Expressed Desires/Goals from Boards, Stakeholders and Commissions for NedPeds Project, and Design Team Responses

- For now, the desire is that any signage must match the current signage displayed throughout the town
    - There will be close collaboration with PROSAB on signage
- Investigate crosswalk locations, specifically one from the park-n-ride to the library as opposed to two, inclusion of one at Jefferson Street, the best placement within the roundabout for maximum safety, and placed to avoid parking spaces near Snyder.
    - As design progresses, the site will be walked to start determine the best locations
    - Current drawings have been updated to show a single crossing of SH 72 (2nd St.) at Jackson St.; a Jefferson St. crosswalk will be added; and the location of the walkway along Snyder is still under consideration.
- Consider one sidewalk versus two along 119
    - This is being done currently after receiving feedback
    - Sidewalks along SH 119 are no longer under consideration; a 5 ft pathway is included the North side.
- Consider clear delineation of bicycle ROWs
    - Current design shows separate bikeways along SH 72 west of the roundabout
- Simplify signage wherever possible
    - This will be looked at during the final design stage in collaboration with PROSAB
- Consider traffic calming measure for drivers coming North on Bridge
    - These are being looked at, primarily in terms of increasing awareness of the roundabout and how to use it per current CDOT signage standards
- Please address run-off issues from paved businesses near roundabout
    - Calculations will be completed for runoff and the water features will be sized to that level at a minimum
- Consider including more on-street parking along Snyder to access business and provide ease of exit once business is complete
    - The location of Snyder St. (between 2nd and 3rd) pathway/parking has parking on the West and the pathway on the East
- Ensure material for walkway is easy to maintain
    - This will be done; ranked as 2nd most important in prioritization survey
- Desire for walkway material to be plowable
    - In current plans

- Desire that walkway material is distinct and in keeping with town character
    - Current surface options include a concrete with exposed aggregate, pigment, and/or stamps
- Desire that the walkway be replicable
    - The intent is for low cost, durable, and distinctive so it will be replicable
- Desire that the walkway be affordable
    - Low life cycle costs were the 4th most important criteria in the prioritization survey and a repeated concern from town boards; this will continue to be addressed
    - Concrete has a low life cycle cost due to its durability; while its initial cost is higher, it was ranked as the lowest life cycle cost option that met all of the other desired criteria
- Preference that the walkway be porous
    - The desire for total porosity is being balanced with other potentially competing needs such as safety and maintenance. The hope is to find a medium or preferred alternative that accomplished the needed porosity but meets the other requirements as well.
    - The walkway itself is not porous, but the construction technique of through-cuts at the joints is being applied to make it permeable
- Desire to educate stakeholders (non-boards)
    - A Public Meeting will be held by the EPA, likely in August/September, to educate residents with theme of what residents can do to improve habitat functionality in their backyards.
- Design for capacity to handle a 100 year flood without backing up
    - This goal was stated by Brian McClaren as reasonable for culvert sizing (both 2nd and East(as needed)) to address the immediate issue of North Beaver Creek flooding. There will be consequences downstream in the stream channel through private property and it is recommended by the design team that culverts replacement be based on capacity to avoid simply shifting the flooding to the next bottleneck.
    - Clarification: The N. Beaver Creek crossings of 2nd St. will be designed to handle the largest possible flow practical without increasing the risk to adjacent properties. These culvert sizes may be limited by the channel capacity (which is on private property). Surface drainage will be designed to conventional drainage criteria (providing a minor drainage system to handle

minor (5-yr) storms, while providing the capacity to convey a major (100-yr) storm to minimize health and life hazards, damage to structures, and interruption to traffic and services.

- Design the water quality features to serve as many functions as possible and to detain as much on street water as can be practically fit in the project
    - The narrow ROW along 2nd St., combined with the need to maintain driveway access to the various properties does put a constraint on the amount of space available for water quality mitigation features. The plan for bioswales in the Gateway Park Concept drawings will be the biggest factor affecting local water quality for North Beaver Creek.
    - The areas shown on the 30% FIR drawings as "native landscaping" will be utilized as much as practical to provide water quality treatment of the storm runoff as well as providing snow storage areas. This will be accomplished with gravel areas for infiltration and native grasses to help retain the soil and provide habitat.
- Design with a goal of reducing the embodied energy (or possibly total energy) of the project to use half of the energy that Phase 1 used on a /SF basis
    - Project team investigating phase 1 energy, will report as design progresses
- Create a document indicating what concerns are being brought up at various meetings and how the design team will address them (Mayor Guerlach)
    - This will be stored separately and include all of the goals/desires along with design team responses (this document)
- Place an emphasis on the needs of the entire system to be addressed especially the upstream portions of the creek (outside of project scope). Provide recommendations and advice as possible to mitigate major flooding at the ecosystem level
    - Will continue to work with BoT and others on best way to do so
    - The Design Team recommends that the Town undergo a Major Drainageway Planning effort for the N. Beaver Creek and Middle Boulder Creek basins to provide a framework for implementing measures to mitigate major flooding in the Town.
- Quantify the benefits of the project via LEED-ND and the Sustainable Sites Initiative
    - Certification matrix has been developed and key recommendations are in the Sustainability update memo
- Major design decisions should include life-cycle costs
    - Noted, will be presented for design options
- Work with PROSAB to take advantage of synergies and help inform future planning

    - Design team will do so
- The treatment of the right of way issues should be conducted in an equitable manner; while it is recognized that there will be "winners" and "losers" the design should strive to demonstrate appropriate and equal concern for all affected residents
    - Design options recognize this and the DDA will be able to weigh in
- Life-cycle costs and impacts of the project should be given serious consideration as part of the design process
    - See related comments
- Consider some means for additional pedestrian safety at the roundabout, including tables at select crossings
    - Tables are unlikely due to plowing issues, but islands of safety beyond the existing islands with the crosswalks in between are being added on all appropriate intersections
- The design should be "self-enforcing" when it comes to where parking occurs as there is limited enforcement of illegal parking in town
    - This will be taken up with the town
- The design should address the dust issues for residents and business owners along second street
    - All of the design options will limit dust exposure
- The design should address erosion issues along 2nd St
    - All of the design options will address erosion issues
- Design should include 14 ft ROWs and enough room to turn a fire truck onto
    - This will be included as a minimum
- Design should be flexible to accommodate future development
    - The location and specific design along developable parcels will accommodate future redevelopment
- Consider the design impacts on delivery vehicles
    - Space for delivery vehicles will be prioritized, though not necessarily at the expense of pedestrians
- Consider snow removal/storage in the design
    - Will be addressed in 60% round of design
    - Snow storage will occur naturally in unprogrammed areas; gravel will allow for direct infiltration as the snow melts
- Consider including parking as part of long term flexibility
    - Parking is a future flexible use and will be incorporated to the extent possible
- Consider the long-term view

    - This is being done in terms of resilience, flexibility, and durability
- Consider any opportunities to include agriculture in project
    - The pollutants from the roadway make edible agriculture difficult in bioswales and landscaped features, but non-edibles could be grown and harvested
    - Native grasses will be planted to retain soil and provide habitat in areas too small to serve as parking or other uses
- Consider one side only from Park N Ride to roundabout and round about to Snyder
    - Current drawings show the pathway only along the south side of E. 2nd St. between the roundabout & Snyder St. and only on one side from the Park N Ride to the roundabout
- Look at on-street parking as a more sustainable option due to traffic shielding and slowing for pedestrians
    - This is being done
- Consider the navigability of the roadway when locating parking
    - Parking as well as the walkway will be located to allow a high degree of maneuverability, but also so as to slow traffic
- Ensure that the established grade is as permanent as possible and functions the best overall
    - This is in the design, it works with existing and planned driveways to allow for the most effective long term grading
- One way to accommodate the issue of snow impeding the roadway would be to use designated areas within the ROW as snow placement zones in the winter and parking spaces in the summer
    - This will be incorporated into the design
    - The areas currently shown as “native landscaping” can be used for snow storage
- Consider options that would not include the removal of the two large mature Spruce trees
    - Currently there is no design to remove the trees; however, their continued presence in the Right of Way may necessitate removal during construction or eventually
- Consider the inclusion of speed bumps or divots after the 30% drawing submittals
    - So far these are not included among the traffic calming methods due to plowing considerations
- Maintain visibility for residents and business owners
    - This will be a design feature

- Consider designing the parking spaces within the CBD ROW to accommodate greater maneuverability including such things as getting around trucks and clear visibility
    - Addressed above
- Consider additional and more hard surfaces for parking within the CBD
    - These are included design, but has been directed by the DDA
- Consider moving the utility poles to accommodate additional ROW utilization, especially for parking
    - One parking spot would be gained from moving the poles; this will be shown on current design.
    - Utilities will be relocated as necessary to accommodate the design.
- Consider making a portion of the street two-way or with two-way functionality to provide the ability for vehicles entering from the west and not going far down the street to be able to continue to get back out without going through the eastern more neighborhood portion
    - The current design is for a one-way street, the two-way functionality will continue to be investigated and if there is sufficient cause to re-explore this option it will be done
- Consider an exposed pebble concrete as a more rustic but still very functional pathway material
    - This is one of the leading current design options for the pathway
- Consider using oval steel or concrete pipes (no PVC ovals in existence that we know of) in the under drain to use a greater volume at lower depth
    - This will be investigated if needed
- The pavement shown by the park on the east side of East down 2nd would be great for parking ambulances on for festivals
    - That paving is included on the design
- Consider mitigating ponding by mining museum corner
    - This will be investigated in the current phase of design
- Consider making an apron or more car friendly curb on mining museum corner as it gets driven over regularly
    - This will be included in the design
    - Pedestrian and ADA accessibility and safety will also need to be considered – an “apron” configuration could lead to vision-impaired pedestrians attempting to cross at an unsafe location.
    - At this time the corner of the mining museum is not going to be addressed to avoid historical clearance issues

- 2 of the "islands of safety" around the roundabout are problematic, consider removing the ones on the North side of Bridge St. (conflicts with gas station pull out) and E side of 2nd(conflicts with Thai restaurant parking) Both are less necessary than the one along more heavily traveled entrances
    - The two have been removed from the design
- Consider extending the striped bike lanes to the community center if they are going to be included
    - That is part of the current design, but the scope does end at roughly the bend in the road
    - At the 30% FIR review, CDOT noted that the striped bike lanes need to be a minimum of 5' wide (per AASHTO).
- Parking spot by driveway across from bus park n ride should be removed for better visibility
    - This is shown in the drawings
- BOT votes: North- 1 South (go with whatever the DAT decides) - 4 votes
    - The path will be on the South side
- BOT unanimously voted to recommend Hybrid, prioritized permeability for roadway surface
    - This is the recommended option
    - Current design is investigating whether it is more cost-effective to put permeable pavers all the way across the street
- Consider undergrounding the utilities if cost-effective
    - Currently this is not cost-effective
    - Current estimates of money in undergrounding fund between $20-25K
- Vote: 5 members of the DAT voted for the walkway on the South side, 1 member voted for the North side (but not strongly) (2/20/13)
    - South side
- Vote: The DDA endorsed the South Side for the walkway
    - South side
- Construction schedule should consider summer festivals
    - Schedule events will be documented as "No-work" times in the Contract Documents.
    - Will be addressed with Construction Manager
- Consider stronger concrete as an alternate so that if can be moved and reinstalled for future maintenance
    - Will be included as alternate
- Explain the entire system to people rather than just what they will see
    - This approach will be used moving forward

- Consider using ¾ inch crushed gravel specifically to avoid migration and rutting
    - An appropriate aggregate gradation will be specified for the parking areas for maximum infiltration, as well as stability
- SAB recommends (unanimously) considering alternative options other than concrete for the pathway understanding project scope could shrink with a higher lifecycle cost, higher quality material
    - Consultants will look at a more environmentally friendly material as an alternate
    - None found to date that are cost-effective
- SAB would like to see recycled crusher fines as an option for pathway
    - Crusher fines are not included due to maintenance concerns; will be revisited if there is additional support for this option and will be presented as an option
- Consider flagstone as a material
    - At this time, flagstone appears to be cost prohibitive and impractical from a maintenance and ADA standpoint
- SAB would like to see the numbers for recycled concrete, recycled crusher fines, and pavers (unanimously)
    - A complete budget will be provided with alternates
- *SAB provides direction to shrink the scope of the project in order to have a higher quality and more sustainable project if necessary*
    - This will be responded to in all design narratives and will be incorporated as the process continues
- SAB wants to cut option of traditional asphalt; if that is decided they recommend not doing that part of the project
    - Traditional asphalt paving of E 2nd will not be considered at this time
- Consider open pavers with planted natives and cobblestones under wheels
    - Open pavers are currently being considered for the dividing strip between the roadway and pathway
- Consider how the edge of the pathway will transition to people's yard and include on sketches. There are concerns about how material and water will flow and structural integrity of the path.
    - Current design shows a 6 inch gravel section between the pathway and yards, further design development will be needed to ensure stability
- Consider how the grading of the new portion of road will affect neighboring properties, Salto may have to serve as highest point due to their constructing at that level, but avoiding the flats by Susane's and creating more of a pitch overall would be acceptable
    - The proposed improvements are limited to construction within the existing street right-of-way – this precludes the option of making significant grade changes.
    - Within those bounds the option of restoring historical grade and creating the most stormwater friendly grade possible will be addressed

- Consider including additional crossing provisions for W-bound arrivals at the Snyder bus stop (currently very dangerous)
    - The addition of crosswalk markings and appropriate signing will be investigated at this location.
- Consider skateboarding as a means of transportation in final design
    - This will be defined and skateboarders will be given a transportation option within the design
- Consider a darker sidewalk and some aggregate top layer to improve snowmelt and traction in the winter
    - These will be included as alternates in the budget
- The focus of the roadway should be on driving and drainage, the path should encourage multiple modes of transportation
    - The current and future designs will reflect this
- Consider focusing on making a functional project rather than one designed for aesthetics ("People come to Nederland to look up, not down")
    - This will be considered in the final recommendations
- PROSAB supports a semi-abrasive walkway path (but still navigable by skateboards, etc.) with some coloration and visual separation from the roadway
    - This option will be called out in the design
- PROSAB would like to see the Bioswale planned for the gateway Park Area to be able to treat stormwater events and accommodate shallow play areas while not encouraging the growth of mosquitoes
    - The design team will provide some recommendations as part of the project, but detailed design will have to be completed by that project's designers
- Consider splitting the 8 foot pathway from the post office to 119 into two 4 foot sidewalks to allow for better connectivity for bus users and potentially avoid impacts to mature trees on East side
    - This is the current design, the walkways would be at least 4 feet
- Consider plowing effects on an inverse crowned roadway with the infiltration strip down the middle. Would it create a frozen layer over the drainage strip?
    - This has not been demonstrated and is not expected, but it should be noted that this is a new application of the chosen systems and more investigation is needed
- Consider including infiltration strips along the edges of 2nd from roundabout to Snyder to improve drainage in that area
    - This will be included as an alternate in the design
- Consider life's principles in the evolving design of the drainage systems and include as many natural features as possible
    - This will be done and such features documented
- Consider expanding the scope of the design to include stream treatments and drainage improvements at all available opportunities
    - The project design scope is still in flux and this option will be presented to the DDA with final approval being needed from the BoT

- Natural stormwater treatment system should be prioritized over parking
    - The current design uses the areas designated for parking as stormwater mitigation
- The design process should include a significant portion of public education
    - The EPA workshop would be completed as a minimum
- The Town recommends against porous concrete at this time due to maintenance concerns
    - Porous concrete will be eliminated as a design option
- Consider relocating the utility pole West as well as North on the NE corner of 2nd and Snyder to accommodate moving the lines away from Salto
    - This will be discussed with Xcel
- Consider future maintenance and construction impacts on the drainage system along East 2nd. Specifically, if the system is complex, a rider for an excavation permit needs to be created with guidance on how to replace the system properly after trenching, etc.
    - A maintenance plan will be provided by the design team that will be able to be incorporated with enforceable language by the town alongside their excavation permits
- Consider doing utility line assessments in conjunction or prior to the NedPeds project
    - The design team recommends this as well
- Consider including clean outs to accommodate cleaning equipment (currently a 400 ft hose, getting a longer one) where pipes are used
    - This will be incorporated into the design
- Future development will need utility taps; consider system impacts
    - See maintenance plan comments above
- DDA Board voted to adopt the “Deliberative” Schedule moving forward, project to be constructed in 2014
    - The Current Schedule will be posted on the NedPeds Page and forwarded to the boards for their next meetings
- Consider adjusting design so that utility pole along 119 are moved to the edge of the sidewalk (and ROW) rather than in the unprogrammed space (Xcel agreed)
    - This can be done with bump-outs around the poles and would be a better solution aesthetically as well
- Recommended to include the ordering of extra pavers in this design for future maintenance needs
    - This will be included as an item to discuss with the construction manager
- TRC advised to do as much as possible to underground utilities prior to building NedPeds project, including assessing the existing conditions, stubbing out anticipated services, and evaluating where different services are located.
    - This will be discussed with the MIP team and the town as a priority measure to be done this Fall prior to ground freeze

- There is a desire to keep the inlet provided on Jefferson low enough to accommodate future improvements on Jefferson
    - The design will accommodate this to the extent possible
- Proper signage for cars and bicyclists is especially desired along any intersections and the entirety of lower 2nd St.
    - Signage recommendations will be included as part of the final report and this issue will be brought to the attention of PROSAB and the town.
    - The final design will include….