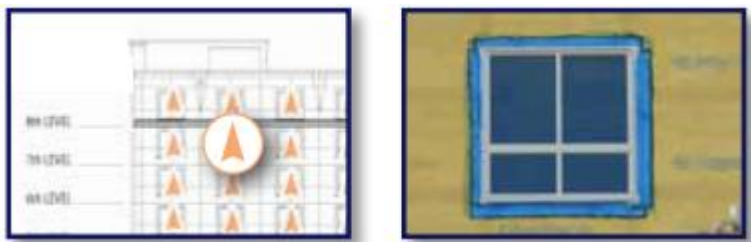
Multivista服务分类

Multivista Service



Critical Milestone

关键节点的精准拍摄



- 立面精确拍摄
 - 高清拍摄建筑物立面信息

- Elevation Exact-Built
 - Capture the condition of building's exterior skin in great detail



- 地下空间精确拍摄
 - 在建筑完全竣工之前拍摄各种与建筑物的相关地下设备的接头

- Underground Utilities
 - Capture the major tie-ins and junctions for underground utilities



- 内部精确拍摄
 - 装修效果、施工质量拍摄

- Finished Interior Exact-Built
 - Capture the post-inspection conditions of finished interior walls, ceilings and floors

Multivista服务分类

Multivista Service



视频拍摄和实时摄像

- 复杂安装的管道等
- 暖通培训
- 减少设备维护成本
- 提供更直观的技术资料
- 记录施工质量用料

Live-Motion & Real-Time

- Building walkthroughs
- Equipment inspections & Installations
- Facilities Maintenance Instructions
- Training Sessions



Multivista服务分类

Multivista Service



实景拍摄和实时摄像

- 提供物料进场、施工进度的全方位监控
- 定时拍摄，自定义存档
- 通过APP随时查看.

Live-Motion & Real-Time

- Slideshow & Video of Jobsite Progress
- Secure Hosting for Unlimited Users
- Anytime, Anywhere Live Access



Multivista Plus

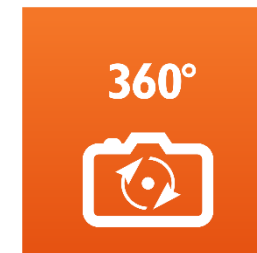
全景图拍摄

- 3D浸入式浏览
- 更全面的浏览细节



Site-Walk 360

- Better communication through a more familiar environment
- A complete visual record of how critical systems migrate through your building



Multivista Plus

无人机拍摄

- 高危场景安全拍摄
- 建筑物视线模拟
- 高层立面、屋顶检查

UAV

- Beginning at the third story and continuing up to the top elevation of building
- Focus to key exterior features like waterproofing



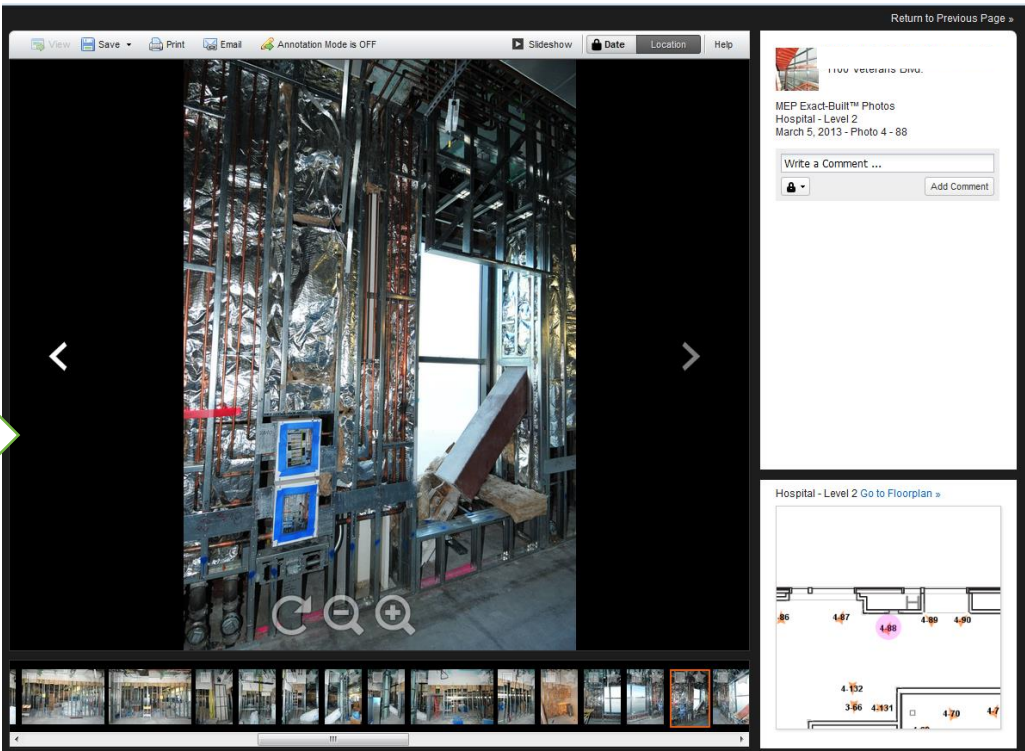
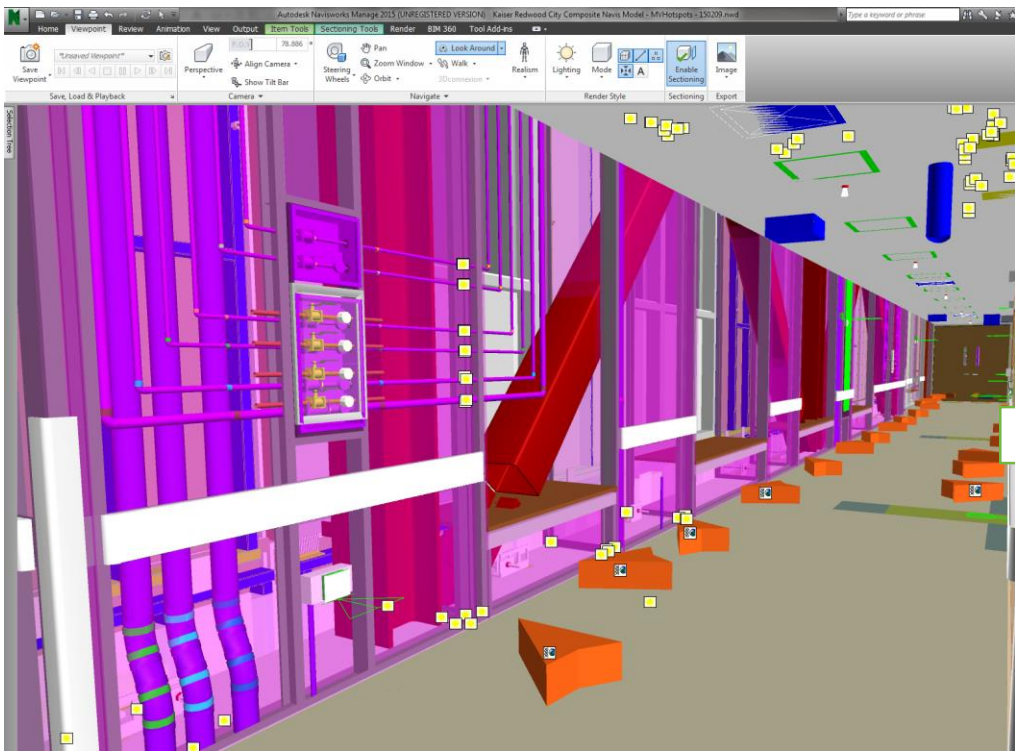
- 还会加入三维激光扫描
- Will Add 3D Laser



Multivista Plus

BIM融合 –Navisworks

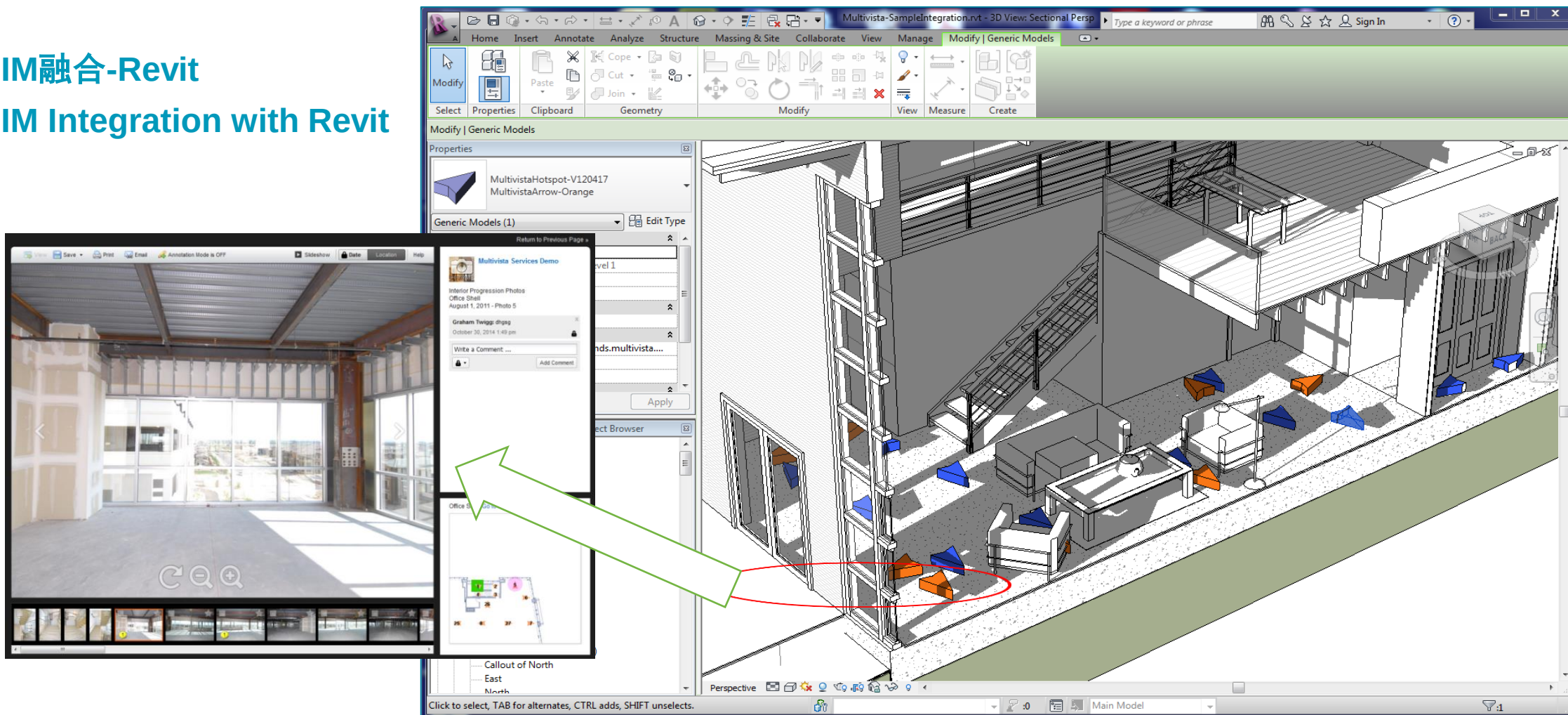
BIM Integration with Navisworks



Multivista Plus

BIM融合-Revit

BIM Integration with Revit



“完全的交钥匙方式，MVS这项服务产生价值远多于它的成本”

“A no-brainer. The service pays for itself.”

“我对MVS提供的这种解决方案印象深刻，它能让我坐在办公室就能了解现场施工进度”

“I was very impressed with the ability to monitor site progress from my desk.”

“我们利用MVS，花出的是美分，回报的是美元”

“We find that an investment of pennies pays off in dollars.”

Shawn Ruthven, Sr. Project Manager



Stella Matko, Director of Estates



University of
Strathclyde
Glasgow



Baptist Health
South Florida

Javier Ordieres, Director of Construction Management



海克斯康
HEXAGON

—— 谢 谢 ——





如果您对此篇PPT感兴趣，请扫描二维码
