



Established 1915

**BROWARD**  
County Public Schools

# 3D BIM CONCEPTUAL



## TRADITIONAL 2D

## VIRTUAL REALITY

# From manually drafting to 2D CAD format

## TRADITIONAL 2D



For many years architects and engineers have been using hand drawings to design, document and create as-built ; But in 1982, Computer Aided Drafting (CAD) was introduced as a design tool

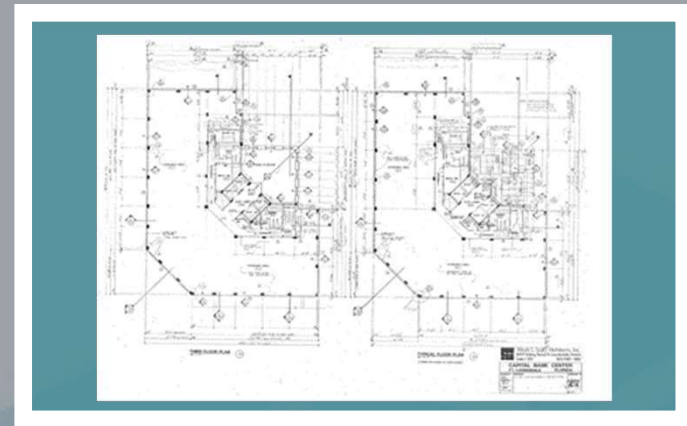
## AUTOCAD 2D



# TRADITIONAL 2D

In the 90's, Broward County Public Schools (BCPS) generated District Site and floor plans of schools and administrative Facilities manually via drafting. Thereafter, the drawings were gradually Converted to 2D CAD format

## PAPER LAYOUT



## AUTOCAD 2D





# 3D BIM CONCEPTUAL



Today, the world is experiencing another revolutionary transition from 2D into 3D modeling and Building Information Modeling (BIM) Revit. As background, BIM Revit began to be used as a design tool 20 plus years ago.

**REVIT**



**From 2D CAD format to 3D format**



# **3D BIM CONCEPTUAL**

In 2016, the Facility Planning & Real Estate (FP&RE)

Department proactively began using BIM Revit,

and in 2017 Laser Scanners, to convert schools and administrative facilities drawings from 2D into

3D BIM Revit format.

Also, the FP&RE Department proactively established a comprehensive BCPS administrative Space Planning Process, and utilizing the Building Owners Management Association (BOMA) standards.

## **3D REVIT MODEL**



## **3D BIM**



## From 3D conceptual to VR

From 2D to 3D BIM Revit, communication continues to grow, and Virtual Reality (VR) has given the end-user, alternative way, paired with real-time visualization, to experience physically built facilities virtually.

### VIRTUAL REALITY



### VRENSCAPE<sub>3D</sub>



# VIRTUAL REALITY

In 2022, the FP&RE Department proactively began incorporating the 3D BIM Revit of administrative buildings layout, into the compelling realism of virtual reality by connecting the Oculus headset in a snap, and enabling the end-user to virtually Walk-thru existing modeled cubicles, offices, and School Facilities.

