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STORM WATER REDIRECTION DEVICE

Abstract

A storm water redirection device includes a channel drain installed in the ground to completely surround a building to capture storm water. A plurality of barriers is each slidably integrated into the channel drain. Each of the plurality of barriers is positionable in a deployed position to deflect the storm water into the channel drain for collecting the storm water. A first drain pipe is positioned in a respective intersecting section of the channel drain to drain the storm water from the respective channel drain. A second drain pipe is positioned above the first drain pipe to drain the storm water from the channel drain when the storm water is filling the channel drain faster than the first drain pipe can drain the storm water from the channel drain. An overflow reservoir is buried beneath the ground to contain the storm water that drains through the second drain pipe.

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Background/Summary

(b) CROSS-REFERENCE TO RELATED APPLICATIONS Not Applicable
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT Not Applicable
(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT Not Applicable
(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC OR AS A TEXT FILE VIA THE OFFICE ELECTRONIC FILING SYSTEM
[0001] Not Applicable
(f) STATEMENT REGARDING PRIOR DISCLOSURES BY THE INVENTOR OR JOINT INVENTOR Not Applicable
(g) BACKGROUND OF THE INVENTION
(1) Field of the Invention
[0002] The disclosure relates to storm water devices and more particularly pertains to a new storm water device for capturing and redirecting storm water away from a building. The device includes a channel drain that is buried in the ground to surround a building for capturing storm water that runs toward the building. The device includes a plurality of barriers that are each slidably installed in the channel drain which is each positionable in a deployed position to direct the storm water into the channel drain. The device includes a pair of pipes that are integrated into the channel drain. One of the pipes drains the storm water into a municipal storm drain and the other of the pipes drains the storm water into an overflow reservoir that is buried beneath the ground. A sump pump is positioned on the overflow reservoir for pumping storm water from the overflow reservoir into the municipal storm drain.
(2) Description of Related Art Including Information Disclosed Under 37 CFR 1.97 and 1.98
[0003] The prior art relates to storm water devices including a variety of storm water drainage channels that are integrated into the ground adjacent to a building for capturing and subsequently redirecting storm water runoff and a variety of erectable flood barriers that can be automatically urged between a deployed position and a stored position. In no instance does the prior art disclose a storm water draining device that includes a channel drain which surrounds a building for capturing storm water runoff and a plurality of barriers slidably integrated into the channel drain for routing the storm water into the channel drain and an overflow reservoir that is in fluid communication with the channel drain for receiving the storm water runoff.
(h) BRIEF SUMMARY OF THE INVENTION
[0004] An embodiment of the disclosure meets the needs presented above by generally comprising a channel drain installed in the ground to completely surround a building to capture storm water. A plurality of barriers is each slidably integrated into the channel drain. Each of the plurality of barriers is positionable in a deployed position to deflect the storm water into the channel drain for collecting the storm water. A first drain pipe is positioned in a respective intersecting section of the channel drain to drain the storm water from the respective channel drain. A second drain pipe is positioned above the first drain pipe to drain the storm water from the channel drain when the storm water is filling the channel drain faster than the first drain pipe can drain the storm water from the channel drain. An overflow reservoir is buried beneath the ground to contain the storm water that drains through the second drain pipe.
[0005] There has thus been outlined, rather broadly, the more important features of the disclosure in order that the detailed description thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are additional features of the disclosure that will be described hereinafter and which will form the subject matter of the claims appended hereto.
[0006] The objects of the disclosure, along with the various features of novelty which characterize

the disclosure, are pointed out with particularity in the claims annexed to and forming a part of this disclosure.

Description

(i) BRIEF DESCRIPTION OF SEVERAL VIEWS OF THE DRAWING(S)

[0007] The disclosure will be better understood and objects other than those set forth above will become apparent when consideration is given to the following detailed description thereof. Such description makes reference to the annexed drawings wherein:

[0008] FIG. **1** is a top in-use view of an embodiment of the disclosure.

[0009] FIG. **2** is a magnified detail view taken from circle **2** of FIG. **1** of an embodiment of the disclosure showing a barrier in a deployed position.

[0010] FIG. **3** is a magnified detail view taken from circle **2** of FIG. **1** of an embodiment of the disclosure showing a barrier in a stored position.

[0011] FIG. **4** is a detail view of an alternative embodiment of the disclosure showing a barrier in a deployed position.

[0012] FIG. **5** is a detail view of an alternative embodiment of the disclosure showing a barrier in a stored position.

[0013] FIG. **6** is a detail view of an alternative embodiment of the disclosure showing a barrier in a second deployed position.

[0014] FIG. **7** is a detail view of an alternative embodiment of the disclosure showing a barrier in a first deployed position.

[0015] FIG. **8** is a detail view of an alternative embodiment of the disclosure showing a barrier in a stored position.

[0016] FIG. **9** is a magnified detail view taken from circle **9** of FIG. **1** of an embodiment of the disclosure showing a barrier in a deployed position.

[0017] FIG. **10** is a magnified detail view taken from circle **9** of FIG. **1** of an embodiment of the disclosure showing a barrier in a stored position.

[0018] FIG. **11** is a detail view of an alternative embodiment of the disclosure showing a barrier in a deployed position.

[0019] FIG. **12** is a detail view of an alternative embodiment of the disclosure showing a barrier in a stored position.

[0020] FIG. **13** is a detail view of an alternative embodiment of the disclosure showing a barrier in a second deployed position.

[0021] FIG. **14** is a detail view of alternative embodiment of the disclosure showing a barrier in a first deployed position.

[0022] FIG. **15** is a detail view of an alternative embodiment of the disclosure showing a barrier in a stored position.

[0023] FIG. **16** is cut-away in-use view of a storm water redirection device according to an embodiment of the disclosure.

[0024] FIG. **17** is a cut-away in-use view of an alternative embodiment of the disclosure.

[0025] FIG. **18** is a perspective view of barrier only without a channel drain showing a barrier in a deployed position.

[0026] FIG. **19** is a perspective view of a barrier only without a channel drain showing a barrier in a stored position.

[0027] FIG. **20** is a cut-away view of an embodiment of the disclosure showing a sump basin and sump pump added to an overflow reservoir.

[0028] FIG. **21** is a cut-away view of an embodiment of the disclosure showing a cleanout tee.

[0029] FIG. **22** is a cut-away view of an embodiment of the disclosure demonstrating a series of

sump basins and a pair of sump pumps.

(j) DETAILED DESCRIPTION OF THE INVENTION

[0030] With reference now to the drawings, and in particular to FIGS. **1** through **22** thereof, a new storm water device embodying the principles and concepts of an embodiment of the disclosure and generally designated by the reference numeral **10** will be described.

[0031] As best illustrated in FIGS. **1** through **22**, the storm water redirection device **10** generally comprises a channel drain **12** that is installed in the ground **14** to capture storm water **16**. The channel drain **12** has a plurality of intersecting sections **18** that form a closed perimeter such that the channel drain **12** completely surrounds a building **20**. In this way the channel drain **12** can capture storm water **16** that runs toward the building **20**. The building **20** may be a residence, such as a house for example, and the channel drain **12** is comprised of a fluid impermeable material, including but not being limited to, concrete or metal.

[0032] The channel drain **12** has a bottom wall **22** and an outer wall **24** extending upwardly from the bottom wall **22** and the outer wall **24** has a front side **26** and a back side **28**. The front side **26** has a top edge **30** and the back side **28** has a top edge **32**; the top edge **32** of the back side **28** and the top edge **30** of the front side **26** defines an opening **34** into the channel drain **12**. Furthermore, the top edge **30** of the front side **26** and the top edge **32** of the back side **28** is aligned with the ground **14**. The channel drain **12** includes a foraminous grate **36** that is positionable on top of channel drain **12** to facilitate storm water **16** to flow into the channel drain **12** while inhibiting debris from entering the channel drain **12**. The foraminous grate **36** may be recessed into the top edge **32** of the back side **28** of the outer wall **24** and the top edge **30** of the front side **26** of the outer wall **24**. The channel drain **12** has a well **38** extending into the top edge **32** of the back side **28** and the well **38** extends along a full length of the back side **28**. Additionally, the channel drain **12** is oriented such that the back side **28** is directed toward the building **20**.

[0033] A plurality of barriers **40** is provided and each of the plurality of barriers **40** is slidably integrated into a respective one of the plurality of intersecting sections **18** of the channel drain **12**. Each of the plurality of barriers **40** is positionable in a deployed position having the plurality of barriers **40** extending upwardly from the respective intersecting section **18** of the channel drain **12**. In this way the plurality of barriers **40** can deflect the storm water **16** into the respective intersecting section **18** of the channel drain **12** for collecting the storm water **16**. Conversely, the plurality of barriers **40** is positionable in a stored position having the plurality of barriers **40** being recessed into the respective intersecting section **18** of the channel drain **12**. Each of the barriers **40** is positioned in the well **38** in the respective intersecting section **18** of the channel drain **12** and each of the barriers **40** is comprised of a fluid impermeable material, including but not being limited to, concrete or metal.

[0034] A plurality of actuators **42** is included and each of the plurality of actuators **42** is integrated into the back side **28** of the outer wall **24** of a respective one of the plurality of intersecting sections **18** of the channel drain **12**. Each of the plurality of actuators **42** is in mechanical communication with the barrier **40** which is positioned in the well **38** in the back side **28** of the outer wall **24** of the respective intersecting section **18** of the channel drain **12**. Additionally, each of the plurality of actuators **42** is actuatable into a lifting condition for urging the plurality of barriers **40** in the deployed position. Furthermore, each of the plurality of actuators **42** is actuatable into a lowering condition for urging the plurality of barriers **40** into the stored position.

[0035] Each of the plurality of actuators **42** is in electrical communication with a control unit **44** and the control unit **44** actuates each of the plurality of actuators **42** between the lowering condition and the lifting condition. The control unit **44** may comprise a water sensor which senses the flow of rainwater along the ground **14** or the control unit **44** may comprise an electronic control unit with control buttons that can be manipulated by a user. Additionally, each of the plurality of actuators **42** may comprise a linear electromechanical actuator or an electric motor with an associated gear or any other type of mechanical actuator that is capable of both lifting and lowering the respective

barrier **40**. Alternatively, each of the plurality of barriers **40** can be manually between the stored position and the deployed position in the event that the plurality of actuators **42** is non-functional or to reduce the energy consumption of the actuators **42** thereby reducing the cost of electricity associated with operating the plurality of barriers **40**. The manual method of moving the plurality of barriers **40** between the stored position and the deployed position might be accomplished with a chain, for example, or other manual method deemed appropriate by the designer of the plurality of barriers **40**.

[0036] A plurality of tie lines **46** is included and each of the tie lines **46** is attached between a topmost edge **48** of a respective one of the plurality of barriers **40** and the top edge **30** of the front side **26** of the outer wall **24** of a respective one of the plurality of intersecting sections **18** of the channel drain **12**. Each of the tie lines **46** inhibits the respective barrier **40** from being deflected rearwardly when the respective barrier **40** is in the deployed position. In this way the plurality of tie lines **46** reinforce the plurality of barriers **40** against the force of the storm water **16** flowing against the plurality of barriers **40**. Each of the plurality of tie lines **46** is comprised of a resilient material, including but not being limited to braided metal cable or a synthetic cable, such that each of the plurality of tie lines **46** has a tensile strength that is sufficient to reinforce the respective barrier **40** against the force of running water. The tie lines **46** transfer the force of the storm water **16** against the barriers **40** into the front side **26** of the outer wall **24** of the respective intersection section **18** of the channel drain **12** thereby increasing the strength of the barriers **40**. In the case that the tie lines **46** are not present, the thickness of each of the plurality of barriers **40** is sufficiently increased to facilitate the plurality of barriers **40** to resist the force of the storm water **16** without the additional reinforcement of the tie lines **46**. In this way the lateral forces produced by the storm water **16** resulting from a flash flood and the bending moment forces produced by the storm water **16** resulting from a flash flood can be resisted by the plurality of barriers **40**.

[0037] A first drain pipe **50** is positioned in a respective one of the intersecting sections **18** of the channel drain **12** to drain the storm water **16** from the channel drain **12**. The first drain pipe **50** is located adjacent to the bottom wall **22** of the respective intersecting section **18** of the channel drain **12**. Additionally, the first drain pipe **50** exits the respective intersecting section **18** of the channel drain **12** and extends beneath ground **14** to terminate in a municipal storm drain **52**. In this way the first drain pipe **50** can direct the storm water **16** collected in the channel drain **12** into the municipal storm drain **52**. A check valve **53** may be integrated into the first drain pipe **50** at a point located proximate the termination of the first drain pipe **50** to inhibit water from backflowing through the first drain pipe **50** into the channel drain **12**. A second drain pipe **54** is positioned in the intersecting section **18** of the channel drain **12** in which the first drain pipe **50** is positioned. Additionally, the second drain pipe **54** is positioned above the first drain pipe **50** thereby facilitating the second drain pipe **54** to drain the storm water **16** from the channel drain **12** when the storm water **16** is filling the channel drain **12** faster than the first drain pipe **50** can drain the storm water **16** from the channel drain **12**.

[0038] An overflow reservoir **56** is buried beneath the ground **14** such that the overflow reservoir **56** can contain storm water **16**. The overflow reservoir **56** is in fluid communication with the second drain pipe **54** to contain the storm water **16** that drains through the second drain pipe **54**. Additionally, the overflow reservoir **56** has an access hatch **58** which extends through a top wall **60** of the overflow reservoir **56** to facilitate a user to access the overflow reservoir **56**. A ladder **62** is integrated into the overflow reservoir **56** to facilitate the user to climb into and out of the overflow reservoir **56**. Additionally, the overflow reservoir **56** has a fill entry **64** which extends through the top wall **60**. The second drain pipe **54** extends through the fill entry **64** such that a terminal end **66** of the second drain pipe **54** is positioned inside of the overflow reservoir **56**.

[0039] A sump pump **68** is provided and the sump pump **68** is positioned within the overflow reservoir **56**. The sump pump **68** has an intake **70** and an exhaust **72** and the sump pump **68** urges the storm water **16** that is contained in the overflow reservoir **56** inwardly through the intake **70**

and outwardly through the exhaust **72** when the sump pump **68** is turned on. The sump pump **68** may comprise a submersible electric fluid pump or other convention type of sump pump **68** that has an output capacity which is sufficient to completely empty the overflow reservoir **56** in approximately 15.0 minutes or less.

[0040] A sump line **74** is fluidly coupled to the exhaust **72** of the sump pump **68** such that the sump line **74** receives the storm water **16** when the sump pump **68** is turned on. The sump line **74** extends out of the overflow reservoir **56** and into the municipal storm drain **52**. In this way the sump pump **68** can pump the storm water **16** in the overflow reservoir **56** into the municipal storm drain **52**. Thus, the combination of the channel drain **12** and the barriers **40** and the overflow reservoir **56** and the sump pump **68** ensure that the building **20** is not exposed to storm water **16** runoff in even the most severe cases of precipitation or snow melting. Furthermore, a building **20** that is situated in a low lying area, for example, can be protected from what could potentially be an overwhelming amount of storm water **16** runoff during severe storms or snow melt. Additionally, the sump pump **68** might include a water sensor **76** that automatically actuates the sump pump **68** when storm water **16** runoff begins to collect in the overflow reservoir **56** and with automatically de-actuates the sump pump **68** when the overflow reservoir **56** has been emptied of the storm water **16** runoff.

[0041] In an alternative embodiment 78 as is shown in FIGS. **4**, **5**, **11** and **12**, the back side **28** of the outer wall **24** of the channel drain **12** extends downwardly beyond the bottom wall **22**. Each of the plurality of barriers **40** remains partially positioned within the well **38** in the respective intersecting section **18** of the channel drain **12** when the plurality of barriers **40** is in the deployed position. In this way the stability of the plurality of barriers **40** is increased when the plurality of barriers **40** is in the deployed position for withstanding the force of water running against the barriers **40**. Furthermore, the back side **28** of the outer wall **24** of each of the channel drain **12** has a thickness that is greater than a thickness of the front side **26** of the outer wall **24** of the channel drain **12**.

[0042] In an alternative embodiment 80 as shown in FIGS. **6**, **7**, **8**, **13**, **14** and **15**, each of the plurality of barriers **40** includes a first portion **82** that has a well **84** extending downwardly into an upper edge **86** of the first portion **82**. Each of the plurality of barriers **40** includes a second portion **88** that is slidably positioned in the well **84** in the first portion **82**. As is shown in FIGS. **7** and **14** each of the plurality of barriers **40** is positionable in a first deployed position having the first portion **82** of each of the plurality of barriers **40** extending partially upwardly from the well **32** in the back side **28** of the outer wall **24** of the respective intersecting section **18** of the channel drain **12**. Additionally, the second portion **88** of each of the plurality of barriers **40** is contained within the well **84** in the first portion **82** when the barriers **40** are in the first deployed position. As is shown in FIGS. **6** and **13** each of the plurality of barriers **40** is positionable in a second deployed position having the first portion **82** of each of the plurality of barriers **40** extending partially upwardly from the well **32** in the back side **28** of the outer wall **24** of the respective intersecting section **18** of the channel drain **12** and having the second portion **88** of each of the plurality of barriers **40** extending upwardly from the well **84** in the first portion **82**.

[0043] In an alternative embodiment 90 as is shown in FIG. **17**, the plurality of intersecting sections **18** of the channel drain **12** includes a plurality of outer intersecting sections **92** and a plurality of inner intersecting sections **94**. Each of the plurality of inner intersecting sections **94** is installed in the ground **14** such that the plurality of inner intersecting sections **94** surrounds the building **20**. Furthermore, the plurality of outer intersecting sections **92** is installed in the ground **14** such that the plurality of outer intersecting sections **92** surrounds the plurality of inner intersecting sections **94**. Continuing in the alternative embodiment 90, a third drain pipe **96** is positioned in a respective one of the outer intersecting sections **92** of the channel drain **12** to drain the storm water **16** from the outer intersecting sections **92** of the channel drain **12**. The third drain pipe **96** is located adjacent to the bottom wall **22** of the respective outer intersecting section **54** of the channel drain **12**.

[0044] The third drain pipe **96** exits the respective outer intersecting section **54** of the channel drain **12** and extends beneath ground **14** to terminate in the municipal storm drain **52**. In this way the third drain pipe **96** can direct the storm water **16** collected in the outer intersecting sections **92** of the channel drain **12** into the municipal storm drain **52**. A fourth drain pipe **98** is positioned in the outer intersecting section **54** of the channel drain **12** in which the third drain pipe **96** is positioned and the fourth drain pipe **98** extends into the overflow reservoir **56**. The fourth drain pipe **98** is positioned above the third drain pipe **96** to drain the storm water **16** from the outer intersecting sections **92** of the channel drain **12** when the storm water **16** is filling the outer intersecting sections **92** of the channel drain **12** faster than the third drain pipe **96** can drain the storm water **16** from the outer intersecting sections **92** of the channel drain **12**. In the event that the third drain pipe **96** and the fourth drain pipe **98** are not sufficient to accommodate the volume of storm water **16** due to the topographic nature of building **20**, an additional third drain pipe **96** and an additional fourth drain pipe **98** may be included to ensure that the volume of storm water **16** can be adequately drained. The number of third drain pipes **96** and fourth drain pipes **98** can be increased to whatever number is necessary to handle the volume of the storm water **16** on a case by case basis.
[0045] As is shown in FIGS. **18** and **19**, the channel drain **12** may include a barrier only channel drain **100** which includes a slab **102** and a sleeve **104** which extends downwardly through the slab **102**; the barrier **40** and the associated actuator **42** are positioned in the sleeve **104**. The barrier **40** extends upwardly from the sleeve **104** when the barrier **40** is in the deployed position and the barrier **40** is contained within the sleeve **104** when the barrier **40** is in the stored position. In this way barrier only channel drain **100** can be strategically located to redirect the storm water **16** runoff away from the building **20** rather than to collect the storm water **16** runoff when the barrier **40** in the barrier only channel drain **100** is in the deployed position. FIGS. **20** through **22** demonstrate various means of structuring the overflow reservoir **56** and the means of routing the storm water **16** into the municipal storm drain **52** to accommodate the topographic nature of the location of the building **20** to ensure the storm water **16** is adequately drained. FIG. **20** demonstrates that a sump basin **106** and a sump pump **108** can be added to the overflow reservoir **56**. FIG. **21** demonstrates a cleanout tee **110** which is surrounded by drainage rock **112** and FIG. **22** demonstrates a series of sump basins **114**, either perforated or solid, which serve as a replacement for the overflow reservoir **56** and additionally shows a sump basin **106** and pair of sump pumps **108**.
[0046] In use, the control unit **44** actuates the plurality of barriers **40** into the deployed position when the building **20** is exposed to storm water **16** runoff. In this way the barriers **40** direct the storm water **16** runoff into the channel drain **12** to inhibit the storm water **16** from reaching the building **20** and potentially causing flood damage. Furthermore, the storm water **16** runoff is subsequently drained into the overflow reservoir **56** when the storm water **16** runoff collects in the channel drain **12**. In this way the building **20** can be protected from even the most severe cases of storm water **16** runoff. The sump pump **68** in the overflow reservoir **56** is actuated when the overflow reservoir **56** begins to collect the storm water **16** runoff thereby inhibiting the overflow reservoir **56** from becoming overfilled with the storm water **16** runoff.
[0047] With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of an embodiment enabled by the disclosure, to include variations in size, materials, shape, form, function and manner of operation, device and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by an embodiment of the disclosure.
[0048] Therefore, the foregoing is considered as illustrative only of the principles of the disclosure. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the disclosure to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the disclosure. In this patent document, the word “comprising” is used in its non-limiting

sense to mean that items following the word are included, but items not specifically mentioned are not excluded. A reference to an element by the indefinite article “a” does not exclude the possibility that more than one of the element is present, unless the context clearly requires that there be only one of the elements.

Claims

1. A storm water redirection device for redirecting storm water away from a building and into a municipal storm drain, said device comprising: a channel drain being installed in the ground wherein said channel drain is configured to capture storm water, said channel drain having a plurality of intersecting sections that form a closed perimeter such that said channel drain completely surrounds a building wherein said channel drain is configured to capture storm water that runs toward said building; a plurality of barriers, each of said plurality of barriers being slidably integrated into a respective one of said plurality of intersecting sections of said channel drain, each of said plurality of barriers being positionable in a deployed position having said plurality of barriers extending upwardly from said respective intersecting section of said channel drain wherein said plurality of barriers is configured to deflect the storm water into said respective intersecting section of said channel drain for collecting the storm water, said plurality of barriers being positionable in a stored position having said plurality of barriers being recessed into said respective intersecting section of said channel drain; a first drain pipe being positioned in a respective one of said intersecting sections of said channel drain wherein first drain pipe is configured to drain the storm water from said respective channel drain; a second drain pipe being positioned in said intersecting channel drain in which said first drain pipe is positioned, said second drain pipe being positioned above said first drain pipe wherein said second drain pipe is configured to drain the storm water from said channel drain when the storm water is filling said channel drain faster than said first drain pipe can drain the storm water from said channel drain; and an overflow reservoir being buried beneath the ground wherein said overflow reservoir is configured to contain storm water, said overflow reservoir being in fluid communication with said second drain pipe wherein said overflow reservoir is configured to contain the storm water that drains through said second drain pipe.

2. The device according to claim 1, wherein: said channel drain has a bottom wall and an outer wall, extending upwardly from said bottom wall; said outer wall has a front side and a back side, said front side having a top edge, said back side having a top edge; said top edge of said back side and said top edge of said front side defines an opening into said channel drain; said top edge of said back side and said top edge of said back side being aligned with the ground; said channel drain includes a foraminous grate being positionable on top of said channel drain wherein said foraminous grate is configured to facilitate storm water to flow into said channel drain while inhibiting debris from entering said channel drain; said channel drain has a well extending into said top edge of said back side; said well extends along a full length of said back side; and said channel drain is oriented such that said back side is directed toward said building.

3. The device according to claim 2, wherein: each of said barriers is positioned in said well in said respective intersecting section of said channel drain; said device includes a plurality of actuators; each of said plurality of actuators is integrated into said back side of said outer wall of a respective one of said plurality of intersecting sections of said channel drain; and each of said plurality of actuators is in mechanical communication with said barrier which is positioned in said well in said back side of said outer wall of said respective intersecting section of said channel drain.

4. The device according to claim 3, wherein: each of said plurality of actuators is actuatable into a lifting condition for urging said plurality of barriers into said deployed position; each of said plurality of actuators is actuatable into a lowering condition for urging said plurality of barriers into said stored position; each of said plurality of actuators is in electrical communication with a control

unit; and said control unit actuates each of said plurality of actuators between said lowering condition and said lifting condition.

5. The device according to claim 2, further comprising a plurality of tie lines, each of said tie lines being attached between a topmost edge of a respective one of said plurality of barriers and said top edge of said front side of said outer wall of a respective one of said plurality of intersecting sections of said channel drain, each of said tie lines inhibiting said respective barrier from being deflected rearwardly when said respective barrier is in said deployed position wherein said plurality of tie lines is configured to reinforce said plurality of barriers against the force of the storm water flowing against said plurality of barriers.

6. The device according to claim 2, wherein said first drain pipe is located adjacent to said bottom wall of said respective intersecting section of said channel drain, said first drain pipe exiting said respective intersecting section of said channel drain and extending beneath ground to terminate in a municipal storm drain wherein said first drain pipe is configured to direct the storm water collected in said channel drain into said municipal storm drain.

7. The device according to claim 1, wherein: said overflow reservoir has an access hatch extending through a top wall of said overflow reservoir wherein said access hatch is configured to facilitate a user to access said overflow reservoir; said overflow reservoir has a fill entry extending through said top wall; and said second drain pipe extends through said fill entry such that a terminal end of said second drain pipe is positioned inside of said overflow reservoir.

8. The device according to claim 1, further comprising a sump pump being positioned within said overflow reservoir, said sump pump having an intake and an exhaust wherein said sump pump is configured to urge the storm water in said overflow reservoir inwardly through said intake and outwardly through said exhaust when said sump pump is turned on.

9. The device according to claim 8, further comprising a sump line being fluidly coupled to said exhaust of said sump pump wherein said sump line is configured to receive the storm water when said sump pump is turned on, said sump line extending out of said overflow reservoir and into said municipal storm drain wherein said sump pump is configured to pump the storm water in said overflow reservoir into said municipal storm drain.

10. A storm water redirection device for redirecting storm water away from a building and into a municipal storm drain, said device comprising: a channel drain being installed in the ground wherein said channel drain is configured to capture storm water, said channel drain having a plurality of intersecting sections that form a closed perimeter such that said channel drain completely surrounds a building wherein said channel drain is configured to capture storm water that runs toward said building, said channel drain having a bottom wall and an outer wall extending upwardly from said bottom wall, said outer wall having a front side and a back side, said front side having a top edge, said back side having a top edge, said top edge of said back side and said top edge of said front side defining an opening into said channel drain, said top edge of said front side and said top edge of said back side being aligned with the ground, said channel drain including a foraminous grate being positionable on top of channel drain wherein said foraminous grate is configured to facilitate storm water to flow into said channel drain while inhibiting debris from entering said channel drain, said channel drain having a well extending into said top edge of said back side, said well extending along a full length of said back side, said channel drain being oriented such that said back side is directed toward said building; a plurality of barriers, each of said plurality of barriers being slidably integrated into a respective one of said plurality of intersecting sections of said channel drain, each of said plurality of barriers being positionable in a deployed position having said plurality of barriers extending upwardly from said respective intersecting section of said channel drain wherein said plurality of barriers is configured to deflect the storm water into said respective intersecting section of said channel drain for collecting the storm water, said plurality of barriers being positionable in a stored position having said plurality of barriers being recessed into said respective intersecting section of said channel drain, each of said

barriers being positioned in said well in said respective intersecting section of said channel drain; a plurality of actuators, each of said plurality of actuators being integrated into said back side of said outer wall of a respective one of said plurality of intersecting sections of said channel drain, each of said plurality of actuators being in mechanical communication with said barrier which is positioned in said well in said back side of said outer wall of said respective intersecting section of said channel drain, each of said plurality of actuators being actuatable into a lifting condition for urging said plurality of barriers in said deployed position, each of said plurality of actuators being actuatable into a lowering condition for urging said plurality of barriers into said stored position, each of said plurality of actuators being in electrical communication with a control unit, said control unit actuating each of said plurality of actuators between said lowering condition and said lifting condition; a plurality of tie lines, each of said tie lines being attached between a topmost edge of a respective one of said plurality of barriers and said top edge of said front side of said outer wall of a respective one of said plurality of intersecting sections of said channel drain, each of said tie lines inhibiting said respective barrier from being deflected rearwardly when said respective barrier is in said deployed position wherein said plurality of tie lines is configured to reinforce said plurality of barriers against the force of the storm water flowing against said plurality of barriers; a first drain pipe being positioned in a respective one of said intersecting sections of said channel drain wherein first drain pipe is configured to drain the storm water from said channel drain, said first drain pipe being located adjacent to said bottom wall of said respective intersecting section of said channel drain, said first drain pipe exiting said respective intersecting section of said channel drain and extending beneath ground to terminate in a municipal storm drain wherein said first drain pipe is configured to direct the storm water collected in said channel drain into said municipal storm drain; a second drain pipe being positioned in said intersecting section of said channel drain in which said first drain pipe is positioned, said second drain pipe being positioned above said first drain pipe wherein said second drain pipe is configured to drain the storm water from said channel drain when the storm water is filling said channel drain faster than said first drain pipe can drain the storm water from said channel drain; an overflow reservoir being buried beneath the ground wherein said overflow reservoir is configured to contain storm water, said overflow reservoir being in fluid communication with said second drain pipe wherein said overflow reservoir is configured to contain the storm water that drains through said second drain pipe, said overflow reservoir having an access hatch extending through a top wall of said overflow reservoir wherein said access hatch is configured to facilitate a user to access said overflow reservoir, said overflow reservoir having a fill entry extending through said top wall, said second drain pipe extending through said fill entry such that a terminal end of said second drain pipe is positioned inside of said overflow reservoir; a sump pump being positioned within said overflow reservoir, said sump pump having an intake and an exhaust wherein said sump pump is configured to urge the storm water in said overflow reservoir inwardly through said intake and outwardly through said exhaust when said sump pump is turned on; and a sump line being fluidly coupled to said exhaust of said sump pump wherein said sump line is configured to receive the storm water when said sump pump is turned on, said sump line extending out of said overflow reservoir and into said municipal storm drain wherein said sump pump is configured to pump the storm water in said overflow reservoir into said municipal storm drain.

11. The device according to claim 10, wherein: said back side of said outer wall of said channel drain extends downwardly beyond said bottom wall; and each of said plurality of barriers remains partially positioned within said well in said respective intersecting section of said channel drain when said plurality of barriers is in said deployed position thereby increasing stability of said plurality of barriers when said plurality of barriers is in said deployed position.

12. The device according to claim 10, wherein: said back side of said outer wall of each of said channel drain has a thickness that is greater than a thickness of said front side of said outer wall of said channel drain; each of said plurality of barriers includes a first portion having a well extending

downwardly into an upper edge of said first portion; each of said plurality of barriers includes a second portion being slidably positioned in said well in said first portion; each of said plurality of barriers being positionable in a first deployed position having said first portion of each of said plurality of barriers extending partially upwardly from said well in said back side of said outer wall of said respective intersecting section of said channel drain and having said second portion of each of said plurality of barriers being contained within said well in said back side of said outer wall of said respective intersecting section of said channel drain; and each of said plurality of barriers being positionable in a second deployed position having said first portion of each of said plurality of barriers extending partially upwardly from said well in said back side of said outer wall of said respective intersecting section of said channel drain.

13. The device according to claim 10, wherein: said plurality of intersecting sections of said channel drain includes a plurality of outer intersecting sections and a plurality of inner intersecting sections; each of said plurality of inner intersecting sections is installed in the ground such that said plurality of inner intersecting sections surrounds said building; and said plurality of outer intersecting sections is installed in the ground such that said plurality of outer intersecting sections surrounds said plurality of inner intersecting sections.

14. The device according to claim 13, further comprising: a third drain pipe being positioned in a respective one of said outer intersecting sections of said channel drain wherein third drain pipe is configured to drain the storm water from said outer intersecting sections of said channel drain, said third drain pipe being located adjacent to said bottom wall of said respective outer intersecting section of said channel drain, said third drain pipe exiting said respective outer intersecting section of said channel drain and extending beneath ground to terminate in said municipal storm drain wherein said third drain pipe is configured to direct the storm water collected in said outer intersecting sections of said channel drain into said municipal storm drain; and a fourth drain pipe being positioned in said outer intersecting section of said channel drain in which said third drain pipe is positioned, said fourth drain pipe being positioned above said third drain pipe wherein said fourth drain pipe is configured to drain the storm water from said outer intersecting sections of said channel drain when the storm water is filling said channel drain faster than said third drain pipe can drain the storm water from said outer intersecting sections of said channel drain.