



INNOVATIVE INTEGRATED INDEPENDENT

April 23, 2019

To: Jordan Beveridge, HSD	Debra Giles, HSD	Adam Stewart, HSD	Casey Waletich, HSD
Sharon McCarthy, HSD	Jim Peterson, HSD	Brent Gadwa, HSD	David Owen, H&M
Vic Beattie, H&M	Jeff Cazal, NIS	Cameron Boe, NIS	Kathy Hammond, NIS

From: Glenn Sexton, NIS

Subj: Fiber Optic Deployment Status Update

General

The joint venture between the City of Hillsboro (City) and Hillsboro School District (HSD) continues to progress. As of today:

- Pathway has been installed between facility (Frame 1, typically) and the utility right-of-way for all school facilities. Exceptions are:
 - Hare Field
 - Brookwood Elementary (coordinating with half-street improvements and site construction to mitigate duplicate work).
- 33,585 liminal feet of boring placement of 2" HDPE conduit
- 27 handhole have been set

Three drill crews have been steadily engaged. Two additional bore crews are available pending resolution of locate issues in the congested residential areas of Hillsboro. Based on decisions in weekly stakeholder's conference call, H&M will mobilize the two additional crews to areas outside the core of the project to begin work north (to North Plains Elementary) and south (Farmington View and Groner) of the City.

NIS staff are on-site each week (typically Tuesdays) to perform QA and project management on behalf of the District. NIS will manage all connectivity from utility right-of-way into each HSD site.

Schedule for Fiber Installation

NIS is working with H&M to develop a schedule of actual fiber installation to allow connectivity on at individual schools in hopes of being able to disconnect Comcast circuits as soon as possible. A connectivity matrix has been developed to identify each segment in the network (see next two pages). We will then populate with projected dates to allow HSD to begin planning efforts for procurement and placement of edge devices at each site. Goal is to activate several sites by June 30th – back feeding to the Administration Center using existing Wave circuits.

Schedule Impacts

Potential delay may occur as we await a total of seven permits from Union Pacific to bore beneath their railroad right-of-way. Unfortunately, there is little to be done in terms of escalation and these locations will become critical if permits are not received in the next 90 days.

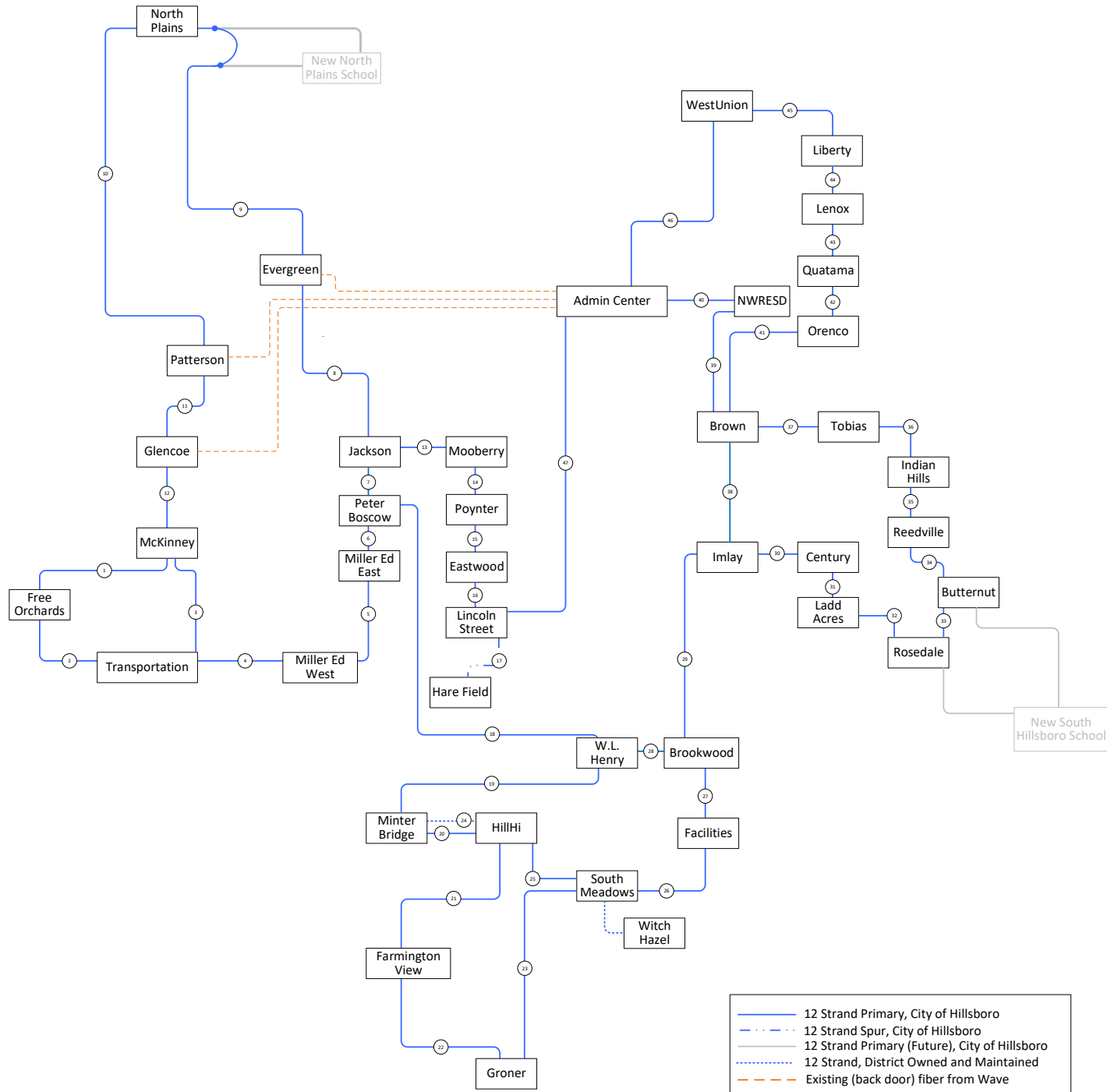
Accurate locates are also key in this process and to date, we are experiencing up to 30% of such locates to be inaccurate. H&M has retained professional locate services as part of their staff to mitigate delays associated with bad located; however, "good-catch" and, "near-miss" situations that involve gas or power require a shutdown to address the situation and re-call of locate services prior to resumption of activities.

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Segment	From	To	Connect Date	Notes
1	McKinney	Free Orchards		
2	Free Orchards	Transportation		
3	McKinney	Transportation		
4	Transportation	Miller Ed West		
5	Miller Ed West	Miller Ed East		
6	Miller Ed East	Peter Boscow		
7	Peter Boscow	Jackson		
8	Jackson	Evergreen		
9	Evergreen	North Plains		
10	North Plains	Patterson		
11	Patterson	Glencoe		
12	Glencoe	McKinney		
13	Jackson	Mooberry		
14	Mooberry	Poynter		
15	Poynter	Eastwood		
16	Eastwood	Lincoln Street		
17	Lincoln Street	Hare Field		Spur
18	Peter Boscow	W.L. Henry		
19	W.L. Henry	Minter Bridge		
20	Minter Bridge	HillHi		
21	HillHi	Farmington View		
22	Farmington View	Groner		
23	Groner	South Meadows		
24	Minter Bridge	HillHi		District Owned
25	HillHi	South Meadows		
26	South Meadows	Facilities		
27	Facilities	Brookwood		
28	W.L. Henry	Brookwood		
29	Brookwood	Imlay		
30	Imlay	Century		
31	Century	Ladd Acres		
32	Ladd Acres	Rosedale		
33	Rosedale	Butternut Creek		
34	Butternut Creek	Reedville		
35	Reedville	Indian Hills		
36	Indian Hills	Tobias		
37	Tobias	Brown		
38	Brown	Imlay		
39	Brown	NWRES		
40	NWRES	Admin Center		
41	Brown	Orencia		
42	Orencia	Quatama		
43	Quatama	Lenox		
44	Lenox	Liberty		
45	Liberty	West Union		
46	West Union	Admin Center		
47	Admin Center	Lincoln Street		

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Site Efforts

As soon as projected dates are developed, NIS will meet on site with H&M to finalize placement of the fiber interface panels (as per previous information provided by Brent Gadwa) at each location. There are multiple sites where on-going work is in progress and we will accommodate as possible. In those locations where the construction will not be completed prior to fiber termination, we will leave adequate slack in the inbound fiber to relocate as required.

A 24 strand fiber has been placed in the new pathway (site to utility right-of-way) that will allow a 12-in, 12-out configuration at all locations except Hare Field, which will be a 12-strand spur fed from Lincoln Street Elementary. The North Plains site will initially loop-back on itself until such time as the new school is constructed and then the loop will be extended to include the school. In a similar manner, a loop will be opened between Rosedale and Butternut Creek Elementary schools to accommodate the new school(s) in south Hillsboro.

Constituent Care

The project management of the backbone element has been assumed by the City, Their representative, Magellan Advisors, is providing the front line triage for issues and concerns raised by the public. NIS has been a part of several resolutions on behalf of HSD when such has been merited, i.e., information concerning the overall plan and how this project will impact the citizens at large. The support and feedback from the constituent has been very positive.

These sandwich-board signs bracket construction zones. The City and HSD are maintaining sites to provide current information about this project.



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