STAGE ONE: Main Street Resurface

Location: Main from Fifth to Intersection of 78/First/Main 0.30 miles



Example of Crushed Granite Road
It is entirely possible to pave a long stretch of roadway with crushed granite. The photo above shows Tige Lane, a stretch of several miles in Tishomingo Oklahoma, which was entirely resurfaced with crushed granite. Crushed granite can be laid on top of existing asphalt and rolled into the surface. For some of the areas along the Walkable Main Strip that are concrete we will need to resurface with granitecrete. Walkable Main is only 0.30 miles.



THE FUTURE—A WALKABLE MAIN STREET

Walkable Main Street will stretch 0.30 miles from the railroad tracks on the West to the Intersection of 78/First/Main on the east.

This strip of Main Street will be entirely resurfaced with crushed granite. Traffic signs will be removed and this stretch of roadway will be narrowed to two-way traffic.

Contrary to our current way of doing things, it has been proven again and again that if you remove all the traffic signs, warnings, instructions, etc. that drivers will automatically slow down and there will be fewer accidents in these areas.

However to further ensure safety for pedestrians, we propose to treat this strip of roadway as we currently treat areas near schools. We propose to post 20 mile an hour speed limit at both entrances to this 0.30-mile stretch of roadway along with no cell phone use by drivers passing through this area. This law applies to those riding bicycles as well since bicycles can be as lethal to pedestrians as cars. Walkable Main is less than half a mile long. Requiring motorists to slow down to 20 miles an area for less than half a mile is not going to create a hardship on anyone. If anyone thinks so, it would be interesting to hear his or her story.

Research has also shown that drivers also automatically slow down when the road surface changes, thus they will be alerted when they drive onto the crushed granite surface of Walkable Main that different rules apply here. More details follow in this section. One of the changes to this strip of Main Street could be to move many of the accesses to the properties that face Main Street to the back from Avenue A on the south side of Main and from State Street for the business located on the north side of Main. Some accesses to business on corner lots on Main might be from side streets [explained in more detail in subsequent document titled "Stage II"].

Each one of the accesses to the existing properties on Walkable Main will require careful planning and consultation with existing owners and users of these properties. These plans will be explained in more detail in subsequent sections of this proposal.

For visitors to the area, we might consider turning a part of the huge areas of Restaurant Tacqueria and Advanced Auto part into a parking lot for visitors to WALKABLE MAIN. These huge expanses of concrete (located at the east entrance

Materials

Materials needed depend on the type of redesign decided for the surface of Walkable Main.

Resources

The resources and funding for this project would most likely be from a variety of sources – perhaps local, state and federal funds for road repair and redesign. on First to Walkable Main Street) are largely unused spaces 24/7. This use of parking could possibly increase customers at their places of business.

Crushed Granite

Crushed granite is an excellent material to use in this area. Main Street and the lots adjacent to it are all about 90% asphalt and concrete. Due to the abundance of crushed granite and the ability to have it sourced locally, it is cost-effective. Crushed granite is strong and can withstand the pressure of a vehicle parked on it. The pieces of rock allow water to filter through so that no puddles or mud is formed, which adds to the safety and aesthetic appeal of crushed granite pathways. Granite can be used with or without binding materials. Concrete, asphalt and tar all work well with crushed granite. When used as a landscaping material, the crushed granite can help reduce soil erosion, conserve water, halt or prevent the growth of weeds. Crushed granite would also be a different road surface from the asphalt of the connecting roadways (First, 78 and the stretch of Main Street extending west from Fifth Street). Thus it would alert motorists that Walkable Main Street is an area that requires their full attention.

Background

Congress for the New Urbanism (CNU https://www.cnu.org) is the leading national organization promoting walkable, mixed-use neighborhood development, sustainable communities and promoting active living. Members of CNU include planners, developers, architects, engineers, public officials, investors and community activists who create and influence our built environment.

The Congress Legacy Project is a new program designed to apply CNU's renowned placemaking expertise to "move the needle" on an urban topic of regional concern in the region hosting the annual congress. Municipalities, non-profits, and others may submit proposals for "low-bono" advising from some of the best minds in placemaking and walkable urbanism.

CNU Study of Garland Walkable Main Area

In April and May of 2015 ASH+LIME Strategies

http://alstrategies.com/What_We_Do.html [an economic development-consulting firm focused on incremental improvements at the neighborhood level who leverage the community,

entrepreneurs and design of the street to enhance the social fabric and help generate stable economic growth] Note: ASH+LIME are not located in Garland, but they appear to be local in the Dallas area

The team that studied this area of Garland, in addition to ASH+LIME, included Tim Van Meter, Partner and Urban Designer at Van Meter Williams Pollack LLP in Denver, along with his colleagues Karen Murray and Chris Sensenig from their San Francisco office.

Dallas county area team members included Kevin Shephard, Co-Founder and Principal at Verdunity, Don Raines (also from Verdunity) and Andrew Laska. *Note:* Verdunity appear to be a consulting firm similar to ASH+LIME. They list their talents as community planning, site development and stormwater management/green infrastructure.

VERDUNITY, Inc. 17000 Preston Road, Suite 110 Dallas, Texas 75248 (214) 729-8733

Andrew Laska is a free-lancer. He was a speaker at the 23rd Congress for the New Urbanism, served on the local host committee, and serves on the CNU North Texas Board. In the past he served on Richardson's Environmental Advisory Commission and on its Sign Control Board. In 2009, he helped lead the Heights Plan for Excellence - A plan for helping revitalize older neighborhoods in Richardson. As part of that effort, Laska helped bring Richardson's first retrofitted park, Durham Park, into existence and was the lead citizen on the redevelopment planning and rezoning of the West Spring Valley corridor in Richardson, Texas. Laska holds a Graduate Certificate in City Planning from the University of Texas at Dallas.

Excerpt from CNU Team Suggestions:

NOTE: April 6th, 2015 the local team presented the Final Report to the Garland City Council as a recommendation for future action. The project represents a new perspective on growth and redevelopment that seemed to resonate with stakeholders, staff and officials as a whole.

"The streetscapes in the district need radical change to be walkable. Before making long-term, multi-million dollar investments, the planners recommend the tactical testing of prototypes. Demonstration projects on streets can help accomplish these goals, they say:

1) Demonstrate new designs for key streets.

- Main Street—use paint or vinyl to delineate sidewalks, use bollards, bumpers, railroad ties or other temporary structures to separate pedestrians from cars.
- Third Street–Demonstrate bike lanes and functional landscaping (such as bioswales).
- Avenues B and D-temporarily narrow streets or permit on-street parking to show that the narrowed streets are capable of handling current traffic values; test pedestrian crosswalks along Third where it intersects these avenues.
- 2) Test the potential of opening Austin St through from Third to Fourth Streets by creating a crushed-granite walkway for pedestrians.
- 3) Use compressed granite where sidewalks are lacking or in need of repair.

Comments on Suggestions from CNU Team from a local Garland Resident:

Main Street—use paint or vinyl to delineate sidewalks, use bollards, bumpers, railroad ties or other temporary structures to separate pedestrians from cars.

In my opinion, such a study would be a useless waste of taxpayer money and time. There are no pedestrians currently who walk along this stretch of Main Street. Once in while one might see a lone pedestrian walking down this stretch of Main. As it exists now, people have no reason to walk along this stretch of Main. Furthermore, with the exception of the sidewalk that runs in front of All Worlds Transmission and Heartland Car Care (about 1 block), there are no sidewalks at all along this entire stretch of Main Street.

The most expedient solution to reduce hazards presented by auto and bicycle traffic is to post this strip of Main Street as a 20-mile zone with no cell phone use.

Third Street-Demonstrate bike lanes and functional landscaping (such as bioswales).

I agree that this area needs bioswales because of all the automotive related businesses. However, I don't see the point of putting them along Third Street where there really aren't any industrial businesses. If you want to demonstrate the functional landscaping of bioswales, I suggest you build one all around Rose Detail and/or perhaps around All World Transmissions and Heartland Car Care. Furthermore, bioswales and bike paths are not really all that compatible, as bioswales have sloped sides somewhat similar to ditches. I wouldn't want to ride my bike alongside a bioswale.

Avenues B and D-temporarily narrow streets or permit on-street parking to show that the narrowed streets are capable of handling current traffic values; test pedestrian crosswalks along Third where it intersects these avenues.

Parking might become an issue in this area if we don't plan carefully. However, Avenue D is too far away from the proposed redesign area to be of any consequence. Overflow Parking for this area is more likely to happen on

Avenue A and State Street (Perhaps Austin and Avenue B as well, but not Avenue D.) Perhaps we could also direct some of the parking to the new lot by City Hall. This would also pull visitors into the downtown area, which we also want to be connected to Walkable Main as well.

Another better and closer solution for parking for visitors to the area, as previously mentioned, might be to convert some of the HUGE paved areas at the east entrance to Walkable Main Street into parking areas. Both *Restaurant Tacqueria* and *Advanced Auto Parts* have huge unused paved areas that would be excellent for parking spaces for visitors to Walkable Main.

2) Test the potential of opening Austin Street through from Third to Fourth Streets by creating a crushed-granite walkway for pedestrians.

Not exactly sure of the value for doing this. It probably is a good idea as the more connecting walking paths to this neighborhood, the more walkable and the more inviting for visitors to explore the area.

3) Use compressed granite where sidewalks are lacking or in need of repair.

This one makes me smile. Ironically, this is probably the largest area in the city of Garland that needs no sidewalk repair—there is only one block of sidewalk along this entire strip and it is in good shape. This proposal essentially is proposing to make the entire surface of this strip of Main into a giant sidewalk that is shared with motorists and bicyclists.

Please Do not Brand this Area "Old Embree Neighborhood"!

First of all I don't think it is historically correct but more than that, it is not descriptive. "Walkable Main" is much more descriptive of what the area will be transformed into.

We are going for connectivity here. Embree vs. Duck Creek is a history of division that finally united in harmony to become Garland, Texas. Why honor one part of that division? It's not unlike those who fly the Confederate Flag. Sometimes it's better to live in the present.

RECREATE MAIN STREET ACCORDING TO CONCEPT OF SHARED SPACE

A traffic engineer in the Netherlands, Hans Monderman (1945 – 2008) turned urban transportation planning upside down with the groundbreaking concept of "Shared Space." His idea is disarmingly simple: remove traffic lights, signs, crosswalks, lane markers and even curbs so that pedestrians, motorists, and cyclists must negotiate their way through streets by interacting with, and reacting to, one another.

Monderman's work demonstrated that city and village streets become *safer* when they are stripped of traffic controls so that drivers must take cues from observing people rather than signs. Though it sounds chaotic, the results of Shared Space have shown to be just the opposite: traffic moves slower and the rate of major accidents declines drastically. [SOURCE: Project for Public Spaces]

Monderman believed firmly that in order for Shared Spaces to work, they needed to be part of a system that consists of well-organized, well-regulated highway systems. He was known to say, "The slow network needs the fast network to work."

Motorist traveling longer distances need to have ample options to exit the road before reaching the Shared Space. It is my hunch that most motorists do not use this stretch of Main Street as a route when travelling longer distances. It is not a traffic corridor of any significance. I think drivers use it to 1) access the business along this strip of Main 2) to get to downtown Garland 3) to get to the city government buildings. Still, a study of the traffic patterns in this area is in order prior to making changes.

Other considerations to keep in mind are that the adjacent land use – the relationship of the buildings to the street, the presence of shops and other activities, etc. — significantly influence motorists behavior. Thus, since our proposed development of the strip of businesses along Main Street will come after the creation of a changed road way, the addition of paths, landscaping and even a few new shops and mobile businesses will even further have the effect of slowing motor traffic down.

"If you want people to behave like they are in a village, then build a village," Monderman was often heard saying.

The Shared Space philosophy is not anti-car

It acknowledges a role for the larger-meshed fast network, which is needed to support the fine-meshed slow network. The slow network motor traffic is welcomed as a guest, but has to adapt to certain social norms of behavior. The layout of the road must make this clear.

Studies completed by Monderman reveal substantial reductions in crashes, particularly serious crashes and fatalities in Shared Spaces. This occurs because the perception of risk to oneself and to others causes drivers, bicyclists and pedestrians to be more alert and take fewer liberties. This leads to more eye contact, and more measured decision-making, which ultimately leads to less accidents.

Combine Street and Walking Path Surfacing Operations

When spreading the crushed granite for Main Street, it is suggested to merge the street surface with what will be the walkable path. In other words, spread the crushed granite for both at the same time and roll it all out flat. Some of the areas along Main Street will need to be filled in prior to putting down the crushed granite in order to level it all off. You can set up temporary markers to indicate where cars are not to drive prior to the installation of the landscaping and other design elements that will later delineate the street from the walking path for the drivers and the pedestrians.

ESTIMATED MATERIALS COST FOR CRUSHED GRANITE

Most prices for crushed granite are at 50 cents a square foot. At an estimated width of 60 feet and a total length of 1,531 feet, Walkable Main is approximately 91,860 square feet. At 50 cents a square foot, it will cost in the neighborhood of \$45,930 for the crushed granite to resurface this area. Perhaps some of these funds can come from existing funds for street/sidewalk repairs.

Here are some examples of where the sidewalk doesn't end.

http://www.smgov.net/uploadedFiles/Departments/PCD/Plans/Bergamot-Area-Plan/Shared-Space-Streets.pdf

TERMS in this Section

Bioswales

Bioswales are landscape elements designed to remove silt and pollution from surface runoff water. They consist of a swaled drainage course with gently sloped sides (less than six percent) and filled with vegetation, compost and/or riprap. The water's flow path, along with the wide and shallow ditch, is designed to maximize the time water spends in the swale, which aids the trapping of pollutants and silt. Depending upon the geometry of land available, a bioswale may have a meandering or almost straight channel alignment. Biological factors also contribute to the breakdown of certain pollutants.

A common application is around parking lots, where substantial automotive pollution is collected by the paving and then flushed by rain. The bioswale, or other type of biofilter, wraps around the parking lot and treats the runoff before releasing it to the watershed or storm sewer.

Shared Space

Shared Space is more a way of thinking than it is a design concept. It is most readily recognized as a street space where all traffic control devices such as signals and stop signs, all markings such as crosswalks, and all signing have been removed. Curbing is removed to blur the lines between sidewalks and motorized travel way. The philosophy is that absence of all of those features forces all users of the space — from pedestrians to drivers — to negotiate passage through the space via eye contact and person-to-person negotiation.

This is all premised on the idea that traditional streets allocate distinct spaces to the different modes, and in doing so create a false sense of security to each user leading them to behave as if they have no responsibility to look out for other users in "their" space. This obviously works best for operators of motor vehicles, who are sitting within the protection of a ton and a half of steel.

NOTES AND COMMENTS