



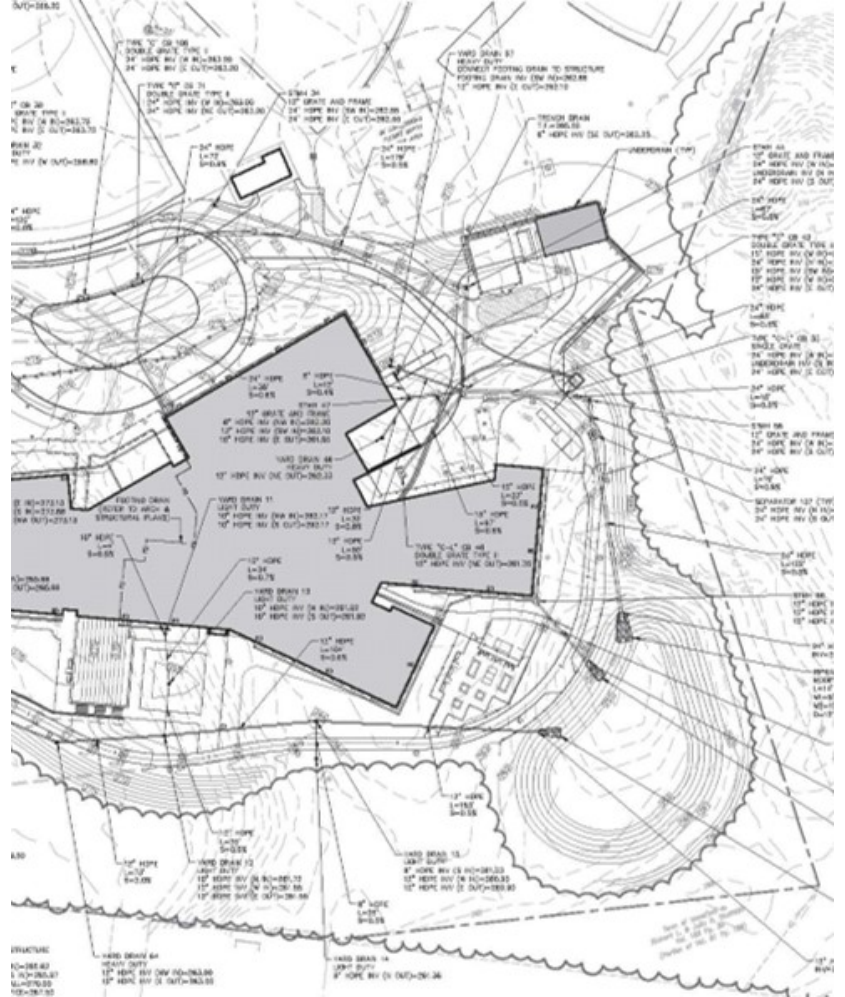
Assessment of Natural Resources

Ideally, LID is considered early in the site planning process. The objective is to allow for the development of the property, while maintaining the essential hydrologic functions of the site. A thorough assessment of the existing natural resources on the site needs to be performed, so that essential features can be preserved, and suitable sites for development can be identified.

Please identify the practices used in assessing the site's natural resources (check all that apply):*

- Natural resources and constraints have been indicated and are identified on the plans (wetlands, rivers, streams, flood hazard zones, meadows, agricultural land, tree lines, slopes (identified with 2-foot contours), soil types, exposed ledge and stone walls). (NR1)
- Development is designed to avoid critical watercourses, wetlands, and steep slopes. (NR3)
- Soils suitable for septic and stormwater infiltration have been identified on plans. (NR4)
- Soil infiltration rate/permeability has been measured and listed on plan. (NR5)
- On-site soils have been assessed to determine suitability for stormwater infiltration. (NR6)
- Natural existing drainage patterns have been delineated on the plan and are proposed to be preserved or impacts minimized. (NR7)

For any unchecked items above, please explain why that practice was not appropriate or possible for your project and what alternatives were considered:*



USING AN LID CHECKLIST FOR SITE PLAN REVIEWS

Supporting Low Impact Development Practices in Local Regulations
Linda M. Painter, AICP ■ December 2, 2020

LID Checklist can help with...

- Helping prospective developers understand the value your community places on balancing development with conservation of natural resources
- Conveying your community's expectations with regard to stormwater management
- Ensuring that information critical to your ability to understand a project's potential impacts on natural systems and resources are included in the submitted plans
- Encouraging the use of LID practices in design of a project
- Requiring applicants to explain why specific best management practices are not appropriate or possible for their project and what alternatives were considered

LID Checklists are not...

- A substitute for stormwater management regulations that identify when a stormwater management plan is required, what the plan must contain, and how stormwater management practices will be maintained
- A mechanism to impose requirements such as minimum buffers that are not already identified in your regulations.

WHY USE AN LID CHECKLIST

What a checklist can do, and what it can not do

Applicability of Stormwater Management Regulations/Preparation of a Stormwater Management Plan

- Any development resulting in the disturbance of one or more acres of land;
- Residential development of five or more dwellings;
- Residential development involving the construction of a new road or common driveway serving more than two dwellings;
- Any development where stormwater will have a point discharge to a wetland or watercourse;
- Nonresidential development having greater than 10,000 square feet of impervious surface;
- Other activities as described in the CTDEEP 2004 Connecticut Stormwater Manual (the Manual) as may be amended; or
- Other developments determined by the Commission to have the potential for stormwater management issues.

WHEN SHOULD A CHECKLIST BE REQUIRED?

In Mansfield, the threshold for compliance with stormwater management regulations is also used to determine whether the LID Checklist will be required

Elements of Natural Resource Assessment

- Natural resources and constraints have been indicated and are identified on the plans (wetlands, rivers, streams, flood hazard zones, meadows, agricultural land, tree lines, slopes (identified with 2-foot contours), soil types, exposed ledge and stone walls)
- Copies of the following documents have been included in the application submission for properties that are identified on the latest CTDEEP Natural Diversity Database (NDDDB) Map as potentially having State and Federal Listed Species and Significant Natural Communities:
 - Completed CTDEEP NDDDB Request Form
 - Copy of CTDEEP Response
 - Description of how CTDEEP recommendations will be addressed
- Development is designed to avoid critical watercourses, wetlands, and steep slopes.
- Soils suitable for septic and stormwater infiltration have been identified on plans.
- Soil infiltration rate/permeability has been measured and listed on plan.
- On-site soils have been assessed to determine suitability for stormwater infiltration.
- Natural existing drainage patterns have been delineated on the plan and are proposed to be preserved or impacts minimized.

CHECKLIST ITEMS

Assessment of Natural Resources

Elements of Open Space Preservation

- Plans identify the percentage of existing natural open space and percentage of natural open space to be retained post development.
- Buildings and/or lots have been clustered to maximize open space.
- Open space and common areas are delineated on the plans.
- Open space is retained in a natural condition.
- Setbacks, frontages and right-of-way widths have been minimized where practicable based on unique features of site and neighborhood context.

Elements of Minimizing Land Disturbance

- Proposed buildings and site improvements are located where development can occur with the least environmental impact.
- Disturbance areas have been delineated to avoid unnecessary clearing or grading.
- Native vegetation outside the immediate construction area remains undisturbed or will be restored.
- Plan includes detail on construction methods and sequencing to minimize compaction of natural and future stormwater areas.

CHECKLIST ITEMS

**Preservation of Open Space &
Minimization of Land
Disturbance**

Elements of Reducing and Disconnecting Impervious Cover

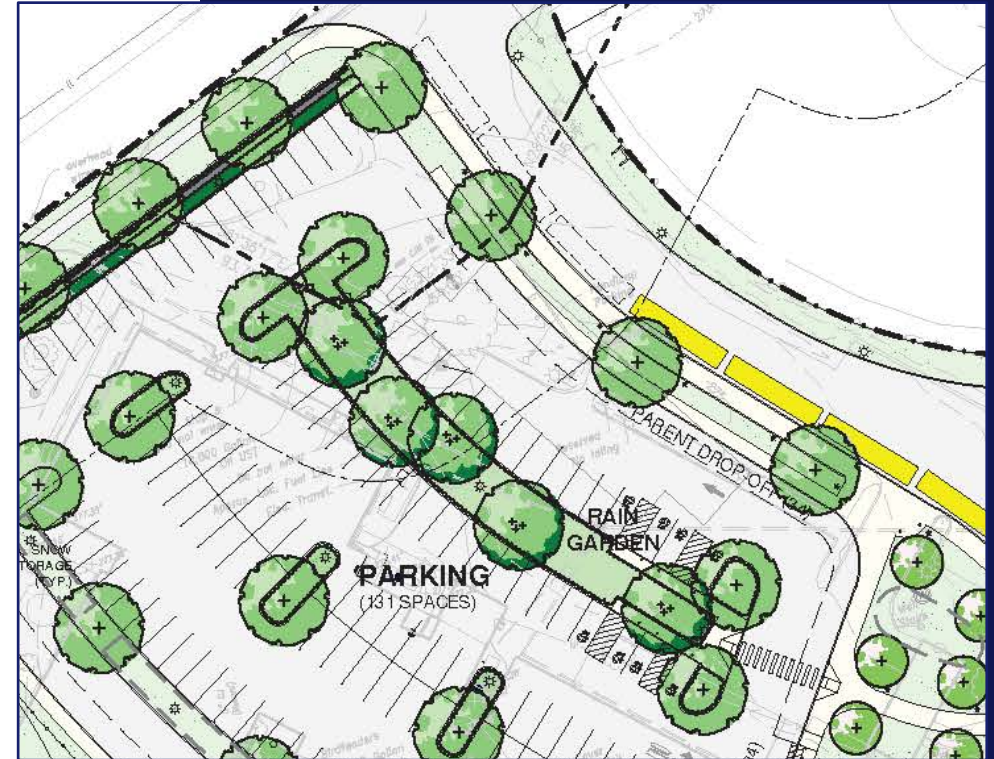
- Impervious surfaces have been kept to the minimum extent practicable, using the following methods (check which methods were used):
 - Minimized road widths
 - Minimized driveway area
 - Minimized sidewalk area
 - Minimized cul-de-sacs
 - Minimized building footprint
 - Minimized parking lot area
- Impervious surfaces have been disconnected from the stormwater system and directed to appropriate pervious areas, where applicable. Pervious areas may be LID practices or un-compacted turf areas.

CHECKLIST ITEMS

Reducing and Disconnecting
Impervious Cover

LID Practices Installed

- Sheet flow is used to the maximum extent possible to avoid concentrating runoff.
- Vegetated swales have been installed adjacent to driveways and/or roads in lieu of a curb and gutter collection system
- Rooftop drainage is discharged to bioretention/rain gardens
- Rooftop drainage is discharged to drywell or infiltration trench
- Rainwater harvesting methods such as rain barrels or cisterns have been installed to manage roof drainage.
- Driveway, roadway, and/or parking lot drainage is directed to bioretention/rain gardens.
- Cul-de-sacs include a landscaped bioretention island.
- Vegetated roof systems have been installed, if appropriate.
- Pervious pavements have been installed, if appropriate.



CHECKLIST ITEMS

LID Practices Installed

QUESTIONS?

Links

- [Mansfield Stormwater Regulations \(Article 6, Section B.4.t of the Zoning Regulations\)](#)
- [Mansfield LID Checklist](#)
- [Mansfield Department of Planning & Development](#)